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Historical Reference Manual

MANUAL through NETXPTS, Volume 7 of 10

Through BCS36 Standard 04.01 June 1999

NORTEL NETWORKS
How the world shares ideas.

DMS-100 Family

Menu Commands

Historical Reference Manual

MANUAL through NETXPTS, Volume 7 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BCS36 Standard 04.01 Reissued to place book in historical reference.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

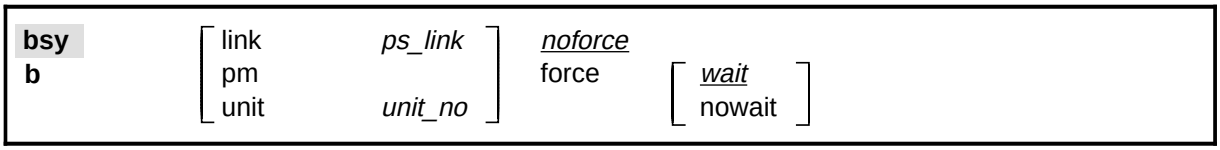
The second section is a description of all the parameters and variables.

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.

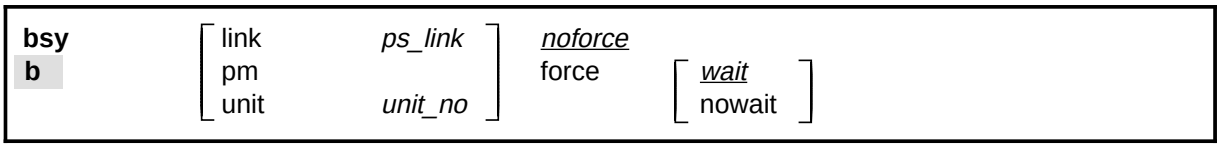
> ***Note:*** Italics always indicates an element that is not entered as part of a command in the form in which it is shown. It is either a variable that must be replaced with a value, a range or another element; or, it is a default condition which is not entered as part of a command.

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).



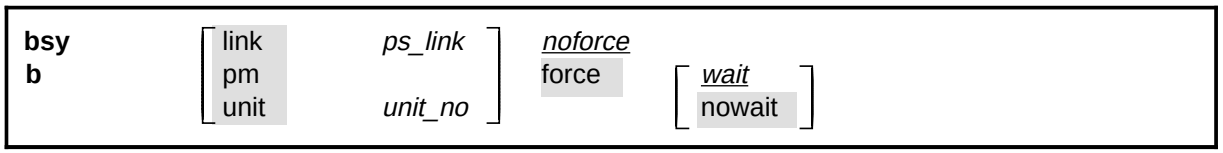
If a truncated or abbreviated form of a command is allowed, it will appear directly beneath the long form of the command.



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

How parameters are presented

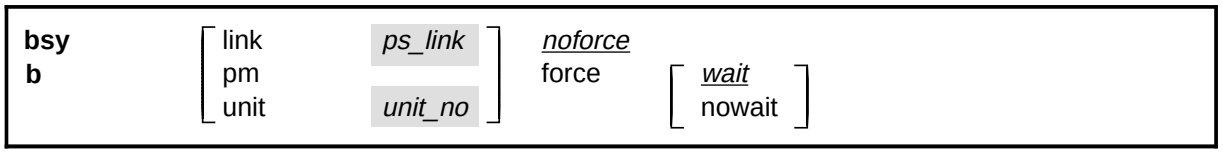
Parameters are lowercase, regular type (not boldface), except where uppercase is required by command case sensitivity.



How variables are presented

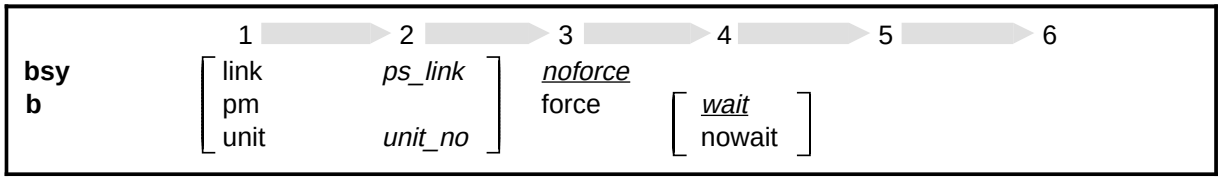
Variable names are in italics. Italics indicates that the variable is not entered as shown, but must be replaced with some other element, such as a value, range, number, or item from a list.

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.

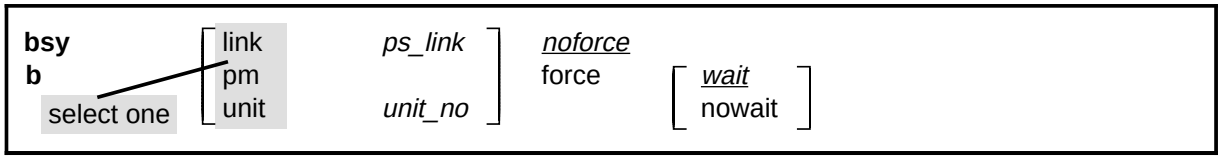


How hierarchy is presented

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*	parameter	*variable*	parameter	*variable*	(1)
		parameter	*variable*	parameter	*variable*	parameter	(2)
command (continued)	(1)	parameter	*variable*	parameter	*variable*	]	(1)
	(2)	*variable*	parameter	*variable*	parameter		(2)
command (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	[link	*ps_link*]	*noforce*		
b	pm		force	[*wait*	]
	unit	*unit_no*		[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	[link	*ps_link*]	*noforce*		
b	pm		force	[*wait*	]
	unit	*unit_no*		[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 **b**	[link *ps_link*] pm [unit *unit_no*]	*noforce* force [*wait*] [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 **b**	[link *ps_link*] pm [unit *unit_no*] *noforce* force [*wait*] [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: **bsy**	uppercase: `BSY`
Truncated commands or abbreviations.	shown directly below long form: **bsy** **b**	Abbreviated form all uppercase, rest of command lowercase: `Bsy`
Parameters	lowercase or case sensitive specific: link	uppercase: `LINK`
Variables	italic, lowercase: *ps_link*	in angled brackets: `<ps_link>` ***note:*** angle brackets also indicate the the variable is mandatory.

Hierarchy	horizontal order, left to right:
	l pdtc *pm_numbers circuit*
		top to bottom:
		`{L <PDTC> {PDTC}`
		`<PM_NUMBERS> {0 TO 255}`
		`[<CIRCUIT> {0 to 16}]`

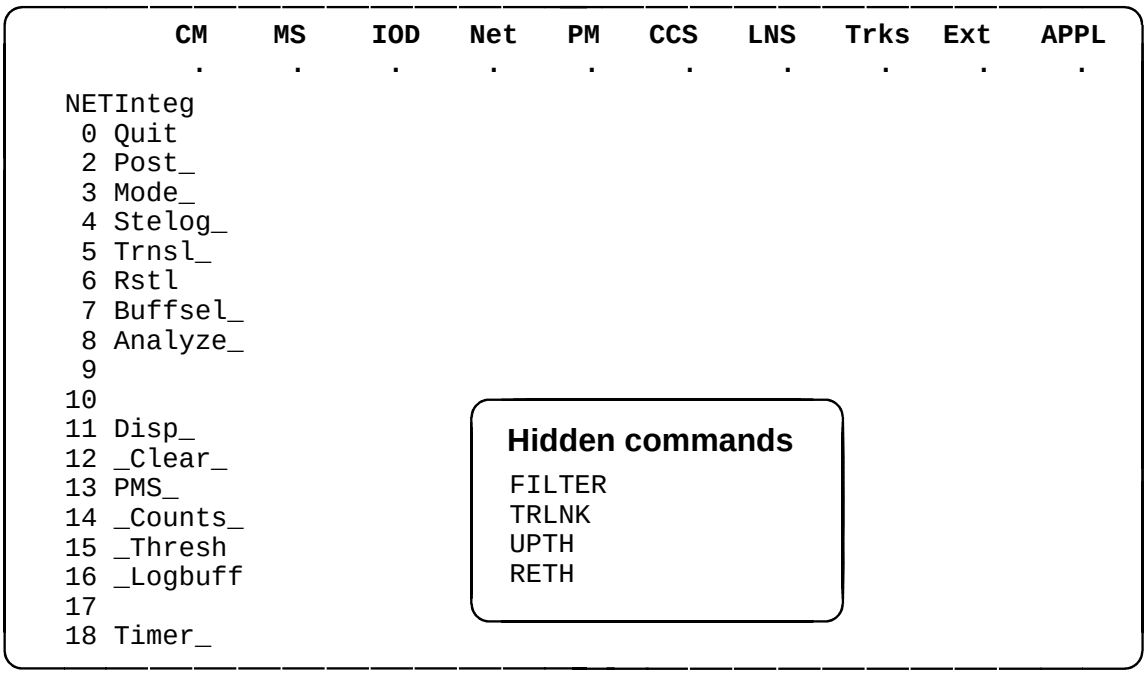
Defaults	underlined: *wait* nowait	no specific method established, but "optional" elements (meaning they do not have to be entered, implying defaults), are represented by square brackets: `[<CIRCUIT> {0 to 16}]`

Selectable elements	a vertical list:
	link
	pm
	unit
		curly braces, separated by vertical bars:
		`{link | pm | unit}`
		or vertical list, separated by commas:
		`{link,`
		`pm,`
		`unit}`

Variable replacement values	defined under parameters and variables description	curly braces: `{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
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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
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almstat	LTP	L-889
alm	LTPISDN	L-1241

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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
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autoctrl	NWM	N-341
autold	CMMnt	C-617
bal	ALT	A-29
bal	LTPMAN	L-1489

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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
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bsy	DTCI	D-969

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Command/menu cross reference table (continued)

Command	Menu	Page
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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
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bsy	MATRIX	M-71

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Command/menu cross reference table (continued)

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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
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bsy	PRADCH	P-357
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bsy	RCC	R-7
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bsy	SEAS	S-417

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Command/menu cross reference table (continued)

Command	Menu	Page
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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
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calltrf	TTP	T-261
cap	LTPLTA	L-1395
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card	Chain	C-305

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Command/menu cross reference table (continued)

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carrier	TRKS	T-227
ccbcapture	INTEG	I-207
ccis6	CCS	C-255
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cdr	IOD	I-287
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chain	Card	C-115
chain	Chain	C-309
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chain	Shelf	S-455
charge	OPMPES	O-49
charge	SRUPES	S-1021
check	BERP	B-9
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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
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cktmon	MONITOR	M-283
ckttst	ALT	A-31

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Command/menu cross reference table (continued)

Command	Menu	Page
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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
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Command/menu cross reference table (continued)

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cmmnt	CM	C-531
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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
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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
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Command/menu cross reference table (continued)

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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
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dddin	SASelect	S-147
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deact	LINKSET	L-625
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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
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deftst	NETPATH	N-189
delcos	LineSel	L-595
delcust	LineSel	L-597
deldwr	LineSel	L-599
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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
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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
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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
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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
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Command/menu cross reference table (continued)

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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
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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
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gwtrantst	SCCPRSS	S-327
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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

-continued-

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

-continued-

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

-continued-

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

-continued-

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

-continued-

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

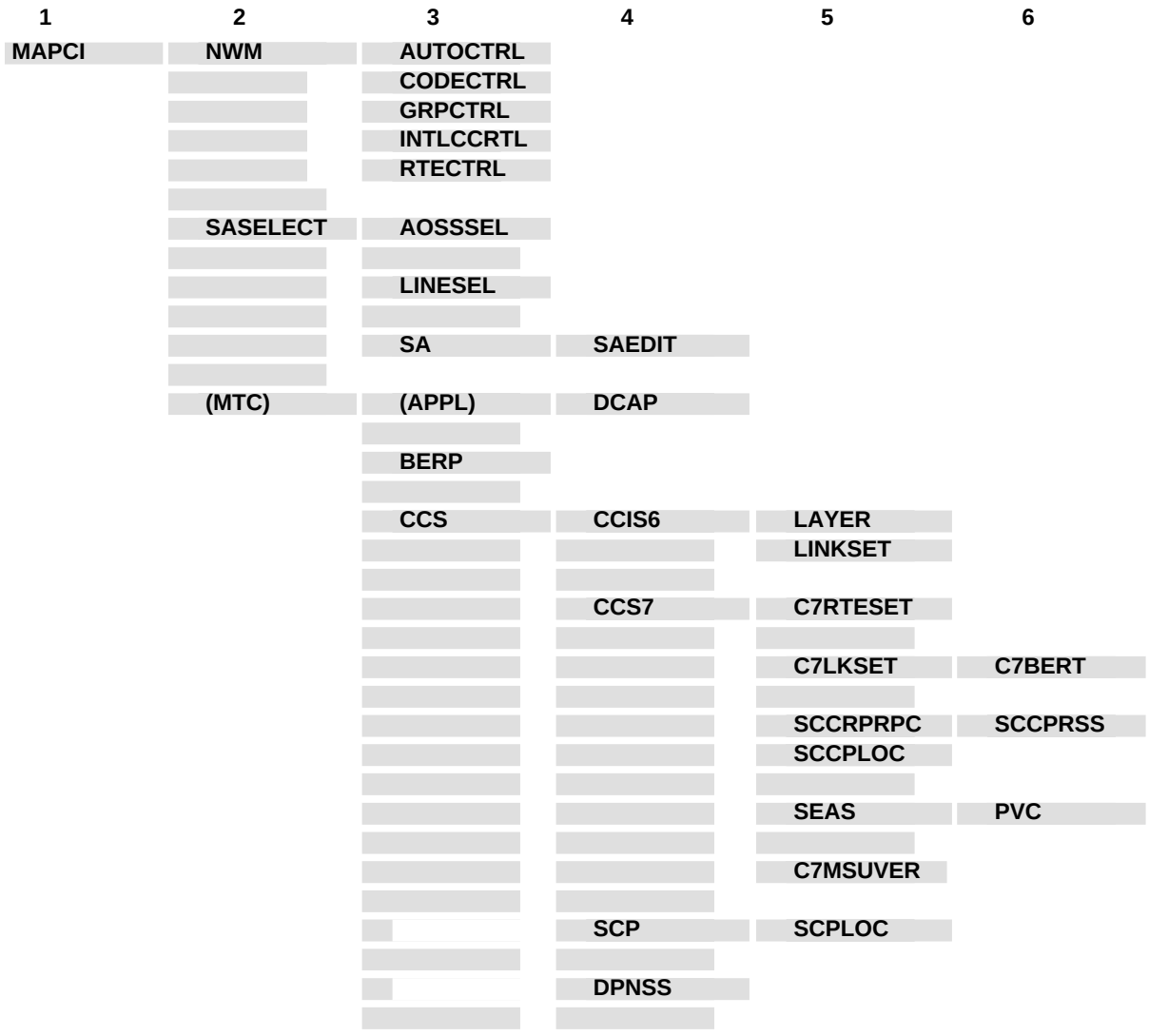
-end-

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-

MANUAL level commands

Use the MANUAL level of the MAP to monitor and maintain trunks.

Accessing the MANUAL level

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

mapci;mtc;trks;ttp;manual ↵

MANUAL commands

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

MANUAL commands

Command	Page
bsy	M-3
calltrf	M-7
hold	M-9
hset	M-11
jack	M-13
loss	M-17
next	M-19
noise	M-23
op	M-25
post	M-31
quit	M-39
rls	M-43
rts	M-45

-continued-

MANUAL commands (continued)	
Command	**Page**
sgnl	M-49
tdet	M-51
tgen	M-55
tst	M-57
-end-	

MANUAL menu

The following figure shows the MANUAL 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
         .     .     .     .     .    .     .     .     .     .


MANUAL
 0 QUIT     POST    DELQ      BUSYQ   DIG
 2 Post_    TTP 6-005
 3 LOSS     CKT TYPE  PM NO.    COM LANG  STA S R DOT TE RESULT
 4 TGEN
 5 BSY
 6 RTS
 7 TST
 8 Noise
 9 OP_
10 TDet
11 Hold
12 NEXT
13 RLS
14 HSet
15 Jack_
16 SGNL
17
18 CallTrf
```

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. The parameter specifies that all posted circuits be placed in the busy queue all (BUSYQ ALL) queue to be busied. For circuits that were previously posted by group by entering the command string 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. The parameter specifies that all posted circuits be placed in the BUSYQ ALL queue to be busied. For circuits that were previously posted by group by entering the command string 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.
inb	This parameter changes the circuit state to installation busy (INB).
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.
- 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 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 string 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.
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.

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. The frls command 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 when the bsy command will not execute.
`Failed, NO CIRCUIT`	**Meaning:** The command failed because no circuit has been posted. **Action:** None
`Failed to seize CKT`	**Meaning:** The command failed to seize a circuit. **Action:** None
`OK, POST SET IS SET IN BSYQ.`	**Meaning:** The posted trunks have been put in the BUSYQ. **Action:** None
`STATE CHANGED.`	**Meaning:** The posted trunks have been placed in the state you requested. **Action:** None

calltrf

Function

Use the calltrf command to transfers the call-processing connection to TTP control.

calltrf command parameters and variables	
Command	**Parameters and variables**
calltrf	There are no parameters or variables.

Qualifications

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

- The circuit in the TTP control position is idled and returned to the posted set, its linked circuit is transferred to the control position, and the TTP headset, if available, is connected.
- This function is executed only if the circuit in the TTP control position is a 101 terminating circuit, and a call-processing connection exists. It allows maintenance functions to be done on 101 calls, in addition to talking.
- This command does not apply to TUP, ETUP, BTUP, or TUP+ trunks.
- This command is not available for detached users.
- The calltrf command is not available for the German Intelligent Networks (GIN) SuperNode Service Switching Point/Signaling Point (SSP).

Examples

Not currently available

calltrf (continued)

Responses

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

Responses for the calltrf command

MAP output	Meaning and action
`FAILED, CKT IS NOT 101 TEST LINE`	**Meaning:** The command failed because the posted circuit is not a T101 test line. **Action:** None
`Failed, NO CIRCUIT`	**Meaning:** The command failed because no circuit has been posted. **Action:** None
`TEST ACCESS DENIED`	**Meaning:** The TTP does not own the CLLI of the linked trunk. **Action:** None

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 Integrated Services Digital Network user part (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`
		`SHORT CLLI IS : CF3P`
		`OK, CIRCUIT POSTED`

	Explanation:	You have placed the circuit with the short common language location identifier (CLLI) of CF3P in the first available hold position.

hold (end)

Responses

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

Responses for the hold command

MAP output	Meaning and action
`Failed, NO CIRCUIT`	**Meaning:** The command failed because no circuit has been posted. **Action:** None
`OK, CKT ON HOLD`	**Meaning:** You have placed the circuit in the control position in the first available hold position. **Action:** None

hset

Function

Use the hset command to connect a headset to the circuit in the control position by a headset trunk.

hset command parameters and variables

Command	Parameters and variables
hset	There are no parameters and variables.

Qualifications

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

- The headset trunk selected must have an external circuit number corresponding to the trunk test position (TTP) number. For example, a headset trunk whose external circuit number is 0 would correspond to a TTP whose number is 0.
- When the connection is set, the software-controlled pads for the headset trunk are set to the value indicated by the pad adjustment value of the circuit in the control position.
- This command is not available for detached users.

Examples

Not currently available

Responses

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

Responses for the hset command

MAP output	Meaning and action
`FAILED, NO CIRCUIT`	**Meaning:** The command was entered, but the command failed because no circuit was posted. **Action:** Post a circuit and enter the command again.

-continued-

hset (end)

Responses for the hset command (continued)

MAP output	Meaning and action
FAILED, NO EQPMT, CHECK TABLE TSTXCON	**Meaning:** The command was entered against a posted circuit, but the command failed because no external test equipment was connected. **Action:** Check table TSTXCON to see if any external test equipment is connected.
FAILED TO SEIZE CIRCUIT	**Meaning:** The command was entered against a posted circuit, but was unsuccessful. **Action:** Enter the command again.

-end-

jack

Function

Use the jack command to connect one of the trunk test position (TTP) test jacks to the control position.

jack command parameters and variables

Command	Parameters and variables
jack	*jack_no* [*indefinite* / *conn_duration*]

Parameters and variables	Description
conn_duration	This variable specifies the duration of the connection. The value must be from 1-36.
indefinite	This is the default parameter. If the duration of the connection is not specified, the connection will last for an indefinite period of time.
jack_no	This variable specifies the jack number. The value must be from 1-24 if table TSTXCON exists. If table TSTXCON does not exist, the range is 1-3.

Qualifications

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

- The connection is made by a jack-ended trunk. Jack-ended trunks are assigned to the TTP as follows:
  - TTP 0 is assigned jack 0, 1, and 2
  - TTP 1 is assigned jack 3, 4, 5...
- When the connection is established, the software-controlled pads for the jack-ended trunk are set to the value indicated by the circuit in the control position.
- The jacks are used to connect external analog test equipment to the circuit in the control position. After the test equipment is connected, the following tests can be performed:
  - absolute delay distortion
  - echo return loss
  - envelope delay distortion
  - foldover distortion
  - frequency attenuation distortion

jack (continued)

  - harmonic distortion
  - level tracking distortion
  - longitudinal balance
  - phase jitter
  - singing point
- This command is not available for detached users.
- The posted trunk must be idle before the command is entered.
- If table TSTXCON exists, 4 posted and held trunks can be connected to the TTP test jacks. If table TSTXCON does not exist, a maximum of 3 posted and held trunks can be connected to the TTP test jacks.

Examples

Not currently available

Responses

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

Responses for the jack command

MAP output	Meaning and action
`FAILED, NO CIRCUIT`	**Meaning:** The command was entered, but the command failed because no circuit was posted. **Action:** Post a circuit and enter the command again.
`FAILED, NO EQPMT, CHECK TABLE TSTXCON`	**Meaning:** The command was entered against a posted circuit, but the command failed because no external test equipment was connected. **Action:** Check table TSTXCON to see if any external test equipment is connected.
`OK, CONNECTION SET`	**Meaning:** The command was entered and the jack connection was made. The status of the trunk is changed to seized (SZD). **Action:** None

-continued-

jack (end)

Responses for the jack command (continued)

MAP output	Meaning and action
TEST NOT IMPLEMENTED FOR REMOTE TRKS	**Meaning:** The command failed because a remote trunk is posted and this command is not available. **Action:** None

-end-

loss

Function

Use the loss command to measure the received signal loss of the circuit in the control position.

loss command parameters and variables

Command	Parameters and variables
loss	[e]

Parameters and variables	Description
e	This parameter initiates the echo return loss test and the singing point test.

Qualifications

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

- This command connects the circuit in the control position to the loss-measuring circuit and displays the results under the header RESULT in the manual status display. The results displayed are the level (in dBm) and the frequency (in Hz). Also displayed, but not included in the measurement, is the expected measurement loss (EML).
- The measurement taken is adjusted by the amount of pad adjustment for the posted circuit. The pad adjustment values are displayed at the MAP below the EML at the headers PAD PC (posted circuit) and TE (test equipment).

Example

The following table provides an example of the loss command.

Example of the loss command

Example	Task, response, and explanation	
loss ↵		
	Task:	Measure the received signal loss of the circuit in the control position.
	Response:	`EML 5.0 DB` `PAD PC .5 TE .6`
	Explanation:	The PAD PC value (0.5 dBm), TE value (0.6 Hz), and EML (5.0) are displayed.

loss (end)

Responses

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

Responses for the loss command

MAP output	Meaning and action
`EML 5.0 DB` `PAD PC .5 TE .6`	**Meaning:** The command string loss e has been entered. The PAD PC value (0.5 dBm), TE value (0.6 Hz), and EML (5.0) are displayed. **Action:** None
`Failed, NO CIRCUIT`	**Meaning:** The command failed because no circuit has been posted. **Action:** None
`loss` `OK, CONNECTION SET`	**Meaning:** The command has been entered and the connection to the loss-measuring circuit has been set. **Action:** None
`loss e` `OK, CONNECTION SET`	**Meaning:** The command string loss e has been entered and the connection to the loss-measuring circuit has been set. **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	*delq* [s p [s] *hold* [s e]]

Parameters and variables	Description
delq	This symbol for the deload queue (DELQ) represents a system default. When you enter only the next command, 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.
e	This parameter exchanges the circuits in the hold and control positions.
hold	This variable specifies the hold position number where the circuit is to be taken. The hold position number range is 1-3.
p	This parameter ensures 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.

Qualifications

- Entering the next command without parameters takes the next circuit from the deload queue and places it in the control position. If there are no circuits available in the DELQ, the circuit is taken from the posted set.
- Without parameters s or e, the outgoing circuit (if there is one) is deleted from the 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.

next (continued)

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:
	`Next`
	`POSTED CKT IDLED`
	`SHORT CLLI IS : CF3P`
	`OK, CKT POSTED`

	Explanation: The next circuit has been placed in the control position.

Response

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

Responses for the next command

MAP output	Meaning and action
`NO CKT, SET IS EMPTY`	
	Meaning: The next command failed because there is not another circuit that can be placed in the control position.
	Action: None
`OK, CKT POSTED`	
	Meaning: The next circuit has been placed in the control position.
	Action: You may continue entering commands against the circuit you have placed in the control position.

-continued-

next (end)

Responses for the next command

MAP output	Meaning and action
POSTED CKT IDLED	**Meaning:** The next circuit has been placed in the control position. **Action:** You may continue entering commands against the circuit you have placed in the control position.

-end-

noise

Function

Use the noise command to measure noise by connecting the circuit in the control position to the noise-measuring circuit and displaying the measured noise (dBrnCO) at a MAP. The measurement display is continuously updated. The maintenance noise limit (MNL) and the immediate action noise limit (IANL) of the circuit also are displayed.

noise command parameters and variables

Command	Parameters and variables
noise	There are no parameters and variables.

Qualifications

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

- The measurements are adjusted by the amount pad adjustment for the posted circuit. These pad adjustment values are displayed below the header MNL at the header PAD PC (posted circuit) and below the header IANL at the header TE (test equipment). If no pad adjustment values are displayed, the noise values displayed are the actual readings.
- The circuit must be properly terminated at the far end.
- This command is only available at offices equipped with this feature.

Example

The following table provides an example of the noise command.

Example of the noise command

Example	Task, response, and explanation	
noise ↵		
	Task:	Measure noise by connecting the circuit in the control position to the noise measuring circuit and display the measured noise.
	Response:	`MNL 50  IANL 50` `PAD PC- TE*`
	Explanation:	The pad adjustment values are 50 for MNL and 50 for IANL. In this example, no pad adjustment values are displayed at PAD PC or TE headers because the noise values displayed are the actual readings.

noise (end)

Responses

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

Responses for the noise command

MAP output	Meaning and action
`FAILED, NO CIRCUIT`	**Meaning:** The command has been entered but no circuit has been posted. **Action:** Post a circuit and enter the command.
`MNL 50  IANL 50` `PAD PC- TE*`	**Meaning:** The pad adjustment values are 50 for MNL and 50 for IANL. In this example, no pad adjustment values are displayed at PAD PC or TE headers because the noise values displayed are the actual readings. **Action:** None
`OK, CONNECTION SET`	**Meaning:** The command has been entered on a posted circuit and the connection to the noise-measuring circuit has been set. **Action:** None

op

Function

Use the op command to outpulse a specified number or test line code on the circuit in the control position.

op command parameters and variables

Command	Parameters and variables
op	[*'cld_no* | *t_l_code*]

Parameters and variables	Description
'cld_no	This variable represents the called number, which must be from 1-14 digits. An apostrophe (') must be entered before the called number.
DIAG	This code represents the test line circuit diagnostic test.
ICOT	This code represents the test line ISUP continuity test.
ISDN	This code represents the DMS-300 ISDN test call line test.
N100	This code represents the test line quiet [balanced] termination [new] test.
S100	This code represents the test line quiet [balanced] termination [old] test.
S104	This code represents the test line transmission loss test.
t_l_code	This variable represents a test line test code. For all tests assigned to test lines, the first test name in data table TSTLCONT should be the test line test with the T prefix character, except for the automatic transmission measuring equipment (ATME) and looparound (LPA) test lines. Otherwise, manual execution of some tests may fail.
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.
T104	This code represents the test line transmission noise and loss test.
T105	This code represents the test line loss measurement test.

-continued-

op (continued)

op command parameters and variables (continued)

Parameters and variables	Description
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.
TA10	This code represents the test line loss, noise, supervision test.
TA11	This code represents the test line loss, noise, frequency deviation, supervision test.

-continued-

op (continued)

op command parameters and variables (continued)

Parameters and variables	Description
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.
TE_M	This code represents the test line E & M lead test.
TERL	This code represents the test line echo return loss test.

-continued-

op (continued)

op command parameters and variables (continued)

Parameters and variables	Description
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.
TSO5	This code represents the test line equipment check test.
TSYN	This code represents the test line synchronous test.

-end-

Qualifications

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

- The trunk in the control position must be outgoing or two-way.
- An apostrophe (’) must be entered before the called number.
- This command is not supported for 1TR7 trunks.
- The op command is not available for the German Intelligent Networks (GIN) SuperNode Service Switching Point/Signaling Point (SSP).

Examples

Not currently available

Responses

Not currently available

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: ▪ 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. ▪ 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: ▪ the b parameter-removes all idle circuits from the posted set, and retains only out-of-service circuits. ▪ 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): ▪ dca-Austrian digital carrier ▪ dcm-digital carrier module ▪ dct-digital carrier trunk ▪ dtc-digital trunk controller ▪ idtc-international digital trunk controller ▪ iltc-international line trunk controller ▪ ltc-line trunk controller ▪ 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: ▪ mtm-maintenance trunk module ▪ oau-office alarm unit ▪ 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:
	▪ cfl — The circuit state code carrier fail (cfl) represents a circuit which was removed from service because of failure of an associated outside facility.
	▪ cpb — The circuit state code call process busy (cpb) represents a circuit that is carrying traffic.
	▪ 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.
	▪ 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.
	▪ idl — The circuit state code idle (idl) represents a circuit that is in service and available to any process.
	▪ inb — The circuit state code installation busy (inb) represents an installed circuit that has not been tested.
	▪ 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.
	▪ 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).
	▪ 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.
	▪ neq — The circuit state code not equipped (neq) represents circuit hardware that is not provided.
	▪ 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. ▪ 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. ▪ 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. ▪ 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. ▪ 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 ↵
where
 	
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.
	
	Response:
	`POST 5 DELQ D 4 BUSYQ A 59 DIG`
	`TTP 14 0 5 0 2 10`
	`CKT TYPE PM NO. COM LANG STA S R DOT TE R`
	`2W S7 S7 DTC 0 10 0 WBINC 1 CPB WBOTG 1`
	`WIDEBAND`
	
	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. **Action:** None

-continued-

post (end)

Responses for the post command (continued)

MAP output	Meaning and action
CPTERMERR QUEUE EMPTY NO MORE TRUNKS IN THE POSTED SET	**Meaning:** The command string post cptermerr was entered when there were no trunks to be posted. **Action:** None
Invalid trunk circuit.	**Meaning:** The wb parameter was entered when the supporting trunk circuit was not a valid trunk. **Action:** None
OK, CKT POSTED.	**Meaning:** The circuit is posted. **Action:** None
POSTED CKT IDLED.	**Meaning:** The circuit is posted and idled. **Action:** None
TEST ACCESS DENIED	**Meaning:** The TTP does not own the CLLI of the entered trunk. **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* all *incrname* *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.

quit (continued)

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 MANUAL level to the previous menu level.
	Response: The display changes to the display of a higher level menu.
	Explanation: The MANUAL level has changed to the previous menu level.
quit mtc ↵ *where* mtc specifies the level higher than the MANUAL 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 MANUAL level has returned to the MAPCI level.

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

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
`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 MANUAL 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
The system replaces the display of the MANUAL level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **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* r rls

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 has the same meaning as the rls parameter. The parameter frees the circuit from the control position and deletes it from the trunk test position (TTP) level.
rls	This parameter has the same meaning as the r parameter. The 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).

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:	You need to release the connection to the circuit in the control position.
	Response:	`rls` `OK`
	Explanation:	The connection to the circuit in the control position has been released.

Responses

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

Responses for the rls command

MAP output	Meaning and action
`Failed, NO CIRCUIT`	
	Meaning: The command failed because no circuit has been 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 to service the circuit in the control position.

rts command parameters and variables

Command	Parameters and variables
rts	a [idl | ini | res]
	r [idl | ini | res]
	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 entries 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 in the control position if it is manual busy. If the circuit is seized and its pending state is manual busy, 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 idle (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 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. It also changes the state of all manual busy 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.
	Response: `RTS OK`
	Explanation: The connection has been released.

-continued-

rts (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: You have already returned the circuit to service and you have tried 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:** You have returned the circuit to service. **Action:** None
SET IS EMPTY	**Meaning:** There are no circuits to be returned to service. **Action:** None
WARNING TRUNK WAS TAKEN OUT OF SERVICE BY SYSTEM DUE TO EXCESSIVE CALL ERRORS. PLEASE CONTACT SUPPORT GROUP PRIOR TO RETURNING TRUNK TO SERVICE. DO YOU WANT TO RTS TRUNK? 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. **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-

sgnl

Function

Use the sgnl command to send the bit signaling test on a North American (NA) or an international (I) trunk.

sgnl command parameters and variables

Command	Parameters and variables
sgnl	[onoffhk | rngbf] [*4_bit _signaling code*]

Parameters and variables	Description
4_bit_signaling code	One of the following sixteen 4-bit signaling codes: 0000 0001 0010 0011 0100 0101 0110 0111 1000 1001 1010 1011 1100 1101 1110 1111. These codes must be entered in single quotation marks. For example, code 0001 must be entered as '0001'.
onoffhk	Used to send an on- or off-hook signal over the circuit in the control position. Each time the signal is invoked, the supervisory state of the circuit is changed. The supervisory state is displayed under the S and R headers at the MAP.
rngbf	Used to send a ring-back or ring-forward signal to the far end over the circuit in the control position. The ringback signal is a 100 ± 20 ms on-hook signal. The signaling state is displayed under the S and R headers at the MAP.

Qualifications

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

- This command is not applicable to Integrated Services Digital Network user part (ISUP) trunks.
- This command is not applicable to 1TR7 trunks.
- The sgnl command is not available for the German Intelligent Networks (GIN) SuperNode Service Switching Point/Signaling Point (SSP).

sgnl (end)

Examples

Not currently available

Responses

Not currently available

tdet

Function

Use the tdet command to connect the tone detector and identify the tone signal received on the circuit in the control position.

tdet command parameters and variables

Command	Parameters and variables
tdet	There are no parameters and variables.

Qualifications

None

Example

The following table provides an example of the tdet command.

Example of the tdet command

Example	Task, response, and explanation	
tdet ↵		
	Task:	Connect the tone detector to the posted circuit.
	Response:	`OK, CONNECTION SET`
	Explanation:	The tone detector has been connected to the posted circuit.

Responses

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

Responses for the tdet command

MAP output	Meaning and action
`30T`	
	Meaning: The detected signal is a 30 IPM tone.
	Action: None

-continued-

tdet (continued)

Responses for the tdet command (continued)

MAP output	Meaning and action
120T	**Meaning:** The detected signal is a 120 IPM tone. **Action:** None
ANN	**Meaning:** The detected signal is a voice or recorded announcement. **Action:** None
BUSY	**Meaning:** The detected signal is a busy tone. **Action:** None
FAILED, NO CIRCUIT	**Meaning:** The command cannot be applied because there is no posted circuit. **Action:** None
DT	**Meaning:** The detected signal is a dial tone. **Action:** None
FL	**Meaning:** The detected signal is a tone detector failure. **Action:** None
H-D	**Meaning:** The detected signal is a high/dry condition. **Action:** None

-continued-

tdet (continued)

Responses for the tdet command (continued)

MAP output	Meaning and action
HETZ	
	Meaning: The detected signal is frequency.
	Action: None
HIT	
	Meaning: The detected signal is hit.
	Action: None
HT	
	Meaning: The detected signal is high tone.
	Action: None
MW	
	Meaning: The detected signal is milliwatt tone.
	Action: None
NONE	
	Meaning: The detected signal is no tone.
	Action: None
OK, CONNECTION SET	
	Meaning: The tone detector has been connected to the posted circuit.
	Action: None
OVFL	
	Meaning: The detected signal is overflow tone.
	Action: None

-continued-

tdet (end)

Responses for the tdet command (continued)

MAP output	Meaning and action
PS	
	Meaning: The detected signal is a periodic signal tone.
	Action: None
RING	
	Meaning: The detected signal is ringing.
	Action: None
RO	
	Meaning: The detected signal is a re-order tone.
	Action: None
TPT	
	Meaning: The detected signal is a test progress tone.
	Action: None
	-end-

tgen

Function

Use the tgen command to send a test tone from a circuit in the control position to a distant office.

tgen command parameters and variables

Command	Parameters and variables
tgen	[*freq*] [*level*]

Parameters and variables	Description
freq	A 0-4000 Hz in steps of 1 Hz. This number represents the frequency of the number to be sent.
level	A -888 dBm to +50 dBm in steps of 0.1 dB. This number represents the level of the signal to be sent.
stdtone	This represents the system default. When only the tgen command is entered, a standard milliwatt tone (1004 Hz at 0 dBm) is sent.

Qualifications

None

Example

The following table provides an example of the tgen command.

Example of the tgen command

Example	Task, response, and explanation	
tgen ↵		
	Task:	Send a standard test tone from a circuit in the control position to a distant office.
	Response:	`OK, CONNECTION SET`
	Explanation:	The standard test tone has been set.

tgen (end)

Responses

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

Responses for the tgen command

MAP output	Meaning and action
FAILED, NO CIRCUIT	**Meaning:** The command cannot be applied because there is not a posted circuit. **Action:** None
OK, CONNECTION SET	**Meaning:** The signal has been sent to the posted circuit. **Action:** None

Function

Use the tst command to test the circuit in the control position.

tst command parameters and variables

Command	Parameters and variables
tst	*autotest* *test_type* [*ext_no* / *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) of 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.
ext_no	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.
ICOT	This code represents the test line ISUP continuity test.
ISDN	This code represents the DMS-300 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, 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.
T104	This code represents the test line transmission noise and loss test.

-continued-

tst (continued)

tst command parameters and variables (continued)

Parameters and variables	Description
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.
TA10	This code represents the test line loss, noise, supervision test.

-continued-

tst (continued)

tst command parameters and variables (continued)

Parameters and variables	Description
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.
TE_M	This code represents the test line E and M lead test.

-continued-

tst (continued)

tst command parameters and variables (continued)

Parameters and variables	Description
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 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.

-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 call processing busy (CPB).

Example

The following table provides an example of the tst command.

Example 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:
	`TEST OK`
	`EAST_COAST_4 ***+ TRK107 NOV30 13:44:04 4800 PASS`
	`CKT CF3P 10`

	Explanation: The circuit passed the test.

tst (end)

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 to seize a circuit for testing. A TRK263 Log will be printed which contains more information on the reason that the test failed. **Action:** None
TST FLD	**Meaning:** The specified test failed. **Action:** None
TST OK	**Meaning:** The specified test was successful. **Action:** None

MATRIX level commands

Use the MATRIX level of the MAP to access maintenance and diagnostic facilities for the switching matrix of the 128K enhanced network (ENET).

Accessing the MATRIX level

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

mapci;mtc;net;matrix ↵

or

mapci;mtc;mtcna;enet;matrix ↵

MATRIX commands

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

MATRIX commands

Command	Page
abtk	M-67
bsy	M-71
deload	M-75
disp	M-81
locate	M-83
offl	M-87
queryen	M-91
quit	M-95
rextst	M-99
rts	M-105

-continued-

MATRIX commands (continued)	
Command	**Page**
shelf	M-109
system	M-111
trnsl	M-115
try	M-119
tst	M-123
zoom	M-127
-end-	

MATRIX menu

The following figure shows the MATRIX 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
        .     .     .     .     .     .     .     .     .     .


MATRIX
 0 Quit       ENET      System     Matrix  Shelf  0 1 2 3
 2 Zoom_       Plane 0     .          .           . . . .
 3 QueryEN_    Plane 1     .          .           . . . .
 4 Locate _
 5 Deload_    Matrix    VBus   Plane 0    VBus   Plane 1
 6 Tst_                 0 1 2 3 4 5 6 7   0 1 2 3 4 5 6 7
 7 Bsy_       H-bus  0  . . . . . . . .   . . . . . . . .
 8 Rts_              1  . . . . . . . .   . . . . . . . .
 9 Offl_             2  . . . . . . . .   . . . . . . . .
10                   3  . . . . . . . .   . . . . . . . .
11 RExTst_           4  . . . . . . . .   . . . . . . . .
12                   5  . . . . . . . .   . . . . . . . .
13                   6  . . . . . . . .   . . . . . . . .
14                   7  . . . . . . . .   . . . . . . . .
15 System_
16
17 Shelf_
18 Trnsl_
```

Hidden commands

```
abtk                disp
try
```

MATRIX status codes

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

Status codes MATRIX menu status display

Code	Meaning	Description
.	in-service	The matrix element is in-service.
-	unequipped	The matrix element is unequipped.
O	offline	The matrix element is offline.
I	in-service trouble	A fault exists on the matrix element, but it is still in-service.
L	P-side fault	A peripheral-side (P-side) link connected to the matrix element has a fault, but is still in-service.
F	link out-of-service	A P-side link connected to the matrix element is out-of-service (system busy or manual busy).
S	system busy	The matrix element has been removed from service by the system.
C	C-side busy	The matrix element is in a central-side (C-side) busy state, indicating that a system card in the node containing the matrix element is out-of-service.
M	manual busy	The matrix element has been manually removed from service.
T	test in progress	The matrix element is currently undergoing maintenance action.

abtk

Function

Use the abtk command to cancel an in-progress maintenance action on a matrix element.

abtk command parameters and variables

Command	Parameters and variables			
abtk	*plane_no*	xpt	*hbus_no*	*vbus_no*

Parameters and variables	Description
hbus_no	This variable is the horizontal bus (H-bus) number of the crosspoint. Valid entries are 0-7.
plane_no	This variable specifies the ENET plane. Valid entries are 0-1.
vbus_no	This variable is the vertical bus (V-bus) number of the crosspoint. Valid entries are 0-15.
xpt	This parameter selects a crosspoint on the specified plane.

Qualifications

None

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 xpt 3 7 ↵
where
 	
1 is the plane number
3 is the H-bus number
7 is the V-bus number
	Task: Abort a maintenance action in progress on the crosspoint card on plane 1, H-bus 3, V-bus 7.
	
	Response:
	
	`Request to ABTK ENET Plane:0 Shelf:2 Slot:12 submitted.`
	`Request to ABTK ENET Plane:0 Shelf:2 Slot:12 passed.`
	
	Explanation: The system aborted the maintenance action in progress.

Responses

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

Responses for the abtk command

MAP output	Meaning and action

`Request to ABTK ENET Plane:1 Shelf:2 Slot:12 submitted.`
`Request to ABTK ENET Plane:1 Shelf:2 Slot:12 failed.`
`Reason: Mailbox unavailable.`
	Meaning: The command did not execute due to an abnormal software resource problem.
	
	Action: Obtain copies of all recent TRAP and SWERR logs and contact Nortel Networks technical support.

-continued-

abtk (end)

Responses for the abtk command (continued)

MAP output	Meaning and action
`Request to ABTK ENET Plane:0 Shelf:2 Slot:12 submitted.` `Request to ABTK ENET Plane:0 Shelf:2 Slot:12 passed.`	**Meaning:** The system aborted the maintenance action in progress. **Action:** None

`Request to ABTK ENET Plane:1 Shelf:2 Slot:12 submitted.`
`Request to ABTK ENET Plane:1 Shelf:2 Slot:12 rejected.`
`Reason: Card unequipped.`
	Meaning: The specified card is unequipped.
	
	Action: Reenter the command, using the correct plane, shelf, and card numbers.

`Request to ABTK ENET Plane:1 Shelf:2 Slot:12 submitted.`
`Request to ABTK ENET Plane:1 Shelf:2 Slot:12 rejected.`
`Reason: Shelf unequipped.`
	Meaning: The specified node is unequipped.
	
	Action: Reenter the command, using the correct plane and shelf numbers.

-end-

bsy

Function

Use the bsy command to manually remove ENET crosspoint cards from service.

bsy command parameters and variables

Command **Parameters and variables**

bsy *plane_no* [xpt / all] *hbus_no* [insv / mbsy / sbsy / cbsy / offl] *vbus_no* [*prompt* / noprompt] [*wait* / nowait]

Parameters and variables	Description
all	This parameter specifies all crosspoint cards on the plane.
cbsy	This parameter specifies that the crosspoint cards in a C-side-busy state are changed to manually busy.
hbus_no	This variable is the horizontal bus (H-bus) number of the crosspoint. Valid entries are 0-7.
mbsy	This parameter specifies that the crosspoint cards with a state of manually busy are changed to manually busy.
noprompt	This parameter suppresses all service degradation warnings.
nowait	This parameter releases the MAP for other actions. All tests that pass and fail generate logs.
offl	This parameter specifies that the crosspoint cards in an offline state are changed to manually busy.
plane_no	This variable specifies the ENET plane. Valid entries are 0-1.
prompt	This default parameter displays all service degradation warnings. Do not enter this parameter.
sbsy	This parameter specifies that crosspoint cards with a state of system busy are changed to manually busy.

-continued-

bsy (continued)

bsy command parameters and variables (continued)

Parameters and variables	Description
vbus_no	This variable is the vertical bus (V-bus) number of the crosspoint. Valid entries are 0-15.
wait	This default parameter prevents all MAP activity until all actions initiated by the bsy command are complete. Do not enter this parameter.
xpt	This parameter selects a crosspoint on the specified plane.

-end-

Qualifications

None

Example

The following table provides an example of the bsy command.

Example of the bsy command

Example	Task, response, and explanation	
bsy 1 all insv ↵		
	Task:	Set all in-service crosspoint cards in ENET plane 1 to manual busy.
	Response:	`WARNING: This action will be performed on ALL XPT slots in ENET Plane:1 that are in-service. Please confirm (“YES” or “NO”):`
	Explanation:	This warning indicates that all in-service crosspoint cards in ENET plane 1 will be set to manual busy if confirmation is given by typing yes. Typing no will cancel the command.

bsy (continued)

Responses

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

Responses for the bsy command

MAP output	Meaning and action
`Request to BSY ENET Plane:1 Shelf:01 Slot:15 submitted.` `Request to BSY ENET Plane:1 Shelf:01 Slot:15 passed.`	**Meaning:** The system busied the requested crosspoint card. **Action:** None
`Request to MAN BSYALL ENET Plane:1 rejected.` `Reason: No cards in necessary state found.`	**Meaning:** There are no crosspoint cards in the necessary state on the plane you specified. **Action:** None
`Request to MAN BSYALL ENET Plane:1 rejected.` `Reason: No XPT increments datafilled properly.`	**Meaning:** There are no fully datafilled card increments in the plane you specified. **Action:** Check the datafill.
`Request to MAN BSYALL ENET Plane:1 rejected.` `Reason: Shelves not equipped.`	**Meaning:** There are no shelves equipped on the specified plane. **Action:** None
`WARNING: This action will be performed on ALL XPT slots in ENET Plane:1 that are in-service.` `Please confirm (“YES” or “NO”):`	**Meaning:** This warning indicates that all the crosspoint cards in the requested state on the specified ENET plane will be set to manual busy if confirmation is given by typing yes. **Action:** Enter yes to continue. Enter no to abort the command.

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
`WARNING: This action will cause NETWORK BLOCKAGE.` `Please confirm (“YES” or “NO”):`	**Meaning:** Blockage will occur in the switching matrix. There will be no path between two or more links in either network plane. **Action:** Enter yes to continue. Enter no to abort the command.
`WARNING: This action will ISOLATE PMs.` `Please confirm (“YES” or “NO”):`	**Meaning:** ICommunications between the ENET and one or more peripheral modules will be totally cut off. **Action:** Enter yes to continue. Enter no to abort the command.

-end-

deload

Function

Use the deload command to control and query the deload status of elements in the ENET switching matrix.

deload command parameters and variables

Command	Parameters and variables
deload	*plane_no* [xpt / all] *hbus_no* *vbus_no* [query / clear / set] [*prompt* / noprompt]

Parameters and variables	Description
all	This parameter specifies all crosspoint cards on the plane.
clear	This parameter clears the deloaded status of the cross point card or cards.
hbus_no	This variable is the horizontal bus (H-bus) number of the crosspoint. Valid entries are 0-7.
noprompt	This parameter suppresses all service degradation warnings.
plane_no	This variable specifies the plane number. Valid entries are 0-1.
prompt	This default parameter displays all service degradation warnings. Do not enter this parameter.
query	This default parameter displays the deload status of the specified crosspoint card or cards.
set	This parameter sets the status of the crosspoint card or cards to deload.
vbus_no	This variable is the vertical bus (V-bus) number of the crosspoint. Valid entries are 0-15.
xpt	This parameter selects a crosspoint on 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.

deload (continued)

- 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.

Example

The following table provides an example of the deload command.

Example of the deload command

Example	Task, response, and explanation

deload 1 xpt 7 7 query ↵
where
 	
1 is the plane number
7 is the H-bus number
7 is the V-bus number
	Task: Query the deload status of the crosspoint card on plane 1, H-bus 7, V-bus 7.
	
	Response:
	`Request to QUERY DELOAD ENET Plane:1 Shelf:03 Slot:32 submitted.`
	`Request to QUERY DELOAD ENET Plane:1 Shelf:03 Slot:32 passed.`
	`ENET Plane:1 Shelf:03 Slot:32 is deloaded.`
	
	Explanation: The selected card is deloaded.

Responses

The following table provides an explanation of the responses for the deload command.

Responses for the deload command

MAP output	Meaning and action

`Request to CLEAR DELOAD ENET Plane:0 Shelf:03 Slot:32 submitted.`
`Request to CLEAR DELOAD ENET Plane:0 Shelf:03 Slot:32 passed.`
 	
or
 	
`Request to SET DELOAD ENET Plane:0 Shelf:03 Slot:32 submitted.`
`Request to SET DELOAD ENET Plane:0 Shelf:03 Slot:32 passed.`
	Meaning: The status of the selected card is changed to the requested state.
	
	Action: None

`Request to CLEAR DELOAD ENET Plane:0 Shelf:03 Slot:32 submitted.`
`Request to CLEAR DELOAD ENET Plane:0 Shelf:03 Slot:32 rejected`
`Reason: Card unequipped.`
 	
or
 	
`Request to QUERY DELOAD ENET Plane:0 Shelf:03 Slot:32 submitted.`
`Request to QUERY DELOAD ENET Plane:0 Shelf:03 Slot:32 rejected`
`Reason: Card unequipped.`
 	
or
 	
`Request to SET DELOAD ENET Plane:0 Shelf:03 Slot:32 submitted.`
`Request to SET DELOAD ENET Plane:0 Shelf:03 Slot:32 rejected`
`Reason: Card unequipped.`
	Meaning: The specified crosspoint card slot is unequipped.
	
	Action: None

-continued-

deload (continued)

Responses for the deload command (continued)

MAP output	Meaning and action

`Request to CLEAR DELOAD ENET Plane:0 Shelf:03 Slot:32 submitted.`
`Request to CLEAR DELOAD ENET Plane:0 Shelf:03 Slot:32 rejected`
`Reason: No equipped shelves.`
 	
or
 	
`Request to QUERY DELOAD ENET Plane:0 Shelf:03 Slot:32 submitted.`
`Request to QUERY DELOAD ENET Plane:0 Shelf:03 Slot:32 rejected`
`Reason: No equipped shelves.`
 	
or
 	
`Request to SET DELOAD ENET Plane:0 Shelf:03 Slot:32 submitted.`
`Request to SET DELOAD ENET Plane:0 Shelf:03 Slot:32 rejected`
`Reason: No equipped shelves.`
	Meaning: The system does not have any shelves equipped on the plane you specified.
	
	Action: None

`Request to CLEAR DELOAD ENET Plane:0 Shelf:03 Slot:32 submitted.`
`Request to CLEAR DELOAD ENET Plane:0 Shelf:03 Slot:32 rejected`
`Reason: Shelf unequipped.`
 	
or
 	
`Request to QUERY DELOAD ENET Plane:0 Shelf:03 Slot:32 submitted.`
`Request to QUERY DELOAD ENET Plane:0 Shelf:03 Slot:32 rejected`
`Reason: Shelf unequipped.`
 	
or
 	
`Request to SET DELOAD ENET Plane:0 Shelf:03 Slot:32 submitted.`
`Request to SET DELOAD ENET Plane:0 Shelf:03 Slot:32 rejected`
`Reason: Shelf unequipped.`
	Meaning: The specified crosspoint card in on an unequipped shelf.
	
	Action: None

-continued-

deload (end)

Responses for the deload command (continued)

MAP output	Meaning and action

`Request to SET DELOAD ENET Plane:1 submitted.`
`Request to SET DELOAD ENET Plane:1 passed.`
`All equipped crosspoint cards have now been marked for deloading.`
	Meaning: This response verifies that a request to deload all cards on the specified ENET plane has been submitted and passed.
	
	Action: None

`WARNING: This action will result in the DELOAD status in Plane:0 being cleared.` `Please confirm (“YES” or “NO”):`	**Meaning:** A crosspoint card and its corresponding card on the other plane cannot both be set to deload at the same time. In order to apply the deload status to the card(s) on the plane you specified, the system must first remove the deload status from any affected corresponding cards on the other plane. **Action:** Enter yes to continue. Enter no to abort the command.

-end-

disp

Function

Use the disp command to display the current contents of the ENET and SYSTEM 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   .     .         . . . .

 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 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
  .

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

 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  . . . . . . . .       . . . . . . . .
```

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

Action: None

locate

Function

Use the locate command to display the location of one or more crosspoint cards.

locate command parameters and variables

Command	Parameters and variables
locate	*plane_no* [xpt / all] *hbus_no* *vbus_no*

Parameters and variables	Description
all	This parameter specifies all crosspoint cards on the plane.
hbus_no	This variable is the horizontal bus (H-bus) number of the crosspoint. Valid entries are 0-7.
plane_no	This variable specifies the plane number. Valid entries are 0-1.
vbus_no	This variable is the vertical bus (V-bus) number of the crosspoint. Valid entries are 0-15.
xpt	This parameter selects a crosspoint on the specified plane.

Qualifications

None

locate (continued)

Example

The following table provides an example of the locate command.

Example of the locate command

Example	Task, response, and explanation

locate 0 xpt 0 3 ↵
where
 	
0 is the plane number
0 is the H-bus number
3 is the V-bus number
	Task: Locate the crosspoint on plane 0, H-bus 0, V-bus 3.
	
	Response:
	`Request to LOCATE ENET Plane:0 Shelf:01 Slot:15 submitted.`
	`Request to LOCATE ENET Plane:0 Shelf:01 Slot:15 passed.`
	
	`SiteFlrRPosBay_id Shf Description Slot EqPec`
	`HOST01 F04 ENC 000 26 ENET:0:01:15 15 9X35BA FRNT`
	`HOST01 F04 ENC 000 26 ENET:0:01:15 15 9X41BA BACK`
	
	Explanation: The system displays the physical location of the front and rear card occupying the crosspont card slot.

Responses

The following table provides explanations of the responses for the locate command.

Responses for the locate command

MAP output	Meaning and action

`Request to LOCATE ENET Plane:0 Shelf:01 Slot:15 submitted.`
`Request to LOCATE ENET Plane:0 Shelf:01 Slot:15 passed.`
 	
`Site Flr RPos Bay_id Shf Description Slot EqPec`
`HOST 01 F04 ENC 000 26 ENET:0:01:15 15 9X35BA FRNT`
`HOST 01 F04 ENC 000 26 ENET:0:01:15 15 9X41BA BACK`
	Meaning: The system displays the physical location of the front and rear card occupying the crosspont card slot.
	
	Action: None

-continued-

locate (end)

Responses for the locate command (continued)

MAP output	Meaning and action
`Request to LOCATE ENET Plane: 1 Slot: 30 rejected.` `Reason: No equipped shelves.`	**Meaning:** The system could not locate the crosspoint because all shelves on the selected plane are unequipped. **Action:** None
`Request to LOCATE ENET Plane: 1 Slot: 30 rejected.` `Reason: Card unequipped.`	**Meaning:** The card slot corresponding to the matrix coordinates you specified is unequipped. **Action:** None

-end-

Function

Use the offl command to place a manual busy element of the crosspoint matrix in the offline state.

offl command parameters and variables

Command	Parameters and variables
offl	*plane_no* [xpt / all] *hbus_no* *vbus_no* [*prompt* / noprompt] [*wait* / nowait]

Parameters and variables	Description
all	This parameter specifies all crosspoint cards on the plane.
hbus_no	This variable is the horizontal bus (H-bus) number of the crosspoint. Valid entries are 0-7.
noprompt	This parameter suppresses all service degradation warnings.
nowait	This parameter releases the MAP for other actions. All tests that pass and fail generate logs.
plane_no	This variable specifies the plane number. Valid entries are 0-1.
prompt	This default parameter displays all service degradation warnings. Do not enter this parameter.
vbus_no	This variable is the vertical bus (V-bus) number of the crosspoint. Valid entries are 0-15.
wait	This default parameter prevents all MAP activity until all actions initiated by the offl command are complete. Do not enter this parameter.
xpt	This parameter selects a crosspoint on the specified plane.

Qualifications

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

- The crosspoint card(s) you wish to set to offline must first be placed in the MBsy (manual busy) state, using the bsy command.
- When a crosspoint card is set to offline, the event is recorded in log ENET206.

offl (continued)

Examples

The following table provides examples of the offl command.

Examples of the offl command

Example	Task, response, and explanation

offl 1 xpt 0 3 ↵
where
 	
1 is the plane number
0 is the H-bus number
3 is the V-bus number
	Task: Offline the crosspoint card on plane 1, H-bus 0, V-bus 3.
	
	Response:
	`Request to OFFL ENET Plane:1 Shelf:01 Slot:15 submitted.`
	`Request to OFFL ENET Plane:1 Shelf:01 Slot:15 passed.`
	
	Explanation: The system set the requested card to offline.

offl 1 all ↵	**Task:** Set all crosspoint cards on plane 1 to offline.
	
	Response:
	`Request to OFFLALL ENET Plane:1 submitted.`
	`Request to OFFLALL ENET Plane:1 completed.`
	
	Explanation: The system set all of the crosspoint cards on plane 1 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
`Request to OFFL ENET Plane:1 Shelf:01 Slot:15 submitted.` `Request to OFFL ENET Plane:1 Shelf:01 Slot:15 passed.`	**Meaning:** The system set the requested card to offline. **Action:** None
`Request to OFFLALL ENET Plane:1 submitted.` `Request to OFFLALL ENET Plane:1 completed.`	**Meaning:** The system set all of the crosspoint cards on plane 1 to the offline state. **Action:** None

`Request to OFFLALL ENET Plane:1 submitted.`
`Request to OFFLALL ENET Plane:1 rejected.`
`Reason: No equipped shelves.`
	Meaning: None of the shelves on the plane you specified are equipped
	
	Action: None

`Request to OFFLALL ENET Plane:1 submitted.`
`Request to OFFLALL ENET Plane:1 rejected.`
`Reason: No MBsy cards.`
	Meaning: No crosspoint cards on the plane you specified are manually busy.
	
	Action: Use the bsy command to make the cards manually busy, then retry the offl command.

`WARNING: This will cause loss of VBUS continuity on`
`all MBSY slots in ENET Plane:0.`
`Please confirm (“YES” or “NO”):`
	Meaning: If the offl command with the all parameter executes, any V-bus containing a manual busy matrix element in the specified plane will be disrupted.
	
	Action: Enter yes to continue. Enter no to abort the command.

queryen

Function

Use the queryen command to display information about the hardware forming an element of the switching matrix.

queryen command parameters and variables

Command	Parameters and variables
queryen	*plane_no* [xpt *hbus_no* *vbus_no* [status | count | istb | summary *number* | verbose *number* | terse *number* | report *number*]]
	[all [summary *number* | verbose *number* | terse *number* | report *number*]]

Parameters and variables	Description
all	This parameter selects all the crosspoints on the plane.
count	This parameter displays ENET counters.
hbus_no	This variable is the horizontal bus (H-bus) number of the crosspoint. Valid entries are 0-7.
istb	This parameter presents the reason for the current ENET state, if applicable.
number	This variable is the quantity of logs or summaries, or the index number of the report. Valid entries are 1-20 or 1-100.
plane_no	This variable specifies the ENET plane. Valid entries are 0-1.
report	This parameter displays a specific diagnostic log. The index of diagnostic logs is obtained by using the summary parameter.
status	This default parameter displays specific system card information, including the number of crosspoint cards 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. This parameter is the default when the all parameter is used.

-continued-

queryen (continued)

queryen command parameters and variables (continued)

Parameters and variables	Description
terse	This parameter displays the most recent diagnostic logs in a brief format.
vbus_no	This variable is the vertical bus (V-bus) number of the crosspoint. Valid entries are 0-15.
verbose	This parameter displays the most recent diagnostic logs in complete detail.
xpt	This parameter selects a crosspoint on the specified plane.

-end-

Qualifications

None

Example

The following table provides an example of the queryen command.

Example of the queryen command

queryen 1 xpt 0 3 status ↵

Task: Query the status of the crosspoint card at plane 0, H-bus 0, V-bus 3.

Response:

```
Request to QUERYEN ENET Plane:1 Shelf:01 Slot:15 submitted.
Request to QUERYEN ENET Plane:1 Shelf:01 Slot:15 passed.
Front: Crosspoint card Back: DS-30 interface
In-Service Trouble Reasons:
No In-Service Trouble Reasons
No diagnostic log information available for request.
```

Explanation: The logical matrix coordinates correspond to the crosspoint in shelf 0, slot 15. There are no in-service trouble reasons applicable to this slot, and no diagnostic log information is available.

Responses

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

Responses for the queryen command

MAP output	Meaning and action

`Request to QUERYEN ENET plane:0 shelf:00 Slot:12 submitted.`
`Request to QUERYEN ENET Plane:0 Shelf:00 Slot:12 in both planes rejected`
`Reason: Shelves not equipped.`
	Meaning: The specified shelves are unequipped.
	
	Action: None

`Request to QUERYEN ENET Plane:0 Shelf:00 Slot:12 submitted.`
`Request to QUERYEN ENET Plane:0 Shelf:00 Slot:12 passed.`
`Front: Crosspoint card Back: DS-30 interface`
`In-Service Trouble Reasons:`
`No In-Service Trouble Reasons`
`No diagnostic log information available for request.`
	Meaning: The system displays the requested information.
	
	Action: None

`Request to QUERYEN ENET Plane:0 Shelf:00 Slot:12 submitted.`
`Request to QUERYEN ENET Plane:0 Shelf:00 Slot:12 rejected`
`Reason: Card unequipped.`
	Meaning: The crosspoint card you specified is unequipped.
	
	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 all *incrname* *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 MATRIX level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The MATRIX 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 MATRIX 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 MATRIX 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` `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 MATRIX 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 MATRIX level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

rextst

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)
	sysrex	enable disable	all days	*weekdays*		(3)(4)
		include	all node matrix			(5)(6)(7)
	tst	*plane*	all node matrix	continue stop		(8)(9)(10)

Command	Parameters and variables	
rextst (continued)	(1)	*wait* nowait
	(2)	
	(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-

rextst (continued)

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

Function

Use the rts command to return a system busy or manually busy element of the switching matrix to service.

rts command parameters and variables

Command	Parameters and variables
rts	*plane_no* [xpt / all] *hbus_no* *vbus_no* [*prompt* / noprompt] [*wait* / nowait] (1) (2)
rts (continued)	(1) [*noforce* / force] (2) (end)

Parameters and variables	Description
all	This parameter specifies all crosspoint cards on the plane.
force	This parameter bypasses out-of-service tests and forces the crosspoint into service.
hbus_no	This variable is the horizontal bus (H-bus) number of the crosspoint. Valid entries are 0-7.
noforce	This default parameter performs out-of-service tests and will not return the crosspoint to service if it fails the tests. Do not enter this parameter.
noprompt	This parameter suppresses all service degradation warnings.
nowait	This parameter releases the MAP for other actions. All tests that pass and fail generate logs.
plane_no	This variable specifies the plane number. Valid entries are 0-1.
prompt	This default parameter displays all service degradation warnings. Do not enter this parameter.
vbus_no	This variable is the vertical bus (V-bus) number of the crosspoint. Valid entries are 0-15.
wait	This default parameter prevents all MAP activity until all actions initiated by the rts command are complete. Do not enter this parameter.
xpt	This parameter selects a crosspoint on the specified plane.

rts (continued)

Qualifications

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

- In order to return a crosspoint to service, it must be in the manually-busy or system-busy state.
- The following log reports are associated with usage of the rts command:
  - ENET200 logs the transition from SBsy or MBsy state to OK
  - ENET208 reports that the entity changed to in-service trouble (Istb) state
  - ENET210 records when test passes
  - ENET211 records when test fails

Example

The following table provides an example of the rts command.

Example of the rts command

Example	Task, response, and explanation

rts 1 xpt 0 3	**Task:** Return the crosspoint card on plane 1, H-bus 0, V-bus 3 to service.
	
	Response:
	
	`Request to RTS ENET Plane:0 Shelf:02 Slot:15 submitted.`
	`Request to RTS ENET Plane:0 Shelf:02 Slot:15 passed.`
	
	Explanation: The crosspoint passed out-of-service tests and has been successfully 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
`Request to RTS ENET Plane:0 Shelf:02 Slot:15 submitted.` `Request to RTS ENET Plane:0 Shelf:02 Slot:15 passed.`	**Meaning:** The crosspoint passed out-of-service tests and has been successfully returned to service. **Action:** None

`Request to RTSALL ENET Plane:0 submitted.`
`Request to RTSALL ENET Plane:0 rejected.`
`Reason: No MBsy or SBsy cards`
	Meaning: None of the cards on the plane you specified are in a state which permits them to be directly returned to service.
	
	Action: Use the bsy command to put the cards in the manually-busy state. Then try the rts command again.

`Request to RTSALL ENET Plane:0 submitted.`
`Request to RTSALL ENET Plane:n rejected.`
`Reason: Shelves not equipped.`
	Meaning: None of the shelves on the specified plane are equipped.
	
	Action: None

`WARNING: This will force all MBSY and SBSY XPT slots in`
`ENET Plane:n to the INSV state without the normal`
`tests being run first.`
`Please confirm (“YES” or “NO”):`
	Meaning: The system will attempt to return the indicated cards to service without running the out-of-service test.
	
	Action: Enter yes to continue. Enter no to abort the command.

shelf

Function

Use the shelf command to enter the SHELF level of the ENET MAP.

shelf command parameters and variables

Command	Parameters and variables
shelf	*shelf*

Parameters and variables	Description
shelf	This variable specifies the ENET shelf. Valid entries are 0-7, or none. None is the default value for most ENETs and 0 is the default value for ENET16K.

Qualifications

None

Example

The following table provides an example of the shelf command.

Example of the shelf command

Example	Task, response, and explanation
shelf 1 ↵	

Task: View the SHELF level of the ENET MAP for shelf 1.

Response: The system changes the menu to the SHELF level menu, and adds the following fields to the display:

```
SHELF  01   SLOT      1111111 11122222 22222333 333333
           123456 78 90123456 78901234 56789012 345678
 Plane 0    .  .  .. ........ -------- ........ ......
 Plane 1    .  .  .. ........ -------- ........ ......
```

Explanation: The system displays the SHELF level screen for shelf 1.

shelf (end)

Responses

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

Responses for the shelf command

MAP output	Meaning and action
`No storage for directory.`	**Meaning:** The system cannot enter the SHELF level because there is insufficient memory to access the shelf-level command directory. **Action:** Clear any memory alarms present under the CM alarm banner.
`Request to PERFORM SHELF 12 rejected.` `Reason: Shelf not equipped.`	**Meaning:** The specified shelf number is unequipped. **Action:** Reenter the command using the correct shelf number.

The system changes the menu to the SHELF level menu, and adds the following fields to the display:
 	
`SHELF 02 SLOT 1111111 11122222 22222333 333333`
`123456 78 90123456 78901234 56789012 345678`
`Plane 0 . . .. ........ -------- ........ ......`
`Plane 1 . . .. ........ -------- ........ ......`
	Meaning: The current level changes to the SHELF level.
	
	Action: None

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:
	
	`SYSTEM`
	`Shelf  Plane 0  Plane 1`
	`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.` `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: SYSTEM Shelf Plane 0 Plane 1 00 . . 01 . . 02 . . 03 . .	**Meaning:** The current level changes to the SYSTEM level. **Action:** None

-end-

trnsl

Function

Use the trnsl command to determine the physical location of a crosspoint card by providing its matrix coordinates, or to determine its matrix coordinates by providing its physical location.

trnsl command parameters and variables

Command	Parameters and variables		
trnsl	logical	*hbus_no*	*vbus_no*
	physical	*shelf_no*	*slot_no*

Parameters and variables	Description
hbus_no	This variable is the horizontal bus (H-bus) number of the crosspoint, which represents its horizontal coordinate in the switching matrix. Valid entries are 0-15.
logical	This parameter directs the system to translate the logical coordinates and display the physical coordinates.
physical	This parameter directs the system to translate the physical coordinates and display the logical coordinates.
shelf_no	This variable specifies the shelf. Valid entries are 0-3.
slot_no	This variable specifies the slot. Valid entries are 9-32.
vbus_no	This variable is the vertical bus (V-bus) number of the crosspoint, which represents its vertical coordinate in the switching matrix. Valid entries are 0-7.

Qualifications

None

trnsl (continued)

Example

The following table provides an example of the trnsl command.

Example of the trnsl command

Example	Task, response, and explanation
trnsl logical 1 1 ↵ *where* 1 is the H-bus number 1 is the V-bus number	**Task:** Determine the physical location of the crosspoint card at H-bus 1, V-bus 1. **Response:** `ENET HBus:1 VBus:1 : Shelf:00 Slot:12` **Explanation:** The system displays the logical and physical locations of the crosspoint card.

Responses

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

Responses for the trnsl command

MAP output	Meaning and action
`Request to TRNSL ENET Plane:0 Shelf:01 rejected.` `Reason: Shelf unequipped.`	**Meaning:** The specified shelf is unequipped. **Action:** Reenter the command specifying the correct plane and shelf numbers.

`Request to TRNSL ENET Plane:0 Shelf:01 Slot:15 submitted.`
`Request to TRNSL ENET Plane:0 Shelf:01 Slot:15 passed.`
`ENET HBus:1 VBus:1 : Shelf:00 Slot:12`
	Meaning: The system translates a logical location into a physical location.
	
	Action: None

-continued-

trnsl (end)

Responses for the trnsl command (continued)

MAP output	Meaning and action

`Request to TRNSL ENET Plane:0 Shelf:01 Slot:15 submitted.`
`Request to TRNSL ENET Plane:0 Shelf:01 Slot:15 passed.`
`ENET Plane:0 Shelf:01 Slot:15 : HBus:0  VBus:3`
	Meaning: The system translates a physical location into a logical location.
	
	Action: None

-end-	

Function

Use the try command to determine which warnings are displayed for certain state-changing commands. This allows you to predetermine the potential impact of a maintenance action before actually executing it.

try command parameters and variables

Command	Parameters and variables
try	bsy *plane_no* [xpt | all] *hbus_no* *vbus_no* [insv | mbsy | sbsy | cbsy | offl] rts *plane_no* [xpt | all] *hbus_no* *vbus_no* [*noforce* | force] tst *plane_no* [xpt | all] *hbus_no* *vbus_no* offl *plane_no* [xpt | all] *hbus_no* *vbus_no*

Parameters and variables	Description
all	This parameter, when used in conjunction with parameters rts, tst, or offl, selects all crosspoint cards on the selected plane. When used in conjunction with the bsy parameter, all can also be used to select hardware entities by state, such as busy or offline.
bsy	This parameter selects the busy command.
cbsy	This parameter selects crosspoints in the C-side-busy state.
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.
hbus_no	This variable is the horizontal bus (H-bus) number of the crosspoint, which represents its horizontal coordinate in the switching matrix. Valid entries are 0-15.
insv	This parameter selects crosspoints in the in-service state.
mbsy	This parameter selects crosspoints in the manual-busy state.

-continued-

try (continued)

try command parameters and variables (continued)

Parameters and variables	Description
noforce	This parameter initiates out-of-service tests. Do not type in this parameter.
offl	This parameter selects the offline command or selects the crosspoints in the offline state.
plane_no	This variable specifies a plane of the ENET. Valid entries are 0 or 1.
rts	This parameter selects the return-to-service command.
sbsy	This parameter selects crosspoints in the system-busy state.
tst	This parameter selects the test command.
vbus_no	This variable is the vertical bus (V-bus) number of the crosspoint, which represents its vertical coordinate in the switching matrix. Valid entries are 0-7.
xpt	This parameter selects a crosspoint.

-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 xpt 57 ↵	
	Task: Check the impact of busying the matrix element at H-bus 5, V-bus 7 of plane 1.
	Response: `WARNING: This action will cause NETWORK BLOCKAGE.`
	Explanation: The system displays the warning which would appear if you actually busied the crosspoint (in this example, plane 1, H-bus number 5, V-bus number 7).

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 warning or response that would actually appear if you used the command string you are trying.	
	Meaning: The system displays the warning or response that would actually appear if you used the command string you are trying.
	Action: None

tst

Function

Use the tst command to test the ENET plane-shelf system cards.

tst command parameters and variables

Command	Parameters and variables
tst	*plane* [xpt / all] *hbus_no* *vbus_no* [*prompt* / noprompt] [*wait* / nowait]

Parameters and variables	Description
all	This parameter directs the system to select all crosspoints.
hbus_no	This variable is the horizontal bus (H-bus) number of the crosspoint, which represents its horizontal coordinate in the switching matrix. Valid entries are 0-15.
noprompt	This parameter suppresses all service degradation warnings.
nowait	This parameter releases the MAP for other actions. All tests that pass and fail generate logs.
plane_no	This variable specifies a plane. Valid entries are 0-1.
prompt	This default parameter displays all service degradation warnings. Do not type in this parameter.
vbus_no	This variable is the vertical bus (V-bus) number of the crosspoint, which represents its vertical coordinate in the switching matrix. Valid entries are 0-7.
wait	This default parameter prevents all MAP activity until all actions initiated by the bsy command are complete. Do not type in this parameter.
xpt	This parameter directs the system to select a crosspoint.

Qualifications

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

- If the entity you specify is in an OK state, the tst command runs in-service (INSV) tests. If the INSV tests fail, the state of the entity changes to system busy (SBsy).
- If the entity you specify is in a manual busy (MBsy) state, the tst command runs out-of-service (OOS) tests. The state of the card does not change, regardless of whether the tests pass or fail.

tst (continued)

- When the nowait parameter is not used, only test failures generate a log report. When nowait is used, all test results generate a log report.
- The log reports associated with the tst command are:
  - ENET203 logs the transition from OK to SBsy
  - ENET208 reports that the entity went into in-service trouble (Istb) state
  - ENET220 logs that tests pass
  - ENET 221 logs that tests fail

Examples

The following table provides examples of the tst command.

Examples of the tst command

Example	Task, response, and explanation

tst1 xpt 0 3 ↵
where
 	
1 is the plane number
0 is the H-bus number
3 is the V-bus number
	Task: Test the crosspoint card on plane 1, Hbus 0, Vbus 3.
	
	Response:
	
	`Request to INSV TEST ENET Plane:1 Shelf:01 Slot:15 submitted.`
	`Request to INSV TEST ENET Plane:1 Shelf:01 Slot:15 passed`
	
	Explanation: The crosspoint card is tested and passed.

tstallnoprompt nowait ↵	**Task:** Test all crosspoints in the in-service or manually-busy states on plane 0.
	
	Response:
	
	`Request to TSTALL ENET Plane:0 submitted.`
	`Request to TSTALL ENET Plane:0 passed.`
	
	Explanation:

Responses

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

Responses for the tst command

MAP output	Meaning and action

`Request to TSTALL ENET Plane:1 submitted.`
`Request to TSTALL ENET Plane:1 rejected.`
`Reason: No MBsy or OK cards.`
	Meaning: None of the cards on the plane you specified are in a state which permits testing.
	
	Action: Use the bsy command to put the desired cards in the manually-busy state, then retry the tst command.

`Request to TSTALL ENET Plane:1 submitted.`
`Request to TSTALL ENET Plane:1 rejected.`
`Reason: No OK shelves.`
	Meaning: None of the shelves on the specified plane are in a state that permits testing.
	
	Action: None

`Request to TSTALL ENET Plane:0 submitted.` `Request to TSTALL ENET Plane:0 passed.`	**Meaning:** All in-service and manually-busy crosspoints are tested and passed. **Action:** None
`Request to INSV TEST ENET Plane:1 Shelf:01 Slot:15 submitted.` `Request to INSV TEST ENET Plane:1 Shelf:01 Slot:15 passed`	**Meaning:** The crosspoint card is tested and passed. **Action:** None

zoom

Function

Use the zoom command to access the SHELF or CARD level which corresponds to the location in the specified crosspoint matrix.

zoom command parameters and variables

Command	Parameters and variables		
zoom	[hbus	*hbus_no*	]
	[xpt	*hbus_no*	*vbus_no*]

Parameters and variables	Description
hbus	This parameter selects the horizontal-bus (H-bus) number which accesses the corresponding ENET SHELF level of the MAP.
hbus_no	This variable selects the H-bus number of the crosspoint which represents the horizontal coordinate in the switching matrix. The range is 0-15.
vbus_no	This variable selects the vertical-bus (V-bus) number of the crosspoint which represents the vertical coordinate in the switching matrix. The range is 0-7.
xpt	This parameter selects a crosspoint on the plane which accesses the corresponding ENET CARD level at the MAP.

Qualifications

None

zoom (continued)

Examples

The following table provides examples of the zoom command.

Examples of the zoom command

Example	Task, response, and explanation

zoom hbus 2 ↵	**Task:** Access the ENET SHELF level associated with H-bus 2.
	
	Response: The system changes the menu to the SHELF level menu, and adds the following fields to the display:
	
	`SHELF 01  SLOT  1111111 11122222 22222333 333333`
	`123456 78 90123456 78901234 56789012 345678`
	`Plane 0  . . .. ........ -------- ........ ......`
	`Plane 1  . . .. ........ -------- ........ ......`
	
	Explanation: The system accesses the ENET SHELF level associated with H-bus 2.

zoom xpt 1 2 ↵	**Task:** Access the ENET CARD level associated with the crosspoint at H-bus 1, V-bus 2.
	
	Response: The system changes the menu to the CARD level menu, and adds the following fields to the display:
	
	`CARD 10  Front:  Back:  DS-512 Links`
	`Xpt  I/F  0 1 2 3`
	`Plane 0  . . . . . .`
	`Plane 1  . . . . . .`
	
	Explanation: The system accesses the ENET CARD level associated with crosspoint 12.

zoom (continued)

Responses

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

Responses for the zoom command

MAP output	Meaning and action

`CARD 10  Front:  Back:  DS-512 Links`
`Xpt  I/F  0 1 2 3`
`Plane 0  .  .  . . . .`
`Plane 1  .  .  . . . .`
	Meaning: The system accesses the ENET CARD level associated with the specified crosspoint card.
	
	Action: None

`SHELF 01  SLOT  1111111 11122222 22222333 333333`
`123456 78 90123456 78901234 56789012 345678`
`Plane 0  . . .. ........ -------- ........ ......`
`Plane 1  . . .. ........ -------- ........ ......`
	Meaning: The system accesses the ENET SHELF level associated with the specified H-bus.
	
	Action: None

`Request to ZOOM ENET Plane:0 Shelf:01 rejected.` `Reason: Shelf unequipped.`	**Meaning:** The shelf corresponding to the specified matrix coordinates is unequipped. **Action:** Reenter the command specifying the correct matrix coordinates.
`Request to ZOOM ENET Plane:0 Shelf:01 Slot:12 rejected.` `Reason: Card unequipped.`	**Meaning:** The card corresponding to the specified matrix coordinates is unequipped. **Action:** Reenter the command specifying the correct matrix coordinates.

-continued-

zoom (end)

Responses for the zoom command (continued)

MAP output	Meaning and action
`Request to ZOOM ENET Plane:0 Shelf:01 Slot:12 rejected.` `Reason: No storage for directory.`	**Meaning:** The system cannot access the card or shelf level because there is insufficient memory storage to link the appropriate directory. **Action:** Clear any memory alarms present under the CM alarm banner. Contact the next level of maintenance support for assistance.
-end-	

MC level commands

Use the message controllers (MC) level of the MAP to test and control the MCs.

Accessing the MC level

To access the MC level, enter the following from the CI (command interpreter) level:

mapci;mtc;cm;mc ↵

MC commands

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

MC commands

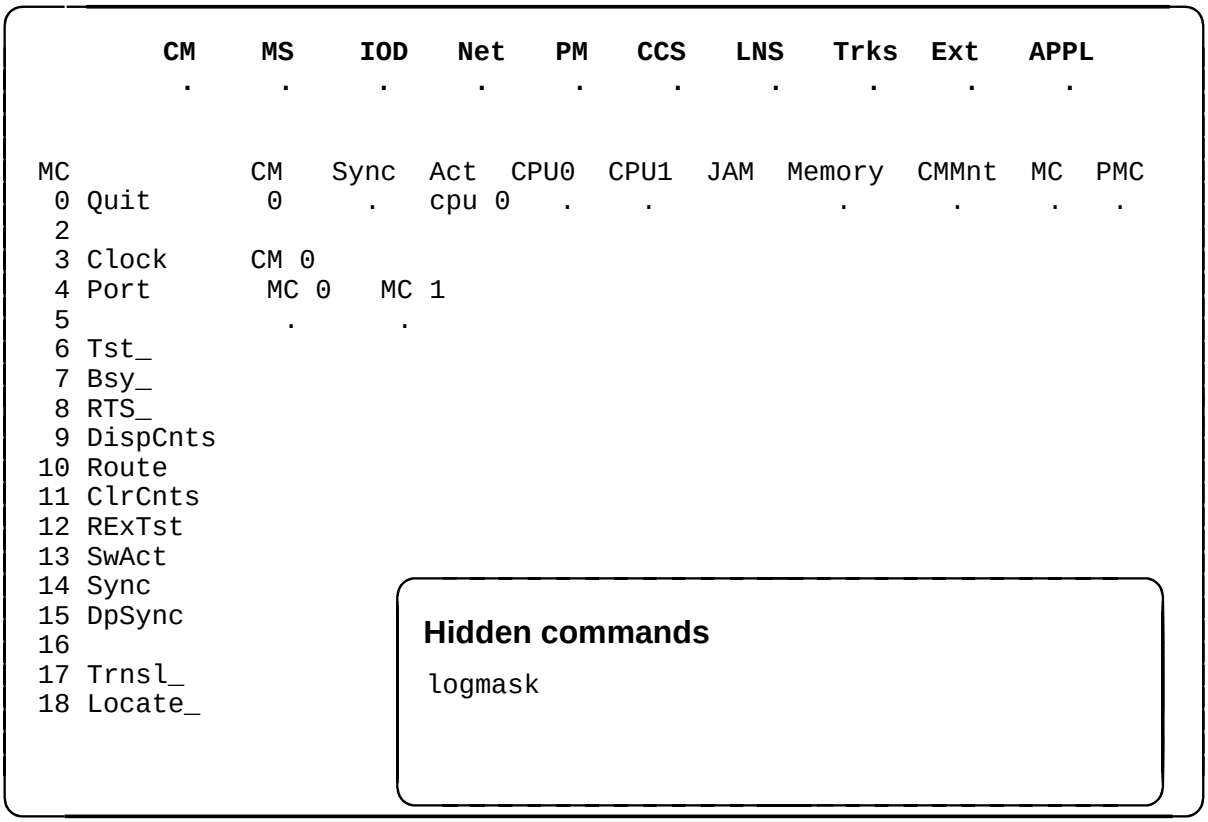
Command	Page
bsy	M-137
clock	M-141
clrcnts	M-143
dispcnts	M-147
dpsync	M-151
locate	M-155
logmask	M-157
port	M-161
quit	M-163
rextst	M-167
route	M-175
rts	M-177

-continued-

MC commands (continued)	
Command	**Page**
swact	M-181
sync	M-185
trnsl	M-195
tst	M-197
-end-	

MC menu

The following figures show the MC menu and status display. The insert with hidden commands is not a visible part of the menu display.



MC status codes

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

Status codes MC menu status display		
Code	**Meaning**	**Description**
CM		
0	CM 0	CM 0 is being monitored.
MC 0, MC 1		
.	in service	The MC and its central-side (C-side) link is in service with no faults.
todf	time-of-day fault	The system detected a fault in the time-of-day (TOD) clock.
sscf	subsystem clock fault	The system detected a fault in one or both of the subsystem clocks.
istb	in-service trouble	One link to the message switch (MS) is system busy or manually busy.
sbsy	system busy	The MC is system busy.
cbsy	C-side busy	The MC is C-side busy because both of its links on the MS are system busy or manually busy.
mbsy	manually busy	The MC is manually busy.

Common responses

The following table provides explanations of the common responses to the MC commands. This responses will be produced by many of the commands under the MC level.

Common responses for the MC commands

MAP output	Meaning and action
`CANNOT RUN TEST WHEN IN SYNCHRONISM.`	**Meaning:** The test cannot be run while the central processing units (CPU) are synchronized. **Action:** Drop sync using the dpsync command and reenter the tst command.

`MAINTENANCE ACTION STARTED.`
 	
or
 	
`MAINTENANCE ACTION ALREADY STARTED.`
	Meaning: Either the MC process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.
	
	Action: None

`MAINTENANCE ACTION SUBMITTED.`	**Meaning:** The MC process has received the maintenance request. The nowait parameter is in effect. **Action:** None
`MATE IS ALREADY UNDER TEST.`	**Meaning:** The mate communication register (MCR) flag is in use and cannot be claimed. **Action:** None
`NO REPLY FROM REQUEST`	**Meaning:** A MC process has taken too long to reply to a MAP request. The MAP request is terminated. **Action:** None

-continued-

Common responses for the MC commands (continued)

MAP output	Meaning and action
`SOFTWARE INCONSISTENCY - ACTION ABORTED.`	**Meaning:** A software fault has occurred. **Action:** None

-end-

bsy

Function

Use the bsy command to change the state of the MC to manually busy.

bsy command parameters and variables

Command	Parameters and variables
bsy	*mc_no* [*prompt* / noprompt] [*noforce* / force]

Parameters and variables	Description
force	This parameter directs the system to force the MC into the manaully-busy state.
mc_no	This variable is the number of the MC to be made manually busy. Valid entries are 0-1.
noforce	This default parameter directs the system to abort the bsy command if the busy will cause an interruption of service. Do not enter this parameter.
noprompt	This parameter suppress the yes/no prompts. The system automatically enters yes.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.

Qualifications

None

Example

The following table provides an example of the bsy command.

Example of the bsy command

Example	Task, response, and explanation
bsy1 ↵ *where* 1 is the MC number	**Task:** Manually busy MC 1. **Response:** `MC BUSIED OK.` **Explanation:** The system places the MC in the manually-busy state.

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
ABORTED	**Meaning:** The system aborted the bsy command because no was entered in response to the prompt. **Action:** None
ABORTED DUE TO SOFTWARE INCONSISTENCY	**Meaning:** Either the mate MC has a nil node number, or the node number has not been deterimined for any MC. **Action:** None
COULD NOT BUSY A LINK	**Meaning:** One or more of the MC links cannot be busied. **Action:** None
MC BUSIED OK.	**Meaning:** The MC was successfully busied. **Action:** None
MC BUSY FAILED.	**Meaning:** The MC was not busied. **Action:** None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
WARNING: AT LEAST ONE MESSAGE SWITCH WILL BE TAKEN OUT OF SERVICE IF YOU BUSY THIS MESSAGE CONTROLLER! PLESASE CONFIRM(“YES” OR “NO”).	**Meaning:** The mate MC has one or more busy links. The system warns that if the MC is busied, at least one message switch will be taken out of service, and requests confirmation. **Action:** Enter yes to busy the MC. Enter no to abort the command.

-end-

clock

Function

Use the clock command to access the Clock level for time-of-day and subsystem clock maintenance.

clock command parameters and variables

Command	Parameters and variables
clock	There are no parameters or variables.

Qualifications

None

Examples

The following table provides an example of the clock command.

Examples of the clock command

Example	Task, response, and explanation
clock ↵	
	Task: Access the Clock menu level.

	Response: The menu changes to the Clock level menu, and the following fields are added to the display:
	
	`T O D  S S C`
	`MC0 MC1`
	`Plane 0  .  .  .`
	`Plane 1  .  .  .`

	Explanation: The Clock menu level and the status of the TOD clock and SSC are 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.
 	
`T O D S S C`
`MC0 MC1`
`Plane 0 . . .`
`Plane 1 . . .`
	Meaning: This is an example of the full resonse to the clock command. Status messages appear under the above headings.
	
	Action: None

clrcnts

Function

Use the clrcnts command to clear the specified link fault counters for the specified circuit, link, or MC. The link fault counters record the message transmission and reception problems that the MC encounters.

clrcnts command parameters and variables

Command	Parameters and variables
clrcnts	[all / mc *mcno* / link *linkno*] [all / lh *lhfault* / bac *bacfault*]

Parameters and variables	Description	
all	This default parameter directs the system to clear all link fault counters.	
bac	This parameter indicates that the circuit is a bus access controller circuit.	
bacfault	This variable is a bus access controller fault code. The value is one of the following:	
	BAC0	This code indicates incoming tansfer timeout from LH or to bus.
	BAC1	This code indicates incoming message overrun.
	BAC2	This code indicates incoming message error.
	BAC3	This code indicates outgoing message purge completed.
	BAC4	This code indicates outgoing message transfer to LH timeout.
	BAC5	This code indicates outgoing message transfer to buffer timeout.
	BAC6	This code indicates outgoing buffer full
	BAC7	This code indicates outgoing message parity error.
lh	This parameter indicates that the circuit is a link handler circuit.	

-continued-

clrcnts (continued)

clrcnts command parameters and variables (continued)

Parameters and variables	Description	
lhfault	This variable is a link handler fault code. The value is one of the following.	
	LH4	This code indicates unused.
	CRC	This code indicates cyclic redundancy check error.
	CV	This code indicates code violation.
	WACK	This code indicates wait for acknowledgement timeout.
	WAN	This code indicates wait for idle timeout.
	WAM	This code indicates wait for message timeout.
	WAS	This code inidcates wait for send timeout.
	2NACK	This code indicates double negative acknowlegement (NACK).
link	This parameter directs the system to clear the link fault counters for a link.	
linkno	This variable indicates the link to be cleared. Valid entries are 0-1.	
mc	This parameter directs the system to clear the link fault counters for a MC.	
mcno	This variable indicates the MC to be cleared. Valid entries are 0-1.	

-end-

Qualifications

None

Example

The following table provides an example of the clrcnts command.

Example of the clrcnts command

Example	Task, response, and explanation
clrcnts mc 0 ↵ *where* 0 indicates that the MC link fault counters to be cleared are those for MC 0	**Task:** Clear the link fault counters for both links on MC 0. **Response:** `THE REQUESTED MC LH LINKHIT COUNTERS HAVE BEEN CLEARED.` **Explanation:** The link handler fault counters for MC 0 have been reset to zero.

Responses

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

Responses for the clrcnts command

MAP output	Meaning and action
`THE REQUESTED BAC LH LINKHIT COUNTERS HAVE BEEN CLEARED.`	**Meaning:** The bus access controller fault counters specified have been reset to zero. **Action:** None
`THE REQUESTED MC LH LINKHIT COUNTERS HAVE BEEN CLEARED.`	**Meaning:** The link handler fault counters specified have been reset to zero. **Action:** None

dispcnts

Function

Use the dispcnts command to display the link fault counters for the specified circuit, link, or MC. The link fault counters record message transmission and reception problems that the message controllers encounter.

dispcnts command parameters and variables

Command	Parameters and variables
dispcnts	[all / lh / bac] [all / mc *mcno* / link *linkno*]

Parameters and variables	Description
all	This default parameter directs the system to display all link fault counters.
bac	This parameter indicates that the circuit is a bus access controller circuit.
lh	This parameter indicates that the circuit is a link handler circuit.
link	This parameter directs the system to display the link fault counters for a link.
linkno	This variable indicates the link to be displayed. Valid entries are 0-1.
mc	This parameter directs the system to display the link fault counters for a MC.
mcno	This variable indicates the MC to be displayed. Valid entries are 0-1.

Qualifications

None

dispcnts (continued)

Example

The following table provides an example of the dispcnts command.

Example of the dispcnts command

Example	Task, response, and explanation
dispcnts lh link 1 ↵ *where* *1* indicates the link number	**Task:** Display the link fault counters for the link 1 link handler circuits. **Response:** LH WAM WAN WACK WAS unused 2NACK CRC CV ---------- MC 0 1 . . . . MC 1 1 . . . 11 12 3 . . **Explanation:** The specified link fault counters are displayed.

Responses

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

Responses for the dispcnts command

MAP output	Meaning and action

