Web-powered.
Java-based.
Fully integrated.
Platform independent.

Innovative’s Millennium system provides a total solution for the library’s information technology needs—with databases, server hardware, and application software, as well as installation, training, and maintenance. Millennium offers by far the most complete array of reliable, flexible, and user-friendly features.

Millennium is developed on the modern principle of Web-based computing: the ability to move information seamlessly, to and from anywhere.

Millennium is graphical and easy to use.

Millennium is accessible, via standard Web browsers, from anywhere—the reading room, home, school, work, and via wireless devices.

Millennium is personalized—integrating with the user’s desktop, including Section 508 (ADA-compliant) applications.

Millennium is customized—designed to accommodate the needs of all types and sizes of libraries and a wide array of optional features to meet specific requirements.

Millennium is easily maintained—utilizing push technology to enable the server and the network to automatically maintain the client software on the user’s workstation.
Millennium is adaptable—the Java-based clients allow the library and the user the platform independence to choose the appropriate workstation technologies now, and as they evolve.

Millennium is connected—providing patrons and staff access to the information they need whenever they need it.

Millennium uses HTML, XML, and Java to provide libraries the tools necessary for the effortless management of basic library functions, as well as providing the means necessary to meet the sophisticated demands of the emerging information-consumer.

Millennium:
- Organizes the library's collection
- Links the collection with enhanced content on the Web
- Integrates and controls access to third-party databases and Web-based resources
- Establishes an information portal for users and provides the necessary tools for librarians to customize and maintain that portal

**Web OPAC**

Defining the library's identity on the Web, Innovative's Web OPAC sets the industry standard for sophistication and ease of use. Requiring only a standard Web browser on the user's workstation, the Millennium Web OPAC is fully available to library patrons from anywhere and at any time, including during library system backup and reporting operations. Using straightforward, simple HTML pages, the system is easily and fully customizable, and library-managed.

**Most powerful:** Sophisticated full-search capabilities, separate children's OPAC, advanced searching using AltaVista's search engine software, scoping, unlimited content linking, Featured Lists.

**Most flexible:** Fully customizable HTML, My Millennium patron-empowerment tools, completely internationalized, staff and public functions and displays.

**MAP: Millennium Access Plus**

Libraries offer a diverse array of information resources—both in electronic and print formats. The challenge for libraries is to provide access to all of these resources in an integrated and user-friendly way. MAP (Millennium Access Plus) meets this challenge with three independent components: WebBridge, MetaFind, and Web Access Management. Together, these tools provide libraries with the ability to manage and control access to all of their information resources by providing smart linking, multi-protocol meta-searching, and authentication.

**WebBridge** offers a smart linking capability, which enables libraries to link together information resources when appropriate. This can include content enrichment such as book-jacket images and book reviews, but can also include linking to the most appropriate copy of full-text journal articles or
e-books. Each resource is offered only if specific criteria are met based on elements from the record or the user's search. These related resources can be categorized under library-defined services such as book reviews, similar titles, holdings at nearby libraries, full-text availability, and book-jacket images. WebBridge can create these lists of related resources from any electronic resource in the library's collection that supports a WebBridge link. WebBridge also includes a management tool to define and maintain the resources.

**MetaFind** offers a meta-search capability against the sources to which a library subscribes. MetaFind is a one-stop search across the library's defined information resources. These can be licensed full-text or citation databases, Web sites, search engines, Z39.50 databases, library catalogs, local digital collections, and more. The grouping of the information resources is configurable by the library; different looks can be offered to different groups within the library. Innovative Interfaces has partnered with MuseGlobal to power MetaFind.

**Web Access Management** is a solution for libraries wanting to provide remote-patron verification to licensed databases. Web Access Management uses a proxy server to control access to licensed Web servers, providing access to these resources to valid patrons searching from home, from the office, or from anywhere in the world. Web Access Management fully controls the access and authentication issues that are so important to libraries serving a geographically distributed user base.

**Circulation**

Millennium Circulation is a total solution—whether yours is a large, high-circulation library or a small, one-branch library. Quick, accurate, simple, and intuitive, Millennium Circulation enables staff to access all functions with a single click or equivalent keyboard command, streamlining the workflow while at the same time facilitating precision and efficiency.

- Full support of all circulation functions
- Single-click access to all patron-related functions
- Comprehensive statistics
- Full integration with INN-Reach, Interlibrary Loan, and Web OPAC

**Fully-featured:**

- Reserve Book Room
- Electronic Course Reserves (see also Millennium Media Management)
- Inventory Control
Materials Booking
Offline Circulation
Telephone Notification System
Telephone Renewal
Self-Checkout
Patron API
Homebound Patron Services

INN-Reach

The INN-Reach Direct Consortial Borrowing System is the only available solution that directly links the local systems of multiple libraries for the purpose of building a real-time union catalog, accepting and resolving user-initiated requests, and managing the requests and circulation transactions between participating libraries.

