Overview of the New SirsiDynix Library Technology Platform Code-named “Rome”

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One in a series of “Rome” white papers
Rome Overview

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Rome Overview

The nucleus of SirsiDynix's new, holistic library technology platform code-named “Rome” is an open, versatile, scalable library management solution for managing all technical and public services within libraries and consortia. With these capabilities, Rome enables libraries to cut costs while providing the highest quality of service, and allows IT staff to respond to the needs of the library while greatly lowering risk. It is designed always to be current. Built on the foundation of the SirsiDynix Unicorn system, it has been significantly upgraded to accommodate new technologies and to meet the growing needs of libraries and their users for years to come.

Installed at more library sites around the world than any other single enterprise-caliber library management system, the Unicorn® Library Management System is a powerful ILS solution designed to always be current. Its flexible architecture makes it possible for the system to accommodate new technologies and to evolve as necessary to meet the growing needs of libraries and their users. As Unicorn is upgraded to become the system currently code-named Rome, it will continue a 25-year history as an open, industry-standard, scalable ILS solution that libraries and consortia of all types and sizes can and do rely on to run their operations.

Rome features an elegant design that employs an n-tier architecture. The flexibility of n-tier design enables scalability and modularity. Rome uses the same software architecture employed by the industry-standard relational database management system (RDBMS) technology of Oracle® databases, SAP, and most of today's major commercial information systems. This architecture lends itself to supporting modular systems and ensures that Rome has the scalability to expand to meet the needs of all types and sizes of libraries.

Rome's architecture makes it easy to change databases and to implement new functionality and entirely new modules and clients – all without requiring difficult and time-consuming redesign of the Rome server. SirsiDynix has a solid history of expanding Unicorn without altering the technology foundation and investments our clients already have in place. That's why the initial release of Rome will be a rock-solid platform for today and for the future.

The Rome system provides comprehensive ILS functionality, including both basic and advanced capabilities: Modules for Circulation, Cataloging, Serials, Acquisitions, Outreach, Materials Booking, Reserves, Accountability, and more. Each module is developed separately and all seamlessly fit into the overall integrated Rome system.

Rome features a single, integrated staff client interface for all Rome public and technical services software functions. WorkFlows®, Rome's staff interface, uses the latest Java, Windows®, user interface, and client/server technologies to produce an innovative and flexible approach to library information management.
SirsiDynix understands that your ILS is only one of any number of tools used to manage your library’s day-to-day work. Rome is designed to **interoperate smoothly with other components**, such as self-check systems, automated materials handling systems, PC reservation systems, E-commerce systems, and print management systems. Open APIs and compliance with dozens of industry standards significantly increase your library’s opportunities for system integration.

Rome provides **application programming interface (API)** access to all software modules. Working at the application server level of the system architecture, APIs enable staff to perform interactive or automated data input or output to the Rome database. Retrieve and update all data elements of the integrated system using these tools. Provide statistical reporting flexibility and establish real-time interactive interfaces between Rome and other systems with Rome APIs.

The evolution of Unicorn into the Rome product continues to benefit libraries of every size and type the world over. Unicorn is now used by more than 300 million library staff and library patrons worldwide. This growth continues as we engineer more enhancements, design and implement new and exciting features and functionality, and adopt new technologies and standards. Our growth is with a result of keeping your library’s primary mission in mind: provide better information and services to the communities you serve.

Growth is best charted by exemplifying features and components. You will find below some of the key features added to Unicorn over the years and a high level summary of new features planned for Rome’s initial release:

1995: **Web-based OPAC**
1995: **Hyperion Digital Media Archive**
1996: **Academic Reserves module**
1998: **Outreach module**
1998: **Frames version of Web OPAC**
1998: **Windows-based staff client**
1998: **Server on Windows NT**
1999: **Materials Booking module**
1999: **Support for Oracle database**
1999: **Enhanced Serials Control module**
2000: **iBistro e-Library with content**
2002: **Acquisitions module update**
2002: **Enhanced ILL functionality**
2002: **Extensions to Unicorn for DRA users**
2002: **SIP, SIP2, and NCIP interfaces**
2002: **Support for URSA 2.6 via NCIP**
2003: **SVA automated telephone notification**
2003: **Acquisitions selection lists and 9XX ordering**
2003: **Interface with B&N.com for book purchase**
2004: PocketCirc handheld circulation unit
2004: Collection Exchange Module
2004: Java-based staff client
2004: Unicode compliance
2004: Server on Red Hat Linux
2004: Support for credit card payment
2004: PDA/wireless devices
2004: Director’s Station Online Analytical Processing tool
2005: e-Resources management capabilities
2005: Updates to consortial ownership and scoping
2005: Support for enriched EDI
2006: Server on SUSE Linux
2006: Portal-based user-experience functions
2006: Content management in EPS portal
2006: SchoolRooms Content and Portal
2006: Acquisitions selection list loader
2006: Links to Serials Solutions ERMS from Acquisitions functions
2006: NCIP enhancements to support many ILL tools
2006: Ability to place holds against entire search result sets
2006: Additional options for Federated Searching and OpenURL

Resolution

Rome’s 2007 additional features and options will include:

- Visual and Faceted searching
- Optional Web-based staff clients supporting key Circulation, Cataloging, Inventory, and Reporting Functions—based on analysis of K-12 needs
- Spell checker in EPS user experience portal
- E-Vance calendar support in EPS
- Enhanced Unicode CJK browse search options.
- Enhanced support for display and printing of right to left-based scripts
- “Group patron card” to support family and proxy situations
- Credits on user records for enhanced e-commerce support
- “Books by Mail” option that allows authorized users to have materials delivered to home/office
- Web Reporter ad hoc reporting tool option for embedded and full Oracle sites
- Multi-tiered holdings display for consortia in EPS
- Unlimited, group-based hold parameters to accommodate hold fill by geographical or political factors

With the largest customer base in the world (larger than our biggest three competitors combined), SirsiDynix is committed to libraries for the long term. SirsiDynix is here for your current automation project and for the next stage in library automation.
Enterprise Portal Solution (EPS)

To a library patron, the user portal is the primary means of accessing all your library has to offer—not only physical items in the library’s collection, but for all e-resources as well. Using EPS, patrons and librarians alike locate information in an intuitive, user-friendly environment, using common Internet navigation techniques that make the experience easier and more straight-forward.

From the librarian’s perspective, EPS (Enterprise Portal Solution) allows for a cohesive Web presence. From the library’s unified environment, a user can more fluidly move from library services and basic information to the library catalog and beyond. The lines between the library’s services, portal, events, and other resources all merge together within a single interface.

EPS functions as both the library’s Web page and its online catalog interface. EPS is the base interface on which the library can easily add additional functionality such as Enriched Content, SirsiDynix Rooms, E-books, Federated Search, and OpenURL resolver.
Search Methods

Searches can be as simple as entering a term or phrase in the initial search display. Novice users benefit from the default "All Indexes" keyword search configuration. More experienced users enjoy the option to limit the search to one or more libraries or to authors, titles, subjects, series, or other categories your library may choose to define. Or, users can let the search default across all categories and all libraries (your library defines the defaults). Rome's unique search engine requires no stopwords or limits on the size of search results. It returns the first screen of matching records immediately, regardless of the size of the total result set.

Users enter a general keyword search just by selecting “Everything” from the drop down menu.

Every word in every field of your bibliographic records is indexed and searchable, so users can find a title by any word or words used in the description of any library item, even contents notes and abstracts. The system ensures that users always get results whether a search results in multiple matches, a single match, or a browse list of terms (no match).
Savvy users switch to Advanced Catalog Search to use Boolean operators, search qualifiers, and other more complex options available through pull-down menus. EPS supports truncation, wildcard, adjacency/proximity, and hypertext searching, as well as Boolean operators. Search results may be limited by library, item type, location (collection) and publication year, and sorted in a variety of ways.

Advanced Catalog search in EPS allows search limiting and use of Boolean operators.

The user may choose to Browse Search the collection by title, author, subject, series, or periodical titles, or to perform a Call Number Search.
Reading Room

All initial EPS installations include the Reading Room. It is a wonderful way to enrich the user experience at your library.

For more information on our Rooms product, please check with your Sales Consultant.
Going beyond searching, the EPS portal makes all your library’s resources more accessible.

Enterprise portal technology gives users a simple interface to find books from your collection, licensed journals, A/V materials, digital media, Web sites, ILL, virtual references, discussion groups, and any other content or service.
Bibliographic Control

Specialized wizards help find, display, create, edit, and delete records.

The Rome Cataloging and Authority Control functions provide an online, interactive system for creating catalog records and establishing a single, authoritative form for all headings. Staff members perform these functions using the WorkFlows® staff interface. Each official heading links automatically to each occurrence of the heading in the library’s catalog. WorkFlows® provides advanced tools for accommodating both local and outsourced authority control.

Cataloging also includes:

- full support & templates for all MARC bibliographic formats, including UNIMARC
- full support, templates, and automatic creation of MARC holdings records
- detailed displays for linked copies, bills, bookings, check outs, holds, orders and serials control information
- multi-layer “shadow” options at copy, volume, & title levels
- Unicode support

Rome’s fully integrated system immediately reflects all additions, changes, and deletions made through the bibliographic control module throughout the system, in every other module as well as in the public catalog. As shown below, appropriate permissions allow catalogers to access functions from any other module from the same WorkFlows® toolbar.

Call Number and Item Maintenance tools allow the addition or deletion of call numbers or items. The left column shows available Cataloging tools. Authorized operators see tools from other modules on pull-down menus.
Wizards typically overlap and link; for example, users can launch the Search and Print wizards from within most other wizards. Also, the next wizard selected offers the record or item most recently selected in the previous wizard, so the operator does not need to re-search when performing successive transactions involving the same record. Other Cataloging wizards include:

- **Global Item Modification**—enables the cataloger to enact a number of changes, and globally apply these changes to all items whose IDs are subsequently scanned, or to items retrieved by a search.