```
BAC   i/c xfr   i/c      i/c     o/g    o/g    o/g xfer  o/g buf   o/g
0->7  timeout  overrun  error   purge  LH to.   to buf    full    parity
-------------------------------------------------------------------------
MC 0     .       .        .       .      .        .        .        .
MC 1     .       .        .       .      .        .        .        .
```

Meaning: The top line of the display lists the circuit type, BAC, followed by the name of each link fault counter. The remaining lines list the number or faults that were detected in each category, on line for each message controller and link specified. In the first column, the first digit following MC is the MC number, the next digit is the link number, then one of the following characters appears under each link fault counter to indicate the count:

- an integer indicates the number of faults
- a dot indicates a count of zero
- an asterisk indicates that the count has exceeded 32,767

Action: None

```
LH            WAM    WAN    WACK    WAS   unused   2NACK   CRC   CV
-----------------------------------------------------------------------
MC 0     .       .        .       .      .        .        .        .
MC 1     .       .        .       .      .        .        .        .
```

Meaning: The top line of the display lists the circuit type, LH, followed by the name of each link fault counter. The remaining lines list the number or faults that were detected in each category, on line for each message controller and link specified. In the first column, the first digit following MC is the MC number, the next digit is the link number, then one of the following characters appears under each link fault counter to indicate the count:

- an integer indicates the number of faults
- a dot indicates a count of zero
- an asterisk indicates that the count has exceeded 32,767

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 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.` `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. **Action:** None
`Running in simplex mode with active CPU 0.`	**Meaning:** Synchronization has been dropped and the indicated CPU is active. **Action:** None
`Software inconsistency - Action aborted.`	**Meaning:** A software fault has occured. **Action:** None
`Synchronization dropped`	**Meaning:** CPU synchronization has been dropped. **Action:** None

-end-

locate

Function

Use the locate command to display the slot and shelf of the specified MC.

locate command parameters and variables

Command	Parameters and variables
locate	*mc_no*

Parameters and variables	Description
mc_no	This variable is the MC number. 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 1 ↵
where
 	
1 is the MC number
	Task: Display the slot and shelf of MC 1.
	
	Response:
	
	`Site Flr RPos  Bay_id  Shf  Description   Slot  EqPEC`
	`HOST  00  A00  CMDC:00  18  MC01:00:1:0   21    9X12AB FRNT`
	`HOST  00  A00  CMDC:00  18  MC01:00:1:0   22    9X12AB FRNT`
	`HOST  00  A00  CMDC:00  18  MC01:00:1:0   21    9X20AA BACK`
	`HOST  00  A00  CMDC:00  18  MC01:00:1:0   22    9X20Aa BACK`
	
	Explanation: The system displays the location information.

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`
`HOST  00  A00  CMDC:00  18  MC01:00:1:0   21    9X12AB FRNT`
`HOST  00  A00  CMDC:00  18  MC01:00:1:0   22    9X12AB FRNT`
`HOST  00  A00  CMDC:00  18  MC01:00:1:0   21    9X20AA BACK`
`HOST  00  A00  CMDC:00  18  MC01:00:1:0   22    9X20Aa BACK`
	Meaning: The system displays the location information.
	
	Action: None

`SPCEIFIED CARD DOES NOT EXIST` `MC NUMBER:  1.`	**Meaning:** The specified card is not equipped, or an invalid card number was entered. The MC number is 0 or 1. **Action:** None

logmask

Function

Use the logmask command to specify or query which link faults are to generate a CM128 link fault data report log.

logmask command parameters and variables

Command	Parameters and variables		
logmask	suppress	lh	*lhfault*
		bac	*bacfault*
	resume	lh	*lhfault*
		bac	*bacfault*
	query		
	sethex	lh	*maskvalue*
		bac	*maskvalue*
	setdefault		

Parameters and variables	Description
bac	This parameter indicates that the link fault is to be for a bus access controller (BAC) circuit.
bacfault	This variable specifies the BAC fault code. Valid entries are one or more of the following: BAC0, BAC1, BAC2, BAC3, BAC4, BAC5, BAC6, or BAC7.
lh	This parameter indicates that the link fault is to be for a link handler (LH) circuit.
lhfault	This variable specifies the LH fault code. Valid entries are one or more of the following: WAM, WAN, WACK, WAS, LH4, 2NACK, CRC, and CV.
maskvalue	This variable specifies which fault types generate a CM128 log. Valid entries are 0-255.
query	This parameter directs the system to query which link faults currently generate a CM128 log.
resume	This parameter directs the system to resume generation of a CM128 log by the specified link faults.
setdefault	This parameter directs the system to set the LH and BAC logmasks to their default values.

-continued-

logmask (continued)

logmask command parameters and variables (continued)

Parameters and variables	Description
sethex	This parameter specifies which link faults are to generate a CM128 log. Sethex can be used instead of suppress and resume.
suppress	This parameter prevents the specified link faults from generating a CM128 log.

-end-

Qualifications

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

- There are two logmasks: one for the LH, and one for the BAC.
- The logmask is an 8-bit binary word that sets each fault code on or off. Bit 0 is the least significant bit; bit 7 is the most significant bit.
- The following table shows the mask bit numbers and the meanings that correspond to the fault codes.

Link handler fault codes		
WAM	0	wait for message timeout
WAN	1	wait for idle timeout
WACK	2	wait for acknowledgement
WAS	3	wait for send timeout
LH4	4	unused
2NACK	5	double negative acknowledgement (NACK)
CRC	6	cyclic redundancy check error
CV	7	code violation
Bus access controller fault codes		
BAC0	0	incoming transfer timeout, from LH or to bus
BAC1	1	incoming message overrun
BAC2	2	incoming message error
BAC3	3	outgoing message purge completed
BAC4	4	outgoing message transfer to LH timeout
BAC5	5	outgoing message transfer to buffer timeout
BAC6	6	outgoing buffer full
BAC7	7	outgoing message parity error

- The default values for the logmasks are 20 hex for the LH logmask, and FF hex for the BAC logmask. The switch sets the logmasks to these vaules when the logmask setdefault command string is entered, and anutomatically after a reload restart.
- The fault types to generate a CM128 log can be specified by entering the logmasks directly, using the sethex parameter.
- Logmasks can be entered in decimal or hexidecimal form.
- To set the logmask in hexadecimal format, precede the hexadecimal value, with the hexadecimal quanitifier, #.

Example

The following table provides an example of the logmask command.

Example of the logmask command

Example	Task, response, and explanation
logmask sethex lh #0F ↵ *where* #0F	specifies the hexadecimal value of the LH circuit to generate a CM128 log
	Task: Specify that LH fault codes WASN, WAM, WACK and WAS will generate a CM128 log.
	Response: `CM128 LH LOGMASK: OLD MASK #20, NEW MASK #0F`
	Explanation: The LH fault codes to generate a CM128 log have been changed as specified.

Responses

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

Responses for the logmask command

MAP output	Meaning and action
`CM128 LH LOGMASK: OLD MASK #20, NEW MASK #0F.`	
	Meaning: The logmask is altered as specified.
	Action: None

-continued-

logmask (end)

Responses for the logmask command (continued)

MAP output	Meaning and action
THE OCCURRENCE OF ONE OF THE FOLLOWING ERRORS WILL CAUSE A CM128 LINKHIT LOG TO BE GENERATED: LH: #20 {2NACK} BAC:#FF {bac0, bac1, bac2, bac3, bac4, bac5, bac6, bac7}	**Meaning:** The logmask for CM128 logs was queried. The value of the logmask for LH and BAC is given in hexadecimal format as nn. A list of the types of LH link faults that will generate a CM128 log is given under lhfaults, and a list of the types of BAC link faults that will generate a CM 128 log is given under bacfaults. **Action:** None

-end-

port

Function

Use the port command to access the Port level.

port command parameters and variables

Command	Parameters and variables
port	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the port command.

Example of the port command

Example	Task, response, and explanation
port ↵	
	Task: Access the Port menu level.

	Response: The menu changes to the Port level menu, and the system adds the following fields to the display:
	
	`P O R T`
	`MC 0  MC 1`
	`Plane 0  .  .`
	`Plane 1  .  .`

	Explanation: The system displays the Port menu level.

port (end)

Responses

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

Responses for the port command

MAP output	Meaning and action

The menu changes to the Port level menu, and the system adds the following fields to the display:
 	
`P O R T`
`MC 0 MC 1`
`Plane 0 . .`
`Plane 1 . .`
	Meaning: This is an example of the full resonse to the port command. Status messages appear under the above headings.
	
	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 all *incrname* *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 MC level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The MC 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 MC 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 MC 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` `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 MC 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 MC level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **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.

rextst (continued)

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. **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. **Action:** Drop sync using the dpsync command and retry the rextst command.
`Caution: CM sync and activity states will change.` `Please confirm (″YES″ or ″NO″).`	**Meaning:** The full REx test includes activity switches. **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.` `Please confirm (″YES″ or ″NO″).`	**Meaning:** Since the CM is not synchronized, only a partial test will be run. **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. **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. **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. **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. **Action:** Retry the rextst command.

`Maintenance action started.`
 	
or
 	
`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.
	
	Action: None

`Maintenance action submitted.`	**Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect. **Action:** None
`Mate is already under test.`	**Meaning:** The mate communication register (MCR) flag is in use and cannot be claimed. **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. **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. **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. **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. **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. **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. **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. **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. **Action:** None
`RExTst passed`	**Meaning:** The test ran without failure. **Action:** None
`Software inconsistency-action aborted.`	**Meaning:** A software fault has occurred. **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. **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. **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. **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. **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. **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. **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.` `Please confirm (“YES”, “Y”, “NO”, or “N”):`	**Meaning:** The system prompts for confirmation before clearing the error counts. **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 MS.

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 MS.
	
	Response:
	
	`MS 0:  Primary is MC 0, port 0, Secondary is MC 1, port 0.`
	`MS 1:  Primary is MC 0, port 1, Secondary is MC 1, port 1.`
	
	Explanation: The system displays the MC routes.

Response

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

Response for the route command

MAP output	Meaning and action
`MS 0:  Primary is MC 0, port 0, Secondary is MC 1, port 0.` `MS 1:  Primary is MC 0, port 1, Secondary is MC 1, port 1.`	**Meaning:** The system displays the routes for the MS. **Action:** None

rts

Function

Use the rts command to test the MC and return the MC to service.

rts command parameters and variables

Command	Parameters and variables	
rts	*mc_no*	[*wait* / nowait]

Parameters and variables	Description
mc_no	This variable is the number of the MC that is to be returned to service. Valid entries are 0-1.
nowait	This parameter allows use of the MAP for other functions while the system tests and returns the MC to service.
wait	This default parameter does not allow use of the MAP for other functions while the system tests and returns the MC to service. Do not enter this parameter.

Qualification

The rts command is qualified by the following restriction: if the MC is in a C-busy state before it is busied, the system returns it to the C-busy state. To return the MC to service from the C-busy state, test it at the MS level of the MAP.

rts (continued)

Example

The following table provides an example of the rts command.

Example of the rts command

Example	Task, response, and explanation
rts 1 ↵ *where* 1 indicates the number of the MC to be returned to service	**Task:** Return MC 1 to service. **Response:** `MC RTS OK.` **Explanation:** MC 1 is in service.

Responses

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

Responses for the rts command

MAP output	Meaning and action
`MTS IS ALREADY INSERVICE!`	**Meaning:** The mc specified is already in service. **Action:** None
`MC MUST BE BUSY BEFORE ATTEMPTING TO RTS.`	**Meaning:** An MC can return to service only from the manually busy state. **Action:** None
`MC RTS ACTION OVERRIDDEN.`	**Meaning:** The system did not return the MC to service because an operation with a higher system priority overrode the rts command. **Action:** None

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
`MC RTS FAILED.`	**Meaning:** The system did not return the MC to service because the MC test failed, or because an MC link could not be returned to service. **Action:** None
`MC RTS OK.`	**Meaning:** The system has returned the MC to service. **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 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 defualt parameter directs the system to not allow 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:
	`ACTIVITY SWITCH ON CPU 0`
	`***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. **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. **Action:** None
`Software inconsistency-action aborted.`	**Meaning:** A software fault has occurred. **Action:** None
`Switch of activity failed.`	**Meaning:** Activity has not been switched. **Action:** None
`Switch of activity successful.`	**Meaning:** Activity has been switched. **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. **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. **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. **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.

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 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. **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. **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. **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. **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. **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. **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. **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. **Action:** None
`Cannot synchronize-first rendezvous failed, suspect CPUs.`	**Meaning:** A problem with the CPUs has prevented CM synchronization. **Action:** None
`Cannot synchronize-faults exist in active CPU memory.`	**Meaning:** Faults in the memory of the active CPU are preventing synchronization. **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. **Action:** Contact maintenance support personnel.
`Cannot synchronize-mate memory is not contiguous.`	**Meaning:** Faults in the memory of the inactive CPU are preventing synchronization. **Action:** Clear the problem and try the command again.
`Cannot synchronize-mate test failed.`	**Meaning:** The inactive CPU failed presynchronization diagnosis. **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. **Action:** Test the message controllers and clear any problems.
`Cannot synchronize-memory copy failed.`	**Meaning:** Memory cannot be copied. **Action:** Try to synchronize again.
`Cannot synchronize-memory protect copy failure.`	**Meaning:** A problem occurred while the system was copying protected memory. **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. **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. **Action:** Check the logs and status displays for faults.
`Cannot synchronize-mismatch while optimizing sync performance.`	**Meaning:** A mismatch of memory occurred during synchronization. **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. **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. **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. **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. **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. **Action:** Clear the problem and retry the command.

`Maintenance action started.`
 	
or
 	
`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.
	
	Action: None

`Maintenance action submitted.`	**Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect. **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. **Action:** None
`Software inconsistency-action aborted.`	**Meaning:** A software fault has occurred. **Action:** None
`Synchronization successful`	**Meaning:** The CPUs are in sync. **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. **Action:** Contact maintenance support personnel.

`WARNING:`
`Memory Error Correction will be DISABLED in SYNC.`
 	
`Single bit memory faults will cause mismatches but performance will be enhanced due to the disabling of Memory Error Checking and Correction.`
`Do you wish to continue?`
`Please confirm (“YES”, “Y”, “NO”, or “N”):`
	Meaning: The system prompts for confirmation before disabling error correction.
	
	Action: Enter yes or y to disable error correction. Enter no or n to abort the command.

`WARNING:`
`Memory Error Correction will be ENABLED in SYNC.`
 	
`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.`
`Do you wish to continue?`
`Please confirm (“YES”, “Y”, “NO”, or “N”):`
	Meaning: The system prompts for confirmation before enabling error correction.
	
	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 The inactive cpu has a different release number. 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. **Action:** Enter yes to continue. Enter no to abort the command.
WARNING: The notest option should only be used under the supervision of the technical assistance support group in an emergency. Please confirm (″YES″ or ″NO″).	**Meaning:** This warning is a reminder of the consequences of entering the sync command with the notest parameter. **Action:** Use the sync command with the notest parameter in emergency situations only. Consult maintenance support personnel.
WARNING: 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. Please confirm (″YES″ or ″NO″).	**Meaning:** This warning is a reminder of the consequences of using the sync command with the optimum parameter. **Action:** Enter yes to continue. Enter no to abort the command.

-end-

trnsl

Function

Use the trnsl command to translate the MC links to the corresponding MS links.

trnsl command parameters and variables

Command	Parameters and variables
trnsl	*mc_no*

Parameters and variables	Description
mc_no	This variable is the number of the MC to be queried. Valid entries are 0-1.

Qualifications

None

Example

The following table provides an example of the trnsl command.

Example of the trnsl command

Example	Task, response, and explanation
trnsl 1 ↵ *where* 1 indicates the number of the MC	**Task:** Display the configuration and status for the C-side link of MC 1. **Response:** `MC 1 LINK 0 IS CONNECTED TO MS1 PORT 1.` **Explanation:** The configuration of the link is displayed.

trnsl (end)

Responses

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

Responses for the trnsl command

MAP output	Meaning and action
`CANNOT TRANSLATE TO C-SIDE LINKS.`	**Meaning:** The C-side of the links may not be in service. **Action:** None
`MC 1 LINK 1 IS CONNECTED TO MS1 PORT 0.` `   LIND STATUS IS OK`	**Meaning:** The system displays the configuration of the link and the status. Possible status messages are C-Bsy, P-Bsy, ok, SysB, ManB, Offl, and Uneq. **Action:** None

tst

Function

Use the tst command to test the specified MC.

tst command parameters and variables

Command	Parameters and variables			
tst	*mc_no*	*no_messages*	[*wait* / nowait]	[*prompt* / noprompt]

Parameters and variables	Description
mc_no	This variable identifies the MC to be tested. Valid entries are 0-1.
no_messages	This variable is the number of messages. Valid entries are 16-10000.
noprompt	This parameter directs the system to suppress the yes/no prompts. The system automatically enters yes.
nowait	This parameter directs the system to allow the use of the MAP for other functions while the test is being run.
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 test is being run. Do not enter this parameter.

Qualifications

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

- If the MC is in sync, the system runs a complete test that includes switching the activity and testing both MCs.
- If the CM is not in sync, the system runs a partial test that only tests the inactive side of the MC through the active port card.

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 16 ↵
where
 	
0 is the number of the MC
16 is the number of messages in the test
	Task: Test MC 0 with 16 messages.
	
	Response:
	`Maintenance action submitted.`
	`MC test passed.`
	`Link 0: 16 messages sent, 16 messages received`
	`Link 1: 16 messages sent, 16 messages received`
	`TOD 0 test passed.`
	`TOD 1 test passed.`
	
	Explanation: The MC passed the tests.

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.` `PLEASE CONFIRM (“YES” OR “NO”).`	**Meaning:** A complete test can be run, but it will cause a switch of activity. **Action:** Enter yes to run a complete test. Enter no if a switch of activity is undesirable.

-continued-

Responses for the tst command (continued)

MAP output	Meaning and action
`AN INCOMPETE TEST WILL BE PERFORMED.` `PLEASE CONFIRM (“YES” OR “NO”).`	**Meaning:** Either the CM is out of sync, or a no was entered in reply to the message indicating that a complete test includes switch of activities. **Action:** Enter yes to run the incomplete test. Enter no to abot the command.
`MC ERRORS INIDICATE THAT SSC MAY BE AT FAULT.` `A TEST ON SSC 1 IS RECOMMENDED.`	**Meaning:** A subsystem clock (SSC) error may have caused the MC test to fail. **Action:** Access the Clock level and test the indicated SSC. Resolve any faults, and retest the SSC. Return to the MC level and retest the MC. If there is no SSC fault, resolve the problem at the MC level.

`Maintenance action submitted.`
`MC test passed.`
`Link 0: 16 messages sent, 16 messages received`
`Link 1: 16 messages sent, 16 messages received`
`TOD 0 test passed.`
`TOD 1 test passed.`
	Meaning: The MC passed the test.
	
	Action: None

`MC TEST FAILED.`	**Meaning:** The MC failed the test. **Action:** None

-end-

Memory level commands

Use the Memory level of the MAP to manipulate the contents of the memory cards.

Accessing the Memory level

To access the Memory level, enter the following from the CI (command interpreter) level:

mapci;mtc;cm;memory ↵

Memory commands

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

Memory commands

Command	Page
align	M-205
claim	M-209
cntrs	M-211
config	M-215
dpsync	M-221
locate	M-225
match	M-227
mtcchk	M-231
quit	M-233
rextst	M-237
rotate	M-245
spare	M-249

-continued-

Memory commands (continued)	
Command	**Page**
swact	M-255
sync	M-259
trnsl	M-269
tst	M-273
-end-	

Memory menu

The following figures show the Memory 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
         .     .     .     .     .    .     .     .     .     .


Memory       CM   Sync  Act  CPU0  CPU1  JAM  Memory  CMMnt  MC  PMC
 0 Quit       0     .   cpu 0   .     .          .      .     .   .
 2
 3           CM 0
 4              Card 123456789
 5           Plane 0 .........
 6 Tst_      Plane 1 .........
 7 Spare
 8 Cntrs_
 9
10 Match_
11
12 RExTst
13 SwAct
14 Sync
15 DpSync
16 MtcChk
17 Trnsl_
18 Locate_
```

Hidden commands

```
align              claim
config             rotate
```

Memory status codes

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

Status codes Memory menu status display		
Code	**Meaning**	**Description**
CM		
0	CM 0	Computing module (CM) 0 is being monitored.
Card		
.	in service	The memory card is in service with no faults.
-	unequipped	The memory card is unequipped.
i	in-service trouble	The memory card has in-service trouble, but it is still operating. The card has a correctable hardware fault.
f	fault	The memory card is faulty. The card has a noncorrectable hardware fault.
x	under test	The memory card is being copied, or is under test.

Common responses

The following table provides explanations of the common responses to the Memory commands. This responses will be produced by many of the commands under the Memory level.

Common responses for the Memory commands	
MAP output	**Meaning and action**
`CANNOT RUN TEST WHEN IN SYNCHRONISM.`	**Meaning:** The test cannot be run while the central processing units (CPU) are synchronized. **Action:** Drop sync using the dpsync command and reenter the tst command.

`MAINTENANCE ACTION STARTED.`
 	
or
 	
`MAINTENANCE ACTION ALREADY STARTED.`
	Meaning: Either the Memory process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.
	
	Action: None

-continued-

Common responses for the Memory commands (continued)

MAP output	Meaning and action
`MAINTENANCE ACTION SUBMITTED.`	**Meaning:** The Memory process has received the maintenance request. The nowait parameter is in effect. **Action:** None
`MATE IS ALREADY UNDER TEST.`	**Meaning:** The mate communication register (MCR) flag is in use and cannot be claimed. **Action:** None
`NO REPLY FROM REQUEST`	**Meaning:** A Memory process has taken too long to reply to a request from the MAP. The request is terminated. **Action:** None
`SOFTWARE INCONSISTENCY - ACTION ABORTED.`	**Meaning:** A software fault has occurred. **Action:** None

-end-

align

Function

Use the align command to force memory to organize itself into 8-megabyte blocks, allowing for the existence of both 2-megabyte and 8-megabyte memory configurations on one plane of the computing module (CM).

align command parameters and variables

Command	Parameters and variables
align	[*wait* / nowait] [*prompt* / noprompt]

Parameters and variables	Description
noprompt	This parameter causes the system to suppress the yes/no prompts. The system automatically enters yes.
nowait	This parameter allows the use of the MAP for other functions while the align command executes.
prompt	This default parameter directs the system to prompt for confirmation. The user does not enter this parameter.
wait	This default parameter does not allow the MAP to be used for other functions while the align command executes. The user does not enter this parameter.

Qualification

The align command is qualified by the following limitation: use the align command on the inactive side while the CM is out of sync.

align (continued)

Example

The following table provides an example of the align command.

Example of the align command

Example	Task, response, and explanation
align noprompt ↵	
	Task: Force the memory to organize itself into 8-megabyte blocks.
	Response: `MEMORY ALIGNMENT SUCCESSFUL - BLOCK TRANSFERS NOW IN EFFECT.`
	Explanation: The memory is now configured in 8-megabyte blocks.

Responses

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

Responses for the align command

MAP output	Meaning and action
`MEMORY ALIGNMENT FAILED.`	
	Meaning: The system cannot extend memory to end on an 8-megabyte boundary.
	Action: Ensure that there is enough spare memory (in multiples of 8-megabyte blocks) for the existing memory to be extended.
`MEMORY ALIGNMENT MUST BE DONE WHEN CM IS NOT IN SYNC.`	
	Meaning: The CM must be out of sync for memory alignment to be performed.
	Action: Use the dpsync command to drop sync then reenter the align command to organize the memory.
`MEMORY ALIGNMENT SUCCESSFUL - BLOCK TRANSFERS NOW IN EFFECT.`	
	Meaning: Memory has been organized into 8-megabyte blocks.
	Action: None

-continued-

align (end)

Responses for the align command (continued)

MAP output	Meaning and action
THE REALIGNMENT OF DATA STORE AND PROGRAM STORE ALONG 8 MBYTE BLOCK BOUNDARIES SHOULD BE DONE WHEN THE USER WANTS TO BEGIN SUPPORTING MIXED MEMORY CONFIGURATIONS. FROM THIS POINT ONWARD, ALL MEMORY TRANSFERS WILL BE DONE IN BLOCKS OF 8 MBYTES. PLEASE CONFIRM (“YES” OR “NO”).	**Meaning:** The system requests confirmation before realigning the memory. **Action:** Enter yes to realign the memory. Enter no to abort the command.

-end-

claim

Function

Use the claim command to return all unused memory to the spare pools.

claim command parameters and variables

Command	Parameters and variables
claim	[*wait* / nowait] [*prompt* / noprompt]

Parameters and variables	Description
noprompt	This parameter causes the system to suppress the yes/no prompts. The system automatically enters yes.
nowait	This parameter allows the use of the MAP for other functions while the claim command executes.
prompt	This default parameter directs the system to prompt for confirmation. The user does not enter this parameter.
wait	This default parameter does not allow the MAP to be used for other functions while the claim command executes. The user does not enter this parameter.

Qualification

The claim command is qualified by the following limitation: because reclaiming spare memory is time consuming, do not use this command during high traffic conditions.

claim (end)

Example

The following table provides an example of the claim command.

Example of the claim command

Example	Task, response, and explanation
claimnoprompt ↵	
	Task: Reclaim the unused memory.
	Response: `RECLAIMS SUCCESSFUL - 12 SPARES HAVE BEEN ADDED TO THE SPARE POOL.`
	Explanation: The reclaimed memory has been added to the spare pool.

Responses

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

Responses for the claim command

MAP output	Meaning and action
`RECLAIM FAILED - UNABLE TO RECLAIM ANY SPARES.`	
	Meaning: There are no spare memory modules to turn over to the spare pool.
	Action: None
`RECLAIMS SUCCESSFUL - 6 SPARE(S) HAVE BEEN ADDED TO THE SPARE POOL.`	
	Meaning: A number of memory modules, n, has been added to the spare pool.
	Action: None
`THE RECLAIMING OF UNUSED DATA STORE AND PROGRAM STORE TO THE SPARE POOL SHOULD ONLY BE DONE IF THE SWITCH IS NOT RUNNING UNDER HEAVY TRAFFIC. PLEASE CONFIRM (“YES” OR “NO”).`	
	Meaning: Use the claim command only under low traffic conditions because reclaiming unused memory is time-consuming.
	Action: Enter yes to reclaims spares. Enter no to abort the command.

cntrs

Function

Use the cntrs command to display the transient error count for the specified card or for all cards.

cntrs command parameters and variables

Command	Parameters and variables		
cntrs	*plane*	[card all]	*card_no*

Parameters and variables	Description
all	This parameter causes the system to display the error count for all cards.
card	This parameter directs the system to display the error count for one card only.
card_no	This variable is the number of the card to be displayed. Valid entries are 1-10.
plane	This variable is the number of the central processing unit (CPU) plane. Valid entries are 0-1.

Qualifications

None

cntrs (continued)

Example

The following table provides an example of the cntrs command.

Example of the cntrs command

Example	Task, response, and explanation
cntrs 0 all ↵ *where* 0 is the number of the plane	**Task:** Display all transient error counters for the plane. **Response:** CM 1 CPU PLANE 1 1 CARD 1234567890 ERR CNTS 0000000000 **Explanation:** The system displays the transient error counters.

Responses

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

Responses for the cntrs command

MAP output	Meaning and action
CARD NOT EQUIPPED.	**Meaning:** The specified card is not equipped. **Action:** None
CARD OUT OF RANGE.	**Meaning:** The specified card is outside of the allowed range of values. **Action:** None

-continued-

cntrs (end)

Responses for the cntrs command (continued)

MAP output	Meaning and action

`CM 1`
`CPU PLANE 1`
`CARD 3`
`TRANSIENT ERROR COUNT: 1.`
	Meaning: The system displays the trasient error count for the specified memory card.
	
	Action: None

`CM 1`
`CPU PLANE 1  1...`
 	
`CARD  1234567890...`
 	
`ERR CNTS  0000000000`
	Meaning: The system displays the error counts for all the equipped cards. The following are the possible error count indicators:
	▪ 0-9 A numeric character is the number of errors.
	▪ * This symbol indicates that the number of errors exceeds 9.
	▪ - This symbol indicates that the card is unequipped.
	
	Action: None

-end-

config

Function

Use the config command to configure the memory of the inactive central processing unit (CPU) into a set of adjoining addresses. Use this command when performing memory extensions, memory reductions, and memory upgrades.

config command parameters and variables

Command	Parameters and variables
config	[*regular* | optimum] [*prompt* | noprompt] [*wait* | nowait] [*test* | notest]

Parameters and variables	Description
noprompt	This parameter causes the system to suppress the yes/no prompts. The system automatically enters yes.
notest	This parameter directs the system to not test memory during the configure process.
nowait	This parameter allows the use of the MAP for other functions while the claim command executes.
optimum	This parameter specifies that the memory of inactive CPU is to be configured using optimum mapping instead of like-to-like mapping.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.
regular	This default parameter directs the system to configure the memory using like-to-like mapping. Do not enter this parameter.
test	This default parameter directs the system to test memory during the configure process. Do not enter this parameter.
wait	This default parameter does not allow the MAP to be used for other functions while the claim command executes. Do not enter this parameter.

Qualifications

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

- The computing module (CM) must be out-of-sync for the memory to be configured.

config (continued)

- Use of the optimum parameter forces a memory configuration on the inactive CPU that cannot support handshake-override is the CM is synchronized. Use the optimum parameter only when modifying memory in a CM equipped with a mixed memory configuration or being upgraded to contain a mixed memory configuration.
- Attempt memory configuration only when the memory that is equipped on the inactive CPU has changed.
- The system will initiate memory configuration only if the mate communications register (MCR) flag can be claimed.
- If the notest or nowait parameters are not used with the config command, the system runs a standard match test over all inactive memory cards after a successful memory configuration.

Example

The following table provides an example of the config command.

Example of the config command

Example	Task, response, and explanation
config noprompt notest nowait ↵	
	Task: To configure the memory on the mate CPU with no prompting, no testing, and no waiting.
	Response: `CONFIGURE SUCCESSFUL.`
	Explanation: The memory is configured.

Responses

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

Responses for the config command

MAP output	Meaning and action
`Configure aborted. Cannot configure mate memory when the CM is running in SYNC.`	
	Meaning: The CPU pair must be out-of-sync for memory to be configured.
	Action: None

-continued-

config (continued)

Responses for the config command (continued)

MAP output	Meaning and action
`Configure 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:** Use the config command with the optimum parameter only when performing memory extensions on a CM that has a mixed memory configuration. Mixed memory configurations are always aligned along 8-megabyte block boundaries. Since the current memory of the inactive CPU is not aligned to support a mixed memory configuration, the action has been aborted. **Action:** None
`CONFIGURE FAILED. ERROR IN NEW MATE CPU INVENTORY.`	**Meaning:** The system cannot configure the memory of the inactive CPU because of an error in the new mate inventory. **Action:** Ensure that the inactive CPU has sufficient memory to perform memory configuration and that the CM is not in sync, then enter the config command again. If the command fails again, contact maintenance support personnel.
`CONFIGURE FAILED. ERROR OCCURRED WHILE CONFIGURING MATE CPU VIA THE MCR.`	**Meaning:** An MCR failure occurred during the configuration. **Action:** Ensure that the inactive CPU has sufficient memory to perform memory configuration and that the CM is not in sync, then enter the config command again. If the command fails again, contact maintenance support personnel.
`CONFIGURE FAILED. INSUFFICIENT MEMORY ON MATE CPU.`	**Meaning:** Not enough memory exists on the inactive side to accommodate the load. **Action:** Ensure that the inactive CPU has sufficient memory to perform memory configuration and that the CM is not in sync, then enter the config command again. If the command fails again, contact maintenance support personnel.

-continued-

config (continued)

Responses for the config command (continued)

MAP output	Meaning and action
`CONFIGURE FAILED. PROCESSORS WERE IN SYNC.`	**Meaning:** The CPU pair must be out-of-sync for the memory to be configured. **Action:** Use the dpsync command to drop sync, then retry the config command.
`CONFIGURE FAILED. UNABLE TO BUILD MEMORY SPARE POOL ON MATE CPU.`	**Meaning:** The identification data of the spare memory modules cannot be collected into the spare pool data structures. **Action:** Ensure that the inactive CPU has sufficient memory to perform memory configuration and that the CM is not in sync, then enter the config command again. If the command fails again, contact maintenance support personnel.
`CONFIGURE FAILED. UNABLE TO GET NEW MATE CPU INVENTORY.`	**Meaning:** The inactive CPU did not respond to the request for a new memory inventory. **Action:** Ensure that the inactive CPU has sufficient memory to perform memory configuration and that the CM is not in sync, then enter the config command again. If the command fails again, contact maintenance support personnel.
`CONFIGURE FAILED. UNABLE TO RESET MATE CPU.`	**Meaning:** The system cannot reset the inactive CPU. **Action:** Ensure that the inactive CPU has sufficient memory to perform memory configuration and that the CM is not in sync, then enter the config command again. If the command fails again, contact maintenance support personnel.
`Configure successful.`	**Meaning:** The memory configuration of the inactive CPU was successful. **Action:** None

-continued-

config (continued)

Responses for the config command (continued)

MAP output	Meaning and action
MEMORY TEST FAILED.	**Meaning:** One or more inactive memory cards failed the test. **Action:** None
MEMORY TEST OK.	**Meaning:** All inactive memory cards have passed the test. **Action:** None
NOW TESTING INACTIVE MEMORY...	**Meaning:** The system is now testing all the inactive memory cards. **Action:** None
WARNING: I will now ask the mate CPU to re-configure its memories. I will also take the new configuration data and re-build the memory map display for the inactive CPU's memory cards. This must only be done when out of SYNC and during a memory extension or reduction (adding or deleting a memory card or replacing a memory card with one of a different PEC code). Please confirm ("YES" or "NO").	**Meaning:** The system provides a warning with the consequences of using the config command, lists the conditions under which its use is justified, and requests confirmation. **Action:** Enter yes to continue. Enter no to abort the command.
WARNING: 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. Please confirm ("YES" or "NO").	**Meaning:** The config command with the optimum parameter causes handshake-override to be disabled when the CM is placed in sync. **Action:** Enter yes to continue. Enter no to abort the command.

-continued-

config (end)

Responses for the config command (continued)

MAP output	Meaning and action
WARNING: 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. Please confirm (“YES” or “NO”).	**Meaning:** You specified the optimum parameter on a DMS-core equipped with NT9X13JA or NT9X10AA (BRISC) processor cards. **Action:** Enter yes to continue. Enter no to abort the command.

-end-

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.` `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. **Action:** None
`Running in simplex mode with active CPU 0.`	**Meaning:** Synchronization has been dropped and the indicated CPU is active. **Action:** None
`Software inconsistency - Action aborted.`	**Meaning:** A software fault has occured. **Action:** None
`Synchronization dropped`	**Meaning:** CPU synchronization has been dropped. **Action:** None

-end-

locate

Function

Use the locate command to display the physical slot and shelf number of the specified card.

locate command parameters and variables

Command	Parameters and variables	
locate	*plane*	*card*

Parameters and variables	Description
card	This variable is the number of the card to be located, as seen on the Memory level MAP display. The value is 0-n, where n is the number of cards displayed in the Memory level status display.
plane	This variable is the central processing unit (CPU) number. Valid entries are 1-10.

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 2 ↵
where
 	
1 indicates the CPU plane of the card
2 indicates the card number of the card to be displayed
	Task: Display the slot and shelf number of card 2 on CPU plane 1.
	
	Response:
	
	`Site Flr RPos Bay_id  Shf  Description  Slot  EqPEC`
	`HOST  00  A00 CMDC:00  18  MEM :00:1:0  24    9X14DB FRNT`
	
	Explanation: The system displays the card location.

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` `HOST  00  A00 CMDC:00  18  MEM :00:1:0  24    9X14DB FRNT`	**Meaning:** The system displays the card location. **Action:** None

`SPECIFIED CARD DOES NOT EXIST.`
`    MEMORY CARD PLANE NUMBER:  0`
`                 CARD NUMBER:  1`
	Meaning: The specified card is not equipped, where n echoes the discrimination numbers for the card.
	
	Action: None

match

Function

Use the match command to perform a match test. The system performs the match test by reading allocated memory in both entral processing units (CPU) to see if they are identical.

match command parameters and variables

Command	Parameters and variables
match	[card / all] [*card_no*] [*wait* / nowait] [*prompt* / noprompt]

Parameters and variables	Description
all	This parameter causes the system to check all memory cards.
card	This paramter causes the system to check a single card.
card_no	This variable is the number of the card to be checked. Valid entries are 0-n, where n is the number of equipped cards.
noprompt	This parameter suppresses the yes/no prompts. The system automatically answers yes.
nowait	This parameter allows the use of the MAP for other functions while the match command is being executed.
prompt	This default parameter causes the system to prompt for confirmation. Do not enter this parameter.
wait	This default parameter does not allow the use of the MAP for other functions while the match command is being executed. Do not enter this parameter.

Qualifications

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

- The match test is performed between the CPUs only when the CPU pair are synchronized.
- When the CPUs are not synchronized, the system checks for uncorrectable memory faults on the active CPU only.

match (continued)

Example

The following table provides an example of the match command.

Example of the match command

Example	Task, response, and explanation
match all ↵	
	Task: Check the match of the memory.
	Response: `MATCH OK.`
	Explanation: The memory passed the match test.

Responses

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

Responses for the match command

MAP output	Meaning and action
`MATCH FAILED: PROCESS MAY HAVE TRAPPED ON MEMORY FAULT. CHECK CARD STATUS INDICATOR FOR REMAINING 'X' INDICATOR.`	
	Meaning: The memory match trapped on a memory error while the computing module (CM) was out of sync.
	Action: None
`MATCH FAILED: SYNC DROPPED ON MATCH OF CARD 1.`	
	Meaning: A mismatch was discovered, where n is the number of the card, as shown in the Memory level status display.
	Action: None
`Matching memory between CPUs in SYNC.`	
	Meaning: The CPUs are in sync.
	Action: None

-continued-

match (end)

Responses for the match command (continued)

MAP output	Meaning and action
`MATCH OK.`	**Meaning:** When the CPUs are synchronized the memory is identical on both planes. When the CPUs are not synchronized there are no uncorrectable errors in the memory of the active CPU. **Action:** None
`SPECIFIED CARD DOES NOT EXIST.`	**Meaning:** The card specified is not equipped. **Action:** None

`The INACTIVE CPU should NOT be JAMMED while MATCHING in SYNC.`
`Do you wish to continue?`
`Please confirm (“YES”, “Y”, ”NO”, or “N”):`
	Meaning: The system prompts for confirmation before performing the match test with the inactive CPU jammed in sync.
	
	Action: Enter yes or y to continue with the match command. Enter no or n to abort the command.

`Verifying own memory while CPUs out of SYNC.`	**Meaning:** The CPUs are out of sync. **Action:** None

-end-

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.
```

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 all *incrname* *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 Memory level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The Memory 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 Memory 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 Memory 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` `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 Memory 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 Memory level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **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. **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. **Action:** Drop sync using the dpsync command and retry the rextst command.
`Caution: CM sync and activity states will change.` `Please confirm (″YES″ or ″NO″).`	**Meaning:** The full REx test includes activity switches. **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.` `Please confirm (″YES″ or ″NO″).`	**Meaning:** Since the CM is not synchronized, only a partial test will be run. **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. **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. **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. **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. **Action:** Retry the rextst command.

`Maintenance action started.`
 	
or
 	
`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.
	
	Action: None

`Maintenance action submitted.`	**Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect. **Action:** None
`Mate is already under test.`	**Meaning:** The mate communication register (MCR) flag is in use and cannot be claimed. **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. **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. **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. **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. **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. **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. **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. **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. **Action:** None
`RExTst passed`	**Meaning:** The test ran without failure. **Action:** None
`Software inconsistency-action aborted.`	**Meaning:** A software fault has occurred. **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. **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. **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. **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. **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. **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. **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.` `Please confirm (“YES”, “Y”, “NO”, or “N”):`	**Meaning:** The system prompts for confirmation before clearing the error counts. **Action:** Enter yes or y to continue. Enter no or n to abort the command.

-end-

rotate

Function

Use the rotate command to restart or cancel the memory rotation algorithm. The memory rotation algorithm exercises memory by changing the mate memory configuration following the daily CM REX test.

rotate command parameters and variables

Command	Parameters and variables
rotate	activate deactivate

Parameters and variables	Description
activate	This parameter causes the memory rotation algorithm to be restarted.
deactivate	This parameter causes the memory rotation algorithm to be canceled.

Qualifications

None

Example

The following table provides an example of the rotate command.

Example of the rotate command

Example	Task, response, and explanation
rotate activate ↵	

Task: Restart the memory rotation algorithm.

Response:

```
Invoking this command will activate the memory
rotation algorithm which exercises memory
by changing the mate memory configuration
following the daily CM REx test.
Please confirm (“YES”, “Y”, “NO”, or “N”):
```

Explanation: If y is entered, there is the additional response

```
Memory rotation algorithm deactivated.
```

Responses

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

rotate (continued)

Responses for the rotate command

MAP output	Meaning and action
`Invoking this command will activate the memory rotation algorithm which exercises memory by changing the mate memory configuration following the daily CM REx test. Please confirm (“YES”, “Y”, “NO”, or “N”):`	**Meaning:** The response is to the rotate activate command when the memory rotation algorithm is not already activated. **Action:** None
`Invoking this command will activate the memory rotation algorithm which exercises memory by changing the mate memory configuration following the daily CM REx test. Memory rotation algorithm is already activated.`	**Meaning:** The response is to the rotate activate command when the memory rotation algorithm is already activated. **Action:** None
`Invoking this command will cancel the memory rotation algorithm which exercises memory by changing the mate memory configuration following the daily CM REx test. Please confirm (“YES”, “Y”, “NO”, or “N”):`	**Meaning:** The response is to the rotate activate command when the memory rotation algorithm is not already deactivated. **Action:** None
`Invoking this command will cancel the memory rotation algorithm which exercises memory by changing the mate memory configuration following the daily CM REx test. Memory rotation algorithm is already deactivated.`	**Meaning:** The response is to the rotate activate command when the memory rotation algorithm is already deactivated. **Action:** None

-continued-

rotate (end)

Responses for the rotate command (continued)

MAP output	Meaning and action
`Memory rotation algorithm activated.`	**Meaning:** `Memory rotation algorithm will exercise memory following the daily CM REX test by changing the mate memory configuration.` **Action:** None
`Memory rotation algorithm deactivated.`	**Meaning:** `Memory rotation algorithm will not exercise memory following the daily CM REX test.` **Action:** None

-end-

spare

Function

Use the spare command to replace the memory modules on the specified card that are not in use with spare memory modules.

spare command parameters and variables

Command	Parameters and variables
spare	*status* / *card_no* [*wait* / nowait] [*prompt* / noprompt]

Parameters and variables	Description
card_no	This variable is the number, as shown on the MAP display, of the memory card on the inactive central processing unit (CPU) that is to be replaced.
nopromt	This parameter directs the system to suppress the 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 replaces the memory modules.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.
status	This default parameter directs the system to display the spare status. 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 replaces the memory modules. Do not enter this parameter.

Qualifications

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

- The spare command should only be used when the CM is not synchronized and the card to be spared is on the inactive side.
- If no card is specified, and the CM is synchronized, the system displays the number of the spares of each module size and the total number of spares for both CPUs.
- If the CM is not synchronized, the system displays the number of spares of each module size and the total number of spares for the active CPU.

spare (continued)

Example

The following table provides an example of the spare command.

Example of the spare command

Example	Task, response, and explanation
spare ↵	
	Task: Perform spare replacement on memory card 8 on the inactive CPU with no prompts and no waiting.

	Response:
	`PLANE 0 HAS 3 SPARE 2 MBYTE MODULES,`
	`3 SPARE 8 MBYTE MODULES.`
	`THE TOTAL SPARE MEMORY AVAILABLE IS 30 MBYTES.`

	Explanation: The spare replacement is completed.

Responses

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

Responses for the spare command

MAP output	Meaning and action
`MAINTENANCE ACTION NOT PERFORMED, RESOURCES IN USE.`	
	Meaning: The requested mate communication register (MCR) resources are unavailable for spare replacement.
	Action: None
`Mate is already under test.`	
	Meaning: The mate is under test. The spare command is aborted.
	Action: None

-continued-

spare (continued)

Responses for the spare command (continued)

MAP output	Meaning and action
PLANE 0 HAS 3 SPARE 2 MBYTE MODULES, 3 SPARE 8 MBYTE MODULES. THE TOTAL SPARE MEMORY AVAILABLE IS 30 MBYTES.	**Meaning:** If the CM is not running in sync, the system displays the number of spare 2-megabyte and 8-megabyte memory modules for the active CPU only. The spare memory total consists of the total amount of memory of all module sizes that is equipped and available in the active CPU. **Action:** None
PLANE 0 HAS 1 SPARE 2 MBYTE MODULES, 1 SPARE 8 MBYTE MODULES. THE TOTAL SPARE MEMORY AVAILABLE IS 10 MBYTES. PLANE 1 HAS 1 SPARE 2 MBYTE MODULES, 1 SPARE 8 MBYTE MODULES. THE TOTAL SPARE MEMORY AVAILABLE IS 10 MBYTES.	**Meaning:** If the CM is running in sync, the system displays the number of spare 2-megabyte and 8-megabyte memory modules for both CPUs. The spare memory total consists of the total amount of memory of all module sizes that is equipped and available in the CPU plane. **Action:** None
SPARE REPLACEMENT COMPLETED.	**Meaning:** The card specified has been spared successfully. **Action:** None
SPARE REPLACEMENT FAILED. CM RUNNING IN SYNC.	**Meaning:** The CM must be out of sync to spare a card. **Action:** None
SPARE REPLACEMENT FAILED. ERROR OCCURRED WHILE SPAREING CARD VIA THE MCR.	**Meaning:** The MCR flag was claimed during the spare replacement. **Action:** Retry the spare command.

-continued-

spare (continued)

Responses for the spare command (continued)

MAP output	Meaning and action
SPARE REPLACEMENT FAILED. ERROR UPDATING MATE CPU INVENTORY.	**Meaning:** The mate CPU's memory inventory could not be updated. **Action:** None
SPARE REPLACEMENT FAILED. CARD CONTAINS FIRMWARE RAM.	**Meaning:** The firmware memory cannot be swapped. **Action:** None
SPARE REPLACEMENT FAILED. INSUFFICIENT NUMBER OF SPARES.	**Meaning:** There is not enough spare memory to spare the card. **Action:** Configure the memory using the config command. Then try to spare the card again.
SPARE REPLACEMENT FAILED. SPARE POOL FOR MATE CPU DESTROYED ON LAST RESTART. POOL CAN BE REBUILT USING THE MAP CONFIG OR SYNC COMMANDS.	**Meaning:** The spare memory pool of the mate CPU was lost during the last system restart. **Action:** Use the config or sync command to reconfigure the memory. Then try to spare the card again.
SPARE REPLACEMENT FAILED. UNABLE TO RESET MATE CPU.	**Meaning:** The CPU did not respond to a reset request which caused the spare replacement to fail. **Action:** None
SPARE REPLACEMENT OF SPECIFIED CARD MAY AFFECT THE PERFORMANACE OF HANDSHAKE-OVERRIDE WHEN CM IS PLACED IN SYNC. PLEASE CONFIRM ("YES" OR "NO").	**Meaning:** No fully spare card exists to spare the specified card. This can prevent the software from configuring memory to satisfy handshake-override requirements when the CM enters syncronization. **Action:** Enter yes to spare the card. Enter no to abort the command.

-continued-

spare (end)

Responses for the spare command (continued)

MAP output	Meaning and action
SPECIFIED CARD DOES NOT EXIST	**Meaning:** The specified card is not equipped. **Action:** None
SPECIFIED CARD DOES NOT EXIST ON INACTIVE PLANE	**Meaning:** The card to be spared is not equipped on the inactive plane. **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 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:
	`ACTIVITY SWITCH ON CPU 0`
	`***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. **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. **Action:** None
`Software inconsistency-action aborted.`	**Meaning:** A software fault has occurred. **Action:** None
`Switch of activity failed.`	**Meaning:** Activity has not been switched. **Action:** None
`Switch of activity successful.`	**Meaning:** Activity has been switched. **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. **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. **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. **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.

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 CPUs 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. **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. **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. **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. **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. **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. **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. **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. **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. **Action:** None
`Cannot synchronize-first rendezvous failed, suspect CPUs.`	**Meaning:** A problem with the CPUs has prevented CM synchronization. **Action:** None
`Cannot synchronize-faults exist in active CPU memory.`	**Meaning:** Faults in the memory of the active CPU are preventing synchronization. **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. **Action:** Contact maintenance support personnel.
`Cannot synchronize-mate memory is not contiguous.`	**Meaning:** Faults in the memory of the inactive CPU are preventing synchronization. **Action:** Clear the problem and try the command again.
`Cannot synchronize-mate test failed.`	**Meaning:** The inactive CPU failed presynchronization diagnosis. **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. **Action:** Test the message controllers and clear any problems.
`Cannot synchronize-memory copy failed.`	**Meaning:** Memory cannot be copied. **Action:** Try to synchronize again.
`Cannot synchronize-memory protect copy failure.`	**Meaning:** A problem occurred while the system was copying protected memory. **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. **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. **Action:** Check the logs and status displays for faults.
`Cannot synchronize-mismatch while optimizing sync performance.`	**Meaning:** A mismatch of memory occurred during synchronization. **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. **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. **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. **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. **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. **Action:** Clear the problem and retry the command.

`Maintenance action started.`
 	
or
 	
`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.
	
	Action: None

`Maintenance action submitted.`	**Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect. **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. **Action:** None
`Software inconsistency-action aborted.`	**Meaning:** A software fault has occurred. **Action:** None
`Synchronization successful`	**Meaning:** The CPUs are in sync. **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. **Action:** Contact maintenance support personnel.

`WARNING:`
`Memory Error Correction will be DISABLED in SYNC.`
 	
`Single bit memory faults will cause mismatches but performance will be enhanced due to the disabling of Memory Error Checking and Correction.`
`Do you wish to continue?`
`Please confirm (“YES”, “Y”, “NO”, or “N”):`
	Meaning: The system prompts for confirmation before disabling error correction.
	
	Action: Enter yes or y to disable error correction. Enter no or n to abort the command.

`WARNING:`
`Memory Error Correction will be ENABLED in SYNC.`
 	
`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.`
`Do you wish to continue?`
`Please confirm (“YES”, “Y”, “NO”, or “N”):`
	Meaning: The system prompts for confirmation before enabling error correction.
	
	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 The inactive cpu has a different release number. 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. **Action:** Enter yes to continue. Enter no to abort the command.
WARNING: The notest option should only be used under the supervision of the technical assistance support group in an emergency. Please confirm (″YES″ or ″NO″).	**Meaning:** This warning is a reminder of the consequences of entering the sync command with the notest parameter. **Action:** Use the sync command with the notest parameter in emergency situations only. Consult maintenance support personnel.
WARNING: 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. Please confirm (″YES″ or ″NO″).	**Meaning:** This warning is a reminder of the consequences of using the sync command with the optimum parameter. **Action:** Enter yes to continue. Enter no to abort the command.

-end-

trnsl

Function

Use the trnsl command to translate a card number to a set of address ranges, or an address to a card. This command also displays the number of memory modules and the module size for each memory card listed.

trnsl command parameters and variables

Command	Parameters and variables
trnsl	*plane_no* [card *card_no* / all / address *page* *offset*]

Parameters and variables	Description
address	This parameter directs the system to translate an address to a card.
all	This parameter directs the system to translate each memory module on all cards to an address range.
card	This parameter directs the system to translate a card number to a start address.
card_no	This variable is the logical number of the card to be translated. Valid entries are 0-10.
page	This variable indicates a memory page. Valid entries are -32768 to 32737.
plane_no	This variable is the number of the central processing unit (CPU) plane. Valid entries are 0-1.
offset	This variable is the offset within a page. Valid entries are -32768 to 32737.

Qualifications

None

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 card 3 ↵
where
 	
0 is the number of the plane
3 is the number of the card
	Task: Display the translation information for card 3 on plane 0.
	
	Response:
	
	`CARD 3 ON PLANE 0 CONTAINS 3 8MBYTE MEMORY MODULES.`
	`USABLE MODULE ADDRESS RANGES ARE:`
	`  MODULE 0:  #02000000 to #027FFFFF,`
	`  MODULE 1:  #02800000 to #02FFFFFF,`
	`  MODULE 2:  #03000000 to #037FFFFF`
	
	Explanation: The system displays the translation information.

Responses

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

Responses for the trnsl command

MAP output	Meaning and action
`ADDRESS IS ON CARD 2 PLANE 0.` `CARD 2 ON PLANE 0 CONTAINS 3 8MBYTE MEMORY MODULES.`	**Meaning:** The trnsl command with the address parameter causes the system to display the number of the CPU plane, the logical number of the memory card that holds the specific address, the number of memory modules, and the size of the memory modules on the card. **Action:** None

-continued-

trnsl (end)

Responses for the trnsl command (continued)

MAP output	Meaning and action
`ADDRESS IS OUT OF EQUIPPED RANGE ON PLANE 0.`	**Meaning:** The trnsl command with the address parameter was used, and the system cannot locate the memory address on any known memory card on the specified CPU plane. Therefore, this address cannot be translated. **Action:** None

`CARD 3 ON PLANE 0 CONTAINS 3 8MBYTE MEMORY MODULES.`
`USABLE MODULE ADDRESS RANGES ARE:`
`  MODULE 0:  #02000000 to #027FFFFF,`
`  MODULE 1:  #02800000 to #02FFFFFF,`
`  MODULE 2:  #03000000 to #037FFFFF`
	Meaning: The trnsl command with the all or card parameter causes the system to display the number of memory modules, the module size, and the hexadecimal value for the address range of each configured module. For other memory modules, the system displays whether the memory module is spare, faulty, or has not been configured.
	
	Note: For all memory cards except the NT9X14AA, three memory modules are listed. For the NT9X14AA memory card, only two modules are listed.
	
	Action: None

`SPARE CARD DOES NOT EXIST ON PLANE 0.`	**Meaning:** The specified card is not equipped. **Action:** None

-end-

tst

Function

Use the tst command to test the memory cards on the inactive CPU.

tst command parameters and variables

Command	Parameters and variables
tst	[card / all] *card_no* [short / long *msw* *lsw*] [*wait* / nowait] [*prompt* / noprompt]

Parameters and variables	Description
all	This parameter directs the system to test all cards.
card	This parameter directs the system to test a single card.
card_no	This variable identifies the card to be tested. Valid entries are 0-10.
long	This parameter directs the system to perform a long test.
lsw	This variable indicates an lsw pattern. Valid entries are -32768 to 32737.
msw	This variable indicates an msw pattern. Valid entries are -32768 to 32737.
noprompt	This parameter causes the system to suppress the yes/no prompts. The system automatically enters yes.
nowait	This parameter directs the system not to allow use of the MAP for other functions while the test is being run.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.
short	This default parameter directs the system to perform a short test.
wait	This default parameter directs the system to not allow use of the MAP for other functions while the test is being run. Do not enter this parameter.

Qualification

The tst command is qualified by the following restriction: the CM must be out of sync for the test to be run.

tst (continued)

Example

The following table provides an example of the tst command.

Examples of the tst command

Example	Task, response, and explanation
tst 3 ↵ *where* 3 is the card number	**Task:** Test card 3. **Response:** `MEMORY TEST OK.` **Explanation:** The card 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
`MEMORY TEST FAILED.`	**Meaning:** The specified card failed the memory test. **Action:** None
`MEMORY TEST OK.`	**Meaning:** The specified card passed the memory test. **Action:** None
`NO ACTION TAKEN.  CANNOT PERFORM TEST WHEN IN SYNC.`	**Meaning:** Memory cannot be tested while the CM is synchronized. **Action:** Use the dpsync command to drop sync, and retry the test command.

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
`SPECIFIED CARD DOES NOT EXIST.` `CARD IS UNEQUIPPED, WILL TEST CARD IN SLOT ANYWAY.`	**Meaning:** The specified card is not equipped, but the noprompt parameter was used. The system will test the card in the slot without asking for confirmation. **Action:** None

`SPECIFIED CARD DOES NOT EXIST.`
`DO YOU WISH TO ATTEMPT TESTING CARD IN SLOT ANYWAY?`
`DO YOU WISH TO CONTINUE?  (YES/NO).`
	Meaning: The specified card is not equipped; the card in that slot may be tested anyway. The system requests confirmation.
	
	Action: Enter yes to test the card in the slot. Enter no to abort the command.

-end-

MONITOR level commands

Use the MONITOR level of the MAP to monitor call processing busy connections: listening, talking, or both.

Accessing the MONITOR level

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

mapci;mtc;trks;ttp;monitor ↵

MONITOR commands

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

Monitor commands

Command	Page
bsy	M-279
cktmon	M-283
cpos	M-285
frls	M-289
hold	M-291
monboth	M-293
monlink	M-297
monpost	M-301
montalk	M-305
next	M-309
post	M-313
quit	M-321

-continued-

Monitor commands Command	Page
rls	M-325
rts	M-327
tst	M-331
-end-	

MONITOR menu

The following figure shows the MONITOR menu and status display.

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


MONITOR
 0 QUIT     POST    DELQ      BUSYQ   DIG
 2 Post_    TTP 6-005
 3 MONPOST  CKT TYPE  PM NO.    COM LANG  STA S R DOT TE RESULT
 4 MONLINK
 5 BSY
 6 RTS
 7 TST
 8 MonTalk
 9 CktMon
10 CPos_
11 Hold
12 NEXT
13 RLS
14 MonBoth
15
16
17
18 FRls
```

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, offl, pbsy, 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 string 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. Entering the frls command 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. **Action:** None
`STATE CHANGED.`	**Meaning:** The posted trunks have been placed in the requested state. **Action:** None

-end-

cktmon

Function

Use the cktmon command to turn the Circuit Monitor feature on or off.

cktmon command parameters and variables

Command	Parameters and variables
cktmon	[*on* / off]

Parameters and variables	Description
off	This parameter turns the Circuit Monitor feature off.
on	This represents a system default. When only the cktmon command is entered, the circuit monitor feature is activated.

Qualifications

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

- The Circuit Monitor feature displays incoming messages on the MAP from the digital or analog PM of a circuit. The command is applied to a circuit in the control position and all messages coming from the PM associated with that circuit are intercepted without interrupting normal call processing.
- The intercept function is applied if the circuit is idle, otherwise intercept is kept off until the circuit becomes idle. With intercept on, messages and digits are displayed as they arrive at the central control (CC).
- If the circuit is moved to a hold position, the next position is displayed. The display appears on the same line as the TTP number and is identified by the characters CKTMON.
- In addition to using the command string cktmon off, the feature can also be turned off by exiting the MONITOR level.
- In the case of trunks using CCITT7 type signaling, this command applies to incoming trunks only.
- This command is not available to centrex customers.
- This command is not available to detached users.

Examples

Not currently available

cktmon (end)

Responses

Not currently available

cpos

Function

Use the cpos command to test a Centralized Automatic Message Accounting (CAMA) or Remote Operator Number Identification (RONI) trunk in the control position.

cpos command parameters and variables

Command	Parameters and variables
cpos	[con oni anif ro hws rls]

Parameters and variables	Description
anif	This parameter sends an automatic number identification fail (ANIF) call tone on the trunk to the centralized automatic message accounting (CAMA)/TOPS position.
con	This parameter reserves a network connection between the trunk test position (TTP) and the outgoing CAMA or RONI trunk for maintenance of the CAMA/TOPS position.
hws	This parameter displays the hardware state on the trunk's signaling card.
oni	This parameter sends an operator number identification (ONI) call tone on the trunk to the CAMA/TOPS position.
rls	This parameter releases all test connections to the trunk.
ro	This parameter sends a reorder-digits tone on the trunk to the CAMA/TOPS position.

Qualifications

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

- The trunk talk circuit (CPOS) must be in the control position. At least one hold position must be available for the trunk key circuit (CPOSKEY). Testing begins with the command string cpos con and ends with the command string cpos rls.

cpos (continued)

- The command string cpos con connects the headset of the trunk test position (TTP) communications device to the CAMA/RONI trunk, and connects a multifrequency (MF) receiver to the trunk's corresponding key circuit for digit reception from the CAMA/TOPS position.
- The command strings cpos oni and cpos anif send, respectively:
  - an ONI call tone (long period high tone, with burst)
  - an ANI FAIL call tone (without burst) to the CAMA/TOPS position.

  A message states that the tone has been sent. To the CAMA/TOPS position, the call seems to be a normal ONI or ANIF call. When the position operator answers the call, an off-hook symbol appears under the R header on the MAP. The TTP maintenance person then notifies the operator that this is a test call, and asks which tone was heard. The test is used to check for problems in the transmission and detection of ONI and ANIF call tones.
- The command string cpos ro sends a reorder tone to the CAMA/TOPS position. This requests the operator to press the RESET key, and send seven more digits from the positions keypad. This initial request for seven digits is done verbally. The received digits are displayed in the digit field of the MAP display. If distorted digits are received, a BDMSG message is displayed. This test ensures that the operator's keypad is functioning and that digits are transmitted without distortion.
- The command string cpos hws reads the scan points on the trunk card talk circuit. It does not run a test. Information is displayed on the MAP as an eight-bit word:

tst_rly	nil	nil	oi_rly	ir_rly	rv_rly	opr	trk_szd
7	6	5	4	3	2	1	0

  - tst_rly is used for tests on the card and should not be sent.
  - oi_rly is set when an ONI or ANIF tone is set, and remains set until the connection is released.
  - ir_rly is set only when an ANIF tone is sent, and remains set until the connection is released.
  - rv_rly is set when a reorder tone is sent (cannot be detected when the other end is a remote TOPS position).
  - opr is set if the operator is jacked into the CAMA position, and must be checked immediately after the test connection is set up.
  - trk_szd indicates a hardware seizure on the outgoing trunk. It remains set once a tone has been sent.
- The command string cpos rls releases all test connections and returns the trunk under test to service.

- Like an ANIF or ONI call, a test call can terminate at either a local operator's position, or at a remote TOPS position by a RONI trunk, if local positions are temporarily closed. In the latter case, certain restrictions exist, because the tester has no control over the RONI trunk, nor the way TOPS software connects a TOPS position. If the TOPS operator jacks out during the test, the TTP only detects a call release, and the test has to be restarted. If the operator jacks back in, the call is not saved.
- If fewer than three CAMA positions are in operation when testing begins, the maintenance person is informed and the person is prompted for confirmation to continue the test.
- If portable test equipment is connected to the trunk under test at the CAMA/TOPS position, transmission tests can be run on the trunk. For example, a far-end to near-end loss measurement can be done by entering a milliwatt signal on the trunk at the CAMA/TOPS position, and entering the command loss at the MANUAL level at the TTP to obtain the loss reading.
- This command is not supported for Integrated Services Digital Network digital trunk controller (DTCI) B-channel/PRI trunk maintenance.
- This command is not available to centrex customers.
- This command is not available to detached users.
- The cpos command is not available for the German Intelligent Networks (GIN) SuperNode Service Switching Point/Signaling Point (SSP).

Examples

Not currently available

Responses

Not currently available

frls

Function

Use the frls command to force a call processing busy (CPB) circuit in the control position to the manual busy (ManB) state.

frls command parameters and variables

Command	Parameters and variables
frls	There are no parameters and variables.

Qualification

A warning message appears at the MAP if the circuit is involved in a wideband call. The user must respond to the warning message with yes or no. Entering yes will change the state of the circuit in the control position to the ManB state and other circuits in the wideband call to idle (IDL). Entering no will abort the command.

Example

The following table provides an example of the frls command.

Example of the frls command

Example	Task, response, and explanation	
frls ↵		
	Task:	Force the release of a circuit.
	Response:	`frls` `OK`
	Explanation:	The circuit has been released.

frls (end)

Responses

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

Responses for the frls command

MAP output	Meaning and action
`FAILED, NO CIRCUIT`	**Meaning:** The command failed because no circuit was posted. **Action:** None
`frls` `OK`	**Meaning:** The command has been entered and the circuit has been released. **Action:** None

`*WARNING*`
`This circuit is involved in a wide band call.`
`Do you want to FRLS trunk?`
`PLEASE CONFIRM (“YES” OR “NO”):`
	Meaning: The command has been entered for a circuit used for a wideband call. Entering yes will change the state of the circuit in the control position to ManB and other circuits in the wideband call to IDL. Entering no will abort the command.
	
	Action: None

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`
		`SHORT CLLI IS : CF3P`
		`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. **Action:** None

monboth

Function

Use the monboth command to set up a connection between the headset of the TTP communications module and the trunk in the control position. This connection enables the user to listen to the incoming and outgoing transmission of the posted trunk .

monboth command parameters and variables

Command	Parameters and variables
monboth	[d / *a*] *frst_jck_nm scnd_jck_nm* [*conn_duration* / *indefinite*]

Parameters and variables	Description
a	This default parameter specifies analog monitoring. If the d parameter is not entered, the system will default to analog monitoring.
conn_duration	This variable represents the duration of the connection. The value is 1-36. Entering this variable is required for analog monitoring. It is optional for digital monitoring.
d	This parameter represents the request for digital monitoring. Entering this parameter is optional.
frst_jck_nm	This variable represents the receive path of the posted trunk. The value is 1-24.
indefinite	This is the default parameter. If the duration of the connection is not specified, the connection will last for an indefinite period of time.
scnd_jck_nm	This variable represents the receive path of the linked trunk. The value is 1-24.

Qualifications

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

- The trunk in the control position must be in a call processing busy (CPB) state or seized (SZD) state.
- In analog monitoring, this command requires a parameter to determine the duration of the connection.
- This command provides two connections between the transmit path of the posted trunk and one of the hset trunks, and between the receive path of the posted trunk and the other hset trunk.
- This command uses digital jack-ended trunks instead of hset trunks.

monboth (continued)

- Digital monitoring is supported by connecting digital test equipment to the digital jack trunks.
- If table TSTXCON exists, 4 posted and held trunks can be monitored. If table TSTXCON does not exist, a maximum of 3 posted and held jacked trunks and 3 posted and held hset trunks can be accessed.

Examples

Not currently available

Responses

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

Responses for the monboth command

MAP output	Meaning and action
`FAILED, NO CIRCUIT`	**Meaning:** No circuit is in the control position. **Action:** Post a circuit.
`FAILED, NO EQPMT, CHECK TABLE TSTXCON`	**Meaning:** No circuit is linked. **Action:** Check table TSTXCON for a circuit name and link that circuit to the circuit in the control position.
`FAILED TO SEIZE MONITOR TEST EQPMT FOR MONITOR CONN`	**Meaning:** The command failed because one of the selected trunks could not be seized. **Action:** Check the status of the selected trunks and correct the situation, or select another set of trunks and issue the command again.
`FAILED TO SET MONITOR CONNECTION`	**Meaning:** The command failed because the monitor connection could not be set with a selected trunk. **Action:** Check the status of the selected trunks and correct the situation, or select another set of trunks and issue the command again.

-continued-

monboth (continued)

Responses for the monboth command (continued)

MAP output	Meaning and action
`MONITOR FAILED, NO TEST EQPMTCLLI NAME`	**Meaning:** The command failed because the jack was not specified in table CLLI. **Action:** Check the datafill in table CLLI and correct the datafill in table CLLI and table TSTXCON.
`OK, MONITOR CONNECTION SET`	**Meaning:** The command was entered and the jack connection was made. **Action:** None
`Please confirm command (“YES”, “Y”, “NO”, or “N”):`	**Meaning:** The user must give confirmation before the command is executed. **Action:** Enter the confirmation and continue.
`THIS IS NOT AN ANALOG HSET TRUNK`	**Meaning:** The command failed because the monitor test is analog and one of the selected trunks is digital. **Action:** Enter the command with another parameter that refers to an analog jack trunk.
`This jack trunk is busy.`	**Meaning:** The command is cancelled because the referred trunk is busy. **Action:** Enter the command with another parameter that does not refer to a busy trunk.
`THIS JACK TRUNK IS NOT A DIGITAL TRUNK`	**Meaning:** The command failed because the monitor test is digital and one of the selected trunks is analog. **Action:** Enter the command with another parameter that refers to a digital jack trunk.

-continued-

monboth (end)

Responses for the monboth command (continued)

MAP output	Meaning and action
THIS JACK TRUNK IS NOT IDLE	**Meaning:** The command failed because one of the selected trunks is not idle. **Action:** Select another set of trunks and issue the command again.

-end-

monlink

Function

Use the monlink command to set up a connection between the headset of the trunk test position (TTP) communications device and the circuit that is linked to the circuit in the control position. The monlink command enables a user to listen to the incoming transmission of the linked circuit.

monlink command parameters and variables

Command	Parameters and variables		
monlink	[d / *a*]	*frst_jck_nm*	[*conn_duration* / *indefinite*]

Parameters and variables	Description
a	This default parameter specifies analog monitoring. If the d parameter is not entered, the system will default to analog monitoring.
conn_duration	This variable represents the duration of the connection. The value is 1-36. Entering this variable is required for analog monitoring. It is optional for digital monitoring.
d	This parameter represents the request for digital monitoring. Entering this parameter is optional.
frst_jck_nm	This variable represents the receive path of the posted trunk. The value is 1-24.
indefinite	This is the default parameter. If the duration of the connection is not specified, the connection will last for an indefinite period of time.

Qualifications

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

- The circuit in the control position must be in a call processing busy (CPB) state.
- When the call processing connection is taken down, the monitor connection is released. When a call processing connection is set up, the monitor connection is re-established.
- This command supports digital monitoring with digital test equipment. In digital monitoring, this command provides the connection between the receive path of the linked trunk and the transmit path of the digital jack-ended trunk which is connected to the digital test equipment.
- This command is not available to centrex customers.

monlink (continued)

- This command is not available to detached users.
- If table TSTXCON exists, 4 posted and held trunks can be monitored. If table TSTXCON does not exist, a maximum of 3 posted and held jacked trunks and 3 posted and held hset trunks can be accessed.

Examples

Not currently available

Responses

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

Responses for the monlink command

MAP output	Meaning and action
`FAILED, NO CIRCUIT`	**Meaning:** No circuit is in the control position. **Action:** Post a circuit.
`FAILED, NO EQPMT, CHECK TABLE TSTXCON`	**Meaning:** No circuit is linked. **Action:** Check table TSTXCON for a circuit name and link that circuit to the circuit in the control position.
`FAILED TO SEIZE MONITOR TEST EQPMT FOR MONITOR CONN`	**Meaning:** The command failed because one of the selected trunks could not be seized. **Action:** Check the status of the selected trunks and correct the situation, or select another set of trunks and issue the command again.
`FAILED TO SET MONITOR CONNECTION`	**Meaning:** The command failed because the monitor connection could not be set with a selected trunk. **Action:** Check the status of the selected trunks and correct the situation, or select another set of trunks and issue the command again.

-continued-

monlink (continued)

Responses for the monlink command (continued)

MAP output	Meaning and action
`MONITOR FAILED, NO TEST EQPMTCLLI NAME`	**Meaning:** The command failed because the jack was not specified in table CLLI. **Action:** Check the datafill in table CLLI and correct the datafill in table CLLI and table TSTXCON.
`OK, MONITOR CONNECTION SET`	**Meaning:** The command was entered and the jack connection was made. **Action:** None
`Please confirm command (Y/N):`	**Meaning:** The user must give confirmation (Y for yes, or N for no) before the command is executed. **Action:** Enter the confirmation and continue.
`THIS IS NOT AN ANALOG HSET TRUNK`	**Meaning:** The command failed because the monitor test is analog and one of the selected trunks is digital. **Action:** Enter the command with another parameter that refers to an analog jack trunk.
`This jack trunk is busy.`	**Meaning:** The command is cancelled because the referred trunk is busy. **Action:** Enter the command with another parameter which does not refer to a busy trunk.
`THIS JACK TRUNK IS NOT A DIGITAL TRUNK`	**Meaning:** The command failed because the monitor test is digital and one of the selected trunks is analog. **Action:** Enter the command with another parameter that refers to a digital jack trunk.

-continued-

monlink (end)

Responses for the monlink command (continued)

MAP output	Meaning and action
THIS JACK TRUNK IS NOT IDLE	**Meaning:** The command failed because one of the selected trunks is not idle. **Action:** Select another set of trunks and issue the command again.

-end-

monpost

Function

Use the monpost command to set up a connection between the headset of the trunk test position (TTP) communications device and the circuit in the control position. The monpost command establishes a connection for listening to the incoming transmission of the posted circuit.

monpost command parameters and variables

Command	Parameters and variables		
monpost	[d / *a*]	*frst_jck_nm*	[*conn_duration* / *indefinite*]

Parameters and variables	Description
a	This default parameter specifies analog monitoring. If the d parameter is not entered, the system will default to analog monitoring.
conn_duration	This variable represents the duration of the connection. The value is 1-36. Entering this variable is required for analog monitoring. It is optional for digital monitoring.
d	This parameter represents the request for digital monitoring. Entering this parameter is optional.
frst_jck_nm	This variable represents the receive path of the posted trunk. The value is 1-24.
indefinite	This is the default parameter. If the duration of the connection is not specified, the connection will last for an indefinite period of time.

Qualifications

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

- The circuit in the control position must be in a call processing busy (CPB) state.
- When the call processing connection is taken down, the monitor connection is released. When a call processing connection is set up, the monitor connection is re-established.
- This command supports digital monitoring with digital test equipment. In digital monitoring, this command provides the connection between the receive path of the linked trunk and the transmit path of the digital jack-ended trunk which is connected to the digital test equipment.
- This command is not available to centrex customers.

monpost (continued)

- This command is not available to detached users.
- If table TSTXCON exists, 4 posted and held trunks can be monitored. If table TSTXCON does not exist, a maximum of 3 posted and held jacked trunks and 3 posted and held hset trunks can be accessed.

Examples

Not currently available

Responses

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

Responses for the monpost command

MAP output	Meaning and action
`FAILED, NO CIRCUIT`	**Meaning:** No circuit is in the control position. **Action:** Post a circuit.
`FAILED, NO EQPMT, CHECK TABLE TSTXCON`	**Meaning:** No circuit is linked. **Action:** Check table TSTXCON for a circuit name and link that circuit to the circuit in the control position.
`FAILED TO SEIZE MONITOR TEST EQPMT FOR MONITOR CONN`	**Meaning:** The command failed because one of the selected trunks could not be seized. **Action:** Check the status of the selected trunks and correct the situation, or select another set of trunks and issue the command again.
`FAILED TO SET MONITOR CONNECTION`	**Meaning:** The command failed because the monitor connection could not be set with a selected trunk. **Action:** Check the status of the selected trunks and correct the situation, or select another set of trunks and issue the command again.

-continued-

monpost (continued)

Responses for the monpost command (continued)

MAP output	Meaning and action
`MONITOR FAILED, NO TEST EQPMTCLLI NAME`	**Meaning:** The command failed because the jack was not specified in table CLLI. **Action:** Check the datafill in table CLLI and correct the datafill in table CLLI and table TSTXCON.
`OK, MONITOR CONNECTION SET`	**Meaning:** The command was entered and the jack connection was made. **Action:** None
`Please confirm command (Y/N):`	**Meaning:** The user must give confirmation (Y for yes, or N for no) before the command is executed. **Action:** Enter the confirmation and continue.
`THIS IS NOT AN ANALOG HSET TRUNK`	**Meaning:** The command failed because the monitor test is analog and one of the selected trunks is digital. **Action:** Enter the command with another parameter that refers to an analog jack trunk.
`This jack trunk is busy.`	**Meaning:** The command is cancelled because the referred trunk is busy. **Action:** Enter the command with another parameter that does not refer to a busy trunk.
`THIS JACK TRUNK IS NOT A DIGITAL TRUNK`	**Meaning:** The command failed because the monitor test is digital and one of the selected trunks is analog. **Action:** Enter the command with another parameter that refers to a digital jack trunk.

-continued-

monpost (end)

Responses for the monpost command (continued)

MAP output	Meaning and action
THIS JACK TRUNK IS NOT IDLE	**Meaning:** The command failed because one of the selected trunks is not idle. **Action:** Select another set of trunks and issue the command again.

-end-

montalk

Function

Use the montalk command to establish a three-party analog conference circuit connection including the circuit in the control position, the circuit linked to it, and the headset (hset) of the trunk test position (TTP). The connections are set up using a three-port conference circuit.

montalk command parameters and variables

Command	Parameters and variables
montalk	[talk / t / *listen* / *l*] [*conn_duration* / *indefinite*]

Parameters and variables	Description
conn_duration	This parameter specifies the duration of the connection. The value is 1-36.
indefinite	This is the default parameter for the duration of the connection. If the duration of the connection is not specified, the connection will last for an indefinite period of time.
l	This default parameter sets up a listening connection. This parameter has the same meaning as the listen parameter.
listen	This default parameter sets up a listening connection. This parameter has the same meaning as the l parameter.
t	This parameter sets up a talking and listening connection. This parameter has the same meaning as the talk parameter.
talk	This parameter sets up a talking and listening connection. This parameter has the same meaning as the t parameter.

Qualifications

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

- The trunks to be monitored must be call processing busy (CPB).
- A connection for monitoring and listening must be established by entering commands monpost and monlink before the montalk command is entered.
- The montalk command can only be entered at the MONITOR level.

