# Critical Release Notice

**Publication number: 297-1001-821**
**Publication release: Standard 04.02**

The content of this customer NTP supports the SN07 (DMS) and ISN07 (TDM) software releases.

Bookmarks used in this NTP highlight the changes between the BCS36 baseline and the current release. The bookmarks provided are color-coded to identify release-specific content changes. NTP volumes that do not contain bookmarks indicate that the BCS36 baseline remains unchanged and is valid for the current release.

## Bookmark Color Legend

**Black: Applies to content for the BCS36 baseline that is valid through the current release.**

**Purple: Applies to new or modified content for ISN07 (TDM)/SN07 (DMS) that is valid through the current release.**

***Attention!***
*Adobe® Acrobat® Reader ™ 5.0 or higher is required to view bookmarks in color*

# Publication History

**December 2004**

Standard release 04.02 for software release ISN07 (TDM)/SN07 (DMS).

Volume 7

Modified command MONTALK for CR Q00859477-01.

Volume 8

Modified command BSY for CR QQ00854765-02.

297-1001-821

DMS-100 Family

# Menu Commands

## Historical Reference Manual

## CARD through C7TTP, Volume 2 of 10

Through BCS36 Standard 04.01 June 1999

NORTEL NETWORKS
How the world shares ideas.

DMS-100 Family

# Menu Commands

## Historical Reference Manual

## CARD through C7TTP, Volume 2 of 10

Publication number: 297-1001-821
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# Publication history

**June 1999**

BCS36 Standard 04.01 Reissued to place book in historical reference.

# Contents

# About this document

This reference manual describes all menu commands used at a maintenance and administration position (MAP) in a Nortel Networks DMS-100 switch.

## When to use this document

Nortel Networks software releases are referred to as batch change supplements (BCS) and are identified by a number, for example, BCS29. This document is written for DMS-100 Family offices that have BCS36 and up.

More than one version of this document may exist. The version and issue are indicated throughout the document, for example, 01.01. The first two digits increase by one each time the document content is changed to support new BCS-related developments. For example, the first release of a document is 01.01, and the next release of the document in a subsequent BCS is 02.01. The second two digits increase by one each time a document is revised and rereleased for the same BCS.

To determine which version of this document applies to the BCS in your office, check the release information in *DMS-100 Family Guide to Northern Telecom Publications*, 297-1001-001.

### How to identify the software in your office

The *Office Feature Record* (D190) identifies the current BCS level and the feature packages in your switch. You can list a specific feature package or patch on the MAP (maintenance and administration position) terminal by typing

**>PATCHER;INFORM LIST identifier**

and pressing the Enter key.

*where*

identifier is the number of the feature package or patch ID

You can identify your current BCS level and print a list of all the feature packages and patches in your switch by performing the following steps. First, direct the terminal response to the desired printer by typing

**>SEND printer_id**
and pressing the Enter key.

*where*
printer_id is the number of the printer where you want to print the data

Then, print the desired information by typing

**>PATCHER;INFORM LIST;LEAVE**
and pressing the Enter key.

Finally, redirect the display back to the terminal by typing

**>SEND PREVIOUS**
and pressing the Enter key.

## How commands reference documentation is organized

This reference manual is one of two commands reference manuals for all commands used at a MAP in a Nortel Networks DMS-100 switch. The two commands reference manuals are the following*:*

| Number | Title |
|---|---|
| 297-1001-820 | *DMS-100 Nonmenu Commands Historical Reference Manual* describes all nonmenu commands used at a MAP in a Nortel Networks DMS-100 switch. |
| 297-1001-821 | *DMS-100 Menu Commands Historical Reference Manual* describes all menu commands used at a MAP in a Nortel Networks DMS-100 switch. |

## What are menu and nonmenu commands

For the commands reference documents the commands used at a MAP position have been divided into two categories, menu and nonmenu:

- Menu commands are associated with a MAP display containing a numbered list or menu of commands and parameters when the level or sublevel from which the commands are entered has be accessed. Commands that can be executed from an accessed menu, but are not displayed, are called hidden commands. The level from which the command may be entered is referred to as its menu or menu level.

  ***Note 1:*** Menus may not always appear when a menu level or sublevel has been accessed, such as when displays have been suppressed with the command mapci nodisp.

  **mapci nodisp↵**

  ***Note 2:*** Hidden commands may be seen when the menu level has been accessed by entering the listst command and printing the top directory.

**liststt**↵

**print *dir***↵

- Nonmenu commands are not associated with a MAP display, even when the level or sublevel from which they may be entered has been accessed. The level from which a nonmenu command is entered is referred to as its directory or directory level.

  ***Note:*** Nonmenu commands can be seen when the directory level has been accessed by entering the print command with the name of the directory.

  **print *dir***↵

## How this manual is organized

The organization of this manual is designed to provide rapid access to comprehensive commands information, in an easy-to-use and easy-to-understand format. The manual has a modular structure designed around chapters, which group commands according to the menu from which they are accessed. Special tables are provided to allow quick location of any command.

### How volumes are organized

The reference manual is divided into into 10 volumes. Each volume contains a publication history section, an about this document section, and the first chapter containing the reference tables. The front cover and title page of each volume indicates the range of command levels within that volume. Since menus are in alphabetical order, the volume containing the menu one wishes to reference is easily determined. Within volumes, page numbers begin with same letter of the alphabet as the menu.

### How the command reference tables chapter is organized

The first chapter, “Commands reference tables,” includes two tables and a chart:

- menu description table-contains a list of all menus in alphabetical order and provides a brief description of each
- menu cross-reference table-lists all of the documented commands in alphabetical order and cross references them to the menu to which they pertain and the page where they are documented
- menu level and sublevel chart-illustrates the hierarchical relationship between all menu levels and sublevels

### How the menu chapters are organized

Each chapter following the “Commands reference tables” documents one menu and all its commands. The names of the chapters are the same as the names of the menus (levels or sublevels) which they document. The chapters are organized in alphabetical order.

Each menu chapter consists of an overview section, which introduces the menu level, followed by a separate section for each command.

### How the overview section is organized

The overview section of each chapter contains the following:

- a brief description of the menu
- instructions for accessing the menu level
- a menu commands table listing all the commands available from the menu cross-referenced to the page where they are described
- a graphic representation of the MAP menu display, including hidden commands
- a status code table for the menu level
- a common responses table, included only when all or most of the commands at a level have many of the same responses
- other tables of common information, included only when all or most of the commands at a level share the same information, such as alarms or status displays

### How command sections are organized

Each command section consists of the following elements in the order listed:

- a brief description of the use and function of the command
- a commands expansion table
- a qualifications section describing any special characteristics, exceptions, restrictions, limitations, cautions, or warnings
- an examples table
- a responses table

## What command convention is used

The following is the description of the commands convention used in this manual.

### How commands are represented

The command convention is used for two distinct representations of commands. One representation includes all parameters, variables, and syntactic relationships and is called a command expansion. The other representation is of commands as they are actually entered and is called a command example.

### How the convention is used in command expansions

A special command table is used for a command expansion. It consists of two sections. The first section is the command expansion itself in which the following characteristics are represented:

- all parameters
- all variables
- hierarchy (the order in which elements must be entered)
- syntax (specific requirements of command strings)
- truncated and abbreviated forms, when allowed
- defaults

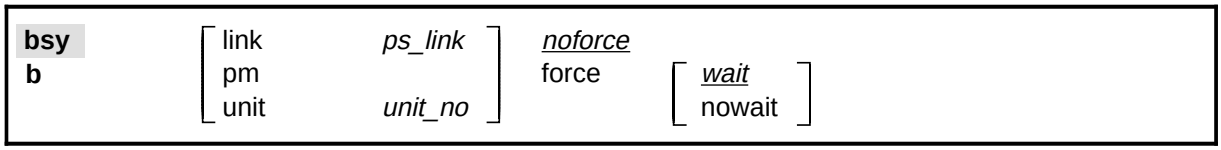
The second section is a description of all the parameters and variables.

Command elements are represented exactly as they are to be entered in actual commands, except when italic font is used indicating the element is not entered as represented, such as for variable names and certain defaults.

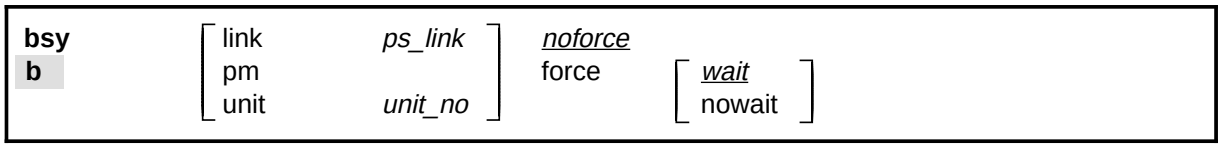
> ***Note:*** Italics always indicates an element that is not entered as part of a command in the form in which it is shown. It is either a variable that must be replaced with a value, a range or another element; or, it is a default condition which is not entered as part of a command.

### How command words are presented

The actual command word is represented in lowercase, boldface, except where uppercase is required by case sensitivity. The command appears to the left of all other elements in the command expansion (parameters and variables).



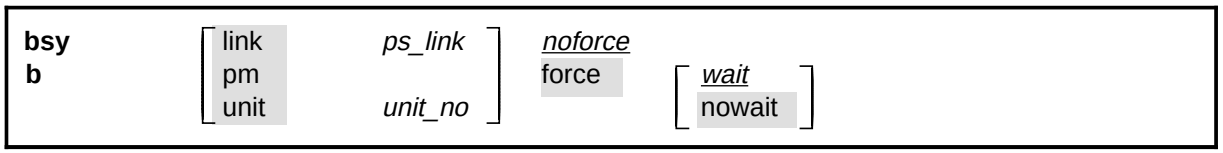

If a truncated or abbreviated form of a command is allowed, it will appear directly beneath the long form of the command.




> ***Note:*** The b command is not a true truncated form of the bsy command and is used merely for illustration.

### How parameters are presented

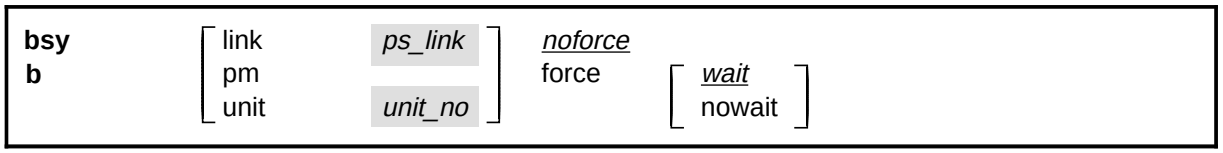
Parameters are lowercase, regular type (not boldface), except where uppercase is required by command case sensitivity.




### How variables are presented

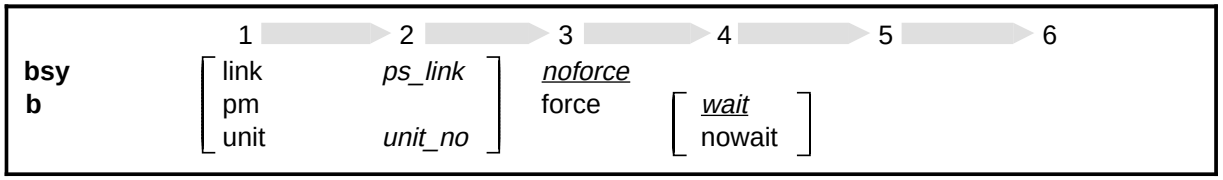
Variable names are in italics. Italics indicates that the variable is not entered as shown, but must be replaced with some other element, such as a value, range, number, or item from a list.

The numbers, values, ranges, and lists that represent the substitutions or actual entries for variable names are not represented in the expansion of the command. These are described in detail for each variable in the description section below the expansion.

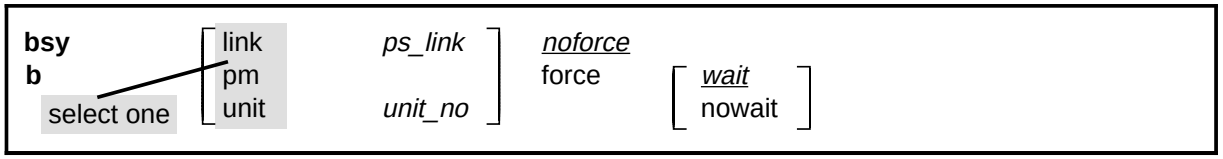



### How hierarchy is presented

The order in which elements must be entered is represented by their order of appearance from left to right.




When several elements appear in the same horizontal position (that is, in a vertical list), one of them must be selected for that position, except when there is a default.




### How long command expansions are presented

Some commands that have many parameters and variables with very long hierarchies require the expansion row to be continued. When this occurs, the horizontal lines of parameters and variables are numbered so that they

can be easily followed from one row to the next. Only numbered lines that are required to make syntax clear are in subsequent expansion rows (like row 2 in the third expansion continuation of the example).

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **command** | parameter | [ *variable*<br>parameter | parameter<br>*variable* | *variable*<br>parameter | parameter<br>*variable* | *variable*<br>parameter | (1)<br>(2) |
| **command**<br>(continued) | (1)<br>(2) | parameter<br>*variable* | *variable*<br>parameter | parameter<br>*variable* | *variable*<br>parameter | ] | (1)<br>(2) |
| **command**<br>(continued) | (2) | parameter | *variable* | parameter | | | (end) |

### How defaults are indicated

A default parameter is underlined. If, in a vertical list, an element may be entered, but is not required, the system must act as if some element were entered. The action the system takes when an element is not entered is called a default action and is usually an action indicated by one of the elements that can be selected. Occasionally, the default action is something other than a selectable action. These nonselectable defaults are represented by the word, “default,” or another word which indicates the action, and is in italics, to indicate that it cannot be entered. The default is fully described in the parameters and variables description section.

| | | | | | |
|---|---|---|---|---|---|
| **bsy**<br>**b** | [ link<br>pm<br>unit | *ps_link*<br><br>*unit_no* ] | *noforce*<br>force | [ *wait*<br>nowait ] | |

### How relationships between groups of elements are indicated

As a general rule of relationship, whenever an element is directly followed horizontally by another element; if the first element is selected, the second element is required.

| | | | | | |
|---|---|---|---|---|---|
| **bsy**<br>**b** | [ link<br>pm<br>unit | *ps_link*<br><br>*unit_no* ] | *noforce*<br>force | [ *wait*<br>nowait ] | |

Within a command expansion, elements or groups of elements (parameters or variables) sometimes relate to elements that precede or follow them, but not all the elements that precede or follow them. To distinguish which elements relate to which, brackets surround those elements that, as a group, pertain to other elements. Only those elements that horizontally directly precede or follow the brackets are related to the elements within the

brackets. When elements are not in brackets, only individual elements that directly precede or follow other elements are related.

| | | | |
|---|---|---|---|
| **bsy**<br>**b** | [ link *ps_link* ]<br>pm<br>[ unit *unit_no* ] | *noforce*<br>force [ *wait* ]<br>[ nowait ] |

## How parameters and variables are described

The parameters and variables description contains a list of every parameter and variable that apply to the command, in alphabetical order. Each of these command elements is fully described, including replacement values and ranges for variables.

Following is an example of a command expansion table including the parameters and variables description.

**bsy command parameters and variables**

| **Command** | **Parameters and variables** |
|---|---|
| **bsy**<br>**b** | [ link *ps_link* ]<br>pm<br>[ unit *unit_no* ]<br>*noforce*<br>force [ *wait* ]<br>[ nowait ] |

| **Parameters and variables** | **Description** |
|---|---|
| force | This parameter overrides all other commands and states in effect on the specified units. If the whole peripheral module (PM) is to be taken out-of-service, confirmation (yes or no) is required. |
| link | This parameter busies one of the P-side links specified by *the ps_link* variable. |
| *noforce* | This default parameter indicates the condition when force parameter is not entered. Busy will not be forced. |
| nowait | This parameter enables the MAP to be used for other command entries before the bsy force command action is confirmed. The nowait parameter is used only with the force parameter. |
| pm | This parameter causes both units of the PM to be made busy. |
| *ps_link* | This variable specifies which of the P-side links is to be busied. The range is 0-3. |
| unit | This parameter causes the PM unit specified by the *unit_no* variable to be made busy. |

**-continued-**

**bsy command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *unit_no* | This variable specifies which unit of the PM is to be busied. The range is 0-1. |
| *wait* | This default parameter indicates the default condition when no parameter is entered. The user must wait until the bsy force command action is confirmed before additional commands can be entered at the MAP. |

**-end-**

## How the convention is used in command examples

Command examples use the same convention as a command expansion, except that all command elements are boldface. Commands can be entered exactly as they appear in examples except when an example does not use an actual variable entry, but a variable name shown in italics.

The following may be entered as shown.

**bsy link 2**↵

The variable *ps_link* must be replaced by an actual value before it can be entered.

**bsy link *ps_link***↵

## How other command conventions relate to reference convention

The command convention used in this reference document is different from conventions used in some older Nortel Networks documents and from command information at a MAP terminal. This difference is intentional. The convention in this document is used to simplify explanations of command syntax and to eliminate possible confusion. For example, when the command information provided in a MAP help screen is unclear, reference to that command represented in a different convention, such as in this reference manual, should eliminate the ambiguity, whereas the same or a similar convention would merely repeat the confusion.

## How to compare conventions

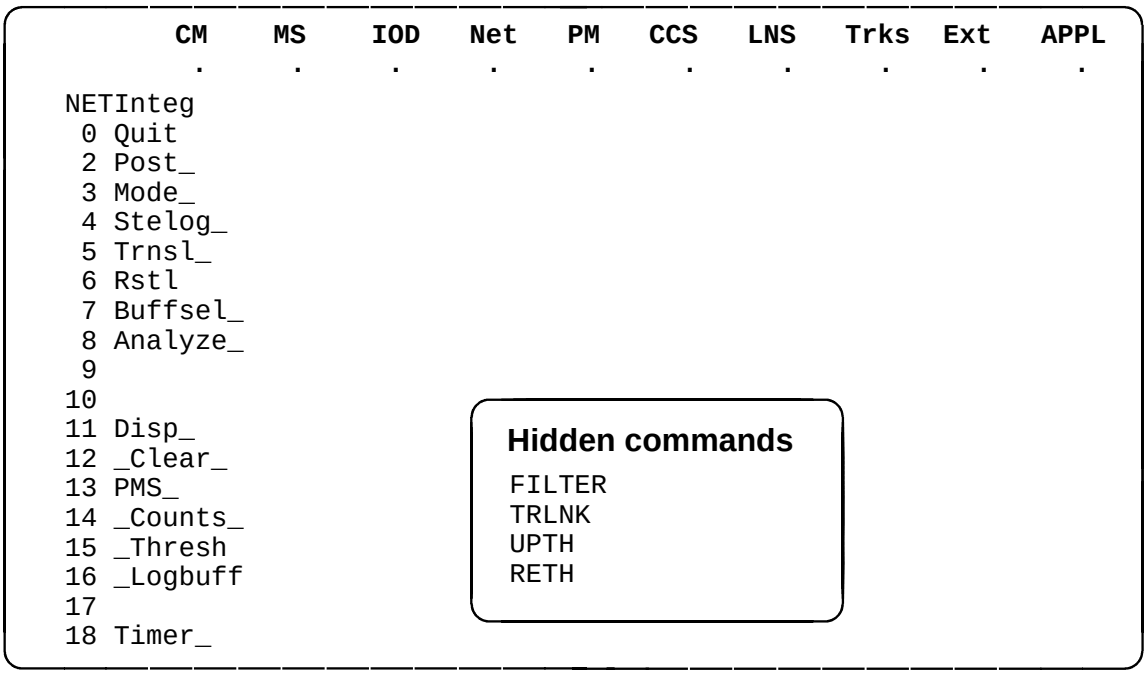
To take advantage of the benefits of the convention in this book, a comparison of the convention used in this document with the most common convention used in MAP help screens is provided in Table 1.

**Table 1xxx**
**Command conventions comparison**

| Element | Commands reference manual | MAP screen |
|---|---|---|
| Commands | lowercase or case sensitive specific:<br>**bsy** | uppercase:<br>`BSY` |
| Truncated commands or abbreviations. | shown directly below long form:<br>**bsy**<br>**b** | Abbreviated form all uppercase, rest of command lowercase:<br>`Bsy` |
| Parameters | lowercase or case sensitive specific:<br>link | uppercase:<br>`LINK` |
| Variables | italic, lowercase:<br>*ps_link* | in angled brackets:<br>`<ps_link>`<br>***note:*** angle brackets also indicate the the variable is mandatory. |
| Hierarchy | horizontal order, left to right:<br>l pdtc *pm_numbers circuit* | top to bottom:<br>`{L <PDTC> {PDTC}`<br>`<PM_NUMBERS> {0 TO 255}`<br>`[<CIRCUIT> {0 to 16}]` |
| Defaults | underlined:<br>*wait*<br>nowait | no specific method established, but "optional" elements (meaning they do not have to be entered, implying defaults), are represented by square brackets:<br>`[<CIRCUIT> {0 to 16}]` |
| Selectable elements | a vertical list:<br>link<br>pm<br>unit | curly braces, separated by vertical bars:<br>`{link \| pm \| unit}`<br>or vertical list, separated by commas:<br>`{link,`<br>`pm,`<br>`unit}` |
| Variable replacement values | defined under parameters and variables description | curly braces:<br>`{0 to 16}` |

## How menu command syntax is used

In the graphic representation of the MAP menu display, all commands, except hidden commands are numbered.




Numbered commands may be entered using their associated number rather than the actual command. For example, the quit command is usually the first command in a menu, that is, number 0, and may be entered in either of the following ways:

**quit**↵

**0**↵

The numbered list of commands frequently contains parameters as well as commands. Commands and parameters can be distinguished by the underscores that follow commands or precede parameters as follows:

- `Tst_` a command that requires a parameter
- `_CPU` a parameter
- `_Card_` a parameter that requires another parameter
- `DpSync` a command not requiring a parameter or variable
- `Quit` a command that accepts a parameter or variable but does not require one

Parameters appearing in the numbered list of commands may also be entered using their associated number rather than the actual parameter. A parameter cannot be entered by number unless the command has also been entered by

number. It is not necessary to enter the parameter by number even if the command is entered by number.

One very important difference in the way commands and parameters are entered using their number rather than the actual commands and parameters is that no space is allowed between numbers but one is required between actual commands and parameters.

For an example of the proper syntax for entering commands using or not using numbers, assume that `Tst_` is number 6 and that `_Card_` is number 10 in the numbered list, then any of the following represents a valid entry for testing card 5 in unit 2:

- **6105 2↵**
- **6card 5 2↵**
- **6 card 5 2↵**
- **tst card 5 2↵**

## What precautionary messages mean

Danger, warning, and caution messages in this document indicate potential risks. These messages and their meanings are listed in the following chart.

| Message | Significance |
|---|---|
| DANGER | Possibility of personal injury |
| WARNING | Possibility of equipment damage |
| CAUTION | Possibility of service interruption or degradation |

Examples of the precautionary messages follow.

**DANGER**
**Risk of electrocution**
The inverter contains high voltage lines. Do not open the front panel of the inverter unless fuses F1, F2, and F3 have been removed first. Until these fuses are removed, the high voltage lines inside the inverter are active, and you risk being electrocuted.

**WARNING**
**Damage to backplane connector pins**
Use light thumb pressure to align the card with the connectors. Next, use the levers to seat the card into the connectors. Failure to align the card first may result in bending of the backplane connector pins.

**CAUTION**
**Loss of service**
Subscriber service will be lost if you accidentally remove a card from the active unit of the peripheral module (PM). Before continuing, confirm that you are removing the card from the inactive unit of the PM.

# Commands reference tables

To assist the user in locating a command description, two commands reference tables are provided in this chapter, the menu description table and the menu cross reference table.

In addition to the tables, a menu chart is provided. The menu chart provides a quick overview of the entire menu structure. The relationships between menus and and sub-menus, sometimes called systems and sub-systems, are illustrated by means of this chart.

## Menu descriptions

The menu description table provides a brief description of every menu documented in this manual.

**Menu description table**

| Menu | Description |
|---|---|
| **ACTIVITY** | Use to provide an on-screen display of minute-by-minute indications of the performance status of the switch. |
| **ALT** | Use to perform automatic line testing (ALT) tests on subscriber lines without manual intervention by maintenance personnel. |
| **ALTBAL** | Use to perform on-hook balance network tests (BAL) on the ALT. |
| **ALTCKTST** | Use to perform keyset line circuit tests (CKTST) on the ALT. |
| **ALTDIAG** | Use to perform the extended diagnostic test (DIAG) on the ALT. |
| **ALTLIT** | Use to perform line insulation tests (LIT) on the ALT. |
| **ALTSDIAG** | Use to perform the short diagnostic tests (SDIAG) on the ALT. |

**-continued-**

**Menu description table** (continued)

| Menu | Description |
|---|---|
| **AOSSSEL** | Use to analyze calls that originate on Auxiliary Operator Services System (AOSS), Traffic Operator Position System (TOPS), Super Centralized Automatic Message Accounting (SCAMA), or Intertoll (IT) incoming trunks and require AOSS operator assistance. |
| **APUX** | Use to perform maintenance for an application processing unit with UNIX (APUX). |
| **ATT** | Use to monitor and control automatic trunk testing (ATT). |
| **AUTOCTRL** | Use to list, apply, remove, disable, or enable automatic network management (NWM) controls. |
| **BERP** | Use to set up bit error rate performance (BERP) tests and to perform bit error rate tests (BERT). |
| **BERT** | Use to measure the overall performance of the hardware components which form the enhanced network (ENET) switching matrix by querying information, defining parameters, and performing functions for a BERT. |
| **CARD** | Use to query information and perform maintenance actions on cards. |
| **CARD** | Use to maintain the enhanced network (ENET) on a card basis arranged by slot. |
| **CARRIER** | Use to monitor and maintain the trunks that are associated with carriers. |
| **CCIS6** | Use to monitor and maintain the Common Channel Interoffice Signaling No. 6 (CCIS6) subsystem. |
| **CCS** | Use to monitor and maintain the Common Channel Signaling (CCS) system and access the CCS subsystem displays. |
| **CCS7** | Use to test and maintain Common Channel Signaling No. 7 (CCS7) trunks. |
| **CHAIN** | Use to perform maintenance actions and display status information on the cards of the specified chain. |
| **CLOCK** | Use to test and maintain the message controller clock. |
| **CLOCK** | Use to control the message switch (MS) clocks and synchronize them to a clock source extracted from incoming digital trunks, an external direct clock source, or internal clock. |
| **CM** | Use to access commands that control and display the status of the paired central processing units (CPU) that comprise the computing module (CM). |

**-continued-**

**Menu description table** (continued)

| Menu | Description |
|---|---|
| **CMMNT** | Use to query specific information about the performance and the available memory of the computing module (CM) and to control the load image and CM maintenance (CMMnt) level alarms. |
| **CODECTRL** | Use to list, apply, or remove code controls on specified code types. |
| **CONS** | Use to access commands that test or change the status of a device controller (DC) and the console connected to it. |
| **CPSTATUS** | Use to access the CPSTATUS tool to measure all CPU occupancies, measure of additional CPU time available for call processing work, and to indicate overload and switch performance with respect to the switch's engineering |
| **C6TTP** | Use to monitor and maintain CCIS6 trunks. |
| **C7BERT** | Use to evaluate the performance of a CCS7 signaling link before putting it into service or during fault isolation activities. A C7BERT test repeatedly transmits a 2047-bit pseudorandom pattern and subsequently checks the pattern to verify that no bit errors have occurred. |
| **C7LKSET** | Use to query and change the status of the links within a selected linkset. |
| **C7MSUVER** | Use to build message signaling units (MSUs), subject them to the screening rules of the CCS7 link interface unit 7 (LIU7), and display the results of screening rules that were encountered. |
| **C7RTESET** | Use to display information about or change the state of a routeset. |
| **C7TTP** | Use to test and maintain CCS7 trunks. |
| **DCAP** | Use to obtain status information for applications and links on the data communications applications (DCAP). |
| **DCH** | Use to interact with the D-channel handler (DCH) maintenance subsystem. |
| **DCTLTP** | Use to access the data call tester (DCT) menu commands from the LTP level. |
| **DCTTTP** | Use to access the data call tester (DCT) menu commands from the TTP level. |
| **DDU** | Use to test and change the status of the disk drive units (DDU). |

**-continued-**

**Menu description table** (continued)

| Menu | Description |
|---|---|
| **DEVICES (CFI)** | Use to obtain information about and perform maintenance functions on a channel frame interface (CFI). |
| **DELAYS (LGC)** | Use to obtain information on call processing delays. |
| **DELAYS (RCC)** | Use to obtain information on call processing delays. |
| **DEVICES (FP)** | Use to display status indicators of the file processor (FP) and to execute commands which produce these displays. |
| **DEVICES (LMX)** | Use to obtain information about and perform maintenance functions on a channel frame interface (LMX). |
| **DEVICES (NIU)** | Use to display information about link interface unit (LIU) components connected to the network interface unit (NIU). |
| **DEVICES (PSP)** | Use to obtain information about and perform maintenance functions on a programmable signal processor (PSP). |
| **DIRP** | Use to access the commands used to control the files and recording volumes of the device independent recording package (DIRP). |
| **DISPLAY** | Use to monitor, maintain, and display information about the trunks that are associated with carriers. |
| **DLC** | Use to test and change the status of the data link controller (DLC). |
| **DPNSS** | Use to enter the Digital Private Network Signaling System (DPNSS) system and query and change the status of the links within a selected linkset. |
| **DRAM** | Use to access and perform maintenance on a DRAM module. |
| **DRM** | Use to perform control and review functions for a distributed recording manager (DRM). |
| **DTC** | Use to perform maintenance functions for a digital trunk controller (DTC). |
| **DTCI** | Use to maintain an digital trunk controller integrated digital network services (ISDN) (DTCI). |
| **ENET** | Use to access all other levels of the ENET system. The ENET level expands the top level alarm and allows the craftsperson to decide where to go next in order to correct a fault. |
| **EXND** | Use to access and perform maintenance functions for an external node (EXND). |

**-continued-**

**Menu description table** (continued)

| Menu | Description |
|---|---|
| **FBUS** | Use to perform maintenance on a frame transport bus (FBUS). |
| **FMT** | Use to monitor and maintain the fiber multiplex terminals (FMT). Maintenance actions are performed on posted FMTs. When posting an FMT using the post command, the FMT sublevel is accessed, from which maintenance actions are conducted. |
| **FP** | Use to maintain and administer a file processor (FP). |
| **FRIU** | Use to perform maintenance activities on the frame relay I/F unit (FRIU). |
| **GRPCTRL** | Use to list, apply, or remove group controls on selected trunk groups. |
| **IBNCON** | Use to maintain and monitor Integrated Business Network (IBN) attendant consoles. |
| **ICRM** | Use to perform maintenance functions on an integrated cellular remote module (ICRM). |
| **IDT** | Use to perform maintenance functions on an intelligent digital transmission (IDT) device. |
| **INTCCTRL** | Use to list, apply, and remove code controls for the DMS-200/300 and DMS-300 switches. |
| **INTEG** | Use to analyze errors which occur along the speech links between the PM and the ENET. |
| **IOC** | Use to access commands that change or monitor the status of disk controller (DC) cards and the devices attached to them. |
| **IOD** | Use to access commands to change or monitor the status of the input/output devices (IOD). |
| **IPML** | Use to access the IPML maintenance menu. |
| **IRLINK** | Use to perform maintenance on the dual remote cluster controller (DRCC). The IRLINK level is accessed from the RCC level using the irlink command. Although the menu always shows the irlink command, it only affects a posted RCC that is part of a DRCC. |
| **ISG** | Use to maintain ISDN service groups (ISG) which are defined for a specific LGC or LTC. In addition, hardware independent access to the associated channels is available. |

**-continued-**

**Menu description table** (continued)

| Menu | Description |
|---|---|
| **ISGACT** | Use to access the ISGACT tool to analyze the real time use of the signaling processor (SP), the master processor (MP), and the ISDN signaling processor (ISP). |
| **ISP** | Use to make measurements and report information on channels of the ISDN signalling processor (ISP). |
| **LAYER** | Use to check the status of selected layers and bands. |
| **LCM** | Use to perform maintenance functions on a loop concentrating module (LCM). |
| **LCME** | Use to monitor and maintain an enhanced line concentrating module (LCME). |
| **LCMI** | Use to monitor and maintain an ISDN line concentrating module (LCMI). |
| **LCOM** | Use to perform maintenance functions for an link interface unit (LIU) communication (LCOM) PM type. |
| **LGC** | Use to perform maintenance functions for a line group controller (LGC) |
| **LGCI** | Use to maintain an LGC equipped to provide integrated services digital network (ISDN) services. |
| **LIM** | Use to perform maintenance functions on a link interface module (LIM). |
| **LINESEL** | Use to select the classification of lines to be presented for service analysis (SA). |
| **LINKSET** | Use to query and change the status of a selected linkset. |
| **LIU7** | Use to perform maintenance activities on the link interface unit 7 (LIU7). |
| **LNS** | Use to access subscriber line tests and associated maintenance actions through the LNS subsystems. |
| **LNSTRBL** | Use to maintain lines that are experiencing call processing trouble. |
| **LTC** | Use to perform maintenance functions for a line trunk controller (LTC). |
| **LTP** | Use to perform manual tests on the subscriber lines. |
| **LTPDATA** | Use to maintain control position data, posted set information, system status updates, and perform additional maintenance action on the line in the control position. |
| **LTPISDN** | Use to monitor and maintain Integrated Services Digital Network (ISDN) lines. |

**-continued-**

**Menu description table** (continued)

| Menu | Description |
|---|---|
| **LTPLTA** | Use to enter the line test position test access commands level. |
| **LTPMAN** | Use to enter the line test position of the manual test commands level. |
| **MANUAL** | Use to monitor and maintain trunks. |
| **MATRIX** | Use to access maintenance and diagnostic facilities for the switching matrix of the 128K ENET. |
| **MC** | Use to test and control the message controllers (MC). |
| **MEMORY** | Use to manipulate the contents of the memory cards. |
| **MONITOR** | Use to monitor call processing busy connections: listening, talking, or both. |
| **MP** | Use to perform maintenance on multipurpose positions (MPs) on TOPS position controllers (TPC) which subtend a TOPS Message Switch (TMS). The MP MAP level is accessed from the TPC level of the MAP. |
| **MPC** | Use to access the commands that test and query the card and link status of a specific multi-protocol controller (MPC). |
| **MS** | Use to access commands to query information and perform maintenance procedures on the MS and MS shelves. |
| **MSB6** | Use to maintain the message switch and buffer (MSB) handling Common Channel Interoffice Signaling No. 6 (CCIS6) and the CCITT No. 6 Signaling (CCITT6). |
| **MSB7** | Use to maintain the message switch and buffer (MSB) handling Common Channel Interoffice Signaling No. 7 (CCIS7) and the CCITT Signaling System No. 7 (CCITT7). |
| **MTD** | Use to test or change the status of specified magnetic tape drives (MTD). |
| **MTM** | Use to perform maintenance for a maintenance trunk module (MTM). |
| **NET** | Use to perform network maintenance and to access other network maintenance MAP levels. |
| **NETINTEG** | Use to access the analysis feature which identifies errors on speech links between PMs and the Network. |
| **NETJCTRS** | Use to display the status of the junctors in both planes of the specified network and perform maintenance functions for junctors. |

**-continued-**

**Menu description table** (continued)

| Menu | Description |
|---|---|
| **NETLINKS** | Use to display the status of the links in both planes of the specified network and perform maintenance functions for links. |
| **NETPATH** | Use to test faulty paths, store test information for each path tested, and display this information. |
| **NETXPTS** | Use to access and perform maintenance functions on the crosspoint (XPT) cards in both planes of a network module (NM). |
| **NIU** | Use to perform maintenance activities on the network interface unit (NIU). |
| **NOP** | Use to monitor and maintain communications between a DMS and a network operations system (NOS). |
| **NWM** | Use to access network management (NWM) control levels, to display the status of automatic and manual controls, and to change the switch operating mode. |
| **OAU** | Use to perform maintenance functions for an office alarm unit (OAU). |
| **OFCINTEG** | Use to access the bit error rate performance (BERP) and wideband error rate test (WBERT) sublevels. |
| **OPMPES** | Use to remotely control battery string switching, identify the alarm and state conditions of the OPMPES, identify the shelves and bay, and give the circuit location. |
| **PERFORM** | Use to display information about the processors of a posted PM of node type LGC, LTC, DTC, or RCC. |
| **PLANE** | Use to maintain and administer a file processor (FP). |
| **PM** | Use to access the PM maintenance system. |
| **PMACT** | Use to access the PMACT tool which is used to analyze the real-time use of the signaling processor (SP), the master processor (MP), and the ISDN signaling processor (ISP). |
| **PMC** | Use to control the peripheral message controllers (PMC) and their individual ports. |
| **PORT** | Use to control individual ports of the MC. |
| **POST** | Use to monitor and maintain the trunks that are associated with carriers. |
| **POSTDEV** | Use to maintain and administer the posted file processor (FP) devices. |
| **PRADCH** | Use to maintain DTCI B-channels and D-channels. |

**-continued-**

**Menu description table** (continued)

| Menu | Description |
|---|---|
| **PVC** | Use to query and change the status of the logical communication links between a signaling transfer point (STP) and the signaling engineering and administration system (SEAS). |
| **RCC** | Use to maintain a remote cluster controller (RCC). |
| **RCCI** | Use to maintain the integrated services digital network (ISDN) RCC (RCCI). |
| **RTECTRL** | Use to list, apply, or remove controls on specified reroutes. |
| **SA** | Use to perform service analysis (SA) on selected types of calls. |
| **SAEDIT** | Use to edit service analysis (SA). |
| **SASELECT** | Use to select the classification of calls to be presented for service analysis (SA). Also use the commands available from the the SASelect level to control the monitor and the traffic offices included in analysis. |
| **SBS** | Use to activate, deactivate or set backup for the billing server. |
| **SBSCOMM** | Use to access the SBS level. |
| **SBSSEL** | Use to perform S/DMS (or Formatter/Storage Agent [FSA]) (SBS) reporting and controling functions. |
| **SBSSTAT** | Use to display information about billing server data streams. |
| **SBSTRM** | Use to display information about billing server streams. |
| **SCCPLOC** | Use to query or change the state of one or more signaling connection control part (SCCP) local subsystems. |
| **SCCPRPC** | Use to query or change the state of a signaling connection control part (SCCP) remote point code. |
| **SCCPRSS** | Use to query or change the state of one or more signaling connection control part (SCCP) remote subsystems. |
| **SCP** | Use to post SCP services, display alarm information about SCP alarms, list datafilled SCP services, and access the SCPLoc level. |
| **SCPLOC** | Use to diagnose system faults and to carry out maintenance operations and corrective actions. |
| **SEAS** | Use to query, test, and change the operating state of the signaling engineering and administration system (SEAS). This level also has access to the PVC (permanent virtual circuits) level of maintenance. |

**-continued-**

**Menu description table** (continued)

| Menu | Description |
|---|---|
| **SHELF** | Use to maintain the enhanced network (ENET) as a collection of cards and to perform maintenance actions on the functions of a slot as a single entity. |
| **SHELF** | Use to access commands to query information and perform maintenance on the message switch (MS) shelves. |
| **SLM** | Use to access maintenance functions for the specified SLM. |
| **SMS** | Use to perform maintenance for a Subscriber Carrier Module-100S (SMS). |
| **SMU** | Use to perform maintenance for a Subscriber Carrier Module-100 Urban (SMU). |
| **SPM** | Use to perform maintenance for a service peripheral module (SPM). |
| **SRUPES** | Use to remotely control battery string switching, identify the alarm and state conditions of the SRUPES, to identify the shelves and bay, and give the circuit location. |
| **STAT TKGRP** | Use to monitor and maintain trunk groups. |
| **STAT TRKS** | Use to monitor and maintain individual trunks. |
| **STC** | Use to maintain signal terminal controllers (STC) attached to message switch and buffers (MSB). |
| **SYSTEM** | Use to maintain the enhanced network (ENET) processing complexes. |
| **TMS** | Use to maintain a TOPS message switch. |
| **TPC** | Use to access the Traffic Operator Position Controller (TPC). Feature package NTXA83AA is required for this level to be operational. |
| **TRKCONV** | Use to monitor and maintain trunks. |
| **TRKS** | Use to access the sublevels of trunk maintenance. |
| **TRKSTRBL** | Use to provide trunk maintenance through thresholding and alarm generation, and buffering of trunk trouble information. This level is used only for identifying troubled trunks and their problems. |
| **TSTEQUIP** | Use to display and post stand-alone test equipment. |
| **TTP** | Use to monitor and maintain trunk status and access the trunk maintenance sublevels. |
| **XFER** | Use to transfer data and to perform maintenance on the data transfer system. |

**-continued-**

| **Menu description table** (continued) | |
|---|---|
| **Menu** | **Description** |
| **XLIU** | Use to perform maintenance activities on the x.25/x.75 link I/F unit. |
| **X75TTP** | Use to monitor and maintain trunk status and access the trunk maintenance sublevels. |
| **-end-** | |

## Menu cross-reference

The menu cross-reference table provides a complete alphabetic list of every command and indicates its associated menu and the number of the page in this manual where that command is described.

| **Command/menu cross reference table** | | |
|---|---|---|
| **Command** | **Menu** | **Page** |
| abortx | XFER | X-57 |
| abtk | CARD | C-7 |
| abtk | CM | C-527 |
| abtk | DCH | D-67 |
| abtk | DEVICES (CFI) | D-367 |
| abtk | DEVICES (FP) | D-419 |
| abtk | DEVICES (LMX) | D-469 |
| abtk | DEVICES (PSP) | D-523 |
| abtk | DTC | D-823 |
| abtk | DTCI | D-967 |
| abtk | FP | F-57 |
| abtk | ICRM | I-65 |
| abtk | LGC | L-269 |
| abtk | LGCI | L-413 |
| abtk | LTC | L-741 |
| abtk | MATRIX | M-67 |
| abtk | MSB6 | M-535 |
| abtk | MSB7 | M-643 |
| **-continued-** | | |

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| abtk | OPMPES | O-43 |
| abtk | RCC | R-5 |
| abtk | RCCI | R-147 |
| abtk | SHELF | S-565 |
| abtk | SMS | S-703 |
| abtk | SMU | S-845 |
| abtk | SRUPES | S-1015 |
| abtk | SYSTEM | S-1157 |
| abtk | TMS | T-5 |
| abtkmcr | PLANE | P-23 |
| abtdly | C7LKSET | C-829 |
| ack | SA | S-5 |
| act | C7LKSET | C-831 |
| act | LINKSET | L-619 |
| act | SBS | S-57 |
| actfsa | SBSSEL | S-85 |
| actlap | DPNSS | D-669 |
| addcos | LineSel | L-583 |
| addcust | LineSel | L-585 |
| adddwr | LineSel | L-587 |
| addofc | LineSel | L-589 |
| addsite | LineSel | L-591 |
| adjust | Clock | C-445 |
| alarm | CMMnt | C-609 |
| alarm | ENET | E-47 |
| align | Memory | M-205 |
| alloc | DDU | D-295 |
| almstat | LTP | L-889 |
| alm | LTPISDN | L-1241 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| alt | LNS | L-681 |
| altinfo | ALT | A-23 |
| altpath | NETPATH | N-163 |
| alttest | CARD | C-11 |
| alttest | NETPATH | N-167 |
| alttype | NETPATH | N-171 |
| analyze | INTEG | I-197 |
| analyze | NET INTEG | N-61 |
| ans | SA | S-7 |
| aosssel | SASelect | S-143 |
| apply | AUTOCTRL | A-347 |
| apply | CODECTRL | C-665 |
| apply | GRPCTRL | G-5 |
| apply | INTCCTRL | I-177 |
| apply | RTECTRL | R-269 |
| att | TRKS | T-225 |
| attcon | LineSel | L-593 |
| attcon | SASelect | S-145 |
| audit | DIRP | D-569 |
| audit | DRM | D-735 |
| audit | INTEG | I-203 |
| audit | OPMPES | O-45 |
| audit | SRUPES | S-1017 |
| auditlink | DPNSS | D-671 |
| autocnv | TRKCONV | T-131 |
| autoctrl | NWM | N-341 |
| autold | CMMnt | C-617 |
| bal | ALT | A-29 |
| bal | LTPMAN | L-1489 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| balnet | LTPLTA | L-1391 |
| bchcon | LTPISDN | L-1243 |
| bert | DATA | D-3 |
| bert | ENET | E-51 |
| bert | LTPDATA | L-1067 |
| bert(isdn) | LTPDATA | L-1091 |
| berttime | DATA | D-13 |
| berttime | LTPDATA | L-1099 |
| bpvo | LTPDATA | L-1103 |
| bsy | APUX | A-367 |
| bsy | Card | C-91 |
| bsy | CARD | C-15 |
| bsy | Chain | C-299 |
| bsy | CONS | C-691 |
| bsy | C6TTP | C-721 |
| bsy | C7LKSET | C-847 |
| bsy | C7RTESET | C-989 |
| bsy | C7TTP | C-1015 |
| bsy | DATA | D-17 |
| bsy | DCH | D-69 |
| bsy | DDU | D-299 |
| bsy | DEVICES (CFI) | D-371 |
| bsy | DEVICES (FP) | D-421 |
| bsy | DEVICES (LMX) | D-473 |
| bsy | DEVICES (PSP) | D-527 |
| bsy | DPNSS | D-673 |
| bsy | DRAM | D-699 |
| bsy | DTC | D-825 |
| bsy | DTCI | D-969 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| bsy | EIU | E-3 |
| bsy | ESA | E-119 |
| bsy | ESTU | E-159 |
| bsy | EXND | E-187 |
| bsy | FBUS | F-5 |
| bsy | FP | F-59 |
| bsy | FRIU | F-101 |
| bsy | IBNCON | I-7 |
| bsy | ICRM | I-67 |
| bsy | IDT | I-135 |
| bsy | IOC | I-241 |
| bsy | IPML | I-323 |
| bsy | IRLINK | I-349 |
| bsy | ISG | I-365 |
| bsy | LAYER | L-5 |
| bsy | LCM | L-31 |
| bsy | LCME | L-109 |
| bsy | LCMI | L-169 |
| bsy | LCOM | L-225 |
| bsy | LGC | L-271 |
| bsy | LGCI | L-415 |
| bsy | LIM | L-537 |
| bsy | LINKSET | L-623 |
| bsy | LIU7 | L-641 |
| bsy | LTC | L-743 |
| bsy | LTP | L-901 |
| bsy(isdn) | LTP | L-907 |
| bsy | MANUAL | M-3 |
| bsy | MATRIX | M-71 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| bsy | MC | M-137 |
| bsy | MONITOR | M-279 |
| bsy | MP | M-345 |
| bsy | MPC | M-385 |
| bsy | MS | M-441 |
| bsy | MSB6 | M-537 |
| bsy | MSB7 | M-645 |
| bsy | MTD | M-753 |
| bsy | MTM | M-781 |
| bsy | NET | N-5 |
| bsy | NET JCTRS | N-115 |
| bsy | NET LINKS | N-141 |
| bsy | NET XPTS | N-227 |
| bsy | NIU | N-257 |
| bsy | OAU | O-3 |
| bsy | OPMPES | O-47 |
| bsy | PLANE | P-25 |
| bsy | PMC | P-159 |
| bsy | POST | P-267 |
| bsy | POSTDEV | P-329 |
| bsy | PRADCH | P-357 |
| bsy | PVC | P-423 |
| bsy | RCCI | R-149 |
| bsy | RCC | R-7 |
| bsy | SCCPLOC | S-203 |
| bsy | SCCPRPC | S-299 |
| bsy | SCCPRSS | S-323 |
| bsy | SCPLOC | S-367 |
| bsy | SEAS | S-417 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| bsy | Shelf | S-437 |
| bsy | SHELF | S-571 |
| bsy | SLM | S-643 |
| bsy | SMS | S-705 |
| bsy | SMU | S-847 |
| bsy | SRUPES | S-1019 |
| bsy | STC | S-1123 |
| bsy | SYSTEM | S-1159 |
| bsy | TMS | T-7 |
| bsy | TPC | T-103 |
| bsy | TRKCONV | T-133 |
| bsy | TTP | T-257 |
| bsy | XLIU | X-81 |
| bsy | X75TTP | X-3 |
| bsychn | Shelf | S-445 |
| bsyms | Card | C-103 |
| bsyms | MS | M-449 |
| bterm | DATA | D-21 |
| buffsel | NET INTEG | N-67 |
| bufpath | NETPATH | N-173 |
| busy | IBNCON | I-11 |
| busy | SA | S-9 |
| callset | BERP | B-5 |
| calltrf | MANUAL | M-7 |
| calltrf | TTP | T-261 |
| cap | LTPLTA | L-1395 |
| card | Card | C-111 |
| card | CARD | C-23 |
| card | Chain | C-305 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| card | Clock | C-451 |
| card | IOC | I-245 |
| card | Shelf | S-451 |
| card | SHELF | S-579 |
| cardlist | NETPATH | N-179 |
| carrier | TRKS | T-227 |
| ccbcapture | INTEG | I-207 |
| ccis6 | CCS | C-255 |
| ccs7 | CCS | C-257 |
| cdr | IOD | I-287 |
| cdrsrch | IOD | I-289 |
| chain | Card | C-115 |
| chain | Chain | C-309 |
| chain | Clock | C-455 |
| chain | Shelf | S-455 |
| charge | OPMPES | O-49 |
| charge | SRUPES | S-1021 |
| check | BERP | B-9 |
| checkinv | CM | C-529 |
| chklnk | NET | N-15 |
| cic | C7TTP | C-1019 |
| ckt | TTP | T-263 |
| cktinfo | TTP | T-267 |
| cktinfo | X75TTP | X-7 |
| cktloc | LTP | L-915 |
| cktloc | TTP | T-269 |
| cktloc | X75TTP | X-9 |
| cktmon | MONITOR | M-283 |
| ckttst | ALT | A-31 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| ckttst | LTPMAN | L-1493 |
| claim | Memory | M-209 |
| claim | PLANE | P-31 |
| cleanup | DIRP | D-573 |
| clear | BERT | B-89 |
| clear | C7MSUVER | C-925 |
| clear | IBNCON | I-15 |
| clear | INTEG | I-211 |
| clear | NETPATH | N-181 |
| clear | NOP | N-311 |
| clkstat | NET | N-19 |
| clock | Card | C-117 |
| clock | Chain | C-311 |
| clock | MC | M-141 |
| clock | MS | M-457 |
| clock | Shelf | S-457 |
| close | DIRP | D-583 |
| clr | DRAM | D-703 |
| clr | MTM | M-783 |
| clr | OAU | O-7 |
| clralm | LNSTRBL | L-699 |
| clralm | TRKSTRBL | T-199 |
| clrbuf | LNSTRBL | L-703 |
| clrbuf | TRKSTRBL | T-201 |
| clrbuff | DDU | D-301 |
| clrcnts | MC | M-143 |
| clrcnts | PMC | P-163 |
| clrfcnt | DDU | D-303 |
| clrfw | SLM | S-647 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| cmmnt | CM | C-531 |
| cntrs | Memory | M-211 |
| codectrl | NWM | N-343 |
| coin | LTPLTA | L-1401 |
| coldst | LTPISDN | L-1249 |
| commstat | SBSSEL | S-87 |
| config. | Memory | M-215 |
| config | PLANE | P-35 |
| connect | LTPDATA | L-1109 |
| connect | PRADCH | P-361 |
| connlog | ENET | E-53 |
| cont | IDT | I-137 |
| cont | ISG | I-369 |
| cont | PRADCH | P-375 |
| conv | TRKCONV | T-137 |
| copy | DRM | D-741 |
| correct | SAEdit | S-43 |
| cpos | MONITOR | M-285 |
| cpstat | PM | P-103 |
| cpu | ENET | E-55 |
| cpypath | NETPATH | N-183 |
| create_ttp | TTP | T-271 |
| creatset | LNSTRBL | L-707 |
| creatset | TRKSTRBL | T-203 |
| cvbsy | TRKCONV | T-141 |
| cvcot | TRKCONV | T-145 |
| cvnext | TRKCONV | T-149 |
| cvpost | TRKCONV | T-151 |
| cvrts | TRKCONV | T-155 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| cvtest | C7TTP | C-1021 |
| c6state | C6TTP | C-725 |
| c7bert | C7LKSET | C-851 |
| c7lkset | CCS7 | C-273 |
| c7msuver | CCS7 | C-275 |
| c7rteset | CCS7 | C-277 |
| dat | DRM | D-753 |
| data_screen | LTP | L-921 |
| dav_screen | LTP | L-923 |
| dch | LGCI | L-421 |
| dch | RCCI | R-155 |
| dch | TMS | T-13 |
| dchcon | LTPISDN | L-1251 |
| dchcon | LTPMAN | L-1497 |
| dcrmoch | NWM | N-345 |
| dcrsel | NWM | N-349 |
| dcsig | LTPISDN | L-1255 |
| dctltp | LTP | L-925 |
| dctttp | TTP | T-275 |
| dddin | SASelect | S-147 |
| ddo | SASelect | S-149 |
| deact | C7LKSET | C-853 |
| deact | LINKSET | L-625 |
| deact | SBS | S-61 |
| deactfsa | SBSSEL | S-89 |
| deactlap | DPNSS | D-675 |
| delays | PERFORM | P-5 |
| demount | DRM | D-763 |
| devices | FP | F-63 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| devices | NIU | N-261 |
| define | ALTBAL | A-51 |
| define | ALTCKTTST | A-95 |
| define | ALTDIAG | A-139 |
| define | ALTLIT | A-183 |
| define | ALTSDIAG | A-229 |
| define | BERP | B-19 |
| define | BERT | B-93 |
| define | XFER | X-59 |
| defman | ALTBAL | A-61 |
| defman | ALTCKTTST | A-105 |
| defman | ALTDIAG | A-149 |
| defman | ALTLIT | A-193 |
| defman | ALTSDIAG | A-239 |
| defpath | NETPATH | N-185 |
| defschd | ALTBAL | A-63 |
| defschd | ALTCKTTST | A-107 |
| defschd | ALTDIAG | A-151 |
| defschd | ALTLIT | A-195 |
| defschd | ALTSDIAG | A-241 |
| deftime | BERP | B-31 |
| deftime | DCTLTP | D-113 |
| deftime | DCTTTP | D-203 |
| deftst | NETPATH | N-189 |
| delcos | LineSel | L-595 |
| delcust | LineSel | L-597 |
| deldwr | LineSel | L-599 |
| delete | DCTLTP | D-123 |
| delete | DCTTTP | D-213 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| delete_ttp | TTP | T-277 |
| deload | CARD | C-25 |
| deload | ENET | E-57 |
| deload | MATRIX | M-75 |
| deload | SHELF | S-581 |
| deload | SYSTEM | S-1163 |
| delofc | LineSel | L-601 |
| delman | ATT | A-297 |
| delsite | LineSel | L-603 |
| det | LTPISDN | L-1259 |
| detail | POST | P-271 |
| devices | FP | F-63 |
| devtype | IOC | I-247 |
| dgttst | LTPLTA | L-1405 |
| diag | ALT | A-35 |
| diag | LTP | L-927 |
| diag(isdn) | LTP | L-943 |
| diagnose | IBNCON | I-17 |
| dial | DCTLTP | D-131 |
| dial | DCTTTP | D-221 |
| dirasst | AOSSsel | A-273 |
| dirp | IOD | I-291 |
| disable | AUTOCTRL | A-349 |
| disable | FMT | F-31 |
| disalm | CCIS6 | C-239 |
| disalm | CCS7 | C-279 |
| disalm | SCP | S-351 |
| disalm | SCPLOC | S-375 |
| disalm | STAT TKGRP | S-1087 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| disalm | STAT TRKS | S-1063 |
| disp | APUX | A-371 |
| disp | CARD | C-31 |
| disp | CARRIER | C-213 |
| disp | DCH | D-71 |
| disp | DEVICES (CFI) | D-375 |
| disp | DEVICES (LMX) | D-463 |
| disp | DEVICES (PSP) | D-531 |
| disp | DISPLAY | D-623 |
| disp | DRAM | D-705 |
| disp | DTC | D-833 |
| disp | DTCI | D-975 |
| disp | EIU | E-7 |
| disp | ENET | E-61 |
| disp | ESA | E-123 |
| disp | Ext | E-207 |
| disp | ICRM | I-73 |
| disp | IDT | I-141 |
| disp | LCM | L-37 |
| disp | LCME | L-113 |
| disp | LCMI | L-173 |
| disp | LCOM | L-229 |
| disp | LGC | L-279 |
| disp | LGCI | L-423 |
| disp | LIM | L-541 |
| disp | LIU7 | L-645 |
| disp | LNSTRBL | L-711 |
| disp | LTC | L-751 |
| disp | MATRIX | M-81 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| disp | MP | M-349 |
| disp | MSB6 | M-541 |
| disp | MSB7 | M-651 |
| disp | MTM | M-785 |
| disp | NET | N-9 |
| disp | NET INTEG | N-69 |
| disp | NET JCTRS | N-119 |
| disp | NET LINKS | N-143 |
| disp | NETPATH | N-193 |
| disp | NET XPTS | N-231 |
| disp | NIU | N-263 |
| disp | OAU | O-9 |
| disp | OPMPES | O-51 |
| disp | PM | P-105 |
| disp | POST | P-277 |
| disp | RCC | R-15 |
| disp | RCCI | R-157 |
| disp | SHELF | S-587 |
| disp | SMS | S-713 |
| disp | SMU | S-855 |
| disp | SMU | S-855 |
| disp | SPM | S-987 |
| disp | SRUPES | S-1023 |
| disp | SYSTEM | S-1169 |
| disp | TMS | T-15 |
| disp | TPC | T-105 |
| disp | TRKSTRBL | T-205 |
| disp | TSTEquip | T-243 |
| disp | XLIU | X-85 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| dispcnts | MC | M-147 |
| dispcnts | PMC | P-171 |
| dispgrp | STAT TKGRP | S-1089 |
| display | BERT | B-99 |
| display | DCTLTP | D-143 |
| display | DCTTTP | D-233 |
| display | INTEG | I-213 |
| display | NWM | N-351 |
| display | SAEdit | S-47 |
| dispopt | POST | P-285 |
| disptrk | STAT TKGRP | S-1091 |
| disptrk | STAT TRKS | S-1065 |
| dmnt | DIRP | D-587 |
| dmnt | XFER | X-61 |
| door | OPMPES | O-53 |
| door | SRUPES | S-1025 |
| downld | MPC | M-389 |
| dpnss | CCS | C-259 |
| dpp | IOD | I-293 |
| dpsync | Clock | C-383 |
| dpsync | Clock | C-457 |
| dpsync | CM | C-533 |
| dpsync | CMMnt | C-619 |
| dpsync | MC | M-151 |
| dpsync | Memory | M-221 |
| dpsync | PLANE | P-39 |
| dpsync | PMC | P-167 |
| dpsync | Port | P-223 |
| dumpb | SBS | S-65 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| dumpb | SBSSTAT | S-105 |
| ebsmsg | LTP | L-965 |
| eiobkup | SBSSTAT | S-107 |
| enable | AUTOCTRL | A-351 |
| enable | FMT | F-33 |
| enclock | ENET | E-63 |
| endcld | SA | S-11 |
| endclg | SA | S-13 |
| equip | Ext | E-215 |
| equip | LTPDATA | L-1123 |
| equip | PRADCH | P-377 |
| exclct | AOSSsel | A-275 |
| exclqst | SASelect | S-153 |
| exclst | SASelect | S-157 |
| exclto | AOSSsel | A-279 |
| exclto | SASelect | S-161 |
| e2alink | CM | C-537 |
| fault | MTD | M-755 |
| fbus | LIM | L-543 |
| fcnt | DDU | D-307 |
| filter | INTEG | I-219 |
| filter | NET INTEG | N-77 |
| findstate | ENET | E-67 |
| fmt | PM | P-107 |
| frls | IBNCON | I-21 |
| frls | LTP | L-967 |
| frls | MONITOR | M-289 |
| frls | MP | M-353 |
| frls | TTP | T-279 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| gwtrantst | SCCPLOC | S-207 |
| gwtrantst | SCCPRSS | S-327 |
| groupcmd | C7TTP | C-1023 |
| grpctrl | NWM | N-355 |
| haltatt | ATT | A-303 |
| hcpygrp | STAT TKGRP | S-1095 |
| hcpytrk | STAT TKGRP | S-1097 |
| hcpytrk | STAT TRKS | S-1069 |
| help | DCAP | D-51 |
| history | OPMPES | O-55 |
| history | SRUPES | S-1027 |
| hold | C6TTP | C-727 |
| hold | C7TTP | C-1025 |
| hold | DATA | D-23 |
| hold | DCTLTP | D-151 |
| hold | DCTTTP | D-241 |
| hold | LTP | L-971 |
| hold | LTPDATA | L-1141 |
| hold | LTPISDN | L-1265 |
| hold | LTPLTA | L-1409 |
| hold | LTPMAN | L-1501 |
| hold | MANUAL | M-9 |
| hold | MONITOR | M-291 |
| hold | PRADCH | P-395 |
| hold | TRKCONV | T-159 |
| hold | TTP | T-281 |
| hold | X75TTP | X-13 |
| hset | MANUAL | M-11 |
| hset | TTP | T-285 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| ibntrk | SASelect | S-165 |
| icrmlogs | ICRM | I-77 |
| idmtce | DEVICES (CFI) | D-377 |
| idmtce | DEVICES (LMX) | D-477 |
| idmtce | DEVICES (PSP) | D-533 |
| lfsloop | C7BERT | C-779 |
| iloss | LTPISDN | L-1267 |
| image | CMMnt | C-623 |
| imp | LTPISDN | L-1269 |
| inclct | AOSSsel | A-283 |
| inclqst | SASelect | S-167 |
| inclst | SASelect | S-171 |
| inclto | AOSSsel | A-285 |
| inclto | SASelect | S-173 |
| info | DRM | D-767 |
| info | EXND | E-189 |
| info | NETPATH | N-195 |
| info | SPM | S-989 |
| inh | C7LKSET | C-857 |
| inhibit | MTD | M-757 |
| inject | DCTLTP | D-153 |
| inject | DCTTTP | D-243 |
| injerr | C7BERT | C-785 |
| insync | CM | C-541 |
| intcctrl | NWM | N-357 |
| integ | ENET | E-71 |
| integ | NET | N-21 |
| interms | MS | M-459 |
| intmess | C7MSUVER | C-927 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| ioc | IOD | I-295 |
| ipml | PM | P-109 |
| irlink | RCC | R-23 |
| irlink | RCCI | R-159 |
| isg | LGCI | L-425 |
| isg | RCCI | R-161 |
| isg | TMS | T-17 |
| isgact | PERFORM | P-7 |
| ismd | DCAP | D-55 |
| isncp | DCAP | D-57 |
| item | STAT TKGRP | S-1101 |
| jack | LTPMAN | L-1503 |
| jack | MANUAL | M-13 |
| jack | TTP | T-287 |
| jctrs | NET | N-23 |
| jctrs | NET JCTRS | N-121 |
| kept | XFER | X-63 |
| layer | CCIS6 | C-243 |
| lco | LTP | L-973 |
| lco(isdn) | LTP | L-979 |
| ldpmall | PM | P-111 |
| level | LTP | L-987 |
| level | TTP | T-289 |
| linesel | SASelect | S-177 |
| linetst | LCOM | L-231 |
| link | CARD | C-33 |
| links | NET | N-25 |
| links | NET LINKS | N-145 |
| linkset | CCIS6 | C-245 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| list | AUTOCTRL | A-353 |
| list | CODECTRL | C-673 |
| list | Ext | E-217 |
| list | FMT | F-35 |
| list | GRPCTRL | G-13 |
| list | INTCCTRL | I-181 |
| list | RTECTRL | R-271 |
| listalm | LNSTRBL | L-715 |
| listalm | TRKSTRBL | T-207 |
| listdev | CONS | C-693 |
| listdev | DDU | D-311 |
| listdev | DLC | D-649 |
| listdev | IOD | I-297 |
| listdev | MPC | M-393 |
| listdev | MTD | M-759 |
| listman | ATT | A-305 |
| listset | APUX | A-373 |
| listset | DTC | D-841 |
| listset | DTCI | D-977 |
| listset | EIU | E-9 |
| listset | FRIU | F-103 |
| listset | ICRM | I-79 |
| listset | LCM | L-39 |
| listset | LCOM | L-233 |
| listset | LGC | L-287 |
| listset | LGCI | L-427 |
| listset | LIM | L-545 |
| listset | LIU7 | L-647 |
| listset | LTC | L-759 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| listset | MSB6 | M-543 |
| listset | MSB7 | M-653 |
| listset | NIU | N-265 |
| listset | RCC | R-25 |
| listset | RCCI | R-163 |
| listset | SMS | S-721 |
| listset | SMU | S-863 |
| listset | TMS | T-19 |
| listset | XLIU | X-87 |
| lit | ALT | A-37 |
| litinfo | ALTLIT | A-197 |
| lnsmp | LineSel | L-605 |
| lnsmp | SASelect | S-179 |
| lnstrbl | LNS | L-683 |
| lntst | LTPLTA | L-1411 |
| loadb | OPMPES | O-59 |
| loadb | SRUPES | S-1031 |
| loadcd | Card | C-119 |
| loadcd | Chain | C-313 |
| loadcd | Clock | C-463 |
| loadcd | Shelf | S-459 |
| loaden | SYSTEM | S-1173 |
| loadenall | SYSTEM | S-1179 |
| loadfw | TTP | T-293 |
| loadms | Card | C-129 |
| loadms | Chain | C-323 |
| loadms | MS | M-461 |
| loadms | Shelf | S-469 |
| loadnotest | DTC | D-845 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| loadnotest | MSB6 | M-545 |
| loadnotest | MSB7 | M-655 |
| loadnotest | LGC | L-291 |
| loadnotest | LGCI | L-431 |
| loadnotest | LTC | L-763 |
| loadnotest | RCC | R-29 |
| loadnotest | RCCI | R-167 |
| loadnotest | SMS | S-725 |
| loadnotest | SMU | S-867 |
| loadpm | APUX | A-375 |
| loadpm | DCH | D-73 |
| loadpm | DRAM | D-707 |
| loadpm | DTC | D-847 |
| loadpm | DTCI | D-981 |
| loadpm | EIU | E-11 |
| loadpm | ESA | E-125 |
| loadpm | FP | F-65 |
| loadpm | FRIU | F-105 |
| loadpm | ICRM | I-81 |
| loadpm | LCM | L-41 |
| loadpm | LCME | L-115 |
| loadpm | LCMI | L-175 |
| loadpm | LCOM | L-235 |
| loadpm | LGC | L-293 |
| loadpm | LGCI | L-433 |
| loadpm | LIM | L-547 |
| loadpm | LIU7 | L-649 |
| loadpm | LTC | L-765 |
| loadpm | MSB6 | M-547 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| loadpm | MSB7 | M-659 |
| loadpm | MTM | M-787 |
| loadpm | NIU | N-267 |
| loadpm | OAU | O-11 |
| loadpm | RCC | R-31 |
| loadpm | RCCI | R-169 |
| loadpm | SMS | S-727 |
| loadpm | SMU | S-869 |
| loadpm | STC | S-1125 |
| loadpm | TMS | T-21 |
| loadpm | XLIU | X-89 |
| loc | NET | N-27 |
| loc | NET XPTS | N-233 |
| locate | CARD | C-35 |
| locate | Clock | C-387 |
| locate | CM | C-545 |
| locate | DLC | D-653 |
| locate | ENET | E-73 |
| locate | MATRIX | M-83 |
| locate | MC | M-155 |
| locate | Memory | M-225 |
| locate | PMC | P-175 |
| locate | Port | P-227 |
| locate | SCCPLOC | S-211 |
| locate | SHELF | S-589 |
| locate | SLM | S-653 |
| locate | SYSTEM | S-1183 |
| logformat | ENET | E-75 |
| logmask | MC | M-157 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| logmask | PMC | P-177 |
| logs | INTEG | I-223 |
| loop | FRIU | F-107 |
| loop | POST | P-289 |
| loopbk | BERP | B-35 |
| loopbk | EIU | E-15 |
| loopbk | IDT | I-143 |
| loopbk | ISG | I-373 |
| loopbk | LCOM | L-237 |
| loopbk | LIU7 | L-653 |
| loopbk | LTPDATA | L-1143 |
| loopbk | PRADCH | P-397 |
| loopbk | X75TTP | X-15 |
| loopbk(isdn) | LTPDATA | L-1153 |
| loss | LTPMAN | L-1507 |
| loss | MANUAL | M-17 |
| loss | TTP | T-297 |
| lstband | LAYER | L-7 |
| lstclli | ATT | A-307 |
| lststop | ATT | A-313 |
| lstwait | ATT | A-315 |
| lta | LTPLTA | L-1413 |
| ltloopbk | LTPISDN | L-1281 |
| ltp | LNS | L-685 |
| ltprsrc | LTP | L-989 |
| ltp_aux_com | LTP | L-991 |
| ltp_aux_gate_com | LTP | L-993 |
| l1blmalm | LTPISDN | L-1273 |
| l1thrsh | LTPISDN | L-1277 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| manual | TTP | T-301 |
| match | Memory | M-227 |
| match | PLANE | P-41 |
| matejam | PLANE | P-45 |
| matrix | CARD | C-37 |
| matrix | ENET | E-79 |
| matrix | SHELF | S-591 |
| matrix | SYSTEM | S-1185 |
| mc | CM | C-547 |
| mdn | IOC | I-257 |
| meas | OPMPES | O-61 |
| meas | SRUPES | S-1033 |
| memory | CM | C-549 |
| memory | ENET | E-83 |
| mnt | DIRP | D-591 |
| mode | NET INTEG | N-81 |
| monconn | AOSSsel | A-287 |
| monconn | SASelect | S-183 |
| monitor | DRM | D-783 |
| monitor | TTP | T-303 |
| monlink | MONITOR | M-297 |
| monlta | LTPLTA | L-1417 |
| monpost | MONITOR | M-301 |
| monrel | AOSSsel | A-289 |
| monrel | SASelect | S-185 |
| montalk | MONITOR | M-305 |
| mount | DRM | D-787 |
| mtcchk | CM | C-551 |
| mtcchk | CMMnt | C-629 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| mtcchk | Memory | M-231 |
| mtcchk | MS | M-469 |
| mtcchk | SLM | S-655 |
| next | APUX | A-379 |
| next | Card | C-135 |
| next | C6TTP | C-729 |
| next | C7LKSET | C-861 |
| next | C7RTESET | C-993 |
| next | C7TTP | C-1027 |
| next | DATA | D-27 |
| next | DCH | D-63 |
| next | DCTLTP | D-159 |
| next | DCTTTP | D-249 |
| next | DEVICES (CFI) | D-381 |
| next | DEVICES (FP) | D-427 |
| next | DISPLAY | D-631 |
| next | DPNSS | D-677 |
| next | DRAM | D-711 |
| next | DTC | D-865 |
| next | DTCI | D-997 |
| next | EIU | E-19 |
| next | ESA | E-129 |
| next | ESTU | E-161 |
| next | FMT | F-37 |
| next | FRIU | F-111 |
| next | IBNCON | I-23 |
| next | ICRM | I-85 |
| next | IDT | I-147 |
| next | IPML | I-327 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| next | ISG | I-377 |
| next | LCM | L-55 |
| next | LCME | L-119 |
| next | LCMI | L-179 |
| next | LCOM | L-239 |
| next | LGC | L-311 |
| next | LGCI | L-451 |
| next | LIM | L-551 |
| next | LIU7 | L-657 |
| next | LTC | L-783 |
| next | LTP | L-995 |
| next | LTPDATA | L-1167 |
| next | LTPLTA | L-1423 |
| next | LTPISDN | L-1287 |
| next | LTPMAN | L-1509 |
| next | MANUAL | M-19 |
| next | MONITOR | M-309 |
| next | MP | M-355 |
| next | MSB6 | M-563 |
| next | MSB7 | M-675 |
| next | MTM | X-57 |
| next | NETPATH | N-201 |
| next | NIU | N-273 |
| next | OAU | O-15 |
| next | OPMPES | O-63 |
| next | PM | P-113 |
| next | POST | P-293 |
| next | PRADCH | P-401 |
| next | PVC | P-427 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| next | RCC | R-49 |
| next | RCCI | R-187 |
| next | SA | S-15 |
| next | SCCPLOC | S-215 |
| next | SCCPRSS | S-331 |
| next | SCPLOC | S-379 |
| next | SMS | S-745 |
| next | SMU | S-887 |
| next | SPM | S-993 |
| next | SRUPES | S-1035 |
| next | STC | S-1129 |
| next | TMS | T-37 |
| next | TPC | T-107 |
| next | TRKCONV | T-163 |
| next | TTP | T-305 |
| next | XLIU | X-92 |
| next | X75TTP | X-21 |
| nextcall | SA | S-15 |
| nextcall | SAEdit | S-49 |
| nextdev | POSTDEV | P-333 |
| nextgrp | STAT TKGRP | S-1103 |
| nextls | C7LKSET | C-863 |
| nextpage | NOP | N-313 |
| nextpage | SBSSTAT | S-109 |
| nextpage | SBSSTRM | S-129 |
| nexttrk | STAT TKGRP | S-1105 |
| nexttrk | STAT TRKS | S-1073 |
| noise | LTPMAN | L-1519 |
| noise | MANUAL | M-23 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| noise | TTP | T-309 |
| nop | IOD | I-305 |
| nse | LTPISDN | L-1297 |
| nx25ci | IOD | I-307 |
| offl | APUX | A-381 |
| offl | Card | C-139 |
| offl | CARD | C-39 |
| offl | Chain | C-329 |
| offl | CONS | C-697 |
| offl | C7LKSET | C-865 |
| offl | C7RTESET | C-995 |
| offl | DCH | D-77 |
| offl | DDU | D-315 |
| offl | DEVICES (CFI) | D-383 |
| offl | DEVICES (FP) | D-429 |
| offl | DLC | D-655 |
| offl | DPNSS | D-679 |
| offl | DRAM | D-713 |
| offl | DTC | D-867 |
| offl | DTCI | D-999 |
| offl | EIU | E-21 |
| offl | ESA | E-131 |
| offl | ESTU | E-163 |
| offl | EXND | E-191 |
| offl | FBUS | F-9 |
| offl | FP | F-71 |
| offl | FRIU | F-113 |
| offl | ICRM | I-87 |
| offl | IDT | I-149 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| offl | IOC | I-259 |
| offl | IPML | I-329 |
| offl | ISG | I-379 |
| offl | LAYER | L-11 |
| offl | LCM | L-57 |
| offl | LCME | L-121 |
| offl | LCMI | L-181 |
| offl | LCOM | L-241 |
| offl | LGC | L-313 |
| offl | LGCI | L-453 |
| offl | LIM | L-553 |
| offl | LINKSET | L-627 |
| offl | LIU7 | L-659 |
| offl | LTC | L-785 |
| offl | MATRIX | M-87 |
| offl | MPC | M-397 |
| offl | MSB6 | M-565 |
| offl | MSB7 | M-677 |
| offl | MTD | M-763 |
| offl | MTM | M-793 |
| offl | NET | N-29 |
| offl | NET JCTRS | N-123 |
| offl | NIU | N-275 |
| offl | OAU | O-17 |
| offl | OPMPES | O-67 |
| offl | POST | P-295 |
| offl | POSTDEV | P-335 |
| offl | PVC | P-429 |
| offl | RCC | R-51 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| offl | RCCI | R-189 |
| offl | SCCPLOC | S-217 |
| offl | SCCPRPC | S-303 |
| offl | SCCPRSS | S-333 |
| offl | SCPLOC | S-381 |
| offl | SEAS | S-419 |
| offl | Shelf | S-475 |
| offl | SHELF | S-593 |
| offl | SLM | S-657 |
| offl | SMS | S-747 |
| offl | SMU | S-889 |
| offl | SPM | S-995 |
| offl | SRUPES | S-1039 |
| offl | STC | S-1131 |
| offl | SYSTEM | S-1187 |
| offl | TMS | T-39 |
| offl | TPC | T-109 |
| offl | XLIU | X-95 |
| offlchn | Shelf | S-483 |
| oosremen | SYSTEM | S-1191 |
| op | MANUAL | M-25 |
| op | TTP | T-311 |
| openckt | OPMPES | O-69 |
| openckt | SRUPES | S-1041 |
| opr | SA | S-19 |
| orig | LTPLTA | L-1433 |
| othopr | SA | S-21 |
| outasst | SASelect | S-187 |
| output | BERP | B-39 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| ovrride | ALTBAL | A-65 |
| ovrride | ALTCKTTST | A-109 |
| ovrride | ALTDIAG | A-153 |
| ovrride | ALTLIT | A-199 |
| ovrride | ALTSDIAG | A-243 |
| pads | TTP | T-317 |
| page | AUTOCTRL | A-357 |
| page | CODECTRL | C-677 |
| page | GRPCTRL | G-17 |
| page | INTCCTRL | I-185 |
| page | NWM | N-359 |
| page | RTECTRL | R-273 |
| parmset | BERP | B-43 |
| patchxpm | DTCI | D-1003 |
| patchxpm | TMS | T-43 |
| path | NET | N-31 |
| pathtest | ENET | E-85 |
| perform | DTC | D-871 |
| perform | DTCI | D-1005 |
| perform | LGC | L-317 |
| perform | LGCI | L-457 |
| perform | LTC | L-789 |
| perform | RCC | R-55 |
| perform | RCCI | R-193 |
| perform | SMS | S-751 |
| perform | SMU | S-893 |
| perform | TMS | T-45 |
| pes | PM | P-115 |
| pfquery | PERFORM | P-9 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| plane | FP | F-75 |
| pmact | PERFORM | P-11 |
| pmc | CM | C-553 |
| pmloader | PM | P-117 |
| pmloop | C7BERT | C-787 |
| pmreset | DTC | D-877 |
| pmreset | DTCI | D-1007 |
| pmreset | FP | F-77 |
| pmreset | LGC | L-323 |
| pmreset | LGCI | L-463 |
| pmreset | LIM | L-555 |
| pmreset | LTC | L-795 |
| pmreset | MSB6 | M-569 |
| pmreset | MSB7 | M-681 |
| pmreset | NIU | N-279 |
| pmreset | RCC | R-61 |
| pmreset | RCCI | R-199 |
| pmreset | SMS | S-757 |
| pmreset | SMU | S-899 |
| pmreset | TMS | T-49 |
| pms | INTEG | I-225 |
| pms | NET INTEG | N-85 |
| port | Card | C-145 |
| port | MC | M-161 |
| post | ALT | A-39 |
| post | ALTBAL | A-69 |
| post | ALTCKTTST | A-113 |
| post | ALTDIAG | A-157 |
| post | ALTLIT | A-203 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| post | ALTSDIAG | A-247 |
| post | APUX | A-383 |
| post | BERT | B-105 |
| post | CARRIER | C-221 |
| post | C6TTP | C-733 |
| post | C7LKSET | C-867 |
| post | C7MSUVER | C-929 |
| post | C7RTESET | C-997 |
| post | C7TTP | C-1031 |
| post | DATA | D-31 |
| post | DCH | D-79 |
| post | DCTLTP | D-161 |
| post | DCTTTP | D-251 |
| post | DEVICES (CFI) | D-387 |
| post | DEVICES (LMX) | D-481 |
| post | DEVICES (PSP) | D-537 |
| post | DISPLAY | D-633 |
| post | DPNSS | D-681 |
| post | DRAM | D-715 |
| post | DTC | D-881 |
| post | DTCI | D-1013 |
| post | EIU | E-25 |
| post | ESA | E-133 |
| post | ESTU | E-165 |
| post | FMT | F-39 |
| post | FRIU | F-117 |
| post | ICRM | I-91 |
| post | IDT | I-151 |
| post | IPML | I-331 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| post | ISG | I-381 |
| post | LCM | L-59 |
| post | LCME | L-123 |
| post | LCMI | L-183 |
| post | LCOM | L-245 |
| post | LGC | L-327 |
| post | LGCI | L-467 |
| post | LIM | L-559 |
| post | LINKSET | L-629 |
| post | LIU7 | L-663 |
| post | LTC | L-799 |
| post | LTP | L-1005 |
| post | LTPDATA | L-1177 |
| post | LTPISDN | L-1301 |
| post | LTPLTA | L-1439 |
| post | LTPMAN | L-1521 |
| post | MANUAL | M-31 |
| post | MONITOR | M-313 |
| post | MP | M-357 |
| post | MSB6 | M-577 |
| post | MSB7 | M-689 |
| post | MTM | M-795 |
| post | NET INTEG | N-93 |
| post | NETPATH | N-203 |
| post | NIU | N-285 |
| post | NOP | N-315 |
| post | OAU | O-19 |
| post | OPMPES | O-71 |
| post | PM | P-121 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| post | POST | P-301 |
| post | PVC | P-431 |
| post | PRADCH | P-405 |
| post | RCC | R-65 |
| post | RCCI | R-203 |
| post | SCCPLOC | S-219 |
| post | SCCPRPC | S-305 |
| post | SCCPRSS | S-335 |
| post | SCP | S-353 |
| post | SCPLOC | S-387 |
| post | SMS | S-761 |
| post | SMU | S-903 |
| post | SPM | S-997 |
| post | SRUPES | S-1043 |
| post | STC | S-1137 |
| post | TMS | T-57 |
| post | TPC | T-115 |
| post | TRKCONV | T-167 |
| post | TSTEquip | T-245 |
| post | TTP | T-323 |
| post | XLIU | X-99 |
| post | X75TTP | X-25 |
| postdev | DEVICES (FP) | D-435 |
| post(isdn) | LTP | L-1023 |
| postisg | ISGACT | I-395 |
| postisp | ISP | I-415 |
| post00 | DTCI | D-1013 |
| potsdiag | LTP | L-1039 |
| pps | IDT | I-155 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| prefix | LTP | L-1043 |
| prev | DPNSS | D-683 |
| prevdm | IBNCON | I-27 |
| prevpage | SBSSTAT | S-111 |
| prevpage | SBSSTRM | S-131 |
| print | SA | S-17 |
| print | SAEdit | S-51 |
| process | BERP | B-45 |
| progress | IDT | I-161 |
| protsw | CARRIER | C-231 |
| protsw | POST | P-311 |
| prtalm | STAT TKGRP | S-1107 |
| prtalm | STAT TRKS | S-1075 |
| prvpage | NOP | N-319 |
| pside | MS | M-471 |
| pvc | SEAS | S-421 |
| qband | LAYER | L-13 |
| qconline | IBNCON | I-29 |
| qconv | MPC | M-401 |
| qcustgrp | IBNCON | I-31 |
| qipml | IPML | I-333 |
| qlayer | LAYER | L-15 |
| qlayer | LTPISDN | L-1319 |
| qlayer2 | LTPDATA | L-1201 |
| qlink | MPC | M-405 |
| qloop | LTPISDN | L-1323 |
| ql1perf | LTPDATA | L-1195 |
| qmpc | MPC | M-407 |
| qmspw | SASelect | S-191 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| qnode | DLC | D-657 |
| qnode | MPC | M-413 |
| qrydev | POSTDEV | P-341 |
| qryfepc | C7LKSET | C-871 |
| qrysig | C6TTP | C-741 |
| qrysig | C7TTP | C-1039 |
| qsbsylk | MPC | M-415 |
| qseated | IBNCON | I-35 |
| qsup | LNSTRBL | L-719 |
| qsup | TRKSTRBL | T-209 |
| qtst | NET | N-33 |
| qtst | NET XPTS | N-239 |
| query | C7BERT | C-793 |
| query | DIRP | D-601 |
| query | FBUS | F-11 |
| query | IOC | I-263 |
| query | NOP | N-321 |
| query | XFER | X-65 |
| queryalm | CCS | C-261 |
| querycd | Card | C-147 |
| querycd | Chain | C-335 |
| querycd | Shelf | S-489 |
| queryclk | Clock | C-389 |
| queryclk | CM | C-555 |
| querycm | Clock | C-391 |
| querycm | CM | C-557 |
| querydv | DEVICES (CFI) | D-391 |
| querydv | DEVICES (LMX) | D-485 |
| querydv | DEVICES (PSP) | D-541 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| queryen | CARD | C-45 |
| queryen | ENET | E-87 |
| queryen | MATRIX | M-91 |
| queryen | SHELF | S-601 |
| queryen | SYSTEM | S-1195 |
| queryflg | CM | C-565 |
| queryflt | C7LKSET | C-873 |
| queryflt | C7RTESET | C-1001 |
| queryflt | PVC | P-435 |
| queryflt | SCPLOC | S-391 |
| queryflt | SEAS | S-423 |
| queryfmt | FMT | F-43 |
| queryfp | DEVICES (FP) | D-439 |
| queryir | IRLINK | I-351 |
| queryisg | ISGACT | I-399 |
| querylap | DPNSS | D-685 |
| querylk | LCOM | L-249 |
| querylnk | DPNSS | D-687 |
| querymcr | PLANE | P-49 |
| queryms | Card | C-155 |
| queryms | Chain | C-343 |
| queryms | Clock | C-479 |
| queryms | MS | M-473 |
| queryms | Shelf | S-497 |
| querypc | C7RTESET | C-1003 |
| querypes | OPMPES | O-75 |
| querypes | SRUPES | S-1047 |
| querypl | PLANE | P-51 |
| querypm | APUX | A-387 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| querypm | DCH | D-81 |
| querypm | DRAM | D-717 |
| querypm | DTC | D-885 |
| querypm | DTCI | D-1017 |
| querypm | EIU | E-29 |
| querypm | ESA | E-135 |
| querypm | EXND | E-193 |
| querypm | FP | F-81 |
| querypm | FRIU | F-121 |
| querypm | ICRM | I-95 |
| querypm | IDT | I-163 |
| querypm | LCM | L-63 |
| querypm | LCME | L-127 |
| querypm | LCMI | L-187 |
| querypm | LCOM | L-253 |
| querypm | LGC | L-331 |
| querypm | LGCI | L-471 |
| querypm | LIM | L-561 |
| querypm | LIU7 | L-667 |
| querypm | LTC | L-803 |
| querymp | MP | M-361 |
| querypm | MSB6 | M-581 |
| querypm | MSB7 | M-693 |
| querypm | MTM | M-797 |
| querypm | NIU | N-289 |
| querypm | OAU | O-21 |
| querypm | RCC | R-69 |
| querypm | RCCI | R-207 |
| querypm | SMS | S-765 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| querypm | SMU | S-907 |
| querypm | SPM | S-999 |
| querypm | TMS | T-61 |
| querypm | TPC | T-111 |
| queryproc | CONS | C-699 |
| queryproc | IOC | I-265 |
| queryproc | MTD | M-765 |
| queryrex | ENET | E-89 |
| querysrv | SCP | S-355 |
| queryss | SCCPLOC | S-223 |
| queryss | SCCPRPC | S-307 |
| queryss | SCCPRSS | S-339 |
| querystc | STC | S-1141 |
| querytape | MTD | M-767 |
| querytrf | C7LKSET | C-891 |
| querytrf | SCPLOC | S-395 |
| querytty | CONS | C-701 |
| queryupd | SCPLOC | S-399 |
| queryusr | C7LKSET | C-897 |
| queryusr | DPNSS | D-689 |
| quit | ACTIVITY | A-5 |
| quit | ALT | A-41 |
| quit | ALTBAL | A-71 |
| quit | ALTCKTTST | A-115 |
| quit | ALTDIAG | A-159 |
| quit | ALTLIT | A-205 |
| quit | ALTSDIAG | A-249 |
| quit | APUX | A-389 |
| quit | ATT | A-317 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| quit | AUTOCTRL | A-359 |
| quit | BERP | B-51 |
| quit | BERT | B-107 |
| quit | Card | C-165 |
| quit | CARRIER | C-233 |
| quit | CCIS6 | C-247 |
| quit | CCS | C-265 |
| quit | CCS7 | C-285 |
| quit | Chain | C-353 |
| quit | Clock | C-399 |
| quit | Clock | C-489 |
| quit | CM | C-567 |
| quit | CMMnt | C-635 |
| quit | CODECTRL | C-679 |
| quit | CONS | C-703 |
| quit | CPSTATUS | C-715 |
| quit | C6TTP | C-743 |
| quit | C7BERT | C-799 |
| quit | C7LKSET | C-899 |
| quit | C7MSUVER | C-931 |
| quit | C7RTESET | C-1005 |
| quit | C7TTP | C-1041 |
| quit | DATA | D-39 |
| quit | DCAP | D-59 |
| quit | DCH | D-83 |
| quit | DCTLTP | D-165 |
| quit | DCTTTP | D-255 |
| quit | DDU | D-317 |
| quit | DELAYS (LGC) | D-335 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| quit | DELAYS (RCC) | D-351 |
| quit | DEVICES (CFI) | D-397 |
| quit | DEVICES (FP) | D-445 |
| quit | DEVICES (LMX) | D-491 |
| quit | DEVICES (NIU) | D-511 |
| quit | DEVICES (PSP) | D-547 |
| quit | DIRP | D-595 |
| quit | DISPLAY | D-643 |
| quit | DLC | D-659 |
| quit | DPNSS | D-691 |
| quit | DRAM | D-719 |
| quit | DRM | D-789 |
| quit | DTC | D-899 |
| quit | DTCI | D-1023 |
| quit | EIU | E-31 |
| quit | ESA | E-141 |
| quit | ESTU | E-167 |
| quit | EXND | E-195 |
| quit | Ext | E-219 |
| quit | FBUS | F-13 |
| quit | FMT | F-45 |
| quit | FP | F-83 |
| quit | FRIU | F-123 |
| quit | GRPCTRL | G-19 |
| quit | IBNCON | I-39 |
| quit | ICRM | I-103 |
| quit | IDT | I-165 |
| quit | INTCCTRL | I-187 |
| quit | INTEG | I-229 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| quit | IOC | I-267 |
| quit | IOD | I-309 |
| quit | IPML | I-335 |
| quit | IRLINK | I-353 |
| quit | ISG | I-387 |
| quit | ISGACT | I-401 |
| quit | ISP | I-417 |
| quit | LAYER | L-17 |
| quit | LCM | L-71 |
| quit | LCME | L-133 |
| quit | LCMI | L-193 |
| quit | LCOM | L-255 |
| quit | LGC | L-345 |
| quit | LGCI | L-479 |
| quit | LIM | L-563 |
| quit | LINKSET | L-631 |
| quit | LIU7 | L-669 |
| quit | LNS | L-687 |
| quit | LNSTRBL | L-721 |
| quit | LTC | L-817 |
| quit | LTP | L-1047 |
| quit | LTPDATA | L-1203 |
| quit | LTPISDN | L-1327 |
| quit | LTPLTA | L-1457 |
| quit | LTPMAN | L-1539 |
| quit | MANUAL | M-39 |
| quit | MATRIX | M-95 |
| quit | MC | M-163 |
| quit | Memory | M-233 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| quit | MONITOR | M-321 |
| quit | MP | M-363 |
| quit | MPC | M-417 |
| quit | MS | M-483 |
| quit | MSB6 | M-589 |
| quit | MSB7 | M-701 |
| quit | MTD | M-769 |
| quit | MTM | M-799 |
| quit | NET | N-37 |
| quit | NET INTEG | N-95 |
| quit | NET JCTRS | N-125 |
| quit | NET LINKS | N-147 |
| quit | NET XPTS | N-235 |
| quit | NETPATH | N-207 |
| quit | NIU | N-293 |
| quit | NOP | N-331 |
| quit | NWM | N-361 |
| quit | OAU | O-23 |
| quit | PERFORM | P-15 |
| quit | PLANE | P-55 |
| quit | PM | P-125 |
| quit | PMACT | P-137 |
| quit | PMC | P-181 |
| quit | Port | P-229 |
| quit | POST | P-313 |
| quit | POSTDEV | P-345 |
| quit | PRADCH | P-409 |
| quit | PVC | P-437 |
| quit | RCC | R-83 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| quit | RCCI | R-215 |
| quit | RTECTRL | R-275 |
| quit | SASelect | S-193 |
| quit | SBSCOMM | S-77 |
| quit | SBSSEL | S-91 |
| quit | SBSSTAT | S-113 |
| quit | SBSSTRM | S-133 |
| quit | SCCPLOC | S-225 |
| quit | SCCPRPC | S-309 |
| quit | SCCPRSS | S-341 |
| quit | SCP | S-357 |
| quit | SCPLOC | S-403 |
| quit | SEAS | S-425 |
| quit | SBS | S-67 |
| quit | SHELF | S-605 |
| quit | Shelf | S-507 |
| quit | SLM | S-661 |
| quit | SMS | S-779 |
| quit | SMU | S-921 |
| quit | SPM | S-1001 |
| quit | SRUPES | S-1051 |
| quit | STAT TKGRP | S-1111 |
| quit | STAT TRKS | S-1079 |
| quit | SYSTEM | S-1199 |
| quit | TMS | T-67 |
| quit | TPC | T-113 |
| quit | TRKCONV | T-175 |
| quit | TRKS | T-229 |
| quit | TRKSTRBL | T-211 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| quit | TSTEquip | T-249 |
| quit | TTP | T-331 |
| quit | XFER | X-67 |
| quit | X75TTP | X-33 |
| rab | LAYER | L-21 |
| rcama | SASelect | S-195 |
| rclli | TRKCONV | T-179 |
| rdbuff | NET | N-45 |
| readfw | SLM | S-665 |
| recann | SA | S-23 |
| record_dtsr | LTP | L-1051 |
| recover | DTC | D-903 |
| recover | LGC | L-349 |
| recover | LGCI | L-483 |
| recover | LTC | L-821 |
| recover | NET | N-41 |
| recover | PM | P-129 |
| recover | RCC | R-87 |
| recover | RCCI | R-219 |
| recover | SMS | S-783 |
| recover | SMU | S-925 |
| release | DCTLTP | D-169 |
| release | DCTTTP | D-259 |
| release | IBNCON | I-43 |
| release | NOP | N-335 |
| remove | ALTBAL | A-75 |
| remove | ALTCKTTST | A-119 |
| remove | ALTDIAG | A-163 |
| remove | ALTLIT | A-209 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| remove | ALTSDIAG | A-253 |
| remove | AUTOCTRL | A-363 |
| remove | CODECTRL | C-683 |
| remove | GRPCTRL | G-23 |
| remove | INTCCTRL | I-191 |
| remove | RTECTRL | R-279 |
| rename | DRM | D-793 |
| report | C7BERT | C-803 |
| res | LTPLTA | L-1461 |
| reset | BERP | B-55 |
| reset | DRM | D-797 |
| reset | IOC | I-271 |
| reset | LineSel | L-609 |
| reset | NETPATH | N-205 |
| resume | LNSTRBL | L-725 |
| resume | TRKSTRBL | T-215 |
| reth | NET INTEG | N-99 |
| review | BERP | B-59 |
| revive | DIRP | D-605 |
| rex | LIM | L-567 |
| rextst | CARD | C-53 |
| rextst | Clock | C-403 |
| rextst | CM | C-571 |
| rextst | CMMnt | C-639 |
| rextst | ENET | E-97 |
| rextst | MATRIX | M-99 |
| rextst | MC | M-167 |
| rextst | Memory | M-237 |
| rextst | PMC | P-185 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| rextst | Port | P-233 |
| rextst | SHELF | S-609 |
| rextst | SYSTEM | S-1203 |
| ring | LTPLTA | L-1465 |
| ring | SA | S-25 |
| rlayer | LTPISDN | L-1331 |
| rlayer2 | LTPDATA | L-1209 |
| rls | C6TTP | C-747 |
| rls | C7TTP | C-1045 |
| rls | DATA | D-43 |
| rls | MANUAL | M-43 |
| rls | MONITOR | M-325 |
| rls | TTP | T-335 |
| rls | X75TTP | X-37 |
| rlsconn | LTPMAN | L-1543 |
| rl1perf | LTPDATA | L-1207 |
| rotate | DIRP | D-611 |
| rotate | DRM | D-801 |
| rotate | MEMORY | M-245 |
| route | Clock | C-411 |
| route | MC | M-175 |
| route | Port | P-241 |
| routecm | SBSSTAT | S-117 |
| routeset | C7TTP | C-1047 |
| rpb | LAYER | L-23 |
| rsetvol | DIRP | D-615 |
| rsti | NET INTEG | N-101 |
| rtectrl | NWM | N-365 |
| rts | APUX | A-393 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| rts | CARD | C-59 |
| rts | Card | C-169 |
| rts | Chain | C-357 |
| rts | Clock | C-413 |
| rts | CONS | C-707 |
| rts | C6TTP | C-749 |
| rts | C7LKSET | C-903 |
| rts | C7RTESET | C-1009 |
| rts | C7TTP | C-1049 |
| rts | DCH | D-87 |
| rts | DDU | D-321 |
| rts | DEVICES (CFI) | D-401 |
| rts | DEVICES (FP) | D-449 |
| rts | DEVICES (LMX) | D-495 |
| rts | DEVICES (PSP) | D-551 |
| rts | DPNSS | D-695 |
| rts | DLC | D-663 |
| rts | DRAM | D-723 |
| rts | DTC | D-907 |
| rts | DTCI | D-1027 |
| rts | EIU | E-35 |
| rts | ESA | E-145 |
| rts | ESTU | E-171 |
| rts | EXND | E-199 |
| rts | FBUS | F-17 |
| rts | FP | F-87 |
| rts | FRIU | F-129 |
| rts | IBNCON | I-45 |
| rts | ICRM | I-107 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| rts | IDT | I-169 |
| rts | IOC | I-273 |
| rts | IPML | I-339 |
| rts | IRLINK | I-357 |
| rts | ISG | I-391 |
| rts | LAYER | L-25 |
| rts | LCM | L-75 |
| rts | LCME | L-137 |
| rts | LCMI | L-197 |
| rts | LCOM | L-259 |
| rts | LGC | L-353 |
| rts | LGCI | L-487 |
| rts | LIM | L-569 |
| rts | LINKSET | L-635 |
| rts | LIU7 | L-673 |
| rts | LTC | L-825 |
| rts | LTP | L-1055 |
| rts | LTP | L-1055 |
| rts | MANUAL | M-45 |
| rts | MATRIX | M-105 |
| rts | MC | M-177 |
| rts | MONITOR | M-327 |
| rts | MP | M-367 |
| rts | MPC | M-427 |
| rts | MS | M-487 |
| rts | MSB6 | M-593 |
| rts | MSB7 | M-705 |
| rts | MTD | M-773 |
| rts | MTM | M-803 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| rts | NET | N-47 |
| rts | NET JCTRS | N-129 |
| rts | NET LINKS | N-151 |
| rts | NET XPTS | N-243 |
| rts | NIU | N-297 |
| rts | OAU | O-27 |
| rts | OPMPES | O-83 |
| rts | PLANE | P-59 |
| rts | PMC | P-193 |
| rts | POST | P-317 |
| rts | POSTDEV | P-349 |
| rts | PRADCH | P-413 |
| rts | PVC | P-441 |
| rts | RCC | R-91 |
| rts | RCCI | R-223 |
| rts | SCCPLOC | S-229 |
| rts | SCCPRPC | S-313 |
| rts | SCCPRSS | S-345 |
| rts | SCPLOC | S-407 |
| rts | SEAS | S-429 |
| rts | Shelf | S-511 |
| rts | SHELF | S-615 |
| rts | SLM | S-671 |
| rts | SMS | S-787 |
| rts | SMU | S-929 |
| rts | SPM | S-1005 |
| rts | SRUPES | S-1055 |
| rts | STC | S-1143 |
| rts | SYSTEM | S-1209 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| rts | SYSTEM | S-1209 |
| rts | TMS | T-71 |
| rts | TPC | T-117 |
| rts | TRKCONV | T-183 |
| rts | TTP | T-337 |
| rts | X75TTP | X-39 |
| rtschn | Shelf | S-519 |
| rtsms | MS | M-495 |
| runatt | ATT | A-321 |
| saedit | SA | S-27 |
| saselect | AOSSsel | A-291 |
| saselect | LineSel | L-611 |
| saselect | SA | S-29 |
| saselect | SAEdit | S-53 |
| save | C7MSUVER | C-935 |
| sbs | SBSCOMM | S-81 |
| sbs | SBSSEL | S-95 |
| sbs | SBSSTAT | S-119 |
| sbs | SBSSTRM | S-137 |
| sbsstat | SBSSEL | S-97 |
| sortfsa | SBSSTAT | S-123 |
| scanms | MS | M-503 |
| scanms | Shelf | S-527 |
| sccploc | CCS7 | C-289 |
| sccprpc | CCS7 | C-291 |
| sccprss | SCCPRPC | S-315 |
| scp | CCS | C-269 |
| scploc | SCP | S-361 |
| screen | C7MSUVER | C-939 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| scur | LTPISDN | L-1335 |
| sdiag | ALT | A-45 |
| seas | CCS7 | C-293 |
| seize | C6TTP | C-753 |
| seize | C7TTP | C-1053 |
| seize | DATA | D-45 |
| seize | IBNCON | I-49 |
| seize | TTP | T-341 |
| seize | X75TTP | X-43 |
| select | BERP | B-63 |
| select | DCTLTP | D-173 |
| select | DCTTTP | D-263 |
| select | GRPCTRL | G-25 |
| select | IBNCON | I-53 |
| selgrp | STAT TKGRP | S-1115 |
| selgrp | STAT TRKS | S-1083 |
| sendmsg | IBNCON | I-59 |
| sent | XFER | X-75 |
| set | NETPATH | N-211 |
| setaction | POST | P-323 |
| setafpc | C7MSUVER | C-945 |
| setbkup | SBS | S-71 |
| setcdpa | C7MSUVER | C-949 |
| setcgpa | C7MSUVER | C-953 |
| setdest | C7MSUVER | C-957 |
| setdpc | C7MSUVER | C-961 |
| seth0h1 | C7MSUVER | C-965 |
| setintg | INTEG | I-233 |
| setlog | NET INTEG | N-103 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| setlpbk | LTPMAN | L-1545 |
| setopc | C7MSUVER | C-967 |
| setsc | Ext | E-223 |
| setscmg | C7MSUVER | C-971 |
| setsd | Ext | E-225 |
| setsio | C7MSUVER | C-975 |
| setstop | C7BERT | C-807 |
| setstst | ATT | A-323 |
| sgnl | MANUAL | M-49 |
| sgnl | TTP | T-343 |
| shelf | Card | C-183 |
| shelf | Chain | C-365 |
| shelf | Clock | C-493 |
| shelf | ENET | E-103 |
| shelf | MATRIX | M-109 |
| shelf | MS | M-507 |
| shelf | Shelf | S-531 |
| shelf | SYSTEM | S-1215 |
| showbackup | MS | M-509 |
| showblock | ENET | E-105 |
| showchn | Shelf | S-533 |
| slm | IOD | I-313 |
| snid | C6TTP | C-755 |
| sortcoll | SBSSTAT | S-121 |
| sortfsa | SBSSTAT | S-123 |
| sortkey | BERP | B-69 |
| sortstrm | SBSSTAT | S-125 |
| spare | Memory | M-249 |
| sparing | DCH | D-91 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| specsig | SA | S-35 |
| spin | SLM | S-679 |
| split | PMC | P-199 |
| start | ACTIVITY | A-9 |
| start | ALTBAL | A-77 |
| start | ALTCKTTST | A-121 |
| start | ALTDIAG | A-165 |
| start | ALTLIT | A-211 |
| start | ALTSDIAG | A-255 |
| start | ATT | A-325 |
| start | BERP | B-75 |
| start | BERT | B-111 |
| start | C7BERT | C-811 |
| start | DDU | D-325 |
| start | NETPATH | N-213 |
| startchg | SA | S-31 |
| startopr | SA | S-33 |
| stat | TRKS | T-233 |
| stat | TRKSTRBL | T-217 |
| status | ALTBAL | A-81 |
| status | ALTCKTTST | A-125 |
| status | ALTDIAG | A-169 |
| status | ALTLIT | A-215 |
| status | ALTSDIAG | A-259 |
| status | DDU | D-323 |
| status | IOC | I-275 |
| status | PM | P-133 |
| stc | MSB6 | M-605 |
| stc | MSB7 | M-717 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| stcload | MSB6 | M-607 |
| stcload | MSB7 | M-719 |
| stksdr | TTP | T-345 |
| stop | ALTBAL | A-85 |
| stop | ALTCKTTST | A-129 |
| stop | ALTDIAG | A-173 |
| stop | ALTLIT | A-219 |
| stop | ALTSDIAG | A-263 |
| stop | ATT | A-331 |
| stop | BERP | B-79 |
| stop | BERT | B-117 |
| stop | C7BERT | C-817 |
| stop | DCTLTP | D-185 |
| stop | DCTTTP | D-275 |
| stop | DDU | D-327 |
| stop | DELAYS (LGC) | D-339 |
| stop | DELAYS (RCC) | D-355 |
| stop | ISGACT | I-405 |
| stop | ISP | I-421 |
| stop | NETPATH | N-217 |
| stop | PMACT | P-141 |
| stopdisp | LNSTRBL | L-729 |
| stopdisp | TRKSTRBL | T-219 |
| stoplog | ACTIVITY | A-13 |
| stoplog | DELAYS (LGC) | D-341 |
| stoplog | DELAYS (RCC) | D-357 |
| stoplog | ISGACT | I-407 |
| stoplog | ISP | I-423 |
| stoplog | PMACT | P-143 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| strmstat | SBSSEL | S-99 |
| strt | DELAYS (LGC) | D-343 |
| strt | DELAYS (RCC) | D-359 |
| strt | ISGACT | I-409 |
| strt | ISP | I-425 |
| strt | PMACT | P-145 |
| strtlog | ACTIVITY | A-15 |
| strtlog | DELAYS (LGC) | D-345 |
| strtlog | DELAYS (RCC) | D-361 |
| strtlog | ISGACT | I-411 |
| strtlog | ISP | I-427 |
| strtlog | PMACT | P-147 |
| submit | ALTBAL | A-87 |
| submit | ALTCKTTST | A-131 |
| submit | ALTDIAG | A-175 |
| submit | ALTLIT | A-221 |
| submit | ALTSDIAG | A-265 |
| summary | BERP | B-81 |
| suppress | LNSTRBL | L-733 |
| suppress | TRKSTRBL | T-221 |
| sustate | LTPDATA | L-1211 |
| sustate | LTPISDN | L-1339 |
| sustate | LTPMAN | L-1547 |
| sustate (isdn) | LTPDATA | L-1217 |
| swact | Clock | C-417 |
| swact | CM | C-579 |
| swact | CMMnt | C-647 |
| swact | DEVICES (CFI) | D-413 |
| swact | DEVICES (LMX) | D-499 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| swact | DEVICES (PSP) | D-555 |
| swact | DTC | D-921 |
| swact | DTCI | D-1039 |
| swact | ICRM | I-111 |
| swact | LGC | L-367 |
| swact | LGCI | L-501 |
| swact | LTC | L-839 |
| swact | MC | M-181 |
| swact | Memory | M-255 |
| swact | MSB6 | M-611 |
| swact | MSB7 | M-723 |
| swact | NIU | N-301 |
| swact | PLANE | P-65 |
| swact | PMC | P-205 |
| swact | Port | P-243 |
| swact | PRADCH | P-417 |
| swact | RCC | R-103 |
| swact | RCCI | R-235 |
| swact | SMS | S-801 |
| swact | SMU | S-943 |
| swact | TMS | T-81 |
| swcarr | Clock | C-495 |
| swen | DEVICES (FP) | D-455 |
| swmast | Clock | C-501 |
| swmast | MS | M-511 |
| swrg | LCM | L-83 |
| swrg | LCME | L-143 |
| swrg | LCMI | L-203 |
| swtch | DCH | D-95 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| sync | Clock | C-509 |
| sync | CM | C-583 |
| sync | CMMnt | C-651 |
| sync | MC | M-185 |
| sync | Memory | M-259 |
| sync | PLANE | P-69 |
| sync | PMC | P-209 |
| sync | Port | P-247 |
| system | CARD | C-67 |
| system | ENET | E-107 |
| system | MATRIX | M-111 |
| system | SHELF | S-623 |
| system | SYSTEM | S-1217 |
| talklta | LTPLTA | L-1469 |
| tcopy | DRM | D-805 |
| tdet | MANUAL | M-51 |
| tdet | TTP | T-349 |
| tei | LTPISDN | L-1357 |
| test | LTPISDN | L-1361 |
| testbook | DCTLTP | D-189 |
| testbook | DCTTTP | D-279 |
| testreq | ATT | A-337 |
| testss | SCCPLOC | S-231 |
| tgen | MANUAL | M-55 |
| tgen | TTP | T-353 |
| thr | LTPISDN | L-1373 |
| thresh | INTEG | I-235 |
| threshold | MTD | M-775 |
| time | SA | S-37 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| timer | NET INTEG | N-105 |
| tnsmp | SASelect | S-197 |
| tonegen | LTPMAN | L-1549 |
| tonegen (isdn) | LTPMAN | L-1557 |
| trans | FMT | F-49 |
| trantst | SCCPLOC | S-293 |
| trantst | SCCPRPC | S-317 |
| trantst | SCCPRSS | S-347 |
| trkqry | C6TTP | C-757 |
| trkqry | C7TTP | C-1055 |
| trkstrbl | TRKS | T-235 |
| trkstrbl | STAT TKGRP | S-1117 |
| trlnk | NET INTEG | N-107 |
| trnsl | Card | C-185 |
| trnsl | CARD | C-71 |
| trnsl | Chain | C-367 |
| trnsl | DCH | D-103 |
| trnsl | DEVICES (CFI) | D-405 |
| trnsl | DEVICES (LMX) | D-501 |
| trnsl | DEVICES (NIU) | D-515 |
| trnsl | DEVICES (PSP) | D-559 |
| trnsl | DRAM | D-727 |
| trnsl | DTC | D-927 |
| trnsl | DTCI | D-1041 |
| trnsl | ESA | E-149 |
| trnsl | FBUS | F-21 |
| trnsl | ICRM | I-115 |
| trnsl | IDT | I-173 |
| trnsl | IOC | I-279 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| trnsl | IOD | I-315 |
| trnsl | IPML | I-343 |
| trnsl | IRLINK | I-359 |
| trnsl | LCM | L-87 |
| trnsl | LCME | L-147 |
| trnsl | LCMI | L-207 |
| trnsl | LGC | L-373 |
| trnsl | LGCI | L-505 |
| trnsl | LIM | L-573 |
| trnsl | LTC | L-845 |
| trnsl | MATRIX | M-115 |
| trnsl | MC | M-195 |
| trnsl | Memory | M-269 |
| trnsl | MP | M-371 |
| trnsl | MSB6 | M-615 |
| trnsl | MSB7 | M-727 |
| trnsl | MTM | M-807 |
| trnsl | NET | N-51 |
| trnsl | NET INTEG | N-109 |
| trnsl | NET JCTRS | N-133 |
| trnsl | NET LINKS | N-153 |
| trnsl | OAU | O-31 |
| trnsl | PLANE | P-77 |
| trnsl | PMC | P-219 |
| trnsl | Port | P-257 |
| trnsl | RCC | R-109 |
| trnsl | RCCI | R-239 |
| trnsl | Shelf | S-535 |
| trnsl | SHELF | S-627 |

**-continued-**

**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| trnsl | SLM | S-685 |
| trnsl | SMS | S-807 |
| trnsl | SMU | S-949 |
| trnsl | STC | S-1147 |
| trnsl | SYSTEM | S-1221 |
| trnsl | TMS | T-83 |
| trnsl | TPC | T-121 |
| trnslvf | TTP | T-355 |
| try | CARD | C-75 |
| try | MATRIX | M-119 |
| try | SHELF | S-629 |
| try | SYSTEM | S-1223 |
| tst | APUX | A-397 |
| tst | Card | C-189 |
| tst | CARD | C-79 |
| tst | Chain | C-371 |
| tst | Clock | C-431 |
| tst | Clock | C-513 |
| tst | CM | C-595 |
| tst | CONS | C-709 |
| tst | C6TTP | C-761 |
| tst | C7LKSET | C-907 |
| tst | C7TTP | C-1059 |
| tst | DCH | D-107 |
| tst | DDU | D-329 |
| tst | DEVICES (CFI) | D-409 |
| tst | DEVICES (FP) | D-457 |
| tst | DEVICES (LMX) | D-505 |
| tst | DEVICES (PSP) | D-563 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| tst | DLC | D-665 |
| tst | DRAM | D-729 |
| tst | DTC | D-931 |
| tst | DTCI | D-1045 |
| tst | EIU | E-39 |
| tst | ESA | E-151 |
| tst | ESTU | E-177 |
| tst | EXND | E-203 |
| tst | FBUS | F-23 |
| tst | FP | F-91 |
| tst | FRIU | F-127 |
| tst | ICRM | I-121 |
| tst | IOC | I-281 |
| tst | IPML | I-345 |
| tst | IRLINK | I-361 |
| tst | LCM | L-89 |
| tst | LCME | L-149 |
| tst | LCMI | L-209 |
| tst | LCOM | L-263 |
| tst | LGC | L-377 |
| tst | LGCI | L-509 |
| tst | LIM | L-575 |
| tst | LINKSET | L-637 |
| tst | LIU7 | L-677 |
| tst | LTC | L-849 |
| tst | MANUAL | M-57 |
| tst | MATRIX | M-123 |
| tst | MC | M-197 |
| tst | Memory | M-273 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| tst | MONITOR | M-331 |
| tst | MP | M-373 |
| tst | MPC | M-433 |
| tst | MS | M-517 |
| tst | MSB6 | M-619 |
| tst | MSB7 | M-729 |
| tst | MTD | M-777 |
| tst | MTM | M-809 |
| tst | NET | N-53 |
| tst | NET JCTRS | N-135 |
| tst | NET LINKS | N-155 |
| tst | NET XPTS | N-247 |
| tst | NIU | N-305 |
| tst | OAU | O-33 |
| tst | OPMPES | O-85 |
| tst | PLANE | P-81 |
| tst | PMC | P-149 |
| tst | Port | P-259 |
| tst | POST | P-325 |
| tst | POSTDEV | P-353 |
| tst | PVC | P-445 |
| tst | RCC | R-113 |
| tst | RCCI | R-243 |
| tst | Shelf | S-539 |
| tst | SHELF | S-633 |
| tst | SLM | S-687 |
| tst | SMS | S-811 |
| tst | SMU | S-953 |
| tst | SPM | S-1007 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| tst | SRUPES | S-1057 |
| tst | STC | S-1149 |
| tst | SYSTEM | S-1227 |
| tst | TMS | T-87 |
| tst | TPC | T-123 |
| tst | TTP | T-367 |
| tst | X75TTP | X-45 |
| tstchn | Shelf | S-553 |
| tstdsalm | Ext | E-229 |
| tstdtmf | LTPMAN | L-1569 |
| tstms | MS | M-523 |
| tstring | LTPMAN | L-1563 |
| tstsgnl | LTPISDN | L-1377 |
| tsttrnsl | C6TTP | C-771 |
| ttp | TRKS | T-237 |
| uinh | C7LKSET | C-915 |
| undo | TRKCONV | T-187 |
| upth | NET INTEG | N-111 |
| vac | LTPLTA | L-1475 |
| vdc | LTPLTA | L-1479 |
| verpath | NETPATH | N-219 |
| view | DRM | D-811 |
| voice | SA | S-39 |
| voice_screen | LTP | L-1061 |
| wait | FP | F-97 |
| wait | LIM | L-579 |
| waitfmsg | IBNCON | I-61 |
| warmswact | DTC | D-949 |
| warmswact | DTCI | D-1057 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| warmswact | ICRM | I-129 |
| warmswact | LGC | L-521 |
| warmswact | LGCI | L-521 |
| warmswact | LTC | L-867 |
| warmswact | MSB6 | M-629 |
| warmswact | MSB7 | M-739 |
| warmswact | RCC | R-131 |
| warmswact | RCCI | R-255 |
| warmswact | SMS | S-829 |
| warmswact | SMU | S-971 |
| warmswact | TMS | T-97 |
| xbert | MSB6 | M-631 |
| xbert | MSB7 | M-741 |
| xfer | IOD | I-317 |
| xmit | XFER | X-77 |
| xpmlogs | DTC | D-953 |
| xpmlogs | DTCI | D-1059 |
| xpmlogs | LGC | L-399 |
| xpmlogs | LGCI | L-523 |
| xpmlogs | LTC | L-871 |
| xpmlogs | MSB6 | M-633 |
| xpmlogs | MSB7 | M-745 |
| xpmlogs | RCC | R-133 |
| xpmlogs | RCCI | R-257 |
| xpmlogs | SMS | S-831 |
| xpmlogs | SMU | S-973 |
| xpmlogs | TMS | T-99 |
| xpmreload | DTC | D-955 |
| xpmreload | LGC | L-401 |

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**Command/menu cross reference table** (continued)

| Command | Menu | Page |
|---|---|---|
| xpmreload | LGCI | L-525 |
| xpmreload | LTC | L-873 |
| xpmreload | RCC | R-135 |
| xpmreload | RCCI | R-259 |
| xpmreload | SMS | S-833 |
| xpmreload | SMU | S-975 |
| xpmreset | DTC | D-957 |
| xpmreset | LGC | L-403 |
| xpmreset | LGCI | L-525 |
| xpmreset | LTC | L-875 |
| xpmreset | MSB6 | M-635 |
| xpmreset | MSB7 | M-747 |
| xpmreset | RCC | R-137 |
| xpmreset | RCCI | R-261 |
| xpmreset | SMS | S-835 |
| xpmreset | SMU | S-977 |
| xpts | NET | N-57 |
| xpts | NET XPTS | N-251 |
| zoom | ENET | E-111 |
| zoom | MATRIX | M-127 |

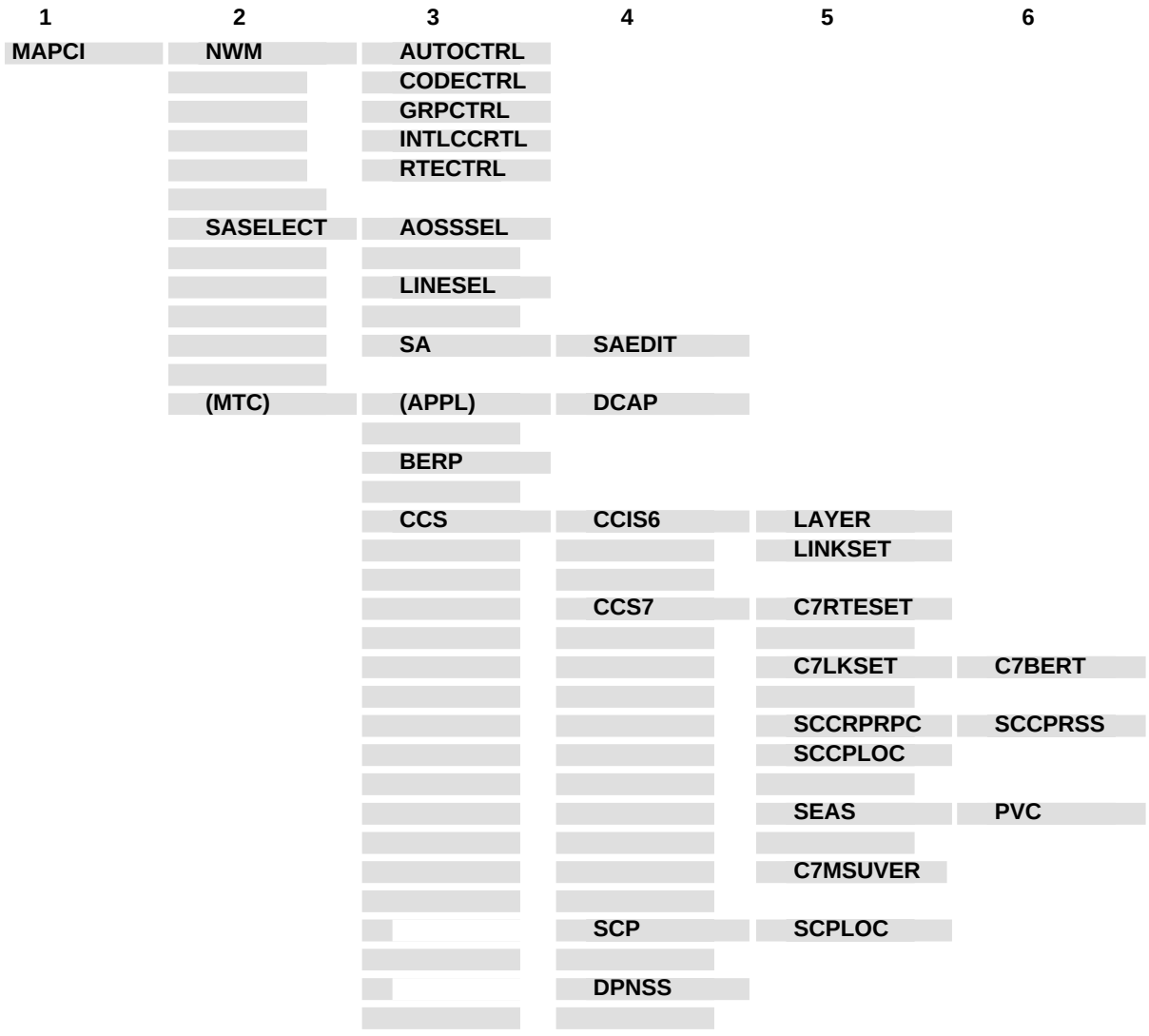
**-end-**

## Menu chart

The menu chart illustrates the hierarchical relationship between menu levels and sublevels. In many cases the relationship between levels and sublevels is indicative of the command string required to reach that level, such as the following:

**mapci;mtc;pm↵**

which is used to reach the PM MAP level. This is not always the case, however, and should not be assumed. Sublevels of the PM level, for example, require a PM to be posted before subsequent levels can be accessed.