- **“Bound-With”**—links multiple bibliographic records to a single item record representing one physical copy. This feature enables the library to maintain proper cataloging for distinct titles that may circulate as one item.

- **Review Title**—enables library staff to review bibliographic records on-line before they are made a permanent part of the catalog. The operator displays and checks each review record, edits the record if necessary, and approves the record for uploading to the permanent catalog, or marks the record as a reject.

- **Label Designer**—creates templates to print spine and book labels. The Label Designer wizard enables the operator to design as many different label templates as are needed by the library. Once catalogers create a label template, users preview labels before printing using the Print Preview Labels helper, or use the Print Labels helper to print spine and book labels for a title.

- **SmartPORT**—opens the WorkFlows® Z39.50 copy cataloging client (licensed separately) which captures MARC bibliographic and authority records from external Z39.50 servers.

**Key Bibliographic Control Features**

Rome fully supports the MARC 21 formats for bibliographic and authority records, including the ANSI/NISO Z39.2/ISO2709 standards for record structure, the content designations defined by each MARC format, and content standards such as ISBD, AACR2, LCSH, ANSI/NISO Z39.44, etc. Rome supports the Z39.85, Dublin Core Metadata Element Set as an available record catalog format. You may also specify custom formats for the catalog; for example, abstracts, or even complete documents, as well as the MARC formats. Best of all, because the policy configuration utility allows new formats to be defined as needed, Rome accommodates changes to standard and local formats without reprogramming.
Record Editing

Rome’s MARC Record Editor simplifies input of bibliographic records by providing appropriate codes for fixed fields, indicators, and subfields. It also displays an alternate, expanded view of indicator and subfield data. The Record Editor presents MARC21 definitions for most MARC elements. Full screen editing enables staff to move freely within the record to add, delete, or edit text. Staff can copy records using the Duplicate Title wizard, or copy individual fields or groups of fields within and among records using copy, cut and paste.

Interactive MARC help is available via right-click in the Modify Title wizard.

Rome supports full MARC format error checking (tags, indicators, and subfields) for all formats. An error message displays when incorrect values are entered and prompts for correct data. Rome automatically verifies and validates the structure of each type of record maintained by the system.

Item Scoping

The “Item Scoping” feature enables selective control of access to the call number, item, and MARC holding records. Extensive policies ensure that only those staff with WorkFloWS® logins corresponding to a given library within a multi-library system can add, modify, or delete call number, item, and MARC holding records associated with that library. Specific logins may also be denied access to the holdings of a defined group of libraries, or to the holdings of all libraries.
MARC Holdings Records

MARC Holdings records generate automatically as issues are checked in using the Serials Control module. Holdings records produce compact displays of serials holdings in the public catalog. However, there may be situations that require you to work with MARC holdings in your cataloging workflow. For example:

- The holdings information generated from serials control does not cover the library’s full range of holdings.
- A previous title or ceased publication, which will not have a serials control record created, is cataloged and holdings should display.
- An enumeration statement or textual note that could not be generated from serials control needs to be added.
- A special holdings statement for a non-serial item needs to be added.

When a title is being modified, the MARC Holdings tab displays. Additions, modifications, and deletions to MARC Holdings information can be made directly from this tab if this behavior property has been set up by your system administrator.

Shadow Catalog

The Shadow Catalog enables the library to create and maintain MARC records that are searchable by library staff only. Records may be shadowed at the title level (hides bibliographic data and all associated items), the call number level (hides selected volumes and all associated copies), copy level (hides selected copies), or by assigning the item to location previously defined as shadowed. Public users cannot see records, call numbers, or copies placed in the Shadow Catalog. Only authorized users using the WorkFlows® staff client can search and display items in the Shadow Catalog. Changing the flagging or location allows shadowed records to be "unshadowed" for display in the public catalog.

Staff can perform searches in both the shadow catalog and public catalog.
Bibliographic Record Loader

The staff client includes a Bibliographic Record Loader to transfer records you import from any MARC compliant source to your library’s local catalog. Multiple load parameters can be established to accommodate ongoing loading of records from multiple sources, defining:

- whether existing records in the database will be updated or new records added
- if the OCLC# or other control number in the record to be loaded should be used as the title control key
- in which fields the appropriate call number and holdings information is to be found
- whether any unwanted fields in the records are to be discarded

Embedded holdings data in the MARC record are used to generate copy level data in the catalog.

Global Editing

The system accommodates search and replace throughout your bibliographic database. The Edit Bibliographic Data Globally Report enables global changes to be generated very precisely:

- Search String (the string to search to find the records to be changed)
- Entry ID (the MARC tag names to which the global change is to be restricted)
- String to Match (the string to be changed if present in the records found)
- Replacement String
- Edit Operation

Edit Operation options include 1) removal of the entire tag, 2) replacement of the text of the tag in its entirety with the specified Replacement String, or 3) replacement only of the String to Match portion of the tag with the Replacement String.

Run the Globaledit report in a test-only mode to verify the modifications that will be made. The report output includes records that would have been selected, replaced, modified, or deleted. Actual modifications to the bibliographic database are made only when the report is run again in “live” mode.

Global Item Modification Wizard

The Global Item Modification wizard changes item record characteristics for several copies in a single step. Catalogers edit copies attached to a given title. As an added convenience, catalogers are also able to print a call number order listing of the copies edited in the current session.
Catalogers select from a list of editable values, specify the new values to be used, and then apply those changes to all items whose barcodes are scanned.

**URL Checker**

Electronic Location and Access (856) tags accommodate a subfield |u that contains a URL, and potentially several other subfields that link to data outside the catalog. When a |u subfield is present, the Electronic Access field in the catalog displays the URL. When a |z subfield is also present, the text of that subfield, such as "Click here to go to the Web site," displays in the catalog in place of the actual URL.

Run-time options available with the URL Checker report include:

- reporting valid URLs, or only those that are flagged as invalid
- updating the catalog URL links automatically when "referral" URLs are found
- limiting the URLs to be checked to those contained in records created, cataloged, or modified during a specified date range
- producing a list of particular URLs or domain names to be excluded

The included URL Checker report creates a list of all valid MARC 856 Electronic Location and Access tags and determines whether the Web page associated with each 856 displays successfully or not.

**Label Designer**

The Label Designer supports creation of as many templates for labels as necessary. These templates might be specific to a library, material type, or combination. Up to 20 labels may be included in each label set.

The label template allows selection of data from a variety of fields to be included on the labels. Constant text may also be entered. The exact size of the labels and position of the labels on the label sheet may also be defined, as can the font used on the labels.
Rome supports extensive call number splitting rules. Pop up help is available throughout. The testing function displays the actual call number layout.

Labels may be printed or previewed, and even edited prior to printing on thermal label stock or even sheets of laser labels.

In the initial release of Rome, the system takes advantage of the label designer utility to expand label printing to the patron records. This is ideal for everything
from printing mailing labels for the new Home/Office item delivery service to printing patron cards on demand. The patron label designer accommodates linked photos, so you may even include the patron’s stored picture or signature among the record elements selected for printing.

Reports and Utilities

A variety of standard report templates delivered in the Bibliographic Catalog Control module can be used to generate management reports, list records requiring attention in cataloging, generate collection analysis statistics, delete records previously marked for discard, transfer items from one library to another, and many other options. Run-time options can be set by an authorized operator to customize each report template.

Related Products/Options

SmartPort, the Rome Z39.50 copy cataloging and authority control utility, streamlines the process of identifying and capturing descriptive bibliographic records and authority records. With SmartPort, technical services staff search any designated Z39.50 bibliographic and authority databases and download appropriate records for local editing. SmartPort also enables libraries to post holdings to OCLC’s WorldCat database.

Authorized staff choose the gateway or gateways to be searched by SmartPORT. In the above example, the Library of Congress has been selected.
SmartPort allows staff to display a record returned in a search for review before loading it into Rome.

**SmartSource**

SirsIDynix SmartSource is a companion service to SmartPort, providing easy, affordable access to LC bibliographic and authority records. Because the databases are housed at SirsiDynix specifically for SirsiDynix customers, SmartSource gives you reliable, fast network access to all the LC bibliographic and authority records you need. For a single, economical, annual subscription, you receive access to an unlimited number of the 7.3 million LC bibliographic records and 6 million authority records maintained by SirsiDynix.

Immediately load records into your Rome cataloging work form for local editing and physical processing, overlay or merge with a more complete cataloging record, or save to a file for later review.

**Portable Inventory Control and Circulation**

Rome incorporates portable circulation control devices for inventory tracking and for recording use of items within the library. If your library uses barcodes, wand barcodes from items on the shelves to take inventory. The entire collection, or a very specific part, such as selected formats, call number ranges, locations, etc., can be analyzed. After scanning the barcodes of items on the shelf, upload the data to the server and compare scanned barcodes to the items in the database to produce a report listing missing items.

The PocketCirc software provides a circulation and inventory client for handheld devices running Windows Mobile. PocketCirc runs online or offline, includes comprehensive online help, and comes with integrated support for multiple languages and barcode scanning.
Authority Control

An online, interactive authority control system establishes a single, authoritative form for heading.

The Authority Control module links authority-controlled bibliographic headings with corresponding authority records through an ANSI-standard thesaurus. Rome’s thesaurus:

- automatically generates the appropriate see and see also references that enable searches to be expanded and redirected in the catalog
- automatically generates appropriate global changes to linked bibliographic headings throughout the catalog whenever an authority record is added or changed
- supports the WorkFlows® tools that enable catalogers to maintain the authority files, validate bibliographic headings as they are added or changed in the course of cataloging, and update all linked bibliographic headings by editing the authority record

To streamline working with both bibliographic and authority records, authority control tools integrate with other Cataloging wizards in the same WorkFlows® toolbar.