- When the call processing connection is released, the connection for monitoring and talking is also released and returned to a connection of monitoring and listening. The next time a call-processing connection is established, a connection for monitoring and listening is set up.
- This command is not available to centrex customers.
- This command is not available to detached users.
- If table TSTXCON exists, 4 posted and held trunks can be monitored. If table TSTXCON does not exist, a maximum of 3 hset trunks can be accessed.
- MONTALK is limited to TRUNK to TRUNK calls only and the command will be rejected if the trunk in the control position is linked to a non-trunk agent.

Examples

Not currently available

Responses

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

Responses for the montalk command

MAP output	Meaning and action
`FAIL TO SELECT CONF CALL`	**Meaning:** The command failed because a conference circuit could not be obtained to make the connection. **Action:** Check to see if a conference circuit is available. If all conference circuits are busy, wait until one is available and try again. If conference circuits are available, check the datafill for this command. If the problems cannot be found, contact the next level of support.
`FAILED, NO CIRCUIT`	**Meaning:** The command was entered, but failed because no circuit was posted. **Action:** None

-continued-

montalk (end)

Responses for the montalk command (continued)

MAP output	Meaning and action
FAILED, NO MONITOR LISTEN CONN	**Meaning:** The command was entered, but failed because the posted circuit was not a three-party conference circuit. **Action:** None
No MONITOR, NO LINKED TRUNK CKT	**Meaning:** The command failed because the posted trunk is not linked to another trunk. **Action:** Post another trunk which has a linked trunk.
OK, MONITOR TALK CONN SET	**Meaning:** The command was entered and the monitor connection was made. **Action:** None
TRUNK NOT CPB OR CPD	**Meaning:** The monitor connection could not be made because the posted trunk is not CPB or call processing deload (CPD). **Action:** Post another trunk which is CPB or CPD, or wait for the posted trunk to become CPB or CPD.
FAILED, LINKED CKT IS NOT A TRUNK	**Meaning:** The command failed because the posted trunk is not linked to another trunk. **Action:** Post another trunk which has a linked trunk.

-end-

Function

Use the next command to place another circuit in the control position.

next command parameters and variables

Command	Parameters and variables
next	s p [*delq* / *delttp* / s] *hold* [*delttp* / s / 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 where 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 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:
	`Next`
	`POSTED CKT IDLED`
	`SHORT CLLI IS : CF3P`
	`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. **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. **Action:** Continue entering commands against the circuit you have placed in the control position.

`POSTED CKT IDLED`
`SHORT CLLI IS: XXXXXXXX`
`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.
	
	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: ▪ 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. ▪ 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: ▪ the b parameter-removes all idle circuits from the posted set, and retains only out-of-service circuits. ▪ 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): ▪ dca-Austrian digital carrier ▪ dcm-digital carrier module ▪ dct-digital carrier trunk ▪ dtc-digital trunk controller ▪ idtc-international digital trunk controller ▪ iltc-international line trunk controller ▪ ltc-line trunk controller ▪ 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: ▪ mtm-maintenance trunk module ▪ oau-office alarm unit ▪ 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: ▪ cfl The circuit state code carrier fail (cfl) represents a circuit which was removed from service because of failure of an associated outside facility. ▪ cpb The circuit state code call process busy (cpb) represents a circuit that is carrying traffic. ▪ 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. ▪ 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. ▪ idl The circuit state code idle (idl) represents a circuit that is in service and available to any process. ▪ inb The circuit state code installation busy (inb) represents an installed circuit that has not been tested. ▪ 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. ▪ 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). ▪ 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. ▪ neq The circuit state code not equipped (neq) represents circuit hardware that is not provided. ▪ 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. ▪ 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. ▪ 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. ▪ 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. ▪ 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 ↵
where
 	
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.
	
	Response:
	`POST 5 DELQ D 4 BUSYQ A 59 DIG`
	`TTP 14 0 5 0 2 10`
	`CKT TYPE PM NO. COM LANG STA S R DOT TE R`
	`2W S7 S7 DTC 0 10 0 WBINC 1 CPB WBOTG 1`
	`WIDEBAND`
	
	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. **Action:** None

-continued-

post (end)

Responses for the post command (continued)

MAP output	Meaning and action
CPTERMERR QUEUE EMPTY NO MORE TRUNKS IN THE POSTED SET	**Meaning:** The command string post cptermerr was entered when there were no trunks to be posted. **Action:** None
Invalid trunk circuit.	**Meaning:** The wb parameter was entered when the supporting trunk circuit was not a valid trunk. **Action:** None
OK, CKT POSTED.	**Meaning:** The circuit is posted. **Action:** None
POSTED CKT IDLED.	**Meaning:** The circuit is posted and idled. **Action:** None
TEST ACCESS DENIED	**Meaning:** The TTP does not own the CLLI of the entered trunk. **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 all *incrname* *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 MONITOR level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The MONITOR level has changed to the previous menu level.

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the MONITOR 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 MONITOR 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 MONITOR 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 MONITOR level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **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* rls 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. This parameter has the same meaning as the rls parameter.
rls	This parameter frees the circuit from the control position and deletes it from the TTP level. This parameter has the same meaning as the r parameter.

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:
	`rls`
	`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

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. If no parameters are entered on a two-way trunk, the default state is IDL.
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.
rls	This parameter releases the connection and idles the circuit.
rts	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 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 IDL. 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 64-kb/s digital bidirectional channel used to carry circuit-switched voice, data, or packet-switched data (B-channel) when its associated channel used to carry call control messages between a terminal on an ISDN interface and the exchange termination (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.
	Response:	`RTS OK`
	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 responses 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. **Action:** None
SET IS EMPTY	**Meaning:** There are no circuits to be returned to service. **Action:** None
WARNING TRUNK WAS TAKEN OUT OF SERVICE BY SYSTEM DUE TO EXCESSIVE CALL ERRORS. PLEASE CONTACT SUPPORT GROUP PRIOR TO RETURNING TRUNK TO SERVICE. DO YOU WANT TO RTS TRUNK? PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** An attempt was made to return to service a trunk taken out of service by the system because of excessive call processing errors. **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-

Function

Use the tst command to test the circuit in the control position.

tst command parameters and variables

Command	Parameters and variables
tst	*autotest* *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 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 0-9999.
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:
	`TEST OK`
	`EAST_COAST_4 ***+ TRK107 NOV30 13:44:04 4800 PASS`
	`CKT CF3P 10`

	Explanation: The circuit passed the test.
tst X75E	
	Task: Perform the external continuity test on a posted X75 trunk.

	Response:
	`Tst X75E`
	`TEST OK`
	`**** X75100 JAN02 01:44:51 TEST PASSED`
	`CKT TOROTT 2`
	`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. **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. **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 for the reason the test failed. **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. **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. **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. **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. **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. **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. **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. **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. **Action:** Attempt the test again using the X75E or X75I test code.
`TST FLD`	**Meaning:** The specified test failed. **Action:** None

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
`TST OK`	**Meaning:** The specified test was successful. **Action:** None
`WARNING: Int loopback not removed`	**Meaning:** The internal continuity test passed, but the loopback in the peripheral module could not be removed. **Action:** Attempt the test again to remove the loopback.

-end-

MP level commands

Use the MP level of the MAP to perform maintenance for multipurpose positions (MPs) on TOPS position controllers (TPC) which subtend a TOPS Message Switch (TMS).

Accessing the MP level

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

mapci;mtc;pm;post tpc;mp ↵

MP commands

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

MP commands

Command	Page
abtk	M-343
bsy	M-345
disp	M-349
frls	M-353
next	M-355
post	M-357
quit	M-363
querymp	M-361
rts	M-367
trnsl	M-371
tst	M-373

MP menu

The following figure shows the MP menu and status display.

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


MP                        SysB   ManB   Offl   CBsy   ISTB   InSv
 0 Quit      PM            0      1      2      0      0      18
 2 Post_     TPC           0      1      0      0      0      0
 3
 4           TPC 17   ManB
 5 Trnsl
 6 Tst_      Status   VTB   SB   MB   PMB   RES   RTRN   INB
 7 Bsy_      MP         0    0    2    0     0      0     0
 8 RTS_
 9
10
11 Disp_
12 Next
13 Frls
14 QueryMP
15
16
17
18
```

Hidden commands

```
abtk
```

MP status codes

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

Status codes	MP menu status display	
Code	**Meaning**	**Description**
VTB	voice trunk busy	Circuit not available to traffic because the associated voice trunk is out-of-service.
SB	system busy	Circuit removed from service by system maintenance that does periodic tests.
MB	manual busy	Circuit removed from service by maintenance person; can only be returned to service by a maintenance person.
PMB	peripheral module busy	Circuit not available to traffic because the associated PM trunk module (TM) or digital controller module (DCM) is out-of-service.
RES	restricted	Circuit is in restricted idle state.
RTRN	return	Circuit is being returned to service, training mode.
INB	installation busy	Circuit is installed, but not yet in-service, for example, not tested.

abtk (end)

Function

Use the abtk command to abort all active tasks on multipurpose position (MP).

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 all current tasks.
	Response:	None
	Explanation:	All active tasks are aborted.

Responses

None

bsy

Function

Use the bsy command to manually busy (MB) or installation busy (INB) the posted multipurpose position (MP).

bsy command parameters and variables

Command	Parameters and variables	
bsy <com>	mb inb	*posted* all

Parameters and variables	Description
all	This parameter places all posted MPs in the MB or INB state.
inb	This parameter causes the posted MPs to be placed in the INB state.
mb	This parameter causes the posted MPs to be placed in the MB state.
posted	This default parameter, which is never entered, indicates that only the currently posted MP will be busied because the all parameter is not entered.

Qualifications

None

Example

The following table provides an example of the bsy command.

Examples of the bsy command

Example	Task, response, and explanation	
bsy all ↵		
	Task:	Busy the posted MPs.
	Response:	BSY PASSED
	Explanation:	All posted MPs are in the MB state.

Responses

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

bsy (continued)

Responses for the bsy command

MAP output	Meaning and action
BSY PASSED	**Meaning:** The busy command was successful. **Action:** None
REQUEST INVALID: MP IS ALREADY <state>	**Meaning:** The MP is laready in the MB or INB state. **Action:** None
NO ACTION TAKEN: MTCE IN PROGRESS	**Meaning:** The busy command was issued while maintenance is active on the TPC. **Action:** Reissue the command when maintenance is completed.
REQUEST INVALID: MP MUST BE MB	**Meaning:** The bsy inb command was issued, but the MP is not in the manual busy (MB) state. **Action:** Manually busy the MP and reissue the bsy inb command.
REQUEST SUBMITTED	**Meaning:** The busy command was issued with the all parameter and a request was submitted for each MP in the current post set,. The MPs in a valid state are busied. For MPs in an invalid state, the request will be ignored. **Action:** None
NO MP POSTED	**Meaning:** The bsy command was issued with no MPs posted. **Action:** None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
EITHER INCORRECT OPTIONAL PARAMETERS(S) OR TOO MANY PARAMETERS	**Meaning:** The bsy command was issued with an invalid parameter or parameters. **Action:** Reissue the command with the correct syntax.

-end-

disp

Function

Use the disp command to display the set of positions or devices in the specified state. If the state is preceded by the parameter p, the positions in the specified state are displayed. If the state is preceded by the parameter d, the devices in the specified state are displayed.

disp command parameters and variables

Command	Parameters and variables
disp	d [*state*] p

Parameters and variables	Description
d	This parameter selects devices to be included in the set of displayed MPs.
p	This parameter selects positions to be included in the set of displayed MPs.
state	This variable is the state of MP positions or devices including: ▪ cpb call processing busy ▪ cpd call processing deload ▪ idl idle (with p parameter only) ▪ inb installation busy ▪ ini initialized ▪ mb manual busy ▪ pmb peripheral module busy ▪ res restricted idle ▪ rtrn return-to-service training ▪ sb system busy ▪ vtb voice trunk busy (with p parameter only)

Qualifications

The disp command can operate on MPs from the MP MAP level only (there are no MP sublevels).

disp (continued)

Examples

The following table provides an examples of the disp command.

Examples of the disp command

Example	Task, response, and explanation
disp p mb ↵ *where* mb	is the state of the position to be included in the set of displayed MPs.

	Task: Display all positions in the MB state.
	
	Response:
	`Pos 100 TPC  7  MP 0`
	`Pos 200 TPC  7  MP 1`
	`Pos 300 TPC  7  MP 2`
	`Pos 400 TPC  7  MP 3`
	`Pos 500 TPC  8  MP 0`
	`Pos 600 TPC  8  MP 1`
	`Pos 700 TPC  8  MP 2`
	
	Explanation: The system responds with all the positions in the MB state.

disp d cpb ↵ *where* cpb	is the state of the device to be included in the set of displayed MPs.

	Task: Display devices in the CPB state.
	
	Response:
	`Dev 800  TPC 18  MP  3`
	`Dev 900  TPC 19  MP  0`
	
	Explanation: The system responds with all the devices in the CPB state.

Response

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

Response for the disp command

MAP output	Meaning and action
`Dev 800  TPC 18  MP  3` `Dev 900  TPC 19  MP  0`	**Meaning:** The system responds with all the devices in the CPB state, as a typical response to a disp d cpb command. **Action:** None

frls

Function

Use the frls command to force release (FRLS), that is, to make a posted MP manually busy regardless of its current state..

frls command parameters and variables

Command	Parameters and variables
frls	There are no parameters or variables.

Qualifications

Example

The following table provides an example of the frls command.

Example of the frls command

Example	Task, response, and explanation
frls ↵	
	Task: Force release of the posted MP

	Response:
	`POS 200 TPC 7 MP 1 CPB`
	`Size of Post set: 1`

	Explanation: The posted MP is made manual busy.

Responses

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

Responses for the frls command

MAP output	Meaning and action
`REQUEST SUBMITTED`	
	Meaning: The display shows the MP state transition for the force release command. The same transition occurs when the MP is force released from the CPD state.
	Action: None

-continued-

frls (end)

Responses for the frls command (continued)

MAP output	Meaning and action
REQUEST INVALID: MP IS ALREADY MB	**Meaning:** The system cannot make busy an MP that is already busy. **Action:** None
NO MP POSTED	**Meaning:** The frls command cannot be executed unless an MP is posted. **Action:** None

-end-

next

Function

Use the next command to step to the next MP in the posted set.

next command parameters and variables

Command	Parameters and variables
next	There are no parameter or variables.

Qualifications

None

Examples

The following table provides an examples of the next command.

Examples of the next command

Example	Task, response, and explanation	
next ↵		
	Task:	Post another position after one post set has been created.
	Response:	`POS 200  TPC    7  MP   1  MB   Mtce` `Size of Post set:    1`
	Explanation:	The system responds by posting another set.
next ↵		
	Task:	Verify that all positions in a set have been posted.
	Response:	`End of Post set`
	Explanation:	The system responds by indicating that all positions in the posted set have been displayed.

next (end)

Response

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

Response for the next command	
MAP output	**Meaning and action**
`<MAP dispaly for next MP>`	**Meaning:** Next MP is posted. **Action:** None
`End of Post set`	**Meaning:** All positions in the posted set have been displayed. **Action:** None

post

Function

Use the post command to select an MP or set of MPs so that maintenance functions can be performed for them.

post command parameters and variables

Command	Parameters and variables	
post	d	[*dev_no* / all / *state*]
	p	[*pos_no* / all / *state*]
	tms	*tms_no*
	tpc	*tpc_no*

Parameters and variables	Description
all	This parameter specifies that all devices are included in the posted set.
d	This parameter indicates one or more devices are included in the posted set.
dev_no	This variable specifies the device number of an MP datafilled in Table TOPSDEV. The range is 0-9999.
p	This parameter indicates one or more positions are included in the posted set.
pos_no	This variable specifies the position number for an MP datafilled in Table TOPSPOS. The range is 0-9999.
state	This variable is the state of MP positions including: ▪ cpb call processing busy ▪ cpd call processing deload ▪ idl idle ▪ inb installation busy ▪ ini initialized ▪ mb manual busy ▪ pmb peripheral module busy ▪ res restricted idle ▪ rtrn return-to-service training ▪ sb system busy ▪ vtb voice trunk busy

-continued-

post (continued)

post command parameters and variables (continued)

Parameters and variables	Description
tms	This parameter indicates that all MPs on the specified TMS will be in the posted set.
tms_no	This variable, when used with parameter tms specifies the TMS whose MPs will be in the posted set. The range is 0-255.
tpc	This parameter indicates that all MPs on the specified TPC will be in the posted set.
tpc_no	This variable, when used with parameter tpc specifies the TPC whose MPs will be in the posted set. The range is 0-254.

-end-

Qualifications

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

- a single position or device
- all positions on a given TMS TPC
- all devices on a given TMS TPC
- all positions on a given TMS
- all devices on a given TMS
- all TMS TPC positions (datafilled in Table TOPSPOS)
- all TMS TPC devices (datafilled in Table TOPSDEV)
- all TMS TPC positions in a specified state
- all TMS TPC devices in a specified state

When an MP is posted, the following information is displayed:

- If the MP is datafilled in Table TOPSPOS, “Pos” is displayed. If it is datafilled in Table TOPSDEV, “Dev” is displayed.
- Position or Device number (from Table TOPSPOS (field POSNO) or Table TOPSDEV (field DEVNO)).
- The TPC number on which the MP resides.
- The MP number from Table TOPSPOS or TOPSDEV (field MPNO).
- MP state.
- A count of MPs in the posted set.
- A “Mtce” flag indicating that maintenance is being performed on the MP. This flag appears only when maintenance is in progress, otherwise this field is blank.

Examples

The following table provides an examples of the post command.

Examples of the post command

Example	Task, response, and explanation

post p mb ↵
where
 	
mb is the state of the MP positions to be posted
	Task: Post the positions in the MB state.
	
	Response:
	`POS 100 TPC 7 MP 0 MB Mtce`
	`Size of Post set: 7`
	
	Explanation: The system responds that seven MPs are in the MB state.

post p sb ↵ *where* sb is the state of the MP positions to be posted	**Task:** Post the positions in the SB state. **Response:** `Failed to create Post set` **Explanation:** The system responds that a posted set was not created because there are no MPs in the SB state.

post d 200 ↵
where
 	
200 is the device number that is datafilled in Table TOPSDEV
	Task: Post device 200.
	
	Response:
	`Dev 200 TPC 17 MP 1 CPB`
	`Size of Post set 1`
	
	Explanation: The system responds by posting device 200.

Response

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

post (end)

Response for the post command

MAP output	Meaning and action
`Failed to create Post set`	**Meaning:** A post set was not created because there are no MPs in the specified state. **Action:** None

querymp

Function

Use the querymp command to display information on the posted MP. The display tells if the posted position/device is of type In-charge, Assistance, General Operator, or Force Management cathode ray tube (FMCRT). Additionally, the service set is displayed.

querymp command parameters and variables

Command	Parameters and variables
querymp	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the querymp command.

Example of the querymp command

Example	Task, response, and explanation

querymp ↵	**Task:** Query the posted position.
	
	Response:
	`POS 100  TPC   7  MP  0  MB  Mtce`
	`Size of Post set:   7`
	
	`Asst`
	`Service set;  DASERV`
	
	Explanation: The system responds by displaying information on the posted MP.

querymp (end)

Responses

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

Responses for the querymp command

MAP output	Meaning and action
`QUERY DOES NOT UTILIZE ANY PARAMETERS`	**Meaning:** This warning message appears when a parameter follows the querypm command. This is warning message, not an error message. The command is executed normally after the warning is given. **Action:** None
`UNEQUIPPED MP`	**Meaning:** Between the time when the MP was posted and the time when the querypm command was issued, the MP was deleted from either Table TOPSPOS or TOPSDEV. When the MP is deleted, its state at the MP level becomes NEQ. **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 all *incrname* *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 MP level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The MP 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 MP 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 MP 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 MP 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 MP level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

rts

Function

Use the rts command to return the MP to service from the manual busy (MB) state.

rts command parameters and variables

Command	Parameters and variables	
rts	*posted* all t	*wait* nowait

Parameters and variables	Description
all	This parameter causes all MPs in the post set to be returned to service.
nowait	This parameter allows additional commands to be entered at the MAP without waiting for the rts command to complete execution.
posted	This default parameter, which is never entered, indicates that only the currently posted MP will be returned to service because the all parameter is not entered.
t	This parameter causes the currently posted MP to be returned to service in the training mode.
wait	This default parameter, which is never entered, indicates that additional commands cannot be entered at the MAP until the rts command has completed execution because the nowait parameter was not entered.

Qualifications

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

- The MP must be in the INI, MB, or SB state to be returned to service.
- The MP must be in the MB state to be returned to service for training.

rts (continued)

Example

The following table provides an example of the rts command.

Examples of the rts command

Example	Task, response, and explanation
rts ↵	
	Task: Return the currently posted MP to service.
	Response: `RTS PASSED`
	Explanation: The posted MP is now 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
`RTS PASSED`	
	Meaning: The rts command was successful.
	Action: None
`RTS FAILED:  CHECK FOR POSSIBLE LOGS`	
	Meaning: The rts command failed due to an unexpected software error.
	Action: Reissue the command. If the problem persists, consult logs and notify next level of maintenance.
`NO ACTION TAKEN: MTCE IN PROGRESS`	
	Meaning: The rts command was issued while maintenance was active on the MP.
	Action: Reissue the command when maintenance is completed.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`RTS FAILED: NO REPLY FROM PM`	**Meaning:** The rts was unsuccessful due to the failure to receive a reply from the TPC. **Action:** Reissue the command. If the problem persists, consult logs and notify next higher level of maintenance.
`RTS FAILED: BAD MESSAGE RECEIVED FROM PM`	**Meaning:** The reply received from the TPC in response to the rts command could not be interpreted by the central control (CC). **Action:** Reissue the command. If the problem persists, consult logs and notify next higher level of maintenance.
`RTS FAILED: <tpc_fail_message>`	**Meaning:** The rts command failed for reason indicated by <tpc_fail_message> which can be any of the following: ▪ Diagnostics in progress ▪ Mtce in progress in the TPC ▪ Datafill in progress at the TAMI ▪ No HSLI card ▪ Failed to enable-check logs in the TPC **Action:** Reissue the command. If the problem persists, consult logs and notify next higher level of maintenance.
`REQUEST INVALID: MP MUST BE INI, MB, or SB`	**Meaning:** The MP was not in valid state to be returned to service. **Action:** Use the bsy command to put the MP in the MB state and reissue the rts command.
`REQUEST INVALID: MP MUST BE MB TO RTS FOR TRAINING`	**Meaning:** The rts t command was issued for an MP not in the MB state. **Action:** Use the bsy command to put the MP in the MB state and reissue the command.

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
REQUEST INVALID: MP MUST BE IN THE TABLE TOPSPOS	**Meaning:** The rts t command was issued on an MP not datafilled in table TOPSPOS. **Action:** None
REQUEST SUBMITTED	**Meaning:** The rts command was issued with the all or nowait parameter and a request was submitted for each MP in the current post set. The user does not have to wait for the rts command to complete executing before performing other maintenance actions. **Action:** None
NO POSiTION POSTED	**Meaning:** The rts command was issued with no MPs posted. **Action:** Use the rts command to post an MP to return it to service.
EITHER INCORRECT OPTIONAL PARAMETER(S) OR TOO MANY PARAMETERS	**Meaning:** The rts command was issued with an invalid parameter. **Action:** Reissue the command with correct syntax.

-end-

trnsl

Function

Use the trnsl command to display voice trunk information on the posted position (MP devices have no voice trunks).

trnsl command parameters and variables

Command	Parameters and variables
trnsl	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the trnsl command.

Example of the trnsl command

Example	Task, response, and explanation
trnsl ↵	

Task: Display the voice trunk information on a posted MP.

Response:

```
POS 200   TPC   7  MP   1  IDL  Mtce
Size of Post set:    2

TMS  0  port  12  chnl  1  VT  State:  MB
```

Explanation: The system displays voice trunk information on the posted MP.

trnsl (end)

Responses

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

Responses for the trnsl command

MAP output	Meaning and action
`TRNSL DOES NOT UTILIZE ANY PARAMETERS`	**Meaning:** This warning message appears when a parameter follows the trnsl command. This is a warning message, not an error message. **Action:** After issuing the warning message, the system generates the normal display in response to the trnsl command.
`UNEQUIPPED MP`	**Meaning:** Between the time when the MP was posted and the time when the trnsl command was issued, the MP was deleted from either Table TOPSPOS or TOPSDEV. When the MP is deleted, its state becomes NEQ. **Action:** None
`DEVICES HAVE NO VOICE TRUNKS`	**Meaning:** If a device is posted instead of a position, an error message will be displayed indicating that devices have no voice trunks. **Action:** None

tst

Function

Use the tst command to perform MP terminal and HSLI card diagnostics on the posted MP. If the test command is issued with no parameter, both the MP terminal diagnostics and HSLI card diagnostics are performed.

tst command parameters and variables

Command	Parameters and variables
tst	mp term hsli

Parameters and variables	Description
mp	This default parameter causes both MP terminal and HSLI card diagnostics to be performed.
term	This parameter causes only MP terminal diagnostics to be performed.
hsli	This parameter causes only HSLI card diagnostics to be performed.

Qualifications

None

Example

The following table provides an example of the tst command.

Example of the tst command

Example	Task, response, and explanation	
tst ↵		
	Task:	Perform both the MP terminal diagnostics and HSLI card diagnostics for the currently posted MP.
	Response:	`tst passed`
	Explanation:	All diagnostics for the currently posted MP passed.

tst (continued)

Responses

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

Responses for the tst command

MAP output	Meaning and action
`TST PASSED`	**Meaning:** The diagnostics passed **Action:** None
`REQUEST INVALID: MP MUST BE MB TO TST`	**Meaning:** The test command was issued, but the MP was not in the MB state. **Action:** Use the bsy command to put the MP in the MB state and reissue the command.
`REQUEST INVALID: TPC <nnn> IS OUT OF SERVICE`	**Meaning:** The test command was issued while the TPC was ManB, CBsy, OffL, or SysB, where <nnn> is the number of the TPC. **Action:** At the TPC MAP level, use the rts command to return the TPC to service.
`NO ACTION TAKEN: MTCE IN PROGRESS`	**Meaning:** The tst command was issued while maintenance was active on the TPC. **Action:** Reissue the command when the maintenance action is completed.

`TST FAILED: <tst_failed_message>`
`ERROR CODE: <error_code>`
`ADDITIONAL VALUE: <additional_value>`	

-continued-

tst (continued)

Responses for the tst command (continued)

Meaning: The tst failure response consists of three parts, <tst_failed_message>, <error_code>, and <additional_value>. These are described below:

- Possible <tst_failed_message> are the following:
  - Diagnostics software error in the TPC
  - HSLI card not present - unable to run diagnostics
  - Error communicating with the MP terminal
  - HSLI card diagnostics failed
  - MP terminal component diagnostic failed
- Possible <error_code> values and meanings for general diagnostic are the following:
  - 0 no error
  - 101 software error
  - 102 fatal error (diagnostics cannot run)
- Possible <error_code> values and meanings for HSLI card diagnostic are the following:
  - 201 software error
  - 202 software error
  - 203 TOPS/HSLI card not present
  - 204 MP position unavailable (not ManB)
  - 205 software error
  - 206 CBT port register error
  - 207 CC port register error
  - 208 mode register access error
  - 209 baudrate register access error
  - 210 initialize UARTS error
  - 211 HSLI port register error
  - 212 HSLI port RAM error
  - 213 software error
  - 214 software error
  - 215 CBT UART loopback time out error
  - 216 CBT UART loopback time out error
  - 217 CBT UART loopback unexpected interrupt
  - 218 CBT UART loopback unexpected interrupt
  - 219 CBT UART loopback parity error
  - 220 CBT UART loopback parity error
  - 221 CBT UART loopback overrun error
  - 222 CBT UART loopback overrun error
  - 223 CBT UART loopback framing error

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
	- 224 CBT UART loopback framing error - 225 CBT UART loopback extra data received - 226 CBT UART loopback extra data received - 227 lost data during CBT port loopback diagnostic - 228 lost data during CBT port loopback diagnostic - 229 data corrupted during CBT port loopback diagnostic - 230 data corrupted during CBT port loopback diagnostic ▪ Possible <error_code> values and meanings for MP functional diagnostic are the following: - 301 error registering with the HSLI server - 302 error setting the acknowledge type - 303 error downloading MP - 304 HSLI I/O error - 305 load or disk problem - 306 communication with MP terminal error - 401 software error - 402 time out waiting for TCD results - 403 CPU TCD failed - 404 ROM TCD failed - 405 RAM TCD failed - 406 exceptions TCD failed - 407 display controller TCD failed - 408 MFP (UART, GPIO, and timer) TCD failed - 409 HSLI TCD failed - 410 telephony circuity TCD failed - 411 keyboard TCD failed - 501 software error - 502 time out (waiting for ACK) of a packet sent - 503 error sending a packet - 504 HSLI loopback (error in response) - 505 software error - 506 HSLI loopback (response time out) - 507 HSLI loopback (correct response not received) - 508 load or disk problem - 509 communication with MP terminal error

-continued-

Responses for the tst command (continued)

MAP output	Meaning and action
	- 510 communication with MP terminal error - 511 communication with MP terminal error - 512 communication with MP terminal error - 513 communication with MP terminal error - 514 bad keycode in packet received from MP ▪ Possible <error_code> values and meanings for HSDA diagnostic are the following: - 1 general error-if the specific code is 1-4, it is a software error. If the specific code is 5, it is a "card-not-installed" error. - 2 messaging error - 3 messaging error - 4 messaging error - 5 messaging error - 6 messaging error - 7 messaging error - 8 time out waiting for reply - 9 driver detected error on a command to the driver - 10 driver detected error on a message to the card - 11 SBC-HSDA communication error - 12 HSDA detected communication error - 13 driver detected recoverable error - 14 HSDA status register error - 15 HSDA power-up/reset diagnostics error - 16 SBC access to shared RAM diagnostic error - 17 SBC-HSDA message loopback error - 18 HSDA system memory diagnostic error - 19 HSDA timers and interrupts diagnostic error - 20 HSDA data communications diagnostic error - 601 software error - 602 HSDA card unavailable (not ManB) - 603 basic diagnostic error - 604 extensive diagnostic error (general) - 605 extensive diagnostic error (system RAM) - 606 extensive diagnostic error (timers and interrupts) - 607 extensive diagnostic error (data communicating)

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
	▪ Possible <error_code> values and meanings for MMI diagnostic are the following: - 701 bad value entered - 702 command/subcommand/option required - 703 command/subcommand/option mutually exclusive - 704 general syntax error - 705 unknown command/subcommand/option - 706 duplicate command/subcommand/option - 707 bad checksum of input line - 708 could not quit diagnostics and return to the main TAMI menu ▪ Possible <error_code> values and meanings for disk diagnostic and maintenance are the following: - 1105 memory error accessing diagnostics disk buffers - 1111 unsupported device type or operation on a device was requested (software error) - 1112 controller error or controller detected error - 1116 disk is uninitialized (but is partitioned) - 1134 bus out of phase sending command or getting status - 1153 disk is uninitialized - 1162 disk name error (software error) - 1173 unsupported volume number error (software error) - 1401 error processing the hard-disk boot code - 1402 error processing the floppy-disk boot code - 1403 error allocating disk buffers - 1404 device is unavailable ▪ Possible <additional_value> values are for engineering purposes and are not meant to be interpreted, although they ought to be reported.
Action:	An action is associated with each tst_filed_message. The actions are as follows: ▪ Diagnostics software error in the TPC. Run diagnostics again. If a problem still remains, reboot the TPC and run diagnostics again. If the problem continues, reload the TPC and run diagnostics again. If the problem persists, notify next level of maintenance. ▪ HSLI card not present-unable to run diagnostics. Check the card to see it is present. If the card is present, reboot the TPC. If the problem persists, consult logs and notify next level of maintenance.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
	▪ Position unavailable for diagnostics. Ensure the position is MB at the MP level. Run diagnostics again. If the problem persists, notify next level of maintenance. ▪ Error communicating with the MP terminal. Run diagnostics again. If the problem persists, check the links to the MP terminal. Ensure the MP is turned on. Run diagnostics again. If the problem persists, replace the HSLI card. Run diagnostics again. If the problem persists, notify next level of maintenance. ▪ HSLI card diagnostics failed. Run diagnostics again. If the problem persists, replace faulty hardware. ▪ MP terminal component diagnostic failed. Run diagnostics again. If the problem persists, replace faulty hardware.
`TST FAILED: NO REPLY FROM PM`	**Meaning:** The test was unsuccessful due to the failure to receive a reply from the TPC. **Action:** Reissue the command. If the problem persists, notify next level of maintenance.
`TST FAILED: BAD MESSAGE RECEIVED FROM PM`	**Meaning:** The reply received from the TPC in response to the test command could not be interpreted by the CC. This may be the result of a data transmission error. **Action:** Reissue the command. If the problem persists notify next level of maintenance.
`TST FAILED: MP DIAGNOSTICS IN PROGRESS` `PLEASE WAIT AND TRY AGAIN`	**Meaning:** The test cannot be performed presently because MP diagnostics are in progress on another MP on the same TPC. **Action:** Reissue command when diagnostics are completed.
`NO POSITION POSTED`	**Meaning:** The test command was issued when there was no MP posted. **Action:** Post the MP before attempting to test it.

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
`EITHER INCORRECT OPTIONAL PARAMETER(S) OR TOO MANY PARAMETERS`	**Meaning:** The test command is issued with incorrect parameters. **Action:** Reissue the command with correct syntax.
`TST FAILED:  CHECK FOR POSSIBLE LOGS`	**Meaning:** The test failed due to an unexpected software error. **Action:** Reissue the command. If the problem persists notify next level of maintenance.
`HSLI AND TERM OPTIONS ARE NOT SUPPORTED ON BP POSITIONS`	**Meaning:** Only the TST and TST MP commands are valid for basic position (BP) positions. **Action:** None

-end-

MPC level commands

Use the multi-protocol controller (MPC) level of the MAP to access the commands that test and query the card and link status of a specific MPC.

For the MPC, the term “conversation” applies to logical link activity between two systems for data transmission. Conversation does not refer to voice transmission or to the establishment of a voice link for call processing.

Accessing the MPC level

To access the MPC level, enter the following from the CI (command interpreter) level:

mapci;mtc;iod;ioc x;mpc y ↵

where

x	is the number of the input/output controller (IOC)
y	is the number of the MPC.

MPC commands

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

MPC commands (continued)

Command	Page
bsy	M-385
downld	M-389
listdev	M-393
offl	M-397
qconv	M-401
qlink	M-405
qmpc	M-407

-continued-

MPC commands (continued)	
Command	**Page**
qnode	M-413
qsbsylk	M-415
quit	M-417
revive	M-421
rts	M-427
tst	M-433
-end-	

MPC menu

The following figure shows the MPC menu and status display.

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


MPC          IOD
 0 Quit      IOC  0  1  2  3  4
 2 _Link_    Stat .  .  .  .  .
 3 _All
 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 Qnode         TYPE MTD  CONS DDU  CONS DDU  CONS CONS CONS MTD
11          Card 3 Unit       0
12 Qsbsylk         User   SYSTEM BOARD  LINK0  LINK1  LINK2  LINK3
13 Qmpc_           Status  Ready COMACT ENABLD ENABLD ENABLD ENABLD
14 Qlink_
15 Qconv_
16 Revive_
17 Downld_
18
```

MPC status codes

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

Status codes MPC 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 MPC commands. These responses will be produced by many of the commands under the MPC level.

Common responses for the MPC 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 set the state of the MPC card to manually busy.

bsy command parameters and variables

Command	Parameters and variables
bsy	[all / link *linknum* / links] [*noforce* / force]

Parameters and variables	Description
all	This parameter sets all links to manually busy, then sets the card to manually busy.
force	This parameter can be used with any bsy commands to busy the MPC card and requested links regardless of any open communication channels.
link	This parameter sets the designated link to manually busy.
linknum	This variable designates the link to be manually busied. Valid entries are 0 to 3.
links	All datafilled links of the MPC card are set to manually busy.
noforce	This default parameter, which is never entered, indicates no device will be made busy while it has open communications channels, because no force parameter is entered.

Qualifications

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

- Options for the bsy command allow for maintenance on individual links of the MPC card as well as the card itself.
- A bsy command is effective only for an offline, system busy, on in-service state.
- If the force parameter is not specified, a busy command succeeds only when there are no conversations in progress.
- While in the busy state, no conversations are handled by the MPC card.

bsy (continued)

Example

The following table provides an example of the bsy command.

Example of the bsy command

Example	Task, response, and explanation
bsy all ↵	
	Task: Make the card busy.
	Response: `REQUEST PASSED FOR CARD`
	Explanation: The system set the card to 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
`CONVERSATIONS EXIST ON LINK 1.`	
	Meaning: The attempted busy command failed due to conversations in progress. The states of the requested links or cards are not changed and the command is aborted.
	Action: None

`DOWNLOAD IN PROGRESS ON MPC.`
`TYPE YES TO BSY AND STOP DOWNLOAD.  NO TO`
`CANCEL COMMAND.`	

	Meaning: A download to the MPC card is in progress, and the card cannot be busied.
	Action: Enter yes to stop the download and continue to busy the MPC. Enter no to abort the bsy command.

-continued-

bsy(continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
`INVALID LINK STATE FOR BSY OF LINK 1.`	**Meaning:** The link is not datafilled. The bsy command with the link parameter is effective only for a link that is offline or in service. **Action:** If the link is required, datafill the link in table MPCLINK. Otherwise, no action is required.
`INVALID REQUEST. ALL LINKS MUST BE BSY OR OFFLINE.`	**Meaning:** The MPC card can not be set to busy while any links are in service. **Action:** None
`LINK 1 HAS NOT BEEN DATAFILLED.`	**Meaning:** The link is unequipped. **Action:** If the link is required, datafill the link in table MPCLINK. Otherwise, no action is required.
`MPC MUST BE BSY OR IN SERVICE FOR BSY OF LINK 1.`	**Meaning:** The system cannot set the requested link to busy because the MPC is in the offline state. **Action:** Use the bsy command with the all parameter to busy the MPC card, and then use the bsy command with the link parameter to busy the link.
`NO LINKS ARE DATAFILLED ON THIS MPC.`	**Meaning:** You attempted to busy links on an MPC that has no datafilled links. The MPC card is busied if so requested, but no links are busied. **Action:** None
`REQUEST PASSED FOR CARD`	**Meaning:** The MPC card is now in the busy state. Log MPC903 is generated, the state shown under the header SYSTEM changes to MBSY, and the state under the header BOARD changes to UNKNWN (if the download condition is yet to be determined), NOLOAD, or DNLDED. **Action:** None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action

`REQUEST PASSED FOR LINK 1.`
 	
or
 	
`REQUEST PASSED FOR LINKS.`
	Meaning: The requested link or all links are now in the busy state. The state shown at the MAP under the LINK header changes to MBSY.
	
	Action: None

`TYPE YES TO VERIFY FORCE, NO TO CANCEL COMMAND.`	**Meaning:** Whenever the force parameter is used, before it cancels all calls in progress, the system prompts for confirmation. If you respond yes the system responds to the original busy command; if you respond no, the system response is BUSY ABORTED. **Action:** Enter yes to verify force, or no to abort the procedure.

-end-

downld

Function

Use the downld command to manually download software from the CC to a selected MPC card.

downld command parameters and variables

Command	Parameters and variables
downld	*file _name* *device_name*

Parameters and variables	Description
device_name	This variable is the name of the device where the file to be downloaded resides.
file_ name	This variable indicates that the download is to be done using the specified file. If no file is specified, the card is downloaded using the file specified in table MPC.

Qualifications

None

Example

The following table provides an example of the downld command.

Example of the downld command

Example	Task, response, and explanation
downld ↵	

Task: Download software onto the displayed MPC card.

Response:

```
FILE-ID FOR FILE “MPCX33AB” ON DEVICE
”S01DPMXPM35”
OBTAINED FROM TABLE PMLOADS.
DOWNLOAD OF TABLE MPC FILE “MPCX33AB” SUCCEEDED.
```

Explanation: The software datafilled in table MPC is downloaded onto the displayed MPC card.

downld (continued)

Responses

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

Responses for the downld command

MAP output	Meaning and action

`BAD DOWNLOAD FILE SPECIFIED IN BOARD TABLE`
 	
or
 	
`COULD NOT GET FID FOR DOWNLOAD FILE.  DOWNLOAD CANCELLED`
 	
or
 	
`COULD NOT SAVE DLOAD FID IN BOARD TABLE`
	Meaning: A problem exists in table MPC. FID is file identification.
	
	Action: Check the datafill in table MPC and ensure that it is correct and that the file exists on the listed device.

`DOWNLOAD FAILED.  SEE MPC LOGS FOR MORE INFO`	**Meaning:** The download failed. Refer to logs MPC101 through MPC106 for the reason of the failure. **Action:** None
`DOWNLOAD SUCCEEDED`	**Meaning:** The download is successful. The card state is DNLDIP while downloading is in progress and becomes DNLDED when it is successfully completed. **Action:** None
`FAILURE IN DIRECTORY SEARCH.  RC: <nn>`	**Meaning:** The system is not able to find the file indicated in table MPC. The return code <nn> is intended for use by maintenance support personnel. **Action:** List the contents of the device on which the downloaded file is located in order to place that file, if it exists, into the user directory. When RC appears on the MAP or in MPC logs 101, 102, or 104, report it to maintenance support personnel.

-continued-

downld (end)

Responses for the downld command (continued)

MAP output	Meaning and action

`FILE-ID FOR FILE “MPCX33AB” ON DEVICE ”S01DPMXPM35”`
`OBTAINED FROM TABLE PMLOADS.`
`DOWNLOAD OF TABLE MPC FILE “MPCX33AB” SUCCEEDED.`
	Meaning: The system downloaded the MPC.
	
	Action: None

`MPC ALREADY BEING DOWNLOADED`	**Meaning:** The MPC is already being downloaded. **Action:** None
`MUST BE IN BUSY STATE TO DOWNLOAD`	**Meaning:** The MPC to be downloaded is not the in manually busy or system busy state. To load the MPC, use the bsy command before the downld command. **Action:** None
`WILL USE DOWNLOAD FILE SPECIFIED IN BOARD TABLE`	**Meaning:** You failed to supply a file name; therefore, the download is done using the file specified in table MPC. **Action:** None

-end-

listdev

Function

Use the listdev command to display the status of all MPCs.

listdev command parameters and variables

Command	Parameters and variables	
listdev	*ioc*	mpc

Parameters and variables	Description
ioc	This variable identifies the number of a specific input/output controller (IOC) card. Valid entries are 0-19.
mpc	This parameter identifies the devices to be listed as MPCs.

Qualification

The listdev command is qualified by the following restriction: displays are shown only up to the highest equipped MPC number.

Example

The following table provides an example of the listdev command.

Example of the listdev command

Example	Task, response, and explanation

listdev1 mpc ↵
where
 	
1 is the number of the IOC card connected to the devices
mpc identifies that the devices to be listed are MPCs
	Task: List the MPC connected to card 1.
	
	Response:
	`MPC  USER   STATUS IOC  CARD  PORT`
	`  1   SYSTEM  Ready   1     4     0`
	
	Explanation: The response lists the MPC and provides identification and status information about it.

listdev (continued)

Responses

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

Responses for the listdev command

MAP output	Meaning and action
CARD 5	**Meaning:** Identifies the card position within the IOC occupied by the DPC. **Action:** None
INVALID card is unknown	**Meaning:** A listdev display cannot occur because the card is unknown, the card is of an unknown type, or no device exists for the device specified. **Action:** None
IOC 1	**Meaning:** Identifies the IOC number to which the DPC is connected. **Action:** None
MPC 0	**Meaning:** This column echoes the device specified and provides the number of each device. **Action:** None
MPC -- NEEDS ANOTHER CI INCREMENT OR MODULE LOADED	**Meaning:** The list device command is available at the IOD, IOC, or MPC levels. None of these levels has been accessed. **Action:** Access the IOD, IOC, or MPC level and enter the command again.

-continued-

listdev (end)

Responses for the listdev command (continued)

MAP output	Meaning and action
MPC USER STATUS IOC CARD PORT 0 SYSTEM MBsy 0 5 0 1 SYSTEM Ready 1 4 0	**Meaning:** This is an example of a full display in response to the listdev command . **Action:** None
PORT 0	**Meaning:** Identifies the port on the card to which the MPC is connected. **Action:** None
STATUS Ready	**Meaning:** Provides the status of the device. **Action:** None
USER SYSTEM	**Meaning:** Displays the field value specific to the relevant device. MPC displays SYSTEM as the user. **Action:** None

-end-

offl

Function

Use the offl command to set the state of the MPC card to offline.

offl command parameters and variables

Command	Parameters and variables
offl	all link *linknum* links

Parameters and variables	Description
all	This parameter sets all the links to offline, then sets the card to offline.
link	This parameter sets the designated link to offline.
linknum	This variable designates the link to be made offline. Valid entries are 0-3.
links	This parameter indicates that all datafilled links of the MPC card are to be set to offline.

Qualifications

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

- Options for the offl command allow for maintenance on individual links of the MPC card as well as the entire card.
- An offline state can be set only from the manual busy state.
- The MPC card becomes unequipped if the card is deleted by the table editor and is offline

offl (continued)

Example

The following table provides an example of the offl command.

Example of the offl command

Example	Task, response, and explanation
offl all ↵	
	Task: Take the card offline.
	Response: `REQUEST PASSED FOR CARD`
	Explanation: The card is offline.

Responses

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

Responses for the offl command

MAP output	Meaning and action
`DOWNLOAD IN PROGRESS ON THIS MPC.` `TYPE YES TO STOP DOWNLOAD & OFFLINE MPC, NO TO CANCEL COMMAND.`	
	Meaning: A download to the MPC card is in progress, and the card cannot be made offline. The offline command is aborted and the download continues if you enter no. The card is set to offline if you enter yes.
	Action: Enter yes to stop the download, or no to abort the command.
`INVALID REQUEST. ALL LINKS MUST BE OFFLINE.`	
	Meaning: The MPC card can not be taken offline because not all links in the card are in the offline state.
	Action: Enter the command again, with the all parameter to take all links offline.
`LINK 1 HAS NOT BEEN DATAFILLED.`	
	Meaning: The link is unequipped.
	Action: Datafill the link in table MPCLINK if the link is required. Otherwise, no action is required.

-continued-

offl (end)

Responses for the offl command (continued)

MAP output	Meaning and action
`LINK 1 MUST BE MAN-BUSY TO OFFLINE.`	**Meaning:** The requested link could not be set to offline because the link was in service. **Action:** None
`NO LINKS ARE DATAFILLED ON THIS MPC.`	**Meaning:** You attempted to take links offline on an MPC that had no datafilled links. The MPC card is made offline if so requested, but no links are made offline. **Action:** None
`REQUEST PASSED FOR CARD`	**Meaning:** The MPC card is now in the offline state. Log MPC902 is generated. **Action:** None

`REQUEST PASSED FOR LINK 1.`
 	
or
 	
`REQUEST PASSED FOR LINKS.`
	Meaning: The requested link or all links are now in the offline state. The state shown at the MAP under the LINK header changes to OFFL.
	
	Action: None

-end-

qconv

Function

Use the qconv command to query information about an MPC conversation.

qconv command parameters and variables

Command	Parameters and variables
qconv	*nnn* *mpcscc*

Parameters and variables	Description
nnn	This variable specifies the central controller (CC) conversation number of the conversation to be queried. Valid entries are 0-255.
mpcscc	This variable specifies a six-character device name that refers to a specific MPC conversation. It causes the CI directory to be searched for the corresponding conversation. If found, the information for the conversation is displayed. The device name begins with the letters mpc to indicate this is an mpc file. The next digit specifies the security number of the conversation. Valid entries for the security number are 0-3. The final digits of the variable specify the CC conversation number. Valid entries are 0-255 (00-FF hexadecimal).

Qualifications

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

- If no variable is specified, all active conversations for the MPC are added to the user directory, and the information for each is displayed.
- *Mpccscc* is automatically generated by the system when the qconv command is entered without a variable.

qconv (continued)

Example

The following table provides an example of the qconv command.

Example of the qconv command

Example	Task, response, and explanation

qconv 5 ↵
where
 	
5 specifies the CC conversation number
	Task: Query conversation number 5.
	
	Response:
	`MPC L LCN STATUS CCC SEC PARDEV INP OPEN OWNER`
	`--- - --- ------ --- --- ------ --- ---- -----`
	`5 2 1 ENABLED 5 1 MPC100 MSG 0 SES`
	
	Explanation: The internal index 5 (under CCC) represents the conversation on MPC 3, link 2, logical channel 1.

Responses

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

Responses for the qconv command

MAP output	Meaning and action
`CONVERSATION 123 ON LINK 235 IS NOT ACTIVE`	**Meaning:** Entering qconv with no parameters causes all of the active conversations for the MPC to be added to the user's directory. A non-active conversation has been detected. The range for both the conversation number and the link number is 0-255. **Action:** None
`CONVERSATION NOT ACTIVE`	**Meaning:** The entered CC number does not refer to an active conversation. An active conversation is one on which a user gets a private virtual circuit. If the conversation is active, information is displayed, and the conversation is added to the CI read/write directory as a file. **Action:** None

-continued-

qconv (continued)

Responses for the qconv command (continued)

MAP output	Meaning and action
`CONVERSATION NUMBER MUST BE BETWEEN 0 TO 255`	**Meaning:** The CC conversation number is not in the valid range. **Action:** None

`MPC L LCN STATUS CCC SEC PARDEV INP OPEN OWNER`
`--- - --- ------ --- --- ------ --- ---- -----`
`5 2 1 ENABLED 5 1 MPC100 MSG 0 SES`
	Meaning: Field STATUS is usually INACTIVE, and CCC, SEC, and PARDEV are NONE for conversations not in use. A non-zero OPEN count indicates conversation use, as well as an INP value of MSG or APP. Non-default values for STATUS, CCC, SEC, and PARDEV may simply mean an MPC volume has been in use, remains allocated, and is not currently in use.
	
	The input indicator (INP) field indicates FIL if the input type specified for the MPC conversation is through the logical file system. INP indicates MSG if input on a conversation is handled by sending it to a mailbox specified for the conversation, and APP if the input is passed through a target routine supplied by the conversation (by the application). Either of these types of input must be explicitly requested for each conversation by the application using that conversation.
	
	The application owner of the conversation field (OWNER) specifies the name of the application that owns the MPC conversation. OWNER is an alphanumeric field of up to eight characters. If no application has registered ownership of the conversation queried, NONE is displayed.
	
	Action: None

`NO CONVERSATIONS ON THIS MPC`	**Meaning:** No conversations are active on the MPC. **Action:** None
`PARAMETER ENTERED IS NOT CCC NO OR PARDEV`	**Meaning:** The system cannot find the device (PARDEV) in the user's directory. When the user leaves the MPC level, PARDEV names are removed from the user's directory. CCC represents conversation with the CC. **Action:** Re-enter the command using a valid MPCscc code.

-continued-

qconv (end)

Responses for the qconv command (continued)

MAP output	Meaning and action
`QCONV MPC012 QUERIES THIS CONVERSATION`	**Meaning:** The code (MPCscc) identifies the device name to be used when referring to this conversation. **Action:** None

-end-

qlink

Function

Use the qlink command to query system configuration parameters for a specified MPC link.

qlink command parameters and variables

Command	Parameters and variables
qlink	*linknum*

Parameters and variables	Description
linknum	This variable specifies the MPS RS-232-C link number to be queried. Valid entries are 2-3.

Qualifications

None

Example

The following table provides an example of the qlink command.

Example of the qlink command

Example	Task, response, and explanation
qlink 2 ↵ *where* 2 indicates the number of the link to be queried	**Task:** Receive the configuration parameters for link number 2. **Response:** APLDEFN NONE L2IDLY 200 XPARENT NODLE IEOM $ ISOM $ OEOM $ OSOM $ BAUDRATE B1200 MODMCTRL FULLMODM L1IDLY 100 LNKDWN 200 STOPBITS S1 PARITY EVEN CHARBITS BIT7 LINEMODE FULL NCHARTMO 0 NCHTMOIN 0 IMODE BLK OMODE BLK FCHARCNT 0 ECHO OFF FLOWCTRL NOFLOW FILLCHAR $ **Explanation:** The values are given for ASYNC link on link number 2.

qlink (end)

Responses

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

Responses for the qlink command

MAP output	Meaning and action
APLDEFN NONE L2IDLY 200 XPARENT NODLE IEOM $ ISOM $ OEOM $ OSOM $ BAUDRATE B1200 MODMCTRL FULLMODM L1IDLY 100 LNKDWN 200 STOPBITS S1 PARITY EVEN CHARBITS BIT7 LINEMODE FULL NCHARTMO 0 NCHTMOIN 0 IMODE BLK OMODE BLK FCHARCNT 0 ECHO OFF FLOWCTRL NOFLOW FILLCHAR $	**Meaning:** These display headings appear when ASYNC has been used in the link. **Action:** None
NUMPVCS 3 NUMSVCS 0 MODULO 1 THRUPUT 1 FACILCODE 1 PKTWINDO 2 PKTDATA 256 TS 45 TF 30 TD 180 PKTT1 60 RD 1 RL 1 RS 1 TC 0 TV 0 TI 0 TJ 40 RR 0 RJ 1 NODETYPE 3 ENVIRON 1 PKTMOD 1 LNKACES 0 FRMWINDO 2 N2 25 FRMT1 30 T2 60 T3 180 T4 180 BAUDRATE 2400 DUPLEX 1 LINKCONT 1 LINUSAGE 1 SYNC 1 CLKSRCE 1 RSSPEC 0 INITROLE 0 PHONE 0 DCDTIMER 0 CTSTIMER 0	**Meaning:** These display headings appear when X250ORIG or X2580 has been used in the link. **Action:** None

qmpc

Function

Use the qmpc command to display the current status of the MPC card, MPC download file, each of the four links on the MPC card, and the operational measurements tuple which correlates to the MPC.

qmpc command parameters and variables

Command	Parameters and variables
qmpc	*unit_num* all

Parameters and variables	Description
all	This parameter displays status information for all MPCs datafilled in table MPC.
unit_ num	This variable specifies the MPC number datafilled in Table MPC. Valid entries are 0-255. If no value is specified, the default is the number of the MPC currently displayed at the MPC level.

Qualifications

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

- The MPC number used to specify an MPC may not be the same operational measurement (OM) tuple number used to record data on that MPC. When requesting a show of OMs for a particular MPC, use the qmpc command to identify the tuple associated with the MPC.
- An MPC link can be offline while the MPC card is in service.

qmpc (continued)

Example

The following table provides an example of the qmpc command.

Example of the qmpc command

Example	Task, response, and explanation
qmpc 3 ↵ *where* 3 indicates the MPC to be displayed	**Task:** Display the status of MPC 3. **Response:** `MPC 3 STATE IS COMACT; LAST DOWNLOADED FILE IS MPCXEO8B; LINK 0 IS UNEQ, LINK 1 IS UNEQ, LINK 2 IS ENABLED, LINK 3 IS UNEQ OM TUPLE = 0` **Explanation:** The system displays the requested status. In this example, communications are active on MPC 3, and it is downloaded with MPCXG03B. Only link 2 has been datafilled, and it is enabled. The OM tuple corresponding to MPC 3 is 0.

Responses

The following table provides explanations of the components of the responses to the qmpc command and an example of a full response.

Responses for the qmpc command

MAP output	Meaning and action
`APPLIP`	**Meaning:** The status of the card is that an application is in progress. **Action:** None
`ARGUMENT MUST BE AN MPC UNIT # OR ALL`	**Meaning:** You did not correctly specify the command. **Action:** Enter the command with the correct variable or parameter.

-continued-

qmpc (continued)

Responses for the qmpc command (continued)

MAP output	Meaning and action
C-side Busy	
	Meaning: The status of the node is central-side (C-side) busy.
	Action: None
COMACT	
	Meaning: The status of the card is that communications are active.
	Action: None
COMIDL	
	Meaning: The status of the card is that communications are idle.
	Action: None
DNLDED	
	Meaning: The status of the card is that a file is downloaded.
	Action: None
DNLDIP	
	Meaning: The status of the card is that a download is in progress.
	Action: None
ENABLD	
	Meaning: The status of the link is enabled.
	Action: None
ENBLIP	
	Meaning: The status of the card is that enabling is in progress.
	Action: None

-continued-

qmpc (continued)

Responses for the qmpc command (continued)

MAP output	Meaning and action
`LAST DOWNLOADED FILE IS MPCX33AB on <Unknown Device>`	**Meaning:** The MPC card has been both loaded and tested; the name of the last downloaded file is given. **Action:** None
`MBSY`	**Meaning:** The status of the link or node is manually busy. **Action:** None
`MPC 3 STATE IS COMACT; LAST DOWNLOADED FILE IS MPCXEO8B; LINK 0 IS UNEQ, LINK 1 IS UNEQ, LINK 2 IS ENABLED, LINK 3 IS UNEQ OM TUPLE = 0`	**Meaning:** The full response identifies the MPC by its number, gives the status of the MPC card, the MPC download file, each of the four links on the MPC card, and the number of the operational measurements tuple which correlates to the MPC. **Action:** None
`MPC UNIT # IS NOT DATAFILLED`	**Meaning:** You did not specify the command correctly. **Action:** Enter the command correctly.
`NOLOAD`	**Meaning:** The status of the card is that the file is not downloaded. **Action:** None
`OFFL`	**Meaning:** The status of the link or node is offline. **Action:** None

-continued-

qmpc (end)

Responses for the qmpc command (continued)

MAP output	Meaning and action
REQUESTED MPC UNIT IS NOT DATATFILLED	**Meaning:** The MPC you requested is not datafilled. **Action:** None
SBSY	**Meaning:** The status of the link or node is system busy. **Action:** None
UNEQ	**Meaning:** The status of the link is unequipped because the link is not datafilled. **Action:** None
UNKNWN	**Meaning:** The status is unknown. **Action:** None

-end-

qnode

Function

Use the qnode command to query the node to which the MPC is connected.

qnode command parameters and variables

Command	Parameters and variables
qnode	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the qnode command.

Example of the qnode command

Example	Task, response, and explanation
qnode ↵	
	Task: Query the status of the node for the displayed MPC.
	Response: `MPC IS OFFLINE`
	Explanation: The MPC node is offline.

Responses

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

Responses for the qnode command

MAP output	Meaning and action
`MPC is in-service`	
	Meaning: The system displays the status of the node to which the MPC is connected. The possible status responses are in-service, offline, man busy, system busy, and unequipped.
	Action: None

qsbsylk

Function

Use the qsbsylk command to display all the MPC links that are in the system busy (SysB) state.

qsbsylk command parameters and variables

Command	Parameters and variables
qsbsylk	There are no parameters or variables.

Qualifications

The system busy status for MPC is shown as SBSY and not SysB as for PMs.

Example

The following table provides an example of the qsbsylk command.

Example of the qsbsylk command

Example	Task, response, and explanation	
qsbsylk ↵		
	Task:	Display all system busy MPC links.

	Response:	`MPC  LINK`
		`===  ====`
		`6    2`
		`10   3`

	Explanation:	Link 2 of mpc 6 and link 3 of mpc 10 are both system busy.

qsbsylk (end)

Responses

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

Responses for the qsbsylk command

MAP output	Meaning and action
`No MPC Links are in the SBSY state.`	**Meaning:** Response to qsbsylk command when there are no system busy links. **Action:** None

`MPC  LINK`
 	
`===  ====`
 	
`m    l`
`m    l`
	Meaning: Response to qsbsylk command indicateing busy links where:
	
	▪ m is the number of the MPC
	▪ l is the number of the link.
	
	Action: MPC links in the system busy state should be taken out of that state. This can be done by either fixing the problem or manually changing their state. Fixing the problem will require checking the physical connection and far end device or application.

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 all *incrname* *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 MPC level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The MPC level has changed to the previous menu level.

-continued-

quit

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the MPC 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 MPC 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` `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 MPC 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 MPC level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

revive

Function

Use the revive command to revive one or more MPC application processes based on parameters specified for entire applications or individual software processes.

revive command parameters and variables

Command	Parameters and variables		
revive	all		
	sdady		
	appln	*appln _name*	
	procname	*process_name*	
	processid	*processid_num1*	*processid_num2*

Parameters and variables	Description
all	This default parameter specifies that all MPC subsystem software processes are to be reinstated by the revive command.
appln	This parameter indicates that a specific application is to be revived.
appln_ name	This variable specifies the name of the application to be revived, where one of the thirty-two names can be entered. Each name can contain up to eight alphanumeric and special characters. The actual range of values is determined by those applications that use the MPC subsystem.
process_name	This variable specifies the MPC subsystem software process to be revived, where one of 32 names can be entered. Each name can contain up to eight alphanumeric characters. The specified process names are actual names of system modules.
processid	This parameter specifies that a specific process is to revived.
processid_num1 and *processid_num2*	These variables specify the process identification number of the process to be revived. The range of acceptable values is -32768 through 32767.
procname	This parameter specifies that all instances of a specific process are to be revived.
sdady	This parameter specifies that the stepdaddy (SDADY) process is to be revived. The parameter sdady starts the SDADY process after this process has died twice in 30 seconds.

revive (continued)

Qualifications

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

- The revive command should be used only under exceptional conditions. For example, logs MPC101 and MPC106 indicate process error conditions under which the command should be used.
- The SDADY process must be running properly before attempts to revive all other processes begin. As a result, SDADY is always the first process the revive command attempts to affect. Because the state of the SDADY process is critical to revival of all other processes, special messages noting the state of the SDADY process are produced when the revive all command is attempted.
- If the SDADY process cannot be revived, processes running under MPC software control continue to operate, provided no error conditions are encountered. If the MPC processes encounter error conditions while the SDADY process is down, they cannot be revived. Furthermore, no new processes can be initiated while the SDADY process is not running.
- MPCGDADY can be used as a process name, but it is treated as an unknown procname. Data for MPCGDADY is kept separate from other processes.

Example

The following table provides an example of the revive command.

Example of the revive command

Example	Task, response, and explanation	
revive ↵		
	Task:	Revive all processes.

	Response:	`ATTEMPTED TO REVIVE 2 PROCESSES`
		`2 SUCCEEDED`
		`0 FAILED`

	Explanation:	All processes are successfully revived.

Responses

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

Responses for the revive command

MAP output	Meaning and action

`ATTEMPTED TO REVIVE 2 PROCESSES`
`2 SUCCEEDED`
`0 FAILED`
	Meaning: The all, appln, or procname parameter was specified and the SDADY process was running. The system displays the total number of the MPC subsystem processes that the revive command attempted to reinstate. Of this total, the number of successful and failed attempts is also specified.
	
	Action: None

`ATTEMPTED TO REVIVE ONE PROCESS, ID = #020000 #022320`
`PROCESS WAS ALREADY RUNNING`
 	
or
 	
`ATTEMPTED TO REVIVE ONE PROCESS, ID = #020000 #023200`
`REVIVAL WAS NOT SUCCESSFUL`
or
 	
`ATTEMPTED TO REVIVE ONE PROCESS, ID = #020000 #023200`
`REVIVAL WAS SUCCESSFUL`
	Meaning: You specified a valid processid number. The system gives the status of the process.
	
	Action: If the attempt to revive an individual process is unsuccessful, check logs MPC101 and MPC106 for one or more causes.

-continued-

revive (continued)

Responses for the revive command (continued)

MAP output	Meaning and action
ATTEMPTED TO REVIVE STEPDADDY PROCESS STEPDADDY COULD NOT BE REVIVED or ATTEMPTED TO REVIVE STEPDADDY PROCESS STEPDADDY HAS BEEN REVIVED or ATTEMPTED TO REVIVE STEPDADDY PROCESS STEPDADDY WAS ALREADY RUNNING	**Meaning:** You specified a valid processid number. The system gives the status of the process. **Action:** If the attempt to revive SDADY was unsuccessful, check logs MPC101 and MPC106 for one or more causes.
CHECKING SDADY STATUS SDADY PROCESS ALREADY RUNNING CONTINUING TO REVIVE ALL NO PROCESSES TO BE REVIVED	**Meaning:** The all parameter or no parameter was used, and the system displays the status. **Action:** None
COULD NOT REVIVE PROCESS: UNKNOWN PROCESS ID	**Meaning:** The processid parameter was specified. The SDADY process is not aware of the given ID. The command was not executed. **Action:** Retry the command using a valid processid.
NO PROCESSES TO BE REVIVED	**Meaning:** No MPC software subsystem processes need to be revived. The command is not executed. **Action:** Check logs MPC101, MPC106, or associated application logs to make sure that specific processes need to be revived. If processes are down, repeat the command.

-continued-

revive (end)

Responses for the revive command (continued)

MAP output	Meaning and action
`NO REVIVE--UNKNOWN APPLN OR PROCNAME`	**Meaning:** You entered the command incorrectly. The command is not executed. **Action:** Query the module name. Make sure you entered the name correctly and used the correct parameters.
`PROCESS MODULE DOES NOT EXIST`	**Meaning:** You entered an invalid process name. Both sdady and mpcgdady are invalid process names. The command was not executed. **Action:** Retry the command using a valid process name.
`SDADY COULD NOT BE REVIVED` `REVIVE ALL ABORTED`	**Meaning:** The system could not revive the SDADY process. As a result, the system discontinues attempts to revive all other processes. The command is not executed. **Action:** Check logs MPC101 and MPC106 for an explanation of the problem.
`SDADY PROCESS ALREADY RUNNING` `CONTINUING REVIVE ALL`	**Meaning:** The SDADY process was already running. The process continues. **Action:** None
`SDADY REVIVED--CONTINUING REVIVE ALL`	**Meaning:** The SDADY process was revived. Revival of all other processes continues. **Action:** None

-end-

rts

Function

Use the rts command to place the MPC card in service after testing. Options for this command allow for maintenance on individual links of the MPC card as well as the card itself. Individual links, all links, the card and all links, or the card only, can be returned to service.

rts command parameters and variables

Command	Parameters and variables	
rts	all link links	*linknum*

Parameters and variables	Description
all	This parameter directs the system to return all links to service, then return the card to service.
link	This parameter indicates that a link will be designated to return to service.
linknum	This variable designates the link number to be returned to service. Valid entries are 0-3.
links	This parameter indicates that all datafilled links are to be returned to service.

Qualifications

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

- A rts command is effective only when the system or link is manually busy.
- During the test, the card's status is displayed as rts. If the test fails, the card is not returned to service. If the test is successful, the state is OK. If the test determines the card is not downloaded, the following steps occur:
  - The card is marked as needing a download.
  - The card is put in service.
  - The card is marked not ready on the MPC MAP display.
  - A download is initiated.

rts (continued)

Example

The following table provides an example of the rts command.

Example of the rts command

Example	Task, response, and explanation
rts all ↵	
	Task: Return the card to service.
	Response: `REQUEST PASSED FOR CARD`
	Explanation: The 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
`BAD FILE SPECIFIED IN TABLE MPC: RTS CANCELLED`	
	Meaning: The value for field DLDFILE in table MPC is not valid.
	Action: Make sure that table MPC is properly datafilled.
`BOARD MAY BE DOWNLOADED IF REQUEST FOR RTS PASSES. REFER TO MPC LOGS IF DOWNLOAD FAILS.`	
	Meaning: A rts command can cause a background download to occur on the MPC. The system tests the MPC, and if necessary, the MPC is downloaded.
	Action: Check for the following states of the MPC card on the MAP under the header BOARD: the response NOLOAD appears for a card that has to be downloaded; the response DNLDED appears for a card that has already been downloaded.
`COULD NOT GET FID FOR DOWNLOAD FILE. RTS CANCELLED`	
	Meaning: A problem exists that prevents the completion of the return to service. The system could not get a file identification (FID) for the file.
	Action: List the volume on which the file exists. Perform a manual download.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`COULD NOT SAVE DOWNLOAD FID IN TABLE MPC: RTS CANCELLED`	**Meaning:** Field DLDFILE in table MPC was incorrectly datafilled. When the rts command was implemented, an attempt was made to identify the file specified by the field DLDFILE. The attempt failed. **Action:** Datafill field DLDFILE properly in table MPC. List the device volume where the file exists before re-entering the rts command.
`DOWNLOAD CAN FAIL EVEN IF REQUEST FOR RTS PASSES.` `WATCH BOARD STATE ON MAP. SEE MPC LOGS IF DOWNLOAD FAILS.`	**Meaning:** If the MPC has not been downloaded previously, a successful return to service causes the card to progress through several potential states as characterized by system status and card status. System status initially is NOT READY and the card state is either NOLOAD (waiting for download) or DNLDIP (download in progress). Following this transition, the card state should proceed in this sequence: DNLDED, APPLIP, COMIDL, ENBLIP, COMACT. However, if the card progresses from DNLDIP to NOLOAD instead of to the state DNLDED, refer to logs MPC101 through MPC106 for error messages. Failure to complete the sequence indicates a problem with data transmission protocol, probably relating to definitions in Table BX25LINK. Refer to logs MPC101 through MPC106 for complete information. When the card state becomes COMACT, system status should be displayed as READY. No links or conversations can be established or maintained unless the card is READY/COMACT. **Action:** None
`ERROR ENABLING LINK 1.`	**Meaning:** The request to bring the link up failed. The state of the link was not changed and the command was aborted. **Action:** Consult the MPC logs.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
FAILURE IN DIRECTORY SEARCH FOR FILE. RC: <nn>; RTS CANCELLED	**Meaning:** The file could not be found. The return code (RC), <nn>, is intended for use by maintenance support personnel. When the RC appears at the MAP or in logs MPC101, MPC102, or MPC104, report them to the support personnel. **Action:** Make sure that the specified download file exists in table MPC. If it does not exist, list the directory of a device on which the file is located before entering the rts command. Listing the device places the file in the user's directory. From there it is made known to the rts command.
INVALID LINK STATE FOR RTS OF LINK 1.	**Meaning:** The link was in the offline state. The state of the link was not changed and the command was aborted. **Action:** Busy the link before returning it to service.
LINK 1 HAS NOT BEEN DATAFILLED.	**Meaning:** This response occurs for links that are unequipped at the time an rts command with parameters all or links is issued. **Action:** If the link is required, datafill the link in table MPLINK. Otherwise, no action is required.
MPC MUST BE BSY TO RTS. REQUEST FAILED.	**Meaning:** The MPC was offline and could not be returned to service. The state of the MPC was not changed, and the command was aborted. **Action:** Busy the MPC card before returning it to service.
MPC MUST BE IN SERVICE TO RTS LINK 1.	**Meaning:** The requested link could not be returned to service before the MPC was returned to service. The state of the link was not changed and the command was aborted. **Action:** Use the rts all command to return the card and all datafilled links to service; or use the rts command with no parameters to return the card to service, and then use the rts command with the link parameter to set the link in service.

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
NO LINKS ARE DATAFILLED ON THIS MPC.	**Meaning:** You attempted to place links in service on an MPC having no datafilled links. If requested, the MPC card is placed in service, but no links are returned to service. **Action:** None
REQUEST PASSED FOR CARD	**Meaning:** The MPC card has been returned to service and the state is OK. **Action:** None
REQUEST PASSED FOR LINK 1. or REQUEST PASSED FOR LINKS.	**Meaning:** The requested link or links are now in service. **Action:** None

-end-

Function

Use the tst command to test the displayed MPC to ensure that the card is communicating properly with the CC. The tst command also checks whether the MPC has been downloaded. If the MPC has been downloaded, the tst command checks the sanity of the software.

tst command parameters and variables

Command	Parameters and variables
tst	full

Parameters and variables	Description
full	This parameter causes the system to perform the full range of tests. It also erases the downloaded file so that the card requires downloading.

Qualifications

None

Example

The following table provides an example of the tst command.

Example of the tst command

Example	Task, response, and explanation	
tst full ↵		
	Task:	Perform the full range of tests on the displayed MPC.
	Response:	`TEST MAY REQUIRE SEVERAL MINUTES. TYPE YES TO CONTINUE/NO TO DO SHORT TEST.`
	Explanation:	Prior to implementing the full range of tests, the system confirms that the full test is desired.

tst (continued)

Responses

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

Responses for the tst command

MAP output	Meaning and action

`COULD NOT OPEN MSG LINK TO DO TESTS`
 	
or
 	
`FULL TESTS FAILED ON INITIAL QUERY.  SEE MPC LOGS FOR MORE INFO`
 	
or
 	
`FULL TESTS FAILED.  SEE MPC LOGS FOR MORE INFO`
	Meaning: The test has failed.
	
	Action: Refer to logs MPC101 through MPC106 for the reason of the test failure.

`INVALID` `MPC 1 IS unequipped`	**Meaning:** The state of the MPC card is incorrect for testing. The status is unequipped, offline, or inservice. **Action:** None
`PASSED DRAM TEST`	**Meaning:** After approximately 1 minute of testing, the dynamic random access memory (DRAM) storage is completely tested. **Action:** Wait approximately 3 more minutes until static random access memory (SRAM) is tested.
`PASSED SRAM TEST`	**Meaning:** Approximately 3 minutes after the DRAM test is completed, the SRAM storage is completely tested. **Action:** None

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
REQUEST PASSED	**Meaning:** The card test succeeds. After a test, the state appears under the header BOARD as DNLDED, NOLOAD; or, if the test cannot be completed, UNKNWN. Link states and the system state do not change. **Action:** None
SEND TO MTCE... TRY AGAIN	**Meaning:** This message may appear for OFFL, BSY, and RTS, and may represent a rare Support Operating System failure. **Action:** None
TEST MAY REQUIRE SEVERAL MINUTES. TYPE YES TO CONTINUE/NO TO DO SHORT TEST.	**Meaning:** The command tst full was entered. A response of no causes a normal test to be done as if the full parameter had not been specified. A response of yes initiates full tests. **Action:** Enter no to continue with normal tests or yes to initiate full tests.

-end-

MS level commands

Use the message switch (MS) level of the MAP to access commands to query information and perform maintenance procedures on the MS and MS shelves.

Accessing the MS level

To access the MS level, enter the following from the CI (command interpreter) level:

mapci;mtc;ms ↵

MS commands

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

MS commands

Command	Page
bsy	M-441
bsyms	M-449
clock	M-457
interms	M-459
loadms	M-461
mtcchk	M-469
pside	M-471
queryms	M-473
quit	M-483
rts	M-487
rtsms	M-495

-continued-

MS commands (continued)	
Command	**Page**
scanms	M-503
shelf	M-507
showbackup	M-509
swmast	M-511
tst	M-517
tstms	M-523
-end-	

MS menu

The following figure shows the MS 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
         .     .     .     .     .    .     .     .     .     .


MS             Message Switch  Clock  Shelf 0  Inter-MS link 0 1
 0 Quit     MS 0      .        Master       .                . .
 2          MS 1      .        Slave        .                . .
 3
 4
 5
 6 Tst_
 7 Bsy_
 8 RTS
 9
10 LoadMS_
11
12 SwMast
13 Shelf_
14 QueryMS_
15
16 MtcChk
17 InterMS
18 Clock
```

Hidden commands

```
bsyms              pside
rtsms              scanms
showbackup         tstms
```

MS status codes

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

Status codes MS menu status display		
Code	**Meaning**	**Description**
Message Switch		
.	OK	The MS is in-service with no faults.
M	manually busy	The MS is in the manually-busy state.
S	system busy	The MS is in the system-busy state.
T	test	The MS is under test.
-	unequipped	The MS is unequipped.
Clock		
Master	master	The MS has possession of the master clock.
Slave	slave	The MS has possession of the slave clock.
MFree	free-running	The MS is in the free-running state.
M Flt	master/ fault	The MS has a fault and has the master clock, which is in sync.
S Flt	slave/ fault	The MS has a fault and has the slave clock, which is in sync.
SOOS	out-of-service	The slave clock is out of service.
SFree	slave/ free	The MS has the slave clock, and the clock is in the free-running state.
Shelf		
.	OK	All the cards on the shelf are OK, offline, or unequipped.
-	unequipped	None of the cards on the shelf are equipped.
C	C-side busy	All the cards on the shelf are communications-side (C-side) busy, or the MS is in the system-busy or manually-busy state.
I	in-service trouble	A card on the shelf is in the in-service trouble state.
F	fault	A card on the shelf has a fault.
Inter-MS link		
.	OK	The inter-MS link is in-service with no faults.
-	unequipped	The inter-MS link is not datafilled.
R	R-side busy	The inter-MS link is remote-side (R-side) busy.
I	in-service trouble	The inter-MS link is in the in-service trouble state.
F	fault	The inter-MS link has a fault.

bsy

Function

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

bsy command parameters and variables

Command	Parameters and variables			
bsy	*ms*	[*wait* / nowait]	[*prompt* / noprompt]	[*noforce* / force]

Parameters and variables	Description
force	This parameter directs the system to circumvent checking for peripheral-side (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 bsy command is qualified by the following exceptions, restrictions, and limitations:

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

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 force ↵
where
 	
0 indicates the MS to be busied
	Task: Manually busy the 0 MS.
	
	Response:
	`Request to Busy MS: 0 submitted.`
	`Request to Busy MS: 0 passed.`
	
	Explanation: The requested MS is busied.

Responses

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

Responses for the bsy command

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

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
`Data inconsistencies, cannot continue your request.`	**Meaning:** A software fault has occurred. **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. **Action:** Use the force parameter with the bsy 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. **Action:** None
`Message switch 1 is unequipped.`	**Meaning:** The indicated MS is not equipped. **Action:** None
`P-side nodes will be isolated-taken out of service.` `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. **Action:** Repeat the command using the force parameter, if it is desirable to busy the MS despite the isolation of P-side nodes.

`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 aborted;`
`Maintenance Action Aborted`
	Meaning: The activity was aborted by yourr request.
	
	Action: None

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
`Request to Busy MS: 0 submitted.` `Request to Busy MS: 0 passed.`	**Meaning:** The requested MS is placed in the manually-busy state. **Action:** None

`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 terminated;`
`S/W error invalid request.`
`Invalid Maintenance Request`
	Meaning: The requested MS cannot be busied.
	
	Action: None

`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 terminated;`
`S/W error (wrong parameter).`
`Invalid Resource Identifier`
	Meaning: You entered an invalid parameter.
	
	Action: Retry the command using valid parameters.

`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 terminated;`
`no resources available.`
`Maintenance In Progress`
	Meaning: You cannot busy the MS while other maintenance activities are in progress.
	
	Action: Retry the bsy command once other activities have finished.

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action

`Request to Busy MS: 0 submitted`
`Request to Busy MS: 0 terminated;`
`S/W inhibited.`
`Local Maintenance Not Accessible`
 	
or
 	
`Request to Busy MS: 0 submitted`
`Request to Busy MS: 0 terminated;`
`no resources available.`
`Required Resources Are Unavailable`
 	
or
 	
`Request to Busy MS: 0 submitted`
`Request to Busy MS: 0 failed;`
`Request not supported`
	Meaning: This command is not accessible.
	
	Action: None

`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 terminated;`
`S/W inhibited.`
`Not Able To Run`
	Meaning: The command was inhibited.
	
	Action: None

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action

`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 failed;`
`ICRC Failure`
 	
or
 	
`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 failed;`
`Check for Swerrs`
 	
or
 	
`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 failed;`
`No Problem`
 	
or
 	
`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 failed;`
`Fail`
	Meaning: Software errors or a system failure caused this command to fail.
	
	Action: Check for software errors or contact maintenance support personnel.

`WARNING, busy command may isolate p-side.` `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. **Action:** Enter yes to busy the MS. Enter no to abort the command.

-continued-

bsy (end)

Responses for the bsy 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.` `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 will redirect routing through the other MS if the user answers yes to the prompt. FTS routing is automatically switched to the other MS before the busy is executed. **Action:** Enter yes to continue making the MS busy. Enter no to abort the 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 ↵
where
 	
0 indicates the MS to be busied
	Task: Manually busy the 0 MS.
	
	Response:
	`Request to Busy MS: 0 submitted.`
	`Request to Busy MS: 0 passed.`
	
	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. **Action:** None
`Can not busy the MS with the master clock-switch mastership.`	**Meaning:** The MS with the master clock cannot be busied. **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. **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. **Action:** Use the force parameter with 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. **Action:** None
`Message switch 1 is unequipped.`	**Meaning:** The indicated MS is not equipped. **Action:** None
`P-side nodes will be isolated-taken out of service.` `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. **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.`
`Request to Busy MS: 0 aborted;`
`Maintenance Action Aborted`
	Meaning: The activity was aborted by your request.
	
	Action: None

`Request to Busy MS: 0 submitted.` `Request to Busy MS: 0 passed.`	**Meaning:** The requested MS is placed in the manually-busy state. **Action:** None

`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 terminated;`
`S/W error invalid request.`
`Invalid Maintenance Request`
	Meaning: The requested MS cannot be busied.
	
	Action: None

`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 terminated;`
`S/W error (wrong parameter).`
`Invalid Resource Identifier`
	Meaning: You entered an invalid parameter.
	
	Action: Retry the command using valid parameters.

`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 terminated;`
`no resources available.`
`Maintenance In Progress`
	Meaning: You cannot busy the MS while other maintenance activities are in progress.
	
	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 Request to Busy MS: 0 failed; Request not supported or Request to Busy MS: 0 submitted Request to Busy MS: 0 terminated; S/W inhibited. Local Maintenance Not Accessible or Request to Busy MS: 0 submitted Request to Busy MS: 0 terminated; no resources available. Required Resources Are Unavailable	**Meaning:** This command is not accessible. **Action:** None
Request to Busy MS: 0 submitted. Request to Busy MS: 0 terminated; S/W inhibited. Not Able To Run	**Meaning:** The command has been inhibited. **Action:** None

-continued-

bsyms (continued)

Responses for the bsyms command (continued)

MAP output	Meaning and action

`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 failed;`
`ICRC Failure`
 	
or
 	
`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 failed;`
`Check for Swerrs`
 	
or
 	
`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 failed;`
`No Problem`
 	
or
 	
`Request to Busy MS: 0 submitted.`
`Request to Busy MS: 0 failed;`
`Fail`
	Meaning: Software errors or a system failure caused this command to fail.
	
	Action: Check for software errors or contact maintenance support personnel.

`WARNING, busy command may isolate p-side.` `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. **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.` `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. **Action:** Enter yes to continue making the MS busy. Enter no to abort the command.

-end-

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:
 	
`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`
	Meaning: The display changes to the Clock level display.
	
	Action: None

interms

Function

Use the interms command to enter the Card level for the card on which the specified inter-MS link resides.

interms command parameters and variables

Command	Parameters and variables
interms	*link*

Parameters and variables	Description
link	This variable identifies the Inter-MS link residing on the card to be displayed. Valid entries are 0-1.

Qualifications

None

Example

The following table provides an example of the interms command.

Example of the interms command

Example	Task, response, and explanation
interms 0 ↵ *where* 0 identifies the Inter-MS link	
	Task: Go to the Card level for the card on which the inter-MS link resides.

	Response: The menu changes to the Card level menu, and the following is added to the display:
	
	`Card 23  Protocol  Port  0__3`
	`MS 0  .   DS30       4   .P-R`
	`MS 1  .   DS30       4   .P-S`

	Explanation: The Card level of the specified link is displayed.

interms (end)

Responses

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

Responses for the interms command

MAP output	Meaning and action
`INTER-MS LINK 1 DOES NOT EXIST.`	**Meaning:** The specified Inter-MS link has not been datafilled in the MSILINV table. The system echoes the link number specified in the command. **Action:** None

The menu changes to the Card level menu, and the following is added to the display:
 	
`Card 23  Protocol  Port  0__3`
`MS 0  .   DS30       4   .P-R`
`MS 1  .   DS30       4   .P-S`
	Meaning: The Card level of the specified link is displayed.
	
	Action: None

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* / *filename* / cancel] [*primary* / secondary] [*wait* / nowait] [*prompt* / noprompt]

Parameters and variables	Description
cancel	This parameter directs the system to abort the loading.
filename	This default parameter directs the system to obtain the default loadfile from the active ITOC.
filename	This 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 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 the computing module interface card (CMIC) 1 (card 25) on the MS level MAP display, rather than through the CMIC 0 (card 24).
wait	This default parameter directs the system to not allow the 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 exceptions, restrictions and limitations:

- The loadms will start loading the system busy MS and invkoe a system RTS after loading is finished.

loadms (continued)

- Wiat until the MAP response with a pass or dail message. Also, check the MS log for reason if the loadind fails.
- The MS load is verified to be compatible to the CM load before loading. If it is not compatible, a MS log is generated and a ITOC alarm is raised under the IOD banner.
- This feature is only for the system busy MS. If the MS is ally busy, a manual RTS is necessary to bring the MS up after a loadms.

loadms (continued)

Examples

The following table provides a examples of the loadms command.

Examples of the loadms command

Example	Task, response, and explanation

loadms 0 ↵
where
 	
0 specifies the MS to be tested
	Task: Reload a specified MS using the default load file.
	
	Response:
	`Active boot file 35AY_MSLOAD from S01DIMAGE`
	`on SLM DISK will be loaded.`
	`Do you want to continue? (‘Yes’ or ‘No’)`
	`>YES`
	
	Explanation: Since no load file name was specified in the command string, the system searches the active ITOC from the SLM and prompts if the default file is desirable. In this example, the response is affirmative so the system starts loading the MS.

loadms 0 noprompt nowait ↵
where
 	
0 is the MS to be loaded
	Task: Reload MS 0 with no prompts and no waiting.
	
	Response:
	`Request to Load MS: 0 submitted.`
	`Request to Load MS: 0 passed.`
	
	Explanation: The requested MS has been reloaded.

Responses

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

loadms (continued)

Responses for the loadms command

MAP output	Meaning and action
`Data inconsistencies, cannot continue your request.`	**Meaning:** A software fault has occurred. **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. **Action:** None
`Loading <record#>`	**Meaning:** The system displays this message in the process of loading the MS software. The record number loaded replaces <record #>. **Action:** None
`Loading started`	**Meaning:** The system displays this message in the process of loading the MS software. **Action:** None
`Initializing`	**Meaning:** The system displays this message in the process of loading the MS software. **Action:** None
`Invalid file specified, file is not a system image file.`	**Meaning:** The specified file is not a system image. **Action:** None

-continued-

loadms (continued)

Responses for the loadms command (continued)

MAP output	Meaning and action
`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. **Action:** Contact the maintenance support group.

`Request to Load MS: 0 submitted.`
`Request to Load MS: 0 aborted;`
`Maintenance Action Aborted`
	Meaning: The activity was aborted by your request.
	
	Action: None

`Request to Load MS: 0 submitted.` `Request to Load MS: 0 passed.`	**Meaning:** The requested MS is reloaded. **Action:** None

`Request to Load MS: 0 submitted.`
`Request to Load MS: 0 terminated;`
`S/W error invalid request.`
`Invalid Maintenance Request`
	Meaning: The requested MS cannot be loaded.
	
	Action: None

`Request to Load MS: 0 submitted.`
`Request to Load MS: 0 terminated;`
`S/W error (wrong parameter).`
`Invalid Resource Identifier`
	Meaning: You entered an invalid parameter.
	
	Action: Retry the command using valid parameters.

-continued-

loadms (continued)

Responses for the loadms command (continued)

MAP output	Meaning and action

`Request to Load MS: 0 submitted.`
`Request to Load MS: 0 terminated;`
`no resources available.`
`Maintenance In Progress`
	Meaning: You cannot load the MS while other maintenance activities are in progress.
	
	Action: Retry the loadms command once other activities have finished.

`Request to Load MS: 0 submitted`
`Request to Load MS: 0 terminated;`
`S/W inhibited.`
`Local Maintenance Not Accessible`
 	
or
 	
`Request to Load MS: 0 submitted`
`Request to Load MS: 0 terminated;`
`no resources available.`
`Required Resources Are Unavailable`
 	
or
 	
`Request to Load MS: 0 submitted`
`Request to Load MS: 0 failed;`
`Request not supported`
	Meaning: This command is not accessible.
	
	Action: None

`Request to Load MS: 0 submitted.`
`Request to Load MS: 0 terminated;`
`S/W inhibited.`
`Not Able To Run`
	Meaning: The command was inhibited.
	
	Action: None

-continued-

loadms (end)

Responses for the loadms command (continued)

MAP output	Meaning and action

`Request to Load MS: 0 submitted.`
`Request to Load MS: 0 failed;`
`ICRC Failure`
 	
or
 	
`Request to Load MS: 0 submitted.`
`Request to Load MS: 0 failed;`
`Check for Swerrs`
 	
or
 	
`Request to Load MS: 0 submitted.`
`Request to Load MS: 0 failed;`
`No Problem`
 	
or
 	
`Request to Load MS: 0 submitted.`
`Request to Load MS: 0 failed;`
`Fail`
	Meaning: Software errors or a system failure caused this command to fail.
	
	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. **Action:** None
`WARNING, INCOMPATIBLE LOAD: CM: <name> MS: <name>` `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>. **Action:** Enter yes to load the file. Enter no to abort the command.

-end-

mtcchk

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.
```

pside

Function

Use the pside command to query information about the P-side nodes.

pside command parameters and variables

Command	Parameters and variables	
pside	isolate	*ms_number*

Parameters and variables	Description
isolate	This parameter directs the system to initiate P-side node isolation checks.
ms_number	This variable is the MS number. Valid entries are 0-1.