INN-Reach provides far superior service for significantly lower cost than traditional interlibrary loan means. It empowers patrons, allowing them to readily find and receive needed material and search across collections—without staff intervention. INN-Reach’s considerable power and sophistication is unrivaled in the industry.

INN-Reach is a:

- Union catalog
- Resource-sharing intermediary
- Converter of local circulation data to common forms used by participants
- Statistics gatherer

The local Innovative systems also have INN-Reach software that allows patrons to transfer a search to the INN-Reach catalog in one keystroke or click of a mouse. The same search as performed on the local system is automatically executed on the INN-Reach catalog with no additional keying by the patron. Local Innovative systems have INN-Reach software that automatically transmits database changes to the INN-Reach catalog so that all bibliographic records and holdings are updated in real-time.

In conjunction with its INN-Reach catalog database, INN-Reach Circulation allows patrons of a participating member library to borrow materials from another. Patrons initiate their own requests on the INN-Reach catalog. The INN-Reach Circulation software provides all the functionality necessary for the complete lending transaction, including the creation of temporary patron and item records on the corresponding local systems, paging, and checkout/checkin to the patron.

Libraries have repeatedly realized the overall cost benefits. INN-Reach circulation costs $3-$8 per transaction and delivers the material from the owning library to patron in one to three days, as compared to a traditional ILL transaction costing $25-$30 and taking two to three weeks. With costs contained and service barriers removed, INN-Reach allows each library’s level of service to their patrons to soar dramatically.

Interlibrary Loan

Millennium’s Interlibrary Loan (ILL) module provides electronic access to library holdings worldwide and a means to supply these materials to
the local library’s users. Staff and patrons can locate these materials with a single click or keystroke. The software’s versatility and seamless integration provide frictionless searches, requests, deliveries, checkouts, and returns. The ILL module tracks items at every point in the process. Staff appreciate Millennium ILL’s integration, security, and rapid patron notification. Patrons enjoy its powerful yet simple search capabilities and quick processing time for materials.

Upon receiving the item from the lending library, Millennium’s standard circulation module is used to lend it to the patron and track the transaction. The system automatically adds a temporary item to the database that is used for circulation and viewable by the patron via the My Millennium OPAC feature. Upon return and checkin of the item, the circulation attendant is automatically notified to send the item to the ILL office for additional processing.

Statistics include the average time to fill and the number of requests. They are viewable online, or downloadable in ASCII-delimited text or in an XML format.

**Acquisitions**

Millennium Acquisitions streamlines workflow with point-and-click functionality, effortless navigation, and seamless integration, making the job both easier and more efficient. It features the most extensive and widely used suite of EDI (Electronic Data Interchange) products in the industry and performs all the functions associated with acquiring all types of materials (books, serials, supplies, etc.) via purchase, gift, and exchange.

Millennium Acquisitions also offers full financial accounting, full integration with Millennium modules, EDI, comprehensive statistics and reports, Web-content integration, and selector’s tools for recommended selections and orders under consideration.
**Serials**

Innovative’s Serials Control has long been the industry leader, offering unlimited control for all types of serials, using a straightforward and easy-to-use interface. Fully integrated with Millennium Acquisitions, Cataloging, Circulation, and Web OPAC, it enables the library to format and process unlimited serials, checkins, and holdings records with single-click navigation among functions, and forms-based records setup. Millennium Serials stores all holdings in MARC 21 holdings format.

- Claiming
- Binding management

**Database Management**

Millennium’s suite of Database Management tools is designed for ease and efficiency, without compromising functionality. The extensive tools and utilities built into the Millennium Database Management module facilitate and simplify operations such as:

- Cataloging in a wide range of languages and character sets
- Original cataloging, MARC-data loading, or Web crawling
- Bringing control to books, serials, digital objects, and all types of material

**Cataloging**

Millennium’s Cataloging software integrates the cataloging experience with all other aspects of the Millennium system. The system interfaces with all major bibliographic utilities. It allows users to create pre-defined templates to minimize or eliminate repetitive input. Millennium’s intuitive and rapid keyboarding is specifically designed to minimize the number of mouse clicks and pop-up windows. The ability to verify MARC tagging, headings, and codes maximizes cataloging efficiency. Indexing is done in real-time so that the benefits of cataloging are immediately realized.

Features include:

- Easy, one-click graphical serials issue checkin
- Serials E-Checkin using XML to automate checkin operations
- Support of electronic journals
- Customized routing slips
Millennium’s Global Updating utility optimizes and expedites ongoing database maintenance by allowing the insertion, deletion, or editing of any field within any record of any type in the database (e.g., bibliographic, patron, item, order, etc.). An authorized user can extract a record list for processing by using any defined index, including keyword. The user can also create such a list by using the report writer software. Next, the user can specify the changes that the global update processing will perform, whether to entire fields or portions of them. Before actually executing the changes, the user can preview their effects—an important and valuable security mechanism.

Authority Control enables keying and updating of full MARC authority records, loading of MARC authority records from files obtained via FTP or tape, and loading of records individually from INN-View’s Library of Congress authority file database. Other powerful tools include automatic overnight updating of headings on bibliographic records, extensive reports, and cataloger-controlled global updating of records.