Key Authority Control Features

- The system supports multiple authority files such as LC Names or LC Subjects file, or others such as MeSH, LC Children's, or local authorities.
- Rome includes a machine-proposed authority feature based upon the “Standard for Machine-Proposed Authority Records,” developed for the Program for Cooperative Cataloging, which requires that systems such as Rome support the creation of minimal level authority records generated from entries in bibliographic records.
• Rome automatically “deblinds” references (so that only those references that lead to additional bibliographic entries in the catalog display.)

Standard reports delivered with the Authority Control module perform automatic scheduled maintenance of the authority files and enable report generation by library staff.

An Authority Import Utility enables batch loading of authority records, matching against existing records and specifying locally-edited fields in authority records to be overlaid without change.

Automatically generate Global Authority Changes to bibliographic records whenever an operator adds a new authority record or modifies the authorized (1xx) form of an existing authority record. Changes to the authority record itself happen immediately, in real-time. A schedule report applies the resulting changes to the affected bib headings.

Two helpers, Global Authority Change and Review Global Authority Change Reports, included within the Add Authority and Edit Existing Authority Records wizards, schedule and manage the Flip Headings reports which automatically update headings in all catalog records to new authorized forms when the previously authorized forms are changed and older forms are then listed in “See” references. Display of these helpers is controlled in the behavior properties set by your system administrator.

The Global Authority Change helper updates bibliographic headings in catalog records based on the 4XX (See) entries in the current authority record by selecting headings to update and scheduling the Flip Headings by Authority Key report to run. The Global Authority Change helper displays a list of headings derived from the 4XX entries in the authority record with a count for each heading of the maximum number of bibliographic entries that will match the heading. The count displayed for each heading is a count of the maximum number of bibliographic entries that could be updated. For instance, it is possible that this display will show a count of five for a given heading, yet the report will only update two bibliographic entries, or no bibliographic entries at all, for that heading.

The user chooses whether to update the catalog records or just generate a list of how many and which headings will be changed by an update. The wizard schedules the Flip Headings by Authority Key report to run for the current authority record. Main entries and uniform title entries can also be corrected from an authority combination leading term, such as a 100/240 combination.
Rome’s Circulation module empowers your operators to perform streamlined tasks through the use of graphical guides called wizards. The system consults your library-defined Circulation Map, a matrix of policies that control the circulation, loan period, grace period, and billing structure of library materials based upon user profile, item type, and library location. Your staff, therefore, does not have to memorize every rule permutation and exception to your circulation policies. The Rome system also consults your library’s calendar, so items will not fall due on a day/date when the library is closed.

The Circulation module quickly and efficiently performs these tasks, increasing user satisfaction while accurately managing circulation policies and tracking materials.

Examples of Circulation’s integration with other Rome modules include:

- Any circulation transaction reflects instantaneously in the OPAC, so the availability of items shown in the catalog is always current and accurate.
- If your library’s policies permit, holds may be placed on items ordered through Acquisitions, and the requesting user notified automatically when the requested item is received.
- Since all modules use the same user file, authorized staff (or the specific user) can display, at one time, all library transactions linked to a specified user, including advance booklings, serials routings, status of orders placed at the user’s request, and replies to reference requests, as well as current circulation data such as charges, holds, fines, and bills.
- Users place holds on materials directly from EPS, or use the Request feature to renew their own items, as permitted by your library’s circulation policies.
- Change current item location data without re-cataloging by charging items to new locations or by using “transfer item.”
- When the Academic Reserves and Materials Booking modules are also installed, creation and management of reserve collections and advance scheduling of reservations for use of materials can be fully integrated with circulation control.

Check materials out to successive locations and route them back correctly when discharged. Define an unlimited number of different loan periods by library without programming. Change any system-determined loan period at time of check-out. Rome checks both item and patron records before allowing circulation or renewal of materials. Block delinquent patrons according to thresholds set by the library. The circulation module produces an extensive suite of statistical reports and notices.

Define the precise terms under which items can be circulated to users from various locations in your library system with Circulation Policies. The Rome three-dimensional policy matrix allows your library to define the precise terms under which items can be circulated to users from various locations in your library system.
library (or from various libraries in your multi-library system). Unless overridden by an authorized operator, each circulation transaction is automatically governed by a specific policy based on:

- Item’s home library
- Item type
- User profile for the user to whom the item is to be charged

User Records

Full user record control is of paramount importance to any library. In Rome terms, users may include individual patrons, staff members, or instructors; as well as library departments, status definitions, and external users such as interlibrary loan partners. Although user records may be linked together and retrieved using the Group ID feature, Rome assigns each user a unique user ID, which may be specified by the library or assigned automatically by Rome.

User records can be created quickly and easily by:

- Importing a file of user records from another source, for example, a pre-existing patron database, campus administration, or student records management system.
- Using the Copy User wizard to create a new user record from an existing user record.
- Using the User Registration wizard to input a new user record from scratch. Records are automatically checked against the database for duplicates using any of the fields, such as name, address, phone number, etc.

With Rome Circulation, see at a glance all user information in one location.
Charging  
(Check-out)

To charge items, a staff member selects the Checkout wizard. Busy circ desks set up the Checkout wizard as the default screen, ready to charge items as soon as staff scans or types in a user ID. Rome first verifies the user ID and reports any exception conditions, such as “User Delinquent.” Override exception conditions where necessary with an authorized override password.

Due dates calculate automatically based on the governing circulation policies for each user, item, and location. However, it is a simple matter to change the due date on the fly if necessary in the alternate due date field.

Date due slips can be produced automatically by the workstation printer as items are charged. Rome calculates any applicable fees per charge, and bills the user automatically. The amount billed displays so that the operator can accept payment immediately.

Discharging  
(Check-in)

Checkout gives you a good look at the status of the user’s account.

At discharge the item status changes to “available,” any applicable overdue fines calculate, and the user is billed automatically. If there is a hold on the item, Rome alerts the staff member to place the item on the hold shelf or send it in transit to the pickup location.

If an item has to be sent somewhere other than to the location of the workstation, Rome prints a routing slip showing the title and item number of the item, and a message, such as Route To Holds, Route To Cataloging, Route To Reference or In-Transit.
Fines
If the user owes a fine, the charge posts to his or her account immediately when the overdue item is checked in. The amount billed displays so that bill can be paid on the spot. To pay a fine, the operator simply selects Pay. The system remembers and shows the user's ID so there is no need to re-enter it. Fines accrue and three delinquency levels are set according to thresholds set by the library. Rome’s initial release will include a new feature called patron credits that will allow credit amounts to be stored on patron records if desired. This will provide additional options for payments of fines and fees and of course will be accessed by the Rome SIP2 server so that third-party interfaces can take advantage of this data as well.

Renewal
Users may renew items in person or over the phone, for individual items or for all of a user's charges. Rome uses the same loan period the item was first charged with unless the operator specifies otherwise. Items with holds may not be renewed without an authorized operator override.

Holds/Demand Management
System-wide policies control all holds and requests. During implementation, your assigned SirsiDynix project manager works closely with representatives of the library to develop hold-fulfillment policy tables. The matrix created by these hold policies is called Demand Management. With Demand Management policies, holds are either Title-level holds or Copy-level holds. In a multi-library system, these holds are applied across a range (Library, Group, System) of item records to further indicate the extent of the hold.

The Trap Holds wizard enables immediate item trapping from a report of on-shelf items currently available at other branches. The Trap Holds wizard indicates if an item should be routed and to where it should be routed to.

Should the library prefer to defer items for hold filling, policies can be set to limit items' availability to fill holds at other branches or libraries. Policies control whether holds may be placed according to any combination of item type, item's owning library, and user profile. If a hold may be placed, then it is possible to limit the set of libraries against which the hold may be placed. This set of libraries can consist of all libraries, a subset of libraries in the system, only the library which owns the requested item, or no libraries (which in effect means no hold can be created). If a hold may be placed, policies can also determine if that location's patrons have priority.

If desired, hold fulfillment may also be prioritized by giving precedence for a library’s items to be first used to fill holds by patrons in defined groups of libraries OR to first fill holds that will be picked up at a given library or group of libraries. This allows holds queues to be reshuffled automatically based on library policies. A new feature in the initial release of Rome also supports "ordered holds fill, which allows the library system to define which libraries' items will fill holds based on factors such as geographical convenience. For example, the library can tell the Rome system holds at a given library should be filled by library A, then library B, then library C based on those library locations being more geographically convenient than other libraries in the system.

Rome permits automation of a significant portion of hold fulfillment processing. Each library branch runs the List Onshelf Items with Holds report, with the owning library’s staff able to mark the requested copy “unavailable” if an item cannot be located. Then Rome automatically transfers the request to the next
available copy in the system. If an available copy is not located, staff send the Cancel Hold Notice with library-customized text to a user.

Staff create holds using the Place Hold wizard, or patrons place holds through EPS. In the Place Hold wizard, staff specify the hold level, and the record range for the hold (if applicable) as well as dates to suspend and unsuspend a hold. Use the Suspend Hold feature if the user will be on vacation or academic break when the item becomes available; the user's hold can resume its place in the hold queue when the suspension period ends.

The Place Hold wizard allows the operator to place multiple sequential holds, entering a new user ID each time.

Counting In-house Use

Track the number of in-house uses for each item by using a portable scanner to wand items as they are cleared from tables or study carrels. Each item record contains a "times used" field that separately tracks the total number of times the item was used without being charged. The total displays in the item record online, and use statistics can be generated by item category and time period.