Qualifications

None

Example

The following table provides an example of the pside command.

Example of the pside command

Example **Task, response, and explanation**

pside isolate 0 ↵
where

0 identifies the MS about which information is to be displayed

Task: Check for P-side isolation on MS 0.

Response:

```
The following P-side nodes will be isolated if MS 0 is
busied.
MS  0  Card  6  Port   0 ENET 1 0
MS  0  Card  6  Port   1 ENET 1 0 30 00,  Active,  LTC 0
MS  0  Card  6  Port   2 ENET 1 0 30 02,  Backup,  LTC 0
MS  0  Card  6  Port   3 IOC 1
MS  0  Card  6  Port   4 IOC 2
Continue listing nodes?  Please confirm ('YES' or 'NO')
```

Explanation: The MS is in-service, and the listed nodes will be isolated if the MS is taken out-of-service.

pside (end)

Responses

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

Responses for the pside command

MAP output	Meaning and action
`MS 1 is already out-of-service.`	**Meaning:** The MS specified is already out-of-service. The system echoes the discrimination number of the MS. **Action:** None
`No P-side nodes will be isolated if MS 0 is busied.`	**Meaning:** There will be no isolation of P-side nodes if the specified MS is made busy. **Action:** None

`The following P-side nodes will be isolated if MS 0 is busied.`
`MS 0 Card 8 Port 0 ENET 1 0`
`Continue listing nodes? Please confirm ('YES' or 'NO')`
	Meaning: The system lists the nodes that will be isolated if the MS is taken out-of-service. The system requests confirmation to list more nodes.
	
	Action: None

`The other MS is out-of-service. Can not busy MS 1.`	**Meaning:** The other MS of the pair is out-of-service; therefore, the specified MS cannot be taken out-of-service. **Action:** None
`Unable to check for P-side node isolation.`	**Meaning:** A software error has occurred. **Action:** Retry the pside command.

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 ↵
where
 	
1 identifies the MS to be queried
0 identifies the shelf to be queried
6 identifies the card to be queried
	Task: Display the information for MS 1, shelf 0, card 6.
	
	Response:
	
	`Load name for MS 1 is MSG35CB .`
	`There are 20 Slots equipped on MS:  1  shelf:  0`
	`REx Test last run MS:  1 92:07:25  01:33:39  AUTO SUCCESSFUL`
	`MS card information:`
	`Site Flr RPos  Bay_id  Shf  Description   SLOT   EqPEC`
	`HOST  00 AA00  DPCC 1   39  MS 1: 0: 6     12    9X17DA FRNT`
	`HOST  00 AA00  DPCC 1   39  MS 1: 1: 6     12    9X20BB BACK`
	
	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. **Action:** None
`BASE` `S0.`	**Meaning:** The baseline of the PEC (the minimum allowable release) is given. **Action:** None
`Card 5 is offline, no action performed.`	**Meaning:** The indicated card position is offline. The possible card numbers are 1-26. **Action:** None
`Card 23 is unequipped.`	**Meaning:** The card is unequipped. **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. **Action:** None
`Clock firmware has failed self test.`	**Meaning:** The test of the firmware integrity failed. The firmware in the clock is not reliable. **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. **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). **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. **Action:** None
`Compatible 'YES'.`	**Meaning:** The MS PEC DCD release is compatible with the BCS software running in the switch. **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. **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. **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` `None`	**Meaning:** There are no exception releases for this PEC. **Action:** None
`Except` `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. **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. **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. **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. **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. **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. **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. **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. **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. **Action:** None

`Load name for MS 1: MSG35BC`
`There are 26 Slots equipped on MS: 1 Shelf: 0`
`MS node and shelf information:`
`REx Test last run MS: 1 89:01:23 16:40:31 AUTO SUCCESSFUL`
`Site Flr RPos Bay_id Shf Description SLOT EqPEC`
`HOST 00 AA01 MSDC 1 MS 1 9X01BA`
`HOST 00 AA00 MSDC 1 13 MS 1:0 9X04AA`
`HOST 00 AA00 MSDC 1 0 MS 1:1 9X04AA`
	Meaning: The requested information about the cards and chains is displayed.
	
	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. **Action:** None
`No clock firmware resident in software.`	**Meaning:** MS software does not contain clock firmware. **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. **Action:** None
`No firmware in clock card.`	**Meaning:** The clock card does not contain valid firmware. **Action:** Load the correct firmware by performing either an out-of-service test or a return-to-service test.
`REL` `S9`	**Meaning:** The card release obtained from querying the ID PROM of the card is given. **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. **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. **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 all *incrname* *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 MS level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The MS 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 MS 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 MS 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 MS 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 MS level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

Function

Use the rts command to return the specified MS to service.

rts command parameters and variables

Command	Parameters and variables			
rts	*ms*	[inband / partial / full / ooband]	[*wait* / nowait]	[*prompt* / noprompt]

Parameters and variables	Description
full	This parameter directs the system to run the full hardware test before returning the MS to service.
inband	This default parameter directs the system to restart the MS by means of the inband channel and to run the full hardware test before returning the MS to service.
ms	This variable is the number of the MS to be returned to service. Valid entries are 0-1.
noprompt	This parameter directs the system not to prompt for confirmation. The system automatically enters yes.
nowait	This parameter allows the use of the MAP for other functions while the MS is being tested and returned to service.
ooband	This parameter directs the system to restart the MS by means of the out-of-band channel and to run the full hardware test before returning the MS to service.
partial	This parameter directs the system to run a partial hardware test before returning the MS to service.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.
wait	This default parameter does not allow use of the MAP for other functions while the MS is being returned to service. The user does not enter this parameter.

rts (continued)

Qualification

The rts command is qualified by the following: the rts that failed or passed with in-service trouble (ISTb) also displays the fault information and the card list of 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

Example

The following table provides an example of the rts command.

Example of the rts command

Example	Task, response, and explanation

rts 0 ↵
where
 	
0 identifies the MS to be returned to service
	Task: Return MS 0 to service.
	
	Response:
	
	`Request to RTS MS: 0 submitted`
	`Request to RTS MS: 0 passed with in-service trouble`
	`Soft faults found on system cards:`
	`SHELF 0 CARD 2: Clock datafill and physical PEC do not match`
	`SHELF 0 CARD 4: MEM: Datafill and physical PEC do not match`
	`Soft faults found on interface cards:`
	`SHELF 0 CARD 6: Interface card CMU configuration data is incorrect.`
	`SHELF 0 CARD 7: Interface back card datafill and physical PEC do not match.`
	`Site Flr RPos Bay_id Shf Description Slot EqPEC`
	`HOST 00 AA00 DPCC 0 39 MS 0:0: 2 08 9x53AA FRNT`
	`HOST 00 AA00 DPCC 0 39 MS 0:0: 2 08 9x54AA BACK`
	`HOST 00 AA00 DPCC 0 39 MS 0:0: 4 10 9x14BB FRNT`
	`HOST 00 AA00 DPCC 0 39 MS 0:0: 6 12 9x73BA FRNT`
	`HOST 00 AA00 DPCC 0 39 MS 0:0: 7 13 9x32AA BACK`
	
	Explanation: The test passed, but it had in-service trouble on system and interface cards.

Responses

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

Responses for the rts command

MAP output	Meaning and action
`CLOCK FIRMWARE HAS FAILED SELF TEST.`	**Meaning:** The test of the firmware integrity failed because the firmware in the clock is not reliable. **Action:** Perform an out-of-service test, or return the card to service to download the primary firmware load.
`DATA INCONSISTENCIES, CANNOT CONTINUE YOUR REQUEST.`	**Meaning:** A software fault has occurred. **Action:** Enter the command again. If it does not execute successfully, notify the maintenance support group.
`FAILED TO DOWNLOAD OR RESET CLOCK FIRMWARE.`	**Meaning:** The most recent attempt to download new firmware into the erasable programmable read-only memory (EPROM) or to reset the clock failed. **Action:** Check and clear the hardware fault on the clock card.
`FAILED TO READ EEPROM IN CLOCK CARD.`	**Meaning:** An attempt to read the EPROM failed, and the MS was removed from service. **Action:** Check and clear the hardware fault on the clock card.
`MS 0 IS ALREADY IN-SERVICE.`	**Meaning:** The MS is already in service. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`MS 0 MUST BE IN MBSY OR SBSY STATE TO PERFORM A RTS.`	**Meaning:** The MS must be in a manually-busy or system-busy state before it can be returned to service. **Action:** None
`NO FIRMWARE IN CLOCK CARD.`	**Meaning:** The clock card does not contain valid firmware. **Action:** Load the correct firmware either by performing an out-of-service test or by returning the card to service.

`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 aborted;`
`Maintenance Action Aborted`
	Meaning: The activity has been aborted by your request.
	
	Action: None

`Request to RTS MS:  0 submitted`
`Request to RTS MS:  0 passed`
`Soft faults found on system cards:`
`SHELF 0 CARD 2: Clock datafill and physical PEC do not match`
`SHELF 0 CARD 4: MEM: Datafill and physical PEC do not match`
`Soft faults found on interface cards:`
`SHELF 0 CARD 6: Interface card CMU configuration data is incorrect.`
`SHELF 0 CARD 7: Interface back card datafill and physical PEC do not match.`
`Site Flr RPos  Bay_id  Shf  Description Slot  EqPEC`
`HOST  00 AA00  DPCC 0   39  MS 0:0: 2   08    9x53AA FRNT`
`HOST  00 AA00  DPCC 0   39  MS 0:0: 2   08    9x54AA BACK`
`HOST  00 AA00  DPCC 0   39  MS 0:0: 4   10    9x14BB FRNT`
`HOST  00 AA00  DPCC 0   39  MS 0:0: 6   12    9x73BA FRNT`
`HOST  00 AA00  DPCC 0   39  MS 0:0: 7   13    9x32AA BACK`
	Meaning: The MS passed the test and is returned to service. When faults are found, the system displays fault and location information.
	
	Action: None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action

`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 terminated;`
`S/W error invalid request.`
`Invalid Maintenance Request`
	Meaning: The requested MS cannot be placed in service.
	
	Action: None

`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 terminated;`
`S/W error (wrong parameter).`
`Invalid Resource Identifier`
	Meaning: You entered an invalid parameter.
	
	Action: Retry the command using valid parameters.

`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 terminated;`
`no resources available.`
`Maintenance In Progress`
	Meaning: You cannot return the MS to service while other maintenance activities are in progress.
	
	Action: Retry the rts command once other activities have finished.

-continued-

rts (continued)

Responses for the rts command (continued)

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

-continued-

Responses for the rts command (continued)

MAP output	Meaning and action

`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 failed;`
`ICRC Failure`
 	
or
 	
`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 failed;`
`Check for Swerrs`
 	
or
 	
`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 failed;`
`No Problem`
 	
or
 	
`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 failed;`
`Fail`
	Meaning: Software errors or a system failure caused this command to fail.
	
	Action: Check for software errors or contact maintenance support personnel.

`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 EPROM firmware. **Action:** Load the correct firmware by either performing an out-of-service test or by returning the card to service.

-end-

rtsms

Function

Use the rtsms command to return the MS specified to service.

rtsms command parameters and variables

Command	Parameters and variables			
rtsms	*ms*	[inband / partial / full / ooband]	[*wait* / nowait]	[*prompt* / noprompt]

Parameters and variables	Description
full	This parameter directs the system to run the full hardware test before returning the MS to service.
inband	This parameter directs the system to restart the MS by means of the inband channel and to run the full hardware test before returning the MS to service.
ms	This variable is the number of the MS to be returned to service. Valid entries are 0-1.
noprompt	This parameter directs the system not to prompt for confirmation. The system automatically enters yes.
nowait	This parameter allows the use of the MAP for other functions while the MS is being tested and returned to service.
ooband	This parameter directs the system to restart the MS by means of the out-of-band channel and to run the full hardware test before returning the MS to service.
partial	This parameter directs the system to run a partial hardware test before returning the MS to service.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.
wait	This default parameter does not allow use of the MAP for other functions while the MS is being tested and returned to service. The user does not enter this parameter.

rtsms (continued)

Qualifications

The rtsms command is qualified by the following: the rts that failed or passed with in-service trouble (ISTb) also displays the fault information and the card list of 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

Example

The following table provides an example of the rtsms command.

Example of the rtsms command

Example	Task, response, and explanation

rtsms 0 ↵
where
 	
0 identifies the MS to be returned to service
	Task: Return MS 0 to service.
	
	Response:
	
	`Request to RTS MS: 0 submitted`
	`Request to RTS MS: 0 passed with in-service trouble`
	`Soft faults found on system cards:`
	`SHELF 0 CARD 2: Clock datafill and physical PEC do not match`
	`SHELF 0 CARD 4: MEM: Datafill and physical PEC do not match`
	`Soft faults found on interface cards:`
	`SHELF 0 CARD 6: Interface card CMU configuration data is incorrect.`
	`SHELF 0 CARD 7: Interface back card datafill and physical PEC do not match.`
	`Site Flr RPos Bay_id Shf Description Slot EqPEC`
	`HOST 00 AA00 DPCC 0 39 MS 0:0: 2 08 9x53AA FRNT`
	`HOST 00 AA00 DPCC 0 39 MS 0:0: 2 08 9x54AA BACK`
	`HOST 00 AA00 DPCC 0 39 MS 0:0: 4 10 9x14BB FRNT`
	`HOST 00 AA00 DPCC 0 39 MS 0:0: 6 12 9x73BA FRNT`
	`HOST 00 AA00 DPCC 0 39 MS 0:0: 7 13 9x32AA BACK`
	
	Explanation: The test passed, but it had in-service trouble on system and interface cards.

rtsms (continued)

Responses

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

Responses for the rtsms command

MAP output	Meaning and action
`CLOCK FIRMWARE HAS FAILED SELF TEST.`	**Meaning:** The test of the firmware integrity failed because the firmware in the clock is not reliable. **Action:** Perform an out-of-service test, or return the card to service to download the primary firmware load.
`DATA INCONSISTENCIES, CANNOT CONTINUE YOUR REQUEST.`	**Meaning:** A software fault has occurred. **Action:** Enter the command again. If it does not execute successfully, notify the maintenance support group.
`FAILED TO DOWNLOAD OR RESET CLOCK FIRMWARE.`	**Meaning:** The most recent attempt to download new firmware into the EPROM or to reset the clock failed. **Action:** Check and clear the hardware fault on the clock card.
`FAILED TO READ EEPROM IN CLOCK CARD.`	**Meaning:** An attempt to read the erasable programmable read-only memory (EPROM) failed, and the MS was removed from service. **Action:** Check and clear the hardware fault on the clock card.
`MS 0 IS ALREADY IN-SERVICE.`	**Meaning:** The MS is already in service. **Action:** None

-continued-

rtsms (continued)

Responses for the rtsms command (continued)

MAP output	Meaning and action
`MS 0 MUST BE IN MBSY OR SBSY STATE TO PERFORM A RTS.`	**Meaning:** The MS must be in a manual-busy or system-busy state before it can be returned to service. **Action:** None
`NO FIRMWARE IN CLOCK CARD.`	**Meaning:** The clock card does not contain valid firmware. **Action:** Load the correct firmware either by performing an out-of-service test or by returning the card to service.

`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 aborted;`
`Maintenance Action Aborted`
	Meaning: The activity was aborted by your request.
	
	Action: None

`Request to RTS MS:  0 submitted`
`Request to RTS MS:  0 passed`
`Soft faults found on system cards:`
`SHELF 0 CARD 2: Clock datafill and physical PEC do not match`
`SHELF 0 CARD 4: MEM: Datafill and physical PEC do not match`
`Soft faults found on interface cards:`
`SHELF 0 CARD 6: Interface card CMU configuration data is incorrect.`
`SHELF 0 CARD 7: Interface back card datafill and physical PEC do not match.`
`Site Flr RPos  Bay_id  Shf  Description Slot  EqPEC`
`HOST  00 AA00  DPCC 0   39  MS 0:0: 2   08    9x53AA FRNT`
`HOST  00 AA00  DPCC 0   39  MS 0:0: 2   08    9x54AA BACK`
`HOST  00 AA00  DPCC 0   39  MS 0:0: 4   10    9x14BB FRNT`
`HOST  00 AA00  DPCC 0   39  MS 0:0: 6   12    9x73BA FRNT`
`HOST  00 AA00  DPCC 0   39  MS 0:0: 7   13    9x32AA BACK`
	Meaning: The MS passed the test and is returned to service. When faults are found, the system displays fault and location information.
	
	Action: None

-continued-

rtsms (continued)

Responses for the rtsms command (continued)

MAP output	Meaning and action

`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 terminated;`
`S/W error invalid request.`
`Invalid Maintenance Request`
	Meaning: The requested MS cannot be placed in service.
	
	Action: None

`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 terminated;`
`S/W error (wrong parameter).`
`Invalid Resource Identifier`
	Meaning: You entered an invalid parameter.
	
	Action: Retry the command using valid parameters.

`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 terminated;`
`no resources available.`
`Maintenance In Progress`
	Meaning: You cannot return the MS to service while other maintenance activities are in progress.
	
	Action: Retry the rtsms command once other activities have finished.

-continued-

rtsms (continued)

Responses for the rtsms command (continued)

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

-continued-

Responses for the rtsms command (continued)

MAP output	Meaning and action

`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 failed;`
`ICRC Failure`
 	
or
 	
`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 failed;`
`Check for Swerrs`
 	
or
 	
`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 failed;`
`No Problem`
 	
or
 	
`Request to RTS MS: 0 submitted.`
`Request to RTS MS: 0 failed;`
`Fail`
	Meaning: Software errors or a system failure caused this command to fail.
	
	Action: Check for software errors or contact maintenance support personnel.

`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 EPROM firmware. **Action:** Load the correct firmware either by performing an out-of-service test or by returning the card to service.

-end-

scanms

Function

Use the scanms command to list all the cards in a specified state for a particular MS.

scanms command parameters and variables

Command	Parameters and variables
scanms	*ms_number status*

Parameters and variables	Description
ms_number	This variable is the MS number. Valid entries are 0-1.
status	This variable is the card status for the list of cards. The following are valid entries: ▪ manb-manually busy ▪ sysb-system busy ▪ istb-in-service trouble ▪ ok-in-service with no faults ▪ cbsy-central-side busy ▪ offl-offline ▪ uneq-unequipped

Qualifications

None

scanms (continued)

Example

The following table provides an example of the scanms command.

Example of the scanms command

Example	Task, response, and explanation

scanms 0 offl ↵
where
 	
0 is the MS number
	Task: Display a list of cards on MS 0 that are in the offline state.
	
	Response:
	
	`Site Flr RPos  Bay_id  Shf  Description  Slot  EqPEC`
	`HOST  00  A00  DPCC 0   39  MS 0:0:22    28    9X17AA FRNT`
	`HOST  00  A00  DPCC 0   39  MS 0:0:22    28    9X23AA BACK`
	`There are 2 cards in the OFFLINE state.`
	
	Explanation: The requested list of cards is displayed.

Responses

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

Responses for the scanms command

MAP output	Meaning and action
`Invalid MS number entered (must be between 0-<n>).`	**Meaning:** The entered MS number is invalid. The range of message switches is given, where <n> is replaced by the number of equipped message switches. **Action:** None

-continued-

scanms (end)

Responses for the scanms command (continued)

MAP output	Meaning and action

`Site Flr RPos  Bay_id  Shf  Description  Slot  EqPEC`
`HOST  00  A00  DPCC 0   39  MS 0:0:22    28    9X17AA FRNT`
`HOST  00  A00  DPCC 0   39  MS 0:0:22    28    9X23AA BACK`
`There are 2 cards in the OFFLINE state.`
	Meaning: The information for the cards in the requested state is listed.
	
	Action: None

`There are 0 cards in the C-SIDE BUSY state.`	**Meaning:** There are no cards in the requested state. **Action:** None

-end-

shelf

Function

Use the shelf command to access the Shelf level commands 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 ↵
where
 	
0 identifies the shelf to be accessed
	Task: Access the Shelf level for shelf 0.
	
	Response: The menu changes to the Shelf level menu, and the following headers are added to the display:
	
	`SHELF 0 1 1 1 1 1 2 2 2 2 2 2`
	`Card 1 2 3 4 5 6 7 ... 5 6 7 8 9 0 1 2 3 4 5 6`
	`Chain`
	`MS 0 . . . . . ... . . . . . .`
	`MS1 . . . . . ... . . . . . .`
	
	Explanation: The 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:
 	
`SHELF 0 1 1 1 1 1 2 2 2 2 2 2`
`Card 1 2 3 4 5 6 7 ... 5 6 7 8 9 0 1 2 3 4 5 6`
`Chain`
`MS 0 . . . . . ... . . . . . .`
`MS1 . . . . . ... . . . . . .`
	Meaning: The Shelf level is displayed.
	
	Action: None

showbackup

Function

Use the showbackup command to specify whether backup port (a DMS-bus port used for backup peripheral messaging) attribute is to be communicated through the DMS-bus Card level MAP display.

showbackup command parameters and variables

Command	Parameters and variables
showbackup	*none* *option*

Parameters and variables	Description
none	This default parameter will show the current status of the showbackup toggle. Do not enter this parameter.
option	This variable specifies whether backup ports are to be identified. Values are on and off. On indicates that backup ports are to be identified. Off indicates that backup ports are not to be identified.

Qualifications

None

Examples

The following table provides an example of the showbackup command.

Examples of the showbackup command

Example	Task, response, and explanation
showbackup on ↵ *where* on	specifies that the backup ports are to be identified

Task:	Identify backup ports.
Response:	`DMS-BUS ports used for backup PM messaging are identified.`
Explanation:	The ports are identified.

showbackup (end)

Responses

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

Responses for the showbackup command

MAP output	Meaning and action
`DMS-BUS ports used for backup PM messaging are identified.`	**Meaning:** The on option has been specified, or no option is specified, and the identification of backup links is currently on. Therefore, backup ports will be identified by the character B in the DMS-bus Card level MAP display. **Action:** None
`DMS-BUS ports used for backup PM messaging are not identified.`	**Meaning:** The off option was specified, or no option was specified and the identification of backup links is currently off. Therefore, backup ports will not be identified by the character B in the DMS-bus Card level MAP display. **Action:** None

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	*ms*	[*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.
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.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.

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.
- The slave remote must be in sync if the master system or the master remote is in sync.
- There must be no remote alarms on the slave MS.

Example

The following table provides an example of the swmast command.

swmast (continued)

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.` `Request to switch master clock passed.`
	Explanation:	The clock mastership is switched.

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. **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. **Action:** Load the correct firmware by performing either an out-of-service or a return-to-service test.

`Request to switch master clock submitted.`
`Request to switch master clock aborted;`
`Maintenance Action Aborted`
	Meaning: The activity was aborted by your request.
	
	Action: None

`Request to switch master clock submitted.` `Request to switch master clock passed.`	**Meaning:** Possession of the master clock is switched from one MS to the other. **Action:** None

`Request to switch master clock submitted.`
`Request to switch master clock terminated;`
`S/W error invalid request.`
`Invalid Maintenance Request`
	Meaning: The clock mastership cannot be switched.
	
	Action: None

-continued-

swmast (continued)

Responses for the swmast command (continued)

MAP output	Meaning and action

`Request to switch master clock submitted.`
`Request to switch master clock terminated;`
`S/W error (wrong parameter).`
`Invalid Resource Identifier`
	Meaning: You entered an invalid parameter.
	
	Action: Retry the command using valid parameters.

`Request to switch master clock submitted.`
`Request to switch master clock terminated;`
`no resources available.`
`Maintenance In Progress`
	Meaning: You cannot switch the master clock while other maintenance activities are in progress.
	
	Action: Retry the swmast command once other activities have finished.

`Request to switch master clock submitted`
`Request to switch master clock terminated;`
`S/W inhibited.`
`Local Maintenance Not Accessible`
 	
or
 	
`Request to switch master clock submitted`
`Request to switch master clock terminated;`
`no resources available.`
`Required Resources Are Unavailable`
 	
or
 	
`Request to switch master clock submitted`
`Request to switch master clock failed;`
`Request not supported`
	Meaning: This command is not accessible.
	
	Action: None

-continued-

swmast (end)

Responses for the swmast command (continued)

MAP output	Meaning and action

`Request to switch master clock submitted.`
`Request to switch master clock terminated;`
`S/W inhibited.`
`Not Able To Run`
	Meaning: The command has been inhibited.
	
	Action: None

`Request to switch master clock submitted.`
`Request to switch master clock failed;`
`ICRC Failure`
 	
or
 	
`Check for Swerrs`
 	
or
 	
`No Problem`
 	
or
 	
`Fail`
	Meaning: Software errors or a system failure caused this command to fail.
	
	Action: Check for software errors or contact maintenance support personnel.

`Running on EPROM clock firmware.`	**Meaning:** The file name of the clock firmware in the context page has a erasable programmable read-only memory (EPROM) file name. Therefore, the clock is running on the EPROM firmware. **Action:** Attempt to switch the PROMs by running either an out-of-service test or a return-to-service test.

-end-

tst

Function

Use the tst command to test the specified MS.

tst command parameters and variables

Command	Parameters and variables			
tst	*ms*	*all* viamate noviamate rex fw	*wait* nowait	*prompt* noprompt

Parameters and variables	Description
all	This default parameter directs the system to run all tests. Do not enter this parameter.
fw	This parameter directs the system to run a firmware test. This test destroys the MS software load. Reload the MS after the test.
ms	This variable is the number of the MS to be tested. Valid entries are 0-1.
noprompt	This parameter directs the system to circumvent any yes/no prompts. The system automatically enters yes.
noviamate	This parameter directs the system to run an out-of-service (OOS) test.
nowait	This parameter directs the system to allow the MAP to be used for other functions while the MS is being tested.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.
rex	This parameter directs the system to run a routine exercise (REx) test.
viamate	This parameter directs the system to run an OOS test by means of the inter-MS link.
wait	This default parameter directs the system to not allow the use of the MAP for other functions while the MS is being tested. Do not enter this parameter.

tst (continued)

Qualifications

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

- If the MS is OK (has no alarms) and passes the test, it remains in the OK state. If it fails, it becomes system busy. If the MS is system busy and passes the test, the system attempts to return the MS to service. If the MS is manually busy, it remains in that state.
- The response for the OOS test that failed or passed with in-service trouble (ISTb) displays 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

Example

The following table provides an example of the tst command.

Example of the tst command

Example	Task, response, and explanation

tst 0 ↵
where
 	
0 identifies the MS to be tested
	Task: Test MS 0.
	
	Response:
	
	`Request to OOS TEST MS:  0 submitted.`
	`Request to OOS TEST MS:  0 passed with in-service trouble.`
	`Interface card(s) failed.`
	`Hard faults found on interface cards.`
	`SHELF 0 CARD 7: Interface front card is not inserted.`
	`Soft faults found on system cards:`
	`SHELF 0 CARD 2: Clock datafill and physical PEC(s) do not match`
	`Site Flr RPos  Bay_id  Shf  Description  Slot  EqPEC`
	`HOST  00  A00  DPCC  0  39  MS 0:0: 7  13  9X32AA BACK`
	
	Explanation: The test is run and the faults displayed.

Responses

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

Responses for the tst command

MAP output	Meaning and action
`Data inconsistencies, cannot continue your request.`	**Meaning:** A software fault has occurred. **Action:** Enter the command again. If it does not execute successfully, notify the maintenance support group.
`MS 0 must be mbsy, sbsy or ok state to perform a test.`	**Meaning:** The specified MS must be in a manually-busy, a system-busy, or an OK state for it to be tested. **Action:** None

`Request to test MS: 0 submitted.`
`Request to test MS: 0 aborted;`
`Maintenance Action Aborted`
	Meaning: The activity was aborted by your request.
	
	Action: None

`Request to test MS: 0 submitted.`
`Request to test MS: 0 passed with in-service trouble.`
`Interface card(s) failed.`
`Hard faults found on interface cards.`
`SHELF 0 CARD 7: Interface front card is not inserted.`
`Soft faults found on system cards:`
`SHELF 0 CARD 2: Clock datafill and physical PEC(s) do not match`
`Site Flr RPos Bay_id Shf Description Slot EqPEC`
`HOST 00 A00 DPCC 0 39 MS 0:0: 7 13 9X32AA BACK`
	Meaning: The requested MS is tested and any faults are displayed.
	
	Action: None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action

`Request to test MS: 0 submitted.`
`Request to test MS: 0 terminated;`
`S/W error invalid request.`
`Invalid Maintenance Request`
	Meaning: The requested MS cannot be tested.
	
	Action: None

`Request to test MS: 0 submitted.`
`Request to test MS: 0 terminated;`
`S/W error (wrong parameter).`
`Invalid Resource Identifier`
	Meaning: You entered an invalid parameter.
	
	Action: Retry the command using valid parameters.

`Request to test MS: 0 submitted.`
`Request to test MS: 0 terminated;`
`no resources available.`
`Maintenance In Progress`
	Meaning: You cannot test the MS while other maintenance activities are in progress.
	
	Action: Retry the command once other activities have finished.

-continued-

tst (continued)

Responses for the tst command (continued)

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

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action

`Request to test MS: 0 submitted.`
`Request to test MS: 0 failed;`
`ICRC Failure`
 	
or
 	
`Request to test MS: 0 submitted.`
`Request to test MS: 0 failed;`
`Check for Swerrs`
 	
or
 	
`Request to test MS: 0 submitted.`
`Request to test MS: 0 failed;`
`No Problem`
 	
or
 	
`Request to test MS: 0 submitted.`
`Request to test MS: 0 failed;`
`Fail`
	Meaning: Software errors or a system failure caused this command to fail.
	
	Action: Check for software errors or contact maintenance support personnel.

`WARNING, destructive test, MS software will be destroyed.` `Please confirm (YES/NO):`	**Meaning:** The MS firmware test destroys the MS software load. If the test is run, reload the MS afterward. **Action:** Enter yes to run the firmware test. Enter no to abort the command.

-end-

tstms

Function

Use the tstms command to test the specified MS.

tstms command parameters and variables

Command	Parameters and variables			
tstms	*ms*	[*all* viamate noviamate rex fw]	[*wait* nowait]	[*prompt* noprompt]

Parameters and variables	Description
all	This default parameter directs the system to run all tests. Do not enter this parameter.
fw	This parameter directs the system to run a firmware test. This test destroys the MS software load. Reload the MS after the test.
ms	This variable is the number of the MS to be tested. Valid entries are 0-1.
noprompt	This parameter directs the system to circumvent any yes/no prompts. The system automatically enters yes.
noviamate	This parameter directs the system to run an out-of-service (OOS) test.
nowait	This parameter directs the system to allow the MAP to be used for other functions while the MS is being tested.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.
rex	This parameter directs the system to run a routine exercise (REx) test.
viamate	This parameter directs the system to run an OOS test by means of the inter-MS link.
wait	This default parameter directs the system to not allow the use of the MAP for other functions while the MS is being tested. Do not enter this parameter.

tstms (continued)

Qualifications

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

- If the MS is OK (has no alarms) and passes the test, it remains in the OK state. If it fails, it becomes system busy. If the MS is system busy and passes the test, the system attempts to return the MS to service. If the MS is manually busy, it remains in that state.
- The response for the OOS test that failed or passed with in-service trouble (ISTb) displays 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

Example

The following table provides an example of the tstms command.

Example of the tstms command

Example	Task, response, and explanation

tstms 0 ↵
where
 	
0 identifies the MS to be tested
	Task: Test MS 0.
	
	Response:
	
	`Request to OOS TEST MS:  0 submitted.`
	`Request to OOS TEST MS:  0 passed with in-service trouble.`
	`Interface card(s) failed.`
	`Hard faults found on interface cards.`
	`SHELF 0 CARD 7: Interface front card is not inserted.`
	`Soft faults found on system cards:`
	`SHELF 0 CARD 2: Clock datafill and physical PEC(s) do not match`
	`Site Flr RPos  Bay_id  Shf  Description  Slot    EqPEC`
	`HOST  00  A00  DPCC  0  39  MS 0:0: 7    13      9X32AA BACK`
	
	Explanation: The test is run and the faults displayed.

tstms (continued)

Responses

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

Responses for the tstms command

MAP output	Meaning and action
`Data inconsistencies, cannot continue your request.`	**Meaning:** A software fault has occurred. **Action:** Enter the command again. If it does not execute successfully, notify the maintenance support group.
`MS 0 must be mbsy, sbsy or ok state to perform a test.`	**Meaning:** The specified MS must be in a manually-busy, a system-busy, or an OK state for it to be tested. **Action:** None

`Request to test MS: 0 submitted.`
`Request to test MS: 0 aborted;`
`Maintenance Action Aborted`
	Meaning: The activity was aborted by your request.
	
	Action: None

`Request to test MS: 0 submitted.`
`Request to test MS: 0 passed with in-service trouble.`
`Interface card(s) failed.`
`Hard faults found on interface cards.`
`SHELF 0 CARD 7: Interface front card is not inserted.`
`Soft faults found on system cards:`
`SHELF 0 CARD 2: Clock datafill and physical PEC(s) do not match`
`Site Flr RPos Bay_id Shf Description Slot EqPEC`
`HOST 00 A00 DPCC 0 39 MS 0:0: 7 13 9X32AA BACK`
	Meaning: The requested MS is tested and any faults are displayed.
	
	Action: None

-continued-

tstms (continued)

Responses for the tstms command (continued)

MAP output	Meaning and action

`Request to test MS: 0 submitted.`
`Request to test MS: 0 terminated;`
`S/W error invalid request.`
`Invalid Maintenance Request`
	Meaning: The requested MS cannot be tested.
	
	Action: None

`Request to test MS: 0 submitted.`
`Request to test MS: 0 terminated;`
`S/W error (wrong parameter).`
`Invalid Resource Identifier`
	Meaning: You entered an invalid parameter.
	
	Action: Retry the command using valid parameters.

`Request to test MS: 0 submitted.`
`Request to test MS: 0 terminated;`
`no resources available.`
`Maintenance In Progress`
	Meaning: You cannot test the MS while other maintenance activities are in progress.
	
	Action: Retry the command once other activities have finished.

-continued-

tstms (continued)

Responses for the tstms command (continued)

MAP output	Meaning and action

`Request to test MS: 0 submitted`
`Request to test MS: 0 terminated;`
`S/W inhibited.`
`Local Maintenance Not Accessible`
 	
or
 	
`Request to test MS: 0 submitted`
`Request to test MS: 0 terminated;`
`no resources available.`
`Required Resources Are Unavailable`
 	
or
 	
`Request to test MS: 0 submitted`
`Request to test MS: 0 failed;`
`Request not supported`
	Meaning: This command is not accessible.
	
	Action: None

`Request to test MS: 0 submitted.`
`Request to test MS: 0 terminated;`
`S/W inhibited.`
`Not Able To Run`
	Meaning: The command was inhibited.
	
	Action: None

-continued-

tstms (end)

Responses for the tstms command (continued)

MAP output	Meaning and action

`Request to test MS: 0 submitted.`
`Request to test MS: 0 failed;`
`ICRC Failure`
 	
or
 	
`Request to test MS: 0 submitted.`
`Request to test MS: 0 failed;`
`Check for Swerrs`
 	
or
 	
`Request to test MS: 0 submitted.`
`Request to test MS: 0 failed;`
`No Problem`
 	
or
 	
`Request to test MS: 0 submitted.`
`Request to test MS: 0 failed;`
`Fail`
	Meaning: Software errors or a system failure caused this command to fail.
	
	Action: Check for software errors or contact maintenance support personnel.

`WARNING, destructive test, MS software will be destroyed.` `Please confirm (YES/NO):`	**Meaning:** The MS firmware test destroys the MS software load. If the test is run, reload the MS afterward. **Action:** Enter yes to run the firmware test. Enter no to abort the command.

-end-

MSB6 level commands

Use the MSB6 level of the MAP to maintain the message switch and buffer (MSB) handling Common Channel Interoffice Signaling No. 6 (CCIS6) and the CCITT Signaling System No. 6 (CCITT6).

Accessing the MSB6 level

To access the MSB6 level, enter the following from the CI level:

mapci;mtc;pm;post msb6 ↵

MSB6 commands

The commands available at the MSB6 MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

MSB6 commands

Command	Page
abtk	M-535
bsy	M-537
disp	M-541
listset	M-543
loadnotest	M-545
loadpm	M-547
next	M-563
offl	M-565
pmreset	M-569
post	M-577
querypm	M-581
quit	M-589

-continued-

MSB6 commands (continued)

-end-

MSB6 menu

The following figure shows the MSB6 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
         .     .     .     .     .    .     .     .     .     .


MSB6                      SysB   ManB   Offl   CBsy   ISTb   InSv
 0 Quit        PM          4      0     10      3      3     130
 2 Post        MSB6        0      0      0      0      1       4
 3 ListSet_
 4             MSB6            Links OOS: CSide    PSide
 5 Trnsl_      Unit0:
 6 Tst_        Unit1:
 7 Bsy_
 8 RTS_
 9 Offl
10 LoadPM_
11 Disp_
12 Next_
13 SwAct_
14 QueryPM_
15 STCLoad_
16 STC
17
18
```

Hidden commands

```
abtk
loadnotest
pmreset
warmswact
xbert
xpmlogs
xpmreset
```

MSB6 status codes

The following table describes the status codes for the MSB6 status display.

Status codes MSB6 menu status display		
Code	**Meaning**	**Description**
MSB6 n		
0-4	number	This is the discrimination number of the MSB6.

-continued-

Status codes		**MSB6 menu status display** (continued)
Code	**Meaning**	**Description**
MSB6 status		MSB6 states (see Notes 1: and 2:)
CBsy	Central side busy	PMs connected to the Network are unable to communicate with the CC because the Network or the links used to carry messages between the PM and the P-side of the Network are unavailable. A PM that is connected to the Network by one or more PM is out-of-service because its C-side of the PM or the links of a PM are unavailable.
Idl	Idle	At the STC level, the ST is available in a pool for CCS7 use, but is not connected to a transmission link.
InSv	In service	PMs are in service and available to support any intended process, for example, call processing.
ISTb	In-service trouble	PMs are still in service but flagged by system maintenance because either: ▪ a minor error condition occurred ▪ the PM failed a REX or minor audit test ▪ the load is not listed in the corresponding data table Call processing service is not affected.
ManB	Manually busy	PMs are manually removed from service by command bsy to allow testing and other manual maintenance action.
NEQ	Not equipped	At the STC level, the ST discrimination number (STNO) is not listed in Table STINV.
Offl	Offline	PMs are temporarily made out-of-service.
SysB	System busy	PMs are automatically removed from service by system maintenance.
Links OOS		Links out-of-service (OOS)
c	CSide	This identifies the number of C-side links that are out-of-service.
p	PSide	This identifies the number of P-side links that are out-of-service.
Unit 0 or Unit 1 activity		This identifies the activity of the unit.
Act	Active	This indicates that the unit is active, that is, processing calls, depending on the status.
Inact	Inactive	This indicates that the unit is inactive, that is, not processing calls.

-continued-

Status codes MSB6 menu status display (continued)

Code	Meaning	Description
Unit 0 or Unit 1 status		This identifies the status of the units. Refer to MSB6 status explained previously in this table.
Unit 0 or Unit 1 state		This identifies the maintenance state of the MSB6.
Mtce	Maintenance	This indicates that the unit is in a maintenance testing state.
Loading	Loading	This indicates that the unit has loading in progress. If loading is in progress, the nnnn changes to the increment of kilobits as the loading progresses.

Note 1: When an XPM status is displayed as manually busy (ManB), off-line (Offl), or unequipped (UNEQUIP), the activity display (Active--Act, or Inactive--Inact) remains blank. When the activity state is not displayed, the command strings rts inactive, loadpm inactive, and SwAct are not valid.
Note 2: When an XPM status is displayed as in service (InSv), in-service trouble (ISTb), C-side busy (CBsy), or system busy (SysB), the activity (Act or Inact) is also displayed.

-end-

abtk

Function

Use the abtk command to abort all active maintenance actions on a posted MSB6. The state of the MSB6 remains the same.

abtk command parameters and variables

Command	Parameters and variables
abtk	There are no parameters or variables.

Qualifications

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

- Use the abtk command when using the loadpm command to cancel the entry of a wrong l_name parameter, or when the unit is executing maintenance processes.
- The loadpm command without the nowait parameter “locks” the terminal keyboard so that other commands cannot be entered until the process is completed. The abtk command unlocks the keyboard by cancelling the loading.

Example

Not currently available

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
`display`	**Meaning:** This line is deleted from the loadpm display: LoadPM UNIT 1 /Loading 200 The abtk command deletes any part of the display associated with a previous active maintenance command such as: swact, tst, bsy, rts, offl, loadpm. It returns units to previous states The displays for the following commands are unaffected: trnsl, disp, next, querypm. The post command is not cancelled and the previous MSB6 posting is unaffected. **Action:** None

`ABORTING MAINTENANCE ON THIS PM WILL AFFECT`
`MAINTENANCE ON OTHER PMS.`
`PLEASE CONFIRM (“YES” OR “NO”)`
	Meaning: Aborting a broadcast loading affects the loading of all PMs in the parallel loading of the posted set.
	
	Action: Entering YES aborts the loading. Groups of XPMs that have already been loaded remain loaded, while the group that has loading in progress retains the current load. Entering NO allows the maintenance action to proceed.

bsy

Function

Use the bsy command to set one or both units of one or all posted MSB6(s) to the manually busy (ManB) state.

bsy command parameters and variables

Command	Parameters and variables				
bsy	active inactive pm unit	*unit_no*	[*wait* nowait]	[*noforce* force]	[all]

Parameters and variables	Description
active	This parameter busies one or all of the units in the active state.
all	This parameter simultaneously busies all of the specified unit(s) or XPMs of the same node type as the XPM in the current position of the posted set. ***Note:*** With parameter all, the larger quantity of MSB6s to be busied concurrently, the longer it takes to complete the busying. Other maintenance activities must wait until completion.
force	This parameter forces the busying to occur even though maintenance actions are already in progress (for example, while it is undergoing REX testing).
inactive	This parameter busies one or all of the units in the inactive state.
noforce	This default parameter indicates the condition when no parameter is entered. Busy will not be forced.
nowait	This parameter enables the MAP to be used for other entries while the busying occurs.
pm	This parameter busies all units of the posted MSB6(s).
unit	This parameter busies one unit of one or all of the posted MSB6(s).
unit_no	This variable specifies which unit of the posted MSB6(s) is to be busied. The range is 0 or 1.
wait	This default parameter indicates default condition when no parameter is not entered. The user must wait until the bsy force command action is confirmed before additional commands can be entered at the MAP.

Qualifications

None

bsy (continued)

Example

The following table provides an example of the bsy command.

Example of the bsy command

Example	Task, response, and explanation
bsy pm ↵	
	Task: Busy the posted MSB6.
	Response: `MSB6 0 BSY PASSED`
	Explanation: The system responds with the display indicating that MSB6 0 is ManB.

Responses

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

Responses for the bsy command

MAP output	Meaning and action
`ALL OPTION NOT SUPPORTED FOR LINK PARAMETER`	
	Meaning: The parameter all does not apply to links because they must be busied one at a time.
	Action: To busy a link, use the parameter link without the parameter all.
`MTCE IN PROGRESS`	
	Meaning: The PM or unit cannot be busied while maintenance actions are already in progress. To override (and cancel) the actions, use the parameter force.
	Action: None
`OPERATIONS ON TRUNK CARRIERS MUST BE DONE AT CARRIER LEVEL`	
	Meaning: Links cannot be busied from the MSB6 levels. The command string query busy displays the syntax at the MSB6 levels with the parameters link and link_no, although they are not valid for this PM.
	Action: None

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
OK	**Meaning:** The MSB6 state is ManB. **Action:** None
MSB6 <pm_number> IS MANUAL BUSY NO ACTION TAKEN	**Meaning:** The command bsy is applied to a PM that is already in the ManB state. **Action:** None
MSB6 <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS	**Meaning:** The XPM cannot be busied because it is already undergoing maintenance action. **Action:** With parameter all, the MSB6 is bypassed from the posted set of XPMs only for the duration of the busying.
SUMMARY: <nnn> PASSED <nnn> NOT SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (<nnn>) of XPMs in the posted set that have been successfully busied or that have been bypassed by the busying. **Action:** None
MSB6 <pm_number> This action will take this PM out of service WARNING: This is the last MSB6 InSv A CCS6 traffic and services office outage will occur! Please confirm (“YES”, “Y”, “NO”, OR “N”)	**Meaning:** This is the response for the bsy command if this is the last InSv or ISTb MSB6 or for the bsy unit command if the other unit is not insv or istb in the last InSv or ISTb MSB6. **Action:** Enter yes or y to busy the MSB6 or unit; enter no or n to abort the bsy command.

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action

`MSB6 <pm_number>  This action will take this PM out of service`
`All CCS6 traffic and services using this MSB6 will be affected.`
 	
`Please confirm (“YES”, “Y”, “NO”, OR “N”)`
	Meaning: This is the response for the bsy command if this is not the last InSv or ISTb MSB6 or for the bsy unit command if the other unit is not insv or istb but not in the last InSv or ISTb MSB6.
	
	Action: Enter yes or y to busy the MSB6 or unit; enter no or n to abort the bsy command.

`THIS OPERATION WILL BE EXECUTED ON <nnn> MSB6` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** A quantity of <nnn> MSB6s in the posted set is to be busied. **Action:** Entering YES busies the XPM(s). The status display of the XPM in the current position of the posted set changes to ManB and the status display for the PM level increments under the header MANB

-end-

disp (end)

Function

Use the disp command to display a list of all MSB6s in a specified PM state.

disp command parameters and variables

Command	Parameters and variables		
disp	state	*pm_state*	msb6

Parameters and variables	Description
pm_state	This variable is one of the state codes identified in the MSB6 status codes table at the beginning of this chapter.
msb6	This parameter is the PM node-type.
state	This parameter is required before the PM state code.

Qualifications

None

Example

Not currently available

Response

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

Response for the disp command

MAP output	Meaning and action

`<pm_state> MSB6: NONE`
or
`<pm_state> MSB6 <n>, <n>`
	Meaning: There are no PMs in the specified state, or all in the state are listed, where <pm_state> is one of the codes identified in the MSB6 status codes table at the beginning of this chapter.
	
	Action: None

listset

Function

Use the listset command to list the discrimination numbers of the PM types that are included in the posted set.

listset command parameters and variables

Command	Parameters and variables
listset	all *pm_type*

Parameters and variables	Description
all	This parameter lists all of the PM types that are in the posted set and includes their discrimination numbers.
pm_type	This variable specifies the type of PM in the posted set that is to be listed with all of its discrimination numbers.

Qualifications

The listset command is qualified by the following:

- Entering the listet command without a parameter lists the PMs of the same type as the PM in the current position of the posted.
- Use the listset command to plan maintenance actions on sets of XPMs of the same type.
- Entering the command string help listset to display the syntax of the command at the MAP shows all of the PM types that use the listset command, however, the ability to use the command depends on the PMs included in the office configuration.

Examples

Not currently available

listset (end)

Responses

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

Responses for the listset command

MAP output	Meaning and action

`<pm_number>, <pm_number>, <pm_number> ...`
`  :`
`  :`
`<pm_number>, <pm_number>, <pm_number> ...`
	Meaning: The discrimination numbers of all of the PM types in the posted set are listed. The list varies according to office configuration.
	
	Action: None

`NO PMS FOUND`	**Meaning:** The posted set of XPMs is empty. **Action:** None
`NO PMS OF SPECIFIED PM TYPE FOUND`	**Meaning:** The posted set does not contain XPMs of the specified type. **Action:** None

loadnotest

Function

Use the loadnotest command to load the whole MSB6 the same as the loadpm command, but without the ROM test.

loadnotest command parameters and variables

Command	Parameters and variables
loadnotest	pm unit *unit_no* [mate] [cc / full / data / exec] [*wait* / nowait]

Parameters and variables	Description
cc	This parameter specifies that the source of the load data is to be the DMS-100 CC data store.
data	This parameter selects the DATA load mode which consists of the static data and execs but not the basic PM software.
exec	This parameter is the name of the CC data file for the posted MSB. Load names are listed in data Table LTCINV field LOAD.
full	This parameter selects the full load mode which consists of the basic PM software, plus the execs and static data in the CC
mate	This parameter specifies that the source of the data to be loaded is to be the mate unit of the posted LCM, instead of the CC load file. The mate command refers only to loading LCM.
nowait	This parameter allows another MSB to be posted and loaded without waiting for confirmation from the previous load request. The nowait command also enables the MAP to be used for other entries while loading proceeds. LOADPM error messages are generated in PM logs.
pm	This parameter loads both units of the posted PM.
unit	This parameter loads one unit of the MSB6.
unit_no	This variable specifies which unit of the posted PM is to be loaded. The range is 0 or 1.
wait	This default parameter indicates the default condition when no parameter is entered. The user must wait until the loadnotest command action is confirmed before additional commands can be entered at the MAP.

loadnotest (end)

Qualifications

None

Example

Not currently available

Responses

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

Responses for the loadnotest command

MAP output	Meaning and action
`LOAD FILE NOT IN THE DIRECTORY`	**Meaning:** The system cannot find the location of the load file. It resides on tape or disk. Use the nonmenu listvol command to list the disk volume. Use the nonmenu mount command to mount the tape that has the load file on it. **Action:** None
`MSB6 <n> UNIT <n> LOADPM PASSED`	**Meaning:** Execution of the command is confirmed, where n echoes the specified MSB6 and UNIT, and the PM is (re) loaded. **Action:** None
`REQUEST INVALID` `MSB6 <n> UNIT <n> IS <status>`	**Meaning:** The specified MSB6 or unit must be ManB, where the <status> is any state but ManB as listed in MSB6 status codes table at the beginning of this chapter. **Action:** None

loadpm

Function

Use the loadpm command to load the peripheral program files into the processor of one or all of the posted MSB6s. The MSB6s must be in the ManB state before entering the loadpm command.

loadpm command parameters and variables

Command	Parameters and variables
loadpm	inactive / pm / unit *u* [cc / full / data / exec] [*l_name*] [*noforce* / force] (1) (2) (3)
loadpm (continued)	(1) [*wait* / (2) nowait / (3) all *r_name*] (end)

Parameters and variables	Description
all	This parameter simultaneously loads all of the specified unit(s) or XPMs of the same node type as the XPM in the current position of the posted set. ***Note:*** With parameter all, the larger the quantity of MSB6s to be loaded concurrently, the longer it takes to complete the loading. Other maintenance activities must wait until completion.
cc	This parameter specifies that the source of the load is to be the DMS-100 CC data store. The CC parameter is the default if no load source is entered.
data	This parameter selects the load mode which consists of the static data and execs but not the basic MSB6 software.
exec	This parameter selects the load mode to be execs only.
force	This parameter bypasses the running of ROM tests while loading occurs.
full	This parameter selects the load mode which consists of the basic MSB6 software, plus the execs and the static data in the CC. The full parameter is the default if no load mode is entered.

-continued-

loadpm (continued)

loadpm command parameters and variables (continued)

Parameters and variables	Description
inactive	This parameter load the unit(s) that are in the inactive state. If specified with parameter all, XPMs with firmware card NT6X45BA or later are loaded by the mate unit. If the status display for the unit's activity is blank, the CC prevents the loading. The action must be done by using explicit parameters. During an upgrade of XPM software, and with parameter all, the inactive units that are to be loaded from their mate units display Broadcast Mate as their maintenance flag.
l_name	This variable is the name of the CC data file for the posted MSB6. Load names are listed in data Table MSBINV field LOAD. The load's file name also appears in the QUERYPM display next to FNAME. By not specifying a load's file name, with parameter all the XPMs are loaded with the file name recorded in the respective XPM inventory tables. More than one load can be used to load more than one PM.
noforce	This default parameter indicates the condition when no parameter is entered. The loadpm will not be forced.
nowait	This parameter allows another MSB6 to be posted and loaded without waiting for confirmation from the previous load request. This allows several MSB6 units to be loaded from the same source. The parameter nowait enables the MAP to be used for other entries while loading proceeds. Error messages from the loadpm command are not updated, but are printed in PM logs.
pm	This parameter loads both units of one or all posted MSB6s.
r_name	This variable is the name of the load that is to replace the load's file name (*l_name*) for those PMs that cannot be loaded by the *l_name* load. Replacement names for such PMs must be listed in data Table LTCINV. The device on which the load resides is specified in Table PMLOADS.
unit	This parameter loads one unit of one or all posted MSB6s.
u	This variable specifies which unit of the posted MSB6s is to be loaded. The range is 0 or 1.
wait	This default parameter indicates the default condition when no parameter is entered. The user must wait until the loadpm force command action is confirmed before additional commands can be entered at the MAP.

-end-

Qualifications

The loadpm command is qualified by the following exception, restrictions and limitations:

- While loading occurs, a series of maintenance flags displays its progress. The status display of the MSB6 in the current position of the posted set shows the maintenance flag Mtce and shows the progression of the loading with the appearance of one at a time combination of:
  - /Reset
  - /Status
  - ROM Test
  - /Loading: nnnnK where nnnn changes according to the increment of kilobits. The rate of appearance of any of these flags depends on the amount of traffic on the switch.
  - Initializing
  - /Static Data
  - Loading: Execs
- To determine the loads for each PM, use the inform nonmenu command.
- After successful loading of the inactive unit, use the rts command. When both units of the MSB6 are InSv, use the command swact to make the newly loaded units active, and the active unit inactive. Then use the loadpm command on the newly inactive unit.
- If the load file name in data Table MSBINV has been changed and the new name does not correspond to the current file in the MSB6, the system makes the MSB6 and respective unit(s) ISTb. STATIC DATA is displayed to indicate that manual maintenance is required for an ODM update. To clear the ISTb, the MSB6 unit(s) must be busied, loaded, and returned to service.
- When using parameter PM, the load file name is taken from the data table, and displayed by the command querypm.
- When the MSB6 is not loaded, the only programs that are present for testing are located in the ROM. If the ROM tests fail, the loadpm command cannot be executed. If the ROM tests already pass, the parameter notest bypasses the ROM tests. The time taken for a ROM test that is already known to succeed is not repeated.
- When loading more than ten units, the action occurs in groups, submitted one after the other. If the broadcast loader or the mate broadcast loader is used, the duration is equivalent to loading one unit. Broadcast loading takes precedence over requests for single unit or single XPM loading.
- To locate a load's file name, use the nonmenu commands dskut and listvol. Load's file names are listed in data Table PMLOADS.

loadpm (continued)

- The failure reasons that prevent PMs in a posted set from being loaded by broadcast loading are described alphabetically as follows:
  - `LOAD NOT RECEIVED FROM BROADCAST LOADER`-The PM through which the load was to be sent has not sent the load. It may be out of service.
  - `NO RESPONSE FROM IPML SETUP MESSAGE`-The XPM has not responded to the IPML set that is required for broadcast loading to occur.
  - `NO RESPONSE FROM NIL EVENT TIMEOUT MESSAGE`-The XPM has not responded to the nil event timeout message.
  - `NO RESPONSE FROM ROM/RAM QUERY MESSAGE`-The XPM has not responded to the ROM and RAM query message.

Examples

The following table provides examples of the loadpm command.

Examples of the loadpm command

Example	Task, response, and explanation
loadpm pm cc ndt26bd all ntd25bc ↵ *where* ndt26bd is the name of the CC data file for the posted MSB6. ntd25bc is the name of the load that is to replace the load's file name	**Task:** **Response:** **Explanation:**
loadpm pm cc ndt26bd all ↵ *where* ndt26bd is the name of the CC data file for the posted MSB6.	**Task:** **Response:** **Explanation:**

-continued-

Examples of the loadpm command (continued)

Example	Task, response, and explanation
loadpm pm cc all ndt25bd ↵ *where* ndt25bd is the name of the load that is to replace the load's file name.	**Task:** **Response:** **Explanation:**
loadpm pm all ↵	**Task:** **Response:** **Explanation:**

-end-

Responses

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

Responses for the loadpm command

MAP output	Meaning and action
`6X45 PEC MISMATCH` `<available_pecs>`	**Meaning:** The loading cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45. **Action:** The equipped PECs of NT6X45 cards are listed, where <available_pecs> is one or more card(s). If a question mark (?) is present instead of a PEC, the PEC can only be obtained by inspecting the appropriate card. Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table MSBINV.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
FAILED TO SEND RESET MESSAGE <card_list>	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not reset. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None
FAILED TO SEND STATUS MESSAGE <card_list>	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`INACTIVE PARAMETER NOT VALID FOR OOS PM`	**Meaning:** The parameter inactive does not apply to out-of-service XPM(s). The XPM(s) must be in service. **Action:** The activity display for the XPM(s) is blank. To load the XPM(s) that are bypassed from the posted set, busy the XPMs with the command bsy and use the command loadpm with the parameter unit or pm.
`LOAD FILE <file_name> NOT FOUND IN SYMBOL TABLE`	**Meaning:** The variable *l_name* or *r_name* is not found in the system's symbol table. The symbol table is a "pseudo-table" for storing data for the duration of a MAP session. It is not a data table and is emptied by a reload or a restart. **Action:** Check for a typo or check data Table LTCINV for the applicable *r_name*. Unless the location of the load file is listed in data Table PMLOADS, list the volume with the load's file name using the nonmenu commands dskut and listvol.
`LOAD FILE NOT IN DIRECTORY`	**Meaning:** The system cannot find the location of the load file. It resides on tape or disk. Use the listvol command to list the disk volume or use the mount command to load the tape that has the load file on it. **Action:** None
`MSB6 <pm_number> UNIT <u> BROADCAST LOAD REQUEST SUBMITTED`	**Meaning:** The PMs in the posted set are being loaded by the broadcast method from the CC, where <pm_number> and unit <u> indicate the MSB6s discrimination numbers. **Action:** None
`MSB6 <pm_number> UNIT <u> BROADCAST MATE LOAD REQUEST SUBMITTED`	**Meaning:** The PMs in the posted set are being loaded by the broadcast method from the mate units, where <pm_number> and unit <u> indicate the MSB6s discrimination numbers. **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
<pm_type> <pm_number> IS <status> NO ACTION TAKEN	**Meaning:** The PM is in the incorrect state for loading, where pm_type is a PM listed in the PM status codes table in the PM MAP level chapter, <pm_number> is the discrimination number of the PM, and <status> is one of ▪ CBSY ▪ INSV ▪ OFFLINE The PM must be ManB. **Action:** None
MSB6 <pm_number> UNIT <u> LOAD FILE <file_name> IS NOT AVAILABLE	**Meaning:** With the parameter all, the PM load's file name has already been identified as being unavailable. Rather than have the system recheck resources for a load that is already unavailable once for a broadcast loading of many XPMs, the system remembers that a response has already stated the reason(s). **Action:** The PM in the posted set is bypassed from the loading.
MSB6 <pm_number> LOAD FILE IN INVENTORY TABLE NOT FOUND ENSURE THAT TABLE PMLOADS IS DATAFILLED CORRECTLY	**Meaning:** The load's file name (parameter *l_name*) is not specified and the file name in the inventory table does not correspond to a valid device in Table PMLOADS. **Action:** The PM in the posted set is bypassed from the loading.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action

`MSB6 <pm_number> UNIT <u> LOADPM FAILED`
`<reason>`
`CAUSED FAILURE OF BROADCAST LOADER`
	Meaning: As a member of the posted set intended for participation with broadcast loading, a PMs failure to be loaded prevents the broadcast loading from occurring. Reasons for the failure are listed in Qualifications.
	
	Action: None of the PMs to be loaded by the broadcast method is loaded. PMs in the posted set are loaded using the single loading method. To allow the broadcast loading to proceed, remove the PM with the failure from the posted set, and try again.

`MSB6 <pm_number> LOADPM FAILED` `LOAD NOT RECEIVED VIA BROADCAST LOADER`	**Meaning:** As a member of the posted set intended for participation with broadcast loading, this PM is not loaded because of a failure in another PM. **Action:** None of the PMs to be loaded by the broadcast method is loaded. PMs in the posted set are loaded using the single loading method. Investigate the cause of the failure to load the PM that is identified by the response CAUSED FAILURE OF BROADCAST LOADER. To proceed with the broadcast loading, remove the failed PM from the posted set and try the loadpm command again.
`MSB6 <pm_number> UNIT <u> LOAD REQUEST SUBMITTED`	**Meaning:** Only the PM in the current position of the posted set is being loaded from the CC. **Action:** None
`MSB6 <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The XPM cannot be loaded because it is already undergoing maintenance action, where <pm_number> is the discrimination number of the MSB6. **Action:** With parameter all, the MSB6 is bypassed from the posted set of XPMs only for the duration of the loading.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`MSB6 <pm_number> NOT SUBMITTED AS INACTIVE UNIT NO LONGER MANB OR ACTIVE UNIT IS NOW OOS`	**Meaning:** As a member of the posted set intended for participation with broadcast loading, the PM is no longer manually busy (ManB state) or the active unit is no longer in service. **Action:** The PM in the posted set is bypassed from the loading.
`MSB6 <pm_number> NOT SUBMITTED AS STATE NO LONGER MANB`	**Meaning:** As a member of the posted set intended for participation with broadcast loading, the PMs units are not both manually busy (ManB state) or the active unit is no longer in service. **Action:** The PM in the posted set is bypassed from the loading.
`<reason>` `NO ACTION TAKEN`	**Meaning:** The command cannot be executed for a reason other than those given in the standard responses. **Action:** None
`NO RESPONSE FROM PM AFTER ROMTEST <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`NO RESPONSE FROM PM AFTER STATUS <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None
`NO RESPONSE FROM ROM/RAM QUERY MESSAGE`	**Meaning:** The loading cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card or because the ROM/RAM query is not replied to. If parameter nowait is specified, this response does not appear. **Action:** The maintenance flag ROM/RAM QUERY appears for the duration or the query. Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table MSBINV.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
NO WAI RECEIVED AFTER RESET <card_list>	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not present. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X46 (FP memory) ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None
PM FAILED TO INITIALIZE TRY RELOADING THE PM	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not initialized. **Action:** Reload the XPM by entering the command pmreset or loadpm at a MAP.
REPLACE CARDS IN CARDLIST: <card_list>	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the loading, where <card_list> is the list of cards. **Action:** Replace the cards. If one of them is a processor card, reload the unit.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`MSB6 <pm_number> UNIT <u> REPLACEMENT NAME MISMATCH WITH INVENTORY TABLE`	**Meaning:** The specified load replacement file name does not match the file name datafilled in the inventory table of this PM. **Action:** The PM in the posted set is bypassed from the loading.
`MSB6 <pm_number> REQUEST INVALID MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an MSB6 in the posted set cannot be loaded because it is not in the manually busy state. **Action:** The PM in the posted set is bypassed from the loading. To proceed with the maintenance, wait until the action on the posted set is completed, then busy the XPM with the command bsy before trying the command loadpm.
`RETRY LAST COMMAND`	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** Reenter the command loadpm.

`SUMMARY`
`<nnn> PASSED`
`<nnn> NOT SUBMITTED`
	Meaning: With parameter all, a summary is given of the quantity (<nnn>) of XPMs in the posted set that have been successfully loaded or that have been bypassed by the loading.
	
	Action: None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`THIS OPERATION WILL BE EXECUTED ON <nnn> MSB6` `PLEASE CONFIRM ("YES" OR "NO"):`	**Meaning:** A quantity of <nnn> MSB6s in the posted set is to be loaded. **Action:** Entering YES loads the MSB6s. The status display of the XPM in the current position of the posted set shows the maintenance flag Mtce and shows the progression of the loading. While loading occurs, a series of maintenance flags displays its progress. The status display of the MSB6 in the current position of the posted set shows the maintenance flag Mtce and shows the progression of the loading with the appearance of one at a time combination of: ▪ /Reset/Status ▪ ROM Test ▪ /Loading: nnnnK where nnnn changes according to the increment of kilobits. The rate of appearance of any of these flags depends on the amount of traffic on the switch. ▪ Initializing ▪ /Static Data ▪ Loading: Execs Entering NO aborts the action.
`TOO MANY CHARACTERS IN REPLACEMENT NAME`	**Meaning:** The parameter *r_name* must be a string of eight characters or less. **Action:** Check for a typo or check data table LTCINV for the applicable *r_name*.
`TOO MANY DIFFERENT LOAD FILES REQUIRED.` `TRY A SMALLER SET OF PMS`	**Meaning:** With the command string loadpm pm all, if the quantity of load's file names in the respective inventory data tables is too large, the loading cannot occur. **Action:** Use the command post to create a posted set with fewer PMs or with PMs that require the same load's file name, and reenter the command.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`UNABLE TO DIAGNOSE FROM MATE` `MTCE NOT ACT/INSV - TRY AGAIN LATER`	**Meaning:** Mate loading is cancelled if the status or the activity of the active unit changes. **Action:** Wait for the changes to complete.
`UNABLE TO DIAGNOSE FROM MATE` `NO RESOURCES - TRY AGAIN LATER`	**Meaning:** Mate loading cannot occur when key software modules are missing from the load. **Action:** Wait for the resources to become available.
`UNABLE TO DIAGNOSE FROM MATE` `MATE MTCE IN PROGRESS - TRY AGAIN LATER`	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, loading from the mate unit cannot occur when maintenance is already in progress on it. **Action:** Wait for the maintenance action(s) to complete.
`WAITING FOR RESOURCES TO BECOME AVAILABLE`	**Meaning:** The system must wait to do maintenance action because the maximum quantity of loading requests has been submitted. **Action:** Wait for the loading to complete or cancel the request with command abtk.

-continued-

loadpm (end)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`WARNING: LOAD FILE <file_name> HAS SAME NAME AS DATAFILLED IN THE INVENTORY TABLE BUT IS NOT ON THE SAME DEVICE AS INDICATED BY TABLE PMLOADS`	**Meaning:** Two load's file names are the same in a PM inventory data table and in Table PMLOADS. The specified file name matches the name in the inventory table, but not the name in Table PMLOADS. **Action:** The PM in the posted set is bypassed from the loading. Check Table PMLOADS for the correct file name.

-end-

next (end)

Function

Use the next command to post the next higher discrimination number of the set of posted MSB.

next command parameters and variables

Command	Parameters and variables
next	*pm_type*

Parameters and variables	Description
pm_type	This variable enables the system to select one of the PM types listed in the PM status codes table in the PM MAP level chapter. Use the disp command to display the list of PM types in the posted set. The system selects the PMs in the sequence displayed by this list.

Qualifications

None

Examples

Not currently available

Response

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

Response for the next command

MAP output	Meaning and action
`END OF POST SET`	**Meaning:** The currently displayed PM is the last in the posted set of PM, or if only one PM number has been posted, the display returns to the next higher menu level. The posted MSB6 number in all displays increases by one. Also, any other post parameters (such as pm_state) change if they are different for the next MSB. **Action:** None

Function

Use the offl command to set one or all MSBs to the offline state. The units must be ManB.

offl command parameters and variables

Command	Parameters and variables
offl	all

Parameters and variables	Description
all	This parameter simultaneously makes offline all of the specified unit(s) or XPMs of the same node type as the XPM in the current position of the posted set.

Qualifications

None

Example

Not currently available

Responses

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

Responses for the offl command

MAP output	Meaning and action
0K	**Meaning:** The MSB6 is in the offline state. **Action:** None

-continued-

offl (continued)

Responses for the offl command (continued)

MAP output	Meaning and action
`<pm_type> <pm_number> IS <status>.` `NO ACTION TAKEN`	**Meaning:** The PM is already offline or is in the incorrect state for being made offline, where <pm_type> is a PM listed in the PM status codes table in the PM MAP level chapter, <pm_number> is the discrimination of the PM, and status is one of ▪ CBSY ▪ OFFLINE ▪ SYSTEM BUSY The PM must be ManB. ***Note:*** For some PM types, REQUEST INVALID appears before NO ACTION TAKEN. **Action:** None
`MSB6 <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The XPM cannot be made offline because it is already undergoing maintenance action, where <pm_number> is the discrimination number of the MSB6. **Action:** With parameter all, the MSB6 is bypassed from the posted set of XPMs only for the duration of being made offline.
`MSB6 <pm_number> REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an MSB6 in the posted set cannot be made offline because it is not in the manually busy state. **Action:** The XPM in the posted set is bypassed from being made offline. To proceed with the maintenance, wait until the action on the posted set is completed, then make the XPM busy with the command bsy before trying the command offl.

-continued-

Responses for the offl command (continued)

MAP output	Meaning and action
SUMMARY: <nnn> PASSED <nnn> SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (<nnn>) of XPMs in the posted set that have been successfully made offline or that have been bypassed by the request. **Action:** None
THIS OPERATION WILL BE EXECUTED ON <nnn> MSB6 PLEASE CONFIRM ("YES" OR "NO"):	**Meaning:** A quantity of <nnn> MSBs in the posted set is to be made offline. **Action:** Entering YES makes the XPM(s) offline. With YES, the status display of the XPM in the current position of the posted set changes to Offl and the status display for the PM level increments under the header OFFL.

-end-

pmreset

Function

Use the pmreset command to reinitialize a posted MSB6 or one of its units after being reloaded. This reset verifies that the reload is correct.

pmreset command parameters and variables

Command	Parameters and variables		
pmreset	pm		[norun]
	unit	*unit_no*	[nodata]

Parameters and variables	Description
nodata	This parameter resets the units after initialization, but without sending data and execs.
norun	This parameter resets the PM without initializing or sending static data and execs.
pm	This parameter reinitializes both units of the posted MSB6.
unit	This parameter reinitializes one unit of the posted PM.
unit_no	This parameter specifies which unit of the posted PM is to be reset. The range is 0 or 1.

Qualifications

None

Example

Not currently available

pmreset (continued)

Responses

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

Responses for the pmreset command

MAP output	Meaning and action
`FAILED TO SEND RESET MESSAGE <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not reset. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None

-continued-

pmreset (continued)

Responses for the pmreset command (continued)

MAP output	Meaning and action
`FAILED TO SEND STATUS MESSAGE <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where card_list is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None
`NO RESPONSE FROM PM`	**Meaning:** If the response occurs for norun before the reset status, there is a hardware fault for transmitting or a fault in the ROM. If the response occurs for nodata during initialization, after these display messages: ▪ /Reset ▪ /Status ▪ /Run ▪ /Initializing the load is not acceptable. **Action:** Use the command loadpm to reload the PM.

-continued-

pmreset (continued)

Responses for the pmreset command (continued)

MAP output	Meaning and action
`NO RESPONSE FROM PM AFTER ROMTEST <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 **Action:** None
`NO RESPONSE FROM PM AFTER STATUS <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None

-continued-

pmreset (continued)

Responses for the pmreset command (continued)

MAP output	Meaning and action
NO WAI RECEIVED AFTER RESET <card_list>	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not present. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X46 (FP memory) ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None
PM FAILED TO INITIALIZE TRY RELOADING THE PM	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not initialized. **Action:** Reload the XPM by entering the command pmreset or loadpm at a MAP.
MSB6 <pm_number> UNIT <n> DETERMINATION OF ESA STATUS FAILED NO REPLY FROM PM REQUEST PROCEEDING	**Meaning:** The CC is unaware that the specified MSB6 is in the ESA mode, where <pm_number> is the discrimination number of the MSB6 and <n> is the MSB6 unit number (0 or 1). The resetting of the MSB6 unit(s) is attempted anyway. **Action:** None

-continued-

pmreset (continued)

Responses for the pmreset command (continued)

MAP output	Meaning and action
REPLACE CARDS IN CARDLIST <card_list>	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the resetting, where <card_list> is the list of cards. **Action:** Replace the cards. If one of them is a processor card, reload the unit.
RETRY LAST COMMAND	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** None
UNABLE TO DIAGNOSE FROM MATE MATE NOT ACT/INSV - TRY AGAIN LATER	**Meaning:** Resetting by the mate test is cancelled if the status or the activity of the active unit changes. **Action:** Wait for the changes to complete.
UNABLE TO DIAGNOSE FROM MATE NO RESOURCES - TRY AGAIN LATER	**Meaning:** Resetting for the mate tests cannot occur when key software modules are missing from the load. **Action:** Wait for the resources to become available.
UNABLE TO DIAGNOSE FROM MATE MATE MTCE IN PROGRESS - TRY AGAIN LATER	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, resetting from the mate unit cannot occur when maintenance is already in progress on it. **Action:** Wait for the maintenance actions(s) to complete.

-continued-

pmreset (end)

Responses for the pmreset command (continued)

MAP output	Meaning and action
UNIT <n> IN ESA MODE THIS ACTION WILL CAUSE ESA EXIT AND ABORT <nnn> CALLS PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** The resetting of an MSB6 equipped with ESA cancels calls, where <nnn> is the current quantity of calls in progress. **Action:** None

-end-

post

Function

Use the post command to select a specific MSB6 upon which action is to be performed by other commands.

post command parameters and variables

Command	Parameters and variables	
post	msb6	*pm_ number*

Parameters and variables	Description
msb6	This parameter identifies the PM node-type to be posted.
pm_number	This variable identifies the discrimination number of the MSB6 housing the units to be posted. The range is 0-4.

Qualification

When entering the command string help post to query the parameters of post, not all of the displayed parameters apply to an office or office network. The applicability of the parameters depends on the types of PMs that are present in the office configuration. For parameters that do not apply, one of several responses indicates that it is ignored.

post (continued)

Example

The following table provides an example of the post command.

Example of the post command

Example	Task, response, and explanation

post 0 ↵
where
 	
0 identifies the discrimination number of the MSB6
	Task: Post MSB6 0.
	
	Response:
	
	`MSB6 0 ISTb Links OOS: CSide 0 PSide 0`
	`Unit 0: Act ISTb`
	`Unit 1: Inact ManB Mtce`
	
	Explanation: The system responds with the display indicating that MSB6 0 is in the ISTb state.

Responses

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

Responses for the post command

MAP output	Meaning and action

`MSB6 <n> <status> LINKS_OOS: CSIDE <c> PSIDE <p>`
`UNIT 0: <activity> <status>`
`UNIT 1; <activity> <status> <state> /LOADING <nnnn>`
	Meaning: MSB6 status is displayed. Refer to the MSB6 status codes table for an explanation of the display fields.
	
	Action: None

-continued-

Responses for the post command (continued)

MAP output	Meaning and action
<nnn> TERMINALS ARE IN CP BUSY STATE. DO YOU WISH TO CARRY ON? PLEASE CONFIRM “YES” OR “NO”:	**Meaning:** The command bsy has been applied to a PM (other than LM) which is performing call processing. Further action may affect calls in process of connection. **Action:** None
NO PM POSTED	**Meaning:** The MSB level is accessed without posting a specific MSB. **Action:** None

-end-

querypm

Function

Use the querypm command to display miscellaneous information about a posted MSB6.

querypm command parameters and variables

Command	Parameters and variables
querypm	cntrs flt

Parameters and variables	Description
cntrs	This parameter displays the contents of the MSB6 maintenance counters.
flt	This parameter displays the reasons of fault conditions on the two units of the posted MSB6.

Qualifications

The querypm command is qualified by the following exception, restrictions and limitations:

- The fault conditions are as follows:
  - Activity Dropped-A system-generated SwAct occurs as a result of a fault detected in the active unit. The newly inactive unit is made SysB.
  - Audit-The internal state of the active or inactive unit is incorrect. The active unit internal state should be RUNNING, inactive unit state should be READY. Fault indications are BUSY, RESTART, or SYNCING. If a minor fault is detected, the unit or PM is made ISTb; if the fault affects the hardware, the unit or PM is made SysB. Audits occur once a minute.
  - CS Links-The C-side links have failed the periodic link test (once per minute).
  - Distributed Data Mismatch-The MISMA TCH means the data in the MSB6 and in the CC do not match, therefore the MSB6 state is changed to in-service trouble (ISTb).
  - Inactive Unit Failure-A fault is detected in the inactive unit. It must be made SysB before using SwAct.
  - IPML Messaging Failure-MSB maintenance actions are reported to the IPML maintenance system.
  - Loader Messages-The reception of load records is acknowledged and the progress of the operation is updated in the CC.

querypm (continued)

- Restart-A CC restart has occurred. RTS is attempted during restarted.
- REX Failed-The unit failed the manual or scheduled REX test.
- Test Failed-The unit failed tests initiated by commands tst or rts.
- Unsolicited Message-Log PM198 is generated whenever an unsolicited message is received from the STC with a fault condition. If more than 50 unsolicited messages occur for one STC in 1 minute, the STC is made SysB.

- The maintenance counters (CNTRS) record the number of times that each FLT condition occurs.

Example

The following table provides an example of the querypm command.

Example of the querypm command

Example	Task, response, and explanation
querypm flt ↵	

Task: Display information on the fault conditions for the two units of MSB6 1.

Response:

```
          QUERYPM FLT
             Unit-0: Data not up to date
             Unit-1: Reset
            PM Type: MSB6 PM No.:              Node No.:
    FNAME:          LDR.FLAG:         CHKSUM       WAI:
          PMS EQUIPPED:      PM INT.#:
            Site Flr RPos Bay_Id  Shf Description Slot EqPEC
            HOST  0  C02   MS6E004  65  MSB6  1        6X07AA
```

Explanation: The system responds by displaying information on both units of the MSB6. The reasons for the faults conditions are as follows:

- Unit 0 is ISTb since its data is not up to date because of a failure to reload following an RTS. The unit is still in service.
- Unit 1 is SysB because an error has occurred on DS30 network link to that unit, and the unit is awaiting a reset by the maintenance system.

Responses

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

Responses for the querypm command

MAP output	Meaning and action
QUERYPM PM TYPE: <type> PM NO.: <nnn> PM INT.#: <n> NODE_NO.: <nnnn> PMS EQUIPPED: <xxx> LOADNAME: <l_name> WARM SWACT IS SUPPORTED <type> <nnn> IS INCLUDED IN THE REX SCHEDULE. LAST REX DATE WAS <day> <mmdd> AT <hh.mm>;<result> <status_info> NODE STATUS:{OK, FALSE} UNIT 0 STATUS:{<status>, FALSE} UNIT 1 STATUS:{<status>, FALSE} STATE FLR RPOS BAY_ID SHF DESCRIPTION SHF DESCRIPTION SLOT EQPEC <card_list>	**Meaning:** PM information is displayed, where: <type> is a PM type as listed in the PM status codes table in the PM MAP level chapter <nnn> IS 0-127 for the discrimination number of the PM type. <n> is a software internal number. <nnnn> is 0-2047 for the PM node number of PM number nnn. <xxx> is the quantity of equipped PM for the PM type. <l_name> is the name of the load file for the PM type. <status_info> is a reason for the status of a unit or node , where status_info can be: 6X45 PEC MISMATCH BETWEEN INVENTORY TABLE & PM The MISMATCH means the datafilled entry in the inventory table does not match the PEC of the NT6X45 card. Check the PECs of the NT6X45 cards in use by entering the querypm command or by inspecting the card and ensure that the PEC with the lowest suffix is the one datafilled in Table MSBINV.

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output	Meaning and action
	`NOT LOADED SINCE POWER UP` The LGC, RCC, or MSB has not been loaded with software after having been powered up. The fault query of the NT6X45 card indicates the need for a load. The system tries to auto-load the units before a return to service. If auto-loading fails, the XPM must be manually busied and loaded (by the commands bsy and loadpm respectively). <day> is an abbreviation for the day, for example, MON for Monday <mmdd> is an abbreviation for the month and includes the date of the day, for example, SEP07 for September 7. <hh.mm> is the time in hours and minutes that the REX test occurred. <result> is the result of the last REX test (PASSED or FAILED) <status> is one of the MSB6 status codes listed in the MSB6 status codes table at the beginning of this chapter. SITE begins the header string which identifies the location of a circuit according to the standard scheme. The display contains standard circuit information under the heading EqPEC identifying the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. <card_list> is the list of potentially faulty cards. **Action:** None
`<unit_no>: LOAD FAILED`	**Meaning:** Test the unit and try to reload. If the load still fails, replace the appropriate card(s). Refer to the appropriate card removal procedures. **Action:** None
`<unit_no>: NO FAULT EXISTS`	**Meaning:** The unit may undergo maintenance actions. **Action:** None

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output	Meaning and action
SYSTEM BUSY REASON: HARD PARITY FAULT WAS DETECTED	**Meaning:** The XPM unit was put to OOS state because of a hard parity fault. Perform a ROM diagnostic to locate the faulty memory card. Replace the appropriate memory card, reload and RTS the faulty unit. Continue monitoring for reoccurrence. **Action:** None
SYSTEM BUSY REASON: SOFT PARITY FAULT WAS DETECTED IN <ps_ds>	**Meaning:** The XPM unit was put to OOS state because of the detection of a soft parity fault in either program store or data store in MP, SP, EP, or FP memory. Depending on where the soft parity fault is detected, the system attempts different action. If it is a soft fault in program store, the system will reload and RTS the faulty unit. If it is a soft fault in data store, the system will RTS the faulty unit with new static data and execs. **Action:** None
SYSTEM BUSY REASON: INTERMITTENT PARITY FAULT WAS DETECTED	**Meaning:** The XPM unit was put to OOS state because of the detection of an intermittent fault in MP, SP, EP, or FP memory. The system will RTS the faulty unit with new static data. **Action:** None
THE FOLLOWING INSERVICE TROUBLES EXIST: INTERMITTENT PARITY FAULT WAS DETECTED IN <xx> MEMORY	**Meaning:** The XPM unit went ISTb because of the detection of an intermittent fault in MP, SP, or FP memory, where <xx> indicates what processor contains the faulty memory. Busy and RTS the faulty unit. Continue monitoring for recurrence. **Action:** None

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output	Meaning and action
`THE FOLLOWING INSERVICE TROUBLES EXIST:` `HARD PARITY FAULT WAS DETECTED IN <xx> MEMORY`	**Meaning:** The XPM unit went ISTb because of the detection of an hard parity fault in MP, SP, FP, or EP memory, where <xx> indicates what processor contains the faulty memory. Busy the faulty unit. Perform a ROM diagnostic to locate the faulty memory card. Replace the appropriate memory card, reload and RTS the faulty unit. Continue monitoring for recurrence. **Action:** None
`THE FOLLOWING INSERVICE TROUBLES EXIST:` `SOFT PARITY FAULT WAS DETECTED IN <ps_ds> OF <xx> MEMORY`	**Meaning:** The XPM unit went ISTb because of the detection of a soft parity fault in program store of MP, SP, FP, or EP memory, where <xx> indicates what processor contains the faulty memory. If it is a parity fault in program store, busy the faulty unit. Then load and RTS the faulty unit. If it is a parity fault in data store, busy and RTS the faulty unit. **Action:** None

-continued-

Responses for the querypm command (continued)

MAP output **Meaning and action**