-continued-

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| ***MAPCI*** | ***MTC*** | **CM** | **CMMNT** | | |
| | | | | | |
| | | | **MC** | **CLOCK** | |
| | | | | **PORT** | |
| | | | | | |
| | | | **MEMORY** | | |
| | | | **PMC** | | |
| | | | | | |
| | | **CPSTATUS** | | | |
| | | | | | |
| | | **ENET** | **BERT** | | |
| | | | **INTEG** | | |
| | | | **SYSTEM** | | |
| | | | **MATRIX** | | |
| | | | **SHELF** | **CARD** | |
| | | | | | |
| | | **EXT** | **EQUIP** | **DCME** | |
| | | | | **ECHOCAN** | |
| | | | | | |
| | | **IOD** | **DIRP** | | |
| | | | **DPP** | | |
| | | | | | |
| | | | **IOC** | **CONS** | |
| | | | | **DDU** | |
| | | | | **DLC** | |
| | | | | **DPAC** | |
| | | | | **MPC** | |
| | | | | **MTD** | |
| | | | | | |
| | | | **NOP** | | |
| | | | **SLM** | | |
| | | | **XFER** | | |
| | | | | | |
| | | **(LNS)** | **ALT** | **ALTBAL** | |
| | | | | **ALTCKTTST** | |
| | | | | **ALTDIAG** | |
| | | | | **ALTLIT** | |
| | | | | **ALTSDIAG** | |
| | | | | | |
| | | | **LNSTRBL** | | |
| | | | | | |

**-continued-**

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| ***MAPCI*** | ***MTC*** | ***(LNS)*** | **LTP** | **CSDDS** | |
| | | | | **IBNCON** | |
| | | | | **LTPDATA** | |
| | | | | **LTPISDN** | |
| | | | | **LTPLTA** | |
| | | | | **LTPMAN** | |
| | | **MS** | **CLOCK** | | |
| | | | **SHELF** | **CARD** | **CHAIN** |
| | | **(MTCNA)** | **TSTEQUIP** | **ESTU** | |
| | | **NET** | **NETINTEG** | | |
| | | | **NETJCTRS** | | |
| | | | **NETLINKS** | | |
| | | | **NETPATH** | | |
| | | | **NETXPTS** | | |
| | | **PM** | **APUX** | | |
| | | | **(CFI)** | **DEVICES** | |
| | | | **DTCI** | **PERFORM** | |
| | | | **DRAM** | | |
| | | | **EIU** | | |
| | | | **ESA** | | |
| | | | **FMT** | | |
| | | | **FP** | **PLANE** | |
| | | | | **DEVICES** | **POSTDEV** |
| | | | **FRIU** | | |
| | | | **GIC** | | |
| | | | **ICRM** | | |
| | | | **IDT** | | |
| | | | **IDTC** | **PERFORM** | |
| | | | Note: IDTC=ILGC, ILTC, PDTC, ADTC | | |

**-continued-**

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| ***MAPCI*** | ***MTC*** | ***PM*** | **IPE** | | |
| | | | **IPML** | | |
| | | | **ISP** | | |
| | | | **LCM** | | |
| | | | Note: LCM=LCME, LCMI, KILCM | | |
| | | | **LCME** | | |
| | | | **LCMI** | | |
| | | | **LCOM** | | |
| | | | **LCR** | **CCH** | |
| | | | **LGC** | **PERFORM** | **PMACT** |
| | | | | | **DELAYS** |
| | | | Note: LGC=DTC, LTC, RCC, SMU, SMR, SMS | | |
| | | | **LGCI** | **PERFORM** | **PMACTX** |
| | | | | | **ISGACT** |
| | | | | **DCH** | |
| | | | | **ISG** | |
| | | | Note: LGCI=LTCI, RCCI,TMS | | |
| | | | **LIM** | **FBUS** | |
| | | | **LIU7** | | |
| | | | **(LMX)** | **DEVICES** | |
| | | | **MSB6** | **STC** | |
| | | | Note: MSB6=MSB7 | | |
| | | | **MTM** | | |
| | | | Note: MTM=TM8, TM2, TM4, RMM, OAU, LM, DCM, STM, ATM, DES, ISLM, T8A, MMA, TAN | | |
| | | | **NIU** | **DEVICES** | |
| | | | **OAU** | | |

**-continued-**

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| ***MAPCI*** | ***MTC*** | ***PM*** | **OPMPES** | | |
| | | | **PSP** | | |
| | | | **RCC** | **PERFORM** | **PMACT** |
| | | | | | **DELAYS** |
| | | | | **IRLINK** | |
| | | | **RCCI** | | |
| | | | **RCS** | | |
| | | | **RCT** | | |
| | | | Note: RCT=TCS | | |
| | | | **RCU** | | |
| | | | **SRU** | **SRUPES** | |
| | | | | **VCH** | |
| | | | **SMU** | **RCU** | |
| | | | **SMSR** | | |
| | | | **SPM** | | |
| | | | **SRUPES** | | |
| | | | **TMS** | | |
| | | | **TPC** | **MP** | |
| | | | **XLIU** | | |
| | | **TRKS** | **ATT** | | |
| | | | **CARRIER** | **POST** | |
| | | | | **DISPLAY** | |
| | | | **STATTKGRP** | **STATTRKS** | |
| | | | **TRKSTRBL** | | |

**-continued-**

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| ***MAPCI*** | ***MTC*** | ***TRKS*** | **TTP** | **MANUAL** | |
| | | | | **MONITOR** | |
| | | | | **C6TTP** | |
| | | | | **DATA** | |
| | | | | **C7TTP** | |
| | | | | **PRADCH** | |
| | | | | **TRKCONV** | |
| | | | | **ECHOCTRL** | |
| | | | | **XDCME** | |
| | | | | **X75TTP** | |
| | | | **-end-** | | |

# CARD level commands

Use the CARD level of the MAP to maintain the enhanced network (ENET) 4780 on a card basis arranged by slot.

## Accessing the CARD level

To access the CARD level, enter the following from the CI level:

**mapci;mtc;net:shelf 0:card 1** ↵

or

**mapci;mtc;mtcna;enet;shelf 0;card 1** ↵

In these examples, 0 is the number of the desired shelf, and 1 is the number of the desired card.

## CARD commands

The commands available at the CARD MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**CARD commands**

| Command | Page |
|---|---|
| abtk | C-7 |
| alttest | C-11 |
| bsy | C-15 |
| card | C-23 |
| deload | C-25 |
| disp | C-31 |
| link | C-33 |
| locate | C-35 |

-continued-

**CARD commands** (continued)



**-end-**

## CARD menu

There are several different MAP displays which are dependent on the card contained in the slot. The following figure shows the CARD menu and status display for the ENET -5 volt power supply card. The significant differences between the various card displays and the ENET -5 volt power supply card are defined in the card status codes table. The insert with hidden commands is not a visible part of the menu display. This display is entered from the ENET level by using the card command.

```
      CM    MS    IOD   Net   PM   CCS   Lns   Trks  Ext   APPL
       .     .     .    1Shlf  .    .     .     .     .     .
                        *C*

CARD
0 Quit        ENET       System
2              Plane 0    Fault
3 QueryEN_     Plane 1    Fault
4 Locate_
5 Deload_     SHELF 02   Slot
6 Tst_                   123456 78 90123456 78901234 56789012 345678
7 Bsy_         Plane 0   .  .   .. ........ -------- ........ .  .
8 Offl_        Plane 1   .  .   .. ........ -------- ........ .  .
9
10            CARD 01    Power
11 RexTst_
12
13
14
15 System_
16 Matrix
17 Card_
18 Trnsl_
```

**Hidden commands**

```
abtk                alttest
disp                link
try
```

## CARD status codes

The following table describes the status codes for the CARD status display.

| Status codes CARD menu status display | | |
|---|---|---|
| **Code** | **Meaning** | **Description** |
| ENET CARD level crosspoint statuses.<br>The Front column displays the status of the crosspoint (XPT) card. | | |
| - | un-equipped | The crosspoint is unequipped. |
| . | in service | The crosspoint is in service with no faults detected. |
| O | offline | The crosspoint is offline as a result of a manual action. |
| I | in service trouble | A nonservice affecting fault exists on the crosspoint. |
| S | system busy | The crosspoint is out of service as a result of a system action. |
| C | C-side busy | The crosspoint is out of service as a result of ENET system cards which are out of service. |
| M | manual busy | The crosspoint is out-of-service as a result of a manual action. |
| T | test in progress | Maintenance actions are in progress for this crosspoint. |
| ENET CARD level interface (IF) paddle board statuses.<br>The Back column displays the status of the interface paddle board.<br>These statuses apply for both DS512 and DS30 paddle boards. | | |
| - | un-equipped | The paddle board is unequipped. |
| . | in service | The paddle board is in service with no faults detected. |
| O | offline | The paddle board is offline as a result of a manual action. |
| I | in service trouble | A nonservice affecting fault exists on the paddle board. |
| S | system busy | The paddle board is out of service as a result of a system action. |
| C | C-side busy | The paddle board is out of service as a result of the crosspoint card being out of service. |
| M | manual busy | The paddle board is out of service as a result of a manual action. |
| T | test in progress | Maintenance actions are in progress for this paddle board. |

**-continued-**

**Status codes CARD menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| ENET CARD level DS512 or DS30 link statuses.<br>The DS512 Link or DS30 Link columns display the status of the P-side links.<br>These statuses apply for both DS512 and DS30 links. | | |
| - | un-equipped | The link is unequipped. |
| . | in service | The link is in service with no faults detected. |
| O | offline | The link is offline as a result of a manual action. |
| I | in service trouble | A nonservice affecting fault exists on the link. |
| F | fault | An out-of-service component exists on the DS512 link. This character is never displayed for DS30 links. |
| P | P-side busy | The link is peripheral-side (P-side) busy. |
| S | system busy | The link is out of service as a result of a system action. |
| C | C-side busy | The link is out of service because the paddle board is out of service. This could also indicate that the nailed-up connection or associated MS ports are not available for a messaging link. |
| M | manual busy | The link is out of service as a result of a manual action. |
| T | test in progress | Maintenance actions are in progress for this link. |

**-continued-**

**Status codes CARD menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| ENET NT9X40 and NT9X45 CARD level summary statuses.<br>The DS30 and DS512 columns in the NT9X45 display and the columns of the NT9X40 display a summary status of either the 16 DS30 links or the 16 DS30 equivalents of the fiber link. In each case, this summary status is dependent upon the status of the DS30 equivalents that comprise it. | | |
| - | un-equipped | All 16 DS30 links are unequipped. |
| O | offline | At least one DS30 link is offline and none are in service. |
| P | P-side busy | At least one DS30 link is P-side busy and none are in service. |
| C | C-side busy | At least one DS30 link is central-side (C-side) busy and none are in service. |
| M | manual busy | At least one DS30 link is manual busy and none are in service. |
| S | system busy | At least one DS30 link is system busy and none are in service. |
| . | in service | At least one DS30 link is in service and none are manual busy or system busy. |
| L | Link ISTb | At least one DS30 link is in service trouble and none are manual busy or system busy. |
| F | fault | At least one DS30 link is in service and at least one other DS30 link is manual busy or system busy. |

**-end-**

# abtk

## Function

Use the abtk command to end the maintenance action in process.

**abtk command parameters and variables**

| Command | Parameters and variables | | | |
|---|---|---|---|---|
| **abtk** | *plane_no* | both<br>slot | *slot_no* | |
| | | link | *link_no* | ds30equiv |
| | | all | | |

| Parameters and variables | Description |
|---|---|
| all | This parameter aborts maintenance actions on all links. |
| both | This parameter specifies the displayed slot in both planes. |
| ds30equiv | This parameter defines the link as a fiber link. |
| link | This parameter selects a specific link number. |
| *link_no* | This variable specifies a link in the range of 0-15 for DS30 links and 0-3 for DS512 links. |
| *plane_no* | This variable specifies a plane of the ENET in the range of 0-1. |
| slot | This parameter specifies a slot number other than the displayed slot. |
| *slot_no* | This variable specifies a slot number in the range of 1-38. |

## Qualifications

The abtk command is qualified by the following exceptions, restrictions and limitations:

- The abtk command may not be used on an unequipped plane, slot, or link.
- The abtk command affects a fiber link in the same manner as the all parameter. It attempts to stop any action running on the entire fiber and any actions running on the DS30 equivalents within the fiber.

# abtk (continued)

## Example

The following table provides an example of the abtk command.

**Example of the abtk command**

| Example | Task, response, and explanation |
|---|---|
| **abtk 1 link 4** ↵ | |
| | **Task:** Cancel a test in progress on link 4 of the selected card on plane 1. |
| | **Response:**<br>`Request to ABTK ENET Plane:1 Shelf:00 Slot:16 Link:04 submitted.`<br>`Request to ABTK ENET Plane:1 Shelf:00 Slot:16 Link:04 passed.` |
| | **Explanation:** The system successfully cancelled the maintenance action. |

## Responses

The following table provides explanations of the responses to the abtk command.

**Responses for the abtk command**

| MAP output | Meaning and action |
|---|---|
| `Request to ABTK ENET Plane:1 Shelf:00 Slot:16 Link:04 submitted.`<br>`Request to ABTK ENET Plane:1 Shelf:00 Slot:16 Link:04 passed.` | |
| | **Meaning:** The system successfully cancelled the maintenance action. |
| | **Action:** None |
| `Request to ABTK ENET Plane:1 Shelf:00 Slot:16 Link:04 submitted.`<br>`Request to ABTK ENET Plane:1 Shelf:00 Slot:16 Link:04 rejected.`<br>`Reason: Link exceeds max for card.` | |
| | **Meaning:** The requested link number is higher than the number of links on the card. |
| | **Action:** Reenter the command with the correct link number. |

**-continued-**

**Responses for the abtk command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to ABTK ENET Plane:1 Shelf:00 Slot:16 Link:04 submitted.`<br>`Request to ABTK ENET Plane:1 Shelf:00 Slot:16 Link:04 rejected.`<br>`Reason: Link unequipped.` | **Meaning:** The specified link is unequipped.<br><br>**Action:** Reenter the command with the correct link number. |

**-end-**

# alttest

## Function

Use the alttest command to alter or query the ENET peripheral-side (P-side) maintenance default parameters.

**alttest command parameters and variables**

| Command | Parameters and variables | |
|---|---|---|
| **alttest** | duration | *duration1* |
| | threshold | *threshold1* |
| | fiber_error_threshold | *threshold2* |
| | fiber_looparound_threshold | *threshold3* |
| | fiber_looparound_duration | *duration2* |
| | low_prio_audit_period | *lowperiod* |
| | high_prio_audit_period | *highperiod* |
| | audit | *on/off* |
| | query | *queryoption* |

| Parameters and variables | Description |
|---|---|
| audit | This parameter turns the ENET P-side link audit on or off. |
| duration | This parameter alters the test duration. |
| *duration1* | This variable determines the duration time in seconds. The valid range is from 1-15 seconds. |
| *duration2* | This variable determines the value of the fiber loop-around test duration in seconds. The valid range is from 1-60. |
| fiber_ error_threshold | This parameter alters the default local DS512 threshold in the ENET P-side fiber test. |
| fiber_ looparound_ duration | This parameter alters the default fiber loop-around test duration for the ENET P-side fiber test. |
| fiber_ looparound_ threshold | This parameter alters the default fiber loop-around test threshold in the ENET P-side fiber test. |
| *highperiod* | This variable determines the value of the P-side link high priority audit period in seconds. The valid range is from 1-255. |

**-continued-**

## alttest (continued)

**alttest command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| high_prio_ audit_period | This parameter alters the ENET P-side link high priority audit period. |
| *lowperiod* | This variable determines the value of the P-side link low priority audit period in 5 second increments. The valid range is from 1-51. |
| low_prio_ audit_period | This parameter alters the ENET P-side link low priority audit period. |
| *on/off* | This parameter sets audit to on or off. |
| query | This parameter queries the specified test or audit parameter. |
| *queryoption* | This variable determines which of the following to query: duration, threshold, audit, fiber, or period. |
| threshold | This parameter alters the default peripheral module (PM) loop-around threshold. |
| *threshold1* | This variable determines the value of the PM loop-around threshold. The valid range is from 1-15. |
| *threshold2* | This variable determines the value of the local DS512 threshold. The valid range is from 0-15. |
| *threshold3* | This variable determines the value of the fiber loop-around test threshold. The valid range is from 0-15. |

**-end-**

## Qualifications

None

## alttest (continued)

## Examples

The following table provides examples of the alttest command.

**Examples of the alttest command**

| Example | Task, response, and explanation | |
|---|---|---|
| **alttest low_prio_audit_period 7** ↵ | | |
| | **Task:** | Change the period for the low priority audit to 35 seconds. |
| | **Response:** | `The ENET PSIDE low priority audit period has been changed to 35 seconds.` |
| | **Explanation:** | The audit period was successfully changed to 35 seconds. The low priority audit period is set in 5 second increments, 5 X 7 = 35 seconds. |
| **alttest query fiber** ↵ | | |
| | **Task:** | Query the P-side fiber test thresholds. |
| | **Response:** | `ENET pside fiber DS512 error threshold: 3`<br>`ENET pside fiber looparound error threshold: 5`<br>`ENET pside fiber looparound duration: 5 seconds` |
| | **Explanation:** | The thresholds and duration of the P-side fiber test are displayed. |

## alttest (end)

## Responses

The following table provides explanations of the responses to the alttest command.

**Responses for the alttest command**

| MAP output | Meaning and action |
|---|---|
| `ENET pside fiber DS512 error threshold: 3`<br>`ENET pside fiber looparound error threshold: 5`<br>`ENET pside fiber looparound duration: 5 seconds` | **Meaning:** The thresholds and duration of the P-side fiber test are displayed.<br><br>**Action:** None |
| `The ENET PSIDE low priority audit period has been changed to 35 seconds.` | **Meaning:** The audit period was successfully changed.<br><br>**Action:** None |

# bsy

## Function

Use the bsy command to manually remove ENET cards, paddle boards, or links from service.

**bsy command parameters and variables**

| Command | Parameters and variables | | | | |
|---|---|---|---|---|---|
| **bsy** | *plane_no* | both<br>front<br>back<br>link<br>all<br>ds30all<br>slot | *link_no*<br>*state*<br>*state*<br>*slot_no* | ds30equiv | noprompt<br>*prompt*<br>nowait<br>*wait* |

| Parameters and variables | Description |
|---|---|
| all | This parameter selects all links on the card when it is used alone. The parameter all can also be used with an additional variable to select hardware entities by state, such as offline. |
| back | This parameter selects the back card of the displayed slot. |
| both | This default parameter selects front and back. |
| ds30all | This parameter refers to the DS30 equivalent on the fiber link and that individual equivalents of fiber links may be affected. The states of the DS30 equivalents within a fiber are considered before the fiber itself. If DS30 equivalents are in a state which may be busied, but the fiber is not, the individual DS30 equivalents are busied but may leave the state of the fiber untouched. |
| ds30equiv | This parameter refers to the DS30 equivalent on the fiber link. If DS30 is specified, the link must be a fiber link. |
| front | This parameter selects the front card of the displayed slot. |
| link | This parameter is used to select a specific link number on the selected card. |
| *link_no* | This variable is the link number in the range of 0-15 for DS30 links or 0-3 for DS512 links. |
| noprompt | This parameter suppresses all service degradation warnings. |

**-continued-**

# bsy (continued)

**bsy command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| nowait | This parameter releases the MAP for other actions. All tests that pass and fail generate logs. |
| *plane_no* | This variable specifies a plane of the ENET, 0 or 1. |
| *prompt* | This default parameter displays all service degradation warnings. Do not type in this parameter. |
| slot | This parameter selects a slot other than the displayed slot. |
| *slot_no* | This variable specifies a slot number in the range of 1-38. |
| *state* | This parameter specifies the machine state and may be any of the following: insv, mbsy, sbsy, cbsy, pbsy, offl. |
| *wait* | This default parameter prevents all MAP activity until all actions initiated by the bsy command are complete. Do not type in this parameter. |

**-end-**

## Qualifications

The bsy command applies to crosspoint card slots and is qualified by the following limitation: parameters front, back, both, link, and all do not apply to system card slots which are crucial to shelf operation. Busying any of these system cards causes all system cards in the node to go manual busy simultaneously. This removes the node from service.

The system cards are any of the following:

- NT9X31 -5V power converter (slots 1-3 and 33-35)
- NT9X30 +5V power converter (slots 4-6 and 36-38)
- NT9X13 central processing unit (CPU) card (slot 7 front)
- NT9X26 reset terminal interface (RTIF) card (slot 7 rear)
- NT9X36 clock and messaging card (slot 8 front)
- NT9X40 DMS-bus interface card (slot 8 rear)

## Example

The following table provides an example of the bsy command.

**Example of the bsy command**

| Example | Task, response, and explanation |
|---|---|
| **bsy 1 all sbsy** ↵ | |
| | **Task:** Manually busy all system busy links on the displayed slot in plane 1. |
| | **Response:**<br>`WARNING:  This action will be performed on ALL links in ENET plane:1 that are SYSB.`<br>`Please confirm (YES or NO):`<br>**>yes**<br>`Request to MAN BSYALL ENET Plane:1 Shelf:02 Slot:10 Link:03 submitted.`<br>`Request to MAN BSYALL ENET Plane:1 Shelf:02 Slot:10 Link:03 completed.` |
| | **Explanation:** The only system busy link on the card, link 03, was successfully set to manual busy. |

## Responses

The following table provides explanations of the responses to the bsy command.

**Responses for the bsy command**

| MAP output | Meaning and action |
|---|---|
| `Request to MAN BSYALL ENET Plane:1 Shelf:02 Slot:10 Link:03 submitted.`<br>`Request to MAN BSYALL ENET Plane:1 Shelf:02 Slot:10 Link:03 completed.` | **Meaning:** The system set the card to manually busy.<br>**Action:** None |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 submitted.`<br>`Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 aborted.`<br>`Reason: Aborted by <action>.` | **Meaning:** The bsy command was aborted by a higher priority maintenance action.<br><br>**Action:** If applicable, repeat the command when the other action is finished. |
| `Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 submitted.`<br>`Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 rejected.`<br>`Reason: <action> already in progress.` | **Meaning:** Another action of equal or higher priority is in progress.<br><br>**Action:** If applicable, repeat the command when the other action is finished. |
| `Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 submitted.`<br>`Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 rejected.`<br>`Reason: Bad message type` | **Meaning:** The command did not execute due to an abnormal software error.<br><br>**Action:** Obtain copies of all recent TRAP and SWERR logs and contact Nortel Networks technical support. |
| `Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 submitted.`<br>`Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 rejected.`<br>`Reason: Bad MTC action return code: <rc>` | **Meaning:** The command did not execute due to an internal messaging problem.<br><br>**Action:** Note the return code, obtain copies of all recent TRAP and SWERR logs, and contact Nortel Networks technical support. |
| `Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 submitted.`<br>`Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 rejected.`<br>`Reason: Invalid state.` | **Meaning:** The specified link is in a state which cannot be directly changed to manual busy.<br><br>**Action:** Access the SHELF level for the correct shelf number and repeat the command or reenter the command specifying the correct plane and slot numbers. |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 submitted.`<br>`Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 rejected.`<br>`Reason: Link exceeds max for card.` | **Meaning:** The link number is outside the valid range.<br><br>**Action:** Reenter the command specifying the correct plane, slot, and link number. |
| `Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 submitted.`<br>`Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 rejected.`<br>`Reason: Link is not OK, MBsy, SBsy, Offl, CBsy, or PBsy.` | **Meaning:** The specified link is in a state which cannot be directly changed to manual busy.<br><br>**Action:** Access the SHELF level for the correct shelf number and repeat the command or reenter the command specifying the correct plane and slot numbers. |
| `Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 submitted.`<br>`Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 rejected.`<br>`Reason: Link unequipped.` | **Meaning:** The specified link number is unequipped.<br><br>**Action:** Access the SHELF level for the correct shelf number and repeat the command or reenter the command specifying the correct plane, slot, and link number. |
| `Request to MAN BSYALL ENET Plane:0 Shelf:01 Slot:01 submitted.`<br>`Request to MAN BSYALL ENET Plane:0 Shelf:01 Slot:01 rejected.`<br>`Reason: No links in valid state.` | **Meaning:** None of the links on the specified card are in a state which can be changed directly to manual busy.<br><br>**Action:** Access the SHELF level for the correct shelf number and repeat the command or reenter the command specifying the correct plane and slot numbers. |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 submitted.`<br>`Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 rejected.`<br>`Reason: Mailbox unavailable <or> Bad Mailbox return code.` | **Meaning:** The command did not execute due to an abnormal software resource problem.<br><br>**Action:** Obtain copies of all recent TRAP and SWERR logs and contact Nortel Networks technical support. |
| `Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 submitted.`<br>`Request to MAN BSY ENET Plane:0 Shelf:01 Slot:01 rejected.`<br>`Reason: Timed out waiting for response.` | **Meaning:** The system could not execute the command within its allowed time threshold due to an abnormal error.<br><br>**Action:** Obtain copies of all recent TRAP and SWERR logs and contact Nortel Networks technical support. |
| `WARNING: This action will be performed on ALL links`<br>`in ENET Plane:0 that are MBSY, INSV, OFFL,`<br>`SBSY, CBSY, or PBSY.`<br>`Please confirm (YES or NO):` | **Meaning:** The all option is specified. If the bsy command executes, all links on the indicated plane in the specified state are removed from service.<br><br>**Action:** Enter yes to execute the command or no to cancel execution. |
| `WARNING: This action will be performed on ALL links`<br>`in ENET Plane:0 that are OFFL.`<br>`Please confirm (YES or NO):` | **Meaning:** The all option is specified. If the bsy command executes, all links on the indicated plane in the specified state are removed from service. The state can be offl, mbsy, insv, offl, sbsy, cbsy, or pbsy.<br><br>**Action:** Enter yes to execute the command or no to cancel execution. |

**-continued-**

# bsy (end)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `WARNING: This action will cause NETWORK BLOCKAGE.`<br>`Please confirm (YES or NO):` | **Meaning:** The bsy command causes network blockage. At least two ENET links in both planes will be unable to communicate through the switching matrix.<br><br>**Action:** Enter yes to execute the command or no to cancel execution. |
| `WARNING: This action will ISOLATE PMs.`<br>`Please confirm (YES or NO):` | **Meaning:** If the bsy command executes, communication between one or more peripheral modules and the ENET is cut off.<br><br>**Action:** Enter yes to execute the command or no to cancel execution. |
| `WARNING: This action will prevent messaging between`<br>`the MS and all PM messaging links on ENET`<br>`Plane:0 Shelf:nn.`<br>`Please confirm (YES or NO):` | **Meaning:** The bsy command removes the crosspoint card in slot 9 of the displayed shelf from service. This will cut off messaging through the indicated shelf between the message switch and the peripheral module messaging links.<br><br>**Action:** Enter yes to execute the command or no to cancel execution. |
| `WARNING: This action will prevent messaging between`<br>`the MS and all PM messaging links on even`<br>`numbered cards on Plane:0 Shelf:01.`<br>`Please confirm (YES or NO):` | **Meaning:** The bsy command removes the crosspoint card in slot 10 of the displayed shelf from service. This cuts off messaging through the indicated shelf between the message switch and the peripheral modules served by even numbered slots on the shelf.<br><br>**Action:** Enter yes to execute the command or no to cancel execution. |

**-end-**

# card

## Function

Use the card command to enter the CARD level of the ENET MAP for the specified slot number.

**card command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **card** | *slot_no* |

| Parameters and variables | Description |
|---|---|
| *slot_no* | This variable identifies the slot number in the ENET shelf in the range of 1-38. |

## Qualifications

None

## Example

The following table provides an example of the card command.

**Example of the card command**

| Example | Task, response, and explanation |
|---|---|
| **card 1** ↵ | |

**Task:** Access the CARD level for slot 1.

**Response:** The system displays the CARD level of the MAP for slot 1.

```
CARD 01      Power
               -5V
 Plane 0     IDPROM OK
 Plane 1     IDPROM OK
```

**Explanation:** The system presents the CARD level of the MAP for slot 1.

# card (end)

## Responses

The following table provides explanations of the responses to the card command.

**Responses for the card command**

| MAP output | Meaning and action |
|---|---|
| CARD 01<br>Power<br>-5V<br>Plane 0 IDPROM OK<br>Plane 1 IDPROM OK | **Meaning:** The system displays the CARD level for the requested card.<br>**Action:** None |
| Request to ENTER CARD 12 invalid, card unequipped. | **Meaning:** The specified slot number is unequipped.<br>**Action:** Equip the slot or reenter the command using a valid card number. |

# deload

## Function

Use the deload command to query and control the deload status of a crosspoint card.

**deload command parameters and variables**

| Command | Parameters and variables | | |
|---|---|---|---|
| **deload** | *plane* | query<br>clear<br>set | *prompt*<br>noprompt |

| Parameters and variables | Description |
|---|---|
| clear | This parameter clears a deload condition on the displayed card in the specified plane. |
| noprompt | This parameter suppresses all warning messages which may occur. |
| *plane* | This variable specifies a plane of the ENET, 0 or 1. |
| *prompt* | This default parameter displays all warning messages which may occur. Do not type in this parameter. |
| query | This default parameter queries the deload status of the displayed card on the specified plane. |
| set | This parameter applies a deload condition to the displayed card in the specified plane. |

## Qualifications

The deload command is qualified by the following exceptions, restrictions, and limitations:

- When a matrix element is deloaded, the system prefers the corresponding element in the other plane for establishing call connections.
- The deload command is used before manually removing a crosspoint card from service to minimize connection integrity problems.
- When one or more crosspoint cards on an ENET plane are set to deload status, a D appears between the system and matrix status fields for the affected plane.

# deload (continued)

## Examples

The following table provides examples of the deload command.

**Examples of the deload command**

| Example | Task, response, and explanation | |
|---|---|---|
| **deload 0 clear** ↵ | | |
| | **Task:** | Remove the deload status from the selected card on plane 0. |
| | **Response:** | `Request to CLEAR DELOAD ENET Plane:0 Shelf:01 Slot:13 submitted.`<br>`Request to CLEAR DELOAD ENET Plane:0 Shelf:01 Slot:13 passed.` |
| | **Explanation:** | The deload status on the displayed card is removed. |
| **deload 1 query** ↵ | | |
| | **Task:** | Query the deload status of the displayed card on plane 1. |
| | **Response:** | `Request to QUERY DELOAD ENET Plane:1 Shelf:01 Slot:13 submitted.`<br>`Request to QUERY DELOAD ENET Plane:1 Shelf:01 Slot:13 passed.`<br>`ENET Plane:1 Shelf:01 Slot:13 is deloaded.` |
| | **Explanation:** | The system responds with deload status information in the above format. |

**-continued-**

# deload (continued)

**Examples of the deload command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **deload 0 set** ↵ | |
| | **Task:** Change the status of the corresponding card on the other plane to deload. |
| | **Response:**<br>`This action will result in the DELOAD status in Plane: 1 being cleared.`<br>`Please confirm (YES or NO):`<br>**>yes**<br>`Request to SET DELOAD ENET Plane:0 Shelf:01 Slot:13 submitted.`<br>`Request to SET DELOAD ENET Plane:0 Shelf:01 Slot:13 passed.`<br>`ENET Plane:1 Shelf:01 Slot:13 is deloaded` |
| | **Explanation:** The deload status for the displayed card is removed from plane 1 and applied to plane 0. |

**-end-**

## Responses

The following table provides explanations of the responses to the deload command.

**Responses for the deload command**

| MAP output | Meaning and action |
|---|---|
| `Request to CLEAR DELOAD ENET Plane:0 Shelf:01 Slot:13 submitted.`<br>`Request to CLEAR DELOAD ENET Plane:0 Shelf:01 Slot:13 passed.` | **Meaning:** The deload status on the displayed card is removed.<br>**Action:** None |

**-continued-**

# deload (continued)

**Responses for the deload command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to CLEAR DELOAD ENET Plane: 1 Slot: 38 submitted.`<br>`Request to CLEAR DELOAD ENET Plane: 1 Slot: 38 rejected.`<br>`Reason: Card unequipped.` | **Meaning:** The system could not deload the specified card because the selected card is unequipped.<br><br>**Action:** Access the CARD level for the correct card number and repeat the deload command or reenter the deload command specifying the correct plane number. |
| `Request to CLEAR DELOAD ENET Plane: 1 Slot: 38 submitted.`<br>`Request to CLEAR DELOAD ENET Plane: 1 Slot: 38 rejected.`<br>`Reason: Shelf unequipped.` | **Meaning:** The system could not deload the specified card because the selected shelf is unequipped.<br><br>**Action:** Access the SHELF level for the correct shelf number and repeat the deload command or reenter the deload command specifying the correct plane number. |
| `Request to QUERY DELOAD ENET Plane:1 Shelf:01 Slot:13 submitted.`<br>`Request to QUERY DELOAD ENET Plane:1 Shelf:01 Slot:13 passed.`<br>`ENET Plane:1 Shelf:01 Slot:13 is deloaded.` | **Meaning:** The system responds with deload status information in the above format.<br><br>**Action:** None |
| `Request to QUERY DELOAD ENET Plane: 1 Slot: 38 submitted.`<br>`Request to QUERY DELOAD ENET Plane: 1 Slot: 38 rejected.`<br>`Reason: Card unequipped.` | **Meaning:** The system could not deload the specified card because the selected card is unequipped.<br><br>**Action:** Access the CARD level for the correct card number and repeat the deload command or reenter the deload command specifying the correct plane number. |

**-continued-**

# deload (continued)

**Responses for the deload command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to QUERY DELOAD ENET Plane: 1 Slot: 38 submitted.`<br>`Request to QUERY DELOAD ENET Plane: 1 Slot: 38 rejected.`<br>`Reason: Shelf unequipped.` | **Meaning:** The system could not deload the specified card because the selected shelf is unequipped.<br><br>**Action:** Access the SHELF level for the correct shelf number and repeat the deload command or reenter the deload command specifying the correct plane number. |
| `Request to SET DELOAD ENET Plane:0 Shelf:01 Slot:13 submitted.`<br>`Request to SET DELOAD ENET Plane:0 Shelf:01 Slot:13 passed.`<br>`ENET Plane:1 Shelf:01 Slot:13 is deloaded` | **Meaning:** The system deloaded the card.<br><br>**Action:** None |
| `Request to SET DELOAD ENET Plane: 1 Slot: 38 submitted.`<br>`Request to SET DELOAD ENET Plane: 1 Slot: 38 rejected.`<br>`Reason: Card unequipped.` | **Meaning:** The system could not deload the specified card because the selected card is unequipped.<br><br>**Action:** Access the CARD level for the correct card number and repeat the deload command or reenter the deload command specifying the correct plane number. |
| `Request to SET DELOAD ENET Plane: 1 Slot: 38 submitted.`<br>`Request to SET DELOAD ENET Plane: 1 Slot: 38 rejected.`<br>`Reason: Shelf unequipped.` | **Meaning:** The system could not deload the specified card because the selected shelf is unequipped.<br><br>**Action:** Access the SHELF level for the correct shelf number and repeat the deload command or reenter the deload command specifying the correct plane number. |

**-continued-**

# deload (end)

**Responses for the deload command** (continued)

| MAP output | Meaning and action |
|---|---|
| WARNING: This action will result in the DELOAD status in Plane:1 being cleared.<br>Please confirm (YES or NO): | **Meaning:** A card and its mate on the other plane cannot both be set to deload at the same time. In order to apply the deload status to the card on the specified plane, the system must first remove the deload status from its mate card on the other plane.<br><br>**Action:** Enter yes to execute the command or no to cancel execution. |

**-end-**

# disp

## Function

Use the disp command to display the current contents of the ENET, SHELF, and CARD levels of the MAP, as well as the Net alarm banner. This command is for use on devices which are not MAPs, such as teletypes.

**disp command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **disp** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the disp command.

**Example of the disp command**

**Example** **Task, response, and explanation**

**disp** ↵

**Task:** Display the contents of the ENET subsystem.

**Response:** The system displays the contents of the ENET status display area and alarm banner on the MAP.

```
ENET
 .

ENET     SystemMatrixShelf 0 1 2 3
 Plane 0   .      .          . . . .
 Plane 1   .      .          . . . .

SHELF 00  SLOT          1111111 11122222 22222333 333333
            123456 78 90123456 78901234 56789012 345678
 Plane 0     .  .   .. ....---- ------- ----.... .  .
 Plane 1     .  .   .. ....---- ------- ----.... .  .

CARD 12   Front    Back:
            Xpt     NIL
 Plane 0     .       -
 Plane 1     .       -
```

**Explanation:** The contents of the ENET status display area and alarm banner are displayed.

# disp (end)

## Response

The following table provides an explanation of the response to the disp command.

**Response for the disp command**

| MAP output | Meaning and action |
|---|---|
| ENET<br>.<br><br>ENET SystemMatrixShelf 0 1 2 3<br>Plane 0 . . . . . .<br>Plane 1 . . . . . .<br><br>SHELF 00 SLOT 1111111 11122222 22222333 333333<br>123456 78 90123456 78901234 56789012 345678<br>Plane 0 . . .. ...---- ------- ---.... . .<br>Plane 1 . . .. ...---- ------- ---.... . .<br><br>CARD 12 Front Back:<br>Xpt NIL<br>Plane 0 . -<br>Plane 1 . - | **Meaning:** The system displays the contents of the ENET status display area and alarm banner.<br><br>**Action:** None |

# link

## Function

Use the link command to display the DS30 equivalents for a DS512 link.

**link command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **link** | *link_no* |

| Parameters and variables | Description |
|---|---|
| *link_no* | This variable determines the DS512 link number in the range of 0-3. |

## Qualification

The link command is qualified by the following limitation: this command is only available for crosspoint slots containing a DS512 link interface paddle board.

## Example

The following table provides an example of the link command.

**Example of the link command**

| Example | Task, response, and explanation | |
|---|---|---|
| **link** ↵ | | |
| | **Task:** | Display the equivalent links for link 0 of the displayed card. |
| | **Response:** | `Link 0  111111`<br>`0123456789012345`<br>`..........S....`<br>`................` |
| | **Explanation:** | A display showing the DS30 equivalent links on the DS512 fiber cable appears to the right of the card level display. |

# link (end)

## Response

The following table provides an explanation of the response to the link command.

**Response for the link command**

| MAP output | Meaning and action |
|---|---|
| `Link 0  111111`<br>`0123456789012345`<br>`..........S....`<br>`................` | **Meaning:** A display showing the DS30 equivalent links on the DS512 fiber cable appears to the right of the card level display.<br><br>**Action:** None |

# locate

## Function

Use the locate command to display the location of the hardware in one or more ENET card slots.

**locate command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **locate** | *plane_no* [ front / back / both / slot *slot_no* ] |

| Parameters and variables | Description |
|---|---|
| *plane_no* | This variable specifies an ENET plane, 0 or 1. |
| front | This parameter selects the front of the displayed card slot. |
| back | This parameter selects the back of the displayed card slot. |
| both | This parameter selects both ENET planes, 0 and 1. |
| slot | This parameter specifies a slot other than the displayed slot. |
| *slot_no* | This variable specifies a slot number in the displayed shelf in the range of 1-38. |

## Qualifications

None

# locate (end)

## Example

The following table provides an example of the locate command.

**Example of the locate command**

| Example | Task, response, and explanation |
|---|---|
| **locate 1 front** ↵ | **Task:** Display the location of the card in the front of the displayed slot of plane 1.<br><br>**Response:** The MAP presents the requested information on the screen.<br><br>`Request to LOCATE ENET Plane:1 Shelf:01 Slot:11 submitted.`<br>`Request to LOCATE ENET Plane:1 Shelf:01 Slot:11 passed.`<br>`Site`<br><br>`Site  Flr Rpos  Bay_id  Shf Description   Slot  EqPEC`<br>`HOST  01  F04   ENC000  26  ENET:1:01:11  11   9X35BA FRNT`<br><br>**Explanation:** The display identifies the card occupying the front of the selected slot and shows where the card is physically located. |

## Response

The following table provides an explanation of the response to the locate command.

**Response for the locate command**

| MAP output | Meaning and action |
|---|---|
| `Request to LOCATE ENET Plane:1 Shelf:01 Slot:11 submitted.`<br>`Request to LOCATE ENET Plane:1 Shelf:01 Slot:11 passed.`<br>`Site`<br><br>`Site  Flr Rpos  Bay_id  Shf Description   Slot  EqPEC`<br>`HOST  01  F04   ENC000  26  ENET:1:01:11  11   9X35BA FRNT` | **Meaning:** The display identifies the card occupying the front of the selected slot and shows where the card is physically located.<br><br>**Action:** None |

# matrix

## Function

Use the matrix command to access the MATRIX level of the MAP.

**matrix command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **matrix** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the matrix command.

**Example of the matrix command**

**Example** **Task, response, and explanation**

**matrix** ↵

**Task:** View the MATRIX level of the ENET MAP.

**Response:** The system displays the MATRIX level.

```
MATRIX  Vbus   Plane 0     VBus   Plane 1
        0 1 2 3 4 5 6 7    0 1 2 3 4 5 6 7
HBus  0 . . . . . . . .    . . . . . . . .
      1 . . . . . . . .    . . . . . . . .
      2 . . . . . . . .    . . . . . . . .
      3 . . . . . . . .    . . . . . . . .
      4 . . . . . . . .    . . . . . . . .
      5 . . . . . . . .    . . . . . . . .
      6 . . . . . . . .    . . . . . . . .
      7 . . . . . . . .    . . . . . . . .
```

**Explanation:** The system displays the MAP MATRIX level screen.

# matrix (end)

## Response

The following table provides an explanation of the response to the matrix command.

**Response for the matrix command**

| MAP output | Meaning and action |
|---|---|
| `No storage for directory.` | **Meaning:** The system cannot enter the MATRIX level because there is insufficient memory to access the MATRIX level command directory.<br><br>**Action:** Clear any memory alarms present under the CM alarm banner. If necessary, contact Nortel Networks technical support for assistance. |
| The system displays the MATRIX level.<br><br>`MATRIX  Vbus   Plane 0     VBus   Plane 1`<br>`        0 1 2 3 4 5 6 7    0 1 2 3 4 5 6 7`<br>`HBus  0 . . . . . . . .    . . . . . . . .`<br>`      1 . . . . . . . .    . . . . . . . .`<br>`      2 . . . . . . . .    . . . . . . . .`<br>`      3 . . . . . . . .    . . . . . . . .`<br>`      4 . . . . . . . .    . . . . . . . .`<br>`      5 . . . . . . . .    . . . . . . . .`<br>`      6 . . . . . . . .    . . . . . . . .`<br>`      7 . . . . . . . .    . . . . . . . .` | **Meaning:** The system displays the MAP MATRIX level screen.<br><br>**Action:** None |

# offl

## Function

Use the offl command to set the state of an ENET card, paddle board, or link to offline.

**offl command parameters and variables**

**Command** **Parameters and variables**

**offl** *plane_no* [ front | back | both | slot *slot_no* | link *link_no* | all ] [ nowait | *wait* ] [ noprompt | *prompt* ]

| Parameters and variables | Description |
|---|---|
| all | This parameter selects all links associated with the card. |
| back | This parameter selects the back card of the displayed slot. |
| both | This parameter selects both front and back cards. |
| front | This parameter selects the front card of the displayed slot. |
| link | This parameter is used to select a specific link number. |
| *link_no* | This variable selects the link number in the range of 0-15 for DS30 links and 0-3 for DS512 links. |
| noprompt | This parameter suppresses the display of any warnings which may occur. |
| nowait | This parameter releases the MAP for other activities while the command executes. |
| *plane_no* | This variable specifies a plane of the ENET, 0 or 1. |
| *prompt* | This default parameter presents all warnings which may occur. Do not type in this command. |
| slot | This parameter selects a slot other than the displayed slot. |

**-continued-**

## offl (continued)

**offl command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *slot_no* | This variable specifies a slot in the displayed shelf in the range of 1-38. |
| *wait* | This default parameter prevents the MAP from being used for other activities while the command executes. Do not type in this parameter. |

**-end-**

## Qualifications

The offl command is qualified by the following exceptions, restrictions and limitations:

- The card or slot must be manual busy before it is set to offline.
- Setting any of the system cards offline causes all system cards in the node to become offline simultaneously. This removes the node from service.

The command syntax shown applies to crosspoint card slots. Parameters front, back, both, link, and all do not apply to system card slots which are crucial to shelf operation. The system cards are defined as follows:

- NT9X31 -5V power converter (slots 1-3 and 33-35)
- NT9X30 +5V power converter (slots 4-6 and 36-38)
- NT9X13 central processing unit card (slot 7 front)
- NT9X26 reset terminal interface card (slot 7 rear)
- NT9X36 clock and messaging card (slot 8 front)
- NT9X40 DMS bus interface card (slot 8 rear)

## Example

The following table provides an example of the offl command.

**Example of the offl command**

| Example | Task, response, and explanation |
|---|---|
| **offl 1 link 2** ↵ | |
| | **Task:** Set link 2 of the displayed card in plane 1 to offline. |
| | **Response:**<br>`Request to OFFLINE ENET Plane:1 Shelf:02 Slot:15 Link:02 submitted.`<br>`Request to OFFLINE ENET Plane:1 Shelf:02 Slot:105 Link:02 completed.` |
| | **Explanation:** Link 2 on the displayed card in plane 1 was successfully set to offline. |

## Responses

The following table provides explanations of the responses to the offl command.

**Responses for the offl command**

| MAP output | Meaning and action |
|---|---|
| `Request to OFFLALL ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OFFLINE ENET Plane:0 Shelf:03 Slot:03 Link:03 aborted.`<br>`Reason: Aborted by <action>.` | **Meaning:** The offl command was aborted by a higher priority maintenance action.<br>**Action:** Repeat the command when the other action is finished. |
| `Request to OFFLINE ENET Plane:1 Shelf:02 Slot:15 Link:02 submitted.`<br>`Request to OFFLINE ENET Plane:1 Shelf:02 Slot:105 Link:02 completed.` | **Meaning:** The system set the requested link to offline.<br>**Action:** None |

**-continued-**

# offl (continued)

**Responses for the offl command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to OFFLALL ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OFFLINE ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Bad message type` | **Meaning:** An abnormal software error occurred which prevented execution of the command.<br><br>**Action:** Obtain copies of all recent TRAP and SWERR logs and contact Nortel Networks technical support. |
| `Request to OFFLALL ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OFFLINE ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Bad MTC action return code: <rc>` | **Meaning:** The system could not execute the offl command because of an internal messaging problem.<br><br>**Action:** Note the return code, obtain copies of all recent TRAP and SWERR logs, and contact Nortel Networks technical support. |
| `Request to OFFLALL ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OFFLINE ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Mailbox unavailable`<br><br>or<br><br>`Bad Mailbox return code.` | **Meaning:** The command did not execute due to an abnormal software resource problem.<br><br>**Action:** Obtain copies of all recent TRAP and SWERR logs and contact Nortel Networks technical support. |
| `Request to OFFLALL ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OFFLINE ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Timed out waiting for response.` | **Meaning:** An abnormal error occurred. The system could not execute the command within its allowed time threshold.<br><br>**Action:** Obtain copies of all recent TRAP and SWERR logs and contact Nortel Networks technical support. |

**-continued-**

# offl (continued)

**Responses for the offl command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to OFFLALL ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OFFLINE ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: <action> already in progress.` | **Meaning:** Another action of equal or higher priority is in progress.<br><br>**Action:** Repeat the command when the other action is finished. |
| `Request to OFFLALL ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OFFLINE ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: Link is not MBsy.` | **Meaning:** The specified link is not manual busy.<br><br>**Action:** Reenter the command specifying the correct plane, card slot, and link numbers, or busy the appropriate link and repeat the offl command. |
| `Request to OFFLALL ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OFFLINE ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: Link unequipped.` | **Meaning:** The specified link number is unequipped.<br><br>**Action:** Reenter the command specifying the correct plane, card slot, and link numbers. |
| `Request to OFFLALL ENET Plane:0 Shelf:03 Slot:03 submitted.`<br>`Request to OFFLALL ENET Plane:0 Shelf:03 Slot:03 rejected.`<br>`Reason: Links are not MBsy.` | **Meaning:** The system cannot offline the specified slot because none of the links are manual busy.<br><br>**Action:** Busy the appropriate links and repeat the command or reenter the command specifying the correct plane, card slot, and link numbers. |

**-continued-**

# offl (end)

**Responses for the offl command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to OFFLALL ENET Plane:0 Shelf:03 Slot:03 submitted.`<br>`Request to OFFLINE ENET Plane:0 Shelf:03 Slot:03 rejected.`<br>`Reason: Link exceeds max for card.` | **Meaning:** A link number was entered which is outside of the valid range.<br><br>**Action:** Reenter the command specifying the correct plane, card slot, and link numbers. |

**-end-**

# queryen

## Function

Use the queryen command to display information about the system cards on the specified node.

**queryen command parameters and variables**

| Command | Parameters and variables | | | | |
|---|---|---|---|---|---|
| **queryen** | *plane_no* | [ <u>*both*</u> | | [ <u>status</u> | |
| | | back | | count | |
| | | front | | istb | |
| | | slot | *slot_no* | summary | *number* |
| | | link | *link_no* | verbose | *number* |
| | | linktype | | terse | *number* |
| | | ] | | report | *number* ] |

| Parameters and variables | Description |
|---|---|
| back | This parameter selects the back card of the displayed slot. |
| <u>both</u> | This default parameter selects both front and back of the displayed slot. |
| count | This parameter displays ENET counters. |
| front | This parameter selects the front card of the displayed slot. |
| istb | This parameter presents the reason for the current ENET state, if applicable. |
| link | This parameter is used to select a specific link number. |
| *link_no* | This variable specifies a link number in the range of 0-15 for DS30 links and 0-3 for DS512 links. |
| linktype | This parameter displays information regarding the links on the selected card, including which links are for speech and which are for messaging. The linktype option applies only to DS30 cards. |
| *number* | This variable represents the quantity of logs or summaries or names the report index number. The range is from 1-200. The default value is 5. |
| *plane_no* | This variable defines the specific ENET plane in the range of 0-1. |
| report | This parameter displays a specific diagnostic log which is selected by the index number. The index can be viewed using the summary parameter. |

**-continued-**

# queryen (continued)

**queryen command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| slot | This parameter is used to select a slot number other than the displayed slot. |
| *slot_no* | This variable specifies a slot number in the range of 1-38. |
| status | This default parameter displays specific system card information, including the number of xpts that are equipped, the reasons for in-service trouble, and the most recent diagnostics. |
| summary | This parameter displays one-line summaries of all plane-shelf test failures. |
| terse | This parameter displays the most recent diagnostic logs in brief detail. |
| verbose | This parameter displays the most recent diagnostic logs in complete detail. |

**-end-**

## Qualifications

None

## queryen (continued)

## Example

The following table provides an example of the queryen command.

**Example of the queryen command**

| Example | Task, response, and explanation |
|---|---|
| **queryen 1 status** ↵ | |
| | **Task:** Query the status of the displayed card on plane 1. |
| | **Response:**<br>`Request to QUERYEN ENET Plane:1 Shelf:01 Slot:11 submitted.`<br>`Request to QUERYEN ENET Plane:1 Shelf:01 Slot:11 passed.`<br>`Front: Crosspoint card Back: DS-30 interface`<br>`In-Service Trouble Reasons:`<br>`No In-Service Trouble Reasons`<br>`No diagnostic log information available for request.` |
| | **Explanation:** General status information about the displayed card in the specified plane is shown in the above format. |

## Responses

The following table provides explanations of the responses to the queryen command.

**Responses for the queryen command**

| MAP output | Meaning and action |
|---|---|
| `Request to QUERYEN ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to QUERYEN ENET Plane:0 Shelf:03 Slot:03 in both planes rejected.`<br>`Reason: Links unequipped.` | |
| | **Meaning:** The paddle board is unequipped, therefore the linktype option cannot be used. |
| | **Action:** Ensure the correct plane, shelf, and slot are selected. If applicable, repeat the command. |

**-continued-**

# queryen (end)

**Responses for the queryen command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to QUERYEN ENET Plane:1 Shelf:01 Slot:11 submitted.`<br>`Request to QUERYEN ENET Plane:1 Shelf:01 Slot:11 passed.`<br>`Front: Crosspoint card Back: DS-30 interface`<br>`In-Service Trouble Reasons:`<br>`No In-Service Trouble Reasons`<br>`No diagnostic log information available for request.` | **Meaning:** The system displays the requested information.<br><br>**Action:** None |
| `Request to QUERYEN ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to QUERYEN ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: Link exceeds max for card.` | **Meaning:** The link number is outside the valid range for the card.<br><br>**Action:** Ensure the correct plane, shelf, and slot are selected. If applicable, enter the command again using a valid link number. |
| `Request to QUERYEN ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to QUERYEN ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: Link unequipped.` | **Meaning:** The specified link is unequipped.<br><br>**Action:** Ensure the correct plane, shelf, and slot are selected. If applicable, enter the command again using a valid link number. |
| `Request to QUERYEN ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to QUERYEN ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: Not valid for a DS512 paddleboard.` | **Meaning:** The linktype parameter was used on a DS512 paddle board. This parameter can only be used on DS30 paddle boards.<br><br>**Action:** Ensure the correct plane, shelf, and slot are selected. If applicable, access the card level for the correct card and repeat the command. |

**-end-**

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any MAP level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the CARD level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The CARD level has changed to the previous menu level. |

**-continued-**

# quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc | specifies the level higher than the CARD level to be exited |
| | **Task:** Return to the MAPCI level (one menu level higher than MTC). |
| | **Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:` |
| | **Explanation:** The CARD level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides explanations of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | |
| | **Meaning:** The system exited all MAP menu levels and returned to the CI level. |
| | **Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | |
| | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. |
| | **Action:** Reenter the command using an appropriate level number. |
| The system replaces the CARD level menu with a menu that is two or more MAP levels higher. | |
| | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. |
| | **Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the CARD level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |

**-end-**

## Function

Use the rextst command to control or query the system-run routine exercise (REx) tests, or to run a manual REx test.

**rextst command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **rextst** | query [ status \| test ] [ *prompt* \| noprompt ] [ *noforce* \| force ] (1)(2)<br>sysrex [ enable \| disable \| include ] [ all \| days *weekdays* ] (3)(4)<br>include [ all \| node \| matrix ] (5)(6)(7)<br>tst *plane* [ all \| node \| matrix ] [ continue \| stop ] (8)(9)(10) |
| **rextst** (continued) | (1)(2) [ *wait* \| nowait ]<br>(3)(4)(5)(6)(7)(8)(9)(10) (end) |

| Parameters and variables | Description |
|---|---|
| all | This parameter specifies all tests when used in conjunction with the tst parameter, specifies all days of the week when used in conjunction with the sysrex parameter, and specifies both subtests when used in conjunction with the include parameter. |
| continue | This parameter causes the manual REx test to log any errors encountered as it continues to run. |
| days | This parameter specifies a range of days. |
| disable | This parameter disables the REx test for the days specified by the parameters days or all. |
| enable | This parameter enables the REx test for the specified day. |

**-continued-**

# rextst (continued)

**rextst command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| force | This parameter forces the system to accept the command. |
| include | This parameter specifies the inclusion of a group of tests for the REx test. |
| matrix | This parameter specifies matrix tests only. |
| node | This parameter specifies node tests. |
| *noforce* | This default parameterdirects the system to provide error messages and discontinue the command the command for some error conditions. Do not enter this parameter. |
| noprompt | This parameter suppresses warnings. |
| nowait | This parameter releases the MAP for other actions. All tests that pass and fail generate logs. |
| *plane* | This variable defines the specific ENET plane in the range of 0-1. |
| *prompt* | This default parameter displays all warnings. Do not type in this parameter. |
| query | This parameter displays information about the system REx test on a per-day basis. |
| status | This parameter queries which days the REx tests are enabled. |
| stop | This parameter specifies that the manual REx test runs only until an error is encounted. |
| sysrex | This parameter controls the operational parameters of the system-run REx tests. |
| test | This parameter queries which tests are enabled on which days, all tests, node tests, or matrix tests. |
| tst | This parameter runs a manual REx test on an ENET plane. |
| *wait* | This default parameter prevents all MAP activity until all actions initiated by the command are complete. Do not type in this parameter. |
| *weekdays* | This variable selects a day, or days, of the week. Values are mon, tue, wed, thu, fri, sat, or sun. Multiple days may be entered. |

**-end-**

## Qualifications

None

## Examples

The following table provides examples of the rextst command.

**Examples of the rextst command**

| Example | Task, response, and explanation |
|---|---|
| **rextst query status** ↵ | |
| | **Task:** Determine which days are scheduled for REx test runs. |
| | **Response:**<br>`Mon Tue Wed Thu Fri Sat Sun`<br>`OFF OFF OFF ON ON ON ON` |
| | **Explanation:** The system REx test is disabled Monday through Wednesday, and enabled Thursday through Sunday. |
| **rextst sysrex disable days thu** ↵ | |
| | **Task:** Disable the system REx test scheduled for Thursday. |
| | **Response:**<br>`This action disables the ENET REX test.`<br>`Please confirm (YES or NO):`<br><br>`Mon Tue Wed Thu Fri Sat Sun`<br>`OFF OFF OFF ON ON ON ON` |
| | **Explanation:** The system REx test is disabled on Thursday if a response of yes is given. |
| **rextst query test** ↵ | |
| | **Task:** Determine which system REx tests are enabled for each day of the week. |
| | **Response:**<br>`Mon Tue Wed Thu Fri Sat Sun`<br>`MAT NOD MAT NOD MAT ALL ALL` |
| | **Explanation:** The matrix REx tests are enabled on Monday, Wednesday, and Friday. The node tests are enabled for Tuesday and Thursday. On Saturday and Sunday both tests are enabled. |

**-continued-**

# rextst (continued)

**Examples of the rextst command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **rextst sysrex include all all** ↵ | |
| | **Task:** Change the test schedule so that all tests run all week. |
| | **Response:**<br>`Mon Tue Wed Thu Fri Sat Sun`<br>`ALL ALL ALL ALL ALL ALL ALL` |
| | **Explanation:** Matrix and node tests are both run on all days of the week. |
| **rextst tst 0 all** ↵ | |
| | **Task:** Run a manual REx test on plane 0, including node and matrix tests. |
| | **Response:** `ENET REX Test Results: Passed.` |
| | **Explanation:** The REx test ran successfully and no faults were detected. |

**-end-**

## Responses

The following table provides explanations of the responses to the rextst command.

**Responses for the rextst command**

| MAP output | Meaning and action |
|---|---|
| `Attempt ignored - change is redundant.` | |
| | **Meaning:** An additional attempt was made to change the scheduled tests on the day specified with the sysrex include parameter. The specified tests are already scheduled. |
| | **Action:** Reenter the command using the correct parameters. |
| `Days already enabled/disabled.` | |
| | **Meaning:** An attempt was made to disable or enable the system-initiated REx test on a day that is already in the enabled or disabled state. |
| | **Action:** Reenter the command with the correct day. |

**-continued-**

# rextst (end)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Mon Tue Wed Thu Fri Sat Sun`<br>`ALL ALL ALL ALL ALL ALL ALL` | **Meaning:** The system displays the REx test schedule.<br><br>**Action:** None |
| `No days specified.` | **Meaning:** An attempt was made to disable or enable the system-initiated REx test without specifying a day.<br><br>**Action:** Reenter the command specifying a day. |
| `WARNING: This action disables the ENET REX test.`<br>`Please confirm (YES or NO):` | **Meaning:** The system-initiated REx test scheduled for specified days will be disabled if yes is entered.<br><br>**Action:** Enter yes to execute the command or no to cancel execution. |
| **-end-** | |

# rts

## Function

Use the rts command to return the ENET cards, paddle boards, or specified links to service.

**rts command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **rts** | *plane_no* [ both / back / front / slot *slot_no* / link *link_no* / all ] [ *noforce* / force ] [ *prompt* / noprompt ] [ *wait* / nowait ] |

| Parameters and variables | Description |
|---|---|
| all | This parameter selects all links associated with the card. |
| back | This default parameter selects the back card of the displayed slot. |
| both | This default parameter selects both front and back of the displayed slot. |
| force | This parameter bypasses out-of-service tests which are normally performed. |
| front | This parameter selects the front card of the displayed slot. |
| link | This parameter is used to select a specific link number. |
| *link_ no* | This variable specifies a link number in the range of 0-15 for DS30 links and 0-3 for DS512 links. |
| *noforce* | This default parameter initiates out-of-service tests. Do not type in this parameter |
| noprompt | This parameter suppresses any warnings about degradations in service which may occur when the command is entered. |
| nowait | This parameter releases the MAP for other activities while the command executes. |
| *plane_no* | This variable defines the specific ENET plane in the range of 0-1. |
| *prompt* | This default parameter presents any warnings about degradations in service which may occur when the command is entered. Do not type in this parameter. |

**-continued-**

## rts (continued)

**rts command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| slot | This parameter is used to select a slot number other than the displayed slot. |
| *slot_no* | This variable specifies a slot number in the range of 1-38. |
| *wait* | This default parameter prevents the MAP from performing other activities while the command is executing. Do not type in this parameter. |

**-end-**

## Qualification

The rts command is qualified by the following limitation: n order to return an entity to service, it must be in manual busy or system busy state.

The command syntax shown applies to crosspoint card slots. Parameters front, back, both, link, and all do not apply to system card slots which are crucial to shelf operation. Returning any of these cards to service causes the system to try and return all system cards in the node to service. The system cards are listed as follows:

- NT9X31 -5V power converter (slots 1-3 and 33-35)
- NT9X30 +5V power converter (slots 4-6 and 36-38)
- NT9X13 central processing unit card (CPU) (slot 7 front)
- NT9X26 reset terminal interface (RTIF) card (slot 7 rear)
- NT9X36 clock and messaging card (slot 8 front)
- NT9X40 DMS-bus interface card (slot 8 rear)

## rts (continued)

## Examples

The following table provides examples of the rts command.

**Examples of the rts command**

| Example | Task, response, and explanation |
|---|---|
| **rts 0 link 2** ↵ | |
| | **Task:** Return link 2 of the displayed card on plane 0 to service. |
| | **Response:**<br>`Request to RTS ENET Plane:0 Shelf:01 Slot:12 Link:02 submitted.`<br>`Request to RTS ENET Plane:0 Shelf:01 Slot:12 Link:02 passed.` |
| | **Explanation:** Link 2 on the displayed card in plane 1 passed the out-of-service tests and was successfully returned to service. |
| **rts 1 all force** ↵ | |
| | **Task:** Return all links on the displayed card in plane 1 to service, omitting the out-of-service tests. |
| | **Response:**<br>`WARNING: This will force all MBSY and SBSY links on ENET plane:1 Shelf:02 Slot:25 to the INSV state without the normal tests being run first. Please confirm (YES or NO):`<br>**>yes**<br>`Request to RTSALL ENET Plane:1 Shelf:02 Slot:25 submitted.`<br>`Request to RTSALL ENET Plane:1 Shelf:02 Slot:25 passed.` |
| | **Explanation:** Link 2 on the displayed card in plane 1 passed the out-of-service tests and was successfully returned to service. |

# rts (continued)

## Responses

The following table provides explanations of the responses to the rts command.

**Responses for the rts command**

| MAP output | Meaning and action |
|---|---|
| `Request to RTSALL ENET Plane:1 Shelf:02 Slot:25 submitted.`<br>`Request to RTSALL ENET Plane:1 Shelf:02 Slot:25 passed.` | **Meaning:** The slot is returned to service.<br><br>**Action:** None |
| `Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 requested.`<br>`Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 aborted.`<br>`Reason: Aborted by <action>.` | **Meaning:** The rts command was aborted by a higher priority maintenance action.<br><br>**Action:** If applicable, repeat the command when the other action is complete. |
| `Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 requested.`<br>`Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`<cardlist generated>.` | **Meaning:** The system could not return the indicated link to service because out-of-service tests detected faulty hardware.<br><br>**Action:** Clear all alarms under the NET header using the procedures in *ENET Alarm Analysis and Card Replacement*, 297-5001-505. |
| `Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 requested.`<br>`Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Bad message type.` | **Meaning:** An abnormal software error occurred, preventing execution of the command.<br><br>**Action:** Obtain copies of all recent TRAP and SWERR logs and report the problem to your Nortel Networks technical support group for investigation. |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 requested.`<br>`Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Bad MTC action return code: <rc>.` | **Meaning:** The system could not execute the rts command due to an internal messaging problem.<br><br>**Action:** Note the return code, obtain copies of all recent TRAP and SWERR logs, and report the problem to your Nortel Networks technical support group for investigation. |
| `Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 requested.`<br>`Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Timed out waiting for response.` | **Meaning:** An abnormal error occurred. The system could not execute the command within the allowed time threshold.<br><br>**Action:** Obtain copies of all recent TRAP and SWERR logs and report the problem to your Nortel Networks technical support group for investigation. |
| `Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 passed.` | **Meaning:** The system returns the link to service.<br><br>**Action:** None |
| `Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 requested.`<br>`Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: <action> already in progress.` | **Meaning:** Another action of equal or higher priority is in progress.<br><br>**Action:** If applicable, repeat the command when the other action is complete. |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 requested.`<br>`Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: Already OK.` | **Meaning:** The specified link is already in service.<br><br>**Action:** If applicable, reenter the command specifying the correct plane, card slot, and link numbers. |
| `Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 requested.`<br>`Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: Invalid state.` | **Meaning:** The specified link is in a state which cannot be directly returned to service.<br><br>**Action:** If applicable, change the state of the link to system busy or manual busy and repeat the rts command or reenter the command specifying the correct plane, card slot, and link numbers. |
| `Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 requested.`<br>`Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: Link is not SBsy or MBsy.` | **Meaning:** The specified link is in a state which cannot be directly returned to service.<br><br>**Action:** If applicable, change the state of the link to system busy or manual busy and repeat the rts command or reenter the command specifying the correct plane, card slot, and link numbers. |
| `Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 requested.`<br>`Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: Link unequipped.` | **Meaning:** The specified link is unequipped.<br><br>**Action:** If applicable, reenter the command specifying the correct plane, card slot, and link numbers. |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 requested.`<br>`Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: Mailbox unavailable`<br><br>or<br><br>`Bad Mailbox return code.` | **Meaning:** The command did not execute because of an abnormal software resource problem.<br><br>**Action:** Obtain copies of all recent TRAP and SWERR logs and report the problem to your Nortel Networks technical support group for investigation. |
| `Request to RTS ENET Plane:0 Shelf:03 Slot:03 Link:03 requested.`<br>`Request to RTSALL ENET Plane:0 Shelf:03 Slot:03 rejected.`<br>`Reason: No out-of-service links.` | **Meaning:** None of the links on the specified card slot are out of service.<br><br>**Action:** If applicable, reenter the command specifying the correct plane and slot numbers. |
| `WARNING:  This will force all MBSY and SBSY links on`<br>`ENET plane:0 Shelf:03 Slot:03 to the INSV state`<br>`without the normal tests being run first.`<br>`Please confirm (YES or NO):` | **Meaning:** The force and all options are specified. If the rts command executes, the system attempts to return all manual busy and system busy links on the indicated slot to service without running the standard out-of-service tests.<br><br>**Action:** Enter yes to execute the command or no to cancel execution. |

**-continued-**

# rts (end)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `WARNING: This will force ENET plane:0 Shelf:03 Slot:03 Link:03 to the INSV state without the normal tests being run first. Please confirm (YES or NO):` | **Meaning:** The force option was specified. If the rts command executes, the system attempts to return the specified link to service without running the standard out-of-service tests.<br><br>**Action:** Enter yes to execute the command, or no to cancel execution. |
| **End** | |

# system

## Function

Use the system command to enter the SYSTEM level of the ENET MAP.

**system command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **system** | *shelf* [ *nocpu* / cpu ] [ *nomemory* / memory ] |

| Parameters and variables | Description |
|---|---|
| cpu | This parameter directs the system to present a summary of central processing unit (CPU) occupancy. |
| memory | This parameter directs the system to present a summary of memory usage. |
| *nocpu* | This default parameter directs the system to suppress a summary of CPU occupancy. Do not enter this parameter. |
| *nomemory* | This default parameter directs the system to suppress a summary of memory usage. Do not enter this parameter. |
| *shelf* | This variable specifies an ENET shelf in the range of 0-7, or all. All is the default if the parameters cpu and memory are not specified. If the shelf is not specified and only the parameters cpu and memory are specified, the default value for the variable shelf is 0. |

## Qualifications

None

## system (continued)

### Example

The following table provides an example of the system command.

**Example of the system command**

| Example | Task, response, and explanation |
|---|---|
| **system 1** ↵ | |
| | **Task:** View the SYSTEM level of the ENET MAP for shelf 1. |
| | **Response:** The system changes the menu to the SYSTEM level menu, and adds the following fields to the display:<br><br>SYSTEM<br>Shelf Plane 0 Plane 1<br>01 . . |
| | **Explanation:** The SYSTEM level screen for shelf 1 is presented. |

### Responses

The following table provides explanations of the responses to the system command.

**Responses for the system command**

| MAP output | Meaning and action |
|---|---|
| No storage for directory. | |
| | **Meaning:** The system cannot enter the SYSTEM level because there is insufficient memory to access the SYSTEM-level command directory. |
| | **Action:** Clear any memory alarms present under the CM alarm banner. If necessary, contact Nortel Networks technical support for assistance. |
| Request to PERFORM SYSTEM 03 rejected.<br>Reason: Shelf not equipped. | |
| | **Meaning:** The specified shelf number is unequipped. |
| | **Action:** Reenter the command with a valid shelf number. |

**-continued-**

# system (end)

**Responses for the system command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system changes the menu to the SYSTEM level menu, and adds the following fields to the display:<br><br>SYSTEM<br>Shelf Plane 0 Plane 1<br>00 . .<br>01 . .<br>02 . .<br>03 . . | **Meaning:** The current level changes to the SYSTEM level.<br><br>**Action:** None |

**-end-**

# trnsl

## Function

Use the trnsl command to translate the specified link in either the control-side (C-side) or peripheral-side (P-side) direction, or determine the logical numbering for the displayed card within the ENET switching matrix.

**trnsl command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **trnsl** | [ p *plane_no* *link_no*<br>c *plane_no* *link_no*<br>xpt ] |

| Parameters and variables | Description |
|---|---|
| c | This parameter selects the translation to the C-side switching cards and message switch ports. |
| *link_no* | This variable specifies a link in the range of 0-15 for DS30 links and 0-3 for DS512 links. |
| p | This parameter selects the translation to the P-side peripheral module. |
| *plane_no* | This variable specifies a plane of the ENET, 0 or 1. |
| xpt | This parameter selects crosspoint translation. |

## Qualifications

None

# trnsl (continued)

## Examples

The following table provides examples of the trnsl command.

**Examples of the trnsl command**

| Example | Task, response, and explanation | |
|---|---|---|
| **trnsl 0 4** ↵ | | |
| | **Task:** | Translate the P-side of link number 4 for the displayed card on plane 0. |
| | **Response:** | `Request to TRNSL ENET Plane:0 Shelf:00 Slot:16 Link:04 submitted.`<br>`Request to TRNSL ENET Plane:0 Shelf:00 Slot:16 Link:04 passed.`<br>`ENET Plane:0 Shelf:01 Slot:12 Link:03`<br>` OAU Port:0` |
| | **Explanation:** | The subtending PM connected to the specified ENET link is identified. In this example, link 4 of the displayed card (shelf 0 slot 16) is connected to port 0 on an office alarm unit (OAU). |
| **trnsl c 1 4** ↵ | | |
| | **Task:** | Translate the C-side of link number 4 for the displayed card on plane 1. |
| | **Response:** | `Request to TRNSL ENET Plane:1 Shelf:00 Slot:16 Link:04 submitted.`<br>`Request to TRNSL ENET Plane:1 Shelf:00 Slot:16 Link:04 passed.`<br>`ENET Plane:1 Shelf:00 Slot:16 Link:04 :`<br>`  Plane:1  Shelf:00  Slot:09`<br>`  Plane:1  Shelf:00  Slot:10`<br>`  Plane:1  Shelf:00  Slot:15`<br>`  Plane:1  Shelf:00  Slot:16`<br>`MS:0 Card:10 Port:15 Secondary, Backup (OK ), Link=(OK )`<br>`MS:1 Card:10 Port:15 Primary, Active (OK ), Link=(OK )` |
| | **Explanation:** | The first four lines identify the C-side hardware connected to link number 4 on the displayed card. The last two lines identify the message switch links and their status. |

## Responses

The following table provides explanations of the responses to the trnsl command.

**Response for the trnsl command**

| MAP output | Meaning and action |
|---|---|
| `Request to TRNSL ENET Plane:0 Shelf:00 Slot:16 Link:04 submitted.`<br>`Request to TRNSL ENET Plane:0 Shelf:00 Slot:16 Link:04 passed.`<br>`ENET Plane:0 Shelf:01 Slot:12 Link:03`<br>`OAU Port:0` | **Meaning:** The system displays the translation information for a link.<br><br>**Action:** None |
| `Request to TRNSL ENET Plane:1 Shelf:00 Slot:16 Link:04 submitted.`<br>`Request to TRNSL ENET Plane:1 Shelf:00 Slot:16 Link:04 passed.`<br>`ENET Plane:1 Shelf:00 Slot:16 Link:04 :`<br>`Plane:1 Shelf:00 Slot:09`<br>`Plane:1 Shelf:00 Slot:10`<br>`Plane:1 Shelf:00 Slot:15`<br>`Plane:1 Shelf:00 Slot:16`<br>`MS:0 Card:10 Port:15 Secondary, Backup (OK ), Link=(OK )`<br>`MS:1 Card:10 Port:15 Primary, Active (OK ), Link=(OK )` | **Meaning:** The system displays the translation information for the specified card.<br><br>**Action:** None |
| `Request to TRNSL Plane:0 Shelf:01 Slot:12 Link:03 submitted.`<br>`Request to TRNSL Plane:0 Shelf:01 Slot:12 Link:03 rejected.`<br>`Reason: Link unequipped.` | **Meaning:** The specified link is unequipped.<br><br>**Action:** If applicable, enter the command again with a valid link number. |

# try

## Function

Use the try command to display the warning which would occur if certain commands are entered. The try command prechecks the potential impact of a maintenance action before actual command execution.

**try command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **try** | bsy *plane_no* [front / back / both / slot *slot_no* / link *link_no* / all *state*] |
| | rts *plane_no* [front / back / both / slot *slot_no* / link *link_no* / all] force |
| | tst *plane_no* [front / back / both / slot *slot_no* / link *link_no* / all] |
| | offl *plane_no* [front / back / both / slot *slot_no* / link *link_no* / all] |

| Parameters and variables | Description |
|---|---|
| all | This parameter selects all hardware entities which are part of the selected plane when used in conjunction with parameters rts, tst, or offl. This parameter can be used to select hardware entities by state, such as busy or offline, when used in conjunction with the bsy parameter. |
| back | This parameter selects back circuit cards which are also called paddle boards. |
| both | This parameter selects both front and back cards. |
| bsy | This parameter selects the busy command. |

**-continued-**

# try (continued)

**try command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| force | This parameter selects the force option of the rts command. The force option of the rts command bypasses out-of-service tests and attempts to force the entity back into service regardless of its condition. |
| front | This parameter selects front circuit cards. |
| link | This parameter selects the specified link number. |
| *link_no* | This variable specifies a link number in the range of 0-3 for DS512 links and 0-15 for DS30 links. |
| offl | This parameter selects the offline command. |
| *plane_no* | This variable specifies a plane of the ENET, 0 or 1. |
| rts | This parameter selects the return-to-service command. |
| slot | This parameter selects the specified slot number. |
| *slot)no* | This variable specifies a slot in the ENET in the range of 1-38. |
| *state* | This variable selects one of the following states: insv, mbsy, sbsy, cbsy, pbsy, offl. |
| tst | This parameter selects the test command. |

**-end-**

## Qualifications

None

## Example

The following table provides an example of the try command.

**Example of the try command**

| Example | Task, response, and explanation |
|---|---|
| **try bsy 1 insv** ↵ | |
| | **Task:** Display any warnings which appear if an attempt to busy the displayed card on plane 1 is made. |
| | **Response:** `WARNING: This action will cause NETWORK BLOCKAGE.` |
| | **Explanation:** This is the warning which appears if the command bsy 1 is attempted. |

## Response

The following table provides an explanation of the response to the try command.

**Response for the try command**

| MAP output | Meaning and action |
|---|---|
| The system displays the response it would display if the actual command were entered. | |
| | **Meaning:** The system displays the response it would display if the actual command were entered. |
| | **Action:** None |

## Function

Use the tst command to initiate a series of tests on the card, paddle board, or links you specify.

**tst command parameters and variables**

| Command | Parameters and variables | | | | | |
|---|---|---|---|---|---|---|
| **tst** | *plane_no* | front<br>back<br>both<br>slot<br>link<br>all | <br><br><br>*slot_no*<br>*link_no*<br> | <br><br><br><br>minutes<br> | [*prompt*<br>noprompt] | [*wait*<br>nowait] |

| Parameters and variables | Description |
|---|---|
| all | This parameter selects all links associated with the card. |
| back | This parameter selects the back card in the displayed slot. |
| both | This parameter selects both front and back cards. |
| front | This parameter selects the front card in the displayed slot. |
| link | This parameter selects a specific link number. |
| *link_no* | This variable specifies a link number in the range of 0-15 for DS30 links and 0-3 for DS512 links. |
| *minutes* | This variable specifies the duration of the linktest in minutes in the range of 1-90 minutes. The default is 1 minute. |
| noprompt | This parameter causes the command to execute without display of any warning messages which occur. |
| nowait | This parameter releases the MAP for other activities while the command executes. |
| *plane_no* | This variable specifies a plane of the ENET, 0 or 1. |
| *prompt* | This default parameter displays any warning messages which occur while the command executes. |
| slot | This parameter selects a slot other than the displayed slot. |

**-continued-**

## tst (continued)

**tst command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *slot_no* | This variable specifies a slot number in the range of 1-38. |
| *wait* | This default parameter prevents the MAP from being used for other activities while the command executes. Do not type in this parameter. |

**-end-**

## Qualifications

The tst command is qualified by the following exceptions, restrictions, and limitations:

- If the specified entity is in service, the tst command runs in-service tests. If the in-service tests fail, the state of the entity changes to system busy.
- If the specified entity is in a manual busy state, the tst command runs out-of-service tests. The state of the card does not change, regardless of whether the tests pass or fail.
- When the nowait option is not used, only test failures generate a log report. When nowait is used, all test results generate a log report.

The command syntax shown applies to crosspoint card slots. Parameters front, back, both, link, and all do not apply to system card slots, which are crucial to shelf operation. The system cards are:

- NT9X31 -5V power converter (slots 1-3 and 33-35)
- NT9X30 +5V power converter (slots 4-6 and 36-38)
- NT9X13 central processing unit (CPU) card (slot 7 front)
- NT9X26 reset terminal interface (RTIF) card (slot 7 rear)
- NT9X36 clock and messaging card (slot 8 front)
- NT9X40 DMS-bus interface card (slot 8 rear)

Running tests on any of these cards causes the system to try and test all system cards in the node.

## tst (continued)

## Examples

The following table provides examples of the tst command.

**Examples of the tst command**

| Example | Task, response, and explanation | |
|---|---|---|
| **tst** ↵ | | |
| | **Task:** | Test the displayed card on plane 1. |
| | **Response:** | `Request to INSV TEST ENET Plane:1 Shelf:01 Slot:12 submitted.`<br>`Request to INSV TEST ENET Plane:1 Shelf:01 Slot:12 passed.` |
| | **Explanation:** | The displayed card in plane 1 passed all in-service diagnostic tests. |
| **tst 1 link 25** ↵ | | |
| | **Task:** | Test link 2 on the selected card on plane1 for 5 minutes. |
| | **Response:** | `Request to OOS TEST ENET Plane:1 Shelf:01 Slot:12 Link:02 submitted.`<br>`Request to OOS TEST ENET Plane:1 Shelf:01 Slot:12 Link:02 passed.` |
| | **Explanation:** | Link 2 on the displayed card passed all out-of-service diagnostic tests. |

# tst (continued)

## Responses

The following table provides an explanation of the responses to the tst command.

**Responses for the tst command**

| MAP output | Meaning and action |
|---|---|
| `Request to INSV TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to INSV TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Aborted by <action>.`<br><br>or<br><br>`Request to OOS TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OOS TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Aborted by <action>.` | **Meaning:** The tst command was aborted by a higher priority maintenance action.<br><br>**Action:** Repeat the command when the other maintenance action is complete. |
| `Request to INSV TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to INSV TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: <action> already in progress.`<br><br>or<br><br>`Request to OOS TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OOS TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: <action> already in progress.` | **Meaning:** Another action of equal or higher priority is in progress.<br><br>**Action:** Repeat the command when the other maintenance action is complete. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to INSV TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to INSV TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Bad message type`<br><br>or<br><br>`Request to OOS TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OOS TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Bad message type` | **Meaning:** An abnormal software error occurred which prevented execution of the command.<br><br>**Action:** Obtain copies of all recent TRAP and SWERR logs and contact Nortel Networks technical support. |
| `Request to INSV TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to INSV TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Bad MTC action return code: <rc>`<br><br>or<br><br>`Request to OOS TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OOS TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Bad MTC action return code: <rc>` | **Meaning:** The command did not execute because of an internal software resource problem.<br><br>**Action:** Note the return code, obtain copies of all recent TRAP and SWERR logs, and contact Nortel Networks technical support. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to INSV TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to INSV TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Mailbox unavailable`<br><br>or<br><br>`Bad Mailbox return code.`<br><br>or<br><br>`Request to OOS TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OOS TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Mailbox unavailable`<br><br>or<br><br>`Bad Mailbox return code.` | **Meaning:** The command did not execute because of an abnormal software resource problem.<br><br>**Action:** Obtain copies of all recent TRAP and SWERR logs and report the problem to your Nortel Networks technical support group for investigation. |
| `Request to INSV TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to INSV TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Timed out waiting for response.`<br><br>or<br><br>`Request to OOS TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to OOS TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 failed.`<br>`Reason: Timed out waiting for response.` | **Meaning:** An abnormal error occurred. The system could not execute the command within its allowed time threshold.<br><br>**Action:** Obtain copies of all recent TRAP and SWERR logs and contact Nortel Networks technical support. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to INSV TEST ENET Plane:1 Shelf:01 Slot:12 submitted.`<br>`Request to INSV TEST ENET Plane:1 Shelf:01 Slot:12 passed.` | **Meaning:** The slot passed the test.<br><br>**Action:** None |
| `Request to INSV TEST ENET Plane:1 Shelf:01 Slot:12 Link:02 submitted.`<br>`Request to INSV TEST ENET Plane:1 Shelf:01 Slot:12 Link:02 passed.` | **Meaning:** The link passed the test.<br><br>**Action:** None |
| `Request to OOS TEST ENET Plane:1 Shelf:01 Slot:12 submitted.`<br>`Request to OOS TEST ENET Plane:1 Shelf:01 Slot:12 passed.` | **Meaning:** The slot passed the test.<br><br>**Action:** None |
| `Request to OOS TEST ENET Plane:1 Shelf:01 Slot:12 Link:02 submitted.`<br>`Request to OOS TEST ENET Plane:1 Shelf:01 Slot:12 Link:02 passed.` | **Meaning:** The link passed the test.<br><br>**Action:** None |
| `Request to TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: Link exceeds max for card.` | **Meaning:** A link number was entered which is outside the valid range.<br><br>**Action:** Reenter the tst command specifying the correct plane, slot, and link numbers. |

**-continued-**

# tst (end)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: Link is not OK, or MBsy.` | **Meaning:** The specified link is in a state which does not permit testing.<br><br>**Action:** Change the state of the affected links to manual busy and repeat the tst command, or reenter the tst command specifying the correct plane, slot, and link numbers. |
| `Request to TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 submitted.`<br>`Request to TEST ENET Plane:0 Shelf:03 Slot:03 Link:03 rejected.`<br>`Reason: Link unequipped.` | **Meaning:** The specified link is unequipped.<br><br>**Action:** Reenter the tst command specifying the correct plane, slot, and link numbers. |
| `Request to TSTALL ENET Plane:0 Shelf:03 Slot:03  submitted.`<br>`Request to TSTALL ENET Plane:0 Shelf:03 Slot:03  rejected.`<br>`Reason: No MBsy or OK links.` | **Meaning:** None of the links on the selected card are in a state which permits testing.<br><br>**Action:** Change the state of the affected links to manual busy and repeat the tst command, or reenter the tst command specifying the correct plane, slot, and link numbers. |

**-end-**

# Card level commands

Use the Card level of the MAP to query information and perform maintenance actions on cards. The menu that appears depends on the type of card selected. When an interface card is selected, the system displays a full Card level menu.

## Accessing the Card level

To access the Card level, enter the following from the CI level:

**mapci;mtc;ms;shelf;card *<card_number>*** ↵

Replace <*card_number*> with the number of the desired card level.

## Card commands

The commands available at the Card MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**Card commands**

| Command | Page |
|---|---|
| bsy | C-91 |
| bsyms | C-103 |
| card | C-111 |
| chain | C-115 |
| clock | C-117 |
| loadcd | C-119 |
| loadms | C-129 |
| next | C-135 |
| offl | C-139 |
| port | C-145 |

-continued-

| **Card commands** (continued) | |
|---|---|
| **Command** | **Page** |
| querycd | C-147 |
| queryms | C-155 |
| quit | C-165 |
| rts | C-169 |
| shelf | C-183 |
| trnsl | C-185 |
| tst | C-189 |
| **-end-** | |

## Card menu

The following figure shows an example of the Card menu and status display. The insert with hidden commands is not a visible part of the menu display.

```
       CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
        .     .     .     .     .     .     .     .     .     .


CARD            Message Switch  Clock  Shelf 0  Inter-MS link 0 1
 0 Quit       MS 0     .         Master       .                . .
 2            MS 1     .         Slave        .                . .
 3
 4            SHELF 0                1 1 1 1 1 2 2 2 2 2 2 2
 5            Card 1 2 3 4 5 6 7 ... 5 6 7 8 9 0 1 2 3 4 5 6
 6 Tst_       Chain
 7 Bsy_       MS 0 . . . . . . . ... . . . . . . . . . . . .
 8 RTS_       MS 1 . . . . . . . ... . . . . . . . . . . . .
 9 Offl_
10            Card 07 Protocol port 0_____3
11 LoadCd_    MS 0  .   DS30     4  . . . .
12 QueryCd_   MS 1  .   DS30     4  . . . .
13 Card_
14 QueryMS_
15 Trnsl_
16
17 Next_
18 Port_
```

**Hidden commands**

```
chain              clock
loadms             shelf
```

The following figure shows an example of the Card menu and status display for a SuperNode Enhanced Network (SNSE) thirty-two bit bus (TBus) to frame transport bus (FBus) interface (TFI) card. Taps 0-23, the 16K enhanced network (ENET) taps, and taps 12-23, the link interface shelf (LIS) taps, are displayed only if they are datafilled. The insert with hidden commands is not a visible part of the menu display.

```
       CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
        .     .     .     .     .     .     .     .     .     .


CARD              Message Switch  Clock  Shelf 0  Inter-MS link 0 1
 0 Quit         MS 0     .         Master       .                . .
 2              MS 1     .         Slave        .                . .
 3
 4              SHELF 0                1 1 1 1
 5              Card 1 2 3 4 5 6 7 8 9 0 1 2 3
 6 Tst_         Chain
 7 Bsy_         MS 0 . . . . . . . . . . . . .
 8 RTS_         MS 1 . . . . . . . . . . . . .
 9 Offl_
10              Card 12 FBus  Tap: 0      11 12____15 16____19 20____23
11 LoadCd_      MS 0  .   .        .       .  . . . .  . . . .  . . . .
12 QueryCd_     MS 1  .   .        .       .  . . . .  . . . .  . . . .
13 Card_
14 QueryMS_
15 Trnsl_
16
17 Next_
18 Port_

                  Hidden commands

                  chain              clock
                  loadms             shelf
```

## Card status codes

The following table describes the status codes for the Card status display.

| Status codes Card menu status display | | |
|---|---|---|
| **Code** | **Meaning** | **Description** |
| One of the following headers appears on the status display, depending on the card number specified. The card number replaces <nn>.<br><br>▪ Card <nn> CMIC Interface Card<br>▪ Card <nn> FBus.<br>▪ Card <nn> Mapper Card<br>▪ Card <nn> Memory Card<br>▪ Card <nn> MS Processor<br>▪ Card <nn> P-bus Terminator<br>▪ Card <nn> P-bus Extension<br>▪ Card <nn> Protocol Port<br>▪ Card <nn> RTIF<br>▪ Card <nn> T-bus Acc. Ext.<br>▪ Card <nn> T-bus Acc. Term. | | |
| . | in-service | The card is ok. |
| - | unequipped | The card is unequipped. |
| F | fault | The card has a fault. |
| O | offline | The card is offline. |
| S | system busy | The card is system busy. |
| CMIC Port | | |
| . | in-service | The port is ok. |
| - | unequipped | The port is unequipped. |
| F | fault | The port has a fault. |
| M | manually busy | The port is manuallybusy. |
| P | P-side busy | The port is P-side busy. |
| C | C-side busy | The port is C-side busy. |
| S | system busy | The port is system busy. |

# bsy

## Function

Use the bsy command to set a specified card to manually busy.

**bsy command parameters and variables**

| Command | Parameters and variables | | | | |
|---|---|---|---|---|---|
| **bsy** | *ms_no* | [ *both* / port / front / back / fbus / tap ] | [ *port_no* / *tap_no* ] | [ *wait* / nowait ] | [ *prompt* / noprompt ] [ *noforce* / force ] |

| Parameters and variables | Description |
|---|---|
| back | This parameter specifies that the card on the rear shelf is to be busied. |
| *both* | This default parameter specifies that both cards are to be busied. Do not enter this parameter. |
| fbus | This parameter specifies that an FBus is to be busied. |
| force | This parameter circumvents checking for P-side node isolation and busies the specified port or interface card. |
| front | This parameter specifies that the card on the front shelf is to be busied. |
| *ms_no* | This variable is the message switch (MS) number. Valid entries are 0-1. |
| *noforce* | This default parameter directs the system to check for P-side node isolation and to abort the bsy command when busying the card will interrupt traffic. Do not enter this parameter. |
| noprompt | This parameter prevents any yes/no prompts from being displayed. The system automatically enters yes. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the system makes the card manually busy. |
| port | This parameter specifies that a port is to be manually busied. |
| *port_no* | This variable specifies the port to be busied. Valid entries are 0-127. |
| tap | This parameter specifies that a tap is to be busied. |

**-continued-**

# bsy (continued)

**bsy command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *tap_no* | This variable specifies the number of the tap that is to be busied. Valid entries are 0-23. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| *wait* | This default parameter directs the system to not allow use of the MAP for other functions while it makes the card manually busy. Do not enter this parameter. |

**-end-**

## Qualifications

The bsy command is qualified by the following exceptions, restrictions, and limitations:

- Using the force parameter to busy a card slot can cause loss of communication to some subtending nodes or loss of the frame transport system (FTS) tandem routing.
- If you do not specify a parameter, the system busies both cards in the slot.
- You cannot make system cards and chain cards manual busy.
- A port or card must be equipped to be made manual busy.
- You cannot make both computing module interface cards (CMIC) or both CMIC links manually busy at the same time.
- Complete isolation of link interface units (LIU) from the DMS-Bus occurs when the user busies the last in-service TFI card.
- When both taps connected to an LIU are out-of-service, the LIU will be isolated from the DMS-Bus.

## bsy (continued)

## Example

The following table provides an example of the bsy command.

**Example of the bsy command**

| Example | Task, response, and explanation |
|---|---|
| **bsy 0 noprompt force** ↵<br>*where*<br><br>0 specifies the message switch | |
| | **Task:** Force the card on MS 0 into the manually busy state without prompting for confirmation.<br><br>**Response:**<br><br>`Request to Busy MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 passed.`<br><br>**Explanation:** Card 17 on MS 0 is manually busy. |

## Responses

The following table provides explanations of the responses to the bsy command.

**Responses for the bsy command**

| MAP output | Meaning and action |
|---|---|
| `Cannot busy both CMIC cards and/or link` | |
| | **Meaning:** The mate CMIC is out-of-service. If you make the second CMIC manually busy, the MS becomes isolated from the computing module (CM).<br><br>**Action:** None |
| `Cannot busy system card 2.` | |
| | **Meaning:** You cannot make system cards manual busy. Only interface cards can be made manual busy. The response echoes the number of the card.<br><br>**Action:** None |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Card 5 is unequipped.` | **Meaning:** The card is unequipped.<br><br>**Action:** None |
| `Error, card services the only inservice Inter-MS link.` | **Meaning:** Busying the specified card disables FTS tandem routing through inter-MS links. The bsy command is rejected.<br><br>**Action:** Use the force parameter of the bsy command to force the loss of inter-MS link routing. |
| `Error, port services the only inservice Inter-MS link.` | **Meaning:** Busying the specified port disables FTS tandem routing through inter-MS links. The bsy command is rejected.<br><br>**Action:** Use the force parameter of the bsy command to force the loss of inter-MS link routing. |
| `FBus 5 is unequipped.` | **Meaning:** The FBus is unequipped.<br><br>**Action:** None |
| `No action done; card 1 already man busy.` | **Meaning:** The card is already manual busy. The response echoes the card number entered.<br><br>**Action:** None |
| `No action done; FBus 1 already man busy.` | **Meaning:** The FBus is already manual busy. The response echoes the FBus number entered.<br><br>**Action:** None |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `No action done, port 23 already man busy.` | **Meaning:** The link is already manually busy. The system echoes the port number entered. Possible values for the port number are 0-127.<br><br>**Action:** None |
| `No action done; tap 1 already man busy.` | **Meaning:** The tap is already manual busy. The response echoes the tap number entered.<br><br>**Action:** None |
| `P-side nodes will be isolated-taken out of service.`<br>`Bsy aborted.` | **Meaning:** The system disallowed the attempt to busy the card slot, as this action would isolate one or more P-side nodes causing loss of communication to some subtending nodes.<br><br>**Action:** Repeat the command using the force parameter. |
| `Port 521 does not exist on this card.` | **Meaning:** The port number is outside the port range for the card displayed at the Card level. The system echoes the port number entered.<br><br>**Action:** Retry the bsy command with a valid port number variable. |
| `Port 5 is unequipped.` | **Meaning:** The port is unequipped.<br><br>**Action:** None |
| `Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 passed.` | **Meaning:** The requested card is placed in the manually busy state.<br><br>**Action:** None |
| `Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested card cannot be busied.<br><br>**Action:** None |
| `Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Input Parameter` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot busy the card while other maintenance activities are in progress.<br><br>**Action:** Retry the bsy command after other activities have finished. |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 failed;`<br>`Request not supported`<br><br>or<br><br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 terminated;`<br>`no resources available.`<br>`Required Resources Are Unavailable` | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| `Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 failed;`<br>`Fail`<br><br>or<br><br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 port: 51 failed;`<br>`No Problem` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `Request to Busy MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to Busy MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 passed.` | **Meaning:** The requested card is placed in the manually busy state.<br><br>**Action:** None |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Busy MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested card cannot be busied.<br><br>**Action:** None |
| `Request to Busy MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to Busy MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot busy the card while other maintenance activities are in progress.<br><br>**Action:** Retry the bsy command after other activities have finished. |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Busy MS: 0 shelf: 0 card: 17 submitted`<br>`Request to Busy MS: 0 shelf: 0 card: 17 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`no resources available.`<br>`Required Resources Are Unavailable`<br><br>or<br><br>`Request to Busy MS: 0 shelf: 0 card: 17 submitted`<br>`Request to Busy MS: 0 shelf: 0 card: 17 failed;`<br>`Request not supported` | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| `Request to Busy MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Busy MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Busy MS: 0 shelf: 0 card: 17 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Check for Swerrs`<br><br>or<br><br>`No Problem`<br><br>or<br><br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `Tap 5 is on an unequipped shelf.` | **Meaning:** The specified tap is not in any of the datafilled shelves.<br><br>**Action:** None |
| `Tap 5 is unequipped.` | **Meaning:** The tap is unequipped.<br><br>**Action:** None |
| `WARNING, Card services the only remaining inter-ms link.`<br>`Please confirm ('yes' or 'no'):` | **Meaning:** The last inter-MS link is serviced by the card being busied. If the card is busied, the inter-MS link goes out-of-service and the FTS tandem routing on the other MS is disabled. FTS tandem routing is automatically disabled on the other MS before the bsy command is executed.<br><br>**Action:** Enter no to abort the bsy command. Enter yes to proceed with the bsy command. |

**-continued-**

# bsy (end)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `WARNING, BSY command may isolate p-side.` | **Meaning:** Since the bsy command was used with the force parameter, the subtending nodes isolate from the MS.<br><br>**Action:** None |
| `WARNING, MBSY command will isolate p-side.`<br>`Please confirm ('yes' or 'no')` | **Meaning:** The mate card is out-of-service. If you busy this card, the subtending nodes isolate from the MS.<br><br>**Action:** Enter yes to proceed with the bsy command. Enter no to abort the bsy command. |
| `WARNING, card services the only remaining Inter-MS link.`<br>`Please confirm ('YES' or 'NO'):` | **Meaning:** The last inter-MS link is serviced by the card being busied. If you busy this card, the last Inter-MS link goes out-of-service, and the FTS tandem routing on the other MS is disabled.<br><br>**Action:** Enter no to abort the bsy command. Enter yes to proceed with the bsy command. |
| `WARNING, port services the only remaining inter-ms link.`<br>`Please confirm ('yes' or 'no'):` | **Meaning:** The last inter-MS link is serviced by the port being busied. If the port is busied, the inter-MS link goes out-of-service and the FTS tandem routing on the other MS is disabled. FTS tandem routing is automatically disabled on the other MS before the busy is executed.<br><br>**Action:** Enter no to abort the bsy command. Enter yes to proceed with the bsy command. |

**-end-**

# bsyms

## Function

Use the bsyms command to make the specified MS manually busy.

**bsyms command parameters and variables**

| Command | Parameters and variables | | | |
|---|---|---|---|---|
| **bsyms** | *ms* | [ *wait* / nowait ] | [ *prompt* / noprompt ] | [ *noforce* / force ] |

| Parameters and variables | Description |
|---|---|
| force | This parameter directs the system to circumvent checking for P-side node isolation and busies the specified MS. If the MS specified has the master clock, the system switches clock mastership to the other MS. |
| *ms* | This variable identifies the MS by number. Valid entries are 0-1. |
| *noforce* | This default parameter directs the system to check for P-side node isolation and clock mastership and does not make the system busy if these are not appropriate. Do not enter this parameter. |
| noprompt | This parameter directs the system not to offer yes/no prompts for confirmation. The system automatically enters yes. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the system is making the MS manually busy. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| *wait* | This default parameter directs the system to not allow use of the MAP for other functions while the system is making the MS manually busy. Do not enter this parameter. |

## Qualifications

The bsyms command is qualified by the following exceptions, restrictions, and limitations:

- The manual busy can be performed only if the mate MS has no alarms, is in-service, and has possession of the master clock.
- Using the force parameter to busy an MS can cause loss of communication to subtending nodes.

# bsyms (continued)

## Example

The following table provides an example of the bsyms command.

**Example of the bsyms command**

| Example | Task, response, and explanation |
|---|---|
| **bsyms 0 force** ↵<br>*where*<br><br>0 indicates the MS to be busied | **Task:** Manually busy the 0 MS.<br><br>**Response:**<br>`Request to Busy MS: 0 submitted.`<br>`Request to Busy MS: 0 passed.`<br><br>**Explanation:** The requested MS is busied. |

## Responses

The following table provides explanations of the responses to the bsyms command.

**Responses for the bsyms command**

| MAP output | Meaning and action |
|---|---|
| `Can not busy both MSs` | **Meaning:** The mate MS is already out-of-service. Removing the second MS would result in an outage.<br><br>**Action:** None |
| `Can not busy the MS with the master clock-switch mastership.` | **Meaning:** The MS with the master clock cannot be busied.<br><br>**Action:** Use the swmast command to switch the mastership of the clocks, and then busy the MS. |

**-continued-**

# bsyms (continued)

**Responses for the bsyms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Data inconsistencies, cannot continue your request.` | **Meaning:** A software fault has occurred.<br><br>**Action:** Enter the command again. If it does not execute successfully, notify the maintenance support group. |
| `ERROR, MS 0 is being used for FTS tandem routing.` | **Meaning:** No inter-MS links are available, and the MS to be busied is being used by frame transport system (FTS) for routing. The bsy command is rejected.<br><br>**Action:** Use the force parameter on the bsyms command to force the system to redirect routing through the other MS before the busy is executed. |
| `Message switch 1 is already man busy.` | **Meaning:** The MS cannot be made busy because it is already in the manually busy state.<br><br>**Action:** None |
| `Message switch 1 is unequipped.` | **Meaning:** The indicated MS is not equipped.<br><br>**Action:** None |
| `P-side nodes will be isolated-taken out of service.`<br>`BSY aborted.` | **Meaning:** The system has disallowed the attempt to busy the MS, as this action would isolate one or more P-side nodes causing loss of communication to some subtending nodes.<br><br>**Action:** Repeat the command using the force parameter, if it is desirable to busy the MS despite the isolation of P-side nodes. |

**-continued-**

# bsyms (continued)

**Responses for the bsyms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Busy MS: 0 submitted.`<br>`Request to Busy MS: 0 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to Busy MS: 0 submitted.`<br>`Request to Busy MS: 0 passed.` | **Meaning:** The requested MS is placed in the manually-busy state.<br><br>**Action:** None |
| `Request to Busy MS: 0 submitted.`<br>`Request to Busy MS: 0 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested MS cannot be busied.<br><br>**Action:** None |
| `Request to Busy MS: 0 submitted.`<br>`Request to Busy MS: 0 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to Busy MS: 0 submitted.`<br>`Request to Busy MS: 0 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot busy the MS while other maintenance activities are in progress.<br><br>**Action:** Retry the bsyms command once other activities have finished. |

**-continued-**

# bsyms (continued)

**Responses for the bsyms command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to Busy MS: 0 submitted<br>Request to Busy MS: 0 failed;<br>Request not supported<br><br>or<br><br>Request to Busy MS: 0 submitted<br>Request to Busy MS: 0 terminated;<br>S/W inhibited.<br>Local Maintenance Not Accessible<br><br>or<br><br>Request to Busy MS: 0 submitted<br>Request to Busy MS: 0 terminated;<br>no resources available.<br>Required Resources Are Unavailable | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| Request to Busy MS: 0 submitted.<br>Request to Busy MS: 0 terminated;<br>S/W inhibited.<br>Not Able To Run | **Meaning:** The command has been inhibited.<br><br>**Action:** None |

**-continued-**

# bsyms (continued)

**Responses for the bsyms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Busy MS: 0 submitted.`<br>`Request to Busy MS: 0 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to Busy MS: 0 submitted.`<br>`Request to Busy MS: 0 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to Busy MS: 0 submitted.`<br>`Request to Busy MS: 0 failed;`<br>`No Problem`<br><br>or<br><br>`Request to Busy MS: 0 submitted.`<br>`Request to Busy MS: 0 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `WARNING, busy command may isolate p-side.`<br>`Please confirm (“yes” or “no”):` | **Meaning:** Busying the MS may isolate one or more P-side nodes and cause loss of communication to some subtending nodes.<br><br>**Action:** Enter yes to busy the MS. Enter no to abort the command. |

**-continued-**

# bsyms (end)

**Responses for the bsyms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `WARNING MS 1 is being used for FTS tandem routing-swroute will be done as part of the request.`<br>`Please confirm (yes or no):` | **Meaning:** No inter-MS links are available, and the MS to be busied is being used by FTS for routing. Since the force parameter was used, the system redirects routing through the other MS if you answer yes to the prompt. FTS routing is automatically switched to the other MS before the busy is executed.<br><br>**Action:** Enter yes to continue making the MS busy. Enter no to abort the command. |

**-end-**

# card

## Function

Use the card command to access the Card level for other cards.

**card command parameters and variables**

| Command | Parameters and variables | | |
|---|---|---|---|
| **card** | *card_no* | port | *port_no* |

| Parameters and variables | Description |
|---|---|
| *card_no* | This variable indicates the card position of the front and back cards that are to be displayed. Valid entries are 1-26. Card number 1 corresponds to slot number 7, and card number 26 corresponds to slot number 32. |
| port | This parameter indicates that a specific port is to be displayed. |
| *port_no* | This variable identifies the port to be displayed. Valid entries are 0-127. |

## Qualifications

The card command is qualified by the following exceptions, restrictions, and limitations:

- The port parameter is available only in offices that have 128-port interface card software.
- When you use the port parameter with the card command, the system displays a 16-port subset that includes the specified port.

# card (continued)

## Example

The following table provides an example of the card command.

**Example of the card command**

| Example | Task, response, and explanation |
|---|---|
| **card 2 port 16** ↵<br>*where*<br><br>2 is the card to be displayed<br>16 is the port to be displayed | **Task:** Display the Card menu level for card 2 and display port 16.<br><br>**Response:** The information in the following display changes to the information for card 2:<br><br>`Card 02 Protocol port 16_______19`<br>`MS 0 . DS30 20 . . . .`<br>`MS 1 . DS30 20 . . . .`<br><br>**Explanation:** The requested Card level and port is displayed. |

## Responses

The following table provides explanations of the responses to the card command.

**Responses for the card command**

| MAP output | Meaning and action |
|---|---|
| `Allocation of MS card level directory failed.` | **Meaning:** No software resources are available to enter the Card level.<br><br>**Action:** Use the command string quit all to quit from the MAP CI and all lower levels, then return to the MS level and enter the card command. |

-continued-

# card (end)

**Responses for the card command** (continued)

| MAP output | Meaning and action |
|---|---|
| The information in the following display changes to the information for the requested card:<br><br>`Card 02 Protocol port  0_____3`<br>`MS 0  .   DS30    4    . . . .`<br>`MS 1  .   DS30    4    . . . .` | **Meaning:** The menu changes to the menu for the requested card.<br><br>**Action:** None |
| **-end-** | |

# chain

## Function

Use the chain command to access the Chain level for a specified chain.

**chain command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **chain** | *card* |

| Parameters and variables | Description |
|---|---|
| *card* | This variable is any card number in the chain to be displayed. Valid entries are 6-23. |

## Qualifications

The chain command is qualified by the following limitation: the system always designates a chain by the first card number in the chain. You can specify a chain by indicating any card number in the chain.

## Example

The following table provides an example of the chain command.

**Example of the chain command**

| Example | Task, response, and explanation |
|---|---|
| **chain 9** ↵<br>*where*<br><br>9 is a card in the chain to be taken offline | |

**Task:** Access the Chain level of which card 9 is a part.

**Response:** The menu changes to the Chain level, and the display changes to show the following headers:

```
Chain 9  Range  Link
MS 0  .  9-11     P
MS 1  .  9-11     P
```

**Explanation:** The requested Chain level is displayed.

# chain (end)

## Response

The following table provides an explanation of the response to the chain command.

**Response for the chain command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the Chain level, and the display changes to show the following headers:<br><br>`Chain 9  Range  Link`<br>`MS 0  .  9-11     P`<br>`MS 1  .  9-11     P` | **Meaning:** The requested Chain level is displayed.<br><br>**Action:** None |

# clock

## Function

Use the clock command to access commands to control the message switch (MS) clocks.

**clock command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **clock** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the clock command.

**Example of the clock command**

| Example | Task, response, and explanation |
|---|---|
| **clock** ↵ | |

**Task:** Access the Clock level.

**Response:** The menu changes to the Clock level menu, and the following headings are added to the display:

```
Card 2 State %Adj. Int/Osc/CARRIER REF STAT SLIP PM  CCT
MS 0   Sync  +59.2    .   /LINK 0: Lck  .    0 DTC 1 0-10
MS 1   Sync  +13.5    .   /Link 1: Smp  .    0 DTC 1 2-12
```

**Explanation:** The Clock level is displayed.

# clock (end)

## Response

The following table provides an explanation of the response to the clock command.

**Response for the clock command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the Clock level menu, and the following headings are added to the display:<br><br>`Card 2 State %Adj. Int/Osc/CARRIER REF STAT SLIP PM  CCT`<br>`MS 0   Sync  +59.2    .   /LINK 0: Lck  .    0 DTC 1 0-10`<br>`MS 1   Sync  +13.5    .   /Link 1: Smp  .    0 DTC 1 2-12` | **Meaning:** The display changes to the Clock level display.<br><br>**Action:** None |

# loadcd

## Function

Use the loadcd command to download firmware to a specified card. The source can be either a valid load file or the load stored in another card. Supply both the device name and the file name for the nondefault load files.

**loadcd command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **loadcd** | *ms_no* [ *default* \| device *dev_name* \| file *file_name* \| fromcd *cd_no* ] [ *wait* \| nowait ] [ *prompt* \| noprompt ] |

| Parameters and variables | Description |
|---|---|
| *cd_no* | This variable specifies the card that provides the firmware load. Valid entries are 1-26. |
| *default* | This default parameter specifies that the card is to be reloaded with the default firmware load. Do not enter this parameter. |
| device | This parameter specifies that a device is to be named to indicate where the file resides. |
| *dev_name* | This variable specifies the name of the device. |
| file | This parameter specifies that a firmware load file is to be specified. |
| *file_name* | This variable specifies the name of the firmware load file. |
| fromcd | This parameter indicates that a card is to be specified from which the firmware load is to be provided. |
| *ms_no* | This variable specifies the MS that contains the card to be downloaded. Valid entries are 0-1. |
| noprompt | This parameter directs the system not to display yes/no prompts. The system automatically enters yes. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the system loads the firmware. |

**-continued-**

# loadcd (continued)

**loadcd command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| *wait* | This default parameter directs the system to not allow the use of the MAP for other functions while the system loads the firmware. Do not enter this parameter. |

**-end-**

## Qualifications

None

## Example

The following table provides an example of the loadcd command.

**Example of the loadcd command**

**Example** **Task, response, and explanation**

**loadcd 0** ↵
*where*

0 specifies the MS

**Task:** Download the default firmware for this card on MS 0.

**Response:**

```
MS S/W:  35CB   CARD F/W:  35CB
Request to load MS: 0 shelf: 0 card: 10 submitted.
Request to load MS: 0 shelf: 0 card: 10 passed.
```

**Explanation:** The firmware is downloaded.

## loadcd (continued)

## Responses

The following table provides explanations of the responses to the loadcd command.

**Responses for the loadcd command**

| MAP output | Meaning and action |
|---|---|
| `Boot file has no label` | **Meaning:** The header record of the load file has no label data.<br><br>**Action:** None |
| `Boot file not for processor` | **Meaning:** The load file is not the right one for the card.<br><br>**Action:** None |
| `Cannot read boot file header` | **Meaning:** The system cannot read the load file.<br><br>**Action:** None |
| `Corrupt boot file header` | **Meaning:** The header record of the load file is corrupted.<br><br>**Action:** None |
| `EEPROM page write failed, downloading aborted.` | **Meaning:** A write to an electrically erasable programable read-only memory (EEPROM) failed, and the process for downloading the card firmware is aborted.<br><br>**Action:** None |
| `Extracted BCS number invalid` | **Meaning:** The BCS number in the header record of the load file is invalid.<br><br>**Action:** None |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Filename should not exceed 8 characters.` | **Meaning:** The file name exceeded the maximum size of eight characters.<br>**Action:** Rename the file and retry the command. |
| `Illegal format for boot file.` | **Meaning:** The load file has a bad B-record format.<br>**Action:** None |
| `Invalid MS number entered (must be between 0-1)` | **Meaning:** The MS number entered is invalid.<br>**Action:** None |
| `LoadCd-Card must be manually busied before loading.` | **Meaning:** The card cannot be busied unless it is manually busy.<br>**Action:** Use the bsy command to busy the card, and retry the loadcd command. |
| `LoadCD-Loading is in progress.` | **Meaning:** Another card is being loaded on the same MS. Only one card can be loaded at one time on the same MS.<br>**Action:** None |
| `LoadCd-MS must be in service to be loaded.` | **Meaning:** The card specified from which to download firmware resides on an MS that is in an out-of-service state.<br>**Action:** Return the MS to service using the rts command on the MS level and retry the command. |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `MS S/W: 35BC CARD F/W: 35BC` | **Meaning:** The firmware is being downloaded. The BCS number is the first two digits of each response. Following the BCS number, the issue of the message switch software and the issue of the card firmware are displayed.<br><br>**Action:** None |
| `Must specify both file and device.` | **Meaning:** Either the device name or the file name was not specified.<br><br>**Action:** Retry the command specifying both the file name and the device name. |
| `PEC <code> is not f/w downloadable.` | **Meaning:** An invalid card was selected from which to download firmware. <Code> is replaced by the product engineering code (PEC).<br><br>**Action:** Retry the command specifying a valid card. |
| `Request invalid, maintenance already in progress.` | **Meaning:** Another maintenance process is running on the card.<br><br>**Action:** Retry the command after the other process is complete. |
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 passed.` | **Meaning:** The requested firmware is downloaded to the card.<br><br>**Action:** None |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested card cannot be loaded.<br><br>**Action:** None |
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot load the card while other maintenance activities are in progress.<br><br>**Action:** Retry the loadcd command after other activities have finished. |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to load MS: 0 shelf: 0 card: 5 submitted<br>Request to load MS: 0 shelf: 0 card: 5 terminated;<br>S/W inhibited.<br>Local Maintenance Not Accessible<br><br>or<br><br>Request to load MS: 0 shelf: 0 card: 5 submitted<br>Request to load MS: 0 shelf: 0 card: 5 terminated;<br>no resources available.<br>Required Resources Are Unavailable<br><br>or<br><br>Request to load MS: 0 shelf: 0 card: 5 submitted<br>Request to load MS: 0 shelf: 0 card: 5 failed;<br>Request not supported | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| Request to load MS: 0 shelf: 0 card: 5 submitted.<br>Request to load MS: 0 shelf: 0 card: 5 terminated;<br>S/W inhibited.<br>Not Able To Run | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 failed;`<br>`No Problem`<br><br>or<br><br>`Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `System cards are not f/w downloadable.` | **Meaning:** System cards cannot be downloaded. Only selected interface cards have downloadable software.<br><br>**Action:** Retry the command specifying a valid card. |
| `The source and target cards are the same.` | **Meaning:** The firmware from the card cannot be copied onto itself.<br><br>**Action:** Check the parameters, making sure that the source and destination cards are not the same card and that they can both be downloaded, and retry the command. |

**-continued-**

# loadcd (end)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `The node must be manually busy for copying.` | **Meaning:** The MS must be in the manually busy state before firmware can be copied from one card to another.<br><br>**Action:** Busy the MS with the bsy command on the MS level, then retry the loadcd command. |
| `*** WARNING, Incompatible loads.`<br>`Please confirm (yes/no):` | **Meaning:** The card firmware in the load file does not match the corresponding MS software load and, if loaded, could cause system problems.<br><br>**Action:** Enter yes to proceed. Enter no to abort the command. |
| `You must specify both filename and devicename.` | **Meaning:** You specified either the file or the device. Both must be specified.<br><br>**Action:** Reissue the command specifying both file and device name. |

**-end-**

# loadms

## Function

Use the loadms command to load software to the specified MS.

**loadms command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **loadms** | *ms* [ *filename* \| cancel ] [ *primary* \| secondary ] [ *wait* \| nowait ] [ *prompt* \| noprompt ] |

| Parameters and variables | Description |
|---|---|
| cancel | This parameter directs the system to abort the loading. |
| *filename* | The variable is the file name of the desired software load. |
| *ms* | This variable is the number of the MS to be loaded. Valid entries are 0-1. |
| noprompt | This parameter directs the system not to display yes/no prompts. The system automatically enters yes. |
| nowait | This parameter directs the system to allow the use of the MAP terminal for other functions while the software is being loaded. |
| *primary* | This default parameter directs the system to load the MS through CMIC 0, card 24 on the MS level MAP display. Do not enter this parameter. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| secondary | This parameter directs the system to load the MS through computing module interface card (CMIC) 1, card 25 on the MS level MAP display, rather than through CMIC 0 (card 24). |
| *wait* | This default parameter directs the system not to allow use of the MAP for other functions while the software is being loaded. Do not enter this parameter. |

## Qualifications

The loadms command is qualified by the following restrictions:

- The MS must be manually busy before the software can be loaded.
- The load file must be in your directory.

# loadms (continued)

## Example

The following table provides an example of the loadms command.

**Example of the loadms command**

| Example | Task, response, and explanation |
|---|---|
| **loadms 0 IMG_102492_DC_MS noprompt nowait** ↵<br>*where*<br><br>0 is the MS to be loaded<br>IMG_102492_DC_MS is the file name | **Task:** Reload MS 0 with no prompts and no waiting.<br><br>**Response:**<br>`Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 passed.`<br><br>**Explanation:** The requested MS has been reloaded. |

## Responses

The following table provides explanations of the responses to the loadms command.

**Responses for the loadms command**

| MAP output | Meaning and action |
|---|---|
| `Data inconsistencies, cannot continue your request.` | **Meaning:** A software fault occurred.<br><br>**Action:** Enter the loadms command again. If it does not execute successfully, notify the maintenance support group. |
| `Firmware test` | **Meaning:** The system displays this message in the process of loading the MS software.<br><br>**Action:** None |

**-continued-**

# loadms (continued)

**Responses for the loadms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Loading <record#>` | **Meaning:** The system displays this message in the process of loading the MS software. The record number loaded replaces <record #>.<br><br>**Action:** None |
| `Loading started` | **Meaning:** The system displays this message in the process of loading the MS software.<br><br>**Action:** None |
| `Initializing` | **Meaning:** The system displays this message in the process of loading the MS software.<br><br>**Action:** None |
| `Invalid file specified, file is not a system image file.` | **Meaning:** The specified file is not a system image.<br><br>**Action:** None |
| `Invalid record length, record is too big for buffer.` | **Meaning:** The record size of the image file is too big for the buffer allocated to read the file.<br><br>**Action:** Contact the maintenance support group. |
| `Loading started` | **Meaning:** The system displays this message in the process of loading the MS software.<br><br>**Action:** None |

**-continued-**

# loadms (continued)

**Responses for the loadms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 passed.` | **Meaning:** The requested MS is reloaded.<br><br>**Action:** None |
| `Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested MS cannot be loaded.<br><br>**Action:** None |
| `Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot load the MS while other maintenance activities are in progress.<br><br>**Action:** Retry the loadms command after other activities have finished. |

**-continued-**

# loadms (continued)

**Responses for the loadms command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to Load MS: 0 submitted<br>Request to Load MS: 0 terminated;<br>S/W inhibited.<br>Local Maintenance Not Accessible<br><br>or<br><br>Request to Load MS: 0 submitted<br>Request to Load MS: 0 terminated;<br>no resources available.<br>Required Resources Are Unavailable<br><br>or<br><br>Request to Load MS: 0 submitted<br>Request to Load MS: 0 failed;<br>Request not supported | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| Request to Load MS: 0 submitted.<br>Request to Load MS: 0 terminated;<br>S/W inhibited.<br>Not Able To Run | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# loadms (end)

**Responses for the loadms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 failed;`<br>`No Problem`<br><br>or<br><br>`Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `Unable to get file information` | **Meaning:** The specified file is not in the search order.<br><br>**Action:** None |
| `WARNING, INCOMPATIBLE LOAD: CM: <name> MS: <name>`<br>`PLEASE CONFIRM (YES/NO):` | **Meaning:** The MS load does not match the corresponding computing module (CM) load and could cause system problems if loaded. The file names of the CM or MS load file replace <name>.<br><br>**Action:** Enter yes to load the file. Enter no to abort the command. |

**-end-**

# next

## Function

Use the next command to display the next 16 ports for a 128-port interface card or the next 16-port group that has at least one port in the specified maintenance state.

**next command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **next** | [ ok / manb / sysb / cbsy / pbsy / istb / uneq / flt / lbsy ] *ms_no* |

| Parameters and variables | Description |
|---|---|
| cbsy | This parameter indicates that the next C-side port is to be displayed. |
| flt | This parameter indicates that the next port that has a fault is to be displayed. |
| istb | This parameter indicates that the next in-service trouble port is to be displayed. |
| lbsy | This parameter indicates that the next group of 16 ports having at least one port that is link busy is to be displayed. |
| manb | This parameter indicates that the next manually busy port is to be displayed. |
| *ms_no* | This variable indicates the message switch (MS) that contains the card. Valid entries are 0-1. |
| ok | This default parameter indicates that the next port that is set to ok is to be displayed. |
| pbsy | This parameter indicates that the next P-side-busy port is to be displayed. |
| sysb | This parameter indicates that the next system-busy port is to be displayed. |
| uneq | This parameter indicates that the next unequipped port is to be displayed. |

# next (continued)

## Qualifications

The next command is qualified by the following exceptions, restrictions, and limitations:

- If no parameter is entered with the next command, the group of 16 ports that is currently displayed at the Card level is replaced by the 16-port group that follows it sequentially. After the last group of 16 ports is reached, the command wraps the display around to the first group.
- If a maintenance-state parameter is entered with the command, then the current 16-port group is replaced with a group of 16 ports that includes at least one port in the specified maintenance state.

## Example

The following table provides an example of the next command.

**Example of the next command**

| Example | Task, response, and explanation |
|---|---|
| **next ok** ↵ | |

**Task:** Display the next group of 16 ports that includes at least one port that is in service with no faults.

**Response:** The display changes to display the next 16 ports:

```
Card 06 Protocol Port 16___19  20___23  24___27  28___31
MS 0  .   DS512   64  . . . .  . . . .  . . . .  . . . .
MS 1  .   DS512   64  . . . .  . . . .  . . . .  . . . .
```

**Explanation:** The requested information is displayed.

## Responses

The following table provides explanations of the responses to the next command.

| Responses for the next command | |
|---|---|
| **MAP output** | **Meaning and action** |
| `No ports exist in the desired state.` | **Meaning:** The 128-port interface card displayed at the Card level has no ports in the maintenance state that was specified.<br><br>**Action:** None |
| `NO MORE PORTS TO DISPLAY.` | **Meaning:** The card that is currently displayed at the Card level of the MAP has a total of 16 ports or less; therefore, there are no more ports to display.<br><br>**Action:** None |
| `The card is unequipped.` | **Meaning:** The card does not exist on both MS 0 and MS 1, or the card does not exist on the specified MS.<br><br>**Action:** None |
| The display changes to display the next 16 ports:<br><br>`Card 06 Protocol Port 16___19  20___23  24___27  28___31`<br>`MS 0  .   DS512   64  . . . .  . . . .  . . . .  . . . .`<br>`MS 1  .   DS512   64  . . . .  . . . .  . . . .  . . . .` | **Meaning:** The display changes to display the next group of ports.<br><br>**Action:** None |

# offl

## Function

Use the offl command to set the state of the specified card or chain to offline.

**offl command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **offl** | *ms_no* [ *both* / *entity* / fbus ] [ *wait* / nowait ] |

| Parameters and variables | Description |
|---|---|
| *both* | This default parameter specifies that both the front and back card positions are to be set offline. Do not enter this parameter. |
| *entity* | This variable is the card position to be set to offline. Valid entries are front and back. |
| fbus | This parameter directs the system to take an FBus offline. |
| *ms_no* | This variable is the message switch (MS) number. Valid entries are 0-1. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the system sets the slot to offline. |
| *wait* | This default parameter directs the system to not allow use of the MAP for other functions while the slot is being set to offline. Do not enter this parameter. |

## Qualifications

The offl command is qualified by the following exceptions, restrictions, and limitations:

- Only interface cards can be set to offline.
- Busy the cards with the bsy command before setting them to offline.
- When a chain is to be taken offline, specify the chain by entering the MS number on which the chain is located plus any card number in the chain.

# offl (continued)

## Example

The following table provides an example of the offl command.

**Example of the offl command**

| Example | Task, response, and explanation |
|---|---|
| **offl 0** ↵<br>*where*<br><br>0 is the MS number | **Task:** Take the card on MS 0 offline.<br><br>**Response:**<br><br>`Request to Offl MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Offl MS: 0 shelf: 0 card: 17 passed.`<br><br>**Explanation:** The requested card is taken offline. |

## Responses

The following table provides explanations of the responses to the offl command.

**Responses for the offl command**

| MAP output | Meaning and action |
|---|---|
| `Cannot offline card when card f/w download in progress.` | **Meaning:** The card is being downloaded and cannot be taken offline.<br><br>**Action:** None |
| `Cannot offline system card 05.` | **Meaning:** Only interface cards can be taken offline. The response echoes the number of the system card entered.<br><br>**Action:** None |

**-continued-**

# offl (continued)

**Responses for the offl command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Card 17 has already been offlined.` | **Meaning:** The card is already offline.<br><br>**Action:** None |
| `Card 17 must be in MBsy state before being offlined.` | **Meaning:** The card must be in the manually-busy state to be taken offline.<br><br>**Action:** Use the bsy command to busy the card and retry the offl command. |
| `Chain card must be offlined as a single entity.` | **Meaning:** The card number specified is part of a chain. The card in a chain can be taken offline only when the entire chain is taken offline.<br><br>**Action:** Use the offlchn command on the shelf level or the offl command on the chain level to take the the chain offline. |
| `FBus 17 has already been offlined.` | **Meaning:** The FBus is already offline.<br><br>**Action:** None |
| `FBus 17 must be in MBsy state before being offlined.` | **Meaning:** The FBus must be in the manually-busy state to be taken offline.<br><br>**Action:** Use the bsy command to busy the card and retry the offl command. |
| `Request to Offl MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Offl MS: 0 shelf: 0 card: 17 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |

**-continued-**

# offl (continued)

**Responses for the offl command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Offl MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Offl MS: 0 shelf: 0 card: 17 passed.` | **Meaning:** The requested card is taken offline.<br><br>**Action:** None |
| `Request to Offl MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Offl MS: 0 shelf: 0 card: 17 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested card cannot be taken offline.<br><br>**Action:** None |
| `Request to Offl MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Offl MS: 0 shelf: 0 card: 17 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to Offl MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Offl MS: 0 shelf: 0 card: 17 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot take the card offline while other maintenance activities are in progress.<br><br>**Action:** Retry the offl command after other activities have finished. |

**-continued-**

# offl (continued)

**Responses for the offl command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to Offl MS: 0 shelf: 0 card: 17 submitted<br>Request to Offl MS: 0 shelf: 0 card: 17 terminated;<br>S/W inhibited.<br>Local Maintenance Not Accessible<br><br>or<br><br>Request to Offl MS: 0 shelf: 0 card: 17 submitted<br>Request to Offl MS: 0 shelf: 0 card: 17 terminated;<br>no resources available.<br>Required Resources Are Unavailable<br><br>or<br><br>Request to Offl MS: 0 shelf: 0 card: 17 submitted<br>Request to Offl MS: 0 shelf: 0 card: 17 failed;<br>Request not supported | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| Request to Offl MS: 0 shelf: 0 card: 17 submitted.<br>Request to Offl MS: 0 shelf: 0 card: 17 terminated;<br>S/W inhibited.<br>Not Able To Run | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# offl (end)

**Responses for the offl command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Offl MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Offl MS: 0 shelf: 0 card: 17 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to Offl MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Offl MS: 0 shelf: 0 card: 17 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to Offl MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Offl MS: 0 shelf: 0 card: 17 failed;`<br>`No Problem`<br><br>or<br><br>`Request to Offl MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to Offl MS: 0 shelf: 0 card: 17 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |

**-end-**

# port

## Function

Use the port command to display a group of 16 ports for the interface card at the Card level.