Accounting Features

Rome’s accounting features allow you to collect library fees. There are two applicable wizards for this function: Bill User and Pay Bills. The system accepts both full and partial payments, and tracks all money accepted at each individual workstation. Any payment method – cash, check, debit card, etc – may be specified. Authorized staff can also cancel or forgive/waive fines. With Rome’s first release, the new credit accounts can also be used to pay fines or fees for those libraries that choose to implement this feature.
Interlibrary Loan

Rome tracks and circulates materials received from and sent to other libraries in the same way as materials owned by the library. Materials received from another library through interlibrary loan are checked out to the ILL department (Interlibrary Loan) and recirculate to patrons from there. When materials are lent to another library through interlibrary loan, that library is made a user on the system, and the materials are checked out to it and recirculated from there. Separate statistics for inter-library loans are kept so that reports referring only to interlibrary loans may be obtained. The library determines the loan periods required using policy tables, and assigns them appropriately.

Rome also integrates with URSA, a complete interlibrary loan management system. URSA drastically reduces the costs of Interlibrary Loan through automated and unmediated ILL.

URSA (Universal Resource Sharing Application) is designed for use with a wide range of local ILS circulation systems and provides huge advantages to libraries that seek to reduce the costs of ILL transactions and provide faster service to library users.

Through its support of the NCIP protocol, URSA communicates with the library’s local circulation system in order to place holds on requested items at the lending library, and to create temporary item records on the borrowing library’s circulation system. For those libraries that have ILS systems that are not NCIP compliant, SirsiDynix creates custom circulation mappings for the same functionality.

URSA extends simple Web-based requesting with a variety of features for users. Staff and users access URSA in conjunction with your portal to place requests for a variety of local and remote materials in a single, unified display. All displays are fully translatable to a variety of languages and may be customized by the use of style sheets. Users can see lender’s terms, including fees, length of loan, and approximate delivery time.

URSA accommodates staff-mediated requests if desired. URSA can be profiled to send requests automatically to a list of preferred lenders or to load balance requesting within a consortium. Requests that cannot be filled within the first tier of lenders drop to subsequent tiers and may be sent via ISO ILL to other partners. Flexibility is built in to avoid a single lock-step progression from initiation to completion, and staff can handle exceptions at any step in the lifecycle.

SirsiDynix provides a formal certification process for third parties who wish to interact with the Rome system via SIP2 or NCIP. This gives our customers extensive choice in which third-party products they implement, along with the assurance that the products will work with the system. In 2006 and 2007, SirsiDynix has seen an increase in the number of third-party ILL providers who have tested their products with the Unicorn and Rome NCIP server.

Notices

Rome accommodates the production of overdue notices, billing notices, and request-available notices. The library determines the text on all notices. Notices can be emailed or sent by telephone using the SVA (SirsiDynix Voice Automation) tool and, of course, may be printed as well. Each user record has a NOTIFY VIA field that can be set to PRINT (hard copy), EMAIL, or PHONE.
Examples of circulation reports include:

- **Circulation Totals.** Factor any combination of time, call number ranges, station, zip, department, location, material type, user profile, and/or time slots into this report for specialized breakdowns reflecting what you want to know.

- **Items.** Missing items report; item status report; recalled items report. Restrict all item reports to item category or call number range or include the whole collection.

- **ILL.** List of items currently circulating from your library through inter-library loans. Gives current location and associated information (holds, etc.).

- **Holds.** Current holds; items with more than x holds; items on hold which are available.

- **Overdue.** Reports List overdue items along with user names and fines accrued; list of items about to become overdue.

- **User Lists.** By profile; zip code; department; status; last activity.

- **User Counts.** By profile; zip code.

The circulation wizards include helpers that enable staff to quickly locate item or user information. For example, the Checkout wizard offers the Register New User helper for a first time library visitor. The Discharge wizard provides a Pay Bills helper, in case an item is returned with monies owed to the library. The Display User Holds provides the Display User helper, if a patron wants to know if any requested items are available for pickup and the patron does not remember his or her user ID.

If a patron wants to know if any requested items are available for pickup and the patron does not remember his or her user ID, the Display User Holds provides the Display User helper.
Materials Booking

Materials Booking establishes a comprehensive schedule for the booking, circulation, and maintenance of audio-visual media, equipment, and rooms. An onscreen calendar shows days free and days booked, so that scheduling can take place days or weeks in advance. Using the same item and patron records used by all other system modules, Material Booking generates printed schedules, lists of items booked for a specified time period, shipping labels, and other notices and reports.

With WorkFlows®, staff members can use the Materials Booking module to:

- Book/reserve items up to 24 months in advance, on a minute-by-minute basis, so items can be booked from 4:10 p.m. until 4:43 p.m., for example.
- Display bookings and reservations by item or user
- Provide flexible searching, including by running time (for videos) or specific performer
- Display availability through an onscreen calendar that shows days free and days booked
- Automatically rotate equipment to distribute wear evenly across inventory

The initial release of Rome will include several updates to Material Booking intended to improve the user interface and efficiency of these wizards. For example, staff will have the option to book multiple items at the same time and likewise may then check out multiple booked items to the same user at once.

Outreach Services

You may have many different types of patrons who cannot make use of traditional circulation services. To extend your services beyond your walls to these users, you may use any of the following methods to make your collection available to outreach users:

- Send bookmobiles or other delivery vehicles
- Ship materials
- Prepare materials to be picked up by designated representatives

The Outreach Services wizard's flexible design allows materials to be delivered to patrons in a number of situations, using the following features:

- An unlimited number of detailed interest profiles may be created for an individual user or outreach site. Searches can be performed based on interest profiles, and may be limited by physical format. Interest profiles may be as general as “new books,” or as specific as “gardening,” “books by John Grisham,” or “The Cat in the Hat.” Select materials for each outreach user or site using interest profiles.
• easy selection, delivery, and return of items.

• Circulation history records keep track of which items have previously been selected and/or circulated to a given user or site. Items may be marked to be reselected after a given time, so that a user can request and receive the same item at regular intervals. Items may also be marked to be excluded from selection for a given user. History records can be viewed by library staff to assist in selecting materials.

• Pickup and shipping lists can be generated.

• When the patron's outreach user status has been set to inactive, circulation history remains stored. Interest profiles and circulation histories of inactive users can also be removed.

• Next and last delivery dates are automatically calculated and stored.

• Delivery dates can be skipped on demand.

Display Interest Profile Wizard
This screen shows the user’s interest profile for books by Stephen King.
SirsiDynix Voice Automation (SVA) is Rome’s telephone notification and call-in module. SVA delivers notices and enables patrons to check on the status of their accounts, thereby reducing the number of calls requiring a “live” answer at the circ desk. SVA automatically relays changes to the Rome databases as the patron makes updates.

With SVA, users can call in to:

- check on materials on hold
- verify fines and fees
- renew materials by title, renew all materials, or by barcode
- change PINs
- review overdue materials

Library-defined messages for each feature and a bulletin board for each location accommodate multiple locations.

SVA notification features include:

- notification of users for overdues, materials on hold, or bills by pickup library
- real time updates to patron records after calls are made
- notification for failed calls by e-mail or paper notices
- ability to specify local area codes, long distance dialing parameters, special dialing instructions
- library-defined messages for all calls

In addition, SVA offers these overall features:

- multiple languages
- ability to record human voice for all notice messages
- multiple phone lines

The capacity of the SVA system to deliver notices is a function of the average length of each call (in real time) times the number of calls divided by the number of outbound lines times the number of hours during which your library is willing to schedule calls to your patrons. For example, if you need SVA to make 6,000 calls a week on two outbound lines, and each call averages one minute, then you would need to schedule 3,000 minutes (50 hours) during which SVA could place calls each week. You might think it reasonable to call your patrons between the hours of noon and 7:30 pm, 7 days a week, to deliver these notices—a total of 52.5 hours. If you had twice that many notices to deliver, you might choose to add more outbound lines, rather than to disturb your patrons by calling too early in the morning or too late at night.
Collection Exchange

Collection Exchange is a fully integrated Rome module that allows library systems to move items from location to location for circulation. You can choose to exchange at the title or item level.

Collection Exchange is an ideal tool to use in collection development. The system:
- pools item resources in the library system
- helps you easily share materials
- efficiently moves items into and out of library locations based on need and collection development goals

Collection Exchange also helps you gain a better perspective of the materials throughout the library system. In fact, Collection Exchange helps you reconsider the items that are stored in your libraries. Your library inventory doesn’t have to be static—instead, you can use Collection Exchange to route items throughout the library system so that collections in individual libraries can continue to shift and evolve. You should consider the following:
- Are the items in your collection relevant to patrons?
- Are there items in other libraries that could better serve your local community?
- Wouldn’t you like an easy way to move items to different locations in response to patron need and your individual library's collection development goals?

With Collection Exchange, you can strategically distribute materials based on circulation history and item performance, revitalizing your library inventory and making sure that patrons continue to rely on the library as the most important source for materials.
Academic Reserves

The Academic Reserves module allows materials to be placed on reserve and circulated from reserves with all the features and controls of the Circulation Module. Establish multiple reserve collections, each with its own separate loan periods and circulation policies. Place individual items on reserve for several individuals and courses simultaneously. Retrieve reserve items not only by searching the bibliographic record, but also by course reserve or course name.

Reserve Features

Any number of items can be placed on reserve for the same instructor or department, and an item can be on reserve for several instructors and courses simultaneously. Fines accrue if applicable and holds may be placed on reserve items. Entire reserve collections can be set to an “inactive” state, with the ability to reactivate the collection at anytime, therefore shortening the time required for library staff to establish reserve collections.

The “instructor” on reserve lists is integrated with the circulation user file as a registered user. This control feature provides greater management reporting capabilities and the ability to communicate reserve information electronically with instructors.