```
QUERYPM CNTRS
UNSOLICITED MSG LIMIT = <ttt>, UNIT 0 = <nnn>, UNIT 1 = <nnn>
UNIT 0
   <count_info>
UNIT 1
   <count_info>
MP: <available_pec> SP: <available_pec>
```

Meaning: PM counter information is displayed, where:

<ttt> is the threshold limit for the number of unsolicited messages from the CC. If the threshold is reached, the PM may cancel calls in progress.

<nnn> is the number of unsolicited messages that have accumulated for each unit.

<count_info> is one of

`RAM LOAD: l_name1`
`ROM LOAD: l_name2`
or
`FAILED TO READ COUNTER`
or
`nnn`
where

- l_name1 is the name of the load file for the unit
- l_name 2 is the firmware load file in the PM
- nnn is the count. The counters cannot be read because the respective unit is out-of-service.

<available_pec> for an in-service unit, is a list of the available PECs of the equipped NT6X45 cards. MP indicates the master processor card, while SP indicates the signaling processor card. If a question mark (?) is present instead of a PEC, the PEC can only be obtained by inspecting the appropriate card.

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 all *incrname* *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 MSB6 level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The MSB6 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 MSB6 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 MSB6 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 MSB6 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 MSB6 level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

rts

Function

Use the rts command to return to service one or both units of one or all posted MSBs. The state must be ManB or SysB.

rts command parameters and variables

Command	Parameters and variables				
rts	link	*ps_link*	[*noforce* / force]	[*wait* / nowait]	
	active				
	inactive				
	pm				
	unit	*unit_no*			[all]
	sysb				

Parameters and variables	Description
active	This parameter returns to service one or all of the units in the active state.
all	This parameter returns to service all posted PMs, regardless of the status of the posted set.
force	This parameter overrides all other commands that may be in effect on a unit. It forces one or both units of the posted MSB6 to the InSv state, even if a test is in effect on one unit. TST is overridden and the test aborted. It requires confirmation YES or NO before execution.
inactive	This parameter returns to service one or all of the units in the inactive state.
link	This parameter returns to service one specified P-side link between the posted MSB6 and one of its associated STCs.
noforce	This default parameter indicates the condition when no parameter is entered. The rts command will not be forced.
nowait	This parameter enables the MAP to be used for other entries while testing for a return to service occurs.
pm	This parameter returns to service both units of one or all posted MSB6s.
ps_link	This variable specifies which P-link is to be returned to service. The range is 0-19.
sysb	This parameter returns all posted system busy PMs to service.

-continued-

rts (continued)

rts command parameters and variables (continued)

Parameters and variables	Description
unit	This parameter returns to service one unit of one or all posted MSBs.
unit_no	This variable specifies which unit of the posted MSB(s) is to be returned to service. The range is 0 or 1.
wait	This default parameter indicates the default condition when no parameter is entered. The user must wait until the rts force command action is confirmed before additional commands can be entered at the MAP.

-end-

Qualifications

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

- If the MSB6 is ManB and the C-side message links to the MSB6 are SysB or ManB, then the MSB6 is made CBsy. The rts command is executed without testing.
- While the status of one PM is displayed, the responses indicate the test initiations and results for the other PMs of the posted set. The discrimination number of the displayed PM does not change while the status for others is shown for the units.
- As PMs are returned to service, the PM status display decrements under the header ManB and increments under ISTb or InSv. If the return to service fails, the header ManB decrements and either header CBsy or SysB increments by one for each posted PM.
- While PMs are tested and returned to service, the status display of the posted PM in the control position changes. It is shown by the maintenance flag (Mtce) beside the unit's status, and by the progression of the tests beside the header RG. Tests occur to one unit at a time, and progression is shown in sequence by the following:
  - Initializing
  - Reset
  - Status
  - Run
  - Reset
  - Run

Examples

Not currently available

Responses

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

Responses for the rts command

MAP output	Meaning and action
`6X45 PEC MISMATCH <available_pec>`	**Meaning:** The return to service cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card. If parameter nowait is entered, this response does not appear. **Action:** While the table query is occurring, the maintenance flag ROM/RAM QUERY is displayed. The available PECs of NT6X45 cards are listed, where available_pecs is one or more card(s). If a question mark (?) is present instead a a PEC, the PEC can only be obtained by inspecting the appropriate card. Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table MSBINV.
`ALL OPTION NOT SUPPORTED FOR LINK PARAMETER`	**Meaning:** The parameter all does not apply to links because they must be busied one at a time **Action:** To busy a link, use the parameter link without all.
`FAILED TO OPEN LINK`	**Meaning:** The MSB6 or unit fails the return to service tests. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`FAILED TO SEND RESET MESSAGE <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not reset. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None
`FAILED TO SEND STATUS MESSAGE <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`INACTIVE PARAMETER NOT VALID FOR OOS PM`	**Meaning:** The parameter INACTIVE does not apply to out-of-service XPMs. The XPM(s) but be in service. **Action:** None
`MSB6 <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The XPM cannot be returned to service because it is already undergoing maintenance action, where <pm_number> is the discrimination number of the MSB6. **Action:** With parameter all, the MSB6 is bypassed from the posted set of XPMs only for the duration of the return to service.
`MSB6 <pm_number> REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an MSB6 in the posted set cannot be returned to service because it is not in the manually busy state. **Action:** The XPM in the posted set is bypassed by the return to service. To proceed with the maintenance, wait until the action on the posted set is completed, then busy the XPM with the command bsy before trying the command rts.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action

`MSB6 <pm_number> RTS PASSED`
`or`
`MSB6 <pm_number> UNIT <u> RTS PASSED`
	Meaning: The MSB6 is returned to service, where the <pm_number> and <u> echo the MSB6 or unit number respectively. While the tests are occurring, various stages are indicated one at a time by the display of the following sequence of headers.
	▪ Initializing
	▪ Static Data
	▪ Testing All
	▪ Tested CSM
	▪ Tested MSG
	▪ Initializing
	After the response indicates PASSED, the state of the active unit changes to InSv, and the state of the inactive unit changes from ManB to ISTb. When the inactive unit becomes synchronized with the active unit, the state changes from ISTb to InSv.
	Action: None

`MSB6 <pm_number> UNIT <u> RTS FAILED` `CHECK FOR POSSIBLE LOGS`	**Meaning:** With the parameter force, failing the RTS may indicate a hardware problem, where the <pm_number> and <u> echo the specified MSB6 or unit respectively. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`NO RESPONSE FROM PM AFTER ROMTEST <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 **Action:** None
`NO RESPONSE FROM PM AFTER STATUS <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
NO RESPONSE FROM ROM/RAM QUERY MESSAGE	**Meaning:** The return to service cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card or because the ROM/RAM query is not replied to. If parameter nowait is specified, this response does not appear. **Action:** The maintenance flag ROM/RAM QUERY appears while the load is being queried. Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table MSBINV
NO WAI RECEIVED AFTER RESET <card_list>	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not present. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X46 (FP memory) ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None
OK	**Meaning:** The test passes and the PM is returned to service. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`OSVCE TEST INITIATED`	**Meaning:** Out-of-service testing is being performed on the posted PM which is in the ManB or SysB state. **Action:** None
`PM FAILED TO INITIALIZE` `TRY RELOADING THE PM`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not initialized. **Action:** Reload the XPM by entering the command pmreset or loadpm at at MAP.
`PM OFFLINE` `NO ACTION TAKEN`	**Meaning:** The PM to which the MSB6 is connected is offline, and testing cannot occur on the MSB6 until the PM is returned to service. **Action:** None
`<pm_type> <pm_number> IS <status>.` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for returning to service, where <pm_type> is a PM listed in the PM status codes table in the PM MAP level chapter, <pm_number> is the discrimination number of the PM, and <status> is one of ▪ CBSY ▪ INSV ▪ OFFLINE The PM must be ManB or SysB. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
REPLACE CARDS IN CARDLIST <card_list>	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the return to service, where <card_list> is the list of cards. **Action:** Replace the cards. If one of them is a processor card, reload the unit.
RETRY LAST COMMAND	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. ***For information on mate testing and loading, see Testing XPM Units by the Mate on page 39.*** **Action:** Reenter the rts command.
RTS FAILED TRY THE RTS COMMAND ON ONE UNIT	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because both units are ManB or a card is pulled. The unit(s) must be reloaded. **Action:** Use the rts command to reload the static data into the unit(s).
TEST FAILED SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC <card_list>	**Meaning:** Results of tests are displayed using the standard circuit display. The display contains standard circuit information under the heading EqPEC identifying the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. **Action:** None

-continued-

Responses for the rts command (continued)

MAP output	Meaning and action
UNABLE TO DIAGNOSE FROM MATE MATE NOT ACT/INSV - TRY AGAIN LATER	**Meaning:** The unit cannot be returned to service if the status or the activity of the active unit changes. ***For information on mate testing and loading, see Testing XPM Units by the Mate on page 39.*** **Action:** Wait for the changes to complete.
UNABLE TO DIAGNOSE FROM MATE NO RESOURCES - TRY AGAIN LATER	**Meaning:** A return to service cannot occur when key software modules are missing from the load. ***For information on mate testing, see Testing XPM unit by the mate on page 39.*** **Action:** Wait for the resources to become available.
UNABLE TO DIAGNOSE FROM MATE MATE MTCE IN PROGRESS - TRY AGAIN LATER	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, testing from the mate unit cannot occur when maintenance is already in progress on it. For information on mate testing, ***see Testing XPM Units by the mate on page 39.*** **Action:** Wait for the maintenance action(s) to complete.
WARNING UNIT <u> MAY NOT HAVE A VALID LOAD	**Meaning:** A unit of MSB6 has undergone the ROM tests, where <u> is 0 or 1. The RAM load is erased. **Action:** Reload the unit(s) using the command loadpm.

-end-

Function

Use the stc command to cause the MSB6 level to change to the STC level.

stc command parameters and variables

Command	Parameters and variables
stc	There are no parameters or variable for this command.

Qualifications

The stc command applies to a posted MSB6.

Examples

The following table provides an examples of the stc command.

Examples of the stc command

Example	Task, response, and explanation	
stc ↵		
	Task:	After posting MSB6 1, access the STC level.
	Response:	`STC 0 0 0 0 0 6`
	Explanation:	The display indicates that there are six STCs in MSB6 1 and all are in the InSv state.
stc ↵		
	Task:	At the STC level, STC 5 has been posted.
	Response:	`STC 5 STCM 1 Ctrl 6 InSv P nn`
	Explanation:	The associated controller circuit is located in STCM1, Ctrl 6, and is in the InSv state. ***See STC Maintenance Tests on page 551 for details of the significance of the identification scheme used in the STC displays.***

Responses

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

stc (end)

Responses for the stc command	
MAP output	**Meaning and action**
`display`	
	Meaning: The STC menu appears. Refer to the STC MAP level chapter. **Action:** None

stcload

Function

Use the stcload command to load the STC data from the CC data file into the STC section of the data memory, in one or both units of the posted MSB. It can also delete or query the STC load stored in the MSB.

stcload command parameters and variables

Command	Parameters and variables				
stcload	pm		delete	*l_name*	
	unit	*unit_no*	add	*l_name*	nowait
			ql		

Parameters and variables	Description
add	This parameter loads STC data into the unit(s) of the posted MSB6.
delete	This parameter erases existing STC data from the unit(s) of the posted MSB6.
l_name	This variable is the name of the CC load file for the STC associated with the posted MSB6. Load names are listed in data Table STINV.
nowait	This parameter allows the MAP to be used for other entries while loading proceeds, without waiting for confirmation that the load has been completed. If the nowait command is omitted, the user cannot enter other commands until the confirmation is displayed.
pm	This parameter loads both units of the posted MSB6.
ql	This parameter queries the load and displays the STC load file name currently stored in the unit(s) of the posted MSB6.
unit	This parameter loads one unit of the posted MSB6.
unit_no	This variable specifies which unit of the posted MSB6 is to be loaded with STC data. The range is 0 or 1.

Qualification

Once the stcload command is successfully executed, the STC data is included thereafter as part of the MSB6 static data. When the loadpm command is used at the STC level with parameter msb or when the rts command is used, the data loaded in the MSB6 by command stcload becomes the source for loading the STC.

Example

The following table provides an example of the stcload command.

stcload (continued)

Example of the stcload command

Example	Task, response, and explanation
stcload ↵ *where*	
	Task: **Response:** **Explanation:**

Responses

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

Responses for the stcload command

MAP output	Meaning and action
`MSB6 <pm_number> UNIT 0 DOES NOT CONTAIN ANY STC LOADS` `MSB6 <pm_number> UNIT 1 DOES NOT CONTAIN ANY STC LOADS`	**Meaning:** The command string stcload pm ql has been entered. It is recommended that the STC load(s) be queried before adding or deleting a load. An MSB6 has been posted, where <pm_number> is the discrimination number. **Action:** None

-continued-

stcload (end)

Responses for the stcload command (continued)

MAP output	Meaning and action
`MSB6 <pm_number> UNIT <u> CONTAINS STC LOAD <l_name> <status>`	**Meaning:** The command string stcload unit *unit_no* ql has been entered. The STC load has actually been added to an MSB6 unit, where <pm_number> is the MSB discrimination number <u> is 0 or 1 <l_name> is the name of the load that was loaded <status> is the status of the load If parameter nowait has been used, check if the command has passed. The value for status is either OK or LOADING. If OK appears, a load may be done; if LOADING appears and the nowait command was not executed, the loading must complete before the MAP is "freed." **Action:** None

`REQUEST SUBMITTED`
`MSB6 <pm_number> UNIT <u> PASSED`
`STC LOAD <l_name> ADDED TO MSB6 <pm_number> UNIT <u>`
	Meaning: Command string stcload unit *unit_no* add *l_name*, has been entered. REQUEST SUBMITTED indicates that the specified load name is retrieved from the CC and checked. When verified, PASSED appears and finally ADDED, which indicates that loading has been completed. Until this session is complete, no further commands can be entered. If the parameter nowait is entered after parameter add and variable *l_name*, other commands can be used immediately, but the foregoing displays do not appear.
	
	Action: None

`STC LOAD <l_name> DELETED FROM MSB6 <pm_number> UNIT <u>`	**Meaning:** Command string stcload unit *unit_no* delete, has been entered and indicates that the specified STC load name is deleted from one unit of the posted MSB6. This could be verified by using the parameter ql, as previously explained. **Action:** None

-end-

swact

Function

Use the swact command to switch the activity of the posted MSB6(s) from whichever unit is currently active (unit 0 or unit 1) to the inactive unit. The units 0 and 1 must be InSv or ManB.

swact command parameters and variables

Command	Parameters and variables
swact	all test

Parameters and variables	Description
all	This parameter simultaneously switches the activities of all XPMs of the same node type as the XPM in the current position of the posted set.
test	This parameter causes a newly inactive unit to go through an RTS with full OOS diagnostics.

Qualifications

The swact command is qualified by the following exception, restrictions and limitations:

- If the MSB6 is not ManB, confirmation YES or NO is required. If the MSB6 is ManB, no confirmation is required.
- Log PM181 is output when the swact command is executed, identifying the newly-active unit. This log is for information only and no alarm occurs.

Examples

The following table provides an example of the swact command.

Example of the swact command

Example	Task, response, and explanation
swact ↵	
	Task: **Response:** **Explanation:**

swact (continued)

Responses

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

Responses for the swact command

MAP output	Meaning and action
`A COLD SWACT WILL BE PERFORMED` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** The MSB6 is not ManB and the unlisted menu command warmswact is off. During a cold SwAct, both units are SysB and call processing is lost until the active units is returned to service. A cold SwAct drops all calls. **Action:** If YES is entered the response is: `MSB6 pm_number SWACT PASSED`. The newly-inactive unit becomes SysB and requires an RTS to return it to the ready state. If NO is entered there is no response and the command is aborted.

`A WARM SWACT WILL BE PERFORMED AFTER`
`DATA SYNC OF ACTIVE TERMINALS`
`PLEASE CONFIRM (“YES” OR “NO”):`
	Meaning: The test option invokes a warm SwAct operation in which the newly inactive unit is returned to service with full OOS diagnostic.
	
	Action: The user is prompted to confirm or reject command execution. Entering YES causes the warm SwAct to be carried out. Entering NO aborts the command.

`A WARM SWACT WILL BE PERFORMED AFTER`
`DATA SYNC OF ACTIVE TERMINALS`
`THE INACTIVE UNIT MAY NOT BE CAPABLE OF GAINING`
`ACTIVITY. (PLEASE CHECK LOGS). DO YOU WISH FOR THE`
`SWACT TO CONTINUE, REGARDLESS?`
`PLEASE CONFIRM (“YES” OR “NO”):`
	Meaning: The pre-SwAct audit has determined that the unit should not assume activity and the warm SwAct operation should be terminated.
	
	Action: The user is prompted to confirm or reject command execution. Entering YES causes the warm SwAct to be carried out. Entering NO aborts the command.

-continued-

swact (continued)

Responses for the swact command (continued)

MAP output	Meaning and action
`MSB6 <pm_number> A WARM SWACT WILL BE PERFORMED`	**Meaning:** The MSB6 is to have the activity of its units switched, where <pm_number> is the discrimination number. Calls in progress are allowed to complete. **Action:** None
`MSB6 <pm_number> SWACT PASSED`	**Meaning:** The activity of the two MSB6 units is switched, where <pm_number> is the discrimination number of the MSB6. **Action:** For MSB7s a warm SwAct maintains calls in progress. A cold SwAct drops calls. For more information.

`MSB6 <pm_number> This action will take this PM out of service`
`WARNING: This is the last MSB6 InSv`
`A CCS6 traffic and services office outage will occur!`
`Please confirm (“YES”, “Y”, “NO”, OR “N”)`
	Meaning: This is the response for the swact command if a cold swact will be performed and if this is the last InSv or ISTb MSB6.
	
	Action: Enter yes or y to continue the swact; enter no or n to abort the swact command.

`MSB6 <pm_number> This action will take this PM out of service`
`All CCS6 traffic and services using this MSB6 will be affected.`
 	
`Please confirm (“YES”, “Y”, “NO”, OR “N”)`
	Meaning: This is the response for the swact command if a cold swact will be performed and if this is not the last InSv or ISTb MSB6.
	
	Action: Enter yes or y to continue the swact; enter no or n to abort the swact command.

-continued-

swact (end)

Responses for the swact command (continued)

MAP output	Meaning and action
REQUEST INVALID INACT UNIT MUST BE INSV OR BOTH UNITS MUST BE MANB	**Meaning:** The units cannot be switched because one or both are in the wrong state. **Action:** None
SWACT OPERATION NOT VALID ON OOS PM	**Meaning:** When an XPM is out-of-service (ManB, SysB, CBsy, or Offl), a switch of activity cannot occur. **Action:** The activity display for the XPM(s) is blank.

-end-

trnsl

Function

Use the trnsl command to identify the C-side links of a posted MSB6 and show the status of all links or a specified link to the network or to the STC.

trnsl command parameters and variables

Command	Parameters and variables	
trnsl	c	*link_no*

Parameters and variables	Description
c	This parameter specifies C-side links for the display.
link_no	This variable selects an individual C-side link. The range is 0-31. If *link_no* is not entered, all C-side links are displayed.

Qualifications

None

trnsl (continued)

Example

The following table provides an example of the trnsl command.

Example of the trnsl command

Example	Task, response, and explanation
trnsl c ↵	

Task: After posting MSB6 1, determine the status of the C-side links.

Response:

```
MSB6 1 ISTb Links_OOS: CSide 0 PSide 0
Unit 0: Act  InSv
Unit 1: InAct ManB Mtce     /Loading 0200
LINK 0  NET00  10;CAP:MS;STATUS:OK ;MSGCOND:OPN,Unrestricted
LINK 1  NET10  10;CAP:MS;STATUS:ManB;MSGCOND:CLS,Unrestricted
LINK 2  NET00  11;CAP: S;STATUS:OK
LINK 3  NET10  11;CAP: S;STATUS:OK
LINK 4  NET00  12;CAP:MS;STATUS:OK ;MSGCOND:OPN,Restricted
LINK 5  NET10  12;CAP:MS;STATUS:ManB;MSGCOND:OPN,Restricted
LINK 6  NET00  13;CAP: S;STATUS:OK
LINK 7  NET10  13;CAP: S;STATUS:OK
```

Explanation: The display provides the status of the links.

Responses

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

Responses for the trnsl command

MAP output	Meaning and action
display	

Meaning: The trnsl display is added to the post display. Refer to the “Example of the trnsl command” table for a representative display.

Action: None

-continued-

Responses for the trnsl command (continued)

MAP output	Meaning and action
`MSB DOES NOT HAVE P-SIDE LINKS`	**Meaning:** With command string trnsl p there is no display **Action:** None

-end-

Function

Use the tst command to test one or both units of one or all posted MSBs.

tst command parameters and variables

Command	Parameters and variables
tst	pm unit *unit_no* [rom] [all] rex [on / off / query / now]

Parameters and variables	Description
all	This parameter simultaneously tests all of the specified unit(s) or XPMs of the same node type as the XPM in the current position of the posted set. ***Note:*** With parameter all, the larger the quantity of MSBs to be tested concurrently, the longer it takes to complete the testing. Other maintenance activities must wait until completion.
now	This parameter requests immediate activation of REX tests regardless of the test schedule. If maintenance is in progress, testing cannot occur until it is completed.
off	This parameter deactivates the REX tests already in progress, or has no effect if none are in progress.
on	This parameter activates the REX tests, and is the default.
pm	This parameter tests both units of one or all posted MSB6s.
query	This parameter displays the status of the REX tests.
rex	This parameter specifies that REX tests are to be controlled manually.

-continued-

tst (continued)

tst command parameters and variables (continued)

Parameters and variables	Description
rom	This parameter runs the ROM tests on one or all MSB6s or all units. The unit(s) must be manually busied. The test erases the RAM load. Running ROM tests on an inactive unit recognizes the differences between the capabilities of the various NT6X45 cards. ROM tests for the BA version of the NT6X45 card are non-destructive. If the XPM is out of service, then the NT6X45B tests are run before the task level tests are run when parameter ROM is not specified. While the ROM tests are running, the maintenance flag NONDESTR ROMTST is displayed. Log PM181 records when the XPM is at the ROM level of maintenance.
unit	This parameter tests one unit of one or all posted MSB6s.
unit_no	This variable specifies which unit of the posted MSB6s is to be tested. Range is 0 or 1.

-end-

Qualifications

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

- Unit(s) that have been tested by the parameter rom must be manually reloaded by the command loadpm before the unit(s) are returned to service.
- When the warm SwAct is disabled for an XPM, a REX test in progress still allows the commands bsy, tst, and rts to be entered for the inactive unit. However, if the warm SwAct is disabled before the REX test starts, the test cannot be run because the inactive unit is in service. The command string tst rex now cannot be used.

Example

None

Responses

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

tst (continued)

Responses for the tst command

MAP output	Meaning and action
`6X45 PEC MISMATCH` `<available_pec>`	**Meaning:** The tests cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card. **Action:** The equipped PECs of NT6X45 cards are listed, where <available_pecs> is one or more card(s). If a question mark (?) is present instead of a PEC, the PEC can only be obtained by inspecting the appropriate card. Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table MSBINV.
`CS LINK UNAVAILABLE` `MSB6 <pm_number> TST PASSED`	**Meaning:** The C-side links used for messages are both out-of-service, therefore the PM cannot communicate with the CC. **Action:** None
`INSERVICE TESTS INITIATED.` `MSB6 <pm_number> TST PASSED.`	**Meaning:** In-service testing is being done on the posted PM which is in the InSv or ISTb state. PASSED appears when testing is satisfactorily completed. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action

`LAST REX DATA WAS <day> <mmdd> AT <hh.mm>; <result>`	**Meaning:** With the command string tst rex query, the date of the last REX test is given, where
	<day> is an abbreviation for the day of the week, for example, MON for Monday.
	<mmdd> is an abbreviation for the month and includes the date of the day, for example, SEP07 for September 7.
	<hh.mm> is the time in hours and minutes that the REX test occurred.
	<result> is the result of the last REX test (PASSED or FAILED).
	
	The following response is displayed:
	
	`MSB6 pm_number IS INCLUDED IN THE REX SCHEDULE`
	or
	`MSB6 pm_number IS REMOVED FROM THE REX SCHEDULE`
	
	Action: None

`MSB6 <n> UNIT <u> TST ABORTED`
`OSVCE TESTS INITIATED`
`or`
`MSB6 <n> UNIT <u> TST FAILED`
`FAILED TO OPEN LINK`
	Meaning: From the command string tst pm, the tests on one MSB6 unit are aborted because the unit is still InSv or the unit is busied and waiting for calls to complete, where
	<n> is the MSB6 discrimination number
	<u> is 0 or 1
	
	The other unit fails the tests. The link opens when the unit passes the tests.
	
	Action: None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
NON DESTRUCTIVE ROM TEST AND OSVCE TESTS WILL BE RUN	**Meaning:** The non-destructive tests occur for both the in-service and out-of-service unit or XPM. **Action:** The maintenance flag NONDESTR ROMTST appears while testing occurs. Log PM181 records when the XPM is at the ROM level of maintenance. Wait for the tests to complete. If the tests fail, check the PECs of the NT6X45 cards in use and ensure that the card with the lowest suffix is the one datafilled in Table MSVINV.
NON-DESTRUCTIVE ROM TEST WILL BE RUN	**Meaning:** The non-destructive tests occur for the in-service unit or PM. **Action:** The maintenance flag NONDESTR ROMTST appears while testing occurs. Wait for the tests to complete. If the tests fail, check the PECs of the NT6X45 cards in use and ensure that the card with the lowest suffix is the one datafilled in Table MSBINV.
NO RESPONSE FROM ROM/RAM QUERY MESSAGE	**Meaning:** The testing cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card or because the ROM/RAM query is not replied to. **Action:** The maintenance flag ROM/RAM query appears while the load is being queried. Log PM181 records when the XPM is at the ROM level of maintenance. Check the PECs of the NT6X45 cards in use and ensure that the card with the lowest suffix is the one datafilled in Table MSBINV.
OK	**Meaning:** The tests pass. **Action:** None
OSVCE TEST INITIATED	**Meaning:** Out-of-service testing is being performed on the posted PM which is in the ManB or SysB state. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`PM IS OFFLINE` `NO ACTION TAKEN`	**Meaning:** The PM to which the MSB6 is connected is offline, and testing cannot occur on the MSB6 until the PM is returned to service. **Action:** None
`MSB6 <pm_number>, CHECKSUM=# <hhh>, AGREES` `OK`	**Meaning:** The test passes. The checksum agreement referred to (AGREES) is between a recent value for the data in the PM and the load-time value as stored in the central control. This confirms that the PM load has not been corrupted. **Action:** None

`MSB6 <pm_number> IS <rex_status>`	**Meaning:** The REX tests are (de)activated or queried, where <rex_status> is either
	
	`INCLUDED IN THE REX SCHEDULE`
	or
	`REMOVED FROM THE REX SCHEDULE`
	
	Action: None

`<pm_type> <pm_number> IS <status>.` `NO ACTION TAKEN`	**Meaning:** The command is not executed because the PM is in the incorrect state for testing, where <status> is; CBSY OFFLINE The PM must be in the ManB state. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`MSB6 <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The XPM cannot be tested because it is already undergoing maintenance action, where <pm_number> is the discrimination number of the MSB6. **Action:** With parameter all, the MSB6 is bypassed from the posted set of XPMs only for the duration of the testing.
`MSB6 <pm_number> REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an MSB6 in the posted set cannot be tested because it is not in the manually busy state. **Action:** The XPM in the posted set is bypassed by the testing. To proceed with the maintenance, wait until the action on the posted set is completed, then make the XPM busy with the command bsy before trying the command tst.
`REPLACE CARDS IN CARDLIST:` `<card_list>`	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the loading, where <card_list> is the list of cards. **Action:** Replace the cards. If one of them is a processor, reload the unit.
`REQUEST INVALID`	**Meaning:** In-service tests occur if the selected PM is in the InSv state, or out-of-service tests occur if it is in the ManB or SysB state. **Action:** None
`RETRY LAST COMMAND`	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** Reenter the tst command.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`REX REQUEST INVALID: MTCE IN PROGRESS`	**Meaning:** A REX test cannot be started on the PM because other maintenance actions are already in progress. **Action:** None

`REX TEST IN PROGRESS`	**Meaning:** A REX test has already been activated. When the test is completed, its status is either:
	
	`REX TEST PASSED`
	or
	`REX TEST reason`
	
	Action: None

`REX TEST PASSED`	**Meaning:** The REX test is successful. **Action:** None
`REX TEST <reason>`	**Meaning:** The REX test failed or is incomplete because of one of these reasons: FAILED - ACHIEVING SUPERFRAME/DATA SYNC FAILED - INACTIVE OOS TESTS FAILED - INACTIVE RTS FAILED - INACTIVE OOS TESTS AFTER SWACT FAILED - INACTIVE RTS AFTER SWACT FAILED - WARM SWACT TERMINATED - AT LEAST ONE UNIT IS ISTB TERMINATED - INACTIVE UNIT IS BSY TERMINATED - OVERLOAD CONDITIONS DETECTED TERMINATED - WARM SWACT IS TURNED OFF **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
SUMMARY: <nnn> PASSED <nnn> NOT SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (<nnn>) of XPMs in the posted set that have been successfully tested or that have been bypassed by the testing. **Action:** None
TEST FAILED SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC <card_list>	**Meaning:** Results of tests are displayed using the standard circuit display. The display contains standard circuit information under the heading EqPEC identifying the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. **Action:** None
TEST RESOURCES IN USE NO ACTION TAKEN	**Meaning:** Test facilities are already temporarily in use for other maintenance purposes. If the test fails, a card list is shown in a standard circuit display. The display contains standard circuit information under the heading EqPEC identifying the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. **Action:** None
THE ROM TEST IS DESTRUCTIVE THE RAM LOAD WILL BE LOST FOR UNIT u PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** The RAM load is erased in the unit(s) because of the ROM test. **Action:** To replace the RAM load the unit(s) must be reloaded by the command loadpm.

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
`THIS OPERATION WILL BE EXECUTED ON <nnn> MSB6` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** A quantity of <nnn> MSBs in the posted set is to be tested. **Action:** Entering YES tests the MSBs. The status display of the MSB6 in the current position of the posted set shows the maintenance flag Mtce while testing is in progress. Entering NO aborts the action.
`TRY PMRESET`	**Meaning:** For XPMs with an NT6X69 messaging card, testing cannot occur because the static data must be reloaded. **Action:** Enter the pmreset command.
`UNABLE TO DIAGNOSE FROM MATE` `MATE NOT ACT/INSV - TRY AGAIN LATER`	**Meaning:** Testing by the mate test is cancelled if the status or the activity of the active unit changes. **Action:** Wait for the changes to complete.
`UNABLE TO DIAGNOSE FROM MATE` `NO RESOURCES - TRY AGAIN LATER`	**Meaning:** Testing by the mate tests cannot occur when key software modules are missing from the load. **Action:** Wait for the resources to become available.
`UNABLE TO DIAGNOSE FROM MATE` `MATE MTCE IN PROGRESS - TRY AGAIN LATER`	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, testing from the mate unit cannot occur when maintenance is already in progress on it. **Action:** Wait for the maintenance action(s) to complete.

-end-

warmswact

Function

Use the warmswact command to switch the activity states of the XPM units of the posted MSB6.

Note: If an attempt to change the warmswact capability is made while a SwAct is in progress, a message will be displayed stating that the attempt is disallowed and no action will be taken.

warmswact command parameters and variables

Command	Parameters and variables
warmswact	on off query [all [noprompt]]

Parameters and variables	Description
all	This parameter includes all XPM units of the posted set.
noprompt	This parameter is used to avoid confirmation requests for each unit affected when command string warmswact on all is entered.
off	This parameter cancels the automatic switching of the activity states of the XPM units.
on	This parameter allows the automatic switching of the activity states of the XPM units.
query	This parameter gives the status of warmswact as on or off.

Qualifications

The warmswact command is qualified by the following:

- When the command string warmswact on is executed, calls in process are maintained when the activity states of the units are switched.
- When the command string warmswact off is executed, calls in process are dropped when the activity states of the units are switched.

Example

Not currently available

Response

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

warmswact (end)

Response for the warmswact command	
MAP output	**Meaning and action**
`WARM SWACT FOR MSB6 <n> UNIT <n> IS <status>`	**Meaning:** If the command swact (menu item 13) is used, a warm SwAct occur, where <n> is the discrimination number of the MSB6 and unit. **Action:** None

xbert

Function

Use the xbert command to access the XBERT monitor of commands in order to allow testing of the XPM bit error ratio of cards for the MSB6. The MSB6 requires feature package NTX885 to access the XBERT level. XBERT tests the MSB and its C-side node independently, however, it does not test the link between the MSB6 and its C-side node.

xbert command parameters and variables

Command	Parameters and variables
xbert	*pm_type* *pm_number*

Parameters and variables	Description
pm_type	This variable identifies the PM type, which in this case is the MSB6.
pm_number	This variable specifies the discrimination number of the PM type. The range is 0-255.

Qualifications

The xbert command is qualified by the following exception, restrictions and limitations:

- XBERT is available in feature package NTX885.
- XBERT can be used only by one MAP user at a time.
- It is recommended that XBERT be used only on an in-service XPM because a larger quantity of bit errors are induced in the XBERT test path when there is heavy traffic on that XPM.
- XBERT can be used on an in-service or out-of-service XPM and is unaffected by other tests.
- The commands that are available when XBERT is accessed are:
  - display
  - initiate
  - help
  - portinfo
  - previous
  - query
  - reset
  - stop

Example

Not currently available

Responses

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

Responses for the xbert command

MAP output	Meaning and action
`THIS XBERT COMMAND IS NOT ALLOWED`	**Meaning:** An invalid XBERT command has been tried. **Action:** None
`XBERT LEVEL NOT FOUND`	**Meaning:** The specified XPM does not have a valid load, and is running by its ROM. **Action:** Use the MSB6 unlisted menu command pmreset to reset the XPM, or use the command rts to return it to service.
`XBERT NOT SUPPORTED BY THIS PM`	**Meaning:** The specified PM type is not supported by XBERT. **Action:** None

-end-

xpmlogs

Function

Use the xpmlogs command to enable logs to be generated from the XPM of the MSB6 and reports internal XPM software errors (SWERRS).

xpmlogs command parameters and variables

Command	Parameters and variables
xpmlogs	on off query

Parameters and variables	Description
off	This parameter prevents logs from being printed.
on	This parameter enables logs to be printed.
query	This parameter gives the status of XPM_LOGS as ON or OFF.

Qualification

XPMLOGS is cancelled by a reload or restart by a default setting.

Example

Not currently available

Responses

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

Responses for the xpmlogs command

MAP output	Meaning and action

`MSB6 <n> UNIT <n> XPMLOGS PASSED`
`or`
`MSB6 <n> UNIT <n> XPMLOGS PASSED`
	Meaning: The response occurs in pairs, one for each MSB6 or MSB6 unit. It applies to either ON or OFF.
	
	Action: None

xpmlogs (end)

Responses for the xpmlogs command (continued)

MAP output	Meaning and action
LOGS FROM XPM ARE DISABLED or LOGS FROM XPM ARE ENABLED	**Meaning:** The status of XPMLOGS is given. A log is produced when the xpmlogs command is enabled. **Action:** None

xpmreset

Function

Use the xpmreset command to to reinitialize a posted MSB6 or one of its units after being reloaded. This reset verifies that the reload is correct.

xpmreset command parameters and variables

Command	Parameters and variables		
xpmreset	pm unit	*unit_no*	[*tstdat* nodata norun]

Parameters and variables	Description
pm	This parameter reinitializes both units of the posted MSB6.
norun	This parameter resets the PM without initializing or sending static data and execs.
unit	This parameter reinitializes one unit of the posted PM.
unit_no	This parameter specifies which unit of the posted PM is to be reset. The range is 0 -1.
nodata	This parameter resets the units after initialization without sending data and execs.
tstdat	This default parameter, which is never entered, resets the units after initialization and sending data and execs, because neither the nodata or norun parameters are entered.

Qualifications

None

xpmreset (end)

Example

The following table provides an example of the xpmreset command.

Examples of the xpmreset command

Example	Task, response, and explanation
xpmreset unit 1 ↵ *where* 1 is the number of the unit to be reset	**Task:** Reset unit 1 of the posted MSB6 **Response:** `MSB6 0 Unit 1  PMReset Passed` **Explanation:** Unit one of the posted MSB6 is successfully reset.

Responses

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

Responses for the xpmreset command

MAP output	Meaning and action
`MSB6 x Unit y  PMReset Passed`	**Meaning:** Indicated unit of MSB6 is reset where ▪ x is the number of the MSB6 ▪ y is the number of the unit **Action:** None
`Request Invalid` `MSB6 x Unit y is InSv`	**Meaning:** MSB6 unit must be manually busy to be reset. **Action:** Busy the unit and reenter the command.

MSB7 level commands

Accessing the MSB7 level

To access the MSB7 level, enter the following from the CI level:

mapci;mtc;pm;post msb7 ↵

MSB7 commands

The commands available at the MSB7 MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

MSB7 commands

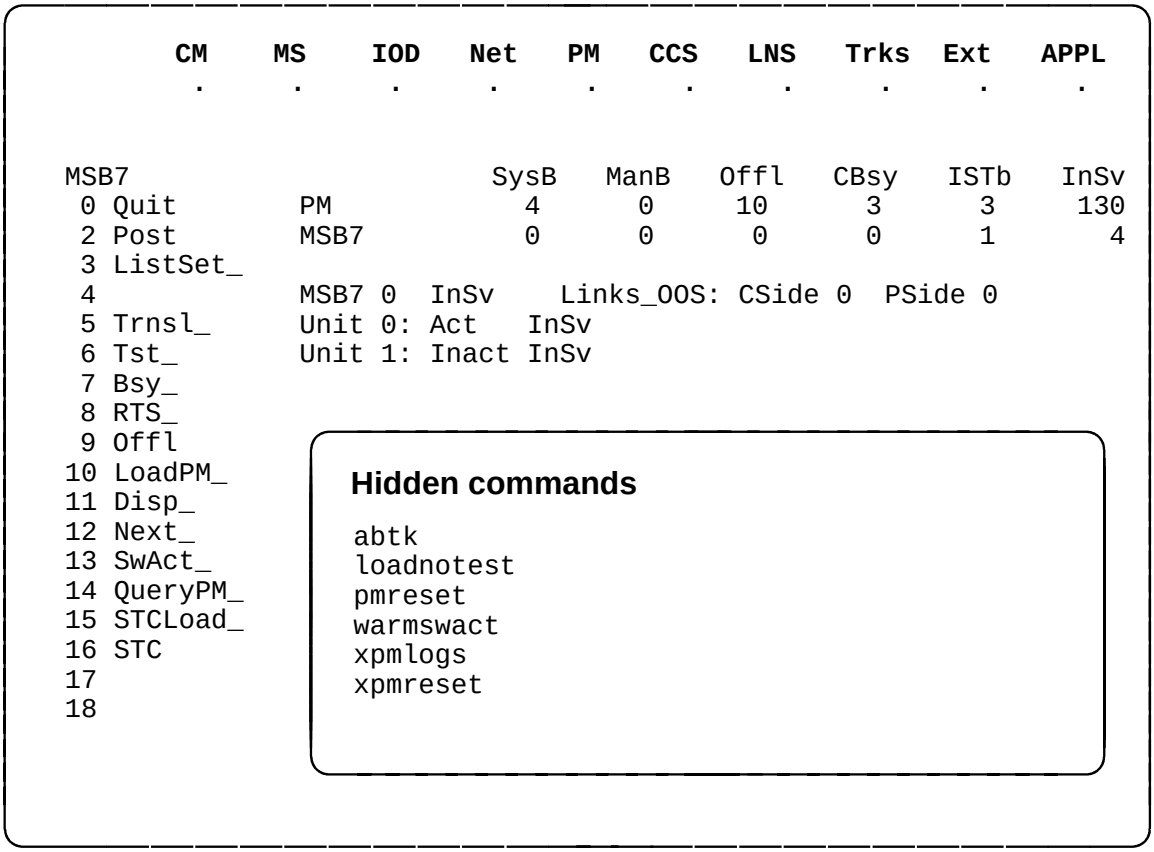
Command	Page
abtk	M-643
bsy	M-645
disp	M-651
listset	M-653
loadnotest	M-655
loadpm	M-659
next	M-675
offl	M-677
pmreset	M-681
post	M-689
querypm	M-693
quit	M-701
rts	M-705

-continued-

MSB7 commands (continued)	
Command	**Page**
stc	M-717
stcload	M-719
swact	M-723
trnsl	M-727
tst	M-729
warmswact	M-739
xbert	M-741
xpmlogs	M-745
xpmreset	M-747
-end-	

MSB7 menu

The following figure shows the MSB7 menu and status display. The insert with hidden commands is not a visible part of the menu display.



MSB7 status codes

The following table describes the status codes for the MSB7 status display.

Status codes MSB7 menu status display		
Code	**Meaning**	**Description**
MSB7 n		
0-4	number	This is the discrimination number of the MSB7.

-continued-

Status codes		**MSB7 menu status display** (continued)
Code	**Meaning**	**Description**
MSB7 status		MSB7 states (see Notes 1: and 2:)
CBsy	Central side busy	PMs connected to the Network are unable to communicate with the CC because the Network or the links used to carry messages between the PM and the P-side of the Network are unavailable. A PM that is connected to the Network by one or more PM is out-of-service because its C-side of the PM or the links of a PM are unavailable.
Idl	Idle	At the STC level, the ST is available in a pool for CCS7 use, but is not connected to a transmission link.
InSv	In service	PMs are in service and available to support any intended process, for example, call processing.
ISTb	In-service trouble	PMs are still in service but flagged by system maintenance because either: ▪ a minor error condition occurred ▪ the PM failed a REX or minor audit test ▪ the load is not listed in the corresponding data table Call processing service is not affected.
ManB	Manually busy	PMs are manually removed from service by command bsy to allow testing and other manual maintenance action.
NEQ	Not equipped	At the STC level, the ST discrimination number (STNO) is not listed in Table STINV.
Offl	Offline	PMs are temporarily made out-of-service.
SysB	System busy	PMs are automatically removed from service by system maintenance.
Links OOS		Links out-of-service (OOS)
c	CSide	This identifies the number of C-side links that are out-of-service.
p	PSide	This identifies the number of P-side links that are out-of-service.
Unit 0 or Unit 1 activity		This identifies the activity of the unit.
Act	Active	This indicates that the unit is active, that is, processing calls, depending on the status.
Inact	Inactive	This indicates that the unit is inactive, that is, not processing calls.

-continued-

Status codes MSB7 menu status display (continued)

Code	Meaning	Description
Unit 0 or Unit 1 status		This identifies the status of the units. Refer to MSB7 status explained previously in this table.
Unit 0 or Unit 1 state		This identifies the maintenance state of the MSB7.
Mtce	Maintenance	This indicates that the unit is in a maintenance testing state.
Loading	Loading	This indicates that the unit has loading in progress. If loading is in progress, the nnnn changes to the increment of kilobits as the loading progresses.

Note 1: When an XPM status is displayed as manually busy (ManB), off-line (Offl), or unequipped (UNEQUIP), the activity display (Active--Act, or Inactive--Inact) remains blank. When the activity state is not displayed, the command strings rts inactive, loadpm inactive, and SwAct are not valid.
Note 2: When an XPM status is displayed as in service (InSv), in-service trouble (ISTb), C-side busy (CBsy), or system busy (SysB), the activity (Act or Inact) is also displayed.

-end-

abtk

Function

Use the abtk command to abort all active maintenance actions on a posted MSB7. The state of the MSB7 remains the same.

abtk command parameters and variables

Command	Parameters and variables
abtk	There are no parameters or variables.

Qualifications

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

- Use the abtk command when using the loadpm command to cancel the entry of a wrong l_name parameter, or when the unit is executing maintenance processes.
- The loadpm command without the nowait parameter "locks" the terminal keyboard so that other commands cannot be entered until the process is completed. The abtk command unlocks the keyboard by cancelling the loading.

Example

The following table provides an example of the abtk command.

Example of the abtk command

Example	Task, response, and explanation
abtk ↵	
	Task:
	Response:
	Explanation:

Responses

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

abtk (end)

Responses for the abtk command

MAP output	Meaning and action
`display`	**Meaning:** This line is deleted from the loadpm display: LoadPM UNIT 1 /Loading 200 The abtk command deletes any part of the display associated with a previous active maintenance command such as: swact, tst, bsy, rts, offl, loadpm. It returns units to previous states The displays for the following commands are unaffected: trnsl, disp, next, querypm. The post command is not cancelled and the previous MSB7 posting is unaffected. **Action:** None
`ABORTING MAINTENANCE ON THIS PM WILL AFFECT MAINTENANCE ON OTHER PMS. PLEASE CONFIRM (“YES” OR “NO”)`	**Meaning:** Aborting a broadcast loading affects the loading of all PMs in the parallel loading of the posted set. **Action:** Entering YES aborts the loading. Groups of XPMs that have already been loaded remain loaded, while the group that has loading in progress retains the current load. Entering NO allows the maintenance action to proceed.

bsy

Function

Use the bsy command to set one or both units of one or all posted MSB7(s) to the manually busy (ManB) state.

bsy command parameters and variables

Command	Parameters and variables				
bsy	active inactive pm unit	*unit_no*	[*wait* nowait]	[*noforce* force]	[all]

Parameters and variables	Description
active	This parameter busies one or all of the units in the active state.
all	This parameter simultaneously busies all of the specified unit(s) or XPMs of the same node type as the XPM in the current position of the posted set. ***Note:*** With parameter all, the larger quantity of MSB7s to be busied concurrently, the longer it takes to complete the busying. Other maintenance activities must wait until completion.
force	This parameter forces the busying to occur even though maintenance actions are already in progress (for example, while it is undergoing REX testing).
inactive	This parameter busies one or all of the units in the inactive state.
noforce	This default parameter indicates the condition when no parameter is entered. Busy will not be forced.
nowait	This parameter enables the MAP to be used for other entries while the busying occurs.
pm	This parameter busies all units of the posted MSB7(s).
unit	This parameter busies one unit of one or all of the posted MSB7(s).
unit_no	This variable specifies which unit of the posted MSB7(s) is to be busied. The range is 0 or 1.
wait	This default parameter indicates default condition when no parameter is not entered. The user must wait until the bsy force command action is confirmed before additional commands can be entered at the MAP.

Qualifications

None

bsy (continued)

Examples

The following table provides an example of the bsy command.

Examples of the bsy command

Example	Task, response, and explanation
bsy pm ↵	
	Task: Busy the posted MSB7.
	Response: `MSB7 0 BSY PASSED`
	Explanation: The system responds with the display indicating that MSB7 0 is ManB.

Responses

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

Responses for the bsy command

MAP output	Meaning and action
`ALL OPTION NOT SUPPORTED FOR LINK PARAMETER`	
	Meaning: The parameter all does not apply to links because they must be busied one at a time.
	Action: To busy a link, use the parameter link without the parameter all.
`MTCE IN PROGRESS`	
	Meaning: The PM or unit cannot be busied while maintenance actions are already in progress. To override (and cancel) the actions, use the parameter force.
	Action: None
`OPERATIONS ON TRUNK CARRIERS MUST BE DONE AT CARRIER LEVEL`	
	Meaning: Links cannot be busied from the MSB7 levels. The command string query busy displays the syntax at the MSB7 levels with the parameters link and link_no, although they are not valid for this PM.
	Action: None

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
OK	**Meaning:** The MSB7 state is ManB. **Action:** None
MSB7 <pm_number> IS MANUAL BUSY NO ACTION TAKEN	**Meaning:** The command bsy is applied to a PM that is already in the ManB state. **Action:** None
MSB7 <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS	**Meaning:** The XPM cannot be busied because it is already undergoing maintenance action. **Action:** With parameter all, the MSB7 is bypassed from the posted set of XPMs only for the duration of the busying.
SUMMARY: <nnn> PASSED <nnn> NOT SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (<nnn>) of XPMs in the posted set that have been successfully busied or that have been bypassed by the busying. **Action:** None

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output **Meaning and action**

```
THIS ACTION WILL TAKE THIS PM AND ALL OF ITS SUBTENDING NODES
OUT-OF-SERVICE AND WILL AFFECT ALL CCIS6 CALLS USING THIS MSB7
PLEASE CONFIRM (“YES” OR “NO”).
```

Meaning: This warning follows the entry of

```
BSY PM
BSY UNIT unit_no
BSY UNIT unit_no FORCE
```

Action: If YES is entered, the response is one of

```
MSB7 n BSY PASSED
MSB7 n BSY FAILED
MSB7 n UNIT n BSY PASSED
MSB7 n UNIT n BSY FAILED
```

where n is 0 or 1 for the discrimination number.

If NO is entered, the response is

```
TASK ABORTED
```

```
MSB6 <pm_number>  This action will take this PM
                  out of service
WARNING:          This is the last MSB7 InSv
                  All CCS7 calls and services on the MSB7 will
                  be affected. If the office is not LPP equipped,
                  a total CCS7 traffic and services outage will occur.
Please confirm (“YES”, “Y”, “NO”, OR “N”)
```

Meaning: This is the response for the bsy command if this is the last InSv or ISTb MSB7 or for the bsy unit command if the other unit is not insv or istb in the last InSv or ISTb MSB7.

Action: Enter yes or y to busy the MSB7 or unit; enter no or n to abort the bsy command.

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action

`MSB7 <pm_number>  This action will take this PM out of service`
`All CCS traffic and services using this MSB7 will be affected.`
 	
`Please confirm (“YES”, “Y”, “NO”, OR “N”)`
	Meaning: This is the response for the bsy command if this is not the last InSv or ISTb MSB7 or for the bsy unit command if the other unit is not insv or istb but not in the last InSv or ISTb MSB7.
	
	Action: Enter yes or y to busy the MSB7 or unit; enter no or n to abort the bsy command.

`THIS OPERATION WILL BE EXECUTED ON <nnn> MSB7` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** A quantity of <nnn> MSB7s in the posted set is to be busied. **Action:** Entering YES busies the XPM(s). The status display of the XPM in the current position of the posted set changes to ManB and the status display for the PM level increments under the header MANB

-end-

disp

Function

Use the disp command to display a list of all MSB7s in a specified PM state.

disp command parameters and variables

Command	Parameters and variables
disp	*pm_state* MSB7

Parameters and variables	Description
pm_state	This variable is one of the state codes identified in the MSB7 status codes table at the beginning of this chapter.
MSB7	This parameter is the PM node-type.

Qualifications

None

Example

The following table provides an example of the disp command.

Examples of the disp command

Example	Task, response, and explanation
disp ↵ *where*	
	Task: **Response:** **Explanation:**

Response

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

disp (end)

Response for the disp command

MAP output	Meaning and action
<pm_state> MSB7: NONE or <pm_state> MSB7 <n>, <n>	**Meaning:** There are no PMs in the specified state, or all in the state are listed, where <pm_state> is one of the codes identified in the MSB7 status codes table at the beginning of this chapter. **Action:** None

listset

Function

Use the listset command to list the discrimination numbers of the PM types that are included in the posted set.

listset command parameters and variables

Command	Parameters and variables
listset	all *pm_type*

Parameters and variables	Description
all	This parameter lists all of the PM types that are in the posted set and includes their discrimination numbers.
pm_type	This variable specifies the type of PM in the posted set that is to be listed with all of its discrimination numbers.

Qualifications

The listset command is qualified by the following:

- Entering the listet command without a parameter lists the PMs of the same type as the PM in the current position of the posted.
- Use the listset command to plan maintenance actions on sets of XPMs of the same type.
- Entering the command string help listset to display the syntax of the command at the MAP shows all of the PM types that use the listset command, however, the ability to use the command depends on the PMs included in the office configuration.

Examples

The following table provides an example of the listset command.

listset (end)

Example of the listset command

Example	Task, response, and explanation
listset ↵ *where*	

Task:

Response:

Explanation:

Responses

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

Responses for the listset command

MAP output	Meaning and action

`<pm_number>, <pm_number>, <pm_number> ...`
`  :`
`  :`
`<pm_number>, <pm_number>, <pm_number> ...`
	Meaning: The discrimination numbers of all of the PM types in the posted set are listed. The list varies according to office configuraiton.
	Action: None

`NO PMS FOUND`	**Meaning:** The posted set of XPMs is empty. **Action:** None
`NO PMS OF SPECIFIED PM TYPE FOUND`	**Meaning:** The posted set does not contain XPMs of the specified type. **Action:** None

loadnotest

Function

Use the loadnotest command to load the whole MSB7 the same as the loadpm command, but without the ROM test.

loadnotest command parameters and variables

Command	Parameters and variables
loadnotest	pm unit *unit_no* [mate] [cc / full / data / exec] [*wait* / nowait]

Parameters and variables	Description
cc	This parameter specifies that the source of the load data is to be the DMS-100 CC data store.
data	This parameter selects the DATA load mode which consists of the static data and execs but not the basic PM software.
exec	This parameter is the name of the CC data file for the posted MSB. Load names are listed in data Table LTCINV field LOAD.
full	This parameter selects the full load mode which consists of the basic PM software, plus the execs and static data in the CC
mate	This parameter specifies that the source of the data to be loaded is to be the mate unit of the posted LCM, instead of the CC load file. The mate command refers only to loading LCM.
nowait	This parameter allows another MSB to be posted and loaded without waiting for confirmation from the previous load request. The nowait command also enables the MAP to be used for other entries while loading proceeds. LOADPM error messages are generated in PM logs.
pm	This parameter loads both units of the posted PM.
unit	This parameter loads one unit of the MSB7.
unit_no	This variable specifies which unit of the posted PM is to be loaded. The range is 0 or 1.
wait	This default parameter indicates the default condition when no parameter is entered. The user must wait until the loadnotest command action is confirmed before additional commands can be entered at the MAP.

loadnotest (continued)

Qualifications

None

Example

The following table provides an example the loadnotest command.

Example of the loadnotest command

Example	Task, response, and explanation
loadnotest ↵ *where*	**Task:** **Response:** **Explanation:**

Responses

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

Responses for the loadnotest command

MAP output	Meaning and action
`LOAD FILE NOT IN THE DIRECTORY`	**Meaning:** The system cannot find the location of the load file. It resides on tape or disk. Use the nonmenu listvol command to list the disk volume. Use the nonmenu mount command to mount the tape that has the load file on it. **Action:** None
`MSB7 <n> UNIT <n> LOADPM PASSED`	**Meaning:** Execution of the command is confirmed, where <n> echoes the specified MSB7 and UNIT, and the PM is (re) loaded. **Action:** None

-continued-

loadnotest (end)

Responses for the loadnotest command (continued)

MAP output	Meaning and action
`REQUEST INVALID` `MSB7 <n> UNIT <n> IS <status>`	**Meaning:** The specified MSB7 or unit must be ManB, where the <status> is any state but ManB as listed in MSB7 status codes table at the beginning of this chapter. **Action:** None

-end-

loadpm

Function

Use the loadpm command to load the peripheral program files into the processor of one or all of the posted MSB7s. The MSB7s must be in the ManB state before entering the loadpm command.

loadpm command parameters and variables

Command	Parameters and variables
loadpm	inactive / pm / unit *u* [cc / full / data / exec] [*l_name*] [*noforce* / force] (1) (2) (3)
loadpm (continued)	(1) [*wait* / (2) nowait / (3) all *r_name*] (end)

Parameters and variables	Description
all	This parameter simultaneously loads all of the specified unit(s) or XPMs of the same node type as the XPM in the current position of the posted set. ***Note:*** With parameter all, the larger the quantity of MSB7s to be loaded concurrently, the longer it takes to complete the loading. Other maintenance activities must wait until completion.
cc	This parameter specifies that the source of the load is to be the DMS-100 CC data store. The CC parameter is the default if no load source is entered.
data	This parameter selects the load mode which consists of the static data and execs but not the basic MSB7 software.
exec	This parameter selects the load mode to be execs only.
force	This parameter bypasses the running of ROM tests while loading occurs.
full	This parameter selects the load mode which consists of the basic MSB7 software, plus the execs and the static data in the CC. The full parameter is the default if no load mode is entered.

-continued-

loadpm (continued)

loadpm command parameters and variables (continued)

Parameters and variables	Description
inactive	This parameter load the unit(s) that are in the inactive state. If specified with parameter all, XPMs with firmware card NT6X45BA or later are loaded by the mate unit. If the status display for the unit's activity is blank, the CC prevents the loading. The action must be done by using explicit parameters. During an upgrade of XPM software, and with parameter all, the inactive units that are to be loaded from their mate units display Broadcast Mate as their maintenance flag.
l_name	This variable is the name of the CC data file for the posted MSB7. Load names are listed in data Table MSBINV field LOAD. The load's file name also appears in the QUERYPM display next to FNAME. By not specifying a load's file name, with parameter all the XPMs are loaded with the file name recorded in the respective XPM inventory tables. More than one load can be used to load more than one PM.
noforce	This default parameter indicates the condition when no parameter is entered. The loadpm will not be forced.
nowait	This parameter allows another MSB7 to be posted and loaded without waiting for confirmation from the previous load request. This allows several MSB7 units to be loaded from the same source. The parameter nowait enables the MAP to be used for other entries while loading proceeds. Error messages from the loadpm command are not updated, but are printed in PM logs.
pm	This parameter loads both units of one or all posted MSB7s.
r_name	This variable is the name of the load that is to replace the load's file name (*l_name*) for those PMs that cannot be loaded by the *l_name* load. Replacement names for such PMs must be listed in data Table LTCINV. The device on which the load resides is specified in Table PMLOADS.
unit	This parameter loads one unit of one or all posted MSB7s.
u	This variable specifies which unit of the posted MSB7s is to be loaded. The range is 0 or 1.
wait	This default parameter indicates the default condition when no parameter is entered. The user must wait until the loadpm force command action is confirmed before additional commands can be entered at the MAP.

-end-

Qualifications

The loadpm command is qualified by the following exception, restrictions and limitations:

- While loading occurs, a series of maintenance flags displays its progress. The status display of the MSB7 in the current position of the posted set shows the maintenance flag Mtce and shows the progression of the loading with the appearance of one at a time combination of:
  - /Reset
  - /Status
  - ROM Test
  - /Loading: nnnnK where nnnn changes according to the increment of kilobits. The rate of appearance of any of these flags depends on the amount of traffic on the switch.
  - Initializing
  - /Static Data
  - Loading: Execs
- To determine the loads for each PM, use the inform nonmenu command.
- After successful loading of the inactive unit, use the rts command. When both units of the MSB7 are InSv, use the command swact to make the newly loaded units active, and the active unit inactive. Then use the loadpm command on the newly inactive unit.
- If the load file name in data Table MSBINV has been changed and the new name does not correspond to the current file in the MSB7, the system makes the MSB7 and respective unit(s) ISTb. STATIC DATA is displayed to indicate that manual maintenance is required for an ODM update. To clear the ISTb, the MSB7 unit(s) must be busied, loaded, and returned to service.
- When using parameter PM, the load file name is taken from the data table, and displayed by the command querypm.
- When the MSB7 is not loaded, the only programs that are present for testing are located in the ROM. If the ROM tests fail, the loadpm command cannot be executed. If the ROM tests already pass, the parameter notest bypasses the ROM tests. The time taken for a ROM test that is already known to succeed is not repeated.
- When loading more than ten units, the action occurs in groups, submitted one after the other. If the broadcast loader or the mate broadcast loader is used, the duration is equivalent to loading one unit. Broadcast loading takes precedence over requests for single unit or single XPM loading.
- To locate a load's file name, use the nonmenu commands dskut and listvol. Load's file names are listed in data Table PMLOADS.

loadpm (continued)

- The failure reasons that prevent PMs in a posted set from being loaded by broadcast loading are described alphabetically as follows:
  - `LOAD NOT RECEIVED FROM BROADCAST LOADER`-The PM through which the load was to be sent has not sent the load. It may be out of service.
  - `NO RESPONSE FROM IPML SETUP MESSAGE`-The XPM has not responded to the IPML set that is required for broadcast loading to occur.
  - `NO RESPONSE FROM NIL EVENT TIMEOUT MESSAGE`-The XPM has not responded to the nil event timeout message.
  - `NO RESPONSE FROM ROM/RAM QUERY MESSAGE`-The XPM has not responded to the ROM and RAM query message.

Examples

The following table provides examples of the loadpm command.

Examples of the loadpm command

Example	Task, response, and explanation
loadpm pm cc ndt26bd all ntd25bc ↵ *where* ndt26bd is the name of the CC data file for the posted MSB7. ntd25bc is the name of the load that is to replace the load's file name	**Task:** **Response:** **Explanation:**
loadpm pm cc ndt26bd all ↵ *where* ndt26bd is the name of the CC data file for the posted MSB7.	**Task:** **Response:** **Explanation:**

-continued-

Examples of the loadpm command (continued)

Example	Task, response, and explanation
loadpm pm cc all ndt25bd ↵ *where* ndt25bd is the name of the load that is to replace the load's file name.	**Task:** **Response:** **Explanation:**
loadpm pm all ↵	**Task:** **Response:** **Explanation:**

-end-

Responses

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

Responses for the loadpm command

MAP output	Meaning and action
`6X45 PEC MISMATCH` `<available_pecs>`	**Meaning:** The loading cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45. **Action:** The equipped PECs of NT6X45 cards are listed, where <available_pecs> is one or more card(s). If a question mark (?) is present instead of a PEC, the PEC can only be obtained by inspecting the appropriate card. Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table MSBINV.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
FAILED TO SEND RESET MESSAGE <card_list>	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not reset. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None
FAILED TO SEND STATUS MESSAGE <card_list>	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`INACTIVE PARAMETER NOT VALID FOR OOS PM`	**Meaning:** The parameter inactive does not apply to out-of-service XPM(s). The XPM(s) must be in service. **Action:** The activity display for the XPM(s) is blank. To load the XPM(s) that are bypassed from the posted set, busy the XPMs with the command bsy and use the command loadpm with the parameter unit or pm.
`LOAD FILE <file_name> NOT FOUND IN SYMBOL TABLE`	**Meaning:** The variable *l_name* or *r_name* is not found in the system's symbol table. The symbol table is a "pseudo-table" for storing data for the duration of a MAP session. It is not a data table and is emptied by a reload or a restart. **Action:** Check for a typo or check data Table LTCINV for the applicable *r_name*. Unless the location of the load file is listed in data Table PMLOADS, list the volume with the load's file name using the nonmenu commands dskut and listvol.
`LOAD FILE NOT IN DIRECTORY`	**Meaning:** The system cannot find the location of the load file. It resides on tape or disk. Use the listvol command to list the disk volume or use the mount command to load the tape that has the load file on it. **Action:** None
`MSB7 <pm_number> UNIT <u> BROADCAST LOAD REQUEST SUBMITTED`	**Meaning:** The PMs in the posted set are being loaded by the broadcast method from the CC, where <pm_number> and unit <u> indicate the MSB7s discrimination numbers. **Action:** None
`MSB7 <pm_number> UNIT <u> BROADCAST MATE LOAD REQUEST SUBMITTED`	**Meaning:** The PMs in the posted set are being loaded by the broadcast method from the mate units, where <pm_number> and unit <u> indicate the MSB7s discrimination numbers. **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
<pm_type> <pm_number> IS <status> NO ACTION TAKEN	**Meaning:** The PM is in the incorrect state for loading, where pm_type is a PM listed in the PM status codes table in the PM MAP level chapter, <pm_number> is the discrimination number of the PM, and <status> is one of ▪ CBSY ▪ INSV ▪ OFFLINE The PM must be ManB. **Action:** None
MSB7 <pm_number> UNIT <u> LOAD FILE <file_name> IS NOT AVAILABLE	**Meaning:** With the parameter all, the PM load's file name has already been identified as being unavailable. Rather than have the system recheck resources for a load that is already unavailable once for a broadcast loading of many XPMs, the system remembers that a response has already stated the reason(s). **Action:** The PM in the posted set is bypassed from the loading.
MSB7 <pm_number> LOAD FILE IN INVENTORY TABLE NOT FOUND ENSURE THAT TABLE PMLOADS IS DATAFILLED CORRECTLY	**Meaning:** The load's file name (parameter *l_name*) is not specified and the file name in the inventory table does not correspond to a valid device in Table PMLOADS. **Action:** The PM in the posted set is bypassed from the loading.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action

`MSB7 <pm_number> UNIT <u> LOADPM FAILED`
`<reason>`
`CAUSED FAILURE OF BROADCAST LOADER`
	Meaning: As a member of the posted set intended for participation with broadcast loading, a PMs failure to be loaded prevents the broadcast loading from occurring. Reasons for the failure are listed in Qualifications.
	
	Action: None of the PMs to be loaded by the broadcast method is loaded. PMs in the posted set are loaded using the single loading method. To allow the broadcast loading to proceed, remove the PM with the failure from the posted set, and try again.

`MSB7 <pm_number> LOADPM FAILED` `LOAD NOT RECEIVED VIA BROADCAST LOADER`	**Meaning:** As a member of the posted set intended for participation with broadcast loading, this PM is not loaded because of a failure in another PM. **Action:** None of the PMs to be loaded by the broadcast method is loaded. PMs in the posted set are loaded using the single loading method. Investigate the cause of the failure to load the PM that is identified by the response CAUSED FAILURE OF BROADCAST LOADER. To proceed with the broadcast loading, remove the failed PM from the posted set and try the loadpm command again.
`MSB7 <pm_number> UNIT <u> LOAD REQUEST SUBMITTED`	**Meaning:** Only the PM in the current position of the posted set is being loaded from the CC. **Action:** None
`MSB7 <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The XPM cannot be loaded because it is already undergoing maintenance action, where <pm_number> is the discrimination number of the MSB7. **Action:** With parameter all, the MSB7 is bypassed from the posted set of XPMs only for the duration of the loading.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`MSB7 <pm_number> NOT SUBMITTED AS INACTIVE UNIT NO LONGER MANB OR ACTIVE UNIT IS NOW OOS`	**Meaning:** As a member of the posted set intended for participation with broadcast loading, the PM is no longer manually busy (ManB state) or the active unit is no longer in service. **Action:** The PM in the posted set is bypassed from the loading.
`MSB7 <pm_number> NOT SUBMITTED AS STATE NO LONGER MANB`	**Meaning:** As a member of the posted set intended for participation with broadcast loading, the PMs units are not both manually busy (ManB state) or the active unit is no longer in service. **Action:** The PM in the posted set is bypassed from the loading.
`<reason>` `NO ACTION TAKEN`	**Meaning:** The command cannot be executed for a reason other than those given in the standard responses. **Action:** None
`NO RESPONSE FROM PM AFTER ROMTEST <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`NO RESPONSE FROM PM AFTER STATUS <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None
`NO RESPONSE FROM ROM/RAM QUERY MESSAGE`	**Meaning:** The loading cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card or because the ROM/RAM query is not replied to. If parameter nowait is specified, this response does not appear. **Action:** The maintenance flag ROM/RAM QUERY appears for the duration or the query. Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table MSBINV.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
NO WAI RECEIVED AFTER RESET <card_list>	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not present. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X46 (FP memory) ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None
PM FAILED TO INITIALIZE TRY RELOADING THE PM	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not initialized. **Action:** Reload the XPM by entering the command pmreset or loadpm at a MAP.
REPLACE CARDS IN CARDLIST: <card_list>	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the loading, where <card_list> is the list of cards. **Action:** Replace the cards. If one of them is a processor card, reload the unit.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`MSB7 <pm_number> UNIT <u> REPLACEMENT NAME MISMATCH WITH INVENTORY TABLE`	**Meaning:** The specified load replacement file name does not match the file name datafilled in the inventory table of this PM. **Action:** The PM in the posted set is bypassed from the loading.
`MSB7 <pm_number> REQUEST INVALID MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an MSB7 in the posted set cannot be loaded because it is not in the manually busy state. **Action:** The PM in the posted set is bypassed from the loading. To proceed with the maintenance, wait until the action on the posted set is completed, then busy the XPM with the command bsy before trying the command loadpm.
`RETRY LAST COMMAND`	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** Reenter the command loadpm.

`SUMMARY`
`<nnn> PASSED`
`<nnn> NOT SUBMITTED`
	Meaning: With parameter all, a summary is given of the quantity (<nnn>) of XPMs in the posted set that have been successfully loaded or that have been bypassed by the loading.
	
	Action: None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`THIS OPERATION WILL BE EXECUTED ON <nnn> MSB7` `PLEASE CONFIRM ("YES" OR "NO"):`	**Meaning:** A quantity of <nnn> MSB7s in the posted set is to be loaded. **Action:** Entering YES loads the MSB7s. The status display of the XPM in the current position of the posted set shows the maintenance flag Mtce and shows the progression of the loading. While loading occurs, a series of maintenance flags displays its progress. The status display of the MSB7 in the current position of the posted set shows the maintenance flag Mtce and shows the progression of the loading with the appearance of one at a time combination of: ▪ /Reset/Status ▪ ROM Test ▪ /Loading: nnnnK where nnnn changes according to the increment of kilobits. The rate of appearance of any of these flags depends on the amount of traffic on the switch. ▪ Initializing ▪ /Static Data ▪ Loading: Execs Entering NO aborts the action.
`TOO MANY CHARACTERS IN REPLACEMENT NAME`	**Meaning:** The parameter *r_name* must be a string of eight characters or less. **Action:** Check for a typo or check data table LTCINV for the applicable *r_name*.
`TOO MANY DIFFERENT LOAD FILES REQUIRED.` `TRY A SMALLER SET OF PMS`	**Meaning:** With the command string loadpm pm all, if the quantity of load's file names in the respective inventory data tables is too large, the loading cannot occur. **Action:** Use the command post to create a posted set with fewer PMs or with PMs that require the same load's file name, and reenter the command.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`UNABLE TO DIAGNOSE FROM MATE` `MTCE NOT ACT/INSV - TRY AGAIN LATER`	**Meaning:** Mate loading is cancelled if the status or the activity of the active unit changes. **Action:** Wait for the changes to complete.
`UNABLE TO DIAGNOSE FROM MATE` `NO RESOURCES - TRY AGAIN LATER`	**Meaning:** Mate loading cannot occur when key software modules are missing from the load. **Action:** Wait for the resources to become available.
`UNABLE TO DIAGNOSE FROM MATE` `MATE MTCE IN PROGRESS - TRY AGAIN LATER`	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, loading from the mate unit cannot occur when maintenance is already in progress on it. **Action:** Wait for the maintenance action(s) to complete.
`WAITING FOR RESOURCES TO BECOME AVAILABLE`	**Meaning:** The system must wait to do maintenance action because the maximum quantity of loading requests has been submitted. **Action:** Wait for the loading to complete or cancel the request with command abtk.

-continued-

loadpm (end)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`WARNING: LOAD FILE <file_name> HAS SAME NAME AS DATAFILLED IN THE INVENTORY TABLE BUT IS NOT ON THE SAME DEVICE AS INDICATED BY TABLE PMLOADS`	**Meaning:** Two load's file names are the same in a PM inventory data table and in Table PMLOADS. The specified file name matches the name in the inventory table, but not the name in Table PMLOADS. **Action:** The PM in the posted set is bypassed from the loading. Check Table PMLOADS for the correct file name.

-end-

next

Function

Use the next command to post the next higher discrimination number of the set of posted MSB7.

next command parameters and variables

Command	Parameters and variables
next	*pm_type*

Parameters and variables	Description
pm_type	This variable enables the system to select one of the PM types listed in the PM status codes table in the PM MAP level chapter. Use the disp command to display the list of PM types in the posted set. The system selects the PMs in the sequence displayed by this list.

Qualifications

None

Example

The following table provides an example of the next command.

Example of the next command

Example	Task, response, and explanation
next ↵ *where*	
	Task: **Response:** **Explanation:**

Response

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

next (end)

Response for the next command

MAP output	Meaning and action
`END OF POST SET`	**Meaning:** The currently displayed PM is the last in the posted set of PM, or if only one PM number has been posted, the disply returns to the next higher menu level. The posted MSB7 number in all diplays increases by one. Also, any other post parameters (such as pm_state) change if they are differenct for the next MSB. **Action:** None

offl

Function

Use the offl command to set one or all MSB7s to the offline state. The units must be ManB.

offl command parameters and variables

Command	Parameters and variables
offl	all

Parameters and variables	Description
all	This parameter simultaneously makes offline all of the specified unit(s) or XPMs of the same node type as the XPM in the current position of the posted set.

Qualifications

None

Example

The following table provides an example of the offl command.

Example of the offl command

Example	Task, response, and explanation
offl ↵ *where*	
	Task: **Response:** **Explanation:**

Responses

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

offl (continued)

Responses for the offl command

MAP output	Meaning and action
OK	**Meaning:** The MSB7 is in the offline state. **Action:** None
<pm_type> <pm_number> IS <status>. NO ACTION TAKEN	**Meaning:** The PM is already offline or is in the incorrect state for being made offline, where <pm_type> is a PM listed in the PM status codes table in the PM MAP level chapter, <pm_number> is the discrimination of the PM, and status is one of ▪ CBSY ▪ OFFLINE ▪ SYSTEM BUSY The PM must be ManB. ***Note:*** For some PM types, REQUEST INVALID appears before NO ACTION TAKEN. **Action:** None
MSB7 <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS	**Meaning:** The XPM cannot be made offline because it is already undergoing maintenance action, where <pm_number> is the discrimination number of the MSB7. **Action:** With parameter all, the MSB7 is bypassed from the posted set of XPMs only for the duration of being made offline.
MSB7 <pm_number> REQUEST INVALID MANUAL ACTION ONLY VALID ON MANB PM	**Meaning:** With parameter all, an MSB7 in the posted set cannot be made offline because it is not in the manually busy state. **Action:** The XPM in the posted set is bypassed from being made offline. To proceed with the maintenance, wait until the action on the posted set is completed, then make the XPM busy with the command bsy before trying the command offl.

-continued-

offl (end)

Responses for the offl command (continued)

MAP output	Meaning and action
SUMMARY: <nnn> PASSED <nnn> SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (<nnn>) of XPMs in the posted set that have been successfully made offline or that have been bypassed by the request. **Action:** None
THIS OPERATION WILL BE EXECUTED ON <nnn> MSB7 PLEASE CONFIRM ("YES" OR "NO"):	**Meaning:** A quantity of <nnn> MSBs in the posted set is to be made offline. **Action:** Entering YES makes the XPM(s) offline. With YES, the status display of the XPM in the current position of the posted set changes to Offl and the status display for the PM level increments under the header OFFL.

-end-

pmreset

Function

Use the pmreset command to reinitialize a posted MSB7 or one of its units after being reloaded. This reset verifies that the reload is correct.

pmreset command parameters and variables

Command	Parameters and variables		
pmreset	pm		[norun]
	unit	*unit_no*	[nodata]

Parameters and variables	Description
nodata	This parameter resets the units after initialization, but without sending data and execs.
norun	This parameter resets the PM without initializing or sending static data and execs.
pm	This parameter reinitializes both units of the posted MSB7.
unit	This parameter reinitializes one unit of the posted PM.
unit_no	This parameter specifies which unit of the posted PM is to be reset. The range is 0 or 1.

Qualifications

None

Example

The following table provides an example of the pmreset command.

Example of the pmreset command

Example	Task, response, and explanation
pmreset ↵ *where*	
	Task: **Response:** **Explanation:**

pmreset (continued)

Responses

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

Responses for the pmreset command

MAP output	Meaning and action
`FAILED TO SEND RESET MESSAGE <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not reset. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None

-continued-

pmreset (continued)

Responses for the pmreset command (continued)

MAP output	Meaning and action
`FAILED TO SEND STATUS MESSAGE <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where card_list is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None
`NO RESPONSE FROM PM`	**Meaning:** If the response occurs for norun before the reset status, there is a hardware fault for transmitting or a fault in the ROM. If the response occurs for nodata during initialization, after these display messages: ▪ /Reset ▪ /Status ▪ /Run ▪ /Initializing the load is not acceptable. **Action:** Use the command loadpm to reload the PM.

-continued-

pmreset (continued)

Responses for the pmreset command (continued)

MAP output	Meaning and action
`NO RESPONSE FROM PM AFTER ROMTEST <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 **Action:** None
`NO RESPONSE FROM PM AFTER STATUS <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None

-continued-

pmreset (continued)

Responses for the pmreset command (continued)

MAP output	Meaning and action
`NO WAI RECEIVED AFTER RESET` `<card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not present. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X46 (FP memory) ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None
`PM FAILED TO INITIALIZE` `TRY RELOADING THE PM`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not initialized. **Action:** Reload the XPM by entering the command pmreset or loadpm at a MAP.

`MSB7 <pm_number> UNIT <n> DETERMINATION OF ESA STATUS FAILED`
`NO REPLY FROM PM`
`REQUEST PROCEEDING`
	Meaning: The CC is unaware that the specified MSB7 is in the ESA mode, where <pm_number> is the discrimination number of the MSB7 and <n> is the MSB7 unit number (0 or 1). The resetting of the MSB7 unit(s) is attempted anyway.
	Action: None

-continued-

pmreset (continued)

Responses for the pmreset command (continued)

MAP output	Meaning and action
REPLACE CARDS IN CARDLIST <card_list>	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the resetting, where <card_list> is the list of cards. **Action:** Replace the cards. If one of them is a processor card, reload the unit.
RETRY LAST COMMAND	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** None
UNABLE TO DIAGNOSE FROM MATE MATE NOT ACT/INSV - TRY AGAIN LATER	**Meaning:** Resetting by the mate test is cancelled if the status or the activity of the active unit changes. **Action:** Wait for the changes to complete.
UNABLE TO DIAGNOSE FROM MATE NO RESOURCES - TRY AGAIN LATER	**Meaning:** Resetting for the mate tests cannot occur when key software modules are missing from the load. **Action:** Wait for the resources to become available.
UNABLE TO DIAGNOSE FROM MATE MATE MTCE IN PROGRESS - TRY AGAIN LATER	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, resetting from the mate unit cannot occur when maintenance is already in progress on it. **Action:** Wait for the maintenance actions(s) to complete.

-continued-

pmreset (end)

Responses for the pmreset command (continued)

MAP output	Meaning and action
UNIT <n> IN ESA MODE THIS ACTION WILL CAUSE ESA EXIT AND ABORT <nnn> CALLS PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** The resetting of an MSB7 equipped with ESA cancels calls, where <nnn> is the current quantity of calls in progress. **Action:** None

-end-

post

Function

Use the post command to select a specific MSB7 upon which action is to be performed by other commands.

post command parameters and variables

Command	Parameters and variables	
post	msb7	*pm_ number*

Parameters and variables	Description
msb6	This parameter identifies the PM node-type to be posted.
pm_number	This variable identifies the discrimination number of the MSB7 housing the units to be posted. The range is 0-4.

Qualification

When entering the command string help post to query the parameters of post, not all of the displayed parameters apply to an office or office network. The applicability of the parameters depends on the types of PMs that are present in the office configuration. For parameters that do not apply, one of several responses indicates that it is ignored.

Example

The following table provides an example of the post command.

post (continued)

Example of the post command

Example	Task, response, and explanation

post 0 ↵
where

0 identifies the discrimination number of the MSB7

Task: Post MSB7 0.

Response:

```
MSB7 0  ISTb  Links OOS: CSide 0  PSide 0
Unit 0: Act    ISTb
Unit 1: Inact  ManB   Mtce
```

Explanation: The system responds with the display indicating that MSB7 0 is in the ISTb state.

Responses

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

Responses for the post command

MAP output	Meaning and action

```
MSB7 <n> <status> LINKS_OOS: CSIDE <c> PSIDE <p>
UNIT 0: <activity> <status>
UNIT 1; <activity> <status> <state>                    /LOADING <nnnn>
```

Meaning: MSB7 status is displayed. Refer to the MSB7 status codes table for an explanation of the display fields.

Action: None

```
<nnn> TERMINALS ARE IN CP BUSY STATE.
DO YOU WISH TO CARRY ON?
PLEASE CONFIRM “YES” OR “NO”:
```

Meaning: The command bsy has been applied to a PM (other than LM) which is performing call processing. Further action may affect calls in process of connection.

Action: None

-continued-

post (end)

Responses for the post command (continued)

MAP output	Meaning and action
NO PM POSTED	**Meaning:** The MSB level is accessed without posting a specific MSB. **Action:** None

-end-

querypm

Function

Use the querypm command to display miscellaneous information about a posted MSB7.

querypm command parameters and variables

Command	Parameters and variables
querypm	cntrs flt

Parameters and variables	Description
cntrs	This parameter displays the contents of the MSB7 maintenance counters.
flt	This parameter displays the reasons of fault conditions on the two units of the posted MSB7.

Qualifications

The querypm command is qualified by the following exception, restrictions and limitations:

- The fault conditions are as follows:
  - Activity Dropped-A system-generated SwAct occurs as a result of a fault detected in the active unit. The newly inactive unit is made SysB.
  - Audit-The internal state of the active or inactive unit is incorrect. The active unit internal state should be RUNNING, inactive unit state should be READY. Fault indications are BUSY, RESTART, or SYNCING. If a minor fault is detected, the unit or PM is made ISTb; if the fault affects the hardware, the unit or PM is made SysB. Audits occur once a minute.
  - CS Links-The C-side links have failed the periodic link test (once per minute).
  - Distributed Data Mismatch-The MISMA TCH means the data in the MSB7 and in the CC do not match, therefore the MSB7 state is changed to in-service trouble (ISTb).
  - Inactive Unit Failure-A fault is detected in the inactive unit. It must be made SysB before using SwAct.
  - IPML Messaging Failure-MSB maintenance actions are reported to the IPML maintenance system.
  - Loader Messages-The reception of load records is acknowledged and the progress of the operation is updated in the CC.

querypm (continued)

- Restart-A CC restart has occurred. RTS is attempted during restarted.
- REX Failed-The unit failed the manual or scheduled REX test.
- Test Failed-The unit failed tests initiated by commands tst or rts.
- Unsolicited Message-Log PM198 is generated whenever an unsolicited message is received from the STC with a fault condition. If more than 50 unsolicited messages occur for one STC in 1 minute, the STC is made SysB.

- The maintenance counters (CNTRS) record the number of times that each FLT condition occurs.

Example

The following table provides an example of the querypm command.

Example of the querypm command

Example	Task, response, and explanation
querypm flt ↵	

Task: Display information on the fault conditions for the two units of MSB7 1.

Response:

```
QUERYPM FLT
   Unit-0: Data not up to date
   Unit-1: Reset
  PM Type: MSB7 PM No.:              Node No.:
FNAME:          LDR.FLAG:         CHKSUM       WAI:
PMS EQUIPPED:      PM INT.#:
  Site Flr RPos Bay_Id  Shf Description Slot EqPEC
  HOST  0  C02   MS6E004  65  MSB7  1        6X07AA
```

Explanation: The system responds by displaying information on both units of the MSB7. The reasons for the faults conditions are as follows:

- Unit 0 is ISTb since its data is not up to date because of a failure to reload following an RTS. The unit is still in service.
- Unit 1 is SysB because an error has occurred on DS30 network link to that unit, and the unit is awaiting a reset by the maintenance system.

Responses

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

querypm (continued)

Responses for the querypm command

MAP output **Meaning and action**