**URL Checker**

Millennium’s URL Checker gives the library the ability to verify and update URLs stored in records in the bibliographic database. URL Checker can be run on demand, or on a daily, weekly, or monthly basis. In addition to reporting errors, a statistical report is produced showing the number of errors found and the frequency of error types.

**MetaSource: Digital Collections Management**

MetaSource is a suite of tools that allows libraries to effectively manage their digital collections. MetaSource is made up of three components: Millennium Media Management, XML Harvester, and Metadata Builder. Together, these tools create a comprehensive digital library management strategy.

**Millennium Media Management** supports the creation of a local media collection (e.g., archival material, photographs, newspaper clippings, electronic reserve material, lecture notes, or audio files). The digital collection can be stored in the library’s format of choice and is fully integrated into the Web OPAC for searching and viewing. A Copyright and Access component is used to provide controlled access to digital collections such as electronic reserve material, local historical image collections, distance learning information, or curriculum guides and bibliographies. Millennium Media Management also provides a robust and feature-rich Electronic Course Reserves module. Media can be associated with course records and copyright, and patron authentication provides the tools libraries need for full electronic reserve management.

**XML Harvester** leverages XML technology to provide an automated cataloging tool which can create library records from metadata records stored on servers anywhere in the world. The XML Harvester unifies access to different XML databases by integrating
external records into the library catalog and making it a single repository for the library’s different digital collections.

**Metadata Builder** allows libraries to effectively and efficiently describe and store digital collections using a variety of metadata schemes such as Dublin Core or EAD. This tool gives libraries the ability to enter, batch load, store, and export XML in a defined metadata scheme, and links digital objects with appropriate metadata (e.g., image database with Dublin Core or digital archives with EAD).

**Report Writing**

Millennium’s report writing capabilities are unrivaled within the industry. Fully integrated with all modules, they provide an intuitive, yet powerful, interface, allowing library staff to create and retrieve reports as needed. Innovative’s overall philosophy in report-writing design is ease of use—requiring no systems-level staff to compile or generate these reports, and allowing library staff to create reports as needed, all without special training or third-party software.

The Millennium software offers three primary report-writing capabilities:

**Create Lists of Records:** Assembles a list of records based on user-keyed Boolean search strategy. A user can execute a search against all, or part of, the database, creating a list of records that match the user-selected criteria.

**Statistical Report Generator:** Analyzes groups of records and supplies various types of numeric reports which can include the entire database, a previously created list of records generated from the report writer, or derived from an Index or Advanced Keyword search.

**Web Management Reports:** A suite of Web-based, graphical management reports that analyze transaction-based information.

**Other Products and Services**

Millennium offers numerous products and services designed to further enhance and meet the specific needs of each individual library.
The following additional products and services are part of the Millennium system offerings:

- Internationalization and localization
- Z39.50 Server
- Z39.50 Client
- INN-View (Web content hosting service)
- INN-Keeper (Millennium Application Service Provider)
- VIPs (Innovative’s Valued Information Providers)

**Innovative Design**

Millennium is an open, standards-based system that takes full advantage of the World Wide Web. It moves beyond the older client-server model to use a Web-based, graphical user interface for both the Web OPAC and staff modules. Millennium uses HTML for the Web OPAC; Java clients power the staff modules. The benefits of using this technology include rapid delivery of software and new enhancements, platform independence for client workstations, integration of Web content throughout the system, and lower total cost of ownership.

Millennium is based on library- and computer-industry standards. The system’s support for standards such as MARC 21, Unicode, Z39.50 (including Bath Profile), and commitment to extension of ISO 10160/10161 and NCIP, ensures the library’s ability to interact with other libraries and partners. The system is also able to accept and output data in XML format. Millennium uses the UNIX operating system, which allows the system to be run on computers manufactured by Sun Microsystems, IBM, Compaq, and Hewlett Packard. Communication between the client and server uses the standard networking protocols TCP/IP and HTTP. Configuration options include full turnkey, software only, or ASP (Application Service Provider).

Millennium offers two database options, depending on the library’s needs: a database designed specifically to support the unique needs of the MARC format and other library data, and also the Oracle Relational Database Management System.

Millennium is flexible and scalable. A suite of locally controlled software options for each module enables the library to use the system in the way that best meets their needs. The Web OPAC design is limited only by the library’s goals and imagination. Millennium staff clients provide personal, customized control over options including screen colors, fonts, icons, sounds, and macros at the user login level.

**Innovative Service**

Innovative’s Implementation and Training teams consist of highly experienced individuals, most of whom are librarians. Innovative works closely with each library to develop an implementation and training process that meets the library’s specific needs.

In addition, Innovative offers by far the richest customer services and support menu. Libraries can reach the help desk 24 hours a day, 7 days a week, 365 days a year. The self-service customer Web site, CSDirect, delivers rich technical content and empowers libraries with content and flexibility.