**port command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **port** | *port_no* |

| Parameters and variables | Description |
|---|---|
| *port_no* | This variable indicates the port that is to be displayed. Valid entries are 0-127. |

## Qualifications

None

## Example

The following table provides an example of the port command.

**Example of the port command**

| Example | Task, response, and explanation |
|---|---|
| **port 21** ↵<br>*where*<br><br>21 is the port to be displayed | **Task:** Display port 21.<br><br>**Response:** The display changes to display a group of 16 ports that includes the requested port:<br><br>`Card 06 Protocol Port 16___19  20___23  24___27  28___31`<br>`MS 0  .   DS512   64  . . . .  . . . .  . . . .  . . . .`<br>`MS 1  .   DS512   64  . . . .  . . . .  . . . .  . . . .`<br><br>**Explanation:** Ports 16-31 are displayed. |

# port (end)

## Responses

The following table provides explanations of the responses to the port command.

**Responses for the port command**

| MAP output | Meaning and action |
|---|---|
| `Invalid port number entered (must be between 0-127).` | **Meaning:** The port number entered is outside the port range for the interface card that is currently displayed at the Card level.<br><br>**Action:** Retry the port command with a valid port number. |
| `No more ports to display.` | **Meaning:** The card that is currently displayed at the Card level of the MAP has a total of 16 ports or less; therefore, there are no more ports to be displayed.<br><br>**Action:** None |
| The display changes to display the requested port:<br><br>`Card 06 Protocol Port 16___19  20___23  24___27  28___31`<br>`MS 0  .   DS512   64  . . . .  . . . .  . . . .  . . . .`<br>`MS 1  .   DS512   64  . . . .  . . . .  . . . .  . . . .` | **Meaning:** The requested port is displayed.<br><br>**Action:** None |

# querycd

## Function

Use the querycd command to display information about the contents of the CONTEXT and MEDIA sections of the electrically erasable programmable read-only memory (EEPROM) of the card selected. It also compares the loads stored in two separate cards.

**querycd command parameters and variables**

| Command | Parameters and variables | | |
|---|---|---|---|
| **querycd** | *ms_no* | with | *cd_no* |

| Parameters and variables | Description |
|---|---|
| *cd_no* | This variable is the card number. The range of values is 1-26. |
| *ms_no* | This variable indicates the message switch (MS) to be queried. Valid entries are 0-1. |
| with | This parameter specifies that two cards are to have their firmware loads compared. Follow this parameter with the *cd_no* variable for the card to be compared with the first specified card. |

## Qualifications

None

# querycd (continued)

## Examples

The following table provides an example of the querycd command.

**Examples of the querycd command**

| Example | Task, response, and explanation |
|---|---|
| **querycd 0** ↵<br>*where*<br><br>0 is the MS number | **Task:** Query the card on MS 0.<br><br>**Response:**<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 6 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 6 passed.`<br><br>`CONTEXT Section: MS 0: 0 : 6`<br>`Loadname : MPF35CB`<br>`Product : MPF`<br>`Version : 35`<br>`Issue : CB`<br>`Increment : 00`<br>`CRC : 7692`<br><br>`MEDIA Section: MS 0: 0 : 6`<br>`Checksum : CFD`<br>`Flag1 : AAAA`<br>`Flag2 : 5555`<br>`Prog time : 1992/06/28/1:00:58:567 SUN.`<br>`Prog count : 66`<br>`Fail count : 0`<br>`PECode : NT9X17DA`<br><br>**Explanation:** The requested information is displayed. |

## querycd (continued)

## Responses

The following table provides explanations of the responses to the querycd command.

**Responses for the querycd command**

| MAP output | Meaning and action |
|---|---|
| `CM-MS link down.` | **Meaning:** There is no communication between the computing module (CM) and the MS.<br><br>**Action:** Restore the communication link between the CM and the MS, or bring the MS back in service. |
| `Invalid MS number entered (must be between 0-<n>).` | **Meaning:** The MS number entered is invalid. The number of equipped message switches replaces <n>.<br><br>**Action:** None |
| `PEC NT9X53AA is not f/w downloadable.` | **Meaning:** An invalid card was selected from which to query firmware.<br><br>**Action:** Retry the command specifying a valid card. |
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |

**-continued-**

# querycd (continued)

**Responses for the querycd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 passed.`<br><br>`CONTEXT Section: MS 0: 0 : 5`<br>`Loadname : MPF35CB`<br>`Product : MPF`<br>`Version : 35`<br>`Issue : CB`<br>`Increment : 00`<br>`CRC : 7692`<br><br>`MEDIA Section: MS 0: 0 : 5`<br>`Checksum : CFD`<br>`Flag1 : AAAA`<br>`Flag2 : 5555`<br>`Progtime : 1992/06/28/1:00:58:567 SUN.`<br>`Prog count : 66`<br>`Fail count : 0`<br>`PECode : NT9X17DA` | **Meaning:** The requested card information is displayed.<br><br>**Action:** None |
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested card cannot be queried.<br><br>**Action:** None |
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |

**-continued-**

# querycd (continued)

**Responses for the querycd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot query the MS while other maintenance activities are in progress.<br><br>**Action:** Retry the querycd command after other activities have finished. |
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`no resources available.`<br>`Required Resources Are Unavailable`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`Request not supported` | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# querycd (continued)

**Responses for the querycd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`No Problem`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `System cards are not f/w downloadable.` | **Meaning:** System cards cannot be queried. Only selected interface cards have downloadable firmware.<br><br>**Action:** Retry the command specifying a valid card. |
| `The firmware cannot be compared to itself.` | **Meaning:** An attempt was made to copy firmware from an interface card onto itself.<br><br>**Action:** Reissue the command, making sure the destination and source cards are not the same card. |

**-continued-**

# querycd (end)

**Responses for the querycd command** (continued)

| MAP output | Meaning and action |
|---|---|
| ***Warning, PEC codes are not the same.<br>Please confirm (″YES″ or ″NO″) | **Meaning:** The PEC of the source and destination cards do not match.<br><br>**Action:** Enter yes to confirm the command. Enter no to abort the command. |

**-end-**

# queryms

## Function

Use the queryms command to query and display information about the cards and chains in the active MS. The information may include the MS load name, the number of equipped card slots, the last time a routine exercise (REx) test was run, identification programable read-only memory (ID PROM) information, a list of card locations, and card fault descriptions.

**queryms command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **queryms** | [*all* / ms *ms_no*] [*all* / shelf *shelf_no*] [card *cd_no* (1) / (2) / chain *cd_no* (3)] |
| **queryms** (continued) | (1) [*noidprom* / idprom] (2) (3) [*noflt* / flt] |

| Parameters and variables | Description |
|---|---|
| *all* | This default parameter displays information for both message switches and all shelves. Do not enter this parameter. |
| card | This parameter displays information for a specified card. |
| *cd_no* | This variable identifies the card for which information is to be displayed, or any card number in the chain that is to be displayed. Valid entries are 1-26 for cards, 6-23 for chains. |
| chain | This parameter displays information for a specified chain. |
| flt | This parameter displays fault conditions. |
| idprom | This parameter displays the product engineering code (PEC) and vintage of the specified card. |
| ms | This parameter displays information for one MS only. |
| *ms_no* | This variable indicates the MS for which information is to be displayed. Valid entries are 0-1. |
| *noflt* | This default parameter directs the system to not display fault conditions. Do not enter this parameter. |

**-continued-**

# queryms (continued)

**queryms command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *noidprom* | This default parameter directs the system to not display the PEC and vintage of the card. Do not enter this parameter. |
| shelf | This parameter displays information only for the shelf specified. |
| *shelf_no* | This variable is the shelf number for which information is to be displayed. Valid entries are 0-3. |

**-end-**

## Qualifications

The queryms command is qualified by the following exceptions, restrictions and limitations:

- Inquire and display information about the thirty-two bit bus (TBus) to frame transport bus (FBus) interface (TFI) cards, FBuses, and taps in one single command when the entered card number is of a TFI type.
- The display includes the faults found on all cards and the card list of all the faulty system cards. The fault descriptions for the cards are sorted and displayed in four groups:
  - hard faults found on system cards
  - hard faults found on interface cards
  - soft faults found on system cards
  - soft faults found on interface cards

## Examples

The following table provides examples of the queryms command.

**Examples of the queryms command**

| Example | Task, response, and explanation |
|---|---|
| **queryms ms 1 shelf 0 card 6** ↵<br>*where*<br><br>1 identifies the MS to be queried<br>0 identifies the shelf to be queried<br>6 identifies the card to be queried | **Task:** Display the information for MS 1, shelf 0, card 6.<br><br>**Response:**<br><br>`Load name for MS 1 is MSG35CB .`<br>`There are 20 Slots equipped on MS:  1  shelf:  0`<br>`REx Test last run MS:  1 92:07:25  01:33:39  AUTO SUCCESSFUL`<br>`MS card information:`<br>`Site Flr RPos  Bay_id  Shf  Description   SLOT   EqPEC`<br>`HOST  00 AA00  DPCC 1   39  MS 1: 0: 6     12    9X17DA FRNT`<br>`HOST  00 AA00  DPCC 1   39  MS 1: 1: 6     12    9X20BB BACK`<br><br>**Explanation:** The requested information is displayed. |

**-continued-**

# queryms (continued)

**Examples of the queryms command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **queryms** ↵ | |

**Task:** Display information for both message switches and all equipped shelves.

**Response:**

```
Load name for MS 0:  MS-S35CK.
Load name for MS 1:  MS-S35CK.
There are 26 Slots equipped on MS:  0  Shelf:  0.
There are 26 slots equipped on MS:  1  Shelf:  0.
REx Test last run MS:  0 92:01:23  15:39:21  AUTO SUCCESSFUL
REx Test last run MS:  1 92:01:23  16:40:31  AUTO SUCCESSFUL
MS node and shelf information:
Site Flr RPos  Bay_id  Shf  Description   SLOT   EqPEC
HOST  00 AA00  MSDC 0       MS 0                 9X01BA
HOST  00 AA00  MSDC 0   39  MS 0:0               9X04AA
HOST  00 AA00  MSDC 0   26  MS 0:1               9X04AA
HOST  00 AA00  MSDC 1       MS 1                 9X01BA
HOST  00 AA00  MSDC 1   13  MS 1:0               9X04BAA
HOST  00 AA00  MSDC 1    0  MS 1:1               9X04AA
HOST  00 AA00  MSDC 0       MS 0                 9X01BA
```

**Explanation:** The queryms command was run without any parameters or variables, so information on both MSs is given.

**-end-**

## Responses

The following table provides explanations of the responses to the queryms command. Some individual elements of complex responses are described separately.

**Responses for the queryms command**

| MAP output | Meaning and action |
|---|---|
| `Back card 23 is offline, no action performed.` | |

**Meaning:** The back card at the indicated card position is offline. The possible card numbers are 1-26.

**Action:** None

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Back card 17 is unequipped, no action performed.` | **Meaning:** The back card at the indicated card position is unequipped. The possible card numbers are 1-26.<br><br>**Action:** None |
| `BASE`<br>`S0.` | **Meaning:** The baseline of the PEC (the minimum allowable release) is given.<br><br>**Action:** None |
| `Card 5 is offline, no action performed.` | **Meaning:** The indicated card position is offline. The possible card numbers are 1-26.<br><br>**Action:** None |
| `Card 23 is unequipped.` | **Meaning:** The card is unequipped.<br><br>**Action:** None |
| `Chain 17 is unequipped.` | **Meaning:** The cards at the specified card position are not part of a chain. In this example, 17 is the card number entered.<br><br>**Action:** None |
| `Clock firmware has failed self test.` | **Meaning:** The test of the firmware integrity failed. The firmware in the clock is not reliable.<br><br>**Action:** Perform an out-of-service test, or return the card to service to download the primary firmware load. |

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Clock firmware load mismatch.` | **Meaning:** The firmware in the clock card does not match the primary firmware in the MS software.<br><br>**Action:** Perform an out-of-service test, or return the card to service to download the primary firmware load. |
| `Clock PROM selector stuck on EPROM.` | **Meaning:** The clock programmable read-only memory (PROM) selection indicates that it is running on erasable PROM (EPROM).<br><br>**Action:** Check the hardware. |
| `Compatible '*NO'.` | **Meaning:** The MS PEC design change document (DCD) release is not compatible with the batch change supplement (BCS) software running in the switch.<br><br>**Action:** None |
| `Compatible 'YES'.` | **Meaning:** The MS PEC DCD release is compatible with the BCS software running in the switch.<br><br>**Action:** None |
| `Contents of clock f/w does not match f/w downloaded.` | **Meaning:** A mismatch occurred between the contents of the clock card firmware and the MS firmware.<br><br>**Action:** Ensure the firmware loads are correct. Perform an out-of-service test to download the correct firmware. |
| `Data inconsistencies, cannot continue your request.` | **Meaning:** A software fault occurred.<br><br>**Action:** Enter the command again. If it does not execute successfully, notify the maintenance support group. |

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| Except<br>None | **Meaning:** There are no exception releases for this PEC.<br><br>**Action:** None |
| Except<br>SA | **Meaning:** In this example, SA is an exception release. The exception releases are above the baseline, but known to be incompatible with the BCS software running in the switch.<br><br>**Action:** None |
| Failed to download or reset clock firmware. | **Meaning:** The most recent attempt to download new firmware into the electrically erasable PROM (EEPROM), or to reset the clock, failed.<br><br>**Action:** Check and clear the hardware fault on the clock card. |
| Failed to read EEPROM in clock card. | **Meaning:** An attempt to read the EEPROM failed, and the MS was removed from service.<br><br>**Action:** Check and clear the hardware fault on the clock card. |
| Front card 23 is offline, no action performed. | **Meaning:** The front card at the indicated card position is offline. The possible card numbers are 1-26.<br><br>**Action:** None |
| Front card 17 is unequipped, no action performed. | **Meaning:** The front card at the indicated card position is unequipped. The possible card numbers are 1-26.<br><br>**Action:** None |

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Incorrect version of clock firmware.` | **Meaning:** A wrong version of the firmware is on the clock card.<br><br>**Action:** Attempt an out-of-service test, or return the card to service to download the correct version of the firmware. |
| `Invalid card number entered (must be between 1-22).` | **Meaning:** An unequipped card was specified. The range provided is the range of equipped cards.<br><br>**Action:** None |
| `Invalid chain number entered (must be between 6-16).` | **Meaning:** The card number entered with the chain parameter is not in the permissible range for chain cards on the message switch shelf. The range is the valid range of chain card numbers on the shelf.<br><br>**Action:** None |
| `Invalid MS number entered (must be between 0-1).` | **Meaning:** You entered an invalid MS number. The range of message switches is provided.<br><br>**Action:** None |
| `Load name for MS 1: MSG35BC`<br>`There are 26 Slots equipped on MS: 1 Shelf: 0`<br>`MS node and shelf information:`<br>`REx Test last run MS: 1 89:01:23 16:40:31 AUTO SUCCESSFUL`<br>`Site Flr RPos Bay_id Shf Description SLOT EqPEC`<br>`HOST 00 AA01 MSDC 1 MS 1 9X01BA`<br>`HOST 00 AA00 MSDC 1 13 MS 1:0 9X04AA`<br>`HOST 00 AA00 MSDC 1 0 MS 1:1 9X04AA` | **Meaning:** The requested information about the cards and chains is displayed.<br><br>**Action:** None |

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Message switch 0 is unequipped.` | **Meaning:** An unequipped MS was specified. The system echoes the entered MS number.<br><br>**Action:** None |
| `No clock firmware resident in software.` | **Meaning:** MS software does not contain clock firmware.<br><br>**Action:** Ensure that the clock firmware loads are in the MS software. |
| `No FBUS has been defined with TFI card 17` | **Meaning:** No FBus was identified with the specified TFI card. Possible card numbers are 1-26.<br><br>**Action:** None |
| `No firmware in clock card.` | **Meaning:** The clock card does not contain valid firmware.<br><br>**Action:** Load the correct firmware by performing either an out-of-service test or a return-to-service test. |
| `REL`<br>`S9` | **Meaning:** The card release obtained from querying the ID PROM of the card is given.<br><br>**Action:** None |
| `Running on EPROM clock firmware.` | **Meaning:** The file name of the clock firmware in the context page has an EPROM file name. Therefore, the clock is running on the EPROM firmware.<br><br>**Action:** Load the correct firmware by performing either an out-of-service test or a return-to-service test. |

**-continued-**

# queryms (end)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Shelf 2 is unequipped.` | **Meaning:** The shelf you specified is unequipped. The shelf number entered is echoed in the response.<br><br>**Action:** None |

**-end-**

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any MAP level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the Card level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The Card level has changed to the previous menu level. |

**-continued-**

# quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the Card level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The Card level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the Card level menu with a menu that is two or more MAP levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the Card level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |
| **-end-** | |

## Function

Use the rts command to return the specified port or card to service. If you do not specify a parameter, the system returns the front and back cards in the slot to service.

**rts command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **rts** | *ms_no* [ *both* / front / back / port *port_no* / fbus / tap *tap_no* ] [ *wait* / nowait ] [ *prompt* / noprompt ] [ *test* / notest ] |

| Parameters and variables | Description |
|---|---|
| back | This parameter returns the card on the rear shelf to service. |
| *both* | This default parameter returns both the front and back cards in the slot to service. Do not enter this parameter. |
| fbus | This parameter returns the FBus to service. |
| front | This parameter returns the card on the front shelf to service. |
| *ms_no* | This variable is the message switch (MS) number. Valid entries are 0-1. |
| noprompt | This parameter directs the system to prevent any yes/no prompts from being displayed. The system automatically enters yes. |
| notest | This parameter directs the system not to perform the in-service test after returning the port or card to service. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the system is testing and returning the port or card to service. |
| port | This parameter returns a port to service. |
| *port_no* | This variable is the number of the port to be returned to service. Valid entries are 0-127. |
| *prompt* | This default parameter directs the system to offer yes/no prompts for confirmation. Do not enter this parameter. |

**-continued-**

# rts (continued)

**rts command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| tap | This parameter returns the tap to service. |
| *tap_no* | This variable is the number of the tap. |
| *test* | This default parameter directs the system to perform an in-service test after returning the port or card to service. Do not enter this parameter. |
| *wait* | This default parameter directs the system to not allow the use of the MAP for other functions while the system is testing and returning the port or card to service. Do not enter this parameter. |

**-end-**

## Qualifications

The rts command is qualified by the following exceptions, restrictions, and limitations:

- You cannot return a system card to service at the Card level.
- Individual cards that are part of a chain cannot be returned to service from the Card level.
- Cards in a chain can be returned to service only if the chain itself is returned to service.
- The card, frame transport bus (FBus), port, or tap must be in the system-busy or manually-busy state before it can be returned to service.

## Example

The following table provides an example of the rts command.

**Examples of the rts command**

| Example | Task, response, and explanation |
|---|---|
| **rts 0** ↵<br>*where*<br><br>0 is the MS number | **Task:** Return the card on MS 0 to service.<br><br>**Response:**<br><br>`Request to RTS MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 passed.`<br><br>**Explanation:** The requested card is returned to service. |

## Responses

The following table provides explanations of the responses to the rts command.

**Responses for the rts command**

| MAP output | Meaning and action |
|---|---|
| `Cannot rts card when card f/w download in progress.` | **Meaning:** The request to return the card to service is aborted because the card is being downloaded.<br><br>**Action:** None |
| `Cannot rts system card 2.` | **Meaning:** System cards cannot be made busy at the Card level; therefore, they cannot be returned to service from the Card level. The card number entered is echoed in the response.<br><br>**Action:** None |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Card has corrupted firmware.` | **Meaning:** The card has corrupted firmware, caused by electrically erasable programable read-only memory (EEPROM) page write failure.<br><br>**Action:** None |
| `Card has no firmware.` | **Meaning:** The card was not loaded with valid firmware.<br><br>**Action:** None |
| `Card 23 is in-service.` | **Meaning:** The specified card is already in service. The card number entered is echoed in the response.<br><br>**Action:** None |
| `Card 23 is in-service, the MS node is OOS.` | **Meaning:** The card is in service, but the C-side node is out-of-service. The card number entered is echoed in the response.<br><br>**Action:** None |
| `Card 23 is offlined.` | **Meaning:** The card is offline and cannot be returned to service.<br><br>**Action:** Use the bsy command to make the card manually busy, then retry the rts command. |
| `Card 23 is unequipped.` | **Meaning:** The card is unequipped.<br><br>**Action:** None |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `FBus 3 is in-service.` | **Meaning:** The specified FBus is already in service. The FBus number entered is echoed in the response.<br><br>**Action:** None |
| `FBus 3 is offlined.` | **Meaning:** The FBus is offline and cannot be returned to service.<br><br>**Action:** Use the bsy command to make the FBus manually busy, then retry the rts command. |
| `FBus 3 is unequipped.` | **Meaning:** The FBus is unequipped.<br><br>**Action:** None |
| `MTC open PS port-request over-ridden.` | **Meaning:** A maintenance action on the peripheral initiated from within the peripheral overrode the maintenance request from the MS software. Internal actions take precedence.<br><br>**Action:** Wait for the internal maintenance action on the peripheral to terminate, then retry the command. |
| `Port 235 does not exist on this card.` | **Meaning:** The specified port number is outside the port range for the card displayed at the Card level. The port number entered is echoed in the response.<br><br>**Action:** None |
| `Port 1 is in-service.` | **Meaning:** The port is already in service. The port number entered is echoed in the response.<br><br>**Action:** None |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Port 2 is in-service, C-side resource is oos.` | **Meaning:** The port is already in service, but the C-side resource is out-of-service. The port number entered is echoed in the response.<br><br>**Action:** None |
| `Port 3 is in-service, P-side resource is busy.` | **Meaning:** The port is already in service, but the P-side resource is out-of-service. The port number entered is echoed in the response.<br><br>**Action:** None |
| `Request to RTS MS: 0 shelf: 0 card: 17 port: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to RTS MS: 0 shelf: 0 card: 17 port: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 passed.` | **Meaning:** The requested port is returned to service.<br><br>**Action:** None |
| `Request to RTS MS: 0 shelf: 0 card: 17 port: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested port cannot be returned to service.<br><br>**Action:** None |

**-continued-**

## rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to RTS MS: 0 shelf: 0 card: 17 port: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to RTS MS: 0 shelf: 0 card: 17 port: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot return the port to service while other maintenance activities are in progress.<br><br>**Action:** Retry the rts command after other activities have finished. |
| `Request to RTS MS: 0 shelf: 0 card: 17 port: 2 submitted`<br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 failed;`<br>`Request not supported`<br><br>or<br><br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 submitted`<br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 submitted`<br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 terminated;`<br>`no resources available.`<br>`Required Resources Are Unavailable` | **Meaning:** This command is not accessible.<br><br>**Action:** None |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to RTS MS: 0 shelf: 0 card: 17 port: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command was inhibited.<br><br>**Action:** None |
| `Request to RTS MS: 0 shelf: 0 card: 17 port: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 failed;`<br>`No Problem`<br><br>or<br><br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 port: 2 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `Request to RTS MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to RTS MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 passed.` | **Meaning:** The requested card is returned to service.<br><br>**Action:** None |
| `Request to RTS MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested card cannot be returned to service.<br><br>**Action:** None |
| `Request to RTS MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the rts command using valid parameters. |
| `Request to RTS MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot return the card to service while other maintenance activities are in progress.<br><br>**Action:** Retry the rts command after other activities have finished. |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to RTS MS: 0 shelf: 0 card: 17 submitted<br>Request to RTS MS: 0 shelf: 0 card: 17 terminated;<br>S/W inhibited.<br>Local Maintenance Not Accessible<br><br>or<br><br>Request to RTS MS: 0 shelf: 0 card: 17 submitted<br>Request to RTS MS: 0 shelf: 0 card: 17 terminated;<br>no resources available.<br>Required Resources Are Unavailable<br><br>or<br><br>Request to RTS MS: 0 shelf: 0 card: 17 submitted<br>Request to RTS MS: 0 shelf: 0 card: 17 failed;<br>Request not supported | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| Request to RTS MS: 0 shelf: 0 card: 17 submitted.<br>Request to RTS MS: 0 shelf: 0 card: 17 terminated;<br>S/W inhibited.<br>Not Able To Run | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to RTS MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to RTS MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to RTS MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 failed;`<br>`No Problem`<br><br>or<br><br>`Request to RTS MS: 0 shelf: 0 card: 17 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 passed.` | **Meaning:** The requested tap is returned to service.<br><br>**Action:** None |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested tap cannot be returned to service.<br><br>**Action:** None |
| `Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 submitted.`<br>`Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot return the tap to service while other maintenance activities are in progress.<br><br>**Action:** Retry the rts command after other activities have finished. |

**-continued-**

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 submitted`<br>`Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 submitted`<br>`Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 terminated;`<br>`no resources available.`<br>`Required Resources Are Unavailable`<br><br>or<br><br>`Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 submitted`<br>`Request to RTS MS: 0 shelf: 0 card: 17 tap: 2 failed;`<br>`Request not supported` | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| `Tap 2 is in-service.` | **Meaning:** The specified tap is already in service. The tap number entered is echoed in the response.<br><br>**Action:** None |
| `Tap 2 is offlined.` | **Meaning:** The tap is offline and cannot be returned to service.<br><br>**Action:** Use the bsy command to make the tap manually busy, then retry the rts command. |
| `Tap 2 is unequipped.` | **Meaning:** The tap is unequipped.<br><br>**Action:** None |

**-end-**

# shelf

## Function

Use the shelf command to access a Shelf level other than the current shelf. Use the commands on the Shelf level to test and control the cards located on the selected shelf.

**shelf command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **shelf** | *shelf_number* |

| Parameters and variables | Description |
|---|---|
| *shelf_number* | This variable is the number of the shelf to be accessed. Valid entries are 0-3. |

## Qualifications

None

## Example

The following table provides an example of the shelf command.

**Example of the shelf command**

| Example | Task, response, and explanation |
|---|---|
| **shelf 0** ↵<br>*where*<br><br>0 identifies the shelf to be accessed | **Task:** Access the Shelf level for shelf 0.<br><br>**Response:** The menu changes to the Shelf level menu and the following headers are added to the display:<br><br>`SHELF 0 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2`<br>`Card 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6`<br>`Chain`<br>`MS 0 . . . . . .`<br>`MS1 . . . . . .`<br><br>**Explanation:** The requested Shelf level is displayed. |

# shelf (end)

## Response

The following table provides an explanation of the response to the shelf command.

**Response for the shelf command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the Shelf level menu and the following headers are added to the display:<br><br>`SHELF 0 1 1 1 1 1 2 2 2 2 2 2`<br>`Card 1 2 3 4 5 6 7 ... 5 6 7 8 9 0 1 2 3 4 5 6`<br>`Chain`<br>`MS 0 . . . . . ... . . . . . .`<br>`MS1 . . . . . ... . . . . . .` | **Meaning:** The Shelf level is displayed.<br><br>**Action:** None |

# trnsl

## Function

Use the trnsl command to display the P-side information for all links, ports, and taps on a specified card. This command also indicates which peripheral module is connected through the switch network to the specified port in the message switch (MS) and performs a translation for a specified port, link, or tap.

**trnsl command parameters and variables**

| Command | Parameters and variables | | |
|---|---|---|---|
| **trnsl** | *ms_no* | link | *link_no* |
| | | port | *port_no* |
| | | tap | *tap_no* |

| Parameters and variables | Description |
|---|---|
| link | This parameter indicates that a link is to be translated. |
| *link_no* | This variable is the link number. Valid entries are 0-3. |
| *ms_no* | This variable is the MS number. Valid entries are 0-1. |
| port | This parameter indicates that a port is to be translated. |
| *port_no* | This variable is the port number. Valid entries are 0-127. |
| tap | This parameter indicates that a tap is to be translated. |
| *tap_no* | This variable is the tap number of the card selected. Valid entries are 0-23. |

## Qualifications

The trnsl command is qualified by the following restrictions, limitations, and exceptions:

- If you do not specify a port number with the trnsl command, the system displays the information for all ports on the card.
- The queryms command, not the trnsl command, produces a display of the card location of the component.

# trnsl (continued)

## Example

The following table provides an example of the trnsl command.

**Example of the trnsl command**

| Example | Task, response, and explanation |
|---|---|
| **trnsl 1** ↵<br>*where*<br><br>1 is the MS number | **Task:** Translate the P-side information for the card, with no port number specified.<br><br>**Response:**<br><br>`Site Flr RPos  Bay_id Shf Description  Slot EqPEC`<br>`HOST  00 AA00  DPCC 0  13 MS 1:2:12    19   9X23AB BACK`<br>`HOST  00 AA00  DPCC 0  13 MS 1:2:12    19   9X17AB FRNT`<br>`Port 000=Net   0 00    (ManB,C,P:Closed)`<br>`Port 001=Net   0 01    (   OK,  :Open  )`<br>`Port 002=IOC   0       (ManB,C,P:Closed)`<br>`Port 003=IOC   1       (ManB,C,P:Closed)`<br><br>**Explanation:** The translation information is displayed. |

## Responses

The following table provides explanations of the responses to the trnsl command.

**Responses for the trnsl command**

| MAP output | Meaning and action |
|---|---|
| `Invalid port number entered (must be between 0-<nnn>)` | **Meaning:** The specified port number is out of the range equipped on the interface card. The number of equipped ports on the card replaces <nnn>.<br><br>**Action:** None |

**-continued-**

# trnsl (end)

**Responses for the trnsl command** (continued)

| MAP output | Meaning and action |
|---|---|
| `No ports exist on card 10.` | **Meaning:** Either the specified card is not an interface card, or no ports are equipped on that card. The card number is echoed in the response.<br><br>**Action:** None |
| `No FBus exists on card 6.` | **Meaning:** The system is trying to translate an FBus, but the card number entered in the command is not a TFI.<br><br>**Action:** None |
| `No FBus has been defined with card 10.` | **Meaning:** The system is trying to translate an FBus, the card number entered in the command is a TFI, but the appropriate datafill is not completed.<br><br>**Action:** None |
| `No tap exists because no FBus for TFI card 12.` | **Meaning:** The system is trying to translate a tap, and the card is an TFI, but the appropriate datafill is not completed.<br><br>**Action:** None |
| `Site Flr RPos Bay_id Shf Description Slot EqPEC`<br>`HOST 00 AA00 DPCC 0 13 MS 1:2:12 19 9X23AB BACK`<br>`HOST 00 AA00 DPCC 0 13 MS 1:2:12 19 9X17AB FRNT`<br>`Port 000=Net 0 00 (ManB,C,P:Closed)`<br>`Port 001=Net 0 01 ( OK, :Open )`<br>`Port 002=IOC 0 (ManB,C,P:Closed)`<br>`Port 003=IOC 1 (ManB,C,P:Closed)` | **Meaning:** The translation is displayed.<br><br>**Action:** None |

**-end-**

# tst

## Function

Use the tst command to test the specified port or card.

**tst command parameters and variables**

| Command | Parameters and variables | | | |
|---|---|---|---|---|
| **tst** | *ms_no* | [ *both* / front / back / port / fbus / tap ] | [ *port_no* / *tap_no* ] | [ *wait* / nowait ] [ *prompt* / noprompt ] |

| Parameters and variables | Description |
|---|---|
| back | This parameter tests the card on the rear shelf. |
| *both* | This default parameter tests both the front and the back cards in the slot. Do not enter this parameter. |
| fbus | This parameter tests an FBus. |
| front | This parameter tests the card on the front shelf. |
| *ms_no* | This variable is the MS number. Valid entries are 0-1. |
| noprompt | This parameter prevents any yes/no prompts from being displayed. The system automatically enters yes. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the system is testing the port or card. |
| port | This parameter tests a port. |
| *port_no* | This variable is the number of the port to be tested. Valid entries are 0-127. |
| *prompt* | This default parameter directs the system to offer yes/no prompts for confirmation. Do not enter this parameter. |
| tap | This parameter tests a tap. |
| *tap_no* | This variable is the tap number. Valid entries are 0-23. |
| *wait* | This default parameter directs the system to not allow use of the MAP for other functions while the system is testing a port or card. Do not enter this parameter. |

# tst (continued)

## Qualifications

The tst command is qualified by the following exceptions, restrictions, and limitations:

- If you do not specify a parameter, the system runs tests on both the front and back cards in the slot.
- The card to be tested must be equipped and not in an offline state.
- The type of test performed depends on the state of the card.
- Use the tst command with the queryms command when isolating load card faults. Several load card faults may occur simultaneously, but the tst command displays only the first fault that is found. In contrast, the queryms command lists all faults that were discovered by the previous test.
- You can verify the integrity of the firmware of the card. The integrity is verified on cards that are set to the out-of-service status.

## Example

The following table provides an example of the tst command.

**Example of the tst command**

| Example | Task, response, and explanation |
|---|---|
| **tst 0** ↵<br>*where*<br><br>0 is the MS number | **Task:** Test the card on MS 0.<br><br>**Response:**<br><br>`Request to INSV TEST MS: 0 shelf: 1 card: 6 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 1 card: 6 passed.`<br><br>**Explanation:** The requested card is tested and passed the tests. |

## Respose

The following table provides explanations of the responses to the tst command.

| **Responses for the tst command** | |
|---|---|
| **MAP output** | **Meaning and action** |
| `Back card illegally at card 5 position.` | |
| | **Meaning:** A back card is at card position 5 (shelf slot number 11) resulting in a faulty shelf configuration. Always leave card position 5 on the back shelf empty. The system has set NT9X52 tranport bus access card (TBAC) to in-service trouble.<br><br>**Action:** Remove the back card from card position 5. |
| `Back card illegally at card 26 position.` | |
| | **Meaning:** A back card is at card position 26 (shelf slot number 32) resulting in a faulty shelf configuration. Put only an NT9X48 P-Bus extension paddleboard at card position 26 on the back shelf. The system has set NT9X52 TBAC to in-service trouble.<br><br>**Action:** Remove the incorrect back card from card position 26. |
| `Cannot test card 10 while MS node is OOS.` | |
| | **Meaning:** The command is aborted because the card cannot be tested while the MS is out-of-service. The entered card number is echoed in the response.<br><br>**Action:** None |
| `Cannot test card when f/w download in progress.` | |
| | **Meaning:** The request to test the card is aborted because the card is being downloaded.<br><br>**Action:** None |
| `Cannot test FBus 3 when TFI or MS is out of service.` | |
| | **Meaning:** The command is aborted because the FBus cannot be tested while the TFI card or the MS node is out-of-service. The entered card number is echoed in the response.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot test port 52 while card or node is OOS.` | **Meaning:** Tests cannot be performed on a port while its card is out-of-service. The port number entered is echoed in the response.<br><br>**Action:** None |
| `Can not test port 123 while P-side is OOS.` | **Meaning:** Tests cannot be performed on the port if the P-side resource of the port is out-of-service. The port number entered is echoed in the response.<br><br>**Action:** None |
| `Cannot test tap 10 while MS, TFI, or FBus is out of service.` | **Meaning:** The command is aborted because the tap cannot be tested while the MS, TFI card, or FBus is out-of-service. The entered card number is echoed in the response.<br><br>**Action:** None |
| `Cannot test TFI card 10 while MS node is OOS.` | **Meaning:** The command is aborted because the card cannot be tested while the MS is out-of-service. The entered card number is echoed in the response.<br><br>**Action:** None |
| `Card has corrupted firmware.` | **Meaning:** The card has corrupted firmware possibly caused by an EEPROM page write failure.<br><br>**Action:** None |
| `Card has no firmware.` | **Meaning:** The card was not loaded with a valid firmware.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Card 3 is offlined.` | **Meaning:** The card is in an offline state and cannot be tested.<br><br>**Action:** Use the bsy command to return the card to the manually-busy state, and retry the tst command. |
| `Card 3 is unequipped.` | **Meaning:** The card is unequipped.<br><br>**Action:** None |
| `FBus 3 if offlined.` | **Meaning:** The FBus is in an offline state and cannot be tested.<br><br>**Action:** Use the bsy command to return the FBus to the manually-busy state, and retry the tst command. |
| `FBus 3 if unequipped.` | **Meaning:** The FBus is unequipped.<br><br>**Action:** None |
| `Load card(s) inserted while DMS-BUS is in service.` | **Meaning:** You have inserted one or more load cards into the MS while it is in service. Only insert load cards when the message switch is out-of-service. Otherwise, data may be corrupted. The system has set NT9X52 TBAC to in-service trouble.<br><br>**Action:** Make a record of the load-card-disturbed error and note the time of the error. Later, if data corruption occurs causing random failures, use the record to relate the random failures to the load card error. |
| `Load card missing at card 1 position.` | **Meaning:** A load card should be inserted in the back shelf at card position 1 (shelf slot number 7) to provide a consistent load distribution on the main clock and frame pulse signals. The system has set the NT9X52 TBAC in the front shelf in card position 1 to in-service trouble.<br><br>**Action:** Add the load card to the back shelf of card position 1. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Load card missing at card 4 position.` | **Meaning:** A load card should be inserted in the back shelf at card position 4 (shelf slot number 10) to provide a consistent load distribution on the main clock and frame pulse signals. The system has set NT9X52 TBAC in the front shelf in card position 1 to in-service trouble.<br><br>**Action:** Add the load card to the back shelf of card position 4. |
| `Load card(s) missing at one or more of card positions 6-23.` | **Meaning:** A load card is always required as a back card at card positions 6-23 (slot numbers 12-29). The system has set NT9X52 TBAC to in-service trouble.<br><br>**Action:** Add the necessary load card to the message switch shelf. |
| `Load card power-up bit(s) stuck.` | **Meaning:** One or more load cards on the specified MS have stuck power-up bits. As a result, the system has disabled the load-card-disturbed error detection for these cards. The system has set NT9X52 TBAC to in-service trouble.<br><br>**Action:** Replace the faulty load card on the message switch shelf. |
| `Load card(s) trapped.` | **Meaning:** Unsuccessful hardware access to one or more load cards has resulted in a trap interrupt. The system has set NT9X52 TBAC to in-service trouble.<br><br>**Action:** Replace the faulty load card on the message switch shelf. |
| `Port 123 does not exist on this card.` | **Meaning:** The port number specified is outside of the port range for the card that is currently displayed at the Card level of the MAP. The port number entered is echoed in the response.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 0 card: 7 failed;`<br>`Card test aborted, resource is not available.` | **Meaning:** The in-service test is aborted because the card is unavailable.<br><br>**Action:** None |
| `Request to INSV TEST MS: 0 shelf: 1 card: 6 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 1 card: 6 passed.` | **Meaning:** The out-of-service test was passed.<br><br>**Action:** None |
| `Request to INSV TEST MS: 0 shelf: 3 card: 8 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 3 card: 8 failed;`<br>`Hard faults found on card:`<br>`SHELF 0 CARD 8: Interface front card has an invalid PEC.`<br>`Site Flr RPos Bay_Id Shf Description Slot EqPEC`<br>`HOST 00 AA00 DPCC 0 39 MS 0:0:08 14 9X32AA BACK` | **Meaning:** The out-of-service test failed, and the system provides the fault and location information for the faulty card.<br><br>**Action:** Replace the faulty card. |
| `Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 0 card: 7 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 0 card: 7 passed.` | **Meaning:** The requested card passed the tests.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 0 card: 7 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested card cannot be tested.<br><br>**Action:** None |
| `Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 0 card: 7 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 0 card: 7 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot test the card while other maintenance activities are in progress.<br><br>**Action:** Retry the tst command after other activities have finished. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted<br>Request to INSV TEST MS: 0 shelf: 0 card: 7 terminated;<br>S/W inhibited.<br>Local Maintenance Not Accessible<br><br>or<br><br>Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted<br>Request to INSV TEST MS: 0 shelf: 0 card: 7 terminated;<br>no resources available.<br>Required Resources Are Unavailable<br><br>or<br><br>Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted<br>Request to INSV TEST MS: 0 shelf: 0 card: 7 failed;<br>Request not supported | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted.<br>Request to INSV TEST MS: 0 shelf: 0 card: 7 terminated;<br>S/W inhibited.<br>Not Able To Run | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 0 card: 7 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 0 card: 7 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 0 card: 7 failed;`<br>`No Problem`<br><br>or<br><br>`Request to INSV TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 0 card: 7 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `Request to OOS TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to OOS TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 failed;`<br>`Card test aborted, resource is not available.` | **Meaning:** The out-of-service test is aborted because the card is unavailable.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to OOS TEST MS: 0 shelf: 3 card: 8 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 3 card: 8 failed;`<br>`Hard faults found on card:`<br>`SHELF 0 CARD 8: Interface front card has an invalid PEC.`<br>`Site Flr RPos Bay_Id Shf Description Slot EqPEC`<br>`HOST 00 AA00 DPCC 0 39 MS 0:0:08 14 9X32AA BACK` | **Meaning:** The out-of-service test failed, and the system provides the fault and location information for the faulty card.<br><br>**Action:** Replace the faulty card. |
| `Request to OOS TEST MS: 0 shelf: 1 card: 6 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 1 card: 6 passed.` | **Meaning:** The out-of-service test passed.<br><br>**Action:** None |
| `Request to OOS TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested card cannot be tested.<br><br>**Action:** None |
| `Request to OOS TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to OOS TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot test the card while other maintenance activities are in progress.<br><br>**Action:** Retry the tst command after other activities have finished. |
| `Request to OOS TEST MS: 0 shelf: 0 card: 7 submitted`<br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 submitted`<br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 terminated;`<br>`no resources available.`<br>`Required Resources Are Unavailable`<br><br>or<br><br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 submitted`<br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 failed;`<br>`Request not supported` | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| `Request to OOS TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to OOS TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 failed;`<br>`No Problem`<br><br>or<br><br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 0 card: 7 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `Request to TST MS: 0 shelf: 0 card: 10 port:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to TST MS: 0 shelf: 0 card: 10 port:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 failed;`<br>`Card test aborted, resource is not available.` | **Meaning:** The in-service test is aborted because the card is unavailable.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to TST MS: 0 shelf: 3 card: 10 port:  8 submitted.`<br>`Request to TST MS: 0 shelf: 3 card: 10 port:  8 failed;`<br>`Hard faults found on card:`<br>`Shelf 0 CARD 8: Interface front card has an invalid PEC.`<br>`Site  Flr  RPos  Bay_Id  Shf  Description  Slot  EqPEC`<br>`HOST  00   AA00  DPCC 0   39  MS 0:0:08    14    9X32AA BACK` | **Meaning:** The in-service test failed, and the system provides the fault and location information for the faulty card.<br><br>**Action:** Replace the faulty card. |
| `Request to TST MS: 0 shelf: 1 card: 10 port:  6 submitted.`<br>`Request to TST MS: 0 shelf: 1 card: 10 port:  6 passed.` | **Meaning:** The in-service test passed.<br><br>**Action:** None |
| `Request to TST MS: 0 shelf: 0 card: 10 port:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested card cannot be tested.<br><br>**Action:** None |
| `Request to TST MS: 0 shelf: 0 card: 10 port:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to TST MS: 0 shelf: 0 card: 10 port:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot test the card while other maintenance activities are in progress.<br><br>**Action:** Retry the tst command after other activities have finished. |
| `Request to TST MS: 0 shelf: 0 card: 10 port:  7 submitted`<br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 submitted`<br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 terminated;`<br>`no resources available.`<br>`Required Resources Are Unavailable`<br><br>or<br><br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 submitted`<br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 failed;`<br>`Request not supported` | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| `Request to TST MS: 0 shelf: 0 card: 10 port:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to TST MS: 0 shelf: 0 card: 10 port:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 failed;`<br>`No Problem`<br><br>or<br><br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 port:  7 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `Request to TST MS: 0 shelf: 0 card: 10 tap:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to TST MS: 0 shelf: 0 card: 10 tap:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 failed;`<br>`Card test aborted, resource is not available.` | **Meaning:** The in-service test is aborted because the card is unavailable.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to TST MS: 0 shelf: 3 card: 10 tap:  8 submitted.`<br>`Request to TST MS: 0 shelf: 3 card: 10 tap:  8 failed;`<br>`Hard faults found on card:`<br>`Shelf 0 CARD 8: Interface front card has an invalid PEC.`<br>`Site  Flr  RPos  Bay_Id  Shf  Description  Slot  EqPEC`<br>`HOST  00   AA00  DPCC 0   39  MS 0:0:08    14    9X32AA BACK` | **Meaning:** The in-service test failed, and the system provides the fault and location information for the faulty card.<br><br>**Action:** Replace the faulty card. |
| `Request to TST MS: 0 shelf: 1 card: 10 tap:  6 submitted.`<br>`Request to TST MS: 0 shelf: 1 card: 10 tap:  6 passed.` | **Meaning:** The in-service test passed.<br><br>**Action:** None |
| `Request to TST MS: 0 shelf: 0 card: 10 tap:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested card cannot be tested.<br><br>**Action:** None |
| `Request to TST MS: 0 shelf: 0 card: 10 tap:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to TST MS: 0 shelf: 0 card: 10 tap:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot test the card while other maintenance activities are in progress.<br><br>**Action:** Retry the tst command after other activities have finished. |
| `Request to TST MS: 0 shelf: 0 card: 10 tap:  7 submitted`<br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 submitted`<br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 terminated;`<br>`no resources available.`<br>`Required Resources Are Unavailable`<br><br>or<br><br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 submitted`<br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 failed;`<br>`Request not supported` | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| `Request to TST MS: 0 shelf: 0 card: 10 tap:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to TST MS: 0 shelf: 0 card: 10 tap:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 failed;`<br>`No Problem`<br><br>or<br><br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 submitted.`<br>`Request to TST MS: 0 shelf: 0 card: 10 tap:  7 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `Tap 3 is offlined.` | **Meaning:** The tap is in an offline state and cannot be tested.<br><br>**Action:** Use the bsy command to return the tap to the manually-busy state, and retry the tst command. |
| `Tap 3 is on an unequipped shelf.` | **Meaning:** The tap is not on any of the datafilled shelves.<br><br>**Action:** None |

**-continued-**

# tst (end)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Tap 3 is unequipped.` | **Meaning:** The tap is unequipped.<br><br>**Action:** None |

**-end-**

# CARRIER level commands

Use the CARRIER level of the MAP to monitor and maintain the trunks that are associated with carriers.

## Accessing the CARRIER level

To access the CARRIER level, enter the following from the CI level:

**mapci;mtc;trks;carrier** ↵

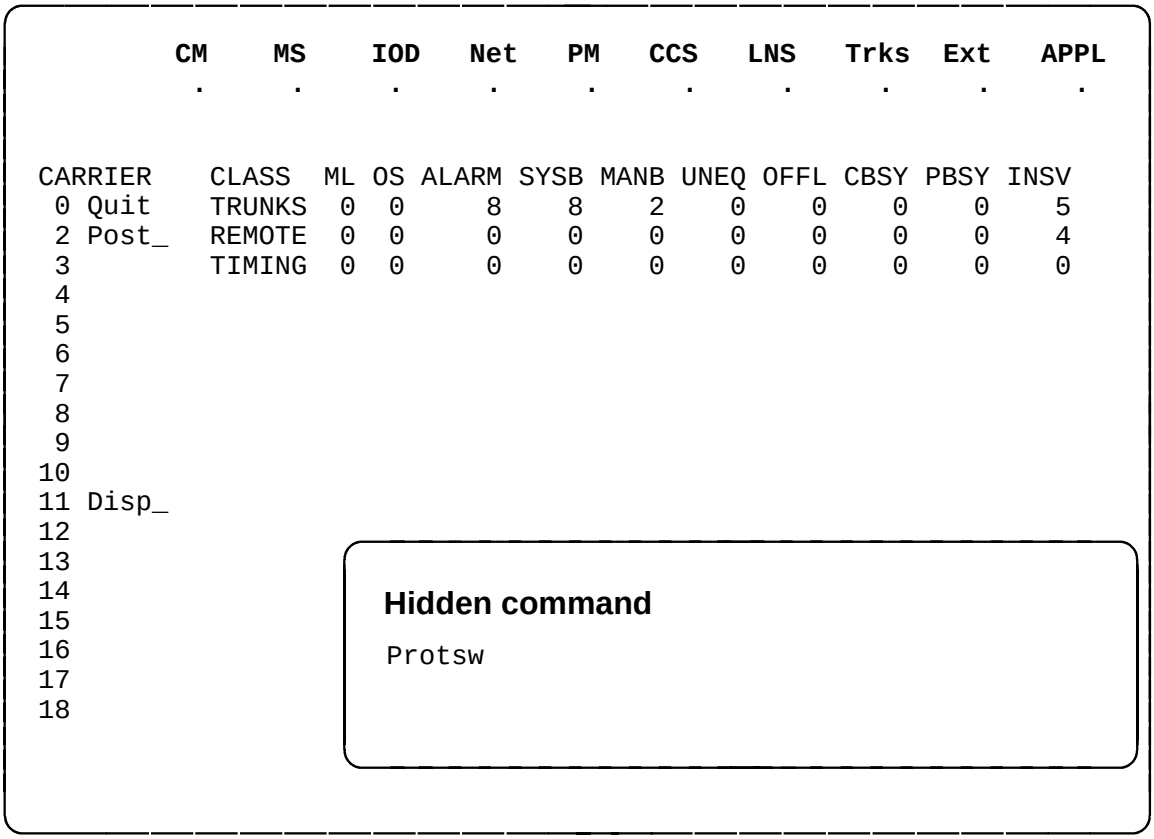
## CARRIER commands

The commands available at the CARRIER MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

| Command | Page |
|---|---|
| disp | C-213 |
| post | C-221 |
| protsw | C-231 |
| quit | C-233 |

## CARRIER menu

The following figure shows the CARRIER menu and status display. The insert with hidden commands is not a visible part of the menu display. The hidden command protsw can only be entered after a line is posted. Entering the disp and post commands will cause new menus to appear that are relevant to these sublevels.



## CARRIER status codes

The following table describes the status codes for the CARRIER status display.

| Status codes CARRIER menu status display<br>Description |
|---|
| ALARM<br>This column shows the quantity of carriers that are causing alarms. |
| CBSY<br>This column shows the quantity of C-side busy carriers. |
| INSV<br>This column shows the quantity of in-service carriers. |
| MANB<br>This column shows the quantity of manually busy carriers. |
| ML<br>This column shows the maintenance limit. |
| OFFL<br>This column shows the quantity of offline carriers. |
| OS<br>This column shows the out-of-service limit. |
| PBSY<br>This column shows the quantity of P-side busy carriers. |
| REMOTE<br>This row shows the status of trunks at the remote end of the carrier. |
| SYSB<br>This column shows the quantity of system busy carriers. |
| TIMING<br>This row shows the status of the timing links. |
| TRUNKS<br>This row shows the number of local trunks. |
| UNEQ<br>This column shows the quantity of unequipped carriers. |

## Common responses

Not currently available

# disp

## Function

Use the disp command to list all carriers of a specified state.

**disp command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **disp** | alarm<br>cbsy<br>insv<br>manb<br>ml<br>offl<br>os<br>pbsy<br>sysb<br>uneq |

| Parameters and variables | Description |
|---|---|
| alarm | This parameter displays the carriers with alarms. |
| cbsy | This parameter displays the C-side busy carriers. |
| insv | This parameter displays the in-service carriers. |
| manb | This parameter displays the manually busy carriers. |
| ml | This parameter displays the maintenance limit. |
| offl | This parameter displays the offline carriers. |
| os | This parameter displays the out-of-service carriers. |
| pbsy | This parameter displays the P-side busy carriers. |
| sysb | This parameter displays the system busy carriers. |
| uneq | This parameter displays the unequipped carriers. |

## Qualifications

None

# disp (continued)

## Examples

The following table provides an example of the disp command.

**Examples of the disp command**

| Example | Task, response, and explanation |
|---|---|
| **disp manb** ↵ | |
| | **Task:** Display the carriers in the manb state. |
| | **Response:** See the response table within this section for the complete response. |
| | **Explanation:** The command string disp manb has been entered and the number of carriers in the specified state is displayed. |

## Responses

The following table provides explanations of the responses to the disp command.

**Responses for the disp command**

| MAP output | Meaning and action |
|---|---|
| CLASS ML OS ALARM SYSB MANB UNEQ OFFL CBSY PBSY INSV<br>TRUNKS 9 0 59 46 6 0 0 0 0 34<br>REMOTE 0 0 7 4 0 0 0 0 10 87<br>TIMING 2 0 2 0 0 0 0 0 0 2<br>PROTLN 0 0 3 3 0 0 0 0 0 2<br><br>disp cbsy<br>Empty set | |
| | **Meaning:** The command string disp cbsy has been entered, but there are no carriers in the specified state. |
| | **Action:** None |

-continued-

# disp (continued)

**Responses for the disp command** (continued)

| MAP output | Meaning and action |
|---|---|

```
CLASS   ML    OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS   9     0       59   46     6     0    0    0    0   34
REMOTE   0     0        7    4     0     0    0    0   10   87
TIMING   2     0        2    0     0     0    0    0    0    2
PROTLN   0     0        3    3     0     0    0    0    0    2

disp offl
Empty set
```

**Meaning:** The command string disp offl has been entered, but there are no carriers in the specified state.

**Action:** None

```
CLASS   ML    OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS   9     0       59   46     6     0    0    0    0   34
REMOTE   0     0        7    4     0     0    0    0   10   87
TIMING   2     0        2    0     0     0    0    0    0    2
PROTLN   0     0        3    3     0     0    0    0    0    2

disp os
Empty set
```

**Meaning:** The command string disp os has been entered, but there are no carriers in the specified state.

**Action:** None

```
CLASS   ML    OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS   9     0       59   46     6     0    0    0    0   34
REMOTE   0     0        7    4     0     0    0    0   10   87
TIMING   2     0        2    0     0     0    0    0    0    2
PROTLN   0     0        3    3     0     0    0    0    0    2

disp uneq
Empty set
```

**Meaning:** The command string disp uneq has been entered, but there are no carriers in the specified state.

**Action:** None

**-continued-**

# disp (continued)

**Responses for the disp command** (continued)

**MAP output** **Meaning and action**

```
CLASS   ML    OS    ALARM SYSB   MANB   UNEQ OFFL CBSY PBSY INSV
TRUNKS   9     0       59   46      6      0    0    0    0   34
REMOTE   0     0        7    4      0      0    0    0   10   87
TIMING   2     0        2    0      0      0    0    0    0    2
PROTLN   0     0        3    3      0      0    0    0    0    2

PM    NO   CKT    PM    NO   CKT    PM    NO   CKT    PM    NO   CKT
DCM    0    0     DCM    1    0     DTC    0    1     DTC    0    2
DTC    0    5     DTC    0    6     DTC    0    7     DTC    0    8
DTC    0    9     DTC    0   10     DTC    0   11     DTC    0   12
DTC    0   13     DTC    0   16     DTC    0   17     DTC    0   18
DTC    0   19     LTC    1    8     LTC    2    8     LTC    2   10
LTC    2   11     SMU    0    1     SMU    0    5     SMU    0    6
SMU    0    7     LTC    0    9     LTC    0   11     LTC    3    8
LTC    3    9     LTC    4   18     LTC    4   19     RCC    0    2
RCCI   0    5     RCCI   1    5     RCC2   0    6     RCC2   0    7
SMSR   0    5     SMSR   0    6     SMSR   0    8     SMSR   1   12
MORE...
```

At this point, pressing the enter key will cause more alarm data to appear in the MAP display:

```
SMSR   1 14     SMSR   1   16      SMSR   2    0     SMSR   2    2
SMSR   2  4     SMSR   2    6      SMSR   2    8     SMSR   3    0
SMSR   3  1     SMSR   3    2      SMSR   3    3     SMSR   3    4
SMSR   3  5     SMSR   3    6      SMSR   3    7     SMSR   3    8
SMSR   3  9     SMSR   3   10      SMSR   3   11     SMSR   3   12
SMSR   3 13     SMSR   3   14      SMSR   3   15     SMSR   3   16
SMSR   3 17     SMSR   3   18      SMSR   3   19     SMSR   3   20

DISPLAYED BY CONDITION : ALARM
```

**Meaning:** The command string disp alarm has been entered and the number of carriers in the specified state is displayed.

**Action:** None

**-continued-**

# disp (continued)

**Responses for the disp command** (continued)

**MAP output** **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  9    0       59   46     6     0    0    0    0   34
REMOTE  0    0        7    4     0     0    0    0   10   87
TIMING  2    0        2    0     0     0    0    0    0    2
PROTLN  0    0        3    3     0     0    0    0    0    2

PM   NO  CKT   PM   NO  CKT   PM   NO  CKT   PM   NO  CKT
DCM   0   0    DCM   1   0    DTC   0   2    DTC   0   5
DTC   0   5    DTC   0   9    DTC   0  12    LTC   0   9
RCCI  0   5   RCCI   1   5

DISPLAYED BY CONDITION : ML
```

**Meaning:** The command string disp ml has been entered and the number of carriers in the specified state is displayed.

**Action:** None

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  9    0       59   46     6     0    0    0    0   34
REMOTE  0    0        7    4     0     0    0    0   10   87
TIMING  2    0        2    0     0     0    0    0    0    2
PROTLN  0    0        3    3     0     0    0    0    0    2

PM   NO  CKT   PM   NO  CKT   PM   NO  CKT   PM   NO  CKT
LTC   2  10    LTC   2  11    LTC   3   8    LTC   3   9
LTC   4  18    LTC   4  19

DISPLAYED BY CONDITION : MANB
```

**Meaning:** The command string disp manb has been entered and the number of carriers in the specified state is displayed.

**Action:** None

**-continued-**

# disp (continued)

**Responses for the disp command** (continued)

**MAP output** **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       23   20     0     2    2    5    0   27
REMOTE 12    0       17    2     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1

PM   NO  CKT   PM   NO  CKT   PM   NO  CKT   PM   NO  CKT
TMS   1   7    TMS   1   9

DISPLAYED BY CONDITION : OFFL
```

**Meaning:** The command string disp offl has been entered and the number of carriers in the specified state is displayed.

**Action:** None

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  9    0       59   46     6     0    0    0    0   34
REMOTE  0    0        7    4     0     0    0    0   10   87
TIMING  2    0        2    0     0     0    0    0    0    2
PROTLN  0    0        3    3     0     0    0    0    0    2

PM   NO  CKT   PM   NO  CKT   PM   NO  CKT   PM   NO  CKT
RCC2  0   24   RCC2  0   25   RCC2  0   26   RCC2  0   27
RCC2  0   28   RCC2  0   29   SMSR  1   12   SMSR  1   14
SMSR  2    0   SMSR  2    2   SMSR  2    4   SMSR  2    6

DISPLAYED BY CONDITION : PBSY
```

**Meaning:** The command string disp pbsy has been entered and the number of carriers in the specified state is displayed.

**Action:** None

**-continued-**

# disp (end)

**Responses for the disp command** (continued)

| MAP output | Meaning and action |
|---|---|

```
CLASS   ML    OS    ALARM SYSB   MANB   UNEQ OFFL CBSY PBSY INSV
TRUNKS   9     0       59   46      6      0    0    0    0   34
REMOTE   0     0        7    4      0      0    0    0   10   87
TIMING   2     0        2    0      0      0    0    0    0    2
PROTLN   0     0        3    3      0      0    0    0    0    2

DISPLAYED BY CONDITION : SYSB
```

**Meaning:** The command string disp sysb has been entered and the number of carriers in the specified state is displayed.

**Action:** None

**-end-**

# post

## Function

Use the post command to select specified carriers for maintenance action and display information for up to five carriers.

**post command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **post** | trunks<br>remote<br>timing<br>protline<br>ds0lnk<br>ds1<br>d30<br>m20<br>ttc<br>sonet<br>nds0<br>cbsy<br>pbsy<br>insv<br>manb<br>sysb<br>uneq<br>offl<br>alarm<br>os<br>ml<br>ec<br>*pm_type* *pm_no* [ *carrier* [ trks \| rem \| c ] \| *pcm_type* ] |

| Parameters and variables | Description |
|---|---|
| alarm | This parameter displays information on carriers in alarm conditions. |
| c | This parameter posts remote cluster controller (RCC) C-side carriers. |
| *carrier* | This variable, ranging from 0-19, specifies the carrier number. |

**-continued-**

# post (continued)

**post command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| cbsy | This parameter displays carriers in the C-side busy state. |
| d30 | This parameter displays information about DMS-100 circuits using the PCM-30 format (D30). |
| ds0lnk | This parameter displays (Not currently available). |
| ds1 | This parameter displays (Not currently available). |
| ec | This parameter displays (Not currently available). |
| insv | This parameter displays carriers in the in-service state. |
| m20 | This parameter displays (Not currently available). |
| manb | This parameter displays carriers in the manual busy state. |
| ml | This parameter displays carriers which exceed the maintenance limit. |
| nds0 | This parameter displays on NDS0 carriers. |
| offl | This parameter displays carriers in the offline state. |
| os | This parameter displays carriers which exceed the out-of-service limit. |
| pbsy | This parameter displays carriers in the P-side busy state. |
| *pcm_type* | This variable specified the type of pulse code modulation (PCM) used by the carrier and is specified where multiple PCM types are datafilled on the same peripheral module (PM). The types of pulse code modulation are:<br>▪ D30<br>▪ DS0<br>▪ DS1<br>▪ M20 |
| *pm_no* | This variable, ranging from 0-511, specifies the discrimination number of the PM. |

**-continued-**

# post (continued)

**post command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *pm_type* | This variable specifies one of the following PM types:<br>▪ adct-Not currently available<br>▪ algc-Not currently available<br>▪ arcc-Not currently available<br>▪ dca-Not currently available<br>▪ dcm-digital carrier module<br>▪ dct-Not currently available<br>▪ dfi-direct fiber interface<br>▪ dtc-digital trunk controller<br>▪ dtci-Integrated Services Digital Network (ISDN) digital trunk controller<br>▪ hsi2-Not currently available<br>▪ iac-ISDN access controller<br>▪ icp-Not currently available<br>▪ idtc-international digital trunk controller<br>▪ ilgc-international line group controller<br>▪ iltc-international line trunk controller<br>▪ itac-Not currently available<br>▪ lgc-line group controller<br>▪ pdtc-digital trunk controller for PCM-30<br>▪ plgc-line group controller for PCM-30<br>▪ prcc-Not currently available<br>▪ rcc-remote cluster controller<br>▪ rcc2-remote cluster controller 2<br>▪ rcci-ISDN remote cluster controller |

**-continued-**

# post (continued)

**post command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| | ▪ rco2-Not currently available<br>▪ rmsc-Not currently available<br>▪ sma-Not currently available<br>▪ smr-subscriber module remote<br>▪ sms-subscriber module SCM-100<br>▪ smsr-subscriber module remote<br>▪ smu-subscriber module urban<br>▪ srcc-Not currently available<br>▪ tac-Not currently available<br>▪ tdtc-Not currently available<br>▪ tlgc-Not currently available<br>▪ tltc-Not currently available<br>▪ tms-TOPS message switch<br>▪ trcc-Not currently available |
| protline | This parameter displays information on protection lines. |
| rem | This parameter displays information about the remote end of the carrier. |
| remote | This parameter displays information on the remote end of the carrier. |
| sonet | This parameter displays information about the Synchronous Optical Network (SONET). |
| sysb | This parameter displays carriers in the system busy state. |
| timing | This parameter displays information on timing links. |
| trks | This parameter displays information on trunks for the specified PM. |
| trunks | This parameter displays carrier-trunk information. |

**-continued-**

| **post command parameters and variables** (continued) | |
|---|---|
| **Parameters and variables** | **Description** |
| ttc | This parameter displays information about trunk test centers (TTC). |
| uneq | This parameter displays carriers in the unequipped state. |
| **-end-** | |

## Qualifications

The post command is qualified by the following exceptions, restrictions, and limitations:

- For PMs which do not support ES or SES, the data field displays a 0 (zero).
- The display format depends on both the type of carriers being posted and on the condition selected.
- Generic classification of a carrier (trunks, remote, timing, protline) appears below the header STATE.
- When an SMS is posted at the CARRIER level, the command protsw is added to the menu.
- If all carriers on the PM are posted using the command string post plgc 0, the posted sets are displayed in groups by PCM type, the number of sets equal to the number of different PCM types datafilled on the PM. Use the next command to display the other PCM types.

## Example

The following table provides an example of the post command.

| **Example of the post command** | | |
|---|---|---|
| **Example** | **Task, response, and explanation** | |
| **post alarm** ↵ | | |
| | **Task:** | Enter the command string post alarm and display the posted carriers in the specified state. |
| | **Response:** | See the response table within this section for the complete response. |
| | **Explanation:** | The command string post alarm has been entered and the posted carriers in the specified state are displayed. |

# post (continued)

## Responses

The following table provides explanations of the responses to the post command.

**Responses for the post command**

| MAP output | Meaning and action |
|---|---|
| N CLASS SITE pm CKT D ALRM SLIP FRME BER ES SES STATE | **Meaning:** The system displays information for the set of posted carriers, where:<br>• ALRM is one of the trunk alarms<br>• BER is the bit error ratio (ber)<br>• CKT is the circuit number on the PM to which the carrier is connected<br>• CLASS is one of the following: protln, remote, timing, trunks<br>• D specifies the direction of the posted carrier, either C-side or P-side<br>• ES is the quantity of error seconds<br>• FRME is the quantity of times the carrier has exceeded the 24-hour threshold for framing errors<br>• N is the number of the carrier<br>• pm is the type of PM to which the carrier is connected<br>• SES is the quantity of severe error seconds<br>• SITE host, which indicates a local carrier connected to the host, or rem, which indicates a remote carrier connected to a PM<br>• SLIP is the quantity of times the carrier has exceeded the 24-hour threshold for slipping errors<br>• STATE is one of the states listed in the CARRIER level status codes table at the beginning of this section<br>**Action:** None |

-continued-

# post (continued)

**Responses for the post command** (continued)

**MAP output** **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 14    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
N  CLASS   SITE DCM CK  D  ALRM  SLIP   FRME  BER     ES  SES   STATE
0  TIMING   HOST   0  0  C  SLIP   ML      0    0.0    0    0   INSV
1  TRUNKS   HOST   1  0  C  SLIP   ML      0    0.0    0    0   INSV
2  TRUNKS   HOST   2  0  C  SLIP   ML      0    0.0    0    0   INSV

POSTED BY CONDITION : ALARM
```

**Meaning:** The command string post alarm has been entered and the posted carriers in the specified state are displayed

**Action:** None

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 14    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
N  CLASS   SITE DCM CK  D  ALRM  SLIP   FRME  BER     ES  SES   STATE
0  TIMING   HOST   3  0  C          0      0    0.0    0    0   CBSY
1  TRUNKS   HOST   3  1  C          0      0    0.0    0    0   CBSY
2  TRUNKS   HOST   3  2  C          0      0    0.0    0    0   CBSY
3  TRUNKS   HOST   3  3  C          0      0    0.0    0    0   CBSY
4  TRUNKS   HOST   3  4  C          0      0    0.0    0    0   CBSY

POSTED BY CONDITION : CBSY
```

**Meaning:** The command string post cbsy has been entered and the posted carriers in the specified state are displayed.

**Action:** None

**-continued-**

# post (continued)

**Responses for the post command** (continued)

**MAP output** **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 14    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
NO CLASS   SITE    PM    CKT   D   ALARM   SLIP   STATE   TLINK  MODE
0  TIMING   HOST   DCM  1   0   C   SLIP     ML    INSV    0  <condition>
1  TRUNKS   HOST   DCM  3   0   C              0   CBSY    1  <condition>

POSTED BY CONDITION : <condition>
```

**Meaning:** The command string post <condition>, where <condition> represents a specified condition, has been entered, but there are no carriers in the specified state.

**Action:** None

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 12    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
N  CLASS   SITE DCM CK  D  ALRM  SLIP   FRME  BER     ES  SES   STATE
0  TIMING   HOST   0  0  C  SLIP   ML      0    0.0    0    0   INSV
1  TRUNKS   HOST   0  2  C           0      0    0.0    0    0   INSV
2  TRUNKS   HOST   0  3  C           0      0    0.0    0    0   INSV
3  TRUNKS   HOST   0  4  C           0      0    0.0    0    0   INSV
4  TRUNKS   HOST   1  0  C  SLIP   ML      0    0.0    0    0   INSV

POSTED BY CONDITION : DS1
```

**Meaning:** The command string post ds1 has been entered and the number of posted carriers in the specified state is displayed.

**Action:** None

**-continued-**

# post (continued)

**Responses for the post command** (continued)

**MAP output** **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 12    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
N  CLASS   SITE DCM CK  D  ALRM  SLIP   FRME  BER     ES  SES   STATE
0  TIMING   HOST   0  0  C  SLIP   ML      0    0.0    0    0   INSV
1  TRUNKS   HOST   1  0  C  SLIP   ML      0    0.0    0    0   INSV
2  TRUNKS   HOST   2  0  C  SLIP   ML      0    0.0    0    0   INSV

POSTED BY CONDITION : ML
```

**Meaning:** The command string post ml has been entered and the number of posted carriers in the specified state is displayed.

**Action:** None

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 14    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
NO CLASS   SITE    PM    CKT   D   ALARM   SLIP   STATE   TLINK  MODE
0  TIMING   HOST   DCM  1   0   C   SLIP     ML    INSV    0  STANDBY
1  TRUNKS   HOST   DCM  3   0   C              0   CBSY    1  STANDBY

POSTED BY CONDITION : TIMING
```

**Meaning:** The command string post timing has been entered and the number of posted carriers in the specified state is displayed.

**Action:** None

**-continued-**

# post (end)

**Responses for the post command** (continued)

**MAP output** **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 12    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
N  CLASS   SITE DCM CK  D  ALRM  SLIP   FRME  BER     ES  SES   STATE
0  TIMING   HOST   0  0  C  SLIP   ML      0    0.0    0    0   INSV
1  TRUNKS   HOST   0  2  C          0      0    0.0    0    0   INSV
2  TRUNKS   HOST   0  3  C          0      0    0.0    0    0   INSV
3  TRUNKS   HOST   0  4  C          0      0    0.0    0    0   INSV
4  TRUNKS   HOST   1  1  C          0      0    0.0    0    0   INSV

POSTED BY CONDITION : TRUNKS
```

**Meaning:** The command string post trunks has been entered and the number of posted carriers in the specified state is displayed.

**Action:** None

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 12    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
NO CLASS   SITE   DCM   CK   D   ALRM   SLIP  FRME  BER  ES  SES   STATE
0  TIMING   HOST     0    1   0            0     0   0.0  0    0    UNEQ
1  TRUNKS   HOST     2    1   0            0     0   0.0  0    0    UNEQ

POSTED BY CONDITION : UNEQ
```

**Meaning:** The command string post uneq has been entered and the number of posted carriers in the specified state is displayed.

**Action:** None

**-end-**

# protsw

## Function

Use the protsw command to control the protection switching for a subscriber module SCM-100 (SMS).

**protsw command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **protsw** | [ opr *carrier* ]<br>[ rls ]<br>[ ena ]<br>[ dis ] |

| Parameters and variables | Description |
|---|---|
| ena | This parameter enables protection switching on the specified normline. |
| *carrier* | This variable is the MAP position of the posted carrier. |
| dis | This parameter disables protection switching on the specified normline. |
| ena | This parameter enables protection switching on the specified normline. |
| opr | This parameter operates the specified normline's protection line. |
| rls | This parameter releases the specified normline's protection line. |

## Qualifications

None

## Examples

Not currently available

## Responses

Not currently available

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any MAP level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mapci, or mtc. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the CARRIER level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The CARRIER level has changed to the previous menu level. |

**-continued-**

# quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the CARRIER level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The CARRIER level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides explanations of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the display of the CARRIER level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the CARRIER level menu with a menu that is two or more MAP levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-end-**

# CCIS6 level commands

Use the CCIS6 level of the MAP to monitor and maintain the Common Channel Interoffice Signaling No. 6 (CCIS6) subsystem.

## Accessing the CCIS6 level

To access the CCIS6 level, enter the following from the CI level:

**mapci;mtc;ccs;ccis6** ↵

## CCIS6 commands

The commands available at the CCIS6 MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**CCIS6 commands**

| Command | Page |
|---|---|
| disalm | C-239 |
| layer | C-243 |
| linkset | C-245 |
| quit | C-247 |

## CCIS6 menu

The following figure shows the CCIS6 menu and status display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


CCIS6           CCS7    DPNSS     CCIS6
 0 Quit         1 RSC     .         .
 2 DisAlm_
 3
 4 LAYER
 5 LINKSET
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
```

# disalm

## Function

Use the disalm command to display the alarm status for the specified layer or linkset. A single alarm status may be displayed or the status of all layers or linksets with faults may be displayed.

**disalm command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **disalm** | all<br>lk<br>lkm<br>rs<br>rsc<br>rsm |

| Parameters and variables | Description |
|---|---|
| all | This default parameter displays all the layers and linksets that are causing an alarm. |
| lk | This parameter displays the linksets that are causing a minor alarm. |
| lkm | This parameter displays the linksets that are causing a major alarm. |
| rs | This parameter displays the layers that are causing a minor alarm. |
| rsc | This parameter displays the layers that are causing a critical alarm. |
| rsm | This parameter displays the layers that are causing a major alarm. |

## Qualifications

None

## Examples

The following table provides examples of the disalm command.

# disalm (continued)

**Examples of the disalm command**

| Example | Task, response, and explanation |
|---|---|
| **disalm rsc** ↵<br>*where*<br><br>rsc displays all layers that are causing a critical alarm | **Task:** Display all layers that are causing a critical alarm.<br><br>**Response:**<br><br>`LAYER ALM State`<br>`LAYER 2 RSC EMERGENCY RESTART`<br><br>**Explanation:** The system identifies the layers that are associated with the alarm and places the information in the display area. |
| **disalm** ↵ | **Task:** Display all layers and linksets that are causing an alarm.<br><br>**Response:**<br><br>`LAYER ALM State`<br>`LAYER 2 RSC EMERGENCY RESTART`<br>`LINKSET ALM ISTB SYSB MANB EXT`<br>`C6LINKSET1 LKC . 1 . .`<br><br>**Explanation:** The system shows information on all layers and linksets that are causing an alarm. |

## Responses

The following table provides explanations of the responses to the disalm command. The following generic characters and terms are used in the responses to represent specific numbers or values:

- n is the layer number
- code is the alarm code
- descrpt is the alarm state description
- clli is the linkset CLLI

# disalm (end)

**Responses for the disalm command**

| MAP output | Meaning and action |
|---|---|
| LAYER<br>LAYER<br>n<br>ALM<br>code<br>State<br>descrpt | **Meaning:** The system shows the layer number, alarm code, and alarm description for the layers causing a critical alarm.<br><br>**Action:** None |
| LINKSET<br>clli<br>ALM<br>code<br>ISTB SYSB MANB EXT<br>. 1 . . | **Meaning:** The system shows information on the linksets that are causing the specified alarm. The linkset information displays the linkset common language location identifier (clli), the alarm code, and the linkset state. To indicate the linkset state, the system places a 1 under the state header.<br><br>**Action:** None |
| LAYER<br>LAYER<br>n<br>ALM<br>code<br>STATE<br>descrpt<br>LINKSET<br>clli<br>ALM<br>code<br>ISTB SYSB MANB EXT<br>. 1 . . | **Meaning:** The system shows information on both the layers and the linksets that are causing an alarm. This is the default response.<br><br>**Action:** None |

# layer

## Function

Use the layer command to access the LAYER subsystem and display the state of all of the layers, up to a maximum of 30 layers.

**layer command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **layer** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the layer command.

**Example of the layer command**

| Example | Task, response, and explanation |
|---|---|
| **layer** ↵ | |

**Task:** Display all layer states.

**Response:**

```
LAYERS:                1111111111  2222222222
           0123456789  0123456789  0123456789
STATES:    ...B.L..PB  P.--------  ----------
```

**Explanation:** The MAP displays the layer states for up to 30 layers. In this example, layers 0, 1, 2, 4, 6, 7, and 11 are in the in-service state. Layers 3 and 9 are in the blocked state. Layer 5 is in the signaling link out-of-service state. Layers 8 and 10 are in the transfer-prohibited state.

# layer (end)

## Response

The following table provides an explanation of the response to the layer command.

**Response for the layer command**

| MAP output | Meaning and action |
|---|---|
| LAYERS: 1111111111 2222222222<br>0123456789 0123456789 0123456789<br>STATES: .......... .......... .......... | **Meaning:** The system lists layers 0-29 and gives the status of each layer.<br><br>**Action:** None |

# linkset

## Function

Use the linkset command to access the LINKSET MAP level and display the corresponding status headers and commands.

**linkset command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **linkset** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the linkset command.

**Example of the linkset command**

| Example | Task, response, and explanation |
|---|---|
| **linkset** ↵ | |
| | **Task:** Access the LINKSET MAP level. |
| | **Response:** |
| | `LINKSET STA LK MODE STA STC STA MIC VF_LINK STA` |
| | **Explanation:** The system displays the LINKSET headers and command menu. |

## Response

The following table provides an explanation of the response to the linkset command.

# linkset (end)

**Response for the linkset command**

| MAP output | Meaning and action |
|---|---|
| `LINKSET STA LK MODE STA STC STA MIC VF_LINK STA` | **Meaning:** The system displays the LINKSET headers and command menu.<br><br>**Action:** None |

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualification

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the CCIS6 level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The CCIS6 level has changed to the previous menu level. |

**-continued-**

# quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the CCIS6 level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The CCIS6 level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the CCIS6 level menu with a menu that is two or more levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the CCIS6 level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |

**-end-**

# CCS level commands

Use the CCS level of the MAP to monitor and maintain the Common Channel Signaling (CCS) system and access the CCS subsystem displays.

## Accessing the CCS level

To access the CCS level, enter the following from the CI level:

**mapci;mtc;ccs ↵**

## CCS commands

The commands available at the CCS MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**CCS commands**

| Command | Page |
|---|---|
| ccis6 | C-255 |
| ccs7 | C-257 |
| dpnss | C-259 |
| queryalm | C-261 |
| quit | C-265 |
| scp | C-269 |

## CCS menu

The following figure shows the CCS menu and status display. This menu shows an example of how an alarm state appears on the MAP display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .   1 RSC   .     .     .     .
                                     *C*

CCS             CCS7    DPNSS     CCIS6     SCP
 0 Quit         1 RSC     .         .         .
 2
 3 CCS7
 4 DPNSS
 5 CCIS6
 6 SCP
 7
 8
 9
10
11
12
13
14 QueryAlm
15
16
17
18
```

***Note:*** This menu reflects a fully equipped office. Some menu items and headers may not appear on the MAP display, or may appear with a different menu number, depending on your office configuration.

## CCS status codes

The following table describes the status codes for the CCS status display. The status codes are used for the CCIS6, CCS7, DPNSS, and SCP subsystems.

| Status codes CCS menu status display | | | |
|---|---|---|---|
| **Status Code** | **Alarm Code** | **Meaning** | **Description** |
| Subsystem | | | |
| . | . | In service | All linksets are carrying traffic or are available for service. |
| LKM | M | Linkset Major | The links within a linkset are unable to carry traffic. One or more of the following conditions may exist:<br>▪ processor outage signal-A processor outage signal has been received on the signaling link.<br>▪ links out-of-service-All the signaling links in a linkset are out-of-service.<br>▪ major equipment failure-The system has detected a major equipment failure that caused a linkset to go out-of-service. |
| LK | | Linkset Minor | System maintenance has detached the duplicated or reserved VF links (transmission links) for a minor periodic audit or equipment maintenance (for the CCIS6 subsystem). |
| RS | | Routeset Minor | The system has received a signal from a signaling transfer point (STP) and designated the routeset or layer as one of the following:<br>▪ transfer restricted for some bands (TFR)<br>▪ transfer prohibited for some bands (TFP)<br>This alarm only pertains to the CCIS6 subsystem. |
| RSC | *C* | Routeset Critical | The routeset has no signaling capability. One or more of the following conditions may exist:<br>▪ emergency restart-The office has lost signaling capability on all linksets in a routeset (layer in the CCIS6 subsystem). An emergency restart procedure has been initiated.<br>▪ congestion-The layer is congested. |
| RSM | M | Routeset Major | This alarm alerts the user that there are reduced alternative routes for traffic. This alarm pertains to the CCIS6 subsystem only. |

# ccis6

## Function

Use the ccis6 command to access the MAP level and display the commands for monitoring and maintaining the Common Channel Interoffice Signaling No. 6 (CCIS6) system.

**ccis6 command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **ccis6** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the ccis6 command.

**Example of the ccis6 command**

| Example | Task, response, and explanation | |
|---|---|---|
| **ccis6** ↵ | | |
| | **Task:** | Access the CCIS6 sublevel from the CCS level. |
| | **Response:** | The CCS menu is replaced by the CCIS6 menu. |
| | **Explanation:** | The system displays the CCIS6 commands menu. |

## Response

The following table provides an explanation of the response to the ccis6 command.

**Response for the ccis6 command**

| MAP output | Meaning and action |
|---|---|
| The CCS menu is replaced by the CCIS6 menu. | |
| | **Meaning:** The system displays the CCIS6 commands menu. |
| | **Action:** None |

# ccs7

## Function

Use the ccs7 command to access the MAP level and display the commands for monitoring and maintaining the Common Channel Signaling No. 7 (CCS7) system.

**ccs7 command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **ccs7** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the ccs7 command.

**Example of the ccs7 command**

| Example | Task, response, and explanation | |
|---|---|---|
| **ccs7** ↵ | | |
| | **Task:** | Access the CCS7 level. |
| | **Response:** | The CCS menu is replaced by the CCS7 menu. |
| | **Explanation:** | The system displays the CCS7 level header and commands menu. |

## Response

The following table provides an explanation of the response to the ccs7 command.

**Response for the ccs7 command**

| MAP output | Meaning and action |
|---|---|
| The CCS menu is replaced by the CCS7 menu. | |
| | **Meaning:** The system displays the CCS7 level header and commands menu. |
| | **Action:** None |

# dpnss

## Function

Use the dpnss command to access the MAP level and display the commands for the Digital Private Network Signaling System (DPNSS).

**dpnss command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **dpnss** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the dpnss command.

**Example of the dpnss command**

| Example | Task, response, and explanation | |
|---|---|---|
| **dpnss** ↵ | | |
| | **Task:** | Access the DPNSS level. |
| | **Response:** | The CCS menu is replaced by the DPNSS menu. |
| | **Explanation:** | The system displays the DPNSS level header and commands menu. |

## Response

The following table provides an explanation of the response to the dpnss command.

**Response for the dpnss command**

| MAP output | Meaning and action |
|---|---|
| The CCS menu is replaced by the DPNSS menu. | |
| | **Meaning:** The system displays the DPNSS level header and commands menu. |
| | **Action:** None |

# queryalm

## Function

Use the queryalm command to display the alarm order for a given CCS system.

**queryalm command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **queryalm** | *ccs_system* |

| Parameters and variables | Description |
|---|---|
| *ccs_system* | This variable specifies the CCS system. The system values are<br>▪ ccis6<br>▪ ccs7<br>▪ dpnss<br>▪ scp |

## Qualifications

None

# queryalm (continued)

## Example

The following table provides an example of the queryalm command.

**Example of the queryalm command**

| Example | Task, response, and explanation |
|---|---|
| **queryalm ccs7** ↵<br>*where*<br><br>ccs7 represents the CCS7 subsystem | **Task:** Check the alarm states for the CCS7 subsystem.<br><br>**Response:**<br>CRITICAL<br>--------<br>RTESET LSS PC RSS Default<br><br>MAJOR<br>-----<br>LKSET RTESET LSS Default<br><br>MINOR<br>-----<br>PC LKSET RTESET LM Default<br><br>**Explanation:** The MAP displays the alarm headers and the corresponding alarm order within the CCS7 level. |

## Response

The following table provides an explanation of the response to the queryalm command.

**Response for the queryalm command**

| MAP output | Meaning and action |
|---|---|
| CRITICAL<br>--------<br>RTESET LSS PC RSS Default<br><br>MAJOR<br>-----<br>LKSET RTESET LSS Default<br><br>MINOR<br>-----<br>PC LKSET RTESET LM Default | **Meaning:** The MAP displays the alarm headers and the corresponding alarm order within the CCS7 level.<br><br>**Action:** None |
| The specified CCS system is not bound in. | **Meaning:** An invalid CCS system has been entered.<br><br>**Action:** Enter the command again, using a valid CCS system. |

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualification

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the CCS level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The CCS level has changed to the previous menu level. |

**-continued-**

# quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the CCS level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The CCS level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the CCS level menu with a menu that is two or more levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the CCS level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |

**-end-**

# scp

## Function

Use the scp command to access the MAP level and display the commands for the Service Control Point (SCP) subsystem.

**scp command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **scp** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the scp command.

**Example of the scp command**

| Example | Task, response, and explanation | |
|---|---|---|
| **scp** ↵ | | |
| | **Task:** | Access the SCP sublevel from the CCS level. |
| | **Response:** | The CCS menu is replaced by the SCP menu. |
| | **Explanation:** | The system displays the SCP commands menu. |

## Response

The following table provides an explanation of the response to the scp command.

**Response for the scp command**

| MAP output | Meaning and action |
|---|---|
| The CCS menu is replaced by the SCP menu. | |
| | **Meaning:** The system displays the SCP commands menu. |
| | **Action:** None |

# CCS7 level commands

Use the CCS7 level of the MAP to test and maintain Common Channel Signaling No. 7 (CCS7) trunks.

## Accessing the CCS7 level

To access the CCS7 level, enter the following from the CI level:

**mapci;mtc;ccs;ccs7** ↵

## CCS7 commands

The commands available at the CCS7 MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**CCS7 commands**

| Command | Page |
|---|---|
| c7lkset | C-273 |
| c7msuver | C-275 |
| c7rteset | C-277 |
| disalm | C-279 |
| quit | C-285 |
| sccploc | C-289 |
| sccprpc | C-291 |
| seas | C-293 |

## CCS7 menu

The following figure shows the CCS7 menu and status display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


CCS7            CCS7    DPNSS    CCIS6
 0 Quit           .        .        .
 2 DisAlm
 3 C7RteSet
 4 C7LkSet
 5 SCCPRPC
 6 SCCPLoc
 7 SEAS
 8
 9
10
11
12
13
14
15
16 C7MSUVER
17
18
```

***Note:*** SEAS and MSUVER apply only to signaling transfer point (STP) and Integrated Services Digital Network (ISDN) node (INode) applications.

# c7lkset

## Function

Use the c7lkset command to access the C7LkSet level. Posted linksets are displayed under the C7LkSet status headers.

**c7lkset command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **c7lkset** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the c7lkset command.

**Example of the c7lkset command**

| Example | Task, response, and explanation |
|---|---|
| **c7lkset** ↵ | |

**Task:** Access the C7LkSet subsystem level.

**Response:** The menu changes to the C7LkSet menu, and the following headers are added to the display:

```
LINKSET
   TRAF  SYNC                                          LINK
LK STAT  STAT RESOURCE  STAT  PHYSICAL  ACCESS  STAT  ACTION
```

**Explanation:** The C7LkSet level status headers appear on the MAP display.

# c7lkset (end)

## Response

The following table provides an explanation of the response to the c7lkset command.

**Response for the c7lkset command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the C7LkSet menu, and the following headers are added to the display:<br><br>LINKSET<br>TRAF SYNC RESOURCE LINK<br>LK STAT STAT TYPE NO STAT PHYSICAL ACCESS STAT ACTION | **Meaning:** The C7LkSet level is displayed.<br><br>**Action:** None |

# c7msuver

## Function

Use the c7msuver command to access the C7MSUVER level.

**c7msuver command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **c7msuver** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the c7msuver command.

**Example of the c7msuver command**

| Example | Task, response, and explanation |
|---|---|
| **c7msuver** ↵ | |
| | **Task:** Access the C7MSUVER level. |
| | **Response:** The menu changes to the C7MSUVER level menu, and the following headers are added to the display:<br><br>`Message:`<br>`SIO:  Network Ind=  Priority=  Service=`<br>`DPC:  OPC:` |
| | **Explanation:** The C7MSUVER level is displayed. |

# c7msuver (end)

## Response

The following table provides an explanation of the response to the c7msuver command.

**Response for the c7msuver command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the C7MSUVER level menu, and the following headers are added to the display:<br><br>`Message:`<br>`SIO:  Network Ind=  Priority=  Service=`<br>`DPC:` | **Meaning:** The C7MSUVER level is displayed.<br><br>**Action:** None |

# c7rteset

## Function

Use the c7rteset command to access the C7RteSet level.

**c7rteset command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **c7rteset** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the c7rteset command.

**Example of the c7rteset command**

| Example | Task, response, and explanation |
|---|---|
| **c7rteset** ↵ | |

**Task:** Access the C7RteSet level.

**Response:** The menu changes to the C7RteSet level menu, and the following headers are added to the display:

```
C7Routeset                                    Linkset Transfer
Rte  State  Mode  Cost  Linkset               State   Status
```

**Explanation:** The C7RteSet level is displayed.

# c7rteset (end)

## Response

The following table provides an explanation of the response to the c7rteset command.

**Response for the c7rteset command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the C7RteSet level menu, and the following headers are added to the display:<br><br>`C7ROUTESET LINKSET TRANSFER`<br>`RTE STATE MODE COST LINKSET STATE STATUS` | **Meaning:** The C7RteSet level menu and status headings are displayed.<br><br>**Action:** None |

# disalm

## Function

Use the disalm command to display the alarm status for the different CCS7 functions.

**disalm command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **disalm** | *all*<br>lkc<br>rsc<br>lssc<br>pcc<br>rssc<br>lkm<br>rsm<br>lssm<br>pc<br>lk<br>rs<br>lm<br>sssb<br>sstr<br>ssmb |

| Parameters and variables | Description |
|---|---|
| *all* | This parameter displays all routesets and linksets that are causing an alarm and the type of alarm in a descending order of severity. This parameter is the system default. |
| lk | This parameter displays the linksets that are causing a minor alarm. |
| lkc | This parameter displays the linksets that are causing a critical alarm. |
| lkm | This parameter displays the linksets that are causing a major alarm. |
| lm | This parameter displays the links that are causing a minor alarm. |
| lssc | This parameter displays the local signaling connection control part (SCCP) subsystems that are causing a critical alarm. |
| lssm | This parameter displays the local SCCP subsystems that are causing a major alarm. |

**-continued-**

# disalm (continued)

**disalm command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| pc | This parameter displays the SCCP point codes that are causing a minor alarm. |
| pcc | This parameter displays the SCCP point codes that are causing a critical alarm. |
| rs | This parameter displays the routesets that are causing a minor alarm. |
| rsc | This parameter displays the routesets that are causing a critical alarm. |
| rsm | This parameter displays the routesets that are causing a major alarm. |
| rssc | This parameter displays the remote SCCP subsystems that are causing a critical alarm. |
| ssmb | This parameter displays the signaling engineering and administration systems (SEAS) that are unavailable and are causing a minor alarm because they are manually busy. |
| sssb | This parameter displays the SEAS that are unavailable and are causing a minor alarm because they are system busy. |
| sstr | This parameter displays the SEAS that are unavailable and are causing a minor alarm because they have in-service trouble. |

**-end-**

## Qualifications

The disalm command is qualified by the following exceptions, limitations, and restrictions:

- The alarm status of single or multiple functions can be displayed.
- The following list is the CCS7 functions with alarm status in order of severity:
  - routesets
  - point codes
  - subsystems
  - linksets
  - SEAS
- When the all parameter is used with the disalm command, each heading appears on the display. If there are no alarms for the function, no status information is shown, and the next heading appears immediately below the heading.

## Example

The following table provides an example of the disalm command.

**Example of the disalm command**

| Example | Task, response, and explanation |
|---|---|
| **disalm all** ↵ | |

**Task:** Display the status of all alarms for the CCS7 functions.

**Response:**

```
C7Routeset          Alm   Stat
MGTSRTESET          RSC   SysB
C7Linkset           Alm   Stat
MGTSLKSET           LKM   SysB
C7Link                    Alm   Stat
Point Code          Alm   Stat
MGTSRTESET          PCC   SysB
No PC alarms
No SSC alarms
Subsystem                 Alm   Stat
MGTSRTESET  ACCS          SSC   SysB
No SSM alarms
```

**Explanation:** The MAP displays the status of all alarms for the CCS7 functions.

## Responses

The following table provides explanations of the responses to the disalm command.

**Responses for the disalm command**

| MAP output | Meaning and action |
|---|---|
| `C7Link  Alm  Stat`<br>`MGTSLINK  LM  SysB` | |

**Meaning:** The system displays all links with a link alarm status code. In this example, MGTSLINK is the link identifier, LM is the alarm status code, and SysB is the link state.

**Action:** None

**-continued-**

# disalm (continued)

**Responses for the disalm command** (continued)

| MAP output | Meaning and action |
|---|---|
| C7Linkset Alm Stat<br>MGTSLKSET LKM SysB | **Meaning:** The system displays all linksets with a linkset alarm status code. In this example, MGTSLKSET is the linkset common language location identifier (CLLI), LKM is the alarm status code, and SysB is the linkset state.<br><br>**Action:** None |
| C7Routeset Alm Stat<br>MGTSRTESET RSC SysB | **Meaning:** The system displays all routesets with a routeset alarm status code. In this example, MGTSRTESET is the routeset CLLI, RSC is the alarm status code, and SysB is the routeset state.<br><br>**Action:** None |
| C7Routeset Alm Stat<br><routeset_clli> <alm> <stat><br>C7Linkset Alm Stat<br><linkset_clli> <alm> <stat><br>C7Link Alm Stat<br><link_name> <alm> <stat><br>Point Code Alm Stat<br><pointcode_clli> <alm> <stat><br>NO alm ALARMS<br>Subsystem Alm Stat<br><subsystem_name> <alm> <stat><br>NO alm ALARMS<br>NO alm ALARMS<br>NO SEAS ALARMS | **Meaning:** The system displays all linksets and routesets causing alarms and names all alarm types that are not in effect. For each alarm, the system supplies the identification of the site of the alarm, the alarm type replaces <alm>, and the status of the function experiencing the alarm replaces <stat>. Note that the status of SEAS alarms is given if the SEAS is resident in the software.<br><br>**Action:** None |

**-continued-**

# disalm (end)

**Responses for the disalm command** (continued)

| MAP output | Meaning and action |
|---|---|
| `LKC alarm status is not applicable for CCS7.` | **Meaning:** The proper alarm status was not entered with the command.<br><br>**Action:** Enter the proper alarm status with the command in CCS7 level. |
| `Point Code  Alm  Stat`<br>`MGTSRTESET  PCC  SysB` | **Meaning:** The system displays all point codes with a point code alarm status code. In this example, MGTSRTESET is the routeset CLLI, PCC is the alarm status code, and SysB is the routeset state.<br><br>**Action:** None |
| `Subsystem  Alm  Stat`<br>`MGTSRTESET  ACCS  SSC  SysB`<br>`NETRAG  SSC  SysB` | **Meaning:** The system displays all subsystems with an alarm status (code SSC). In this example, MGTSRTESET is an alphanumeric code defining the point code CLLI, ACCS and NETRAG are the subsystems, and SysB is the subsystem state. A subsystem without a point code CLLI is a local subsystem.<br><br>**Action:** None |
| **-end-** | |

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | *1*<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| *1* | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualification

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the CCS7 level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The CCS7 level has changed to the previous menu level. |

**-continued-**

# quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the CCS7 level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The CCS7 level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the CCS7 level menu with a menu that is two or more levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the CCS7 level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |
| **-end-** | |

# sccploc

## Function

Use the sccploc command to display the local point code MAP level. Local point codes that are posted are displayed.

**sccploc command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **sccploc** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the sccploc command.

**Example of the sccploc command**

| Example | Task, response, and explanation |
|---|---|
| **sccploc** ↵ | |

**Task:** Access the SCCPLoc subsystem level.

**Response:** The menu changes to the SCCPLoc menu, and the following headers are added to the display:

```
C7 SCCP LOCAL                    111111 11112222 22222233
SUBSYSTEM    STATE    01234567 89012345 67890123 45678901
```

**Explanation:** The SCCPLoc level is displayed.

## sccploc (end)

## Response

The following table provides an explanation of the response to the sccploc command.

**Response for the sccploc command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the SCCPLoc menu, and the following headers are added to the display:<br><br>`C7 SCCP LOCAL 111111 11112222 22222233`<br>`SUBSYSTEM STATE 01234567 89012345 67890123 45678901` | **Meaning:** The SCCPLoc level is displayed.<br><br>**Action:** None |

# sccprpc

## Function

Use the sccprpc command to access the SCCP remote point code (RPC) MAP level. Remote point codes that are still posted are displayed.

**sccprpc command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **sccprpc** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the sccprpc command.

**Example of the sccprpc command**

| Example | Task, response, and explanation |
|---|---|
| **sccprpc** ↵ | |

**Task:** Access the SCCPRPC subsystem level.

**Response:** The menu changes to the SCCPRPC level menu, and the following headings are added to the display:

```
C7 SCCP REMOTE PC
    Point Code   State      Number of SS
```

**Explanation:** The RPC headings appear on the display.

## sccprpc (end)

## Response

The following table provides an explanation of the response to the sccprpc command.

**Response for the sccprpc command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the SCCPRPC level menu, and the following headings are added to the display:<br><br>`C7 SCCP REMOTE PC`<br>`Point Code State Number of SS` | **Meaning:** The SCCPRPC level is displayed.<br><br>**Action:** None |

# seas

## Function

Use the seas command to access the signaling engineering and administration system (SEAS) level.

**seas command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **seas** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the seas command.

**Example of the seas command**

| Example | Task, response, and explanation |
|---|---|
| **seas** ↵ | |

**Task:** Access the SEAS subsystem level.

**Response:** The menu changes to the menu for the SEAS level, and the following headers are added to the display:

```
SEAS           Msg Blk Vol         Buffer Vol
PVCs    Offl    ManB    RMB    SysB  InSv  INI
```

**Explanation:** The SEAS level is displayed.

## seas (end)

## Response

The following table provides an explanation of the response to the seas command.

**Response for the seas command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the menu for the SEAS level, and the following headers are added to the display:<br><br>`SEAS  Msg Blk Vol  Buffer Vol`<br>`PVCs  Offl  ManB  RMB  SysB  InSv  INI` | **Meaning:** The SEAS level is displayed.<br><br>**Action:** None |

# Chain level commands

Use the Chain level of the MAP to perform maintenance actions and display status information on the cards of the specified chain.

## Accessing the Chain level

To access the Chain level, enter the following from the CI level:

**mapci;mtc;ms;chain <*card_number*>** ↵

Replace <*card_number*> with the number of the first card in the chain.

## Chain commands

The commands available at the Chain MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**Chain commands**

| Command | Page |
|---|---|
| bsy | C-299 |
| card | C-305 |
| chain | C-309 |
| clock | C-311 |
| loadcd | C-313 |
| loadms | C-323 |
| offl | C-329 |
| querycd | C-335 |
| queryms | C-343 |
| quit | C-353 |
| rts | C-357 |
| shelf | C-365 |

| **Chain commands** (continued) | |
|---|---|
| **Command** | **Page** |
| trnsl | C-367 |
| tst | C-371 |

## Chain

The following figure shows the Chain menu and status display. The insert with hidden commands is not a visible part of the menu display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .     .     .     .     .     .


Chain                Message Switch     Clock     Shelf 0
 0 Quit         MS 0       .            Master          .
 2              MS 1       .            Slave           .
 3
 4              SHELF 0                 1 1 1 1     2 2 2 2 2 2
 5              Card 1 2 3 4 5 6 7 8 9 0 1 2 3 ... 1 2 3 4 5 6
 6 Tst_         Chain          <     > <     >
 7 Bsy_         MS 0 . . . . . . . . . . . . . ... . . . . . .
 8 RTS_         MS 1 . . . . . . . . . . . . . ... . . . . . .
 9 Offl_
10              Chain 10  Range   Link
11              MS 0   .  10-13     P
12 Chain_       MS 1   .  10-13     P
13 Card_
14 QueryMS_
15 Trnsl_
16
17
18
```

**Hidden commands**

```
clock               loadcd
loadms              querycd
shelf
```

## Chain status codes

The following table describes the status codes for the Chain status display.

| Status codes | Chain menu status display | |
|---|---|---|
| **Code** | **Meaning** | **Description** |
| Chain <nn> | | The card number of the first card in the chain replaces <nn>. |
| . | ok | Both cards at the card position are ok. |
| F | fault | A card has a fault. |
| I | in-service trouble | A card has in-service trouble. |
| M | manually busy | A card is in the manually-busy state. |
| O | offline | A card is offline. |
| S | system-busy | A card is in a system-busy state. |
| T | temporary | A card is undergoing a temporary maintenance action. |
| Range | 1-26 | A range of card numbers of cards in the chain is displayed. |
| Link | | |
| . | ok | The channelized link is in service with no faults. |
| C | C-side busy | The channelized link is central-side (C-side) busy. |
| M | manually busy | The channelized link is in a manually-busy state. |
| P | P-side busy | The channelized link is peripheral-side (P-side) busy. |
| T | temporary | The channelized link is undergoing a temporary maintenance action. |

# bsy

## Function

Use the bsy command to set to manually busy a specified chain or channelized link.

**bsy command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **bsy** | *ms_no* [ *chain* / link *link_no* ] [ *wait* / nowait ] [ *prompt* / noprompt ] [ *noforce* / force ] |

| Parameters and variables | Description |
|---|---|
| *chain* | This default parameter specifies that the entire chain is to be busied. Do not enter this parameter. |
| force | This parameter circumvents checking for P-side node isolation and busies the specified link or chain. |
| *ms_no* | This variable is the message switch (MS) number. Valid entries are 0-1. |
| *noforce* | This default parameter directs the system to check for P-side node isolation and to abort the bsy command when busying the chain or link will interrupt traffic. Do not enter this parameter. |
| noprompt | This parameter prevents any yes/no prompts from being displayed. The system automatically enters yes. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the system makes the chain or link manually busy. |
| link | This parameter specifies that a link is to be manually busied. |
| *link_no* | This variable specifies the link to be busied. Valid entries are 0-3. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| *wait* | This default parameter directs the system to not allow use of the MAP for other functions while the system makes the chain or link manually busy. Do not enter this parameter. |

# bsy (continued)

## Qualifications

The bsy command is qualified by the following exceptions, restrictions, and limitations:

- If the bsy command is entered without the link parameter, the command makes an entire chain manually busy.
- Since a chain must be specified when entering the Chain level, it is unnecessary to indicate which chain is being acted on by the bsy command.

## Example

The following table provides an example of the bsy command.

**Example of the bsy command**

| Example | Task, response, and explanation |
|---|---|
| **bsy 0 noprompt force** ↵<br>*where*<br><br>0 specifies the message switch | **Task:** Force the chain on MS 0 into the manually busy state without prompting for confirmation.<br><br>**Response:**<br><br>`Request to MAN BUSY MS: 0 shelf: 0 chain: 7 submitted.`<br>`Request to MAN BUSY MS: 0 shelf: 0 chain: 7 passed.`<br><br>**Explanation:** The chain on MS 0 is manually busy. |

## Responses

The following table provides explanations of the responses to the bsy command.

**Responses for the bsy command**

| MAP output | Meaning and action |
|---|---|
| `P-side nodes will be isolated-taken out of service.`<br>`Bsy aborted.` | **Meaning:** The system has disallowed the attempt to busy the chain, as this action would isolate one or more P-side nodes causing loss of communication to some subtending nodes.<br><br>**Action:** Repeat the command using the force parameter. |
| `Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 passed.` | **Meaning:** The requested chain or link is placed in the manually-busy state.<br><br>**Action:** None |
| `Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested chain or link cannot be busied.<br><br>**Action:** None |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot busy the chain while other maintenance activities are in progress.<br><br>**Action:** Retry the bsy command once after activities have finished. |
| `Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted`<br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`Request not supported`<br><br>or<br><br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted`<br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted`<br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`no resources available.`<br>`Required Resources Are Unavailable` | **Meaning:** This command is not accessible.<br><br>**Action:** None |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command was inhibited.<br><br>**Action:** None |
| `Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`Fail`<br><br>or<br><br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to MAN BUSY MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`No Problem` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `WARNING, MBSY command will isolate p-side.`<br>`Please confirm ('yes' or 'no')` | **Meaning:** Some or all of the mate cards in the chain are out-of-service. If you busy this chain, the subtending nodes isolate from the MS.<br><br>**Action:** Enter yes to proceed with the bsy command. Enter no to abort the bsy command. |

**-continued-**

# bsy (end)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `WARNING, chain services the only remaining Inter-MS link.`<br>`WARNING, busy command may isolate P-side.`<br>`Please confirm ('YES' or 'NO'):` | **Meaning:** The cards in the chain you are trying to busy may be used by the frame transport system (FTS) for tandem routing. If you busy the chain, the last inter-MS link goes out-of-service, and the FTS routing is affected. You will be notified by the P-side node maintenance of the loss of the last inter-MS link. The alternate inter-MS link is no longer available to the FTS.<br><br>**Action:** Enter no to abort the bsy command. Enter yes to proceed with the bsy command. |

**-end-**

# card

## Function

Use the card command to access the Card level for a specified card.

**card command parameters and variables**

| Command | Parameters and variables | | | |
|---|---|---|---|---|
| **card** | *card_no* | *ms* | port | *port_no* |

| Parameters and variables | Description |
|---|---|
| *card_no* | This variable indicates the card position of the front and back cards that are to be displayed. Valid entries are 1-26. Card number 1 corresponds to slot number 7, and card number 26 corresponds to slot number 32. |
| *ms* | This variable identifies the message switch (MS) that contains the card. Valid entries are 0-1. |
| port | This parameter indicates that a specific port is to be displayed. |
| *port_no* | This variable identifies the port to be displayed. Valid entries are 0-127. |

## Qualifications

The card command is qualified by the following exceptions, restrictions, and limitations:

- The port parameter is available only in offices that have 128-port interface card software.
- When you use the port parameter with the card command, the system displays a 16-port subset that includes the specified port.

# card (continued)

## Example

The following table provides an example of the card command.

**Example of the card command**

| Example | Task, response, and explanation |
|---|---|
| **card 2** ↵<br>*where*<br><br>2 is the card to be displayed | **Task:** Display the Card menu level for card 2.<br><br>**Response:** The information in the following display changes to the information for card 2:<br><br>`Card 02 Protocol port  0_____3`<br>`MS 0  .   DS30    4    . . . .`<br>`MS 1  .   DS30    4    . . . .`<br><br>**Explanation:** The requested Card level is displayed. |

## Responses

The following table provides explanations of the responses to the card command.

**Responses for the card command**

| MAP output | Meaning and action |
|---|---|
| `Allocation of MS card level directory failed.` | **Meaning:** No software resources were available to enter the Card level.<br><br>**Action:** Use the command string quit all to quit from the MAPCI and all lower levels, then return to the MS level and enter the card command. |

**-continued-**

**Responses for the card command** (continued)

| MAP output | Meaning and action |
|---|---|
| The information in the following display changes to the information for the requested card:<br><br>`Card 02 Protocol port  0_____3`<br>`MS 0  .   DS30    4    . . . .`<br>`MS 1  .   DS30    4    . . . .` | **Meaning:** The menu changes to the menu for the requested card.<br><br>**Action:** None |

**-end-**

# chain

## Function

Use the chain command to access the Chain level for another chain.

**chain command parameters and variables**

| Command | Parameters and variables | |
|---|---|---|
| **chain** | *ms* | *card* |

| Parameters and variables | Description |
|---|---|
| *card* | This variable is any card number in the chain to be displayed. Valid entries are 6-23. |
| *ms* | This variable is the message switch (MS) number. Valid entries are 0-1. |

## Qualification

The chain command is qualified by the following exception: the *ms* variable is useful whenever chain configuration mismatches exist.

## Example

The following table provides an example of the chain command.

**Example of the chain command**

| Example | Task, response, and explanation |
|---|---|
| **chain 0 9** ↵<br>*where*<br><br>0 is the MS number<br>9 is a card in the chain to be taken offline | |
| | **Task:** Access the Chain level of which card 9 on MS 0 is a part. |
| | **Response:** The menu changes to the Chain level, and the display changes to show the following fields:<br><br>`Chain 9  Range  Link`<br>`MS 0  .  9-11     P`<br>`MS 1  .  9-11     P` |
| | **Explanation:** The system displays the requested Chain level. |

# chain (end)

## Response

The following table provides an explanation of the response to the chain command.

**Response for the chain command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the Chain level, and the display changes to show the following fields:<br><br>`Chain 9  Range  Link`<br>`MS 0  .  9-11     P`<br>`MS 1  .  9-11     P` | **Meaning:** The system displays the requested Chain level.<br><br>**Action:** None |

# clock

## Function

Use the clock command to access commands to control the message switch (MS) clocks.

**clock command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **clock** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the clock command.

**Example of the clock command**

| Example | Task, response, and explanation |
|---|---|
| **clock** ↵ | |

**Task:** Access the Clock level.

**Response:** The menu changes to the Clock level menu and the following fields are added to the display:

```
Card 2 State %Adj. Int/Osc/CARRIER REF STAT SLIP PM  CCT
MS 0   Sync  +59.2    .   /LINK 0: Lck  .    0 DTC 1 0-10
MS 1   Sync  +13.5    .   /Link 1: Smp  .    0 DTC 1 2-12
```

**Explanation:** The Clock level is displayed.

# clock (end)

## Response

The following table provides an explanation of the response to the clock command.

**Response for the clock command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the Clock level menu, and the following fields are added to the display:<br><br>`Card 2 State %Adj. Int/Osc/CARRIER REF STAT SLIP PM  CCT`<br>`MS 0   Sync  +59.2    .   /LINK 0: Lck  .    0 DTC 1 0-10`<br>`MS 1   Sync  +13.5    .   /Link 1: Smp  .    0 DTC 1 2-12` | **Meaning:** The display changes to the Clock level display.<br><br>**Action:** None |

# loadcd

## Function

Use the loadcd command to download firmware to a specified card. The source can be either a valid load file or the load stored in another card. Supply both the device name and the file name for the nondefault load files.

**loadcd command parameters and variables**

**Command** **Parameters and variables**

**loadcd** *ms_no* [ *default* | device *dev_name* | file *file_name* | fromcd *cd_no* ] [ *wait* | nowait ] [ *prompt* | noprompt ]

| Parameters and variables | Description |
|---|---|
| *cd_no* | This variable specifies the card that provides the firmware load. Valid entries are 1-26. |
| *default* | This default parameter specifies that the card is to be reloaded with the default firmware load. Do not enter this parameter. |
| device | This parameter specifies that a device is to be named to indicate where the file resides. |
| *dev_name* | This variable specifies the name of the device. |
| file | This parameter specifies that a firmware load file is to be specified. |
| *file_name* | This variable specifies the name of the firmware load file. |
| fromcd | This parameter indicates that a card is to be specified from which the firmware load is to be provided. |
| *ms_no* | This variable specifies the message switch (MS) that contains the card to be downloaded. Valid entries are 0-1. |
| noprompt | This parameter directs the system not to display yes/no prompts. The system automatically enters yes. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the system loads the firmware. |

**-continued-**

# loadcd (continued)

**loadcd command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| *wait* | This default parameter directs the system to not allow the use of the MAP for other functions while the system loads the firmware. Do not enter this parameter. |

**-end-**

## Qualifications

None

## Example

The following table provides an example of the loadcd command.

**Example of the loadcd command**

**Example** **Task, response, and explanation**

**loadcd 0** ↵
*where*

0 specifies the MS

**Task:** Download the default firmware for this card on MS 0.

**Response:**

```
MS S/W:  35CB   CARD F/W:  35CB
Request to load MS: 0 shelf: 0 card: 10 submitted.
Request to load MS: 0 shelf: 0 card: 10 passed.
```

**Explanation:** The firmware is downloaded.

## Responses

The following table provides explanations of the responses to the loadcd command.

**Responses for the loadcd command**

| MAP output | Meaning and action |
|---|---|
| `Boot file has no label` | **Meaning:** The header record of the load file has no label data.<br><br>**Action:** None |
| `Boot file not for processor` | **Meaning:** The load file is not the right one for the card.<br><br>**Action:** None |
| `Cannot read boot file header` | **Meaning:** The system cannot read the load file.<br><br>**Action:** None |
| `Corrupt boot file header` | **Meaning:** The header record of the load file is corrupted.<br><br>**Action:** None |
| `EEPROM page write failed, downloading aborted.` | **Meaning:** A write to an electrically reasable programable read-only memory (EEPROM) failed, and the process for downloading the card firmware is aborted.<br><br>**Action:** None |
| `Extracted BCS number invalid` | **Meaning:** The BCS number in the header record of the load file is invalid.<br><br>**Action:** None |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Filename should not exceed 8 characters.` | **Meaning:** The file name exceeded the maximum size of eight characters.<br>**Action:** Rename the file and retry the command. |
| `Illegal format for boot file.` | **Meaning:** The load file has a bad B-record format.<br>**Action:** None |
| `Invalid MS number entered (must be between 0-1)` | **Meaning:** The MS number entered is invalid.<br>**Action:** None |
| `LoadCd-Card must be manually busied before loading.` | **Meaning:** The card cannot be busied unless it is manually busy.<br>**Action:** Use the bsy command to busy the card, and retry the loadcd command. |
| `LoadCD-Loading is in progress.` | **Meaning:** Another card is being loaded on the same MS. Only one card can be loaded at one time on the same MS.<br>**Action:** None |
| `LoadCd-MS must be in service to be loaded.` | **Meaning:** The card specified from which to download firmware resides on an MS that is in an out-of-service state.<br>**Action:** Return the MS to service using the rts command on the MS level and retry the command. |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `MS S/W: 35BC CARD F/W: 35BC` | **Meaning:** The firmware is being downloaded. The BCS number is the first two digits of each response. Following the BCS number, the issue of the message switch software and the issue of the card firmware are displayed.<br><br>**Action:** None |
| `Must specify both file and device.` | **Meaning:** Either the device name or the file name was not specified.<br><br>**Action:** Retry the command specifying both the file name and the device name. |
| `PEC <code> is not f/w downloadable.` | **Meaning:** An invalid card was selected from which to download firmware. <Code> is replaced by the product engineering code (PEC).<br><br>**Action:** Retry the command specifying a valid card. |
| `Request invalid, maintenance already in progress.` | **Meaning:** Another maintenance process is running on the card.<br><br>**Action:** Retry the command after the other process is complete. |
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 passed.` | **Meaning:** The requested firmware is downloaded to the card.<br><br>**Action:** None |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested card cannot be loaded.<br><br>**Action:** None |
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot load the card while other maintenance activities are in progress.<br><br>**Action:** Retry the loadcd command after other activities have finished. |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to load MS: 0 shelf: 0 card: 5 submitted<br>Request to load MS: 0 shelf: 0 card: 5 failed;<br>Request not supported<br><br>or<br><br>Request to load MS: 0 shelf: 0 card: 5 submitted<br>Request to load MS: 0 shelf: 0 card: 5 terminated;<br>S/W inhibited.<br>Local Maintenance Not Accessible<br><br>or<br><br>Request to load MS: 0 shelf: 0 card: 5 submitted<br>Request to load MS: 0 shelf: 0 card: 5 terminated;<br>no resources available.<br>Required Resources Are Unavailable | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| Request to load MS: 0 shelf: 0 card: 5 submitted.<br>Request to load MS: 0 shelf: 0 card: 5 terminated;<br>S/W inhibited.<br>Not Able To Run | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 failed;`<br>`No Problem`<br><br>or<br><br>`Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `System cards are not f/w downloadable.` | **Meaning:** System cards cannot be downloaded. Only selected interface cards have downloadable software.<br><br>**Action:** Retry the command specifying a valid card. |
| `The source and target cards are the same.` | **Meaning:** The firmware from the card cannot be copied onto itself.<br><br>**Action:** Check the parameters, making sure that the source and destination cards are not the same card and that they can both be downloaded, and retry the command. |

**-continued-**

# loadcd (end)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `The node must be manually busy for copying.` | **Meaning:** The MS must be in the manually busy state before firmware can be copied from one card to another.<br><br>**Action:** Busy the MS with the bsy command on the MS level, then retry the loadcd command. |
| `*** WARNING, Incompatible loads.`<br>`Please confirm (yes/no):` | **Meaning:** The card firmware in the load file does not match the corresponding MS software load and, if loaded, could cause system problems.<br><br>**Action:** Enter yes to proceed. Enter no to abort the command. |
| `You must specify both filename and devicename.` | **Meaning:** You specified either the file or the device. Both must be specified.<br><br>**Action:** Reissue the command specifying both file and device name. |

**-end-**

# loadms

## Function

Use the loadms command to load software to the specified MS.

**loadms command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **loadms** | *ms* [ *filename* / cancel ] [ *primary* / secondary ] [ *wait* / nowait ] [ *prompt* / noprompt ] |

| Parameters and variables | Description |
|---|---|
| cancel | This parameter directs the system to abort the loading. |
| *filename* | The variable is the file name of the desired software load. |
| *ms* | This variable is the number of the MS to be loaded. Valid entries are 0-1. |
| noprompt | This parameter directs the system not to display yes/no prompts. The system automatically enters yes. |
| nowait | This parameter directs the system to allow the use of the MAP terminal for other functions while the software is being loaded. |
| *primary* | This default parameter directs the system to load the MS through CMIC 0, card 24 on the MS level MAP display. Do not enter this parameter. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| secondary | This parameter directs the system to load the MS through computing module interface card (CMIC) 1, card 25 on the MS level MAP display, rather than through CMIC 0 (card 24). |
| *wait* | This default parameter directs the system not to allow use of the MAP for other functions while the software is being loaded. Do not enter this parameter. |

## Qualifications

The loadms command is qualified by the following restrictions:

- The MS must be manually busy before the software can be loaded.
- The load file must be in your directory.

# loadms (continued)

## Example

The following table provides an example of the loadms command.

**Example of the loadms command**

| Example | Task, response, and explanation |
|---|---|
| **loadms 0 IMG_102492_DC_MS noprompt nowait** ↵<br>*where*<br><br>0 is the MS to be loaded<br>IMG_102492_DC_MS is the file name | **Task:** Reload MS 0 with no prompts and no waiting.<br><br>**Response:**<br>`Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 passed.`<br><br>**Explanation:** The requested MS has been reloaded. |

## Responses

The following table provides explanations of the responses to the loadms command.

**Responses for the loadms command**

| MAP output | Meaning and action |
|---|---|
| `Data inconsistencies, cannot continue your request.` | **Meaning:** A software fault occurred.<br><br>**Action:** Enter the loadms command again. If it does not execute successfully, notify the maintenance support group. |
| `Firmware test` | **Meaning:** The system displays this message in the process of loading the MS software.<br><br>**Action:** None |

**-continued-**

# loadms (continued)

**Responses for the loadms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Loading <record#>` | **Meaning:** The system displays this message in the process of loading the MS software. The record number loaded replaces <record #>.<br><br>**Action:** None |
| `Loading started` | **Meaning:** The system displays this message in the process of loading the MS software.<br><br>**Action:** None |
| `Initializing` | **Meaning:** The system displays this message in the process of loading the MS software.<br><br>**Action:** None |
| `Invalid file specified, file is not a system image file.` | **Meaning:** The specified file is not a system image.<br><br>**Action:** None |
| `Invalid record length, record is too big for buffer.` | **Meaning:** The record size of the image file is too big for the buffer allocated to read the file.<br><br>**Action:** Contact the maintenance support group. |
| `Loading started` | **Meaning:** The system displays this message in the process of loading the MS software.<br><br>**Action:** None |

**-continued-**

# loadms (continued)

**Responses for the loadms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 passed.` | **Meaning:** The requested MS is reloaded.<br><br>**Action:** None |
| `Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested MS cannot be loaded.<br><br>**Action:** None |
| `Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to Load MS: 0 submitted.`<br>`Request to Load MS: 0 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot load the MS while other maintenance activities are in progress.<br><br>**Action:** Retry the loadms command after other activities have finished. |

**-continued-**

# loadms (continued)

**Responses for the loadms command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to Load MS: 0 submitted<br>Request to Load MS: 0 terminated;<br>S/W inhibited.<br>Local Maintenance Not Accessible<br><br>or<br><br>Request to Load MS: 0 submitted<br>Request to Load MS: 0 terminated;<br>no resources available.<br>Required Resources Are Unavailable<br><br>or<br><br>Request to Load MS: 0 submitted<br>Request to Load MS: 0 failed;<br>Request not supported | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| Request to Load MS: 0 submitted.<br>Request to Load MS: 0 terminated;<br>S/W inhibited.<br>Not Able To Run | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# loadms (end)

**Responses for the loadms command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to Load MS: 0 submitted.<br>Request to Load MS: 0 failed;<br>ICRC Failure<br><br>or<br><br>Request to Load MS: 0 submitted.<br>Request to Load MS: 0 failed;<br>Check for Swerrs<br><br>or<br><br>Request to Load MS: 0 submitted.<br>Request to Load MS: 0 failed;<br>No Problem<br><br>or<br><br>Request to Load MS: 0 submitted.<br>Request to Load MS: 0 failed;<br>Fail | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| UNABLE TO GET FILE INFORMATION | **Meaning:** The specified file is not in the search order.<br><br>**Action:** None |
| WARNING, INCOMPATIBLE LOAD: CM: <name> MS: <name><br>PLEASE CONFIRM (YES/NO): | **Meaning:** The MS load does not match the corresponding computing module (CM) load and could cause system problems if loaded. The file names of the CM or MS load file replace <name>.<br><br>**Action:** Enter yes to load the file. Enter no to abort the command. |

**-end-**

# offl

## Function

Use the offl command to set the state of the specified card or chain to offline.

**offl command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **offl** | *ms_no* [ *wait* / nowait ] |

| Parameters and variables | Description |
|---|---|
| *ms_no* | This variable is the message switch (MS) number. Valid entries are 0-1. |
| nowait | This parameter directs the system to allow use of the MAP for the other functions while the system sets the chain to offline. |
| *wait* | This default parameter directs the system to not allow use of the MAP for other functions while the chain is being set to offline. Do not enter this parameter. |

## Qualifications

The offl command is qualified by the following exceptions, restrictions, and limitations:

- The offl command does not have a link parameter because the channelized link cannot be set to offline.
- This command sets an entire chain to the offline state.
- Since a chain must be specified when entering the Chain level, it is unnecessary to indicate which chain is being acted on by the offl command.

# offl (continued)

## Example

The following table provides an example of the offl command.

**Example of the offl command**

| Example | Task, response, and explanation |
|---|---|
| **offl** ↵ | |
| | **Task:** Set the chain to the offline state.<br><br>**Response:**<br><br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 passed.`<br><br>**Explanation:** The chain is set to the offline state. |

## Responses

The following table provides explanations of the responses to the offl command.