```
QUERYPM
PM TYPE: <type> PM NO.: <nnn> PM INT.#: <n>  NODE_NO.: <nnnn>
PMS EQUIPPED: <xxx> LOADNAME: <l_name>
WARM SWACT IS SUPPORTED
<type> <nnn> IS INCLUDED IN THE REX SCHEDULE.
LAST REX DATE WAS <day> <mmdd> AT <hh.mm>;<result>
<status_info>
NODE STATUS:{OK, FALSE}
UNIT 0 STATUS:{<status>, FALSE}
UNIT 1 STATUS:{<status>, FALSE}
STATE FLR RPOS BAY_ID SHF DESCRIPTION SHF DESCRIPTION SLOT EQPEC
<card_list>
```

Meaning: PM information is displayed, where:

<type> is a PM type as listed in the PM status codes table in the PM MAP level chapter

<nnn> IS 0-127 for the discrimination number of the PM type.

<n> is a software internal number.

<nnnn> is 0-2047 for the PM node number of PM number nnn.

<xxx> is the quantity of equipped PM for the PM type.

<l_name> is the name of the load file for the PM type.

<status_info> is a reason for the status of a unit or node , where status_info can be:

`6X45 PEC MISMATCH BETWEEN INVENTORY TABLE & PM`

The MISMATCH means the datafilled entry in the inventory table does not match the PEC of the NT6X45 card. Check the PECs of the NT6X45 cards in use by entering the querypm command or by inspecting the card and ensure that the PEC with the lowest suffix is the one datafilled in Table MSBINV.

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output	Meaning and action
	`NOT LOADED SINCE POWER UP` The LGC, RCC, or MSB has not been loaded with software after having been powered up. The fault query of the NT6X45 card indicates the need for a load. The system tries to auto-load the units before a return to service. If auto-loading fails, the XPM must be manually busied and loaded (by the commands bsy and loadpm respectively). <day> is an abbreviation for the day, for example, MON for Monday <mmdd> is an abbreviation for the month and includes the date of the day, for example, SEP07 for September 7. <hh.mm> is the time in hours and minutes that the REX test occurred. <result> is the result of the last REX test (PASSED or FAILED) <status> is one of the MSB7 status codes listed in the MSB7 status codes table at the beginning of this chapter. SITE begins the header string which identifies the location of a circuit according to the standard scheme. The display contains standard circuit information under the heading EqPEC identifying the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. <card_list> is the list of potentially faulty cards. **Action:** None
`<unit_no>: LOAD FAILED`	**Meaning:** Test the unit and try to reload. If the load still fails, replace the appropriate card(s). Refer to the appropriate card removal procedures. **Action:** None
`<unit_no>: NO FAULT EXISTS`	**Meaning:** The unit may undergo maintenance actions. **Action:** None

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output	Meaning and action
SYSTEM BUSY REASON: HARD PARITY FAULT WAS DETECTED	**Meaning:** The XPM unit was put to OOS state because of a hard parity fault. Perform a ROM diagnostic to locate the faulty memory card. Replace the appropriate memory card, reload and RTS the faulty unit. Continue monitoring for reoccurrence. **Action:** None
SYSTEM BUSY REASON: SOFT PARITY FAULT WAS DETECTED IN <ps_ds>	**Meaning:** The XPM unit was put to OOS state because of the detection of a soft parity fault in either program store or data store in MP, SP, EP, or FP memory. Depending on where the soft parity fault is detected, the system attempts different action. If it is a soft fault in program store, the system will reload and RTS the faulty unit. If it is a soft fault in data store, the system will RTS the faulty unit with new static data and execs. **Action:** None
SYSTEM BUSY REASON: INTERMITTENT PARITY FAULT WAS DETECTED	**Meaning:** The XPM unit was put to OOS state because of the detection of an intermittent fault in MP, SP, EP, or FP memory. The system will RTS the faulty unit with new static data. **Action:** None
THE FOLLOWING INSERVICE TROUBLES EXIST: INTERMITTENT PARITY FAULT WAS DETECTED IN <xx> MEMORY	**Meaning:** The XPM unit went ISTb because of the detection of an intermittent fault in MP, SP, or FP memory, where <xx> indicates what processor contains the faulty memory. Busy and RTS the faulty unit. Continue monitoring for recurrence. **Action:** None

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output	Meaning and action
`THE FOLLOWING INSERVICE TROUBLES EXIST:` `HARD PARITY FAULT WAS DETECTED IN <xx> MEMORY`	**Meaning:** The XPM unit went ISTb because of the detection of an hard parity fault in MP, SP, FP, or EP memory, where <xx> indicates what processor contains the faulty memory. Busy the faulty unit. Perform a ROM diagnostic to locate the faulty memory card. Replace the appropriate memory card, reload and RTS the faulty unit. Continue monitoring for recurrence. **Action:** None
`THE FOLLOWING INSERVICE TROUBLES EXIST:` `SOFT PARITY FAULT WAS DETECTED IN <ps_ds> OF <xx> MEMORY`	**Meaning:** The XPM unit went ISTb because of the detection of a soft parity fault in program store of MP, SP, FP, or EP memory, where <xx> indicates what processor contains the faulty memory. If it is a parity fault in program store, busy the faulty unit. Then load and RTS the faulty unit. If it is a parity fault in data store, busy and RTS the faulty unit. **Action:** None

-continued-

querypm (end)

Responses for the querypm command (continued)

MAP output **Meaning and action**

```
QUERYPM CNTRS
UNSOLICITED MSG LIMIT = <ttt>, UNIT 0 = <nnn>, UNIT 1 = <nnn>
UNIT 0
   <count_info>
UNIT 1
   <count_info>
MP: <available_pec> SP: <available_pec>
```

Meaning: PM counter information is displayed, where:

<ttt> is the threshold limit for the number of unsolicited messages from the CC. If the threshold is reached, the PM may cancel calls in progress.

<nnn> is the number of unsolicited messages that have accumulated for each unit.

<count_info> is one of

`RAM LOAD: l_name1`
`ROM LOAD: l_name2`
or
`FAILED TO READ COUNTER`
or
`nnn`
where

l_name1 is the name of the load file for the unit

l_name 2 is the firmware load file in the PM

nnn is the count. The counters cannot be read because the respective unit is out-of-service.

<available_pec> for an in-service unit, is a list of the available PECs of the equipped NT6X45 cards. MP indicates the master processor card, while SP indicates the signaling processor card. If a question mark (?) is present instead of a PEC, the PEC can only be obtained by inspecting the appropriate card.

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 all *incrname* *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 MSB7 level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The MSB7 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 MSB7 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 MSB7 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 MSB7 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 MSB7 level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

rts

Function

Use the rts command to return to service one or both units of one or all posted MSB7s. The state must be ManB or SysB.

rts command parameters and variables

Command	Parameters and variables				
rts	link	*ps_link*	[*noforce* / force]	[*wait* / nowait]	
	active				
	inactive				
	pm				
	unit	*unit_no*			[all]
	sysb				

Parameters and variables	Description
active	This parameter returns to service one or all of the units in the active state.
all	This parameter returns to service all posted PMs, regardless of the status of the posted set.
force	This parameter overrides all other commands that may be in effect on a unit. It forces one or both units of the posted MSB7 to the InSv state, even if a test is in effect on one unit. TST is overridden and the test aborted. It requires confirmation YES or NO before execution.
inactive	This parameter returns to service one or all of the units in the inactive state.
link	This parameter returns to service one specified P-side link between the posted MSB7 and one of its associated STCs.
noforce	This default parameter indicates the condition when no parameter is entered. The rts command will not be forced.
nowait	This parameter enables the MAP to be used for other entries while testing for a return to service occurs.
pm	This parameter returns to service both units of one or all posted MSB7s.
ps_link	This variable specifies which P-link is to be returned to service. The range is 0-19.
sysb	This parameter returns all posted system busy PMs to service.

-continued-

rts (continued)

rts command parameters and variables (continued)

Parameters and variables	Description
unit	This parameter returns to service one unit of one or all posted MSB7s.
unit_no	This variable specifies which unit of the posted MSB7(s) is to be returned to service. The range is 0 or 1.
wait	This default parameter indicates the default condition when no parameter is entered. The user must wait until the rts force command action is confirmed before additional commands can be entered at the MAP.

-end-

Qualifications

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

- If the MSB7 is ManB and the C-side message links to the MSB7 are SysB or ManB, then the MSB7 is made CBsy. The rts command is executed without testing.
- While the status of one PM is displayed, the responses indicate the test initiations and results for the other PMs of the posted set. The discrimination number of the displayed PM does not change while the status for others is shown for the units.
- As PMs are returned to service, the PM status display decrements under the header ManB and increments under ISTb or InSv. If the return to service fails, the header ManB decrements and either header CBsy or SysB increments by one for each posted PM.
- While PMs are tested and returned to service, the status display of the posted PM in the control position changes. It is shown by the maintenance flag (Mtce) beside the unit's status, and by the progression of the tests beside the header RG. Tests occur to one unit at a time, and progression is shown in sequence by the following:
  - Initializing
  - Reset
  - Status
  - Run
  - Reset
  - Run

Examples

The following table provides an example of the rts command.

Examples of the rts command

Example	Task, response, and explanation
rts ↵ *where*	**Task:** **Response:** **Explanation:**

Responses

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

Responses for the rts command

MAP output	Meaning and action
`6X45 PEC MISMATCH` `<available_pec>`	**Meaning:** The return to service cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card. If parameter nowait is entered, this response does not appear. **Action:** While the table query is occurring, the maintenance flag ROM/RAM QUERY is displayed. The available PECs of NT6X45 cards are listed, where available_pecs is one or more card(s). If a question mark (?) is present instead a a PEC, the PEC can only be obtained by inspecting the appropriate card. Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table MSBINV.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
ALL OPTION NOT SUPPORTED FOR LINK PARAMETER	**Meaning:** The parameter all does not apply to links because they must be busied one at a time **Action:** To busy a link, use the parameter link without all.
/CLEAR DATA	**Meaning:** With feature package NTX270, MSB7 does not undergo the second restart for command rts that other XPMs undergo. Therefore, the resetting of the Static Data occurs before the initial restart, and the system confirms that the Static Data is reset (cleared). **Action:** None
/DISTRIBUTED DATA	**Meaning:** With feature package NTX041, at least one MSB7 is being loaded while the command rts is in progress. The loading is required because of a mismatch of data between the MSB7 and the Central Control (CC). **Action:** Depending on the result of the loading, a log is generated. For the description of the DDM logs, see Distributed Data Management for DTC and MSB7 on page 30.
FAILED TO OPEN LINK	**Meaning:** The MSB7 or unit fails the return to service tests. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`FAILED TO SEND RESET MESSAGE <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not reset. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None
`FAILED TO SEND STATUS MESSAGE <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`INACTIVE PARAMETER NOT VALID FOR OOS PM`	**Meaning:** The parameter INACTIVE does not apply to out-of-service XPMs. The XPM(s) but be in service. **Action:** None
`MSB7 <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The XPM cannot be returned to service because it is already undergoing maintenance action, where <pm_number> is the discrimination number of the MSB7. **Action:** With parameter all, the MSB7 is bypassed from the posted set of XPMs only for the duration of the return to service.
`MSB7 <pm_number> REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an MSB7 in the posted set cannot be returned to service because it is not in the manually busy state. **Action:** The XPM in the posted set is bypassed by the return to service. To proceed with the maintenance, wait until the action on the posted set is completed, then busy the XPM with the command bsy before trying the command rts.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action

`MSB7 <pm_number> RTS PASSED`
`or`
`MSB7 <pm_number> UNIT <u> RTS PASSED`
	Meaning: The MSB7 is returned to service, where the <pm_number> and <u> echo the MSB7 or unit number respectively. While the tests are occurring, various stages are indicated one at a time by the display of the following sequence of headers.
	▪ Initializing
	▪ Static Data
	▪ Testing All
	▪ Tested CSM
	▪ Tested MSG
	▪ nitializing
	After the response indicates PASSED, the state of the active unit changes to InSv, and the state of the inactive unit changes from ManB to ISTb. When the inactive unit becomes synchronized with the active unit, the state changes from ISTb to InSv.
	Action: None

`MSB7 <pm_number> UNIT <u> RTS FAILED` `CHECK FOR POSSIBLE LOGS`	**Meaning:** With the parameter force, failing the RTS may indicate a hardware problem, where the <pm_number> and <u> echo the specified MSB7 or unit respectively. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`NO RESPONSE FROM PM AFTER ROMTEST <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 **Action:** None
`NO RESPONSE FROM PM AFTER STATUS <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
NO RESPONSE FROM ROM/RAM QUERY MESSAGE	**Meaning:** The return to service cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card or because the ROM/RAM query is not replied to. If parameter nowait is specified, this response does not appear. **Action:** The maintenance flag ROM/RAM QUERY appears while the load is being queried. Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table MSBINV.
NO WAI RECEIVED AFTER RESET <card_list>	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not present. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X46 (FP memory) ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None
OK	**Meaning:** The test passes and the PM is returned to service. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`OSVCE TEST INITIATED`	**Meaning:** Out-of-service testing is being performed on the posted PM which is in the ManB or SysB state. **Action:** None
`PM FAILED TO INITIALIZE` `TRY RELOADING THE PM`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not initialized. **Action:** Reload the XPM by entering the command pmreset or loadpm at at MAP.
`PM OFFLINE` `NO ACTION TAKEN`	**Meaning:** The PM to which the MSB7 is connected is offline, and testing cannot occur on the MSB7 until the PM is returned to service. **Action:** None
`<pm_type> <pm_number> IS <status>.` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for returning to service, where <pm_type> is a PM listed in the PM status codes table in the PM MAP level chapter, <pm_number> is the discrimination number of the PM, and <status> is one of ▪ CBSY ▪ INSV ▪ OFFLINE The PM must be ManB or SysB. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
REPLACE CARDS IN CARDLIST <card_list>	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the return to service, where <card_list> is the list of cards. **Action:** Replace the cards. If one of them is a processor card, reload the unit.
RETRY LAST COMMAND	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** Reenter the rts command.
RTS FAILED TRY THE RTS COMMAND ON ONE UNIT	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because both units are ManB or a card is pulled. The unit(s) must be reloaded. **Action:** Use the rts command to reload the static data into the unit(s).
TEST FAILED SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC <card_list>	**Meaning:** Results of tests are displayed using the standard circuit display. The display contains standard circuit information under the heading EqPEC identifying the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. **Action:** None
UNABLE TO DIAGNOSE FROM MATE MATE NOT ACT/INSV - TRY AGAIN LATER	**Meaning:** The unit cannot be returned to service if the status or the activity of the active unit changes. **Action:** Wait for the changes to complete.

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
UNABLE TO DIAGNOSE FROM MATE NO RESOURCES - TRY AGAIN LATER	**Meaning:** A return to service cannot occur when key software modules are missing from the load. **Action:** Wait for the resources to become available.
UNABLE TO DIAGNOSE FROM MATE MATE MTCE IN PROGRESS - TRY AGAIN LATER	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, testing from the mate unit cannot occur when maintenance is already in progress on it. **Action:** Wait for the maintenance action(s) to complete.
WARNING UNIT <u> MAY NOT HAVE A VALID LOAD	**Meaning:** A unit of MSB7 has undergone the ROM tests, where <u> is 0 or 1. The RAM load is erased. **Action:** Reload the unit(s) using the command loadpm.

-end-

Function

Use the stc command to cause the MSB7 level to change to the STC level.

stc command parameters and variables

Command	Parameters and variables
stc	There are no parameters or variable.

Qualification

The stc command applies to a posted MSB7.

Examples

The following table provides an examples of the stc command.

Examples of the stc command

Example	Task, response, and explanation	
stc ↵		
	Task:	After posting MSB7 1, access the STC level.
	Response:	`STC 0 0 0 0 0 6`
	Explanation:	The display indicates that there are six STCs in MSB7 1 and all are in the InSv state.
stc ↵		
	Task:	At the STC level, STC 5 has been posted.
	Response:	`STC 5 STCM 1 Ctrl 6 InSv P nn`
	Explanation:	The associated controller circuit is located in STCM1, Ctrl 6, and is in the InSv state. ***See STC Maintenance Tests on page 551 for details of the significance of the identification scheme used in the STC displays.***

Responses

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

stc (end)

Responses for the stc command

MAP output	Meaning and action
`display`	**Meaning:** The STC menu appears. Refer to the STC MAP level chapter. **Action:** None

stcload

Function

Use the stcload command to load the STC data from the CC data file into the STC section of the data memory, in one or both units of the posted MSB. It can also delete or query the STC load stored in the MSB.

stcload command parameters and variables

Command	Parameters and variables				
stcload	pm		delete	*l_name*	
	unit	*unit_no*	add	*l_name*	nowait
			ql		

Parameters and variables	Description
add	This parameter loads STC data into the unit(s) of the posted MSB7.
delete	This parameter erases existing STC data from the unit(s) of the posted MSB7.
l_name	This variable is the name of the CC load file for the STC associated with the posted MSB7. Load names are listed in data Table STINV.
nowait	This parameter allows the MAP to be used for other entries while loading proceeds, without waiting for confirmation that the load has been completed. If the nowait command is omitted, the user cannot enter other commands until the confirmation is displayed.
pm	This parameter loads both units of the posted MSB7.
ql	This parameter queries the load and displays the STC load file name currently stored in the unit(s) of the posted MSB7.
unit	This parameter loads one unit of the posted MSB7.
unit_no	This variable specifies which unit of the posted MSB7 is to be loaded with STC data. The range is 0 or 1.

Qualification

Once the stcload command is successfully executed, the STC data is included thereafter as part of the MSB7 static data. When the loadpm command is used at the STC level with parameter msb or when the rts command is used, the data loaded in the MSB7 by command stcload becomes the source for loading the STC.

Example

The following table provides an example of the stcload command.

stcload (continued)

Example of the stcload command

Example	Task, response, and explanation
stcload ↵ *where*	

Task:

Response:

Explanation:

Responses

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

Responses for the stcload command

MAP output	Meaning and action
`MSB7 <pm_number> UNIT 0 DOES NOT CONTAIN ANY STC LOADS` `MSB7 <pm_number> UNIT 1 DOES NOT CONTAIN ANY STC LOADS`	**Meaning:** The command string stcload pm ql has been entered. It is recommended that the STC load(s) be queried before adding or deleting a load. An MSB7 has been posted, where <pm_number> is the discrimination number. **Action:** None

-continued-

stcload (end)

Responses for the stcload command (continued)

MAP output	Meaning and action
`MSB7 <pm_number> UNIT <u> CONTAINS STC LOAD <l_name> <status>`	**Meaning:** The command string stcload unit *unit_no* ql has been entered. The STC load has actually been added to an MSB7 unit, where <pm_number> is the MSB discrimination number <u> is 0 or 1 <l_name> is the name of the load that was loaded <status> is the status of the load If parameter nowait has been used, check if the command has passed. The value for status is either OK or LOADING. If OK appears, a load may be done; if LOADING appears and the nowait command was not executed, the loading must complete before the MAP is "freed." **Action:** None

`REQUEST SUBMITTED`
`MSB7 <pm_number> UNIT <u> PASSED`
`STC LOAD <l_name> ADDED TO MSB7 <pm_number> UNIT <u>`
	Meaning: Command string stcload unit *unit_no* add *l_name*, has been entered. REQUEST SUBMITTED indicates that the specified load name is retrieved from the CC and checked. When verified, PASSED appears and finally ADDED, which indicates that loading has been completed. Until this session is complete, no further commands can be entered. If the parameter nowait is entered after parameter add and variable *l_name*, other commands can be used immediately, but the foregoing displays do not appear.
	
	Action: None

`STC LOAD <l_name> DELETED FROM MSB7 <pm_number> UNIT <u>`	**Meaning:** Command string stcload unit *unit_no* delete, has been entered and indicates that the specified STC load name is deleted from one unit of the posted MSB7. This could be verified by using the parameter ql, as previously explained. **Action:** None

-end-

swact

Function

Use the swact command to switch the activity of the posted MSB7(s) from whichever unit is currently active (unit 0 or unit 1) to the inactive unit. The units 0 and 1 must be InSv or ManB.

swact command parameters and variables

Command	Parameters and variables
swact	all test

Parameters and variables	Description
all	This parameter simultaneously switches the activities of all XPMs of the same node type as the XPM in the current position of the posted set.
test	This parameter causes a newly inactive unit to go through an RTS with full OOS diagnostics.

Qualifications

The swact command is qualified by the following exception, restrictions and limitations:

- If the MSB7 is not ManB, confirmation YES or NO is required. If the MSB7 is ManB, no confirmation is required.
- Log PM181 is output when the swact command is executed, identifying the newly-active unit. This log is for information only and no alarm occurs.

Examples

The following table provides an example of the swact command.

swact (continued)

Example of the swact command

Example	Task, response, and explanation
swact ↵ *where*	

Task:

Response:

Explanation:

Responses

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

Responses for the swact command

MAP output	Meaning and action
`A COLD SWACT WILL BE PERFORMED` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** The MSB7 is not ManB and the unlisted menu command warmswact is off. During a cold SwAct, both units are SysB and call processing is lost until the active units is returned to service. A cold SwAct drops all calls. **Action:** If YES is entered the response is: `MSB7 pm_number SWACT PASSED`. The newly-inactive unit becomes SysB and requires an RTS to return it to the ready state. If NO is entered there is no response and the command is aborted.

`A WARM SWACT WILL BE PERFORMED AFTER`
`DATA SYNC OF ACTIVE TERMINALS`
`PLEASE CONFIRM (“YES” OR “NO”):`
	Meaning: The test option invokes a warm SwAct operation in which the newly inactive unit is returned to service with full OOS diagnostic.
	
	Action: The user is prompted to confirm or reject command execution. Entering YES causes the warm SwAct to be carried out. Entering NO aborts the command.

-continued-

swact (continued)

Responses for the swact command (continued)

MAP output	Meaning and action

```
A WARM SWACT WILL BE PERFORMED AFTER
DATA SYNC OF ACTIVE TERMINALS
THE INACTIVE UNIT MAY NOT BE CAPABLE OF GAINING
ACTIVITY.  (PLEASE CHECK LOGS).  DO YOU WISH FOR THE
SWACT TO CONTINUE, REGARDLESS?
PLEASE CONFIRM (“YES” OR “NO”):
```

Meaning: The pre-SwAct audit has determined that the unit should not assume activity and the warm SwAct operation should be terminated.

Action: The user is prompted to confirm or reject command execution. Entering YES causes the warm SwAct to be carried out. Entering NO aborts the command.

```
MSB6 <pm_number>  This action will take this PM
                  out of service
WARNING:          This is the last MSB7 InSv
                  All CCS7 calls and services on the MSB7 will
                  be affected. If the office is not LPP equipped,
                  a total CCS7 traffic and services outage will occur.
Please confirm (“YES”, “Y”, “NO”, OR “N”)
```

Meaning: This is the response for the swact command if a cold swact will be performed and if this is the last InSv or ISTb MSB7.

Action: Enter yes or y to continue the swact; enter no or n to abort the swact command.

```
MSB7 <pm_number>  This action will take this PM
                  out of service
All CCS traffic and services using this MSB7 will be affected.

Please confirm (“YES”, “Y”, “NO”, OR “N”)
```

Meaning: This is the response for the swact command if a cold swact will be performed and if this is not the last InSv or ISTb MSB7.

Action: Enter yes or y to continue the swact; enter no or n to abort the swact command.

-continued-

swact (end)

Responses for the swact command (continued)

MAP output	Meaning and action
`MSB7 <pm_number> A WARM SWACT WILL BE PERFORMED`	**Meaning:** The MSB7 is to have the activity of its units switched, where <pm_number> is the discrimination number. Calls in progress are allowed to complete. **Action:** None
`MSB7 <pm_number> SWACT PASSED`	**Meaning:** The activity of the two MSB7 units is switched, where <pm_number> is the discrimination number of the MSB7. **Action:** For MSB7s a warm SwAct maintains calls in progress. A cold SwAct drops calls.
`REQUEST INVALID` `INACT UNIT MUST BE INSV OR BOTH UNITS MUST BE MANB`	**Meaning:** The units cannot be switched because one or both are in the wrong state. **Action:** None
`SWACT OPERATION NOT VALID ON OOS PM`	**Meaning:** When an XPM is out-of-service (ManB, SysB, CBsy, or Offl), a switch of activity cannot occur. **Action:** The activity display for the XPM(s) is blank.

-end-

trnsl

Function

Use the trnsl command to identify the C-side links of a posted MSB7 and show the status of all links or a specified link to the network or to the STC.

trnsl command parameters and variables

Command	Parameters and variables	
trnsl	c	*link_no*

Parameters and variables	Description
c	This parameter specifies C-side links for the display.
link_no	This variable selects an individual C-side link. The range is 0-31. If *link_no* is not entered, all C-side links are displayed.

Qualifications

None

Example

The following table provides an example of the trnsl command.

Example of the trnsl command

Example	Task, response, and explanation
trnsl c ↵	

Task: After posting MSB7 1, determine the status of the C-side links.

Response:

```
MSB7 1 ISTb Links_OOS: CSide 0 PSide 0
Unit 0: Act  InSv
Unit 1: InAct ManB Mtce     /Loading 0200
LINK 0  NET00  10;CAP:MS;STATUS:OK ;MSGCOND:OPN,Unrestricted
LINK 1  NET10  10;CAP:MS;STATUS:ManB;MSGCOND:CLS,Unrestricted
LINK 2  NET00  11;CAP: S;STATUS:OK
LINK 3  NET10  11;CAP: S;STATUS:OK
LINK 4  NET00  12;CAP:MS;STATUS:OK ;MSGCOND:OPN,Restricted
LINK 5  NET10  12;CAP:MS;STATUS:ManB;MSGCOND:OPN,Restricted
LINK 6  NET00  13;CAP: S;STATUS:OK
LINK 7  NET10  13;CAP: S;STATUS:OK
```

Explanation: The display provides the status of the links.

Responses

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

Responses for the trnsl command

MAP output	Meaning and action
`display`	**Meaning:** The trnsl display is added to the post display. Refer to the "Example of the trnsl command" table for a representative display. **Action:** None
`MSB DOES NOT HAVE P-SIDE LINKS`	**Meaning:** With command string trnsl p there is no display **Action:** None

Function

Use the tst command to test one or both units of one or all posted MSB7s.

tst command parameters and variables

Command	Parameters and variables
tst	pm unit *unit_no* [rom] [all] rex [on / off / query / now]

Parameters and variables	Description
all	This parameter simultaneously tests all of the specified unit(s) or XPMs of the same node type as the XPM in the current position of the posted set. ***Note:*** With parameter all, the larger the quantity of MSBs to be tested concurrently, the longer it takes to complete the testing. Other maintenance activities must wait until completion.
now	This parameter requests immediate activation of REX tests regardless of the test schedule. If maintenance is in progress, testing cannot occur until it is completed.
off	This parameter deactivates the REX tests already in progress, or has no effect if none are in progress.
on	This parameter activates the REX tests, and is the default.
pm	This parameter tests both units of one or all posted MSB7s.
query	This parameter displays the status of the REX tests.
rex	This parameter specifies that REX tests are to be controlled manually.

-continued-

tst (continued)

tst command parameters and variables (continued)

Parameters and variables	Description
rom	This parameter runs the ROM tests on one or all MSB7s or all units. The unit(s) must be manually busied. The test erases the RAM load. Running ROM tests on an inactive unit recognizes the differences between the capabilities of the various NT6X45 cards. ROM tests for the BA version of the NT6X45 card are non-destructive. If the XPM is out of service, then the NT6X45B tests are run before the task level tests are run when parameter ROM is not specified. While the ROM tests are running, the maintenance flag NONDESTR ROMTST is displayed. Log PM181 records when the XPM is at the ROM level of maintenance.
unit	This parameter tests one unit of one or all posted MSB7s.
unit_no	This variable specifies which unit of the posted MSB7s is to be tested. Range is 0 or 1.

-end-

Qualifications

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

- Unit(s) that have been tested by the parameter rom must be manually reloaded by the command loadpm before the unit(s) are returned to service.
- When the warm SwAct is disabled for an XPM, a REX test in progress still allows the commands bsy, tst, and rts to be entered for the inactive unit. However, if the warm SwAct is disabled before the REX test starts, the test cannot be run because the inactive unit is in service. The command string tst rex now cannot be used.

Example

The following table provides an example of the tst command.

Example of the tst command

Example	Task, response, and explanation
tst ↵ *where*	
	Task: **Response:** **Explanation:**

Responses

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

Responses for the tst command

MAP output	Meaning and action
`6X45 PEC MISMATCH` `<available_pec>`	**Meaning:** The tests cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card. **Action:** The equipped PECs of NT6X45 cards are listed, where <available_pecs> is one or more card(s). If a question mark (?) is present instead of a PEC, the PEC can only be obtained by inspecting the appropriate card. Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table MSBINV.
`CS LINK UNAVAILABLE` `MSB7 <pm_number> TST PASSED`	**Meaning:** The C-side links used for messages are both out-of-service, therefore the PM cannot communicate with the CC. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`INSERVICE TESTS INITIATED.` `MSB7 <pm_number> TST PASSED.`	**Meaning:** In-service testing is being done on the posted PM which is in the InSv or ISTb state. PASSED appears when testing is satisfactorily completed. **Action:** None

`LAST REX DATA WAS <day> <mmdd> AT <hh.mm>; <result>`	**Meaning:** With the command string tst rex query, the date of the last REX test is given, where
	<day> is an abbreviation for the day of the week, for example, MON for Monday.
	<mmdd> is an abbreviation for the month and includes the date of the day, for example, SEP07 for September 7.
	<hh.mm> is the time in hours and minutes that the REX test occurred.
	<result> is the result of the last REX test (PASSED or FAILED).
	
	The following response is displayed:
	
	`MSB7 pm_number IS INCLUDED IN THE REX SCHEDULE`
	or
	`MSB7 pm_number IS REMOVED FROM THE REX SCHEDULE`
	
	Action: None

`MSB7 <n> UNIT <u> TST ABORTED`
`OSVCE TESTS INITIATED`
or
`MSB7 <n> UNIT <u> TST FAILED`
`FAILED TO OPEN LINK`
	Meaning: From the command string tst pm, the tests on one MSB7 unit are aborted because the unit is still InSv or the unit is busied and waiting for calls to complete, where
	<n> is the MSB7 discrimination number
	<u> is 0 or 1
	
	The other unit fails the tests. The link opens when the unit passes the tests.
	
	Action: None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
NON DESTRUCTIVE ROM TEST AND OSVCE TESTS WILL BE RUN	**Meaning:** The non-destructive tests occur for both the in-service and out-of-service unit or XPM. **Action:** The maintenance flag NONDESTR ROMTST appears while testing occurs. Log PM181 records when the XPM is at the ROM level of maintenance. Wait for the tests to complete. If the tests fail, check the PECs of the NT6X45 cards in use and ensure that the card with the lowest suffix is the one datafilled in Table MSVINV.
NON-DESTRUCTIVE ROM TEST WILL BE RUN	**Meaning:** The non-destructive tests occur for the in-service unit or PM. **Action:** The maintenance flag NONDESTR ROMTST appears while testing occurs. Wait for the tests to complete. If the tests fail, check the PECs of the NT6X45 cards in use and ensure that the card with the lowest suffix is the one datafilled in Table MSBINV.
NO RESPONSE FROM ROM/RAM QUERY MESSAGE	**Meaning:** The testing cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card or because the ROM/RAM query is not replied to. **Action:** The maintenance flag ROM/RAM query appears while the load is being queried. Log PM181 records when the XPM is at the ROM level of maintenance. Check the PECs of the NT6X45 cards in use and ensure that the card with the lowest suffix is the one datafilled in Table MSBINV.
OK	**Meaning:** The tests pass. **Action:** None
OSVCE TEST INITIATED	**Meaning:** Out-of-service testing is being performed on the posted PM which is in the ManB or SysB state. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`PM IS OFFLINE` `NO ACTION TAKEN`	**Meaning:** The PM to which the MSB7 is connected is offline, and testing cannot occur on the MSB7 until the PM is returned to service. **Action:** None
`MSB7 <pm_number>, CHECKSUM=# <hhh>, AGREES` `OK`	**Meaning:** The test passes. The checksum agreement referred to (AGREES) is between a recent value for the data in the PM and the load-time value as stored in the central control. This confirms that the PM load has not been corrupted. **Action:** None

`MSB7 <pm_number> IS <rex_status>`	**Meaning:** The REX tests are (de)activated or queried, where <rex_status> is either
	
	`INCLUDED IN THE REX SCHEDULE`
	or
	`REMOVED FROM THE REX SCHEDULE`
	
	Action: None

`<pm_type> <pm_number> IS <status>.` `NO ACTION TAKEN`	**Meaning:** The command is not executed because the PM is in the incorrect state for testing, where <status> is; CBSY OFFLINE The PM must be in the ManB state. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`MSB7 <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The XPM cannot be tested because it is already undergoing maintenance action, where <pm_number> is the discrimination number of the MSB7. **Action:** With parameter all, the MSB7 is bypassed from the posted set of XPMs only for the duration of the testing.
`MSB7 <pm_number> REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an MSB7 in the posted set cannot be tested because it is not in the manually busy state. **Action:** The XPM in the posted set is bypassed by the testing. To proceed with the maintenance, wait until the action on the posted set is completed, then make the XPM busy with the command bsy before trying the command tst.
`REPLACE CARDS IN CARDLIST:` `<card_list>`	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the loading, where <card_list> is the list of cards. **Action:** Replace the cards. If one of them is a processor, reload the unit.
`REQUEST INVALID`	**Meaning:** In-service tests occur if the selected PM is in the InSv state, or out-of-service tests occur if it is in the ManB or SysB state. **Action:** None
`RETRY LAST COMMAND`	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** Reenter the tst command.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`REX REQUEST INVALID: MTCE IN PROGRESS`	**Meaning:** A REX test cannot be started on the PM because other maintenance actions are already in progress. **Action:** None

`REX TEST IN PROGRESS`	**Meaning:** A REX test has already been activated. When the test is completed, its status is either:
	
	`REX TEST PASSED`
	or
	`REX TEST reason`
	
	Action: None

`REX TEST PASSED`	**Meaning:** The REX test is successful. **Action:** None
`REX TEST <reason>`	**Meaning:** The REX test failed or is incomplete because of one of these reasons: FAILED - ACHIEVING SUPERFRAME/DATA SYNC FAILED - INACTIVE OOS TESTS FAILED - INACTIVE RTS FAILED - INACTIVE OOS TESTS AFTER SWACT FAILED - INACTIVE RTS AFTER SWACT FAILED - WARM SWACT TERMINATED - AT LEAST ONE UNIT IS ISTB TERMINATED - INACTIVE UNIT IS BSY TERMINATED - OVERLOAD CONDITIONS DETECTED TERMINATED - WARM SWACT IS TURNED OFF **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
SUMMARY: <nnn> PASSED <nnn> NOT SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (<nnn>) of XPMs in the posted set that have been successfully tested or that have been bypassed by the testing. **Action:** None
TEST FAILED SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC <card_list>	**Meaning:** Results of tests are displayed using the standard circuit display. The display contains standard circuit information under the heading EqPEC identifying the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. **Action:** None
TEST RESOURCES IN USE NO ACTION TAKEN	**Meaning:** Test facilities are already temporarily in use for other maintenance purposes. If the test fails, a card list is shown in a standard circuit display. The display contains standard circuit information under the heading EqPEC identifying the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. **Action:** None
THE ROM TEST IS DESTRUCTIVE THE RAM LOAD WILL BE LOST FOR UNIT u PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** The RAM load is erased in the unit(s) because of the ROM test. **Action:** To replace the RAM load the unit(s) must be reloaded by the command loadpm.

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
THIS OPERATION WILL BE EXECUTED ON <nnn> MSB7 PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** A quantity of <nnn> MSB7s in the posted set is to be tested. **Action:** Entering YES tests the MSB7s. The status display of the MSB7 in the current position of the posted set shows the maintenance flag Mtce while testing is in progress. Entering NO aborts the action.
TRY PMRESET	**Meaning:** For XPMs with an NT6X69 messaging card, testing cannot occur because the static data must be reloaded. **Action:** Enter the pmreset command.
UNABLE TO DIAGNOSE FROM MATE MATE NOT ACT/INSV - TRY AGAIN LATER	**Meaning:** Testing by the mate test is cancelled if the status or the activity of the active unit changes. **Action:** Wait for the changes to complete.
UNABLE TO DIAGNOSE FROM MATE NO RESOURCES - TRY AGAIN LATER	**Meaning:** Testing by the mate tests cannot occur when key software modules are missing from the load. **Action:** Wait for the resources to become available.
UNABLE TO DIAGNOSE FROM MATE MATE MTCE IN PROGRESS - TRY AGAIN LATER	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, testing from the mate unit cannot occur when maintenance is already in progress on it. **Action:** Wait for the maintenance action(s) to complete.

-end-

warmswact

Function

Use the warmswact command to switch the activity states of the XPM units of the posted MSB7.

Note: If an attempt to change the warmswact capability is made while a SwAct is in progress, a message will be displayed stating that the attempt is disallowed and no action will be taken.

warmswact command parameters and variables

Command	Parameters and variables
warmswact	on off query [all [noprompt]]

Parameters and variables	Description
all	This parameter includes all XPM units of the posted set.
noprompt	This parameter is used to avoid confirmation requests for each unit affected when command string warmswact on all is entered.
off	This parameter cancels the automatic switching of the activity states of the XPM units.
on	This parameter allows the automatic switching of the activity states of the XPM units.
query	This parameter gives the status of warmswact as on or off.

Qualifications

The warmswact command is qualified by the following:

- When the command string warmswact on is executed, calls in process are maintained when the activity states of the units are switched.
- When the command string warmswact off is executed, calls in process are dropped when the activity states of the units are switched.

Example

The following table provides an example of the warmswact command.

warmswact (end)

Example of the warmswact command	
Example	**Task, response, and explanation**
warmswact ↵ *where*	
	Task:
	Response:
	Explanation:

Response

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

Response for the warmswact command	
MAP output	**Meaning and action**
`WARM SWACT FOR MSB7 <n> UNIT <n> IS <status>`	
	Meaning: If the command swact (menu item 13) is used, a warm SwAct occur, where <n> is the discrimination number of the MSB7 and unit.
	Action: None

xbert

Function

Use the xbert command to access the XBERT monitor of commands in order to allow testing of the XPM bit error ratio of cards for the MSB7. The MSB7 requires feature package NTX885 to access the XBERT level. XBERT tests the MSB and its C-side node independently, however, it does not test the link between the MSB7 and its C-side node.

xbert command parameters and variables

Command	Parameters and variables
xbert	*pm_type* *pm_number*

Parameters and variables	Description
pm_type	This variable identifies the PM type, which in this case is the MSB7.
pm_number	This variable specifies the discrimination number of the PM type. The range is 0-255.

Qualifications

The xbert command is qualified by the following exception, restrictions and limitations:

- XBERT is available in feature package NTX885.
- XBERT can be used only by one MAP user at a time.
- It is recommended that XBERT be used only on an in-service XPM because a larger quantity of bit errors are induced in the XBERT test path when there is heavy traffic on that XPM.
- XBERT can be used on an in-service or out-of-service XPM and is unaffected by other tests.
- The commands that are available when XBERT is accessed are:
  - display
  - initiate
  - help
  - portinfo
  - previous
  - query
  - reset
  - stop

xbert (continued)

Example

The following table provides an example of the xbert command.

Example of the xbert command

Example	Task, response, and explanation
xbert ↵ *where*	**Task:** **Response:** **Explanation:**

Responses

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

Responses for the xbert command

MAP output	Meaning and action
`THIS XBERT COMMAND IS NOT ALLOWED`	**Meaning:** An invalid XBERT command has been tried. **Action:** None
`XBERT LEVEL NOT FOUND`	**Meaning:** The specified XPM does not have a valid load, and is running by its ROM. **Action:** Use the MSB7 unlisted menu command pmreset to reset the XPM, or use the command rts to return it to service.

-continued-

xbert (end)

Responses for the xbert command (continued)

MAP output	Meaning and action
XBERT NOT SUPPORTED BY THIS PM	**Meaning:** The specified PM type is not supported by XBERT. **Action:** None

-end-

xpmlogs

Function

Use the xpmlogs command to enable logs to be generated from the XPM of the MSB7 and reports internal XPM software errors (SWERRS).

xpmlogs command parameters and variables

Command	Parameters and variables
xpmlogs	on off query

Parameters and variables	Description
off	This parameter prevents logs from being printed.
on	This parameter enables logs to be printed.
query	This parameter gives the status of XPM_LOGS as ON or OFF.

Qualification

XPMLOGS is cancelled by a reload or restart by a default setting.

Example

The following table provides an example of the xpmlogs command.

Example of the xpmlogs command

Example	Task, response, and explanation
xpmlogs ↵ *where*	
	Task: **Response:** **Explanation:**

Responses

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

xpmlogs (end)

Responses for the xpmlogs command

MAP output	Meaning and action

`MSB7 <n> UNIT <n> XPMLOGS PASSED`
`or`
`MSB7 <n> UNIT <n> XPMLOGS PASSED`
	Meaning: The response occurs in pairs, one for each MSB7 or MSB7 unit. It applies to either ON or OFF.
	
	Action: None

`LOGS FROM XPM ARE DISABLED`
`or`
`LOGS FROM XPM ARE ENABLED`
	Meaning: The status of XPMLOGS is given. A log is produced when the xpmlogs command is enabled.
	
	Action: None

xpmreset

Function

Use the xpmreset command to to reinitialize a posted MSB7 or one of its units after being reloaded. This reset verifies that the reload is correct.

xpmreset command parameters and variables

Command	Parameters and variables		
xpmreset	pm unit	*unit_no*	[*tstdat* nodata norun]

Parameters and variables	Description
pm	This parameter reinitializes both units of the posted MSB7.
norun	This parameter resets the PM without initializing or sending static data and execs.
unit	This parameter reinitializes one unit of the posted PM.
unit_no	This parameter specifies which unit of the posted PM is to be reset. The range is 0 -1.
nodata	This parameter resets the units after initialization without sending data and execs.
tstdat	This default parameter, which is never entered, resets the units after initialization and sending data and execs, because neither the nodata or norun parameters are entered.

Qualifications

None

xpmreset (end)

Example

The following table provides an example of the xpmreset command.

Examples of the xpmreset command

Example	Task, response, and explanation
xpmreset unit 1 ↵ *where* 1 is the number of the unit to be reset	**Task:** Reset unit 1 of the posted MSB7. **Response:** `MSB7 0 Unit 1  PMReset Passed` **Explanation:** Unit one of the posted MSB7 is successfully reset.

Responses

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

Responses for the xpmreset command

MAP output	Meaning and action
`MSB7 x Unit y  PMReset Passed`	**Meaning:** Indicated unit of MSB7 is reset where ▪ x is the number of the MSB7 ▪ y is the number of the unit **Action:** None
`Request Invalid` `MSB7 x Unit y is InSv`	**Meaning:** MSB6 unit must be manually busy to be reset. **Action:** Busy the unit and reenter the command.

MTD level commands

Use the magnetic tape drive (MTD) level of the MAP to test or change the status of specified MTDs.

Accessing the MTD level

To access the MTD level, enter the following from the CI (Command Interpreter) level:

mapci;mtc;iod;ioc 0;card 2 ↵

In this example, 0 is the input/output controller (IOC) and 2 is the card where the multi-protocol controller (MPC) is connected.

MTD commands

The commands available at the MTD MAP level are described in this chapter. The page number for each command is listed in the following table.

MTD commands

Command	Page
bsy	M-753
fault	M-755
inhibit	M-757
listdev	M-759
offl	M-763
queryproc	M-765
querytape	M-767
quit	M-769
rts	M-773

-continued-

MTD commands (continued)	
Command	**Page**
threshold	M-775
tst	M-777
-end-	

MTD menu

The following figure shows the MTD 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
         .     .     .     .     .     .     .     .     .     .


MTD           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 INHIBIT_       TYPE MTD  CONS DDU  CONS DDU  CONS CONS CONS MTD
11            Card 0 MTD       0
12                   TapeName
13                   Status   Idle
14                   User
15
16
17
18
```

Hidden commands

```
fault                queryproc
querytape            threshold
```

MTD status codes

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

Status codes MTD menu status display		
Code	**Meaning**	**Description**
Status		
CS Bsy	C-side busy	The MTD is central-side (C-side) busy.
Man Bsy	manually busy	The MTD is manually busy.
Sys Bsy	system busy	The MTD is system busy.
Idle	idle	The MTD is idle.
Mt	mounted	The tape is mounted. The system also displays the tape volume number.

Common responses

The following table provides explanations of the common responses to the MTD commands. This responses will be produced by many of the commands under the MTD level.

Common responses for the MTD commands	
MAP output	**Meaning and action**
`INVALID`	
	Meaning: The command could not be carried out because the card or device does not exist or is not connected as specified.
	Action: None
`OK`	
	Meaning: The command has been carried out.
	Action: None

bsy

Function

Use the bsy command to change the status of the displayed MTD disk controller card to manually busy.

bsy command parameters and variables

Command	Parameters and variables
bsy	There are no parameters or variables.

Qualifications

None

Example

The following table gives an example of the bsy command.

Example of the bsy command

Example	Task, response, and explanation	
bsy ↵		
	Task:	Manually busy the displayed MTD.
	Response:	OK
	Explanation:	The MTD is busied.

bsy (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 FILE IS OPEN ON THIS TAPE`
 	
or
 	
`INVALID`
`<message>`
	Meaning: An invalid message occurs if an attempt is made to busy a MTD loaded with a tape that has an open file on it. The MTD cannot be busied unless the open file is closed.
	
	Action: Close the open file before busying the MTD.

`MTD 1 IS MANUAL BUSY`
 	
or
 	
`MTD 1 IS UNEQUIPPED`
	Meaning: The state of the specified circuit is incorrect for busying.
	
	Action: None

`OK`	**Meaning:** The MTD is busied. **Action:** None

fault

Function

Use the fault command to query or clear the fault counts.

fault command parameters and variables

Command	Parameters and variables
fault	*query* clear

Parameters and variables	Description
clear	This parameter directs the system to clear the fault counts.
query	This default parameter directs the system to display the fault counts. Do not enter this parameter.

Qualifications

None

Example

The following table provides an example of the fault command.

Example of the fault command

Example	Task, response, and explanation	
fault ↵		
	Task:	Clear the fault counts.
	Response:	0K
	Explanation:	The system cleared the fault counts.

fault (end)

Responses

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

Responses for the fault command

MAP output	Meaning and action
READ XSIENT: 0 READ FAULT: 0 WRITE XSIENT: 0 WRITE FAULT: 0 RRC1: 0000 RRC2: 0000 WRC1: 0000 WRC2: 0000	**Meaning:** The system displays the fault counts. **Action:** None
OK	**Meaning:** The system cleared the fault counts. **Action:** None

inhibit

Function

Use the inhibit command to enable or disable all front panel switches on the MTD.

inhibit command parameters and variables

Command	Parameters and variables
inhibit	*mtd* [on | off]

Parameters and variables	Description
mtd	This variable identifies the MTD to be inhibited. Valid entries are 0-15.
off	This parameter enables the front panel switches.
on	This parameter disables the front panel switches.

Qualifications

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

- A tape must be correctly threaded onto the MTD before using the inhibit command.
- The tape that is mounted and demounted, and that is affected by the commands mount and demount may be the same tape. It may be necessary to physically remove the tape from the MTD.

Example

The following table provides an example of the inhibit command.

Example of the inhibit command

Example	Task, response, and explanation
inhibit 1 off ↵ *where* 1 is the MTD to be inhibited	**Task:** Enable the front panel switches on MTD 1. **Response:** 0K **Explanation:** The front panel switches are enabled.

inhibit (end)

Responses

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

Responses for the inhibit command

MAP output	Meaning and action
FAILED	**Meaning:** The front panel cannot be enabled because of hardware conditions. **Action:** None
INVALID	**Meaning:** An MTD is not connected to the DC. **Action:** None
OK	**Meaning:** On or off is executed. **Action:** None

listdev

Function

Use the listdev command to display the status of the MTD.

listdev command parameters and variables

Command	Parameters and variables	
listdev	*ioc*	mtd

Parameters and variables	Description
ioc	This variable identifies the number of a specific input/output controller (IOC) card. Valid entries are 0-11.
mtd	This parameter identifies the device to be listed as MTDs.

Qualification

The listdev command is qualified by the following restriction: displays are shown only up to the highest equipped MTD number.

Example

The following table provides an example of the listdev command.

Example of the listdev command

Example	Task, response, and explanation

listdev 1 mtd ↵
where
 	
1 is the number of the IOC card connected to the devices
	Task: List the magnetic tape drives.
	
	Response:
	`MTD  TapeName  Status  IOC.CD`
	`0  Idle  0.4`
	`1  A376458C  MT 1672  1.0`
	`2  T2  MT 4829  2.3`
	`3  Man Bsy  3.7`
	`4  SCRATCH1  Sys Bsy  5.1`
	
	Explanation: The response lists all the magnetic tape drives and provides identification and status information about each one.

listdev (continued)

Responses

The following table describes the meaning and significance of each portion of the possible responses to the listdev command, and an example of a full response.

Responses for the listdev command

MAP output	Meaning and action
`IOC.CD` `  0.4`	
	Meaning: Consists of two fields, where ioc is the number of the IOC connected to the console, and cd is the number of the card within the IOC that serves the console. **Action:** None
`INVALID` `<reason>`	
	Meaning: A listdev display cannot occur because the card is unknown, the card is of an unknown type, or no device exists for the device specified. **Action:** None
`MTD` ` 0`	
	Meaning: This column echoes the device specified and provides the number of each device. **Action:** None
`STATUS` ` Idle`	
	Meaning: This column provides the status of the device. **Action:** None

-continued-

listdev (end)

Responses for the listdev command (continued)

MAP output	Meaning and action
TAPENAME	**Meaning:** Provides the user- or system-assigned name of up to eight characters. Tn is the default system tape name, where n is the MTD number. The tape name is blank if no tape is mounted or the MTD is in the idle or unequipped state. **Action:** None

```
MTD  TapeName  Status  IOC.CD
 0              Idle     0.4
 1   A376458C   MT 1672  1.0
 2   T2         MT 4829  2.3
 3              Man Bsy  3.7
 4   SCRATCH1   Sys Bsy  5.1
```

Meaning: This is an example of a display in response to the listdev command with mtd specified as the device.

Action: None

-end-

offl

Function

Use the offl command to change the status of the displayed MTD disk controller card to offline.

offl command parameters and variables

Command	Parameters and variables
offl	There are no parameters and variables.

Qualifications

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

- The MTD must be manually busy before entering 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 ↵		
	Task:	Take the displayed MTD offline.
	Response:	0K
	Explanation:	The MTD is offline.

offl (end)

Responses

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

Responses for the offl command

MAP output	Meaning and action
`MTD 1 IS offline`	**Meaning:** The state of the MTD circuit is incorrect for taking it offline, where n echoes the MTD discrimination number, and the status is one of the following: unequipped, offline, sys bsy, cs bsy, ps bsy, idle, inservice. **Action:** None
`OK`	**Meaning:** The system has taken the MTD offline. **Action:** None

queryproc

Function

Use the queryproc command to query tape maintenance processes.

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.

Example of the queryproc command

Example	Task, response, and explanation	
queryproc ↵		
	Task:	Query the tape process.
	Response:	`PROCESS ALIVE`
	Explanation:	The tape process is alive.

Responses

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

Responses for the queryproc command

MAP output	Meaning and action
`PROCESS ALIVE`	**Meaning:** The queried process is alive. **Action:** None

-continued-

queryproc (end)

Responses for the queryproc command (continued)

MAP output	Meaning and action
PROCESS DEAD	**Meaning:** The queried process is dead. **Action:** None

-end-

querytape

Function

Use the querytape command to query the tape node status.

querytape command parameters and variables

Command	Parameters and variables
querytape	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the querytape command.

Example of the querytape command

Example	Task, response, and explanation
querytape ↵	
	Task: Query the tape.

	Response:
	`is in service`
	`  NODE NO 7`

	Explanation: The system displays the status and the node number.

Response

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

Responses for the querytape command

MAP output	Meaning and action
`is in service` `  NODE NO 7`	
	Meaning: The system displays the status and the node number.
	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 all *incrname* *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 MTD level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The MTD level has changed to the previous menu level.

-continued-

quit

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the MTD 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 MTD 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` `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 MTD 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 MTD level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

rts

Function

Use the rts command to return the MTD card to service.

rts command parameters and variables

Command	Parameters and variables
rts	There are no parameters or variables.

Qualification

The rts command is qualified by the following restriction: the MTD must be either manually busied 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	
rts ↵		
	Task:	Return the displayed MTD to service.
	Response:	0K
	Explanation:	The MTD is in service.

rts (end)

Responses

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

Responses for the rts command

MAP output	Meaning and action
INVALID MTD 1 IS offline	**Meaning:** The state of the circuit is incorrect for returning to service. The response echoes the device discrimination number and the status is one of the following: unequipped, offline, sys bsy, cs bsy, ps bsy, idle, or inservice. **Action:** None
OK	**Meaning:** The specified card is returned to service. **Action:** None
ONLY CONTROLLER IS TESTED	**Meaning:** The card fails the test because no tape is mounted on the specified MTD. Only the device controller card is tested. **Action:** None
REQUEST FAILED	**Meaning:** The card cannot be returned to service. **Action:** Check that the circuit status is M. If so, it may be neccesary to replace the card.
SITE FLR RPOS BAY-ID SHF DESCRIPTION SLOT EQPEC	**Meaning:** A list of probable faulty cards is given under these headers. **Action:** None

threshold

Function

Use the threshold command to query or set the fault threshold.

threshold command parameters and variables

Command	Parameters and variables
threshold	*query* *value*

Parameters and variables	Description
query	This default parameter directs the system to display the fault threshold. Do not enter this parameter.
value	This variable is the new value of the threshold. Valid entries are 0-32767.

Qualifications

None

Example

The following table provides an example of the threshold command.

Example of the threshold command

Example	Task, response, and explanation	
threshold ↵		
	Task:	Display the current threshold value.
	Response:	`THRESHOLD 10`
	Explanation:	The system displays the current threshold value.

threshold (end)

Responses

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

Responses for the threshold command

MAP output	Meaning and action
OK	**Meaning:** The system accepts the value entered and changes the threshold. **Action:** None
THRESHOLD 10	**Meaning:** The system displays the current threshold value. **Action:** None

tst

Function

Use the tst command to test the displayed device and its connecting disk controller (DC) card.

tst command parameters and variables

Command	Parameters and variables
tst	There are no parameters or variables.

Qualifications

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

- The MTD must be manually or system busy before entering the command tst. Also before the tst command is entered, a scratch tape must be loaded onto the MTD and the tape must be online and write-enabled. If no scratch tape is loaded, only the controller is tested.
- The command mount is used to identify the physically mounted tape to the software before assigning it as a scratch tape. Demount cancels the mount command.

Example

The following table provides an example of the tst command.

Example of the tst command

Example	Task, response, and explanation	
tst ↵		
	Task:	To test the displayed MTD.
	Response:	`INVALID` `MTD 1 IS OFFLINE`
	Explanation:	The test cannot be completed because the device is in the offline state. The MTD must be returned to service before it can be tested.

tst (end)

Responses

The following table provides common responses to the tst command.

Responses for the tst command

MAP output	Meaning and action
INVALID MTD 1 IS offline	**Meaning:** The state of the MTD circuit is incorrect for testing. The response echoes the device discrimination number and the status is one of the following: unequipped, offline, sys bsy, cs bsy, ps bsy, idle, or inservice. **Action:** None
OK	**Meaning:** The MTD circuit passes the test. **Action:** None
READ ONLY	**Meaning:** The scratch tape is not write-enabled: that is, does not have a write-ring on it. **Action:** None
TAPE NOT READY	**Meaning:** The MTD is not ready for testing. The scratch tape that is loaded is not online. **Action:** None

MTM level commands

Use the MTM level of the MAP to perform maintenance for a maintenance trunk module (MTM).

Accessing the MTM level

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

mapci; mtc; pm; post mtm ↵

MTM commands

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

MTM commands

Command	Page
bsy	M-781
clr	M-783
disp	M-785
loadpm	M-787
next	M-791
offl	M-793
post	M-795
querypm	M-797
quit	M-799
rts	M-803
trnsl	M-807
tst	M-809

MTM menu

The following figure shows the MTM 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
         .     .     .     .   4SysB   .     .     .     .     .
                                 M

MTM                   SysB   ManB   Offl   CBsy   ISTb   InSv
 0 Quit      PM         4      0     10      3      3     130
 2 Post_     MTM        0      0      4      1      1      40
 3
 4
 5 Trnsl_
 6 Tst_
 7 Bsy_
 8 RTS_
 9 OffL
10 LoadPM_
11 Disp_
12 Next_
13
14 QueryPM_
15
16
17
18
```

Hidden command

clr

bsy

Function

Use the bsy command to change the state of a posted PM to the ManB state from any other state.

bsy command parameters and variables

Command	Parameters and variables
bsy	*pm_type* *pm_number*

Parameters and variables	Description
pm_type	This variable selects one of the PM types. A PM in the control position of the posted set is the default.
pm_number	This variable identifies the discrimination number of the pm_type. The range is 0 to 2047.

Qualifications

When the MTM is busied, the ManB status displays are updated.

Examples

Not currently available

Responses

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

Responses for the bsy command

MAP output	Meaning and action
nnn LINES ARE IN CP BUSY STATE MATE ALREADY OUT OF SERVICE DO YOU WISH TO CARRY ON? PLEASE CONFIRM “YES” OR “NO”	**Meaning:** The command bsy is applied to an LM bay in TAKEOVER condition (see Part 11 on page 177), which is performing call processing. Further action may affect calls in process of connection. **Action:** None

-continued-

Responses for the bsy command (continued)

MAP output	Meaning and action
nnn LINES ARE IN CP BUSY STATE TRANSFER TO MATE WILL AFFECT CALLS DO YOU WISH TO CARRY ON? PLEASE CONFIRM “YES” OR “NO”	**Meaning:** Further action invokes TAKEOVER action, which transfers the call processing load to the mate LM bay. Takeover action causes calls in the process of connection to be lost. **Action:** None
NO ACTION TAKEN	**Meaning:** NO is entered in response to a prompt and the command is aborted. **Action:** None
OK	**Meaning:** YES is entered in response to a prompt and the PM is busied. **Action:** None
pm_type pm_number IS MANUAL BUSY NO ACTION TAKEN	**Meaning:** The command bsy is applied to a PM that is already in the ManB state. **Action:** None
nnn TERMINALS ARE IN CP BUSY STATE DO YOU WISH TO CARRY ON? PLEASE CONFIRM “YES” OR “NO”	**Meaning:** The command bsy has been applied to a PM (other than LM) which is performing call processing. This response warns that further action may affect calls in process of connection. **Action:** None

-end-

clr

Function

Use the clr command to clear the ISTb state of the read access memory (RAM) parity (RAMP) since the state remains until the PM is reloaded. The command clr is recommended for use by the maintenance support personnel.

A parity error with the RAM indicates a “trap” in PM processing. When a RAMP occurs, the PM reports it to the CC and the header RAMP appears with the status ISTb on the PM display. To clear the ISTb state of the RAMP, enter the command string clr ramp.

clr command parameters and variables

Command	Parameters and variables
clr	ramp

Parameters and variables	Description
ramp	This parameter specifies that the RAM parity is to be cleared.

Qualifications

The clr command is qualified by the following exception, restrictions and limitations:

- The clr command is used when RAMP does not affect the operation of the PM.
- The PM is not taken out-of-service when the RAMP can be ignored.
- If there is no other ISTb for the RAMP, then its state changes to in service, and InSv is displayed. If the PM is out-of-service the RAMP header is not displayed.

Examples

Not currently available

clr (end)

Response

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

Response for the clr command

MAP output	Meaning and action
`display`	**Meaning:** The header RAMP on the status display disappears and the RAMP is cleared. **Action:** The RAMP is cleared regardless of the state of the PM. If there is no RAMP, the command has no effect.

disp

Function

Use the disp command to display a list of a posted PM type that is in a specified maintenance state.

disp command parameters and variables

Command	Parameters and variables		
disp	state	*pm_state*	*pm_type*

Parameters and variables	Description
pm_state	This variable is one of the PM states listed in Table 130-NO TAG on page NO TAG.
pm_type	This variable selects one of the appropriate PM types, which in this case is the MTM. A PM in the control position of the posted set is the default.
state	This parameter is required before the PM state code.

Qualifications

If a pm_type is not entered, the display includes all PM in the specified state.

Examples

The following table provides an example of the disp command.

Examples of the disp command

Example **Task, response, and explanation**

disp state offl mtm ↵
where

offl is the state of the PM to be displayed
mtm is the PM type to be displayed.

Task: Identify all MTMs in the Offl state.

Response:
```
OFFL MTM:  7, 9, 24, 48.
```

Explanation: The discrimination numbers of MTMs that are in the Offl state are displayed.

-end-

disp (end)

Responses

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

Responses for the disp command

MAP output	Meaning and action
`state pm: n, n, ... n`	**Meaning:** The display appears, where state and pm echo the specified state and PM type, and n are the discrimination numbers of the PM. **Action:** None

loadpm

Function

Use the loadpm command to load the peripheral program files into the processor of a posted MTM. The MTM must be in the ManB state before entering the loadpm command.

loadpm command parameters and variables

Command	Parameters and variables
loadpm	exec [nowait] notest

Parameters and variables	Description
exec	This parameter selects the load mode to be executives (execs) only.
no wait	This parameter allows another MTM to be posted and loaded without waiting for confirmation from the previous load request. The parameter nowait also enables the MAP to be used for other entries while loading proceeds. Error messages associated with the loadpm command are printed in PM logs.
notest	This parameter allows loadpm to be completed without the ROM test.

Qualifications

The loadpm command is qualified by the following exception, restrictions and limitations:

- When using the loadpm command, the load file name is taken from the data table. The load name is displayed by the command querypm.
- To determine the loads for each PM use the command inform in XPM Single Change Supplement Commands on page NO TAG.
- When the MTM is not loaded, the only programs that are present for testing are located in the ROM. If the ROM tests fail, the loadpm command cannot be used. If the ROM tests pass, the parameter notest bypasses the ROM tests. The time taken for a ROM test that is already known to succeed is not repeated.
- To reload an MTM, enter the loadpm command on the inactive unit, then enter the command swact when it is completed, and then reenter the loadpm command for the newly inactive unit.

Examples

Not currently available

loadpm (continued)

Responses

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

Responses for the loadpm command

MAP output	Meaning and action
`LOAD FILE NOT IN DIRECTORY`	**Meaning:** The system cannot find the location of the load file. It resides on tape or disk. **Action:** For DMS-100 systems equipped with Disk Drive Units (DDU) refer to the DDU MAP level starting on page NO TAG and use the commands listvol and dskut. For DMS-100 systems equipped with Magnetic Tape Drives (MTD) refer to the MTD MAP level starting on page NO TAG and use the commands mount and list.
`pm_type pm_number IS status` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for loading, where pm_type is a PM in the posted set, PM_number is the discrimination number of the PM, and status is one of CBSY INSV OFF-LINE The PM must be ManB. **Action:** None
`pm_type pm_number OK. CHECKSUM = # hhh`	**Meaning:** The PM has been successfully loaded. The checksum is the value associated with the data loaded into the PM. **Action:** None

-continued-

loadpm (end)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`reason` `NO ACTION TAKEN`	**Meaning:** The command cannot be executed for a reason other than those given in the standard response. **Action:** For DMS-100 systems equipped with Disk Drive Units (DDU) refer to the DDU MAP level starting on page NO TAG and use the commands listvol and dskut. For DMS-100 systems equipped with Magnetic Tape Drives (MTD) refer to the MTD MAP level starting on page NO TAG and use the commands mount and list.

-end-

next

Function

Use the next command to post the next higher PM number of the set of posted PM.

next command parameters and variables

Command	Parameters and variables
next	*pm_type*

Parameters and variables	Description
pm_type	This variable selects one of the PM types selected, which in this case is the MTM. Use the disp command to display the list of PM types in the posted set. The system selects the PMs in the sequence displayed by this list.

Qualifications

None

Examples

The following table provides an example of the next command.

Examples of the next command

Example	Task, response, and explanation	
next ↵		
	Task:	Post the next higher MTM. MTM 3 is the PM that is posted currently.
	Response:	`MTM 4`
	Explanation:	The next higher MTM is now posted.

next (end)

Responses

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

Responses for the next command

MAP output	Meaning and action
END OF POST SET	**Meaning:** The currently displayed PM is the last in the posted set of PM, or only one PM number has been posted. The display returns to the next higher menu level. **Action:** None

offl

Function

Use the offl command to change the state of a posted PM from ManB to off-line. The PM is temporarily removed from service during maintenance action.

offl command parameters and variables

Command	Parameters and variables
offl	There are no parameters or variables.

Qualifications

The MTM must first be set to ManB by using the command bsy, before using the offl command.

Examples

Not currently available

Responses

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

Responses for the offl command

MAP output	Meaning and action
OK	**Meaning:** The PM is made off-line. **Action:** None

-continued-

offl (end)

Responses for the offl command (continued)

MAP output	Meaning and action
`pm_type pm_number IS status.` `NO ACTION TAKEN`	**Meaning:** The PM is already off-line or is in the incorrect state for being made off-line, where pm_type is a PM in the posted set, pm_number is the discrimination number of the PM, and status is one of CBSY INSV OFF-LINE SYSTEM BUSY the PM must be ManB. **Action:** For some PM types, `REQUEST INVALID` appears before the response `NO ACTION TAKEN`.

-end-

post

Function

Use the post command to select the corresponding menu and display for the PM or PM state.

post command parameters and variables

Command	Parameters and variables
post	*pm_states* *pm_type* *pm_number*

Parameters and variables	Description
pm_type	This variable selects one of the PM types, which in this case is the MTM. If the level of an MTM node-type is already accessed, the default for pm_type is the MTM in the control position.
pm_number	This variable identifies the discrimination number of the pm_type.
pm_state	This variable selects the state of the specified PM.

Qualifications

When the command string help post is entered to query the parameters of post, not all of the displayed parameters apply to an office or office network. The applicability of the parameters depends on the types of PMs that are present in the office configuration. For parameters that do not apply, one of several responses indicates that it is ignored.

Examples

Not currently available

Responses

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

Responses for the post command

MAP output	Meaning and action
`NO PM POSTED`	**Meaning:** The command string post *pm_type* accesses a PM level without posting a specific PM. **Action:** None

post (end)

Responses for the post command (continued)

MAP output	Meaning and action
`pm_state pm_type: NONE`	**Meaning:** There are no PMs in the specified state. The variable pm_state is one of the codes in Table 130- on page NO TAGNO TAG and *pm_type* echoes the posted PM. **Action:** None

-end-

querypm

Function

Use the querypm command to display information about a posted MTM. The information is drawn from the DMS-100 data tables, and is used for debugging or office extensions. The information also includes the name of the valid load file which is used by the command loadpm.

querypm command parameters and variables

Command	Parameters and variables
querypm	There are no parameters or variables.

Qualifications

The querypm command is qualified by the following exception, restrictions and limitations:

- The display for the querypm command is the same for all TM node-types.
- If parameters flt or cntrs are entered with the command querypm at the TM-node levels, the parameters are ignored and the same information is displayed (see the example in the "Example of the querypm command" table). (The parameters flt and cntr are common to other PM levels that also have the querypm command.)

Example

The following table provides an example of the querypm command.

Example of the querypm command

Example	Task, response, and explanation
querypm ↵	
	Task: Display information about the posted MTM.

	Response:
	`PM TYPE: MTM  PM NO.: 0  NODE NO.: 18`
	`PM STATUS: InSv NODE STATUS: OK,FALSE, CKSUM:#0244`
	`PP LOAD: VALID  PP EXECS: VALID FNAME: TKTMKA02`
	`PMS EQUIPPED: 21 PM INT.#: 3`
	`Site Flr RPos Bay_id Shf Description Slot EqPEC`
	`HOST 00  B00  DCE 000 65  MTM : 000  2X58AU`
	`TM Entries: 0 TO 8`

	Explanation: Executing the querypm command results in the above display for the posted MTM.

querypm (end)

Responses

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

Responses for the querypm command

MAP output	Meaning and action

`PM TYPE: pm  PM NO.: n  NODE NO.: nnnn`
`PM STATUS: state  NODE STATUS: status  CKSUM:#value`
`PP LOAD: accept  PP EXECS: VALID FNAME: load_name`
`PMS EQUIPPED: tt PM INT.#: x`
`Site Flr RPos Bay_id Shf Description Slot EqPEC`
`TM Entries: y TO z`
	Meaning: The appropriate display appears, where:
	
	pm — is the type of PM.
	n — is the discrimination number of the PM type.
	nnnn — is the PM node number.
	state — is one of the PM states listed in Table 130-NO TAG on page NO TAG.
	status — is one of
	OK
	FALSE
	value — is a hexadecimal number for PM of node-type TM. The number is used to calculate the checksum (header CHKSUM) for each software load. After loading the peripheral and testing the PM, the checksum total is to be compared with the expected checksum total. If the totals match, the load is OK. If there is a mismatch, the load must be loaded again using the command loadpm. Each pm_type has a different checksum value for each load.
	accept — is VALID or INVALID for the load file that the PM uses.
	load_name — is the name of the load file that is used as a value for parameter l_name of the command loadpm.
	tt — is the total of equipped PM for that office.
	x — is 0-2047 for a location identifier of channel. For information on the use of these channels, refer to the non-resident program Channel MAP feature. To use the feature, the non-resident software module CHNLMAP must be loaded. The loading procedures are discussed in the information on the Channel MAP feature.
	y, z — is 0-127 for the range of PM that are posted.
	
	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 all *incrname* *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 MTM level to the previous menu level. **Response:** The display changes to the display of a higher level menu. **Explanation:** The MTM 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 MTM 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 MTM 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 MTM 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 MTM level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

rts

Function

Use the rts command to change the state of a posted PM from ManB to SysB or InSv.

rts command parameters and variables

Command	Parameters and variables	
rts	*pm_type*	*pm_number*
	sysb	all

Parameters and variables	Description
all	This parameter returns to service all posted PMs, regardless of status.
pm_number	This variable identifies the discrimination number of the pm_type. The range is 0-2047.
pm_type	This variable selects one of the appropriate PM types, which in this case is the MTM. A PM in the control position of the posted set is the default.
sysb	This parameter returns all posted system busy PMs to service.

Qualifications

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

- Before the rts command is used, the PM must first be set from Offl to ManB by using the command bsy.
- As PMs are returned to service, the PM status display decrements under the header ManB and increments under ISTb or InSv. If the return to service fails, the header ManB decrements and either header CBsy or SysB increments by one for each posted PM.
- When an XPM is made system busy (SysB state), the testing and loading of a return to service are automatically initiated. For the data table setup, refer to the appropriate PM maintenance document for information on automatic loading of an XPM.

Examples

Not currently available

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
`CLOCK SOURCE SWITCHING TROUBLE`	**Meaning:** The tst command is applied to LM or DCM, and the ISTb state is caused by clock switching problems.***should this response be deleted?????*** **Action:** None
`CS LINK UNAVAILABLE` `NO ACTION TAKEN`	**Meaning:** The C-side links used for messages are both out-of-service, therefore, the PM cannot communicate with the CC. **Action:** None
`OK`	**Meaning:** The specified PM is returned to service. **Action:** None

`nnn LINES ARE IN THE CP BUSY STATE`
`LOAD TRANSFER FROM MATE WILL DISRUPT CALLS`
`DO YOU WISH TO CARRY ON?`
`PLEASE CONFIRM (“YES” OR “NO”)`
	Meaning: Further action invokes takeback which transfers the call processing load from the mate LM bay. Takeback action causes loss of calls in process of connection.
	
	Action: None

-continued-

Responses for the rts command (continued)

MAP output	Meaning and action
`pm_type pm_number IS status.` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for returning to service, where pm_type echoes the posted PM, pm_number is the discrimination number of the PM, and status is one of CBSY INSV OFF-LINE The PM, must be ManB. **Action:** None
`TEST FAILED` `SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC`	**Meaning:** Results of tests are shown using the standard circuit display. A standard format, based on the DMS-100 Family equipment identification scheme, identifies the physical location of possible faulty circuit cards. When the circuit location display is part of the response to a failed test, the circuit cards are listed in order of the most likely cause of the fault, and therefore their recommended sequence of replacement. The characters listed under the header EQPEC are the hardware PEC of the suspected circuit card. shown without the prefix NT. **Action:** None

-end-

trnsl (end)

Function

Use the trnsl command to identify the various links between a posted PM type and the Network or subsidiary PM.

trnsl command parameters and variables

Command	Parameters and variables
trnsl	There are no parameters or variables.

Qualifications

None

Examples

Not currently available

Response

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

Response for the trnsl command

MAP output	Meaning and action

`trnsl`
`NM PAIR n: n  NM PORT n:nn`
`NM PAIR n: n  NM PORT n:nn`
`NM PAIR n: n  NM PORT n:nn`
`NM PAIR n: n  NM PORT n:nn`
	Meaning: The display is added to the PM display, where n is 0 or 1 for the plane number and nn is 0-31 for the NM number to which a port is connected.
	
	Action: None

tst

Function

Use the tst command to invoke test routines on a posted PM.

tst command parameters and variables

Command	Parameters and variables
tst	*pm_type* *pm_number*

Parameters and variables	Description
pm_number	This variable identifies the discrimination number of the pm_type. The range is 0-2047.
pm_type	This variable selects one of the appropriate PM types, which in this case is the MTM. A PM in the control position of the posted set is the default.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the tst command

MAP output	Meaning and action
`CLOCK SOURCE SWITCHING TROUBLE`	**Meaning:** The test command is applied to LM or DCM, and the ISTb states is caused by clock switching problems. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`OSVCE TEST INITIATED`	**Meaning:** Out-of-service testing is being performed on the posted PM which is in the ManB or SysB state. **Action:** None
`CS LINK UNAVAILABLE` `NO ACTION TAKEN`	**Meaning:** The C-side links used for messages are both out-of-service, therefore, the PM cannot communicate with the CC. **Action:** None
`INSVCE TESTS INITIATED` `pm_type pm_number TST PASSED.`	**Meaning:** In-service testing is being done on the posted PM which is the InSv or ISTb state. `PASSED` appears when testing is satisfactorily completed. **Action:** None
`OK`	**Meaning:** The test was performed and the PM passed. **Action:** None
`pm_type pm_number IS status` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for testing, where pm_type echoes the posted PM, pm_number is the discrimination number of the PM, and status is one of CBSY OFF-LINE The PM must be ManB. **Action:** None

-continued-

Responses for the tst command (continued)

MAP output	Meaning and action
`pm_type pm_number, CHECKSUM=# hhh, AGREES.`	**Meaning:** The test passes. The checksum agreement referred to (AGREES) is between a recent value for the data in the PM and the load-time value as stored in the central control. This confirms that the PM load has not been completed. **Action:** None
`REQUEST INVALID`	**Meaning:** In-service tests occur if the selected PM is in the InSv state, or out-of-service tests occur if it is in the ManB or SysB state. **Action:** None
`TEST FAILED` `SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC`	**Meaning:** Results of tests are shown using the standard circuit display. A standard format, based on the DMS-100 Family equipment identification scheme, identifies the physical location of possible faulty circuit cards. When the circuit location display is part of the response to a failed test, the circuit cards are listed in order of the most likely cause of the fault, and therefore their recommended sequence of replacement. The characters listed under the header EQPEC are the hardware PEC of the suspected circuit card. shown without the prefix NT. **Action:** None
`TEST RESOURCES IN USE` `NO ACTION TAKEN`	**Meaning:** Test facilities are already in use for other maintenance actions. **Action:** None

-end-

NET level commands

Use the NET level of the MAP to perform network maintenance and to access other network maintenance MAP levels.

Accessing the NET level

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

mapci; mtc; net ↵

NET commands

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

NET commands

Command	Page
bsy	N-5
disp	N-9
chklnk	N-15
clkstat	N-19
integ	N-21
jctrs	N-23
links	N-25
loc	N-27
offl	N-29
path	N-31
qtst	N-33
quit	N-37

-continued-

NET commands (continued)	
Command	**Page**
recover	N-41
rdbuff	N-45
rts	N-47
trnsl	N-51
tst	N-53
xpts	N-57
-end-	

NET menu

The following figure shows the NET 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
         .     .     .    2SysB   .     .     .     .     .     .
                           M

Net             Net                11111 11111 22222 22222 33
 0 Quit          Plane 01234 56789 01234 56789 01234 56789 01
 2                 0   .S..I ..C.. LJ... ..I.. .0
 3                 1   ...S. .T... ....M ..... 00
 4 Recover
 5 Loc_
 6 Tst_
 7 Bsy_
 8 RTS_
 9 Offl_
10
11 Disp_
12 QTst_
13 Integ
14 Path_
15 XPts_
16 Trnsl_
17 Links_
18 Jctrs
```

Hidden commands

```
chklnk
clkstat
rdbuff
```

NET status codes

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

Status codes NET menu status display

Code	Meaning	Description
▪	(all)	No faults. The network, link, junctor, or crosspoint is OK.
-	Link, Jctr, Xpt	Unequipped (not serviceable).
C	Net	C-side busy, where the NM is busy due to call processing conditions. For example, both CMC links to the NM are out-of-service.
	Link	The link is busy due to call processing conditions. For example the NM, not the link, or network crosspoint card is system busy (S) or manual busy (M).
	Jctr	The junctor is busy due to call processing conditions. For example the NM, not the junctor, is system busy (S) or the network crosspoint card is manual busy (M).
	Xpt	The crosspoint card is busy due to call processing conditions, that is the NM is busy.
I	Net	The inservice trouble flag is set for the NM. It includes excessive integrity failures.
J	Net	One or more junctors in the NM are out-of-service.
L	Net	One or more links in the NM are out-or-service
M	(all)	Manual busy.
O	Net, Jctr	Offline.
P	Link	P-side busy, where the link is busy due to conditions in the PM that is assigned to the link. For example, the PM is out-of-service.
	Jctr	The other end of the junctor is out-of-service, for example, M, S, C busy.
	Xpt	The crosspoint card is busy because all the links and juctors that are connected to the crosspoint card are busy.
S	Net, Link, Jctr	System busy.
T	Net, Xpt	The network or crosspoint is under test.

bsy

Function

Use the bsy command to set an NM to the M (manual busy) state.

bsy command parameters and variables

Command	Parameters and variables		
bsy	*plane*	*pair*	force

Parameters and variables	Description
pair	This variable specifies the NM to be busied. Range is 0-31.
plane	This variable specifies the plane of the NM to be busied. Range is 0 or 1.
force	This parameter busies the specified plane pair regardless of the state.

Qualifications

The following notes apply to the bsy command:

- Before entering the bsy command the NM must be in the • (in service), I (in-service trouble), S (system busy), C (C-side busy), or O(off-line) state.
- A manual busy NM is returned to service by a reload or cold restart, but remains busy after a warm restart.
- These logs are generated under the following conditions:

  NETM105 an NM is manual busy (M state).
  NETM138 a network warning is overridden.
  NETM141 the parameter FORCE is used.

Examples

Not currently available

bsy (continued)

Responses

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

Responses for the bsy command

MAP output	Meaning and action
`CAUTION--FORCES NO PATH FROM NM nn TO NM nn.` `PLEASE CONFIRM (″YES″ OR ″NO″):`	**Meaning:** If one speech link is busied, busying the one in the other plane prevents a speech pah from being established. **Action:** Enter YES to force the specified NM to the M(manual busy) state. Enter NO to abort the request.
`OK`	**Meaning:** The specified NM is busied. **Action:** The status display changes to M.
`REQUEST ABORTED. MTCE IN PROGRESS`	**Meaning:** The Network cannot be busied because it is undergoing maintenance testing. **Action:** None
`REQUEST ABORTED. NO MAILBOX.`	**Meaning:** Mailboxes are used by the software to send messages throughout a system. If the Network is too busy with call processing, a mailbox is temporarily unavailable. **Action:** Try again.
`REQUEST INVALID--FORCES NMnn PAIR OUT OF SERVICE.` `PLEASE CONFIRM (″YES″ OR NO″):`	**Meaning:** One plane is already busy. **Action:** Enter YES to busy the NM pair and cancels its call processing. Enter NO to abort the request.

-continued-

Responses for the bsy command (continued)

MAP output	Meaning and action
`REQUEST INVALID.  NM IS MAN_BUSY`	**Meaning:** The NM must be in the •, I, S, C, or O state for busying. **Action:** None
`WARNING:  ACTIVE MTCE PROCESS ABORTED.` `PLEASE CONFIRM (″YES″ OR ″NO″):`	**Meaning:** Forcing an NM pair into the M state cancels call processing. **Action:** Enter YES to force a PM, a speech link, a junctor, or an NM pair out-of-service. The respective call processing is stopped, the affected NM pair is identified, and the response to confirm the command bsy is OK. Enter NO to abort the command and the response echoes NO.

`WARNING:  NETPATH TESTS ARE RUNNING ON THIS NETWORK.`
`THEY WILL ABORT IF YOU CONTINUE.`
`PLEASE CONFIRM (“YES” OR “NO”):`
	Meaning: The command entered will busy a Network on which NET PATH tests are running. If the state of the Network changes, the tests will abort.
	
	Action: Enter YES to execute the command and abort the NET PATH tests. Enter NO to abort the command and allow the tests to run.

-end-

disp

Function

Use the disp command to display general information about one or all NMs.

disp command parameters and variables

Command	Parameters and variables			
disp	clear	*plane*	*pair*	
	count	*side*	*plane*	*pair*
	istb	*plane*	*pair*	
	status			

Parameters and variables	Description
clear	This parameter clears the C-side and P-side counters for the specified NM.
count	This parameter displays the Network counter status for a specified side, plane, and NM.
istb	This parameter displays whether the specified NM is In-Service Trouble (I state) and gives the reason if it is.
pair	This variable identifies the NM. The range is 0-31.
plane	This variable identifies the plane of the NM. The range is 0 or 1.
side	This variable selects the side to be displayed. The range is C or P.
status	This parameter displays the status information on all NMs.

Qualifications

The following notes apply to the disp command:

- The command string disp status is mainly used with non-MAP devices since it repeats the NET status display that appears automatically when the NET level is accessed.
- Log NETM149 is generated when an NM is set to the I state.

Examples

Not currently available

disp (continued)

Responses

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

Responses for the disp command

MAP output	Meaning and action
A NETWORK TEST HAS FAILED. A NETWORK OUT OF SERVICE TEST WILL CLEAR THIS.	**Meaning:** Using parameter istb, the test is one of these out-of-service tests: ▪ CONTROLLER TESTS ▪ RESET FUNCTIONS ▪ BUFFER CHECK ▪ LOOPBACK MESSAGE ▪ CSIDE BUFFER ▪ PSIDE FUNCTIONS ▪ CLOCK PORT SWITCH ▪ BASIC CM TEST ▪ BASIC INTERFACE TEST ▪ BASIC XPT TEST ▪ BASIC PAD TEST ▪ **Actio▪n:** Use command qtst may display the name of the last test that failed. Use the command tst to execute the out-of-service tests to determine which test failed.
INTEGRITY LEVEL COUNTERS HAVE REACHED THE THRESHOLD. THIS CAN BE CLEARED FROM THE INTEGRITY MAP LEVEL.	**Meaning:** Network integrity counters have accumulated up to the threshold total that is specified by the commands UPTH or RETH. The default for the threshold is 250 counts. **Actio▪n:** Access the NET INTEG level to check Network integrity by entering command integ.

-continued-

disp (continued)

Responses for the disp command (continued)

MAP output	Meaning and action

```
NM n-n      COUNTERS
1-WFSND     nnnn
2-WFACK     nnnn
3-WSOM      nnnn
4-NACK1     nnnn
5-NACK2     nnnn
6-NACKS     nnnn
7-MSGIGN    nnnn
8-BUFERR    nnnn

ERRLOG      aabb aabb aabb aabb aabb aabb aabb aabb
   aabb aabb aabb aabb aabb aabb aabb aabb
```

Meaning: The counters for DISP COUNT P are given, where nnnn is 0-9999, aabb is an alphanumerical digit, and:

- WFSND is Wait For Send timeout
- WFACK is Wait For Acknowledgement timeout
- WSOM is Wait for Start Of Message timeout
- NACK1 is single NACK received
- NACK2 is double NACK received
- NACKS is NACK Sent
- MSGIGN is Message Ignored
- BUFERR is Buffer Errors
- ERRLOG is Error LogFor the description of the error counters.

During faultless operation of the Network, nnnn has the value 0 (zero). The ERRLOG display summarizes the last sixteen error counters. They are stored in order of occurrence, where:

- aa is 1-8 for the error type (for example, 1 for WFSND and 8 for BUFERR).
- bb is the Network P-side port number.

Actio·n: None

-continued-

disp (continued)

Responses for the disp command (continued)

MAP output	Meaning and action

```
NM n-n      COUNTERS
            CMC 0 CMC 1
WFSND       nnnn  nnnn
WFACK       nnnn  nnnn
WSOM        nnnn  nnnn
NACK1       nnnn  nnnn
NACK2       nnnn  nnnn
NACKS       nnnn  nnnn
OPCOOR      nnnn  nnnn
RMKILL      nnnn  nnnn
BUFFULL     nnnn
INCDEL      nnnn

RETRY nnnn nnnn nnnn nnnn nnnn nnnn nnnn nnnn
```

Meaning: Command string disp count c displays the counters, where nnnn is 0-9999, and:

- WFSND is Wait For Send timeout
- WFACK is Wait For Acknowledgement timeout
- WSOM is Wait for Start Of Message timeout
- NACK1 is single NACK received
- NACK2 is double NACK received
- NACKS is NACK Sent
- OPCOOR is Opcode Out Of Range
- RMKILL is Return Message Killed
- BUFFULL is Buffer Full counter
- INCDEL is Incoming message Delayed
- RETRY is Retry counter for messages to CM.

For the description of the error counters. RETRY is not present for Network type NT0X48; it applies to types NT5X13, NT7X27, and NT8X11. During faultless operation of the Network, nnnn has the value 0 (zero).