Reserve Inventory Control

The location of a reserve item is tracked at all times. All charges and holds are shown and monitored, and fines accrue for overdue items. A reserve item’s location is tracked even when it is temporarily removed from the reserve shelf, as it must be to go to the bindery, the reference department, a display case, the repair office, etc. The item is routed back to reserves when returned from the temporary location.

Temporary items can be created and placed on reserve. Rome tracks these like permanent items until they are removed from the catalog. Multi-library reserve tracking is also provided. Items placed on reserve somewhere other than the owning library remain in the reserve collection until the reserve is inactivated or removed.

Reserve Loan Periods

Reserve loan periods of any length may be specified, e.g., 2-HOUR. An alternative loan period may be substituted when appropriate. For example, an operator might enter “OVERNIGHT” as the alternate reserve loan period for items being checked out shortly before the library closes. Items may be placed in a reserve collection permanently. A search on such items shows their location as permanently in a reserve collection.

Reserve Reports

Standard reports included with the Academic Reserves module include:

- tables showing instructor/course & times used
- counts and lists of individual and reserve control records selected and arranged by call number, copy information, instructor, course, author, title, circulation rule, number of charges, date placed, expiration date, alternate loan period, etc.
- overdue reserve lists and user notices
Debt Collection Interface

The Collection Agency interface was designed in consultation with Unique Management (although it may also be used with other systems). The system includes special Debt Collection reports that output information on overdue fines, bills, and referral fees in the form required by Unique Management.

Before a library begins to use the services of Unique Management, the general process of collecting fines and bills from users is typically used. A user will have typically received several of the library’s Overdue Notice reports before the first letter is received from Unique Management.

Typically, a user is not reported until it is clear that he is not responding to standard Overdue Notice reports. Once users qualify for debt collection, appropriate procedures should be followed to ensure that the proper users are reported for the proper amounts. You will work with Unique Management to determine how frequently the collection reports should be run. You may select to run them weekly or monthly or on some other schedule.

Serials

Serials Control manages the prediction, receipt, and routing of all serial subscriptions, generating and maintaining a separate MARC holdings record for each subscription. Managing orders and renewals is fully integrated with Acquisitions. As the library receives individual issues, Serials Control automatically predicts the next expected issue based on the serials publication pattern. Combined issues, special issues, missing issues, or other irregularities are handled easily and efficiently.

Serials Control functions are fully integrated with the other Rome functions. Bibliographic, control, and holdings information is online at all times. An extensive variety of reports provides tools for collection management and claiming.

Serials Control also includes:

- support of the MARC21 Format for Holdings Data, including the automatic creation, update, and maintenance of USMARC holdings records
- automatic claim processing for missing and late issues and automatic creation of standard claiming notices and EDI transactions
- support for routing lists and automatic creation of routing slips
- support for tracking binding information
A sample WorkFlows® screen showing information available on the Patterns tab.

**Serials Database**

Each serial title has a bibliographic record, either a short form (brief author/title, ISSN) or a full bibliographic record, depending on the system option. Each physical issue of a serial received may be listed in the bibliographic record in an issues received note or added as an individual item to the on-line catalog database. If added individually to the catalog database, any item can be either circulating or non-circulating. Other information about a piece may include its item number, issue number or name, date of receipt, and current location. For those serial titles to which the library currently subscribes, the control information consists of the vendor, the number of copies being received, and a receipt tolerance period.

**Checkin**

When new copies are received, they are checked in using WorkFlows®. The operator identifies the serial title, and the system supplies the predicted numeration of the issue to be checked in. The operator verifies the issue numeration and the number of copies received, and checks in the copies with a single keystroke. The operator may change the predicted issue on the screen if necessary without causing loss of its place in the prediction pattern. The system then records the new pieces and their arrival dates.

Because Rome is also SISAC compliant, journals that include the issue’s chronology in bar code format can simply be scanned to record the receipt of the issue.
Automated checkin automatically inserts and updates MARC Holdings tag data at issue receipt.

USMARC Holdings

SirsiDynix implemented the USMARC Format for Holdings Data (MFHD) using the standard holdings tags embedded in the bibliographic record. Separate holdings records, linked to the bibliographic record, contain USMARC holdings data. A separate holdings record can be generated for each library defined in Rome. Using RECEIVE ITEM automatically generates multi-library holdings data for the 852, 853, 863 and 866 holdings tags. The holdings record follows the punctuation as described in the Z39.44 - Serials Holdings standard. By taking advantage of SirsiDynix’s automated checkin process, individual libraries can let Rome automatically insert and update holdings tag data when issues are received. No manual intervention is required by library staff to input detailed or consolidated holdings statements.

Example

```
MAIN--
  Location:
  STACKS
  Holdings:
  v.1:no.9 (1999:May 1) - v.1:no.15 (1999:Sept. 1), v.2:no.7 (2000:July 1)
  - v.2:no.8 (2001:Aug. 1)
```

Serials Control Record

Once a title record for the serial has been established, the serial control record for the title can be created. The control record acts as a link between the title in the catalog and any issues received for that title. The control record may contain notes about subscription and binding cycles. Each time an issue is checked in,
The control record generally corresponds to a library subscription. The receipt date, numeration, and name are automatically recorded. MARC holdings information can also be updated.

While a serial title will have only one title record, each serial title may have one or more linked control records. A control record maintains basic information about the entire serial title to be checked in. This information does not change from issue to issue. Generally, each control record corresponds to a single library subscription, although for a variety of reasons, your library may have several different subscriptions for one serial title.

Subscription information such as the expected number of copies and the serial expiration date is specified in the Subscription tab. The library may also maintain a link for the control record to either an order or a vendor. Order linking provides more complete tracking information and history of your subscription. When the linking preference is set to vendor, claiming information is typed directly on the Subscription tab. When creating or modifying serial controls, the operator can click the Order History button to add or modify any order linking or sibling linking information.

For serial publications such as a membership newsletter, or for membership benefits such as periodic loose-leaf updates, the library can catalog the materials separately and create a serial control record for the ongoing receipt of each membership title. The library may record the first receipt in the DESCRIPTION field of the membership orderline; for the remainder of the subscription period and beyond, you will record the receipt of materials on the serial control record. Link the serial control record to the membership orderline. Often membership includes receipt of more than one journal. When multiple serial titles are received through a single membership, these titles are called ‘siblings,’ meaning these publications have a common parent – the membership order.

The Serial Control Records report produces a list of serial control records, e.g., a list of every title under serials control whose subscription will expire within the next 90 days.

The system can, on demand, produce a list of titles that are late in arriving. Any title for which no issues have been received within the expected time is considered late.

Support exists for both electronic and printed claiming. For serials claiming, the serials control record includes a section for entering claim cycle information. The library may fill in the days to wait before claiming (the number of days beyond the expected receipt date that should occur before claiming a missing issue) as well as the days to subsequent claim. The number entered in the "days to wait" field should be based on how often the library wants the system to create claim notices. Every serial claim notice is based on one or more checkin records. In order to generate a claim notice, the checkin record must reflect "number received = 0" and a valid claim reason. The linked control record must contain a vendor ID and fiscal cycle. Reports allow the library to apply other criteria to claim notice generation, such as date received is never, date expected is past, or date to claim is past. Claims can be sent via letter, email or X12, and can be generated automatically and/or on demand for individual titles or issues.
Serials claim records contain the same information about an issue as a prediction record, such as enumeration, chronology, and number of copies expected, but also contains information about the dates and copies that have been or need to be claimed. Also, the Serials Claim Reason policy is used in checkin records to describe why a serial issue is being claimed. Each Claim Reason policy defines a name, a type, a numeric code, and a line of text to be inserted in the claim notice text. Claim information to the vendor is automatically entered in a claim record when either the Serial Claim Notices Report or X12 Serial Claim Transactions Report has been run.

The prediction schedule for serials anticipates the arrival of subscription issues so that Rome can report late or missing issues for claims purposes. Claims are also based on the values entered in the Days to Wait Before Claiming and the Days Before Subsequent Claim fields.

**X12 EDI**

SirsDynix supports all transactions formats currently adopted by SISAC (Claims/Claim Response /Invoice/Dispatch Information/Functional Acknowledgment). Rome can electronically transmit and receive information in these formats using X12.

EDI (Electronic Data Interchange) is a separately purchased module that allows libraries to communicate with vendors to transfer ordering, invoicing, or subscription information between computers. EDI places information from one computer to another, making it different from electronic mail or sharing files on a network. Although EDI requires a specified data structure for each document, you and your vendors can have quite different processing systems and still gain the advantages of EDI.

Support for EDIFACT will be provided in one of the initial Rome releases.
Routing

A routing list can be maintained for each copy of an issue received through serials control. A routing record contains the user ID of each user who should see the copy. The routing record contains the user’s rank which positions all users on the routing list.

Separate lists of users are maintained for each copy to be routed. Routing records can also be created for an issue’s table of contents. In Table of Contents routing, a staff member duplicates and distributes a copy of the table of contents to each of the users on the routing list for a particular journal.

Bindery Control

The serials control module may be used to perform many bindery control functions. The serial control record contains information about binding cycles.

Reports can list all titles whose DATE TO BIND in the serials control record falls within a certain relative or fixed time period. Other serials control data fields may be combined with the binding element selection to list, for example, all issues still not received for volumes ready to be collected and sent to the bindery.

Bindery statuses can be assigned and treated as pseudo patrons to permit automatic routing of materials and display of bindery status in the catalog.

Optionally, the LINCPlus bindery module from SF-Systems is also available. LINCPlus is a comprehensive binding preparation module created to specifications gathered from library bookbinders and supports output of data into the LARS and ABEL bindery formats. LINCPlus uses the NCIP protocol to work with Rome seamlessly and automatically to make the preparation of publications for binding a quick and easy process.