**Responses for the offl command**

| MAP output | Meaning and action |
|---|---|
| `Cannot offline card when card f/w download in progress.` | |
| | **Meaning:** A card is being downloaded, so the chain cannot be taken offline.<br><br>**Action:** None |
| `Chain 15 must be in MBsy state before being offlined.` | |
| | **Meaning:** The chain must be in the manually-busy state to be taken offline. The first card number of the chain is given as a number to identify the chain.<br><br>**Action:** Use the bsy command to busy the chain, and retry the offl command. |
| `No action performed; chain 15 already offline.` | |
| | **Meaning:** You have attempted to place in the offline state a chain that is already offline. In this example, the number of the first card of the chain is 15.<br><br>**Action:** None |

**-continued-**

# offl (continued)

**Responses for the offl command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 passed.` | **Meaning:** The requested chain or link is taken offline.<br><br>**Action:** None |
| `Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested chain or link cannot be taken offline.<br><br>**Action:** None |
| `Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot set the chain to offline while other maintenance activities are in progress.<br><br>**Action:** Retry the command after other activities have finished. |

**-continued-**

# offl (continued)

**Responses for the offl command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted<br>Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;<br>Request not supported<br><br>or<br><br>Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted<br>Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;<br>S/W inhibited.<br>Local Maintenance Not Accessible<br><br>or<br><br>Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted<br>Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;<br>no resources available.<br>Required Resources Are Unavailable | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.<br>Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;<br>S/W inhibited.<br>Not Able To Run | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# offl (end)

**Responses for the offl command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`No Problem`<br><br>or<br><br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Offl MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |

**-end-**

# querycd

## Function

Use the querycd command to display information about the contents of the CONTEXT and MEDIA sections of the electrically erasable programmable read-only memory (EEPROM) of the card selected. It also compares the loads stored in two separate cards.

**querycd command parameters and variables**

| Command | Parameters and variables | | | |
|---|---|---|---|---|
| **querycd** | *ms_no* | *cd_no* | with | *cd_no* |

| Parameters and variables | Description |
|---|---|
| *cd_no* | This variable is the card number. The range of values is 1-26. |
| *ms_no* | This variable indicates the message switch (MS) to be queried. Valid entries are 0-1. |
| with | This parameter specifies that two cards are to have their firmware loads compared. Follow this parameter with the *cd_no* variable for the card to be compared with the first specified card. |

## Qualifications

None

# querycd (continued)

## Example

The following table provides an example of the querycd command.

**Example of the querycd command**

| Example | Task, response, and explanation |
|---|---|
| **querycd 0 6** ↵<br>*where*<br><br>0 is the MS number<br>6 is the card number | **Task:** Query card 6 on MS 0.<br><br>**Response:**<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 6 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 6 passed.`<br><br>`CONTEXT Section: MS 0: 0 : 6`<br>`Loadname : MPF33CB`<br>`Product : MPF`<br>`Version : 35`<br>`Issue : CB`<br>`Increment : 00`<br>`CRC : 7692`<br><br>`MEDIA Section: MS 0: 0 : 6`<br>`Checksum : CFD`<br>`Flag1 : AAAA`<br>`Flag2 : 5T55`<br>`Progtime : 1992/06/28/1:00:58:567 SUN.`<br>`Frog count : 66`<br>`Fail count : 0`<br>`PECode : NT9X17DA`<br><br>**Explanation:** The requested information is displayed. |

## querycd (continued)

## Responses

The following table provides explanations of the responses to the querycd command.

**Responses for the querycd command**

| MAP output | Meaning and action |
|---|---|
| `CM-MS link down.` | **Meaning:** There is no communication between the computing module (CM) and the MS.<br><br>**Action:** Restore the communication link between the CM and the MS, or bring the MS back in service. |
| `Invalid MS number entered (must be between 0-<n>).` | **Meaning:** The MS number entered was invalid. The number of equipped message switches replaces <n>.<br><br>**Action:** None |
| `PEC NT9X53AA is not f/w downloadable.` | **Meaning:** An invalid card was selected from which to query firmware.<br><br>**Action:** Retry the command specifying a valid card. |
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |

**-continued-**

# querycd (continued)

**Responses for the querycd command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.<br>Request to QueryCD MS: 0 shelf: 0 card: 5 passed.<br><br>CONTEXT Section: MS 0: 0 : 5<br>Loadname : MPF33CB<br>Product : MPF<br>Version : 35<br>Issue : CB<br>Increment : 00<br>CRC : 7692<br><br>MEDIA Section: MS 0: 0 : 5<br>Checksum : CFD<br>Flag1 : AAAA<br>Flag2 : 5T55<br>Progtime : 1992/06/28/1:00:58:567 SUN.<br>Frog count : 66<br>Fail count : 0<br>PECode : NT9X17DA | **Meaning:** The requested card information is displayed.<br><br>**Action:** None |
| Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.<br>Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;<br>S/W error invalid request.<br>Invalid Maintenance Request | **Meaning:** The requested card cannot be queried.<br><br>**Action:** None |
| Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.<br>Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;<br>S/W error (wrong parameter).<br>Invalid Resource Identifier | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |

**-continued-**

## querycd (continued)

**Responses for the querycd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot query the MS while other maintenance activities are in progress.<br><br>**Action:** Retry the querycd command after other activities have finished. |
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`Request not supported`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`no resources available.`<br>`Required Resources Are Unavailable` | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# querycd (continued)

**Responses for the querycd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`No Problem`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `System cards are not f/w downloadable.` | **Meaning:** System cards cannot be queried. Only selected interface cards have downloadable firmware.<br><br>**Action:** Retry the command specifying a valid card. |
| `The firmware cannot be compared to itself.` | **Meaning:** An attempt was made to copy firmware from an interface card onto itself.<br><br>**Action:** Reissue the command, making sure the destination and source cards are not the same card. |

**-continued-**

# querycd (end)

**Responses for the querycd command** (continued)

| MAP output | Meaning and action |
|---|---|
| ***Warning, PEC codes are not the same.<br>Please confirm (″YES″ or ″NO″) | **Meaning:** The PEC of the source and destination cards do not match.<br><br>**Action:** Enter yes to confirm the command. Enter no to abort the command. |

**-end-**

# queryms

## Function

Use the queryms command to query and display information about the cards and chains in the active MS. The information may include the MS load name, the number of equipped card slots, the last time a routine exercise (REx) test was run, identification programable read-only memory (ID PROM) information, a list of card locations, and card fault descriptions.

**queryms command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **queryms** | [*all* / ms *ms_no*] [*all* / shelf *shelf_no*] [card *cd_no* (1) / (2) / chain *cd_no* (3)] |
| **queryms** (continued) | (1) [*noidprom* / idprom] (2) (3) [*noflt* / flt] |

| Parameters and variables | Description |
|---|---|
| *all* | This default parameter displays information for both message switches and all shelves. Do not enter this parameter. |
| card | This parameter displays information for a specified card. |
| *cd_no* | This variable identifies the card for which information is to be displayed, or any card number in the chain that is to be displayed. Valid entries are 1-26 for cards, 6-23 for chains. |
| chain | This parameter displays information for a specified chain. |
| flt | This parameter displays fault conditions. |
| idprom | This parameter displays the product engineering code (PEC) and vintage of the specified card. |
| ms | This parameter displays information for one MS only. |
| *ms_no* | This variable indicates the MS for which information is to be displayed. Valid entries are 0-1. |
| *noflt* | This default parameter directs the system to not display fault conditions. Do not enter this parameter. |

**-continued-**

# queryms (continued)

**queryms command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *noidprom* | This default parameter directs the system to not display the PEC and vintage of the card. Do not enter this parameter. |
| shelf | This parameter displays information only for the shelf specified. |
| *shelf_no* | This variable is the shelf number for which information is to be displayed. Valid entries are 0-3. |

**-end-**

## Qualifications

The queryms command is qualified by the following exceptions, restrictions and limitations:

- Inquire and display information about the thirty-two bit bus (TBus) to frame transport bus (FBus) interface (TFI) cards, FBuses, and taps in one single command when the entered card number is of a TFI type.
- The display includes the faults found on all cards and the card list of all the faulty system cards. The fault descriptions for the cards are sorted and displayed in four groups:
  - hard faults found on system cards
  - hard faults found on interface cards
  - soft faults found on system cards
  - soft faults found on interface cards

## Examples

The following table provides examples of the queryms command.

**Examples of the queryms command**

| Example | Task, response, and explanation |
|---|---|
| **queryms ms 1 shelf 0 card 6** ↵<br>*where*<br><br>1 identifies the MS to be queried<br>0 identifies the shelf to be queried<br>6 identifies the card to be queried | **Task:** Display the information for MS 1, shelf 0, card 6.<br><br>**Response:**<br><br>`Load name for MS 1 is MSG35CB .`<br>`There are 20 Slots equipped on MS:  1  shelf:  0`<br>`REx Test last run MS:  1 92:07:25  01:33:39  AUTO SUCCESSFUL`<br>`MS card information:`<br>`Site Flr RPos  Bay_id  Shf  Description   SLOT   EqPEC`<br>`HOST  00 AA00  DPCC 1   39  MS 1: 0: 6     12    9X17DA FRNT`<br>`HOST  00 AA00  DPCC 1   39  MS 1: 1: 6     12    9X20BB BACK`<br><br>**Explanation:** The requested information is displayed. |

**-continued-**

# queryms (continued)

**Examples of the queryms command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **queryms** ↵ | |

**Task:** Display information for both message switches and all equipped shelves.

**Response:**

```
Load name for MS 0:  MS-S35CK.
Load name for MS 1:  MS-S35CK.
There are 26 Slots equipped on MS:  0  Shelf:  0.
There are 26 slots equipped on MS:  1  Shelf:  0.
REx Test last run MS:  0 92:01:23  15:39:21  AUTO SUCCESSFUL
REx Test last run MS:  1 92:01:23  16:40:31  AUTO SUCCESSFUL
MS node and shelf information:
Site Flr RPos  Bay_id  Shf  Description   SLOT   EqPEC
HOST  00 AA00  MSDC 0       MS 0                 9X01BA
HOST  00 AA00  MSDC 0   39  MS 0:0               9X04AA
HOST  00 AA00  MSDC 0   26  MS 0:1               9X04AA
HOST  00 AA00  MSDC 1       MS 1                 9X01BA
HOST  00 AA00  MSDC 1   13  MS 1:0               9X04BAA
HOST  00 AA00  MSDC 1    0  MS 1:1               9X04AA
HOST  00 AA00  MSDC 0       MS 0                 9X01BA
```

**Explanation:** The queryms command was run without any parameters or variables, so information on both MSs is given.

**-end-**

## Responses

The following table provides explanations of the responses to the queryms command. Some individual elements of complex responses are described separately.

**Responses for the queryms command**

| MAP output | Meaning and action |
|---|---|
| `Back card 23 is offline, no action performed.` | |

**Meaning:** The back card at the indicated card position is offline. The possible card numbers are 1-26.

**Action:** None

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Back card 17 is unequipped, no action performed.` | **Meaning:** The back card at the indicated card position is unequipped. The possible card numbers are 1-26.<br><br>**Action:** None |
| `BASE`<br>`S0.` | **Meaning:** The baseline of the PEC (the minimum allowable release) is given.<br><br>**Action:** None |
| `Card 5 is offline, no action performed.` | **Meaning:** The indicated card position is offline. The possible card numbers are 1-26.<br><br>**Action:** None |
| `Card 23 is unequipped.` | **Meaning:** The card is unequipped.<br><br>**Action:** None |
| `Chain 17 is unequipped.` | **Meaning:** The cards at the specified card position are not part of a chain. In this example, 17 is the card number entered.<br><br>**Action:** None |
| `Clock firmware has failed self test.` | **Meaning:** The test of the firmware integrity failed. The firmware in the clock is not reliable.<br><br>**Action:** Perform an out-of-service test, or return the card to service to download the primary firmware load. |

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Clock firmware load mismatch.` | **Meaning:** The firmware in the clock card does not match the primary firmware in the MS software.<br><br>**Action:** Perform an out-of-service test, or return the card to service to download the primary firmware load. |
| `Clock PROM selector stuck on EPROM.` | **Meaning:** The clock programmable read-only memory (PROM) selection indicates that it is running on erasable PROM (EPROM).<br><br>**Action:** Check the hardware. |
| `Compatible '*NO'.` | **Meaning:** The MS PEC design change document (DCD) release is not compatible with the batch change supplement (BCS) software running in the switch.<br><br>**Action:** None |
| `Compatible 'YES'.` | **Meaning:** The MS PEC DCD release is compatible with the BCS software running in the switch.<br><br>**Action:** None |
| `Contents of clock f/w does not match f/w downloaded.` | **Meaning:** A mismatch occurred between the contents of the clock card firmware and the MS firmware.<br><br>**Action:** Ensure the firmware loads are correct. Perform an out-of-service test to download the correct firmware. |
| `Data inconsistencies, cannot continue your request.` | **Meaning:** A software fault occurred.<br><br>**Action:** Enter the command again. If it does not execute successfully, notify the maintenance support group. |

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Except`<br>`None` | **Meaning:** There are no exception releases for this PEC.<br><br>**Action:** None |
| `Except`<br>`SA` | **Meaning:** In this example, SA is an exception release. The exception releases are above the baseline, but known to be incompatible with the BCS software running in the switch.<br><br>**Action:** None |
| `Failed to download or reset clock firmware.` | **Meaning:** The most recent attempt to download new firmware into the electrically erasable PROM (EEPROM), or to reset the clock, failed.<br><br>**Action:** Check and clear the hardware fault on the clock card. |
| `Failed to read EEPROM in clock card.` | **Meaning:** An attempt to read the EEPROM failed, and the MS was removed from service.<br><br>**Action:** Check and clear the hardware fault on the clock card. |
| `Front card 23 is offline, no action performed.` | **Meaning:** The front card at the indicated card position is offline. The possible card numbers are 1-26.<br><br>**Action:** None |
| `Front card 17 is unequipped, no action performed.` | **Meaning:** The front card at the indicated card position is unequipped. The possible card numbers are 1-26.<br><br>**Action:** None |

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Incorrect version of clock firmware.` | **Meaning:** A wrong version of the firmware is on the clock card.<br><br>**Action:** Attempt an out-of-service test, or return the card to service to download the correct version of the firmware. |
| `Invalid card number entered (must be between 1-22).` | **Meaning:** An unequipped card was specified. The range provided is the range of equipped cards.<br><br>**Action:** None |
| `Invalid chain number entered (must be between 6-16).` | **Meaning:** The card number entered with the chain parameter is not in the permissible range for chain cards on the message switch shelf. The range is the valid range of chain card numbers on the shelf.<br><br>**Action:** None |
| `Invalid MS number entered (must be between 0-1).` | **Meaning:** You entered an invalid MS number. The range of message switches is provided.<br><br>**Action:** None |
| `Load name for MS 1: MSG35BC`<br>`There are 26 Slots equipped on MS: 1 Shelf: 0`<br>`MS node and shelf information:`<br>`REx Test last run MS: 1 89:01:23 16:40:31 AUTO SUCCESSFUL`<br>`Site Flr RPos Bay_id Shf Description SLOT EqPEC`<br>`HOST 00 AA01 MSDC 1 MS 1 9X01BA`<br>`HOST 00 AA00 MSDC 1 13 MS 1:0 9X04AA`<br>`HOST 00 AA00 MSDC 1 0 MS 1:1 9X04AA` | **Meaning:** The requested information about the cards and chains is displayed.<br><br>**Action:** None |

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Message switch 0 is unequipped.` | **Meaning:** An unequipped MS was specified. The system echoes the entered MS number.<br><br>**Action:** None |
| `No clock firmware resident in software.` | **Meaning:** MS software does not contain clock firmware.<br><br>**Action:** Ensure that the clock firmware loads are in the MS software. |
| `No FBUS has been defined with TFI card 17` | **Meaning:** No FBus was identified with the specified TFI card. Possible card numbers are 1-26.<br><br>**Action:** None |
| `No firmware in clock card.` | **Meaning:** The clock card does not contain valid firmware.<br><br>**Action:** Load the correct firmware by performing either an out-of-service test or a return-to-service test. |
| `REL`<br>`S9` | **Meaning:** The card release obtained from querying the ID PROM of the card is given.<br><br>**Action:** None |
| `Running on EPROM clock firmware.` | **Meaning:** The file name of the clock firmware in the context page has an EPROM file name. Therefore, the clock is running on the EPROM firmware.<br><br>**Action:** Load the correct firmware by performing either an out-of-service test or a return-to-service test. |

**-continued-**

# queryms (end)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Shelf 2 is unequipped.` | **Meaning:** The shelf you specified is unequipped. The shelf number entered is echoed in the response.<br><br>**Action:** None |

**-end-**

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any MAP level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the Chain level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The Chain level has changed to the previous menu level. |

**-continued-**

# quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the Chain level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The Chain level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the Chain level menu with a menu that is two or more MAP levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the Chain level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |
| **-end-** | |

# rts

## Function

Use the rts command to return the specified link or chain to service.

**rts command parameters and variables**

| Command | Parameters and variables | | | |
|---|---|---|---|---|
| **rts** | *ms_no* | [ *chain* / link *link_no* ] | [ *wait* / nowait ] | [ *test* / notest ] |

| Parameters and variables | Description |
|---|---|
| *ms_no* | This variable is the MS number. Valid entries are 0-1. |
| *chain* | This default parameter directs the system to return the chain to service. Do not enter this parameter. |
| notest | This parameter directs the system not to perform the in-service test after returning the port or card to service. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the system is testing and returning the port or card to service. |
| link | This parameter returns a link to service. |
| *link_no* | This variable is the number of the link to be returned to service. Valid entries are 0-3. |
| *test* | This default parameter directs the system to perform an in-service test after returning the chain to service. Do not enter this parameter. |
| *wait* | This default parameter directs the system to not allow the use of the MAP for other functions while the system is testing and returning the chain to service. Do not enter this parameter. |

## Qualifications

The rts command is qualified by the following exceptions, restrictions, and limitations:

- If the rts command is entered without the link parameter, the command returns the entire chain to service.
- Since a chain must be specified when entering the Chain level, it is unnecessary to indicate which chain is being acted on when entering the rts command.

## rts (continued)

- The response for the chain rts command string that failed or passed with in-service trouble displays the faults and card list of all the faulty chain cards.
- The fault descriptions for the cards are sorted and displayed in two groups:
  - hard faults found on the chain cards
  - soft faults found on the chain cards

## Example

The following table provides an example of the rts command.

**Example of the rts command**

| Example | Task, response, and explanation |
|---|---|
| **rts 0** ↵<br>*where*<br><br>0 is the MS number | **Task:** Return the chain on MS 0 to service.<br><br>**Response:**<br><br>`Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 passed.`<br><br>**Explanation:** The chain is returned to service. |

## Responses

The following table provides explanations of the responses to the rts command.

**Responses for the rts command**

| MAP output | Meaning and action |
|---|---|
| `A card failure occurred on the chain.` | **Meaning:** One or more cards of a chain have failed the test that is performed before the chain can be returned to service. All the cards in the chain have remained out-of-service.<br><br>**Action:** Perform an out-of-service test on each card in the supplied card list to determine which cards are faulty. |

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `A chain mismatch occurred between the CM and the MS.` | **Meaning:** The hardware configuration of the MS may not agree with the DMS-Core configuration data.<br><br>**Action:** Check the MS. If it is not configured correctly, perform the following steps:<br><br>1 Busy the MS that has the hardware configuration problem.<br>2 Reconfigure the MS hardware correctly.<br>3 Return the MS to service with an out-of-band rts command.<br>4 Reattempt the rts command on the chain. |
| `Cannot rts card when card f/w download in progress.` | **Meaning:** The request to return the chain to service is aborted because a card is being downloaded.<br><br>**Action:** None |
| `Card has corrupted firmware.` | **Meaning:** The card has corrupted firmware, caused by electrically erasable programable read-only memory (EEPROM) page-write failure.<br><br>**Action:** None |
| `Card has no firmware.` | **Meaning:** The card was not loaded with valid firmware.<br><br>**Action:** None |
| `Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 passed.` | **Meaning:** The requested chain or link is placed in the in-service state.<br><br>**Action:** None |
| `Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested chain or link cannot be returned to service.<br><br>**Action:** None |
| `Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot return the chain to service while other maintenance activities are in progress.<br><br>**Action:** Retry the rts command after other activities have finished. |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted<br>Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;<br>Request not supported<br><br>or<br><br>Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted<br>Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;<br>S/W inhibited.<br>Local Maintenance Not Accessible<br><br>or<br><br>Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted<br>Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;<br>no resources available.<br>Required Resources Are Unavailable | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.<br>Request to RTS MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;<br>S/W inhibited.<br>Not Able To Run | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Busy MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Busy MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to Busy MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Busy MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to Busy MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Busy MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`No Problem`<br><br>or<br><br>`Request to Busy MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Busy MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `The chain link failed the loopback test.` | **Meaning:** The channelized link associated with the chain has failed a test and was not returned to service.<br><br>**Action:** At the Chain level of the MAP, perform an out-of-service test on the channelized link. If the problem persists, check the physical connection between the fiber link and the chain. |

**-continued-**

# rts (end)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `The chain status update failed.` | **Meaning:** A fault in one or more cards in the displayed chain has prevented the chain from being returned to service. All cards in the chain are placed out-of-service.<br><br>**Action:** Perform an out-of-service test on each card in the supplied card list to determine the faulty card or cards. |

**-end-**

# shelf

## Function

Use the shelf command to access a Shelf level other than the current shelf. Use the commands on the Shelf level to test and control the cards located on the selected shelf.

**shelf command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **shelf** | *shelf_no* |

| Parameters and variables | Description |
|---|---|
| *shelf_no* | This variable is the number of the shelf to be accessed. Valid entries are 0-3. |

## Qualifications

None

## Example

The following table provides an example of the shelf command.

**Example of the shelf command**

| Example | Task, response, and explanation |
|---|---|
| **shelf 0** ↵<br>*where*<br><br>0 identifies the shelf to be accessed | **Task:** Access the Shelf level for shelf 0.<br><br>**Response:** The menu changes to the Shelf level menu, and the following headers are added to the display:<br><br>`SHELF 0 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2`<br>`Card 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6`<br>`Chain`<br>`MS 0 . . . . . .`<br>`MS1 . . . . . .`<br><br>**Explanation:** The requested Shelf level is displayed. |

# shelf (end)

## Response

The following table provides an explanation of the response to the shelf command.

**Response for the shelf command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the Shelf level menu, and the following headers are added to the display:<br><br>`SHELF 0 1 1 1 1 1 2 2 2 2 2 2`<br>`Card 1 2 3 4 5 6 7 ... 5 6 7 8 9 0 1 2 3 4 5 6`<br>`Chain`<br>`MS 0 . . . . . ... . . . . . .`<br>`MS1 . . . . . ... . . . . . .` | **Meaning:** The Shelf level is displayed.<br><br>**Action:** None |

# trnsl

## Function

Use the trnsl command to display the P-side information for the link.

**trnsl command parameters and variables**

| Command | Parameters and variables | | |
|---|---|---|---|
| **trnsl** | *ms_no* | link<br>port | *link_no*<br>*port_no* |

| Parameters and variables | Description |
|---|---|
| link | This parameter indicates that a link is to be displayed. |
| *link_no* | This variable is the link number. Valid entries are 0-3. |
| *ms_no* | This variable is the MS number. Valid entries are 0-1. |
| port | This parameter indicates that a port is to be displayed. |
| *port_no* | This variable is the port number. Valid entries are 0-127. |

## Qualifications

The trnsl command is qualified by the following restrictions, limitations, and exceptions:

- If no link is entered, the assignments for all links on the chain are displayed.
- The queryms command, not the trnsl command, produces a display of the card location of the component.

# trnsl (continued)

## Example

The following table provides an example of the trnsl command.

**Example of the trnsl command**

| Example | Task, response, and explanation |
|---|---|
| **trnsl 0 link 0** ↵<br>*where*<br><br>0 is the MS number<br>0 is the link number | **Task:** Translate the P-side information for link 0.<br><br>**Response:**<br><br>`Site Flr RPos  Bay_id Shf Description  Slot EqPEC`<br>`HOST  00 AA00  DPCC 0  39 MS 0:0: 6    12   9X17DA FRNT`<br>`HOST  00 AA00  DPCC 0  39 MS 0:0: 6    12   9X20BB BACK`<br>`Link  0=ENET 0 0 (OK   :Opened)`<br><br>**Explanation:** The translation information is displayed. |

## Responses

The following table provides explanations of the responses to the trnsl command.

**Responses for the trnsl command**

| MAP output | Meaning and action |
|---|---|
| `Invalid port number entered (must be between 0-<nnn>)` | **Meaning:** The specified port number is out of the range equipped on the interface card. The number of equipped ports on the card replaces <nnn>.<br><br>**Action:** None |
| `No ports exist on card 10.` | **Meaning:** Either the specified card is not an interface card, or no ports are equipped on that card. The card number is echoed.<br><br>**Action:** None |

**-continued-**

# trnsl (end)

**Responses for the trnsl command** (continued)

| MAP output | Meaning and action |
|---|---|
| `No FBus exists on card 6.` | **Meaning:** The system is trying to translate a frame transport bus (FBus), but the card number entered in the command is not a thirty-two bit bus (TBus) to FBus interface (TFI).<br><br>**Action:** None |
| `No FBus has been defined with card 10.` | **Meaning:** The system is trying to translate an FBus, the card number entered in the command is a TFI, but no shelf has been datafilled yet.<br><br>**Action:** None |
| `No tap exists because no FBus for TFI card 12.` | **Meaning:** The system is trying to translate a tap, and the card is an FTI, but no LIS shelf has been datafilled yet.<br><br>**Action:** None |
| `Site Flr RPos Bay_id Shf Description Slot EqPEC`<br>`HOST 00 AA00 DPCC 0 13 MS 1:2:12 19 9X23AB BACK`<br>`HOST 00 AA00 DPCC 0 13 MS 1:2:12 19 9X17AB FRNT`<br>`Port 000=Net 0 00 (ManB,C,P:Closed)`<br>`Port 001=Net 0 01 ( OK, :Open )`<br>`Port 002=IOC 0 (ManB,C,P:Closed)`<br>`Port 003=IOC 1 (ManB,C,P:Closed)` | **Meaning:** The translation is displayed.<br><br>**Action:** None |
| **-end-** | |

## Function

Use the tst command to test the specified port or card. If you do not specify a parameter, the system runs tests on both cards in the slot.

**tst command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **tst** | *ms_no* [ card / link ] *card_no* / *link_no* [ *wait* / nowait ] |

| Parameters and variables | Description |
|---|---|
| link | This parameter tests a link. |
| *link_no* | This variable is the number of the link to be tested. Valid entries are 0-3. |
| *ms_no* | This variable is the MS number. Valid entries are 0-1. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the system is testing the chain or link. |
| card | This parameter indicates that the front and back cards at one card position in the displayed chain are to be tested. |
| *card_no* | This variable is the card position of the front and back cards that are to be tested. The range of values is determined by the head card of the chain and its extent. |
| wait | This default parameter directs the system to not allow the use of the MAP for other functions while the system is testing the chain or link. Do not enter this parameter. |

## Qualifications

The tst command is qualified by the following exceptions, restrictions, and limitations:

- If the tst command is entered with only the *ms_no* variable, an entire chain is tested.
- If the tst command is entered with the card parameter and the *card_no* variable, the cards at a single card position are tested.
- If the tst command is entered with the link parameter, the channelized link associated with the displayed chain is tested.
- Since a chain must be specified when entering the Chain level, it is unnecessary to indicate which chain is being acted on by the tst command.

# tst (continued)

- The response for the out-of-service (OOS) and in-service (InSv) test that failed or passed with in-service trouble (ISTb) displays the faults and card list of all the faulty chain cards.
- The fault descriptions for the cards are sorted and displayed in two groups:
  - hard faults found on the chain cards
  - soft faults found on the chain cards

## Example

The following table provides an example of the tst command.

**Example of the tst command**

| Example | Task, response, and explanation |
|---|---|
| **tst 0** ↵<br>*where*<br><br>0 is the MS number | **Task:** Test the chain on MS 0.<br><br>**Response:**<br><br>`Request to Test MS: 0 Shelf: 0 Chain: 7 submitted.`<br>`Request to Test MS: 0 Shelf: 0 Chain: 7 passed.`<br><br>**Explanation:** The requested chain is tested. |

## Responses

The following table provides explanations of the responses to the tst command.

**Responses for the tst command**

| MAP output | Meaning and action |
|---|---|
| `A chain card failure occurred-test each card listed below to locate the fault.` | **Meaning:** One or more cards of a chain have failed the test. All the cards in the chain have been taken out-of-service.<br><br>**Action:** Perform an out-of-service test on each card in the supplied card list to determine the faulty card or cards. |
| `A chain extent mismatch occurred between the CM and the MS.` | **Meaning:** The hardware configuration of the MS may not agree with the computing module (CM) configuration data.<br><br>**Action:** Check the MS. If it is not configured correctly, perform the following steps:<br><br>1 Busy the MS that has the hardware configuration problem.<br>2 Reconfigure the MS hardware correctly.<br>3 Return the MS to service with an out-of-band rts command.<br>4 Reattempt the tst command on the chain. |
| `Cannot test card when f/w download in progress.` | **Meaning:** The request to test the chain is aborted because a card is being downloaded.<br><br>**Action:** None |
| `Card has corrupted firmware.` | **Meaning:** A card has corrupted firmware possibly caused by an electrically erasable programmable read-only memory (EEPROM) page-write failure.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Card has no firmware.` | **Meaning:** A card was not loaded with a valid firmware.<br><br>**Action:** None |
| `Chain test aborted, a card resource is not available.` | **Meaning:** The chain InSv test found that a card in the chain was not available for testing. The card resource is not available if it is currently handling a card InSv test. Note that if a chain InSv test is aborted because a chain card is not available, the chain test has no effect on the MSCHDIA or MSCHDIAF operational measurement (OM) pegs.<br><br>**Action:** None |
| `Request to INSV TEST MS: 0 shelf: 0 Chain: 7 submitted.`<br>`Request to INSV TEST MS: 0 shelf: 0 Chain: 7 failed;`<br>`Chain test aborted, a card resource is not available.` | **Meaning:** The in-service test is aborted because one of the cards is unavailable.<br><br>**Action:** None |
| `Request to OOS TEST MS: 0 shelf: 1 Chain: 6 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 1 Chain: 6 passed.` | **Meaning:** The out-of-service test passed.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to OOS TEST MS: 0 shelf: 3 Chain: 8 submitted.`<br>`Request to OOS TEST MS: 0 shelf: 3 Chain: 8 failed;`<br>`Hard faults found on chain cards:`<br>`SHELF 0 CARD 8: Interface front card has an invalid PEC.`<br>`Soft faults found on chain cards:`<br>`SHELF 0 CARD 9: Interface front card datafill and physical PEC does not match`<br>`Site Flr RPos Bay_Id Shf Description Slot EqPEC`<br>`HOST 00 AA00 DPCC 0 39 MS 0:0:08 14 9X32AA BACK`<br>`HOST 00 AA00 DPCC 0 39 MS 0:0:09 15 9X32AA BACK` | **Meaning:** The out-of-service test failed, and the system provides the fault and location information for the faulty cards.<br><br>**Action:** Replace the faulty card or cards. |
| `Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 passed.` | **Meaning:** The requested chain or link passed the tests.<br><br>**Action:** None |
| `Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested chain or link cannot be tested.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot busy the chain while other maintenance activities are in progress.<br><br>**Action:** Retry the tst command after other activities have finished. |
| `Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted`<br>`Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`no resources available.`<br>`Required Resources Are Unavailable`<br><br>or<br><br>`Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted`<br>`Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`Request not supported` | **Meaning:** This command is not accessible.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command was inhibited.<br><br>**Action:** None |
| `Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 submitted.`<br>`Request to Test MS: 0 Shelf: 0 Chain: 7 Link: 0 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Check for Swerrs`<br><br>or<br><br>`No Problem`<br><br>or<br><br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `The chain link failed the loopback test.` | **Meaning:** The channelized link associated with the chain failed the test.<br><br>**Action:** At the Chain level, perform an out-of-service test on the channelized link. If the problem persists, check the physical connection between the fiber link and the chain. |

**-continued-**

# tst (end)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `The chain status update failed.` | **Meaning:** A fault in one or more cards in the displayed chain has failed the test. All cards in the chain are now out-of-service.<br><br>**Action:** Perform an out-of-service test on each card in the supplied card list to determine the faulty cards. |

**-end-**

# Clock level commands

Use the Clock level of the MAP for message controller (MC) clock testing and maintenance.

## Accessing the Clock level

To access the Clock level, enter the following from the CI (command interpreter) level:

**mtc;cm;mc;clock ↵**

## Clock commands

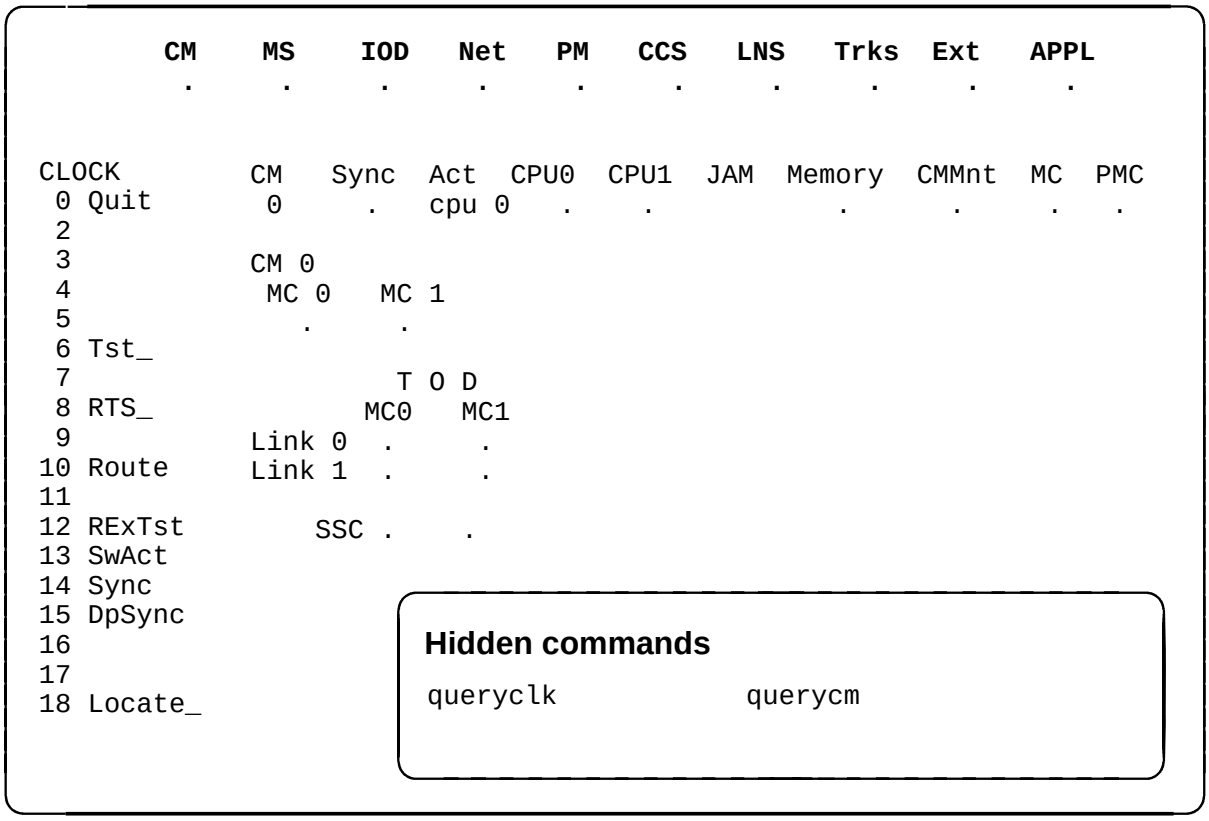
The commands available at the Clock MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**Clock commands**

| Command | Page |
|---|---|
| dpsync | C-383 |
| locate | C-387 |
| queryclk | C-389 |
| querycm | C-391 |
| quit | C-399 |
| rextst | C-403 |
| route | C-411 |
| rts | C-413 |
| swact | C-417 |
| sync | C-421 |
| tst | C-431 |

## Clock menu

The following figures show the Clock menu and status display. The insert with hidden commands is not a visible part of the menu display.



## Clock status codes

The following table describes the status codes for the Clock status display.

| Status codes Clock menu status display | | |
|---|---|---|
| **Code** | **Meaning** | **Description** |
| TOD | time-of-day clock | |
| MC0 and MC1 | message controller | |
| . | in-service | The clock is in the in-service state. |
| sp | split mode | The clock cannot be accessed because the computing module (CM) is in split mode. |
| flt | fault | The clock has a fault. |
| SSC | subsystem clock | |
| . | in-service | The clock is in the in-service state. |
| ut | under test | The clock is under test. |
| sp | split mode | The clock cannot be accessed because the CM is in split mode. |
| istb | in-service trouble | The clock is in-service trouble, but it is still operating. It is in-service trouble because the secondary clock reference cannot synchronize to the primary clock reference. |
| src | source | The clock is in the source state because both clock reference links are closed. |
| flt | fault | The clock is out-of-service because of a hardware fault, or because of a problem with both of the links that supply the reference frame to the clock. |

## Common responses

The following table provides explanations of the common responses to the Clock commands. This responses will be produced by many of the commands under the Clock level.

| Common responses for the Clock commands | |
|---|---|
| **MAP output** | **Meaning and action** |
| `Cannot run test when in synchronism.` | **Meaning:** The system cannot run the test while the central processing units (CPU) are in sync.<br><br>**Action:** Use the dpsync command to drop synchronization. Then retry the command. |

**-continued-**

**Common responses for the Clock commands** (continued)

| MAP output | Meaning and action |
|---|---|
| `Maintenance action started`<br><br>or<br><br>`Maintenance action already started` | **Meaning:** The system has initiated a maintenance request, or there is a maintenance request already in progress.<br><br>**Action:** Retry your command again later. |
| `Maintenance action submitted.` | **Meaning:** The system has received your command.<br><br>**Action:** None |
| `No mailbox available.` | **Meaning:** Either the system could not allocate a mailbox for interprocess communication, or the command generated an invalid return code.<br><br>**Action:** Retry the command. |
| `No reply from request.` | **Meaning:** The process has taken too long to reply to the MAP request.<br><br>**Action:** Try the command again. |
| `Software inconsistency-action aborted.` | **Meaning:** The system aborted the command due to a software error.<br><br>**Action:** Retry the command. Contact maintenance support personnel if the problem reoccurs. |

**-end-**

# dpsync

## Function

Use the dpsync command to drop the synchronization of the CPU pair.

**dpsync command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **dpsync** | [ *wait* / nowait ] [ *prompt* / noprompt ] [ *match* / nomatch ] |

| Parameters and variables | Description |
|---|---|
| *match* | This default parameter directs the system to perform a match test. Do not enter this parameter. |
| nomatch | This parameter directs the system to suspend the match test. |
| noprompt | This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the system is dropping sync. |
| *wait* | This default parameter directs the system to not allow the use of the MAP for other functions while the system is dropping sync. Do not enter this parameter. |

## Qualifications

None

# dpsync (continued)

## Examples

The following table provides examples of the dpsync command.

**Examples of the dpsync command**

| Example | Task, response, and explanation |
|---|---|
| **dpsync** ↵ | |
| | **Task:** Drop the syncronization of the CPU pair. |
| | **Response:** `SYNCHRONIZATION DROPPED` |
| | **Explanation:** Synchronization of the pair has been dropped. |

## Responses

The following table provides explanations of the responses to the dpsync command.

**Responses for the dpsync command**

| MAP output | Meaning and action |
|---|---|
| `Aborted, active CPU 0 has faulty processor clock.` | |
| | **Meaning:** The active CPU clock is faulty and manual drop syncronization is disallowed. |
| | **Action:** None |
| `Drop synchronization failed.` | |
| | **Meaning:** The CPU is still in sync. |
| | **Action:** None |
| `If you intend to jam the mate CPU, please do so before dropping synchronization.`<br>`Do you wish to continue? Please confirm (”YES” or ”NO”).` | |
| | **Meaning:** The system is offering the opportunity to abort this process and jam the inactive CPU before sync is dropped. |
| | **Action:** Enter yes to drop sync without jamming the inactive CPU. Enter no to abort this drop sync, then jam the inactive CPU. |

**-continued-**

# dpsync (end)

**Responses for the dpsync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `No reply from request` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `Running in simplex mode with active CPU 0.` | **Meaning:** Synchronization has been dropped and the indicated CPU is active.<br><br>**Action:** None |
| `Software inconsistency - Action aborted.` | **Meaning:** A software fault has occured.<br><br>**Action:** None |
| `Synchronization dropped` | **Meaning:** CPU synchronization has been dropped.<br><br>**Action:** None |

**-end-**

# locate

## Function

Use the locate command to display the physical location of the specified SSC.

**locate command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **locate** | *ssc_no* |

| Parameters and variables | Description |
|---|---|
| *ssc_no* | This variable is the number of the SSC. Valid entries are 0-1. |

## Qualifications

None

## Example

The following table provides an example of the locate command.

**Example of the locate command**

| Example | Task, response, and explanation |
|---|---|
| **locate 0** ↵<br>*where*<br><br>0 is the SSC number | **Task:** Display the location of SSC 0.<br><br>**Response:**<br><br>`Site Flr RPos  Bay-id  Shf Description Slot EqPEC`<br>`HOST  00  A00 CMCD:00   18 SSC :00:0:0  16  9X22CA BACK`<br><br>**Explanation:** The system displays the location of the SSC. |

# locate (end)

## Responses

The following table provides explanations of the responses to the locate command.

**Responses for the locate command**

| MAP output | Meaning and action |
|---|---|
| `Site Flr RPos  Bay-id  Shf Description Slot EqPEC`<br>`HOST  00  A00 CMCD:00   18 SSC :00:0:0  16  9X22CA BACK` | **Meaning:** The system displays the location of the SSC.<br><br>**Action:** None |
| `Specified card does not exist.`<br>`SSC number:  2` | **Meaning:** You entered an invalid SSC number.<br><br>**Action:** None |

# queryclk

## Function

Use the queryclk command to display the processor clock source of each central processing unit (CPU).

**queryclk command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **queryclk** | There are no parameters or variables. |

## Qualifications

None

## Examples

The following table provides an example of the queryclk command.

**Examples of the queryclk command**

| Example | Task, response, and explanation |
|---|---|
| **queryclk** ↵ | **Task:** Display the processor clock source of each CPU.<br><br>**Response:**<br>`ACTIVE:  CPU0 is running on the processor clock of CPU0.`<br>`INACTIVE:  CPU1 is running on the processor clock of CPU0.`<br><br>**Explanation:** The system displays the clock source of each CPU. |

## Response

The following table provides an explanation of the response to the queryclk command.

**Response for the queryclk command**

| MAP output | Meaning and action |
|---|---|
| `ACTIVE:  CPU0 is running on the processor clock of CPU0.`<br>`INACTIVE:  CPU1 is running on the processor clock of CPU0.` | **Meaning:** The system displays the clock source of each CPU.<br><br>**Action:** None |

# querycm

## Function

Use the querycm command to query and display information about the cards in the CM. This information includes idprom information, a list of card locations, and the status of the last routine exercise (REx) test.

**querycm command parameters and variables**

| Command | Parameters and variables | | | | | | |
|---|---|---|---|---|---|---|---|
| **querycm** | *default* | | | | | | (1) |
| | cpu | *cpu_no* | shelf | *shelf_no* | slot | *slot_no* | (2) |
| | shelf | *shelf_no* | slot | *slot_no* | side | *side* | (3) |
| | slot | *slot_no* | side | *side* | *function* | | (4) |
| | side | *side* | | | | | (5) |
| | *function* | | | | | | (6) |
| | all | | | | | | (7) |
| **querycm** (continued) | (1) | | | | | | (1) |
| | (2) | side | *side* | *function* | *empty* / noempty | *norexresult* / rexresult | rexschd (2) |
| | (3) | *function* | | | | | (3) |
| | (4) | | | | | | (4) |
| | (5) | | | | | | (5) |
| | (6) | | | | | | (6) |
| | (7) | | | | | | (7) |
| **querycm** (continued) | (1) | thresholds | *count_id* | | | | |
| | (2) | counts | *count_id* | | | | |
| | (3) | | | | | | |
| | (4) | | | | | | |
| | (5) | | | | | | |
| | (6) | | | | | | |
| | (7) | | | | | | (end) |

| Parameters and variables | Description |
|---|---|
| all | This parameter directs the system to display all the CM information by function. |
| counts | This parameter directs the system to display the error counts. |

**-continued-**

# querycm (continued)

**querycm command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *count_id* | This variable is the threshold or count to be displayed. The following are valid entries:<br>▪ linkcls link closures<br>▪ mmroosync out-of-sync recovery mismatches<br>▪ mmrinsync in-sync recovery mismatches<br>▪ traprate trap rate exceeded<br>▪ procmemflt processor memory faults<br>▪ clockflt processor clock faults<br>▪ canrex cancelled REx tests<br>▪ all all counts |
| cpu | This parameter directs the system to display information on the central processing unit (CPU). |
| *cpu_no* | This variable is the CPU number. Valid entries are 0-1. The default is both CPUs. |
| *default* | This default parameter directs the system to display all the CM information. Do not enter this parameter. |
| *empty* | This default parameter directs the system to display information on empty cards. Do not enter this parameter. |

**-continued-**

# querycm (continued)

**querycm command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *function* | This variable directs the system to display the information by individual function. When used in conjunction with cpu, shelf, or slot the default is all. The following are valid entries:<br>▪ mc message controller (MC) cards only<br>▪ cpus CPU cards only<br>▪ busext bus extender cards only<br>▪ busterm bus terminator cards only<br>▪ ssc subsystem controller cards only<br>▪ pwrpack power supply cards only<br>▪ pmc peripheral message controller cards only<br>▪ tif terminal interface cards only<br>▪ memory memory cards only<br>▪ slm system load module (SLM) cards only<br>▪ all all cards |
| noempty | This parameter directs the system to not display information on empty cards. |
| *norexresult* | This default parameter directs the system to not display the REx test results. Do not enter this parameter. |
| rexresult | This parameter directs the system to display the results of the most recent REx test. |
| rexsched | This parameter directs the system to display the thresholds or counts. |
| shelf | This parameter directs the system to display the shelf information. |
| *shelf_no* | This variable is the shelf number. Valid entries are 0-3. The default is all shelves. |
| side | This parameter directs the system to display information on the side or sides of a shelf. |
| *side* | This variable is the side of the shelf. Valid entries are front, back, both. The default is both. |

**-continued-**

# querycm (continued)

**querycm command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| slot | This parameter directs the system to display information on a slot. |
| *slot_no* | This variable is the slot number. Valid entries are 1-37. The default is all the slots. |
| thresholds | This parameter directs the system to display the error thresholds. |

**-end-**

## Qualifications

The querycm command is qualified by the following exceptions, restrictions, and limitations:

- All the parameters and variables to the querycm command are optional. Line 2 of the parameter and variable expansion table shows the maximum configuration of a command string; any of the elements of that string can be eliminated when appropriate.
- In the compatible column of the response, when yes is displayed, the CM product engineering code (PEC) release is compatible with the BCS software running in the switch. When *no is displayed, it is not compatible with the BCS software.

## Examples

The following table provides examples of the querycm command.

**Examples of the querycm command**

| Example | Task, response, and explanation |
|---|---|
| **querycmrexresult** ↵ | **Task:** Display the results of the most recent REx test.<br><br>**Response:**<br><br>`Last REx run on cpu 0 on 1992/12/17 02:06:56.354 THU..`<br>`Test done by system action and result was a pass.`<br>`Last REx run on cpu 0 on 1992/12/17 02:06:56.356 THU..`<br>`Test done by system action and result was a pass.`<br><br>**Explanation:** The results of the REx test are displayed. |

**-continued-**

# querycm (continued)

**Examples of the querycm command** (continued)

**Example** **Task, response, and explanation**

**querycm cpu 0 shelf 0 slot 17 side front** ↵
*where*

0 is the CPU number
0 is the shelf number
17 is the slot number
front is the side of the shelf

**Task:** Display the information for the specified side of a specified card.

**Response:**

```
Querycm basic print-out
CPU SHELF SLOT SIDE EQPEC   BASE EXCEPT REL COMPATIBLE
 0    0    17  FRNT NT9X12AB  10 13 14   15      YES
```

**Explanation:** Information about the side of the card is displayed.

**querycm mc** ↵
*where*

mc is the function to be displayed

**Task:** Query the message controller (MC) cards.

**Response:**

```
Message Controllers Cards:
CPU SHELF SLOT SIDE EQPEC   BASE EXCEPT REL COMPATIBLE
 0    0    17  FRNT NT9X12AB  10 13 14   15      YES
 0    0    17  BACK NT9X20AA  50 None    5K      YES
 0    0    18  FRNT NT9X12AB  10 13 14   15      YES
 0    0    18  BACK NT9X20AA  50 None    5J      YES
 1    0    21  FRNT NT9X12AB  10 13 14   1A      YES
 1    0    21  BACK NT9X20AA  50 None    51      YES
 1    0    22  FRNT NT9X12AB  10 13 14   02      *NO
 1    0    22  BACK NT9X20AA  50 None    5H      YES
```

**Explanation:** Information about the MC cards is displayed.

**-end-**

# querycm (continued)

## Responses

The following table provides explanations of the responses to the querycm command. Examples of full responses are given, as well as explanations of some of the individual components of full responses.

**Responses for the querycm command**

| MAP output | Meaning and action |
|---|---|
| BASE<br>S0. | |
| | **Meaning:** The baseline of the PEC, the minimum allowable release, is given.<br><br>**Action:** None |
| Compatible '*NO'. | |
| | **Meaning:** The MS PEC design change document (DCD) release is not compatible with the batch change supplement (BCS) software running in the switch.<br><br>**Action:** None |
| Compatible 'YES'. | |
| | **Meaning:** The MS PEC DCD release is compatible with the BCS software running in the switch.<br><br>**Action:** None |
| Except<br>None | |
| | **Meaning:** There are no exception releases for this PEC.<br><br>**Action:** None |
| Except<br>SA | |
| | **Meaning:** In this example, SA is an exception release. The exception releases are above the baseline, and are known to be incompatible with the BCS software running in the switch.<br><br>**Action:** None |

**-continued-**

## querycm (continued)

**Responses for the querycm command** (continued)

**MAP output** **Meaning and action**

```
Last REx run on cpu 0 on 1992/12/17 02:06:56.354 THU..
Test done by system action and result was a pass.
Last REx run on cpu 0 on 1992/12/17 02:06:56.356 THU..
Test done by system action and result was a pass.
```

**Meaning:** The system displays the results of the most recent REx test.

**Action:** None

```
Message Controllers Cards:
CPU SHELF SLOT SIDE EQPEC   BASE EXCEPT REL COMPATIBLE
 0    0    17  FRNT NT9X12AB  10 13 14   15      YES
 0    0    17  BACK NT9X20AA  50 None    5K      YES
 0    0    18  FRNT NT9X12AB  10 13 14   15      YES
 0    0    18  BACK NT9X20AA  50 None    5J      YES
 1    0    21  FRNT NT9X12AB  10 13 14   1A      YES
 1    0    21  BACK NT9X20AA  50 None    51      YES
 1    0    22  FRNT NT9X12AB  10 13 14   02      *NO
 1    0    22  BACK NT9X20AA  50 None    5H      YES
```

**Meaning:** The system displays the card information for the specified function.

**Action:** None

```
No last REx result info for cpu 0
No last REx result info for cpu 1
```

**Meaning:** The system has not run a REx test since the last restart.

**Action:** None

```
Querycm basic print-out
CPU SHELF SLOT SIDE EQPEC   BASE EXCEPT REL COMPATIBLE
 0    0    17  FRNT NT9X12AB  10 13 14   15      YES
```

**Meaning:** The system displays the information for the specified card or cards.

**Action:** None

**-continued-**

## querycm (end)

**Responses for the querycm command** (continued)

| MAP output | Meaning and action |
|---|---|
| REL<br>S9 | **Meaning:** The card release obtained from querying the ID PROM of the card is given.<br><br>**Action:** None |
| The Link Closure Threshold is 1<br>The Out-of-sync Recover Mismatch Threshold is 1<br>The In-Sync Recovery Mismatch Threshold is 3<br>The Trap Rate Threshold is 1<br>The Processor Memory Fault Threshold is 1<br>The Clock Fault Threshold is 1<br>The Cancelled REx Threshold is 2 | **Meaning:** The system displays the requested thresholds or counts.<br><br>**Action:** None |
| -end- | |

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any MAP level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the Clock level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The Clock level has changed to the previous menu level. |

**-continued-**

# quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the Clock level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The Clock level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the Clock level menu with a menu that is two or more MAP levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the Clock level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |
| **-end-** | |

# rextst

## Function

Use the rextst command to run routine exercise (REx) tests on the CM. The CM must be synchronized for the full test to be run.

**rextst command parameters and variables**

**Command** **Parameters and variables**

**rextst**

[ short / long ] [ all / cpu / mem / link / pmc ] [ stop / continue ] [ *noreset* / resethits ] [ *wait* / nowait ] [ *prompt* / noprompt ] (1) (2) (3) (4) (5)

**rextst** (continued)

(1) (2) (3) (4) (5) [ *noreset* / resetcounts ] [ *noverbose* / verbose ] (end)

| Parameters and variables | Description |
|---|---|
| all | This default parameter directs the system to run all REx tests. |
| continue | This parameter directs the system to generate a log when an error is encountered and the system continues the test. |
| cpu | This parameter directs the system to run only central processing unit (CPU) tests. |
| link | This parameter directs the system to run only the link tests. |
| long | This parameter directs the system to run all tests for the specified type regardless of how much time they take. |
| mem | This parameter directs the system to run only the memory REx tests. |
| noprompt | This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes. |
| *noreset* | This default parameter directs the system not to reset. Do not enter this parameter. |
| *noverbose* | This default parameter directs the system not to return completion messages after each individual REx test. Do not enter this parameter. |

**-continued-**

# rextst (continued)

**rextst command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| nowait | This parameter directs the system to allow use of the MAP for other functions while the REx test is running. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| pmc | This parameter directs the system to run only the peripheral message controller (PMC) REx tests. |
| resetcounts | This parameter directs the system to reset all but the cancelled REx fault counts. |
| resethits | This parameter directs the system to reset link hit counts. |
| short | This parameter directs the system to run only fast diagnostics. |
| stop | This parameter directs the system to stop running the type of test it is running when an error is encountered. |
| verbose | This parameter directs the system to return completion messages after each individual REx test. |
| *wait* | This default parameter directs the system to not allow the use of the MAP for other functions while the REx test is running. Do not enter this parameter. |

**-end-**

## Qualifications

The restrictions that must be observed when running a REx test are built into the system responses to the command. Any attempt to run a test which would violate one or more of the conditions the REx test requires to run will result in a warning message or a cancellation of the requested test.

## Example

The following table provides an example of the rextst command.

**Example of the rextst command**

| Example | Task, response, and explanation |
|---|---|
| **rextst nowait** ↵ | |
| | **Task:** Run REx tests on the CM. |
| | **Response:** `MAINTENANCE ACTION SUBMITTED.` |
| | **Explanation:** The system accepted the command and started the test. |

## Responses

The following table provides explanations of the responses to the rextst command.

**Responses for the rextst command**

| MAP output | Meaning and action |
|---|---|
| `Aborted. CPU is jammed inactive.` | |
| | **Meaning:** You cannot run REx tests because the mate CPU is jammed inactive. The CM must be able to switch activity for the REx test to be run. |
| | **Action:** Unjam the inactive CPU by entering /releasejam at the reset terminal for the inactive CPU, then reenter the rextst command. |
| `Abort-systems not equipped with PMCs` | |
| | **Meaning:** The system is not equipped with peripheral-side message controllers (PMC). Therefore, you cannot run the PMC test. |
| | **Action:** None |
| `Aborted-REx disallowed for 5 minutes after a restart.` | |
| | **Meaning:** The system cannot run the REx test within the named number of minutes after a restart. |
| | **Action:** Wait the specified time and reissue the rextst command. |

**-continued-**

# rextst (continued)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot run test as mate CPU is jammed inactive.` | **Meaning:** As part of the REx test, the CM switches activity. However, this is not possible because the mate CPU is jammed inactive.<br><br>**Action:** Unjam the inactive CPU by entering /release jam at the reset terminal for the inactive CPU, then reenter the rextst command. |
| `Cannot run test when in synchronism.` | **Meaning:** The test cannot be run while the CPUs are synchronized.<br><br>**Action:** Drop sync using the dpsync command and retry the rextst command. |
| `Caution: CM sync and activity states will change.`<br>`Please confirm (″YES″ or ″NO″).` | **Meaning:** The full REx test includes activity switches.<br><br>**Action:** Enter yes to run the full REx test. Enter no to abort the command. |
| `CM is out of sync. Only partial test can be performed.`<br>`Please confirm (″YES″ or ″NO″).` | **Meaning:** Since the CM is not synchronized, only a partial test will be run.<br><br>**Action:** Enter yes to continue with a partial test. Enter no to abort the command. |
| `CPU REX test did not run-CPU resources in use.` | **Meaning:** Another process is using the resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `Hit counts have been cleared.` | **Meaning:** The link hit counts were cleared after completion of a REx test, where resethits was included in the command string.<br><br>**Action:** None |

**-continued-**

## rextst (continued)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Hit counts have not been cleared.` | **Meaning:** The system could not clear the hit counts.<br><br>**Action:** Replace the cards in the card list. Repeat the test. Contact maintenance support personnel if the problem persists. |
| `Maintenance action not performed, resources in use.` | **Meaning:** The resources required to perform one or more of the individual REx tests were not available.<br><br>**Action:** Retry the rextst command. |
| `Maintenance action started.`<br><br>or<br><br>`Maintenance action already started.` | **Meaning:** Either the CM process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.<br><br>**Action:** None |
| `Maintenance action submitted.` | **Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect.<br><br>**Action:** None |
| `Mate is already under test.` | **Meaning:** The mate communication register (MCR) flag is in use and cannot be claimed.<br><br>**Action:** None |

**-continued-**

# rextst (continued)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `MC REX test did not run-MC resources in use.` | **Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `MEM REX test did not run-MEM resources in use.` | **Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `No mailbox available.` | **Meaning:** The system encountered an error during the test.<br><br>**Action:** Try the rextst command again. |
| `No reply from request` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `PMC REX test did not run-PMC resources in use.` | **Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `RESETHITS option is only valid with the LINK and ALL classes. Counts will not be cleared.` | **Meaning:** The resethits parameter is not valid with some classes of tests.<br><br>**Action:** None |

**-continued-**

# rextst (continued)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `REXTST not run. A PRE-REX match of memory resulted in a mismatch. Please check memory indicators for possible faults.` | **Meaning:** The REx test was not run because memory errors occurred during the memory match.<br><br>**Action:** Access the Memory level, clear the memory faults, and attempt to run the REx test again. |
| `RExTst failed. Test name= CPU` | **Meaning:** One or more REx tests failed. The system displays only the first failure in this response and displays the failed test. The system displays a list of the cards that may be defective.<br><br>**Action:** None |
| `RExTst passed` | **Meaning:** The test ran without failure.<br><br>**Action:** None |
| `Software inconsistency-action aborted.` | **Meaning:** A software fault has occurred.<br><br>**Action:** None |
| `SSC REX test did not run-SSC resources in use.` | **Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `Switch is out of Sync. Only a partial test can be performed. Please confirm ("YES" or "NO"):` | **Meaning:** The system cannot run full tests when the switch is out of sync.<br><br>**Action:** Enter yes to continue with the partial test. Enter no to abort the command. |

**-continued-**

# rextst (end)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `SYSTEM NOT EQUIPPED WITH A PMC-PMC REX TEST WILL NOT RUN.` | **Meaning:** The PMC is not equipped and cannot be tested.<br><br>**Action:** None |
| `UNABLE TO RUN MEM REX TEST.` | **Meaning:** The system cannot run the specified type of REx test because the device to be tested is in use. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** None |
| `VERBOSE cannot be used with NOWAIT.` | **Meaning:** You entered the verbose and nowait parameters in the same command string, and they are mutually exclusive.<br><br>**Action:** Reissue the rextst command with one or the other parameter. |
| `Warning: Running of a REx test is not recommended at this time due to exceeded error thresholds. Use the QUERYCM RExSchd command for more details concerning the errors which have occurred.` | **Meaning:** One or more counts of stability-effecting error conditions has exceeded a preset threshold.<br><br>**Action:** Wait for the fault counts to fall below the stability thresholds and retry the rextst command. Use the rextst resetcounts command string to clear the counts if the error condition is known and has been corrected. |
| `Warning: The clearing of the error counts is not recommended until the source of the errors is corrected. Use the QUERYCM RExSch command for more details concerning the errors which have occurred. A successful REx test will also clear the error counts.`<br>`Please confirm (“YES”, “Y”, “NO”, or “N”):` | **Meaning:** The system prompts for confirmation before clearing the error counts.<br><br>**Action:** Enter yes or y to continue. Enter no or n to abort the command. |

**-end-**

# route

## Function

Use the route command to display the primary and secondary MC routes for the frame pulse reference of the subsystem clocks (SSC), the validity of these routes, and the state of the SSCs.

**route command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **route** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the route command.

**Example of the route command**

| Example | Task, response, and explanation |
|---|---|
| **route** ↵ | |

**Task:** Display the MC routes for the SSCs.

**Response:**

```
SSC 0 -   OK, Primary:  Link 0 , Secondary: Link 1 .
SSC 1 -   OK, Primary:  Link 0 , Secondary: Link 1 .
```

**Explanation:** The system displays the MC routes.

# route (end)

## Response

The following table provides an explanation of the response to the route command.

**Response for the route command**

| MAP output | Meaning and action |
|---|---|
| SSC 0 - OK, Primary: Link 0 , Secondary: Link 1 .<br>SSC 1 - OK, Primary: Link 0 , Secondary: Link 1 . | **Meaning:** The system displays the MC routes.<br><br>**Action:** None |

# rts

## Function

Use the rts command to test the subsystem clock (SSC) or time-of-day clock (TOD) and return it to service if the test is successful.

**rts command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **rts** | [ ssc *ssc_no* ] [ tod *mc_no* *plane _no* ] [ mc *mc_no* ] [ *wait* ] [ nowait ] |

| Parameters and variables | Description |
|---|---|
| mc | This parameter directs the system to return the MC to service. |
| *mc_no* | This variable is the number of the MC. Valid entries are 0-1. |
| nowait | This parameter directs the system to allow the use of the MAP for other functions while the system is testing and returning the clock to service. |
| *plane_no* | This variable is the central processing unit (CPU) plane on which the MC is located. Valid entries are 0-1. |
| ssc | This parameter directs the system to return an SSC to service. |
| *ssc_no* | This variable is the number of the SSC to be returned to service. Valid entries are 0-1. |
| tod | This parameter directs the system to return a TOD clock to service. |
| *wait* | This default parameter directs the system not to allow the use of the MAP for other functions while the system is testing and returning the clock to service. Do not enter this parameter. |

## Qualifications

The rts command is qualified by the following restriction: if you do not enter a plane number with the TOD parameter, the system returns both TOD clocks on the specified MC to service.

# rts (continued)

## Example

The following table provides an example of the rts command.

**Example of the rts command**

| Example | Task, response, and explanation |
|---|---|
| **rts ssc 0** ↵<br>*where*<br><br>0 is the number of the SSC | **Task:** Return SSC 0 to service.<br><br>**Response:** `SSC 0 RTS OK.`<br><br>**Explanation:** The SSC is returned to service. |

## Responses

The following table provides explanations of the responses to the rts command.

**Responses for the rts command**

| MAP output | Meaning and action |
|---|---|
| `MC 1 TOD 1 is already in service.` | **Meaning:** The specified clock is already in-service.<br><br>**Action:** Contact maintenance support personnel. |
| `MC 1 TOD 1 RTS aborted.` | **Meaning:** The system aborted the rts command.<br><br>**Action:** Try the rts command again. |
| `MC 1 TOD 1 RTS failed.` | **Meaning:** The TOD clock failed the rts tests and was not returned to service.<br><br>**Action:** Contact maintenance support personnel. |

**-continued-**

# rts (continued)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `MC 1 TOD 1 RTS failed-due to a TOD failure.` | **Meaning:** The TOD clock failed the rts tests and was not returned to service.<br><br>**Action:** Contact maintenance support personnel. |
| `MC 1 TOD 1 RTS failed-MC is out of service.` | **Meaning:** The MC that the TOD clock is on is out-of-service so the TOD was not returned to service.<br><br>**Action:** Use the rts command on the MC level to return the MC to service. Then return the clock to service. |
| `MC 1 TOD 1 RTS failed-SSC is out of service.` | **Meaning:** The SSC that supplies the TOD clock with a frame pulse reference is out-of-service.<br><br>**Action:** Return the SSC to service, then return the TOD to service. |
| `MC 1 TOD 1 RTS failed-TOD has lost time.` | **Meaning:** The TOD clock has an incorrect time value and was not returned to service.<br><br>**Action:** None |
| `SSC 1 is already in service.` | **Meaning:** The specified clock is already in-service.<br><br>**Action:** Contact maintenance support personnel. |
| `SSC 1 RTS aborted.` | **Meaning:** The system aborted the rts command.<br><br>**Action:** Try the rts command again. |
| `SSC 1 RTS failed-SSC is faulty.` | **Meaning:** The SSC is faulty and was not returned to service.<br><br>**Action:** Clear the SSC fault. |

**-continued-**

# rts (end)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `SSC 1 RTS failed-SSC test did not run due to missing links/TODs.` | **Meaning:** At least one TOD or link is out of service on the other SSC.<br><br>**Action:** Try the rts command again. Return the links or TODs to service. |
| `SSC 1 RTS OK.` | **Meaning:** The system successfully returned the SSC to service.<br><br>**Action:** None |
| `SSC 1 RTS OK-SSC is in-service-trouble.` | **Meaning:** The SSC secondary reference link failed to synchronize to the primary reference link during the RTS sequence.<br><br>**Action:** None |

**-end-**

# swact

## Function

Use the swact command to switch activity (SwAct) to the mate central processing unit (CPU).

**swact command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **swact** | [ *prompt* \| noprompt ] [ *check* \| nocheck ] [ *noforce* \| force ] [ *match* \| nomatch ] |

| Parameters and variables | Description |
|---|---|
| *check* | This default parameter directs the sysstem to check the common processor clock source of the computing module (CM). The clock source check is performed automatically before the SwAct. If the check finds that the CM would be running on the inactive CPU processor clock after the SwAct, a prompt is displayed at the MAP to ask for permission to automatically drop sync and then sync the CM again after the SwAct. Do not enter this parameter, |
| force | This parameter directs the system to perform the SwAct when the CPU is out of sync. |
| *match* | This default parameter directs the system to perform a match test. Do not enter this parameter. |
| nocheck | This parameter directs the system to bypass the checking of the common processor clock source of the CM. The nocheck parameter is used to switch activities without sync being dropped. CM sync status should not be altered if the CPU occupancy is over 50 percent. |
| *noforce* | This defualt parameter directs the system to not allow the SwAct when the CPU is out of sync. Do not enter this paramter. |
| nomatch | This parameter directs the system to suspend the match test. |
| noprompt | This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes. |
| *prompt* | This default parameter directs the system to enable yes and no prompts. Do not enter this parameter. |

## Qualifications

None

## swact (continued)

## Example

The following table provides an example of the swact command.

**Example of the swact command**

| Example | Task, response, and explanation |
|---|---|
| **swact noprompt force** ↵ | |
| | **Task:** To switch activity to the mate CPU. |
| | **Response:**<br>`ACTIVITY SWITCH ON CPU 0`<br>`***SOS COLD RESTART NO.8 AT AUGUST-17 00:00:00` |
| | **Explanation:** The CPUs were not in sync, therefore SwAct caused a cold restart. |

## Responses

The following table provides explanations of the responses to the swact command.

**Responses for the swact command**

| MAP output | Meaning and action |
|---|---|
| `Aborted. CM is not in sync and the 'force' option is not specified.` | |
| | **Meaning:** The CPUs are out of sync. Therefore, the force parameter must be used to switch activity. The command is terminated. |
| | **Action:** Synchronize the CPUs first using the sync command and then SwAct. If a cold restart is acceptable, use the force parameter with the SwAct command. |
| `Aborted. Inactive CPU 1 has a faulty clock and should not be allowed to gain activity.` | |
| | **Meaning:** The inactive CPU has a faulty clock and should not be allowed to gain activity. |
| | **Action:** Drop sync and perform a mate CPU clock test. If the test fails, replace the faulty CPU card. |

**-continued-**

# swact (continued)

**Responses for the swact command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Mate is jammed inactive.` | **Meaning:** The system cannot switch activity because the mate CPU is out of sync.<br><br>**Action:** None |
| `No reply from request` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `Software inconsistency-action aborted.` | **Meaning:** A software fault has occurred.<br><br>**Action:** None |
| `Switch of activity failed.` | **Meaning:** Activity has not been switched.<br><br>**Action:** None |
| `Switch of activity successful.` | **Meaning:** Activity has been switched.<br><br>**Action:** None |
| `Switch of activity successful. Drop synchronization in progress. running in simplex mode with active CPU 0. Synchronization in progress...synchronization successful.` | **Meaning:** The activity switch has been successful. Sync is dropped automatically to switch the clock source to the active CPU. The CM is then resynchronized automatically.<br><br>**Action:** None |

**-continued-**

## swact (end)

**Responses for the swact command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Switch of activity will cause a cold restart. Do you wish to continue? (TYPE YES/NO)` | **Meaning:** The CPUs are not synchronized. If you switch the activity of the CPU, the system will initiate a cold restart.<br><br>**Action:** Enter yes if a SwAct through a cold restart is acceptable. Enter no to abort the command. |
| `Switch of activity will cause the CM to be running on the inactive CPU'S processor clock. System will drop sync and then re-sync in order to switch to the active CPU'S clock. Do you wish to continue? Please confirm (YES OR NO):` | **Meaning:** The CM would be running on the newly inactive CPU's clock after the activity switch. To enhance the fault tolerance of the CM in sync operation, the system would drop sync and then re-sync in order to switch to the newly active CPU's clock.<br><br>**Action:** Enter yes to continue with the command. Enter no if a change to the sync status is not acceptable. |
| **-end-** | |

# sync

## Function

Use the sync command to synchronize the computing module (CM). This command copies the memory of the active central processing unit (CPU), performs a match test between CPUs, and tests the inactive CPU. If all the tests are passed, the system completes the sync.

**sync command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **sync** | [ *none* \| optimum ] [ normal \| nomatch \| notest \| nohands ] [ *none* \| eccoff \| eccon ] [ *wait* \| nowait ] [ *prompt* \| noprompt ] |

| Parameters and variables | Description |
|---|---|
| eccoff | This parameter directs the system to disable memory error correction. |
| eccon | This parameter directs the system to enable memory error correction. |
| nohands | This parameter directs the system to disable handshake-override. Handshake-override is a feature that speeds CPU operation by overriding the handshake synchronization of memory access between CPUs. The handshake-override feature is available only on CMs that are equipped with NT9X14BB or NT9X14DA memory cards, or a combination of both. It is implemented automatically when the CM is synchronized. Use the nohands parameter to disable the handshake-override feature, or contact maintenance support personnel to take the feature out of service. The nohands parameter triggers the NoOvr alarm. |
| nomatch | This parameter directs the system to suspend the match test. Use the nomatch parameter in emergency situations only. |
| *none* | This default parameter directs the system not to perform optimum tests, or not to change the condition of error correction. Do not enter this parameter. |
| noprompt | This parameter directs the system to suppress system prompts. The system automatically enters yes. |
| normal | This default parameter indicates that a normal sync operation is to be performed. |

**-continued-**

## sync (continued)

**sync command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| notest | This parameter directs the system to suspend all the tests that the system usually performs during synchronization. Use the notest parameter in emergency situations only. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the CM is being synchronized. |
| optimum | This parameter directs the system to synchronize the CM using an optimum memory mapping for the mate (inactive) CPU. The sync command with the optimum parameter disables the handshake-override feature and triggers the NoOvr alarm. Use this parameter only when performing memory extensions on a CM that can support a mixed memory configuration. A mixed memory configuration can be supported if program store and data store are aligned along 8-megabyte block boundaries. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| *wait* | This default parameter directs the system not to allow the use of the MAP for other functions while the CM is being synchronized. Do not enter this parameter. |

**-end-**

## Qualification

The sync command is qualified by the following restriction: the system will sync the CM only if it can claim the mate communication register.

## Example

The following table provides an example of the sync command.

**Examples of the sync command**

| Example | Task, response, and explanation | |
|---|---|---|
| **sync nowait noprompt** ↵ | | |
| | **Task:** | Put the CPUs in sync, with no waiting and no prompts for confirmation. |
| | **Response:** | `SYNCHRONIZATION SUCCESSFUL` |
| | **Explanation:** | The CPU's are in sync. |

## sync (continued)

## Responses

The following table provides explanations of the responses to the sync command.

**Responses for the sync command**

| MAP output | Meaning and action |
|---|---|
| `Aborted. CM is already running in sync.` | **Meaning:** The two CPUs are already synchronized.<br><br>**Action:** None |
| `Aborted. Optimum configuration can only be attempted when memory has been aligned along 8 mbyte block boundaries. Memory can be aligned using the MEMORY MAP level ALIGN command.` | **Meaning:** The current memory of the mate (inactive) CPU is not aligned to support mixed memory. Therefore, an optimum configuration is not possible. Use the sync optimum command string only when performing memory extensions on a CM that can support a mixed memory configuration. A CM can support a mixed memory configuration if program store and data store are aligned along 8-megabyte block boundaries.<br><br>**Action:** Clear the problem and retry the command. |
| `Aborted. The CPU releases are not compatible.` | **Meaning:** The NT release number on the active CPU firmware is different from the NT release number on the inactive CPU firmware. The firmware in the CPUs is not compatible.<br><br>**Action:** None |
| `Cannot synchronize-cannot configure mate memory.` | **Meaning:** Either too many memory faults exist in the memory of the inactive CPU or the active CPU cannot communicate with the inactive CPU.<br><br>**Action:** Clear the problem and retry the command. |
| `Cannot synchronize-cannot reset mate CPU.` | **Meaning:** The inactive CPU did not respond to a request from the active CPU.<br><br>**Action:** None |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot synchronize-could not get mate on same clock.` | **Meaning:** The inactive CPU cannot switch the processor clocking source to the active CPU processor clock.<br><br>**Action:** Test the inactive CPU. |
| `Cannot synchronize-CPUs have different firmware.` | **Meaning:** The system cannot synchronize the CM because the two CPUs contain different firmware.<br><br>**Action:** Test the inactive CPU. |
| `Cannot synchronize-different CPU hardware vintage.` | **Meaning:** The system cannot synchronize the CM because the suffixes of the product engineering codes (PEC) on the two CPU cards are different and the cards are incompatible.<br><br>**Action:** Change the inactive CPU card to one that has the same PEC and suffix as the active CPU card. |
| `Cannot synchronize-firmware sync kernel failed.` | **Meaning:** The failure of a firmware synchronization kernel has prevented CM synchronization.<br><br>**Action:** None |
| `Cannot synchronize-first rendezvous failed, suspect CPUs.` | **Meaning:** A problem with the CPUs has prevented CM synchronization.<br><br>**Action:** None |
| `Cannot synchronize-faults exist in active CPU memory.` | **Meaning:** Faults in the memory of the active CPU are preventing synchronization.<br><br>**Action:** Clear the problem and retry the command. |

**-continued-**

## sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot synchronize-invalid link configuration.` | **Meaning:** A problem exists with inter-CPU links.<br><br>**Action:** Contact maintenance support personnel. |
| `Cannot synchronize-mate memory is not contiguous.` | **Meaning:** Faults in the memory of the inactive CPU are preventing synchronization.<br><br>**Action:** Clear the problem and try the command again. |
| `Cannot synchronize-mate test failed.` | **Meaning:** The inactive CPU failed presynchronization diagnosis.<br><br>**Action:** Check status indicators for faults, then test the inactive CPU. |
| `Cannot synchronize-MC 1 accesses will mismatch.` | **Meaning:** A problem exists with a message controller which will cause a mismatch if the CM is synchronized.<br><br>**Action:** Test the message controllers and clear any problems. |
| `Cannot synchronize-memory copy failed.` | **Meaning:** Memory cannot be copied.<br><br>**Action:** Try to synchronize again. |
| `Cannot synchronize-memory protect copy failure.` | **Meaning:** A problem occurred while the system was copying protected memory.<br><br>**Action:** Contact maintenance support personnel. |
| `Cannot synchronize-mismatch while disabling ECC.` | **Meaning:** A mismatch of memory occurred while the system was disabling error checking and correction.<br><br>**Action:** Check the logs and status displays for faults. |

**-continued-**

## sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot synchronize-mismatch while enabling handshake-override.` | **Meaning:** A mismatch occurred while the system was enabling handshake-override.<br><br>**Action:** Check the logs and status displays for faults. |
| `Cannot synchronize-mismatch while optimizing sync performance.` | **Meaning:** A mismatch of memory occurred during synchronization.<br><br>**Action:** Check the logs and status displays for faults. |
| `Cannot synchronize-not enough memory on mate.` | **Meaning:** Not enough memory is available on the inactive CPU to permit the system to copy memory.<br><br>**Action:** Use the config command at the Memory level of the MAP to configure the memory of the inactive CPU, then try to synchronize the CM again. |
| `Cannot synchronize-second rendezvous failed, suspect CPUs.` | **Meaning:** A problem with the CPUs has prevented CM synchronization.<br><br>**Action:** None |
| `Cannot synchronize-software package inconsistency.` | **Meaning:** The system cannot synchronize the CM because the software load in the DMS-Core is not compatible with the NT9X13 processor cards that are currently installed.<br><br>**Action:** Contact maintenance support personnel. |
| `Cannot synchronize-SSC 1 accesses will mismatch.` | **Meaning:** There is a problem with the specified subsystem clock (SSC) that causes a mismatch if the CM is synchronized.<br><br>**Action:** Test the SSCs and clear any problems. |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot synchronize-synchronization dropped during match.` | **Meaning:** Either there are too many memory faults on the inactive CPU or a mismatch occurred during synchronization.<br><br>**Action:** Clear the problem and retry the command. |
| `Maintenance action started.`<br><br>or<br><br>`Maintenance action already started.` | **Meaning:** Either the CM process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.<br><br>**Action:** None |
| `Maintenance action submitted.` | **Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect.<br><br>**Action:** None |
| `No reply from request` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `Software inconsistency-action aborted.` | **Meaning:** A software fault has occurred.<br><br>**Action:** None |
| `Synchronization successful` | **Meaning:** The CPUs are in sync.<br><br>**Action:** None |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Synchronization successful. Handshake-override is not enabled.` | **Meaning:** The CM is synchronized. The handshake-override feature is in-service but was disabled during synchronization. If you entered the sync command to enable handshake-override, a memory configuration problem may have prevented the action.<br><br>**Action:** Contact maintenance support personnel. |
| `WARNING:`<br>`Memory Error Correction will be DISABLED in SYNC.`<br><br>`Single bit memory faults will cause mismatches but performance will be enhanced due to the disabling of Memory Error Checking and Correction.`<br>`Do you wish to continue?`<br>`Please confirm (“YES”, “Y”, “NO”, or “N”):` | **Meaning:** The system prompts for confirmation before disabling error correction.<br><br>**Action:** Enter yes or y to disable error correction. Enter no or n to abort the command. |
| `WARNING:`<br>`Memory Error Correction will be ENABLED in SYNC.`<br><br>`Memory mismatches will not occur due to correctable single bit memory faults but a degradation in service will result due to the enabling of memory error correction.`<br>`Do you wish to continue?`<br>`Please confirm (“YES”, “Y”, “NO”, or “N”):` | **Meaning:** The system prompts for confirmation before enabling error correction.<br><br>**Action:** Enter yes or y to enable error correction. Enter no or n to abort the command. |

**-continued-**

# sync (end)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| WARNING<br>The inactive cpu has a different release number.<br>Please confirm (”YES” or ”NO”). | **Meaning:** The NT release number on the active CPU firmware is different from the NT release number on the inactive CPU firmware. The firmware in the CPUs might not be compatible.<br><br>**Action:** Enter yes to continue. Enter no to abort the command. |
| WARNING:<br>The notest option should only be used under the supervision of the technical assistance support group in an emergency.<br>Please confirm (”YES” or ”NO”). | **Meaning:** This warning is a reminder of the consequences of entering the sync command with the notest parameter.<br><br>**Action:** Use the sync command with the notest parameter in emergency situations only. Consult maintenance support personnel. |
| WARNING:<br>The optimum option should only be used when doing memory extensions. It will configure mate memory such that a maximum number of spares of each memory module size is provided. However, under this configuration, a CM running in sync will have handshake-override disabled.<br>Please confirm (”YES” or ”NO”). | **Meaning:** This warning is a reminder of the consequences of using the sync command with the optimum parameter.<br><br>**Action:** Enter yes to continue. Enter no to abort the command. |

**-end-**

# tst

## Function

Use the tst command to test the subsystem clock (SSC) or the time-of-day (TOD) clock.

**tst command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **tst** | [ tod / ssc ] *tod_no* / *ssc_no* *link_no* ] [ *wait* / nowait ] [ *prompt* / noprompt ] |

| Parameters and variables | Description |
|---|---|
| *link_no* | This variable is the link number. Valid entries are 0-1. |
| noprompt | This parameter directs the system not to prompt for confirmation. The system automatically enters yes. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while it is testing the clock. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| ssc | This parameter directs the system to test the SSC. |
| *ssc_no* | This variable is the SSC number. Valid entries are 0-1. |
| tod | This parameter directs the system to test the TOD clock. |
| *mc_no* | This variable is the MC number for the TOD clock. Valid entries are 0-1. |
| *wait* | This default parameter directs the system not to allow use of the MAP for other functions while it is testing the clock. Do not enter this parameter. |

## Qualifications

The tst command is qualified by the following exceptions, restrictions and limitations:

- A complete SSC test includes in-service and out-of-service tests. Before the out-of-service test can be executed, the two links and two TOD clocks that will be affected by the test must be temporarily taken out-of-service. When the test is completed, these links and TODs will be restored.

# tst (continued)

- Because links and TODs will be lost, out-of-service testing will only be allowed when all four links and the two TODs driven by the SSC that is not placed under test are functioning properly.
- Where it is not possible to attempt an out-of-service test, only in-service tests will be run. This is referred to as an incomplete test.

## Example

The following table provides an example of the tst command.

**Example of the tst command**

| Example | Task, response, and explanation |
|---|---|
| **tst tod 1** ↵<br>*where*<br><br>1 is the number of the TOD clock | **Task:** Test TOD clock 1.<br><br>**Response:**<br>`Maintenance action submitted.`<br>`MC 1 TOD 0 test passed.`<br>`MC 1 TOD 1 test passed.`<br><br>**Explanation:** The clock passed the test. |

## Responses

The following table provides explanations of the responses to the tst command.

**Responses for the tst command**

| MAP output | Meaning and action |
|---|---|
| `A complete test will include activity switches.`<br>`Please confirm (“YES”, “Y”, “NO”,or “N”):Please confirm (“YES”, “Y”, “NO”,or “N”):` | **Meaning:** The system prompts for confirmation before engaging in tests that will involve a switch of activities.<br><br>**Action:** Enter yes or y if a switch of activities is acceptable. Enter no to not run the complete test. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `A complete test will include temporary loss of two links.`<br>`Please confirm (“YES”, “Y”, “NO”,or “N”):` | **Meaning:** The system prompts for confirmation because two links will be temporarily taken out-of-service.<br><br>**Action:** Enter yes or y if taking the links out-of-service is acceptable. Enter no or n to not run the complete test. |
| `An incomplete test will be performed.`<br>`Please confirm (“YES”, “Y”, “NO”,or “N”):` | **Meaning:** You have responded to an earlier prompt indicating that you do not want to run a complete test.<br><br>**Action:** Enter yes or y to perform an incomplete test. Enter no or n to abort the test. |
| `Complete test cannot be run because at least one link or TOD driven by the other SSC is not in-service. Running incomplete test.` | **Meaning:** You can only run a complete test when both links and TOD clocks driven by the SSC are in-service.<br><br>**Action:** None |
| `Complete test cannot be run due to faulty state of other SSC. Running incomplete test.` | **Meaning:** You can only run a complete test when the other SSC is in-service and has no faults.<br><br>**Action:** None |
| `Maintenance action submitted.` | **Meaning:** The system accepts the test command and starts the test.<br><br>**Action:** None |
| `MC 1 TOD 1 test aborted.` | **Meaning:** The system aborted the test.<br><br>**Action:** Try the tst command again. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `MC 1 TOD 1 test failed.` | **Meaning:** The specified clock failed the test.<br><br>**Action:** None |
| `MC 1 TOD 1 test passed.` | **Meaning:** The TOD clock specified passed the test.<br><br>**Action:** None |
| `SSC 1 complete test did not run due to missing links/TODs.` | **Meaning:** The complete out-of-service test was not run on the specified SSC because at least one link or TOD clock that is driven by the mate SSC is not in-service.<br><br>**Action:** None |
| `SSC 1 complete test failed.` | **Meaning:** The complete SSC test failed.<br><br>**Action:** None |
| `SSC 1 complete test failed. SSC hardware is faulty.` | **Meaning:** The SSC failed the complete out-of-service test because of faulty hardware.<br><br>**Action:** None |
| `SSC 1 complete test passed.` | **Meaning:** The complete out-of-service SSC test passed.<br><br>**Action:** None |
| `SSC 1 complete test passed.  SSC is in in-service trouble.` | **Meaning:** The SSC secondary reference link failed to synchronize to the primary link during a complete out-of-service SSC test.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `SSC 1 test aborted.` | **Meaning:** The system aborted the test.<br>**Action:** Try the tst command again. |
| `SSC 1 test failed. Faults detected by hardware.` | **Meaning:** The SSC failed the in-service test because the hardware detected a fault.<br>**Action:** None |
| `SSC 1 test passed. No faults detected by hardware.` | **Meaning:** The SSC passed the in-service test.<br>**Action:** None |
| `SSC 1 test passed. SSC is in in-service trouble.` | **Meaning:** The secondary reference link did not synchronize to the primary reference link.<br>**Action:** None |
| `TOD 1 test aborted.` | **Meaning:** The system aborted the test.<br>**Action:** Try the tst command again. |
| `TOD 1 test failed.` | **Meaning:** The specified clock failed the test.<br>**Action:** None |
| `TOD 1 test passed.` | **Meaning:** The TOD clock specified passed the test.<br>**Action:** None |

**-continued-**

# tst (end)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `TST TOD aborted` | **Meaning:** The system experienced a software error.<br><br>**Action:** Try the tst command again. Contact maintenance support personnel if the problem reoccurs. |

**-end-**

# Clock level commands

Use the Clock level of the MAP to control the message switch (MS) clocks and synchronize them to a clock source extracted from incoming digital trunks (slave office), an external direct clock source (master-external), or internal clock (master-internal).

## Accessing the Clock level

To access the Clock level, enter the following from the CI level:

**mapci;mtc;ms;clock** ↵

## Clock commands

The commands available at the Clock MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**Clock commands**

| Command | Page |
|---|---|
| adjust | C-445 |
| card | C-451 |
| chain | C-455 |
| dpsync | C-457 |
| loadcd | C-463 |
| querycd | C-471 |
| queryms | C-479 |
| quit | C-489 |
| shelf | C-493 |
| swcarr | C-495 |
| swmast | C-501 |

-continued-

| **Clock commands** (continued) | |
|---|---|
| **Command** | **Page** |
| sync | C-509 |
| tst | C-513 |
| **-end-** | |

## Clock menu

The following figures show the Clock menu and status display. The following figure shows the Clock display for a master external remote sync configuration. The insert with hidden commands is not a visible part of the menu display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   EIO
         .     .     .     .     .    .     .     .     .     .


CLOCK          Message Switch  Clock  Shelf 0  Inter-MS link 0 1
 0 Quit      MS 0      .       Master       .                . .
 2           MS 1      .       Slave        .                . .
 3
 4 SwCarr    Shelf 0                1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2
 5           Card 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6
 6 Tst_      Chain          |         |            < >
 7           MS 0 . . . . . . - - - - . - - - - . . . . . . . . . . .
 8           MS 1 . . . . . . - - - - . - - - - . . . . . . . . . . .
 9
10 Sync_     Card 02 Alm Int  %Adj. Src Rem  %Adj Src
11 DpSync_   MS 0  .  .  Syn  +00.7 Ex0 Syn +03.1 Ex0
12 SwMast    MS 1  .  .  Syn  +01.3 In0 Syn -02.7 In0
13 Card_     Links Slipping:       4 out of 10276
14 QueryMS_
15
16                          Hidden commands
17
18 Adjust_                  chain              loadms
                            querycd            shelf
```

The following figure shows the Clock display for a slave remote sync configuration. The insert with hidden commands is not a visible part of the menu display.

```
         CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   EIO
          .     .     .     .     .     .     .     .     .     .


CLOCK          Message Switch  Clock  Shelf 0  Inter-MS link 0 1
 0 Quit       MS 0      .       Master       .                . .
 2            MS 1      .       Slave        .                . .
 3
 4 SwCarr     Shelf 0                1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2
 5            Card 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6
 6 Tst_       Chain          |         |            < >
 7            MS 0 . . . . . . - - - - . - - - - . . . . . . . . . . .
 8            MS 1 . . . . . . - - - - . - - - - . . . . . . . . . . .
 9
10 Sync_      Card 02 Alm Int %Adj. Src Rem  %Adj Src|Car Stat Sp PM   CCT
11 DpSync_    MS 0  .  .  Syn +00.7 Ex0 Syn +03.1 Ex0|Lk0 Lck  0 DTC 002 02
12 SwMast     MS 1  .  .  Syn +01.3 In0 Syn -02.7 In0|Lk1 Smp  0 DTC 002 02
13 Card_      Links Slipping:       4 out of 10276
14 QueryMS_
15
16
17
18 Adjust_
```

**Hidden commands**

```
chain              loadms
querycd            shelf
```

The following figure shows the Clock display for a master external/master internal configuration. The insert with hidden commands is not a visible part of the menu display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .     .     .     .     .     .


CLOCK           Message Switch  Clock  Shelf 0  Inter-MS link 0 1
 0 Quit       MS 0      .       Master       .                . .
 2            MS 1      .       Slave        .                . .
 3
 4 SwCarr     Shelf 0                1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2
 5            Card 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6
 6 Tst_       Chain          |         |             < >
 7            MS 0 . . . . . . - - - - . - - - - . . . . . . . . . . .
 8            MS 1 . . . . . . - - - - . - - - - . . . . . . . . . . .
 9
10 Sync_      Card 02 Alm Int %Adj. Src
11 DpSync_    MS 0  .  .  Syn +00.7 Ex0
12 SwMast     MS 1  .  .  Syn +01.3 Ms0
13 Card_      Links Slipping:       4 out of 10276
14 QueryMS_
15
16
17
18 Adjust_
```

**Hidden commands**

```
chain               loadms
querycd             shelf
```

The following figure shows the Clock display for a slave configuration. The insert with hidden commands is not a visible part of the menu display.

```
         CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   EIO
          .     .     .     .     .     .     .     .     .     .

CLOCK          Message Switch  Clock  Shelf 0  Inter-MS link 0 1
 0 Quit      MS 0      .       Master       .                . .
 2           MS 1      .       Slave        .                . .
 3
 4 SwCarr    Shelf 0                1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2
 5           Card 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6
 6 Tst_      Chain          |         |            < >
 7           MS 0 . . . . . . - - - - . - - - - . . . . . . . . . . .
 8           MS 1 . . . . . . . - - - - . - - - - . . . . . . . . . . .
 9
10 Sync_     Card 02 Alm Int %Adj.  Src |Car Stat Sp PM   CCT
11 DpSync_   MS 0  .  .  Syn +00.7 Ex0 | Lk0 Lck  0 DTC 002 02
12 SwMast    MS 1  .  .  Syn +01.3 In0 | Lk1 Smp  0 DTC 002 02
13 Card_     Links Slipping:       4 out of 10276
14 QueryMS_
15
16
17
18 Adjust_
```

**Hidden commands**

```
chain              loadms
querycd            shelf
```

## Clock status codes

The following table describes the status codes for the Clock status display.

| **Status codes** | **Clock menu status display** (continued) | |
|---|---|---|
| **Code** | **Meaning** | **Description** |
| Alm | | |
| . | OK | There are no clock alarms |
| Al0 | alarm 0 | A customer-defined alarm state has been reached. |
| Al1 | alarm 1 | A customer-defined alarm state has been reached. |
| Bt | beat | A significant beat period exists between the two external reference signals. |
| Cmu | CMU fail | The clock card card maintenance unit (CMU) has failed. |
| Ext | external fail | The external reference is faulty. |
| Htr | heater fail | The clock heater has failed. |
| Mat | mate fail | The clock signals from the mate MS have failed. |
| MM | mismatch | A clock configuration mismatch between MS hardware and computing module (CM) datafill has occurred. |
| Msp | fault | The MS processor has detected a fault while handling a clock card request. |
| Pwr | power fail | The clock card has a power failure. |
| Sub | subsystem fail | The subsystem clock signals have failed. |
| Sys | system fail | The system clock signals have failed. |
| Tun | tuning | The tuning detector is reaching the end of the +/– 70% tuning range. |
| Int | internal clock | |
| Fr | free | The clock is in the free-running state. |
| LKg | linking | The clock is attempting to sync with its reference. This may take up to two hours. |
| Syn | in-sync | The clock is running in sync with its reference. |
| Ext | external clock | |
| Fr | free | The clock is in the free-running state. |
| LKg | linking | The clock is attempting to sync with its reference. This may take up to two hours. |
| Syn | in-sync | The clock is running in sync with its reference. |
| Adj. | | |
| –100.0 to +99.9 | | The number indicates the percent deviation from the normal center frequency. A SYNC102 log is generated if the value exceeds +/– 70%. |

**-continued-**

**Status codes Clock menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| Src | | |
| Ex0 | | The clock's timing source is the external reference for MS 0. |
| Ex1 | | The clock's timing source is the external reference for MS 1. |
| In0 | | The clock's timing source is the internal clock on MS 0. |
| In1 | | The clock's timing source is the internal clock on MS 1. |
| Lk0 | | The clock's timing source is the carrier timing link 0. |
| Lk1 | | The clock's timing source is the carrier timing link 1. |
| Ms0 | | The clock's timing source is MS 0. |
| Ms1 | | The clock's timing source is MS 1. |
| Nil | | The clock is free running and is not referencing any timing source. |
| Rm0 | | The clock's timing source is the remote clock attached to MS 0. |
| Rm1 | | The clock's timing source is the remote clock attached to MS 1. |
| ***Note:*** If the clock is currently syncing or linking, the Src field specifies the current timing source reference. If the clock state is free running, the Src field specifies the timing source that would be in effect if the sync command were entered. | | |
| Car | | |
| Lk0 | link 0 | The information following this header is associated with carrier timing link 0. |
| Lk0 | link 1 | The information following this header is associated with carrier timing link 1. |
| Stat | | |
| - | unequipped | The carrier timing link is unequipped. |
| Idl | idle | The carrier timing link is in service but it not not sending samples. |
| Lck | sync | The carrier timing link is receiving phase samples and is synchronizing to them. |
| M | manually busy | The carrier timing link is manually busy. |
| O | offline | The carrier timing link is offline. |
| S | system busy | The carrier timing link is system busy. |
| Smp | no-sync | The carrier timing link is receiving phase samples but is not synchronizing to them. |
| Sp | | |
| 0-999 | | The number indicates the number of slips detected by the peripheral module (PM) since the last request to send phase samples. |

**-continued-**

| **Status codes** | **Clock menu status display** (continued) | |
|---|---|---|
| **Code** | **Meaning** | **Description** |
| PM | | |
| <PM type> | | The PM type indicates which PM is being used to supply the timing links from the master office. <PM type> is replaced by the name of one of the PMs at the master office. |
| CCT | | |
| | 0-99 | The number indicates the circuit number on the PM that is the carrier timing link. |
| | | **-end-** |

# adjust

## Function

Use the adjust command to adjust the frequency of the specified master clock upwards or downwards.

**adjust command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **adjust** | *ms_no* *vlk_steps* [ *prompt* / noprompt ] remote |

| Parameters and variables | Description |
|---|---|
| *clk_steps* | This variable is the amount of change to be made to the clock's frequency. A step of 1 is equivalent to 0.1% increase in the clock's tuneable range. The range of valid entries is –999 to 999. |
| *ms_no* | This variable is the number of the MS for the clock that is to be adjusted. Valid entries are 0-1. |
| noprompt | This parameter directs the system not to display yes/no prompts. The system automatically enters yes. |
| *prompt* | This default parameter directs the system to prompt the user for confirmation. Do not enter this parameter. |
| remote | This parameter designates the remote clock to be ajdusted. This parameter is only available for remote sync configurations. |

## Qualifications

None

# adjust (continued)

## Example

The following table provides an example of the adjust command.

**Example of the adjust command**

| Example | Task, response, and explanation |
|---|---|
| **adjust 0 2** ↵<br>*where*<br><br>0 is the number of the MS on which the clock is to be adjusted<br>2 is the increase in the clock's tuneable range | **Task:** Adjust the clock on MS 0 by 0.2%.<br><br>**Response:**<br><br>`Request to Adjust Freq of  Clock 0 by  00.2 %: submitted.`<br>`Request to Adjust Freq of  Clock 0 by  00.2 %: passed.`<br><br>**Explanation:** The clock is adjusted. |

## Responses

The following table provides explanations of the responses to the adjust command.

**Responses for the adjust command**

| MAP output | Meaning and action |
|---|---|
| `Failed`<br>`Clock under test` | **Meaning:** The clock is undergoing system-initiated or user-initiated tests and cannot be adjusted.<br><br>**Action:** None |

**-continued-**

# adjust (continued)

**Responses for the adjust command** (continued)

| MAP output | Meaning and action |
|---|---|
| Failed<br>Master clock is in sync-may cause carrier slips or drop sync.<br>Please confirm (’yes’ or ’no’): | **Meaning:** If you attempt to adjust the master clock while it is in sync, you may cause it to drop sync with the reference frequency. This could result in slips. If you attempt to adjust the slave clock while it is in sync, you may cause it to drop sync with the master clock. This could cause the MS to fail.<br><br>**Action:** Enter yes to continue to adjust. Enter no to abort the command. |
| Failed<br>Reached lower limit | **Meaning:** The lower limit of adjustment has been reached.<br><br>**Action:** None |
| Failed<br>Reached upper-limit | **Meaning:** The upper limit of adjustment has been reached.<br><br>**Action:** None |
| Invalid<br>Command is valid for master clock only. | **Meaning:** You can only adjust the master clock frequency manually. The clock card automatically adjusts the slave clock frequency.<br><br>**Action:** None |
| Invalid<br>Master clock is synchronizing-please drop sync. | **Meaning:** You cannot adjust the master clock while it is synchronizing.<br><br>**Action:** None |

**-continued-**

# adjust (continued)

**Responses for the adjust command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Adjust Freq of  Clock 0 by  00.2 %: submitted.`<br>`Request to Adjust Freq of  Clock 0 by  00.2 %: aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to Adjust Freq of  Clock 0 by  00.2 %: submitted.`<br>`Request to Adjust Freq of  Clock 0 by  00.2 %: passed.` | **Meaning:** The system adjusts the requested clock.<br><br>**Action:** None |
| `Request to Adjust Freq of  Clock 0 by  00.2 %: submitted.`<br>`Request to Adjust Freq of  Clock 0 by  00.2 %: terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested clock cannot be adjusted.<br><br>**Action:** None |
| `Request to Adjust Freq of  Clock 0 by  00.2 %: submitted.`<br>`Request to Adjust Freq of  Clock 0 by  00.2 %: terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to Adjust Freq of  Clock 0 by  00.2 %: submitted.`<br>`Request to Adjust Freq of  Clock 0 by  00.2 %: terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot adjust the clock while other maintenance activities are in progress.<br><br>**Action:** Retry the adjust command once other activities have finished. |

**-continued-**

# adjust (continued)

**Responses for the adjust command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to Adjust Freq of Clock 0 by 00.2 %: submitted<br>Request to Adjust Freq of Clock 0 by 00.2 %: terminated;<br>S/W inhibited.<br>Local Maintenance Not Accessible<br><br>or<br><br>Request to Adjust Freq of Clock 0 by 00.2 %: submitted<br>Request to Adjust Freq of Clock 0 by 00.2 %: terminated;<br>no resources available.<br>Required Resources Are Unavailable<br><br>or<br><br>Request to Adjust Freq of Clock 0 by 00.2 %: submitted<br>Request to Adjust Freq of Clock 0 by 00.2 %: failed;<br>Request not supported | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| Request to Adjust Freq of Clock 0 by 00.2 %: submitted.<br>Request to Adjust Freq of Clock 0 by 00.2 %: terminated;<br>S/W inhibited.<br>Not Able To Run | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# adjust (end)

**Responses for the adjust command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Adjust Freq of  Clock 0 by  00.2 %: submitted.`<br>`Request to Adjust Freq of  Clock 0 by  00.2 %: failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to Adjust Freq of  Clock 0 by  00.2 %: submitted.`<br>`Request to Adjust Freq of  Clock 0 by  00.2 %: failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to Adjust Freq of  Clock 0 by  00.2 %: submitted.`<br>`Request to Adjust Freq of  Clock 0 by  00.2 %: failed;`<br>`No Problem`<br><br>or<br><br>`Request to Adjust Freq of  Clock 0 by  00.2 %: submitted.`<br>`Request to Adjust Freq of  Clock 0 by  00.2 %: failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `Request to Adjust Frequency of  Clock 0 by  00.2 %: Invalid.`<br>`Command is valid for Master Clock only.` | **Meaning:** Only the master clock can be adjusted.<br><br>**Action:** Use the swmast command to switch clock mastership and retry the adjust command. |

**-end-**

# card

## Function

Use the card command to access the Card level for a specified card.

**card command parameters and variables**

| Command | Parameters and variables | | | |
|---|---|---|---|---|
| **card** | *card_no* | *ms* | port | *port_no* |

| Parameters and variables | Description |
|---|---|
| *card_no* | This variable indicates the card position of the front and back cards that are to be displayed. Valid entries are 1-26. Card number 1 corresponds to slot number 7, and card number 26 corresponds to slot number 32. |
| *ms* | This variable identifies the MS that contains the card. Valid entries are 0-1. |
| port | This parameter indicates that a specific port is to be displayed. |
| *port_no* | This variable identifies the port to be displayed. Valid entries are 0-127. |

## Qualifications

The card command is qualified by the following exceptions, restrictions, and limitations:

- The port parameter is only available in offices that have 128-port interface card software.
- When you use the port parameter with the card command, the system displays a 16-port subset that includes the specified port.

# card (continued)

## Example

The following table provides an example of the card command.

**Example of the card command**

| Example | Task, response, and explanation |
|---|---|
| **card 2** ↵<br>*where*<br><br>2 is the card to be displayed | **Task:** Display the Card menu level for card 2.<br><br>**Response:** The information in the following display changes to the information for card 2:<br><br>`Card 02 Protocol port  0_____3`<br>`MS 0  .   DS30    4    . . . .`<br>`MS 1  .   DS30    4    . . . .`<br><br>**Explanation:** The requested Card level is displayed. |

## Responses

The following table provides explanations of the responses to the card command.

**Responses for the card command**

| MAP output | Meaning and action |
|---|---|
| `Allocation of MS card level directory failed.` | **Meaning:** No software resources were available to enter the Card level.<br><br>**Action:** Use the quit all command string to quit from the MAPCI and all lower levels, then return to the MS level and enter the card command. |

**-continued-**

# card (end)

**Responses for the card command** (continued)

| MAP output | Meaning and action |
|---|---|
| The information in the following display changes to the information for the requested card:<br><br>`Card 02 Protocol port  0_____3`<br>`MS 0  .   DS30    4    . . . .`<br>`MS 1  .   DS30    4    . . . .` | **Meaning:** The menu changes to the menu for the requested card.<br><br>**Action:** None |
| **-end-** | |

# chain

## Function

Use the chain command to access the Chain level for a specified chain.

**chain command parameters and variables**

| Command | Parameters and variables | |
|---|---|---|
| **chain** | *ms* | *card* |

| Parameters and variables | Description |
|---|---|
| *ms* | This variable is the MS number. Valid entries are 0-1. |
| *card* | This variable is any card number in the chain to be displayed. Valid entries are 6-23. |

## Qualifications

The chain command is qualified by the following exceptions, limitations, and restrictions:

- The *ms* variable is useful whenever chain configuration mismatches exist.
- The system always designates a chain by the first card number in the chain. You can specify a chain by indicating any card number in the chain.

# chain (end)

## Example

The following table provides an example of the chain command.

**Example of the chain command**

| Example | Task, response, and explanation |
|---|---|
| **chain 0 9** ↵<br>*where*<br><br>0 is the MS number<br>9 is a card in the chain to be taken offline | **Task:** Access the Chain level of which card 9 on MS 0 is a part.<br><br>**Response:** The menu changes to the Chain level and the display changes to show the following headers:<br><br>`Chain 9  Range  Link`<br>`MS 0  .  9-11     P`<br>`MS 1  .  9-11     P`<br><br>**Explanation:** The requested Chain level is displayed. |

## Response

The following table provides an explanation of the response to the chain command.

**Responses for the chain command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the Chain level and the display changes to show the following headers:<br><br>`Chain 9  Range  Link`<br>`MS 0  .  9-11     P`<br>`MS 1  .  9-11     P` | **Meaning:** The requested Chain level is displayed.<br><br>**Action:** None |

# dpsync

## Function

Use the dpsync command to cause the master clock to drop sync with the external reference and enter the free-running state.

**dpsync command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **dpsync** | There are no parameters or variables. |

## Qualifications

The dpsync command is qualified by the following limitation: for the master external remote sync configuration, the DMS system dpsync command will have the following results:

- The remotes drop sync from the external references.
- The master internal clock syncs to the free-running master remote clock.
- The slave internal clock syncs to the master internal clock.
- The slave remote clock reverse syncs to the slave internal clock.

## Example

The following table provides an example of the dpsync command.

**Example of the dpsync command**

| Example | Task, response, and explanation |
|---|---|
| **dpsync** ↵ | **Task:** Drop clock syncronization on the master clock.<br><br>**Response:**<br><br>`Request to Drop Synchronization of Clock 0: submitted.`<br>`Request to Drop Synchronization of Clock 0: passed.`<br><br>**Explanation:** Synchronization was dropped successfully. |

# dpsync (continued)

## Responses

The following table provides explanations of the responses to the dpsync command.

**Responses for the dpsync command**

| MAP output | Meaning and action |
|---|---|
| `Request to Drop Synchronization on Clock 0: Invalid Already out of sync` | **Meaning:** The master clock is already out of service.<br><br>**Action:** None |
| `Request to Drop Synchronization on Clock 0: Invalid Clock must be Free running in Master-Internal offices.` | **Meaning:** Master internal clocks are free running and are not synchronized.<br><br>**Action:** None |
| `Request to Drop Synchronization on Clock 0: Invalid Command is valid for master clock only` | **Meaning:** You can only take the master clock out of sync. The slave clock must remain in sync to preserve office integrity.<br><br>**Action:** Use the swmast command to switch clock mastership and retry the dpsync command. |
| `Request to Drop Synchronization on Clock 0: submitted. Request to Drop Synchronization on Clock 0: aborted; Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to Drop Synchronization on Clock 0: submitted. Request to Drop Synchronization on Clock 0: passed.` | **Meaning:** Sync is dropped for the requested clock.<br><br>**Action:** None |

**-continued-**

# dpsync (continued)

**Responses for the dpsync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Drop Synchronization on Clock 0: submitted.`<br>`Request to Drop Synchronization on Clock 0: terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** Sync cannot be dropped for the requested clock.<br><br>**Action:** None |
| `Request to Drop Synchronization on Clock 0: submitted.`<br>`Request to Drop Synchronization on Clock 0: terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to Drop Synchronization on Clock 0: submitted.`<br>`Request to Drop Synchronization on Clock 0: terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot drop sync of the clock while other maintenance activities are in progress.<br><br>**Action:** Retry the dpsync command once other activities have finished. |

**-continued-**

# dpsync (continued)

**Responses for the dpsync command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to Drop Synchronization on Clock 0: submitted<br>Request to Drop Synchronization on Clock 0: terminated;<br>S/W inhibited.<br>Local Maintenance Not Accessible<br><br>or<br><br>Request to Drop Synchronization on Clock 0: submitted<br>Request to Drop Synchronization on Clock 0: terminated;<br>no resources available.<br>Required Resources Are Unavailable<br><br>or<br><br>Request to Drop Synchronization on Clock 0: submitted<br>Request to Drop Synchronization on Clock 0: failed;<br>Request not supported | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| Request to Drop Synchronization on Clock 0: submitted.<br>Request to Drop Synchronization on Clock 0: terminated;<br>S/W inhibited.<br>Not Able To Run | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# dpsync (end)

**Responses for the dpsync command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to Drop Synchronization on Clock 0: submitted.<br>Request to Drop Synchronization on Clock 0: failed;<br>ICRC Failure<br><br>or<br><br>Request to Drop Synchronization on Clock 0: submitted.<br>Request to Drop Synchronization on Clock 0: failed;<br>Check for Swerrs<br><br>or<br><br>Request to Drop Synchronization on Clock 0: submitted.<br>Request to Drop Synchronization on Clock 0: failed;<br>No Problem<br><br>or<br><br>Request to Drop Synchronization on Clock 0: submitted.<br>Request to Drop Synchronization on Clock 0: failed;<br>Fail | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |

**-end-**

# loadcd

## Function

Use the loadcd command to download firmware to a specified card. The source can be either a valid load file or the load stored in another card. Supply both the device name and the file name for the nondefault load files.

**loadcd command parameters and variables**

| Command | Parameters and variables | | | | | |
|---|---|---|---|---|---|---|
| **loadcd** | *ms_no* | *card_no* | [ *default*<br>device<br>file<br>fromcd ] | <br>*dev_name*<br>*file_name*<br>*cd_no* | [ *wait*<br>nowait ] | [ *prompt*<br>noprompt ] |

| Parameters and variables | Description |
|---|---|
| *card_no* | This variable specifies the card to be downloaded. Valid entries are 1-26. |
| *cd_no* | This variable specifies the card which will provide the firmware load. Valid entries are 1-26. |
| *default* | This default parameter specifies that the card is to be reloaded with the default firmware load. Do not enter this parameter. |
| device | This parameter specifies that a device will be named to indicate where the file resides. |
| *devname* | This variable specifies the name of the device. |
| file | This parameter specifies that a firmware load file is to be specified. |
| *filename* | This variable specifies the name of the firmware load file. |
| fromcd | This parameter indicates that a card will be specified from which the firmware load will be provided. |
| *ms_no* | This variable specifies the MS that contains the card to be downloaded. Valid entries are 0-1. |
| noprompt | This parameter directs the system not to display yes/no prompts. The system automatically enters yes. |
| nowait | This parameter allows use of the MAP for other functions while the system loads the firmware. |

**-continued-**

# loadcd (continued)

**loadcd command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *prompt* | This default parameter directs the system to prompt the user for confirmation. Do not enter this parameter. |
| *wait* | This default parameter does not allow the use of the MAP for other functions while the system loads the firmware. Do not enter this parameter. |

**-end-**

## Qualifications

None

## Examples

The following table provides an example of the loadcd command.

**Examples of the loadcd command**

**Example** **Task, response, and explanation**

**loadcd 0 10** ↵
*where*

0 specifies the MS
10 specifies the card to be downloaded

**Task:** Download the default firmware to card 10, MS 0.

**Response:**

```
MS S/W:  34CB   CARD F/W:  34CB
Request to load MS: 0 shelf: 0 card: 10 submitted.
Request to load MS: 0 shelf: 0 card: 10 passed.
```

**Explanation:** The firmware is downloaded.

## Responses

The following table provides explanations of the responses to the loadcd command.

# loadcd (continued)

**Responses for the loadcd command**

| MAP output | Meaning and action |
|---|---|
| `Boot file has no label` | **Meaning:** The header record of the load file has no label data<br>**Action:** None |
| `Boot file not for processor` | **Meaning:** The load file is not the right one for the card.<br>**Action:** None |
| `Cannot read boot file header` | **Meaning:** The system cannot read the load file.<br>**Action:** None |
| `Corrupt boot file header` | **Meaning:** The header record of the load file is corrupted.<br>**Action:** None |
| `EEPROM page write failed, downloading aborted.` | **Meaning:** a write to an EEPROM failed and the process for downloading the card firmware is aborted.<br>**Action:** None |
| `Extracted BCS number invalid` | **Meaning:** The BCS number in the header record of the load file is invalid.<br>**Action:** None |
| `Filename should not exceed 8 characters.` | **Meaning:** The file name has exceeded the maximum size of eight characters.<br>**Action:** Rename the file and retry the command. |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Illegal format for boot file.` | **Meaning:** The load file has a bad B-record format.<br><br>**Action:** None |
| `Invalid MS number entered (must be between 0-1)` | **Meaning:** The MS number entered is invalid.<br><br>**Action:** None |
| `LoadCd-Card must be manually busied before loading.` | **Meaning:** The card cannot be busied unless it is manually busy.<br><br>**Action:** Use the bsy command to busy the card, and retry the loadcd command. |
| `LoadCD-Loading is in progress.` | **Meaning:** Another card is being loaded on the same MS. Only one card can be loaded at one time on the same MS.<br><br>**Action:** None |
| `LoadCd-MS must be in service to be loaded.` | **Meaning:** The card specified from which to download firmware resides on an MS which is in an out-of-service state.<br><br>**Action:** Return the MS to service using the rts command on the MS level and retry the command. |
| `MS S/W:  34BC  CARD F/W:  34BC` | **Meaning:** The firmware is being downloaded. The BCS number is the first two digits of each response. Following the BCS number, the issue of the message switch software and the issue of the card firmware is displayed.<br><br>**Action:** None |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Must specify both file and device.8 6` | **Meaning:** Either the device name or the file name was not specified.<br><br>**Action:** Retry the command specifying both the file name and the device name. |
| `PEC <code> is not f/w downloadable.` | **Meaning:** An invalid card was selected from which to download firmware. <Code> is replaced by the product engineering code (PEC).<br><br>**Action:** Retry the command specifying a valid card. |
| `Request invalid, maintenance already in progress.` | **Meaning:** Another maintenance process is running on the card.<br><br>**Action:** Retry the command after the other process is complete. |
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity has been aborted by user request.<br><br>**Action:** None |
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 passed.` | **Meaning:** The requested firmware is downloaded to the card.<br><br>**Action:** None |
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested card cannot be loaded.<br><br>**Action:** None |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot load the card while other maintenance activities are in progress.<br><br>**Action:** Retry the loadcd command once other activities have finished. |
| `Request to load MS: 0 shelf: 0 card: 5 submitted`<br>`Request to load MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`no resources available.`<br>`Required Resources Are Unavailable`<br><br>or<br><br>`Request to load MS: 0 shelf: 0 card: 5 submitted`<br>`Request to load MS: 0 shelf: 0 card: 5 failed;`<br>`Request not supported` | **Meaning:** This command is not accessible.<br><br>**Action:** None |

**-continued-**

# loadcd (continued)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command has been inhibited.<br><br>**Action:** None |
| `Request to load MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to load MS: 0 shelf: 0 card: 5 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Check for Swerrs`<br><br>or<br><br>`No Problem`<br><br>or<br><br>`Fail` | **Meaning:** Software errors or system failure has caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `System cards are not f/w downloadable.` | **Meaning:** System cards cannot be downloaded. Only selected interface cards have downloadable software.<br><br>**Action:** Retry the command specifying a valid card. |
| `The source and target cards are the same.` | **Meaning:** The firmware from the card cannot be copied onto itself.<br><br>**Action:** Check the parameters, making sure that the source and destination cards are not the same card and that they can both be downloaded, and retry the command. |

**-continued-**

# loadcd (end)

**Responses for the loadcd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `The node must be manually busy for copying.` | **Meaning:** The MS must be in the manually-busy state before firmware can be copied from one card to another.<br><br>**Action:** Busy the MS with the bsy command on the MS level, then retry the loadcd command. |
| `*** WARNING, Incompatible loads.`<br>`Please confirm (yes/no):` | **Meaning:** The card firmware in the load file dose not match the corresponding MS software load and if loaded could cause system problems.<br><br>**Action:** Enter yes to proceed. Enter no to abort the command. |
| `You must specify both filename and devicename.` | **Meaning:** You specified either the file or the device. Both must be specified.<br><br>**Action:** Reissue the command specifying both file and device name. |

**-end-**

# querycd

## Function

Use the querycd command to display information about the contents of the CONTEXT and MEDIA sections of the electrically erasable programmable read-only memory (EEPROM) of the card selected. It also compares the loads stored in two separate cards.

**querycd command parameters and variables**

| Command | Parameters and variables | | | |
|---|---|---|---|---|
| **querycd** | *ms_no* | *cd_no* | with | *cd_no* |

| Parameters and variables | Description |
|---|---|
| *cd_no* | This variable is the card number. The range of values is 1-26. |
| *ms_no* | This variable indicates the message switch (MS) to be queried. Valid entries are 0-1. |
| with | This parameter specifies that two cards are to have their firmware loads compared. Follow this parameter with the *cd_no* variable for the card to be compared with the first specified card. |

## Qualifications

None

# querycd (continued)

## Examples

The following table provides an example of the querycd command.

**Examples of the querycd command**

| Example | Task, response, and explanation |
|---|---|
| **querycd 0 6** ↵<br>*where*<br><br>0 is the MS number<br>6 is the card number | **Task:** Query card 6 on MS 0.<br><br>**Response:**<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 6 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 6 passed.`<br><br>`CONTEXT Section: MS 0: 0 : 6`<br>`Loadname : MPF35CB`<br>`Product : MPF`<br>`Version : 35`<br>`Issue : CB`<br>`Increment : 00`<br>`CRC : 7692`<br><br>`MEDIA Section: MS 0: 0 : 6`<br>`Checksum : CFD`<br>`Flag1 : AAAA`<br>`Flag2 : 5555`<br>`Prog time : 1992/06/28/1:00:58:567 SUN.`<br>`Prog count : 66`<br>`Fail count : 0`<br>`PECode : NT9X17DA`<br><br>**Explanation:** The requested information is displayed. |

## querycd (continued)

## Responses

The following table provides explanations of the responses to the querycd command.

**Responses for the querycd command**

| MAP output | Meaning and action |
|---|---|
| `CM-MS link down.` | **Meaning:** There is no communication between the computing module (CM) and the MS.<br><br>**Action:** Restore the communication link between the CM and the MS, or bring the MS back in service. |
| `Invalid MS number entered (must be between 0-<n>).` | **Meaning:** The MS number entered is invalid. The number of equipped message switches replaces <n>.<br><br>**Action:** None |
| `PEC NT9X53AA is not f/w downloadable.` | **Meaning:** An invalid card was selected from which to query firmware.<br><br>**Action:** Retry the command specifying a valid card. |
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |

**-continued-**

# querycd (continued)

**Responses for the querycd command** (continued)

| MAP output | Meaning and action |
|---|---|

```
Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.
Request to QueryCD MS: 0 shelf: 0 card: 5 passed.

CONTEXT Section: MS 0: 0 : 5
Loadname   :  MPF35CB
Product    :  MPF
Version    :  35
Issue      :  CB
Increment  :  00
CRC        :  7692

MEDIA Section: MS 0: 0 : 5
Checksum   :  CFD
Flag1      :  AAAA
Flag2      :  5555
Progtime   : 1992/06/28/1:00:58:567 SUN.
Prog count  :  66
Fail count  :  0
PECode      :  NT9X17DA
```

**Meaning:** The requested card information is displayed.

**Action:** None

```
Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.
Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;
S/W error invalid request.
Invalid Maintenance Request
```

**Meaning:** The requested card cannot be queried.

**Action:** None

```
Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.
Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;
S/W error (wrong parameter).
Invalid Resource Identifier
```

**Meaning:** You entered an invalid parameter.

**Action:** Retry the command using valid parameters.

**-continued-**

# querycd (continued)

**Responses for the querycd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot query the MS while other maintenance activities are in progress.<br><br>**Action:** Retry the querycd command after other activities have finished. |
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`no resources available.`<br>`Required Resources Are Unavailable`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`Request not supported` | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-continued-**

# querycd (continued)

**Responses for the querycd command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`No Problem`<br><br>or<br><br>`Request to QueryCD MS: 0 shelf: 0 card: 5 submitted.`<br>`Request to QueryCD MS: 0 shelf: 0 card: 5 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `System cards are not f/w downloadable.` | **Meaning:** System cards cannot be queried. Only selected interface cards have downloadable firmware.<br><br>**Action:** Retry the command specifying a valid card. |
| `The firmware cannot be compared to itself.` | **Meaning:** An attempt was made to copy firmware from an interface card onto itself.<br><br>**Action:** Reissue the command, making sure the destination and source cards are not the same card. |

**-continued-**

# querycd (end)

**Responses for the querycd command** (continued)

| MAP output | Meaning and action |
|---|---|
| ***Warning, PEC codes are not the same.<br>Please confirm (″YES″ or ″NO″) | **Meaning:** The PEC of the source and destination cards do not match.<br><br>**Action:** Enter yes to confirm the command. Enter no to abort the command. |

**-end-**

# queryms

## Function

Use the queryms command to query and display information about the cards and chains in the active MS. The information may include the MS load name, the number of equipped card slots, the last time a routine exercise (REx) test was run, identification programable read-only memory (ID PROM) information, a list of card locations, and card fault descriptions.

**queryms command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **queryms** | [*all* / ms *ms_no*] [*all* / shelf *shelf_no*] [card *cd_no* (1) / (2) / chain *cd_no* (3)] |
| **queryms** (continued) | (1) [*noidprom* / idprom] (2) (3) [*noflt* / flt] |

| Parameters and variables | Description |
|---|---|
| *all* | This default parameter displays information for both message switches and all shelves. Do not enter this parameter. |
| card | This parameter displays information for a specified card. |
| *cd_no* | This variable identifies the card for which information is to be displayed, or any card number in the chain that is to be displayed. Valid entries are 1-26 for cards, 6-23 for chains. |
| chain | This parameter displays information for a specified chain. |
| flt | This parameter displays fault conditions. |
| idprom | This parameter displays the product engineering code (PEC) and vintage of the specified card. |
| ms | This parameter displays information for one MS only. |
| *ms_no* | This variable indicates the MS for which information is to be displayed. Valid entries are 0-1. |
| *noflt* | This default parameter directs the system to not display fault conditions. Do not enter this parameter. |

**-continued-**

# queryms (continued)

**queryms command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *noidprom* | This default parameter directs the system to not display the PEC and vintage of the card. Do not enter this parameter. |
| shelf | This parameter displays information only for the shelf specified. |
| *shelf_no* | This variable is the shelf number for which information is to be displayed. Valid entries are 0-3. |

**-end-**

## Qualifications

The queryms command is qualified by the following exceptions, restrictions and limitations:

- Inquire and display information about the thirty-two bit bus (TBus) to frame transport bus (FBus) interface (TFI) cards, FBuses, and taps in one single command when the entered card number is of a TFI type.
- The display includes the faults found on all cards and the card list of all the faulty system cards. The fault descriptions for the cards are sorted and displayed in four groups:
  - hard faults found on system cards
  - hard faults found on interface cards
  - soft faults found on system cards
  - soft faults found on interface cards

## Examples

The following table provides examples of the queryms command.