Actio·n: None

```
NETWORK n-n IS NOT IN-SERVICE.
```

Meaning: The NM is not in the I state, where n-n echoes the specified NM.

Actio·n: None

-continued-

disp (continued)

Responses for the disp command (continued)

MAP output	Meaning and action
NETWORK WAS UNABLE TO SWITCH CLOCK SOURCES. A NETWORK OUT OF SERVICE TEST WILL CLEAR THIS.	**Meaning:** One of two links is used by the Central Message Controller (CMC) to send clock signals to the Network. If there is an attempt to busy the link that is currently signalling, and if the signal cannot be switched to the second link, then clock sources cannot be switched and the link cannot be busied. **Actio·n:** Use the command tst to execute the out-of-service test.
OK	**Meaning:** Using the command string disp clear resets the counters. **Actio·n:** None
REQUEST ABORTED. NO MAILBOX	**Meaning:** Mailboxes are used by the software to send messages throughout a system. If the Network is too busy with call processing, a mailbox is temporarily unavailable. **Actio·n:** Try again.
REQUEST FAILED. ERROR ENCOUNTERED CLEARING BUFFERS.	**Meaning:** For parameter clear communication with the buffer is temporarily suspended. **Actio·n:** None
REQUEST FAILED. RBUF ERROR.	**Meaning:** DISP COUNT depends on the read buffer where the counts are stored. **Actio·n:** None
REQUEST INVALID. NM IS C-SIDE BUSY.	**Meaning:** DISP COUNT cannot be executed because the C-side busy state prevents communication to the NM. **Actio·n:** None

-continued-

disp (end)

Responses for the disp command (continued)

MAP output	Meaning and action
`REQUEST INVALID.  NM IS status.`	**Meaning:** DISP COUNT or CLEAR cannot be performed unless the NM is in the • state, where status is one of the other codes listed in Table B, Display Codes for Network System Status. The command string disp status can be entered during any NM state. **Actio·n:** Try again.

`THE NETWORK C-SIDE BUFFER HAS BEEN CORRUPTED.`
`A NETWORK OUT OF SERVICE TEST WILL CLEAR THIS.`
`THE FOLLOWING CIRCUIT PACK MAY HAVE TO BE REPLACED.`
`NET CARD LIST`
`  SITE  FLR  RPOS  BAY_ID  SHF  DESCRIPTION  SLOT  EQPEC`
	Meaning: For a failure of the C-Side Buffer Test, the card(s) that are responsible are identified. For more information about the card list. For the description of the Buffer test see Out-Of-Service Tests on page 27.
	
	Actio·n: Use command tst to execute the out-of-service test.

-end-

chklnk

Function

Use the chklnk command to alter the firmware P-side link sensitivity and error byte. The command chklnk does not apply to Network type NT0X48. The command chklnk is intended for use only by the maintenance support personnel. It can cause links to be made system busy (state S).

chklnk command parameters and variables

Command	Parameters and variables			
chklnk	all	on off query init [*nnn* / 30]		
	net	*plane*	*pair*	[on off query init [*nnn* / 30]]

Parameters and variables	Description
30	This default parameter is the code used for low idle initializing of the Network P-side buffer.
all	This parameter specifies all in-service Networks in the office
init	This parameter initializes the error location in the Network P-side buffer.
net	This parameter indicates that only one Network is to be affected.
off	This parameter causes #00 to be written to the link sensitivity location of the Network P-side buffer to turn on the firmware link sensitivity.
on	This parameter causes #01 to be written to the link sensitivity location of the Network P-side buffer to turn on the firmware link sensitivity.
nnn	This parameter identifies the Network P-side buffer to be initialized. Range is 0-255.
pair	This parameter identifies the NM pair. Range is 0-31.

-continued-

chklnk (continued)

chklnk command parameters and variables (continued)

Parameters and variables	Description
plane	This variable identifies the Network plane. Range is 0 or 1.
query	This parameter gives the link sensitivity location and indicates if it is ON or OFF.

-end-

Qualifications

The following notes apply to the chklnk command:

- Before entering command chklnk the NM must be in the • (in-service) state.
- Command chklnk is used on links that are enabled for messaging, but which are not currently involved in a message transfer. Such links should be in an idle state. Detection by the Network of a non-idle state (transmitted by a PM) that does not follow the protocol of link sensitivity may indicate an intermittent problem with a PM link. The problem would otherwise appear during a message transfer sequence.
- With command chklnk only specific values may appear on a P-side link. If the link sensitivity is ON:
  - links with valid values are closed by the Network firmware
  - the link state is made system busy
- The command bsy or rts of the Network that the link is ON changes the sensitivity to OFF.
- By using command chklnk to set the Network link to SysB, the problematic part is identifiable from the MAP displays. Once enabled, it is disabled only by entering command string chklnk off or by a system restart.

CAUTION
The command chklnk can affect the service and performance of a switch.
Calls in progress may be dropped. The Network links may be made system busy.

Examples

The following table provides an example of the chklnk command.

chklnk (continued)

Examples of the chklnk command

Example	Task, response, and explanation
chklnk net 1 3 off ↵ *where* 1 identifies the network plane 3 identifies the NM pair	**Task:** Turn off the sensitivity for Network 3, plane 1. **Response:** `NM 1-3 SENSITIVITY OFF, ERROR BYTE: #30` **Explanation:** The links are idle for Network 3, plane 1.

Responses

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

Responses for the chklnk command

MAP output	Meaning and action
`NETWORK n-n IS A 0X48 AND HAS NO LINK SENSITIVITY BYTE.`	**Meaning:** Command chklnk is not relevant to Network type NT0X48, where n-n is the plane and pair number. **Action:** None
`NETWORK n-n IS NOT OK`	**Meaning:** The NM must be in the • (in-service) state before command chklnk is executed. **Action:** None

-continued-

chklnk (end)

Responses for the chklnk command (continued)

MAP output	Meaning and action
`NETWORK n-n SENSITIVITY status, ERROR BYTE:  #hex`	**Meaning:** The sensitivity of the link is given, where n-n is the Network plane and pair, status is ON or OFF, and hex is a hexadecimal code denoting the link state. Links should be in one of the following states as represented by the corresponding hexadecimal code: 30 IDLE (Idle) 32 HIDLE (High Idle) 34 MIS (May-I-Send) 36 SEND (Send) 38 SOM (Start of Message) 3A PACK (Positive Acknowledgement) 3C NACK (Negative Acknowledgement) 3E IWS (I-Will-Send) 3F WAI (Who-Am-I) A different state from one of these indicates an error in the link state. **Action:** None

`NM n-n SENSITIVITY RDBUFF ERROR.`
or
`REQUEST ABORTED--NO MAILBOX`
or
`UNABLE TO GET PARAMETER`
or
`WTBUFER OR NODE_NO ERROR`
	Meaning: When the Network is busy with extensive call processing, unusual and temporary software conditions may cause one of these replies.
	
	Action: Try again.

-end-

clkstat

Function

Use the clkstat command to determine the C-side clock to which the NET is synchronized.

clkstat command parameters and variables

Command	Parameters and variables	
clkstat	*plane*	*pair*

Parameters and variables	Description
plane	This variable is the plane to be queried and has a range of 0-1.
pair	This variable specifies the network pair to be queried and has a range of 0-31.

Qualifications

None

Example

The following table provides an example of the clkstat command.

Example of the clkstat command

Example	Task, response, and explanation
clkstat 0 1 ↵ *where* 0 is the number of the plane 1 is the network pair	**Task:** Show which C-side clock network pair 1 in plane 0 is synchronized to. **Response:** `NET 0 1 SYNCHRONIZED TO C_SIDE CLOCK 0` **Explanation:** Network pair 1 in plane 0 is synchronized to clock 0.

clkstat (end)

Responses

The following table describes the meaning and significance of responses to the CLKSTAT command.

Responses for the clkstat command

MAP output	Meaning and action
`NET <x> <y> SYNCHRONIZED TO C_SIDE CLOCK <n>`	**Meaning:** The C-side clock the indicated plane and pair are synchronized to is displayed where ▪ <x> is the number of the plane ▪ <y> is the network pair ▪ <n> is the number of the C-side clock **Action:** None
`Request Invalid -` `Max NM NO: <n>`	**Meaning:** A clkstat command request was made for a network pair that does not exist where <n> is the highest numbered pair. **Action:** None.

integ

Function

Use the integ command to access the NET INTEG level for the number of integrity failures for each NM.

integ command parameters and variables

Command	Parameters and variables
integ	There are no parameters or variables.

Qualifications

The status of NET INTEG level commands is given when the level is accessed because the system status display fields are not necessarily shown on a printout.

Examples

The following table provides an example of the integ command.

Examples of the integ command

Example	Task, response, and explanation
integ ↵	
	Task: Access the NET INTEG level of the MAP
	Response: `<INTEG level display>`
	Explanation: The INTEG level has been accessed.

Responses

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

Responses for the integ command

MAP output	Meaning and action
`<display>`	
	Meaning: The NET INTEG level is displayed.
	Action: None

-continued-

integ (end)

Responses for the integ command (continued)

MAP output	Meaning and action
`REQUEST INVALID.  NOT IMPLEMENTED.`	**Meaning:** The NET INTEG software is not provided. **Action:** None

-end-

jctrs (end)

Function

Use the jctrs command to access the NET JCTRS status level and to display the status of the junctors in both planes of the specified Network.

jctrs command parameters and variables

Command	Parameters and variables
jctrs	*pair*

Parameters and variables	Description
pair	This parameter identifies the NM to be displayed. The range is 0-31.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the jctrs command

MAP output	Meaning and action
<display>	**Meaning:** The NET JCTRS level is displayed. The status of the specified junctors appears beneath the NET status display**.** **Action:** None

links (end)

Function

Use the links command to access the NET LINKS level for the PM links to both planes of a specified NM.

links command parameters and variables

Command	Parameters and variables
links	*pair*

Parameters and variables	Description
pair	This variable identifies the NM to be displayed. Range is 0-31.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the links command

MAP output	Meaning and action
`<Display>`	**Meaning:** The NET LINKS level is displayed, as in ***Figure 7 on page 86.*** **Action:** None

loc

Function

Use the loc command to display the physical location of a crosspoint card.

loc command parameters and variables

Command	Parameters and variables
loc	*plane* *pair*

Parameters and variables	Description
pair	This variable identifies the plane of the crosspoint card. The range is 0-1.
plane	This variable identifies the NM pair. The range 0-63.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the loc command

MAP output	Meaning and action
<display>	**Meaning:** The card for the specified plane and pair is listed. **Action:** None

-continued-

loc (end)

Responses for the loc command (continued)

MAP output	Meaning and action
XPT TEST NOT IMPLEMENTED FOR NT0X48 NETWORK. or INVALID REQUEST FOR 5X13 NETWORK OUT OF RANGE FOR NT5X13 (CARD NO TO 3). or INVALID REQUEST FOR 8X11 NETWORK OUT OF RANGE FOR NT8X11 (CARD NO 0 OR 1).	**Meaning:** The specified card number is out of range because the office is not configured for that type of Network. **Action:** None

-end-

offl

Function

Use the offl command to set an NM to the O (off-line) state.

offl command parameters and variables

Command	Parameters and variables	
offl	*plane*	*pair*

Parameters and variables	Description
plane	This variable identifies the plane of the NM to be made off-line. The range is 0-1.
pair	This variable identifies the NM to be made off-line. The range is 0-31.

Qualifications

The following notes apply to the offl command:

- Before entering command offl, the NM must be in the M (manual busy) state.
- When command offl is executed, the specified NM remains off-line through all restarts.
- These logs are generated under the following conditions:

  NETM106 records the status change to off-line (0 state)
  NETM107 the specified NM is unequipped (- state)
  NET118 the link between the PM and the Network is made Offl.

Examples

The following table provides an example of the offl command.

Examples of the offl command

Example	Task, response, and explanation
offl 0 1 ↵	
	Task: Set the NM o pair 1 offline
	Response: 0K
	Explanation: The selected NM is offline.

offl (end)

Responses

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

Responses for the offl command

MAP output	Meaning and action
OK	**Meaning:** OFFL is executed. **Action:** The status display changes from M to O.
REQUEST FAILED. UNBIND TID FAILED.	**Meaning:** Input/Output (I/O) software cannot execute the request, where TID refers to Terminal Identifier. **Action:** Try again. If the response persists, contact the maintenance support group.
REQUEST INVALID. NM IS NOT MAN BUSY.	**Meaning:** The command offl cannot be executed unless the NM is in the M state. **Action:** None
WARNING: NETPATH TESTS ARE RUNNING ON THIS NETWORK, THEY WILL ABORT IF YOU CONTINUE. PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** The command entered will busy a Network on which NET PATH tests are running. If the state of the Networks changes, the tests will abort. **Action:** Enter ”YES” to execute the command and abort the NET PATH tests. Enter ”NO” to abort the command and allow the tests to run.

-end-

path (end)

Function

Use the path command to access the NET PATH level of the MAP which provides commands for fault isolation and verification.

path command parameters and variables

Command	Parameters and variables
path	There are no parameters or variables.

Qualifications

None

Examples

The following table provides an example of the path command.

Examples of the path command

Example	Task, response, and explanation
path ↵	
	Task: Access the PATH level of the MAP
	Response: `<PATH level display>`
	Explanation: The MAP PATH level is accessed.

Responses

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

Responses for the path command

MAP output	Meaning and action
`<display>`	
	Meaning: The NET PATH level is displayed.
	Action: None

qtst

Function

Use the qtst command to display the current status of the NM under test. While a test is in progress data may be displayed for the stages.

qtst command parameters and variables

Command	Parameters and variables	
qtst	*plane*	*pair*

Parameters and variables	Description
pair	This variable identifies the NM to be displayed (A and B sides). The range is 0-31
plane	This variable identifies the plane of the NM. The range is 0-1.

Qualifications

The following notes apply to the qtst command:

- For Network type NT5X13, the duration of testing the A- or B-side of a crosspoint card is 12 minutes.
- When ISTb and Flt occur, a card list indicates the most probable cards to have caused the test failure.

Examples

Not currently available

qtst (continued)

Responses

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

Responses for the qtst command

MAP output	Meaning and action
`NM n-nn test_name status`	**Meaning:** One of the previous occurs depending on the Network type and the testing that is currently active. The last response appears if the status is ABT or IDL. The status of the tests are displayed, where: nn-nn is the Network plane and NM respectively. ▪ test_name is one of the following out-of-service tests: - CROSSPOINT CARD TEST - CROSSPOINT SELF TEST - CONTROLLER TEST - RESET FUNCTIONS - BUFFER CHECK - LOOPBACK MESSAGE - CSIDE BUFFER - PSIDE FUNCTIONS - CLOCK PORT SWITCH - BASIC CM TEST - BASIC INTERFACE TEST - BASIC XPT TEST - BASIC PAD TEST. ▪ status is one of: - ABT means the command is aborted. - ACT means the test is active. - IDL means the test passed, where IDL applies to all tests except for cross-points. - FLT means the test has failed. - PASS applies to crosspoints only and means the test passed. - TRB occurs while testing is in progress and means In-service trouble (I state) is pending. **Action:** None

-continued-

qtst (continued)

Responses for the qtst command (continued)

MAP output **Meaning and action**

```
NM n-nn test_name status
        test_data
        cardlist
```

Meaning: MN, n-nn, test_name, and status are discussed in the previous QT st command response.

- test_data gives data about the test that is occurring on it if the test status is TRB, FLT, or ACT. The response varies according to the Network type.

- For all Network types the response to tests (except crosspoint) is:
  SUBTEST = nn, FATAL = t/f, DATA1 = nnnn, DATA2 = nnnn.
  where:
  nn is 0 to 31 to identify the NM.
  t/f is TRUE or FALSE to indicate whether a test is failing. If FALSE appears, then a card list is forthcoming.
  nnnn is a code that depends on the type of out-of-service test.

- For Network type NT5X13, the response for crosspoint tests is:
  SIDE side ICCARD n OGCARD n
  ERROR COUNT = nn
  TEST progress
  where:
  side is A or B for the A- or B-side crosspoints.
  n is 0 to 3 for the number of the incoming card (ICCARD) and the outgoing card (OGCARD).
  nn is 0 to 31 for the number of errors that occur in the procedures of a test.
  progress is COMPLETED or NOT COMPLETED.

- For Network type NT8X11, the response for crosspoint tests is:
  TEST STARTED
  junc_type side-SIDE TEST ERRORS = nnn,
  STAGE = nnn
  STATUS: activity progress result
  where:
  - junc_type is PARALLEL or SERIAL for the junctor type.
  - side is A, B, or BOTH for the A- or B-side crosspoints.
  - nnn is 0 to 255 for the total number of test procedures that failed. If no failures occur, the identification number of the stage at which testing has progressed is given.
  - activity is ACTIVE or INACTIVE.
  - progress is COMPLETED or NOT COMPLETED.
  - result is ABORTED or NOT ABORTED.

-continued-

qtst (end)

Responses for the qtst command (continued)

MAP output	Meaning and action
	Meaning (contd) ▪ cardlist occurs with status TRB or FLT. It gives the location of the failing card. **Action:** None
`NM n-nn TEST STATUS status`	**Meaning:** NM, n-nn, and status, have been discussed in the previous QT st command response. **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 all *incrname* *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 NET level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The NET 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 NET 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 NET 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 NET 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 NET level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

recover

Function

Use the recover command to return all NMs to service.

recover command parameters and variables

Command	Parameters and variables
recover	*busy_type*

Parameters and variables	Description
busy_type	This variable is SYSB, MANB, or ALL

Qualifications

The following notes apply to the recover command:

- The effect of the command is essentially the same as the command ”RTS plane pair FORCE NOWAIT”, except that the RECOVER command applies to all NMs rather than to only one plane and one pair.
- The RECOVER command does not copy the Connection Memory.
- The RECOVER command aborts the current active maintenance tasks of the NMs before returning them to service.
- Network audits will sometimes automatically return SYSB NMs to service; in such cases the RECOVER SYSB command will not be necessary.

Examples

Not currently available

recover (continued)

Responses

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

Responses for the recover command

MAP output	Meaning and action

`Warning - Active Mtce tasks aborted`
`submitting requests...`
`TOTAL number of NM RTS submitted = xx`
`number of NM RTS aborted = yy`
`OK`
	Meaning: xx number of RTS requests have been issued. Of this number, yy number of requests have aborted (failed); the rest are successful.
	
	Action: None

`Warning - Active Mtce tasks aborted`
`submitting requests...`
`TOTAL number of NM RTS submitted = xx`
`OK`
	Meaning: xx number of RTS requests have been issued successfully.
	
	Action: None

`no SYSB NM found` `OK`	**Meaning:** The command string recover sysb has been issued, but no SysB NM have been found. **Action:** None
`no MANB NM found` `OK`	**Meaning:** The command string recover manb has been issued, but no ManB NM have been found. **Action:** None

-continued-

recover (end)

Responses for the recover command (continued)

MAP output	Meaning and action
`no SYSB nor MANB NM found` `OK`	**Meaning:** The command string recover all has been issued, but no SysB or ManB NM have been found. **Action:** None

-end-

rdbuff

Function

Use the rdbuff command to read up to 48 bytes of memory buffer. The command rdbuff is recommended for use by the maintenance support personnel.

rdbuff command parameters and variables

Command	Parameters and variables			
rdbuff	*plane*	*pair*	*address*	*nbytes*

Parameters and variables	Description
address	This variable identifies the location in the buffer. The range is 0-32767.
nbytes	This variable identifies the number of bytes to be read from a buffer. The range is 1-48.
pair	This variable identifies the NM pair. The range is 0-31.
plane	This variable identifies the plane number. The range is 0 or 1.

Qualifications

None

Examples

Not currently available

rdbuff (end)

Responses

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

Responses for the rdbuff command

MAP output	Meaning and action
`ERROR--NO NM MAILBOX AVAILABLE.`	**Meaning:** Mailboxes are used by the software to send messages throughout a system. If the Network is too busy with call processing, a mailbox is temporarily unavailable. **Action:** Try again.
`ERROR--NETWORK C-SIDE LINKS BUSY.`	**Meaning:** Communication messages cannot be sent to the Network if the message links are busy. **Action:** None
`ERROR--CANNOT OPEN LINKS`	**Meaning:** The software is temporarily prevented from opening the links. **Action:** Try again later.
`ERROR--NO REPLY FROM NM.`	**Meaning:** A timeout of 1 second occurs if the Network does not reply. If the timeout occurs, the Network is occupied by call processing. **Action:** None
`REQUEST FAILED--CANNOT FILL BUFFER HEADER.`	**Meaning:** A message buffer is temporarily unavailable and communication with the Network is prevented. **Action:** Try again later.

Function

Use the rts command to test an NM and if OK, return it to service. To copy the connection memory (CM), use the parameter copy.

rts command parameters and variables

Command	Parameters and variables				
rts	*plane*	*pair*	copy	[*noforce* / force]	[*wait* / nowait]

Parameters and variables	Description
plane	This variable identifies the plane of the NM. The range is 0-1.
pair	This variable identifies the NM. The range is 0-31.
copy	This parameter gives a copy of the CM of the busy plane to the CM of the in-service plane when RTS is completed.
force	This parameter returns the specified pair to service without testing. Cards that are in the O state or are unequipped are not returned to service.
noforce	This default parameter, which is never entered, indicates that the specified pair will be tested before being returned to service because the force parameter is not entered.
nowait	This parameter enables the MAP to be used for other entries while the forced return-to-service proceeds.
wait	This default parameter, which is never entered, indicates that no additional commands may be entered at the MAP until the rts command is completed.

Qualifications

The following notes apply to the rts command:

- Before entering command rts, the NM must be in the S (SysB) or M (ManB) state.
- When one plane is being tested the CM of its mate is being updated by call processing. When the plane with the busy CM is returned to service after testing, a mismatch between the two CMs occur. The parameter copy busies the CM of the in-service plane into the CM of the busy plane at the time of the RTS.
- If a test other than BUFFER CHECK fails, the NM may not be returned to service depending on which of the tests failed.

rts (continued)

- If an NM is returned to service and the BUFFER CHECK test fails, an In-service Trouble (ISTb) is flagged.
- If the full tests fail, a card list of probable causes is displayed.
- These logs are generated under the following conditions:

NETM103	command rts is executed manually or by the system
NETM108	the previously-busy C-side message link has been returned to service
NET112	full tests have failed and are listed
NETM141	parameter force is used

Examples

Not currently available

Responses

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

Responses for the rts command

MAP output	Meaning and action
`ABORTED, RETURN CODE = n`	**Meaning:** The return-to-service is aborted, where n is the number that indicates a software reason by which the return-to-service is stopped. This response applies to the maintenance support personnel. **Action:** None
`REQUEST ABORTED`	**Meaning:** The timeout period for the request is based on percentage of load on the central processing unit (CPU). When another RTS request is already enqueued on the same plane and pair, secondary RTS requests are aborted. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`REQUEST ABORTED - MTCE IN PROGRESS`	**Meaning:** Return-to-service is not accepted because other maintenance is already in progress on the specified Network. For example, for the same plane and pair, another RTS request may be occurring or a SysB state has occurred. **Action:** None
`REQUEST INVALID. MAX NM NO. nn`	**Meaning:** The specified NM number is unequipped, where nn is the highest equipped NM number. **Action:** None
`REQUEST INVALID. NM IS status.`	**Meaning:** Command rts cannot be executed unless the NM is in the S or M state, where status is one of the other codes listed in ***Table B on page 18.*** **Action:** None

`REQUEST SUBMITTED. REPLY EXPECTED WITHIN 3 MINS.`
`TEST PASSED.`
`OK.`
	Meaning: RTS out-of-service tests are successful.
	
	Action: The status display changes from M to I.

`RESET FUNCTIONS FAILED.`
`NET CARD LIST`
`SITE FLR RPOS BAY_ID SHF DESCRIPTION SLOT EQPEC`
	Meaning: An RTS test failed and the faulty cards are listed according to*.*
	
	Action: No user action required.

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
WARNING: ACTIVE MTCE PROCESS ABORTED. PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** The parameter force bypasses the tests and CM copy when RTS is executed. **Action:** If YES is entered, the response to confirm RTS is OK. If NO is entered, the response echoes NO and the command is aborted.
WARNING: NETPATH TESTS ARE RUNNING ON THIS NETWORK, THEY WILL NOT ABORT IF YOU CONTINUE. PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** The command entered will busy a Network on which NET PATH tests are running. If the state of the Network changes, the tests will abort. **Action:** Enter “YES” to execute the command and abort the NET PATH tests. Enter “NO” to abort the command and allow the tests to run.
-end-	

trnsl (end)

Function

Use the trnsl command to translate the NM number to the CMC port number and displays the number of the CMC port to which the NM is assigned.

trnsl command parameters and variables

Command	Parameters and variables	
trnsl	*plane*	*pair*

Parameters and variables	Description
pair	This variable identifies the NM to be displayed. The range is 0-31.
plane	This variable identifies the plane of the NM. The range is 0 or 1.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the trnsl command

MAP output	Meaning and action
`NET plane - pair = CMC0 and 1, CARD card PORT port.`	**Meaning:** The CMC port to which the specified NM port is connected is given, where plane and pair echo the command, and card and port are the corresponding CMC card and port numbers. **Action:** None
`REQUEST INVALID. MAX NM NO. nn.`	**Meaning:** The specified NM number is unequipped, where nn is the highest equipped NM number. **Action:** None

tst

Function

Use the tst command to test a Network plane and NM pair and to initiate a test of the NMC for the specified NM.

tst command parameters and variables

Command	Parameters and variables	
tst	*plane*	*pair*

Parameters and variables	Description
pair	This variable identifies the NM to be tested. The range is 0-31.
plane	This variable identifies the plane of the NM to be tested. The range is 0 or 1.

Qualifications

The following notes apply to the tst command:

- Before the command tst is entered the NM state must be • (InSv) or M (ManB).
- For all Network types the maximum timeout for completion of a test or a return to service is 60 minutes and the minimum is 30.
- When the NM is in the • (InSv) state, the in-service test is executed.
- When the NM is in the M (ManB) state, the out-of-service test is executed.
- These Logs are generated under the following conditions:
  - NET112 either the in-service or out-of-service test failed or the test cannot be executed.
  - NETM120 a manual or system request for a test has occurred on a link between the PM and the Network, and the test failed or could not be executed.
  - NET141 a test fails.

Examples

Not currently available

tst (continued)

Responses

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

Responses for the tst command

MAP output	Meaning and action
CONTROLLER TEST FAILED n BUFFER MISMATCHES AT LOCATION: #nnnn, ... NET CARD LIST SITE FLR RPOS BAY_ID SHF DESCRIPTION SLOT EQPEC	**Meaning:** For Network type NT5X13, the controller test that checks for buffer corruption (on the C-side card NT3X74) has failed at a specific procedure of the test, where n is the number of buffer mismatches and nnnn is a software location identifier for a procedure. A card list of the probable faulty cards is given. ***For details of the card list, see Circuit Location Display on page 24.*** **Action:** None
INSERVICE (SHORT) TEST SELECTED.	**Meaning:** If the status of the specified NM is • (InSv), the in-service test is performed (***see In-Service Tests on page 26***). **Action:** None
OUT-OF-SERVICE (LONG) TEST SELECTED. WARNING: UNFINISHED CALLS ON THIS PLANE CAN CAUSE INTEGRITY FAILURES.	**Meaning:** Out-of-service tests are performed (see ***Out-Of-Service Tests on page 27***). When the CM is tested, call processing is cancelled and integrity failures may occur. While the NM is in the • (InSv) or M (ManB) states, call processes are cancelled. That is, calls in progress are cancelled during the tests. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action

`test_type FAILED`
`NET CARD LIST`
`SITE FLR RPOS BAY_ID SHF DESCRIPTION SLOT EQPEC`
	Meaning: A test failed, where test_type is one of:
	CONTROLLER TEST
	RESET FUNCTIONS
	BUFFER CHECK
	LOOPBACK MESSAGE
	CSIDE BUFFER
	PSIDE FUNCTIONS
	CLOCK PORT SWITCH
	BASIC CM TEST
	BASIC INTERFACE TEST
	BASIC XPT TEST
	BASIC PAD TEST
	
	A list of the faulty card(s) is also displayed (see Circuit Location Display on page 24). For a description of the tests see Out-Of-Service Tests on page 27.
	
	Action: None

`REQUEST INVALID. MAX NM NO. nn`	**Meaning:** The specified NM number is unequipped, where nn is the highest equipped NM number. In the following example display nn would be 21:
	
	`Net 11111 11111 22222 22222 33`
	`Plane 01234 56789 01234 56789 01234 56789 01`
	`0 .S..I..C.. LJ... ..I.. .O`
	`1 ...S..T... ....M ..... OO`
	
	Action: None

`REQUEST INVALID. NM IS status.`	**Meaning:** The NM must be in the • (InSv) or M (ManB) state, where status is one of the other codes ***listed in Table B on page 18***. **Action:** None

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
`REQUEST INVALID.  NM IS C-SIDE BUSY.`	**Meaning:** TST cannot be executed because the C-side busy state prevents communication to the NM. **Action:** None
`REQUEST SUBMITTED.  REPLY EXPECTED WITHIN duration.`	**Meaning:** The result of the test is eventually given, where duration is the length of time it takes to execute the test. The duration varies according to the type of test and to the software load. **Action:** While testing occurs, use of the MAP keyboard is suspended. To query Network maintenance processes, use another MAP.
`TEST PASSED.`	**Meaning:** The command tst is successful. **Action:** None

`WARNING:  NETPATH TESTS ARE RUNNING ON THIS NETWORK,`
`THEY WILL ABORT IF YOU CONTINUE.`
`PLEASE CONFIRM (“YES” OR “NO”).`
	Meaning: The command entered will busy a Network on which NET PATH tests are running. If the state of the Network changes, the tests will abort.
	
	Action: Enter YES to execute the command and abort the NET PATH tests. Enter NO to abort the command and allow the tests to run.

-end-

xpts (end)

Function

Use the xpts command to display the XPT status in the same way as the command disp at the NET XPTS level.

xpts command parameters and variables

Command	Parameters and variables
xpts	*pair*

Parameters and variables	Description
pair	This variable identifies the NM. The range is 0-31.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the xpts command

MAP output	Meaning and action
`display`	**Meaning:** The NET XPTS level ***is displayed, as in Figure 6 on page 73.*** **Action:** None

NETINTEG level commands

Use the NETINTEG level of the MAP to access the analysis feature which identifies errors on speech links between PMs and the Network.

Accessing the NETINTEG level

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

mapci;mtc;net;integ ↵

NETINTEG commands

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

NETINTEG commands

Command	Page
analyze	N-61
buffsel	N-67
disp	N-69
filter	N-77
mode	N-81
pms	N-85
post	N-93
quit	N-95
reth	N-99
rsti	N-101
setlog	N-103
timer	N-105

-continued-

NETINTEG commands (continued)	
Command	**Page**
trlnk	N-107
trnsl	N-109
upth	N-111
-end-	

NETINTEG menu

The following figure shows the NETINTEG 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
         .     .     .     .   2SysB   .     .     .     .     .
                                 M

Net Integ       Net                11111 11111 22222 22222 33
 0 Quit          Plane 01234 56789 01234 56789 01234 56789 01
 2 Post_           0   .S..I ..C.. LJ... ..I.. .0
 3 Mode_           1   ...S. .T... ....M ..... 00
 4 SetLog_
 5 Trnsl_       Posted Net: None  Tjimer: Enabled  Mode: Inter
 6 RstI_        Net101 & Net102 Logs will be stored in Logbuff
 7 Buffsel_
 8 Analyze_
 9
10
11 Disp_
12 Clear_
13 PMS_
14 _Counts_
15 _Thresh
16 _Logbuff
17
18 Timer_
```

Hidden commands

```
filter
reth
trlnk
upth
```

analyze

Function

Use the analyze command to analyze the following for a posted NM:

- the totals of both integrity and parity counts are listed in descending order for each type of card, where cards for the links are listed first, then junctors, then crosspoints
- the ten (or fewer) PM ports with the highest counts
- the ten (or fewer) junctors of both ends with the highest counts

analyze command parameters and variables

Command	Parameters and variables	
analyze	counts pm jctrs	[*all* integrity parity]

Parameters and variables	Description
all	This default parameter, which is never entered, indicates that both parity and intgrity counts will be included.
counts	This parameter specifies analysis of the total number of fault counts for the Network cards.
integrity	This parameter limits the display to integrity counts only.
jctrs	This parameter specifies analysis of the ten highest counts for junctors at both ends.
parity	This parameter limits the display to parity counts only.
pm	This parameter specifies analysis of the ten highest counts for the PM ports.

Qualifications

The following notes apply to the analyze command:

- If both integrity and parity are omitted, thay are both included in the display generated by command disp.
- NMs are posted by the commands post.
- When either parameter integrity or parity is entered, the display shows only the respective counts.

Examples

The following table provides an example of the analyze command.

analyze (continued)

Examples of the analyze command (continued)

Example **Task, response, and explanation**

analyze counts ↵

Task: Rearrange the display provided from the command string disp counts by executing the command string analyze counts for Network NT5X13.

Response:

```
ILNK 3X72 Shelf 65 Pos 18 Parity =12 Integrity = 0 Total =12
OLNK 3x72 Shelf 65 Pos 21 Parity = 3 Integrity = 0 Total = 3
OLNK 3X72 Shelf 65 Pos 19 Parity = 1 Integrity = 2 Total = 3
OLNK 3x72 Shelf 65 Pos 17 Parity = 1 Integrity = 1 Total = 2
ILNK 3X72 Shelf 65 Pos 17 Parity = 0 Integrity = 1 Total = 1
OLNK 3x72 Shelf 65 Pos 20 Parity = 1 Integrity = 0 Total = 1
OLNK 3X72 Shelf 65 Pos 16 Parity = 1 Integrity = 0 Total = 1
AJCT 3x72 Shelf 65 Pos  3 Parity = 4 Integrity = 0 Total = 4
BJCT 3X72 Shelf 65 Pos  3 Parity = 4 Integrity = 0 Total = 4
AJCT 3x72 Shelf 65 Pos  6 Parity = 3 Integrity = 0 Total = 3
AJCT 3X72 Shelf 65 Pos  5 Parity = 1 Integrity = 1 Total = 2
AJCT 3x72 Shelf 65 Pos  2 Parity = 2 Integrity = 0 Total = 2
BJCT 3X72 Shelf 65 Pos  7 Parity = 0 Integrity = 2 Total = 2
BJCT 3x72 Shelf 65 Pos  2 Parity = 2 Integrity = 0 Total = 2
AJCT 3X72 Shelf 65 Pos  8 Parity = 1 Integrity = 0 Total = 1
AJCT 3x72 Shelf 65 Pos  1 Parity = 1 Integrity = 0 Total = 1
BJCT 3X72 Shelf 65 Pos  8 Parity = 0 Integrity = 1 Total = 1
BJCT 3x72 Shelf 65 Pos  1 Parity = 1 Integrity = 0 Total = 1
AIXP 3X70 Shelf 51 Pos  3 Parity =12 Integrity = 0 Total =12
AOXP 3x70 Shelf 51 Pos  2 Parity = 4 Integrity = 0 Total = 4
BIXP 3X70 Shelf 51 Pos  9 Parity = 3 Integrity = 1 Total = 4
BIXP 3x70 Shelf 51 Pos  6 Parity = 3 Integrity = 1 Total = 4
BOXP 3X70 Shelf 51 Pos  8 Parity = 4 Integrity = 0 Total = 4
AOXP 3x70 Shelf 51 Pos  5 Parity = 2 Integrity = 1 Total = 3
AOXP 3X70 Shelf 51 Pos  4 Parity = 3 Integrity = 0 Total = 3
AOXP 3x70 Shelf 51 Pos  3 Parity = 3 Integrity = 0 Total = 3
BOXP 3X70 Shelf 51 Pos  7 Parity = 1 Integrity = 2 Total = 3
BOXP 3x70 Shelf 51 Pos  6 Parity = 2 Integrity = 1 Total = 3
AIXP 3X70 Shelf 51 Pos  2 Parity = 0 Integrity = 1 Total = 1
BIXP 3x70 Shelf 51 Pos  8 Parity = 0 Integrity = 1 Total = 1
BIXP 3X70 Shelf 51 Pos  7 Parity = 1 Integrity = 0 Total = 1
```

Explanation: The orderly display of information from the command string disp counts is provided using the command string analyze counts. Notice the sequence of totals and the grouping of card types. For the output displayed using the command string disp counts, refer to the example of the disp command on page N-70.

-continued-

analyze (continued)

Examples of the analyze command (continued)

Example	Task, response, and explanation
analyze jctrs ↵	

Task: The totals resulting from the command string analyze pm show a low discrepancy. The integrity failure is probably not the link between the Network and the PM. (If the totals had shown a large discrepancy-high and low counts-then using analyze on the planes and pairs with high counts would indicate the source of the integrity or parity failure.) Analyze the ten highest counts for junctors at both ends.

Response:

```
NM 0-0 BUFFER LAST CLEARED FEB7 08:01:59
NET O JCTR 40 NET 0 JCTR 56 PARITY = 0 INTEGRITY = 1 TOTAL= 1
NET 0 JCTR 46 NET 0 JCTR 62 PARITY = 1 INTEGRITY = 0 TOTAL= 1
NET 0 JCTR 54 NET 0 JCTR 22 PARITY = 1 INTEGRITY = 0 TOTAL= 1
```

Explanation: Since the totals still show a low discrepancy, the problem is probably intermittent. To verify this, Log NET102 would show that the tests of the Network cards are OK:

```
NET102 : FEB09 11:15:24, INTEGRITY FAILURE
LTC 3, DTC 0, CALL NOT SET UP, PATH IN SERVICE
NETA: 0 - 0 ILNK  10 ICHNL 25 AIXP  0 AOXP 3 AJCT 56
NETB: 0 - 0 ILNK  44 ICHNL 22 BIXP  2 BOXP 2 BJCT 40
DIAG  OK  ASIDE-EXT  TST  BSIDE-EXT  TST
MEM - ASIDE: IXPT OK, OXPT OK;     BSIDE: IXPT OK, OXTP OK
 TC - ASIDE: OK   BSIDE:   OK JCTR: OK
```

-continued-

analyze (continued)

Examples of the analyze command (continued)

Example	Task, response, and explanation

analyze pm ↵	**Task:** Analyze the ten highest counts for the PM ports.
	
	Response:
	
	`NM 0-0 BUFFER LAST CLEARED FEB7 08:01:59`
	`LTC 3 PORT 0 NET  PORT  10 PARITY = 0 INTEGRITY = 1 TOTAL = 1`
	`DTC 0 PORT15 NET  PORT  14 PARITY = 1 INTEGRITY = 0 TOTAL = 1`
	`LTC 0 PORT 6 NET  PORT  17 PARITY = 1 INTEGRITY = 0 TOTAL = 1`
	`LTC 1 PORT 4 NET  PORT  21 PARITY = 1 INTEGRITY = 0 TOTAL = 1`
	`DTC 0 PORT 4 NET  PORT  44 PARITY = 0 INTEGRITY = 1 TOTAL = 1`
	
	Explanation: In the two displays resulting from entering command strings disp counts and analyze counts compare the counts for ilnk on card 1 and the total for ilnk 3X72. Since card ilnk has from four through eight PM linked to it, the system responds with the above display.

-end-

Responses

The following table describes the meaning and significance of responses to the analyze command.

Responses for the analyze command

MAP output	Meaning and action
`ALL COUNTS ZERO`	**Meaning:** There are no counts in the buffer to be analyzed. The buffer has been cleared. **Action:** None

-continued-

analyze (continued)

Responses for the analyze command (continued)

MAP output **Meaning and action**

```
NM n-n BUFFER LAST CLEARED modd hh.mm.ss
card pec SHELF xx POS yy PARITY = ppp INTEGRITY = iii TOTAL = ttt
or
NM n-n BUFFER LAST CLEARED modd hh.mm.ss
card pec SHELF xx POS yy PARITY = ppp
or
NM n-n BUFFER LAST CLEARED modd hh.mm.ss
card pec SHELF xx POS yy INTEGRITY = iii
```

Meaning: The counts for the NM pair are displayed where:

n-n	is the posted NM plane and pair.
modd	is the month and day when the buffer was cleared.
hh.mm.ss	is the hour, minutes, and seconds when the buffer was cleared.
card	includes the following Network card types: ILNK ILNK OLNK OLNK AJCT BJCT AIXP AOXP BIXP BOXP
pec	is the card PEC without the prefix NT.
xx	is the shelf number in the Net frame.
yy	is the crd position in the shelf.
ppp	is 0 to 999 or the threshold value for the parity count.
iii	is 0 to 999 or the threshold value for the integrity count.
ttt	is the addition of the integrity and parity counts.

Action: None

-continued-

analyze (end)

Responses for the analyze command (continued)

MAP output	Meaning and action
`NM n-n BUFFER LAST CLEARED modd hh.mm.ss` `NET n JCTR j TO NET n JCTR j PARITY = pp INTEGRITY = ii TOTAL = tt`	**Meaning:** If parameter jctr is used, the junctors at both ends are displayed, where: n-n is the posted NM plane and pair. modd is the month and day when the buffer was cleared. hh.mm.ss is the hour, minutes, and seconds when the buffer was cleared. n is the discrimination number of the Networks. j is the discrimination number of the junctors. ppp is 0 to 255 or the threshold value for the parity count. iii is 0 to 255 or the threshold value for the integrity count. ttt is the addition of the integrity and parity counts. ***Note:*** ttt = ppp + iii is less than or equal to 255. **Action:** None
`pm n PORT n NET PORT nn PARITY = ppp INTEGRITY = iii TOTAL = ttt`	**Meaning:** If parameter PM is used, the PM and Network counts are displayed, where: pm is the type of PM that is connected to the Network. n, nn is the discrimination number of the PM, the PM port, and the Network port respectively. The values of n are not necessarily the same. ppp is 0 to 255 or the threshold value for the parity count. iii is 0 to 255 or the threshold value for the integrity count. ttt is the addition of the integrity and parity counts. ***Note:*** ttt = ppp + iii is less than or equal to 255. **Action:** None
`REQUEST INVALID, NO NET POSTED`	**Meaning:** The command post must be used before analyze. **Action:** None

-end-

buffsel

Function

Use the buffsel command to control the contents of the Log storage buffer (Logbuff) which contains the last one hundred Logs of the specified type.

buffsel command parameters and variables

Command	Parameters and variables	
buffsel	*logtype*	on off

Parameters and variables	Description
on	This default parameter includes the display of the specified log.
logtype	This variable identifies the log type which is NET101 or NET102.
off	This parameter excludes the display of the specified log

Qualifications

The following notes apply to the buffsel command:

- The contents of the Log buffer are displayed by the command string disp logbuff.
- The initial Logtype to be included in the buffer is NET102. NET101 Logs contain information that does not contribute to fault diagnosis.

buffsel (end)

Example

The following table provides an example of the buffsel command.

Example of the buffsel command

Example	Task, response, and explanation
buffsel buffsel net102 off ↵ *where* net102 is the logtype	**Task:** Control the content of the Log storage buffer so that the remaining log type to be included in the buffer is NET102. **Response:** `NET102 LOGS WILL BE STORED IN THE LOGBUFF.` **Explanation:** The system responds by displaying the above response indicating that only NET102 logs will be stored in the buffer. If the log buffer contained only NET102 logs before this command was entered the response is: `NO LOGS WILL BE STORED IN THE LOGBUFF`

Responses

The following table provides examples of the responses to the buffsel command.

Responses for the buffsel command

MAP output	Meaning and action
`logtype LOGS WILL BE STORED IN THE LOGBUFF`	**Meaning:** The Logs that are included in the display of the contents of the Log buffer are only the remaining Logs. **Action:** None
`NO LOGS WILL BE STORED IN THE LOGBUFF`	**Meaning:** All Logs have been excluded from the buffer. **Action:** None

disp

Function

Use the disp command to allow the contents of the fault counters and the integrity and parity buffers to be displayed or cleared for all planes or for a plane and pair selected by the post command.

disp command parameters and variables

Command	Parameters and variables		
disp	master	[integrity	
	counts	parity]	
	clear	logbuff	
		counts	all
	logbuff	all	
	thresh		

Parameters and variables	Description
master	This default parameter displays the total fault counts of cards for all plane pairs of the posted NM.
all	This parameter clears all counts in the Log buffer or displays all contents of the Log buffer.
clear	This parameter clears all counters on the posted plane and pair, including the ISTb displays set by the command analyze, or clears the contents of the Log buffer.
counts	This parameter displays the fault counters only for the plane and pair identified by the command post. When used with parameter clear, this parameter displays the counts pegged against the cards of the posted NM or clears counts in the Log buffer
integrity	This parameter specifies the display of integrity counts.
logbuff	This parameter displays the contents of the integrity buffer. A ”snapshot” is taken, and displayed for failures associated with the posted plane(s) and pair(s).
parity	This parameter specifies the display of parity counts.
thresh	This parameter displays all the fault counters on the selected Network plane and pair that have reached the threshold limit (displayed as status code T). The threshold is set by the comand upth, but is defaulted at a count of 250.

disp (continued)

Qualifications

The following notes apply to the disp command:

- When either parameter integrity or parity is entered, the display shows only the respective counts.
- If both parameters integrity and parity are omitted, the default is to include both in the disp display.

Examples

The following table provides an example of the disp command.

Examples of the disp command

Example	Task, response, and explanation
disp counts ↵	**Task:** Display the fault counters for the posted plane and pair. **Response:** NM 0-0 BUFFER LAST CLEARED FEB7 08:01:59 PARITY + INTEGRITY FAULTS CARD ILNK AIXP AOXP AJCT BJCT BIXP BOXP OLNK 0 0 2 0 0 0 0 0 0 1 2 0 0 0 0 0 2 0 2 0 0 1 0 0 1 1 2 3 0 0 1 0 1 2 0 0 4 0 1 1 0 5 0 0 0 1 6 0 0 0 0 7 0 1 1 0 **Explanation:** The fault counters for NM 0 0 is displayed. The sum of all the counts on this display is 20. When the command string analyze counts is entered, the information displayed above is rearranged as displayed in the example for the command analyze on page N-62 .

-continued-

disp (continued)

Examples of the disp command (continued)

Example **Task, response, and explanation**

disp master ↵

Task: Display the status of all Networks.

Response:

```
PAIR  0 PLANE 1  PAIR  0 PLANE 1  PAIR  0 PLANE 1
  0   20     48   11   ---    ---  22   ---   ---
  1   20     32   12   ---    ---  23   ---   ---
  2   0      0    13   ---    ---  24   ---   ---
  3   0      0    14   ---    ---  25   ---   ---
  4   0      0    15   ---    ---  26   ---   ---
  5   0      0    16   ---    ---  27   ---   ---
  6   0      0    17   ---    ---  28   ---   ---
  7   0      0    18   ---    ---  29   ---   ---
  8   0      0    19   ---    ---  30   ---   ---
  9   0      0    20   ---    ---  31   ---   ---
  10  0      0    21   ---    ---  PARITY+INTEGRITY
```

Explanation: NM-0 of plane-0 has a sum of 20 integrity and parity counts, while NM-0 of plane-1 has 48. (Command post is not required with parameter master of disp.)

-end-

Responses

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

Responses for the disp command

MAP output **Meaning and action**

`ALL COUNTS ZERO`

Meaning: The posted NM pair has no faults.

Action: None

-end-

disp (continued)

Responses for the disp command (continued)

MAP output	Meaning and action
PARITY + INTEGRITY FAULTS CARD ILNK AXPT ATCT BJCT BXPT OLNK 0 nnn nnn nnn nnn nnn nnn 1 nnn nnn nnn nnn nnn nnn 2 nnn nnn nnn nnn 3 nnn nnn nnn nnn	**Meaning:** For Network type NT8X11, parameter counts displays the fault counts for each card type, where nnn has the range 0-999 or up to the threshold value. Blanks under the headers for the card types indicate that the Network type is unequipped for those cards. **Action:** None
PARITY + INTEGRITY FAULTS CARD ILNK AIXP AOXP AJCT BJCT BIXP BOXP OLNK 0 nnn nnn nnn nnn nnn nnn nnn nnn 1 nnn nnn nnn nnn nnn nnn nnn nnn 2 nnn nnn nnn nnn nnn nnn nnn nnn 3 nnn nnn nnn nnn nnn nnn nnn nnn 4 nnn nnn nnn nnn 5 nnn nnn nnn nnn 6 nnn nnn nnn nnn 7 nnn nnn nnn nnn	**Meaning:** For Network type NT5X13, parameter counts displays the fault counts for each card type, where nnn has the range 0-999 or up to the threshold value. Blanks under the headers for the card types indicate that the Network type is unequipped for those cards. The display is the same for Network types NT7X27 and NT7X40 except that nnn under headers AJCT and BJCT is always (zero). **Action:** None

-continued-

disp (continued)

Responses for the disp command (continued)

MAP output **Meaning and action**

```
PARITY + INTEGRITY FAULTS
CARD  ILNK  AIXP  AOXP  AJCT  BJCT  BIXP  BOXP    OLNK
0  nnn      nnn   nnn   nnn   nnn   nnn   nnn     nnn
1  nnn      nnn   nnn   nnn   nnn   nnn   nnn     nnn
2  nnn      nnn   nnn   nnn   nnn   nnn   nnn     nnn
3  nnn      nnn   nnn   nnn   nnn   nnn   nnn     nnn
4  nnn      nnn   nnn   nnn   nnn   nnn   nnn     nnn
5  nnn      nnn   nnn   nnn   nnn   nnn   nnn     nnn
6  nnn      nnn   nnn   nnn   nnn   nnn   nnn     nnn
7  nnn      nnn   nnn   nnn   nnn   nnn   nnn     nnn
8  nnn                  nnn   nnn                 nnn
9  nnn                  nnn   nnn                 nnn
CARD  ILNK  AIXP  AOXP  AJCT  BJCT  BIXP  BOXP    OLNK
10 nnn                  nnn   nnn                 nnn
11 nnn                  nnn   nnn                 nnn
12 nnn                  nnn   nnn                 nnn
13 nnn                  nnn   nnn                 nnn
14 nnn                  nnn   nnn                 nnn
15 nnn                  nnn   nnn                 nnn
```

Meaning: For Network type NT0X48, parameter counts displays the fault counts for each card type, where nnn has the range 0 to 999 or up to the threshold value. Blanks under the headers for the card types indicate that the Network type is unequipped for those cards.

Action: None

```
NM n-nn BUFFER LAST CLEARED modd hh.mm.ss
```

Meaning: The time at which the counts of the posted NM was cleared is displayed, where:

- n-nn identifies the NM pair.
- modd is the month and day when the buffer is cleared.
- hh.mm.ss is the hour, minutes, and seconds when the counts were cleared.

Action: None

-continued-

disp (continued)

Responses for the disp command (continued)

MAP output **Meaning and action**

```
PAIR   0 PLANE  1 PAIR   0 PLANE  1 PAIR  0  PLANE  1
 0    nnn   nnn   11    nnn   nnn   22    nnn    nnn
 1    nnn   nnn   12    nnn   nnn   23    nnn    nnn
 2    nnn   nnn   13    nnn   nnn   24    nnn    nnn
 3    nnn   nnn   14    nnn   nnn   25    nnn    nnn
 4    nnn   nnn   15    nnn   nnn   26    nnn    nnn
 5    nnn   nnn   16    nnn   nnn   27    nnn    nnn
 6    nnn   nnn   17    nnn   nnn   28    nnn    nnn
 7    nnn   nnn   18    nnn   nnn   29    nnn    nnn
 8    nnn   nnn   19    nnn   nnn   30    nnn    nnn
 9    nnn   nnn   20    nnn   nnn   31    nnn    nnn
10    nnn   nnn   21    nnn   nnn   PARITY + INTEGRITY
```

Meaning: If parameter master is used, the sum of all the parity and integrity fauls is listed, where:

- 0-31 are the NM card numbers.
- nnn is 0-999 for the quantity of pegged faults on the respective cards, where:
  - *** indicates that the counts exceed 999.
  - --- indicates that the NM is unequipped.
  - T indicates that the counts for one of the cards of the NM has reached its threshold.

Note: To list only the parity or the integrity counts, enter the parameter parity or integrity with the command disp master.

Action: None

```
NONE FOUND.
```

Meaning: If command string disp thresh is entered, and no counters have exceeded the threshold limits.

Action: None

REQUEST INVALID. NO NET POSTED.

Meaning: No plane and pair have been specified by the command post; no integ level command can occur until one is.

Action: None

-continued-

disp (end)

Responses for the disp command (continued)

MAP output	Meaning and action
`SNAPSHOT BUFFER EMPTY.`	**Meaning:** DISP_LOGBUFF is entered, and the integrity buffer does not contain any data. **Action:** None
`PLEASE CONFIRM ("YES" OR "NO"):`	**Meaning:** DISP_CLEAR requires parameter logbuff or counts. **Action:** If DISP_CLEAR_COUNTS is entered and YES is replied, the response is: OK. COUNTS CLEARED. If DISP_CLEAR_INTG is entered and YES is replied, the response is: OK. LOGBUFF CLEARED. If NO is replied in either case, the command is aborted.

-end-

filter

Function

Use the filter command to alters the integrity or parity action thresholds (or both) in a specifies XPM. Filter is recommended for use by the maintenance support personnel.

filter command parameters and variables

Command	Parameters and variables
filter	[*xpmtype* *xpmnum*] query [integrity / parity / both] set [parity *parm* / both *parm*]

Parameters and variables	Description
both	This parameter displays the threshold value of both parity and integrity action.
integrity	This parameter displays the threshold value of integrity action.
query	This parameter displays the threshold value of the quantity of XPM faults that are allowed to increment before XPM maintenance action is triggered.
parity	This parameter displays the threshold value of parity action.
parm	This variable identifies the number of faults that are required in a 10 second interval to cause a fault to be acted upon by the XPM. The range is 1-20.
set	This parameter alters only the threshold for parity value.
xpmnum	This variable is the XPM discrimination number. The range is 0-127.
xpmtype	This variable is one of these XPMs: LGC, ILGC DTC, IDTC LTC, ILTC

Qualifications

The following notes apply to the filter command:

- If an asterisk (*) appears under the heading ACTUAL VALUES for integrity or parity, there is an error condition in the software or hardware respectively.

filter (continued)

- Parameter XPM_PARITY THRESHOLD in Table OFCSTD is set to 20 for all offices, but may be changed by the operating company (refer to the appropriate office parameters reference manual).

Example

The following table provides an example of the filter command.

Example of the filter command

Example	Task, response, and explanation
filter dtc 0 query both ↵ *where* dtc identifies the XPM type 0 identifies the XPM discrimination number	**Task:** Display the threshold value (of both parity and itegrity actions) of the quantity of DTC 0 faults that are allowed to inrement before XPM maintenance action is triggered. **Response:** RTS VALUES ACTUAL VALUES INTEGRITY PARITY UNIT STATE INTEGRITY PARITY DTC 0 10 1 0 INSV 10 18* 1 MANB N/A N/A **Explanation:** The system responds by noting the mismatched values with an asterisk (*).

Responses

The following provides explanations of the responses to the filter command.

Responses for the filter command

MAP output	Meaning and action
CHANGES TO THE INTEGRITY VALUE ARE NOT SUPPORTED	**Meaning:** The threshold value of the integrity action cannot be changed. **Action:** None

-continued-

filter (continued)

Responses for the filter command (continued)

MAP output	Meaning and action
INVALID PM SELECTED	**Meaning:** The switching office is not configured with the specified XPM. **Action:** None
OK LEVELS SET	**Meaning:** Both units of the XPM are in service (status INSv) and the thresholds are set to the required values. **Action:** None
XPM VALUES / ACTUAL VALUES INTEGRITY PARITY / UNIT STATE INTEGRITY PARITY xpm n ii pp / 0 state ii* pp 1 state ii* pp	**Meaning:** The status of XPM and the integrity and parity counts are given, where: RTS — specifies the counts for the returning to service of the XPM xpm — is the type of XPM n — is the XPM discrimination number ii — is the integrity count between the XPM and the Network pp — is the parity count between the XPM and the Network. Under the header ACTUAL VALUES, pp may be N/A for Not Available, for example when a PM is manually busy (ManB state). state — is one of the following maintenance states of the XPM: CBSY INSV MANB OFFL SYSB Unequipped * — is present when an ACTUAL VALUE mismatches a corresponding RTS value. N/A — means Not Applicable to units that are in the ManB state. **Action:** None

-continued-

filter (end)

Responses for the filter command (continued)

MAP output **Meaning and action**

```
      RTS VALUES                          ACTUAL VALUES
      INTEGRITY          UNIT  STATE      INTEGRITY
xpm   n      ii             0   state          ii *
                            1   state          ii *
```

Meaning: Only the integrity status is given, where the variables are the same as those described previously.

Action: None

```
      RTS VALUES                            ACTUAL VALUES
        PARITY           UNIT  STATE          PARITY
xpm   n  ii                 0   state            ii *
                            1   state            ii *
```

Meaning: Only the parity status is given, where the variables are the same as those described previously.

Action: None

-end-

mode

Function

Use the mode command to change the pegging of integrity faults.

mode command parameters and variables

Command	Parameters and variables
mode	inter intra specific [*pair1* *pair2*]

Parameters and variables	Description
inter	This parameter pegs the faults of all Networks involved in call processing.
intra	This parameter pegs the faults of a single NM involved in intra-Network call processing. Intra is used to prevent a faulty card on one NM causing high counts on another NM.
pair1, 2	These variables identify the NM (on both planes) for which the pegging is to occur. Range is 0-31 for each NM.
specific	This parameter selects a pair of NMs for faults that occur only between the selected pair.

Qualifications

The following notes apply to the mode command:

- To display the counts use the command disp.
- When the NETINTEG level is initially accessed, the mode is set to inter.
- Whenever the mode is changed, the NETINTEG level status display is updated. The header Mode displays one of:
  - Inter
  - Intra
  - x<--->y, where x and y are the numbers for the range of NMs.

Examples

The following table provides an example of the mode command.

mode (continued)

Examples of the mode command

Example	Task, response, and explanation

mode specific 0 4 ↵
where
 	
0 is the first NM pair for which pegging is to occur
4 is the second NM pair for which pegging is to occur
	Task: Display the faults on Network pair 0 and 4.
	
	Response: `ONLY FAULTS BETWEEN PAIR 0 AND 4 WILL BE PEGGED`
	
	Explanation: The system responds with the following:
	`Posted Net: None Timer: Enabled Mode: Specific`
	`Logbuff Contents: Net102`
	The log NET102 generated means an integrity fault has been detected. An integrity fault can be either a parity failure or an integrity mismatch.

Responses

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

Responses for the mode command

MAP output	Meaning and action
`ALL INTER-PAIR FAULTS WILL BE PEGGED (NORMAL MODE)`	**Meaning:** Peg counts for all NM faults are occurring, provided the command timer is enabled. **Action:** None
`ALL INTRA-PAIR FAULTS WILL BE PEGGED`	**Meaning:** Peg counts occur only for faults within a single NM. That is, pegs occur for each NM that has a fault within itself. **Action:** None

-continued-

mode (end)

Responses for the mode command (continued)

MAP output	Meaning and action
`NO CHANGE REQUIRED - MODE ALREADY SELECTED`	**Meaning:** The specified mode is currently active. **Action:** None
`ONLY FAULTS BETWEEN PAIR x AND y WILL BE PEGGED`	**Meaning:** Pegging occurs for a range of NMs, where x and y specify the NM numbers. **Action:** None

-end-

pms

Function

Use the pms command to display the counts of faults of the PM ports that are connected to NM ports, from the PM maintenance perspective.

pms command parameters and variables

Command	Parameters and variables
pms	full summary *n* [parity integrity]

Parameters and variables	Description
full	This parameter displays the highest non-zero counts of up to twenty PMs. The corresponding Network and PM ports are identified.
integrity	This parameter specifies that the counts are for integrity faults.
n	This variable indicates the quantity of PMs for which counts are to be displayed. Range is 1-20.
parity	This parameter specifies that the counts are for parity faults.
summary	This parameter displays a summarized version of the parameter full counts.

Qualifications

The following notes apply to the pms command:

- When neither parameter integrity nor parity is entered, the displays for both are included.
- Use the parameter summary to establish an overview of the counts of PM faults in the office. Then use the parameter full to display more details about the PMs with the highest counts in the summarize display. For example, if five PMs have very high counts when 20 are displayed, the command string pms full 5 gives details in another display.

pms (continued)

Examples

The following table provides examples of the pms command.

Examples of the pms command

Example	Task, response, and explanation

pms full 3 parity ↵
where

3 is the number of PMs for which fault counts are to be displayed.

Task: Display more information on the PMs with fault counts from the previous example.

Response:

```
 DTC 1     Network     Unit 0 *     Unit 1
Port     Pair Port    0 Plane 1    0 Plane 1
 0       1     12     86    36     0      0
 1       3     43     108   22     0      0
 4       1     8      15    9      0      0
 5       2     22     4     23     0      0
 8       2     11     21    13     0      0
 9       2     54     34    98     0      0
 12      1     31     40    16     0      0
 13      3     18     2     5      0      0
   PARITY              Check for Swacts
```

Explanation: The DTC 1 display is an expansion of the information resulting from the command summary display. The addition of all the numbers under the headers Unit 0 and Unit 1 is equal to the 532 under the header Total Hits of command summary display. The quantity of ports under the header DTC 1 Port is the 8 indicated in the command summary display under header No. Ports With Hits.

This list of eight identifies the port with the highest number of hits, in this case port 1 with 108. On the DTC ports 1, 2, 4, 5 may be on the same card, in which case the card should be tested. Replace the card if it fails the test.

-continued-

pms (continued)

Examples of the pms command (continued)

Example	Task, response, and explanation

pms full 3 parity ↵
where

3 is the number of PMs for which fault counts are to be displayed.

Task: Display more information on the PMs with fault counts from the previous example.

Response:

```
MTM 106      Network
 Port        Pair Port    0 Plane 1
0            2     15     88      0
               PARITY
```

Explanation: Since the command summary display indicates YES for the header Hits On Both Planes the problem is more likely to be with a PM card than with a Network card. In the example of MTM 106 the problem is likely to be with a Network card because a count has been incremented on only one plane.

pms full 3 parity ↵
where

3 is the number of PMs for which fault counts are to be displayed.

Task: Display more information on the PMs with fault counts from the previous example.

Response:

```
LTC 10     Network      Unit 0      Unit 1 *
Port       Pair Port   0 Plane 1   0 Plane 1
2          3     4     0       0   0      12
3          2     19    0       0   0      4
10         3     5     0       0   1      24
11         1     52    0       0   2      2
    PARITY                Check for Swacts
```

Explanation: The inactive unit of an XPM does not usually have counts; zeros (0) are normal. (The active unit is indicated by an asterisk (*) beside the header.) If there are counts for the inactive unit it may be because of a switch of activity between the units (a SwAct). If the counts result from a SwAct, disregard them.

-continued-

pms (continued)

Examples of the pms command (continued)

Example **Task, response, and explanation**

pms summary 5 parity ↵
where

5 is the number of PMs for which fault counts are to be displayed.

Task: Identify the five PMs with the highest fault counts.

Response:

```
   PM     Highest     Total    No. Ports    Hits On
        Hits/Port     Hits     With Hits    Both Pl
DTC 1    108         532      8            YES
MTM 106  88          88       1            NO
LTC 10   24          45       4            YES
LGC 8    8           53       16           NO
LM  2    2           2        1            NO
```

Explanation: In this display, the sequence of PMs occurs according to the field under header Highest Hits/Port. Since DTC 1, MTM 106, and LTC 10 have the highest counts (hits), it is likely that they are responsible for affecting some service.

-end-

Responses

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

Responses for the pms command

MAP output	Meaning and action
ALL COUNTS ZERO	**Meaning:** No counts are incremented for any of the PMs in the office configuration. **Action:** None

-continued-

pms (continued)

Responses for the pms command (continued)

MAP output **Meaning and action**

```
PM          HIGHEST      TOTAL        NO. PORTS     HITS ON
            HITS/PORT    HITS         WITH HITS     BOTH PL
pm_type     high_hit     nnnnn          pt            y/n
   :           :           :            :             :
   :           :           :            :             :
pm_type     high_hit     nnnnn          pt            y/n
                         display_mode
```

Meaning: For all PMs the summary display gives up to twenty of the highest non-zero counts. The ranges of values are described below:

- pm_type — is the tpye of PM and its discrimination number.
- high_hit — is 0 to 255 for the highest count on a port (taken from the nnn values).
- nnnnn — is the total quantity of counts on all ports.
- pt — is the quantity of ports that have fault counts, where:
  1 to 4 for a PM of node type TM, LM, or DCM
  1 to 16 for an XPM.
- y/n — is YES or NO to indicate if the count occurred on the ports of both planes.
- display_mode — specifies the type of couints that are displayed where display_mode is one of:
  PARITY
  INTEGRITY
  PARITY + INTEGRITY

Action: None

-continued-

pms (continued)

Responses for the pms command (continued)

MAP output	Meaning and action

`pm_type NETWORK`
`PORT PAIR PORT 0 PLANE 1`
`pp np nm nnn nnn`
`pp np nm nnn nnn`
`pp np nm nnn nnn`
`pp np nm nnn nnn`
`display_mode`
	Meaning: For PMs of node type TM, Lm, and DCM the full displayis given for up to four of the highest non-zero counts. The ranges of values are described below:
	nm is 0 to 31 to identify the Network pair.
	nnn is 0 to 255 for the counts that are incremented for each port fault. The increment LIMIT may be different according to settings by the threshold commands UPTH and RETH.
	np is 0 to 63 to identify the NM port.
	display_mode specifies the type of counts that are displayed where display_mode is one of:
	PARITY
	INTEGRITY
	PARITY + INTEGRITY
	
	Action: None

-continued-

Responses for the pms command (continued)

MAP output **Meaning and action**

```
pm_type     NETWORK     UNIT 0 *    UNIT 1 *
   PORT     PAIR PORT   0 PLANE 1   0 PLANE 1
   pp       np    nm    nnn   nnn   nnn   nnn
   :        :     :     :     :     :     :
   :        :     :     :     :     :     :
   pp       np    nm    nnn   nnn   nnn   nnn
   display_mode         CHECK FOR SWACTS
```

Meaning: For XPMs the full display is given for up to sixteen of the highest non-zero counts. Only one asterisk (*) is present at a time. The ranges of values are described below:

- * indicates which XPM unit is currently active.
- pp are the discrimination numbers for the PM ports, where the ranges are:
  - 0 to 3 for a PM of node type TM, LM, or DCM
  - 0 to 15 for an XPM.
- np is 0 to 63 to identify the NM port.
- nm is 0 to 31 to identify the Network pair.
- nnn is 0 to 255 for the counts that are incremented for each port fault. The increment LIMIT may be different according to settings by the threshold commands UPTH and RETH.
- CHECK FOR SWACTS An inactive unit does not usually have counts therefore if any are displayed it may be because of a switch of activity (SwAct) between the units of the PM.

Action: None

-end-

post

Function

Use the post command to select a Network plane and pair to be displayed by the commands analyze, disp, and setlog, or to be reset by the commands rsti, upth, and reth.

post command parameters and variables

Command	Parameters and variables	
post	*plane*	*pair*

Parameters and variables	Description
pair	This variable identifies the NM of the selected plane. The range is 0-31.
plane	This variable identifies the plane of the NMs to be selected. The range is 0 or 1.

Qualifications

None

Examples

The following table provides an example of the post command

Examples of the post command

Example	Task, response, and explanation
post 0 0 ↵ *where* 0 is the plane of the NM to be selected. 0 is the NM of the selected plane.	**Task:** Post NM 0 0 **Response:** `OK, NETWORK 0-0 POSTED.` **Explanation:** Network plane 0, pair 0 has been selected and is able to be displayed pending further commands.

post (end)

Responses

The following table provides an explanation of the response to the post command

Responses for the post command

MAP output	Meaning and action

`OK, NETWORK n-n POSTED`	**Meaning:** Selection of a Network is confirmed, where n-n is the number of the plane and pair respectively.
	
	Action: The data field for the header Posted Net in the example below, changes from None to n-n. This header appears only at the NETINTEG level.
	
	`Posted Net: None Timer: Enabled Mode: Specific`
	`Logbuff Contents: Net102`

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 all *incrname* *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 NETINTEG level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The NETINTEG 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 NETINTEG 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 NETINTEG 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 NETINTEG 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 NETINTEG level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

reth

Function

Use the reth command to reset all the thresholds to a count of 250. The reth command is the same as the upth command.

reth command parameters and variables

Command	Parameters and variables
reth	There are no parameters or variables.

Qualifications

Log NET142 is generated whenever the NET INTEG counters are cleared or the counter thresholds are changed.

Example

The following table provides an example of the reth command.

Example of the reth command

Example	Task, response, and explanation
reth <parameter> *<variable>* ↵ *where*	
	Task: **Response:** **Explanation:**

reth (end)

Responses

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

Responses for the reth command

MAP output	Meaning and action
`CURRENT THRESHOLDS: LINKS = nnn JCTRS = nnn XPNTS = nnn.`	**Meaning:** With the command string help reth, the current threshold counts are given, where nnn is 0 to 999. **Action:** None
`OK, RESET.`	**Meaning:** All the thresholds are reset to 250 counts. **Action:** None
`PLEASE CONFIRM (“YES” OR “NO”)`	**Meaning:** The prompt occurs each time the reth command is to be executed. **Action:** None

rsti

Function

Use the rsti command to reset any ISTb conditions displayed by the command analyze on the plane and pair defined by the command post. Any counters set at or exceeding the threshold for the selected plane and pair are set to zero.

rsti command parameters and variables

Command	Parameters and variables
rsti	all

Parameters and variables	Description
all	This parameter overrides the selected plane and pair, and applies the command rsti to reset the failure counters for all planes and pairs on the switch.

Qualifications

The following notes apply to the rsti command:

- Log NET142 is generated whenever the NET INTEG counters are cleared or the counter thresholds are changed
- Refer to the non-menu commands upth on page N-111 and reth on page N-99 .

Examples

Not currently available

rsti (end)

Responses

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

Responses for the rsti command

MAP output	Meaning and action
OK	**Meaning:** The reset is executed. **Action:** None
REQUEST INVALID. NO NET POSTED.	**Meaning:** The command rsti is entered without parameter all and cannot be executed because the plane and pair have not been selected by the command post. **Action:** None

setlog

Function

Use the setlog command to enable or disable the output of Network integrity Logs to a teleprinter for all NM or for a NM plane and pair selected by the command post.

setlog command parameters and variables

Command	Parameters and variables
setlog	all off on

Parameters and variables	Description
all	This parameter turns the printing of NET Logs ON and overrides any selected plane and pair.
off	This parameter deactivates printing of Logs for the selected plane and pair.
on	This parameter activates printing of Logs NET101, and NET102 for the selected plane and pair.

Qualifications

The following notes apply to the setlog command:

- If Log NET102 is generated containing condition FLT then the Log is printed regardless of the state of the ON/OFF parameter.
- Setlog does not affect the storage of Logs in the Log buffer.
- To find out if NET Logs for the posted plane and pair are ON or OFF, enter the command string query setlog. If a plane and pair has been selected, the status of the Logs is displayed, together with the command format.

Examples

Not currently available

setlog (end)

Responses

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

Responses for the setlog command

MAP output	Meaning and action
OK LOGS ON or OK LOGS OFF	**Meaning:** Setlog is confirmed as ON or OFF. **Action:** None
REQUEST INVALID. NO NET POSTED.	**Meaning:** No plane and pair have been specified by the command post. **Action:** In the NET INTEG status display, the header POSTED NET shows NONE in its data field.

timer

Function

Use the timer command to manually control the automatic clearing of fault counters.

timer command parameters and variables

Command	Parameters and variables
timer	disable enable query

Parameters and variables	Description
disable	This parameter suspends the automatic clearing of the counters
enable	This parameter re-activates the automatic clearing of the counters
query	This parameter gives the status of the clearing as Enabled or Disabled

Qualifications

The following notes apply to the timer command:

- When the timer is enabled, the automatic clearing occurs daily at 8:00 AM.
- The header TIMER is updated to display disabled or enabled beside it whenever the status of the timer is changed.
- Counts that accumulate too slowly may be cleared by the daily reset before it can be determined which card is most likely to be at fault. Therefore, by disabling the timer counts eventually reach the threshold (T or 250). The cunts that approach the threshold the most rapidly are most likely at fault.

Examples

Not currently available

timer (end)

Responses

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

Responses for the timer command

MAP output	Meaning and action
THE AUTOMATIC COUNTER/LOGBUFF TIMED CLEAR IS DISABLED WARNING: IF LEFT DISABLED FOR EXTENDED PERIODS OF TIME NETWORKS COULD BECOME ISTB.	**Meaning:** The integrity counters are not to be cleared at 8:00 AM. **Action:** No ne
THE AUTOMATIC COUNTER/LOGBUFF TIMED CLEAR IS ENABLED	**Meaning:** The integrity counters are to be cleared at 8:00 AM. **Action:** None
THE INTEGRITY COUNTS/LOGBUFF WILL BE CLEARED AT 8:00 am (IF THE TIMER IS ENABLED).	**Meaning:** The automatic clearing is active. **Action:** None
THE TIMER IS ALREADY DISABLED or THE TIMER IS ALREADY ENABLED	**Meaning:** The requested action is already active or inactive respectively. Repeating the disabling or enabling does not reset the timer. **Action:** None

-end-

trlnk

Function

Use the trlnk command to translate the information of the pair, port, or channel of the Network in order to determine the corresponding circuit(s) of the PM that is connected to it. The trlnk command is recommended for use by the maintenance support group.

trlnk command parameters and variables

Command	Parameters and variables		
trlnk	*pair*	*port*	*channel*

Parameters and variables	Description
channel	This variable specifies a channel of the port. The range is 0-31.
pari	This variable specifies the NM pair. The range is 0-31.
port	This variable specifies a port on the NM. The range is 0-63.

Qualifications

None

Example

The following table provides an example of the trlnk command.

Example of the trlnk command

Example	Task, response, and explanation
trlnk 1 5 0 ↵ *where* 1 specifies the NM pair. 5 specifies the port on the NM. 0 specifies the channel of the port.	**Task:** **Response:** `NET 1 LINK 5 CHANNEL 0 -- DTC 1` **Explanation:** The system display indicates that channel zero (0) in the Network does not have a PM circuit connected to it.

trlnk (end)

Responses

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

Responses for the trlnk command

MAP output	Meaning and action
`NET x LINK y CHANNEL x pm_type pm circuit`	**Meaning:** The circuit in the PM to which the specified circuit in the NM connects is identified, where: x — echoes the identity of the NM pair. The range is 0-31. y — echoes the identity of the link (port) of the pair. The range is 0-63. z — echoes the identity of the channel of the (link) port. The range is 0-31. pm_type — is the type of pm. pm — is the discrimination number of the pm. circuit — is the circuit number in the PM that connects to the indicated circuit of the Network. **Action:** None
`REQUEST FAILED - TRANSLATION ERROR`	**Meaning:** The specified Network circuit does not exist ort is not open (caller off-hook on the line). **Action:** Choose a valid circuit number.

trnsl

Function

Use the trnsl command to translate the specified card type and card number into the equivalent NT PEC, shelf position, and the position of the specified card on that shelf. The plane and pair of the specified card are defined by the command post.

trnsl command parameters and variables

Command	Parameters and variables
trnsl	*cardtype* *cardno*

Parameters and variables	Description
cardno	This variable is 0-15 for the discrimination number of the card. The range of cardno differs, depending on the PEC of the NM: NT0X48 0-15 NT5X13 0-7 NT7X27 0-7 NT7X40 0-7 NT8X11 0-3
cardtype	is the functional type of the specified card, where cardtype is one of: ILNK AIXP AOXP AJCT BJCT BIXP BOXP OLNK

Qualifications

The following notes apply to the trnsl command:

- Trnsl should be used in conjucntion with the command displ counts if cardtype and cardno are not known.
- If cardno is not entered, the range of numbers applicable to Network types NT0X48, NT5X

Examples

Not currently available

trnsl (end)

Responses

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

Responses for the trnsl command

MAP output	Meaning and action
`display`	**Meaning:** If parameter cardtype is not known, and trnsl is entered without a parameter, a list of acceptable card types is displayed (for example, AIXP: A-side, incoming crosspoint). **Action:** No user action is required.
`REQUEST INVALID.  NO NET POSTED.`	**Meaning:** Trnsl is not executed because a plane and pair have not been specified by the command post. **Action:** In the NETINTEG status display, the header Posted Net shows None in its data field.

upth

Function

Use the upth command to change the threshold for the counters upon which the disp counts command relies.

upth command parameters and variables

Command	Parameters and variables		
upth	*link*	*xpt*	*junctor*

Parameters and variables	Description
junctor	This variable specifies the threshold for counters for the junctors. The range is 0-999.
link	This variable specifies the threshold for counters for the links. The range is 0-999
xpt	This variable specifies the threshold for counters for the crosspoints. The range is 0-999.

Qualifications

The following notes apply to the upth command:

- The upth command allows the default threshold counts for links, cross-points, and junctors to be different.
- Log NET142 is generated whenever the NET INTEG counters are cleared or the counter thresholds are changed.

Examples

Not currently available

Responses

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

Responses for the upth command

MAP output	Meaning and action
`CURRENT THRESHOLDS:  LINKS = nnn  JCTRS = nnn  XPNTS = nnn`	**Meaning:** With the help upth command, the current threshold counts are given, where nnn is 0-999. **Action:** None
`OK, UPDATED.`	**Meaning:** The thresholds are reset according to the specified counts. **Action:** None
`PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** The prompt occurs each time the upth command is executed. **Action:** Enter YES to continue. Enter NO to quit.

NETJCTRS level commands

Use the NETJCTRS level of the MAP to display the status of the junctors in both planes of the specified network and perform maintenance functions for junctors.

Accessing the NETJCTRS level

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

mapci;mtc;net;jctrs ↵

This command also indicates the "path" from the CI level that is required to reach this level.

NETJCTRS commands

All of the commands available at the NETJCTRS MAP level are described in this chapter. They are arranged in alphabetical order. The table below lists every command and indicates the page where its description is located.

NETJCTRS commands (continued)

Command	Page
bsy	N-115
disp	N-119
jctrs	N-121
offl	N-123
quit	N-125
rts	N-129
trnsl	N-133
tst	N-135

NETJCTRS menu

The following figure shows the NETJCTRS 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
         .     .     .     .    .     .     .     .     .     .


Net Jctrs     Net               11111 11111 22222 22222 33
 0 Quit        Plane 01234 56789 01234 56789 01234 56789 01
 2               0   .S..I ..C.. LJ... ..I.. .0
 3               1   ...S. .T... ....M ..... 00
 4             NET 11 Jctrs            11 1111 1111 2222 2222 2233
 5                   Plane  0123 4567 8901 2345 6789 0123 4567 8901
 6 Tst_                 0   S... .--- C... M... P... .... .... ....
 7 Bsy_                 1   .... .___ .... .... .... .... .... ....
 8 RTS_              Jctrs  3333 3333 4444 4444 4455 5555 5555 6666
 9 Offl_             Plane  2345 6789 0123 4567 8901 2345 6789 0123
10                      0   .... .... .... .... .... .... .... ....
11 Disp_                1   .... .... .... .... .... .... .... ....
12
13
14
15
16 Trnsl_
17
18 Jctrs
```

bsy

Function

Use the bsy command to busy both ends of a junctor and set it to the M (manually busy) state.

bsy command parameters and variables

Command	Parameters and variables		
bsy	*plane*	*junctor*	force

Parameters and variables	Description
force	This parameter busies the specified plane pair regardless of the state.
junctor	This variable identifies the junctor. The range is 0-63
plane	This variable identifies the plane of the junctor to be busied. The range is 0 or1.

Qualifications

The following notes apply to the bsy command:

- Before entering the bsy command the junctor must be in the *, S, C, P, or O state.
- These logs are generated under the
  - NETM122 the junctor is set to system busy (S state).
  - NETM123 the junctor is set to manual busy (M state).
  - NETM140 a network junctor warning is overridden.
  - NETM141 parameter force is used.

Examples

Not currently available

bsy (continued)

Responses

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

Responses for the bsy command

MAP output	Meaning and action
`CAUTION--FORCES NO PATH FROM NM nn TO NM nn.` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** If the junctor to be set to M is the last junctor to the NM in the mate plan, the Caution appears. **Action:** Enter YES to force the junctor into the M (manual busy) state. Enter NO to abort the request.
`OK`	**Meaning:** The bsy command is executed and Log NET123 is generated. **Action:** The junctor status display changes to M.
`OUT OF RANGE <JCTR> {0 to 63}.`	**Meaning:** The specified junctor number is not within range. **Action:** None
`REQUEST INVALID. JCTR IS status.`	**Meaning:** The busy command is not executed because the junctor is in a state other than • or M. **Action:** None
`REQUEST INVALID. JCTR IS M OR - (UNEQ.)`	**Meaning:** The NM is already in the M state or is unequipped. **Action:** None
`REQUEST INVALID. NM NOT OK/MAN BUSY.`	**Meaning:** Before a junctor can be tested, its NM must be in the • or M state. **Action:** None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
REQUEST INVALID. OTHER END NM NOT OK/MAN BUSY.	**Meaning:** PM links are not in the • or M state. **Action:** None
WARNING: ACTIVE MTCE TASKS ABORTED. PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** Forcing a junctor into the M state cancels call processing. **Action:** Enter YES to force a PM, speech link, junctor, or NM pair out-of-service. The respective call processing is stopped, the affected junctor is identified, and the response to confirm the bsy command is OK. Enter NO to abort the command; the response echoes NO.

-end-

disp

Function

Use the disp command to display the status of all Network junctors or their types.

disp command parameters and variables

Command	Parameters and variables
disp	status type

Parameters and variables	Description
status	This parameter displays the junctor status. This display is intended for non-MAP devices, such as teleprinter (TTY).
type	This parameter gives the type of junctor as inter-Network or intra-Network.

Qualifications

None

Examples

Not currently available

disp (end)

Response

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

Responses for the disp command

MAP output	Meaning and action
`display`	**Meaning:** The junctor status display or the junctor type display is printed. **Action:** None

jctrs (end)

Function

Use the jctrs command to display junctor status in the same manner as the jctrs command of the NET level menu.

jctrs command parameters and variables

Command	Parameters and variables
jctrs	*pair*

Parameters and variables	Description
pair	This variable identifies the link to be displayed. The range is 0-31.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the jctrs command

MAP output	Meaning and action
<display>	**Meaning:** The status of the specified junctor is displayed. **Action:** None

Function

Use the offl command to set both ends of a junctor to the O state.

offl command parameters and variables

Command	Parameters and variables	
offl	*plane*	*junctor*

Parameters and variables	Description
junctor	This variable identifies the junctor. The range is 0-63.
plane	This variable identifies the plane of the junctor to be set off-line. The range is 0 or 1.

Qualifications

The following notes apply to the offl command:

- Before entering command offl the junctor must be in the M state.
- When command offl is executed the specified junctor remains off-line through all restarts.
- Log NETM124 is generated whenever a junctor is made off-line (O state).

Examples

Not currently available

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
OK	**Meaning:** The command offl is executed. **Action:** The junctor status display changes from M to O.
OUT OF RANGE <JCTR> {0 to 63}	**Meaning:** The specified NM number is not within range. **Action:** None
REQUEST INVALID. JCTR IS NOT MAN BUSY.	**Meaning:** The command offl cannot be executed unless both the junctor and the Network are in the M state. **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 all *incrname* *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 NETJCTRS level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The NETJCTRS 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 NETJCTRS 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 NETJCTRS 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 NETJCTRS 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 NETJCTRS level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

rts

Function

Use the rts command to test a junctor and if OK return the junctor to service. If the junctor is in the • state it is left in that state.

rts command parameters and variables

Command	Parameters and variables		
rts	*plane*	*junctor*	force

Parameters and variables	Description
force	This parameter returns the specified pair to service without testing. Cards that are in the O state or are unequipped are not returned to service.
junctor	This variable identifies the junctor. The range is 0-63.
plane	This variable identifies the plane of the junctor to be returned to service. The range is 0 or 1.

Qualifications

The following notes apply to the rts command:

- Before entering rts the junctor must be in the M or S state.
- The NETM141 log is generated when the parameter force is used.