Serials Reports

In addition to the missing and late issues lists and the claiming notices, there are many other reports designed to monitor the serials collection and the checkin process.
Acquisitions

Automate the process of ordering, receiving, invoicing, and processing new materials

The Acquisitions and Fund Accounting functions provide efficient online tracking of materials from ordering through claiming, receiving, invoicing, and processing. Firm orders, gifts, subscriptions, approval, and standing orders are all easily accommodated and can be tracked separately or together.

Acquisitions and Fund Accounting also includes:

- tracking of outstanding orders, including numbers and amount of orders outstanding
- detailed management data that provides up-to-the-minute information on reporting funds and allocated funds, fund groups, and accounts
- unlimited field lengths and local field definitions for all acquisition data objects, including orders and individual order line items
- performance tracking for both vendors and funds
- currency conversion for orders and invoices
- EDI ordering and invoicing
- selection lists
- support for loading orders created via materials suppliers’ Web ordering interfaces

Using the Acquisitions module, you can:

- manage budgets and fund accounting, providing up-to-the-minute accuracy for finding cash and free balances for any fund or group of funds
- monitor vendor performance tracking average receipt period, average discount, and number of copies claimed or canceled. Vendor statistics are updated automatically as orders are placed, received, claimed, or canceled
- place, track, receive, claim, and invoice orders
- maintain a secure audit trail and generate comprehensive reports on all orders and materials expenditures: dollar amount of orders outstanding and orders paid for each vendor, as well as the total number of items on order, received, canceled, claimed, and paid for, etc.

Fund Management

The system supports an unlimited number of library-defined funds. New funds and funding levels (sub-accounts) can be created by authorized staff whenever needed. Rome’s record structure allows funds to be defined in great detail, with many opportunities to structure fund records to best extract desirable statistical information, including hierarchical funding levels. Extensive fund “scoping” exists to ensure that operators can only see and manipulate those funds that apply to the libraries for which they perform Acquisitions functions. The initial release of Rome will expand this scoping even further so that staff that should be able to see/use all funds will be able to designate that some funds may be used to order materials for certain libraries. This will provide additional protection by preventing an operator who orders for all locations to use only the correct funds for given locations.
Each fund is represented by a master fund record containing constant information about the fund, and by a number of fund cycle records, detailing fund amounts and activity for a specific period of time. Each master fund record may be associated with one or more fund cycle records. Fund cycle records include the fiscal cycle identifying the time covered, budget amount, encumbered percentage allowed, over encumbrance block, ordering block, and payment block.

Fund management wizards allow for percentage or amount-based fund adjustment, as well as a complete allocation redefinition. Wizard helpers make easy work of fund management and budget control.

Wizards for fund accounting incorporate folder-based design, and a single line columnar-style formatting, with totals at the top, similar in design to spreadsheet programs. Hyperlink glossaries allow users to see individual fund detail in a child window from any fund list. Review All Funds, the wizard that gives you an overview of your budget, can output results to a .csv file that can be opened with spreadsheet software.

Within Acquisitions and Fund Accounting, review all fund financial and performance information for a fiscal cycle in one location.

As orders are created, placed, received or canceled, and paid, Rome automatically maintains:

- original budget allocation of the fund
- dollar amount of orders outstanding
- dollar amount of orders paid
- free balance
• cash balance
• number of items on order
• number received
• number paid for
• number of orders placed for the fund

You can define which fund(s) are to be used to pay for each line item ordered. For example, one or more copies may be ordered on a single line item from one fund. Copy costs may also be divided among multiple funds by percentage or by specific amount.

Vendor Records
Using WorkFlows, authorized staff easily create and modify an unlimited number of vendor records.

Each vendor record contains constant information about the vendor. Link multiple vendor cycle records to each vendor, each containing information about vendor activity for a specific period of time. In a multi-library system, each vendor record belongs to the library that created it. Rome allows you to create templates that define which vendor fields display at various points in the ordering process.

Linked vendor cycle records include the fiscal cycle identifying the time covered, deposit account amount, encumbrance percentage allowed on deposit, and an over encumbrance block. In addition, Rome automatically tracks outstanding orders, dollar amounts of orders outstanding, and orders paid for each vendor, as well as the number of items on order, received, paid for, and orders placed, plus links all of this information to each vendor cycle. This information is automatically used to update vendor performance statistics shown for each vendor cycle.

Deposit Accounts
If you have a deposit account with a vendor, you can keep track of the available amount in the current fiscal cycle. Every time you order from the vendor, the deposit amount decreases as amounts are encumbered/paid to the vendor. Rome monitors the deposit amount, and, based on the specified percentage encumbrance allowed, alerts you at any point at which any order would cause the account to be over-encumbered or overspent.

Discount Table
Materials vendors often offer discounts to libraries based on the volume purchases within a specified period of time. In the course of creating an order, authorized staff can either enter a specific discount, or allow Rome to calculate the appropriate discount automatically from a vendor discount table, based on the current vendor cycle and either quantity or line item amount. Either way, the system will encumber the discounted total against the appropriate funds, and verify that the discount has been applied when the order is invoiced.

Currency Control
Currency control feature automatically calculates foreign currency purchases in your local currency. While creating an order, authorized staff can either enter a specific exchange rate or allow Rome to calculate the cost automatically from an exchange rate table. There is no limit on the number or variety of currencies that can be established and maintained.

Orders
The system matches your library’s preferred workflow. Ordering an item does not require that a special acquisitions record be temporarily created for it that is
replaced by a MARC record upon receipt. Instead, Rome order records associate funds and vendors with a description of items being ordered. Order information is linked automatically to a catalog record at the point an order is created. The catalog record can be as brief or complete as the library chooses to make it. Use the SmartPort Z39.50 client to capture a full MARC record for the item you want to order or import. Or create a brief record that can be edited or overlaid with more complete cataloging at any point in the process. Either way, linked orders or items are not affected.

Bibliographic records for items on order are accessible using any of the access points available in the staff catalog or e-library. Choose to make these on-order records accessible to users through the e-library, or “shadow” them to limit display to staff only. By searching the catalog first, staff can easily determine whether a title being considered for order is already in the catalog and display any pending orders associated with a title. Additional orders can be added if you decide to order copies.

Selection Lists

Acquisitions selection lists aid librarians in making informed decisions for acquiring new and replacement titles for collection development. Selection lists wizards assist in creating and processing these lists. WorkFlows® uses the following types of information to manage selection lists:

- selection list control records, which provide basic information about the selection lists and how they are used
- list line records, which are linked to titles in your catalog
- decision records, which are linked to the list line records and are also linked to user records, so that a selector can list all of his or her selected titles and make purchasing decisions
- order and orderline records, which can be automatically created from selection list decisions, and are linked to fund records and vendor records

Selection lists policies gather statistics about control records, as well as for tracking selection list processing and selection orders.

Selection list reports perform a variety of functions, including notifying selectors when selections lists are active and ready for processing and removing temporary selection list titles that have been rejected.

As discussed in the 9xx Order Loader section, libraries that create selection lists on vendor Web sites or that use approval plans may also opt to load selection data from other sources to avoid extra keying.

Ordering

The first step in ordering is to create or import into your catalog a bibliographic record for the item(s) you wish to order. The CREATE ORDER wizard will guide you through the process of

- locating or creating a catalog record
- identifying the vendor to which the order is to be sent (from your library's vendor file) and the fund(s) (from your library's fund file) from which money should be encumbered to pay for the item(s)
- entering the order type, price of each item and other information pertaining to the order according to templates defined by your library
Every order line is hyperlinked to its corresponding catalog record, and to details on price, fund(s), and copy distribution segments.

Add Basic Order Wizard

A basic order is a complete order by itself; for instance, the Order Type policy FIRM would be categorized as a Basic order type. The Recurring order type is used when a line item on an order should be duplicated as soon as the order line is received or invoiced. Rome generates a new line item 1, either on the same order or on a new order in the next fiscal cycle (e.g., the BLANKET policy). A dated order is used when a line item on an order should be duplicated on a particular date, regardless of the receipt or invoicing of the previous line item order. Through the Rollover Renewal Orders report, Rome generates a new order when the line item's renew date has passed.

You may enter a purchase order number or allow the system to generate an order ID automatically. Rome will also “stamp” the order with the date created, date the order was sent, and other status information for future reference and reporting.

Each purchase order can contain as many order lines as you care to create. Holdings and user distribution segments can be completed to indicate how copies are to be distributed upon receipt. Rome allows multiple distribution methods, e.g., by each library's unique holdings code, directly to requester’s address, or indirectly to requester with shipment to library for processing. Rome also supports orders for multi-volume sets with multiple copies of each volume. For example, Rome automatically handles an order for three copies of a 2-volume set.
Purchase orders for each vendor can be generated and sent electronically or printed as soon as an order has been recorded in Rome. You need not place a completed order immediately—a “date ready” field is used to indicate whether orders are complete and the date at which they should be sent.

At any time, the details of an order may be changed, even to the extent of canceling a single ordered item or the entire order. You may also move the order link to a new bibliographic record at any time during the acquisitions process. As orders are placed, received, or canceled, or invoices are paid, Rome automatically adjusts the data in the fund and vendor records in real time.

**Receiving**

As ordered items arrive, they can be received into the system either in batch, by entering order numbers and order line numbers using the receive order wizard, or individually, using the edit order wizard. The system generates a list of any items missing from the order. The link between an order and a title allows the transfer of holdings from the order file to the catalog. Rome can load an item from the order record into the catalog using the ordered item’s holding code. Items that have been received may then be moved efficiently onto invoices.