**Examples of the queryms command**

| Example | Task, response, and explanation |
|---|---|
| **queryms ms 1 shelf 0 card 6** ↵<br>*where*<br><br>1 identifies the MS to be queried<br>0 identifies the shelf to be queried<br>6 identifies the card to be queried | **Task:** Display the information for MS 1, shelf 0, card 6.<br><br>**Response:**<br><br>`Load name for MS 1 is MSG35CB .`<br>`There are 20 Slots equipped on MS:  1  shelf:  0`<br>`REx Test last run MS:  1 92:07:25  01:33:39  AUTO SUCCESSFUL`<br>`MS card information:`<br>`Site Flr RPos  Bay_id  Shf  Description   SLOT   EqPEC`<br>`HOST  00 AA00  DPCC 1   39  MS 1: 0: 6     12    9X17DA FRNT`<br>`HOST  00 AA00  DPCC 1   39  MS 1: 1: 6     12    9X20BB BACK`<br><br>**Explanation:** The requested information is displayed. |

**-continued-**

## queryms (continued)

**Examples of the queryms command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **queryms** ↵ | |

**Task:** Display information for both message switches and all equipped shelves.

**Response:**

```
Load name for MS 0:  MS-S35CK.
Load name for MS 1:  MS-S35CK.
There are 26 Slots equipped on MS:  0  Shelf:  0.
There are 26 slots equipped on MS:  1  Shelf:  0.
REx Test last run MS:  0 92:01:23  15:39:21  AUTO SUCCESSFUL
REx Test last run MS:  1 92:01:23  16:40:31  AUTO SUCCESSFUL
MS node and shelf information:
Site Flr RPos  Bay_id  Shf  Description   SLOT   EqPEC
HOST  00 AA00  MSDC 0       MS 0                 9X01BA
HOST  00 AA00  MSDC 0   39  MS 0:0               9X04AA
HOST  00 AA00  MSDC 0   26  MS 0:1               9X04AA
HOST  00 AA00  MSDC 1       MS 1                 9X01BA
HOST  00 AA00  MSDC 1   13  MS 1:0               9X04BAA
HOST  00 AA00  MSDC 1    0  MS 1:1               9X04AA
HOST  00 AA00  MSDC 0       MS 0                 9X01BA
```

**Explanation:** The queryms command was run without any parameters or variables, so information on both MSs is given.

**-end-**

## Responses

The following table provides explanations of the responses to the queryms command. Some individual elements of complex responses are described separately.

**Responses for the queryms command**

| MAP output | Meaning and action |
|---|---|
| `Back card 23 is offline, no action performed.` | |

**Meaning:** The back card at the indicated card position is offline. The possible card numbers are 1-26.

**Action:** None

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Back card 17 is unequipped, no action performed.` | **Meaning:** The back card at the indicated card position is unequipped. The possible card numbers are 1-26.<br><br>**Action:** None |
| `BASE`<br>`S0.` | **Meaning:** The baseline of the PEC (the minimum allowable release) is given.<br><br>**Action:** None |
| `Card 5 is offline, no action performed.` | **Meaning:** The indicated card position is offline. The possible card numbers are 1-26.<br><br>**Action:** None |
| `Card 23 is unequipped.` | **Meaning:** The card is unequipped.<br><br>**Action:** None |
| `Chain 17 is unequipped.` | **Meaning:** The cards at the specified card position are not part of a chain. In this example, 17 is the card number entered.<br><br>**Action:** None |
| `Clock firmware has failed self test.` | **Meaning:** The test of the firmware integrity failed. The firmware in the clock is not reliable.<br><br>**Action:** Perform an out-of-service test, or return the card to service to download the primary firmware load. |

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Clock firmware load mismatch.` | **Meaning:** The firmware in the clock card does not match the primary firmware in the MS software.<br><br>**Action:** Perform an out-of-service test, or return the card to service to download the primary firmware load. |
| `Clock PROM selector stuck on EPROM.` | **Meaning:** The clock programmable read-only memory (PROM) selection indicates that it is running on erasable PROM (EPROM).<br><br>**Action:** Check the hardware. |
| `Compatible '*NO'.` | **Meaning:** The MS PEC design change document (DCD) release is not compatible with the batch change supplement (BCS) software running in the switch.<br><br>**Action:** None |
| `Compatible 'YES'.` | **Meaning:** The MS PEC DCD release is compatible with the BCS software running in the switch.<br><br>**Action:** None |
| `Contents of clock f/w does not match f/w downloaded.` | **Meaning:** A mismatch occurred between the contents of the clock card firmware and the MS firmware.<br><br>**Action:** Ensure the firmware loads are correct. Perform an out-of-service test to download the correct firmware. |
| `Data inconsistencies, cannot continue your request.` | **Meaning:** A software fault occurred.<br><br>**Action:** Enter the command again. If it does not execute successfully, notify the maintenance support group. |

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Except`<br>`None` | **Meaning:** There are no exception releases for this PEC.<br><br>**Action:** None |
| `Except`<br>`SA` | **Meaning:** In this example, SA is an exception release. The exception releases are above the baseline, but known to be incompatible with the BCS software running in the switch.<br><br>**Action:** None |
| `Failed to download or reset clock firmware.` | **Meaning:** The most recent attempt to download new firmware into the electrically erasable PROM (EEPROM), or to reset the clock, failed.<br><br>**Action:** Check and clear the hardware fault on the clock card. |
| `Failed to read EEPROM in clock card.` | **Meaning:** An attempt to read the EEPROM failed, and the MS was removed from service.<br><br>**Action:** Check and clear the hardware fault on the clock card. |
| `Front card 23 is offline, no action performed.` | **Meaning:** The front card at the indicated card position is offline. The possible card numbers are 1-26.<br><br>**Action:** None |
| `Front card 17 is unequipped, no action performed.` | **Meaning:** The front card at the indicated card position is unequipped. The possible card numbers are 1-26.<br><br>**Action:** None |

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Incorrect version of clock firmware.` | **Meaning:** A wrong version of the firmware is on the clock card.<br><br>**Action:** Attempt an out-of-service test, or return the card to service to download the correct version of the firmware. |
| `Invalid card number entered (must be between 1-22).` | **Meaning:** An unequipped card was specified. The range provided is the range of equipped cards.<br><br>**Action:** None |
| `Invalid chain number entered (must be between 6-16).` | **Meaning:** The card number entered with the chain parameter is not in the permissible range for chain cards on the message switch shelf. The range is the valid range of chain card numbers on the shelf.<br><br>**Action:** None |
| `Invalid MS number entered (must be between 0-1).` | **Meaning:** You entered an invalid MS number. The range of message switches is provided.<br><br>**Action:** None |
| `Load name for MS 1: MSG35BC`<br>`There are 26 Slots equipped on MS: 1 Shelf: 0`<br>`MS node and shelf information:`<br>`REx Test last run MS: 1 89:01:23 16:40:31 AUTO SUCCESSFUL`<br>`Site Flr RPos Bay_id Shf Description SLOT EqPEC`<br>`HOST 00 AA01 MSDC 1 MS 1 9X01BA`<br>`HOST 00 AA00 MSDC 1 13 MS 1:0 9X04AA`<br>`HOST 00 AA00 MSDC 1 0 MS 1:1 9X04AA` | **Meaning:** The requested information about the cards and chains is displayed.<br><br>**Action:** None |

**-continued-**

## queryms (continued)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Message switch 0 is unequipped.` | **Meaning:** An unequipped MS was specified. The system echoes the entered MS number.<br><br>**Action:** None |
| `No clock firmware resident in software.` | **Meaning:** MS software does not contain clock firmware.<br><br>**Action:** Ensure that the clock firmware loads are in the MS software. |
| `No FBUS has been defined with TFI card 17` | **Meaning:** No FBus was identified with the specified TFI card. Possible card numbers are 1-26.<br><br>**Action:** None |
| `No firmware in clock card.` | **Meaning:** The clock card does not contain valid firmware.<br><br>**Action:** Load the correct firmware by performing either an out-of-service test or a return-to-service test. |
| `REL`<br>`S9` | **Meaning:** The card release obtained from querying the ID PROM of the card is given.<br><br>**Action:** None |
| `Running on EPROM clock firmware.` | **Meaning:** The file name of the clock firmware in the context page has an EPROM file name. Therefore, the clock is running on the EPROM firmware.<br><br>**Action:** Load the correct firmware by performing either an out-of-service test or a return-to-service test. |

**-continued-**

## queryms (end)

**Responses for the queryms command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Shelf 2 is unequipped.` | **Meaning:** The shelf you specified is unequipped. The shelf number entered is echoed in the response.<br><br>**Action:** None |

**-end-**

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any MAP level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the Clock level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The Clock level has changed to the previous menu level. |

**-continued-**

## quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the Clock level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The Clock level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the Clock level menu with a menu that is two or more MAP levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the Clock level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |
| **-end-** | |

# shelf

## Function

Use the shelf command to access a Shelf level other than the current shelf. Use the commands on the Shelf level to test and control the cards located on the selected shelf.

**shelf command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **shelf** | *shelf_no* |

| Parameters and variables | Description |
|---|---|
| *shelf_no* | This variable is the number of the shelf to be accessed. Valid entries are 0-3. |

## Qualifications

None

## Example

The following table provides an example of the shelf command.

**Example of the shelf command**

| Example | Task, response, and explanation |
|---|---|
| **shelf 0** ↵<br>*where*<br><br>0 identifies the shelf to be accessed | **Task:** Access the Shelf level for shelf 0.<br><br>**Response:** The menu changes to the Shelf level menu, and the following headers are added to the display:<br><br>`SHELF 0 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2`<br>`Card 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6`<br>`Chain`<br>`MS 0 . . . . . .`<br>`MS1 . . . . . .`<br><br>**Explanation:** The requested Shelf level is displayed. |

# shelf (end)

## Response

The following table provides an explanation of the response to the shelf command.

**Response for the shelf command**

| MAP output | Meaning and action |
|---|---|
| The menu changes to the Shelf level menu, and the following headers are added to the display:<br><br>`SHELF 0 1 1 1 1 1 2 2 2 2 2 2`<br>`Card 1 2 3 4 5 6 7 ... 5 6 7 8 9 0 1 2 3 4 5 6`<br>`Chain`<br>`MS 0 . . . . . ... . . . . . .`<br>`MS1 . . . . . ... . . . . . .` | **Meaning:** The Shelf level is displayed.<br><br>**Action:** None |

# swcarr

## Function

Use the swcarr command to switch the active timing carrier link used as sync reference and the standby carrier link so that the system can perform maintenance on the PM.

**swcarr command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **swcarr** | *prompt*<br>noprompt |

| Parameters and variables | Description |
|---|---|
| *prompt* | This default parameter directs the system to offer prompts for confirmation. Do not enter this parameter. |
| noprompt | This parameter prevents the displaying of any yes/no prompts. The system automatically answers yes. |

## Qualifications

None

## Example

The following table provides an example of the swcarr command.

**Example of the swcarr command**

| Example | Task, response, and explanation | |
|---|---|---|
| **swcarr** ↵ | | |
| | **Task:** | Switch the active and standby timing links. |
| | **Response:** | `Request to Switch Timing Links: Submitted.`<br>`Request to Switch Timing Links: Passed.` |
| | **Explanation:** | The timing links have been switched successfully. |

## swcarr (continued)

## Responses

The following table provides explanations of the responses to the swcarr command.

**Responses for the swcarr command**

| MAP output | Meaning and action |
|---|---|
| `Office must be in sync to switch carriers` | **Meaning:** The master clock must be in sync with the carriers before the carrier links can be switched.<br><br>**Action:** Use the sync command to place the master clock in sync, then retry the swcarr command. |
| `Request to Switch Timing Links: Invalid Command is only allowed in Slave offices.` | **Meaning:** Only slave offices use carrier timing links.<br><br>**Action:** None |
| `Request to Switch Timing Links: submitted.` `Request to Switch Timing Links: aborted; Maintenance Action Aborted` | **Meaning:** The activity has been aborted by user request.<br><br>**Action:** None |

**-continued-**

## swcarr (continued)

**Responses for the swcarr command** (continued)

| MAP output | Meaning and action |
|---|---|
| Request to Switch Timing Links: submitted.<br>Request to Switch Timing Links: failed;<br>ICRC Failure<br><br>or<br><br>Request to Switch Timing Links: submitted.<br>Request to Switch Timing Links: failed;<br>Check for Swerrs<br><br>or<br><br>Request to Switch Timing Links: submitted.<br>Request to Switch Timing Links: failed;<br>No Problem<br><br>or<br><br>Request to Switch Timing Links: submitted.<br>Request to Switch Timing Links: failed;<br>Fail | **Meaning:** Software errors or a system failure has this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| Request to Switch Timing Links: Submitted.<br>Request to Switch Timing Links: Failed<br>Other carrier link not in service | **Meaning:** The system cannot switch to the other carrier link because that link is not in service.<br><br>**Action:** None |

**-continued-**

## swcarr (continued)

**Responses for the swcarr command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Switch Timing Links: Submitted.`<br>`Request to Switch Timing Links: Failed`<br>`Timing links are not in sync and may cause a carrier slip`<br>`Please confirm ('yes' or 'no')` | **Meaning:** The carrier links are not synchronized and slips may result if you switch the carriers.<br><br>**Action:** Enter yes to continue with the swcarr command. Enter no to abort the swcarr command. |
| `Request to Switch Timing Links: Submitted.`<br>`Request to Switch Timing Links: Passed.` | **Meaning:** The system switched the carrier links successfully.<br><br>**Action:** None |
| `Request to Switch Timing Links: submitted.`<br>`Request to Switch Timing Links: terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The carrier links cannot be switched.<br><br>**Action:** None |
| `Request to Switch Timing Links: submitted.`<br>`Request to Switch Timing Links: terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |

**-continued-**

# swcarr (end)

**Responses for the swcarr command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to Switch Timing Links: submitted.`<br>`Request to Switch Timing Links: terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot switch carrier links while other maintenance activities are in progress.<br><br>**Action:** Retry the swcarr command once other activities have finished. |
| `Request to Switch Timing Links: submitted`<br>`Request to Switch Timing Links: terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`Request to Switch Timing Links: submitted`<br>`Request to Switch Timing Links: terminated;`<br>`no resources available.`<br>`Required Resources Are Unavailable`<br><br>or<br><br>`Request to Switch Timing Links: submitted`<br>`Request to Switch Timing Links: failed;`<br>`Request not supported` | **Meaning:** This command is not accessible.<br><br>**Action:** None |
| `Request to Switch Timing Links: submitted.`<br>`Request to Switch Timing Links: terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command was inhibited.<br><br>**Action:** None |

**-end-**

# swmast

## Function

Use the swmast command to switch clock mastership from the current master clock to the current slave clock.

**swmast command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **swmast** | There are no parameters or variables. |

## Qualifications

The swmast command is qualified by the following exceptions, restrictions, and limitations: the swmast command checks for the following conditions for remote sync:

- The status of the master system clock must not be linking.
- Slave remote must be in sync if the master system or the master remote are in sync.
- There must be no remote alarms on the slave MS.

## Example

The following table provides an example of the swmast command.

**Example of the swmast command**

| Example | Task, response, and explanation | |
|---|---|---|
| **swmast** ↵ | | |
| | **Task:** | Switch clock mastership from one MS to the other. |
| | **Response:** | `Request to switch master clock submitted.`<br>`Request to switch master clock passed.` |
| | **Explanation:** | The clock mastership is switched. |

## swmast (continued)

## Responses

The following table provides explanations of the responses to the swmast command.

**Responses for the swmast command**

| MAP output | Meaning and action |
|---|---|
| `Clock firmware has failed self test.` | **Meaning:** The test of the firmware integrity failed. The firmware in the clock is not reliable.<br><br>**Action:** Perform an out-of-service test, or return the card to service to download the primary firmware. |
| `No firmware in clock card.` | **Meaning:** The clock card does not contain valid firmware.<br><br>**Action:** Load the correct firmware by performing either an out-of-service or a return-to-service test. |
| `Request to switch master clock submitted.`<br>`Request to switch master clock aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity has been aborted by user request.<br><br>**Action:** None |
| `Request to switch master clock submitted.`<br>`Request to switch master clock passed.` | **Meaning:** Possession of the master clock is switched from one MS to the other.<br><br>**Action:** None |
| `Request to switch master clock submitted.`<br>`Request to switch master clock terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The clock mastership cannot be switched.<br><br>**Action:** None |

**-continued-**

## swmast (continued)

**Responses for the swmast command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to switch master clock submitted.`<br>`Request to switch master clock terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to switch master clock submitted.`<br>`Request to switch master clock terminated;`<br>`SWMAST not allowed`<br>`Master MS has mate fault` | **Meaning:** The system will not allow a switch of mastership because the current master has a mate fault. A change of mastership would result in the current master going out-of-service.<br><br>**Action:** Clear the Mat alarm from the slave MS then retry the swmast command. |
| `Request to switch master clock submitted.`<br>`Request to switch master clock terminated;`<br>`SWMAST not allowed`<br>`Mate MS is OOS` | **Meaning:** The mate MS is not able to acquire mastership because it is out-of-service.<br><br>**Action:** Return the mate MS to service and retry the swmast command. |
| `Request to switch master clock submitted.`<br>`Request to switch master clock terminated;`<br>`SWMAST not allowed`<br>`Slave MS has faulty external reference` | **Meaning:** The slave MS cannot acquire mastership because it has no external clock reference. This response is only applicable to master external office configurations.<br><br>**Action:** Clear the Ext, AI1, or AI0 alarms from the slave MS then retry the swmast command. |

**-continued-**

# swmast (continued)

**Responses for the swmast command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to switch master clock submitted.`<br>`Request to switch master clock terminated;`<br>`SWMAST not allowed`<br>`Slave MS has serious clock faults.` | **Meaning:** The slave MS has clock faults which prevent it from acquiring mastership.<br><br>**Action:** Clear the clock alarm from the slave MS then retry the swmast command. |
| `Request to switch master clock submitted.`<br>`Request to switch master clock terminated;`<br>`SWMAST not allowed`<br>`Slave MS has TO MAKE FRAME PULSE fault` | **Meaning:** The slave MS cannot acquire mastership because it would result in the current master going out-of-service.<br><br>**Action:** Clear the TMt alarm from the slave MS then retry the swmast command. |
| `Request to switch master clock submitted.`<br>`Request to switch master clock terminated;`<br>`SWMAST not allowed`<br>`Slave MS remote faulty` | **Meaning:** The slave MS is not able to acquire mastership because it has faults on the remote clock. This response is only applicable for remote sync configurations.<br><br>**Action:** Clear the Rem alarm from the slave MS then retry the swmast command. |

**-continued-**

## swmast (continued)

**Responses for the swmast command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to switch master clock submitted.`<br>`Request to switch master clock terminated;`<br>`SWMAST not allowed`<br>`Slave MS remote not synced.` | **Meaning:** The slave MS is not able acquire mastership because its remote clock has not attained sync. This response is only applicable for remote sync configurations.<br><br>**Action:** Wait for the slave remote to sync if it is currently linking, then retry the swmast command. Perform an in-service test on the slave MS to start the remote linking if you have not previously started it. |
| `Request to switch master clock submitted.`<br>`Request to switch master clock terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot switch the master clock while other maintenance activities are in progress.<br><br>**Action:** Retry the swmast command once other activities have finished. |
| `Request to switch master clock submitted`<br>`Request to switch master clock terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`Request to switch master clock submitted`<br>`Request to switch master clock terminated;`<br>`no resources available.`<br>`Required Resources Are Unavailable`<br><br>or<br><br>`Request to switch master clock submitted`<br>`Request to switch master clock failed;`<br>`Request not supported` | **Meaning:** This command is not accessible.<br><br>**Action:** None |

**-continued-**

## swmast (continued)

**Responses for the swmast command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to switch master clock submitted.`<br>`Request to switch master clock terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command has been inhibited.<br><br>**Action:** None |
| `Request to switch master clock submitted.`<br>`Request to switch master clock failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to switch master clock submitted.`<br>`Request to switch master clock failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to switch master clock submitted.`<br>`Request to switch master clock failed;`<br>`No Problem`<br><br>or<br><br>`Request to switch master clock submitted.`<br>`Request to switch master clock failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |
| `Running on EPROM clock firmware.` | **Meaning:** The filename of the clock firmware in the context page has a erasable programmable read-only memory (EPROM) filename. Therefore, the clock is running on the EPROM firmware.<br><br>**Action:** Attempt to switch the PROMs by running either an out-of-service test or a return-to-service test. |

**-continued-**

# swmast (end)

**Responses for the swmast command** (continued)

| MAP output | Meaning and action |
|---|---|
| `SWMAST not allowed, check swerrs` | **Meaning:** Software errors or a system failure caused this command to fail.<br>**Action:** Check for software errors or contact maintenance support personnel. |

**-end-**

# sync

## Function

Use the sync command to synchronize the clock in the specified MS with the external reference.

**sync command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **sync** | There are no parameters or variables. |

## Qualification

The sync command is qualified by the following restriction: the system checks for clock mismatches or remote clock faults before proceeding.

## Example

The following table provides an example of the sync command.

**Example of the sync command**

| Example | Task, response, and explanation |
|---|---|
| **sync** ↵ | |
| | **Task:** Synchronize the clocks. |
| | **Response:**<br>`Request to Synchronize Clock 0: Passed`<br>`Clock synchronization started . . .` |
| | **Explanation:** The clocks are synchronized. |

## Responses

The following table provides explanations of the responses to the sync command.

**Responses for the sync command**

| MAP output | Meaning and action |
|---|---|
| `Carriers are not inservice` | |
| | **Meaning:** Both timing links are out-of-service. |
| | **Action:** Bring the timing links into service and then retry the sync command. |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Clock must be free running in Master-Internal offices.` | **Meaning:** A master internal office does not sync to a clock reference and thus the sync command is not applicable.<br><br>**Action:** None |
| `Clock is already syncing` | **Meaning:** The office is currently synced or linking.<br><br>**Action:** None |
| `Currently no master clock.  Reattempt command in 10 seconds` | **Meaning:** The office cannot by synced because there is no master clock. The system will automatically recover from the two-slave situation.<br><br>**Action:** Reattempt sync command after 10 seconds. |
| `Data mismatch between CM and MS 0` | **Meaning:** The Sync command has been rejected because there is a configuration mismatch between the computing module (CM) and the MS.<br><br>**Action:** Clear the alarm by either correcting the fault causing the mismatch or by changing the data in table SYNCLK. |
| `Master clock has no remote reference.` | **Meaning:** The sync command has been rejected because the master's remote clock is faulty. This response is only applicable to slave remote sync configurations.<br><br>**Action:** Clear the Rem alarm by correcting the remote fault. Switch the mastership if the Rem alarm cannot be cleared. Then retry the sync command. |
| `Master stratum1 alarm0 present and SYNCLK table EXTALARM MAJOR` | **Meaning:** The master MS has one of the user defined stratum 1 alarm faults present and the EXTALARM field in the SYNCLK table has the value MAJOR. This value indicates that these faults represent a faulty remote.<br><br>**Action:** Clear the Al0 or Al1 alarms for MS and repeat the sync command. |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `No external reference link available` | **Meaning:** The master MS has no external clock reference. This response is only applicable for master external office configurations.<br><br>**Action:** Clear the Ext alarm for the master MS and retry the sync command. |
| `Request to Synchronized Clock 0: Invalid`<br>`Already in sync` | **Meaning:** The clock is already in sync.<br><br>**Action:** None |
| `Request to Synchronized Clock 0: Invalid`<br>`Clock must be free running in master-internal offices.` | **Meaning:** The master clock must be in the free-running state in a master internal office.<br><br>**Action:** None |
| `Request to Synchronized Clock 0: Invalid`<br>`Command is valid for master clock only.` | **Meaning:** You can only synchronize the master clock to an external reference source.<br><br>**Action:** None |
| `Request to Synchronize Clock 0: Passed`<br>`Clock synchronization started . . .` | **Meaning:** The clock passed system tests and the system has started synchronization.<br><br>**Action:** None |

**-continued-**

## sync (end)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Warning: Master clock has a faulty remote` | **Meaning:** The master MS has a faulty remote. For master external remote sync configurations, the office can be synced with the master remote faulty. However, if the slave has no faults, it may be best to sync with the current slave as master.<br><br>**Action:** Use the swmast command to switch mastership then retry the sync command. |

**-end-**

# tst

## Function

Use the tst command to test the clock cards. If you do not specify a parameter, the system runs tests on both the front and back of the slot.

**tst command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **tst** | *ms_no* [ front / back ] [ *wait* / nowait ] [ *prompt* / noprompt ] |

| Parameters and variables | Description |
|---|---|
| back | This parameter tests the card on the rear of the shelf. |
| front | This parameter test the card on the front of the shelf. |
| *ms_no* | This variable is the number of the MS. Valid entries are 0-1. |
| noprompt | This variable directs the system to prevent any yes/no prompts from being displayed. The system automatically enters yes. |
| nowait | This variable directs the system to allow the use of the MAP for other functions while the system is testing the card. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| *wait* | This default parameter directs the system not to allow the use of the MAP for other functions while the system is testing the card. Do not enter this parameter. |

## Qualifications

None

# tst (continued)

## Example

The following table provides an example of the tst command.

**Example of the tst command**

| Example | Task, response, and explanation |
|---|---|
| **tst 0** ↵<br>*where*<br><br>0 is the MS number | **Task:** Test the clock on MS 0.<br><br>**Response:**<br><br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted.`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 passed.`<br><br>**Explanation:** The requested clock is tested and had no faults. |

## Responses

The following table provides explanations of the responses to the tst command.

**Responses for the tst command**

| MAP output | Meaning and action |
|---|---|
| `Cannot test card 17 while MS node is OOS.` | **Meaning:** You cannot perform tests on the cards of an out-of-service MS.<br><br>**Action:** None |
| `Clock firmware has failed self test.` | **Meaning:** The test of the firmware integrity failed. The firmware in the clock is not reliable.<br><br>**Action:** Perform an out-of-service test or return the card to service to download the primary firmware load. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Clock firmware load mismatch.` | **Meaning:** The firmware in the clock card does not match the primary firmware in the MS software.<br><br>**Action:** Perform an out-of-service test or return the card to service to download the primary firmware load. |
| `Clock PROM selector stuck on EPROM` | **Meaning:** The clock programmable read-only memory (PROM) selector indicates it is running on erasable PROM (EPROM).<br><br>**Action:** None |
| `Contents of clock f/w does not match f/w downloaded.` | **Meaning:** A mismatch occurred between the contents of the clock card firmware and the MS firmware.<br><br>**Action:** Ensure the firmware loads are correct. Perform an out-of-service test to download the correct firmware. |
| `Failed to download or reset clock firmware.` | **Meaning:** The most recent attempt to download new firmware into the electrically-erasable PROM (EEPROM) or to reset the clock failed.<br><br>**Action:** Check and clear the hardware fault on the clock card. |
| `Failed to read EEPROM in clock card.` | **Meaning:** An attempt to read the EEPROM failed and the MS was removed from service.<br><br>**Action:** Check and clear the hardware fault on the clock card. |
| `Incorrect version of clock firmware.` | **Meaning:** A wrong version of the firmware is on the clock card.<br><br>**Action:** f you changed the datafill in table SYNCLK, attempt an out-of-service test or return the card to service to download the correct version of the firmware. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `No clock firmware resident in software.` | **Meaning:** MS software does not contain clock firmware.<br><br>**Action:** Ensure that the clock firmware loads are in the MS software. |
| `No firmware in clock card.` | **Meaning:** The clock card does not contain valid firmware.<br><br>**Action:** Load the correct firmware by performing either an out-of-service test or a return-to-service test. |
| `Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted.`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 aborted;`<br>`Maintenance Action Aborted` | **Meaning:** The activity was aborted by your request.<br><br>**Action:** None |
| `Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted.`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 passed.` | **Meaning:** The requested clock is tested.<br><br>**Action:** None |
| `Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted.`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 terminated;`<br>`S/W error invalid request.`<br>`Invalid Maintenance Request` | **Meaning:** The requested clock cannot be tested.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted.`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 terminated;`<br>`S/W error (wrong parameter).`<br>`Invalid Resource Identifier` | **Meaning:** You entered an invalid parameter.<br><br>**Action:** Retry the command using valid parameters. |
| `Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted.`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 terminated;`<br>`no resources available.`<br>`Maintenance In Progress` | **Meaning:** You cannot test the clock while other maintenance activities are in progress.<br><br>**Action:** Retry the tst command once other activities have finished. |
| `Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 terminated;`<br>`S/W inhibited.`<br>`Local Maintenance Not Accessible`<br><br>or<br><br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 terminated;`<br>`no resources available.`<br>`Required Resources Are Unavailable`<br><br>or<br><br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 failed;`<br>`Request not supported` | **Meaning:** This command is not accessible.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted.`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 terminated;`<br>`S/W inhibited.`<br>`Not Able To Run` | **Meaning:** The command was inhibited.<br><br>**Action:** None |
| `Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted.`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 failed;`<br>`ICRC Failure`<br><br>or<br><br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted.`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 failed;`<br>`Check for Swerrs`<br><br>or<br><br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted.`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 failed;`<br>`No Problem`<br><br>or<br><br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 submitted.`<br>`Request to TEST INSV MS: 0 shelf: 0 card: 2 failed;`<br>`Fail` | **Meaning:** Software errors or a system failure caused this command to fail.<br><br>**Action:** Check for software errors or contact maintenance support personnel. |

**-continued-**

# tst (end)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Running on EPROM clock firmware.` | **Meaning:** The filename of the clock firmware in the context page has a EPROM filename. Therefore, the clock is running on the EPROM firmware.<br><br>**Action:** Load the correct firmware loads by performing an out-of-service or a return-to-service test. |

**-end-**

# CM level commands

Use the computing module (CM) level of the MAP to access commands that control and display the status of the paired central processing units (CPU) that comprise the CM.

## Accessing the CM level

To access the CM level, enter the following from the CI (command interpreter) level:

**mapci;mtc;cm ↵**

## CM commands

All of the commands available at the CM MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**CM commands**

| Command | Page |
|---|---|
| abtk | C-527 |
| checkinv | C-529 |
| cmmnt | C-531 |
| dpsync | C-533 |
| e2alink | C-537 |
| insync | C-541 |
| locate | C-545 |
| mc | C-547 |
| memory | C-549 |
| mtcchk | C-551 |
| pmc | C-553 |

-continued-

| **CM commands** (continued) | |
|---|---|
| **Command** | **Page** |
| queryclk | C-555 |
| querycm | C-557 |
| queryflg | C-565 |
| quit | C-567 |
| rextst | C-571 |
| swact | C-579 |
| sync | C-583 |
| tst | C-595 |
| **-end-** | |

## CM menu

The following figures show the CM menu and status display. The insert with hidden commands is not a visible part of the menu display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .     .     .     .     .     .


CM           CM   Sync  Act  CPU0  CPU1  JAM  Memory  CMMnt  MC  PMC
 0 Quit       0     .   cpu 0   .     .          .      .     .   .
 2 CMMnt
 3 Memory
 4 MC
 5 PMC
 6 Tst
 7
 8
 9
10
11
12 RExTst
13 SwAct
14 Sync
15 DpSync
16 MtcChk_
17
18 Locate_
```

**Hidden commands**

```
abtk                checkinv
e2alink             queryclk
querycm             queryflg
```

## CM status codes

The following table describes the status codes for the CM status display.

| Status codes CM menu status display | | |
|---|---|---|
| **Code** | **Meaning** | **Description** |
| CM | | |
| 0 | CM 0 | CM 0 is being monitored. |
| Sync | | |
| . | sync | The CPU pair is synchronized. |
| no | no sync | The CPU pair is not synchronized. |
| NoOvr | override disabled | The CPU pair is running in sync but with handshake-override disabled. The CM runs five to ten percent slower in duplex mode with handshake-override disabled. |
| split | split | The CPU pair is in split CM mode, with the active CPU controlling the inactive CPU. |
| Act | | |
| CPU 0 | CPU 0 | CPU plane 0 is active. |
| CPU1 | CPU 1 | CPU plane 1 is active. |
| CPU0 or CPU1 | | |
| . | no faults | The CPU has no faults. |
| e2a | e2a link | The e2a links have been disconnected, disabled, or both. |
| clk | clock | The CPU processor clock is faulty. |
| flt | fault | There is a fault on the CPU. |
| rex | REX test failed | The CPU failed a routine exercise (REX) test. |
| ut | under test | The CPU is under test. |
| Jam | | |
| | blank | The mate CPU is not jammed inactive. |
| yes | jammed | The mate CPU is jammed inactive. |
| Memory | | |
| . | no faults | No memory faults exist. |
| istb | in-service trouble | A correctable memory error exists on one or more memory modules. |
| flt | fault | A noncorrectable error exists on one or more memory modules. This is the most serious memory fault indicator. |
| ut | under test | The memory is under test. |

**-continued-**

**Status codes CM menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| CMMnt | | |
| . | no faults | No faults exist in the CMMnt level. |
| lowspr | low spares | The system is running out of memory spares. |
| lowmem | low memory | The system is running out of memory. |
| autold | autoload corrupt | The automatic load register is corrupt. |
| cmtrap | trap rate | The CM trap rate is higher than the defined limit. |
| IMAGE | image test failed | The image test failed on the inactive CPU. The inactive CPU may not survive a cold restart. |
| MC | | |
| . | no faults | No faults exists on the MC. |
| SBsy | system busy | The MC has a fault and is in the system-busy state. |
| C | c-side busy | The MC has a communications-side link fault. |
| MBsy | manually busy | The MC has been placed in the manually-busy state. |
| PMC | | |
| . | no faults | The PMC is fully operational and has no faults. |
| tbl | in-service trouble | The PMC has in-service trouble, but it is still operating. It may have in-service trouble because one system load module (SLM) is cut off from the CM. |
| flt | fault | The PMC is out-of-service. The CM cannot access either SLM. |

**-end-**

## Common responses

The following table provides explanations of the common responses to the CM commands. This responses will be produced by many of the commands under the CM level.

**Common responses for the CM commands**

| MAP output | Meaning and action |
|---|---|
| `CANNOT RUN TEST WHEN IN SYNCHRONISM.` | **Meaning:** The test cannot be run while the CPUs are synchronized.<br>**Action:** Drop sync using the dpsync command and reenter the tst command. |
| `MAINTENANCE ACTION STARTED.`<br>or<br>`MAINTENANCE ACTION ALREADY STARTED.` | **Meaning:** Either the CM process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.<br>**Action:** None |
| `MAINTENANCE ACTION SUBMITTED.` | **Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect.<br>**Action:** None |
| `MATE IS ALREADY UNDER TEST.` | **Meaning:** The mate communication register (MCR) flag is in use and cannot be claimed.<br>**Action:** None |
| `NO REPLY FROM REQUEST` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br>**Action:** None |

**-continued-**

**Common responses for the CM commands** (continued)

| MAP output | Meaning and action |
|---|---|
| SOFTWARE INCONSISTENCY - ACTION ABORTED. | **Meaning:** A software fault has occurred.<br><br>**Action:** None |

**-end-**

# abtk

## Function

Use the abtk command to abort the process that is running on the inactive CPU and release the mate communication register (MCR) flag and resources so a new task can be run on the inactive CPU.

**abtk command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **abtk** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the abtk command.

**Example of the abtk command**

| Example | Task, response, and explanation | |
|---|---|---|
| **abtk** ↵ | | |
| | **Task:** | Abort the process running on the inactive CPU. |
| | **Response:** | `Current process claiming flag will be aborted. Do you wish to continue? (Y/N)` |
| | **Explanation:** | The system is confirming that it is desirable to abort the current process on the inactive CPU. |

# abtk (end)

## Responses

The following table provides explanations of the responses to the abtk command.

**Responses for the abtk command**

| MAP output | Meaning and action |
|---|---|
| `Current process claiming flag will be aborted.`<br>`Do you wish to continue? (Y/N)` | **Meaning:** The system is confirming that it is desirable to abort the process.<br><br>**Action:** Enter y to continue aborting the process. Enter n to discontinue the abtk command. |
| `Failed to force release of resources within 5 seconds.` | **Meaning:** The MCR flag could not be released.<br><br>**Action:** None |
| `Mate communication flag on CM 0 is not claimed.` | **Meaning:** No process is executing on the mate CPU.<br><br>**Action:** None |
| `Mate communication flag on CM 0 will be released in 5 minutes.` | **Meaning:** This response indicates which process has claimed the MCR flag, how long it will hold the flag, and other information concerning this process. The response provides the number of minutes until the flag is released.<br><br>**Action:** None |
| `Process and its resource claim have been successfully terminated.` | **Meaning:** The system aborted the task and released the MCR flag.<br><br>**Action:** None |

# checkinv

## Function

Use the checkinv command to update the software card inventory after cards are replaced. This command also verifies that the card inventory is valid.

**checkinv command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **checkinv** | There are no parameters or variables. |

## Qualifications

The checkinv command is qualified by the following exceptions, restrictions, and limitations:

- The CM must be out of sync before this command will execute successfully.
- Two logs are associated with this command: log CM156, which records inventory updates, and log CM157 which records inventory errors.

## Example

The following table provides an example of the checkinv command.

**Example of the checkinv command**

| Example | Task, response, and explanation | |
|---|---|---|
| **checkinv** ↵ | | |
| | **Task:** | Update the card inventory after a card has been replaced. |
| | **Response:** | `Checkinv completed:  0 updates, 0 errors.` |
| | **Explanation:** | The card inventory is up to date. |

# checkinv (end)

## Responses

The following table provides explanations of the responses to the checkinv command.

**Responses for the checkinv command**

| MAP output | Meaning and action |
|---|---|
| `Aborted.  Command is invalid when CM is running in sync.` | **Meaning:** The checkinv command cannot be invoked while the CM is in sync.<br><br>**Action:** None |
| `Checkinv completed:  0 updates, 0 errors.` | **Meaning:** The card inventory is up to date. The number of the card inventory update and the number of card inventory errors are given in the response.<br><br>**Action:** None |

# cmmnt

## Function

Use the cmmnt command to access the CMMnt level.

**cmmnt command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **cmmnt** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the cmmnt command.

**Example of the cmmnt command**

| Example | Task, response, and explanation |
|---|---|
| **cmmnt** ↵ | |

**Task:** Access the CMMnt level menu.

**Response:** The MAP displays the menu and status display for the CMMnt level. The system adds the following fields to the display.

```
Traps:      Per minute =    0       Total =     0

AutoLdev:   Primary = SLM 1 DISK  Secondary = SLM 0 DISK

Image Restartable = No image test since last restart

Next image test restart type = WARM

Last CMREXTST executed

System memory in kbytes as of  22:38:29

Memory (kbytes): Used = 130656 Avail = 111008 Total = 241664
```

**Explanation:** The CM level changes to the CMMnt level.

# cmmnt (end)

## Responses

The following table provides an explanation of the response to the cmmnt command.

**Responses for the cmmnt command**

| MAP output | Meaning and action |
|---|---|
| `No reply from request` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `Software inconsistency-action aborted.` | **Meaning:** The system detected a software fault.<br><br>**Action:** None |
| The MAP displays the menu and status display for the CMMnt level. The system adds the following fields to the display.<br><br>`Traps: Per minute = 0 Total = 0`<br><br>`AutoLdev: Primary = SLM 1 DISK Secondary = SLM 0 DISK`<br><br>`Image Restartable = No image test since last restart`<br><br>`Next image test restart type = WARM`<br><br>`Last CMREXTST executed`<br><br>`System memory in kbytes as of 22:38:29`<br><br>`Memory (kbytes): Used = 130656 Avail = 111008 Total = 241664` | **Meaning:** The CM level changes to the CMMnt level.<br><br>**Action:** None |

# dpsync

## Function

Use the dpsync command to drop the synchronization of the CPU pair.

**dpsync command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **dpsync** | [ *wait* / nowait ] [ *prompt* / noprompt ] [ *match* / nomatch ] |

| Parameters and variables | Description |
|---|---|
| *match* | This default parameter directs the system to perform a match test. Do not enter this parameter. |
| nomatch | This parameter directs the system to suspend the match test. |
| noprompt | This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the system is dropping sync. |
| *wait* | This default parameter directs the system to not allow the use of the MAP for other functions while the system is dropping sync. Do not enter this parameter. |

## Qualifications

None

# dpsync (continued)

## Examples

The following table provides examples of the dpsync command.

**Examples of the dpsync command**

| Example | Task, response, and explanation |
|---|---|
| **dpsync** ↵ | |
| | **Task:** Drop the synchronization of the CPU pair. |
| | **Response:** `SYNCHRONIZATION DROPPED` |
| | **Explanation:** Synchronization of the pair has been dropped. |

## Responses

The following table provides explanations of the responses to the dpsync command.

**Responses for the dpsync command**

| MAP output | Meaning and action |
|---|---|
| `Aborted, active CPU 0 has faulty processor clock.` | |
| | **Meaning:** The active CPU clock is faulty and manual drop synchronization is disallowed. |
| | **Action:** None |
| `DpSync will cause the CM to be running on the active CPU which has a processor memory fault.`<br>`Any subsequent SYNC attempts may fail.`<br>`Do you want to to continue?`<br>`Please confirm (“YES” or “NO”):` | |
| | **Meaning:** The active CPU has a processor memory fault and a drop sync should not be performed. |
| | **Action:** Enter yes to proceed with the drop sync. Enter no to abort the command. Check the faulty CPU by using the swact command to switch activity to the good CPU. Drop synchronization, then perform a CPU PCCAB test. If the test fails, replace the faulty CPU card. |

**-continued-**

# dpsync (end)

**Responses for the dpsync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Drop synchronization failed.` | **Meaning:** The CPU is still in sync.<br><br>**Action:** None |
| `If you intend to jam the mate CPU, please do so before dropping synchronization.`<br>`Do you wish to continue?  Please confirm (″YES″ or ″NO″).` | **Meaning:** The system is offering the opportunity to abort this process and jam the inactive CPU before sync is dropped.<br><br>**Action:** Enter yes to drop sync without jamming the inactive CPU. Enter no to abort this drop sync, then jam the inactive CPU. |
| `No reply from request` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `Running in simplex mode with active CPU 0.` | **Meaning:** Synchronization has been dropped and the indicated CPU is active.<br><br>**Action:** None |
| `Software inconsistency - Action aborted.` | **Meaning:** The system has detected a software fault.<br><br>**Action:** None |
| `Synchronization dropped` | **Meaning:** The system has dropped CPU synchronization.<br><br>**Action:** None |

**-end-**

# e2alink

## Function

Use the e2alink command to enable, disable, or check the E2A link status of the CPU planes.

**e2alink command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **e2alink** | [ check / enable / disable ] [ default / *cpu_no* ] |

| Parameters and variables | Description |
|---|---|
| check | This parameter directs the system to check the E2A link fault status. |
| *cpu_no* | This variable indicates the CPU on which the action is to be performed. Valid entries are 0-1. |
| *default* | This parameter indicates that the action is to be performed on both CPUs. |
| disable | This parameter directs the system to disable the E2A link. |
| enable | This parameter directs the system to enable the E2A link. |

## Qualifications

None

# e2alink (continued)

## Examples

The following table provides examples of the e2alink command.

**Examples of the e2alink command**

| Example | Task, response, and explanation |
|---|---|
| **e2alink check** ↵ | **Task:** Check the E2A link status of the CPU planes.<br>**Response:**<br>`CPU1: E2A Link is CONNECTED, ENABLED.`<br>`CPU0: E2A Link is DISCONNECTED, DISABLED.`<br>**Explanation:** The status of the CPU planes is displayed. |
| **e2alink enable** ***1*** ↵<br>*where*<br>1 is the variable that indicates which CPU is to be enabled | **Task:** Enable the E2A link status of CPU 1.<br>**Response:** `CPU1: E2A Link is DISCONNECTED, ENABLED.`<br>**Explanation:** The status of the E2A link is enabled. |

## Responses

The following table provides explanations of the responses to the e2alink command.

**Responses for the e2alink command**

| MAP output | Meaning and action |
|---|---|
| `ABORTED. E2A IS NOT DATAFILLED.` | **Meaning:** The office parameter in E2ALINKEQP OFCENG is not datafilled to yes. The system aborts the command.<br>**Action:** None |

**-continued-**

# e2alink (continued)

**Responses for the e2alink command** (continued)

| MAP output | Meaning and action |
|---|---|
| `MAINTENANCE REQUEST FAILED.` | **Meaning:** The request cannot be completed and the command terminates.<br><br>**Action:** Retry the command. If the problem persists, check the connection of the reset terminal interface (RTIF) to the CPU and try the command again. |
| `CPU1: E2A Link is CONNECTED, ENABLED.` | **Meaning:** The E2A link on the CPU plane is operational. If the E2A Flt minor alarm was raised because this E2A link was previously not operational, the alarm clears.<br><br>**Action:** None |
| `CPU1: E2A Link is CONNECTED, DISABLED.` | **Meaning:** The E2A link on the specified CPU has been disabled. The E2AFlt minor alarm is raised and a CM163 E2A link fault report log is generated.<br><br>**Action:** Enable the E2A link of the indicated CPU using the appropriate MAP, RTIF, or SCC command. |
| `CPU1: E2A Link is DISCONNECTED, ENABLED`<br><br>or<br><br>`CPU1: E2A Link is DISCONNECTED, DISABLED` | **Meaning:** The E2A link on the CPU plane has been disconnected or the RTIF is unable to communicate with the subsystem clock (SSC). The connection from the RTIF to the E2A telemetry equipment may have been disconnected. The E2AFlt minor alarm is raised and a CM163 E2A link fault report log is generated.<br><br>**Action:** Reconnect the E2A link and issue the e2alink enable *n* command string or the e2alink check *cpu_no* command string to clear the E2AFlt alarm. If the alarm cannot be cleared, contact maintenance personnel responsible for the next level of support. |

**-continued-**

# e2alink (end)

**Responses for the e2alink command** (continued)

| MAP output | Meaning and action |
|---|---|
| `CPU1:  E2A Link is UNSTABLE, ENABLED`<br><br>or<br><br>`CPU1:  E2A Link is UNSTABLE, DISABLED` | **Meaning:** The E2A link on the specified CPU plane has been disconnected or there is an excessive amount of noise in the connection. The connection from the RTIF to the E2A telemetry equipment may have been disconnected. The E2AFlt minor alarm is raised and a CM163 E2A link fault report log is generated.<br><br>**Action:** Reconnect the E2A link and issue the e2alink enable *n* command string or the e2alink check *cpu_no* command string to clear the E2AFlt alarm. If the alarm cannot be cleared, contact maintenance personnel responsible for the next level of support. |

**-end-**

# insync

## Function

Use the insync command to query the CPUs to see if they are in sync, and if the CM is running on the active CPU's clock.

**insync command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **insync** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the insync command.

**Example of the insync command**

| Example | Task, response, and explanation | |
|---|---|---|
| **insync** ↵ | | |
| | **Task:** | Query the CPUs to see if they are in sync. |
| | **Response:** | `CPU PAIR IS IN SYNC CPU 0 IS ACTIVE`<br>`CM IS RUNNING ON ACTIVE CPU CLOCK:  THE INACTIVE CPU IS NOT JAMMED.` |
| | **Explanation:** | The status of the CPU synchronization, the active CPU clock, and the inactive CPU is given. |

# insync (continued)

## Responses

The following table provides explanations of the responses to the insync command.

**Responses for the insync command**

| MAP output | Meaning and action |
|---|---|
| `CPU pair is in sync CPU 0 is active`<br>`CM is running on active CPU clock:`<br><br>`Memory Error Correction is DISABLED.`<br><br>`The inactive CPU is not jammed.` | **Meaning:** The CPUs are synchronized, and the specified CPU is active. Memory error correction is disabled. The CM is running on the active clock and the inactive CPU in not jammed.<br><br>**Action:** None |
| `CPU pair is in sync CPU 0 is active`<br>`CM is running on active CPU clock:`<br><br>`Memory Error Correction is ENABLED.`<br><br>`The inactive CPU is not jammed.` | **Meaning:** The CPUs are synchronized, and the specified CPU is active. Memory error correction is enabled. The CM is running on the active clock and the inactive CPU in not jammed.<br><br>**Action:** None |
| `CPU pair is not in sync CPU 0 is active`<br>`CM is running on inactive CPU clock:`<br><br>`Memory Error Correction is ENABLED.`<br><br>`The inactive CPU is jammed.` | **Meaning:** The CPUs are not synchronized and the specified CPU is active. The CM is running on the inactive CPU's clock and the inactive CPU is jammed.<br><br>**Action:** None |

**-continued-**

# insync (end)

**Responses for the insync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `CPU pair is not in sync CPU 0 is active`<br>`CM is running on inactive CPU clock:`<br><br>`Memory Error Correction is ENABLED.`<br><br>`The inactive CPU is jammed.` | **Meaning:** The CPUs are not synchronized, and the specified CPU is active. The CM is running on the active clock and the inactive CPU is jammed.<br><br>**Action:** None |

**-end-**

# locate

## Function

Use the locate command to display the physical location of the specified CPU in standard card list form.

**locate command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **locate** | *cpu_no* |

| Parameters and variables | Description |
|---|---|
| *cpu_no* | This variable is the CPU number. Valid entries are 0 or 1. |

## Qualifications

None

## Example

The following table provides an example of the locate command.

**Example of the locate command**

| Example | Task, response, and explanation |
|---|---|
| **locate 1** ↵<br>*where*<br><br>1 indicates that CPU 1 is to be displayed | **Task:** Display the location of CPU number 1.<br><br>**Response:**<br><br>`Site Flr RPos  Bay_id  Shf  Description  Slot  EqPEC`<br>`HOST  00  A00  CMDC:00  18  CPU :00:0:0  19  9X13GA FRNT`<br><br>**Explanation:** The system displays the requested information. |

# locate (end)

## Responses

The following table provides an explanation of the responses to the locate command.

**Responses for the locate command**

| MAP output | Meaning and action |
|---|---|
| `NO REPLY FROM REQUEST` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `SPECIFIED CARD DOES NOT EXIST.`<br>`CPU NUMBER 0.` | **Meaning:** The card information is not available or the card is not equipped.<br><br>**Action:** None |
| `SOFTWARE INCONSISTENCY-ACTION ABORTED.` | **Meaning:** The system detected a software error and aborted the command.<br><br>**Action:** Try the locate command again. |
| `Site Flr RPos Bay_id Shf Description Slot EqPEC`<br>`HOST 00 A00 CMDC:00 18 CPU :00:0:0 19 9X13GA FRNT` | **Meaning:** The command has executed properly.<br><br>**Action:** None |

# mc

## Function

Use the mc command to access the message controller (MC) level.

**mc command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **mc** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the mc command.

**Example of the mc command**

| Example | Task, response, and explanation |
|---|---|
| **mc** ↵ | |
| | **Task:** Access the MC level menu. |
| | **Response:** The menu changes to the MC level menu and the display changes to the display of the MC level. The following fields are added to the display:<br><br>`CM 0`<br>`MC 0  MC 1`<br>`.  .` |
| | **Explanation:** The CM level changes to the MC level. |

# mc (end)

## Responses

The following table provides an explanation of the response to the mc command.

**Responses for the mc command**

| MAP output | Meaning and action |
|---|---|
| `NO REPLY FROM REQUEST` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `SOFTWARE INCONSISTENCY - ACTION ABORTED.` | **Meaning:** The system encountered a software error and aborted the command.<br><br>**Action:** Retry the mc command. |
| The menu changes to the MC level menu and the display changes to the display of the MC level. The following fields are added to the display:<br><br>`CM 0`<br>` MC 0  MC 1`<br>`  .  .` | **Meaning:** The CM level changes to the MC level.<br><br>**Action:** None |

# memory

## Function

Use the memory command to access the Memory level.

**memory command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **memory** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the memory command.

**Example of the memory command**

| Example | Task, response, and explanation |
|---|---|
| **memory** ↵ | |
| | **Task:** Access the Memory level menu. |
| | **Response:** The menu changes to the Memory level menu and the display changes to the display of the Memory level. The following fields are added to the display:<br><br>`CM 0`<br>`    Card  123456789`<br>`Plane 0  .........`<br>`Plane 1  .........` |
| | **Explanation:** The CM level changes to the Memory level. |

# memory (end)

## Responses

The following table provides an explanation of the response to the memory command.

**Responses for the memory command**

| MAP output | Meaning and action |
|---|---|
| `NO REPLY FROM REQUEST` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `SOFTWARE INCONSISTENCY - ACTION ABORTED.` | **Meaning:** The system has detected a software error and aborted the command.<br><br>**Action:** Retry the memory command. |
| The menu changes to the Memory level menu and the display changes to the display of the Memory level. The following fields are added to the display:<br><br>`CM 0`<br>`    Card  123456789`<br>`Plane 0  .........`<br>`Plane 1  .........` | **Meaning:** The CM level changes to the Memory level.<br><br>**Action:** None |

# mtcchk (end)

## Function

The mtcchk command is not currently active. If the command is attempted or the command, help mtcchk, is entered the following response is issued:

```
The function is not available.  Please consult the
appropriate NTPs instead.
```

# pmc

## Function

Use the pmc command to access the peripheral message controller (PMC) level.

**pmc command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **pmc** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the pmc command.

**Example of the pmc command**

| Example | Task, response, and explanation |
|---|---|
| **pmc** ↵ | |

**Task:** Access the PMC level menu.

**Response:** The menu changes to the PMC level menu and the display changes to the display of the PMC level. The following fields are added to the display:

```
CM 0
       PMC 0
          .

PORT0:   .
PORT1:   .
```

**Explanation:** The CM level changes to the PMC level.

# pmc (end)

## Responses

The following table provides an explanation of the response to the pmc command.

**Responses for the pmc command**

| MAP output | Meaning and action |
|---|---|
| `NO REPLY FROM REQUEST` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `SOFTWARE INCONSISTENCY - ACTION ABORTED.` | **Meaning:** The system detected a software fault and aborted the command.<br><br>**Action:** Try the pmc command again. |
| The menu changes to the PMC level menu and the display changes to the display of the PMC level. The following fields are added to the display:<br><br>`CM 0`<br>`PMC 0`<br>`.`<br><br>`PORT0: .`<br>`PORT1: .` | **Meaning:** The CM level changes to the PMC level.<br><br>**Action:** None |

**-end-**

# queryclk

## Function

Use the queryclk command to display the processor clock source of each CPU.

**queryclk command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **queryclk** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the queryclk command.

**Example of the queryclk command**

| Example | Task, response, and explanation |
|---|---|
| **queryclk** ↵ | **Task:** Display the processor clock source of each CPU.<br><br>**Response:**<br>`ACTIVE:  CPU0 is running on the processor clock of CPU0.`<br>`INACTIVE:  CPU1 is running on the processor clock of CPU0.`<br><br>**Explanation:** The system displays the clock source of each CPU. |

## Response

The following table provides an explanation of the response to the queryclk command.

**Response for the queryclk command**

| MAP output | Meaning and action |
|---|---|
| `ACTIVE:  CPU0 is running on the processor clock of CPU0.`<br>`INACTIVE:  CPU1 is running on the processor clock of CPU0.` | **Meaning:** The system displays the clock source of each CPU.<br><br>**Action:** None |

## Function

Use the querycm command to query and display information about the cards in the CM. This information includes idprom information, a list of card locations, and the status of the last routine exercise (REx) test.

**querycm command parameters and variables**

| Command | Parameters and variables | | | | | | |
|---|---|---|---|---|---|---|---|
| **querycm** | *default* | | | | | | (1) |
| | cpu | *cpu_no* | shelf | *shelf_no* | slot | *slot_no* | (2) |
| | shelf | *shelf_no* | slot | *slot_no* | side | *side* | (3) |
| | slot | *slot_no* | side | *side* | *function* | | (4) |
| | side | *side* | | | | | (5) |
| | *function* | | | | | | (6) |
| | all | | | | | | (7) |

| Command | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **querycm** (continued) | (1) | | | | | | | (1) |
| | (2) | side | *side* | *function* | *empty* | *norexresult* | rexschd | (2) |
| | (3) | *function* | | | noempty | rexresult | | (3) |
| | (4) | | | | | | | (4) |
| | (5) | | | | | | | (5) |
| | (6) | | | | | | | (6) |
| | (7) | | | | | | | (7) |

| Command | | | | |
|---|---|---|---|---|
| **querycm** (continued) | (1) | thresholds | *count_id* | |
| | (2) | counts | *count_id* | |
| | (3) | | | |
| | (4) | | | |
| | (5) | | | |
| | (6) | | | |
| | (7) | | | (end) |

| Parameters and variables | Description |
|---|---|
| all | This parameter directs the system to display all the CM information by function. |
| counts | This parameter directs the system to display the error counts. |

**-continued-**

# querycm (continued)

**querycm command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *count_id* | This variable is the threshold or count to be displayed. The following are valid entries:<br>▪ linkcls link closures<br>▪ mmroosync out-of-sync recovery mismatches<br>▪ mmrinsync in-sync recovery mismatches<br>▪ traprate trap rate exceeded<br>▪ procmemflt processor memory faults<br>▪ clockflt processor clock faults<br>▪ cancrex cancelled REx tests<br>▪ all all counts |
| cpu | This parameter directs the system to display information on the central processing unit (CPU). |
| *cpu_no* | This variable is the CPU number. Valid entries are 0-1. The default is both CPUs. |
| *default* | This default parameter directs the system to display all the CM information. Do not enter this parameter. |
| *empty* | This default parameter directs the system to display information on empty cards. Do not enter this parameter. |

**-continued-**

# querycm (continued)

**querycm command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *function* | This variable directs the system to display the information by individual function. When used in conjunction with cpu, shelf, or slot the default is all. The following are valid entries:<br>▪ mc message controller (MC) cards only<br>▪ cpus CPU cards only<br>▪ busext bus extender cards only<br>▪ busterm bus terminator cards only<br>▪ ssc subsystem controller cards only<br>▪ pwrpack power supply cards only<br>▪ pmc peripheral message controller cards only<br>▪ tif terminal interface cards only<br>▪ memory memory cards only<br>▪ slm system load module (SLM) cards only<br>▪ all all cards |
| noempty | This parameter directs the system to not display information on empty cards. |
| *norexresult* | This default parameter directs the system to not display the REx test results. Do not enter this parameter. |
| rexresult | This parameter directs the system to display the results of the most recent REx test. |
| rexsched | This parameter directs the system to display the thresholds or counts. |
| shelf | This parameter directs the system to display the shelf information. |
| *shelf_no* | This variable is the shelf number. Valid entries are 0-3. The default is all shelves. |
| side | This parameter directs the system to display information on the side or sides of a shelf. |
| *side* | This variable is the side of the shelf. Valid entries are front, back, both. The default is both. |

**-continued-**

# querycm (continued)

**querycm command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| slot | This parameter directs the system to display information on a slot. |
| *slot_no* | This variable is the slot number. Valid entries are 1-37. The default is all the slots. |
| thresholds | This parameter directs the system to display the error thresholds. |

**-end-**

## Qualifications

The querycm command is qualified by the following exceptions, restrictions, and limitations:

- All the parameters and variables to the querycm command are optional. Line 2 of the parameter and variable expansion table shows the maximum configuration of a command string; any of the elements of that string can be eliminated when appropriate.
- In the compatible column of the response, when yes is displayed, the CM product engineering code (PEC) release is compatible with the BCS software running in the switch. When *no is displayed, it is not compatible with the BCS software.

## Examples

The following table provides examples of the querycm command.

**Examples of the querycm command**

**Example** **Task, response, and explanation**

**querycm rexresult** ↵

**Task:** Display the results of the most recent REx test.

**Response:**

```
Last REx run on cpu 0 on 1992/12/17 02:06:56.354 THU..
Test done by system action and result was a pass.
Last REx run on cpu 0 on 1992/12/17 02:06:56.356 THU..
Test done by system action and result was a pass.
```

**Explanation:** The results of the REx test are displayed.

**-continued-**

# querycm (continued)

**Examples of the querycm command** (continued)

**Example** **Task, response, and explanation**

**querycm cpu 0 shelf 0 slot 17 side front** ↵
*where*

0 is the CPU number
0 is the shelf number
17 is the slot number
front is the side of the shelf

**Task:** Display the information for the specified side of a specified card.

**Response:**

```
Querycm basic print-out
CPU SHELF SLOT SIDE EQPEC   BASE EXCEPT REL COMPATIBLE
 0    0    17  FRNT NT9X12AB  10 13 14   15      YES
```

**Explanation:** Information about the side of the card is displayed.

**querycm mc** ↵
*where*

mc is the function to be displayed

**Task:** Query the message controller (MC) cards.

**Response:**

```
Message Controllers Cards:
CPU SHELF SLOT SIDE EQPEC   BASE EXCEPT REL COMPATIBLE
 0    0    17  FRNT NT9X12AB  10 13 14   15      YES
 0    0    17  BACK NT9X20AA  50 None    5K      YES
 0    0    18  FRNT NT9X12AB  10 13 14   15      YES
 0    0    18  BACK NT9X20AA  50 None    5J      YES
 1    0    21  FRNT NT9X12AB  10 13 14   1A      YES
 1    0    21  BACK NT9X20AA  50 None    51      YES
 1    0    22  FRNT NT9X12AB  10 13 14   02      *NO
 1    0    22  BACK NT9X20AA  50 None    5H      YES
```

**Explanation:** Information about the MC cards is displayed.

**-end-**

# querycm (continued)

## Responses

The following table provides explanations of the responses to the querycm command. Examples of full responses are given, as well as explanations of some of the individual components of full responses.

**Responses for the querycm command**

| MAP output | Meaning and action |
|---|---|
| BASE<br>S0. | |
| | **Meaning:** The baseline of the PEC, the minimum allowable release, is given.<br><br>**Action:** None |
| Compatible '*NO'. | |
| | **Meaning:** The MS PEC design change document (DCD) release is not compatible with the batch change supplement (BCS) software running in the switch.<br><br>**Action:** None |
| Compatible 'YES'. | |
| | **Meaning:** The MS PEC DCD release is compatible with the BCS software running in the switch.<br><br>**Action:** None |
| Except<br>None | |
| | **Meaning:** There are no exception releases for this PEC.<br><br>**Action:** None |
| Except<br>SA | |
| | **Meaning:** In this example, SA is an exception release. The exception releases are above the baseline, and are known to be incompatible with the BCS software running in the switch.<br><br>**Action:** None |

**-continued-**

## querycm (continued)

**Responses for the querycm command** (continued)

**MAP output** **Meaning and action**

```
Last REx run on cpu 0 on 1992/12/17 02:06:56.354 THU..
Test done by system action and result was a pass.
Last REx run on cpu 0 on 1992/12/17 02:06:56.356 THU..
Test done by system action and result was a pass.
```

**Meaning:** The system displays the results of the most recent REx test.

**Action:** None

```
Message Controllers Cards:
CPU SHELF SLOT SIDE EQPEC   BASE EXCEPT REL COMPATIBLE
 0    0    17  FRNT NT9X12AB  10 13 14   15      YES
 0    0    17  BACK NT9X20AA  50 None    5K      YES
 0    0    18  FRNT NT9X12AB  10 13 14   15      YES
 0    0    18  BACK NT9X20AA  50 None    5J      YES
 1    0    21  FRNT NT9X12AB  10 13 14   1A      YES
 1    0    21  BACK NT9X20AA  50 None    51      YES
 1    0    22  FRNT NT9X12AB  10 13 14   02      *NO
 1    0    22  BACK NT9X20AA  50 None    5H      YES
```

**Meaning:** The system displays the card information for the specified function.

**Action:** None

```
No last REx result info for cpu 0
No last REx result info for cpu 1
```

**Meaning:** The system has not run a REx test since the last restart.

**Action:** None

```
Querycm basic print-out
CPU SHELF SLOT SIDE EQPEC   BASE EXCEPT REL COMPATIBLE
 0    0    17  FRNT NT9X12AB  10 13 14   15      YES
```

**Meaning:** The system displays the information for the specified card or cards.

**Action:** None

**-continued-**

# querycm (end)

**Responses for the querycm command** (continued)

| MAP output | Meaning and action |
|---|---|
| REL<br>S9 | **Meaning:** The card release obtained from querying the ID PROM of the card is given.<br><br>**Action:** None |
| The Link Closure Threshold is 1<br>The Out-of-sync Recover Mismatch Threshold is 1<br>The In-Sync Recovery Mismatch Threshold is 3<br>The Trap Rate Threshold is 1<br>The Processor Memory Fault Threshold is 1<br>The Clock Fault Threshold is 1<br>The Cancelled REx Threshold is 2 | **Meaning:** The system displays the requested thresholds or counts.<br><br>**Action:** None |
| | **-end-** |

# queryflg

## Function

Use the queryflg command to display the holder of the mate communication register (MCR) flag, and the estimated time before the flag will be released.

**queryflg command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **queryflg** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the queryflg command.

**Example of the queryflg command**

| Example | Task, response, and explanation | |
|---|---|---|
| **queryflg** ↵ | | |
| | **Task:** | Display the holder of the MCR flag. |
| | **Response:** | `MATE COMMUNICATION FLAG ON CM 0 IS NOT CLAIMED.` |
| | **Explanation:** | There is no process holding the MCR flag on the mate CPU. |

## Responses

The following table provides explanations of the responses to the queryflg command.

**Responses for the queryflg command**

| MAP output | Meaning and action |
|---|---|
| `MATE COMMUNICATION FLAG ON CM 0 IS NOT CLAIMED.` | |
| | **Meaning:** No process is executing on the mate CPU. |
| | **Action:** None |

**-continued-**

# queryflg (end)

**Responses for the queryflg command** (continued)

| MAP output | Meaning and action |
|---|---|
| `MATE COMMUNICATION FLAG ON CM 0 WILL BE RELEASED IN 5 MINUTES.` | **Meaning:** The system indicates which process has claimed the MCR flag, and how long the flag will be held.<br><br>**Action:** None |

**-end-**

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any MAP level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the CM level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The CM level has changed to the previous menu level. |

**-continued-**

## quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the CM level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The CM level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the CM level menu with a menu that is two or more MAP levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the CM level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |

**-end-**

# rextst

## Function

Use the rextst command to run routine exercise (REx) tests on the CM. The CM must be synchronized for the full test to be run.

**rextst command parameters and variables**

**Command** **Parameters and variables**

**rextst**

[ short / long ] [ all / cpu / mem / link / pmc ] [ stop / continue ] [ *noreset* / resethits ] [ *wait* / nowait ] [ *prompt* / noprompt ] (1) (2) (3) (4) (5)

**rextst** (continued)

(1) (2) (3) (4) (5) [ *noreset* / resetcounts ] [ *noverbose* / verbose ] (end)

| Parameters and variables | Description |
|---|---|
| all | This default parameter directs the system to run all REx tests. |
| continue | This parameter directs the system to generate a log when an error is encountered and the system continues the test. |
| cpu | This parameter directs the system to run only central processing unit (CPU) tests. |
| link | This parameter directs the system to run only the link tests. |
| long | This parameter directs the system to run all tests for the specified type regardless of how much time they take. |
| mem | This parameter directs the system to run only the memory REx tests. |
| noprompt | This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes. |
| *noreset* | This default parameter directs the system not to reset. Do not enter this parameter. |
| *noverbose* | This default parameter directs the system not to return completion messages after each individual REx test. Do not enter this parameter. |

**-continued-**

# rextst (continued)

**rextst command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| nowait | This parameter directs the system to allow use of the MAP for other functions while the REx test is running. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| pmc | This parameter directs the system to run only the peripheral message controller (PMC) REx tests. |
| resetcounts | This parameter directs the system to reset all but the cancelled REx fault counts. |
| resethits | This parameter directs the system to reset link hit counts. |
| short | This parameter directs the system to run only fast diagnostics. |
| stop | This parameter directs the system to stop running the type of test it is running when an error is encountered. |
| verbose | This parameter directs the system to return completion messages after each individual REx test. |
| *wait* | This default parameter directs the system to not allow the use of the MAP for other functions while the REx test is running. Do not enter this parameter. |

**-end-**

## Qualifications

The restrictions that must be observed when running a REx test are built into the system responses to the command. Any attempt to run a test which would violate one or more of the conditions the REx test requires to run will result in a warning message or a cancellation of the requested test.

## Example

The following table provides an example of the rextst command.

**Example of the rextst command**

| Example | Task, response, and explanation |
|---|---|
| **rextst nowait** ↵ | |
| | **Task:** Run REx tests on the CM. |
| | **Response:** `MAINTENANCE ACTION SUBMITTED.` |
| | **Explanation:** The system accepted the command and started the test. |

## Responses

The following table provides explanations of the responses to the rextst command.

**Responses for the rextst command**

| MAP output | Meaning and action |
|---|---|
| `Aborted. CPU is jammed inactive.` | |
| | **Meaning:** You cannot run REx tests because the mate CPU is jammed inactive. The CM must be able to switch activity for the REx test to be run. |
| | **Action:** Unjam the inactive CPU by entering /releasejam at the reset terminal for the inactive CPU, then reenter the rextst command. |
| `Abort-systems not equipped with PMCs` | |
| | **Meaning:** The system is not equipped with PMC. Therefore, you cannot run the PMC test. |
| | **Action:** None |
| `Aborted-REx disallowed for 5 minutes after a restart.` | |
| | **Meaning:** The system cannot run the REx test within the named number of minutes after a restart. |
| | **Action:** Wait the specified time and reissue the rextst command. |

**-continued-**

# rextst (continued)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot run test as mate CPU is jammed inactive.` | **Meaning:** As part of the REx test, the CM switches activity. However, this is not possible because the mate CPU is jammed inactive.<br><br>**Action:** Unjam the inactive CPU by entering /release jam at the reset terminal for the inactive CPU, then reenter the rextst command. |
| `Cannot run test when in synchronism.` | **Meaning:** The test cannot be run while the CPUs are synchronized.<br><br>**Action:** Drop sync using the dpsync command and retry the rextst command. |
| `Caution: CM sync and activity states will change.`<br>`Please confirm (″YES″ or ″NO″).` | **Meaning:** The full REx test includes activity switches.<br><br>**Action:** Enter yes to run the full REx test. Enter no to abort the command. |
| `CM is out of sync. Only partial test can be performed.`<br>`Please confirm (″YES″ or ″NO″).` | **Meaning:** Since the CM is not synchronized, only a partial test will be run.<br><br>**Action:** Enter yes to continue with a partial test. Enter no to abort the command. |
| `CPU REX test did not run-CPU resources in use.` | **Meaning:** Another process is using the resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `Hit counts have been cleared.` | **Meaning:** The link hit counts were cleared after completion of a REx test, where resethits was included in the command string.<br><br>**Action:** None |

**-continued-**

# rextst (continued)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Hit counts have not been cleared.` | **Meaning:** The system could not clear the hit counts.<br><br>**Action:** Replace the cards in the card list. Repeat the test. Contact maintenance support personnel if the problem persists. |
| `Maintenance action not performed, resources in use.` | **Meaning:** The resources required to perform one or more of the individual REx tests were not available.<br><br>**Action:** Retry the rextst command. |
| `Maintenance action started.`<br><br>or<br><br>`Maintenance action already started.` | **Meaning:** Either the CM process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.<br><br>**Action:** None |
| `Maintenance action submitted.` | **Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect.<br><br>**Action:** None |
| `Mate is already under test.` | **Meaning:** The mate communication register (MCR) flag is in use and cannot be claimed.<br><br>**Action:** None |

**-continued-**

# rextst (continued)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `MC REX test did not run-MC resources in use.` | **Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `MEM REX test did not run-MEM resources in use.` | **Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `No mailbox available.` | **Meaning:** The system encountered an error during the test.<br><br>**Action:** Try the rextst command again. |
| `No reply from request` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `PMC REX test did not run-PMC resources in use.` | **Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `RESETHITS option is only valid with the LINK and ALL classes. Counts will not be cleared.` | **Meaning:** The resethits parameter is not valid with some classes of tests.<br><br>**Action:** None |

**-continued-**

# rextst (continued)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `REXTST not run. A PRE-REX match of memory resulted in a mismatch. Please check memory indicators for possible faults.` | **Meaning:** The REx test was not run because memory errors occurred during the memory match.<br><br>**Action:** Access the Memory level, clear the memory faults, and attempt to run the REx test again. |
| `RExTst failed. Test name= CPU` | **Meaning:** One or more REx tests failed. The system displays only the first failure in this response and displays the failed test. The system displays a list of the cards that may be defective.<br><br>**Action:** None |
| `RExTst passed` | **Meaning:** The test ran without failure.<br><br>**Action:** None |
| `Software inconsistency-action aborted.` | **Meaning:** A software fault has occurred.<br><br>**Action:** None |
| `SSC REX test did not run-SSC resources in use.` | **Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `Switch is out of Sync. Only a partial test can be performed. Please confirm ("YES" or "NO"):` | **Meaning:** The system cannot run full tests when the switch is out of sync.<br><br>**Action:** Enter yes to continue with the partial test. Enter no to abort the command. |

**-continued-**

# rextst (end)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `SYSTEM NOT EQUIPPED WITH A PMC-PMC REX TEST WILL NOT RUN.` | **Meaning:** The PMC is not equipped and cannot be tested.<br><br>**Action:** None |
| `UNABLE TO RUN MEM REX TEST.` | **Meaning:** The system cannot run the specified type of REx test because the device to be tested is in use. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** None |
| `VERBOSE cannot be used with NOWAIT.` | **Meaning:** You entered the verbose and nowait parameters in the same command string, and they are mutually exclusive.<br><br>**Action:** Reissue the rextst command with one or the other parameter. |
| `Warning: Running of a REx test is not recommended at this time due to exceeded error thresholds. Use the QUERYCM RExSchd command for more details concerning the errors which have occurred.` | **Meaning:** One or more counts of stability-effecting error conditions has exceeded a preset threshold.<br><br>**Action:** Wait for the fault counts to fall below the stability thresholds and retry the rextst command. Use the rextst resetcounts command string to clear the counts if the error condition is known and has been corrected. |
| `Warning: The clearing of the error counts is not recommended until the source of the errors is corrected. Use the QUERYCM RExSch command for more details concerning the errors which have occurred. A successful REx test will also clear the error counts.`<br>`Please confirm (“YES”, “Y”, “NO”, or “N”):` | **Meaning:** The system prompts for confirmation before clearing the error counts.<br><br>**Action:** Enter yes or y to continue. Enter no or n to abort the command. |

**-end-**

# swact

## Function

Use the swact command to switch activity (SwAct) to the mate central processing unit (CPU).

**swact command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **swact** | [ *prompt* / noprompt ] [ *check* / nocheck ] [ *noforce* / force ] [ *match* / nomatch ] |

| Parameters and variables | Description |
|---|---|
| *check* | This default parameter directs the system to check the common processor clock source of the computing module (CM). The clock source check is performed automatically before SwAct. If the check finds that the CM would be running on the inactive CPU processor clock after the SwAct, a prompt is displayed at the MAP to ask for permission to automatically drop sync; then sync the CM again after the SwAct. Do not enter this parameter, |
| force | This parameter directs the system to perform the SwAct when the CPU is out of sync. |
| *match* | This default parameter directs the system to perform a match test. Do not enter this parameter. |
| nocheck | This parameter directs the system to bypass the checking of the common processor clock source of the CM. The nocheck parameter is used to switch activities without sync being dropped. CM sync status should not be altered if the CPU occupancy is over 50 percent. |
| *noforce* | This default parameter directs the system to not allow SwAct when the CPU is out of sync. Do not enter this parameter. |
| nomatch | This parameter directs the system to suspend the match test. |
| noprompt | This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes. |
| *prompt* | This default parameter directs the system to enable yes and no prompts. Do not enter this parameter. |

## Qualifications

None

## swact (continued)

## Example

The following table provides an example of the swact command.

**Example of the swact command**

| Example | Task, response, and explanation |
|---|---|
| **swact noprompt force** ↵ | |
| | **Task:** To switch activity to the mate CPU. |
| | **Response:**<br>`ACTIVITY SWITCH ON CPU 0`<br>`***SOS COLD RESTART NO.8 AT AUGUST-17 00:00:00` |
| | **Explanation:** The CPUs were not in sync, therefore SwAct caused a cold restart. |

## Responses

The following table provides explanations of the responses to the swact command.

**Responses for the swact command**

| MAP output | Meaning and action |
|---|---|
| `Aborted. CM is not in sync and the 'force' option is not specified.` | |
| | **Meaning:** The CPUs are out of sync. Therefore, the force parameter must be used to switch activity. The command is terminated. |
| | **Action:** Synchronize the CPUs first using the sync command and then SwAct. If a cold restart is acceptable, use the force parameter with the SwAct command. |
| `Aborted. Inactive CPU 1 has a faulty clock and should not be allowed to gain activity.` | |
| | **Meaning:** The inactive CPU has a faulty clock and should not be allowed to gain activity. |
| | **Action:** Drop sync and perform a mate CPU clock test. If the test fails, replace the faulty CPU card. |

**-continued-**

# swact (continued)

**Responses for the swact command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Aborted. Inactive CPU 1 has a processor memory fault.` | **Meaning:** The inactive CPU has a processor memory fault and should not be allowed to gain activity.<br><br>**Action:** Drop sync and perform a mate CPU PCCAB. If the test fails, replace the faulty CPU card. |
| `Mate is jammed inactive.` | **Meaning:** The system cannot switch activity because the mate CPU is out of sync.<br><br>**Action:** None |
| `No reply from request` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `Software inconsistency-action aborted.` | **Meaning:** A software fault has occurred.<br><br>**Action:** None |
| `Switch of activity failed.` | **Meaning:** Activity has not been switched.<br><br>**Action:** None |
| `Switch of activity successful.` | **Meaning:** Activity has been switched.<br><br>**Action:** None |

**-continued-**

## swact (end)

**Responses for the swact command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Switch of activity successful. Drop synchronization in progress. running in simplex mode with active CPU 0. Synchronization in progress...synchronization successful.` | **Meaning:** The activity switch has been successful. Sync is dropped automatically to switch the clock source to the active CPU. The CM is then resynchronized automatically.<br><br>**Action:** None |
| `Switch of activity will cause a cold restart. Do you wish to continue? (TYPE YES/NO)` | **Meaning:** The CPUs are not synchronized. If you switch the activity of the CPU, the system will initiate a cold restart.<br><br>**Action:** Enter yes if a SwAct through a cold restart is acceptable. Enter no to abort the command. |
| `Switch of activity will cause the CM to be running on the inactive CPU'S processor clock. System will drop sync and then re-sync in order to switch to the active CPU'S clock. Do you wish to continue? Please confirm (YES OR NO):` | **Meaning:** The CM would be running on the newly inactive CPU clock after the activity switch. To enhance the fault tolerance of the CM in sync operation, the system should drop sync and then re-sync, in order to switch to the newly active CPU clock.<br><br>**Action:** Enter yes to continue with the command. Enter no if a change to the sync status is not acceptable. |

**-end-**

# sync

## Function

Use the sync command to synchronize the computing module (CM). This command copies the memory of the active central processing unit (CPU), performs a match test between CPUs, and tests the inactive CPU. If all the tests are passed, the system completes the sync.

**sync command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **sync** | [ *none* / optimum ] [ normal / nomatch / notest / nohands ] [ *none* / eccoff / eccon ] [ *wait* / nowait ] [ *prompt* / noprompt ] |

| Parameters and variables | Description |
|---|---|
| eccoff | This parameter directs the system to disable memory error correction. |
| eccon | This parameter directs the system to enable memory error correction. |
| nohands | This parameter directs the system to disable handshake-override. Handshake-override is a feature that speeds CPU operation by overriding the handshake synchronization of memory access between CPUs. The handshake-override feature is available only on CMs that are equipped with NT9X14BB or NT9X14DA memory cards, or a combination of both. It is implemented automatically when the CM is synchronized. Use the nohands parameter to disable the handshake-override feature, or contact maintenance support personnel to take the feature out of service. The nohands parameter triggers the NoOvr alarm. The nohands parameter is not available on DMS-core equipped with NT9X10AA (BRISC) processor boards. |
| nomatch | This parameter directs the system to suspend the match test. Use the nomatch parameter in emergency situations only. |
| *none* | This default parameter directs the system not to perform optimum tests, or not to change the condition of error correction. Do not enter this parameter. |
| noprompt | This parameter directs the system to suppress system prompts. The system automatically enters yes. |
| normal | This default parameter indicates that a normal sync operation is to be performed. |

**-continued-**

## sync (continued)

**sync command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| notest | This parameter directs the system to suspend all the tests that the system usually performs during synchronization. Use the notest parameter only in emergency situations and under the supervision of high level technical support personnel. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the CM is being synchronized. |
| optimum | This parameter directs the system to synchronize the CM using an optimum memory mapping for the mate (inactive) CPU. The sync command with the optimum parameter disables the handshake-override feature and triggers the NoOvr alarm. Use this parameter only when performing memory extensions on a CM that can support a mixed memory configuration. A mixed memory configuration can be supported if program store and data store are aligned along 8-megabyte block boundaries. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| *wait* | This default parameter directs the system not to allow the use of the MAP for other functions while the CM is being synchronized. Do not enter this parameter. |

**-end-**

## Qualifications

The sync command is qualified by the following restriction:

- The system will sync the CM only if it can claim the mate communication register.
- When the optimum parameter is used, it forces a memory configuration on the inactive CPU that cannot support handshake-override when the CM is synchronized. Use the optimum parameter only when modifying the memory in a CM equipped with a mixed memory configuration, or in a CM whose memory is being upgraded to contain a mixed memory configuration.
- When the notest parameter is used, no tests or match checks are performed during synchronization. This voids all presync and postsync testing. Use this parameter only under the supervision of high level technical support personnel.
- When the nohands parameter is used, the CM will enter sync without enabling handshake override. The nohands parameter is not available on DMS-core equipped with BRISC processor boards.

## sync (continued)

## Example

The following table provides an example of the sync command.

**Example of the sync command**

| Example | Task, response, and explanation |
|---|---|
| **sync nowait noprompt** ↵ | |
| | **Task:** Put the CPUs in sync, with no waiting and no prompts for confirmation. |
| | **Response:** `SYNCHRONIZATION SUCCESSFUL` |
| | **Explanation:** The CPU's are in sync. |

## Responses

The following table provides explanations of the responses to the sync command.

**Responses for the sync command**

| MAP output | Meaning and action |
|---|---|
| `Aborted. CM is already running in sync.` | |
| | **Meaning:** The two CPUs are already synchronized. |
| | **Action:** None |
| `Aborted. Optimum configuration can only be attempted when memory has been aligned along 8 mbyte block boundaries. Memory can be aligned using the MEMORY MAP level ALIGN command.` | |
| | **Meaning:** The current memory of the inactive mate CPU is not aligned to support mixed memory. Therefore, an optimum configuration is not possible. Use the sync optimum command string only when performing memory extensions on a CM that can support a mixed memory configuration. A CM can support a mixed memory configuration if program store and data store are aligned along 8-megabyte block boundaries. |
| | **Action:** Clear the problem and retry the command. |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Aborted. The CPU releases are not compatible.` | **Meaning:** The NT release number on the active CPU firmware is different from the NT release number on the inactive CPU firmware. The firmware in the CPUs is not compatible.<br><br>**Action:** None |
| `Aborted.`<br>`Current high call processing utilization indicates that disabling burst mode operation may result in raising call processing utilization to a point where CALL ORIGINATION FAILURES MAY OCCUR.`<br>`The NOCHECK option can be used with the SYNC command to override this condition if required.` | **Meaning:** The response received when a SYNC is attempted in conditions that would force burst mode operation to be disabled while call processing utilization is high. Performance degradation caused by disabling burst mode operation of the memory system will bring the system to a call processing utilization level that may cause call origination failures. You can reenter the SNYC command with the NOCHECK option if overriding of this checking is desired.<br><br>**Action:** Correct the inactive CPU's configuration that supports burst mode operation and reissue the SYNC command. This will eventually result in system operation in-sync with burst mode operation enabled.<br><br>Wait until call processing utilization level diminishes and reissue the SYNC command. This will result in a system running in simplex mode with burst mode enabled until the SYNC command is reissued.<br><br>Reissue the SYNC command with the NOCHECK option. This will result in a system eventually running in sync with burst mode operation disabled and with a call processing utilization level that may cause call origination failures. |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Burst mode operation will be disabled as requested.`<br>`Pleasse confirm (“YES” or “NO”).` | **Meaning:** This response is received when a SYNC is requested with the NOBURST option. Disabling burst mode operation diminishes system’s performance and therefore, call processing utilization is higher when burst mode is disabled, given the same quantity of call processing work.<br><br>**Action:** If burst mode operation is not desired in sync, enter ‘YES’ and the command will proceed. Keep in mind however that burst mode will remain disabled until another SYNC command is executed without the NOBURST option. |
| `Burst mode operation will now be disabled as it is not currently supported by both CPUs. Current high call processing utilization indicates that disabling burst mode operation may result in raising call processing utilization to a point where CALL ORIGINATION FAILURES MAY OCCUR.`<br>`Please (“YES” or “NO”)` | **Meaning:** This response is received when a SYNC is attempted in conditions that would force burst mode operation to be disabled while call processing utilization is high. Performance dregradation caused by disabling burst mode operation of the memory system will bring the system at a call processing utilization level that may cause call origination failures. This action should be taken under supervision from the technical support group.<br><br>**Action:** It is important that you properly understand the impact of high call processing utilization. Only answer yes to the prompt if sync operation without burst mode is desired at the cost of raising the call processing utilization to a level that may cause call origination failures. |
| `Cannot synchronize-cannot configure mate memory.` | **Meaning:** Either too many memory faults exist in the memory of the inactive CPU or the active CPU cannot communicate with the inactive CPU.<br><br>**Action:** Clear the problem and retry the command. |
| `Cannot synchronize-cannot reset mate CPU.` | **Meaning:** The inactive CPU did not respond to a request from the active CPU.<br><br>**Action:** None |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot synchronize-could not get mate on same clock.` | **Meaning:** The inactive CPU cannot switch the processor clocking source to the active CPU processor clock.<br><br>**Action:** Test the inactive CPU. |
| `Cannot synchronize-CPUs have different firmware.` | **Meaning:** The system cannot synchronize the CM because the two CPUs contain different firmware.<br><br>**Action:** Test the inactive CPU. |
| `Cannot synchronize-different CPU hardware vintage.` | **Meaning:** The system cannot synchronize the CM because the suffixes of the product engineering codes (PEC) on the two CPU cards are different and the cards are incompatible.<br><br>**Action:** Change the inactive CPU card to one that has the same PEC and suffix as the active CPU card. |
| `Cannot synchronize-firmware sync kernel failed.` | **Meaning:** The failure of a firmware synchronization kernel has prevented CM synchronization.<br><br>**Action:** None |
| `Cannot synchronize-first rendezvous failed, suspect CPUs.` | **Meaning:** A problem with the CPUs has prevented CM synchronization.<br><br>**Action:** None |
| `Cannot synchronize-faults exist in active CPU memory.` | **Meaning:** Faults in the memory of the active CPU are preventing synchronization.<br><br>**Action:** Clear the problem and retry the command. |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot synchronize-invalid link configuration.` | **Meaning:** A problem exists with inter-CPU links.<br><br>**Action:** Contact maintenance support personnel. |
| `Cannot synchronize-mate memory is not contiguous.` | **Meaning:** Faults in the memory of the inactive CPU are preventing synchronization.<br><br>**Action:** Clear the problem and try the command again. |
| `Cannot synchronize-mate test failed.` | **Meaning:** The inactive CPU failed presync diagnosis.<br><br>**Action:** Check status indicators for faults, then test the inactive CPU. |
| `Cannot synchronize-MC 1 accesses will mismatch.` | **Meaning:** A problem exists with a message controller which causes a mismatch if the CM is synchronized.<br><br>**Action:** Test the message controllers and clear any problems. |
| `Cannot synchronize-memory copy failed.` | **Meaning:** Memory cannot be copied.<br><br>**Action:** Try to synchronize again. |
| `Cannot synchronize-memory protect copy failure.` | **Meaning:** A problem occurred while the system was copying protected memory.<br><br>**Action:** Contact maintenance support personnel. |
| `Cannot synchronize-mismatch while disabling ECC.` | **Meaning:** A mismatch of memory occurred while the system was disabling error checking and correction.<br><br>**Action:** Check the logs and status displays for faults. |

**-continued-**

## sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot synchronize-mismatch while enabling handshake-override.` | **Meaning:** A mismatch occurred while the system was enabling handshake-override.<br><br>**Action:** Check the logs and status displays for faults. |
| `Cannot synchronize-mismatch while optimizing sync performance.` | **Meaning:** A mismatch of memory occurred during synchronization.<br><br>**Action:** Check the logs and status displays for faults. |
| `Cannot synchronize-not enough memory on mate.` | **Meaning:** Not enough memory is available on the inactive CPU to permit the system to copy memory.<br><br>**Action:** Use the config command at the Memory level of the MAP to configure the memory of the inactive CPU , then try to synchronize the CM again. |
| `Cannot synchronize-second rendezvous failed, suspect CPUs.` | **Meaning:** A problem with the CPUs has prevented CM synchronization.<br><br>**Action:** None |
| `Cannot synchronize-software package inconsistency.` | **Meaning:** The system cannot synchronize the CM because the software load in the DMS-core is not compatible with the NT9X13 processor cards that are currently installed.<br><br>**Action:** Contact maintenance support personnel. |
| `Cannot synchronize-SSC 1 accesses will mismatch.` | **Meaning:** There is a problem with the specified subsystem clock (SSC) that causes a mismatch if the CM is synchronized.<br><br>**Action:** Test the SSCs and clear any problems. |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot synchronize-synchronization dropped during match.` | **Meaning:** Either there are too many memory faults on the inactive CPU or a mismatch occurred during synchronization.<br><br>**Action:** Clear the problem and retry the command. |
| `Inactive CPU configuration does not support burst mode operation. Burst mode will now be disabled.`<br>`Please confirm (“YES” or “NO”).` | **Meaning:** This response is received when a SYNC is attempted in conditions that would force burst mode operation to be disabled. Burst mode operation can only be used in sync if both CPUs support it. If either CPU does not support burst memory operation, it will be disabled prior to syncing.<br><br>**Action:** If burst mode operation is desired in snyc, enter ‘No’ and the command will terminate. You should contact the technical support group to get necessary support for burst mode operation on the inactive CPU. If sync is desired even if burst mode is going to be disabled, enter ‘Yes’ and the command will continue. |
| `Maintenance action started.`<br><br>or<br><br>`Maintenance action already started.` | **Meaning:** Either the CM process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.<br><br>**Action:** None |
| `Maintenance action submitted.` | **Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect.<br><br>**Action:** None |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `No reply from request` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `Software inconsistency-action aborted.` | **Meaning:** A software fault has occurred.<br><br>**Action:** None |
| `Synchronization successful` | **Meaning:** The CPUs are in sync.<br><br>**Action:** None |
| `Synchronization successful. Handshake-override is not enabled.` | **Meaning:** The CM is synchronized. The handshake-override feature is in service but was disabled during synchronization. If you entered the sync command to enable handshake-override, then a memory configuration problem may have prevented the action.<br><br>**Action:** Contact maintenance support personnel. |
| `WARNING:`<br>`Memory Error Correction will be DISABLED in SYNC.`<br><br>`Single bit memory faults will cause mismatches but performance will be enhanced due to the disabling of Memory Error Checking and Correction.`<br>`Do you wish to continue?`<br>`Please confirm (“YES”, “Y”, “NO”, or “N”):` | **Meaning:** The system prompts for confirmation before disabling error correction.<br><br>**Action:** Enter yes or y to disable error correction. Enter no or n to abort the command. |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| WARNING:<br>Memory Error Correction will be ENABLED in SYNC.<br><br>Memory mismatches will not occur due to correctable single bit memory faults but a degradation in service will result due to the enabling of memory error correction.<br>Do you wish to continue?<br>Please confirm (“YES”, “Y”, “NO”, or “N”): | **Meaning:** The system prompts for confirmation before enabling error correction.<br><br>**Action:** Enter yes or y to enable error correction. Enter no or n to abort the command. |
| WARNING<br>The inactive cpu has a different release number.<br>Please confirm (”YES” or ”NO”). | **Meaning:** The NT release number on the active CPU firmware is different from the NT release number on the inactive CPU firmware. The firmware in the CPUs might not be compatible.<br><br>**Action:** Enter yes to continue. Enter no to abort the command. |
| WARNING:<br>The notest option should only be used under the supervision of the technical assistance support group in an emergency.<br>Please confirm (”YES” or ”NO”). | **Meaning:** This warning is a reminder of the consequences of entering the sync command with the notest parameter.<br><br>**Action:** Use the sync command with the notest parameter in emergency situations only. Consult maintenance support personnel. |

**-continued-**

## sync (end)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| WARNING:<br>The optimum option should only be used when doing memory extensions. It will configure mate memory such that a maximum number of spares of each memory module size is provided. However, under this configuration, a CM running in sync will have handshake-override disabled.<br>Please confirm (″YES″ or ″NO″). | **Meaning:** The system prompts for confirmation with a reminder of the consequences of using the sync command with the optimum parameter.<br><br>**Action:** Enter yes to continue. Enter no to abort the command. |
| WARNING:<br>The optimum option should only be used when doing memory extensions. It will configure mate memory such that a maximum number of spares of each memory module size is provided.<br>Please confirm (″YES″ or ″NO″). | **Meaning:** You specified the optimum option on a DMS-core equipped with NT9X13JA or BRISC processor cards. The system prompts for confirmation with a reminder of the consequences of using the sync command with the optimum parameter.<br><br>**Action:** Enter yes to continue. Enter no to abort the command. |

**-end-**

# tst

## Function

Use the tst command to test the inactive CPU.

**tst command parameters and variables**

| Command | Parameters and variables | |
|---|---|---|
| **tst** | *test_id* | [ *prompt* / noprompt ] |

| Parameters and variables | Description |
|---|---|
| noprompt | This parameter suppresses the yes/no prompt. The system enters yes. |
| *prompt* | This default parameter enables the system yes/no prompts and displays warning messages. The user does not enter this parameter. |
| *test_id* | This variable consists of one of the following test parameters:<br>▪ all all tests<br>▪ destr all tests, with no warning regarding the static random access memory (SRAM) test<br>▪ nondestr all tests except SRAM<br>▪ maze maze test<br>▪ rom read only memory (ROM) test<br>▪ usart usart test<br>▪ fir fault identification register test<br>▪ mau memory access unit test<br>▪ cache data cache test<br>▪ bus bus access test<br>▪ apr access protection memory test<br>▪ sram SRAM test<br>▪ clock clock test<br>▪ mei mei test<br>▪ pccab pccab test<br>▪ tic tic test<br>▪ cmmu cmmu test<br>▪ dmc dmc test |

# tst (continued)

## Qualifications

The tst command is qualified by the following exceptions, restrictions, and limitations:

- If no test is specified, the system runs all of the tests.
- The CPU pair must be out of sync for the tests to be run.
- When the tst all command string is used, warning messages are shown if the noprompt parameter is not used.
- The system displays a list of possibly defective cards with each failure response.

## Example

The following table provides an example of the tst command.

**Example of the tst command**

| Example | Task, response, and explanation |
|---|---|
| **tst rom noprompt** ↵<br>*where*<br><br>rom indicates that a test is to be run on the read-only memory | **Task:** Test the ROM of the inactive CPU.<br><br>**Response:** `TEST PASSED.`<br><br>**Explanation:** The test has been run successfully. |

## Responses

The following table provides explanations of the responses to the tst command.

**Responses for the tst command**

| MAP output | Meaning and action |
|---|---|
| `ABORTED. CANNOT TEST MATE CPU WHEN RUNNING IN SYNC.` | **Meaning:** The mate CPU test must be run with the CPUs out of sync.<br><br>**Action:** Drop sync using the dpsync command and reenter the tst command. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| ABORTED. STATIC RAM NOT EQUIPPED. | **Meaning:** The mate CPU is not equipped with SRAM.<br>**Action:** None |
| Access Protection RAM test failed | **Meaning:** The CPU test failed.<br>**Action:** None |
| Bus Access test failed | **Meaning:** The CPU test failed.<br>**Action:** None |
| CANNOT RUN TEST WHEN IN SYNCHRONISM. | **Meaning:** The test cannot be run while the CPUs are synchronized.<br>**Action:** Drop sync using the dpsync command and reenter the tst command. |
| Cannot test mate CPU when in sync. | **Meaning:** The test cannot be run while the CPUs are in sync.<br>**Action:** None |
| Clock test failed | **Meaning:** The CPU test failed.<br>**Action:** None |
| Data cache test failed | **Meaning:** The CPU test failed.<br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `DMC test failed` | **Meaning:** The CPU test failed.<br><br>**Action:** None |
| `Do you want to continue testing without destroying the software load in the inactive CPU by not executing the following test(s):`<br>`Static RAM test`<br>`PCCAB test`<br><br>`Please confirm (“YES” or “NO”):` | **Meaning:** You have responded to the previous prompt indicating that the SRAM test is not required. The system is now inquiring if it should perform other CPU hardware tests.<br><br>**Action:** Enter yes to run the tests. Enter no to abort the command. |
| `FIR test failed` | **Meaning:** The CPU test failed.<br><br>**Action:** None |
| `Maintenance action not performed, resources in use.` | **Meaning:** The required operation cannot be performed because the resource is in use by other processes.<br><br>**Action:** Wait a few minutes and try again. If the response persists, contact maintenance support personnel. |
| `MAINTENANCE ACTION STARTED.`<br><br>or<br><br>`MAINTENANCE ACTION ALREADY STARTED.` | **Meaning:** Either the CM process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `MAINTENANCE ACTION SUBMITTED.` | **Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect.<br>**Action:** None |
| `Mate CPU is of a different processor type.` | **Meaning:** The mate processor is of a different processor type.<br>**Action:** None |
| `Mate is already under test.` | **Meaning:** The mate is already under test by another process.<br>**Action:** None |
| `MAU test failed` | **Meaning:** The CPU test failed.<br>**Action:** None |
| `Maze test failed` | **Meaning:** The CPU test failed.<br>**Action:** None |
| `MEI test failed` | **Meaning:** The CPU test failed.<br>**Action:** None |
| `No mailbox available.` | **Meaning:** The system cannot allocate the software mailbox required for inactive CPU test.<br>**Action:** Wait a few minutes, then try the tst command again. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `No response from mate CPU.` | **Meaning:** The inactive CPU does not respond. The system will generate a card list to indicate the possible problem location.<br><br>**Action:** Repair or replace the faulty cards and repeat the test |
| `NO REPLY FROM REQUEST` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `PCCAB test failed` | **Meaning:** The CPU test failed.<br><br>**Action:** None |
| `ROM test failed` | **Meaning:** The CPU test failed.<br><br>**Action:** None |
| `SOFTWARE INCONSISTENCY - ACTION ABORTED.` | **Meaning:** A software fault has occurred.<br><br>**Action:** None |
| `Static RAM does not exist.` | **Meaning:** Static RAM is not equipped. The system aborts the command.<br><br>**Action:** None |
| `Static RAM test failed` | **Meaning:** The CPU test failed.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `STATIC RAM TEST WILL CORRUPT THE SOFTWARE LOAD IN THE INACTIVE CPU. DO YOU WISH TO TEST THE SRAM ANYWAY? PLEASE CONFIRM "YES" OR "NO").` | **Meaning:** Testing the SRAM destroys the software load in the inactive CPU.<br><br>**Action:** Enter yes to run the test, or no to abort the command. |
| `TEST PASSED` | **Meaning:** The CPU passed the specified tests.<br><br>**Action:** None |
| `TEST PASSED. MATE CPU IS OF A DIFFERENT PROCESSOR TYPE.` | **Meaning:** The specified tests passed but the mate CPU is of a different processor type. Two CPU cards are of a different processor type if their PEC codes do not match, up to and including the seventh character of the code. (For example, NT9X13BC and NT9X13GA are of different processor types.) The mate CPU can be of a different processor type only during a BCS application to change the CPUs in the CM.<br><br>If the processor clock test was specified, it is bypassed, since the mate processor clock runs at a different frequency when it is a different processor type.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| THE FOLLOWING TESTS FAILED.<br>MAZE TEST<br>ROM CHECKSUM TEST<br>USART TEST<br>FIR TEST<br>MAU TEST<br>DATA CACHE TEST<br>BUS ACCESS TEST<br>ACCESS PROTECTION RAM TEST<br>STATIC RAM TEST<br>PROCESSOR CLOCK TEST | **Meaning:** The specified tests failed. The CM Flt major alarm is raised. The mate CPU indicator is marked flt, and the CM125 CPU test fail report log is generated.<br><br>**Action:** Repair or replace the faulty cards and repeat the test. |
| The issued test is not a valid test for the NT9X10 processor. | **Meaning:** The specified test is not valid for the CM.<br><br>**Action:** None |
| The issued test is not a valid test for the NT9X13 processor. | **Meaning:** The specified test is not valid for the CM.<br><br>**Action:** None |
| The test(s) listed below will destroy the software load in inactive CPU.<br>Static RAM test<br>PCCAB test<br><br>Do you wish to do the test(s) anyway? | **Meaning:** The SRAM and PCCAB test destroy the inactive CPU software load, if there is one. The system displays this warning in response to the tst and tst all command strings.<br><br>**Action:** Enter yes to run the tests anyway. Enter no to bypass the tests. |

**-continued-**

# tst (end)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `USART test failed` | **Meaning:** The CPU test failed.<br><br>**Action:** None |

**-end-**

# CMMnt level commands

Use the computing module maintenance (CMMnt) level of the MAP to query specific information about the performance and the available memory of the computing module (CM) and to control the load image and CMMnt level alarms.

## Accessing the CMMnt level

To access the CMMnt level, enter the following from the CI (command interpreter) level:

**mapci;mtc;cm;cmmnt** ↵

## CMMnt commands

All of the commands available at the CMMnt MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**CMMnt commands**

| Command | Page |
|---|---|
| alarm | C-609 |
| autold | C-617 |
| dpsync | C-619 |
| image | C-623 |
| mtcchk | C-629 |
| quit | C-635 |
| rextst | C-639 |
| swact | C-647 |
| sync | C-651 |

## CMMnt menu

The following figure shows the CMMnt menu and status display.

```
          CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
           .     .     .     .     .    .     .     .     .     .