Examples

Not currently available

Responses

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

Responses for the rts command

MAP output	Meaning and action
`JCTR TEST NOT RUN DUE TO NETWORK FAULT`	**Meaning:** Junctor test cannot be completed when there is a hardware fault in the Network. **Action:** None

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
NETWORK STATUS PREVENTS TESTING THIS JUNCTOR.	**Meaning:** If test resources are not available (for example, no test card) the junctor test is bypassed, and it is returned to service directly. **Action:** None
OK	**Meaning:** The command rts test is successful. **Action:** The junctor status display changes from M to • or I.
OUT OF RANGE <JCTR> {0 to 63}.	**Meaning:** The specified junctor number is not within range. **Action:** None
REQUEST INVALID. JCTR IS status	**Meaning:** The rts command test is not executed because the junctor is not in the * or M state, where status is one of the other code. **Action:** None
REQUEST INVALID. JCTR IS NOT OK/MAN BUSY.	**Meaning:** The junctor must be in the M state before it can be returned to service. **Action:** None
REQUEST SUBMITTED. REPLY EXPECTED WITHIN 10 SECS. TEST PASSED.	**Meaning:** The rts command is executed, and may be delayed for the duration of testing. Log NETM121 is generated. **Action:** None

-continued-

Responses for the rts command (continued)

MAP output	Meaning and action
RESET FUNCTIONS FAILED. NET CARD LIST SITE FLR RPOS BAY_ID SHF DESCRIPTION SLOT EQPEC	**Meaning:** An rts command test failed and the faulty card(s) are listed according to the scheme. **Action:** None
WARNING: ACTIVE MTCE TASKS ABORTED. OK	**Meaning:** The parameter force bypasses the tests and connection memory (CM) copy when the rts command is executed. **Action:** None

-end-

trnsl

Function

Use the trnsl command to translate a junctor number and identifies the other-end Network, the type of junctor, and the junctor number.

trnsl command parameters and variables

Command	Parameters and variables
trnsl	*junctor*

Parameters and variables	Description
junctor	This variable identifies the junctor to be translated. Range is 0-63.

Qualifications

The following notes apply to the trnsl command:

- The types of junctors are connected as follows:
  - parallel junctors to crosspoint cards
  - serial junctors to junctor interface cards
  - inter-junctors to different Networks
  - intra-junctors to junctors of the same NM.
- The junctor types apply to the Network types as follows:

Network	Junctor Types
NT0X48	serial inter-junctor serial intra-junctor
NT5X13	serial inter-junctor parallel intra-junctor serial intra-junctor
NT7X27	parallel inter-junctor parallel inter-junctor
NT7X40	serial inter-junctor parallel intra-junctor serial intra-junctor
NT8X11	serial inter-junctor parallel intra-junctor serial intra-junctor

Examples

Not currently available

trnsl (end)

Responses

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

Responses for the trnsl command

MAP output	Meaning and action
`NM nn, JCTR nn = IS UNEQUIPPED.`	**Meaning:** The specified junctor has no translation because it is unequipped. **Action:** None

`NM nn, JCTR nn = NM nn, JCTR nn type`
`AXPT CARD n BXPT CARD n`
or
`NM nn, JCTR nn = NM nn, JCTR nn type`
`JCTR CARD n JCTR CARD n`
	Meaning: The specified junctor number is echoed and the other-end junctor is identified, where:
	nn — are the discrimination numbers.
	type — is one of these junctor types:
	PARALLEL INTER-JUNCTOR
	SERIAL INTER-JUNCTOR
	PARALLEL INTRA-JUNCTOR
	SERIAL INTRA-JUNCTOR
	AXPT — is one of the card types that is connected to the junctor.
	BXPT — is the other card type that is connected to the junctor.
	JCTR — means the card type is junctor interface.
	
	Action: None

`OUT OF RANGE <JCTR> {0 TO 63}`	**Meaning:** The specified junctor number is not within range. **Action:** None

tst

Function

Use the tst command to test a junctor and apply the test to the NM specified by the command string jctrs pair.

tst command parameters and variables

Command	Parameters and variables	
tst	*plane*	*junctor*

Parameters and variables	Description
junctor	This variable identifies the junctor to be tested. The range is 0-63. The junctor number is associated with the port number (also 0-63) which identifies the inputs and outputs of an NM independently of the IF and XPT cards handling the paths through the NM.
plane	The variable identifies the plane of the link to be tested. The range is 0 or 1.

Qualifications

The following notes apply to the tst command:

- Before entering the command tst, the junctor must be in the • or M state.
- A junctor consists of the half of the IF card circuits used by the specified junctor and the associated outgoing crosspoint circuit.
- If the test fails a card list is displayed, indicating the status of the IF and XPT cards at both ends of the junctor. The list also distinguishes between inter-Network junctors, and junctors between sides of the same Network (intra-Network). Log NET126 is generated.
- For double shelf network equipment (DSNE) (NT8X11), command string tst card all applies the NETJCTRS tests to both sides of the specified NM.
- For DSNE, a full test of all parallel junctors takes approximately 20 minutes, while a full test of all serial junctors takes about 40 minutes.

Examples

Not currently available

tst (continued)

Responses

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

Responses for the tst command

MAP output	Meaning and action
`JCTR TEST NOT RUN DUE TO NETWORK FAULT.`	**Meaning:** Junctor tests cannot be completed when there is a hardware fault in the Network. **Action:** None
`NETWORK STATUS PREVENTS TESTING THIS JUNCTOR.`	**Meaning:** The tst command is not executed because the Network is not in the • state. **Action:** None
`OK`	**Meaning:** The junctor test is accepted. **Action:** The junctor status display changes to T while the testing occurs.
`OUT OF RANGE <JCTR> {0 TO 63}.`	**Meaning:** The specified junctor number is not within range. **Action:** None
`REQUEST INVALID.  JCTR IS status.`	**Meaning:** The command tst is not executed because the junctor is not in the • state. **Action:** None
`REQUEST INVALID.  NM NOT OK.`	**Meaning:** Before a junctor can be tested, its NM must be in the • or M state. **Action:** No ne

-continued-

Responses for the tst command (continued)

MAP output	Meaning and action
REQUEST INVALID. OTHER END NM NOT OK/MAN BUSY.	**Meaning:** PM and/or central message controller (CMC) links are not in the • or M state. **Action:** None
REQUEST SUBMITTED. REPLY EXPECTED WITHIN 10 SECS. TEST PASSED	**Meaning:** The command tst is successful. **Action:** None
TEST ABORTED - reason.	**Meaning:** Software resources are temporarily unavailable, where reason explains why. **Action:** None
TEST FAIL. NET CARD LIST SITE FLOR RPOS BAY_ID SHF DESCRIPTION SLOT EQPEC	**Meaning:** The test failed, and the faulty cards are listed according to the scheme. **Action:** None

-end-

NETLINKS level commands

Use the NETLINKS level of the MAP to display the status of the links in both planes of the specified network and perform maintenance functions for links.

Accessing the NETLINKS level

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

mapci;mtc;net;links ↵

This command also indicates the "path" from the CI level that is required to reach this level.

NETLINKS commands

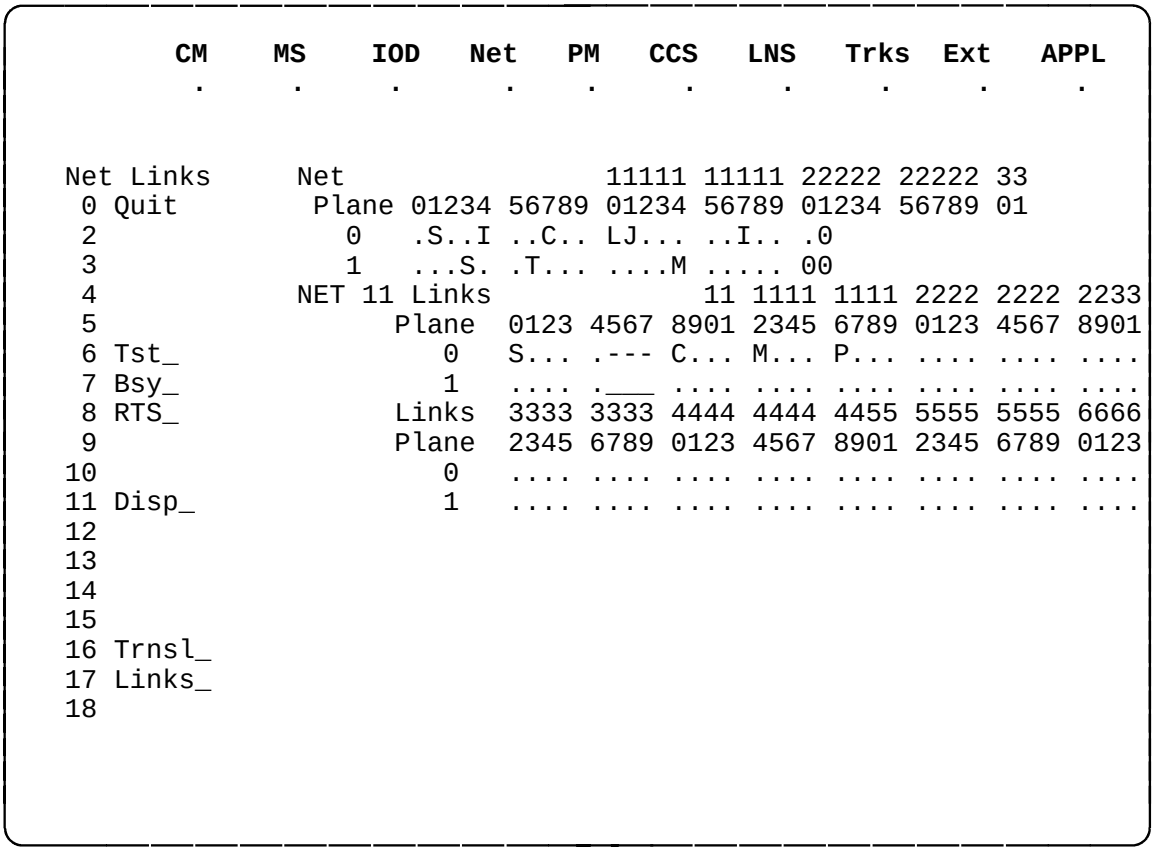
All of the commands available at the NETLINKS MAP level are described in this chapter. They are arranged in alphabetical order. The table below lists every command and indicates the page where its description is located.

NETLINKS commands (continued)

Command	Page
bsy	N-141
disp	N-143
links	N-145
quit	N-147
rts	N-151
trnsl	N-153
tst	N-155

NETLINKS menu

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



bsy

Function

Use the bsy command to busy the Network P-side links and set a link to the M (manually busy) state.

bsy command parameters and variables

Command	Parameters and variables		
bsy	*plane*	*link*	force

Parameters and variables	Description
force	This parameter busies the specified plane pair regardless of the state.
link	This variable identifies the link. The range is 0-63.
plane	The variable identifies the plane of the link to be busied. The range is 0-1.

Qualifications

The following notes apply to the bsy command:

- Before entering the bsy command, the link must be in the *, S, C, or P state.
- When a link is busied, the PM is requested to switch integrity checking (integrity byte of CSM) to the mate plane.
- These Logs are generated under the following conditions:

NETM116	the link state is changed to system busy (state S) by the system or by command BSY.
NETM117	BSY is confirmed, the link state changes to manual busy (M state) and the previous link state is recorded.
NETM119	the link state changes from manual busy (M state) to unequipped (- state).
NETM139	a network link warning is overridden.
NETM141	parameter force is used.

Examples

Not currently available

bsy (end)

Responses

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

Responses for the bsy command

MAP output	Meaning and action
`FORCE BSY LINK nn.  NET nn.`	**Meaning:** The command is echoed and NET139 records it. **Action:** None

`CAUTION--FORCES PMNAME nn PAIR OUT-OF-SERVICE.`
or
`REQUEST INVALID--FORCES PMNAME nn OUT-OF-SERVICE.`
	Meaning: Busying the specified link suspends the last message link to the PM, where nn is the PM name or the pair respectively.
	
	Action: Call processing in the PM is cancelled. It is the equivalent of busying the link or PM from the PM level.

`OK`	**Meaning:** BSY is executed. **Action:** The link status display changes to M.
`REQUEST INVALID - LINK NOT OK/SYS BUSY.`	**Meaning:** The NM must be in the •, M, or S state. **Action:** No user action is required.
`WARNING:  ACTIVE MTCE TASKS ABORTED.` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** Forcing a link into the M state cancels call processing. **Action:** Enter YES to force a PM, speech link, junctor, or NM pair out-of-service. The respective call processing is stopped, the affected link is identified, and the response to confirm the bsy command is OK. Enter NO to abort the command. The response echoes NO.

-end-

disp (end)

Function

Use the disp command to display the status of all Network links or the type of link.

disp command parameters and variables

Command	Parameters and variables
disp	status type

Parameters and variables	Description
status	This parameter displays the link status. This display is intended for non-MAP devices, such as teleprinter (TTY).
type	This parameter gives the type of link as message or speech.

Qualifications

None

Examples

Not currently available

Response

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

Response for the disp command

MAP output	Meaning and action
`display`	**Meaning:** The link status displayed corresponds to status or type. With status, the M and S in the display represent Manual busy and System busy states respectively. With type, the M and S in the display represent Message and Speech links respectively. **Action:** None

links (end)

Function

Use the links command to display link status in the same manner as the links command at the NET level.

links command parameters and variables

Command	Parameters and variables
links	*pair*

Parameters and variables	Description
pair	This variable identifies the NM links to be displayed. The range is 0-31.

Qualifications

None

Examples

Not currently available

Response

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

Response for the links command

MAP output	Meaning and action
`<display>`	**Meaning:** The status of the specified link is displayed. **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 all *incrname* *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 NETLINKS level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The NETLINKS 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 NETLINKS 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 NETLINKS 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 NETLINKS 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 NETLINKS level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

rts

Function

Use the rts command to return Network P-side links to service and test the specified link and if OK return the link to service (sets it to the O state). If the link is in the P state it is left in that state.

rts command parameters and variables

Command	Parameters and variables		
rts	*plane*	*link*	force

Parameters and variables	Description
force	This parameter returns the specified pair to service without testing. Cards that are in the O state or are unequipped are not returned to service.
link	This variable identifies the link. The range is 0-63.
plane	This variable identifies the plane of the link to be returned to service. The range is 0 or 1.

Qualifications

The following notes apply to the rts command:

- Before entering the rts command, the link must be in the M or S state.
- After the rts command is entered on a link between the Network and a PM, the resulting state generates a corresponding Log, as follows:
  from P to • state --> NET113
  from P to P state --> NET114
  from M to • state --> NETM115
  from S to • state --> NETM115
- Log NET139 is generated if the force command is used.

Examples

Not currently available

rts (end)

Responses

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

Responses for the rts command

MAP output	Meaning and action
`OK mtest - stest`	**Meaning:** The command rts is executed, where mtest is one of: MESSAGE TEST FAILED MESSAGE TEST NOT RUN MESSAGE TEST PASSED (where NOT RUN indicates that the link is not a message link) and where stest is one of: SPEECH TEST FAILED BY P-SIDE SPEECH TEST NOT RUN BY P-SIDE SPEECH TEST PASSED BY P-SIDE The response combination indicates how much testing as a result of the rts command has occurred. When a message link test fails, the tests for the speech links are discontinued. The state of the P-side links determine the results of the message and speech link tests. **Action:** None

`REQUEST INVALID: LINK NOT MANUAL BUSY`
or
`REQUEST INVALID: LINK NOT SYSTEM BUSY`
	Meaning: The link is not in the M or S state.
	
	Action: None

`WARNING: ACTIVE MTCE TASKS ABORTED.` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** The parameter force bypasses the tests and the copy of the connection memory (CM) when rts is executed. **Action:** Enter YES to confirm. The system response to confirm rts is OK. Enter NO to abort the action. The system response echoes NO.

trnsl

Function

Use the trnsl command to identify the functional name and number of the PM assigned to the specified link.

trnsl command parameters and variables

Command	Parameters and variables
trnsl	*link*

Parameters and variables	Description
link	This variable identifies the link to be translated. The range is 0-63.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the trnsl command

MAP output	Meaning and action
`NET.nn/LINK.nn = IS UNEQUIPPED.`	**Meaning:** The PM is unequipped. **Action:** None
`NET.nn/LINK.nn = PM.nn/PORT.nn`	**Meaning:** The number of the link in the PM that is connected to the NM is given. **Action:** None

-continued-

trnsl (end)

Responses for the trnsl command (continued)

MAP output	Meaning and action
`NET.nn/LINK.nn = UNKNOWN PM.`	**Meaning:** The trnsl command cannot identify the specified link because of a software error. **Action:** None
`OUT OF RANGE <LINK> {0 to 63}.`	**Meaning:** The specified link number is not within range. **Action:** None

-end-

tst

Function

Use the tst command to test a Network link and initiates the NET LINKS tests and applies the tests to the NM specified by the command string link pair, and to the specified link.

tst command parameters and variables

Command	Parameters and variables	
tst	*plane*	*link*

Parameters and variables	Description
link	This variable identifies the link to be tested. The range is 0-63. The link number is associated with the port number (also 0-63), which identifies the inputs and outputs of an NM independent of the interface (IF) and XPT cards handling the paths through the NM.
plane	This variable identifies the plane of the link to be tested. The range is 0 or 1.

Qualifications

The following notes apply to the tst command:

- The link must be in the •, M, or S state.
- A link consists of the half of the IF card circuits used by the specified P-side link, and the associated incoming cross-point circuit.
- Log NETM120 is generated whenever the NET LINKS tests fail or could not be executed on a link between the Network and a PM.

Examples

Not currently available

Responses

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

Responses for the tst command

MAP output	Meaning and action
0K	**Meaning:** The link passes the test. **Action:** The link status display remains unchanged.

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`OUT OF RANGE <LINK> {0 to 63}`	**Meaning:** The specified link is out of range. **Action:** None
`REQUEST INVALID--LINK NOT OK/SYS BUSY.`	**Meaning:** The NM must be in the •, M, or S state. **Action:** None
`SPEECHLOOP TEST ABORTED--reason.`	**Meaning:** Testing of the PM speech links is cancelled, where reason is one of: CANNOT SET UP CONNECTIONS NO RESOURCES AVAILABLE TEST CODE RESOURCES FAILED TEST CODE RESOURCES UNAVAILABLE. A conflict of connections occurs when one link is being tested, and tst tries to test its mate link. Test code resources become unavailable because there is only one test code card for each plane, and the card is already busy. **Action:** Try again since these are temporary software conditions.
`SPEECHLOOP TEST FAILED DUE TO NETWORK FAULT.`	**Meaning:** A hardware problem in the Network prevents testing of the PM links. **Action:** None
`SPEECHLOOP TEST FAILED--TEST FAILED.`	**Meaning:** Since the speechloop test for the PM fails, the link test also fails. **Action:** None

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
SPEECHLOOP--TEST PASSED.	**Meaning:** The tests for the speech links to the PM are successful. **Action:** None

-end-

NETPATH level commands

Use the NETPATH level of the MAP to test faulty paths and store test information for each path tested, and to display this information.

Accessing the NETPATH level

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

mapci;mtc;net;path ↵

This command also indicates the "path" from the CI level that is required to reach this level.

NETPATH commands

All of the commands available at the NETPATH MAP level are described in this chapter. They are arranged in alphabetical order. The table below lists every command and indicates the page where its description is located.

NETPATH commands (continued)

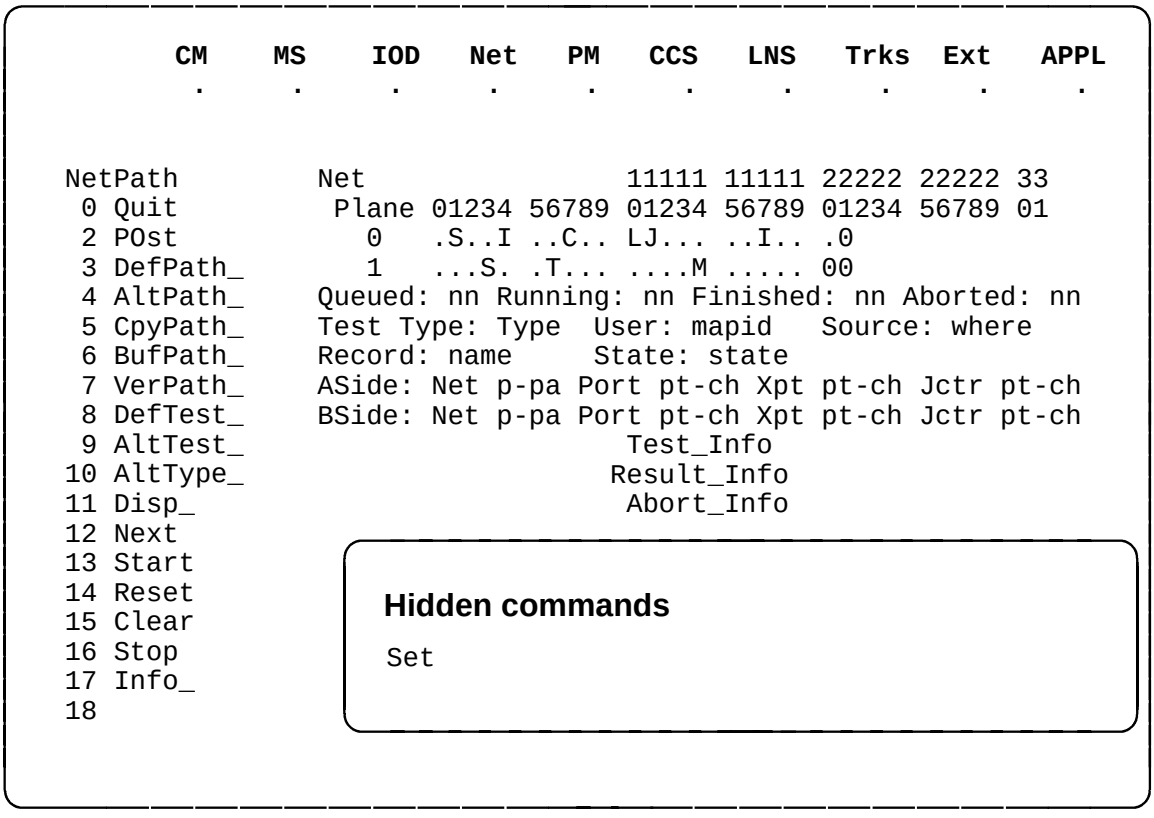
Command	Page
altpath	N-163
alttest	N-167
alttype	N-171
bufpath	N-173
cardlst	N-179
clear	N-181
cpypath	N-183
defpath	N-185
deftest	N-189
disp	N-193
info	N-195

-continued-

NETPATH commands	
Command	**Page**
next	N-201
post	N-203
reset	N-205
quit	N-207
set	N-211
start	N-213
stop	N-217
verpath	N-219
-end-	

NETPATH menu

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



NETPATH status codes

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

Status codes NETPATH menu status display

Code	Meaning	Description
QUEUED	tests waiting	Indicates that the system is waiting for resources to become available. For example, it may be waiting for a connection or for the test code card.
RUNNING	tests running	Indicates that the specified quantity of tests are in progress.
FINISHED	tests finished	Indicates that the specified quantity of tests are finished.
ABORTED	tests aborted	Indicates the the specified quantity of tests have been aborted.
nn	quantity	Indicates the quantity of tests in each stage.

altpath

Function

Use the altpath command to alter the components of a previously-defined path.

altpath command parameters and variables

Command	Parameters and variables							
altpath	a		s	*pl*	anet	anpt	anch	(1)
			p	*pl*	anpt	ach		(2)
			x	*pl*	axpt	axch		(3)
			j	*pl*	ajpt	anch		(4)
			n	*pl*	anet			(5)
								(6)
	b		s	*pl*	bnet	bnpt	bnch	(7)
			p	*pl*	bnpt	bnch		(8)
			x	*pl*	bxpt	bxch		(9)
			j	*pl*	bjpt	bjch		(10)
			n	*pl*	bnet			(11)
	dir							(12)
	pl		*pl*					(13)
altpath (continued)	(1)	axpt	axch	ajpt	ajch			
	(2)							
	(3)							
	(4)							
	(5)							
	(6)							
	(7)	bxpt	bxch	bjpt	bjch			(end)

Parameters and variables	Description
a	This parameter specifies that the information entered is for the A-Side Network.
ajch	This variable, also known as ajctch, identifies the A-side junctor channel. The range is 0-31.
ajpt	This variable, also known as ajctpt, identifies the A-side junctor port. The range is 0-63.
anch	This variable, also known as anetch, identifies the A-side Network channel. The range is 0-31.
anet	This variable identifies the A-side Network. The range is 0-31.

-continued-

altpath (continued)

altpath command parameters and variables (continued)

Parameters and variables	Description
anpt	This variable, also known as anetpt, identifies the A-side Network port. The range is 0-63.
axch	This variable, also known as axptch, identifies the A-side crosspoint channel. The range is 0-31.
axpt	This variable, also known as axptpt, identifies the A-side crosspoint port. The range is 0-63.
b	This parameter specifies that the information for the B-side Network is to be entered.
bjch	This variable, also known as bjctch, identifies the B-side junctor channel. The range is 0-31.
bjpt	This variable, also known as bjctpt, identifies the B-side junctor port. The range is 0-63.
bnch	This variable, also known as bnetch, identifies the B-side Network channel. The range is 0-31.
bnet	This variable identifies the B-side Network. The range is 0-31.
bnpt	This variable, also known as bnetpt, identifies the B-side Network port. The range is 0-63.
bxch	This variable, also known as bxptch, identifies the B-side crosspoint channel. The range is 0-31.
bxpt	This variable, also known as bxptpt, identifies the B-side crosspoint port. The range is 0-31.
dir	This parameter alters the direction of the path. That is, the A-side path is switched with the B-side path.
j	This parameter specifies that a junctor port and channel is to be entered.
n	This parameter specifies that the Network path is to be entered.
p	This parameter specifies that a Network port and channel is to be entered.
pl	This parameter specifies that a Network plane is to be entered.

-continued-

altpath command parameters and variables (continued)

Parameters and variables	Description
pl	This variable identifies the plane. The range is 0 or 1.
s	This parameter specifies that the complete path information for a Network side is to entered.
x	This parameter specifies that a crosspoint port and channel is to be entered.

-end-

Qualifications

The following notes apply to the altpath command:

- When command help is entered at the MAP, the display shows the long versions of the abbreviations used to identify components. For example, anetpt instead of anet.
- Entering 32 for any of the channel parameters causes the system to select any available channel.

Example

The following table provides an example of the altpath command.

Example of the altpath command

Example **Task, response, and explanation**

altpath dir ↵

Task: Switch the path data from the A-side to the B-side

Response:
```
A-SIDE: NET 0- 1  PORT 4- 5  XPT 34- 6  JCTR 42- 8
B-SIDE: NET 0- 1  PORT 0- 1  XPT 50- 2  JCTR 58- 8
to:
A-SIDE: NET 0- 1  PORT 0- 1  XPT 50- 2  JCTR 58- 8
B-SIDE: NET 0- 1  PORT 4- 5  XPT 34- 6  JCTR 42- 8
```

Explanation: The direction of the path has been altered by switching the A-side path with the B-side path.

altpath (end)

Responses

The following table provides explanation of the responses to the altpath command.

Responses for the altpath command

MAP output	Meaning and action
A RECORD MUST BE POSTED TO USE THIS COMMAND.	**Meaning:** The record must be posted before the path data can be altered. **Action:** Post a record using the command post.
ERROR: NON-EXISTENT PAIR ON SWITCH	**Meaning:** The Network number entered does not exist. **Action:** Enter a valid Network number.
NO PATH DATA HAS BEEN DEFINED FOR THIS RECORD. USE THE COMMAND “DEFPATH”, “CPYPATH”, OR “BUFPATH” BEFORE USING THIS COMMAND.	**Meaning:** No path has been defined for the posted record. **Action:** Enter the minimum path information for the test using the command bufpath, cpypath or defpath.
THE POSTED RECORD MUST BE IN THE “PATH DATA INPUT” STATE TO ISSUE THIS COMMAND	**Meaning:** The posted record must be in the Path Data Input state before the path data can be altered. **Action:** Return the record to the path data input state.
YOU MUST BE THE “USER” OF THE POSTED RECORD TO ISSUE THIS COMMAND	**Meaning:** The record has already been posted by another user. **Action:** Re-enter the command altpath when the record is no longer displayed by another user.

alttest

Function

Use the alttest command to alter the test data for a posted record. The parameters vary accoring to the test_type of the posted record as described below.

- For NET tests:
  - d dur
  - i iloc
  - e eloc
- For LOOP tests:
  - d dur
  - i iloc
- For HOLD tests:
  - d dur

alttest command parameters and variables

Command	Parameters and variables	
alttest	d	*dur*
	e	*eloc*
	i	*iloc*

Parameters and variables	Description
d	This parameter indicates that the duration of the test is to be entered.
dur	This variable identifies the range for D, which varies according to the test_type. When the test_type is NET or LOOP, the range is 1-180 minutes. When the test_type is HOLD, the range is 1-960 minutes. When the test_type is AUTO, the range is 1-60 minutes.
e	This parameter indicates that the extraction point is to be entered.
eloc	This variable identifies the point at which the test code can be extracted. The variable eloc varies according to the types of Networks in the path and the junctors (parallel or serial) connecting them. The command info displays a diagram showing the valid extraction point for each Network type. The possibilities are: Apt Bpt AXpt0 BXpt AXpt1 BXpt1 AXpt2 BXpt2 Ajct Bjct

-continued-

alttest (continued)

alttest command parameters and variables (continued)

Parameters and variables	Description
i	This parameter indicates that the insertion point is to be entered.
iloc	This variable identifies the point at which the test code can be inserted. The variable iloc varies according to the types of Networks in the path and the junctors (parallel or serial) connecting them. The command info displays a diagram showing the valid insertion points for each Network type. The possibilities are: Apt Bjct AXpt BXpt

-end-

Qualifications

The following notes apply to the alttest command:

- To assist in the selection of valid insertion and extraction points, the command info displays diagrams showing the points for the different Network types.
- The duration defaults to 5 minutes for each of the test_types (except for ICTS, with which no time can be specified). The duration, and the insertion and extraction points specified by the user are displayed when the command verpath is entered.

alttest (continued)

Example

The following table provides an example of the alttest command.

Example of the alttest command

Example	Task, response, and explanation
alttest <parameter> *<variable>* ↵ *where*	**Task:** **Response:** **Explanation:**

-end-

Responses

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

Responses for the alttest command

MAP output	Meaning and action
A RECORD MUST BE POSTED TO USE THIS COMMAND	**Meaning:** The record must be posted before the test data can be altered. **Action:** Post a record using the command post.
THE POSTED RECORD MUST BE IN THE ″TEST DATA INPUT″ STATE TO ISSUE THIS COMMAND	**Meaning:** The posted record must be in the Test Data Input state before the test data can be altered. **Action:** Return the record to the Test Data Input state.

-continued-

alttest (end)

Responses for the alttest command (continued)

MAP output	Meaning and action
THIS ALTERS THE TEST DATA FOR A POSTED RECORD TO GET THE SYNTAX, QUERY WHEN A RECORD IS POSTED	**Meaning:** The command string help alttest has been entered, but no record has been posted. Since the syntax depends on the test_type of a posted record, it cannot be displayed until a record is posted. **Action:** None
YOU MUST BE THE “USER” OF THE POSTED RECORD TO ISSUE THIS COMMAND	**Meaning:** The record has already been posted by another user. **Action:** Re-enter the command alttest when the record is no longer displayed by another user.

-end-

alttype

Function

Use the alttype command to alter the test_type for a posted record.

alttype command parameters and variables

Command	Parameters and variables
alttype	*test_type*

Parameters and variables	Description
test_type	This variable identifies the type of new test to be submitted on the posted record. The range includes the following test types: HOLD ICTS LOOP NET AUTO

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the alttype command

MAP output	Meaning and action
`A RECORD MUST BE POSTED TO USE THIS COMMAND`	**Meaning:** The record must be posted before the test type can be altered. **Action:** Post a record using the command post.

-continued-

alttype (end)

Responses for the alttype command (continued)

MAP output	Meaning and action
THE POSTED RECORD MUST BE IN THE “PATH DATA INPUT” STATE TO ISSUE THIS COMMAND	**Meaning:** The posted record must be in the Path Data Input state before the test type can be altered. **Action:** Return the record to the Path Data Input state.
YOU MUST BE THE “USER” OF THE POSTED RECORD TO ISSUE THIS COMMAND	**Meaning:** The record has already been posted by another user. **Action:** Re-enter the command alttype when the record is no longer displayed by another user.

-end-

bufpath

Function

Use the bufpath command to copy path data from the ICTS, INTEG, INPUT and FAULT buffers.

bufpath command parameters and variables

Command	Parameters and variables
bufpath	all berp delete down fault icts integ up

Parameters and variables	Description
all	This parameter causes any path data to be taken form the top of the INPUT buffer.
berp	This parameter causes BERP path data to be taken form the INPUT buffer.
delete	This parameter causes the current “bufpathed” path to be deleted and the next record to be selected.
down	This parameter causes the next path of the currently defined source to be taken. All is assumed if not previously defined.
fault	This parameter causes any path data to be taken form the top of the FAULT buffer.
icts	This parameter causes ICTS path data to be taken form the INPUT buffer.
integ	This parameter causes INTEG path data to be taken form the INPUT buffer.
up	This parameter causes the previous path of the currently defined source to be taken. All is assumed if not previously defined.

Qualifications

None

bufpath (continued)

Examples

The following table provides examples of the bufpath command.

Examples of the bufpath command

Example	Task, response, and explanation	
post new auto test2↵ **bufpath icts**↵ **pufpath down**↵ **bufpath down**↵ **bufpath up**↵ **verpath**↵ **start**↵		
	Task:	Attempt to copy an ICTS path from the Input buffer for an AUTO record.
	Response:	`Not currrently available`
	Explanation:	An ICTS path is copied from the Input buffer for an AUTO record.
post new auto test2↵ **bufpath fault**↵ **pufpath down**↵ **bufpath down**↵ **verpath**↵ **start**↵		
	Task:	Attempt to copy a path from the FAULT buffer for and AUTO record.
	Response:	`Not currently available`
	Explanation:	A path from the FAULT buffer is copied for and AUTO record.

bufpath (continued)

Responses

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

Responses for the bufpath command

MAP output	Meaning and action
`Buffer empty`	**Meaning:** The is no path in the buffer. **Action:** None
`Source not defined`	**Meaning:** No source specified before u, down, or delete command. **Action:** Use the bufpath command to get a path from the buffered and then retry the original command.
`Path is under testing`	**Meaning:** Path cannot be deleted path is undergoing testing. **Action:** Retry command when testing is competed.
`Get the path from buffer first`	**Meaning:** Path undefined **Action:** Use the bufpath command to get a path from the buffered and then retry the original command.
`Top of buffer`	**Meaning:** It is the top of the buffer and no more paths are available. **Action:** None
`Bottom of buffer`	**Meaning:** It is the bottom of the buffer and no more paths are available **Action:** None

-continued-

bufpath (continued)

Responses for the bufpath command (continued)

MAP output	Meaning and action
A RECORD MUST BE POSTED TO USE THIS COMMAND	**Meaning:** The record must be posted before the path data can be defined. **Action:** Post the record using the command post.
ERROR: THE PATH WAS NOT TAKEN FROM THE PATH BUFFER	**Meaning:** The command bufpath path clear has been entered to clear the path on a posted record, but the path data for the record was not taken from the path fault buffer. **Action:** To clear a path which was defined at the MAP or taken from the NET INTEG buffer, enter the command clear. The posted record will be freed, and new path data can be entered. To clear the path fault buffer, post a new record using path data from the path fault buffer. Then repeat the command bufpath path next followed by bufpath path clear until all the entries in the buffer have been posted and cleared.
THE POSTED RECORD MUST BE IN THE "PATH DATA INPUT" STATE TO ISSUE THIS COMMAND	**Meaning:** The posted record must be in the Path Data Input state before the path data can be entered. **Action:** Return the record to the Path Data Input state.
THE RECORD HAS BEEN CLEARED FROM THE BUFFER	**Meaning:** The command string bufpath path clear has been executed, and the displayed path has been cleared from the path fault buffer. **Action:** None
THERE IS NOTHING IN THE BUFFER	**Meaning:** The command string bufpath path has been entered, but there are no path entries in the path fault buffer. **Action:** Enter the command string bufpath integ to get an entry from the INTEG buffer, or define a path with the defpath command.

-continued-

bufpath (end)

Responses for the bufpath command (continued)

MAP output	Meaning and action
YOU MUST BE THE "USER" OF THE POSTED RECORD TO ISSUE THIS COMMAND	**Meaning:** The record has already been posted by another user. **Action:** Re-enter the command bufpath when the record is no longer displayed by another user.

-end-

cardlst

Function

Use the cardlst command to display the locations of all cards between the user-defined insertion and extraction points for the AUTO test.

cardlst command parameters and variables

Command	Parameters and variables
cardlst	path fault

Parameters and variables	Description
fault	This default parameter displays all faulty cards between the user-defined insertion and extraction points.
path	This parameter displays all cards between the user-defined insertion and extraction points.

Qualifications

The following notes apply to the cardlst command:

- To display the card list, the test state must be “Test Data Input”.
- To display faulty card list, the test state must be “Finished.”
- The test path must be fully defined.
- The parameter path operates as described above only with the AUTO test; if executed for HOLD or ICTS tests, a full path card list will be displayed.
- The parameter fault operates only with the AUTO test.

Examples

Not currently available

Responses

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

cardlst (end)

Responses for the cardlst command

MAP output	Meaning and action
NOT IN TEST DATA INPUT STATE	**Meaning:** See “Qualifications.” **Action:** None
PATH IS NOT FULLY DEFINED YET	**Meaning:** See “Qualifications.” **Action:** None
NOT IN FINISHED STATE	**Meaning:** See “Qualifications.” **Action:** None
NOT IN AUTO MODE	**Meaning:** See “Qualifications.” **Action:** None
	-end-

clear

Function

Use the clear command to free the posted record. When a record is freed, all the test information is erased and can no longer be referenced.

clear command parameters and variables

Command	Parameters and variables
clear	There are no parameter or variables.

Qualifications

The following notes apply to the clear command:

- A test that is in the QUEUED or RUNNING stage must be aborted before the record can be freed.
- Records must be displayed and freed one at a time. Enter the next command followed by the clear command for each record to be freed.

Examples

Not currently available

Responses

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

Responses for the clear command

MAP output	Meaning and action
`ALL RECORDS HAVE BEEN POSTED`	**Meaning:** The command clear has been entered after all defined records were posted with the command post all. There are no records to display, and therefore none to free. **Action:** None
`A RECORD MUST BE POSTED TO USE THIS COMMAND.`	**Meaning:** The record must be posted before it can be freed. **Action:** To free a record for reuse, post the record using the command post. Then enter the command clear.

-continued-

clear (end)

Responses for the clear command (continued)

MAP output	Meaning and action
THE POSTED RECORD MUST BE IN THE “FINISHED”, “ABORTED”, “TEST DATA INPUT” OR “PATH DATA INPUT” STATE TO ISSUE THIS COMMAND. YOU MUST ABORT THE TEST FIRST WITH THE STOP COMMAND FOR ANY OTHER STATE.	**Meaning:** The posted record cannot be freed unless it is in one of these states: Aborted Finished Path Data Input Test Data Input **Action:** Enter the command stop to abort the test. When the test is in the ABORTED state, re-enter the command clear.
YOU MUST BE THE “USER” OF THE POSTED RECORD TO ISSUE THIS COMMAND	**Meaning:** The record has already been posted by another user. **Action:** Re-enter the command clear when the record is no longer displayed by another user.

-end-

cpypath

Function

Use the cpypath command to copy the path data from one record to another.

cpypath command parameters and variables

Command	Parameters and variables
cpypath	fromname

Parameters and variables	Description
fromname	This parameter specifies the record from which the path information is to be taken.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the cpypath command

MAP output	Meaning and action
A RECORD MUST BE POSTED TO USE THIS COMMAND.	**Meaning:** The record must be posted before path data can be copied into it. **Action:** Post the record into which the data is to be copied using the command post.
THE POSTED RECORD MUST BE IN THE “PATH DATA INPUT” STATE TO ISSUE THIS COMMAND.	**Meaning:** The posted record must be in the Path Data Input state before the path data can be copied into it. **Action:** Return the record to the Path Data Input state.

-continued-

cypath (end)

Responses for the cypath command (continued)

MAP output	Meaning and action
THERE IS NO TEST RECORD DEFINED UNDER THE GIVEN NAME.	**Meaning:** No record has been defined under the name specified. **Action:** Enter the command string disp all to verify the name which was entered. Then, either correct the name entered, or post a new record with the command string post new name. ***Note:*** The command string disp all lists al defined test records.
YOU MUST BE THE "USER" OF THE POSTED RECORD TO ISSUE THIS COMMAND	**Meaning:** The record has already been posted by another user. **Action:** Re-enter the command cypath when the record is no longer displayed by another user.

-end-

defpath

Function

Use the defpath command to specify the initial path information for a newly posted record.

defpath command parameters and variables

Command	Parameters and variables							
defpath	a		s	*plane*	*anet*	*anpt*	*anch*	(1)
			p	*plane*	*anpt*	*ach*		(2)
			x	*plane*	*axpt*	*axch*		(3)
			j	*plane*	*ajpt*	*ajch*		(4)
								(5)
	b		s	*plane*	*bnet*	*bnpt*	*bnch*	(6)
			p	*plane*	*bnpt*	*bch*		(7)
			x	*plane*	*bxpt*	*bxch*		(8)
			j	*plane*	*bjpt*	*bjch*		(9)
	c		*plane*	*parms*				(10)
defpath (continued)	(1)	*axpt*	*axch*	*ajpt*	*ajch*			
	(2)							
	(3)							
	(4)							
	(5)							
	(6)	*bxpt*	*bxch*	*bjpt*	*bjch*			(end)

Parameters and variables	Description
a	This parameter specifies that the information entered is for the A-Side Network.
ajch	This variable, also known as ajctch, identifies the A-side junctor channel. The range is 0-31.
ajpt	This variable, also known as ajctpt, identifies the A-side junctor port. The range is 0-63.
anch	This variable, also known as anetch, identifies the A-side Network channel. The range is 0-31.
anet	This variable identifies the A-side Network. The range is 0-31.
anpt	This variable, also known as anetpt, identifies the A-side Network port. The range is 0-63.

-continued-

defpath (continued)

defpath command parameters and variables (continued)

Parameters and variables	Description
axch	This variable, also known as axptch, identifies the A-side crosspoint channel. The range is 0-31.
axpt	This variable, also known as axptpt, identifies the A-side crosspoint port. The range is 0-63.
b	This parameter specifies that the information entered is for the B-side Network
bjch	This variable, also known as bjctch, identifies the B-side junctor channel. The range is 0-31.
bjpt	This variable, also known as bjctpt, identifies the B-side junctor port. The range is 0-63.
bnch	This variable, also known as bnetch, identifies the B-side Network channel. The range is 0-31.
bnet	This variable identifies the B-side Network. The range is 0-31.
bnpt	This variable, also known as bnetpt, identifies the B-side Network port. The range is 0-63.
bxch	This variable, also known as bxptch, identifies the B-side crosspoint channel. The range is 0-31.
bxpt	This variable, also known as bxptpt, identifies the B-side crosspoint port. The range is 0-31.
c	This parameter indicates that the complete path is to be entered.
j	This parameter specifies that a junctor port and channel is to be entered.
p	This parameter specifies that a Network port and channel is to be entered.
parms	This variable is one of the following variables which are described individually above: anet bnet anpt bnpt anch bnch axpt bxpt axch bxch ajpt bjpt ajch bjch

-continued-

defpath command parameters and variables

Parameters and variables	Description
plane	This variable identifies the Network plane to be entered. The range is 0 or 1.
s	This parameter specifies that the information required to define a complete path through a Network side is to be entered.
x	This parameter specifies that a crosspoint port and channel is to be entered..

-end-

Qualifications

The following notes apply to the defpath command:

- If the command defpath is used with a posted test record on which a path has already been defined, the existing path data will be cleared and the new data entered.
- When the command help is entered at the MAP, the display shows the long versions of the abbreviations used to identify components. For example, anetpt instead of anet.

Examples

Not currently available

Responses

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

Responses for the defpath command

MAP output	Meaning and action
`A RECORD MUST BE POSTED TO USE THIS COMMAND`	**Meaning:** The record must be posted before the path can be defined. **Action:** Post the record with the command post.

-continued-

defpath (end)

Responses for the defpath command (continued)

MAP output	Meaning and action
ERROR: NON-EXISTENT PAIR ON SWITCH	**Meaning:** The Network pair entered does not exist. **Action:** Enter a valid Network number.
NOTE: IF CHANNEL 32 IS ENTERED IT IMPLIES THAT ANY CHANNEL MAY BE SELECTED	**Meaning:** Entering channel 32 causes the system to select any available channel to complete the path. **Action:** If no specific channel is to be tested, enter 32 for any of the channel parameters.
THE POSTED RECORD MUST BE IN THE "PATH DATA INPUT" STATE TO ISSUE THIS COMMAND	**Meaning:** The posted record must be in the Path Data Input state before the path data can be defined. **Action:** Return the record to the Path Data Input state.
YOU MUST BE THE "USER" OF THE POSTED RECORD TO ISSUE THIS COMMAND	**Meaning:** The record has already been posted by another user. **Action:** Re-enter the command defpath when the record is no longer displayed by another user.

-end-

deftest

Function

Use the deftest command to define the test data for the posted record. The parameters vary according to the test_type defined on the posted record. In the description that follows, the parameters are listed according to test_types.

- For NET tests:
  - dur iloc eloc
- For LOOP tests:
  - dur iloc
- For HOLD tests:
  - dur
- For AUTO tests:
  - dur iloc eloc

deftest command parameters and variables

Command	Parameters and variables		
deftest	*dur*	*iloc*	*eloc*

Parameters and variables	Description
dur	This variable is the length of time the test is to run. The ranges for this variable vary according to the test_type. When the test_type is NET or LOOP, dur is 1-180 minutes. When the test_type is HOLD, dur is 1-960 minutes. When the test_type is AUTO, dur is 1-60 minutes.

-continued-

deftest (continued)

deftest command parameters and variables

Parameters and variables	Description
eloc	This variable is the point at which the test code is to be extracted. The variable eloc varies according to the types of Networks in the path, and the junctors (parallel or serial) connecting them. The command info displays a diagram showing the valid extraction points for each Network type. These are the possible extraction points: Apt Bpt AXpt0 BXpt0 AXpt1 BXpt1 AXpt2 BXpt2 Ajct Bjct
iloc	This variable is the point at which the test code is to be inserted. The variable iloc varies according to the types of Networks in the path and the junctors (parallel or serial) connecting them. The command info displays a diagram showing the valid insertion points for each Network type. These are the possible insertion points: Apt Bjct AXpt BXpt

-end-

Qualifications

To assist in the selection of these points, the command info displays a diagram showing the valid insertion and extraction points for each Network type.

Examples

Not currently available

Responses

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

Responses for the deftest command

MAP output	Meaning and action
`RECORD MUST BE POSTED TO USE THIS COMMAND`	**Meaning:** The record must be posted before the test data can be defined. **Action:** Post the record using the command post.

-end-

deftest (end)

Responses for the deftest command (continued)

MAP output	Meaning and action
NOTE: NO TEST DATA IS REQUIRED FOR THIS TEST START IT WHEN READY	**Meaning:** The test_type (ICTS) of the posted record requires no test data. **Action:** Start the test when ready.
THE POSTED RECORD MUST BE IN THE "TEST DATA INPUT" STATE TO ISSUE THIS COMMAND	**Meaning:** The posted record must be in the Test Data Input state before the test data can be entered. **Action:** Return the record to the Test Data Input state.
THIS DEFINES THE TEST DATA FOR A POSTED RECORD TO GET THE SYNTAX, QUERY WHEN A RECORD IS POSTED	**Meaning:** The command string help deftest has been entered. Since the syntax for the command deftest depends on the test_type of the posted record, it cannot be displayed until a record is posted. **Action:** Post a record, then re-enter the command.
YOU MUST BE THE "USER" OF THE POSTED RECORD TO ISSUE THIS COMMAND	**Meaning:** The record has already been posted by another user. **Action:** Re-enter the command deftest when the record is no longer displayed by another user.

-end-

disp

Function

Use the disp command to display a posted record or group of records.

disp command parameters and variables

Command	Parameters and variables	
disp	all	[summary / full]
	log	
	record	*name* [full / summary]
	threshold	

Parameters and variables	Description
full	This parameter displays the complete status of the posted record. Full is the default for record.
summary	This parameter displays a summarized status of the posted record. Summary is the default for parameter all.
all	This parameter indicates that all posted records are to be displayed.
log	This parameter displays the state (ON/OFF) of the NET104/105 logs.
name	This variable identifes a specific test record. This variable is a one to ten alphanumberic character string. The string must begin with a letter.
record	This parameter indicates that a specific record is to be displayed.
threshold	This parameter displays the threshold value of the failure count.

Qualifications

None

Examples

Not currently available

disp (end)

Responses

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

Responses for the disp command

MAP output	Meaning and action
RECORD: name STATE: state ASIDE: NET p-pa PORT pt-ch XPT pt-ch JCTR pt-ch BSIDE: NET p-pa PORT pt-ch XPT pt-ch JCTR pt-ch < test_info > < result_info > < abort_info >	**Meaning:** If the parameter full is used, the complete status of the posted record is displayed. **Action:** None
RECORD: name STATE: state HITS: nn	**Meaning:** With the parameter summay, the summarized status of the posted record is displayed. **Action:** None
THERE IS NO TEST RECORD DEFINED UNDER THE GIVEN NAME	**Meaning:** There are no records identified by the character string specified with the command cpypath name. **Action:** Enter the command string disp all to verify the name which was entered. Then, either correct the name entered, or post a new record with the command post new name. The command string disp all lists all defined test records.
THERE ARE NO RECORDS DEFINED	**Meaning:** The command string disp all has been entered, but no records have been defined. **Action:** None

info

Function

Use the info command to display a diagram of the cards involved in the path being tested. The diagram shows the valid insertion and extraction points for the office, depending on the Network types and the junctors connecting them.

info command parameters and variables

Command	Parameters and variables
info	There are no parameters or variables.

Qualifications

The following notes apply to the info command:

- If the command info is entered while the record is in any stat other than the Path Data Input state, one of the diagrams shown in the responses to this command is displayed.
- The diagrams differ, depending on the types of Networks involved in the path and the type of junctor (parallel or serial). Parallel and serial junctors are also referred to as short and long junctors, respectively.
- Network NT5X13 is representative of Network types NT7X27 and NT7X40. Therefore, all references to NT5X13 apply equally to these Network types.

Examples

Not currently available

Responses

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

Responses for the info command

MAP output	Meaning and action
`A RECORD MUST BE POSTED TO USE THIS COMMAND.`	**Meaning:** The record must be posted before the data can be displayed. **Action:** Post the record with the command post.

-continued-

info (continued)

Responses for the info command (continued)

MAP output	Meaning and action
`THIS COMMAND IS ONLY VALID IF THE PATH DATA HAS BEEN DEFINED AND VERIFIED.`	
	Meaning: The command info displays valid insertion and extraction points. However, this information is not available until the path data for the record has been entered and verified.
	Action: Enter the path data, then enter the verpath command. If the path data is valid, the state changes to Test Data Input. The command info can then be re-entered.

```
      APt                   AXpt       *                   *   -> 3X72
->   3X73   ->    3X70  ->    3X70  ->   3X86     ->   3X72 ->       +
+            +       +                             +        |      APt
AXpt0     AXpt1     AXpt2                                  Ajct       |
|
|                                                 BXpt              Bjct
|                                                   *                  *
|    <-   3X72 <-    3X86     <-  3X70    <-       3X70   <- 3X73  <- 3X72
<-      +                           +     +          +
Bpt                  BXpt2      BXpt1 BXpt0                Bjct
```

Meaning: For a Network of type NT5X13 involving both A- and B-sides, with serial junctors, the valid insertion and extraction points are given. The asterisk (*) and plus (+) signs indicate the points where the test code can be inserted and extracted, respectively.

The * and + are associated with card numbers, for example, 3X72. The arrows (->) represent the direction of the call paths. The headers (Apt, AXpt, and Ajct, etc.) ***are described in Nomenclature For Insertion and Extraction Points on page 168.***

Action: None

-continued-

info (continued)

Responses for the info command (continued)

MAP output **Meaning and action**

```
      Apt                      AXpt       *                      *   -> 3X72
->   3X73   ->      3X70  ->   3X70   ->      +                          +
+       +            |     Apt                AXpt0   AXpt1   AXpt2     |
|                                                                        |
BXpt         |                                                  *    |    <-
3X72      <-        3X86  <-    3X70      <-    3X70          <-         +
+       +               Bpt               BXpt2 BXpt1 BXpt0
```

Meaning: For a Network of type NT5X13 involving both A- and B-sides, with parallel junctors, the valid insertion and extraction points are given. The asterisk (*) and plus (+) signs indicate the points where the test code can be inserted and extracted, respectively.

The * and + are associated with card numbers, for example, 3X72. The arrows (->) represent the direction of the call paths.

Action: None

```
     Apt       *    ->    8X12 --------->     8X13    ------------->
8X12 --------->              +                          +              +
+                        |        Apt                      AXpt0    AXpt2
Ajct                                                                    |
|
|                                                                     Bjct
|                                                                       *
|    <-   8X12      <---------      8X13      <-------------          8X12
<---------        +                  +            +
Bpt              BXpt2     BXpt0                 Bjct
```

Meaning: For a Network of type NT9X11 involving both A- and B-sides, with serial junctors, the valid insertion and extraction points are given. The asterisk (*) and plus (+) signs indicate the points where the test code can be inserted and extracted, respectively.

The * and + are associated with card numbers, for example, 3X72. The arrows (->) represent the direction of the call paths.

Action: None

-continued-

info (continued)

Responses for the info command (continued)

MAP output	Meaning and action

```
     Apt          * ->    8X12 ------------>   8X13       -------------->
+           +       +                        |       Apt               AXpt0
AXpt2                                                                      |
|                                                                          |
|                                                                    |    <- 8X12
<---------  8X13  <-------------         +                          +
Bpt            BXpt2    BXpt0
```

Meaning: For a Network of type NT8X11 involving both A- and B-sides, with parallel junctors, the valid insertion and extraction points are given. The asterisk (*) and plus (+) signs indicate the points where the test code can be inserted and extracted, respectively.

The * and + are associated with card numbers, for example, 3X72. The arrows (->) represent the direction of the call paths.

Action: None

```
      APt                AXpt         *                          *    -> 3X72
->     3X73 ->    3X70    ->     3X70     ->  3X86  ->    3X72    ->    +
+         +     +                            +           |          APt
AXpt0      AXpt1   AXpt2                                  Ajct        |
|
|                                                                    Bjct
|                                                                     *
|    <-   8X12    <-----------      8X13      <-------------         8X12
<---------         +                          +      +
Bpt               BXpt2     BXpt0                   Bjct
```

Meaning: For an A-Side Network of type NT5X13 and a B-Side Network of type NT8X11 with serial junctors, the valid insert and extraction points are given. The asterisk (*) and plus (+) signs indicate the points where the test code can be inserted and extracted, respectively.

The * and + are associated with card numbers, for example, 3X72. The arrows (->) represent the direction of the call paths.

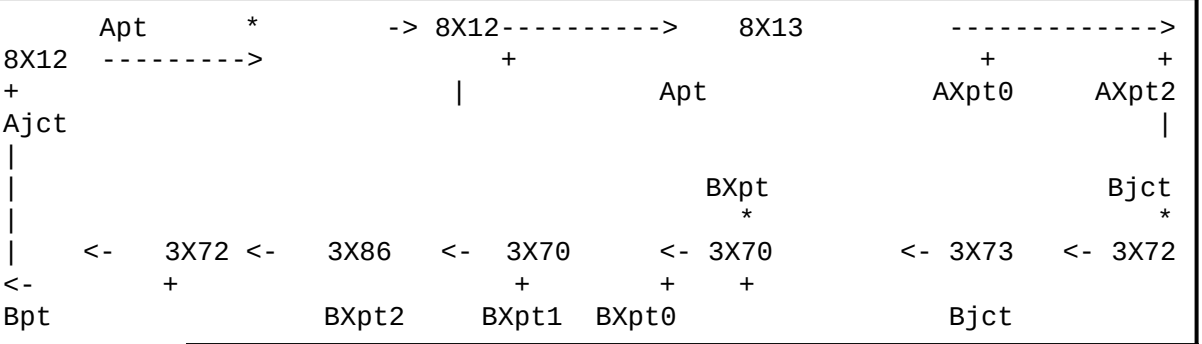
Action: None

-continued-

info (end)

Responses for the info command (continued)

MAP output **Meaning and action**



Meaning: For an A-Side Network of type NT8X11 and a B-side Network of type NT5X13 with serial junctors, the valid insertion and extraction points are given. The asterisk (*) and plus (+) signs indicate the points where the test code can be inserted and extracted, respectively.

The * and + are associated with card numbers, for example, 3X72. The arrows (->) represent the direction of the call paths.

Action: None

-end-

next

Function

Use the next command to display the next defined record after the command post all has been entered.

next command parameters and variables

Command	Parameters and variables
next	There are no parameters or variables.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the next command

MAP output	Meaning and action
`ALL RECORDS HAVE BEEN POSTED`	**Meaning:** The command next has been entered after all defined records are posted with the command string post all. **Action:** To examine the records again, enter the command string post all.
`A RECORD MUST BE POSTED TO USE THIS COMMAND`	**Meaning:** The record must be posted before the data it contains can be displayed. **Action:** Post the record using the command post.

-continued-

next (end)

Responses for the next command (continued)

MAP output	Meaning and action
THE NEXT COMMAND IS ONLY VALID WHEN THE “POST ALL” OPTION IS USED	**Meaning:** The command next can be used only when the displayed record was posted with the command post all. **Action:** Enter the command string post all, then re-enter the command next.

-end-

post

Function

Use the post command to create a new record and provide commands to define and submit a test. The post command also specifies a record or set of records to be displayed.

post command parameters and variables

Command	Parameters and variables		
post	all		
	new	*test_type*	*name*
	record	*name*	

Parameters and variables	Description
all	This parameter specifies that all defined records are to be posted.
name	This parameter identifies a specific record. The variable is a one to ten alphanumeric character string. The string must begin with a letter. ▪ When the variable name is used with the parameter new, the character string identifies the newly created record. ▪ When the variable name is used with the parameter record, the record identified by the specified string is posted.
new	This parameter indicates that a record is to be created.
record	This parameter indicates indicates that an existing record is to be posted.
test_type	This variable is the test_type of the new record to be posted. The possible test types include the following: NET LOOP HOLD ICTS AUTO

Qualifications

The following notes apply to the post command:

- A maximum of 20 records can be defined.
- When a record is posted, it is displayed at the MAP and can be acted on by the NET PATH commands.

Examples

Not currently available

post (end)

Responses

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

Responses for the post command

MAP output	Meaning and action
`THE SELECTED NAME IS ALREADY IN USE.`	**Meaning:** Each record must be given a unique name. **Action:** Use another character string. Re-define the test_type before entering the character string.
`THERE ARE NO TEST RECORDS AVAILABLE.`	**Meaning:** Another record is to be posted, but all 20 records are in use. **Action:** Re-enter the new record when a test record becomes free, or clear a record on which testing has been completed.
`THERE ARE NO RECORDS DEFINED.`	**Meaning:** The command post all has been entered, but no records have been defined. **Action:** None
`THERE IS NO TEST RECORD DEFINED UNDER THE GIVEN NAME.`	**Meaning:** There is no record defined under the name specified with the command string post record name. **Action:** Re-enter the command using a valid name.

-end-

reset

Function

Use the reset command to return a posted test to a previous state (except when the test is in the QUEUED or MEASURING state) each time the command is entered.

reset command parameters and variables

Command	Parameters and variables
reset	There are no parameters or variables.

Qualifications

To return a posted test to the PATH DATA INPUT state, enter the command reset repeatedly, as described below:

- If the record is in the FINISHED or ABORTED state, enter reset to return it to the TEST DATA INPUT state.
- Enter the reset command again to return the record to the PATH DATA INPUT state. (The path data displayed will not change.) To remove the system-defined path data and display only the path data defined by the user, enter the reset command once more.

Examples

Not currently available

Responses

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

Responses for the reset command

MAP output	Meaning and action
`A RECORD MUST BE POSTED TO USE THIS COMMAND`	**Meaning:** This record must be posted before its state can be changed. **Action:** Post the record using the command post.

-continued-

reset (end)

Responses for the reset command (continued)

MAP output	Meaning and action
THE POSTED RECORD MUST BE IN THE “FINISHED”, “ABORTED”, “TEST DATA INPUT” OR “PATH DATA INPUT” STATE TO ISSUE THIS COMMAND. YOU MUST ABORT THE TEST FIRST WITHTHE STOP COMMAND FOR ANY OTHER STATE	**Meaning:** The command reset has been entered on a record that is in the Queued or Running stage (that is, under system control). **Action:** Enter the command stop to abort the test. When the test is in the ABORTED state, re-enter the command reset.
YOU MUST BE THE “USER” OF THE POSTED RECORD TO ISSUE THIS COMMAND	**Meaning:** The record has already been posted by another user. **Action:** Re-enter the command reset when the record is no longer displayed by another user.

-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 all *incrname* *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 NETPATH level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The NETPATH 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 NETPATH 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 NETPATH 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 NETPATH 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 NETPATH level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

set

Function

Use the set command to set the threshold of the failure count for NET PATH tests, and turns the NET104/105 logs on or off for the Auto tests.

set command parameters and variables

Command	Parameters and variables	
set	log	*status*
	threshold	*hit*

Parameters and variables	Description
hit	This variable identifies the threshold value to be set. The range is 1-100, however, the default value is 20.
log	This parameter indicates that NET104/105 logs are to be turned on or off.
status	This variable identifies if the logs are to be turned on or off. The range is on or off however, the default value is off.
threshold	This parameter indicates that threshold for failure count is to be set.

Qualifications

The following notes apply to the set command:

- The threshold value can be set only while no NET PATH tests are running.
- The command string set log can be used for Auto tests only.

Examples

Not currently available

set (end)

Responses

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

Responses for the set command

MAP output	Meaning and action
NETPATH TEST IS RUNNING	**Meaning:** An attempt was made to set the NETYPATH test threshold. It cannot be set whiel NETPTH tests are running. **Action:** Wait for test to complete, then reissue the command.

start

Function

Use the start command to start a test which has been newly defined or reset.

start command parameters and variables

Command	Parameters and variables
start	There are no parameters or variables.

Qualifications

None

Examples

The following table provides an example of the start command.

Examples of the start command

Example	Task, response, and explanation
start ↵	
	Task: Start the NETPATH test for the posted record.
	Response: `Not cvurrently available`
	Explanation: The test is started.

Responses

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

Responses for the start command

MAP output	Meaning and action
`A RECORD MUST BE POSTED TO USE THIS COMMAND`	
	Meaning: The record must be posted before a test can be run on it.
	Action: Post the record using the command post.

-continued-

start (continued)

Responses for the start command (continued)

MAP output	Meaning and action
ERROR: THE INSERT LOCATION IS ON A SHORT JUNCTOR HINT: USE THE INFO COMMAND TO ASSIST IN SELECTING THE INSERT/EXTRACT LOCATIONS or ERROR: THE INSERT LOCATION IS ON A LONG JUNCTOR HINT: USE THE INFO COMMAND TO ASSIST IN SELECTING THE INSERT/EXTRACT LOCATIONS or ERROR: THE INSERT LOCATION IS AFTER THE EXTRACT LOCATION HINT: USE THE INFO COMMAND TO ASSIST IN SELECTING THE INSERT/EXTRACT LOCATIONS	**Meaning:** Each of the error responses listed above indicates that the insertion and or extraction points specified are invalid for the reasons specified. **Action:** Enter the command info for a display of all the valid insertion and extraction points for the defined path. Choose a valid combination and start the test again.
ERROR: THE INSERT LOCATION DOES NOT EXIST ON THE 8X11 NETWORK or ERROR: THE EXTRACT LOCATION DOES NOT EXIST ON THE 8X11 NETWORK	**Meaning:** Each of the error responses listed above indicates that the insertion and or extraction points specified are invalid. **Action:** Enter the command info for a display of all the valid insertion and extraction points for the defined path. Choose a valid combination and start the test again.
NETWORKS ARE NOT IN A VALID STATE	**Meaning:** One or both of the Networks involved in the path are in the Offl or CBsy state. All Networks must be in either the ManB or InSv state for NET PATH tests to run. ***Note:*** The appropriate Network can be made ManB from the NET level of the MAP. This should only be done during periods of low traffic. **Action:** None

-continued-

Responses for the start command (continued)

MAP output	Meaning and action
THE NETWORK HAS CHANGED STATE BETWEEN PATH VERIFICATION AND STARTING PLEASE RESET AND VERIFY THE PATH AGAIN	**Meaning:** A change of state by one or both of the Networks involved in the path can cause defined path data to be invalid. **Action:** Enter the command reset to reset the record, and the verpath command to verify the path before starting the test.
THE POSTED RECORD MUST BE IN THE "TEST DATA INPUT" STATE TO ISSUE THIS COMMAND	**Meaning:** The posted record must be in the TEST DATA INPUT state before the test can start. **Action:** Return the record to the TEST DATA INPUT state.
YOU MUST BE THE "USER" OF THE POSTED RECORD TO ISSUE THIS COMMAND	**Meaning:** The record has already been posted by another user. **Action:** Re-enter the command start when the record is no longer displayed by another user.

-end-

stop

Function

Use the stop command to abort the posted test.

stop command parameters and variables

Command	Parameters and variables
stop	There are no parameters or variables.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the stop command

MAP output	Meaning and action
`A RECORD MUST BE POSTED TO USE THIS COMMAND.`	**Meaning:** No records have been posted, therefore there are no tests to abort. **Action:** None
`THE TEST IS NOT RUNNING.`	**Meaning:** A test must be in the QUEUED or RUNNING stage for this command to be executed. **Action:** None
`THE TEST WILL BE ABORTED.`	**Meaning:** The command stop has been executed. The state of the test record changes to ABORTED within 10 seconds. **Action:** None

-continued-

stop (end)

Responses for the stop command (continued)

MAP output	Meaning and action
YOU MUST BE THE “USER” OF THE POSTED RECORD TO ISSUE THIS COMMAND.	**Meaning:** The record has already been posted by another user. **Action:** None

-end-

verpath

Function

Use the verpath command to verify that the path data entered is valid, that is, the data describes a valid path through the Network.

verpath command parameters and variables

Command	Parameters and variables
verpath	There are no parameters or variables.

Qualifications

Entering the command verpath displays the defaults for the test data, depending on the type of test submitted on the record.

Examples

Not currently available

Responses

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

Responses for the verpath command

MAP output	Meaning and action
`A RECORD MUST BE POSTED TO USE THIS COMMAND`	**Meaning:** The record must be posted before the path data can be verified. **Action:** Post the record using the command post.
`ERROR:  THE PATHENDS MUST BE UNIQUE.`	**Meaning:** The same pair, port, and channel have been selected on both the A-side and the B-side of the Network. **Action:** Change one of the endpoints, or enter the command altpath and specify channel 32. This allows the system to select a channel from the resources available.

-continued-

verpath (continued)

Responses for the verpath command (continued)

MAP output	Meaning and action
ERROR: COULD NOT FIND A JCTR TO MATCH THE XPT DATA or ERROR: COULD NOT FIND B JCTR TO MATCH THE XPT DATA	**Meaning:** The data entered for the parameter XPT pt-ch is invalid, therefore a suitable junctor cannot be selected. **Action:** Select a different "XPT pt-ch" or enter the data for one side only and let the system select the other side.
ERROR: INVALID A-SIDE XPT/JCTR COMBINATION or ERROR: INVALID B-SIDE XPT/JCTR COMBINATION	**Meaning:** The data entered for the parameter XPT pt-ch is inconsistent with the data for the parameter JCTR pt-ch. **Action:** Select a different XPT pt-ch or JCTR pt-ch or enter the data for one of these parameters and let the system select the other.
ERROR: A-SIDE NETWORK PAIR IS UNKNOWN or ERROR: B-SIDE NETWORK PAIR IS UNKNOWN	**Meaning:** The Network specified does not exist on the switch. This should not happen. **Action:** Select a valid Network pair.
ERROR: TEST IS NOT SUPPORTED ON THE A-SIDE NETWORK or ERROR: TEST IS NOT SUPPORTED ON THE B-SIDE NETWORK	**Meaning:** The Network specified is not of the appropriate type to run the test. **Action:** None
ERROR: THE LOOP TEST IS NOT SUPPORTED FOR THE PM ASSOCIATED WITH THE B-SIDE PATH DATA	**Meaning:** The specified "BSide: NET p-pa PORT pt-ch" is associated with a PM that does not support the LOOP test. **Action:** A loop test cannot be run. Choose a different test type or endpoint.

-continued-

verpath (continued)

Responses for the verpath command (continued)

MAP output	Meaning and action
NO PATH DATA HAS BEEN DEFINED FOR THIS RECORD. USE THE "DEFPATH", "CPYPATH", OR "BUFPATH" BEFORE USING THIS COMMAND.	**Meaning:** The command verpath verifies the path data of a posted record, but no path data has been defined. **Action:** Enter the minimum path information for a test, then enter the verpath command to verify the path.
PROBLEM: THE A-SIDE PT IS NOT SUPPORTED. YOU MUST BUSY THE NETWORKS INVOLVED IF YOU WANT TO RUN THIS TEST or PROBLEM: THE B-SIDE PT IS NOT SUPPORTED. YOU MUST BUSY THE NETWORKS INVOLVED IF YOU WANT TO RUN THIS TEST	**Meaning:** The selected pair, port, and channel (NET p-pa PORT pt-ch) for either the A-side or the B-side Network translate into an LM. LMs are not supported for testing when the Networks are inservice. **Action:** To proceed with the test, the Network must be made busy. ***Note:*** The appropriate Network can be made Man-Busy from the NET level of the MAP. This should only be done during periods of low traffic.
PROBLEM: COULD NOT FIND SUITABLE PATHENDS REFER TO DOCUMENTATION FOR HELP	**Meaning:** The system is required to select one or both pathends (PORT pt-ch) but is unable to find an endpoint because: ▪ All of the endpoints on the Network are LMs which are not supported by the system. ▪ All of the endpoints are associated with trunks which are not in the INB state. **Action:** If the associated trunks are not in the INB state, either: busy out both Networks involved in the connection (only on the plane of interest) or change a trunk on the link or Network of interest to the INB state. ***Note:*** The appropriate Network can be made Man-Busy from the NET level of the MAP. This should be done only during periods of low traffic.

-continued-

verpath (continued)

Responses for the verpath command (continued)

MAP output	Meaning and action
TEST: DURATION: nn INSERT: aa EXTRACT: bb or TEST: DURATION: nn INSERT: aa or TEST: DURATION: nn	**Meaning:** The path and test data has been verified using the command verpath. These responses give the defaults for the NET, LOOP, HOLD, and AUTO tests respectively, where: nn is 5 minutes for each of the test_types. aa is the insertion point specified for the NET, LOOP, and AUTO tests. bb is the extraction point specified for the NET and AUTO tests. **Action:** None
THE A-SIDE PORT INVOLVES circuit-CLLI WHICH IS NOT IN A VALID STATE. or THE B-SIDE PORT INVOLVES circuit_CLLI WHICH IS NOT IN A VALID STATE.	**Meaning:** The selected pair, port, and channel translate into a trunk which is not in the INB state. **Action:** Change the state of the trunk to INB, or select a different pathend.
THE POSTED RECORD MUST BE IN THE “PATH DATA INPUT” STATE TO ISSUE THIS COMMAND	**Meaning:** The posted record must be in the Path Data Input state before the path data can be altered. **Action:** Return the record to the Path Data Input state.

-continued-

verpath (end)

Responses for the verpath command (continued)

MAP output	Meaning and action
YOU MUST BE THE “USER” OF THE POSTED RECORD TO ISSUE THIS COMMAND	**Meaning:** The record has already been posted by another user. **Action:** Re-enter the verpath command when the record is no longer displayed by another user.

-end-

NETXPTS level commands

Use the NETXPTS level of the MAP to access and perform maintenance functions on the crosspoint (XPT) cards in both planes of a network module (NM).

Accessing the NETXPTS level

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

mapci;mtc;net;xpts ↵

This command also indicates the "path" from the CI level that is required to reach this level.

NETXPTS commands

All of the commands available at the NETXPTS MAP level are described in this chapter. They are arranged in alphabetical order. The table below lists every command and indicates the page where its description is located.

NETXPTS commands (continued)

Command	Page
bsy	N-227
disp	N-231
loc	N-233
quit	N-235
qtst	N-239
rts	N-243
tst	N-247
xpts	N-251

NETXPTS menu

The following figure shows the NETXPTS 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
         .     .     .     .     .     .     .     .     .     .


LEVEL          Net                11111 11111 22222 22222 33
 0 Quit         Plane 01234 56789 01234 56789 01234 56789 01
2                 0   .S..I ..C.. LJ... ..I.. .0
3                 1   ...S. .T... ....M ..... 00
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
```

NT0X48 Network

```
Net 06 Xpts
      Plane  0 1 2 3 4 5 6 7
        0    . . . . . . . .
        1    . . T . . . . .
```

NT5X13 Network

```
Net 04 Xpts
      Plane  0 1 2 3
        0    P . T .
        1    . . . .
```

NT8X11 Network

```
Net 02 Xpts
      Plane  0 1
        0    . P
        1    C C
```

bsy

Function

Use the bsy command to set the specified XPT card to the P state. All P links and junctors connected to the card are also set to the M state.

bsy command parameters and variables

Command	Parameters and variables		
bsy	*plane*	*card*	force

Parameters and variables	Description
card	This variable specifies the number of the crosspoint card to be busied. The ranges are: 0-7 for NT0X48 cards 0-1 for NT8X11 cards 0-3 for NT5X13 cards
force	This parameter busies the specified plane pair regardless of the state.
plane	This variable identifies the plane of the card to be busied. The range is 0 or 1.

Qualifications

The following notes apply to the bsy command:

- Before entering bsy the card must be in the •, S, or C state.
- The links and junctors are indicated as C if for any reason they cannot be RTS after BSY.

Examples

Not currently available

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
OK	**Meaning:** The command bsy is executed. **Action:** The crosspoint status display changes to M.
REQUEST ABORTED. NO MAILBOX.	**Meaning:** Mailboxes are used by the software to send messages throughout a system. If the Network is too busy with call processing, a mailbox is temporarily unavailable. **Action:** Try again.
XPT TEST NOT IMPLEMENTED FOR NT0X48 NETWORK. or INVALID REQUEST FOR 5X13 NETWORK OUT OF RANGE FOR NT5X13 (CARD NO 0 TO 3). or INVALID REQUEST FOR 8X11 NETWORK OUT OF RANGE FOR NT8X11 (CARD NO 0 OR 1).	**Meaning:** The specified card number is out of range because of the type of Network. **Action:** None
REQUEST INVALID. XPT IS BUSY.	**Meaning:** The NM is busy. **Action:** None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
WARNING: ACTIVE MTCE TASKS ABORTED. PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** Forcing an NM pair into the M state cancels call processing. **Action:** Enter YES to force a PM, speech link, junctor, or NM pair out-of-service. The respective call processing is stopped, the affected NM pair is identified, and the response to confirm bsy is OK. Enter NO to abort the command. The system response echoes NO.
WARNING: SOME OF THE JCTRS DID NOT GO MBSY. or WARNING: SOME OF THE LINKS DID NOT GO MBSY.	**Meaning:** All links and junctors connected to the specified crosspoint card should go to the P state, except those which are in the O state or unequipped. **Action:** None

-end-

disp (end)

Function

Use the disp command to display the status of all the crosspoint cards in both planes of the Network specified by the command XPTS at the NET level. This command is for use with non-MAP devices (such as a TTY).

disp command parameters and variables

Command	Parameters and variables
disp	There are no parameters or variables.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the disp command

MAP output	Meaning and action
`<display>`	**Meaning:** Display of 2, 4 or 6 XPtx. **Action:** None

loc

Function

Use the loc command to display the physical location of a crosspoint card according to the plane, card number, and side of the card.

loc command parameters and variables

Command	Parameters and variables		
loc	*plane*	*card*	side

Parameters and variables	Description
card	This variable specifies the number of the crosspoint card. The range is 0-3 for NT5X13 cards, and 0-1 for NT8X11 cards.
plane	This variable identifies the plane of the crosspoint card. The range is 0 or 1.
side	This parameter is ASIDE or BSIDE to identify the Network side served by the specified card.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the loc command

MAP output	Meaning and action
`SITE FLR RPOS BAY_ID SHF DESCRIPTION SLOT EQPEC`	**Meaning:** The card location for the specified plane and pair is listed. **Action:** None

-continued-

loc (end)

Responses for the loc command (continued)

MAP output	Meaning and action
XPT TEST NOT IMPLEMENTED FOR NT0X48 NETWORK. or INVALID REQUEST FOR 5X13 NETWORK OUT OF RANGE FOR NT5X13 (CARD NO 0 TO 3). or INVALID REQUEST FOR 8X11 NETWORK OUT OF RANGE FOR NT8X11 (CARD NO 0 OR 1).	**Meaning:** The specified card number is out of range because of the type of Network. **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 all *incrname* *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 NETXPTS level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The NETXPTS 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 NETXPTS 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 NETXPTS 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 NETXPTS 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 NETXPTS level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

qtst

Function

Use the qtst command to query the test state of NM crosspoints and display the current state of a Network test on a specified NM.

qtst command parameters and variables

Command	Parameters and variables	
qtst	*plane*	*pair*

Parameters and variables	Description
pair	This variable identifies the NM containing the crosspoint to be queried. The range is 0-31.
plane	This variable identifies the plane of the NM to be queried. This range is 0 or 1.

Qualifications

The following notes apply to the qtst command:

- For Network type NT5X13 the duration of testing the A- or B-side of a crosspoint card is 12 minutes.
- ISTRB and FLT output a card list indicating the most probable cards likely to have caused the test failure.

Examples

Not currently available

qtst (continued)

Responses

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

Responses for the qtst command

MAP output	Meaning and action
NM n-nn test_name status or NM n-nn test_name status test_data cardlist or NM n-nn TEST STATUS status	**Meaning:** One of the previous occurs depending on the Network type and the testing that is currently active. The last response appears if the status is ABT or IDL. The status of the tests are displayed, where: n-nn is the Network plane and NM respectively. test_name is one of the following out-of-service tests: CROSSPOINT CARD TEST CROSSPOINT SELF TEST CONTROLLER TEST RESET FUNCTIONS BUFFER CHECK LOOPBACK MESSAGE CSIDE BUFFER PSIDE FUNCTIONS CLOCK PORT SWITCH BASIC CM TEST BASIC INTERFACE TEST BASIC XPT TEST BASIC PAD TEST.

-continued-

qtst (continued)

Responses for the qtst command (continued)

MAP output	Meaning and action
	status is one of: ABT means the command is aborted. ACT means the test is active. IDL means the test passed, where IDL applies to all tests except for crosspoints. FLT means the test has failed. PASS applies to crosspoints only and means the test passed. TRB occurs while testing is in progress and means In-service Trouble is pending.
	test_data gives data about the test that is occurring on it if the test status is TRB, FLT, or ACT. The response varies according to the Network type. For all Network types the response to tests (except crosspoint) is: SUBTEST = nn, FATAL = t/f, DATA1 = nnnn DATA2 = nnnn. where: nn is 0 to 31 to identify the NM. t/f is TRUE or FALSE to indicate whether a test is failing. If FALSE appears, then a card list is forthcoming. nnnn is a code that depends on the type of out-of-service test. For Network type NT5X13, the response for crosspoint tests is: SIDE side ICCARD n OGCARD n ERROR COUNT = nn TEST progress where: side is A or B for the A- or B-side crosspoints. n is 0 to 3 for the number of the incoming card (ICCARD) and the outgoing card (OGCARD). nn is 0 to 31 for the number of errors that occur in the procedures of a test. progress is COMPLETED or NOT COMPLETED

-continued-

qtst (end)

Responses for the qtst command (continued)

MAP output	Meaning and action
	For Network type NT8X11, the response for crosspoint tests is: TEST STARTED junc_type side-SIDE TEST ERRORS = nnn, STAGE = nnn STATUS: activity progress result where: junc_type is PARALLEL or SERIAL for the junctor type. side is A, B, or BOTH for the A- or B-side crosspoint. nnn is 0 to 255 for the total number of test procedures that failed. If no failures occur, the identification number of the stage at which testing has progressed is given. activity is ACTIVE or INACTIVE. progress is COMPLETED or NOT COMPLETED. result is ABORTED or NOT ABORTED.
cardlist	occurs with status TRB or FLT.
Action:	

-end-

rts

Function

Use the rts command to partially test a crosspoint card, and if OK returns the card to service (sets it to the • state).

rts command parameters and variables

Command	Parameters and variables		
rts	*plane*	*card*	force

Parameters and variables	Description
card	This variable specifies the number of the crosspoint card to be returned to service. The ranges are: 0-7 for NT0X48 cards 0-1 for NT8X11 cards 0-3 for NT5X13 cards.
force	This parameter returns the specified pair to service without testing. Cards that are in the O state or are unequipped are not returned to service.
plane	This variable identifies the plane of the card to be returned to service. The range is 0 or 1.

Qualifications

The following notes apply to the rts command:

- Before entering rts, the card must be in the M state.
- All junctors and links connected to the specified xpt card are rts except those that are off-line or unequipped.

Examples

Not currently available

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
INVALID REQUEST FOR 5X13 NETWORK OUT OF RANGE FOR NT5X13 (CARD NO 0 TO 3). or INVALID REQUEST FOR 8X11 NETWORK OUT OF RANGE FOR NT8X11 (CARD NO 0 OR 1). or XPT TEST NOT IMPLEMENTED FOR NT0X48 NETWORK.	**Meaning:** The specified card number is out of range because of the type of Network. **Action:** None
OK	**Meaning:** The command rts is executed. **Action:** The crosspoint status display changes from M to • or I.
REQUEST ABORTED. NO MAILBOX.	**Meaning:** Mailboxes are used by the software to send messages throughout a system. If the Network is too busy with call processing, a mailbox is temporarily unavailable. **Action:** Try again.
REQUEST INVALID. XPT IS NOT P-SIDE BUSY.	**Meaning:** The command rts occurs only if the XPT is in the P state. **Action:** None

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
WARNING: ACTIVE MTCE TASKS ABORTED. PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** The parameter force bypasses the tests and the copy of CM when rts is executed. **Action:** Enter YES to confirm the rts command, the system response is OK. Enter NO to abort the command. The system response echoes NO.
WARNING: ALL JCTRS RETURNED TO SERVICE WITHOUT ANY TESTS DONE. or WARNING: ALL LINKS RETURNED TO SERVICE WITHOUT ANY TESTS DONE.	**Meaning:** All junctors or links on a xpt card cannot be tested by rts together, therefore no tests are done. **Action:** None
WARNING: SOME OF THE JCTRS ARE NOT RTS. or WARNING: SOME OF THE LINKS ARE NOT RTS.	**Meaning:** A software error prevents automatic rts. **Action:** None
-end-	

tst

Function

Use the tst command to control the tests for the crosspont cards in an NM. The tst command does not apply to XPTS in a NT0X48 Network.

tst command parameters and variables

Command	Parameters and variables			
tst	all	*plane*		
	card	*plane*	*card*	*side*
	stop	*plane*		

Parameters and variables	Description
all	This parameter tests all crosspoint cards in the specified plane of the NM under test.
card	This parameter tests only the specified card.
card	This variable specifies the number of the crosspoint card to be tested. for the NT5X13 Network, the range is 0 -3 for the NT8X11 Network, the range is 0 -1
plane	This variable identifies the plane to be tested. The range is 0-1.
side	This variable identifies the side associated with the crosspoint card to be tested. The range is A or B.
stop	This parameter stops the crosspoint tests on the specified plane.

Qualifications

Before entering tst the NM must be in the M state.

Examples

Not currently available

tst (continued)

Responses

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

Responses for the tst command

MAP output	Meaning and action
`REQUEST INVALID.  NM IS C-SIDE BUSY.`	**Meaning:** The command string disp count cannot be executed because the C-side busy state prevents communication to the NM. **Action:** None
`REQUEST INVALID.  NM IS NOT MAN BUSY.`	**Meaning:** XPT tests cancel all call-processing on the XPT card(s), so the tst command is not permitted unless the NM is in the M state. **Action:** None
`TEST STARTED.`	**Meaning:** The specified components are tested. **Action:** None
`TEST STOPPED.`	**Meaning:** Tests on the specified components are cancelled. **Action:** None
`THIS FIRMWARE EDITION DOES NOT SUPPORT THIS TEST MODE.`	**Meaning:** Some versions of the Network firmware do not support all of the XPT tests. Unless the A or B sides are specified, the command string tst card cannot be executed at the XPT level. **Action:** None

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
INVALID REQUEST FOR 5X13 NETWORK OUT OF RANGE FOR NT5X13 (CARD NO 0 TO 3). or INVALID REQUEST FOR 8X11 NETWORK OUT OF RANGE FOR NT8X11 NETWORK OUT OF RANGE FOR NT8X11 (CARD NO 0 OR 1). or XPT TEST NOT IMPLEMENTED FOR NT0X48 NETWORK.	**Meaning:** The specified card number is out of range because of the type of the Network. **Action:** None

-end-

xpts

Function

Use the xpts command to access the NET XPTS level for the crosspoint cards in both planes of the NM.

xpts command parameters and variables

Command	Parameters and variables
xpts	*pair*

Parameters and variables	Description
pair	This variable identifies the NM. The range is 0-31.

Qualifications

None

Examples

Not currently available

Responses

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

Responses for the xpts command

MAP output	Meaning and action
`<display>`	**Meaning:** Displays 2, 4, or 6 XPts. **Action:** None

DMS-100 Family

Menu Commands

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