**Claiming/Canceling**

If an order passes its library-defined “date to claim,” the system automatically adds a claim segment to the appropriate outstanding line items on the order. Each claim segment includes a claim reason, number of copies claimed, times claimed, part or volume claimed (for multi-part items), date mailed, vendor response, date of vendor response, and claim status (OPEN, RECEIVED, CANCELED). Elements in the claim segment are updated automatically, and claim notices to vendors can also generate automatically according to a predetermined schedule, or on demand. An authorized staff member can create or modify the text of the claim notice or select an appropriate notice from a set of library-defined notices.

On any order, all or some ordered copies may have to be canceled. A workstation operator may enter cancel/return information into the line item ID. The cancel reason identifies the origin of the cancellation as the library, a user, or the vendor. If the cancel reason is VENDOR, the vendor cycle record is updated with the number of copies canceled. Rome can automatically generate a letter to the appropriate vendor regarding the copies/volumes canceled and the reason.

**Invoicing**

Invoices may be posted online at the workstation. Information from the invoice is automatically reconciled against the individual line items on the purchase order. Rome allows special fees such as shipping and postage to be charged against specific accounts, pro-rated across all copies on a line item/order, or all line items on an order.

Invoices are accessible by Invoice Number (full or truncated), check number, line item number, and library. Each invoice query can be tailored by authorized staff to display only the desired information. e.g., dates, summary, extended information, notes, amounts, and vendor links.

**Reports**

In addition to purchase orders and claiming notices, Rome offers any number of other reports designed to monitor the acquisitions process. Reports cover
When ordering from a vendor's Web site, you also need a way to record the order in your Rome system without re-entering the bibliographic record and order data. Many vendors now enable buyers to use the vendor’s Web interface to search, select, and order new materials, then download MARC records for the items ordered along with details of the order. Our MARC Order Load or “9XX” interface enables authorized users to import these MARC records for new orders and record the order details in Rome’s Acquisitions Control module in one step, without re-entering any data. This provides a complete record of every order, so that it can be tracked and claimed within Rome, as well as maintaining complete and accurate records of vendor performance and balances for amounts that have been encumbered.

Our EDI (Electronic Data Interchange) Transaction Manager facilitates the transfer of order or subscription information between your library and your vendors using standard transaction sets such as those defined in the X12 protocols. This suite of reports interacts with the Acquisitions and/or Serials modules to send, resend, and receive EDI transmissions, and to acknowledge that the transmittal has been sent or received.

EDI Address fields for EDI capable vendors are recorded in the Rome vendor record and include communication information such as the type of transfer (e.g., ftp), login and password information for the vendor, directories where the files are to be placed and picked up, and other information used in contacting the vendor. Rome reports use this information to automatically transmit outgoing X12 transaction files such as orders and claims to each EDI capable vendor, rather than in printed form.

Rome can also use the login and directory information in the vendor EDI Address fields of X12 capable vendors to connect to the vendor’s system via ftp. EDI functional acknowledgment files, invoices, claim responses, and other types of data are then automatically retrieved and downloaded to the appropriate Rome directories.
Customization

Rome provides great flexibility in implementing individual library policies and maintaining security through the policy management utilities included with every Rome system installation. There is no limit on the number of policies a library may assign, so policies can be established that allow each library complete autonomy of operation with respect to its circulation policies, user access, acquisitions, serial subscriptions, orders, etc. Rome is a highly user-configurable system that can be adapted to changing policies and procedures without programming.

Prior to system installation, SirsiDynix works with the library to configure the Rome system to match each library's policies and procedures. After installation is complete, your system administrator can perform changes or add policies as needed.

Below, an authorized operator will select a Circulation Map policy and edit/modify the rules:

For example, an authorized operator can change the circulation rule from UNLIMITED to 3 WEEKS, and the system will apply this new rule when CD-ROMs are checked out to a library department:
The LIBRARY POLICY establishes open/closed dates, which libraries' operators can display and/or edit the library's records, and more:

Administrative staff can update closed dates, record editing/maintenance permissions systemwide, and other policy-driven parameters.
The system includes a comprehensive suite of more than 500 customizable report templates, designed to provide management statistics, working lists, notices and database management tools across all system modules. Reports can be scheduled to run automatically and unattended according to a pre-set timetable, with results directed to the user(s) who need them, (for example, so that every morning the circ desk automatically gets a list of items to be pulled from the shelf to fill holds placed in the preceding 24 hours). Reports can also be launched on demand by an authorized operator from any Rome staff workstation, and the resulting report output directed to a word processing or spreadsheet application on that user’s desktop. The system need not be paused or “down” in order to run reports.

The Report module also includes these features:

- creation of reports by selecting almost any element or combination of elements in appropriate records
- direction of completed reports to a workstation for display or import into word processing or spreadsheet applications, printed on a variety of printers, output to an ASCII file, or directed to an email address
- initiation of and scheduling of a specific report by merely highlighting the report and clicking the SCHEDULE button
- easy, on-the-fly editing of notice text using the “notice helper”
Information used to produce a report is derived either from the system database or from logs, as determined by the type of report. The system database provides information about the current status of users, items, vendors, funds, etc., based on information in each record at the time the report runs. The history and system logs provide information about transactions that have already taken place. For each transaction that takes place, the logs record the date, time, workstation, operator password if used, and all information entered by the operator and returned by the server. This information can be used to examine system activity and build statistical reports, based on operator-specified time periods.

Generally, each report’s format is determined by the content selections. Reports may be created by selecting almost any element or combination of elements in appropriate records. Rome allows you to select a very precise group of records in the database to include in a report.

With any database reports involving materials such as new accessions lists, shelf lists, high/low circulation lists, or bibliographies, the operator can select items for inclusion based on any combination of bibliographic information (using full Boolean word and phrase searching). The operator can also select items based on any combination of control information, e.g., collection, current status, number of circulations, number of holds, classification, and accession date.

Reports involving historical data allow the operator to specify the starting date-and-time and ending date-and-time which the report should cover. Logs of all transactions which alter the database are kept until the library decides they are no longer needed. This means that reports for several years past can be produced if needed. This would be a valuable asset when, for example, a comparison of circulation activity for the previous five years is needed to support a request for a budget increase.

Completed reports may be directed to a workstation for display or import into word processing or spreadsheet applications, printed on a variety of printers, output to an ASCII file, or directed to an email address.

Types of available reports in Rome include:

**Count** reports simply provide statistical information on the number of records or transactions meeting one or more operator-specified criteria.

**List** reports select and output records meeting one or more operator-specified criteria.

**Statistics** reports produce “column and row” tables of statistical information combining counts of records meeting one set of criteria with records meeting another set.

**Notices** selectively or inclusively list every item meeting a set of library-specified criteria, order these into notices for each user or vendor, select the users or vendors to receive the notice and the notice text, and print or email the appropriate items in letter form.
Label reports export information in a format designed for printing labels, e.g., mailing labels for users and vendors, and spine or book pocket labels for selected titles.

Import/Export reports are used for importing new information to Rome or extracting Rome information for use by an external system.

Remove reports permanently remove information from the Rome system.

Housekeeping reports make changes to existing information in the Rome system.

When selecting a report, you can limit the report output by choosing the appropriate criteria from the list displayed.
The reports module also supports and/or outputs options (e.g., how the bills selected are to be broken down by column/row).

Selection options for each report are presented graphically. Pull-down menus include “verify” lists of appropriate values for each selection option, so there’s no need to remember or type in codes or categories for locations, users, items, etc. Once the operator has configured the report options as preferred, he or she can either save the report for future use or further modification (“Save as Template”), or proceed to schedule the report to run using the “Schedule” button.
The operator can schedule the report to run “ASAP” or “Once” (at a specified date/time), or on a regular schedule (Daily, Weekly, Monthly), in which case the operator can also set the first date to run the report and fine tune the schedule, e.g., by specifying every third day, every other week, etc. From the same screen, the operator can specify the disposition of the report output, once the report has run. Options include:

**Log:** When this checkbox is selected, the results of the report, if emailed or printed, will include the log, which is a detailed description of the formatting options used and how the selection criteria affected the results.

**Save Results to the Finished Reports List:** This checkbox causes the report to display in the Finished Reports list in addition to any printing or emailing selections.

**Email Options:** This selection sends the entire report log and/or results directly to an email address or list of addresses selected by the operator.

**Format:** Prescribes the default formatting option. If the checkbox is enabled, an emailed report will reflect Rome-defined formatting specific to each report, such as report headers, spacing, and page breaks.

**Print Options:** Allows you to send your results directly to a printer selected from the verify list of available printers.

**Notify Owner when the Report is Finished:** Sends an email to the owner of the report when the report has been run and is either available for viewing from the Finished list, or has been printed or emailed.
For new reports, staff can either save the report for future use or further modification (Save As Template), or proceed to schedule the report to run using the schedule button.

Scheduled and Finished Reports

Once scheduled, Rome provides a summary screen for each report, as specifically configured and scheduled by the operator.

Each version of any standard report scheduled to run has its own unique name and “owner.”
Director's Station, as an add-on business intelligence solution for Rome, enables your library director and managers to better chart trends in everything from locations of highest circulation to the percentage of the materials budget spent by subject, to the actual use of the various periodical databases to which you subscribe.

Features include:
- Director's "Dashboard" populated with mission critical information
- Automated Alerts - "Notify me if..."
- Graphical presentations using charts and graphs
- Natural queries - "When was the highest circulation month in the past fiscal year?"
- Create calculations on the fly while analyzing the data
- Go behind the numbers with "drill down" data mining
- Sophisticated "What if" analysis (OLAP - Online Analytical Processing)
- Print, Send and Download in a variety of formats (Excel, PowerPoint, etc)
- Drag and drop for dynamic data manipulation

Benefits include:
- Designed for directors and managers
- Content and information links relevant to a director's day
- Accessible management level data for deep collection use analysis
- Organized into meaningful views, or "Dashboards"
- Delivered automatically to the director for "slice and dice" analysis
- Presentation output that is "Board Ready," for effective information delivery
- Deep Circulation analysis to uncover trends and assist in collection development
- No software deployed on the director's PC, other than a Web browser

A three-dimensional relational modeling tool, Director's Station is a graphical, drag and drop, statistical analysis platform intended to be used by directors as an aid to managing library resources.
Web Reporter is a revolutionary reporting solution that can be added to Rome to work with SQL databases (Oracle, Sybase, Microsoft SQL Server or DB2), although it does not require knowledge of SQL to use. It offers zero-footprint Web clients that can be used anywhere your staff has access to the Internet, including their homes. The Web clients give the power of a Windows client with the flexibility of using a Web browser.