CM Mnt        CM   Sync  Act  CPU0  CPU1  JAM  Memory  CMMnt  MC  PMC
 0 Quit        0    no  cpu 0  .    flt   yes     .       .     .   .
 2
 3 AutoLd_    Traps:      Per minute =    0  Total =     0
 4 Image
 5 Alarm_     AutoLdev:   Primary = SLM 1 DISK  Secondary = SLM 0 DISK
 6
 7            Image Restartable = No image test since last restart
 8
 9            Next image test restart type = WARM
10
11            Last CMREXTST executed
12 RExTst
13 SwAct      System memory in kbytes as of  22:38:29
14 Sync
15 DpSync     Memory (kbytes): Used=130656 Avail=111008 Total=241664
16 MtcChk_
17
18
```

## CMMnt status codes

The following table describes the status codes for the CMMnt status display.

| Status codes CMMnt menu status display | | |
|---|---|---|
| **Code** | **Range** | **Description** |
| Primary and Secondary | | |
| SLM | 0-1 | The reload image will come from a system load module (SLM). |
| TAPE | tape | The reload image will be read off a tape. |
| DISK | disk | The reload image will be read off a disk. |
| DEV | a, b, c, d | The reload image will come from a device. |
| MS | 0-1 | The reload image will come from the device on this message switch. |
| Image restartable | | |
| Yes | | When the image was last tested it survived an inactive and out-of-sync restart. |
| Maybe | | The last image test could not determine the sanity of the image. |
| No | | When the image was last tested, it did not survive an inactive and out-of-sync restart. |
| Next CM REXTST restart type: | | |
| warm | | The next CM routine exercise (REx) test will run a warm restart on the inactive central processor unit (CPU). |
| cold | | The next CM REx test will run a cold restart on the inactive CPU. |
| reload | | The next CM REx test will run a reload restart on the inactive CPU. |

# alarm

## Function

Use the alarm command to enable or disable the specified type of alarm.

**alarm command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **alarm** | *alarm_type* [ enable / disable ] |

| Parameters and variables | Description |
|---|---|
| disable | This parameter directs the system to disable the alarm. |
| enable | This parameter directs the system to enable the alarm. |
| *alarm_type* | This variable indicates the specific alarm to be enabled or disabled. The alarm type is one of the following:<br>▪ autoload<br>▪ cmtrap<br>▪ image<br>▪ lowmem<br>▪ lowsprmajor<br>▪ lowsprminor<br>▪ rexschedule |

## Qualifications

The alarm command is qualified by the following restrictions, exceptions, and limitations:

- If no alarm type is entered, the system displays the status (enabled or disabled) of all the alarm types.
- If an alarm type is entered without enable or disable, the system displays the current status of the alarm type.

# alarm (continued)

## Examples

The following table provides an example of the alarm command.

**Examples of the alarm command**

| Example | Task, response, and explanation |
|---|---|
| **alarm autold enable** ↵<br>*where*<br><br>autold enables or disables the auto load alarm | **Task:** Enable the auto load alarm.<br><br>**Response:** `The AutoLd alarm is enabled.`<br><br>**Explanation:** The auto load alarm is enabled. |

## Responses

The following table provides explanations of the responses to the alarm command.

**Responses for the alarm command**

| MAP output | Meaning and action |
|---|---|
| `Autoload alarm is now being enabled` | **Meaning:** The system is enabling the autoload alarm.<br><br>**Action:** None |
| `Autoload alarm will be disabled until 09:00 am.` | **Meaning:** The specified alarm is disabled until the time specified in the response.<br><br>**Action:** None |
| `CMTrap alarm is now being enabled` | **Meaning:** The system is enabling the CMTrap alarm.<br><br>**Action:** None |

**-continued-**

# alarm (continued)

**Responses for the alarm command** (continued)

| MAP output | Meaning and action |
|---|---|
| `CMTRAP alarm will be disabled until 09:00 am.` | **Meaning:** The specified alarm is disabled until the time specified in the response.<br>**Action:** None |
| `Image alarm is now being enabled` | **Meaning:** The system is enabling the image alarm.<br>**Action:** None |
| `Image alarm will be disabled until 09:00 am.` | **Meaning:** The specified alarm is disabled until the time specified in the response.<br>**Action:** None |
| `Invalid enable/disable option, no action taken.` | **Meaning:** You entered an invalid parameter.<br>**Action:** None |
| `Invalid alarm supplied, no action taken.` | **Meaning:** The alarm type entered was invalid.<br>**Action:** Retry the command with a correct alarm type. |
| `LowMem alarm is now being enabled` | **Meaning:** The system is enabling the LowMem alarm.<br>**Action:** None |
| `LowMem alarm will be disabled until 09:00 am.` | **Meaning:** The specified alarm is disabled until the time specified in the response.<br>**Action:** None |

**-continued-**

# alarm (continued)

**Responses for the alarm command** (continued)

| MAP output | Meaning and action |
|---|---|
| `LowSprMajor alarm is now being enabled` | **Meaning:** The system is enabling the LowSprMajor alarm.<br>**Action:** None |
| `LowSprMajor alarm will be disabled until 09:00 am.` | **Meaning:** The specified alarm is disabled until the time specified in the response.<br>**Action:** None |
| `LowSprMinor alarm is now being enabled` | **Meaning:** The system is enabling the LowSprMinor alarm.<br>**Action:** None |
| `LowSprMinor alarm will be disabled until 09:00 am.` | **Meaning:** The specified alarm is disabled until the time specified in the response.<br>**Action:** None |
| `RExSchedule alarm is now being enabled` | **Meaning:** The system is enabling the RExSchedule alarm.<br>**Action:** None |
| `RExSchedule alarm will be disabled until 09:00 am.` | **Meaning:** The specified alarm is disabled until the time specified in the response.<br>**Action:** None |
| `The AutoLd alarm is disabled.` | **Meaning:** The system disabled the specified alarm, or the status of the alarm already was disabled.<br>**Action:** None |

**-continued-**

# alarm (continued)

**Responses for the alarm command** (continued)

| MAP output | Meaning and action |
|---|---|
| `The AutoLd alarm is enabled.` | **Meaning:** The system enabled the specified alarm, or the status of the alarm already was enabled.<br><br>**Action:** None |
| `The CMTrap alarm is disabled.` | **Meaning:** The system disabled the specified alarm, or the status of the alarm already was disabled.<br><br>**Action:** None |
| `The CMTrap alarm is enabled.` | **Meaning:** The system enabled the specified alarm, or the status of the alarm already was enabled.<br><br>**Action:** None |
| `The Image alarm is disabled.` | **Meaning:** The system disabled the specified alarm, or the status of the alarm already was disabled.<br><br>**Action:** None |
| `The Image alarm is enabled.` | **Meaning:** The system enabled the specified alarm, or the status of the alarm already was enabled.<br><br>**Action:** None |
| `The LowMem alarm is disabled.` | **Meaning:** The system disabled the specified alarm, or the status of the alarm already was disabled.<br><br>**Action:** None |

**-continued-**

# alarm (continued)

**Responses for the alarm command** (continued)

| MAP output | Meaning and action |
|---|---|
| `The LowMem alarm is enabled.` | **Meaning:** The system enabled the specified alarm, or the status of the alarm already was enabled.<br><br>**Action:** None |
| `The LowSprMajor alarm is disabled.` | **Meaning:** The system disabled the specified alarm, or the status of the alarm already was disabled.<br><br>**Action:** None |
| `The LowSprMajor alarm is enabled.` | **Meaning:** The system enabled the specified alarm, or the status of the alarm already was enabled.<br><br>**Action:** None |
| `The LowSprMinor alarm is disabled.` | **Meaning:** The system disabled the specified alarm, or the status of the alarm already was disabled.<br><br>**Action:** None |
| `The LowSprMinor alarm is enabled.` | **Meaning:** The system enabled the specified alarm, or the status of the alarm already was enabled.<br><br>**Action:** None |
| `The RExSchedule alarm is disabled.` | **Meaning:** The system disabled the specified alarm, or the status of the alarm already was disabled.<br><br>**Action:** None |

**-continued-**

# alarm (end)

**Responses for the alarm command** (continued)

| MAP output | Meaning and action |
|---|---|
| `The RExSchedule alarm is enabled.` | **Meaning:** The system enabled the specified alarm, or the status of the alarm already was enabled.<br><br>**Action:** None |

**-end-**

# autold

## Function

Use the autold command to specify the device from which the image is to be taken when the office reboots.

**autold command parameters and variables**

| Command | Parameters and variables | | |
|---|---|---|---|
| **autold** | slm | *slm_no* | [ tape ] [ disk ] |
| | dev | *device* | *ms_no* |

| Parameters and variables | Description |
|---|---|
| dev | This parameter indicates that the image is to be taken from an input/output controller (IOC) device. |
| *device* | This variable specifies the IOC device. Valid entries are a, b, c, or d. |
| disk | This parameter indicates that the image is to be taken from the disk drive of the specified system load module (SLM). |
| *ms_no* | This variable is the number of the message switch (MS) through which the image is to be routed. Valid entries are 0-1. |
| slm | This parameter indicates that the image is to be taken from an SLM. |
| *slm_no* | This variable indicates which SLM the image is to be taken from. Valid entries are 0-1. |
| tape | This parameter indicates that the image is to be taken from the tape of the specified system load module (SLM). |

## Qualifications

None

# autold (end)

## Example

The following table provides an example of the autold command.

**Example of the autold command**

| Example | Task, response, and explanation |
|---|---|
| **autold slm 0 disk** ↵<br>*where*<br><br>slm is an SLM<br>0 is the SLM number<br>disk is the auto load source | **Task:** Specify the auto load route of SLM 0 disk.<br><br>**Response:** `New autoload route has been set.`<br><br>**Explanation:** The primary auto load source is set to SLM 0 disk. |

## Responses

The following table provides explanations of the responses to the autold command.

**Responses for the autold command**

| MAP output | Meaning and action |
|---|---|
| `NEW AUTOLOAD ROUTE HAS BEEN SET.` | **Meaning:** The auto load route specified is valid and the system has accepted it.<br><br>**Action:** None |
| `SLM 0 IS NOT AVAILABLE AS AN AUTOLOAD DEVICE.` | **Meaning:** The specified SLM is in a state that prevents it from being used as an auto load device.<br><br>**Action:** None |

# dpsync

## Function

Use the dpsync command to drop the synchronization of the central processing unit (CPU) pair.

**dpsync command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **dpsync** | [ *wait* / nowait ] [ *prompt* / noprompt ] [ *match* / nomatch ] |

| Parameters and variables | Description |
|---|---|
| *match* | This default parameter directs the system to perform a match test. Do not enter this parameter. |
| nomatch | This parameter directs the system to suspend the match test. |
| noprompt | This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the system is dropping sync. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| *wait* | This default parameter directs the system to not allow the use of the MAP for other functions while the system is dropping sync. Do not enter this parameter. |

## Qualifications

None

# dpsync (continued)

## Example

The following table provides examples of the dpsync command.

**Example of the dpsync command**

| Example | Task, response, and explanation |
|---|---|
| **dpsync** ↵ | |
| | **Task:** Drop the syncronization of the CPU pair. |
| | **Response:** `SYNCHRONIZATION DROPPED` |
| | **Explanation:** Synchronization of the pair has been dropped. |

## Responses

The following table provides explanations of the responses to the dpsync command.

**Responses for the dpsync command**

| MAP output | Meaning and action |
|---|---|
| `Aborted, active CPU 0 has faulty processor clock.` | |
| | **Meaning:** The active CPU clock is faulty and manual drop syncronization is disallowed. |
| | **Action:** None |
| `Drop synchronization failed.` | |
| | **Meaning:** The CPU is still in sync. |
| | **Action:** None |
| `If you intend to jam the mate CPU, please do so before dropping synchronization.`<br>`Do you wish to continue? Please confirm (”YES” or ”NO”).` | |
| | **Meaning:** The system is offering the opportunity to abort this process and jam the inactive CPU before sync is dropped. |
| | **Action:** Enter yes to drop sync without jamming the inactive CPU. Enter no to abort this drop sync, then jam the inactive CPU. |

**-continued-**

# dpsync (end)

**Responses for the dpsync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `No reply from request` | **Meaning:** A computing module (CM) process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `Running in simplex mode with active CPU 0.` | **Meaning:** Synchronization has been dropped and the indicated CPU is active.<br><br>**Action:** None |
| `Software inconsistency - Action aborted.` | **Meaning:** A software fault has occured.<br><br>**Action:** None |
| `Synchronization dropped` | **Meaning:** CPU synchronization has been dropped.<br><br>**Action:** None |

**-end-**

# image

## Function

Use the image command to cause the inactive CPU to undergo a restart to verify that the image will operate correctly.

**image command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **image** | [*current* / warm / cold / reload / query / alarm / change [warm / cold / reload]] [*sync* / nosync] [*match* / nomatch] |

| Parameters and variables | Description |
|---|---|
| alarm | Not currently available |
| change | This parameter changes the restart type for the next CM routine exercise (REx) test, as displayed in the field “Next CM REXTST restart type:” in the CMMnt level display. A parameter indicating the desired restart type (warm, cold, or reload) must follow this parameter. |
| cold | This parameter causes the system to run a warm restart on the inactive CPU. |
| *current* | This default parameter causes the system to use the restart type specified in the field “Next CM REXTST restart type:” of the CMMnt level display. Do not enter this parameter. |
| *match* | This default parameter directs the system to perform a match test. Do not enter this parameter. |
| nomatch | This parameter directs the system not to perform a match test. Do not enter this parameter. |
| nosync | This parameter causes the system to run the image test specified with the image command (warm, cold, or reload) without synchronizing the CM after completing the test. If no other parameter is entered with the nosync parameter, the system runs the image test type specified in the field “Next CM REXTST restart type:” in the CMMnt level display. Use the nosync parameter only in emergency situations. |

**-continued-**

# image (continued)

**image command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| query | This parameter causes the following information on the status of the image test to be displayed:<br>• if the image can be restarted<br>• a list of tests that failed, or that were not run during the last image test<br>• the type of restart the next rextst command will perform<br>• whether the last image test was run by the image command, or the rextst command on the CM level<br>***Note:*** The command string image query does not test the image. |
| reload | This parameter causes the system to run a reload restart on the inactive CPU. |
| *sync* | This default parameter directs the system to run the image with the CPUs synchronized. Do not enter this parameter. |
| warm | This parameter causes the system to run a warm restart on the inactive CPU. |

**-end-**

## Qualifications

The image command is qualified by the following exceptions, restrictions and limitations:

- If no parameters are entered with the image command, the system uses the image test type that is specified in field “Next CM REXTST restart type:” in the CMMnt level display.
- The image query command string does not test the image.

## Example

The following table provides an example of the image command.

**Example of the image command**

| Example | Task, response, and explanation |
|---|---|
| **image change reload** ↵ | |
| | **Task:** Change the next test restart type to reload. |
| | **Response:** `Next CM REXTST restart type will be reload. Please confirm (”YES”, “Y”, “NO”, or “N”):` |
| | **Explanation:** The system prompts for confirmation before changing the restart type. |

## Responses

The following table provides explanations of the responses to the image command.

**Responses for the image command**

| MAP output | Meaning and action |
|---|---|
| `ABORTED. MATE IS JAMMED INACTIVE.` | |
| | **Meaning:** The system cannot run the image test because the mate CPU is hammed inactive. |
| | **Action:** Unjam the inactive CPU by entering the \releasejam at the reset terminal, then retry the image command. |
| `EXISTING CRITICAL IMAGE ALARM WILL BE DOWNGRADED TO MINOR. PLEASE CONFIRM (“YES” OR “NO”):` | |
| | **Meaning:** The system confirms the command because the alarm parameter downgrades the existing critical alarm to minor. |
| | **Action:** Enter yes to continue, or enter no to abort the command. |
| `IMAGE OK.` | |
| | **Meaning:** The current image can survive a cold restart. |
| | **Action:** None |

**-continued-**

# image (continued)

**Responses for the image command** (continued)

| MAP output | Meaning and action |
|---|---|
| IMAGE TEST TAKES APPROXIMATELY 10 MINUTES.<br>CONTINUE? | **Meaning:** The system warns that the test will take 10 minutes, and confirms that the test is be performed.<br><br>**Action:** Enter y to continue, or enter n to abort the command. |
| IMAGE TEST ABORTED. | **Meaning:** No was entered in response to a confirmation query and the system aborted the test.<br><br>**Action:** None |
| IMAGE TEST BEGINS. | **Meaning:** The image test is running.<br><br>**Action:** None |
| IMAGE TEST IS IN PROGRESS.<br>NO ACTION TAKEN. | **Meaning:** An image test is in progress.<br><br>**Action:** None |
| IMAGE TEST FAILED: CONTACT EMERGENCY PERSONNEL.<br>WARNING: DO NOT ATTEMPT AN ACTIVE RESTART. | **Meaning:** The image test failed. The image could not survive a restart.<br><br>**Action:** Contact emergency personnel. |
| IMAGE TEST NOT COMPLETED: CONTACT EMERGENCY PERSONNEL. | **Meaning:** The image test was not completed, and the sanity of the image could not be determined.<br><br>**Action:** Contact emergency personnel. |

**-continued-**

# image (continued)

**Responses for the image command** (continued)

| MAP output | Meaning and action |
|---|---|
| `IMAGE TEST PASSED: IMAGE IS RESTARTABLE.` | **Meaning:** The current image can survive a cold restart.<br><br>**Action:** None |
| `NEXT CM REXTST RESTART WILL BE COLD.`<br>`PLEASE CONFIRM ("YES", "Y", "NO", or "N"):` | **Meaning:** The system confirms that the image command was entered with the change parameter to set the type of restart for the next REX test.<br><br>**Action:** Enter yes to continue, or enter no to abort the command. |
| `NEXT CM REXTST RESTART WILL BE RELOAD.`<br>`PLEASE CONFIRM ("YES", "Y", "NO", or "N"):` | **Meaning:** The system confirms that the image command was entered with the change parameter to set the type of restart for the next REX test.<br><br>**Action:** Enter yes to continue, or enter no to abort the command. |
| `NEXT CM REXTST RESTART WILL BE WARM.`<br>`PLEASE CONFIRM ("YES", "Y", "NO", or "N"):` | **Meaning:** The system confirms that the image command was entered with the change parameter to set the type of restart for the next REX test.<br><br>**Action:** Enter yes to continue, or enter no to abort the command. |
| `NO IMAGE TEST SINCE LAST RESTART`<br>`NEXT CM REXTST RESTART WILL BE COLD.` | **Meaning:** The image command was entered with the query parameter. No image test has been run since the last restart. The system displays the type of restart for the next CM REx test: cold, reload, or warm.<br><br>**Action:** None |
| `NOT RESTARTABLE (TEST FAILED).` | **Meaning:** The current image cannot survive a cold restart.<br><br>**Action:** None |

**-continued-**

# image (end)

**Responses for the image command** (continued)

| MAP output | Meaning and action |
|---|---|
| THE CPUs MUST BE IN SYNC BEFORE IMAGE TEST CAN BE RUN. | **Meaning:** The CM must be in sync for the image test to be run.<br><br>**Action:** None |
| THERE IS NO CRITICAL IMAGE ALARM RAISED.<br>NO ACTION TAKEN. | **Meaning:** The image command was entered with the alarm parameter. There is no critical image alarm to be downgrade to minor.<br><br>**Action:** None |
| THE SWITCH WILL BE OUT OF SYNC FOR APPROXIMATELY 10 MINUTES.<br>A COLD RESTART WILL BE PERFORMED ON THE ACTIVE CPU.<br>PLEASE CONFIRM (“YES” OR “NO”): | **Meaning:** The image test takes approximately 10 minutes to run, during which time the switch is not synchronized. The system will perform the specified type of restart on the inactive CPU: warm, cold, or reload.<br><br>**Action:** Enter yes to continue, or enter no to abort the command. |
| THE SWITCH WILL NOT BE SYNCED AFTER THE IMAGE TEST.<br>THE NOSYNC OPTION IS FOR EMERGENCY USE ONLY.<br>A COLD RESTART WILL BE PERFORMED ON THE INACTIVE CPU.<br>PLEASE CONFIRM (“YES” OR “NO”): | **Meaning:** The image command was entered with the nosync parameter, which should only be used in case of emergency. The system will perform the specified type of restart on the inactive CPU.<br><br>**Action:** Enter yes to continue, or enter no to abort the command. |

**-end-**

# mtcchk

## Function

Use the mtcchk command to verify the system is in a correct state to proceed with maintenance.

**mtcchk command parameters and variables**

| Command | Parameters and variables | | | | | |
|---|---|---|---|---|---|---|
| **mtcchk** | *subsystem* | *unit* | slot | *slot_no* | *position* | *pec* |

| Parameters and variables | Description |
|---|---|
| *pec* | This variable is the product engineering code (PEC) of the card on which the premaintenance check is to be performed. Use of this variable is optional. |
| *position* | This variable is the position of the board in the slot on which the premaintenance check is to be performed. Valid entries are front or back. This optional variable must be entered if the slot number is entered. |
| slot | This parameter indicates the next variable in the command string will be a slot number. |
| *slot_no* | This variable specifies the physical slot number. Valid entries are 1-38. Use of this parameter is optional. |
| *subsystem* | This variable is the name of the subsystem. Valid entries are cpu, ms, or slm. |
| *unit* | This variable in the number of the unit. Valid entries are 0 or 1. |

## Qualification

The mtcchk command is qualified by the following: in the event that the entire subsystem is to be powered down, enter the subsystem and the unit number. When a specific card is to be removed, enter the subsystem, unit, slot, position, and PEC numbers.

# mtcchk (continued)

## Example

The following table provides an example of the mtcchk command.

**Example of the mtcchk command**

| Example | Task, response, and explanation |
|---|---|
| **mtcchk cpu 1** ↵<br>*where*<br><br>cpu directs the system to check a central processing unit (CPU)<br>1 is the CPU number | **Task:** Verify that CPU 1 is in the correct state to proceed with maintenance.<br><br>**Response:**<br><br>`SYSTEM IS PROPERLY CONFIGURED FOR MAINTENANCE ACTIVITY ON:`<br>`SUBSYSTEM: CPU 0  SLOT: 9  FRONT NT9X13BC`<br><br>**Explanation:** The system displays the maintenance status of the CPU. |

## Responses

The following table provides explanations of the responses to the mtcchk command.

**Responses for the mtcchk command**

| MAP output | Meaning and action |
|---|---|
| `ERROR-COMMAND ABORTED` | **Meaning:** The mtcchk command was aborted for an unspecified reason.<br><br>**Action:** Enter the mtcchk command correctly. If the error persists, contact the next level of maintenance support personnel. |
| `ERROR-TARGET NOT BOUND IN` | **Meaning:** There is a software or load build problem.<br><br>**Action:** Contact the next level of maintenance support personnel. |

**-continued-**

# mtcchk (continued)

**Responses for the mtcchk command** (continued)

| MAP output | Meaning and action |
|---|---|
| ERROR-NO CARD IN SPECIFIED SLOT | **Meaning:** The hardware inventory table contains no entry for the slot/position specified.<br>**Action:** Use the config command to update the hardware inventory table. |
| ERROR-PHYSICAL PEC CODE DOES NOT MATCH | **Meaning:** A PEC number has been entered that does not exist in the inventory table.<br>**Action:** Enter the mtcchk command again with the correct PEC number. |
| HAS CPU 1 BEEN POWERED DOWN? (YES/NO)? | **Meaning:** The system is requesting a user check of the power status of CPU 1.<br>**Action:** Enter yes if the subsystem has been powered down. Enter no if the subsystem has not been powered down. |
| NO REPLY FROM REQUEST | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br>**Action:** None |
| PEC CODE INVALID | **Meaning:** An invalid PEC number has been entered.<br>**Action:** Enter the mtcchk command again with the correct PEC number. |
| SLOT NUMBER INVALID | **Meaning:** A slot number has been entered that is not valid for the specified CPU.<br>**Action:** Enter the mtcchk command again with the correct slot number. |
| SOFTWARE INCONSISTENCY-ACTION ABORTED. | **Meaning:** The system experienced a software error and aborted the command.<br>**Action:** Try the mtcchk command again. |

**-continued-**

# mtcchk (continued)

**Responses for the mtcchk command** (continued)

| MAP output | Meaning and action |
|---|---|
| SYSTEM IS NOT PROPERLY CONFIGURED FOR MAINTENANCE ACTIVITY ON:<br>SUBSYSTEM: CPU 0 SLOT: 1 FRONT NTX30AA<br>REQUIRED ACTIONS:<br>MAKE THE SPECIFIED CPU INACTIVE (SYNC, SWACT)<br>DROP SYNC (DPSYNC) ON THE CM.<br>MANUALLY BUSY THE CMIC LINKS TO THE SPECIFIED CPU.<br>MANUALLY BUSY THE MC.<br>JAM THE INACTIVE CPU AT THE RTIF TERMINAL.<br>VERIFY THAT THE INACTIVE CPU IS POWERED DOWN.<br>RUN THE MTCCHK AGAIN TO VERIFY SUCCESS OF STATUS CHANGES.<br>REFER TO NTP DOCUMENTATION FOR DETAILED PROCEDURES. | **Meaning:** The system is not properly configured for maintenance action.<br><br>**Action:** Perform all the indicated status changes. Rerun the mtcchk command to verify that the system is properly configured. |
| SYSTEM IS NOT PROPERLY CONFIGURED FOR MAINTENANCE ACTIVITY ON:<br>SUBSYSTEM: CPU 1<br>REQUIRED ACTIONS:<br>MAKE THE SPECIFIED CPU INACTIVE (SYNC, SWACT)<br>DROP SYNC (DPSYNC)<br>MANUALLY BUSY THE CMIC LINKS TO THE SPECIFIED CPU.<br>MANUALLY BUSY THE MC.<br>JAM THE INACTIVE CPU AT THE RTIF TERMINAL.<br>VERIFY THAT THE INACTIVE CPU IS POWERED DOWN.<br>RUN THE MTCCHK AGAIN TO VERIFY SUCCESS OF STATUS CHANGES.<br>REFER TO NTP DOCUMENTATION FOR DETAILED PROCEDURES. | **Meaning:** The system is not properly configured for maintenance.<br><br>**Action:** Perform all the indicated status changes. Rerun the mtcchk command to verify that the system is properly configured. |
| SYSTEM IS PROPERLY CONFIGURED FOR MAINTENANCE ACTIVITY ON:<br>SUBSYSTEM: CPU 0 SLOT: 9 FRONT NT9X13BC | **Meaning:** The system is properly configured for maintenance action.<br><br>**Action:** Perform the necessary maintenance action on the specified component. |

-continued-

# mtcchk (end)

**Responses for the mtcchk command** (continued)

| MAP output | Meaning and action |
|---|---|
| `UNIT NUMBER INVALID` | **Meaning:** An invalid unit number has been entered.<br>**Action:** Enter the mtcchk command again with the correct unit number. |

**-end-**

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any MAP level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the CMMnt level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The CMMnt level has changed to the previous menu level. |

**-continued-**

# quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the CMMnt level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The CMMnt level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the CMMnt level menu with a menu that is two or more MAP levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the CMMnt level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |

**-end-**

## Function

Use the rextst command to run routine exercise (REx) tests on the CM. The CM must be synchronized for the full test to be run.

**rextst command parameters and variables**

**Command** **Parameters and variables**

**rextst**

[ short / long ] [ all / cpu / mem / link / pmc ] [ stop / continue ] [ *noreset* / resethits ] [ *wait* / nowait ] [ *prompt* / noprompt ] (1) (2) (3) (4) (5)

**rextst** (continued)

(1) (2) (3) (4) (5) [ *noreset* / resetcounts ] [ *noverbose* / verbose ] (end)

| Parameters and variables | Description |
|---|---|
| all | This default parameter directs the system to run all REx tests. |
| continue | This parameter directs the system to generate a log when an error is encountered and the system continues the test. |
| cpu | This parameter directs the system to run only central processing unit (CPU) tests. |
| link | This parameter directs the system to run only the link tests. |
| long | This parameter directs the system to run all tests for the specified type regardless of how much time they take. |
| mem | This parameter directs the system to run only the memory REx tests. |
| noprompt | This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes. |
| *noreset* | This default parameter directs the system not to reset. Do not enter this parameter. |
| *noverbose* | This default parameter directs the system not to return completion messages after each individual REx test. Do not enter this parameter. |

**-continued-**

# rextst (continued)

**rextst command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| nowait | This parameter directs the system to allow use of the MAP for other functions while the REx test is running. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| pmc | This parameter directs the system to run only the peripheral message controller (PMC) REx tests. |
| resetcounts | This parameter directs the system to reset all but the cancelled REx fault counts. |
| resethits | This parameter directs the system to reset link hit counts. |
| short | This parameter directs the system to run only fast diagnostics. |
| stop | This parameter directs the system to stop running the type of test it is running when an error is encountered. |
| verbose | This parameter directs the system to return completion messages after each individual REx test. |
| *wait* | This default parameter directs the system to not allow the use of the MAP for other functions while the REx test is running. Do not enter this parameter. |

**-end-**

## Qualifications

The restrictions that must be observed when running a REx test are built into the system responses to the command. Any attempt to run a test which would violate one or more of the conditions the REx test requires to run will result in a warning message or a cancellation of the requested test.

## Example

The following table provides an example of the rextst command.

**Example of the rextst command**

| Example | Task, response, and explanation |
|---|---|
| **rextst nowait** ↵ | |
| | **Task:** Run REx tests on the CM. |
| | **Response:** `MAINTENANCE ACTION SUBMITTED.` |
| | **Explanation:** The system accepted the command and started the test. |

## Responses

The following table provides explanations of the responses to the rextst command.

**Responses for the rextst command**

| MAP output | Meaning and action |
|---|---|
| `Aborted. CPU is jammed inactive.` | |
| | **Meaning:** You cannot run REx tests because the mate CPU is jammed inactive. The CM must be able to switch activity for the REx test to be run. |
| | **Action:** Unjam the inactive CPU by entering /releasejam at the reset terminal for the inactive CPU, then reenter the rextst command. |
| `Abort-systems not equipped with PMCs` | |
| | **Meaning:** The system is not equipped with peripheral-side message controllers (PMC). Therefore, you cannot run the PMC test. |
| | **Action:** None |
| `Aborted-REx disallowed for 5 minutes after a restart.` | |
| | **Meaning:** The system cannot run the REx test within the named number of minutes after a restart. |
| | **Action:** Wait the specified time and reissue the rextst command. |

**-continued-**

# rextst (continued)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot run test as mate CPU is jammed inactive.` | **Meaning:** As part of the REx test, the CM switches activity. However, this is not possible because the mate CPU is jammed inactive.<br><br>**Action:** Unjam the inactive CPU by entering /release jam at the reset terminal for the inactive CPU, then reenter the rextst command. |
| `Cannot run test when in synchronism.` | **Meaning:** The test cannot be run while the CPUs are synchronized.<br><br>**Action:** Drop sync using the dpsync command and retry the rextst command. |
| `Caution: CM sync and activity states will change.`<br>`Please confirm (″YES″ or ″NO″).` | **Meaning:** The full REx test includes activity switches.<br><br>**Action:** Enter yes to run the full REx test. Enter no to abort the command. |
| `CM is out of sync. Only partial test can be performed.`<br>`Please confirm (″YES″ or ″NO″).` | **Meaning:** Since the CM is not synchronized, only a partial test will be run.<br><br>**Action:** Enter yes to continue with a partial test. Enter no to abort the command. |
| `CPU REX test did not run-CPU resources in use.` | **Meaning:** Another process is using the resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `Hit counts have been cleared.` | **Meaning:** The link hit counts were cleared after completion of a REx test, where resethits was included in the command string.<br><br>**Action:** None |

**-continued-**

# rextst (continued)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Hit counts have not been cleared.` | **Meaning:** The system could not clear the hit counts.<br><br>**Action:** Replace the cards in the card list. Repeat the test. Contact maintenance support personnel if the problem persists. |
| `Maintenance action not performed, resources in use.` | **Meaning:** The resources required to perform one or more of the individual REx tests were not available.<br><br>**Action:** Retry the rextst command. |
| `Maintenance action started.`<br><br>or<br><br>`Maintenance action already started.` | **Meaning:** Either the CM process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.<br><br>**Action:** None |
| `Maintenance action submitted.` | **Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect.<br><br>**Action:** None |
| `Mate is already under test.` | **Meaning:** The mate communication register (MCR) flag is in use and cannot be claimed.<br><br>**Action:** None |

**-continued-**

# rextst (continued)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `MC REX test did not run-MC resources in use.` | **Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `MEM REX test did not run-MEM resources in use.` | **Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `No mailbox available.` | **Meaning:** The system encountered an error during the test.<br><br>**Action:** Try the rextst command again. |
| `No reply from request` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `PMC REX test did not run-PMC resources in use.` | **Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `RESETHITS option is only valid with the LINK and ALL classes. Counts will not be cleared.` | **Meaning:** The resethits parameter is not valid with some classes of tests.<br><br>**Action:** None |

**-continued-**

# rextst (continued)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `REXTST not run. A PRE-REX match of memory resulted in a mismatch. Please check memory indicators for possible faults.` | **Meaning:** The REx test was not run because memory errors occurred during the memory match.<br><br>**Action:** Access the Memory level, clear the memory faults, and attempt to run the REx test again. |
| `RExTst failed. Test name= CPU` | **Meaning:** One or more REx tests failed. The system displays only the first failure in this response and displays the failed test. The system displays a list of the cards that may be defective.<br><br>**Action:** None |
| `RExTst passed` | **Meaning:** The test ran without failure.<br><br>**Action:** None |
| `Software inconsistency-action aborted.` | **Meaning:** A software fault has occurred.<br><br>**Action:** None |
| `SSC REX test did not run-SSC resources in use.` | **Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** Check logs and status displays for faults that may prevent the test from running. |
| `Switch is out of Sync. Only a partial test can be performed. Please confirm ("YES" or "NO"):` | **Meaning:** The system cannot run full tests when the switch is out of sync.<br><br>**Action:** Enter yes to continue with the partial test. Enter no to abort the command. |

**-continued-**

# rextst (end)

**Responses for the rextst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `SYSTEM NOT EQUIPPED WITH A PMC-PMC REX TEST WILL NOT RUN.` | **Meaning:** The PMC is not equipped and cannot be tested.<br><br>**Action:** None |
| `UNABLE TO RUN MEM REX TEST.` | **Meaning:** The system cannot run the specified type of REx test because the device to be tested is in use. The test type is cpu, mem, mc, ssc, or pmc.<br><br>**Action:** None |
| `VERBOSE cannot be used with NOWAIT.` | **Meaning:** You entered the verbose and nowait parameters in the same command string, and they are mutually exclusive.<br><br>**Action:** Reissue the rextst command with one or the other parameter. |
| `Warning: Running of a REx test is not recommended at this time due to exceeded error thresholds. Use the QUERYCM RExSchd command for more details concerning the errors which have occurred.` | **Meaning:** One or more counts of stability-effecting error conditions has exceeded a preset threshold.<br><br>**Action:** Wait for the fault counts to fall below the stability thresholds and retry the rextst command. Use the rextst resetcounts command string to clear the counts if the error condition is known and has been corrected. |
| `Warning: The clearing of the error counts is not recommended until the source of the errors is corrected. Use the QUERYCM RExSch command for more details concerning the errors which have occurred. A successful REx test will also clear the error counts.`<br>`Please confirm (“YES”, “Y”, “NO”, or “N”):` | **Meaning:** The system prompts for confirmation before clearing the error counts.<br><br>**Action:** Enter yes or y to continue. Enter no or n to abort the command. |

**-end-**

# swact

## Function

Use the swact command to switch activity (SwAct) to the mate central processing unit (CPU).

**swact command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **swact** | [ *prompt* \| noprompt ] [ *check* \| nocheck ] [ *noforce* \| force ] [ *match* \| nomatch ] |

| Parameters and variables | Description |
|---|---|
| *check* | This default parameter directs the system to check the common processor clock source of the computing module (CM). The clock source check is performed automatically before the SwAct. If the check finds that the CM would be running on the inactive CPU processor clock after the SwAct, a prompt is displayed at the MAP to ask permission to automatically drop sync and then sync the CM again after the SwAct. Do not enter this parameter, |
| force | This parameter directs the system to perform the SwAct when the CPU is out of sync. |
| *match* | This default parameter directs the system to perform a match test. Do not enter this parameter. |
| nocheck | This parameter directs the system to bypass checking the common processor clock source of the CM. The nocheck parameter is used to switch activities without sync being dropped. CM sync status should not be altered if the CPU occupancy is over 50 percent. |
| *noforce* | This defualt parameter directs the system to not allow the SwAct when the CPU is out of sync. Do not enter this paramter. |
| nomatch | This parameter directs the system to suspend the match test. |
| noprompt | This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes. |
| *prompt* | This default parameter directs the system to enable yes and no prompts. Do not enter this parameter. |

## Qualifications

None

## swact (continued)

## Example

The following table provides an example of the swact command.

**Example of the swact command**

| Example | Task, response, and explanation |
|---|---|
| **swact noprompt force** ↵ | |
| | **Task:** To switch activity to the mate CPU. |
| | **Response:**<br>`ACTIVITY SWITCH ON CPU 0`<br>`***SOS COLD RESTART NO.8 AT AUGUST-17 00:00:00` |
| | **Explanation:** The CPUs were not in sync, therefore SwAct caused a cold restart. |

## Responses

The following table provides explanations of the responses to the swact command.

**Responses for the swact command**

| MAP output | Meaning and action |
|---|---|
| `Aborted. CM is not in sync and the 'force' option is not specified.` | |
| | **Meaning:** The CPUs are out of sync. Therefore, the force parameter must be used to switch activity. The command is terminated. |
| | **Action:** Synchronize the CPUs first using the sync command and then SwAct. If a cold restart is acceptable, use the force parameter with the SwAct command. |
| `Aborted. Inactive CPU 1 has a faulty clock and should not be allowed to gain activity.` | |
| | **Meaning:** The inactive CPU has a faulty clock and should not be allowed to gain activity. |
| | **Action:** Drop sync and perform a mate CPU clock test. If the test fails, replace the faulty CPU card. |

**-continued-**

## swact (continued)

**Responses for the swact command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Mate is jammed inactive.` | **Meaning:** The system cannot switch activity because the mate CPU is out of sync.<br><br>**Action:** None |
| `No reply from request` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `Software inconsistency-action aborted.` | **Meaning:** A software fault has occurred.<br><br>**Action:** None |
| `Switch of activity failed.` | **Meaning:** Activity has not been switched.<br><br>**Action:** None |
| `Switch of activity successful.` | **Meaning:** Activity has been switched.<br><br>**Action:** None |
| `Switch of activity successful. Drop synchronization in progress. running in simplex mode with active CPU 0. Synchronization in progress...synchronization successful.` | **Meaning:** The activity switch is successful. Sync is dropped automatically to switch the clock source to the active CPU. The CM is then resynchronized automatically.<br><br>**Action:** None |

**-continued-**

# swact (end)

**Responses for the swact command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Switch of activity will cause a cold restart. Do you wish to continue? (TYPE YES/NO)` | **Meaning:** The CPUs are not synchronized. If you switch the activity of the CPU, the system will initiate a cold restart.<br><br>**Action:** Enter yes if a SwAct through a cold restart is acceptable. Enter no to abort the command. |
| `Switch of activity will cause the CM to be running on the inactive CPU'S processor clock. System will drop sync and then re-sync in order to switch to the active CPU'S clock. Do you wish to continue? Please confirm (YES OR NO):` | **Meaning:** The CM would be running on the newly inactive CPU clock after the activity switch. To enhance the fault tolerance of the CM in sync operation, the system would drop sync and then re-sync in order to switch to the newly active CPU clock.<br><br>**Action:** Enter yes to continue with the command. Enter no if a change to the sync status is not acceptable. |

**-end-**

# sync

## Function

Use the sync command to synchronize the computing module (CM). This command copies the memory of the active central processing unit (CPU), performs a match test between CPUs, and tests the inactive CPU. If all the tests are passed, the system completes the sync.

**sync command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **sync** | [ *none* \| optimum ] [ normal \| nomatch \| notest \| nohands ] [ *none* \| eccoff \| eccon ] [ *wait* \| nowait ] [ *prompt* \| noprompt ] |

| Parameters and variables | Description |
|---|---|
| eccoff | This parameter directs the system to disable memory error correction. |
| eccon | This parameter directs the system to enable memory error correction. |
| nohands | This parameter directs the system to disable handshake-override. Handshake-override is a feature that speeds CPU operation by overriding the handshake synchronization of memory access between CPUs. The handshake-override feature is available only on CMs that are equipped with NT9X14BB or NT9X14DA memory cards, or a combination of both. It is implemented automatically when the CM is synchronized. Use the nohands parameter to disable the handshake-override feature, or contact maintenance support personnel to take the feature out of service. The nohands parameter triggers the NoOvr alarm. |
| nomatch | This parameter directs the system to suspend the match test. Use the nomatch parameter in emergency situations only. |
| *none* | This default parameter directs the system not to perform optimum tests, or not to change the condition of error correction. Do not enter this parameter. |
| noprompt | This parameter directs the system to suppress system prompts. The system automatically enters yes. |
| normal | This default parameter indicates that a normal sync operation is to be performed. |

**-continued-**

## sync (continued)

**sync command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| notest | This parameter directs the system to suspend all the tests that the system usually performs during synchronization. Use the notest parameter in emergency situations only. |
| nowait | This parameter directs the system to allow use of the MAP for other functions while the CM is being synchronized. |
| optimum | This parameter directs the system to synchronize the CM using an optimum memory mapping for the mate (inactive) CPU. The sync command with the optimum parameter disables the handshake-override feature and triggers the NoOvr alarm. Use this parameter only when performing memory extensions on a CM that can support a mixed memory configuration. A mixed memory configuration can be supported if program store and data store are aligned along 8-megabyte block boundaries. |
| *prompt* | This default parameter directs the system to prompt for confirmation. Do not enter this parameter. |
| *wait* | This default parameter directs the system not to allow the use of the MAP for other functions while the CM is being synchronized. Do not enter this parameter. |

**-end-**

## Qualifications

The sync command is qualified by the following restriction: the system will sync the CM only if it can claim the mate communication register.

## Example

The following table provides an example of the sync command.

**Examples of the sync command**

| Example | Task, response, and explanation | |
|---|---|---|
| **sync nowait noprompt** ↵ | | |
| | **Task:** | Put the CPUs in sync, with no waiting and no prompts for confirmation. |
| | **Response:** | `SYNCHRONIZATION SUCCESSFUL` |
| | **Explanation:** | The CPUs are in sync. |

## Responses

The following table provides explanations of the responses to the sync command.

**Responses for the sync command**

| MAP output | Meaning and action |
|---|---|
| `Aborted. CM is already running in sync.` | **Meaning:** The two CPUs are already synchronized.<br><br>**Action:** None |
| `Aborted. Optimum configuration can only be attempted when memory has been aligned along 8 mbyte block boundaries. Memory can be aligned using the MEMORY MAP level ALIGN command.` | **Meaning:** The current memory of the mate (inactive) CPU is not aligned to support mixed memory. Therefore, an optimum configuration is not possible. Use the sync optimum command string only when performing memory extensions on a CM that can support a mixed memory configuration. A CM can support a mixed memory configuration if program store and data store are aligned along 8-megabyte block boundaries.<br><br>**Action:** Clear the problem and retry the command. |
| `Aborted. The CPU releases are not compatible.` | **Meaning:** The NT release number on the active CPU firmware is different from the NT release number on the inactive CPU firmware. The firmware in the CPUs is not compatible.<br><br>**Action:** None |
| `Cannot synchronize-cannot configure mate memory.` | **Meaning:** Either too many memory faults exist in the memory of the inactive CPU or the active CPU cannot communicate with the inactive CPU.<br><br>**Action:** Clear the problem and retry the command. |
| `Cannot synchronize-cannot reset mate CPU.` | **Meaning:** The inactive CPU did not respond to a request from the active CPU.<br><br>**Action:** None |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot synchronize-could not get mate on same clock.` | **Meaning:** The inactive CPU cannot switch the processor clocking source to the active CPU processor clock.<br><br>**Action:** Test the inactive CPU. |
| `Cannot synchronize-CPUs have different firmware.` | **Meaning:** The system cannot synchronize the CM because the two CPUs contain different firmware.<br><br>**Action:** Test the inactive CPU. |
| `Cannot synchronize-different CPU hardware vintage.` | **Meaning:** The system cannot synchronize the CM because the suffixes of the product engineering codes (PEC) on the two CPU cards are different and the cards are incompatible.<br><br>**Action:** Change the inactive CPU card to one that has the same PEC and suffix as the active CPU card. |
| `Cannot synchronize-firmware sync kernel failed.` | **Meaning:** The failure of a firmware synchronization kernel has prevented CM synchronization.<br><br>**Action:** None |
| `Cannot synchronize-first rendezvous failed, suspect CPUs.` | **Meaning:** A problem with the CPUs has prevented CM synchronization.<br><br>**Action:** None |
| `Cannot synchronize-faults exist in active CPU memory.` | **Meaning:** Faults in the memory of the active CPU are preventing synchronization.<br><br>**Action:** Clear the problem and retry the command. |

**-continued-**

## sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot synchronize-invalid link configuration.` | **Meaning:** A problem exists with inter-CPU links.<br><br>**Action:** Contact maintenance support personnel. |
| `Cannot synchronize-mate memory is not contiguous.` | **Meaning:** Faults in the memory of the inactive CPU are preventing synchronization.<br><br>**Action:** Clear the problem and try the command again. |
| `Cannot synchronize-mate test failed.` | **Meaning:** The inactive CPU failed presynchronization diagnosis.<br><br>**Action:** Check status indicators for faults, then test the inactive CPU. |
| `Cannot synchronize-MC 1 accesses will mismatch.` | **Meaning:** A problem exists with a message controller which will cause a mismatch if the CM is synchronized.<br><br>**Action:** Test the message controllers and clear any problems. |
| `Cannot synchronize-memory copy failed.` | **Meaning:** Memory cannot be copied.<br><br>**Action:** Try to synchronize again. |
| `Cannot synchronize-memory protect copy failure.` | **Meaning:** A problem occurred while the system was copying protected memory.<br><br>**Action:** Contact maintenance support personnel. |
| `Cannot synchronize-mismatch while disabling ECC.` | **Meaning:** A mismatch of memory occurred while the system was disabling error checking and correction.<br><br>**Action:** Check the logs and status displays for faults. |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot synchronize-mismatch while enabling handshake-override.` | **Meaning:** A mismatch occurred while the system was enabling handshake-override.<br><br>**Action:** Check the logs and status displays for faults. |
| `Cannot synchronize-mismatch while optimizing sync performance.` | **Meaning:** A mismatch of memory occurred during synchronization.<br><br>**Action:** Check the logs and status displays for faults. |
| `Cannot synchronize-not enough memory on mate.` | **Meaning:** Not enough memory is available on the inactive CPU to permit the system to copy memory.<br><br>**Action:** Use the config command at the Memory level of the MAP to configure the memory of the inactive CPU , then try to synchronize the CM again. |
| `Cannot synchronize-second rendezvous failed, suspect CPUs.` | **Meaning:** A problem with the CPUs has prevented CM synchronization.<br><br>**Action:** None |
| `Cannot synchronize-software package inconsistency.` | **Meaning:** The system cannot synchronize the CM because the software load in the DMS-Core is not compatible with the NT9X13 processor cards that are currently installed.<br><br>**Action:** Contact maintenance support personnel. |
| `Cannot synchronize-SSC 1 accesses will mismatch.` | **Meaning:** There is a problem with the specified subsystem clock (SSC) that causes a mismatch if the CM is synchronized.<br><br>**Action:** Test the SSCs and clear any problems. |

**-continued-**

## sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Cannot synchronize-synchronization dropped during match.` | **Meaning:** Either there are too many memory faults on the inactive CPU or a mismatch occurred during synchronization.<br><br>**Action:** Clear the problem and retry the command. |
| `Maintenance action started.`<br><br>or<br><br>`Maintenance action already started.` | **Meaning:** Either the CM process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.<br><br>**Action:** None |
| `Maintenance action submitted.` | **Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect.<br><br>**Action:** None |
| `No reply from request` | **Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated.<br><br>**Action:** None |
| `Software inconsistency-action aborted.` | **Meaning:** A software fault has occurred.<br><br>**Action:** None |
| `Synchronization successful` | **Meaning:** The CPUs are in sync.<br><br>**Action:** None |

**-continued-**

# sync (continued)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Synchronization successful. Handshake-override is not enabled.` | **Meaning:** The CM is synchronized. The handshake-override feature is in service but was disabled during synchronization. If you entered the SYNC command to enable handshake-override, then a memory configuration problem may have prevented the action.<br><br>**Action:** Contact maintenance support personnel. |
| `WARNING:`<br>`Memory Error Correction will be DISABLED in SYNC.`<br><br>`Single bit memory faults will cause mismatches but performance will be enhanced due to the disabling of Memory Error Checking and Correction.`<br>`Do you wish to continue?`<br>`Please confirm (“YES”, “Y”, “NO”, or “N”):` | **Meaning:** The system prompts for confirmation before disabling error correction.<br><br>**Action:** Enter yes or y to disable error correction. Enter no or n to abort the command. |
| `WARNING:`<br>`Memory Error Correction will be ENABLED in SYNC.`<br><br>`Memory mismatches will not occur due to correctable single bit memory faults but a degradation in service will result due to the enabling of memory error correction.`<br>`Do you wish to continue?`<br>`Please confirm (“YES”, “Y”, “NO”, or “N”):` | **Meaning:** The system prompts for confirmation before enabling error correction.<br><br>**Action:** Enter yes or y to enable error correction. Enter no or n to abort the command. |

**-continued-**

# sync (end)

**Responses for the sync command** (continued)

| MAP output | Meaning and action |
|---|---|
| WARNING<br>The inactive cpu has a different release number.<br>Please confirm (”YES” or ”NO”). | **Meaning:** The NT release number on the active CPU firmware is different from the NT release number on the inactive CPU firmware. The firmware in the CPUs might not be compatible.<br><br>**Action:** Enter yes to continue. Enter no to abort the command. |
| WARNING:<br>The notest option should only be used under the supervision of the technical assistance support group in an emergency.<br>Please confirm (”YES” or ”NO”). | **Meaning:** This warning is a reminder of the consequences of entering the sync command with the notest parameter.<br><br>**Action:** Use the sync command with the notest parameter in emergency situations only. Consult maintenance support personnel. |
| WARNING:<br>The optimum option should only be used when doing memory extensions. It will configure mate memory such that a maximum number of spares of each memory module size is provided. However, under this configuration, a CM running in sync will have handshake-override disabled.<br>Please confirm (”YES” or ”NO”). | **Meaning:** This warning is a reminder of the consequences of using the sync command with the optimum parameter.<br><br>**Action:** Enter yes to continue. Enter no to abort the command. |

**-end-**

# CodeCtrl level commands

Use the CodeCtrl level of the MAP to list, apply, or remove code controls on specified code types.

## Accessing the CodeCtrl level

To access the CodeCtrl level, enter the following from the CI level:

**mapci;nwm;codectrl** ↵

## CodeCtrl commands

The commands available at the CodeCtrl MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**CodeCtrl commands**

| Command | Page |
|---|---|
| apply | C-665 |
| list | C-673 |
| page | C-677 |
| quit | C-679 |
| remove | C-683 |

## CodeCtrl menu

The following figure shows the CodeCtrl menu and status display. The insert with hidden commands is not a visible part of the menu display.

```
Ctrl  ITS  RADR     CPU  Init   IDOC Cs DCR           Fs
....    0    0%      2%     .      .  .  FHR            0


    CodeCtrl    CodeCtrl
  0 Quit_         CBkC  CBkA  CBkN  CBKP  PRPC  PRPA  PRPN  PRPP
  2                 25    12    65    10     8    15    20    10
  3
  4 List_
  5 Apply_
  6 Remove_
  7 _CBk_       HTRFC HTRFA HTRFN HTRFP
  8 _PRP_          2     7    20    10
  9 _HRTF_
 10
 11 _Pct_
 12 _Gap_
 13 _CCODE_
 14 _ACODE_
 15 _NAC_
 16
 17 _PFX_
 18 PAGE
```

The status displays are immediately updated whenever a control is applied or removed. Without accessing the CodeCtrl menu, the code-blocking (CBK) control may be applied by the CI level masscall command, and the preroute-peg-count (PRP) control may be applied by the CI level prepeg command. The commands and parameters are the same for CBK and PRP for both the CI level commands and the CodeCtrl menu commands.

## CodeCtrl status codes

The following table describes the status codes for the CodeCtrl status display.

| Status codes CodeCtrl menu status display | | |
|---|---|---|
| **Code** | **Meaning** | **Description** |
| Headers | | |
| CBk | - | Code blocking |
| PRP | - | Preroute peg count |
| HTRF | - | Hard to reach flag |
| Suffixes | | |
| C | CCODE | Country code |
| A | ACODE | Area code |
| N | NAC | Non-area code |
| P | PFX | Prefix code |
| Field values | | |
| CBK + PRP | | total equals: |
| | 256 | Range is 0-256 in offices without (equal access) EADAS |
| | 64 | Range is 0-64 maximum in offices with EADAS |

## Operation of ACODE controls

The operation of the network management (NWM) area code (ACODE) code controls have been modified. If the numbering plan area (NPA) digits of the ACODE control match the serving NPA (SNPA) in the table HNPACONT against which the control is being applied, the control is implemented internally as an non-area code (NAC) control with the NPA removed from the destination string. Thus, if an ACODE control on 919-991 is applied against SNPA 919, the control is implemented internally as a NAC control against 991. This internal modification is transparent at the MAP interface and in the Engineering and Administrative Data Acquisition System network management (EADAS/NM) interface.

As a further example, assume that the switch contains two entries in table HNPACONT: 919 and 704. The following table describes how different ACODE controls in this example affect different traffic.

| **Acode examples** | | | | |
|---|---|---|---|---|
| **Acode control** | **919 customer dials** | **919 encounters control** | **704 customer dials** | **704 encounters control** |
| 919 | 919- | Yes | 919- | Yes |
| 919-991 | 919-991- | Yes | 919-991- | Yes |

| **Acode examples** | | | | |
|---|---|---|---|---|
| **Acode control** | **919 customer dials** | **919 encounters control** | **704 customer dials** | **704 encounters control** |
| 919-991 | 991- | Yes | 991- | No |
| 704 | 704- | Yes | 704- | Yes |
| 704-991 | 704-991- | Yes | 704-991- | Yes |
| 704-991 | 991- | No | 991- | Yes |
| 201 | 201- | Yes | 201- | Yes |
| 201-991 | 201-991 | Yes | 201-991- | Yes |
| -end- | | | | |

# apply

## Function

Use the apply command to add a code control.

**apply command parameters and variables**

| Command | Parameters and variables | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **apply** | cbk<br>prp<br>htrf | *blocktype*<br>*type* | [ *type*<br>*code* | *code* ] | *level* | *gap* | (1)<br>(2)<br>(3) | |
| **apply** (continued) | (1)<br>(2)<br>(3) | *ann* | [ all<br>*snpa/sts* ] | | | | | (end) |

| Parameters and variables | Description |
|---|---|
| all | This parameter indicates that the specified control is to be applied to all NPAs defined in the office. |
| *ann* | This variable indicates the announcement and is one of the following:<br>▪ ea1 emergency announcement 1<br>▪ ea2 emergency announcement 2<br>▪ nca no circuit announcement |
| *blocktype* | This variable designates one of the two cbk block types as follows:<br>▪ pct percentage<br>▪ gap gap ACODE |
| cbk | This parameter designates code blocking. |
| *code* | This variable designates the 1-18 digit number (country codes (CCODE) are designated by a 1-4 digit number). Except for the 7-digit numbers, the number must be entered with single quotation marks, for example ‘727’. |
| *gap* | This variable indicates the duration of the gap in tenths of a second and has a range of 0.0-600.0. The value must be enclosed in single quotes, for example ‘50.0’. |
| htrf | This parameter designates hard-to-reach flag (HTRF). |
| *level* | This variable is the percent of blockage and has a range of 1-100. |
| prp | This parameter designates preroute peg count. |

**-continued-**

# apply (continued)

**apply command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *snpa/sts* | This variable is a three digit code with the following ranges:<br>▪ snpa 100-999<br>▪ sts 000-999<br>These values must be enclosed enclosed in single quotation marks (for example '212'). This field does not apply to CCODE or PFX code types. |
| *type* | This variable designates the type of blocking as follows:<br>▪ ccode country code<br>▪ acode area code<br>▪ nac non-area code<br>▪ pfx prefix code |

**-end-**

## Qualifications

The apply command is qualified by the following exceptions, restrictions, and limitations:

- A decimal must always be used in gapping values, for example '50.5'.
- Some apply parameters do not allow SNPA/STS values. SNPA/STS must be specified for ACODE and NAC.
- A PFX code control cannot be applied against a code that is longer than the number of digits required for translations.
- If more than one control can be applied against an equal access call, only the most specific control is applied to the call.
- The apply cbk command string will block a percentage of traffic or gaps calls are destined for and reroutes this traffic to one of the specified treatments.
- For ACODEs, if the NPA against which the control is being applied matches the NPA in the destination code, the NPA is removed from the destination code for that particular entry.
- The apply prp or apply htrf command strings will peg all calls to a given code, but block none. A percentage of HTRF traffic is blocked if the STR control is active.
- Mass calling, if present in the software, is applied when you enter cbk or htrf parameters.

- Tables CCTR and CCTRNSL cannot be edited until all CCODE controls are deactivated. For example, CCODE 44 cannot be deleted from table CCTR until the list command indicates that all CCODE 44 controls are inactive. Attempts to edit the table may receive the following response:

  ```
  CODE CONTROL IN EFEECT - NO MODIFICATIONS ALLOWED
  ```

  Quit the table and reenter the CodeCtrl menu, then cancel the appropriate controls.

## Examples

The following table provides examples of the apply command.

**Examples of the apply command**

| Example | Task, response, and explanation |
|---|---|
| **apply prp ccode '33'** ↵<br>*where*<br><br>'33' is the country code for the ccode type to be applied | **Task:** Apply protective reservation equipment to count all ccodes with tuple 33 but do not block them.<br><br>**Response:** OK<br><br>**Explanation:** More than one PRP cannot be applied, and the SNPA/STS is optional. All CCODES with tuple 33 are counted but are not blocked. |
| **apply prp acode '613' '819'** ↵<br>*where*<br><br>'613' is the area code for the ACODE type<br>819 is the SNPA for the ACODE type | **Task:** Apply counting to all traffic offered to area code 613 the originates from area code 819.<br><br>**Response:** OK<br><br>**Explanation:** All traffic offered to area code 613 the originates from area code 819 is counted. |

**-continued-**

# apply (continued)

**Examples of the apply command** (continued)

**Example** **Task, response, and explanation**

**apply CBK PCT ACODE '613' 10 NCA '222'** ↵
*where*

'613' is the ACODE type area code
10 is level or percent of blockage
'222' is the SNPA area code for ACODE

**Task:** Randomly block 10% of calls originating on area code 819 and being offered to area code 613 and apply NCA treatment.

**Response:** `Valid SNPA NEEDED`

**Explanation:** The wrong area code (222) was entered. The correct SNPA area code of 819 should have been entered.

**apply apply htrf ccode '33'** ↵
*where*

33 The country code of calls to be classified hard-to-reach (HTR).

**Task:** Flag all calls to CCODE 33 as HTR.

**Response:** OK

**Explanation:** All calls to country code 33 are classified as HTR.

**apply cbk pct nac '6211234' 100 nca '613'** ↵
*where*

'6211234' is the non-area code code
100 if the percentage of calls affected (that is 100%)
'613' is the SNPA area code

**Task:** Apply a percentage of code blocking on the digits 6211234 for maximum blocking from subscribers with area code 613 and send them to no-circuit announcement.

**Response:** OK

**Explanation:** All calls with digits 6211234 from area code 613 are sent to no-circuit announcement.

**-continued-**

# apply (continued)

**Examples of the apply command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **apply cbk pct acode 6136211234 100 nca '613'** ↵<br>*where*<br><br>6136211234 is the area code code<br>100 if the percentage of calls affected (100%)<br>'613' is the SNPA area code | **Task:** Apply a percentage of code blocking on the digits 6136211234 for maximum blocking from subscribers with area code 613 and send them to no-circuit announcement.<br><br>**Response:** 0K<br><br>**Explanation:** All calls dialing 6211234 from within the 613 NPA are blocked. |
| **apply cbk gap pfx '10222' 100 nca** ↵<br>*where*<br><br>'10222' the prefix digits<br>100 the percentage of calls affected | **Task:** Apply a gapping control on the prefix digits 10222, with the gap set to 100 seconds and with a no-circuit announcement.<br><br>**Response:** 0K<br><br>**Explanation:** The control is applied so that only one call for all 10222 destinations is allowed to complete every 100 seconds. No circuit announcement is given to uncompleted calls. |

**-continued-**

# apply (continued)

**Examples of the apply command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **apply cbk gap acode '613' 50 nca '919'** ↵<br>*where*<br><br>'613' is the acode area code<br>50 is the number of seconds (s) of the gap (50 s)<br>'919' is the SNPA area code | **Task:** Apply call gapping that involves control of both the originator and the destination.<br><br>**Response:** OK<br><br>**Explanation:** Call gapping is applied to area code 613 so that only one subscriber dialing from NPA 919 is allowed to complete every 50 s. |

**-end-**

## Responses

The following table provides explanations of the responses to the apply command.

**Responses for the apply command**

| MAP output | Meaning and action |
|---|---|
| CANNOT APPLY HTRF WHEN CBK ACTIVE | **Meaning:** When both HTRF and CBK apply to the same codes, only one control can be activated on those codes.<br><br>**Action:** None |
| CARRIER NUMBER NOT DEFINED IN OCCINFO | **Meaning:** The carrier number specified by '10XXX' is not defined in table OCCINFO.<br><br>**Action:** None |

**-continued-**

# apply (continued)

**Responses for the apply command** (continued)

| MAP output | Meaning and action |
|---|---|
| CODE ALREADY HAS ACTIVE CONTROL | **Meaning:** More than one of the specified controls is not allowed.<br>**Action:** None |
| CODE BLOCKING BY CC NOT APPLICABLE | **Meaning:** Although parameter CCODE is listed, it cannot be applied because it has no effect.)<br>**Action:** None |
| INSUFFICIENT DIGITS<br>or<br>INVALID DIGITS | **Meaning:** The code digits are incorrect or the single quotation marks have been omitted. The destination code lacks the ‘10’, ‘0’, or ‘9501’ of the prefix code.<br>**Action:** None |
| NO DDO SOFTWARE IN OFFICE | **Meaning:** When attempting to block a CCODE, the subsystem for direct dialing overseas (DDOSUB) is not available.<br>**Action:** None |
| NOT AN EQUAL ACCESS OFFICE | **Meaning:** The office does not have equal access capability.<br>**Action:** None |
| OK | **Meaning:** The control has been successfully activated.<br>**Action:** None |

**-continued-**

# apply (end)

**Responses for the apply command** (continued)

| MAP output | Meaning and action |
|---|---|
| TO MANY CONTROLS ACTIVE | **Meaning:** The number of controls has exceeded the 256 or 64 limit. The 64 limit is only for offices containing EADAS.<br><br>**Action:** None |
| VALID SNPA NEEDED | **Meaning:** According to table HNPACONT, the SNPA/STS has not been supplied or is incorrect for controls with ACODE or NAC.<br><br>**Action:** None |
| **-end-** | |

# list

## Function

Use the list command to list code controls.

**list command parameters and variables**

| Command | Parameters and variables | | | | |
|---|---|---|---|---|---|
| **list** | *ctrl* | *blocktype* | *type* | [ all / *code* ] | [ all / *snpa/sts* ] |

| Parameters and variables | Description |
|---|---|
| all | This default parameter indicates that all codes are to be included when no code is entered or all parameter is entered. |
| all | This parameter indicates that the specified control is to be listed for all numbering plan areas (NPAs) defined in the office. |
| *blocktype* | This variable is only used with cbk and is one of the following:<br>▪ pct percentage<br>▪ gap gapping range |
| *code* | This variable designates the 1-18 digit number (1-4 for CCODE). Except for the 7-digit numbers, the number must be entered inside single quotation marks, for example '727'. |
| *ctrl* | This variable is one of the following code controls:<br>▪ cbk code blocking<br>▪ prp preroute peg<br>▪ htrf hard-to-reach flag |
| *snpa/sts* | This variable is a three digit number representing one fo the following values:<br>▪ snpa is serving number plan area and has a range of 100-999<br>▪ sts is serving translation scheme and has a range of 000-999 |
| *type* | This variable is one of the following code types:<br>▪ ccode country code<br>▪ acode area code<br>▪ nac non-area code<br>▪ pfx prefix code |

# list (continued)

## Qualifications

The list command is qualified by the following exceptions, restrictions, and limitations:

- Although the display headers include a letter to denote the ctrl type (C, A, N, or P) the control and type are entered separately.
- If there is more than one snpa/sts in the office and all parameter is not specified, parameter snpa/sts must be specified.

## Examples

The following table provides examples of the list command.

**Examples of the list command**

| Example | Task, response, and explanation |
|---|---|
| **list cbk pct acode all** ↵ | |
| | **Task:** List the code blocking percentage for all area codes. |
| | **Response:**<br>`CBk ACODE Page 1 of 1`<br>`Digits Level Ann Peg SNPA`<br>`819221112 10% EA2 2 613`<br>`819221113 15% EA2 3 613` |
| | **Explanation:** The snpa/sts variable is not optional for all control types; for example, snpa is not optional for cbk acode or nzac, and is not relevant in terms of CCODE. The apply command for the first set of digits has a specified that 10% of all calls for 819-222-1112 from snpa 613 are to be routed to treatment. |
| **list prp ccode all** ↵ | |
| | **Task:** List the preroute peg count for all country codes. |
| | **Response:**<br>`CBk ACODE Page 1 of 1`<br>`Digits Level Ann Peg SNPA`<br>`44 0`<br>`44 0` |
| | **Explanation:** The display headers are the same for all control parameters for the list command, but PRP and HTRF have blanks for the Level and Ann data fields, and HTRF has a blank for Peg. |

## Responses

The following table provides explanations of the responses to the list command.

**Responses for the list command**

| MAP output | Meaning and action |
|---|---|
| `CONTROL NOT ACTIVE` | **Meaning:** The specified control is not active.<br><br>**Action:** None |
| `DIGITS LEVEL ANN PEG SNPA/STS GAP` | **Meaning:** These headers appear over numbers or codes that provide the following information:<br><br>▪ DIGITS number of digits for the code by which calls are blocked or counted and has a range of 1-18.<br>▪ LEVEL percentage of blocking that is set on the blocked code and has a range of 0-100<br>▪ ANN treatment to which calls are routed and is one fo the following:<br>- ea1 emergency announcement 1<br>- ea2 emergency announcement 2<br>- nca no circuit announcement<br>▪ PEG number of times a code is blocked or counted and has a range of 0-9999<br>▪ SNPASTS code indicating the area code of the serving office to which the control applies and has the following ranges:<br>- snpa is serving number plan area and has a range of 100-999<br>- sts is serving translation scheme and has a range of 000-999<br>▪ GAP duration in tenths of a second, between completed calls and has a range of 0.0-600.0<br><br>**Action:** None |

# page

## Function

Use the page command to display the next page of data.

**page command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **page** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the page command.

**Example of the page command**

| Example | Task, response, and explanation |
|---|---|
| **page** ↵ | |
| | **Task:** Display the next page of data. |
| | **Response:** `DIGITS LEVEL ANN PEG SNPA/STS GAP` |
| | **Explanation:** The system displays the next screen of data with the values under these display headers. |

## Response

The following table provides an explanation of the response to the page command.

**Responses for the page command**

| MAP output | Meaning and action |
|---|---|
| `DIGITS LEVEL ANN PEG SNPA/STS GAP` | |
| | **Meaning:** The system displays the next screen of data with the values under these display headers. |
| | **Action:** None |

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the CodeCtrl level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The CodeCtrl level has changed to the previous menu level. |

**-continued-**

# quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mapci** ↵<br>*where*<br><br>mapci specifies the level higher than the CodeCtrl level to be exited | **Task:** Return to the CI level (one menu level higher than MAPCI).<br><br>**Response:** The display changes to the CI display:<br><br>`CI:`<br><br>**Explanation:** The CodeCtrl level has returned to the CI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the CodeCtrl level menu with a menu that is two or more levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the CodeCtrl level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |
| **-end-** | |

# remove

## Function

Use the remove command to delete code controls.

**remove command parameters and variables**

| Command | Parameters and variables | | | | |
|---|---|---|---|---|---|
| **remove** | *ctrl* | *blocktype* | *type* | [ all / *code* ] | [ all / *snpa/sts* ] |

| Parameters and variables | Description |
|---|---|
| all | This default parameter for code indicates that all codes are to be included when no code is entered or all parameter is entered. This parameter for snpa/sts indicates that the specified control is to be listed for all NPAs defined in the office. |
| *blocktype* | This variable is only used with cbk and is one of the following:<br>▪ pct percentage<br>▪ gap gapping range |
| *code* | This variable designates the 1-18 digit number (1-4 for CCODE). Except for the 7-digit numbers, the number must be entered inside single quotation marks, for example '727'. |
| *ctrl* | This variable is one of the following code controls:<br>▪ cbk code blocking<br>▪ prp preroute peg<br>▪ htrf hard-to-reach flag |
| *snpa/sts* | This variable is a three digit number representing one fo the following values:<br>▪ snpa is serving number plan area and has a range of 100-999<br>▪ sts is serving translation scheme and has a range of 000-999 |
| *type* | This variable is one of the following code types:<br>▪ ccode country code<br>▪ acode area code<br>▪ nac non-area code<br>▪ pfx prefix code |

## remove (continued)

## Qualifications

The remove command is qualified by the following exceptions, restrictions, and limitations:

- Although the display headers include a letter to denote the ctrl type (C, A, N, or P) enter the ctrl and type separately.
- If there is more than one SNPA/STS in the office and the parameter all is not specified, you must specify the snpa/sts parameter.

## Example

The following table provides an example of the remove command.

**Example of the remove command**

| Example | Task, response, and explanation |
|---|---|
| **remove cbk pct nac '6211234'** ↵ | |
| | **Task:** Remove the specified code control. |
| | **Response:** OK |
| | **Explanation:** Percentage code blocking on the digits 6211234 for any subscriber within the 613 area code has been removed. |

## Responses

The following table provides explanations of the responses to the remove command.

**Responses for the remove command**

| MAP output | Meaning and action |
|---|---|
| CARRIER NUMBER NOT DEFINED IN OCCINFO | |
| | **Meaning:** The carrier number specified by '10xxx' is not defined in table OCCINFO. |
| | **Action:** None |

**-continued-**

# remove (end)

**Responses for the remove command** (continued)

| MAP output | Meaning and action |
|---|---|
| CONTROL NOT ACTIVE | **Meaning:** The remove command does not deactivate a control unless the control is active.<br><br>**Action:** None |
| INSUFFICIENT DIGITS | **Meaning:** The code digits are incorrect, or the single quotation marks have been omitted. The destination code lacks the ‘10’ of the ‘10xxx’prefix code.<br><br>**Action:** None |
| NOT AN EQUAL ACCESS OFFICE | **Meaning:** The office does not have equal access capability.<br><br>**Action:** None |
| OK | **Meaning:** Previously applied code controls have been deactivated. The system updates the display fields as each control is removed.<br><br>**Action:** None |

**-end-**

# CONS level commands

Use the CONS level of the MAP to access commands that test or change the status of a device controller (DC) and the console connected to it.

## Accessing the CONS level

To access the CONS level, enter the following from the CI (Command Interpreter) level:

**mapci;mtc;iod;ioc 0;card 2** ↵

In this example, 0 is the number of an input/output controller (IOC) on which card number 2 is the card to which the console is connected.

## CONS commands

The commands available at the CONS MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**CONS commands**

| Command | Page |
|---|---|
| bsy | C-691 |
| listdev | C-693 |
| offl | C-697 |
| queryproc | C-699 |
| querytty | C-701 |
| quit | C-703 |
| rts | C-707 |
| tst | C-709 |

## CONS menu

The following figure shows the CONS menu and status display. The insert with hidden commands is not a visible part of the menu display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


CONS          IOD
0  Quit       IOC  0  1  2  3  4
2             Stat .  .  .  .  .
3
4  ListDev_   DIRP:  .    XFER:  .   DPPP:  .   DPPU:  .  NOP:  .
5             SLM :  .    NX25:  .   MLP :  .
6  Tst
7  Bsy        IOC CARD   0    1    2    3    4    5    6   7   8
8  RTS         0  PORT 0123 0123 0123 0123 0123 0123 0123 0123 0123
9  Offl           STAT .--- .... .... .-.. .--- .... .... .... ....
10                TYPE MTD  CONS DDU  CONS DDU  CONS CONS CONS MTD
11            Card 3    Ckt     0      1       2        3
12            Status            .      -       .        .
13            Cons Id         H              DPPD1     X
14            ConType         VT100          VT100     VT100
15
16
17
18
```

**Hidden commands**

```
queryproc           querytty
```

## CONS status codes

The following table describes the status codes for the CONS status display.

| Status codes CONS menu status display | | |
|---|---|---|
| **Code** | **Meaning** | **Description** |
| Ckt 0, 1, 2, or 3 | | |
| . | in-service | The console circuit is in-service with no faults. |
| ManBsy | manually busy | The console circuit is manually busy. |
| SysBsy | system busy | The console circuit is system busy. |
| Offl | offline | The console circuit is offline. |
| - | unequipped | The console circuit is unequipped. |

## Common responses

The following table provides explanations of the common responses to the CONS commands. This responses will be produced by many of the commands under the CONS level.

| Common responses for the CONS commands | |
|---|---|
| **MAP output** | **Meaning and action** |
| INVALID | |
| | **Meaning:** The state of the circuit is incorrect for the system to carry out the command. |
| | **Action:** None |
| OK | |
| | **Meaning:** The command has been carried out. |
| | **Action:** None |

# bsy

## Function

Use the bsy command to change the status of the specified console DC port to manually busy.

**bsy command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **bsy** | *circuit* |

| Parameters and variables | Description |
|---|---|
| *circuit* | This variable identifies the DC port by number. Valid entries are 0-3. |

## Qualification

The bsy command is qualified by the following restriction: before entering bsy, the circuit status must be in-service or offline.

## Example

The following table gives an example of the bsy command.

**Example of the bsy command**

| Example | Task, response, and explanation |
|---|---|
| **bsy 1** ↵<br>*where*<br><br>1 is the port number | **Task:** To manually busy console number one.<br><br>**Response:** 0K<br><br>**Explanation:** The console is busied. |

# bsy (end)

## Responses

The following table provides common responses to the bsy command.

| Responses for the bsy command | |
|---|---|
| **MAP output** | **Meaning and action** |
| OK | **Meaning:** The console is busied.<br><br>**Action:** None |
| REQUEST FAILED<br>invalid message | **Meaning:** An invalid message occurs if the request to busy the circuit comes from the device that is requested to be busied.<br><br>**Action:** None |
| User logged on that console<br>Please confirm (“YES”, “Y”, “NO” or “N”): | **Meaning:** A user is logged onto the specified console and busying it woud cancel use of that console until it is returned to service by another device. A response of yes will cause the user to be logged off, and the response OK if given to the canceler. A response of no cancels the request.<br><br>**Action:** Enter yes to continue. Enter no to abort the command. |

# listdev

## Function

Use the listdev command to display the status of a specified device that is connected to a specified input/output controller (IOC).

**listdev command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **listdev** | *ioc* *device_type*<br>cons |

| Parameters and variables | Description |
|---|---|
| cons | This parameter directs the system to list all the consoles. |
| *device_type* | This variable is the device type. Valid entries are nx25, dlc, cons, dpac, mtd, ddu, and mpc. |
| *ioc* | This variable identifies the number of a specific IOC card. Valid entries are 0-19. |

## Qualification

The listdev command is qualified by the following restriction: a card can have up to four consoles connected to it.

# listdev (continued)

## Example

The following table provides an example of the listdev command.

**Example of the listdev command**

| Example | Task, response, and explanation |
|---|---|
| **listdev 1 cons** ↵<br>*where*<br><br>1 is the number of the IOC card connected to the device | **Task:** To list the consoles.<br><br>**Response:**<br>CONS MAP PRT2 A D B PRT1 PRT3<br>CONSTYPE VT100 KSR VUC4 VUC4 VT100 KSR KSR<br>STATUS Babbling . . . Offl Man Bsy .<br>IOC.CARD 0.5 0.5 0.5 0.5 1.3 2.1 3.6<br><br>**Explanation:** The response lists all the consoles and provides identification and status information about each one. |

## Responses

The following table describes the meaning of each portion of the possible responses to the listdev command, and examples of full response.

**Responses for the listdev command**

| MAP output | Meaning and action |
|---|---|
| CONS CONSTYPE STATUS IOC.CARD<br>MAP VT100 Babbling 0.5<br>PRT2 KSR . 0.5<br>A VUC4 . 0.5<br>D VUC4 . 0.5<br>B VT100 Offl 1.3<br>PRT1 KSR Man Bsy 2.1<br>PRT3 KSR . 4.6<br>TATSNPE KSR Offl 1.3 | **Meaning:** This is an example of a display in response to the listdev command with cons specified as the device.<br><br>**Action:** None |
| CONS ID | **Meaning:** Displays the name, of up to eight characters, by which the consolde device is known within the DMS system, for example MAP or PRT1.<br><br>**Action:** None |
| CONSTYPE | **Meaning:** Displays a code of up to eight characters representing the type of terminal, for example, VT100 or KSR.<br><br>**Action:** None |
| IOC.CARD | **Meaning:** Consists of two fields, where ioc is the number of the IOC connected to the console, and card is the number of the DC card within the IOC which serves that console.<br><br>**Action:** None |

**-continued-**

# listdev (end)

**Responses for the listdev command** (continued)

| MAP output | Meaning and action |
|---|---|
| INVALID <reason> | |
| | **Meaning:** The system cannot produce a listdev display. The <reason> can be that the card is unknown, the card is of an unknown type, or no device exists for the device specified. |
| | **Action:** None |
| STATUS | |
| | **Meaning:** Provides the status of the device. |
| | **Action:** None |

**-end-**

# offl

## Function

Use the offl command to change the status of the console DC card to offline.

**offl command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **offl** | *circuit* |

| Parameters and variables | Description |
|---|---|
| *circuit* | This variable identifies the DC port by number. Valid entries are 0-3. |

## Qualifications

The offl command is qualified by the following exceptions, restrictions and limitations:

- The console must be manually busy or system busy before you enter the offl command.
- When one port of a card is made offline, the whole card is made offline.

## Example

The following table provides an example of the offl command.

**Example of the offl command**

| Example | Task, response, and explanation |
|---|---|
| **offl 1** ↵<br>*where*<br><br>1 is the port number | **Task:** To take the specified port offline.<br><br>**Response:** OK<br><br>**Explanation:** The console is offline. |

# offl (end)

## Responses

The following table provides a common response to the offl command.

**Responses for the offl command**

| MAP output | Meaning and action |
|---|---|
| INVALID<br>CONS IS offline | **Meaning:** The state of the console circuit is incorrect for taking it offline, where the status is one of the following: unequipped, offline, sys bsy, cs bsy, ps bsy, idle, inservice.<br><br>**Action:** None |
| OK | **Meaning:** The console DC card is offline.<br><br>**Action:** None |

# queryproc

## Function

Use the queryproc command to test if the cons maintenance process is alive.

**queryproc command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **queryproc** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the queryproc command.

**Examples of the queryproc command**

| Example | Task, response, and explanation |
|---|---|
| **queryproc** ↵ | |
| | **Task:** Test to see if the cons maintenance process is alive. |
| | **Response:** `Process ALIVE` |
| | **Explanation:** The cons maintenance process is alive. |

## Responses

The following table provides explanations of the responses to the queryproc command.

**Responses for the queryproc command**

| MAP output | Meaning and action |
|---|---|
| `Process ALIVE` | |
| | **Meaning:** The process is alive. |
| | **Action:** None |

**-continued-**

# queryproc (end)

**Responses for the queryproc command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Process DEAD` | **Meaning:** The process is dead.<br><br>**Action:** None |

**-end-**

# querytty

## Function

Use the querytty command to query the teletype.

**querytty command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **querytty** | *circuit* |

| Parameters and variables | Description |
|---|---|
| *circuit* | This variable identifies the DC circuit by number. Valid entries are 0-3. |

## Qualifications

None

## Example

The following table provides an example of the querytty command.

**Example of the querytty command**

| Example | Task, response, and explanation |
|---|---|
| **querytty 0** ↵<br>*where*<br><br>0 is the circuit number | **Task:** Query the teletype on circuit 0.<br><br>**Response:**<br>`is in service`<br>`NODE NO 8`<br>`DEVICE#: 0`<br><br>**Explanation:** The system displays the requested information. |

# querytty (end)

## Response

The following table provides an explanation of the response to the querytty command.

**Response for the querytty command**

| MAP output | Meaning and action |
|---|---|
| `  is in service`<br>`NODE NO 8`<br>`DEVICE#: 0` | **Meaning:** The system displays the requested information.<br><br>**Action:** None |

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any MAP level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the CONS level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The CONS level has changed to the previous menu level. |

**-continued-**

# quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the CONS level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The CONS level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the CONS level menu with a menu that is two or more MAP levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the CONS level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |

**-end-**

## Function

Use the rts command to return the console card to service.

**rts command parameters and variables**

| Command | Parameters and variables | |
|---|---|---|
| **rts** | *circuit* | [ *noforce* / force ] |

| Parameters and variables | Description |
|---|---|
| *circuit* | This variable identifies the disk controller circuit by number. Valid entries are 0-3. |
| force | This parameter directs the system to force the card into service. |
| *noforce* | This default parameter directs the system not to force the card into service. Do not enter this parameter. |

## Qualification

The rts command is qualified by the following restriction: the circuits that are offline must be either manually busy or system busy before the rts command can be implemented.

## Example

The following table provides one example of the rts command.

**Example of the rts command**

| Example | Task, response, and explanation |
|---|---|
| **rts0** ↵<br>*where* | |
| 0 | indicates the card to be returned to service |
| | **Task:** To return the console on card 0 to service. |
| | **Response:** 0K |
| | **Explanation:** The console is in service. |

# rts (end)

## Responses

The following table provides a common response to the rts command.

**Responses for the rts command**

| MAP output | Meaning and action |
|---|---|
| INVALID<br>IOC 0 CARD 1 PORT 1 IS IN SERVICE AND PBSY | **Meaning:** A circuit must be made busy before it can be returned to service. The response echoes the circuit discrimination numbers.<br><br>**Action:** None |
| OK | **Meaning:** The specified card is returned to service. The status display value changes from manually busy to in-service.<br><br>**Action:** None |
| REQUEST FAILED | **Meaning:** The card cannot be returned to service.<br><br>**Action:** Check the circuit status. If appropriate, replace the card. |

## Function

Use the tst command to test the displayed device and its connecting DC card.

**tst command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **tst** | *circuit* |

| Parameters and variables | Description |
|---|---|
| *circuit* | This variable identifies the DC port by number. Valid entries are 0-3. |

## Qualification

The tst command is qualified by the following restriction: the circuit must be manually or system busy before entering the tst command.

## Example

The following table provides an example of the tst command.

**Example of the tst command**

| Example | Task, response, and explanation |
|---|---|
| **tst 0** ↵<br>*where*<br><br>0 indicates the card to be tested | **Task:** Test console DC card 1.<br><br>**Response:**<br>`INVALID`<br>`CONS 1 IS OFFLINE`<br><br>**Explanation:** The test cannot be completed because the device is in the offline state. The console must be returned to service before it can be tested. |

# tst (end)

## Responses

The following table describes the meaning and significance of the responses to the tst command.

**Responses for the tst command**

| MAP output | Meaning and action |
|---|---|
| INVALID<br>CONS 1 IS SYS BSY | **Meaning:** The state of the console circuit is incorrect for testing, where n echoes the device discrimination number and the status is one of the following: unequipped, offline, sys bsy, cs bsy, ps bsy, idle, or inservice.<br><br>**Action:** None |
| OK | **Meaning:** The console circuit passes the test.<br><br>**Action:** None |
| SITE FLR RPOS BAY-ID SHF DESCRIPTION SLOT EQPEC | **Meaning:** A of list of probable faulty cards is given under these headers.<br><br>**Action:** None |

# CPSTATUS level commands

Use the CPSTATUS level of the MAP to access the CPSTATUS tool to

- measure all CPU occupancies including call processing occupancy
- measure of additional CPU time available for call processing work
- indicate overload and switch performance with respect to the switch's engineering

## Accessing the CPSTATUS level

To access the CPSTATUS level, enter the following from the CI level:

**mapci;mtc;cpstatus ↵**

## CPSTATUS commands

The commands available at the CPSTATUS MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

***Note:*** The non-menu command cpstat can be used at the CI level to perform the same functions as the CPSTATUS level.

**CPSTATUS commands**

| Command | Page |
|---|---|
| quit | C-715 |

## CPSTATUS menu

The following figure shows the CPSTATUS menu and status display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


CPSTATUS        CATMP/HR CPOCC CPAVAIL ENGLEVEL CCOVRLD
 0 Quit              180   2%    76%    BELOW     OFF
 2              SCHED FORE MAINT DNC  OM  GTERM BKG IDLE
 3               20%    1%   6%   0%   0%   0%  42%  29%
 4
 5
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
```

## CPSTATUS status codes

The following table describes the status codes for the CPSTATUS status display.

**Status codes CPSTATUS menu status display**

| Code | Meaning | Description |
|---|---|---|
| CATMP/HR | Call attempts per hour | The number of call attempts per hour derived from Operational Measurements (OMs). |
| CPOCC | Call processing occupancy | This field displays the proportion of CPU time used for call processing, expressed as a percentage of total CPU time. Included are High Priority CP class (HPCP), Deferrable CP class (DEFCP) and CP class occupancy. |
| CPAVAIL | CPU available for call processing | The difference between the maximum percentage of CPU time available for Call Processing and CP occupancy yields the amount of CPU time still available for CP use. This field provides an indication of how much CPU real time is still available for call processing and how close to capacity the switch is operating. |

**-continued-**

**Status codes CPSTATUS menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| | | ENGLEVEL - the engineering level. This field indicates whether the current CP occupancy is above or below the engineered level. The definition of this level is determined by the office parameter CC_ENGLEVEL_WARNING_THRESHOLD in the OFCENG table. This field has two possible values:<br>▪ ABOVE- indicates that the CPOCC has surpassed or is equal to the given threshold<br>▪ BELOW- indicates that the CPOCC has gone below the threshold. |
| CCOVRLD | Central control overload | This field indicates whether overload has been reached in the last minute. The overload indicator is triggered in two cases:<br>▪ The number of 1 and 2 message tosses during the last minute was greater than 40. The information is acquired from the following OM groups: ORIGDENY (one message tosses) and INEFDENY (two message tosses).<br>***Note:*** This is applicable only in office types with these overload controls.<br>▪ There was a 5 second interval where there was always work in the Call Processing scheduler class over the last minute.<br>***Note:*** This method of overload identification is present in all offices.<br>CCOVERLD has two possible values:<br>▪ ON-indicates that CC overload controls were in effect at some time within the last minute.<br>▪ OFF-indicates that CC overload controls were not in effect during the last minute. |
| SCHED | CPU usage of the scheduler | Data is given in percentages of total CPU time and expressed in integer values. |
| FORE | CPU usage of System6 and System7 classes | Data is given in percentages of total CPU time and expressed in integer values. |

**-continued-**

**Status codes CPSTATUS menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| MAINT | CPU usage of the maintenance class | Data is given in percentages of total CPU time and expressed in integer values. |
| DNC | CPU usage of the Network Operating System (NOS) file transfer class. | Data is given in percentages of total CPU time and expressed in integer values. |
| OM | CPU usage of the OMs and guaranteed class | Data is given in percentages of total CPU time and expressed in integer values. |
| GTERM | CPU usage of the guaranteed terminal class | Data is given in percentages of total CPU time and expressed in integer values. |
| BKG | CPU usage of the background class | Data is given in percentages of total CPU time and expressed in integer values. |
| IDLE | CPU usage of the System0 class | Data is given in percentages of total CPU time and expressed in integer values. |

**-end-**

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the CPSTATUS level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The CPSTATUS level has changed to the previous menu level. |

**-continued-**

## quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the CPSTATUS level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The CPSTATUS level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the CPSTATUS level menu with a menu that is two or more levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the CPSTATUS level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |

**-end-**

# C6TTP level commands

Use the C6TTP level of the MAP to monitor and maintain CCIS6 trunks.

## Accessing the C6TTP level

To access the C6TTP level, enter the following from the CI level:

**mapci;mtc;trks;ttp;c6ttp**

## C6TTP commands

The commands available at the C6TTP MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.



-continued-

| Command | Page |
|---|---|
| tst | C-761 |
| tsttrnsl | C-771 |
| **-end-** | |

## C6TTP menu

The following figure shows the C6TTP menu and status display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


C6TTP
 0 Quit_    POST    DELQ      BUSYQ     DIG
 2 Post_    TTP 6-005
 3 Seize_   CKT TYPE  PM NO.  COM LANG  STA S R DOT TE RESULT
 4
 5 Bsy_
 6 RTS_
 7 Tst_
 8
 9
10
11 Hold
12 Next_
13 Rls_
14 SNID
15 QrySig
16 TstTrnsl
17 C6State
18 TrkQry
```

# bsy

## Function

Use the bsy command to set a circuit to the specified out-of-service state.

**bsy command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **bsy** | [ inb [ all ] ] [ mb [ a ] ] [ sb ] [ all ] [ a ] |

| Parameters and variables | Description |
|---|---|
| a | This parameter has the same meaning as the all parameter. This parameter specifies that all posted circuits are placed in the busy queue all (BUSYQALL) queue to be busied. For circuits that were previously posted by group (the command post g), all circuits in the group are busied. When used after inb, mb, or sb, this parameter specifies that the posted trunk be placed in the busy queue (BUSYQ) and put in the specified state when call processing or maintenance action is completed on the trunks. |
| all | This parameter has the same meaning as the a parameter. This parameter specifies that all posted circuits be placed in the BUSYQALL queue to be busied. For circuits that were previously posted by group (the command post g), all circuits in the group are busied. When used after inb, mb, or sb, this parameter specifies the posted trunk be placed in the busy queue (BUSYQ) and put in the specified state when call processing or maintenance action is completed on the trunks. |
| inb | This parameter changes the circuit state to installation busy. |
| mb | This parameter changes the circuit state to manual busy (ManB). |
| sb | This parameter changes the circuit state to system busy (SysB). |

## Qualifications

The bsy command is qualified by the following exceptions, restrictions, and limitations:

- Busying a circuit makes it unavailable for call processing. Circuits can be busied either manually when maintenance personnel put the circuit into the ManB state or automatically when the system performs the same action.

## bsy (continued)

- Manual busying has priority to override any out-of-service state (cbsy, neq, pbsy, offl, and sysb).
- If call processing or maintenance action is in progress on the circuit, it is placed in a Busy Queue (BUSYQ). This circuit queue, called a BUSYQ CCT, may contain up to 20 circuits at a time. When a circuit becomes available, it is busied and removed from the queue.
- The specified group of circuits or the entire posted set can be busied by placing the circuits in BUSYQALL. As circuits become available, they are busied and deleted from the BUSYQALL.
- If any circuits in the BUSYQALL do not become available within 4 minutes of being queued, the system no longer attempts to busy them.
- When busying transmission links in an office are equipped with Common Channel Signaling (CCIS6), CCITT6, and CCS7, an outage of the entire associated trunk group can occur.
- The bsy command is the only command that has an effect on trunks involved in a wideband IT Integrated Services Digital Network user part (ISUP). If a trunk is call processing busy (CPB) and the bsy command is done on a trunk in the control position, the trunk state is changed to call processing deloaded (CPD). Call processing deloaded is an indication to call processing software that a trunk is not to be set idle (IDL) when the call is released. The trunk state is changed from CPD to ManB and the trunk is no longer available for call processing.
- If the entire wideband IT ISUP trunk group is posted in the control position and the busy all command (bsy all) is issued, all trunks that are CPB are changed to CPD and set to ManB upon call disconnect.

## Examples

The following table provides examples of the bsy command.

**Examples of the bsy command**

| Example | Task, response, and explanation | |
|---|---|---|
| **bsy inb all** ↵ | | |
| | **Task:** | Place all posted trunks in the busy queue and make them installation busy. |
| | **Response:** | `OK, POST SET IS SET IN BSYQ.` |
| | **Explanation:** | The posted trunks have been placed in the busy queue and made installation busy. |

**-continued-**

**Examples of the bsy command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **bsy mb** | |
| | **Task:** Place all posted trunks in the ManB state. |
| | **Response:** `STATE CHANGED.` |
| | **Explanation:** The posted trunks have been placed in the ManB state. |

**-end-**

## Responses

The following table provides explanations of the responses to the bsy command.

**Responses for the bsy command**

| MAP output | Meaning and action |
|---|---|
| `A PVC is on this trunk. Use FRLS if necessary.` | |
| | **Meaning:** An X75 trunk has been accessed, the trunk has a PVC, and the bsy command has been used. You may need to use the forced release (FRLS) command. Forced release forces the trunk in the control position to the ManB state. This message appears on SuperNode only. |
| | **Action:** The user may opt to use the FRLS command if maintenance action is necessary and the bsy command will not execute. |
| `FAILED, NO CIRCUIT` | |
| | **Meaning:** The command failed because no circuit was posted. |
| | **Action:** None |
| `Failed to seize CKT` | |
| | **Meaning:** The command failed to seize a circuit. |
| | **Action:** None |

**-continued-**

# bsy (end)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `OK, POST SET IS SET IN BSYQ.` | **Meaning:** The posted trunks have been put in the BUSYQ.<br><br>**Action:** None |
| `STATE CHANGED.` | **Meaning:** The posted trunks have been placed in the requested state.<br><br>**Action:** None |

**-end-**

# c6state

## Function

Use the c6state command to query the near-end state of a CCIS6 trunk in the control position.

**c6state command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **c6state** | There are no parameters or variables. |

## Qualifications

None

## Examples

Not currently available

## Responses

Not currently available

# hold

## Function

Use the hold command to place the circuit in the control position in the first available hold position.

**hold command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **hold** | There are no parameters and variables. |

## Qualification

The hold command works regardless of the trunk state and has no effect on a wideband IT ISUP call.

## Example

The following table provides an example of the hold command.

**Example of the hold command**

| Example | Task, response, and explanation | |
|---|---|---|
| **hold** | | |
| | **Task:** | Place the circuit in the control position in the first available hold position. |
| | **Response:** | `OK, CIRCUIT ON HOLD`<br>`SHORT CLLI IS : CF3P`<br>`OK, CIRCUIT POSTED` |
| | **Explanation:** | The circuit with the short CLLI of CF3P has been placed in the first available hold position. |

# hold (end)

## Response

The following table provides explanations of the response to the hold command.

| Response for the hold command | |
|---|---|
| **MAP output** | **Meaning and action** |
| `FAILED, NO CIRCUIT` | **Meaning:** The command failed because no circuit was posted.<br>**Action:** None |
| `OK, CKT ON HOLD` | **Meaning:** The circuit in the control position has been placed in the first available hold position.<br>**Action:** None |

## Function

Use the next command to place another circuit in the control position.

**next command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **next** | s [ *delq* ]<br>p [ *delttp* ]<br>[ s ] |
| | *hold* [ *delttp* ]<br>[ s ]<br>[ e ] |

| Parameters and variables | Description |
|---|---|
| *delq* | This represents a system default. When only the next command is entered, the system takes the next circuit from the deload queue (DELQ) and places it in the control position. If there are no circuits available from the DELQ, the system takes a circuit from the posted set. |
| *delttp* | This represents a system default. When the parameters s or e are not entered, the system automatically deletes the outgoing circuit (if there is one) from the trunk test position (TTP). |
| e | This parameter exchanges the circuits in the control and hold positions. |
| *hold* | This variable specifies the hold position number from which the circuit is to be taken. The hold position number range is 1-3. |
| p | This parameter ensures that the next circuit to go in the control position is from the posted set, and not from the DELQ. |
| s | This parameter saves the circuit in the outgoing control position in the posted set. When only the next command is entered, the system takes the next circuit from the DELQ and places it in the control position. If there are no circuits available in the DELQ, the circuit is taken from the posted set. |

## Qualifications

The next command is qualified by the following exceptions, restrictions, and limitations:

- Entering the next command without parameters takes the next circuit from the DELQ and places it in the control position. If there are no circuits available in the DELQ, the circuit is taken from the posted set.

## next (continued)

- Without parameters s or e, the outgoing circuit is deleted from the trunk test position (TTP).
- The next command works regardless of the trunk state and has no effect on a wideband IT Integrated Services Digital Network user part (ISUP) call.

## Example

The following table provides an example of the next command.

**Example of the next command**

| Example | Task, response, and explanation |
|---|---|
| **next** | |
| | **Task:** Place the next circuit in the control position. |
| | **Response:**<br>`Next`<br>`POSTED CKT IDLED`<br>`SHORT CLLI IS : CF3P`<br>`OK, CKT POSTED` |
| | **Explanation:** The next circuit has been placed in the control position. The name of the short common language location identifier (clli) is displayed. |

## Response

The following table provides explanations of the response to the next command.

**Response for the next command**

| MAP output | Meaning and action |
|---|---|
| `FAILED, HOLD POSITION IDLE` | |
| | **Meaning:** The command string next 1 is issued but no circuit is held in the first hold position. |
| | **Action:** None |
| `NO CKT, SET IS EMPTY` | |
| | **Meaning:** No circuit has been posted. |
| | **Action:** None |

**-continued-**

# next (end)

**Response for the next command** (continued)

| MAP output | Meaning and action |
|---|---|
| `OK, CKT POSTED` | **Meaning:** The next circuit has been placed in the control position.<br><br>**Action:** Continue entering commands against the circuit you have placed in the control position. |
| `POSTED CKT IDLED` | **Meaning:** The next circuit has been placed in the control position.<br><br>**Action:** Continue entering commands against the circuit you have placed in the control position. |
| `POSTED CKT IDLED`<br>`SHORT CLLI IS: XXXXXXXX`<br>`OK, CKT POSTED` | **Meaning:** The next circuit in the posted set in now placed in the control position. The name of the short clli is displayed.<br><br>**Action:** Continue entering commands against the circuit you have placed in the control position. |

**-end-**

## Function

Use the post command to post one or more circuits for maintenance.

**post command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **post** | a *state* [ *firsttrkgrp* / *clli* ] |
| | b a / b / c / f |
| | cptermerr |
| | d *d_pm* *d_pm_no* *ckt_no* *t_slot* *to t_slot* |
| | e des *des_no* [ b / r / s ] *des_ckt* to *des_ckt* |
| | g [ *clli* / *clnr* ] *ckt* to *ckt* |
| | p *pm* *pm_no* *pm_pos* to *pm_pos* |
| | tm *tm_name* *tm_no* to *tm_no* |
| | s *state* |
| | t *clli* *ckt* .... *ckt* / *cnri1* |
| | tb *clli* m *buffer* / cp [ hc / mr / all ] |
| | wb *clli* *member _#* |

**-continued-**

# post (continued)

**post command parameters and variables**

| Parameters and variables | Description |
|---|---|
| .... | This variable represents a string of circuit numbers. |
| a | This parameter, when preceded by:<br>▪ the b parameter-transfers circuits which are left in the busy queue after the time-out interval from the BUSY ALL queue to the posted set.<br>▪ the post command-posts all DMS-100 Family circuits of a particular state. |
| all | This parameter specifies the entire contents of the maintenance (M) or call processing (CP) buffer. |
| b | This parameter, when preceded by:<br>▪ the b parameter-removes all idle circuits from the posted set, and retains only out-of-service circuits.<br>▪ the post command-posts circuits from one of the two busy queues or the posted set. |
| *buffer* | This variable posts the contents of the M or CP buffer. The *buffer* range is 0-9. |
| c | This parameter transfers circuits from the BUSY CIRCUIT queue to the posted set (up to 10 circuits at a time). |
| *ckt* | This variable represents the circuit number of the trunk group. If two circuit numbers are entered, all circuits from the first number to the second are posted. If only one number is entered, all circuits from that number to the end of the list are posted. The circuit number range is 0-9999. |
| *ckt_no* | This variable represents the circuit number. Its range is 0-19. |
| *clli* | This variable represents the full or short common language location identifier (CLLI) code assigned to a group of circuits or trunk group. When preceded by the command string post a *state*, the trunk group specified by the CLLI is posted first. |
| *clnr* | This variable following the g parameter represents the circuit number of the trunk group. If two circuit numbers are entered, all circuits from the first number to the second number are posted. If only one circuit number is posted, all numbers from that number to the end of the list are posted. If a circuit number is not entered, entering the command post g *clli* posts up to the first 512 circuit in the group. The value is 0-9 999. |
| *cnri1* | This variable following the t parameter represents circuit numbers or test equipment. Up to 10 circuit numbers can be entered serially. The value is 0-9999. |

**-continued-**

# post (continued)

**post command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| cptermerr | This parameter posts trunk entries in the CPTERMERR queue which are currently out of service. |
| d | This parameter posts digital trunks. |
| *des_ckt* | This variable represents the circuit number of a digital echo suppressor DES. Its range is 0-63. |
| *des_no* | This variable represents the DES number. Its range is 0-511. |
| *d_pm* | This variable specifies the type of digital peripheral module (PM):<br>▪ dca-Austrian digital carrier<br>▪ dcm-digital carrier module<br>▪ dct-digital carrier trunk<br>▪ dtc-digital trunk controller<br>▪ idtc-international digital trunk controller<br>▪ iltc-international line trunk controller<br>▪ ltc-line trunk controller<br>▪ rcc-remote cluster controller |
| *d_pm_no* | This variable represents the discrimination number of the digital PM. Its range is 0-511. |
| e | This parameter posts one or both sides of a DES. |
| f | This parameter forces all circuits from the BUSY ALL queue to the posted set. |
| *frsttrkgrp* | This represents a system default. You do not enter a value at the MAPWhen you enter the command string post a *state*, the system begins posting with the first trunk group. |
| g | This parameter posts a group of circuits by its CLLI. If no circuit number is entered after the g command, entering the command post g *clli* posts up to the first 512 circuit in the group. |
| hc | This parameter specifies the highest count (HC) of the contents of the M or CP buffer. |

**-continued-**

# post (continued)

**post command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *member_ #* | This variable represents the trunk member number (*member_#*). The trunk member number can be any circuit, master or slave, which is on the originating or terminating side and is involved in a wideband call. |
| mr | This parameter specifies the most recent (MR) content of the M or CP buffer. |
| *nockt* | This represents a system default. You do not enter a value at the MAP. If no circuit number is specified, entering the command string post g *clli* posts up to the first 512 circuits in the group. |
| p | This parameter posts a group of circuits in a non-digital PM. |
| *pm* | This variable specifies the type of non-digital PM. Examples of non-digital PM types are:<br>▪ mtm-maintenance trunk module<br>▪ oau-office alarm unit<br>▪ tm-trunk module |
| *pm_no* | This variable represents the PM discrimination number. Its range is 0-9999. |
| *pm_pos* | This variable specifies the PM position. Its range is 0-29. |
| s | This parameter posts circuits in the posted set separately according to their state. |

**-continued-**

# post (continued)

**post command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *state* | This variable represents one of the following circuit state codes:<br>▪ cfl The circuit state code carrier fail (cfl) represents a circuit which was removed from service because of failure of an associated outside facility.<br>▪ cpb The circuit state code call process busy (cpb) represents a circuit that is carrying traffic.<br>▪ cpd The circuit state code call process deload (cpd) represents a circuit that is carrying traffic and that another entity, such as maintenance (Mtce), has requested to be informed when call processing (CP) releases the circuit.<br>▪ del The circuit state code deload (del) represents a circuit which was in the cpd state, has been released by CP, and is now available.<br>▪ idl The circuit state code idle (idl) represents a circuit that is in service and available to any process.<br>▪ inb The circuit state code installation busy (inb) represents an installed circuit that has not been tested.<br>▪ ini The circuit state code initialized (ini) represents a circuit in an intermediate state to which all previously cpb circuits are set following a system restart.<br>▪ lo The circuit state code lockout (lo) represents a circuit under continuous seizure from a far office without digits being received. The system continues scanning and sets circuit idl when seizure ceases. For CCS7 trunks, this state may be due to a problem with the message switch and buffer (MSB) or the interperipheral message link (IPML).<br>▪ mb The circuit state code manual busy (ManB) represents a circuit which was removed from service by a maintenance person and can only be returned to service by a maintenance person.<br>▪ neq The circuit state code not equipped (neq) represents circuit hardware that is not provided.<br>▪ nmb The circuit state code network management busy (nmb) represents a circuit which is removed from service through automatic or manual network management action. |

**-continued-**

# post (continued)

**post command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| | ▪ pmb The circuit state code peripheral module busy (pmb) represents a circuit that is not available to traffic because the associated PM is out of service.<br>▪ res The circuit state code restricted idle (res) represents a two-way trunk that has restricted availability to traffic. For example, the outgoing side of the trunk is not available.<br>▪ rmb The circuit state code remote make busy (rmb) represents a trunk with its incoming side removed from service, either by the far end or by the near end which informs the far end.<br>▪ sb The circuit state code system busy (sb) represents a circuit which is removed from service by system maintenance, which runs periodic tests until the circuit is either restored to service or set to mb; for example, a test to detect intermittent conditions.<br>▪ szd The circuit state code seized (szd) represents a circuit which has been seized for manual or system action. |
| t | This parameter posts a trunk, service circuit, or test equipment by its CLLI. |
| *t_slot* | This variable represents the time slot number. Its range is 1-31. |
| tb | This parameter posts the trouble buffer. The trouble buffer was created in the TRKSTRBL level using the creatset command. |
| tm | This parameter posts a trunk module (TM), which is a non-digital PM. |
| *tm_name* | This variable represents the trunk module name. |
| *tm_no* | This variable represents the trunk module number. Its range is 0-9 999. |
| wb | This parameter posts all trunk circuits involved in a wideband call. |

**-end-**

## Qualifications

The post command is qualified by the following exceptions, restrictions, and limitations:

- The post command posts only trunks which belong to the user.
- If the CLLI to be entered is short and a numerical value, enter the CLLI with single quotation marks (’) around it.

- To get the total number of trunks in the wideband (wb) call, you must add the master trunk in the control position to the number of trunk circuits in the post set. Obtain the number of trunk circuits in the post set by looking at the post indicator in the trunk test position (TTP) display.
- The post command works regardless of the trunk state and has no effect on a wb IT Integrated Services Digital Network user part (ISUP) call.

## Example

The following table provides an example of the post command.

**Example of the post command**

| Example | Task, response, and explanation |
|---|---|
| **post wb wbinc 3** ↵<br>*where*<br><br>WBINC 3 is the third circuit on the incoming side of the call of a 6 circuit call | **Task:** Place WBINC 1, which is the master circuit of the incoming side in a wideband (wb) call, in the control position.<br><br>**Response:**<br>`POST 5 DELQ D 4 BUSYQ A 59 DIG`<br>`TTP 14 0 5 0 2 10`<br>`CKT TYPE PM NO. COM LANG STA S R DOT TE R`<br>`2W S7 S7 DTC 0 10 0 WBINC 1 CPB WBOTG 1`<br>`WIDEBAND`<br><br>**Explanation:** POST 5 indicates the remaining 5 circuits are still in the post set. |

## Responses

The following table provides an explanation of the responses to the post command.

**Responses for the post command**

| MAP output | Meaning and action |
|---|---|
| `Circuit not involved in a wideband call.` | **Meaning:** The wb parameter was entered when the provided trunk circuit was not involved in a wb call.<br><br>**Action:** None |

**-continued-**

# post (end)

**Responses for the post command** (continued)

| MAP output | Meaning and action |
|---|---|
| CPTERMERR QUEUE EMPTY<br>NO MORE TRUNKS IN THE POSTED SET | **Meaning:** The command string post cptermerr was entered when there were no trunks to be posted.<br><br>**Action:** None |
| Invalid trunk circuit. | **Meaning:** The wb parameter was entered when the supporting trunk circuit was not a valid trunk.<br><br>**Action:** None |
| OK, CKT POSTED. | **Meaning:** The circuit is posted.<br><br>**Action:** None |
| POSTED CKT IDLED. | **Meaning:** The circuit is posted and idled.<br><br>**Action:** None |
| TEST ACCESS DENIED | **Meaning:** The TTP does not own the CLLI of the entered trunk.<br><br>**Action:** None |

**-end-**

# qrysig

## Function

Use the qrysig command to query the signaling availability and the state of the trunk in the control position.

**qrysig command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **qrysig** | There are no parameters or variables. |

## Qualifications

The qrysig command is especially useful when the trunk is in the locked out (LO) state. Any of the following can cause a trunk to be in the LO state:

- IPML outage
- signaling link/terminal outage (layer/band blockages)
- protocol violation, such as an unacknowledged reset trunk message.

## Examples

Not currently available

## Responses

Not currently available

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

The quit command works regardless of the trunk state and has no effect on a wideband IT ISUP call.

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the C6TTP level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The C6TTP level has changed to the previous menu level. |

# quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the C6TTP level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The C6TTP level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the C6TTP level menu with a menu that is two or more levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the C6TTP level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |

**-end-**

# rls

## Function

Use the rls command to release the connection to the circuit in the control position.

**rls command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **rls** | *ctrl_pos*<br>rls<br>r |

| Parameters and variables | Description |
|---|---|
| *ctrl_pos* | This represents the system default. When only the rls command is entered, the system retains the circuit in the control position in the same state as before the connection. |
| r | This parameter frees the circuit from the control position and deletes it from the trunk test position (TTP) level. |
| rls | This parameter frees the circuit from the control position and deletes it from the trunk test position (TTP) level. |

## Qualifications

The rls command is qualified by the following exceptions, restrictions, and limitations:

- The rls command also idles associated test equipment (for example, the monitor function).
- The rls command does not affect trunks in call processing busy (CPB).

# rls (end)

## Example

The following table provides an example of the rls command.

**Example of the rls command**

| Example | Task, response, and explanation |
|---|---|
| **rls** ↵ | |
| | **Task:** Release the connection to the circuit in the control position. |
| | **Response:**<br>`rls`<br>`OK` |
| | **Explanation:** The connection to the circuit in the control position has been released. |

## Response

The following table provides explanations of the response to the rls command.

**Response for the rls command**

| MAP output | Meaning and action |
|---|---|
| `FAILED, NO CIRCUIT` | |
| | **Meaning:** The command failed because no circuit was posted. |
| | **Action:** None |
| `OK` | |
| | **Meaning:** The connection to the circuit in the control position has been released. |
| | **Action:** None |

# rts

## Function

Use the rts command to return the circuit in the control position to service.

**rts command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **rts** | [ a / rls / r / rts ] [ idl / ini / res ] |
| | c [ cp / m / both ] all |

| Parameters and variables | Description |
|---|---|
| a | This parameter releases all manual busy (ManB) circuits in the posted set. |
| all | This parameter selects the entire trouble buffer to be cleared. |
| both | This parameter selects both the call-processing and maintenance buffer entry to be cleared. |
| c | This parameter clears the trouble buffer entry. |
| cp | This parameter selects the call-processing buffer entry to be cleared. |
| idl | This parameter specifies the idle circuit state. |
| ini | This parameter specifies the initialized circuit state. |
| m | This parameter selects the maintenance buffer entry to be cleared. |
| res | This parameter specifies the restricted idle circuit state. |
| r | This parameter releases the connection and idles the circuit. |
| rls | This parameter releases the connection and idles the circuit. |
| rls | This parameter returns the circuit in the control position to service. |

# rts (continued)

## Qualifications

The rts command is qualified by the following exceptions, restrictions, and limitations:

- Entering the rts command without a parameter returns to service the circuit which is in the control position if the circuit is manual busy (ManB). If the circuit is seized and its pending state is ManB, the pending state is set to the specified state.
- For two-way trunks only, the return state can be specified as idle (IDL) or restricted idle. If no parameters are entered, the default state is IDL.
- Entering the command string rts r without a specified state releases any connection to the circuit, and sets the circuit to either its prior or pending state.
- Entering the command string rts a without a specified state releases the circuit if it is seized, returns the circuit to the posted set, and changes the state of all ManB circuits in the posted set to IDL.
- Entering the command string rts a with a specified state has the same effect as entering rts a without a specified state. It also changes the state of all ManB circuits to the specified state.
- The rts command does not affect trunks in call processing busy (CPB).
- The rts command at the MANUAL, MONITOR, and TTP levels will fail if the command is applied to a B-channel when its associated D-channel or DS-1 link is out of service.

## Examples

The following table provides examples of the rts command.

**Examples of the rts command**

| Example | Task, response, and explanation |
|---|---|
| **rts** ↵ | |
| | **Task:** Release the connection.<br>**Response:** `RTS OK`<br>**Explanation:** The connection has been released. |

**-continued-**

**Examples of the rts command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **rts r ini** | |
| | **Task:** Release the connection and idle the circuit in the initialized circuit state. |
| | **Response:** `RTS OK` |
| | **Explanation:** The connection has been released and the circuit has been idled in the initialized circuit state. |

**-end-**

## Responses

The following table provides an explanation of the response to the rts command.

**Responses for the rts command**

| MAP output | Meaning and action |
|---|---|
| `ALREADY DONE` | |
| | **Meaning:** The circuit is already returned to service and an attempt has been made to return the circuit to service again. |
| | **Action:** None |
| `FAILED: D CHANNEL IS DOWN` | |
| | **Meaning:** The rts command failed after being applied to a B-channel because its associated D-channel or DS-1 link is out of service. The B-channel has been made idle. |
| | **Action:** None |
| `FAILED, NO CIRCUIT` | |
| | **Meaning:** There are no circuits to be returned to service. |
| | **Action:** None |

**-continued-**

# rts (end)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| RTS OK | **Meaning:** The circuit has been returned to service.<br><br>**Action:** None |
| SET IS EMPTY | **Meaning:** There are no circuits to be returned to service.<br><br>**Action:** None |
| *WARNING*<br>TRUNK WAS TAKEN OUT OF SERVICE BY SYSTEM DUE TO EXCESSIVE CALL ERRORS.<br><br>PLEASE CONTACT SUPPORT GROUP PRIOR TO RETURNING TRUNK TO SERVICE.<br><br>DO YOU WANT TO RTS TRUNK?<br><br>PLEASE CONFIRM (“YES” OR “NO”): | **Meaning:** An attempt was made to return to service a trunk that was taken out of service by the system due to excessive call processing errors.<br><br>**Action:** Enter YES if you want to return the specified trunk to service; otherwise, enter NO. Additional maintenance action may be required to clear the fault prior to returning the trunk to service. |

**-end-**

# seize

## Function

Use the seize command to seize a posted trunk for maintenance action.

**seize command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **seize** | *ctrl_pos*<br>[ all ]<br>[ a ] *del_no* |

| Parameters and variables | Description |
|---|---|
| a | This parameter specifies that seizure is automatic as circuits become available. |
| all | This parameter specifies that seizure is automatic as circuits become available. |
| *ctrl_pos* | This default name represents a system default. When you enter only the seize command, only the circuit in the control position is seized. |
| *del_no* | This variable specifies the maximum quantity of circuits to be deloaded at one time. The range is 0-20. |

## Qualifications

The seize command is qualified by the following exceptions, restrictions, and limitations:

- Normally, the maximum number of circuits in the deload queue (DELQ) is 20, but this number can be reduced by entering a value for the variable *del_no*. The maximum quantity is reset by the command seize, or whenever another set of circuits is posted.
- The characters A-SZ on line 9 of the status display indicate an automatic seizure condition. When automatic seizure is in effect, use the next command to select the next circuit from the posted set that can be seized. Those circuits that cannot be seized are bypassed.
- The seize command does not work on call processing busy (CPB) trunks.

# seize (end)

## Example

The following table provides an example of the seize command.

**Example of the seize command**

| Example | Task, response, and explanation |
|---|---|
| **seize** ↵ | |
| | **Task:** Seize the circuit in the control position. |
| | **Response:** `CKT SEIZED` |
| | **Explanation:** The circuit has been seized. |

## Responses

The following table provides explanations of the responses to the seize command.

**Responses for the seize command**

| MAP output | Meaning and action |
|---|---|
| `ALREADY DONE` | |
| | **Meaning:** The circuit has already been seized and you have tried to seize the circuit again. |
| | **Action:** None |
| `CKT SEIZED` | |
| | **Meaning:** The circuit has been seized. |
| | **Action:** None |

**-end-**

# snid

## Function

Use the snid command to query the signaling network identifier (SNID) of the CCIS6 trunk in the control position.

**snid command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **snid** | There are no parameters or variables. |

## Qualifications

The SNID of a circuit consists of its layer number, band number, and circuit number. The information is displayed at the MAP in the form:

Layer: n; Band: n; CKT n, where n is a variable and the range of n is 0-9.

## Examples

Not currently available

## Responses

Not currently available

# trkqry

## Function

Use the trkqry command to query a far-end state of a CCIS6 trunk in the control position.

**trkqry command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **trkqry** | There are no parameters or variables. |

## Qualification

If a reply has not been received within six seconds, a second attempt is made automatically; if both attempts fail, the position is locked out for a maximum of 12 seconds.

## Example

The following table provides an example of the trkqry command.

**Example of the trkqry command**

| Example | Task, response, and explanation | |
|---|---|---|
| **trkqry** | | |
| | **Task:** | Check the far-end state of the selected CCIS6 trunk. |
| | **Response:** | `ACTIVE IDLE` |
| | **Explanation:** | The CCIS6 trunk is in the idle state. |

# trkqry (continued)

## Responses

The following table provides explanations of the responses to the trkqry command.

**Responses for the trkqry command**

| MAP output | Meaning and action |
|---|---|
| ACTIVE ICT_BSY | |
| | **Meaning:** The trunk is in the active ict_bsy state. This CCIS6 state corresponds to the call processing busy (CPB) state for a DMS trunk. |
| | **Action:** None |
| ACTIVE IDLE | |
| | **Meaning:** The trunk is in the active idle state. This CCIS6 state corresponds to the idle (IDL) or installation idle (INI) state for a DMS trunk. |
| | **Action:** None |
| ACTIVE OGT_BSY | |
| | **Meaning:** The trunk is in the active ogt_bsy state. This CCIS6 state corresponds to the CPB state for a DMS trunk. |
| | **Action:** None |
| BLOCKED ICT_BSY | |
| | **Meaning:** The trunk is in the blocked ict_bsy state. This CCIS6 state corresponds to the call processing deload (CPD) state or pending remote make-busy state for a DMS trunk. |
| | **Action:** None |
| BLOCKED IDLE | |
| | **Meaning:** The trunk is in the blocked idle state. This CCIS6 state corresponds to the remote make-busy (RMB) state for a DMS trunk. |
| | **Action:** None |

**-continued-**

# trkqry (continued)

**Responses for the trkqry command** (continued)

| MAP output | Meaning and action |
|---|---|
| BLOCKED OGT_BSY | **Meaning:** The trunk is in the blocked ogt_bsy state. This CCIS6 state corresponds to the call processing deload (CPD) state or pending remote make-busy state for a DMS trunk.<br><br>**Action:** None |
| LOCKED OUT/DISABLED ICT_BSY | **Meaning:** The trunk is in the disabled ict_bsy state. This CCIS6 state corresponds to the CPD and pending manual busy (P_MB) or pending P_PMB or pending system busy (P_SB) for a DMS trunk.<br><br>**Action:** None |
| LOCKED OUT/DISABLED IDLE | **Meaning:** The trunk is in the disabled idle state. This CCIS6 state corresponds to the manual busy (MB), PMB, system busy (SB), CFL, or the locked out (LO) state for a DMS trunk.<br><br>**Action:** None |
| LOCKED OUT/DISABLED OGT_BSY | **Meaning:** The trunk is in the disabled ogt_bsy state. This CCIS6 state corresponds to the CPD and pending manual busy (P_MB) or pending PMB (P_PMB) or pending system busy (P_SB) for a DMS trunk.<br><br>**Action:** None |
| LOCKED OUT OR DISABLED AND BLOCKED ICT_BSY | **Meaning:** The trunk is in the disabled and blocked ict_bsy state. This CCIS6 state corresponds to the CPD and P_RMB and P_MB or P_PMB or P_SB for a DMS trunk.<br><br>**Action:** None |

**-continued-**

# trkqry (end)

**Responses for the trkqry command** (continued)

| MAP output | Meaning and action |
|---|---|
| LOCKED OUT OR DISABLED AND BLOCKED IDLE | |
| | **Meaning:** The trunk is in the disabled and blocked idle state. This CCIS6 state corresponds to the RMB and MB or PMB or SB or CFL for a DMS trunk. |
| | **Action:** None |
| LOCKED OUT OR DISABLED AND BLOCKED OGT_BSY | |
| | **Meaning:** The trunk is in the disabled and blocked ogt_bsy state. This CCIS6 state corresponds to the CPD and P_RMB and P_MB or P_PMB or P_SB for a DMS trunk. |
| | **Action:** None |
| TRANSIENT | |
| | **Meaning:** The trunk is in the transient state. This CCIS6 state corresponds to the either the deload (DEL) or seized (SZD) state for a DMS trunk. |
| | **Action:** None |
| UNEQUIPPED | |
| | **Meaning:** The trunk is in the unequipped state. This CCIS6 state corresponds to the not equipped (NEQ) state for a DMS trunk. |
| | **Action:** None |

**-end-**

## Function

Use the tst command to test the circuit in the control position.

**tst command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **tst** | *autotest*<br>*test_type* [ *extrknm* / *psid* ] |

| Parameters and variables | Description |
|---|---|
| *autotest* | This represents a system default. When you enter only the test command, the system begins the test sequence for the particular product engineering code (PEC) for the circuit in the control position. If the first test is passed, the system begins a signaling test on the circuit. |
| DIAG | This code represents the test line circuit diagnostic test. |
| *extrknm* | This variable specifies a trunk number within a trunk group. This number is required only for the looparound test line (TPLA) and represents the second circuit of the test. The trunk number value is 0-9 999. |
| ICOT | This code represents the test line Integrated Services Digital Network user part (ISUP) continuity test. |
| ISDN | This code represents the DMS-300 Integrated Services Digital Network (ISDN) test call line test. |
| N100 | This code represents the test line quiet [balanced] termination [new] test. |
| *psid* | This variable represents the parameter set identifier (PSID), which is used only with the ISDN option. The PSID corresponds with the test parameters in table ISDNTCP. |
| S100 | This code represents the test line quiet [balanced] termination [old] test. |
| S104 | This code represents the test line transmission loss test. |
| T100 | This code represents the test line quiet termination test. |
| T102 | This code represents the test line milliwatt test. |
| T103 | This code represents the test line supervisory and signaling tests. |

**-continued-**

# tst (continued)

**tst command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| T104 | This code represents the test line transmission noise and loss test. |
| T105 | This code represents the test line loss measurement test. |
| T108 | This code represents the test line echo suppression test. |
| T165 | This code represents the test line loss and noise test. |
| T50L | This code represents the test line loss and return loss test. |
| T56N | This code represents the test line loss, noise, and return loss test. |
| T5AS | This code represents the test line loss, noise, return loss and self-check test. |
| T5AT | This code represents the test line loss, noise, and return loss test. |
| T5BS | This code represents the test line return loss and return loss self-check test. |
| T5LB | This code represents the test line loss and return loss test. |
| T5LH | This code represents the test line return loss low and high test. |
| T5SB | This code represents the test line return loss self-check test. |
| TA01 | This code represents the test line loss measurement test. |
| TA02 | This code represents the test line loss and frequency test. |
| TA03 | This code represents the test line noise (C-msg) test. |
| TA04 | This code represents the test line loss, noise test. |
| TA05 | This code represents the test line loss, frequency-deviation, noise (C-notch) test. |
| TA06 | This code represents the test line supervision test. |
| TA07 | This code represents the test line loss, supervision test. |
| TA08 | This code represents the test line loss, frequency-deviation, supervision test. |
| TA09 | This code represents the test line noise, supervision test. |

**-continued-**

# tst (continued)

**tst command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| TA10 | This code represents the test line loss, noise, supervision test. |
| TA11 | This code represents the test line loss, noise, frequency-deviation, supervision test. |
| TA12 | This code represents the test line supervision test. |
| TA13 | This code represents the test line supervision test. |
| TA14 | This code represents the test line busy flash, loss test. |
| TA15 | This code represents the test line busy flash, loss, frequency-deviation test. |
| TA16 | This code represents the test line busy flash, noise test. |
| TA17 | This code represents the test line busy flash, loss, noise test. |
| TA18 | This code represents the test line busy flash, loss, frequency-deviation, noise test. |
| TA19 | This code represents the test line supervision test. |
| TA20 | This code represents the test line supervision, busy flash, loss test. |
| TA21 | This code represents the test line supervision, busy flash, loss, frequency-deviation test. |
| TA22 | This code represents the test line supervision, busy flash, noise test. |
| TA23 | This code represents the test line supervision, busy flash, loss, noise test. |
| TA24 | This code represents the test line supervision, busy flash, frequency-deviation, noise test. |
| TA25 | This code represents the test line supervision, busy flash test. |
| TART | This code represents the test line loss and noise [Turkey] test. |
| TCLC | This code represents the test line short circuit test. |
| TCON | This code represents the test line CCIS6 continuity test. |
| TCOT | This code represents the test line CCITT6 continuity test. |

**-continued-**

# tst (continued)

**tst command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| TE_M | This code represents the test line E & M lead test. |
| TERL | This code represents the test line echo return loss test. |
| *test_type* | This variable represents a test line test code or the carrier number for the digital module for a circuit in the control position. The range of carrier numbers is T0-T19. |
| TISS | This code represents the test line synchronous test. |
| TL01 | This code represents the test line DMS-300 looparound test. |
| TL65 | This code represents the test line loss measurement test. |
| TL6N | This code represents the test line loss and noise test. |
| TL6S | This code represents the test line loss measurement test. |
| TLO5 | This code represents the test line loss measurement test. |
| TLON | This code represents the test line loss and noise test. |
| TLOS | This code represents the test line loss measurements test. |
| TLPA | This code represents the test line looparound test. |
| TOPC | This code represents the test line open-circuit test. |
| TNSS | This code represents the test line non-synchronous test. |
| TR2L | This code represents the test line repeat 2 (long delay) test. |
| TR2S | This code represents the test line repeat 2 (short delay) test. |
| TS65 | This code represents the test line equipment check test. |
| TS6N | This code represents the test line equipment check test. |
| TSBS | This code represents the test line loss, noise, return loss self-check test. |
| TSBT | This code represents the test line return loss test. |

**-continued-**

**tst command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| TSO5 | This code represents the test line equipment check test. |
| TSYN | This code represents the test line synchronous test. |
| X75E | This code represents the test line external continuity for X75 trunks test. |
| X75I | This code represents the test line internal continuity for X75 trunks test. |

**-end-**

## Qualifications

The tst command is qualified by the following exceptions, restrictions, and limitations:

- When you use the carrier number to replace the *test_type* variable, the system tests all circuits of the specified carrier.
- The signaling test can be enabled or disabled by datafilling table CLLIMTCE.
- The tst command does not affect trunks in CPB.
- The loopback command is required before the X75E test can be performed.
- Before the external continuity test can be performed on an X75 trunk, a far end office must issue the loopback command so that the test information coming from a near end office may be looped back.
- The loopback command is required before the X75I test can be performed.
- The loopback is set on the X25/X75 link interface unit (XLIU) card of an individual trunk.
- Entering a test command without a test code causes a diagnostic to be run on the card. DS1 is the card type for X75 trunks.

# tst (continued)

## Examples

The following table provides examples of the tst command.

**Examples of the tst command**

| Example | Task, response, and explanation |
|---|---|
| **tst** | |
| | **Task:** Perform a test on a circuit which has the short CLLI of CF3P. |
| | **Response:**<br>`TEST OK`<br>`EAST_COAST_4 ***+ TRK107 NOV30 13:44:04 4800 PASS`<br>`CKT CF3P 10` |
| | **Explanation:** The circuit passed the test. |
| **tst X75E** | |
| | **Task:** Perform the external continuity test on a posted X75 trunk. |
| | **Response:**<br>`Tst X75E`<br>`TEST OK`<br>`**** X75100 JAN02 01:44:51 TEST PASSED`<br>`CKT TOROTT 2`<br>`INFO = Test passed` |
| | **Explanation:** The circuit passed the test. |

## Responses

The following table provides explanations of the responses to the tst command.

**Responses for the tst command**

| MAP output | Meaning and action |
|---|---|
| `DS1 diagnostics results` | |
| | **Meaning:** The test command was entered without a test code on an X75 trunk, causing a diagnostic to be run on the card. DS1 is the card type for X75 trunks. |
| | **Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| FAILED, NO CIRCUIT | **Meaning:** The command failed because no circuit was posted.<br><br>**Action:** None |
| FAILED, POSTED CKT IS NOT X75 TRUNK | **Meaning:** The external or internal continuity test was attempted but could not be run because the posted trunk is not an X75 trunk.<br><br>**Action:** Post an X75 trunk and attempt the test again. |
| FAILED TO SEIZE CKT | **Meaning:** The specified test failed to seize a circuit for testing. A TRK263 Log will be printed which contains more information about the reason the test failed.<br><br>**Action:** None |
| NO TID ASSOCIATED WITH TRUNK | **Meaning:** The external or internal continuity test was attempted on an X75 trunk but could not be run because the terminal ID of the trunk could not be found.<br><br>**Action:** Attempt the test again. |
| PM IS NOT IN-SERVICE | **Meaning:** The external or internal continuity test was attempted but could not be run because the peripheral module (PM) is not in service.<br><br>**Action:** Go to the PM MAP level and put the PM in service. Attempt the test again. |
| Test failed, bad frames | **Meaning:** The external or internal continuity test on an X75 trunk ran, but some frames returned to the XLIU were corrupt.<br><br>**Action:** None |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Test failed, frames lost` | **Meaning:** The external or internal continuity test on an X75 trunk ran, but the number of frames received by the XLIU was less than the number of frames sent by the XLIU.<br><br>**Action:** None |
| `Test failed, loopback cannot be set` | **Meaning:** The external or internal continuity test on an X75 trunk was attempted but could not be run because a loopback could not be set in a peripheral module.<br><br>**Action:** Attempt the test again. |
| `Test failed, request rejected` | **Meaning:** The external or internal continuity test on an X75 trunk was attempted but could not be run because of a hardware or software problem.<br><br>**Action:** Make sure the XLIU is in service. If the XLIU is in service, run the test again. |
| `Test passed` | **Meaning:** The external or internal continuity test passed.<br><br>**Action:** None |
| `TST command diag invalid with X75. Use X75I or X75E options.` | **Meaning:** The test command was attempted on an X75 trunk but could not be run because a test code was not entered. Test codes are required for X75 trunks.<br><br>**Action:** Attempt the test again using the X75E or X75I test code. |
| `TST FLD` | **Meaning:** The specified test failed.<br><br>**Action:** None |

**-continued-**

# tst (end)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `TST OK` | **Meaning:** The specified test was successful.<br><br>**Action:** None |
| `WARNING: Int loopback not removed` | **Meaning:** The internal continuity test passed, but the loopback in the peripheral module could not be removed.<br><br>**Action:** Attempt the test again to remove the loopback. |

**-end-**

# tsttrnsl

## Function

Use the tsttrnsl command to test the translation for a posted CCIS6 trunk (in the control position) to verify the existence of a signaling path, in the CCIS6 Signaling Network, between the near- and far-end offices.

**tsttrnsl command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **tsttrnsl** | There are no parameters or variables. |

## Qualifications

The tsttrnsl command is qualified by the following exceptions, restrictions and limitations:

- If the translation is incorrect, no trunk-related messages for the given trunk reach their destination.
- If the test is successful, an identifier signal is received for the trunk for which the translation test was done. The common identifier name (CIN) stored at both offices is compared: if the comparison fails, an appropriate message is displayed at the MAP.
- If the test fails, a Signaling_Problem reply with information about the failure is displayed. For example, the test was aborted, or failed at a switching office or a signal transfer point. In addition, the common language location identifier (CLLI) of the office that generated the Signaling_Problem message, and the reason for the failure, is displayed (if the reason is known).
- If a reply has not been received within seven seconds, a second attempt is made automatically. If both attempts fail, the position is locked out for a maximum of 14 seconds.

## Examples

Not currently available

## Responses

Not currently available

# C7BERT level commands

Use the C7BERT maintenance and administration position (MAP) level to evaluate the performance of a common channel signaling 7 link before putting it into service or during fault isolation activities. A C7 bit error rate test (C7BERT) repeatedly transmits a 2 047-bit pseudorandom pattern and subsequently checks the pattern to verify that no bit errors have occurred.

## Accessing the C7BERT level

To access the C7BERT level, enter the following from the command interpreter (CI) level:

**mapci;mtc;ccs;ccs7;c7lkset;c7bert** ↵

## C7BERT commands

The commands available at the C7BERT MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**C7BERT commands**

| Command | Page |
|---|---|
| lfsloop | C-779 |
| injerr | C-785 |
| pmloop | C-787 |
| query | C-793 |
| quit | C-799 |
| report | C-803 |
| setstop | C-807 |
| start | C-811 |
| stop | C-817 |

## C7BERT menu

The following figure shows the C7BERT menu and status display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


C7BERT     Linkset
 0 Quit       Traf Sync                                        Link
 2          Lk Stat Stat Resource Stat Physical Access   Stat Action
 3
 4 Start_
 5 Stop_
 6 Query_
 7 Report_
 8 SetStop_
 9 InjErr_
10
11 LFSLoop_
12
13 PMLoop_
14
15
16
17
18
```

## C7BERT status codes

The following table describes the status codes for the C7BERT status display.

**Status codes C7BERT menu status display**

| Code | Meaning | Description |
|---|---|---|
| LK | | |
| 0-15 | link number | The number of the link being displayed |
| LinkSet State | | The LinkSet State displays status of the linkset. |
| InSv | In service | There are enough in service (InSv) links to satisfy the number of active links datafilled. The linkset is able to provide satisfactory traffic capability. |
| ISTb | In-service trouble | Some links are InSv, but not enough are InSv to satisfy the number of active links. The linkset is able to provide signaling, but possibly at a degraded service level. |

**-continued-**

**Status codes C7BERT menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| LInh | Local inhibit | This is a transitory state. No links are InSv, in-service trouble (ISTb), or system busy (SysB), but some are LInh. |
| ManB | Manual busy | No links are inhibited, InSv, ISTb, or SysB, but some are manual busy (ManB). The linkset is unable to provide signaling capability. |
| Offl | Offline | All links are offline (offl). |
| RInh | Remote inhibit | This is a transitory state. No links are LInh, ISTb, or SysB, but some are RInh. |
| SysB | System busy | There are no links InSv or ISTb, but some links are SysB. The linkset is unable to provide signaling capability. |
| Uneq | Unequipped | The inkset is not equipped. |
| Traf Stat | | Traf Stat indicates the link traffic state. |
| Idle | Idle | The signaling link is available for signaling, but it is not presently in use and is not connected to a transmission link. |
| InSv | In service | The link is able to carry traffic on the transmission link. It is presently being used to carry signaling traffic. |
| ISTb | In-service trouble | The link is capable of having traffic routed on it, but the service is degraded. There are three types of degradation:<br>▪ Changeback-The link is in transition from the SysB to the InSv state. The link is undergoing the changeback procedure to bring traffic to the link in an orderly fashion from its alternate routes.<br>▪ Changeover-The link is in transition from an InSv state to SysB. The link is going through the changeover to reroute traffic to alternate routes in an orderly fashion.<br>▪ Congestion-The link is congested with traffic and can only carry higher priority traffic. |
| LInh | Local inhibit | The near end of the signaling link has successfully initiated and accomplished link inhibiting. |
| ManB | Manual busy | The link has been manually taken out of service (OOS). The link can now be used for testing and commissioning purposes. |
| Offl | Offline | The link has been removed from software control. The link can be deleted only in this state. |
| RInh | Remote inhibit | The far end of the signaling link has successfully initiated and accomplished link inhibiting. |
| SysB | System busy | The link is unable to carry traffic. The link is not synchronized, or the signaling link test failed. |

**-continued-**

**Status codes C7BERT menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| Sync Stat | | Signaling link synchronization state |
| AInd | Aligned | The signaling link is synchronized with the far end, but the link traffic state is ManB. |
| DAct | Deactivated | The signaling link has been manually deactivated. |
| FtLk | Faulty link | The failure of a signaling link was detected because synchronization was lost or an excessive error rate was detected. |
| Idle | Idle | The signaling link is available for synchronization, but the link is not presently synchronized. The state occurs when the number of links currently active (synchronized) is equal to the number specified in table C7LKSET. |
| Init | Initialized | This is a temporary state of the signaling link after a warm or cold restart of the central control (CC), or after an message switch and buffer 7 (MSB7) return to service (RTS). The signaling link establishes its true sync state by querying the appropriate functions in the CC and in the signaling terminal (ST). The signaling link then moves to the appropriate state. |
| LPO | Local processor outage | A processor outage occurs when signaling messages cannot be transferred to functional levels 3, 4, or both. This may be because of a CC failure, an MSB failure, or both. |
| RPO | Remote processor outage | There are no faults in the nearend office link, but signaling has been halted because of a failure in the farend office. |
| Sync | Synchronized | The signaling link has met the requirements of the appropriate proving period and has achieved synchronization with the distant switching office. |
| SysB | System busy | The signaling link is not synchronized with the distant end because of some fault. |
| BERT | Bit error rate testing | The signaling link is selected for bit error rate testing (BERT) testing to evaluate the performance of the CCS7 signaling link prior to putting it into service and to aid in identifying troubles in the transmission path. |
| Resource | | Resource discrimination number |
| nn | Resource number | This is the number given to the resource signaling terminal (ST7) or CCS7 link interface unit (LIU7) by system tables. |
| Resource Stat | | Resource state |
| CBsy | Central side busy | The signaling terminal controller (STC) is OOS because the MSB to which it is connected is OOS. |
| InSv | In service | The STC is InSv. |
| ISTb | In-service trouble | The STC is still InSv, but PM maintenance has detected one of the following problems:<br>▪ The STC has failed a minor periodic audit test. |

**-continued-**

**Status codes C7BERT menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| | | ▪ The load file is not the same as the one specified in table STINV. |
| ManB | Manual busy | The STC was removed from service manually to allow testing and other manual maintenance action. |
| Offl | Offline | The STC or LIU7 is offl. |
| SysB | System busy | The system detected a failure and removed the STC from service by system maintenance. |
| UnEq | Unequipped | The STC hardware is not provided, or the STC does not exist in the system software. |
| Physical Access | | |
| CLLI | Common language location identifier | This is the transmission link identification for ST7. LIU7s do not require transmission links. |
| DS0A or V.35 | Signaling type of the 9X78 Paddleboard card | This indicates the type of carrier for the LIU7. ST7s use transmission links. |
| ExtrkNM | External trunk number | This is the transmission link number identified in system tables. |
| Stat | | Stat indicates the physical access states. |
| CFl | Carrier fail | The transmission link was removed from service because of some failure in the facility. |
| Idl | Idle | The transmission link is not presently in use and is not connected to an STC. |
| InB | Installation Busy | The transmission link hardware is installed, but the link has not yet been placed InSv. |
| Ini | Initialization | This is an intermediate state to which all circuits are set following a CC restart. |
| MB | Manual busy | The transmission link was removed from service manually. |
| NEq | Not equipped | The transmission link is not provided. |
| PMB | Peripheral Module busy | The transmission link is OOS because the peripheral module (PM) to which it is connected is OOS. |
| SB | System busy | The system detected a failure and removed the transmission link from service. |
| SZD | Seized | The transmission link InSv, is being chosen to carry traffic, or is being chosen for maintenance functions. |
| Link action | | A six-character code describing the current action on the link. |

**-end-**

# lfsloop

## Function

Use the lfsloop command to invoke the latching or nonlatching loopback on the specified network element.

**lfsloop command parameters and variables**

| Command | Parameters and variables | | | | |
|---|---|---|---|---|---|
| **lfsloop** | start | *link_no* | csu<br>ds0dp<br>dsu<br>ocudp<br>spare1<br>spare2<br>spare3<br>spare4<br>NEI | latch<br>nonlatch | *occurrence* |
| | stop | *link_no* | | | |
| | status | *link_no* | | | |

| Parameters and variables | Description |
|---|---|
| csu | This parameter selects a CSU as the element type on which the loopback request will be started . |
| ds0dp | This parameter selects a DS0 Datapath (DS0DP) as the element type on which the loopback request will be started . |
| dsu | This parameter selects a DSU as the element type on which the loopback request will be started . |
| latch | This parameter indicates loopback is to be latching. |
| *link_no* | This variable indicates the link on which to invoke the loopback request. The range of links is 0-15. |
| nonlatch | This parameter indicates loopback is to be nonlatching. |
| *occurrence* | This variable indicates the occurrence of a given Network Element type, where there are more than one in tandem. Its range is 1-16. |
| ocudp | This parameter selects a OCUDP as the element type on which the loopback request will be started on. |

**-continued-**

# lfsloop (continued)

**lfsloop command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| spare1 | This parameter selects spare 1 as the element type on which the loopback request will be started. |
| spare2 | This parameter selects spare 2 as the element type on which the loopback request will be started . |
| spare3 | This parameter selects spare 3 as the element type on which the loopback request will be started . |
| spare4 | This parameter selects spare 4 as the element type on which the loopback request will be started . |
| start | This parameter causes a loopback to be started on the specified link, element type, loopback type, or occurrence. |
| *status* | This parameter indicates if a loopback is currently active for the specified link. |
| *stop* | This parameter stops loopback applied to the specified link. |

**-end-**

## Qualifications

The lfsloop command is qualified by the following exceptions, restrictions, and limitations:

- This command is not provided unless the Link Fault Sectionalization feature is present on the node.
- This command will not proceed if C7BERT is running on the specified link.
- The NONLATCH option is only valid for OCUDP, DSU, and CSU.
- The lfsloop command will not allow the craftsperson to invoke a loopback request on an activated link.

# lfsloop (continued)

## Example

The following table provides an example of the lfsloop command.

**Example of the lfsloop command**

| Example | Task, response, and explanation |
|---|---|
| **lfsloop 0 csu nonlatch 1** ↵<br>*where*<br><br>0 is the number of the link<br>1 is the number of occurrence | **Task:** Invoke nonlatching loopback on line number one of the CSU.<br><br>**Response:** `Link 01: Element 01 has gone into loopback.`<br><br>**Explanation:** A successful loopback has been applied to the specified Network Element. |

## Responses

The following table provides explanations of the responses to the lfsloop command.

**Responses for the lfsloop command**

| MAP output | Meaning and action |
|---|---|
| `Failed - Link state invalid for lfsloop.`<br>`Link must be ManB and DAct.` | **Meaning:** A link fault sectionalization loopback has been attempted on a link which is currently non-ManB and not Deactivated.<br><br>**Action:** ManB and Deactivate the link if the link requires the loopback. |
| `Failed - LIU in wrong state for maintenance.`<br>`Must be in InSv or ISTb.` | **Meaning:** The selected LIU7 is not InSv.<br><br>**Action:** The craftsperson must ensure that the LIU7 is brought back InSv before invoking the loopback. |

**-continued-**

# lfsloop (continued)

**Responses for the lfsloop command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Failed - LIU is in a LIS or FLIS configuration.` | **Meaning:** Link fault sectionalization is not supported for link interface shelf (LIS) or fiberized link interface shelf (FLIS) based LIUs.<br><br>**Action:** None |
| `Failed - No linkset posted` | **Meaning:** C7BERT is not active. No linkset has been posted.<br><br>**Action:** Post the linkset and reinitiate C7BERT. |
| `Failed - PMLOOP (Local\|Remote\|Enable) is active.` | **Meaning:** A loopback has already been applied by the craftsperson from the PM MAP level before attempting a link fault sectionalization (LFS) loopback.<br><br>**Action:** The craftsperson must manually release the loopback on the PM MAP level. If the loopback is a local type, then this can be released using the pmloop off command. |
| `Failed - Software problem - Check for logs.`<br>`Recommend LIU restart.` | **Meaning:** Something internal to the signaling transfer point (STP) software has become corrupted. There are also two scenarios which could cause this.<br><br>1. In deactivating the link prior to attempting LFS or BERT, the command DeAct <linkno> force was not used.<br><br>2. A switch activity (SWACT) one-night process (ONP) was executed in batch change supplement (BCS) 35 (35-35 or 35-36) with BERT or LFS running on the link.<br><br>**Action:** Attempt to recover by busying the LIU, perform a PMRESET, and return the LIU to service. |

**-continued-**

# lfsloop (continued)

**Responses for the lfsloop command** (continued)

**MAP output** **Meaning and action**

```
Link nn: C7BERT Results:
Run time:           33 Sec.
Tx Frames:        1234        Rx Frames:  123
RX Bit Errors:    0232        BER:        1E-5
```

**Meaning:** This is the format of the periodic-repetition C7BERT result, sent to the MAP screen. Some of the existing fields, which are reported when C7BERT is stopped or queried, are not included here. A new measurement is BER, which is the bit error rate of the link. This is the result of specifying the screen option for the report command when C7BERT is started or stopped.

**Action:** Use the periodic screen display to judge the quality of the link without having to perform a query or stop.

```
Link nn: Element mm has gone into loopback.
```

**Meaning:** A successful loopback has been applied to the specified Network Element.

**Action:** If the loopback type was nonlatching, this response is sent out regardless of whether the particular network element actually went into loopback. The craftsperson should now invoke a BERT on the specified link to verify correct loopback action or physically check the hardware light emitting diode (LED). It should be noted that some network elements perform bit shifting on the looped back data. The BERT will fail in this instance.

```
Link nn: Has not gone into loopback.
         Element mm has not responded.
```

**Meaning:** Link fault sectionalization has been attempted on a Network Element that cannot communicate with the CCS7 link that generated the control codes.

**Action:** The craftsperson must invoke external corrective action to determine the cause of the loss of communication. Generally this is the case when the transmission path is completely broken or has a very high error rate. If the next closest Network Element has successfully completed link fault sectionalization, then the location of the problem will have been localized to one segment between two Network Elements.

**-continued-**

# lfsloop (end)

**Responses for the lfsloop command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Link nn: LFS is active`<br>`Element Type: <Type>`<br>`Occurrence: <MM>`<br>`Latch Type: <latch/nonlatch>` | **Meaning:** Indicates the state of an applied loopback in response to the loopback status command.<br><br>**Action:** None |
| `PM not equipped with 9X78DA.` | **Meaning:** Link fault sectionalization, by the way of the lfsloop command, has been attempted on a link that is not equipped with an NT9X78DA. The same reply will also result for the inj_error command.<br><br>**Action:** If you require link fault sectionalization on this link, then an NT9X78DA must be installed on that link. The only other option is to use an external Test Tool to generate the loopback code sequence. |

**-end-**

# injerr (end)

## Function

Use the injerr command to insert a single bit error on the specified link under test.

**injerr command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **injerr** | *link_number* |

| Parameters and variables | Description |
|---|---|
| *link_number* | This variable indicates the link on which to insert the error. Its valid entires are 0-15. |

## Qualifications

The injerr command is qualified by the following exceptions, restrictions, and limitations:

- The link selected must have a BERT session in progress.
- You should note the current number of received bit errors before invoking this command.
- The start command will not allow the craftsperson to start BERT unless the associated link is ManB and Deactivated.

## Examples

Not currently available

## Responses

Not currently available

# pmloop

## Function

Use the pmloop command to add or remove the paddle board loopback on the 9X78 card. This is the same command as available at the PM local loopback level.

**pmloop command parameters and variables**

| Command | Parameters and variables | |
|---|---|---|
| **pmloop** | off<br>on | *link_no* |

| Parameters and variables | Description |
|---|---|
| off | This parameter turns loopback on for the specified link. |
| on | This parameter turns loopback off for the specified link. |
| *link_no* | This variable specifies the link on which loopback action is to take place. Its valid entries are 0-15. |

## Qualifications

The pmloop command is qualified by the following exceptions, restrictions, and limitations:

- This command will be rejected if BERT is running, if any other kind of loopback is active, or if LFS is active.
- The pmloop command will not allow the craftsperson to invoke a loopback request on an active link.

# pmloop (continued)

## Example

The following table provides an example of the pmloop command.

**Example of the pmloop command**

| Example | Task, response, and explanation |
|---|---|
| **pmloop off 2** ↵<br>*where*<br><br>2 is the number of the link | **Task:** Turn loopback off on link number 2<br><br>**Response:** `Not currently available`<br><br>**Explanation:** Loopback on link number 2 is turned off. |

## Responses

The following table provides an explanation of the responses to the pmloop command.

**Responses for the pmloop command**

| MAP output | Meaning and action |
|---|---|
| `Failed - Link state invalid for lfsloop.`<br>`Link must be ManB and DAct.` | **Meaning:** A link fault sectionalization loopback has been attempted on a link which is currently not ManB and Deactivated.<br><br>**Action:** ManB and Deactivate the link, if the link requires the loopback. |
| `Failed - LIU in wrong state for maintenance.`<br>`Must be in InSv or ISTb.` | **Meaning:** The selected LIU7 is not InS.<br><br>**Action:** The craftsperson must ensure that the LIU7 is brought back InSv before invoking the loopback. |

**-continued-**

# pmloop (continued)

**Responses for the pmloop command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Failed - LIU is in a LIS or FLIS configuration.` | **Meaning:** Link fault sectionalization is not supported for LIS or FLIS based LIUs.<br><br>**Action:** None |
| `Failed - PMLOOP (Local\|Remote\|Enable) is active.` | **Meaning:** A loopback has already been applied by the craftsperson from the PM MAP level before attempting an LFS loopback.<br><br>**Action:** The craftsperson must manually release the loopback on the PM MAP level. If the loopback is a local type, then this can be released using the pmloop off command. |
| `Failed - Software problem - Check for logs.`<br>`Recommend LIU restart.` | **Meaning:** Something internal to the STP software has become corrupted. There are also two scenarios which could cause this.<br><br>1. In deactivating the link prior to attempting LFS or BERT, the command DeAct <linkno> force was not used.<br><br>2. A SWACT (ONP) was executed in BCS35 (35-35 or 35-36) with BERT or LFS running on the link.<br><br>**Action:** Attempt to recover by busying the LIU, perform a PMRESET, and return the LIU to service. |
| `Link nn: C7BERT Results:`<br>`Run time: 33 Sec.`<br>`Tx Frames: 1234 Rx Frames: 123`<br>`RX Bit Errors: 0232 BER: 1E-5` | **Meaning:** This is the format of the periodic-repetition C7BERT result, sent to the MAP screen. Some of the existing fields, which are reported when C7BERT is stopped or queried, are not included here. A new measurement is BER, which is the bit error rate of the link. This is the result of specifying the screen option for the report command when C7BERT is started or stopped.<br><br>**Action:** Use the periodic screen display to judge the quality of the link without having to perform a query or stop. |

**-continued-**

# pmloop (continued)

**Responses for the pmloop command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Link nn: Element mm has gone into loopback.` | **Meaning:** A successful loopback has been applied to the specified Network Element.<br><br>**Action:** If the loopback type was nonlatching, this response is sent out regardless of whether the particular network element actually went into loopback. The craftsperson should now invoke a BERT on the specified link to verify correct loopback action or physically check the hardware (LED). It should be noted that some network elements perform bit shifting on the looped back data. The BERT will fail in this instance. |
| `Link nn: Has not gone into loopback.`<br>`Element mm has not responded.` | **Meaning:** Link fault sectionalization has been attempted on a Network Element that cannot communicate with the CCS7 link that generated the control codes.<br><br>**Action:** The craftsperson must invoke external corrective action to determine the cause of the loss of communication. Generally this is the case when the transmission path is completely broken or has a very high error rate. If the next closest Network Element has successfully completed link fault sectionalization, then the location of the problem will have been localized to one segment between two Network Elements. |
| `Link nn: LFS is active`<br>`Element Type: <Type>`<br>`Occurrence: <MM>`<br>`Latch Type: <latch/nonlatch>` | **Meaning:** Indicates the state of an applied loopback, in response to the loopback status command.<br><br>**Action:** None |

**-continued-**

# pmloop (end)

**Responses for the pmloop command** (continued)

| MAP output | Meaning and action |
|---|---|
| `PM not equipped with 9X78DA.` | **Meaning:** Link fault sectionalization, by the way of the lfsloop command, has been attempted on a link that is not equipped with an NT9X78DA. The same reply will also result for the inj_error command.<br><br>**Action:** If you require link fault sectionalization on this link, then an NT9X78DA must be installed on that link. The only other option is to use an external Test Tool to generate the loopback code sequence. |

**-end-**

# query

## Function

Use the query command to check on the progress of a currently running C7BERT.

**query command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **query** | all<br>*link*<br>[ pr ] |

| Parameters and variables | Description |
|---|---|
| all | This parameter specifies that all links in the posted linkset running a C7BERT are to be queried. |
| *link* | This variable specifies the link number to be queried. The range is 0-15. |
| pr | This parameter sends the query results common channel signaling (CCS) 190 log to a printer. The results are also displayed on the MAP screen. |

## Qualifications

The query command is qualified by the following:

- The query command cannot be executed on a C7BERT if an automatic query has already been requested. See the report command in this chapter for more information.
- Before issuing the query command, a test must be active on the specified link or links.

## Examples

The following table provides examples of the query command.

## query (continued)

**Examples of the query command**

| Example | Task, response, and explanation |
|---|---|
| **query 0 pr** ↵<br>*where*<br>0 is the link number to be queried | |
| | **Task:** Query link 0, and send the statistics as CCS190 logs to the printer. |
| | **Response:** The current link statistics from link 0 are displayed. |
| | **Explanation:** The current link statistics from link 0 are displayed, and the results are sent to the log system. |
| **query all** ↵ | |
| | **Task:** Query all links in the posted linkset. |
| | **Response:**<br>`LINK nn : C7BERT Query`<br>`Run Time : 18`<br>`Err Free Secs: 18`<br>`Tx Frames : 27698`<br>`Rx Sync Errs: 0`<br>`Rx Bad Frames: 0`<br>`Rx Frames : 27691`<br>`Rx Bit Errors: 0`<br>`Rx Bits : 4215744` |
| | **Explanation:** All links in the linkset with C7BERT active are displayed. |

## Responses

The following table provides explanations of the responses to the query command.

***Note:*** For all applicable responses, <nn> represents the link number and has a range of 0-15.

## query (continued)

**Responses for the query command**

| MAP output | Meaning and action |
|---|---|
| `LINK nn : C7BERT Query`<br>`Run Time : 18`<br>`Err Free Secs: 18`<br>`Tx Frames : 27698`<br>`Rx Sync Errs: 0`<br>`Rx Bad Frames: 0`<br>`Rx Frames : 27691`<br>`Rx Bit Errors: 0`<br>`Rx Bits : 4215744` | **Meaning:** The C7BERT has been successfully queried on the specified link. A snapshot of the statistics of the test appear on the screen, including the test status and the start and stop times. If parameter pr was specified, a log report of the statistics is printed.<br><br>**Action:** The C7BERT remains active. The test statistics are sent to the log system if parameter pr was specified. |
| `LINK <nn>: FAILED, AUTOMATIC QUERY REPORTING IS ACTIVE` | **Meaning:** Automatic query has already been requested.<br><br>**Action:** Use the report command to cancel the automatic query. |
| `LINK <nn>: FAILED, C7BERT IS NOT ACTIVE ON THIS LINK` | **Meaning:** There is no C7BERT running.<br><br>**Action:** Use the start command to start a C7BERT. |
| `LINK <nn>: FAILED, LINK STATE INVALID FOR THIS REQUEST` | **Meaning:** The link is not in the ManB BERT state.<br><br>**Action:** Access the C7LKSET level to put the link in the ManB state or start a C7BERT. |
| `LINK <nn>: FAILED, LIU IN WRONG STATE FOR MAINTENANCE` | **Meaning:** The LIU is not in the InSv state.<br><br>***Note:*** This response applies only to LIU-based links, that is, STPs.<br><br>**Action:** Return the LIU to service from the PM LIU7 MAP level. |

**-continued-**

# query (continued)

**Responses for the query command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, LIU MAINTENANCE IN PROGRESS | **Meaning:** Another maintenance activity is already in progress.<br>***Note:*** This response applies only to LIU-based links, that is, STPs.<br>**Action:** Reenter the command later. If the problem persists, abort the maintenance and force the LIU into the required state. |
| LINK <nn>: FAILED, NO REPLY FROM LIU MAINTENANCE | **Meaning:** A request to LIU maintenance did not receive a reply because of software problems.<br>**Action:** Ensure that the LIU is InSv. |
| LINK <nn>: FAILED, OTHER C7BERT COMMAND IN PROGRESS | **Meaning:** A C7BERT command is already in progress.<br>**Action:** Reenter the command later. |
| LINK <nn>: FAILED, REQUEST ABORTED BY AUTONOMOUS LIU RESTART | **Meaning:** There has likely been a hardware failure.<br>***Note:*** This response applies only to LIU-based links, that is, STPs.<br>**Action:** Wait until the hardware recovers, or manually try to recover it. |
| LINK <nn>: FAILED, REQUEST ABORTED BY LIU CI | **Meaning:** Another command has been entered from a different MAP terminal.<br>***Note:*** This response applies only to LIU-based links, that is, STPs.<br>**Action:** Reenter the command later. If the problem persists, abort the maintenance and force the LIU into the required state. |

**-continued-**

# query (end)

**Responses for the query command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, REQUEST ABORTED BY LIU OPERATIONAL FAULT | **Meaning:** There has likely been a hardware failure.<br><br>***Note:*** This response applies only to LIU-based links, that is, STPs.<br><br>**Action:** Wait until the hardware recovers, or manually try to recover it. |
| LINK <nn>: FAILED, SOFTWARE PROBLEM - CHECK FOR LOGS | **Meaning:** An unexpected or unknown error occurred.<br><br>**Action:** Contact the next level of support. |
| LINK <nn>: FAILED, UNABLE TO SEND REQUEST TO ST | **Meaning:** There is no communication between the collector card and the message switch buffer (MSB) because of a hardware or software fault.<br><br>**Action:** Verify that the appropriate hardware is InSv. If the hardwareis InSv, it is a software problem. Contact the next level of support. |
| **-end-** | |

# quit

## Function

Use the quit command to exit from the current menu level, and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the C7BERT level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The C7BERT level has changed to the previous menu level. |

**-continued-**

## quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the C7BERT level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the maintenance and administration position command interpreter (MAPCI) menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The C7BERT level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the C7BERT level menu with a menu that is two or more levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |
| The system replaces the display of the C7BERT level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |

**-end-**

# report

## Function

Use the report command to request a periodic automatic query of a C7BERT that is being conducted on a link. The statistics are routed to the log system. The results can be sent to a terminal, or the log system can be requested to send the results to a printer.

**report command parameters and variables**

| Command | Parameters and variables | | |
|---|---|---|---|
| **report** | *link* | off<br>on<br>status | *interval* |

| Parameters and variables | Description |
|---|---|
| *interval* | This variable specifies the number of times each hour that a C7BERT statistics log is generated. The range is 1-12. |
| *link* | This variable specifies the number of the link number to be queried. The range is 0-15. |
| off | This parameter turns the periodic reporting off. |
| on | This parameter turns the periodic reporting on. When the on parameter is specified, the system displays a prompt for a value for the parameter interval. |
| status | This parameter displays the current reporting interval, if there is one. |

## Qualifications

The report command is qualified by the following exceptions, restrictions, and limitations:

- A test must be active on the specified link or links.
- When entering this command with the on parameter, queries continue until either the command is entered again with the off parameter, or the test is stopped.
- If the 1 hour reference interval is not evenly divisible by the specified interval, the resultant interval is rounded to the lowest whole number.
- With the report command active, the query command is not accepted.

# report (continued)

## Examples

The following table provides examples of the report command.

**Examples of the report command**

| Example | Task, response, and explanation |
|---|---|
| **report 0 on 5** ↵<br>*where*<br><br>0 is the link number to be tested<br>5 is the number of times each hour at which test statistics are to be logged | **Task:** Report statistics on link 0 every 12 minutes (or five times each hour).<br><br>**Response:** `None if there are no problems.`<br><br>**Explanation:** A log is produced from link 0 every 12 minutes or five times each hour. |
| **report 2 off** ↵<br>*where*<br><br>2 is the link number to be tested. | **Task:** Stop the log reporting on link 2.<br><br>**Response:** `None if there are no problems.`<br><br>**Explanation:** The log reporting is stopped on link 2. |
| **report 2 status** ↵<br>*where*<br><br>2 is the link number to be tested | **Task:** Display the log reporting interval on link 2 (if an interval has been set).<br><br>**Response:** Not currently available<br><br>**Explanation:** The log reporting interval is set on link 2. |

## Responses

The following table provides explanations of the responses to the report command.

***Note:*** For all of the responses, <nn> represents the link number with a range of 0-15.

**Responses for the report command**

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | FAILED C7BERT IS NOT ACTIVE ON THIS LINK |
| | **Meaning:** There is no C7BERT running.<br>**Action:** Enter the start command to begin a C7BERT. |
| LINK <nn>: | FAILED NO LINKSET POSTED. |
| | **Meaning:** C7BERT cannot be activated prior to posting the linkset.<br>**Action:** Post the linkset and activate C7BERT. |
| LINK <nn>: | FAILED REPORT INTERVAL ALREADY SET |
| | **Meaning:** There is already a report interval set.<br>**Action:** None |
| LINK <nn>: | FAILED UNABLE TO START REPORT INTERVAL TIMER |
| | **Meaning:** There is a software problem with the timer system.<br>**Action:** Reenter the report command. If the problem persists, check the logs and contact the next level of support. |

# setstop

## Function

Use the setstop command to set an automatic stop time for a C7BERT.

**setstop command parameters and variables**

| Command | Parameters and variables | | | | |
|---|---|---|---|---|---|
| **setstop** | *link* | set<br>clear<br>status | *day* | *hour* | *min* |

| Parameters and variables | Description |
|---|---|
| clear | This parameter clears a previous setstop time. |
| *day* | This variable sets the day of the setstop time. The range is mon, tue, wed, thu, fri, sat, sun. |
| *link* | This variable specifies the link number on which a C7BERT stop time is to be set. The range is 0-15. |
| *min* | This variable sets the minute of the setstop time. The range is 0-59. |
| *hour* | This variable sets the hour of the setstop time. The range is 0-23. |
| set | This parameter defines a setstop time. |
| status | This parameter displays the current setstop time, if there is one. |

## Qualifications

The setstop command is qualified by the following exceptions, restriction, and limitations:

- The setstop command can be used to set a setstop time for up to one week from the current time.
- The stop command can override the setstop command by stopping the test immediately.

## setstop (continued)

## Examples

The following table provides examples of the setstop command.

**Examples of the setstop command**

| Example | Task, response, and explanation |
|---|---|
| **setstop 0 set mon 15 35** ↵<br>*where*<br><br>0 is the link number on which the setstop is to be defined<br>15 selects the hour for stop time<br>35 selects the minute for stop time | **Task:** Set up the stop time for the currently running test on link 0 to stop at 15:35.<br><br>**Response:** Not currently available<br><br>**Explanation:** Not currently available |
| **setstop 0 clear** ↵<br>*where*<br><br>0 is the link number on which the setstop is to be defined | **Task:** Clear the preset stop time on link 0.<br><br>**Response:** Not currently available<br><br>**Explanation:** Not currently available |
| **setstop 0** ↵<br>*where*<br><br>0 is the link number on which the setstop is to be defined | **Task:** Display the current stop time setting for link 0.<br><br>**Response:** Not currently available<br><br>**Explanation:** Not currently available |

## Responses

The following table provides explanations of the responses to the setstop command.

***Note:*** For all the responses, <nn> represents the link number. with a range of 0-15.

**Responses for the setstop command**

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | FAILED, C7BERT IS NOT ACTIVE ON THIS LINK |
| | **Meaning:** There is no C7BERT running.<br>**Action:** Enter the start command to begin the C7BERT. |
| LINK <nn>: | FAILED, NO LINKSET POSTED. |
| | **Meaning:** A stop time cannot be set until C7BERT is activated.<br>**Action:** Post the linkset and activate C7BERT. |
| LINK <nn>: | FAILED, OTHER C7BERT COMMAND IN PROGRESS |
| | **Meaning:** A C7BERT command is already in progress.<br>**Action:** Reenter the command later. |
| LINK <nn>: | FAILED, STOP TIME ALREADY SET AT: dd;hh;mm |
| | **Meaning:** A stop time is already set.<br>**Action:** To clear the existing stop time, reenter the command using the clear parameter. |
| LINK <nn>: | FAILED, UNABLE TO SET WAKEUP MESSAGE |
| | **Meaning:** There is a software problem in the wakeup facility.<br>**Action:** Reenter the command. If the problem persists, check the logs and contact the next level of support. |

**-continued-**

# setstop (end)

**Responses for the setstop command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: STOP TIME CLEARED | **Meaning:** The selected stop time has been cleared.<br><br>**Action:** The stop time has been cleared on the specified link. The test will continue undisturbed; it now must be stopped manually using the stop command. |
| LINK <nn>: STOP TIME SET = <dd>:<hh>:<mm> | **Meaning:** The selected stop time has been set, where<br><br><dd> is the day of the week (mon, tue, wed, thu, fri, sat, sun)<br><hh> is the hour of the day (00, 01, 02, ..., 22, 23)<br><mm> is the minute of the day (00, 01, ..., 58, 59)<br><br>**Action:** The selected stop time has been set. The test on the link for which the stop time has been set automatically terminates at the designated time; the test statistics are logged as a CCS190 information log. |

**-end-**

# start

## Function

Use the start command to start a C7BERT on a posted linkset.

**start command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **start** | all<br>*link* |

| Parameters and variables | Description |
|---|---|
| all | This parameter selects all links in the posted linkset. |
| *link* | This variable specifies the link number on which a C7BERT is to be run. The range is 0-15. |

## Qualifications

The start command is qualified by the following:

- Before starting a C7BERT, arrange for the physical connection, post the link, and ensure it is in the following states:
  - link traffic state ManB (maintenance)
  - resource status InSv (in service)
  - synchronization state DAct (deactivated)
- Once a C7BERT is started on a link, the link cannot be brought into service to carry traffic until the test is stopped, either manually or through the setstop command.

## start (continued)

## Examples

The following table provides examples of the start command.

**Examples of the start command**

| Example | Task, response, and explanation |
|---|---|
| **start 0** ↵<br>*where*<br>0 is the link number | |
| | **Task:** Start the C7BERT for link 0.<br>**Response:** Not currently available<br>**Explanation:** Not currently available |
| **start all** ↵ | |
| | **Task:** Start the C7BERT for all links.<br>**Response:** Not currently available<br>**Explanation:** Not currently available |

## Responses

The following table provides explanations of the responses to the start command.

***Note:*** For all the responses, <nn> represents the link number, with a range of 0-15.

**Responses for the start command**

| MAP output | Meaning and action |
|---|---|
| `LINK <nn>: FAILED, C7BERT IS ALREADY ACTIVE ON THIS LINK` | |
| | **Meaning:** A C7BERT is already in progress on this link.<br>**Action:** None |

**-continued-**

## start (continued)

**Responses for the start command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, INVALID MTA | **Meaning:** There is a software problem.<br>**Action:** Contact the next level of support. |
| LINK <nn>: FAILED, LINK STATE IS INVALID FOR C7BERT | **Meaning:** The link is not in the ManB and deactivated (DAct) state.<br>**Action:** Access the C7LKSET level to put the link in the appropriate state. |
| LINK <nn>: FAILED, LIU IN WRONG STATE FOR MAINTENANCE | **Meaning:** The LIU is not in the InSv state.<br>**Action:** Place LIU in the ManB state from the PM LIU7 MAP level. |
| LINK <nn>: FAILED, LIU MAINTENANCE IN PROGRESS | **Meaning:** Another maintenance activity is already in progress.<br>**Action:** Reenter the command later. If the problem persists, abort the maintenance and force the LIU into the required state. |
| LINK <nn>: FAILED, NO COMMUNICATION WITH STDLP | **Meaning:** The processor on the ST card failed.<br>**Action:** Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, call the next level of support. |
| LINK <nn>: FAILED, NO LINKSET POSTED | **Meaning:** A C7BERT has been attempted prior to posting the linkset.<br>**Action:** Post the linkset from the MAP level and reinitiate start. |
| LINK <nn>: FAILED, NO REPLY FROM LIU MAINTENANCE | **Meaning:** There is a software problem.<br>**Action:** Contact the next level of support. |

**-continued-**

# start (continued)

**Responses for the start command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, OTHER C7BERT COMMAND IN PROGRESS | **Meaning:** A C7BERT command is already in progress.<br>**Action:** Reenter the command later. |
| LINK <nn>: FAILED, POOLED RESOURCES CANNOT BE USED | **Meaning:** The C7LINK table has been datafilled incorrectly.<br>**Action:** Datafill the C7LINK for basic link. |
| LINK <nn>: FAILED, REQUEST ABORTED BY AUTONOMOUS LIU RESTART | **Meaning:** There has likely been a hardware failure.<br>**Action:** Wait until the hardware recovers, or manually try to recover it. |
| LINK <nn>: FAILED, REQUEST ABORTED BY LIU CI | **Meaning:** Another command has been entered from a different MAP level.<br>**Action:** Reenter the command later. If the problem persists, abort the maintenance and force the LIU into the required state. |
| LINK <nn>: FAILED, REQUEST ABORTED BY LIU OPERATIONAL FAULT | **Meaning:** There has likely been a hardware failure.<br>**Action:** Wait until the hardware recovers, or manually try to recover it. |
| LINK <nn>: FAILED, SOFTWARE PROBLEM | **Meaning:** There is a software problem.<br>**Action:** Contact the next level of support. |
| LINK <nn>: FAILED, STC INVALID PEC - SLOT NOT EQUIPPED WITH 6X66AC | **Meaning:** A NT6X66AC ST is not equipped in the card slot.<br>**Action:** Check to see if the NT6X66AC version of the ST card is in the slot. If it is, contact the next level of support. |

**-continued-**

## start (continued)

**Responses for the start command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, STDLP FAILED TO RESET | **Meaning:** The processor on the ST card failed.<br>**Action:** Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, call the next level of support. |
| LINK <nn>: FAILED, UNABLE TO ALLOCATE LIU | **Meaning:** The LIU is in the wrong state or is already in use.<br>**Action:** Change the state of the LIU, or reenter the command later. |
| LINK <nn>: FAILED, UNABLE TO COMMUNICATE WITH MSB | **Meaning:** The processor on the MSB card failed.<br>**Action:** Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, contact the next level of support. |
| LINK <nn>: FAILED, UNABLE TO CONNECT ST TO TRANSMISSION LINK | **Meaning:** There is a hardware or software problem.<br>**Action:** Verify that the network is InSv. If it is, there is a software problem. Contact the next level of support. |
| LINK <nn>: FAILED, UNABLE TO SEIZE ST | **Meaning:** The ST is not available for use. The trunk is in the wrong state or is in use by someone else.<br>**Action:** Verify that the trunk is idle and in the right state. |
| LINK <nn>: FAILED, UNABLE TO SEIZE TRUNK | **Meaning:** The transmission link is not available for use. The trunk is in the wrong state or is in use by someone else.<br>**Action:** Verify that the trunk is idle and in the right state. |

**-continued-**

# start (end)

**Responses for the start command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, UNABLE TO SEND REQUEST TO ST | **Meaning:** The processor on the ST card failed.<br>**Action:** Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, call the next level of support. |
| LINK <nn>: FAILED, UPDATE ROUTING FAILED | **Meaning:** There is a software problem.<br>**Action:** Contact the next level of support. |

**-end-**

# stop

## Function

Use the stop command to manually stop a C7BERT running on the link specified from the posted linkset. The summary test statistics are displayed at the MAP screen and sent to the log system.

**stop command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **stop** | all<br>*link* |

| Parameters and variables | Description |
|---|---|
| all | This parameter selects all links running C7BERT in the posted linkset. |
| *link* | This variable specifies the number of the link on which the C7BERT is to be stopped. The range is 0-15. |

## Qualifications

For the stop command to be valid, ensure the link is in the following state:

- link traffic state ManB
- resource status InSv
- synchronization state DAct

## Examples

The following table provides examples of the stop command.

**Examples of the stop command**

| Example | Task, response, and explanation | |
|---|---|---|
| **stop all** ↵ | | |
| | **Task:** | Stop the BERT on all links in the linkset with C7BERT active, and display and log the summary statistics from the test. |
| | **Response:** | Not currently available |
| | **Explanation:** | Not currently available |

**-continued-**

## stop (continued)

**Examples of the stop command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **stop 0** ↵<br>*where*<br><br>0 is the link number on which the C7BERT is to be stopped | **Task:** Stop the test that is active on link 0, and display or log the summary statistics from the test.<br><br>**Response:** Not currently available<br><br>**Explanation:** The C7BERT that was running on link 0 is stopped. The summary statistics have been sent to logs. |

**-end-**

## Responses

The following table provides explanations of the responses to the stop command.

***Note:*** For all of the applicable responses, <nn> represents the link number with a range of 0-15.

**Responses for the stop command**

| MAP output | Meaning and action |
|---|---|
| Link <nn>: C7BERT stopped.<br>Run Time : 18<br>Err Free Secs: 18<br>Tx Frames : 26798<br>Rx Sync Errs: 0<br>Rx Bad Frames: 0<br>Rx Frames : 27691<br>Rx Bit Errors: 0<br>Rx Bits : 4215744 | **Meaning:** The C7BERT has been successfully stopped on the specified link.<br><br>**Action:** The test is terminated, and statistics are displayed and logged. |

**-continued-**

# stop (continued)

**Responses for the stop command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, C7BERT IS NOT ACTIVE ON THIS LINK | **Meaning:** There is no C7BERT running on the selected link.<br>**Action:** Enter the start command to begin a C7BERT. |
| LINK <nn>: FAILED, INVALID MTA | **Meaning:** There is a software problem.<br>**Action:** Contact the next level of support. |
| LINK <nn>: FAILED, LINK STATE INVALID FOR THIS REQUEST | **Meaning:** The link is not in the ManB or DAct state.<br>**Action:** Access the C7LKSET level to put the link in the appropriate state. |
| LINK <nn>: FAILED, LIU IN WRONG STATE FOR MAINTENANCE | **Meaning:** The LIU is not in the InSv state.<br>**Action:** Return the LIU to service at the PM LIU7n MAP level. |
| LINK <nn>: FAILED, LIU MAINTENANCE IN PROGRESS | **Meaning:** Another maintenance activity is already in progress.<br>**Action:** Reenter the command later. If the problem persists, abort the maintenance and force the LIU into the required state. |
| LINK <nn>: FAILED, NO COMMUNICATION WITH STDLP | **Meaning:** The processor on the ST card failed.<br>**Action:** Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, call the next level of support. |
| LINK <nn>: FAILED, NO LINKSET POSTED. | **Meaning:** The stop command is not valid when C7BERT has not been activated.<br>**Action:** Post the linkset and activate C7BERT. |

**-continued-**

# stop (continued)

**Responses for the stop command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, NO REPLY FROM LIU MAINTENANCE | **Meaning:** There is a software problem.<br>**Action:** Contact the next level of support. |
| LINK <nn>: FAILED, REQUEST ABORTED BY AUTONOMOUS LIU RESTART | **Meaning:** There has likely been a hardware failure.<br>**Action:** Wait until the hardware recovers, or manually try to recover it. |
| LINK <nn>: FAILED, REQUEST ABORTED BY LIU CI | **Meaning:** Another command has been entered from a different MAP level.<br>**Action:** Reenter the command later. If the problem persists, abort the maintenance and force the LIU into the required state. |
| LINK <nn>: FAILED, REQUEST ABORTED BY LIU OPERATIONAL FAULT | **Meaning:** There has likely been a hardware failure.<br>**Action:** Wait until the hardware recovers, or manually try to recover it. |
| LINK <nn>: FAILED, SOFTWARE PROBLEM - CHECKING FOR LOGS | **Meaning:** There is a software problem.<br>**Action:** Contact the next level of support. |
| LINK <nn>: FAILED, STDLP FAILED TO RESET | **Meaning:** The processor on the ST card failed.<br>**Action:** Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, call the next level of support. |
| LINK <nn>: FAILED, UNABLE TO ALLOCATE LIU | **Meaning:** The LIU is in the wrong state or is already in use.<br>**Action:** Change the state of the LIU, or reenter the command later. |

**-continued-**

# stop (end)

**Responses for the stop command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, UNABLE TO COMMUNICATE WITH MSB | **Meaning:** The processor on the MSB card failed.<br>**Action:** Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, contact the next level of support. |
| LINK <nn>: FAILED, UNABLE TO SEND REQUEST TO ST | **Meaning:** The processor on the ST card failed.<br>**Action:** Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, call the next level of support. |

**-end-**

# C7LKSET level commands

Use the C7LKSET level of the MAP to query and change the status of the links within a selected linkset.

## Accessing the C7LKSET level

To access the C7LKSET level, enter the following from the CI level:

**mapci;mtc;ccs;ccs7;c7lkset** ↵

## C7LKSET commands

The commands available at the C7LKSET MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**C7LKSET commands**

| Command | Page |
|---|---|
| abtdly | C-829 |
| act | C-831 |
| bsy | C-847 |
| c7bert | C-851 |
| deact | C-853 |
| inh | C-857 |
| next | C-861 |
| nextls | C-863 |
| offl | C-865 |
| post | C-867 |
| qryfepc | C-871 |
| queryflt | C-873 |

-continued-

| **C7LKSET commands** (continued) | |
|---|---|
| **Command** | **Page** |
| querytrf | C-891 |
| queryusr | C-897 |
| quit | C-899 |
| rts | C-903 |
| tst | C-907 |
| uinh | C-915 |
| **-end-** | |

## C7LKSET menu

The following figure shows the C7LKSET menu and status display. The insert with hidden commands is not a visible part of the menu display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


C7LKSet    CCIS6    CCS7   CCITT6
0 Quit     2 LKM      *        *
2 Post_  Link Set               -  state
3           Traf Sync                                      Link
4 Inh_   LK Stat Stat ResourceStat Physical  Access Stat Action
5 UInh
6 Tst_
7 Bsy_
8 Rts_
9 Offl_
10 AbtDly_
11 NextLS
12 Next
13
14 QueryFlt
15 QueryUsr
16 QueryTrf
17 Act_
18 DeAct_
```

**Hidden commands**

C7BERT
Qryfepc

## C7LKSET status codes

The following table describes the status codes for the C7LKSET status display.

**Status codes C7LKSET menu status display**

| Code | Meaning | Description |
|---|---|---|
| LK | | |
| 0-15 | Link number | This number identifies the link the linkset. Only four are displayed at a time. |
| Linkset status | | This indicates the status of the linkset. |
| InSv | In service | There are enough InSv links to satisfy the number of active links datafilled. The linkset is able to provide satisfactory traffic capability. |
| ISTb | In-service trouble | Some links are InSv, but not enough are InSv to satisfy the number of active links. The linkset is able to provide signaling, but at a possibly degraded service level. |
| LInh | Local inhibit | This is a transitory state. No links are InSv, ISTb, or SysB, but some are LInh. |
| ManB | Manual busy | No links are inhibited, InSv, ISTb, or SysB, but some are ManB. The linkset is unable to provide signaling capability. |
| Offl | Offline | The linkset has been removed from service. |
| RInh | Remote inhibit | This is a transitory state. No links are LInh, ISTb, or SysB, but some are RInh. |
| SysB | System busy | There are no links InSv or ISTb, but some links are SysB. The linkset is unable to provide signaling capability. |
| Uneq | Unequipped | The linkset is not equipped. |
| Traf Stat | Traffic state | This indicates the traffic state of the link. |
| Idle | Idle | The signaling link is available for signaling but it is not presently in use and is not connected to a transmission link. |
| InSv | In service | The link is able to carry traffic on the transmission link. It is presently being used to carry signaling traffic. |
| ISTb | In-service trouble | The link is capable of having traffic routed on it, but the service is degraded. There are three types of degradation:<br>▪ Changeback-The link is in transition from the SysB to the InSv state. The link is undergoing the changeback procedure to bring traffic to the link in an orderly fashion from its alternate routes.<br>▪ Changeover-The link is in transition from an in-service state to system busy. The link is going through the changeover provide to reroute traffic to alternate routes in an orderly fashion.<br>▪ Congestion-The link is congested with traffic and can only carry higher priority traffic. |

**-continued-**

**Status codes C7LKSET menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| LInh | Local inhibit | The near end of the signaling link has successfully initiated and accomplished link inhibiting. |
| ManB | Manual busy | The link has been manually taken out-o-service. The link can now be used for testing and commissioning purposes. |
| Offl | Offline | The link has been removed from software control. The link can be deleted only in this state. |
| RInh | Remote inhibit | The far end of the signaling link has successfully initiated and accomplished link inhibiting. |
| SysB | System busy | The link is unable to carry traffic. The link is not synchronized, or the signaling link test failed. |
| Sync Stat | Signaling link synchroniza-tion state | This indicates the synchronization state for the link. |
| Alnd | Aligned | The signaling link is synchronized with the far end, but the link traffic state is ManB. |
| DAct | Deactivated | The signaling link has been manually deactivated. |
| FtLk | Faulty link | The failure of a signaling link was detected because synchronization was lost or an excessive error rate was detected. |
| Idle | Idle | The signaling link is available for synchronization, but the link is not presently synchronized. The state occurs when the number of links currently active (synchronized) is equal to the number specified in Table C7LKSET. |
| Init | Initialized | This is a temporary state of the signaling link after a warm or cold restart of the central control (CC), or after an MSB7 return to service. The signaling link will establish its true sync state by querying the appropriate functions in the CC and in the ST. The signaling link then moves to the appropriate one. |
| LPO | Local processor outage | A processor outage occurs when signaling messages cannot be transferred to functional levels 3, 4, or both. This may be because of a central control (CC) failure, an MSB failure, or both. |
| RPO | Remote processor outage | There are no faults in the near-end office link, but signaling has been halted because of a failure at the far-end office. |
| Sync | Synchronized | The signaling link has met the requirements of the appropriate proving period and has achieved synchronization with the distant switching office. |
| SysB | System busy | The signaling link is not synchronized with the distant end because of some fault. |

**-continued-**

**Status codes C7LKSET menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| Resource (Type) | | |
| ST7 | Signaling Terminal | This is the resource identified in the system tables for switching offices and service switching points (SSP). |
| LIU7 | Link interface unit | This is the resource identified in the system tables for signaling transfer points (STP). |
| Resource | | This identifies the discrimination number of the resource. |
| nn | Resource number | This is the number given to the resource (ST7 or LIU7) by system tables |
| Resource Stat | | |
| CBsy | Central side busy | The STC is out of service because the MSB to which it is connected is out-of-service. (This state does not apply to an LIU7.) |
| InSv | In service | The STC or LIU7 is in service. |
| ISTb | In-service trouble | The STC or LIU7 is still in service, but PM maintenance has detected one of the following problems:<br>▪ A unit failed a minor periodic audit test<br>▪ The load file is not the same as the one specified in table STINV or LIUINV. |
| ManB | Manual busy | The STC or LIU7 was removed from service manually to allow testing and other manual maintenance action. |
| Offl | Offline | The STC or LIU7 is offline. |
| SysB | System busy | The system detected a failure and removed the STC from service by system maintenance. (This state does not apply to an LIU7.) |
| UnEq | Unequipped | The STC hardware is not provided, or the STC does not exist in the system software. (This state does not apply to an LIU7.) |
| Physical Access | | Transmission link CLLI or carrier type |
| CLLI | Common language location identifier | This indicates transmission link identification for ST7. (LIU7s do not require transmission links.) |
| DS0A or V.35 | Signaling type of the 9X78 Paddle board card. | The type of carrier for the LIU7. (ST7s use transmission links.) |
| Stat | | Transmission link state |
| CFl | Carrier fail | The transmission link was removed from service because of some failure in the facility. |

**-continued-**

**Status codes C7LKSET menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| Idl | Idle | The transmission link is not presently in use and is not connected to an STC. |
| InB | Installation busy | The transmission link hardware is installed, but the link has not yet been placed in service. |
| Ini | Initialization | Indicates the intermediate state to which all circuits are set following a CC restart. |
| MB | Man busy | The transmission link was removed from service manually. |
| NEq | Not equipped | The transmission link is not provided. |
| PMB | Peripheral Module busy | The transmission link is out-of-service because the PM to which it is connected in out-of-service. |
| SB | System busy | The system detected a failure and removed the transmission link from service. |
| SZD | Seized | The transmission link is in service, being chosen to carry traffic, or being chosen for maintenance functions. |
| Link action | | Describes a system action in progress for the link. |
| Alnd | aligned | The resource has received the out of alignment status indicator (SIO) (normal alignment status indicator [SIN] or emergency alignment status indicator [SIE]) from the far-end office and is waiting to receive SIN or SIE. |
| AlnNRd | Align not ready | The near end has proved, and the resource is waiting for fill-in signal unit (FISU) messages from the far-end office (indicating that the far-end office has proved). The near-end then has a local processor outage, the resource starts sending status indicator processor outage (SIPO) on the link. When the resource receives FISU, message signal unit (MSU), or SIPO from the far end office, the resource state goes to processor outage. |
| AlnRdy | Aligned ready | The proving is completely successful. The resource is sending FISU messages, and is waiting to receive FISU, MSU, or SIPO messages from the far-end office. |
| InSv | In service | |
| NotAln | Not aligned | This message is the first state of initial alignment. The resource is sending SIO messages and is waiting for an SIO (SIN or SIE) from the far end offices. |
| OOS | Out of service | An error is detected on the link during an alignment procedure. |
| ProOut | Processor outage | There is a local processor outage or a remote processor outage valid on the link. |
| Prvng | Proving | The link is aligned and proving has commenced. The resource is transmitting and receiving SIE or SIN. |
| Test | Testing | The test is undergoing a signaling link test. |
| Size of Posted Set | | This indicates the quantity of links in the posted linkset. |

**-end-**

# abtdly

## Function

Use the abtdly command to cancel the penalty delay for any delayed link in the linkset. The abtdly command allows the link to resynchronize immediately. Any link failing within 5 minutes (probation period) of synchronization is subject to a 60-second delay (penalty period) before it is allowed to resynchronize. This eliminates the possibility of multiple failures and recoveries in the same minute. The penalty period does apply to manually deactivated links.

**abtdly command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **abtdly** | all<br>*link* |

| Parameters and variables | Description |
|---|---|
| all | This parameter returns to service all links in the posted linkset. |
| *link* | This variable specifies the number of the link to be returned to service. The range is 0-15. More than one link can be specified at a time. |

## Qualification

Using the abtdly command may delay critical link recovery for about 60 seconds.

## Example

The following table provides an example of the abtdly command.

**Example of the abtdly command**

| Example | Task, response, and explanation |
|---|---|
| **abtdly 0** ↵<br>*where*<br><br>0 is the link number to be returned to service | **Task:** Return link zero to service without penalty delay.<br><br>**Response:** PASSED<br><br>**Explanation:** The abtdly command was executed on link 0, which was in a delayed state. |

# abtdly (end)

## Responses

The following table provides an explanation of the responses to the abtdly command.

**Responses for the abtdly command**

| MAP output | Meaning and action |
|---|---|
| LINK <nn> IS NOT DELAYED | **Meaning:** The abtdly command was executed on a link or links that are not in a delayed state.<br><br>**Action:** None |
| PASSED | **Meaning:** The abtdly command was executed on a link or links that are in a delayed state.<br><br>**Action:** None |

# act

## Function

Use the act command to synchronize an individual signaling link with the far end. Issuing the act command causes the central control to send a message to the signaling terminal (ST). When the ST receives the message, it attempts to start communication with the far end.

**act command parameters and variables**

| Command | Parameters and variables | |
|---|---|---|
| **act** | all<br>*link* | [ *wait*<br>nowait ] |

| Parameters and variables | Description |
|---|---|
| all | This parameter selects all links in a posted linkset to be activated. |
| *link* | This variable specifies the selected link to be activated. Only one link or all links in a linkset can be selected. The range is 0-15. |
| nowait | This parameter specifies that the user can continue to enter commands at the MAP after the act command has been entered. |
| *wait* | This default parameter, which is never entered, specifies that the user must wait for the act command to be executed before other commands can be entered at the MAP. |

## Qualifications

None

## Example

The following table provides an example of the act command.

## act (continued)

**Example of the act command**

| Example | Task, response, and explanation |
|---|---|

**act 2** ↵
*where*

2 is the link number to be activated

**Task:** Activate link 2.

**Response:**

```
  CCIS6    CCS7    CCITT6
  2 LKM    1 LK       *
Link Set OCALATOALASKA  - ISTb
   Traf Sync  STC   Transmission Link       Action In
LK Stat Stat No Stat CLLI     ExtrkNM  Stat Progress
 0 InSv Sync  2 InSv OCALATOALASKA 100 SZD
 1 ManB Alnd  5 InSv OCALATOALASKA 101 SZD
 2 SysB SysB  0 InSv OCALATOALASKA 102 SZD  Prvng
 3 InSv Sync  1 InSv OCALATOALASKA 103 SZD
Act 2
```

**Explanation:** The sync state of link 2 changes to Sync.

## Responses

The following table provides explanations of the responses to the act command.

***Note:*** For all responses, <nn> represents the link number, with a range of 0-15.

# act (continued)

**Responses for the act command**

| MAP output | Meaning and action |
|---|---|
| IN PROGRESS | |
| | **Meaning:** The selected link or series of links is being synchronized. If the link is in the manual busy state, the connection to the resource is made and a synchronization procedure initiated. Once the synchronization procedure is complete, this message disappears and the display shows that the link or series of links is synchronized. |
| | **Action:** None |
| LINK <nn>: COMMAND ALREADY IN PROGRESS | |
| | **Meaning:** The selected link is already in the process of being activated. |
| | **Action:** Repeat the command later**.** |
| LINK <nn>: FAILED, ABNORMAL BSN RECEIVED | |
| | **Meaning:** Two out of three signaling messages had an invalid backward sequence number (BSN). The routeset manager (RSMan) attempts to resynchronize the link and sets the resource state to system busy. |
| | **Action:** Access PM maintenance to verify the resource (the resource may be faulty). |
| LINK <nn>: FAILED, ABNORMAL FIB RECEIVED | |
| | **Meaning:** Two out of three signaling messages had invalid forward indicator bits (FIB). The system attempts to resynchronize the link and sets the resource state to system busy. |
| | **Action:** Access PM maintenance to verify the resource (the resource may be faulty). |
| LINK <nn>: FAILED, CHANGEOVER ORDER RECEIVED FROM FAR END | |
| | **Meaning:** The far-end office detected signaling message failures and implemented a changeover procedure. RSMan is transferring traffic to another link as part of the changeover procedure. When traffic has been transferred, the system sets the resource synchronization state to system busy. |
| | **Action:** Contact the far-end office to determine the reason for the changeover procedure. |

**-continued-**

## act (continued)

**Responses for the act command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, CONFIGURATION REJECTED BY ST | **Meaning:** The resource does not recognize the configuration data, that is, the signaling terminal (ST) rejects the data.<br><br>**Action:** Reconfigure the link by using the deact command to deactivate the link, then enter the act command again to activate the link. |
| LINK <nn>: FAILED, CORRUPT RECEIVE BUFFER | **Meaning:** The data link processor (DLP) in the resource detects an error in the receive buffer. RSMan transfers signaling to another link, sets the resource to system busy, and generates an RX UDRFLOW or RX OVRFLOW software error report (SWERR).<br><br>**Action:** Access the PM maintenance level to determine the reason for the error. |
| LINK <nn>: FAILED, CORRUPT TRANSMIT BUFFER | **Meaning:** The DLP in the resource has detected an error in its transmit buffer. RSMan transfers signaling to another link, sets the resource to system busy, and generates a COR TX BUF SWERR.<br><br>**Action:** Access the PM maintenance level to determine the reason for the error. |
| LINK <nn>: FAILED, CORRUPT TRANSMIT BUFFER READ POINTER | **Meaning:** Because of resource failures, the RSMan cannot use the link for signaling. RSMan transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR.<br><br>**Action:** Access the PM maintenance level to determine the reason for the error. |
| LINK <nn>: FAILED, CORRUPT RETRANSMIT BUFFER READ POINTER | **Meaning:** Because of a link failure, the system cannot use the link for signaling. RSM transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR.<br><br>**Action:** Access the PM maintenance level to determine the reason for the error. |

**-continued-**

# act (continued)

**Responses for the act command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | FAILED, DLP RECEIVE BUFFER OVERRUN |
| | **Meaning:** The DLP in the resource detects an error in the receive buffer. RSMan transfers signaling to another link, sets the resource to system busy, and generates either an RX OVERRUN or RX READ ER SWERR. |
| | **Action:** Access the PM maintenance level to determine the reason for the error |
| LINK <nn>: | FAILED, DLP OUT OF SERVICE |
| | **Meaning:** The resource has been taken out-of-service because the DLP has detected too many errors in the signaling messages. RSMan has deallocated the resource and started a test. When the resource has been returned to service, link activation is reattempted. |
| | **Action:** To start activation, return the link to service by entering the rts command. |
| LINK <nn>: | FAILED, EXCESSIVE DELAY OF ACKNOWLEDGEMENT |
| | **Meaning:** The far-end office has failed to acknowledge receipt of a message signal unit (MSU) message within a specified time. |
| | **Action:** Contact the far-end office to determine the cause of the fault. |
| LINK <nn>: | FAILED, EXCESSIVE ERROR RATE |
| | **Meaning:** The resource is receiving data with errors, or the far-end office is not activating its end of the link within 90 s of the act command. The system terminates the command. |
| | **Action:** Reenter the command. |
| LINK <nn>: | FAILED, INVALID INTERNAL ST NUMBER |
| | **Meaning:** The address register in the resource is corrupt, and call processing cannot seize the resource. RSMan transfers signaling to another link, sets the resource to system busy, and generates a COR TX BUF SWERR. |
| | **Action:** Determine the resource number, then enter the resource level of PM maintenance to determine the cause of the failure. |

**-continued-**

# act (continued)

**Responses for the act command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, INVALID LINK STATE | **Meaning:** The link is in the wrong traffic state for activation.<br><br>**Action:** Post the linkset and check the state of the link. Rectify any faults and return the link to service. Then, reenter the act command. |
| LINK <nn>: Failed, link is not in MAN BUSY STATE | **Meaning:** The link was not in the manual busy state when the act command was entered.<br><br>**Action:** Enter the bsy command to change the link state to ManB (post the linkset first if necessary). Then, re-enter the act command. |
| LINK <nn>: FAILED, LIU7 DLP FIFO LENGTH ERROR | **Meaning:** The link failed to synchronize because of an interface problem between the signaling terminal and the link general processor (LGP). The system continues the synchronizing procedure to recover the link. If the procedure cannot end successfully, the link is set to the SysB state.<br><br>**Action:** Check log reports for additional information. Check the hardware to ensure correct operation. |
| LINK <nn>: FAILED, LIU7 DLP RECEIVE FIFO FULL | **Meaning:** The link failed to synchronize because of an interface problem between the signaling terminal and the LGP. The system continues the synchronizing procedure to recover the link. If the procedure cannot end successfully, the link is set to the SysB state.<br><br>**Action:** Check log reports for additional information. Check the hardware to ensure it is operating properly. |
| LINK <nn>: FAILED, LIU7 INACCESSIBLE | **Meaning:** During the link synchronization procedure, communications between the computing module (CM) and the LIU7 were interrupted. The system waits for the LIU7 to be reconnected, then initiates a recovery procedure.<br><br>**Action:** Check the log reports for additional information. |

**-continued-**

# act (continued)

**Responses for the act command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, LIU7 IS IN LOOPBK | **Meaning:** The link traffic is not in the InSv state, and the link activation procedure has failed because the system could not allocate an LIU7. This response also appears if the LIU7 is in the loopback mode. The system continually tries to complete the activation procedure.<br><br>**Action:** Ensure that the link is in the InSv state. If the LIU7 is in the loopback mode, access the LIU7 MAP level and remove the LIU7 from the loopback mode. |
| LINK <nn>: FAILED, LIU7/ST RECEIVE ENQUEUED FAILED | **Meaning:** The link failed to synchronize because of an interface problem between the signaling terminal and the LGP. The system continues the synchronizing procedure to recover the link. If the procedure cannot end successfully, the link is set to the SysB state.<br><br>**Action:** Check the log reports for additional information. Ensure the hardware is operating properly. |
| LINK <nn>: FAILED, LIU7/ST RECEIVE PROC UNINITIALIZED | **Meaning:** The link failed to synchronize because the signaling terminal on the LIU7 link resource detected software errors. The system continues the synchronizing procedure to recover the link. If the procedure cannot end successfully, the link is set to the SysB state.<br><br>**Action:** Check the log reports for additional information. Ensure the hardware is operating properly. |
| LINK <nn>: FAILED, LIU7/ST TRANSMIT PROC UNINITIALIZED | **Meaning:** The link failed to synchronize because the signaling terminal on the LIU7 link resource detected software errors. The system continues the synchronizing procedure to recover the link. If the procedure cannot end successfully, the link is set to the SysB state.<br><br>**Action:** Check the log reports for additional information. Ensure the hardware is operating properly. |

**-continued-**

## act (continued)

**Responses for the act command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, LOST FSN | **Meaning:** The RSMan could not identify the forward sequence number (FSN) and rejected the message. RSMan sets the traffic state of the link to system busy, transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR.<br><br>**Action:** Access the PM maintenance level to determine the cause of the resource going system busy. |
| LINK <nn>: FAILED, NO REAL TIME IN LIU7 | **Meaning:** The link fails to synchronize because the application code in the signaling terminal is occupying the computing real time for an unacceptable length of time. The system continues the synchronizing procedure to recover the link. If the procedure cannot end successfully, the link is set to the SysB state.<br><br>**Action:** Check the log reports for additional information. Ensure the hardware is operating properly. |
| LINK <nn>: FAILED, NO RESPONSE FROM MSB7 | **Meaning:** The system is unable to communicate with the MSB7. Since the MSB7 serves all the links in a linkset, there may be a system alarm with this message.<br><br>**Action:** Silence the alarm (if necessary), and access the PM maintenance level to determine the reason for the MSB7 fault. |
| LINK <nn>: FAILED, NO RESPONSE FROM ST | **Meaning:** RSMan is unable to seize the resource since it is in the wrong state.<br><br>**Action:** Access the PM maintenance level to determine why the resource is in the wrong state. |
| LINK <nn>: FAILED, PROVING FAILED | **Meaning:** The link, which has reached the proving phase of an alignment procedure, cannot complete the procedure because of an excessive error rate. RSMan sets the link state to SysB and attempts to resynchronize the link.<br><br>**Action:** None |

**-continued-**

## act (continued)

**Responses for the act command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, REMOTE LEVEL 2 CONGESTION | **Meaning:** The far-end office has stayed congested too long. RSMan sends a message to the far-end office requesting them to restrict messages, then sets the resource state to system busy.<br><br>**Action:** None |
| LIN <nn>: FAILED, RETRIEVAL BUFFER ENQUEUE FAILED | **Meaning:** RSMan cannot use the link for signaling because the resource failed. RSMan transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR.<br><br>**Action:** Access the PM maintenance level to determine the cause of the resource going system busy. |
| LINK <nn>: FAILED, RETRIEVAL TRANSMIT BUFFER PROBLEM | **Meaning:** The DLP in the resource has detected an error in its transmit buffer. RSMan transfers signaling to another link, sets the resource state to system busy, and generates a COR TX BUF SWERR.<br><br>**Action:** Access the PM maintenance level to determine the cause of the resource going system busy. |
| LINK <nn>: FAILED, SEQUENCE NUMBER ERROR | **Meaning:** RSMan cannot use the link for signaling because of resource failures. RSMan transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR.<br><br>**Action:** Access the PM maintenance level to determine the cause of the resource going system busy. |
| LINK <nn>: FAILED, SIE RECEIVED FROM FAR END | **Meaning:** The resource has received an emergency alignment status indicator (SIE) message from the far-end office on a link that is in service. Linkset management sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** None |

**-continued-**

## act (continued)

**Responses for the act command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, SIN RECEIVED FROM FAR END | **Meaning:** The resource has received a normal alignment status indication (SIN) message from the far-end office on a link that is in service. Linkset management sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** None |
| LINK <nn>: FAILED, SIO RECEIVED FROM FAR END | **Meaning:** The resource has received an out-of-alignment status indicator (SIO) message, indicating a failure, from the far-end office. Linkset management sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** None |
| LINK <nn>: FAILED, SIOS RECEIVED FROM FAR END | **Meaning:** The resource has received an out-of-service status indication, indicating a failure, from the far-end office. Linkset management sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** Access the PM maintenance level to determine whether the resource is at fault. |
| LINK <nn>: FAILED, ST AUDIT FAILED IN LIU7 | **Meaning:** Link synchronization failed because of a hardware or software fault. The error was detected during an audit procedure. The system attempts recovery action. Link synchronization continues to initiate until it times out; then, the system sets the link synchronizing state to system busy.<br><br>**Action:** Check the log reports for additional information. Ensure the hardware is operating properly. |

**-continued-**

## act (continued)

**Responses for the act command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | FAILED, ST IS OUT OF SERVICE |
| | **Meaning:** The resource state has changed to system busy because of a command from the MAP or a fault in the resource. RSMan attempts to retrieve signaling messages from the resource and prevents further signaling messages from using the link. |
| | **Action:** Determine the number of the faulty resource, and access the resource status level of PM maintenance to determine the cause of failure. |
| LINK <nn>: | FAILED, STOP RECEIVED BY ST |
| | **Meaning:** RSMan changed the resource state to system busy because of some irregularity. RSMan sets the state of the affected link to system busy. |
| | **Action:** None |
| LINK <nn>: | FAILED, TRANSMISSION LINK OUT OF SERVICE |
| | **Meaning:** The transmission link is in the wrong state for a synchronizing procedure. |
| | **Action:** Access the TRKS MAP level to determine why the transmission link is in the wrong state. |
| LINK <nn>: | FAILED, TRANSMIT/RETRANSMIT BUFFER PROBLEM |
| | **Meaning:** The DLP in the resource detects an error in its transmit buffer. RSMan transfers signaling to another link, sets the resource to system busy, and generates a COR TX BUF SWERR. |
| | **Action:** Access the PM maintenance level to determine the cause of the resource state changing to system busy. |
| LINK <nn>: | FAILED, UNABLE TO ALIGN WITH FAR END |
| | **Meaning:** The link was activated, but RSMan did not receive acknowledgements from the far-end office, or the acknowledgments were incorrect. The procedure is terminated, and the link is set to the no-aligned state. |
| | **Action:** None |

**-continued-**

# act (continued)

**Responses for the act command** (continued)

| MAP output | Meaning and action |
|---|---|
| `LINK <nn>: FAILED, UNABLE TO ALLOCATE AN LIU7` | **Meaning:** The link is in a state other than in-service. The activation procedure has failed because the system could not allocate an LIU7. The system continues to attempt synchronization until it times out.<br><br>**Action:** Return the LIU7 to the in-service state. |
| `LINK <nn>: FAILED, UNABLE TO GET NETWORK CONNECTION` | **Meaning:** The system cannot get a network connection.<br><br>***Note:*** This response is not valid for links using an LIU7 link resource.<br><br>**Action:** Use the queryflt command to determine the reason for the connection failure. |
| `LINK <nn>: FAILED, UNABLE TO SEIZE A TRANSMISSION LINK` | **Meaning:** The system cannot seize a transmission link.<br><br>***Note:*** This response is not valid for links using an LIU7 link resource.<br><br>**Action:** Use the queryflt command to determine the reason for the seize failure. |
| `LINK <nn>: FAILED, UNABLE TO SEIZE AN LIU7` | **Meaning:** The link traffic is not in the in-service state. The activation procedure has failed because an LIU7 resource could not be seized. The system continues to attempt synchronization until it times out.<br><br>**Action:** Return the LIU7 to the in-service state. |
| `LINK <nn>: FAILED, UNABLE TO SEIZE AN ST` | **Meaning:** The system cannot seize a signaling terminal.<br><br>***Note:*** This response is not valid for links using an LIU7 link resource.<br><br>**Action:** Use the queryflt command to determine the reason for the seize failure. |

**-continued-**

# act (continued)

**Responses for the act command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, WAITING FOR FISU/MSU TIMEOUT | **Meaning:** The link, in an aligned ready state of an alignment procedure, is waiting for a fill-in signal unit (FISU) or a message signal unit (MSU). However, a time-out has occurred. RSMan sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** None |
| LINK <nn>: FAILED, WAITING FOR SIN/SIE TIMEOUT | **Meaning:** The link, while undergoing an alignment procedure, has reached an aligned state and is waiting for a normal alignment status indicator (SIN) or an emergency alignment status indicator (SIE). However, a time-out has occurred. RSMan sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** None |
| LINK <nn>: FAILED, WAITING FOR SIO/SIN TIMEOUT | **Meaning:** The link, while undergoing an alignment procedure, has reached the not-aligned state and is waiting for an out-of-alignment status indicator (SIO) or a normal alignment status indicator (SIN). However, a time-out has occurred. RSMan sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** None |
| LINK <nn>: FAR END PROCESSOR OUTAGE | **Meaning:** The far-end office cannot provide call processing on the link. A level 2 function of the far-end office is sending link status signal units which indicate processor outage. On receipt of the processor outage signals, the resource sends fill-in signal units and informs RSMan that the link cannot be used.<br><br>**Action:** Contact the far-end office to establish the cause of the failure. |
| LINK <nn>: LINK SYNCHRONIZATION HAS ALREADY BEEN ACHIEVED | **Meaning:** The link is in the in-service or idle traffic state.<br><br>**Action:** None |

**-continued-**

## act (continued)

**Responses for the act command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: LINK WILL STAY IN ALIGNED STATE DUE TO MAN BUSY CONDITION | **Meaning:** The link is in the manual busy state and the act command was completed successfully. The link stays in this state until it is returned to service.<br><br>**Action:** Enter the rts command to return the link to service. |
| LINK <nn>: LINK DEACTIVATED BY OTHER MAINTENANCE | **Meaning:** The link was deactivated at another MAP.<br><br>**Action:** Determine why the link was deactivated. |
| LINK <nn>: MSB NOT IN SERVICE | **Meaning:** The MSB7 is not in the correct state for the link to be activated.<br><br>**Action:** Access the PM MAP level and determine the state of the MSB7. |
| LINK <nn> nowait: REQUEST SUBMITTED | **Meaning:** The system allows other maintenance actions before the synchronization is completed.<br><br>**Action:** None |
| LINK <nn>: OTHER MAINTENANCE IN PROGRESS | **Meaning:** The system is engaged in another command from the same MAP.<br><br>**Action:** When the current command is finished, reenter the act command. |
| LINK <nn>: PASSED | **Meaning:** The selected link has been activated.<br><br>**Action:** None |
| LINK <nn>: PASSED, ENOUGH LINKS ACTIVE - LINK STAYS IDLE | **Meaning:** The link has passed the proving periods and is synchronized with the far-end office. RSMan places the link in the idle state.<br><br>**Action:** None |

**-continued-**

# act (end)

**Responses for the act command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: PASSED, LINK WILL BE IDLE | **Meaning:** The act command was successfully completed, but RSMan has enough links in service. The system places the link in the synchronized and idle state.<br><br>**Action:** None |
| LINK <nn>: Request submitted. | **Meaning:** The system allows other maintenance actions before the synchronization is completed.<br><br>**Action:** None |
| LINK <nn>: SIGNALING LINK TEST FAILED | **Meaning:** The link has failed a test initiated by the command. RSMan has sent a test message, but it has not received a signaling link test acknowledgment from the far-end office in the correct time period, or the acknowledgment received had an incorrect test pattern. RSMan removes the link from service, initiates a changeover procedure, and changes the link state to system busy.<br><br>**Action:** Access the PM maintenance level and check the MSB7 and resource for faults. |
| LINK <nn>: SOFTWARE PROBLEM - SEE LOGS | **Meaning:** The system has detected a fault that cannot be identified as a hardware problem.<br><br>**Action:** Check the log reports to find the sequence of events that led up to the failure. |
| This link is not equipped. | **Meaning:** An invalid link number has been entered.<br><br>**Action:** Enter the command again, using a valid link number. |

**-end-**

# bsy

## Function

Use the bsy command to transfer a link or links to the manual busy state to do maintenance actions or as a first step to returning a link to service.

***Note:*** Before using the bsy command, use the inh command to divert traffic from the link or links.

**bsy command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **bsy** | *all*<br>*link* |

| Parameters and variables | Description |
|---|---|
| *all* | This default parameter places all links in the posted linkset into the busy state. |
| *link* | This variable specifies the link number. The range is 0-15. |

## Qualifications

The bsy command is qualified by the following exceptions, restrictions, and limitations:

- There is no peer-to-peer protocol to inform the far end that a link has been manually busied, therefore, there will be no state change at the far end link.
- A manually busied link continues to transmit maintenance and testing messages. The far end link will continue to use the link normally, which includes the sending of all message types.

## Example

The following table provides an example of the bsy command.

# bsy (continued)

**Examples of the bsy command**

| Example | Task, response, and explanation |
|---|---|

**bsy 0** ↵
*where*

0 is the link number to be busied

**Task:** Busy link 0.

**Response:**

```
  CCIS6    CCS7    CCITT6
  2 LKM      *        *
Link Set OCALATOALASKA  - ISTb
   Traf Sync  STC   Transmission Link       Action In
LK Stat Stat No Stat CLLI    ExtrkNM   Stat Progress
 0 ManB Alnd  2 InSv OCALATOALASKA 100 SZD
 1 InSv Sync  5 InSv OCALATOALASKA 101 SZD
 2 InSv Sync  0 InSv OCALATOALASKA 102 SZD
 3 InSv Sync  1 InSv OCALATOALASKA 103 SZD
Bsy 0
Link 0: Passed
```

**Explanation:** The traffic state of link 0 changes to ManB.

## Responses

The following table provides explanations of the responses to the bsy command.

**Responses for the bsy command**

| MAP output | Meaning and action |
|---|---|
| COMMAND ALREADY DONE | **Meaning:** The linkset is already in the busy state.<br>**Action:** None |

**-continued-**

# bsy (continued)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| COMMAND FAILED, TIMEOUT EXPIRED - SEE LOGS<br>REFER PROBLEM TO NEXT LEVEL OF SUPPORT | **Meaning:** The linkset has not been set to the busy state, because there is no other way for traffic to be handled.<br><br>**Action:** If absolutely essential, repeat the command using the force parameter. Contact the next level of support. |
| FAILED, COMMAND ALREADY IN PROGRESS | **Meaning:** The system is attempting to busy the linkset from another MAP.<br><br>**Action:** Repeat the command later. |
| FAILED, NO LINKSETS POSTED | **Meaning:** There are no linksets in the posted state on this MAP.<br><br>**Action:** Post the required routeset and repeat the command. |
| LINK DESTINATION IS UNEQUIPPED | **Meaning:** No routeset uses the specified linkset.<br><br>**Action:** Enter the command again, using a valid link number. |
| LINK <nn>: Traffic is running on that link.<br>Please confirm (“Yes”, “Y”, “NO”, or “N”): | **Meaning:** Call in progress may be cancelled if the linkset is in the InSv state.<br><br>**Action:** If Yes or Y is entered, the response is:<br><br>LINK <nn>: PASSED<br><br>If NO or N is entered, there is no response and the command is aborted. |
| PASSED | **Meaning:** The linkset is set to the busy state.<br><br>**Action:** None |

**-continued-**

# bsy (end)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `THIS LINK IS NOT EQUIPPED` | **Meaning:** An invalid link number has been entered.<br><br>**Action:** Enter the command again, using a valid link number. |

**-end-**

# c7bert

## Function

Use the c7bert command to access the C7BERT MAP level to measure the quality of a posted linkset. The C7BERT command is not a command in the C7LKSET directory (hidden command).

**c7bert command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **c7bert** | There are no parameters or variables. |

## Qualifications

The c7bert command is qualified by the following exceptions, restrictions, and limitations:

- Using the c7bert command is a maintenance action, so any link under test will be unavailable to carry traffic for the duration of the test.
- The link must be manually busy to activate the BERT.

## Example

The following table provides an example of the c7bert command.

**Examples of the c7bert command**

| Example | Task, response, and explanation | |
|---|---|---|
| **c7bert** ↵ | | |
| | **Task:** | Run C7BERT on the posted linkset. |
| | **Response:** | (Not currently available) |
| | **Explanation:** | (Not currently available) |

## Responses

Not currently available

# deact

## Function

Use the deact command to deactivate an active link of a posted linkset.

***Note:*** Before deactivating the link or series of links, use the inh command to inhibit the link(s).

**deact command parameters and variables**

| Command | Parameters and variables | |
|---|---|---|
| **deact** | all<br>*link* | [ *noforce*<br>force ] |

| Parameters and variables | Description |
|---|---|
| all | This parameter puts all links in the posted linkset into the deactivated state. |
| force | This parameter forces the link or links into the deactivated state immediately, even if there is the possibility of losing traffic. Therefore, the force parameter should not be used unless provision for this loss of service is made. The only time this parameter should be used is when difficulties are encountered in trying to deactivate a CCS7 link. |
| *noforce* | This default parameter indicates the condition when no parameter is entered. If the force parameter is not entered, the system places the specified link or links into the deactivated state under normal conditions. |
| *link* | This variable specifies the number of the link you want to deactivate. The range is 0-15. |

## Qualification

When using the force parameter with the deact command, the traffic state of the CCS7 link must be in the ManB state.

## Examples

The following table provides examples of the deact command.

# deact (continued)

**Examples of the deact command**

**Example** **Task, response, and explanation**

**deact 1** ↵
*where*

1 is the link number to be deactivated

**Task:** Deactivate link 1.

**Response:**

```
  CCIS6    CCS7    CCITT6
  2 LKM      *        *
Link Set OCALATOALASKA  - ISTb
   Traf Sync  STC    Transmission Link      Action In
LK Stat Stat No Stat CLLI     ExtrkNM  Stat Progress
 0 InSv Sync  2 InSv OCALATOALASKA 100 SZD
 1 ManB DAct  5 InSv OCALATOALASKA 101 IDL
 2 InSv Sync  0 InSv OCALATOALASKA 102 SZD
 3 InSv Sync  1 InSv OCALATOALASKA 103 SZD
DeAct 1: Passed
```

**Explanation:** The sync state of link 1 changes to DAct, indicating that it is deactivated.

**deact 1 force** ↵
*where*

1 is the link number to be deactivated

**Task:** Force the deactivation of link 1.

**Response:**

```
  CCIS6    CCS7    CCITT6
  2 LKM      *        *
Link Set OCALATOALASKA  - ISTb
   Traf Sync  STC       Transmission Link      Action In
LK Stat Stat No Stat    CLLI     ExtrkNM  Stat Progress
 0 InSv Sync  2 InSv OCALATOALASKA 100 SZD
 1 ManB DAct  5 InSv OCALATOALASKA 101 IDL
 2 InSv Sync  0 InSv OCALATOALASKA 102 SZD
 3 InSv Sync  1 InSv OCALATOALASKA 103 SZD
DeAct 1: Passed
```

**Explanation:** The sync state of link 1 changes to DAct indicating that it is deactivated.

## Responses

The following table provides explanations of the responses to the deact command.

***Note:*** For all the responses, <nn> represents the link number, with a range of 0-15.

**Responses for the deact command**

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | COMMAND ALREADY DONE |
| | **Meaning:** The link is already in the deactivated state. |
| | **Action:** None |
| LINK <nn>: | COMMAND ALREADY IN PROGRESS |
| | **Meaning:** RSMan is already deactivating the link. |
| | **Action:** None |
| LINK <nn>: | FAILED, TRAFFIC STATE NOT MANB |
| | **Meaning:** Deactivation has failed. The traffic state of the link being deactivated (using the force parameter) must be ManB. |
| | **Action:** Place the link into the ManB state then enter the command string deact force again. |
| LINK <nn>: | NO RESPONSE TO QUERY OF TRAFFIC STATES |
| | **Meaning:** RSMan is not able to communicate with the far-end office to establish the state on the link. The command is denied. |
| | **Action:** Place the link in the offline state, then reenter the deact command. |
| LINK <nn>: | PASSED |
| | **Meaning:** The link has been deactivated. |
| | **Action:** None |

**-continued-**

# deact (end)

**Responses for the deact command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: TRAFFIC RUNNING ON LINK (SHOULD INHIBIT LINK FIRST) | **Meaning:** The link is in-service and is carrying traffic. The link must be inhibited to allow both offices to transfer traffic to another link.<br><br>**Action:** Use the inh command to inhibit the link, then reenter the deact command. |

**-end-**

# inh

## Function

Use the inh command to divert (inhibit) traffic from a link or all the links of a posted linkset. An inhibited link has all traffic diverted from it to an alternative link.

**inh command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **inh** | all<br>*link* |

| Parameters and variables | Description |
|---|---|
| all | This parameter specifies that all links in the posted linkset be inhibited. |
| *link* | This variable specifies the number of the link to be inhibited. The range is 0-15. |

## Qualifications

The inh command is qualified by the following exceptions, restrictions, and limitations:

- The inh command is not allowed on JPN7 linksets although the command is displayed as a valid command. This command is therefore not applicable for companies in Japan.
- Ensure that the link is on-line before issuing the inh command. Offline links cannot carry traffic and, therefore, cannot be inhibited.
- If there is only one in-service link available for use by a routeset, it cannot be inhibited.
- Inhibiting the last link stops traffic and puts the routeset into the system busy state (SysB).

## Example

The following table provides an example of the inh command.

# inh (continued)

**Example of the inh command**

| Example | Task, response, and explanation |
|---|---|
| **inh 3** ↵<br>*where*<br><br>3 | is the number of the link to be inhibited. |
| | **Task:** Inhibit traffic from link 3. |
| | **Response:** `LINK 03: PASSED` |
| | **Explanation:** The link has been inhibited and the traffic transferred to another link. |

## Responses

The following table provides explanations of the responses to the inh command.

***Note:*** For all of the appropriate responses, <nn> represents the link number with a range of 0-15.

**Responses for the inh command**

| MAP output | Meaning and action |
|---|---|
| `FAILED, LINKS IN THIS NETWORK CANNOT BE INHIBITED` | |
| | **Meaning:** A link from a network that cannot be inhibited was entered. |
| | **Action:** None |
| `FAILED, LINKSET DESTINATION IN OFFLINE OR ManBsy` | |
| | **Meaning:** The destination for the linkset that was entered is offline or manual busy. |
| | **Action:** Enter the command again later, or contact the far-end office to determine the cause of the problem. |
| `LINK <nn>: COMMAND ALREADY DONE` | |
| | **Meaning:** The link is already in the inhibit state. |
| | **Action:** None |

**-continued-**

# inh (continued)

**Responses for the inh command** (continued)

| MAP output | Meaning and action |
|---|---|
| `LINK <nn>: FAILED, COMMAND ALREADY IN PROGRESS` | **Meaning:** The system is completing the inhibit command entered at another MAP.<br><br>**Action:** None |
| `LINK <nn>: FAILED, FAR END OFFICE DENIED REQUEST` | **Meaning:** The far-end office cannot find a link that can be used for the changeover procedure. The far-end office sends a link inhibit denied (LID) message.<br><br>**Action:** Contact the far-end office to determine the reason for the refusal. |
| `LINK <nn>: FAILED, FAR END DID NOT REPLY TO REQUEST` | **Meaning:** The far-end office did not reply to the inhibit message within the prescribed time limits.<br><br>**Action:** Contact the far-end office to determine the cause of the fault. |
| `LINK <nn>: FAILED, LINK IS OFFLINE` | **Meaning:** An offline link is not carrying traffic and therefore cannot be inhibited.<br><br>**Action:** None |
| `LINK <nn>: FAILED, MAINTENANCE COMMAND IN PROGRESS` | **Meaning:** The MAP is already engaged in processing a command. Only one command at a time can be processed at the MAP.<br><br>**Action:** After the current command has finished, reenter the inhibit command. |
| `LINK <nn>: FAILED, THIS IS LAST AVAILABLE LINK IN ROUTESET` | **Meaning:** The system has refused the command because there is only one link in the in-service state, and if this link is inhibited the routeset state changes to system busy.<br><br>**Action:** Synchronize other links, then inhibit the selected link. |

**-continued-**

# inh (end)

**Responses for the inh command** (continued)

| MAP output | Meaning and action |
|---|---|
| `LINK <nn>: FAILED, UNABLE TO COMMUNICATE WITH FAR END OFFICE` | **Meaning:** The system cannot communicate with the far-end office. Either the link is down or the far-end office is down.<br><br>**Action:** Contact the far-end office to determine the cause of the fault. |
| `LINK <nn>: PASSED` | **Meaning:** The link has been inhibited and the traffic transferred to another link.<br><br>**Action:** None |
| `LINK <nn>: SYSTEM PROBLEM - CHECK LOGS` | **Meaning:** The system cannot complete the inhibit command because of a system fault that cannot be traced to hardware.<br><br>**Action:** Check the log reports to find the sequence of events that led up to the failure. |
| `LINK <nn>: WRONG INPUT PARAMETER` | **Meaning:** The parameter entered with the command is greater than 3 or is a character. The parameter entered is different from what is expected.<br><br>**Action:** Verify the entered parameter and reenter the command. |
| `This link is not equipped.` | **Meaning:** An invalid link number has been entered.<br><br>**Action:** Enter the command again, using a valid link number. |
| `Wrong number of parameters` | **Meaning:** The data entered with the command consists of more than one parameter.<br><br>**Action:** Verify the entered parameter, and reenter the command with the correct number of parameters. |

**-end-**

# next

## Function

Use the next command to display the next four links (or those that are remaining if there are less than four) of the posted linkset. The order in which the links are displayed is the same as the order in system tables.

**next command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **next** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the next command.

**Example of the next command**

| Example | Task, response, and explanation |
|---|---|
| **next** ↵ | |
| | **Task:** Display the next four links in the posted linkset. |
| | **Response:** (Not currently available) |
| | **Explanation:** The next four links in the posted linkset appear. |

## Response

The following table provides an explanation of the response to the next command.

**Response for the next command**

| MAP output | Meaning and action |
|---|---|
| `NO MORE LINKS TO BE VIEWED IN THE LINKSET` | |
| | **Meaning:** There are no more links in the posted linkset. |
| | **Action:** None |

# nextls

## Function

Use the nextls command to display the next linkset with the same alarm (or linkset) state as the currently posted linkset, if the currently posted linkset has been posted by alarm (or linkset) state. The nextls command displays the first four links of the linkset, starting at link 0.

**nextls command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **nextls** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the nextls command.

**Examples of the nextls command**

| Example | Task, response, and explanation |
|---|---|
| **nextls** ↵ | |
| | **Task:** Display the next linkset in the posted set. |
| | **Response:** (Not currently available) |
| | **Explanation:** The next linkset in the posted set is displayed. |

## Response

The following table provides an explanation of the response to the nextls command.

**Response for the nextls command**

| MAP output | Meaning and action |
|---|---|
| `END OF POSTED SET` | |
| | **Meaning:** There are no more linksets in the posted set. |
| | **Action:** None |

**-continued-**

# nextls (end)

**Response for the nextls command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Nextls not valid with posting by CLLI.` | **Meaning:** There are no linksets to display in the posted set.<br><br>**Action:** Enter the command again with more than one valid posted linkset. |

**-end-**

# offl

## Function

Use the offl command to transfer a link or links to the offline state. In this state, the links are not available for signaling and do not cause alarms. The link must be in the manual busy state and deactivated prior to entering the offl command. When all links in a linkset are offlined, then the linkset state is Offl.

**offl command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **offl** | all<br>*link* |

| Parameters and variables | Description |
|---|---|
| all | This parameter puts all links in the posted linkset into the deactivated state. |
| *link* | This variable specifies the link number to be made offline. The range is 0-15. |

## Qualifications

None

## Example

The following table provides an example of the offl command.

**Example of the offl command**

| Example | Task, response, and explanation |
|---|---|
| **offl 3** ↵<br>*where* | |
| 3 | is the number of the link to be placed in the offline state. |
| | **Task:** Place link 3 in the offline state. |
| | **Response:** `LINE 03: PASSED` |
| | **Explanation:** Link 3 has been placed in the offline state. |

## Responses

The following table provides explanations of the responses to the offl command.

# offl (end)

***Note:*** For all the responses, <nn> represents the link number, with a range of 0-15.

**Responses for the offl command**

| MAP output | Meaning and action |
|---|---|
| `LINK <nn>: FAILED, LINK IS NOT deactivated` | **Meaning:** The link must be in the deact state to be placed in the offline state.<br>**Action:** Enter the deact command to put the link in the deactivate state, then reenter the offl command. |
| `LINK <nn>: FAILED, LINK IS NOT IN MAN BUSY STATE` | **Meaning:** The link must be in the manual busy state to be placed in the offline state.<br>**Action:** Enter the bsy command to put the link in the manual busy state, then reenter the offl command. |
| `LINK <nn>: PASSED` | **Meaning:** The link has been placed in the offline state.<br>**Action:** None |

# post

## Function

Use the post command to select a linkset for maintenance actions. The act of posting a linkset does not affect the operation of the linkset.

**post command parameters and variables**

| Command | Parameters and variables | | |
|---|---|---|---|
| **post** | a | *alarm* | [ *link* ] |
| | c | *clli* | |
| | s | *state* | |

| Parameters and variables | Description |
|---|---|
| a | This parameter specifies that linksets are posted by alarm state. |
| *alarm* | This variable represents the linkset alarm state. The values for this variable are<br>▪ lkm which is all linksets with major alarms<br>▪ lk which is all linksets with minor alarms |
| c | This parameter specifies that linksets are posted by CLLI. |
| s | This parameter specifies that linksets are posted by linkset state. |
| *clli* | This variable represents the linkset CLLI name. The value for this variable is a unique CLLI across all CCS7 networks. |
| *state* | This variable specifies the linkset state to be posted. The values for this variable are:<br>▪ cong<br>▪ insv<br>▪ istb<br>▪ manb<br>▪ offl<br>▪ sysb |
| *link* | This variable specifies the starting link number in the linkset. Up to four linksets can be specified. The range is 0-15. |

## Qualifications

All links in the linkset are posted, but only the first four links are displayed. Use the next command to display the next four links in the posted linkset. Use the nextls command to display the first four links of the next linkset in the posted set.

# post (continued)

## Example

The following table provides an example of the post command.

**Example of the post command**

| Example | Task, response, and explanation |
|---|---|
| **post c ocalatoalaska** ↵<br>*where*<br><br>ocalatoalaska is the CLLI linkset name to be posted | **Task:** Post the linkset named OCALATOALASKA.<br><br>**Response:**<br><br>CCIS6 CCS7 CCITT6<br>2 LKM * *<br>Link Set OCALATOALASKA - InSv<br>Traf Sync STC Transmission Link Action In<br>LK Stat Stat No Stat CLLI ExtrkNM Stat Progress<br>0 InSv Sync 2 InSv OCALATOALASKA 100 SZD<br>1 ManB Alnd 5 InSv OCALATOALASKA 101 IDL<br>2 InSv Sync 0 InSv OCALATOALASKA 102 SZD<br>3 InSv Sync 1 InSv OCALATOALASKA 103 SZD<br>Post C OCALATOALASKA<br><br>**Explanation:** The linkset is posted. |

## Responses

The following table provides explanations of the responses to the post command.

**Responses for the post command**

| MAP output | Meaning and action |
|---|---|
| End of posted set = <nn> | **Meaning:** The linkset is posted with an invalid alarm state. There is no linkset to display with the command.<br><br>**Action:** Enter the command again with a posted linkset that has a valid alarm state. |

**-continued-**

# post (continued)

**Responses for the post command** (continued)

| MAP output | Meaning and action |
|---|---|
| FAILED, NO LINKSET POSTED | **Meaning:** Parameter a, c, or s or the associated variables are missing or incorrect. No linkset is posted.<br><br>**Action:** Check the command format and reenter the command. |
| INVALID ALARM STATE ENTERED | **Meaning:** There are no linksets with the specified alarm state. No linkset is posted.<br><br>**Action:** None |
| INVALID LINKSET STATE ENTERED | **Meaning:** There are no linksets with the specified linkset state. No linkset is posted.<br><br>**Action:** None |
| INVALID STATE NAME | **Meaning:** An invalid linkset state was entered. No linkset is posted.<br><br>**Action:** Reenter the command. |
| NOT A VALID CLLI | **Meaning:** The CLLI linkset name does not exist in the linkset tables or it was entered in an invalid format. No linkset is posted.<br><br>**Action:** None |
| THIS CLLI IS NOT DATAFILLED | **Meaning:** The CLLI entered is of the correct format, but RSMan cannot find it in the system tables. No linkset is posted.<br><br>**Action:** Reenter the command with a valid CLLI. |

**-continued-**

# post (end)

**Responses for the post command** (continued)

| MAP output | Meaning and action |
|---|---|
| THIS IS NOT A LINKSET | **Meaning:** The data entered is not recognized as a linkset CLLI. No linkset is posted.<br><br>**Action:** None |
| WRONG INPUT PARAMETER | **Meaning:** The wrong combination of parameters or variables was entered. The parameter a, c, or s must be entered along with the corresponding value.<br><br>**Action:** Re-enter the command with the correct combination of parameters. |
| WRONG NUMBER OF PARAMETERS | **Meaning:** An incorrect number of parameters was entered. The system may display the post command format.<br><br>**Action:** Reenter the command using the correct format. |

**-end-**

# qryfepc

## Function

Use the qryfepc command to display the point code along with the network type and the CCITT7 format, if required.

**qryfepc command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **qryfepc** | [ *all* / *link* ] |

| Parameters and variables | Description |
|---|---|
| *all* | This default parameter selects all links in a posted linkset. |
| *link* | This variable selects the number of the link to be queried. The range is 0-15. Entering this variable is optional. |

## Qualifications

None

## Example

The following table provides an example of the qryfepc command.

**Example of the qryfepc command**

| Example | Task, response, and explanation |
|---|---|
| **qryfepc 0** ↵<br>*where*<br>0 is the number of the link to be queried | **Task:** Determine the network and front end point code (FEPC) of a linkset.<br>**Response:**<br>`Linkset NAME  Network Name  FEPC`<br>`LINKSET_1  NETWORK_1  CCITT7 INTL 3 103 5`<br>**Explanation:** The system responds by providing the network and FEPC of the linkset. |

## Response

The following table provides an explanation of the response to the qryfepc command.

# qryfepc (end)

**Response for the qryfepc command**

| MAP output | Meaning and action |
|---|---|
| `Linkset NAME  Network Name   FEPC`<br>`<ls_name>     <net_clli>     <pt_code>` | **Meaning:** The system displays the network and FEPC of a linkset, where<br><br><ls_name> is the name of the linkset<br><net_clli> is the CLLI of the network<br><pt_code> is the point code of the linkset<br><br>**Action:** None |

# queryflt

## Function

Use the queryflt command to list the reasons why the link of a posted linkset is faulty. The display shows states other than those listed by the post command. This command provides insight as to why a link or linkset is system busy, without referring to the logs. The link must be in the system busy or in-service trouble state before using the queryflt command.

**queryflt command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **queryflt** | all<br>*link* |

| Parameters and variables | Description |
|---|---|
| all | This parameter selects all links in a posted linkset. |
| *link* | This variable selects the number of the link to be queried. The range is 0-15. |

## Qualifications

None

## queryflt (continued)

## Example

The following table provides an example of the queryflt command.

**Example of the queryflt command**

| Example | Task, response, and explanation |
|---|---|
| **queryflt 0** ↵<br>*where*<br><br>0 is the number of the link to be queried to determine faults | **Task:** Query link 0.<br><br>**Response:**<br><br>CCIS6 CCS7 CCITT6<br>2 LKM * *<br>Link Set OCALATOALASKA - ISTb<br>Traf Sync STC Transmission Link Action In<br>LK Stat Stat No Stat CLLI ExtrkNM Stat Progress<br>0 InSv Sync 2 InSv OCALATOALASKA 100 SZD<br>1 InSv Sync 5 InSv OCALATOALASKA 101 SZD<br>2 InSv Sync 0 InSv OCALATOALASKA 102 SZD<br>3 InSv Sync 1 InSv OCALATOALASKA 103 SZD<br>Queryflt 0<br>Link 0: No Fault detected at present<br><br>**Explanation:** Link 0 does not have any faults. |

## queryflt (continued)

## Responses

The following table provides explanations of the responses to the queryflt command.

***Note:*** For all the responses, <nn> represents the link number with a range of 0-15.

**Responses for the queryflt command**

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | ABNORMAL BSN RECEIVED |
| | **Meaning:** Two out of three consecutive backward sequence number (BSN) messages. The system changes the link synchronizing state to system busy and requests a changeover procedure. |
| | **Action:** If the condition persists, access the PM level to check the resource, that is, the STC, to see if it is faulty. |
| LINK <nn>: | ABNORMAL FIB RECEIVED |
| | **Meaning:** Two out of three consecutive signaling messages had invalid forward indicator bits (FIB). The system changes the link synchronizing state to system busy and requests a changeover procedure. |
| | **Action:** If the condition persists, access the PM level to check the resource. |
| LINK <nn>: | CHANGEOVER ORDER RECEIVED FROM FAR END |
| | **Meaning:** The far-end office has detected signaling message failures and has implemented a changeover procedure. When the system transfers traffic to another link (as part of the changeover procedure), the resource synchronization state is set to system busy. |
| | **Action:** None |

**-continued-**

# queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| `LINK <nn>: CONFIG REPLY CFA TIMEOUT` | **Meaning:** The resource is seized, but when the system attempts to configure it, there is no reply (configuration acknowledge [CFA]) from the resource. RSMan changes the resource state to system busy and runs tests. When the resource is returned to service, RSMan attempts to activate the link again.<br><br>***Note:*** This response is not valid for links using the LIU7 link resource.<br><br>**Action:** Enter the rts command (post the linkset if necessary) to get RSMan to activate the link. |
| `LINK <nn>: CONFIG REPLY CPA TIMEOUT` | **Meaning:** The resource is seized, but when RSMan attempts to send it congestion parameters, there is no acknowledgement (configuration parameter acknowledge [CPA]) from the resource. The system changes the resource state to system busy and runs tests. When the resource is returned to service, RSMan attempts to activate the link again.<br><br>***Note:*** This response is not valid for links using the LIU7 link resource.<br><br>**Action:** Enter the rts command (post the linkset if necessary) to get RSMan to activate the link. |
| `LINK <nn>: CONFIG REPLY LNA TIMEOUT` | **Meaning:** The resource is seized, but it does not reply when the RSMan attempts to address it, that is, it receives no link number acknowledgement (LNA). The system changes the resource state to system busy and runs diagnostics. When the resource is returned to service, RSMan attempts to activate the link again.<br><br>***Note:*** This response is not valid for links using the LIU7 link resource.<br><br>**Action:** Enter the rts command (post the linkset if necessary) to get RSMan to activate the link. |

**-continued-**

# queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | CONFIG REPLY LSM PARM TIMEOUT |
| | **Meaning:** RSMan did not send the complete set of messages, configuration, and congestion parameters (linkset management [LSM]), which are to be relayed to the resource, to the MSB7. The system changes the resource state to system busy and runs tests. When the resource is returned to service, RSMan attempts to activate the link again. |
| | **Action:** Enter the rts command (post the linkset if necessary) to get RSMan to activate the link. |
| LINK <nn>: | CORRUPT RECEIVE BUFFER |
| | **Meaning:** The data link processor (DLP) in the resource detects an error in the receive buffer. The system transfers signaling to another link, sets the resource to system busy, and generates either an RX UDRFLOW or RX OVRFLW SWERR. |
| | **Action:** Access the PM maintenance level to determine the cause of the resource changing to the system busy state. |
| LINK <nn>: | CORRUPT RETRANSMIT BUFFER READ POINTER |
| | **Meaning:** The system cannot use the link for signaling because of a resource failure. The system transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR. |
| | **Action:** Access the PM maintenance level to determine the cause of the resource changing to the system busy state. |
| LINK <nn>: | CORRUPT TRANSMIT BUFFER |
| | **Meaning:** The DLP in the resource has detected an error in its transmit buffer. The system transfers signaling to another link, sets the resource to system busy, and generates a COR TX BUF SWERR. |
| | **Action:** Access the PM maintenance level to determine the cause of the resource changing to the system busy state. |

**-continued-**

## queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | CORRUPT TRANSMIT BUFFER READ POINTER |
| | **Meaning:** The system cannot use the link for signaling because of resource failures. The system transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR. |
| | **Action:** Access the PM maintenance level to determine the cause of the resource changing to the system busy state. |
| LINK <nn>: | DLP OUT OF SERVICE |
| | **Meaning:** The resource has been taken out-of-service because the DLP has detected too many errors in the signalling messages. RSMan deallocates the resource and starts a test. When the resource is returned to service, link activation is attempted again. |
| | **Action:** Enter the rts command (post the linkset if necessary) to get RSMan to activate the link. |
| LINK <nn>: | DLP RECEIVE BUFFER OVERRUN |
| | **Meaning:** The DLP in the resource detects an error in the receive buffer. The system transfers signaling to another link, sets the resource to system busy, and generates either a RX OVERRUN or RX READ ER SWERR. |
| | **Action:** Access the PM maintenance level to determine the cause of the resource changing to the system busy state. |
| LINK <nn>: | EXCESSIVE DELAY OF ACKNOWLEDGEMENT |
| | **Meaning:** The far-end office has failed to acknowledge a message signaling unit (MSU) in a specified time. The command was terminated. |
| | **Action:** Contact the far-end office to determine the cause of the fault. |
| LINK <nn>: | EXCESSIVE SU ERROR ON LINK |
| | **Meaning:** The resource found too many transmission errors in the signaling unit. RSMan is trying to reactivate the link. |
| | **Action:** None |

**-continued-**

# queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED TO NAIL UP LINK | **Meaning:** The link is not nailed up (there is no permanent software connection between the signaling terminal and the transmission facility) because of network module problems.<br><br>***Note:*** This response is not valid for links using the LIU7 link resource.<br><br>**Action:** Access the NET maintenance level and investigate the network module problems. |
| LINK <nn>: FAILED TO NAIL UP ST | **Meaning:** The link cannot be nailed up because the resource is either system busy, manual busy, or offline.<br><br>***Note:*** This response is not valid for links using the LIU7 link resource.<br><br>**Action:** Access the PM maintenance level to investigate the signaling terminal problems. |
| LINK <nn>: FAILED, UNABLE TO COMMUNICATE WITH FAR END | **Meaning:** The link was activated, but it never received an out-of-service status indication (SIO) message from the far-end office in the correct time period. The system terminates the synchronization procedure and sets the link to the not-aligned state.<br><br>**Action:** Contact the far-end office to determine the state of the link. |
| LINK <nn>: FAILED, UNABLE TO GET NETWORK CONNECTION | **Meaning:** The network module is either in the system busy, or manual busy state. The system cannot seize a network connection at the start of an activation procedure.<br><br>***Note:*** This response is not valid for links using the LIU7 link resource.<br><br>**Action:** Access the NET maintenance level to determine the cause of the fault. |

**-continued-**

## queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | FAILED, UNABLE TO SEIZE A TRANSMISSION LINK |
| | **Meaning:** The transmission link is in the wrong state for the act command. The RSMan cannot seize a transmission link at the start of an activation procedure.<br>***Note:*** This response is not valid for links using the LIU7 link resource.<br>**Action:** Access the TRKS maintenance level to determine the cause of the problem. |
| LINK <nn>: | FAILED, UNABLE TO SEIZE AN ST |
| | **Meaning:** The resource is in the wrong state for the act command. The RSMan cannot seize a resource at the start of an activation procedure.<br>***Note:*** This response is not valid for links using the LIU7 link resource.<br>**Action:** Access the PM maintenance level to determine the cause of the failure. |
| LINK <nn>: | IN PROCESS OF ALIGNING LINK |
| | **Meaning:** The link is being activated.<br>**Action:** None |
| LINK <nn>: | INVALID STATE FOR FAULT QUERY, MUST BE SYSB OR ISTB |
| | **Meaning:** The link must be in the system busy or in-service trouble state before issuing the queryflt command.<br>**Action:** Take one of the following actions fas indicated by the situation:<br>▪ If the link is offline, enter the post command and then return the link to service using the rts command.<br>▪ If the link is faulty, repeat the queryflt command (the system sets the state to system busy).<br>▪ If the link is in the in-service state, there is no fault to query. |
| LINK <nn>: | Invalid sync state for faulty query, MUST NOT BE DACT OR IDLE |
| | **Meaning:** The queryflt command has been entered in an invalid sync state.<br>**Action:** Activate the link in a valid sync state to query the fault. |

**-continued-**

# queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | LINK IS INITIALIZING |
| | **Meaning:** The link is in the process of being initialized.<br><br>**Action:** None |
| LINK <nn>: | LINK IS MAN BUSY |
| | **Meaning:** The link is not in service and synchronized, because the traffic state is manual busy.<br><br>**Action:** Return the link to service using the rts command. |
| LINK <nn>: | LINK IS MAN BUSY, COULD NOT NAIL UP LINK |
| | **Meaning:** The link is synchronized but cannot go to the synchronized state because the traffic state is manual busy. Also, the link is not nailed up.<br><br>***Note:*** This response is not valid for links using the LIU7 link resource.<br><br>**Action:** Enter the rts command to return the link to service, and investigate the network module problem. |
| LINK <nn>: | LINK TEST FAILED |
| | **Meaning:** The link has failed a test that was initiated by the test or act command. The link has not sent a signaling link test acknowledgment to the far-end office in the correct time period, or the acknowledgment was received at the far-end office with an incorrect test pattern. The system removes the link from service, initiates a changeover procedure, and changes the link traffic state to system busy.<br><br>**Action:** Access the PM maintenance level and check the resource for faults. |
| LINK <nn>: | LINK TEST TIMEOUT |
| | **Meaning:** There was no reply to a request for a test from the MSB7. The MSB7 has sent a request for a test of the link to RSMan. RSMan did not acknowledge the request and a time-out occurred.<br><br>**Action:** None |

**-continued-**

# queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | LINK TOO LONG INITIALIZING |
| | **Meaning:** The link has failed to synchronize. RSMan has repeated one of the activate procedures too often and a timeout has occurred. RSMan deactivates the link and sets the link traffic state to system busy.<br><br>**Action:** None |
| LINK <nn>: | LINK UNDERGOING CHANGEBACK |
| | **Meaning:** A link has been returned to service and the traffic that had been routed to an alternate route is being routed back to the newly available link.<br><br>**Action:** None |
| LINK <nn>: | LINK UNDERGOING CHANGEOVER |
| | **Meaning:** Because a link has failed, the RSMan has initiated a changeover procedure to transfer the traffic to other links.<br><br>**Action:** None |
| LINK <nn>: | LOCAL PROCESSOR OUTAGE |
| | **Meaning:** Signaling is not possible on the link, because of a failure or because the link has been inhibited. The resource transmits link status signal units indicating a processor outage and discards the signaling messages that it receives. The level 2 function at the far-end office informs its own RSMan of the problem, and starts to transmit fill-in signal units. When the local processor outage condition ceases, normal transmission is resumed.<br><br>**Action:** Check maintenance MAP levels for alarm states and rectify. |
| LINK <nn>: | LIU7 DLP FIFO LENGTH ERROR |
| | **Meaning:** The link failed to synchronize as a result of an interface problem between the signaling terminal and the link general processor (LGP). The system attempts to recover the link by continuing the synchronizing procedure. If the procedure cannot end successfully, the link is set to the system busy state.<br><br>**Action:** Check the log reports for additional information. Check to ensure that the hardware is operating properly. |

**-continued-**

# queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: LIU7 DLP RECEIVE FIFO FULL | **Meaning:** The link failed to synchronize as a result of an interface problem between the signaling terminal and the LGP. The system attempts to recover the link by continuing the synchronizing procedure. If the procedure cannot end successfully, the link is set to the system busy state.<br><br>**Action:** Check the log reports for additional information. Check to ensure that the hardware is operating properly. |
| LINK <nn>: LIU7 FAILED | **Meaning:** A failure has been detected in the signaling terminal processor or LGP processor, or there has been a loss of integrity in the LIU7. The system attempts to recover from the error by starting the synchronization procedure.<br><br>**Action:** If the system is unable to recover, check the hardware. Also check the log reports for additional information. |
| LINK <nn>: LIU7 IS IN LOOPBK | **Meaning:** The link resource is in a loopback (loopbk) mode. This response also appears if the system could not allocate an LIU7 for the link. The system attempts to recover the link.<br><br>**Action:** If the resource is in the InSv or ISTb state and in loopback mode, remove the LIU7 from the loopback state manually. |
| LINK <nn>: LIU7 NOT ACCESSIBLE | **Meaning:** Communications between the computing module (CM) and the LIU7 have stopped. If the link was synchronized when the LIU7 became inaccessible, then the link synchronizing state is displayed as LPO (local processing outage), and the system waits for the LIU7 to recover. When communications are resumed, the system enters the recovery process without operator intervention. If the LIU7 became inaccessible during the link synchronizing process, the system continually attempts to complete the process. When communications are resumed, the link synchronizing continues to completion.<br><br>**Action:** Manual action may be required to restore communications between the LIU7 and the CM. |

**-continued-**

## queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: LIU7/ST RECEIVE ENQUEUE FAILED | **Meaning:** The link failed to synchronize because of an interface problem between the signaling terminal and the LGP. The system attempts to recover the link by continuing the synchronization. If the procedure cannot end successfully, the link is set to the system busy state.<br><br>**Action:** Check log reports for additional information. Check hardware for correct operation. |
| LINK <nn>: LIU7/ST RECEIVE PROC UNINITIALIZED | **Meaning:** The link failed to synchronize because the signaling terminal on the LIU7 link resource detected software errors. The system attempts to recover the link by continuing the synchronizing procedure. If the procedure cannot end successfully, the link is set to the system busy state.<br><br>**Action:** Check the log reports for additional information. Check the hardware for correct operation. |
| LINK <nn>: LIU7/ST TRANSMIT PROC UNINITIALIZED | **Meaning:** The link failed to synchronize because the signaling terminal on the LIU7 link resource detected software errors. The system attempts to recover the link by continuing the synchronizing procedure. If the procedure cannot end successfully, the link is set to the system busy state.<br><br>**Action:** Check the log reports for additional information. Check the hardware for correct operation. |
| LINK <nn>: LOST FSN | **Meaning:** The system could not identify the FSN, and rejected the message. RSMan sets the traffic state of the link to system busy, transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR.<br><br>**Action:** Access the PM maintenance level to determine the cause of the resource going system busy. |

**-continued-**

# queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: NO FAULT DETECTED AT PRESENT | **Meaning:** There are no faults on the link. This message is shown if an in-service link is queried for faults. RSMan has agreed with the far-end office to engage in a changeover procedure. RSMan is moving traffic to other available links (with a minimum of traffic disruption) in conjunction with the far-end office. The procedure allows RSMan to hold up new traffic temporarily in buffers, while trying to retrieve any untransmitted signaling messages that are waiting in the resource. The untransmitted messages are the first to be sent through the alternate route; they are followed by the messages in the buffers.<br><br>**Action:** None |
| LINK <nn>: NO REAL TIME IN LIU7 | **Meaning:** The link failed to synchronize because the application code in the signaling terminal was occupying the computing real-time for an unacceptable length of time. The system attempts to recover the link by continuing the synchronizing procedure. If the procedure cannot end successfully, the link is set to the system busy state.<br><br>**Action:** Check the log reports for additional information. Check the hardware for correct operation. |
| LINK <nn>: PERIODIC TEST FAILED | **Meaning:** The link has failed the periodic link test. RSMan has not received a signaling link test acknowledgment from the far-end office within the correct time period, or the acknowledgment was received with an incorrect test pattern. RSMan removes the link from service, initiates a changeover procedure, and sets the state of the link to system busy.<br><br>**Action:** Access the PM maintenance level and check the resource for faults. |
| LINK <nn>: PROVING FAILED | **Meaning:** The link has reached the proving phase of an alignment procedure, but it is unable to finish because of an excessive error rate. RSMan sends a message to the far-end office requesting it to restrict messages, sets the resource to the system busy state, then tries to resynchronize the link.<br><br>**Action:** None |

**-continued-**

## queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | REMOTE CONGESTION TIMEOUT |
| | **Meaning:** The far-end office has stayed congested too long. The system sends a message to the far-end office requesting it to restrict messages, then sets the resource to the system busy state. |
| | **Action:** None |
| LINK <nn>: | REMOTE PROCESSOR OUTAGE |
| | **Meaning:** The far-end office is unable to provide call processing on the link. Its level 2 function is sending link status signal units indicating processor outage. On receipt of the processor outage signals, the resource sends fill-in signal units and informs the system that the link cannot be used. |
| | **Action:** Contact the far-end office to establish the cause of the failure. |
| LINK <nn>: | RETRIEVAL BUFFER ENQUEUE PROBLEM |
| | **Meaning:** The system is unable to use the link for signaling because the resource failed. RSMan transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR. |
| | **Action:** Access the PM maintenance level to determine the cause of the resource going system busy. |
| LINK <nn>: | RETRIEVAL CORRUPT AUDIT BYTE |
| | **Meaning:** The system transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR. |
| | **Action:** Access the PM maintenance level to determine the cause of the resource going system busy. |
| LINK <nn>: | RETRIEVAL TRANSMIT BUFFER PROBLEM |
| | **Meaning:** The data link processor (DLP) in the resource has detected an error in its transmit buffer. The system transfers signaling to another link, sets the resource to system busy, and generates a COR TX BUF SWERR. |
| | **Action:** Access the PM maintenance level to determine the cause of the resource going system busy. |

**-continued-**

# queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: SEQUENCE NUMBER ERROR | **Meaning:** The system is unable to use the link for signaling because of resource failures. The system transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR.<br><br>**Action:** Access the PM maintenance level to determine the cause of the resource going system busy. |
| LINK <nn>: SIE RECEIVED | **Meaning:** The resource has received an emergency alignment status indication (SIE) message from the far-end office on a link that is in service. Linkset management sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** None |
| LINK <nn>: SIN RECEIVED | **Meaning:** The resource has received a normal alignment status indication (SIN) message from the far-end office on a link that is in service. Linkset management sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** None |
| LINK <nn>: SIO RECEIVED | **Meaning:** The resource has received an out-of-alignment status indication (SIO) message from the far-end office on a link that is in-service. The system sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** None |
| LINK <nn>: SIOS RECEIVED | **Meaning:** The resource has received an out-of-service status indicator (SIOS) message from the far-end office indicating that link alignment has failed. RSMan sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** None |

**-continued-**

## queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | ST AUDIT FAILED IN LIU7 |
| | **Meaning:** During an audit procedure, a hardware or software fault was detected. The system attempts recovery action. The system continues to initiate link synchronization until it times out, then it sets the link to the system busy state. |
| | **Action:** Check the log reports for additional information. Check the hardware for problems. |
| LINK <nn>: | ST FAILURE ON THE LINK |
| | **Meaning:** The resource is in the manual busy or the system busy state. The system is unable to seize the resource at the start of an activate procedure, or the resource has failed during the procedure. The system attempts to retrieve signaling messages from the resource and prevents further transmission of signaling messages on the link. |
| | **Action:** Access the PM maintenance level to determine the cause of the fault. |
| LINK <nn>: | STOP RECEIVED |
| | **Meaning:** The resource has been directed to stop because of some irregularity. RSMan has set the resource to the system busy state, which runs tests. When the resource is returned to service, the system attempts to activate the link again. |
| | **Action:** Enter the rts command (post the linkset if necessary) to activate the link. |
| LINK <nn>: | STOP RECEIVED, ALREADY STOPPED |
| | **Meaning:** The resource has been told to stop, but it is already in the busy state. |
| | **Action:** None |
| LINK <nn>: | SYSTEM PROBLEM - CHECK LOGS |
| | **Meaning:** RSMan has detected an error that cannot be associated with the components of the signaling link. RSMan is unable to isolate the fault and prompts the user to use other methods. |
| | **Action:** Check all other MAP levels for alarms, and check the log reports for irregularities. Log reports associated with CCS7 are prefixed with C7. |

**-continued-**

## queryflt (continued)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: | TL OUT OF SERVICE |
| | **Meaning:** The traffic state of the link is system busy because the transmission link (TL) is out-of-service.<br><br>***Note:*** This response is not valid for links using the LIU7 link resource.<br><br>**Action:** Access the TRKS maintenance level and investigate the TL problem. |
| LINK <nn>: | TRANSMIT/RETRANSMIT BUFFER PROBLEM |
| | **Meaning:** The DLP in the resource has detected an error in its transmit buffer. The system transfers signaling to another link, sets the resource to system busy, and generates a COR TX BUF SWERR.<br><br>**Action:** Enter the PM maintenance level to determine the cause of the resource going system busy. |
| LINK <nn>: | UNABLE TO DETERMINE FAULT |
| | **Meaning:** The fault on the link is either a transient fault or a multiple fault.<br><br>**Action:** Check the maintenance levels on the MAP and correct any faults. |
| LINK <nn>: | UNABLE TO SEIZE AN LIU7 |
| | **Meaning:** The link traffic is not in the in-service state. The activation procedure has failed because an LIU7 resource could not be seized. The system continues to attempt synchronization until it is timed out.<br><br>**Action:** Return the LIU7 to the in-service state. |
| LINK <nn>: | WAITING FOR FISU/MSU TIMEOUT |
| | **Meaning:** The link has reached the aligned ready state of an alignment procedure and is waiting for an FISU or an MSU, but a time-out has occurred. Linkset management sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** None |

**-continued-**

# queryflt (end)

**Responses for the queryflt command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: WAITING FOR SIN/SIE TIMEOUT | **Meaning:** The link has reached the aligned state of an alignment procedure and is waiting for a SIN or a SIE, but a time-out has occurred. RSMan sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** None |
| LINK <nn>: WAITING FOR SIO/SIN TIMEOUT | **Meaning:** The link has reached the not-aligned state of an alignment procedure and is waiting for an SIO or an SIN, but a time-out has occurred. The system sets the link synchronizing state to system busy and attempts to resynchronize the link.<br><br>**Action:** None |

**-end-**

# querytrf

## Function

Use the querytrf command to obtain an estimate of the traffic on each CCS7 signaling link.

**querytrf command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **querytrf** | all<br>*link* |

| Parameters and variables | Description |
|---|---|
| all | This parameter puts all links in the posted linkset into the deactivated state. |
| *link* | This variable specifies the number of the link to be queried. The range is 0-15. |

## Qualifications

The querytrf command is qualified by the following:

- The information in the querytrf report is only an approximation of the link occupancy. The calculations are based on data collected during the time interval specified in the querytrf header line, and may be up to 30 min old. Therefore, the current state of the link may differ considerably from the querytrf report.
- If the configuration of a link is changed, the querytrf command may miscalculate its occupancy, since the querytrf command uses the current link state for some if its calculations. For example, if the link speed is changed, the querytrf command calculates the occupancy of the link based on the new speed, rather than the actual speed of the link at the time the traffic measurements were collected. This may also cause the "Inconsistent OM registers" error message to be displayed.
- The MTP level 2 headers are considered part of the message signal unit (MSU) in the calculations used by this command.
- The average MSU length may have a nonzero value for low occupancy links as in the following example:

```
Link  Speed  Byte/sec  Erlang  MSU len  %RTx
 0     300       0      0.00     17       0
```

  For a synchronized link, there will be some MTP test messages that have an effect on the number of bytes used in the calculation of the average. When considering the length of the OM transfer period, however, these test messages do not occur frequently enough to affect the bytes/sec calculations or the link occupancy.

# querytrf (continued)

## Example

The following table provides an example of the querytrf command.

**Example of the querytrf command**

| Example | Task, response, and explanation |
|---|---|
| **querytrf all** ↵ | **Task:** Query the traffic level on all links in the posted linkset.<br><br>**Response:**<br><br>`QueryTrf:  Link occupancy for 10:16:00 - 10:46:00`<br>`Link   Speed   Byte/sec   Erlang    MSU len  %RTx`<br>`   1    7168      2345      0.33         30     2`<br>`   3    7168      2403      0.35         35     0`<br>`   5    7168      5628      0.80         18     0`<br><br>**Explanation:** The response is the traffic level report for all links. |

## querytrf (continued)

## Responses

The following table provides explanations of the responses to the querytrf command.

**Responses for the querytrf command**

| MAP output | Meaning and action |
|---|---|
| `QUERYTRF: LINK OCCUPANCY FOR <start> - <end>`<br>`LINK SPEED BYTE/SEC ERLANG MSU LEN %RTX`<br>`<link> <speed> <byte/sec> <erlang> <msu len> <%rtx>` | **Meaning:** This is the normal response of the querytrf command. It is a report composed of a two-line header followed by one or more lines containing information on each queried link, where<br><br><start> is the starting time of the period for which traffic estimates are calculated<br><end> is the ending time of the period for which traffic estimates are calculated<br><link> is the link number. The range is 0-15.<br><speed> is the maximum speed of the link in bytes/sec<br><byte/sec> is the average traffic rate in bytes/sec<br><erlang> is the link occupancy estimate in Erlang<br><msu len> is the MSU length in bytes<br><%rtx> is the percentage of link traffic that was retransmitted<br><br>**Action:** None |
| `WARNING: OM TRANSFER OCCURRED; PLEASE RUN AGAIN` | **Meaning:** This warning message, which follows the querytrf report, is generated if an OM transfer took place while the querytrf command was running. In this situation, part of the report generated may be based on the new OM values, and therefore is inconsistent with the rest of the report.<br><br>**Action:** Enter the querytrf command again to get a report based on the updated OM values. |
| `FAILED, NO LINKSET POSTED.` | **Meaning:** The querytrf command can only run if there is a posted linkset.<br><br>**Action:** Post a linkset using the post command before using the querytrf command. |

**-continued-**

# querytrf (continued)

**Responses for the querytrf command** (continued)

| MAP output | Meaning and action |
|---|---|
| WRONG NUMBER OF PARAMETERS | **Meaning:** The querytrf command expects exactly one parameter, either the number of a link to query or the all parameter. This message is generated if more or fewer than one parameter is entered.<br><br>**Action:** Reenter the command with one parameter. |
| WRONG INPUT PARAMETER | **Meaning:** The querytrf command expects as its parameter either the number of a link to query (0-15) or the all parameter. This message is generated if the parameter specified is neither of these.<br><br>**Action:** Reenter the command with the correct parameter. |
| NO EQUIPPED LINKS IN THIS LINKSET | **Meaning:** This message is generated when the posted linkset has no equipped links.<br><br>**Action:** None |
| THIS LINK IS NOT EQUIPPED | **Meaning:** The specified link is not equipped.<br><br>**Action:** None |
| QUERYTRF FAILED, INCONSISTENT OM TIMESTAMPS | **Meaning:** This message indicates that the timestamps associated with the current OM registers are inconsistent. For example, this might be caused by an incorrectly reset system clock.<br><br>**Action:** Check the system clock or wait for the next OM transfer. |
| QUERYTRF FAILED, OM DATA NOT YET AVAILABLE | **Meaning:** This message indicates that the first OM transfer has not yet occurred. Data for the querytrf calculations is not available until after the OM transfer.<br><br>**Action:** Wait for the first OM transfer to take place. |

**-continued-**

# querytrf (end)

**Responses for the querytrf command** (continued)

| MAP output | Meaning and action |
|---|---|
| `OMS ARE INCONSISTENT FOR THIS LINK` | **Meaning:** This message indicates that the values of the OM registers are inconsistent. For example, the OM registers indicate more traffic was transmitted on the link than is possible at its current speed.<br><br>**Action:** The situation may correct itself when the OM registers are reset at the next OM transfer. |

**-end-**

# queryusr

## Function

Use the queryusr command to list all routesets that use the posted linkset as one of its route. If users exist, the output indicates the signaling point code, the routeset CLLI, and the network name. The definition of a routeset is the network name plus its destination point code.

**queryusr command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **queryusr** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the queryusr command.

**Example of the queryusr command**

**Example** **Task, response, and explanation**

**queryusr**↵

**Task:** Identify the routesets using the posted linkset.

**Response:**

```
  CCIS6    CCS7    CCITT6
  2 LKM    1 LK        *
Link Set TORONTOTOMTRL  - ISTb
   Traf Sync  STC   Transmission Link      Action In
LK Stat Stat No Stat CLLI     ExtrkNM  Stat Progress
 0 InSv Sync  2 InSv TORONTOTOMTRL 100 SZD
 1 ManB Alnd  5 InSv TORONTOTOMTRL 101 SZD
 2 SysB SysB  0 InSv TORONTOTOMTRL 102 SZD /Proving
 3 SysB SysB  1 InSv TORONTOTOMTRL 103 SZD /Proving
Queryusr
Routeset Clli      Network Name       Point Code
MONTREAL123        TCTS               045 222 111
OTTAWA89           TCTS               101 002 159
TORONTO200         TCTS               243 098 087
QUEBECCITY45       TCTS               155 198 212
```

**Explanation:** The system lists the routesets of the posted linkset.

# queryusr (end)

## Response

The following table provides an explanation of the response to the queryusr command.

**Response for the queryusr command**

| MAP output | Meaning and action |
|---|---|
| ROUTESET NAME<br><full_routeset_name> | NETWORK NAME<br><network_name> | POINT CODE<br><nnn nnn nnn> |
| | **Meaning:** The MAP shows the queryusr information, where<br><br><full_routeset_name> is the full name of the routeset.<br><network_name> is the name assigned to the network in system table c7rteset.<br><nnn nnn nnn> is a unique numerical address given to each signaling point in the network.<br><br>**Action:** None |

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the C7LKSET level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The C7LKSET level has changed to the previous menu level. |

**-continued-**

## quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the C7LKSET level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The C7LKSET level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the C7LKSET level menu with a menu that is two or more levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the C7LKSET level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |
| **-end-** | |

# rts

## Function

Use the rts command to return to service the selected link of a posted linkset. If the all parameter is used, all links in the posted linkset are returned to service.

**rts command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **rts** | all<br>*link* |

| Parameters and variables | Description |
|---|---|
| all | This parameter returns to service all links in the posted linkset. |
| *link* | This variable specifies the number of the link to be returned to service. The range is 0-15. |

## Qualifications

None

# rts (continued)

## Example

The following table provides an example of the rts command.

**Example of the rts command**

| Example | Task, response, and explanation |
|---|---|
| **rts 0** ↵<br>*where*<br><br>0 is the link number to be returned to service | **Task:** Return to service link 0.<br><br>**Response:**<br><br>`  CCIS6    CCS7    CCITT6`<br>`  2 LKM      *        *`<br>`Link Set OCALATOALASKA  - InSv`<br>`   Traf Sync  STC    Transmission Link       Action In`<br>`LK Stat Stat No Stat CLLI     ExtrkNM  Stat Progress`<br>` 0 Idle Idle  2 InSv OCALATOALASKA 100  IDL`<br>` 1 InSv Sync  5 InSv OCALATOALASKA 101  SZD`<br>` 2 InSv Sync  0 InSv OCALATOALASKA 102  SZD`<br>` 3 InSv Sync  1 InSv OCALATOALASKA 103  SZD`<br>`Rts 0`<br>`Link 0: Passed`<br><br>**Explanation:** Link 0 has been returned to service. |

## Responses

The following table provides explanations of the responses to the rts command.

***Note:*** For all the responses, <nn> represents the link number, with a range of 0-15.

| **Responses for the rts command** | |
|---|---|
| **MAP output** | **Meaning and action** |
| `LINK <nn>: Command already done.` | |
| | **Meaning:** The link is already in the in-service state.<br><br>**Action:** None |
| `LINK <nn>: FAILED, LINK IS NOT IN MAN BUSY STATE` | |
| | **Meaning:** The link must be in the manual busy state to return the link to service.<br><br>**Action:** Using the busy command, set the link to the manual busy state. Then, reenter the rts command. |
| `LINK <nn>: MAINTENANCE COMMAND IN PROGRESS` | |
| | **Meaning:** Another command is being processed at the MAP. Since only one command at a time can be acted upon from the MAP, the rts command was not initiated.<br><br>**Action:** Repeat the command later. |
| `LINK <nn>: PASSED` | |
| | **Meaning:** The link has been returned to service.<br><br>**Action:** None |
| `The link is not equipped.` | |
| | **Meaning:** An invalid link number has been entered.<br><br>**Action:** Enter the command again, using a valid number. |

# tst

## Function

Use the tst command to initiate a signaling route test (SRT) on a link in the posted linkset. The test includes transmitting a message with the standard SNM routing label and a two-byte test pattern to a specified endpoint. The same message is expected to be returned as acknowledgement.

**tst command parameters and variables**

| Command | Parameters and variables | | | | | |
|---|---|---|---|---|---|---|
| **tst** | all<br>*link_number* | *fep* | | | | |
| | | *route_id* | d | *mainarea* | *subarea* | *areaunit* |
| | | | r | *routeset* | | |

| Parameters and variables | Description |
|---|---|
| all | This parameter selects all links in the posted linkset. |
| *areaunit* | This variable selects the unit signaling point. The unit signaling point is a unique numerical address in the CCS7 destination point code (DPC) message. The range is 0-127. |
| d | This parameter selects DPC as the far end code to be specified. |
| *fep* | This default parameter, which is never entered, indicates that the far end point code of the linkset will be the destination point code used as the SRT whenever neither the d or r parameter is entered. |
| *link_number* | This variable selects the link to be tested. The range is 0-15. |
| *mainarea* | This variable selects the main signaling area. The main signaling area is a unique numerical address in the CCS7 DPC message. The range is 0-31. |
| r | This parameter selects the routeset. |
| *route_id* | This variable selects the specific routes in CCS7 message. |

**-continued-**

# tst (continued)

**tst command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *routeset* | This variable is the routeset common language location identifier (CLLI) that must be supplied when the r parameter is entered. The DPC of this routeset will be used as the DPC in the routing label of the SRT. |
| *subarea* | This variable selects the SUB signaling area. The SUB signaling area is a unique numerical address in the CCS7 DPC message. The range is 0-15. |

**-end-**

## Qualifications

The tst command is qualified by the following:

- Signaling links must be in the synchronized state before testing. Use the act command to synchronize the links.
- If the all parameter is used, only those links that are in the synchronized state are tested. If there are no links in the sync state, the command is aborted.

## tst (continued)

## Example

The following table provides an example of the tst command.

**Example of the tst command**

| Example | Task, response, and explanation |
|---|---|
| **tst 0** ↵<br>*where*<br><br>0 is the link to be tested | **Task:** Test link 0.<br><br>**Response:**<br><br>`  CCIS6    CCS7    CCITT6`<br>`  2 LKM    1 LK       *`<br>`Link Set OCALATOALASKA  - ISTb`<br>`   Traf Sync  STC    Transmission Link      Action In`<br>`LK Stat Stat No Stat CLLI     ExtrkNM  Stat Progress`<br>` 0 InSv Sync  2 InSv OCALATOALASKA 100 SZD`<br>` 1 ManB Alnd  5 InSv OCALATOALASKA 101 SZD`<br>` 2 InSv Sync  0 InSv OCALATOALASKA 102 SZD`<br>` 3 SysB SysB  1 InSv OCALATOALASKA 103 SZD   Prvng`<br>`Tst 0`<br>`Link 0: Test passed`<br><br>**Explanation:** Link 0 has been tested successfully. |
| **tst 3 d 3 4 5** ↵<br>*where*<br><br>3 is the link to be tested<br>3 4 5 is the destination point code | **Task:** Use destination point 3 4 5 to test link 3.<br><br>**Response:** `Link 3: Test passed`<br><br>**Explanation:** The test of link 3 using destination point 3 4 5 passed. |

# tst (continued)

## Responses

The following table provides explanations of the responses to the tst command.

***Note:*** For all the applicable responses, <nn> represents the link number, with a range of 0-15.

**Responses for the tst command**

| MAP output | Meaning and action |
|---|---|
| `Cannot send message to signaling management` | **Meaning:** A problem exists with internal communication.<br>**Action:** Check for and save any logs. Contact the next level of support. |
| `Failed to get DPC for specified routeset` | **Meaning:** The routeset supplied with the R parameter does not have a corresponding DPC based on the current datafill.<br>**Action:** Issue the command with the correct routeset. |
| `Inconsistent data - check logs` | **Meaning:** A problem exists with the internal data.<br>**Action:** Check for and save any logs. Contact the next level of support. |
| `LINK <nn>: FAILED, FAR END DID NOT REPLY TO REQUEST` | **Meaning:** The far-end office failed to respond to the request for a test transmission. The far-end office is in one of the following states: manual busy, system busy, or offline.<br>**Action:** Contact the far-end office to determine the cause of the fault. |
| `LINK <nn>: FAILED, NO RESPONSE FROM MSB7` | **Meaning:** The MSB7 did not respond to the tst command. The MSB7 is in one of the following states: manual busy, system busy, or offline.<br>**Action:** Use PM maintenance to check the MSB7. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `LINK <nn>: LINK MUST BE SYNCHRONIZED` | **Meaning:** The link synchronization state is not in the in-service or synchronized state. Therefore, the link is not in the proper state to undergo testing.<br><br>**Action:** Activate using the act command and return the link to service using the rts command. Then, reenter the tst command. |
| `LINK <nn>: Other maintenance command in progress` | **Meaning:** Another command is being processed at the MAP. Because only one command can be acted on at any one time from the MAP, the command tst command was not initiated.<br><br>**Action:** Repeat the command later. |
| `LINK <nn>: TEST ALREADY REQUESTED` | **Meaning:** The test procedure has already started.<br><br>**Action:** None |
| `LINK <nn>: TEST CANCELLED BY OTHER MAINTENANCE COMMAND` | **Meaning:** Another command using the force parameter has been entered, forcing the premature completion of the tst command.<br><br>**Action:** Repeat the command later. |
| `LINK <nn>: TEST FAILED` | **Meaning:** An acknowledgment was not received (in 1 s) from the far-end office, or the test pattern received was different from that sent. There is noise on the signaling link or a fault in the resource.<br><br>**Action:** Access both the TRKS maintenance level and the PM maintenance level to check the signaling link and the resource. |
| `Link nn: Test failed, far end did not reply to request` | **Meaning:** No SRA was received from the far end in the allotted time.<br><br>**Action:** Ascertain source of the error. Reenter the command. If the response recurs, contact the next level of support. |

**-continued-**

# tst (continued)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Link nn: Test failed, no response form LIU7` | **Meaning:** The LIU7 did not reply to the request in the allotted time.<br><br>**Action:** Check for and save any logs. Contact the next level of support. |
| `LINK <nn>: Test failed, no timer available` | **Meaning:** No timers are currently available for use.<br><br>**Action:** Repeat the command later. |
| `Link nn: TEST FAILED, REPLY ARRIVED ON A DIFFERENT LINK` | **Meaning:** The test acknowledgment was received on a different link than the one on which the test message was sent.<br><br>**Action:** Contact the far-end office to determine the cause of the fault. |
| `Link nn: Test failed, test patterns mismatched` | **Meaning:** The SRA that was received in response to the transmitted SRT contained an error in the test pattern field.<br><br>**Action:** Ascertain source of the error. Reenter the command. If the response recurs, contact the next level of support. |
| `LINK <nn>: TEST PASSED` | **Meaning:** The test pattern received at the far-end office corresponds with the one sent by the system. No further action is taken on the link.<br><br>**Action:** None |
| `Specified routeset must have a full PC scope` | **Meaning:** The routeset supplied does not have a corresponding DPC with a full point code scope based on the current datafill.<br><br>**Action:** Issue the command with a different routeset. |

**-continued-**

# tst (end)

**Responses for the tst command** (continued)

| MAP output | Meaning and action |
|---|---|
| `This DPC does not correspond to any valid routeset` | **Meaning:** The DPC supplied with the D parameter does not correspond to a valid routeset based on the current datafill.<br><br>**Action:** Issue the command with the correct parameter. |
| `This is not a valid routeset` | **Meaning:** The routeset supplied with the R parameter does not correspond to a valid routeset based on the current datafill.<br><br>**Action:** Issue the command with the correct routeset. |
| `This linkset is not a route in the specified routeset` | **Meaning:** The test was aborted because the posted linkset is not a route in the specified routeset.<br><br>**Action:** Enter the command again with the routeset that the posted linkset is a route in. |
| `Wrong input parameter` | **Meaning:** An improper parameter was supplied with the command<br><br>**Action:** Reissue the command with the correct parameters. |
| `WRONG NUMBER OF PARAMETERS` | **Meaning:** The data entered with the command consists of more than one parameter.<br><br>**Action:** Verify the parameter and reenter the command with the number of parameters. |

**-end-**

# uinh

## Function

Use the uinh command to restore traffic back to previously inhibited links. A request to uninhibit is sent to the far-end office. Reception of an uninhibit acknowledgement allows the system to return the links to service.

**uinh command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **uinh** | all<br>*link* |

| Parameters and variables | Description |
|---|---|
| all | This parameter selects all links in the posted linkset. |
| *link* | This variable selects the link to be uninhibited. The range is 0-15. |

## Qualification

The uinh command is not allowed on JPN7 linksets although the command is displayed as a valid command. This command is therefore not applicable for companies in Japan.

## Example

Not currently available

## Responses

The following table provides explanations of the responses to the uinh command.

***Note:*** For all the applicable responses, <nn> represents the link number with a range of 0-15.

**Responses for the uinh command**

| MAP output | Meaning and action |
|---|---|
| `FAILED, LINKSET DESTINATION IS OFFLINE OR MANBSY` | **Meaning:** The destination for the specified linkset is Offl or ManB.<br><br>**Action:** Contact the far-end office to determine the problem. |

**-continued-**

# uinh (continued)

**Responses for the uinh command** (continued)

| MAP output | Meaning and action |
|---|---|
| FAILED, LINKS IN THIS NETWORK CANNOT BE UNINHIBITED | **Meaning:** You entered a link from a network that cannot be uninhibited.<br>**Action:** None |
| LINK <nn>: COMMAND ALREADY DONE | **Meaning:** The selected link is already uninhibited.<br>**Action:** None |
| LINK <nn>: FAILED, COMMAND ALREADY IN PROGRESS | **Meaning:** The system is in the process of uninhibiting the link as a result of a command issued from another MAP.<br>**Action:** None |
| LINK <nn>: FAILED, FAR-END DENIED REQUEST | **Meaning:** The far-end office denied the request from the sending office.<br>**Action:** Contact the far-end office to determine the cause. |
| LINK <nn>: FAILED, FAR-END DID NOT REPLY TO REQUEST | **Meaning:** The far-end office did not reply within the prescribed time limits.<br>**Action:** Contact the far-end office to determine the cause. |
| LINK <nn>: FAILED, LINK IS OFFLINE | **Meaning:** Offline links cannot carry traffic and therefore cannot be inhibited or uninhibited.<br>**Action:** None |
| LINK <nn>: FAILED, MAINTENANCE COMMAND IN PROGRESS | **Meaning:** The MAP is already processing another command.<br>**Action:** When the current command is finished, reenter the uinh command. |

**-continued-**

# uinh (end)

**Responses for the uinh command** (continued)

| MAP output | Meaning and action |
|---|---|
| LINK <nn>: FAILED, THIS IS THE LAST AVAILABLE LINK IN ROUTESET | **Meaning:** The link is the last one available for a given routeset to use.<br>**Action:** None |

**-end-**

# C7MSUVER level commands

Use the C7MSUVER level of the MAP to build message signaling units (MSU), subject them to the screening rules of the CCS7 link interface unit 7 (LIU7), and display the results of screening rules that were encountered. Receiving screening rule information lets you verify if a message will be discarded or allowed.

The C7MSUVER level has one main MAP display, but allows access to other MAP displays for various MSU service types. The main C7MSUVER MAP display shows only the message transfer part (MTP) of the message, that is, only the service information octet (SIO), the origination point code (OPC), and the destination point code (DPC). Then, if the service type indicated in the service indicator (SI) field requires additional message fields, a different C7MSUVER menu display appears. The additional MAP displays correspond to the following MSU service types:

- signaling network management (SNM)
- signaling connection control part (SCCP)
- telephone user part (TUP)

Since the SNM, SCCP, and TUP menu displays are subdisplays of the C7MSUVER level, all commands available from the four menu displays are included in the C7MSUVER directory. However, you can access certain commands only within a particular sublevel. The field names correspond with the available menu commands. For example, the setdest command is only available within the SNM sublevel. You cannot see the destination field in the message template until you access the SNM sublevel display.

## Accessing the C7MSUVER level

To access the C7MSUVER level, enter the following from the CI level:

**mapci;mtc;ccs;ccs7;c7msuver** ↵

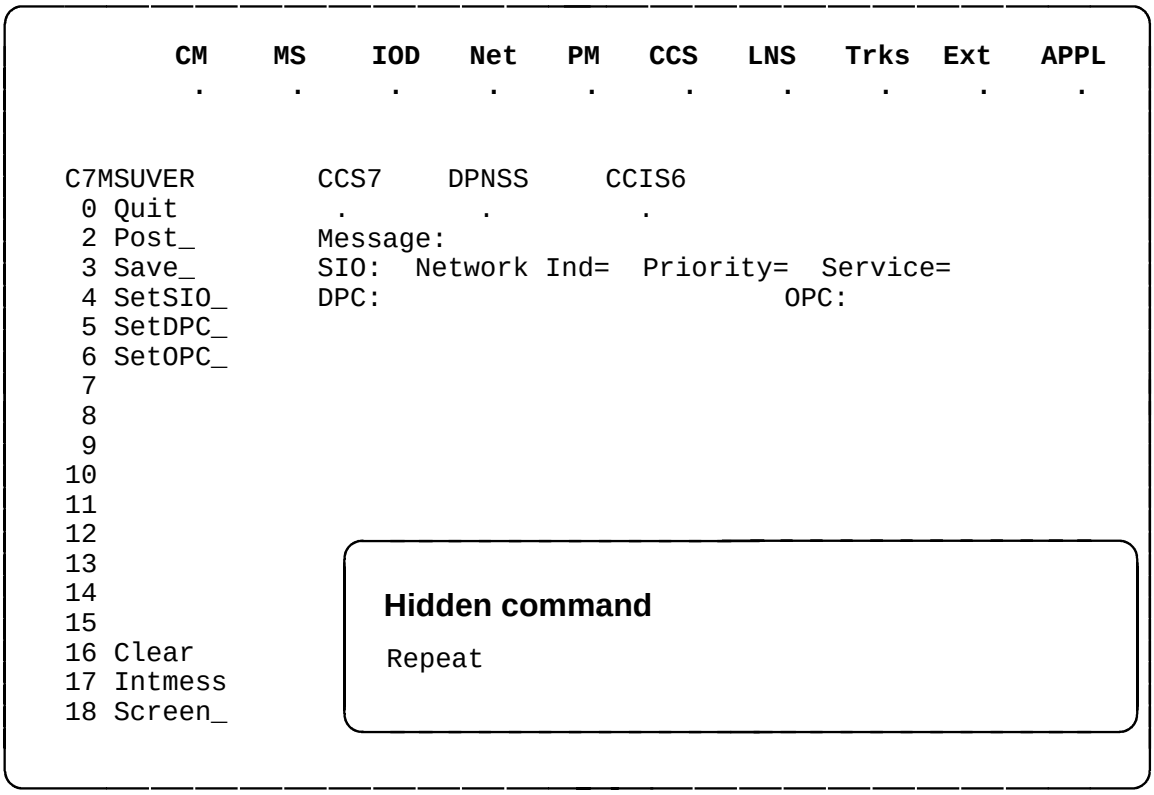
## C7MSUVER commands

The commands available at the C7MSUVER MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

| **C7MSUVER commands**<br>**Command** | **Page** |
|---|---|
| clear | C-925 |
| intmess | C-927 |
| post | C-929 |
| quit | C-931 |
| save | C-935 |
| screen | C-939 |
| setafpc | C-945 |
| setcdpa | C-949 |
| setcgpa | C-953 |
| setdest | C-957 |
| setdpc | C-961 |
| seth0h1 | C-965 |
| setopc | C-967 |
| setscmg | C-971 |
| setsio | C-975 |

## C7MSUVER menu

The following figure shows the main C7MSUVER menu and status display. The insert with hidden commands is not a visible part of the menu display.




***Note:*** Although the repeat command is listed in the C7MSUVER directory, it is not available for the C7MSUVER tool. Any attempt to use this command results in a "command not available" error message. The repeat command serves as a reminder that the purpose of the C7MSUVER tool is to verify screening rules, rather than generate traffic.

## C7MSUVER SNM menu

The following figure shows the C7MSUVER SNM menu and status display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


C7MSUVER        CCS7    DPNSS     CCIS6
 0 Quit         1 RSC     .         .
 2 Post_        Message:
 3 Save_        SIO:  Network Ind=  Priority=  Service=
 4 SetSIO_      DPC:                        OPC:
 5 SetDPC_      SNM: H0=   H1=    Dest Field=
 6 SetOPC_
 7 SetH0H1_
 8 SetDEST_
 9
10
11
12
13
14
15
16 Clear
17 Intmess
18 Screen_
```

## C7MSUVER SCCP menu

The following figure shows the C7MSUVER SCCP menu and status display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


C7MSUVER        CCS7    DPNSS     CCIS6
 0 Quit         1 RSC     .         .
 2 Post_        Message:
 3 Save_        SIO:  Network Ind=  Priority=  Service=
 4 SetSIO_      DPC:                        OPC:
 5 SetDPC_      CDPA: SSN=        GT Format=     Trans Type=
 6 SetOPC_            Routing=
 7 SetCDPA_     CGPA: SSN=        PC=
 8 SetCGPA_     SCMG: MT=        SSN=      Affected PC=
 9 SetSCMG_
10 SetAFPC_
11
12
13
14
15
16 Clear
17 Intmess
18 Screen_
```

## C7MSUVER TUP menu

The following figure shows the C7MSUVER TUP menu and status display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


C7MSUVER        CCS7    DPNSS     CCIS6
 0 Quit         1 RSC     .         .
 2 Post_        Message:
 3 Save_        SIO:  Network Ind=   Priority=   Service= 4
 4 SetSIO_      DPC:                          OPC:
 5 SetDPC_      TUP: H0=   H1=
 6 SetOPC_
 7 SetH0H1_
 8
 9
10
11
12
13
14
15
16 Clear
17 Intmess
18 Screen_
```

# clear

## Function

Use the clear command to erase the currently displayed message (made up of the entries in the message fields).

**clear command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **clear** | There are no parameters or variables. |

## Qualifications

The clear command is qualified by the following exceptions, restrictions, and limitations:

- When you use the clear command, the basic MAP display is shown. The message that was displayed when you entered the command is no longer shown. It is not deleted from the table unless you use the save command.
- When in either the SNM, SCCP, or TUP sublevel, the clear command returns you to the main C7MSUVER MAP display.

## Example

The following table provides an example of the clear command.

**Example of the clear command**

| Example | Task, response, and explanation |
|---|---|
| **clear** ↵ | **Task:** Clear the fields in the displayed message template.<br><br>**Response:**<br><br>`Message:`<br>`SIO:  Network Ind=  Priority=  Service=`<br>`DPC:  OPC:`<br><br>**Explanation:** The displayed message disappears from the MAP, and the basic message template reappears. |

## clear (end)

## Response

The following table provides an explanation of the response to the clear command.

**Response for the clear command**

| MAP output | Meaning and action |
|---|---|
| Message:<br>SIO: Network Ind= Priority= Service=<br>DPC: OPC: | Meaning: The message information disappears from the MAP and the basic message template reappears.<br><br>**Action:** None |

# intmess

## Function

Use the intmess command to interpret the message displayed on the MAP. The system translates the codes into an easily readable and understandable format.

**intmess command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **intmess** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the intmess command.

**Example of the intmess command**

| Example | Task, response, and explanation |
|---|---|
| **intmess** ↵ | |

**Task:** Display the current message in an easily readable and understandable format.

**Response:**

```
Service Indicator Octet:
 Network Indicator=NATL Priority=0 Service Indicator=TUP Plus
Origination Point Code:
 Point Code=ANSI7 001 001 001 C7ROUTESET1
Destination Point Code:
 Point Code=ANSI7 002 002 002 C7ROUTESET2
```

**Explanation:** The message is displayed in an easily readable and understandable format. The system identifies the codes, abbreviations, and acronyms used in the message fields.

## Response

The following table provides an explanation of the response to the intmess command.

# intmess (end)

**Response for the intmess command**

| MAP output | Meaning and action |
|---|---|
| `Service Indicator Octet:`<br>`  Network Indicator= ni Priority= pri Service Indicator= si`<br>`Origination Point Code: Point Code= opc  opc routeset`<br>`Destination Point Code: Point Code= dpc  dpc routeset` | **Meaning:** The message is displayed in an easily readable and understandable format. The system identifies the codes, abbreviations, and acronyms used in the message fields.<br><br>**Action:** None |

# post

## Function

Use the post command to display a message from the verification message table.

**post command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **post** | *msgno* |

| Parameters and variables | Description |
|---|---|
| *msgno* | This variable specifies the number of the message you want to post. The message number ranges from 0-9. |

## Qualifications

None

## Example

The following table provides an example of the post command.

**Example of the post command**

| Example | Task, response, and explanation |
|---|---|
| **post 9** ↵<br>*where*<br><br>9 is the message number | **Task:** Post message number 9.<br><br>**Response:**<br><br>`Message:`<br>`SIO: Network Ind= 1 Priority= 2 Service=2`<br>`DPC: ANSI7 003 001 000 OPC: CCITT7 BASIC 00005`<br><br>**Explanation:** The system overwrites the current message template with the contents of message 9. |

## Responses

The following table provides explanations of the responses to the post command. The following generic characters are used in the responses to represent specific numbers:

## post (end)

- ni is the network indicator
- nn is the verification message number
- pc is the point code

**Responses for the post command**

| MAP output | Meaning and action |
|---|---|
| `LOCAL POINT CODE FOR NETWORK INDICATOR <ni> IS <pc>` | **Meaning:** The network indicator and corresponding point code are valid. The system updates the message template with the new message information.<br><br>**Action:** None |
| `The current message has not been saved. Do you wish to continue posting the message? Please enter Yes or No.` | **Meaning:** You have not yet saved the current message. If you do not save the current message, the new message will overwrite the current one.<br><br>**Action:** Enter the word yes to overwrite the current message with the new one. Enter the word no to stop the posting process. Then, use the save command to save the current message. |
| `VERIFICATION MESSAGE <nn>: ALREADY POSTED` | **Meaning:** You specified a message that is already posted at another MAP.<br><br>**Action:** Determine if the message is posted at another MAP. If it is, wait until later, then reenter the command. Or, quit from the C7MSUVER level at the other MAP and reenter the command at your MAP. |
| `WARNING: NO LOCAL PC IN TABLE C7NETWRK FOR NI <ni>` | **Meaning:** There is no entry in the C7NETWRK table for the network indicator you entered. The system updates the other message fields with the new message information.<br><br>**Action:** None |

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualification

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the C7MSUVER level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The C7MSUVER level has changed to the previous menu level. |

**-continued-**

# quit (continued)

**Examples of the quit command** (continued)

**Example** **Task, response, and explanation**

**quit mtc** ↵
*where*

mtc specifies the level higher than the C7MSUVER level to be exited

**Task:** Return to the MAPCI level (one menu level higher than MTC).

**Response:** The display changes to the MAPCI menu display:

```
MAPCI:
```

**Explanation:** The C7MSUVER level has returned to the MAPCI level.

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

**MAP output** **Meaning and action**

```
CI:
```

**Meaning:** The system exited all MAP menu levels and returned to the CI level.

**Action:** None

```
QUIT -- Unable to quit requested number of levels
Last parameter evaluated was: 1
```

**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.

**Action:** Reenter the command using an appropriate level number.

The system replaces the C7MSUVER level menu with a menu that is two or more levels higher.

**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.

**Action:** None

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the C7MSUVER level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |
| **-end-** | |

# save

## Function

Use the save command to save a message in the verification message table under a specified message number.

**save command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **save** | *msgno* |

| Parameters and variables | Description |
|---|---|
| *msgno* | This variable specifies the number under which the message will be recorded in the verification message table. The message number ranges from 0-9. |

## Qualifications

The save command is qualified by the following exceptions, restrictions, and limitations:

- You can save a maximum of ten messages.
- You must use the save command to save any changes to a temporary message or a previously saved message from the verification message table.
- If you exit from the C7MSUVER MAP level without saving your messages, the system prompts you to choose whether or not to save the messages you built or changed. If you choose to save your messages and cancel the quit sequence, you have to access the save command. The system does not automatically save the messages once you cancel the quit command.

## Example

The following table provides an example of the save command.

## save (continued)

**Example of the save command**

| Example | Task, response, and explanation |
|---|---|

**save 9** ↵
*where*

9 specifies that the message saved will be recorded in the verification message table as message number 9

**Task:** Save the current message as number 9 in the verification message table.

**Response:**

```
Message:
SIO:    Network Ind=  1   Priority= 2   Service=15
DPC: ANSI7 003 001 000          OPC: CCITT7 BASIC 00005
```

**Explanation:** The system records the current message template as message 9 in the verification message table.

## Responses

The following table provides explanations of the responses to the save command. The generic character n represents a specific message number.

**Responses for the save command**

| MAP output | Meaning and action |
|---|---|
| `VERIFICATION MESSAGE <n> IN USE.  MESSAGE IS NOT SAVED.` | **Meaning:** You specified a message that is already posted at another MAP. The system cannot save a message in use at another MAP.<br>**Action:** Reenter the command using another message number. |

**-continued-**

**Responses for the save command** (continued)

| MAP output | Meaning and action |
|---|---|
| DO YOU WISH TO OVERWRITE EXISTING DATA FOR VERIFICATION MESSAGE <n><br>PLEASE ENTER YES OR NO<br><br>VERIFICATION MESSAGE <n> IS SAVED<br>or<br>MESSAGE IS NOT SAVED | **Meaning:** A message has already been saved with the number you entered. You have the choice of either overwriting the saved message with the current message, or canceling the command.<br><br>**Action:** Enter the word yes if you want to overwrite the saved message with the current message. Then, the response "Verification message is saved" appears. Enter the word no if you want to cancel the command. Then, the response "Message is not saved" appears. |
| VERIFICATION MESSAGE <n> IS SAVED AND VERIFICATION MESSAGE <n> IS NO LONGER POSTED | **Meaning:** The current message is saved under the specified verification table number, which is different from the currently posted message number.<br><br>**Action:** None |

**-end-**

## Function

Use the screen command to send the currently displayed message to an LIU7 for appropriate routing (screening).

**screen command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **screen** | *linkstname* *linkno* |

| Parameters and variables | Description |
|---|---|
| *linkno* | This variable specifies the link number, ranging from 0-15. |
| *linkstname* | This variable specifies the name of the linkset. |

## Qualification

The screen command may affect the operational measurement (OM) and MSU detailed recording 7 (MDR7) if the ENABLED field in the C7GTWLKS table is set to the value Y.

## Example

The following table provides an example of the screen command.

**Example of the screen command**

| Example | Task, response, and explanation |
|---|---|
| **screen lkset1 0** ↵<br>*where*<br><br>lkset1 indicates the linkset name<br>0 indicates the link number | **Task:** Send the message currently displayed to the LIU7 connected to linkset 1, link 0 for screening.<br><br>**Response:**<br><br>`Sending verification message to LKSET1 0`<br>`02 0F 56 78 09 0D D4 A1 23 6C 56 23 12 12 23 45`<br><br>**Explanation:** The message is being sent to the specified linkset name and link number. The actual verification message is displayed in hexadecimal format on the second line. |

## screen (continued)

## Responses

The following table provides explanations of the responses to the screen command. A generic name for a value or number, such as linkset_name, indicates where an actual value or number appears on the MAP display.

**Responses for the screen command**

| MAP output | Meaning and action |
|---|---|
| ERROR: CALLED PARTY ADDRESS NOT DEFINED | **Meaning:** You specified an SCCP message by setting the SI field to 3 in the SIO, but the called party address field is not valid for an SCCP message.<br><br>**Action:** If this is an SCCP message, use the setcdpa command to set the fields for the CDPA field of the message template. |
| ERROR: CALLING PARTY ADDRESS NOT DEFINED | **Meaning:** You specified an SCCP message by setting the SI field to 3 in the SIO, but the calling party address field is not valid for an SCCP message.<br><br>**Action:** If this is an SCCP message, use the setcgpa command to set the fields for the CGPA field of the message template. |
| ERROR: INVALID NETWORK TYPE | **Meaning:** You specified a network in the SIO field that is not datafilled in table C7NETWRK. The system cancels the screen command request.<br><br>**Action:** Change the network indicator of the SIO field to show a valid network that is datafilled in table C7NETWRK. Then, reenter the screen command. |
| ERROR: THE PC DOES NOT MATCH NI PROVIDED | **Meaning:** You specified a network indicator (NI) that does not match with either the opc, dpc, or SNM pc.<br><br>**Action:** None |
| <linkset_name> <link_number> IS NOT AN LIU7 LINK | **Meaning:** You specified a linkset name and link number that are not valid for an LIU7 link.<br><br>**Action:** Reenter the command using a valid LIU7 linkset name and number. |

**-continued-**

## screen (continued)

**Responses for the screen command** (continued)

| MAP output | Meaning and action |
|---|---|
| `<linkset_name> IS NOT DATAFILLED IN C7LKSET` | **Meaning:** You specified a linkset name that is not datafilled in the C7LKSET table.<br><br>**Action:** Reenter the command using a linkset name that is datafilled in the C7LKSET table. |
| `<linkset_name> IS NOT DATAFILLED IN TABLE C7GTWLKS` | **Meaning:** You specified a linkset name that is not datafilled in the C7GTWLKS table.<br><br>**Action:** Reenter the command using a linkset name that is datafilled in the C7GTWLKS table. |
| `<linkset_name> <link_number> IS NOT DATAFILLED IN TABLE C7LINK` | **Meaning:** You specified a linkset name and link number that are not datafilled in the C7LINK table.<br><br>**Action:** Reenter the command using a linkset name and link number that are datafilled in the C7LINK table. |
| `<linkset_name> <link_number> IS NOT RESPONDING. REASON:` | **Meaning:** The specified link did not receive the verification message. The reason for the failure is displayed. Although the screen process was completed, there is no output displayed.<br><br>**Action:** Retry the screen command. If the problem continues, contact second level support. |
| `<linkset_name> <link_number>: LIU7 IS NOT IN SERVICE` | **Meaning:** You specified an LIU7 that is not in service.<br><br>**Action:** Reenter the command using an LIU7 that is in service. Or, put the LIU7 into the in-service state and reenter the command. |

**-continued-**

## screen (continued)

**Responses for the screen command** (continued)

| MAP output | Meaning and action |
|---|---|
| `<number> screening functions were performed:`<br>`screening started\|continued with function <funct>`<br>`screening error occurred because <error msg>`<br>or<br>`screening was aborted because <error msg>`<br>or<br>`screening  ended`<br>or<br>`screening failed because <error msg>` | **Meaning:** This message contains details about the screening applied to the verification message. The first line shows the number of screening functions performed. The second line (or lines depending on the number of functions performed) lists the functions performed. The third line shows the result of the screening procedure and describes any associated screening error.<br><br>The meaning of each result line is listed below.<br><br>▪ screening error occurred because <error msg><br>The message was allowed to proceed.<br><br>▪ screening was aborted because <error msg><br>The message was allowed to proceed.<br><br>▪ screening ended<br>The message was allowed to proceed.<br><br>▪ screening failed because <error msg><br>The message was discarded.<br><br>**Action:** None |
| `SENDING VERIFICATION MESSAGE TO <linkset_name> <link_number>`<br>`verification message` | **Meaning:** The message is being sent to the specified linkset and link number. The verification message is displayed in hexadecimal format on the second line of the response.<br><br>**Action:** None |

**-continued-**

# screen (end)

**Responses for the screen command** (continued)

| MAP output | Meaning and action |
|---|---|
| THERE IS NO VERIFICATION MESSAGE DEFINED<br>NO MESSAGE SENT | **Meaning:** There is no verification message to be sent currently displayed on the MAP. The system cancels the screen command.<br><br>**Action:** Either post a message from the verification message table or build a verification message that can be screened. |
| UNABLE TO SEND <linkset_name> <link_number>. REASON: | **Meaning:** The system could not send the verification message to the specified link. The reason for the failure is displayed. The system cancels the screen command.<br><br>**Action:** Retry the screen command. If the problem continues, contact second level support. |
| WARNING: SCREENING IS ENABLED ON LINKSET <linkset_name><br>C7GTWSCR OMs WILL BE AFFECTED | **Meaning:** You specified a linkset name and link number with screening enabled, which means that OMs will be affected.<br><br>**Action:** If you do not want the OMs to be affected, make sure the ENABLED field in the C7GTWLKS table is datafilled with the value “n”. Otherwise, no action is required. |
| WARNING: GT FORMAT=0001 NATURE OF ADDRESS ONLY<br>TRANSLATION TYPE <trans type> WILL NOT BE PRESENT IN THE MESSAGE | **Meaning:** You entered a GT format indicator of 0001, which means nature of address only, for a CCITT SCCP message. The system continues to execute the screen command. This response is a warning only. The selected translation type entered as part of the setcdpa command will not be used as part of the message.<br><br>**Action:** If you want to use the translation type as part of the CCITT SCCP message, select a different GT format indicator. Otherwise, disregard the response. |

**-end-**

# setafpc

## Function

Use the setafpc command to set the affected point code and subsystem number for the signaling connection control part management (SCMG) field in the message template.

**setafpc command parameters and variables**

| Command | Parameters and variables | | | | | |
|---|---|---|---|---|---|---|
| **setafpc** | *ssnum* | ansi7 | network | *network* | | |
| | | | cluster | *network* | *cluster* | |
| | | | full | *network* | *cluster* | *member* |
| | | ccitt7 | basic | *pc* | | |
| | | | intl | *zone* | *areanetw* | *sigpoint* |

| Parameters and variables | Description |
|---|---|
| ansi7 | This parameter specifies that the affected point code has an ANSI7 network type. |
| *areanetw* | This variable specifies the area network of the affected point code for a CCITT7 network type. The area network number ranges from 0-255. |
| basic | This parameter specifies that the scope of the CCITT7 network type is basic. |
| ccitt7 | This parameter specifies that the affected point code has a network type of CCITT7. |
| cluster | This parameter specifies that the scope of the ANSI network type is cluster. |
| *cluster* | This variable specifies the cluster of the affected point code for ANSI7 network type. The cluster number ranges from 0-255. |
| full | This parameter specifies that the scope of the ANSI network type is full. |
| intl | This parameter specifies that the scope of the CCITT7 network type is international. |
| *member* | This variable specifies the member of the affected point code for ANSI7 network type. The member number ranges from 0-255. |
| network | This parameter specifies that the scope of an ANSI network type is network. |
| *network* | This variable specifies the network of the affected point code for ANSI7 network type. The network number ranges from 0-255. |

**-continued-**

## setafpc (continued)

**setafpc command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *pc* | This variable specifies the point code of the affected point code for CCITT7 network type. The point code number ranges from 0-16383. |
| *sigpoint* | This variable specifies the signaling point of the affected point code for CCITT7 network type. The signaling point number ranges from 0-255. |
| *ssnum* | This variable specifies the subsystem number (SSN), ranging from 0-255. |
| *zone* | This variable specifies the zone of the affected point code for CCITT7 network type. The zone number ranges from 0-7. |

**-end-**

## Qualifications

The setafpc command is qualified by the following exceptions, restrictions, and limitations:

- When you use this command, the old data is overwritten by the new data you enter.
- The called party address subsystem number must be set to 1 before you can set the affected point code and subsystem number for the SCMG field. Use the setcdpa command.

## Examples

The following table provides examples of the setafpc command.

**Examples of the setafpc command**

| Example | Task, response, and explanation |
|---|---|
| **setafpc 34 ccitt7 basic 3456** ↵<br>*where*<br><br>34 is the subsystem number<br>ccitt7 indicates that the scope of the network for the affected point code is CCITT7<br>basic indicates the scope of the CCITT7 network is basic<br>3456 is the point code number | **Task:** Set the affected point codes in the SCCP management fields with a CCITT7 point code and subsystem 34.<br><br>**Response:**<br>`SCMG: MT= 5 SSN= 34 Affected PC= 3456`<br><br>**Explanation:** The system updates the SCMG SSN and Affected PC fields with the new data specified in the setafpc command string. |
| **setafpc 123 ansi7 network 4** ↵<br>*where*<br><br>123 is the subsystem number<br>ansi7 is the network type for the affected point code<br>network 4 is the network number | **Task:** Set the affected point codes in the SCCP management fields with an ANSI7 point code and subsystem 123.<br><br>**Response:**<br>`SCMG: MT= 5 SSN= 123 Affected PC= ANSI7 NETWORK 4`<br><br>**Explanation:** The system updates the SCMG SSN and Affected PC fields with the new data specified in the setafpc command string. |

## Responses

The following table provides explanations of the responses to the setafpc command. A generic name for a value or number, such as message_type, indicates where an actual value or number appears on the MAP display.

# setafpc (end)

**Responses for the setafpc command**

| MAP output | Meaning and action |
|---|---|
| `SCMG: MT= <message_type> SSN= <subsystem_number> Affected PC= <pc_number>` | **Meaning:** The system updates the SCMG SSN and Affected PC fields with the new data entered by using the setafpc command.<br><br>**Action:** None |
| `The CPDA SSN IS NOT SCMG (1)` | **Meaning:** For SCCP management messages, the system cannot update the SCMG field unless the subsystem number (SSN) of the called party address is set to 1.<br><br>**Action:** Use the setcdpa (called party address) command to set the subsystem number to 1. |
| `Command invalid` | **Meaning:** The setafpc command is not available from the currently displayed MAP level. The setafpc command is only available from the SCCP management level of the C7MSUVER MAP level.<br><br>**Action:** Access the SCCP sublevel from the C7MSUVER level by setting the service indicator field of the SIO to 3, using the setsio command. |

# setcdpa

## Function

Use the setcdpa command to set the SCCP called party address (CDPA) fields in the verification message template.

**setcdpa command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **setcdpa** | [ nossn / ssn *ss_num* ] [ nogt / gt *format* *type* ] gt / ssn |

| Parameters and variables | Description |
|---|---|
| *format* | This variable, ranging from 1-15, specifies the number of the global title format. |
| gt | This parameter, global title, specifies two things, depending on its location in the command string. When preceded by a subsystem number, it indicates that the global title for the subsystem will appear in the message. When preceded by the gt *type* variable or the nogt parameter, it represents a global title translation routing type. |
| nogt | This parameter specifies that the global title for the subsystem will not appear in the message. |
| nossn | This parameter specifies that the subsystem number will not appear in the message. |
| ssn | This parameter, subsystem number, specifies two things, depending on its location in the command string. When preceded by the setcdpa command, it indicates that the subsystem number will appear in the message. When preceded by either the nogt parameter or the gt *type* variable, it represents a subsystem number routing type. |
| *ss_num* | This variable, ranging from 0-255, specifies the number of the subsystem to appear in the message. |
| *type* | This variable, ranging from 0-255, specifies the number of the global title translation type. |

## Qualifications

The setcdpa command is qualified by the following exceptions, restrictions, and limitations:

- Any old data is overwritten by the new data you enter.

## setcdpa (continued)

- This command can only be accessed from the SCCP sublevel. You can access this sublevel by setting the service indicator field in the service information octet to 3.

## Examples

The following table provides examples of the setcdpa command.

**Examples of the setcdpa command**

| Example | Task, response, and explanation |
|---|---|
| **setcdpa ssn 12 gt 2 45 gt** ↵<br>*where*<br><br>ssn 12 specifies subsystem 12<br>gt 2 45 specifies global title format 2, global title translation type 45<br>gt specifies global title translation routing | **Task:** Set the SCCP CDPA to subsystem 12, with a global title format 2, global title translation type 45, and global title routing type.<br><br>**Response:**<br><br>`CDPA: SSN= 12 GT Format= 2 Trans Type= 45`<br>`Routing= GT`<br><br>**Explanation:** The system sets the CDPA to the specifications you entered. The system updates the display headers for the CDPA fields in the message template. |

**-continued-**

**Examples of the setcdpa command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **setcdpa nossn nogt ssn** ↵<br>*where*<br><br>nossn indicates no subsystem number will appear in the message<br>nogt indicates no global title number will appear in the message<br>ssn specifies subsystem routing | **Task:** Set the SCCP CDPA fields to indicate no subsystem, no global title translation, and subsystem routing type.<br><br>**Response:**<br><br>`CDPA: SSN= 0 GT Format= 0 Trans Type= 0`<br>`Routing= SSN`<br><br>**Explanation:** The system sets the CDPA to the specifications you entered. The system updates the display headers for the CDPA fields in the message template. |

**-end-**

## Responses

The following table provides explanations of the responses to the setcdpa command. A generic name for a value or number, such as format_number, indicates where an actual value or number appears on the MAP display.

**Responses for the setcdpa command**

| MAP output | Meaning and action |
|---|---|
| `CDPA:SSN= <ss_number> GT Format= <format_number> Trans Type=<type_number>`<br>`Routing= <routing_indicator>` | **Meaning:** The system updates the CDPA fields in the message template with the specified attributes you entered.<br><br>**Action:** None |

**-continued-**

# setcdpa (end)

**Responses for the setcdpa command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Command invalid` | **Meaning:** The setcdpa command is not available from the currently displayed MAP level. The setcdpa command is only available from the SCCP management level of the C7MSUVER MAP level.<br><br>**Action:** Access the SCCP sublevel from the C7MSUVER level by setting the service indicator field of the SIO to 3, using the setsio command. |

**-end-**

# setcgpa

## Function

Use the setcgpa command to set the SCCP calling party address (CGPA) of the verification message.

**setcgpa command parameters and variables**

| Command | Parameters and variables | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **setcgpa** | nossn | | nopc | | | | | (1) |
| | ssn | *ssnum* | pc | ansi7 | network | *network* | | (2) |
| | | | | | cluster | *cluster* | | (3) |
| | | | | | full | *network* | | (4) |
| | | | | ccitt7 | basic | *pc* | | (5) |
| | | | | | intl | *zone* | | (6) |

| Command | | | | | |
|---|---|---|---|---|---|
| **setcgpa** (continued) | (1) | | | | |
| | (2) | | | | |
| | (3) | *member* | | | |
| | (4) | *cluster* | *member* | | |
| | (5) | | | | |
| | (6) | *areantw* | *sigpoint* | | (end) |

| Parameters and variables | Description |
|---|---|
| ansi7 | This parameter specifies that the affected point code is an ANSI7 network type. |
| *areantw* | This variable specifies the area network of the destination field for a CCITT7 network type. The area network number ranges from 0-255. |
| basic | This parameter specifies that the format of the CCITT7 network type is basic. |
| ccitt7 | This parameter specifies that the affected point code is a CCITT7 network type. |
| cluster | This parameter specifies that the scope of the ANSI network type is cluster. |
| *cluster* | This variable specifies the cluster of the specified point code for ANSI7 network type. The cluster number ranges from 0-255. |
| full | This parameter specifies that the scope of the ANSI network type is full. |
| intl | This parameter specifies that the format of the CCITT7 network type is international. |

**-continued-**

## setcgpa (continued)

**setcgpa command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *member* | This variable specifies the member of the affected point code for ANSI7 network type. The member number ranges from 0-255. |
| network | This parameter specifies that the scope of the specified point code of an ANSI network is network. |
| *network* | This variable specifies the network of the affected point code for ANSI7 network type. The network number ranges from 0-255. |
| nopc | This parameter specifies that no point code will appear in the message template. |
| nossn | This parameter specifies that no subsystem number will appear in the message template. |
| pc | This parameter specifies that a point code will appear in the message template. |
| *pc* | This variable specifies the point code of the affected point code for CCITT7 network type. The point code number ranges from 0-16383. |
| *sigpoint* | This variable specifies the signaling point of the affected point code for CCITT7 network type. The signaling point number ranges from 0-255. |
| ssn | This parameter specifies that a subsystem type will appear in the message template. |
| *ssnum* | This variable specifies the subsystem number, ranging from 0-255. |
| *zone* | This variable specifies the zone of the affected point code for CCITT7 network type. The zone number ranges from 0-7. |

**-end-**

## Qualifications

The setcgpa command is qualified by the following exceptions, restrictions, and limitations:

- Any old data is overwritten by the new data you enter.
- When specifying the scope of the ANSI7 network, use the parameters network, cluster, or full. When using the network parameter, the system assigns a nil value to the cluster and member fields. Likewise, when using the cluster parameter, the system assigns a nil value to the member field. These nil values are indicated on the MAP display by the dollar ($) symbol.

- You can access the setcgpa command only through the SCCP sublevel of the C7MSUVER MAP level. To access the SCCP sublevel, you must set the service indicator field of the SIO to 3, using the setsio command.

## Example

The following table provides an example of the setcgpa command.

**Example of the setcgpa command**

| Example | Task, response, and explanation |
|---|---|
| **setcgpa ssn 123 pc ansi7 full 2 3 4** ↵<br>*where*<br><br>ssn 123<br>pc<br>ansi7<br>full<br><br>2 3 4 | <br><br>specifies the subsystem number<br>specifies the point code<br>specifies the ANSI7 network type<br>specifies that the point code will be listed in the full ANSI7 format of network, cluster, and member<br>indicates network 2, cluster 3, and member 4 |

**Task:** Set the calling party address by specifying the point code in full ANSI7 format and giving the subsystem number.

**Response:**

```
CGPA:  SSN=  123     PC=  ANSI7  FULL  2  3  4
```

**Explanation:** The system updates the CGPA headers to show the new setting for the calling party address point code.

## Responses

The following table provides explanations of the responses to the setcgpa command. A generic name for a value or number, such as ntwrk_type, indicates where an actual value or number appears on the MAP display.

# setcgpa (end)

**Responses for the setcgpa command**

| MAP output | Meaning and action |
|---|---|
| `CGPA: SSN= <subsystem_number> PC= <ntwrk_type> <ntwrk_format>` | **Meaning:** The system updates the subsystem and point code fields of the calling party address field with the data you enter using the setcgpa command.<br><br>**Action:** None |
| `Command invalid` | **Meaning:** The setcgpa command is not available from the currently displayed MAP level. The setcgpa command is only available from the SCCP management level of the C7MSUVER MAP level.<br><br>**Action:** Access the SCCP sublevel from the C7MSUVER level by setting the service indicator field of the SIO to 3, using the setsio command. |

# setdest

## Function

Use the setdest command to set the signaling network management (SNM) destination field in the message template.

**setdest command parameters and variables**

| Command | Parameters and variables | | | | |
|---|---|---|---|---|---|
| **setdest** | ansi7 | network | *network* | | |
| | | cluster | *network* | *cluster* | |
| | | full | *network* | *cluster* | *member* |
| | ccitt7 | basic | *pc* | | |
| | | intl | *zone* | *areanetw* | *sigpoint* |

| Parameters and variables | Description |
|---|---|
| ansi7 | This parameter specifies that the destination field has an ANSI7 network type. |
| *areanetw* | This variable specifies the area network of the destination field for a CCITT7 network type. The area network number ranges from 0-255. |
| basic | This parameter specifies that the format of the CCITT7 network type is basic. |
| ccitt7 | This parameter specifies that the destination field has a network type of CCITT7. |
| cluster | This parameter specifies that the scope of the ANSI network type is cluster. |
| *cluster* | This variable specifies the cluster of the destination field for ANSI7 network type. The cluster number ranges from 0-255. |
| full | This parameter specifies that the scope of the ANSI network type is full. |
| intl | This parameter specifies that the format of the CCITT7 network type is international. |
| *member* | This variable specifies the member of the destination field for ANSI7 network type. The member number ranges from 0-255. |
| network | This parameter specifies that the scope of an ANSI network type is network. |
| *network* | This variable specifies the network of the destination field for ANSI7 network type. The network number ranges from 0-255. |

**-continued-**

# setdest (continued)

**setdest command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *pc* | This variable specifies the point code of the destination field for CCITT7 network type. The point code number ranges from 0-16383. |
| *sigpoint* | This variable specifies the signaling point of the destination field for CCITT7 network type. The signaling point number ranges from 0-255. |
| *zone* | This variable specifies the zone of the destination field for CCITT7 network type. The zone number ranges from 0-7. |

**-end-**

## Qualifications

The setdest command is qualified by the following exceptions, restrictions, and limitations:

- Any old data in the destination field is overwritten by the new data you enter.
- The setdest command is only applicable to the SNM sublevel of the C7MSUVER level. To access the SNM sublevel, you must set the service indicator field to 0, 1, or 2, using the setsio command.

## Examples

The following table provides examples of the setdest command.

**Examples of the setdest command**

**Example** **Task, response, and explanation**

**setdest ansi7 network 1** ↵
*where*

ansi7 indicates the message format
network specifies that the scope of the ANSI format is a network
1 specifies the particular network for the message destination

**Task:** Set the destination field in the SNM message template as ANSI format for network 1.

**Response:**

```
SNM: H0=  0   H1=  0    Dest Field=  ANSI7 NETWORK 1
```

**Explanation:** The destination field is set for ANSI7 NETWORK 1. The system updates the Dest Field display header.

**setdest ccitt7 intl 1 2 3** ↵
*where*

ccitt7 indicates the message format
intl specifies that the scope of the CCITT7 format is international
1 2 3 specifies the zone, area network, and signaling point for the CCITT7 message destination

**Task:** Set the destination field in the SNM message template as CCITT7 for an international network with zone 1, area network 2, and signaling point 3.

**Response:**

```
SNM: H0=  0   H1=  0    Dest Field=  CCITT7 INTL 1 2 3
```

**Explanation:** The destination field is set for CCITT7 INTL 1 2 3. The system updates the Dest Field display header.

## Responses

The following table provides explanations of the responses to the setdest command. A generic name for a value or number, such as network_type, indicates where an actual value or number appears on the MAP display.

# setdest (end)

**Responses for the setdest command**

| MAP output | Meaning and action |
|---|---|
| `SNM: H0= 0 H1= 0 Dest Field= <network_type> <network_scope>` | **Meaning:** The system updates the Dest Field display header with the specified destination code. The ansi7 and ccitt parameters represent the network type. The network, cluster, and full parameters, along with the network and member variables, represent the network scope.<br><br>**Action:** None |
| `Command invalid` | **Meaning:** The setdest command is not available for the currently displayed MAP level. The setdest command is only applicable to the SNM sublevel of the C7MSUVER level.<br><br>**Action:** None |

# setdpc

## Function

Use the setdpc command to set the destination point code (DPC) field in the message signal unit. The designated destination point code appears in the message template.

**setdpc command parameters and variables**

| Command | Parameters and variables | | | | |
|---|---|---|---|---|---|
| **setdpc** | ansi7 | network | *network* | | |
| | | cluster | *network* | *cluster* | |
| | | full | *network* | *cluster* | *member* |
| | ccitt7 | basic | *pc* | | |
| | | intl | *zone* | *areanetw* | *sigpoint* |

| Parameters and variables | Description |
|---|---|
| ansi7 | This parameter specifies that the destination point code has an ANSI7 network type. |
| *areanetw* | This variable specifies the area network of the destination point code for a CCITT7 network type. The area network number ranges from 0-255. |
| basic | This parameter specifies that the format of the CCITT7 network type is basic. |
| ccitt7 | This parameter specifies that the destination point code has a network type of CCITT7. |
| cluster | This parameter specifies that the scope of the ANSI network type is cluster. |
| *cluster* | This variable specifies the cluster of the destination point code for ANSI7 network type. The cluster number ranges from 0-255. |
| full | This parameter specifies that the scope of the ANSI network type is full. |
| intl | This parameter specifies that the format of the CCITT7 network type is international. |
| *member* | This variable specifies the member of the destination point code for ANSI7 network type. The member number ranges from 0-255. |
| network | This parameter specifies that the scope of an ANSI network type is network. |

**-continued-**

# setdpc (continued)

**setdpc command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *network* | This variable specifies the network of the destination point code for ANSI7 network type. The network number ranges from 0-255. |
| *pc* | This variable specifies the point code of the destination point code for CCITT7 network type. The point code number ranges from 0-16383. |
| *sigpoint* | This variable specifies the signaling point of the destination point code for CCITT7 network type. The signaling point number ranges from 0-255. |
| *zone* | This variable specifies the zone of the destination point code for CCITT7 network type. The zone number ranges from 0-7. |

**-end-**

## Qualification

When you use this command, the old data is overwritten by the new data you enter.

## Example

The following table provides an example of the setdpc command.

**Example of the setdpc command**

**Example** **Task, response, and explanation**

**setdpc ansi7 full 1 1 1** ↵
*where*

ansi7 indicates the network type
full indicates that the scope of the ANSI7 network is the network, cluster, and member
1 1 1 indicates the number of the network, cluster, and member, in that order

**Task:** Set the destination point code with the value for an ANSI7 network at network 1, cluster 1, and member 1.

**Response:**
```
DPC: ANSI7 001 001 001
```

**Explanation:** The system updates the destination point code field in the message template.

## Response

The following table provides an explanation of the response to the setdpc command. A generic name for a value or number, such as scope_name, indicates where an actual value or number appears on the MAP display.

**Response for the setdpc command**

| MAP output | Meaning and action |
|---|---|
| `DPC: ANSI7 <scope_name> <scope_number>`<br>or<br>`DPC: CCITT7 <format> <format_number>` | **Meaning:** The system updates the DPC field with the information you specified in the command string.<br><br>**Action:** None |

# seth0h1

## Function

Use the seth0h1 command to set the H0 and H1 header fields of the message signal unit. The designated H0 and H1 codes appear on the MAP display in the message template. The H0 field specifies the message group, and the H1 field contains signal codes for the message being built.

**seth0h1 command parameters and variables**

| Command | Parameters and variables | |
|---|---|---|
| **seth0h1** | *h0code* | *h1code* |

| Parameters and variables | Description |
|---|---|
| *h0code* | This variable, ranging from 0-15, sets the H0 field in the message signal unit. |
| *h1code* | This variable, ranging from 0-15, sets the H1 field in the message signal unit. |

## Qualifications

The seth0h1 command is qualified by the following exceptions, restrictions, and limitations:

- The H0 and H1 fields only apply to SNM and TUP messages. Use the setsio command to access the SNM and TUP displays.
- When the SNM or TUP MAP displays appear, the default value of zero appears in both the H0 and H1 fields. Unless the fields are modified, the default values remain in the message when sent to the LIU7 for screening. However, when you enter the seth0h1 command, the system requires input.

## Example

The following table provides an example of the seth0h1 command.

# seth0h1 (end)

**Example of the seth0h1 command**

| Example | Task, response, and explanation |
|---|---|
| **seth0h1 1 0** ↵<br>*where*<br><br>1 specifies that the value 1 be placed in the H0 field<br>0 specifies that the value 0 be placed in the H1 field | **Task:** Set the H0 field with value 1 and the H1 field with value 0.<br><br>**Response:** `H0= 1 H1= 0`<br><br>**Explanation:** The system updates the message template with the specified h0 and h1 values. |

## Response

The following table provides an explanation of the response to the seth0h1 command. The terms h0_code and h1_code represent the actual values for the message fields.

**Response for the seth0h1 command**

| MAP output | Meaning and action |
|---|---|
| `H0= <h0_code> H1= <h1_code>` | **Meaning:** The message template shows the values set for the H0 and H1 fields.<br><br>**Action:** None |

# setopc

## Function

Use the setopc command to set the origination point code (OPC) field in the message signal unit. The designated OPC then appears in the message template.

**setopc command parameters and variables**

| Command | Parameters and variables | | | | |
|---|---|---|---|---|---|
| **setopc** | ansi7 | network | *network* | | |
| | | cluster | *network* | *cluster* | |
| | | full | *network* | *cluster* | *member* |
| | ccitt7 | basic | *pc* | | |
| | | intl | *zone* | *areanetw* | *sigpoint* |

| Parameters and variables | Description |
|---|---|
| ansi7 | This parameter specifies that the origination point code has an ANSI7 network type. |
| *areanetw* | This variable specifies the area network of the origination point code for a CCITT7 network type. The area network number ranges from 0-255. |
| basic | This parameter specifies that the format of the CCITT7 network type is basic. |
| ccitt7 | This parameter specifies that the origination point code has a network type of CCITT7. |
| cluster | This parameter specifies that the scope of the ANSI network type is cluster. |
| *cluster* | This variable specifies the cluster of the origination point code for ANSI7 network type. The cluster number ranges from 0-255. |
| full | This parameter specifies that the scope of the ANSI network type is full. |
| intl | This parameter specifies that the format of the CCITT7 network type is international. |
| *member* | This variable specifies the member of the origination point code for ANSI7 network type. The member number ranges from 0-255. |
| network | This parameter specifies that the scope of an ANSI network type is network. |

**-continued-**

# setopc (continued)

**setopc command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *network* | This variable specifies the network of the origination point code for ANSI7 network type. The network number ranges from 0-255. |
| *pc* | This variable specifies the point code of the origination point code for CCITT7 network type. The point code number ranges from 0-16383. |
| *sigpoint* | This variable specifies the signaling point of the origination point code for CCITT7 network type. The signaling point number ranges from 0-255. |
| *zone* | This variable specifies the zone of the origination point code for CCITT7 network type. The zone number ranges from 0-7. |

**-end-**

## Qualification

When you use this command, any old data is overwritten by the new data you enter.

## Example

The following table provides an example of the setopc command.

**Example of the setopc command**

**Example** **Task, response, and explanation**

**setopc ccitt7 intl 1 2 3** ↵
*where*

ccitt7 specifies the CCITT7 network type
intl specifies the scope of the CCITT7 network
1 2 3 specifies zone 1, area network 2, and signal point 3

**Task:** Set the OPC as CCITT7 INTL network, zone 1, area network 2, and signal point 3.

**Response:**
```
OPC: CCITT7 INTL 1 002 3
```

**Explanation:** The system updates the origination point code field in the message template.

## Response

The following table provides an explanation of the response to the setopc command. A generic name for a value or number, such as scope_name, indicates where an actual value or number appears on the MAP display.

**Response for the setopc command**

| MAP output | Meaning and action |
|---|---|
| `OPC: ANSI7 <scope_name> <scope_number>`<br>or<br>`OPC: CCITT7 <format> <format_number>` | **Meaning:** The system updates the OPC field with the information you specified in the command string.<br><br>**Action:** None |

# setscmg

## Function

Use the setscmg command to set the SCCP management fields in the message template.

**setscmg command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **setscmg** | *msgtype* |

| Parameters and variables | Description |
|---|---|
| *msgtype* | This variable specifies the message type to appear in the signaling connection control part management (SCMG) field of the message template. The message type ranges from 0-255. |

## Qualifications

The setscmg command is qualified by the following exceptions, restrictions, and limitations:

- Any old data in the SCMG field is overwritten by the new data you enter using the setscmg command.
- You can access the setscmg command through the SCCP sublevel of the C7MSUVER MAP level only. To access the SCCP sublevel, you must set the service indicator field of the service information octet to 3, using the setsio command.
- To set the SCMG field, the subsystem number (SSN) of the called party address (CDPA) must be set to 1. When the CDPA SSN is set to 1, the system automatically sets the scmg mt field to 0.

## Example

The following table provides an example of the setscmg command.

## setscmg (continued)

**Example of the setscmg command**

| Example | Task, response, and explanation |
|---|---|
| **setscmg 5** ↵<br>*where*<br><br>5 indicates message type 5 | **Task:** Set the SCMG message type to 5.<br><br>**Response:**<br><br>`SCMG: MT= 5 SSN= Affected PC=`<br><br>**Explanation:** The system updates the message type in the SCMG field. |

## Responses

The following table provides explanations of the responses to the setscmg command. The term message_type indicates where an actual message number appears on the MAP display.

**Responses for the setscmg command**

| MAP output | Meaning and action |
|---|---|
| `SCMG: MT= <message_type> SSN= Affected PC=` | **Meaning:** The system displays the new message type in the SCMG MT field of the message template.<br><br>**Action:** None |
| `The CPDA SSN IS NOT SCMG (1)` | **Meaning:** For SCCP management messages, the system cannot update the SCMG field unless the subsystem number (SSN) of the called party address is set to 1.<br><br>**Action:** Use the setcdpa (called party address) command to set the subsystem number to 1. |

**-continued-**

# setscmg (end)

**Responses for the setscmg command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Command invalid` | **Meaning:** The setscmg command is not available from the currently displayed MAP level. The setscmg command is only available from the SCCP management level of the C7MSUVER MAP level.<br><br>**Action:** Access the SCCP sublevel from the C7MSUVER level by setting the service indicator field of the service information octet to 3, using the setsio command. |

**-end-**

# setsio

## Function

Use the setsio command to set the service information octet (SIO) fields in the message template.

**setsio command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **setsio** | *netwrk_ind* *priority* *service_ind* |

| Parameters and variables | Description |
|---|---|
| *netwrk_ind* | This variable specifies the network from which the message signal unit (MSU) originated. The following codes, 0-3, referred to as network indicators (NI), represent the four network types:<br>▪ 0-international network<br>▪ 1-international network (spare)<br>▪ 2-national network<br>▪ 3-national network (spare) |

**-continued-**

## setsio (continued)

**setsio command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *priority* | This variable, ranging from 0-3, specifies the priority of the message. Priority 0 indicates the lowest priority. |
| *service_ind* | This variable, ranging from 0-15, specifies the service type of the MSU originated. This variable is often referred to as the service indicator (SI). Values for the service indicator are<br>▪ 0-Signaling Network Management (SNM)<br>▪ 1-SNM testing<br>▪ 2-SNM testing special<br>▪ 3-Signaling Connection Control Part (SCCP)<br>▪ 4-T elephone User Part (TUP)<br>▪ 5-ISDN User Part (ISUP)<br>▪ 6-Data User Part<br>▪ 7-Data User Part Maintenance<br>▪ 15-T elephone User Part Plus<br>Values 8-14 do not have a matching service type. |

**-end-**

## Qualifications

The setsio command is qualified by the following exceptions, restrictions, and limitations:

- Any old data is overwritten by the new data you enter.
- Depending on the SI you enter, you may see a different C7MSUVER MAP display. A new MAP display shows additional message fields and commands corresponding to the service type indicated by the SI number. The following service types have their own C7MSUVER MAP displays:
  - SNM (SI codes 0, 1, and 2)
  - SCCP (SI code 3)
  - TUP (SI code 4)

## Examples

The following table provides examples of the setsio command.

# setsio (continued)

**Examples of the setsio command**

| Example | Task, response, and explanation |
|---|---|

**setsio 3 3 15** ↵
*where*

| | |
|---|---|
| 3 | indicates the national network (spare) type |
| 3 | indicates the highest priority type |
| 15 | indicates the telephone user part plus (TUP+) service type |

**Task:** Set the SIO of a message signal unit for a TUP+ national network spare with the highest priority.

**Response:**

```
Local point code for network indicator 3 is ANSI7 054 055 056

SIO:  Network Ind=  3   Priority=  3     Service=  15
DPC:                                          OPC:
```

**Explanation:** The system displays the local point code for the specified network. Since the specified service indicator does not require additional message fields, the C7MSUVER menu remains the same. The SIO values are updated in the message template.

**-continued-**

# setsio (continued)

**Examples of the setsio command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **setsio 0 0 0** ↵<br>*where*<br><br>0 indicates the international network<br>0 indicates the lowest priority type<br>0 indicates SNM service type | **Task:** Set the SIO of a message signal unit for an SNM international network with low priority.<br><br>**Response:**<br><br>`Local point code for network indicator 0 is CCITT7 INTL 001 002 003`<br><br>`SIO: Network Ind= 0 Priority= 0 Service= 0`<br>`DPC: OPC:`<br>`SNM: H0= H1= Dest Field=`<br><br>**Explanation:** With the service indicator set at 0, the message template and command menu change to reflect the additional fields and commands for the SNM. The SIO values are updated in the message template. |

**-continued-**

# setsio (continued)

**Examples of the setsio command** (continued)

**Example** **Task, response, and explanation**

**setsio 0 0 3** ↵
*where*

0 indicates the international network
0 indicates the lowest priority type
3 indicates SCCP service type

**Task:** Set the SIO of a message signal unit for an SCCP international network with low priority.

**Response:**

```
Local point code for network indicator 0 is CCITT7 INTL 001
002 003

SIO:  Network Ind=  0   Priority=  0  Service=  3
DPC:                                  OPC:
CDPA: SSN=        GT Format=     Trans Type=
   Routing=
CGPA: SSN=        PC=
SCMG: MT=        SSN=      Affected PC=
```

**Explanation:** With the service indicator set at 3, the message template and command menu change to reflect the additional fields and commands for the SCCP message type. The SIO values are updated in the message template.

**-continued-**

## setsio (continued)

**Examples of the setsio command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **setsio 0 0 4** ↵<br>*where*<br><br>0 indicates the international network<br>0 indicates the lowest priority type<br>4 indicates TUP service type | **Task:** Set the SIO of a message signal unit for a TUP international network with low priority.<br><br>**Response:**<br><br>`Local point code for network indicator 0 is CCITT7 INTL 001 002 003`<br><br>`SIO: Network Ind= 0 Priority= 0 Service= 4`<br>`DPC: OPC:`<br>`TUP: H0= H1=`<br><br>**Explanation:** With the service indicator set at 4, the message template and command menu change to reflect the additional fields and commands for the TUP message type. The SIO values are updated in the message template. |

**-end-**

## Responses

The following table provides explanations of the responses to the setsio command. The following generic characters, which do not actually appear on the MAP display, are used in the responses to represent specific numbers:

- ni is the network indicator value
- pc is the point code value

# setsio (end)

**Responses for the setsio command**

| MAP output | Meaning and action |
|---|---|
| `Local point code for network indicator <ni> IS <pc>` | **Meaning:** You entered a valid network indicator. The system displays the network indicator and its corresponding point code. The message template, which shows the values for various message fields, shows the new entries for network indicator, priority, and service indicator.<br><br>**Action:** None |
| `NO local PC in table C7NETWRK for NI <ni>` | **Meaning:** The network indicator value you entered is not in the C7NETWRK table. The specific network indicator value is displayed.<br><br>**Action:** Reenter the message using a valid network indicator. |

# C7RteSet level commands

Use the C7RteSet level of the MAP to display information about or change the state of a routeset.

## Accessing the C7RteSet level

To access the C7RteSet level, enter the following from the CI (command interpreter) level:

**mapci;mtc;ccs;ccs7;c7rteset ↵**

## C7RteSet commands

The commands available at the C7RteSet MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**C7RteSet commands**

| Command | Page |
|---|---|
| bsy | C-989 |
| next | C-993 |
| offl | C-995 |
| post | C-997 |
| queryflt | C-1001 |
| querypc | C-1003 |
| quit | C-1005 |
| rts | C-1009 |

## C7RteSet menu

The following figure shows the C7RteSet menu and status display. The insert with the hidden command is not a visible part of the menu display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


LEVEL           CCS7    CCIS6
 0 Quit           .       .
 2 Post         C7ROUTESET                      LINKSET  TRANSFER
 3              RTE STATE  MODE COST LINKSET  STATE    STATUS
 4
 5
 6
 7 Bsy
 8 RTS
 9 Offl
10
11
12 Next
13
14 QueryFlt
15
16
17
18
```

**Hidden command**

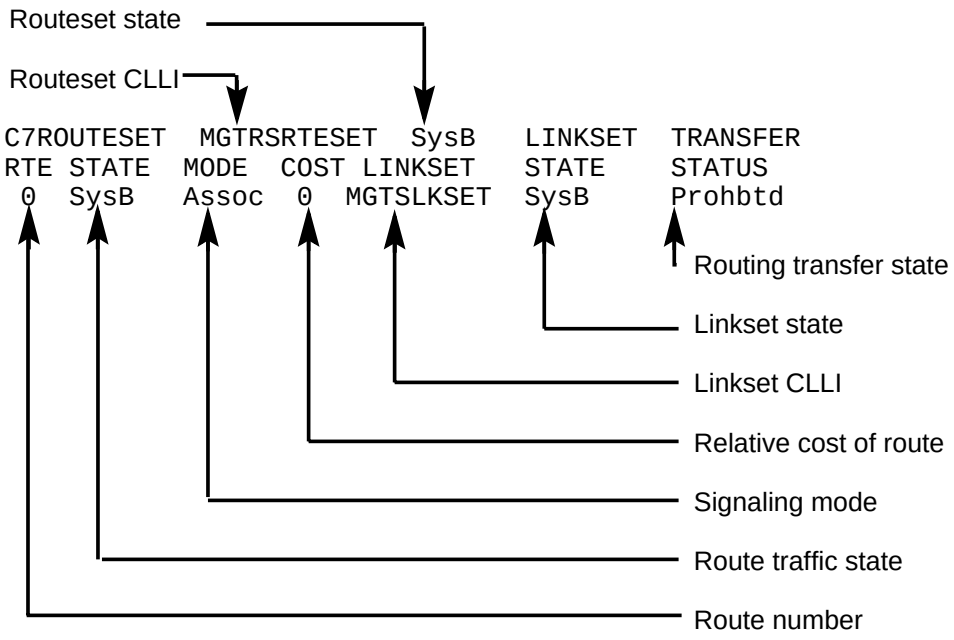
QueryPC

## C7RteSet status codes

The following table describes the status codes for the C7RteSet status display.

**Status codes C7RteSet menu status display**

| Code | Meaning | Description |
|---|---|---|
| (Routeset CLLI) | | |
| | routeset CLLI | The routeset common language location identifier (CLLI) is given.<br>***Note:*** The following figure shows an example of the information that appears in the status area when a routeset is posted and the locations of the status information. The routeset CLLI and routeset state information for the posted route do not appear under identifying headers. |




| | | |
|---|---|---|
| (Routeset state) | | |
| InSv | in service | The routeset is capable of signaling through all of its component routes, with no fault condition on any of the routes. |
| ISTb | in-service trouble | The routeset is capable of carrying traffic, but the service is degraded. The reasons for this state may be one or more of the following:<br>▪ congestion-The routeset is congested locally or in the signaling network, and only priority messages are allowed.<br>▪ route prohibited-Some, but not all, of the routes in the routeset have received a transfer-prohibited signal and are not capable of carrying traffic. |

**-continued-**

**Status codes C7RteSet menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| | | ▪ route restricted-Some or all of the routes in the routeset have received a transfer-restricted signal and are capable of carrying traffic only at a degraded level of service.<br>▪ linkset failure-Some, but not all, of the linksets in the routes are out-of-service. |
| ManB | Manually busy | The routeset is out-of-service and under the control of operating company personnel. |
| Offl | Offline | The routeset is datafilled, but is not available to the signaling system. |
| SysB | System busy | The routeset is unable to deliver messages to its destination. Each route in the routeset is either linkset out-of-service-no local links towards the destination, or the route traffic state is out-of-service-no routes in the network. A failure of the route verification test also sets the SysB state. |
| UnEq | Un-equipped | The routeset is not datafilled and cannot be used until it is. |
| Rte | | |
| 0-5 | Route number | The number of the route in the routeset is given. |
| State | | |
| InSv | In service | The network is able to route signaling traffic at a reliable grade of service. |
| ISTb | In-service trouble | The route can still be used for carrying signaling traffic, but at a degraded level of service. This level of service includes the following restrictions:<br>▪ route restricted-The network has faults in the normal routing paths and can only offer a degraded level of service.<br>▪ controlled rerouting-The level of service in the network has improved and traffic is being rerouted in an orderly manner.<br>▪ forced rerouting-The level of service in the network has been degraded and traffic is being rerouted in an orderly manner. |
| SysB | System Busy | The network is unable to route signaling traffic to their destinations. This may be caused by a number of transmission link faults in the network or by failures in the route verification test. |
| Mode | | |
| Assoc | Associated | The transmission links used by the route are connected to the far-end office by links operating in the associated mode of operation. |
| Quasi | Quasi-associated | The transmission links used by the route are connected to the far-end office by links operating in the quasi-associated mode of operation. |

**-continued-**

**Status codes C7RteSet menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| Cost | | |
| 0-99 | Relative cost | The relative cost of the route is expressed as a number. The lower the number, the lower the cost of using the route. The working routes with the lowest numbers are selected for routing traffic. |
| Linkset | | |
| | Linkset CLLI | The linkset CLLI for the route is given. |
| Linkset State | | |
| InSv | In service | There are enough in-service links in the linkset to satisfy the call-processing software requirements of the switch. The linkset is therefore able to provide a satisfactory traffic capability. |
| ISTb | In-service trouble | Some links are in service or have in-service trouble, but there are not enough in-service links to completely satisfy the call-processing software requirements. The linkset is able to provide service, but with a degraded traffic capability. |
| IInh | Local inhibit | There are no links in the in-service, in-service trouble, or system-busy state, but some are in the local-inhibit state. This is a transitory state, caused by a problem in the near-end office. If a linkset is in the local-inhibit state, the call-processing software automatically attempts to uninhibit the affected links. |
| ManB | Manual busy | There are no links in the in-service, in-service trouble, or system-busy states, but some links are in the manually busy state. The linkset is unable to provide any traffic capability. |
| Offl | Offline | All the links in the linkset are not available for use by the call-processing software. |
| RInh | Remote inhibit | There are no links in the local-inhibit, in-service, in-service trouble, or system-busy state, but there are some that are in the remote inhibit-state. This is a transitory state caused by a problem in the far-end office. If a linkset is in the remote-inhibit state, the call-processing software automatically attempts to uninhibit the affected links. |
| SysB | System busy | The switch does not have any links that have a status of in service or in-service trouble, and some links have a status of system busy. The linkset is unable to provide any traffic capability. |
| UnEq | Un-equipped | All the links in the linkset have been deleted from the system tables. The linkset is unknown to the call-processing software. |

**-continued-**

**Status codes C7RteSet menu status display** (continued)

| Code | Meaning | Description |
|---|---|---|
| Transfer Status | | |
| Allowed | allowed | There is an acceptable grade of service on the route. |
| Prohbtd | prohibited | There is no service on the route, and all messages are discarded if sent. |
| Rstrctd | restricted | Service on the route is degraded, but the route is able to deliver messages. This status only applies to networks using the American National Standards Institute (ANSI) protocol. |
| TFA | transfer allowed | The routing is available. The indication of a restored route arrives from the remote signaling transfer point. |
| TFC | transfer controlled | Discard messages of priority 0 or 1 destined for a specified DPC for a period of 90 seconds. |
| TFP | transfer prohibited | The routing is still available, but at a degraded level of service. |
| TFR | transfer restricted | The routing is not available. Controlled rerouting is also invoked when a route becomes restricted because of a degraded level of service. |

**-end-**

# bsy

## Function

Use the bsy command to change the current state of a posted routeset to the manually busy state.

**bsy command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **bsy** | [ *noforce* \| force ] |

| Parameters and variables | Description |
|---|---|
| force | This parameter forces the posted routeset into the busy state immediately, with the possibility of losing traffic. The system does not attempt to reroute traffic. |
| *noforce* | This default parameter causes the system to refuse the bsy command if placing the routeset in the manually busy state would cause a loss of traffic. Do not enter this parameter. |

## Qualifications

The bsy command is qualified by the following exceptions, restrictions, and limitations:

- Before busying a routeset, use the post command to post the routeset.
- Associated linksets must be in the manually busy state before the routeset can be busied.

## Example

The following table provides an example of the bsy command.

**Example of the bsy command**

| Example | Task, response, and explanation | |
|---|---|---|
| **bsy force** ↵ | | |
| | **Task:** | Busy the posted routeset. |
| | **Response:** | `Passed` |
| | **Explanation:** | The posted routeset is manually busied. |

# bsy (continued)

## Responses

The following table provides explanations of the responses to the bsy command.

**Responses for the bsy command**

| MAP output | Meaning and action |
|---|---|
| `FAILED, Command already requested from another map` | **Meaning:** The system is attempting to complete the bsy command from another MAP.<br><br>**Action:** None |
| `FAILED, No routeset posted` | **Meaning:** There are no routesets posted at the MAP.<br><br>**Action:** Post the required routeset and repeat the bsy command. |
| `Failed, traffic running on routeset` | **Meaning:** Traffic cannot be routed to another routeset. Either there is only one routeset in the system or all other routesets are not able to carry traffic. To busy this routeset the force parameter must be used.<br><br>**Action:** Use the bsy command at the C7LkSet level to busy all linksets in the routeset. If it is essential that the routeset be placed in the manually busy state, enter the bsy command using the force parameter. |
| `Maintenance command in progress` | **Meaning:** The system cannot complete the command at this time because another command is in progress.<br><br>**Action:** Enter the bsy command again later. |
| `Maintenance level already achieved` | **Meaning:** The routeset is already in the busy state.<br><br>**Action:** None |

**-continued-**

# bsy (end)

**Responses for the bsy command** (continued)

| MAP output | Meaning and action |
|---|---|
| `No response from signaling network management` | **Meaning:** There has been no response from signaling network management within the appropriate time period.<br><br>**Action:** Enter the bsy command again. If the problem persists, contact maintenance support personnel. |
| `Passed` | **Meaning:** The routeset has been set to the manually busy state. The states in the display change to reflect the new state of the routeset.<br><br>**Action:** None |

**-end-**

# next

## Function

Use the next command to display the next posted routeset.

**next command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **next** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the next command.

**Example of the next command**

| Example | Task, response, and explanation |
|---|---|
| **next** ↵ | **Task:** Display the next posted routeset.<br><br>**Response:** The status display changes to show the next posted routeset:<br><br>`C7routeset C7RTESET1 SysB Linkset Transfer`<br>`Rte State Mode Cost Linkset State Status`<br>`0 SysB Assoc 0 C7LKSET1 SysB`<br><br>**Explanation:** The display shows the data of the next posted routeset. |

# next (end)

## Responses

The following table provides explanations of the responses to the next command.

**Responses for the next command**

| MAP output | Meaning and action |
|---|---|
| `End of posted set` | **Meaning:** There are no more posted routesets.<br><br>**Action:** None |
| `FAILED, No routeset posted` | **Meaning:** There are no posted routesets.<br><br>**Action:** None |
| `Next not valid with posting by NAME` | **Meaning:** The post command was entered with the c parameter and a routeset_clli variable, so only one routeset was posted. There are no more posted routesets to be displayed.<br><br>**Action:** None |
| The status display changes to show the next posted routeset:<br><br>`C7routeset routeset_clli stat Linkset Transfer`<br>`Rte State Mode Cost Linkset State Status`<br>`0 SysB Assoc 0 C7LKSET1 SysB` | **Meaning:** The information for the next posted routeset is displayed.<br><br>**Action:** None |

# offl

## Function

Use the offl command to remove a routeset from the system maintenance, allowing you to make office data modifications for the routeset.

**offl command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **offl** | There are no parameters or variables. |

## Qualifications

The offl command is qualified by the following exceptions, restrictions, and limitations:

- Routesets must be in the manual-busy state before being taken offline.
- An offline routeset cannot cause an alarm.

## Example

The following table provides an example of the offl command.

**Example of the offl command**

| Example | Task, response, and explanation | |
|---|---|---|
| **offl**↵ | | |
| | **Task:** | Place the posted routeset in the offline state. |
| | **Response:** | `Passed` |
| | **Explanation:** | The posted routeset is in the offline state. |

# offl (end)

## Responses

The following table provides explanations of the responses to the offl command.

**Responses for the offl command**

| MAP output | Meaning and action |
|---|---|
| `FAILED, Routeset not in man busy state` | **Meaning:** The routeset is not in the busy state.<br>**Action:** Use the bsy command to change the routeset state to manually busy, and enter the offl command again. |
| `Maintenance level already achieved` | **Meaning:** The routeset is already in the offline state.<br>**Action:** None |
| `Passed` | **Meaning:** The routeset is in the offline state.<br>**Action:** None |

# post

## Function

Use the post command to select a routeset for maintenance actions and to identify all the routes in the routeset.

**post command parameters and variables**

| Command | Parameters and variables | |
|---|---|---|
| **post** | a | *alarm_state* |
| | c | *routeset_clli* |
| | s | *routeset_state* |

| Parameters and variables | Description |
|---|---|
| a | This parameter specifies that a group of routesets are to be posted and that they will be identified by alarm state. |
| c | This parameter specifies that a single routeset is to be posted and that it will be identified by its common language location identifier (CLLI). |
| s | This parameter specifies that a group of routesets are to be posted and that they will be identified by state. |
| *alarm_state* | This variable specifies the subsystem state code. The following are the possible values:<br>▪ RSC critical alarms<br>▪ RSM major alarms<br>▪ RS minor alarms |
| *routeset_clli* | This variable specifies the routeset CLLI. |
| *routeset_ state* | This variable specifies the routeset state. The following are the possible values:<br>▪ InSv in service<br>▪ ISTb in-service trouble<br>▪ ManB manually busy<br>▪ Offl offline<br>▪ SysB system busy |

# post (continued)

## Qualifications

The post command is qualified by the following exceptions, restrictions and limitations:

- The command string c *routeset* can post only one routeset at a time.
- Posting a routeset does not affect the operation of the routeset.

## Example

The following table provides an example of the post command.

**Example of the post command**

| Example | Task, response, and explanation |
|---|---|
| **post s insv** ↵<br>*where*<br><br>insv indicates the routesets to be posted are those that are in the in-service state | **Task:** Post the routesets that are in the in-service state.<br><br>**Response:** The status display changes to show the posted routeset:<br><br>`C7Routeset MGTSRTESET InSv Linkset Transfer`<br>`Rte State Mode Cost Linkset State Status`<br>`0 InSv Assoc 0 MGTSLKSET InSv`<br><br>**Explanation:** The system has displayed the first routeset of the posted set and the routes in that routeset. If more than one routeset is posted, use the next command to display each of the remaining routesets. |

## Responses

The following table provides explanations of the responses to the post command.

**Responses for the post command**

| MAP output | Meaning and action |
|---|---|
| `End of posted set` | **Meaning:** There are no routesets in the posted set.<br><br>**Action:** None |

**-continued-**

# post (end)

**Responses for the post command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Invalid alarm state entered` | **Meaning:** The variable entered is not a valid alarm state.<br><br>**Action:** None |
| `Invalid routeset state entered` | **Meaning:** The variable entered is not a valid routeset state.<br><br>**Action:** None |
| The status display changes to show the posted routeset:<br><br>`C7routeset MGTRSRTESET SysB Linkset Transfer`<br>`Rte State Mode Cost Linkset State Status`<br>`0 InSv Assoc 0 MGTSLKSET InSv` | **Meaning:** The information for the first posted routeset is displayed. A full explanation of possible display values is given in the introduction to the C7RteSet level.<br><br>**Action:** Use the next command to display each of the remaining routesets. |
| `This CLLI not data filled in c7 routeset table` | **Meaning:** There is no routeset with the specified routeset name in datafill Table C7ROUTESET.<br><br>**Action:** Enter the post command again using a valid routeset name. |
| `This is not a routeset` | **Meaning:** The data entered is not recognized as a linkset CLLI. No routeset is posted.<br><br>**Action:** None |

**-end-**

# queryflt

## Function

Use the queryflt command to display information about the fault status of the route or routes of the posted routeset and to determine why there are traffic problems on a routeset.

**queryflt command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **queryflt** | *route_number* |

| Parameters and variables | Description |
|---|---|
| *route_number* | This variable specifies the route number in a posted routeset. Valid entries are 0-5. |

## Qualifications

None

## Example

The following table provides an example of the queryflt command.

**Example of the queryflt command**

| Example | Task, response, and explanation |
|---|---|
| **queryflt 0** ↵<br>*where*<br><br>0 specifies the route number on the routeset to be queried | |
| | **Task:** Query the fault status of route 0 on the posted routeset. |
| | **Response:** `Route 0: No fault exists on route at the moment` |
| | **Explanation:** The fault status of route 0 is displayed. |

# queryflt (end)

## Responses

The following table provides explanations of the responses to the queryflt command.

**Responses for the queryflt command**

| MAP output | Meaning and action |
|---|---|
| `Route 0: Linkset is not able to carry traffic` | **Meaning:** The route cannot carry traffic because the associated linkset has failed.<br><br>**Action:** Rectify the linkset fault. |
| `Route 1: Linkset offering degraded level of service` | **Meaning:** The route is faulty because the linkset cannot provide sufficient links for the route. Several links in the linkset are not in the in-service state.<br><br>**Action:** Rectify the linkset fault. |
| `Route 3: No fault exists on route at the moment` | **Meaning:** The route is in the in-service state. There is no fault on the specified route.<br><br>**Action:** None |
| `Route number entered not datafilled` | **Meaning:** The specified route number is not datafilled.<br><br>**Action:** Enter the command again using a valid route number. |

# querypc

## Function

Use the querypc command to display the destination point code (DPC) for the posted routeset and the far end point code (FEPC) for the linkset of a route in the posted routeset.

**querypc command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **querypc** | dpc<br>fepc *route_number* |

| Parameters and variables | Description |
|---|---|
| dpc | This parameter directs the system to display the DPC for the posted routeset. |
| fepc | This parameter directs the system to display the FEPC for a linkset in a route in the posted routeset. |
| *route_number* | This variable identifies the route for which the FEPC is to be displayed. Valid entries are 0-5. |

## Qualifications

None

## Example

The following table provides an example of the querypc command.

**Example of the querypc command**

| Example | Task, response, and explanation |
|---|---|
| **querypc fepc 0** ↵<br>*where*<br><br>0 is the route number of the linkset for which an FEPC is to be displayed | **Task:** Display the FEPC for the linkset on route 0 of the posted routeset.<br><br>**Response:**<br>`Linkset Name  Network Name  FEPC`<br>`RTPBLKSET  C7TESTNET  ANSI7 004 005 006`<br><br>**Explanation:** The requested FEPC is displayed. |

# querypc (end)

## Responses

The following table provides explanations of the responses to the querypc command.

**Responses for the querypc command**

| MAP output | Meaning and action |
|---|---|
| `Linkset Name  Network Name  FEPC`<br>`RTPBLKSET  C7TESTNET  ANSI7 004 005 006` | **Meaning:** The requested FEPC is displayed.<br>**Action:** None |
| `Route number entered not datafilled` | **Meaning:** The route number specified is not datafilled. The route is not a valid route.<br>**Action:** Enter the querypc command again using a valid route number. |
| `Routeset Name  Network Name  DPC`<br>`RTPBRTESET  C7TESTNET  ANSI7 004 005 006` | **Meaning:** The requested DPC is displayed.<br>**Action:** None |
| `Wrong number of parameters` | **Meaning:** The querypc command was entered with invalid parameters.<br>**Action:** Enter the querypc command again using valid parameters. |

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | *1*<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| *1* | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualification

None

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the C7RteSet level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The C7RteSet level has changed to the previous menu level. |

**-continued-**

## quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the C7RteSet level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The C7RteSet level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the C7RteSet level menu with a menu that is two or more levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the C7RteSet level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |
| **-end-** | |

# rts

## Function

Use the rts command to return the posted routeset to the InSv state.

**rts command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **rts** | There are no parameters and variables. |

## Qualifications

The rts command is qualified by the following exceptions, restrictions, and limitations:

- If all the routes in a routeset cannot be returned to the InSv (in-service) state, the routeset is put in the ISTb (in-service trouble) state. This indicates that the routeset can only provide degraded service.
- If all routes in a routeset are faulty, the result of the command is still passed, but the routeset state changes to SysB (system busy).

## Example

The following table provides an example of the rts command.

**Example of the rts command**

| Example | Task, response, and explanation | |
|---|---|---|
| **rts** ↵ | | |
| | **Task:** | Return the posted routeset to service. |
| | **Response:** | `Passed` |
| | **Explanation:** | The posted routeset is returned to service. |

# rts (continued)

## Responses

The following table provides explanations of the responses to the rts command.

**Responses for the rts command**

| MAP output | Meaning and action |
|---|---|
| `FAILED, No routeset posted` | **Meaning:** There are no posted routesets.<br><br>**Action:** Post the selected routeset, then enter the rts command again. |
| `Linkset not able to carry traffic` | **Meaning:** The linkset associated with the route is unable to carry traffic. The system has successfully completed the rts command, but because the linkset is unable to carry traffic, the routeset enters or remains in the system-busy state.<br><br>**Action:** Investigate the linkset problem. |
| `Maintenance command in progress` | **Meaning:** The system is unable to initiate the command while the system is busy completing a previous command.<br><br>**Action:** Enter the rts command again. |
| `Maintenance level already achieved` | **Meaning:** The selected routeset has already been returned to service, and is either in the in-service or the in-service trouble state.<br><br>**Action:** None |
| `Passed` | **Meaning:** The system has tested the individual routes and allows the routes to carry traffic. When all routes have passed, the states in the display are upgraded to show the states of the routes and the routeset.<br><br>**Action:** None |

**-continued-**

# rts (end)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| `Routeset not in man busy state` | **Meaning:** The routeset can only be returned to service from the manual-busy state.<br><br>**Action:** Use the bsy command to busy the routeset and enter the rts command again. |

**-end-**

# C7TTP level commands

Use the C7TTP level of the MAP to test and maintain CCS7 trunks.

## Accessing the C7TTP level

To access the C7TTP level, enter the following from the CI level:

**mapci;mtc;trks;ttp;c7ttp ↵**

## C7TTP commands

The commands available at the C7TTP MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

**C7TTP commands**

| Command | Page |
|---|---|
| bsy | C-1015 |
| cic | C-1019 |
| cvtest | C-1021 |
| hold | C-1025 |
| next | C-1027 |
| post | C-1031 |
| qrysig | C-1039 |
| quit | C-1041 |
| rls | C-1045 |
| routeset | C-1047 |
| rts | C-1049 |
| seize | C-1053 |

-continued-

| **C7TTP commands** (continued) | |
|---|---|
| **Command** | **Page** |
| trkqry | C-1055 |
| tst | C-1059 |
| **-end-** | |

## C7TTP menu

The following figure shows the C7TTP menu and status display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .     .     .     .     .     .


C7TTP
 0 Quit       POST    INB DELQ        BUSYQ       DIG
 2 Post_      TTP 6-025
 3 Seize      CKT TYPE  PM NO.   COM LANG  STA S R DOT T E RESULT
 4            OG      TM8 3 25    TVSNVL1  1 MB
 5 Bsy
 6 RTS
 7 Tst
 8
 9
10
11 HOLD
12 Next
13 Rls
14 CVTest
15 TrkQry
16 QrySig
17 RouteSet
18 CIC
```

# bsy

## Function

Use the bsy command to set a circuit to the specified out-of-service state.

**bsy command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **bsy** | [ inb [ all ] ] [ mb [ a ] ] [ sb ] [ all ] [ a ] |

| Parameters and variables | Description |
|---|---|
| a | This parameter specifies that all posted circuits are placed in the busy queue all (BUSYQ ALL) queue to be busied. For circuits that were previously posted by group (the command post g), all circuits in the group are busied. This parameter has the same meaning as the all parameter. When used after inb, mb, or sb, this parameter specifies that the posted trunk be placed in the busy queue (BUSYQ) and put in the specified state when call processing or maintenance action is completed on the trunks. |
| all | This parameter specifies that all posted circuits be placed in the BUSYQ ALL queue to be busied. For circuits that were previously posted by group (the command post g), all circuits in the group are busied. This parameter has the same meaning as the a parameter. When used after inb, mb, or sb, this parameter specifies that the posted trunk be placed in the busy queue (BUSYQ) and put in the specified state when call processing or maintenance action is completed on the trunks. |
| inb | This parameter changes the circuit state to installation busy. |
| mb | This parameter changes the circuit state to manual busy. |
| sb | This parameter changes the circuit state to system busy. |

## Qualifications

The bsy command is qualified by the following exceptions, restrictions, and limitations:

- Busying a circuit makes it unavailable for call processing. Circuits can be busied either manually when maintenance personnel put the circuit into the manual busy (MB) state or automatically when the system performs the same action.
- Manual busy has priority to override any out-of-service state.

## bsy (continued)

- The specified group of circuits or the entire posted set can be busied by placing the circuits in BUSYQ ALL. As circuits become available, they are busied and deleted from the BUSYQ ALL.
- If any circuits in the BUSYQ ALL do not become available within 4 minutes of being queued, the system no longer attempts to busy them.
- When busying transmission links in an office equipped with Common Channel Signaling (CCIS6), CCITT6, and CCS7, an outage of the entire associated trunk group can occur.
- The bsy command is the only command that has an effect on trunks involved in a wideband IT ISUP. If a trunk is call processing busy (CPB) and the bsy command is done on a trunk in the control position, the trunk state is changed to call processing deloaded (CPD). CPD is an indication to call processing software that a trunk is not to be set idle (IDL) when the call is released. The trunk state is changed from CPD to manual busy (MB) and the trunk is no longer available for call processing.
- If the entire wideband IT ISUP trunk group is posted in the control position and the busy all command (BSY ALL) is issued, all trunks that are CPB are changed to CPD and set to MB upon call disconnect.

## Examples

The following table provides examples of the bsy command.

**Examples of the bsy command**

| Example | Task, response, and explanation | |
|---|---|---|
| **bsy inb all** ↵ | | |
| | **Task:** | Place all posted trunks in the busy queue and make them installation busy. |
| | **Response:** | `OK, POST SET IS SET IN BSYQ.` |
| | **Explanation:** | The posted trunks have been placed in the busy queue and made installation busy. |
| **bsy mb** | | |
| | **Task:** | Place all posted trunks in the manually busy state. |
| | **Response:** | `STATE CHANGED.` |
| | **Explanation:** | The posted trunks have been placed in the manually busy state. |

## Responses

The following table provides explanations of the responses to the bsy command.

**Responses for the bsy command**

| MAP output | Meaning and action |
|---|---|
| `A PVC is on this trunk. Use FRLS if necessary.` | **Meaning:** You have accessed an X75 trunk and the trunk has a PVC and the bsy command is used. You may need to use the forced release (FRLS) command. FRLS forces the trunk in the control position to the manual busy state. This message appears on SuperNode only.<br><br>**Action:** The user may opt to use the FRLS command if maintenance action is necessary (the bsy command will not execute). |
| `Failed to seize CKT` | **Meaning:** The command failed to seize a circuit.<br><br>**Action:** None |
| `OK, POST SET IS SET IN BSYQ.` | **Meaning:** The posted trunks have been put in the BUSYQ.<br><br>**Action:** None |
| `STATE CHANGED.` | **Meaning:** The posted trunks have been placed in the state you requested.<br><br>**Action:** None |

# cic

## Function

Use the cic command to display the circuit identification code (CIC) of the posted trunk.

**cic command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **cic** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the cic command.

**Example of the cic command**

| Example | Task, response, and explanation | |
|---|---|---|
| **cic** | | |
| | **Task:** | Display the CIC of the posted trunk. |
| | **Response:** | `Circuit ID Code (CIC) : 1` |
| | **Explanation:** | The CIC of the posted trunk is 1. |

## Responses

The following table provides explanations of the responses to the cic command.

**Responses for the cic command**

| MAP output | Meaning and action |
|---|---|
| `Circuit ID Code (CIC) : 1` | |
| | **Meaning:** The CIC of the posted trunk is 1. |
| | **Action:** None |

**-continued-**

# cic (end)

**Responses for the cic command** (continued)

| MAP output | Meaning and action |
|---|---|
| `FAILED, NO CIRCUIT` | **Meaning:** No circuit is posted.<br>**Action:** Post a circuit and retry the command. |
| `FAILED, NOT A CCS7 TRUNK.` | **Meaning:** The posted circuit is not a CCS7 trunk.<br>**Action:** Post a circuit that contains a CCS7 trunk and retry the command. |
| **-end-** | |

# cvtest

## Function

Use the cvtest command to perform a circuit validation test for a posted trunk.

**cvtest command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **cvtest** | There are no parameters and variables. |

## Qualifications

The cvtest command is qualified by the following exceptions, restrictions, and limitations:

- The circuit validation test is not supported for 1TR7 trunks. 1TR7 ISUP trunks can be tested for continuity by the tst 1TR7 command.
- The cvtest command is not available for the German Intelligent Network SSP.
- The cvtest command is not available for the German Intelligent Networks (GIN) SuperNode Service Switching Point/Signaling Point (SSP).

## Example

The following table provides an example of the cvtest command.

**Example of the cvtest command**

| Example | Task, response, and explanation | |
|---|---|---|
| **cvtest** ↵ | | |
| | **Task:** | Perform a circuit validation test for a posted trunk. |
| | **Response:** | `SUCCEEDED, Glare control data compatible with remote office.` |
| | **Explanation:** | The test was successful and found glare control data compatible with a remote office. |

# cvtest (end)

## Responses

The following table provides explanations of the responses to the cvtest command.

**Responses for the cvtest command**

| MAP output | Meaning and action |
|---|---|
| `FAILED, not datafilled as a CCS7 trunk.` | **Meaning:** The circuit you are trying to test does not have CCS7 datafill.<br><br>**Action:** None |
| `SUCCEEDED, Glare control data compatible with remote office.` | **Meaning:** The test was successful and found glare control data compatible with a remote office.<br><br>**Action:** None |

# groupcmd

## Function

Use the groupcmd command to perform an action on a group of trunks.

**groupcmd command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **groupcmd** | [ bsy<br>rts<br>inb ] |

| Parameters and variables | Description |
|---|---|
| bsy | The busy (BSY) circuit state code represents an installed circuit that has been busied. |
| inb | The installation busy (INB) circuit state code represents an installed circuit that has not been tested. |
| rts | The return to service (RTS) circuit state code represents an installed circuit that has been returned to service. |

## Qualifications

Not currently available

## Examples

Not currently available

## Responses

Not currently available

# hold

## Function

Use the hold command to place the circuit in the control position in the first available hold position.

**hold command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **hold** | There are no parameters and variables. |

## Qualification

The hold command works regardless of the trunk state and has no effect on a wideband IT ISUP call.

## Example

The following table provides an example of the hold command.

**Example of the hold command**

| Example | Task, response, and explanation | |
|---|---|---|
| **hold** | | |
| | **Task:** | You need to place the circuit in the control position in the first available hold position. |
| | **Response:** | `OK, CIRCUIT ON HOLD`<br>`SHORT CLLI IS : CF3P`<br>`OK, CIRCUIT POSTED` |
| | **Explanation:** | You have placed the circuit with the short CLLI of CF3P in the first available hold position. |

# hold (end)

## Response

The following table provides explanations of the response to the hold command.

**Response for the hold command**

| MAP output | Meaning and action |
|---|---|
| OK, CKT ON HOLD | **Meaning:** You have placed the circuit in the control position in the first available hold position.<br><br>**Action:** None |

# next

## Function

Use the next command to place another circuit in the control position.

**next command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **next** | s [ *delq* ]<br>p [ *delttp* ]<br>[ s ] |
| | *hold* [ *delttp* ]<br>[ s ]<br>[ e ] |

| Parameters and variables | Description |
|---|---|
| *delq* | This represents a system default. When only the next command is entered, the system takes the next circuit from the deload queue (DELQ) and places it in the control position. If there are no circuits available from the DELQ, the system takes a circuit from the posted set. |
| *delttp* | This represents a system default. When the parameters s or e are not entered, the system automatically deletes the outgoing circuit (if there is one) from the trunk test position (TTP). |
| e | This parameter exchanges the circuits in the control and hold positions. |
| *hold* | This variable specifies the hold position number from which the circuit is to be taken. The hold position number range is 1-3. |
| p | This parameter ensures that the next circuit to go in the control position is from the posted set, and not from the DELQ. |
| s | This parameter saves the circuit in the outgoing control position in the posted set. When only the next command is entered, the system takes the next circuit from the DELQ and places it in the control position. If there are no circuits available in the DELQ, the circuit is taken from the posted set. |

## Qualifications

The next command is qualified by the following exceptions, restrictions, and limitations:

- Entering the next command without parameters takes the next circuit from the DELQ and places it in the control position. If there are no circuits available in the DELQ, the circuit is taken from the posted set.

## next (continued)

- Without parameters s or e, the outgoing circuit is deleted from the TTP.
- The next command works regardless of the trunk state and has no effect on a wideband IT ISUP call.

## Example

The following table provides an example of the next command.

**Example of the next command**

| Example | Task, response, and explanation |
|---|---|
| **next** | |
| | **Task:** Place the next circuit in the control position. |
| | **Response:**<br>`Next`<br>`POSTED CKT IDLED`<br>`SHORT CLLI IS : CF3P`<br>`OK, CKT POSTED` |
| | **Explanation:** The next circuit has been placed in the control position. The name of the short common language location identifier (clli) is displayed. |

## Response

The following table provides explanations of the response to the next command.

**Response for the next command**

| MAP output | Meaning and action |
|---|---|
| `FAILED, HOLD POSITION IDLE` | |
| | **Meaning:** The command string next 1 is issued but no circuit is held in the first hold position. |
| | **Action:** None |
| `NO CKT, SET IS EMPTY` | |
| | **Meaning:** No circuit has been posted. |
| | **Action:** None |

**-continued-**

# next (end)

**Response for the next command** (continued)

| MAP output | Meaning and action |
|---|---|
| `OK, CKT POSTED` | **Meaning:** The next circuit has been placed in the control position.<br><br>**Action:** Continue entering commands against the circuit you have placed in the control position. |
| `POSTED CKT IDLED` | **Meaning:** The next circuit has been placed in the control position.<br><br>**Action:** Continue entering commands against the circuit you have placed in the control position. |
| `POSTED CKT IDLED`<br>`SHORT CLLI IS: XXXXXXXX`<br>`OK, CKT POSTED` | **Meaning:** The next circuit in the posted set in now placed in the control position. The name of the short clli is displayed.<br><br>**Action:** Continue entering commands against the circuit you have placed in the control position. |

**-end-**

# post

## Function

Use the post command to post one or more circuits for maintenance.

**post command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **post** | a *state* [ *firsttrkgrp* / *clli* ] |
| | b a / b / c / f |
| | cptermerr |
| | d *d_pm* *d_pm_no* *ckt_no* *t_slot* *to t_slot* |
| | e des *des_no* [ b / r / s ] *des_ckt* to *des_ckt* |
| | g [ *clli* / *clnr* ] *ckt* to *ckt* |
| | p *pm* *pm_no* *pm_pos* to *pm_pos* |
| | tm *tm_name* *tm_no* to *tm_no* |
| | s *state* |
| | t *clli* *ckt* .... *ckt* / *cnri1* |
| | tb *clli* m *buffer* / cp [ hc / mr / all ] |
| | wb *clli* *member _#* |

**-continued-**

# post (continued)

**post command parameters and variables**

| Parameters and variables | Description |
|---|---|
| .... | This variable represents a string of circuit numbers. |
| a | This parameter, when preceded by:<br>▪ the b parameter-transfers circuits which are left in the busy queue after the time-out interval from the BUSY ALL queue to the posted set.<br>▪ the post command-posts all DMS-100 Family circuits of a particular state. |
| all | This parameter specifies the entire contents of the maintenance (M) or call processing (CP) buffer. |
| b | This parameter, when preceded by:<br>▪ the b parameter-removes all idle circuits from the posted set, and retains only out-of-service circuits.<br>▪ the post command-posts circuits from one of the two busy queues or the posted set. |
| *buffer* | This variable posts the contents of the M or CP buffer. The *buffer* range is 0-9. |
| c | This parameter transfers circuits from the BUSY CIRCUIT queue to the posted set (up to 10 circuits at a time). |
| *ckt* | This variable represents the circuit number of the trunk group. If two circuit numbers are entered, all circuits from the first number to the second are posted. If only one number is entered, all circuits from that number to the end of the list are posted. The circuit number range is 0-9999. |
| *ckt_no* | This variable represents the circuit number. Its range is 0-19. |
| *clli* | This variable represents the full or short common language location identifier (CLLI) code assigned to a group of circuits or trunk group. When preceded by the command string post a *state*, the trunk group specified by the CLLI is posted first. |
| *clnr* | This variable following the g parameter represents the circuit number of the trunk group. If two circuit numbers are entered, all circuits from the first number to the second number are posted. If only one circuit number is posted, all numbers from that number to the end of the list are posted. If a circuit number is not entered, entering the command post g *clli* posts up to the first 512 circuit in the group. The value is 0-9 999. |
| *cnri1* | This variable following the t parameter represents circuit numbers or test equipment. Up to 10 circuit numbers can be entered serially. The value is 0-9999. |

**-continued-**

# post (continued)

**post command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| cptermerr | This parameter posts trunk entries in the CPTERMERR queue which are currently out of service. |
| d | This parameter posts digital trunks. |
| *des_ckt* | This variable represents the circuit number of a digital echo suppressor DES. Its range is 0-63. |
| *des_no* | This variable represents the DES number. Its range is 0-511. |
| *d_pm* | This variable specifies the type of digital peripheral module (PM):<br>▪ dca-Austrian digital carrier<br>▪ dcm-digital carrier module<br>▪ dct-digital carrier trunk<br>▪ dtc-digital trunk controller<br>▪ idtc-international digital trunk controller<br>▪ iltc-international line trunk controller<br>▪ ltc-line trunk controller<br>▪ rcc-remote cluster controller |
| *d_pm_no* | This variable represents the discrimination number of the digital PM. Its range is 0-511. |
| e | This parameter posts one or both sides of a DES. |
| f | This parameter forces all circuits from the BUSY ALL queue to the posted set. |
| *frsttrkgrp* | This represents a system default. You do not enter a value at the MAPWhen you enter the command string post a *state*, the system begins posting with the first trunk group. |
| g | This parameter posts a group of circuits by its CLLI. If no circuit number is entered after the g command, entering the command post g *clli* posts up to the first 512 circuit in the group. |
| hc | This parameter specifies the highest count (HC) of the contents of the M or CP buffer. |

**-continued-**

# post (continued)

**post command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *member_ #* | This variable represents the trunk member number (*member_#*). The trunk member number can be any circuit, master or slave, which is on the originating or terminating side and is involved in a wideband call. |
| mr | This parameter specifies the most recent (MR) content of the M or CP buffer. |
| *nockt* | This represents a system default. You do not enter a value at the MAP. If no circuit number is specified, entering the command string post g *clli* posts up to the first 512 circuits in the group. |
| p | This parameter posts a group of circuits in a non-digital PM. |
| *pm* | This variable specifies the type of non-digital PM. Examples of non-digital PM types are:<br>▪ mtm-maintenance trunk module<br>▪ oau-office alarm unit<br>▪ tm-trunk module |
| *pm_no* | This variable represents the PM discrimination number. Its range is 0-9999. |
| *pm_pos* | This variable specifies the PM position. Its range is 0-29. |
| s | This parameter posts circuits in the posted set separately according to their state. |

**-continued-**

# post (continued)

**post command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| *state* | This variable represents one of the following circuit state codes:<br>▪ cfl The circuit state code carrier fail (cfl) represents a circuit which was removed from service because of failure of an associated outside facility.<br>▪ cpb The circuit state code call process busy (cpb) represents a circuit that is carrying traffic.<br>▪ cpd The circuit state code call process deload (cpd) represents a circuit that is carrying traffic and that another entity, such as maintenance (Mtce), has requested to be informed when call processing (CP) releases the circuit.<br>▪ del The circuit state code deload (del) represents a circuit which was in the cpd state, has been released by CP, and is now available.<br>▪ idl The circuit state code idle (idl) represents a circuit that is in service and available to any process.<br>▪ inb The circuit state code installation busy (inb) represents an installed circuit that has not been tested.<br>▪ ini The circuit state code initialized (ini) represents a circuit in an intermediate state to which all previously cpb circuits are set following a system restart.<br>▪ lo The circuit state code lockout (lo) represents a circuit under continuous seizure from a far office without digits being received. The system continues scanning and sets circuit idl when seizure ceases. For CCS7 trunks, this state may be due to a problem with the message switch and buffer (MSB) or the interperipheral message link (IPML).<br>▪ mb The circuit state code manual busy (ManB) represents a circuit which was removed from service by a maintenance person and can only be returned to service by a maintenance person.<br>▪ neq The circuit state code not equipped (neq) represents circuit hardware that is not provided.<br>▪ nmb The circuit state code network management busy (nmb) represents a circuit which is removed from service through automatic or manual network management action. |

**-continued-**

# post (continued)

**post command parameters and variables** (continued)

| Parameters and variables | Description |
|---|---|
| | ▪ pmb The circuit state code peripheral module busy (pmb) represents a circuit that is not available to traffic because the associated PM is out of service.<br>▪ res The circuit state code restricted idle (res) represents a two-way trunk that has restricted availability to traffic. For example, the outgoing side of the trunk is not available.<br>▪ rmb The circuit state code remote make busy (rmb) represents a trunk with its incoming side removed from service, either by the far end or by the near end which informs the far end.<br>▪ sb The circuit state code system busy (sb) represents a circuit which is removed from service by system maintenance, which runs periodic tests until the circuit is either restored to service or set to mb; for example, a test to detect intermittent conditions.<br>▪ szd The circuit state code seized (szd) represents a circuit which has been seized for manual or system action. |
| t | This parameter posts a trunk, service circuit, or test equipment by its CLLI. |
| *t_slot* | This variable represents the time slot number. Its range is 1-31. |
| tb | This parameter posts the trouble buffer. The trouble buffer was created in the TRKSTRBL level using the creatset command. |
| tm | This parameter posts a trunk module (TM), which is a non-digital PM. |
| *tm_name* | This variable represents the trunk module name. |
| *tm_no* | This variable represents the trunk module number. Its range is 0-9 999. |
| wb | This parameter posts all trunk circuits involved in a wideband call. |

**-end-**

## Qualifications

The post command is qualified by the following exceptions, restrictions, and limitations:

- The post command posts only trunks which belong to the user.
- If the CLLI to be entered is short and a numerical value, enter the CLLI with single quotation marks (’) around it.

- To get the total number of trunks in the wideband (wb) call, you must add the master trunk in the control position to the number of trunk circuits in the post set. Obtain the number of trunk circuits in the post set by looking at the post indicator in the trunk test position (TTP) display.
- The post command works regardless of the trunk state and has no effect on a wb IT Integrated Services Digital Network user part (ISUP) call.

## Example

The following table provides an example of the post command.

**Example of the post command**

| Example | Task, response, and explanation |
|---|---|
| **post wb wbinc 3** ↵<br>*where*<br><br>WBINC 3 is the third circuit on the incoming side of the call of a 6 circuit call | **Task:** Place WBINC 1, which is the master circuit of the incoming side in a wideband (wb) call, in the control position.<br><br>**Response:**<br>`POST 5 DELQ D 4 BUSYQ A 59 DIG`<br>`TTP 14 0 5 0 2 10`<br>`CKT TYPE PM NO. COM LANG STA S R DOT TE R`<br>`2W S7 S7 DTC 0 10 0 WBINC 1 CPB WBOTG 1`<br>`WIDEBAND`<br><br>**Explanation:** POST 5 indicates the remaining 5 circuits are still in the post set. |

## Responses

The following table provides an explanation of the responses to the post command.

**Responses for the post command**

| MAP output | Meaning and action |
|---|---|
| `Circuit not involved in a wideband call.` | **Meaning:** The wb parameter was entered when the provided trunk circuit was not involved in a wb call.<br><br>**Action:** None |

**-continued-**

# post (end)

**Responses for the post command** (continued)

| MAP output | Meaning and action |
|---|---|
| CPTERMERR QUEUE EMPTY<br>NO MORE TRUNKS IN THE POSTED SET | **Meaning:** The command string post cptermerr was entered when there were no trunks to be posted.<br><br>**Action:** None |
| Invalid trunk circuit. | **Meaning:** The wb parameter was entered when the supporting trunk circuit was not a valid trunk.<br><br>**Action:** None |
| OK, CKT POSTED. | **Meaning:** The circuit is posted.<br><br>**Action:** None |
| POSTED CKT IDLED. | **Meaning:** The circuit is posted and idled.<br><br>**Action:** None |
| TEST ACCESS DENIED | **Meaning:** The TTP does not own the CLLI of the entered trunk.<br><br>**Action:** None |

**-end-**

# qrysig

## Function

Use the qrysig command to display the signaling status of the posted CCS7 trunk.

**qrysig command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **qrysig** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the qrysig command.

**Example of the qrysig command**

| Example | Task, response, and explanation | |
|---|---|---|
| **qrysig** | | |
| | **Task:** | Display the signaling state of the posted CCS7 trunk. |
| | **Response:** | `Signaling Available` |
| | **Explanation:** | The circuit is okay. |

## Responses

The following table provides explanations of the responses to the qrysig command.

**Responses for the qrysig command**

| MAP output | Meaning and action |
|---|---|
| `FAILED, NO CIRCUIT` | |
| | **Meaning:** No circuit is posted. |
| | **Action:** Post a circuit and retry the command. |

**-continued-**

# qrysig (end)

**Responses for the qrysig command** (continued)

| MAP output | Meaning and action |
|---|---|
| FAILED, NOT CCS7 TRUNK | **Meaning:** The posted trunk is not a CCS7 trunk.<br><br>**Action:** None |
| PROBLEMS SIGNALING FOR THIS CIRCUIT | **Meaning:** Signaling is not available because the circuit is not equipped at the remote end.<br><br>**Action:** None |
| Signaling Available | **Meaning:** The circuit is okay.<br><br>**Action:** None |
| SIGNALING NOT AVAILABLE:<br>- IPML 2 IS BLOCKED | **Meaning:** The PM is down or busy.<br><br>**Action:** None |
| SIGNALING NOT AVAILABLE:<br>- PROTOCOL VIOLATION | **Meaning:** The circuit is not responding to signaling.<br><br>**Action:** None |
| SIGNALING NOT AVAILABLE:<br>- ROUTESET IS BLOCKED | **Meaning:** The message route to the other office is blocked.<br><br>**Action:** None |

**-end-**

# quit

## Function

Use the quit command to exit from the current menu level and return to a previous menu level.

**quit command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **quit** | 1<br>all<br>*incrname*<br>*n* |

| Parameters and variables | Description |
|---|---|
| 1 | This default parameter causes the system to display the next higher MAP level. |
| all | This parameter causes the system to display the CI level from any level. |
| *incrname* | This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci. |
| *n* | This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level. |

## Qualifications

The quit command works regardless of the trunk state and has no effect on a wideband IT ISUP call.

## Examples

The following table provides examples of the quit command.

**Examples of the quit command**

| Example | Task, response, and explanation | |
|---|---|---|
| **quit** ↵ | | |
| | **Task:** | Exit from the C7TTP level to the previous menu level. |
| | **Response:** | The display changes to the display of a higher level menu. |
| | **Explanation:** | The C7TTP level has changed to the previous menu level. |

# quit (continued)

**Examples of the quit command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **quit mtc** ↵<br>*where*<br><br>mtc specifies the level higher than the C7TTP level to be exited | **Task:** Return to the MAPCI level (one menu level higher than MTC).<br><br>**Response:** The display changes to the MAPCI menu display:<br><br>`MAPCI:`<br><br>**Explanation:** The C7TTP level has returned to the MAPCI level. |

**-end-**

## Responses

The following table provides an explanation of the responses to the quit command.

**Responses for the quit command**

| MAP output | Meaning and action |
|---|---|
| `CI:` | **Meaning:** The system exited all MAP menu levels and returned to the CI level.<br><br>**Action:** None |
| `QUIT -- Unable to quit requested number of levels`<br>`Last parameter evaluated was: 1` | **Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.<br><br>**Action:** Reenter the command using an appropriate level number. |
| The system replaces the C7TTP level menu with a menu that is two or more levels higher. | **Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.<br><br>**Action:** None |

**-continued-**

# quit (end)

**Responses for the quit command** (continued)

| MAP output | Meaning and action |
|---|---|
| The system replaces the display of the C7TTP level with the display of the next higher MAP level. | **Meaning:** The system exited to the next higher MAP level.<br><br>**Action:** None |
| **-end-** | |

# rls

## Function

Use the rls command to release the connection to the circuit in the control position.

**rls command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **rls** | *ctrl_pos*<br>r |

| Parameters and variables | Description |
|---|---|
| *ctrl_pos* | This default name represents the system default. When you enter only the rls command, the system retains the circuit in the control position, in the same state as before the connection. |
| r | This parameter frees the circuit from the control position and deletes it from the TTP level. |

## Qualifications

The rls command is qualified by the following exceptions, restrictions, and limitations:

- The rls command also idles associated test equipment (for example, the monitor function).
- The rls command does not affect trunks in call processing busy (CPB).

## Example

The following table provides an example of the rls command.

**Example of the rls command**

| Example | Task, response, and explanation | |
|---|---|---|
| **rls** ↵ | | |
| | **Task:** | You need to release the connection to the circuit in the control position. |
| | **Response:** | `rls`<br>`OK` |
| | **Explanation:** | The connection to the circuit in the control position has been released. |

# rls (end)

## Response

The following table provides explanations of the response to the rls command.

| Response for the rls command | |
|---|---|
| **MAP output** | **Meaning and action** |
| OK | **Meaning:** The connection to the circuit in the control position has been released.<br><br>**Action:** None |

# routeset

## Function

Use the routeset command to display the route set CLLI of the posted CCS7 trunk.

**routeset command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **routeset** | There are no parameters or variables. |

## Qualifications

None

## Example

The following table provides an example of the routeset command.

**Example of the routeset command**

| Example | Task, response, and explanation | |
|---|---|---|
| **routeset** | | |
| | **Task:** | Display the route set CLLI of the posted CCS7 trunk. |
| | **Response:** | `ROUTESET : LOOPBKRS1` |
| | **Explanation:** | The route set CLLI of the posted trunk is LOOPBKRS1. |

## Responses

The following table provides explanations of the responses to the routeset command.

**Responses for the routeset command**

| MAP output | Meaning and action |
|---|---|
| `FAILED, NOT A CCS7 TRUNK` | |
| | **Meaning:** You have attempted to perform the command on a trunk that is not a CCS7 trunk. |
| | **Action:** None |

**-continued-**

# routeset (end)

**Responses for the routeset command** (continued)

| MAP output | Meaning and action |
|---|---|
| ROUTESET : LOOPBKRS1 | **Meaning:** In this example, the route set CLLI of the posted trunk is LOOPBKRS1.<br><br>**Action:** None |
| **-end-** | |

# rts

## Function

Use the rts command to return to service the circuit in the control position.

**rts command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **rts** | a [ idl / ini / res ] |
| | r |
| | c [ cp / m / both ] [ all ] |

| Parameters and variables | Description |
|---|---|
| a | This parameter releases all manual busy circuits in the posted set. |
| all | This parameter selects the entire trouble buffer to be cleared. |
| both | This parameter selects both the call-processing and maintenance buffer entry to be cleared. |
| c | This parameter clears the trouble buffer entry. |
| cp | This parameter selects the call-processing buffer entry to be cleared. |
| idl | This parameter specifies the idle circuit state. |
| ini | This parameter specifies the initialized circuit state. |
| m | This parameter selects the maintenance buffer entry to be cleared. |
| r | This parameter releases the connection and idles the circuit. |
| res | This parameter specifies the restricted idle circuit state. |

# rts (continued)

## Qualifications

The rts command is qualified by the following exceptions, restrictions, and limitations:

- Entering the rts command without a parameter returns to service the circuit that is in the control position if it is manual busy. If the circuit is seized and its pending state is manual busy,l the pending state is set to the specified state.
- For two-way trunks only, the return state can be specified as idle or restricted idle. If no parameters are entered, the default state is IDL (idle).
- Entering the command string rts r without a specified state releases any connection to the circuit, and sets the circuit to either its prior or pending state.
- Entering the command string rts a without a specified state releases the circuit if it is seized, returns the circuit to the posted set, and changes the state of all manual busy circuits in the posted set to IDL.
- Entering the command string rts a with a specified state does the same as rts a without a specified state, but also changes the state of all manual busy circuits to the specified state.
- The rts command does not affect trunks in CPB.

## Example

The following table provides an example of the rts command.

**Example of the rts command**

| Example | Task, response, and explanation |
|---|---|
| **rts** ↵ | |
| | **Task:** Release the connection. |
| | **Response:** `RTS OK` |
| | **Explanation:** The connection has been released. |

**-continued-**

# rts (continued)

**Example of the rts command** (continued)

| Example | Task, response, and explanation |
|---|---|
| **rts r ini** | |
| | **Task:** Release the connection and idle the circuit in the initialized circuit state. |
| | **Response:** `RTS OK` |
| | **Explanation:** The connection has been released and the circuit has been idled in the initialized circuit state. |

**-end-**

## Responses

The following table provides an explanation of the response to the rts command.

**Responses for the rts command**

| MAP output | Meaning and action |
|---|---|
| `ALREADY DONE` | |
| | **Meaning:** You have already returned the circuit to service and you have tried to return the circuit to service again. |
| | **Action:** None |
| `FAILED, NO CIRCUIT` | |
| | **Meaning:** There are no circuits to be returned to service. |
| | **Action:** None |
| `RTS OK` | |
| | **Meaning:** You have returned the circuit to service. |
| | **Action:** None |

**-continued-**

# rts (end)

**Responses for the rts command** (continued)

| MAP output | Meaning and action |
|---|---|
| SET IS EMPTY | **Meaning:** There are no circuits to be returned to service.<br><br>**Action:** None |
| *WARNING*<br>TRUNK WAS TAKEN OUT OF SERVICE BY SYSTEM DUE TO EXCESSIVE CALL ERRORS.<br><br>PLEASE CONTACT SUPPORT GROUP PRIOR TO RETURNING TRUNK TO SERVICE.<br><br>DO YOU WANT TO RTS TRUNK?<br><br>PLEASE CONFIRM (“YES” OR “NO”): | **Meaning:** An attempt was made to return to service a trunk that was taken out of service by the system due to excessive call processing errors.<br><br>**Action:** Enter “yes” if you want to return the specified trunk to service; otherwise, enter “no”. Additional maintenance action may be required to clear the fault prior to returning the trunk to service. |

**-end-**

# seize

## Function

Use the seize command to seize a posted trunk for maintenance action.

**seize command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **seize** | *ctrl_pos*<br>a *del_no* |

| Parameters and variables | Description |
|---|---|
| a | This parameter specifies that seizure is automatic as circuits become available. |
| *ctrl_pos* | This default name represents a system default. When you enter only the seize command, only the circuit in the control position is seized. |
| *del_no* | This variable specifies the maximum quantity of circuits to be deloaded at one time. The range is 0-20. |

## Qualifications

The seize command is qualified by the following exceptions, restrictions, and limitations:

- Normally, the maximum number of circuits in the DELQ (deload queue) is 20, but this number can be reduced by entering a value for the variable *del_no*. The maximum quantity is reset by the command seize, or whenever another set of circuits is posted.
- The characters A-SZ on line 9 of the status display indicate an automatic seizure condition. When automatic seizure is in effect, use the next command to select the next circuit from the posted set that can be seized. Those circuits that cannot be seized are bypassed.
- The seize command does not work on call processing busy (CPB) trunks.

# seize (end)

## Example

The following table provides an example of the seize command.

**Example of the seize command**

| Example | Task, response, and explanation |
|---|---|
| **seize** ↵ | |
| | **Task:** Seize the circuit in the control position. |
| | **Response:** `CKT SEIZED` |
| | **Explanation:** The circuit has been seized. |

## Responses

The following table provides explanations of the responses to the seize command.

**Responses for the seize command**

| MAP output | Meaning and action |
|---|---|
| `ALREADY DONE` | |
| | **Meaning:** You have already seized the circuit and you have tried to seize the circuit again. |
| | **Action:** None |
| `CKT SEIZED` | |
| | **Meaning:** The circuit has been seized. |
| | **Action:** None |

**-end-**

# trkqry

## Function

Use the trkqry command to display the local and/or remote state of the posted trunk.

**trkqry command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **trkqry** | *both*<br>local<br>remote |

| Parameters and variables | Description |
|---|---|
| *both* | This default represents a system default. When the trkqry command is used alone, both local and remote states of the posted trunk are displayed. |
| local | This parameter displays the near-end state of the posted CCS7 trunk. |
| remote | This parameter displays the far-end state of the posted CCS7 trunk. |

## Qualifications

The trkqry command is qualified by the following exceptions, restrictions, and limitations:

- When the system defaults to displaying both states, the states may be incompatible. When this happens, the maintenance action required to solve the problem is displayed and the user is prompted to proceed.
- If the local end of the circuit is not in service, entering the command string trkqry remote is not a given response.
- If the trkqry command seems to lock out the circuit (LO state), an unequipped CIC has been received from the far end. Use the sigqry command to verify that the circuit is actually unequipped at the far end.
- The trkqry command is not supported for TUP+ trunks.

# trkqry (continued)

## Example

The following table provides an example of the trkqry command.

**Example of the trkqry command**

| Example | Task, response, and explanation |
|---|---|
| **trkqry local** ↵ | |
| | **Task:** Display the near-end state of the local posted CCS7 trunk. |
| | **Response:** `Local Trunk State: IDLE` |
| | **Explanation:** The near-end state of the local posted CCS7 trunk is idle. |

## Responses

The following table provides explanations of the responses to the trkqry command.

**Responses for the trkqry command**

| MAP output | Meaning and action |
|---|---|
| `FAILED, ACTION FAILED` | |
| | **Meaning:** The circuit cannot have the requested action taken on it, probably due to a change of state. |
| | **Action:** Try the command again. |
| `FAILED, CHECK LOGS` | |
| | **Meaning:** A problem exists somewhere in the system that is preventing the requested action from occurring. |
| | **Action:** Check the logs and alarm indicators for system problems. |
| `FAILED, FUNCTION NOT AVAILABLE AT REMOTE OFFICE` | |
| | **Meaning:** The remote office is not equipped to process the query message. |
| | **Action:** None |

**-continued-**

# trkqry (continued)

**Responses for the trkqry command** (continued)

| MAP output | Meaning and action |
|---|---|
| FAILED, LOCAL STATE CHANGED | **Meaning:** The local state has changed since the command was entered.<br>**Action:** None |
| FAILED, NO CIRCUIT | **Meaning:** No circuit is posted, and therefore a query cannot occur.<br>**Action:** None |
| FAILED, NO REPLY | **Meaning:** The remote office did not reply within the six second timeout period.<br>**Action:** None |
| FAILED, NO RESOURCES | **Meaning:** No system resources are available to do the command at this time.<br>**Action:** None |
| FAILED, NOT A CCS7 TRUNK | **Meaning:** The posted trunk is not a CCS7 trunk.<br>**Action:** None |
| FAILED, ROUTESET NOT AVAILABLE | **Meaning:** No signaling is available to the remote office to provide the remote state.<br>**Action:** None |
| Local Trunk State: IDLE | **Meaning:** The near-end state of the posted local CCS7 trunk is idle.<br>**Action:** None |

**-continued-**

# trkqry (end)

**Responses for the trkqry command** (continued)

| MAP output | Meaning and action |
|---|---|
| REMOTE OPTION NOT SUPPORTED FOR THE POSTED CCS7 TRUNK | **Meaning:** You have attempted to use the remote option on a CCS7 trunk that is not an ISUP trunk.<br><br>**Action:** None |
| TRUNK IS IDLE AT BOTH ENDS AND NO ACTION REQUIRED | **Meaning:** The near end of the ISUP trunk is idle, while the far end is system busy (SB).<br><br>**Action:** None |

**-end-**

## Function

Use the tst command to provide a test facility for 1TR7 ISUP trunks in the TTP and C7TTP level of the MAP. The tst command allows a continuity test to be performed on the posted trunk.

**tst command parameters and variables**

| Command | Parameters and variables |
|---|---|
| **tst** | *test_type* |

| Parameters and variables | Description |
|---|---|
| *test_type* | This variable represents a test line test code or the carrier number for the digital module whose circuit is in the control position. |
| GCOT | This code represents the test line 1TR7 Integrated Service Digital Network user part (ISUP) continuity test for the German Intelligent Network. |
| ICOT | This code represents the test line ISUP continuity test. |
| T100 | This code represents the test line quiet termination test. |
| T101 | This code represents the test line 2-way talking test. |
| T102 | This code represents the test line milliwatt test. |
| T104 | This code represents the test line transmission noise and loss test. |
| T105 | This code represents the test line loss measurement test. |
| T108 | This code represents the test line echo suppression test. |
| TCON | This code represents the test line CCIS6 continuity test. |
| TCOT | This code represents the test line CCITT6 continuity test. |

## Qualifications

The tst command is qualified by the following exceptions, restrictions, and limitations:

- When you use the carrier number to replace the *test_type* variable, the system tests all circuits of the specified carrier.

## tst (continued)

- The signaling test can be enabled or disabled by datafilling table CLLIMTCE.
- The tst command is applicable to 1TR7 trunks of the German Intelligent Network. 1TR7 trunks connect a signaling switching point (SSP) to the German #7 network..
- When a continuity test is run during a call, a significant time delay is made on the ISUP call. There is a delay is at the near end during the continuity test. In addition there is a delay at the far end until the COT message appears. Use the continuity tests mainly on analog trunks and for some calls, not all calls, so that the test's call setups minimize the effect on real time.
- For 2-way trunks, do continuity test on both ends to prevent glare.
- The tst command does not affect trunks in CPB.

## Examples

The following table provides examples of the tst command.

**Examples of the tst command**

| Example | Task, response, and explanation | |
|---|---|---|
| **tst** ↵ | | |
| | **Task:** | Test the circuit which has the short CLLI of CF3P. |
| | **Response:** | `TEST OK`<br>`EAST_COAST_4 ***+ TRK107 NOV30 13:44:04 4800 PASS`<br>`CKT CF3P 10` |
| | **Explanation:** | The circuit passed the test. |
| **tst icot** ↵ | | |
| | **Task:** | Test a CCS7 trunk. |
| | **Response:** | `TEST OK` |
| | **Explanation:** | The circuit passed the test. |

## Responses

The following table provides explanations of the responses to the tst command.

**Responses for the tst command**

| MAP output | Meaning and action |
|---|---|
| FAILED TO SEIZE CKT | **Meaning:** The specified test failed. A TRK263 Log will be printed that contains more information on the reason that the test failed.<br><br>**Action:** None |
| TST FLD | **Meaning:** The specified test failed. A C7UP107 log will be printed that contains more information on the reason that the test failed.<br><br>**Action:** None |
| TST OK | **Meaning:** The specified test was successful.<br><br>**Action:** None |

DMS-100 Family

# Menu Commands

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