SirsiDynix Web Reporter is extremely easy to use for the staff member who just needs to run pre-developed reports. At the same time, it offers great capability for the "power user" to create new or customize existing reports.

Features/Benefits include:

- State-of-the-art reporting technology for use with SQL databases
- Delivered with standard reports that can be customized, along with tools for creating ad hoc reports
- Reports are available through simple Web browser, providing ease and flexibility for users
- Easy-to-use solution for staff, with options for power users
System Architecture

The Rome® platform is a comprehensive system for managing all technical and public services within your library. It is designed to always be current – to accommodate new technologies and to meet the growing needs of your library and users for years to come.

With Rome, each SirsiDynix library is a global center for accessing and delivering information, while each librarian is a facilitator of worldwide knowledge exchange. Whatever your library envisions for its future, Rome makes possible today – whether it’s a state-of-the-art electronic library, gateway to commercial databases, Z39.50 resources, community information, or user records; a union catalog that enables easy resource sharing among public, school, and university libraries throughout your area; or a way to catalog, store, and view online photographs, slides, audio, and video. Rome puts your library at the center of your patron’s information world.

A prime example of the system’s elegant system design is its employment of leading-edge architecture. The system has been expertly partitioned to provide an advanced multi-tiered approach to this architecture: data management, applications logic, and presentation.

Every facet of Rome reflects its careful design so that it meets all your library’s needs.

**Multi-Tiered Architecture**

**Data management and applications logic exist on the server, while client software performs applications logic and all presentation functions.**

The desktop client sends transaction requests to a system agent, which verifies and routes the requests to a transaction processor program on the...
server. The transaction processor program returns responses through the agent to the originating client. This economical multi-tiered architecture enables you to scale Rome to a size that best meets your needs. For example, suppose your library has a high circulation. You can meet your continuous demand for check-in/check-out transactions by activating multiple instances of the circulation transaction processor program. If the first program is engaged, the agent immediately routes the client’s request to an alternate transaction processor program.

Rome also enables you to scale your system in response to changing needs. Special monitoring programs report the amount of traffic presented to Rome’s transaction processor programs and the number of times, if any, a wait-state was encountered by an incoming transaction. After reviewing the logs of this monitoring program, you can adjust your system configuration by activating additional instances of high-demand transaction processor programs, easily and dynamically tuning your system to meet your unique operational needs.

Rome’s architecture ensures that specific technologies can easily be introduced into, or retired from, the software’s framework. Since tasks are divided between the client and server portions, SirsiDynix can adjust an application on one without affecting the other. For example, the client interfaces can be modified or changed dramatically without affecting the core function on the server. Conversely, SirsiDynix can change database technologies or other server applications without making any modifications to the clients. As a result, the SirsiDynix system evolves over time to incorporate the latest appropriate new technologies, keeping the system as fresh today as it was over 20 years ago.

Rome is a multi-tiered library management system that is designed to function efficiently in existing and future server, client, and network environments. SirsiDynix has taken advantage of these capabilities native to UNIX, Linux, and Windows servers, making our systems compatible with a wide variety of networks, including the Internet. Rome operates on any TCP/IP compliant network.

The SirsiDynix WorkFlows® staff clients are designed to consume minimal bandwidth, and this has been borne out in benchmark testing vs. other systems. Our online search portal uses a standard Web browser, for which network bandwidth consumption is comparable to that of other Web-based applications.

Bandwidth depends on the volume of data sent across the lines at any given point in time. This would vary based on such factors as whether the lines are dedicated only to traffic between our system clients and the server, the mix of staff and OPAC PCs at each site, whether and how often all of the PCs would be active at any given point in time (peak use), etc. For good response over a network at peak use, each PC should be allotted 10K of bandwidth.

Because it is built on industry-standard relational database management systems, SirsiDynix provides libraries with the database tools necessary to maximize their systems and complement their networks. SirsiDynix offers the Oracle® Relational Database Management System (RDBMS), which results
in unrivaled manageability, scalability, and value. As the undisputed leader in
database technology, Oracle provides superior transaction processing, lower
management cost for the library, reliable and secure content management,
security, and protection from server failure, site failure, and storage failure. Robust support for database roles, auditing, and data entry encryption
provides strong access control and accountability to address the library’s
security and privacy needs.

SirsiDynix also provides an ODBC (Open Database Connectivity) API for
Oracle that allows Rome to work seamlessly with the library’s or institution’s
entire IT infrastructure, enabling access from any data from any application.

Within Rome, relational database technology controls information that
provides the quick, flexible function that librarians require, while full-text
indexing provides the power to search and retrieve citations and documents
quickly, even in very large databases.

Relational databases are ideal for fast indexing and retrieval of fixed-length,
highly structured data. However, libraries also need a fast, efficient way to
search variable length bibliographic data. To provide libraries with maximum
performance for indexing and searching variable length bibliographic data,
Rome uses a fully indexed text and metadata. This superior text search
engine, which includes keyword, adjacency, and Boolean query capability,
-enables SirsiDynix libraries to easily index and retrieve all of their
bibliographic data.

The Oracle advantage
As the recognized leader worldwide, the Oracle RDBMS offers ease in
development and deployment, as well as high performance, security,
scalability, reliability, and superior content management. Using the power of
Oracle (SQL), all Rome data is available for query, including variable length
MARC data. Oracle’s database engine has the highest transactional
performance, offers full support for Unicode, and is available on the largest
group of platforms. Oracle on Rome has no impact on day-to-day site
administration; it is completely transparent and no special Oracle training or
knowledge is required. Further, the database maintenance is completely
automated – any required tasks are performed by Oracle itself or via Rome
maintenance tasks. Oracle is more easily integrated with other applications,
such as student information management, financial, purchasing, and
courseware systems.

SirsiDynix databases support includes a built-in API (application programming
interface). Because it uses established templates and pre-determined
database relationships, SirsiDynix’s API makes constructing reports and other
database management tasks quick and easy. SirsiDynix offers complete
training classes, full documentation, and a special help desk for its APIs.

Oracle Embedded Software License – a low-cost alternative
While the Rome platform fully supports commercial Oracle licenses – from
newly purchased to full site licenses under both Standard Edition and
Enterprise Edition, the Rome platform also can utilize the Oracle Embedded
Software License (ESL).
Using Rome with the Oracle ESL, customers receive all the features, scalability, performance, functionality, power, and integrity of Oracle, completely integrated into their Rome system – without the need to become Oracle DBAs. With Rome and the Oracle ESL, all database management and administration is automated and implemented transparently to library staff and administrators. The Oracle ESL is implemented optimally tuned for Rome to provide maximum performance, flexibility, response time, and reliability. In addition, Rome and Oracle ESL simplify customer service relationship and support. All Oracle updates, upgrades, patches, and support are handled through the same Client Care desk staff via dedicated, SirsiDynix Oracle DBAs. Among the benefits of Rome and Oracle ESL:

- Single source for support for Rome and Oracle
- Full Oracle features – without the need for an Oracle DBA
- Library centric, MARC-oriented, fully documented API requiring no knowledge of Oracle
- Full support for Web Reporter report template and customized SQL access
- SQL based, direct RDBMS access via “sirsisql” tool without the need for third-party SQL interfaces
- Optional connectivity via ODBC, Crystal reports, and other third-party toolkits and products
- Full support for advanced Oracle features such as High Availability, replication and Real Application Clusters (RAC)
- Extensions and customizations via Rome APIs, toolsets, Web Reporter for Rome, and consulting projects
- Industry standard interfaces to and compatibility with SIP, SIP2, NCIP, LDAP, XML, MS Office, Z39.50, etc., data and interactive interface formats and protocols
- Bi-directional data import/export and direct data interaction with database objects, structures, data, and metadata in standardized formats, as well as user customizable formats
- Bi-directional UNICODE and UniMARC support
- No feature limitations from fully licensed, commercial off-the-shelf (COTS) Oracle

Libraries that elect to take advantage of the Oracle embedded license do have one limitation: it is not possible to create local tables. However, there are many other ways to accomplish functionality that might have required new tables in other systems. SirsiDynix provides a fully documented API which allows for extensive local development. The API is available for all sites regardless of whether they have a full Oracle license, and embedded license or elect not to use Oracle at all. In addition, many interactions with third-party systems may be accommodated by standards-based interfaces such as those provided by SIP2 or NCIP. SirsiDynix can assist libraries who want to create custom solutions, but who lack staff time, via our Consulting Services group. Libraries who may have a need for these or additional levels of access are, of course, not restricted to using ESL with Rome and may implement a full Oracle commercial license.
Hardware Guidelines

Server Requirements

The Rome operating environment spans multiple levels of performance and system architectures, enabling the needs of a wide variety of libraries to be met with SirsiDynix systems. Rome is available for multiple server/operating system configurations, including platforms running Windows 2000 SP1, Windows 2003 or higher, or Linux, SUN servers running Solaris 9 or higher, the IBM RS6000 series running AIX5.2L or higher, and Hewlett Packard models running HP-UX 11i or higher, or Tru64 51B or higher.

Programming Language

To provide maximum portability to a wide variety of platforms, Rome server-based applications are written in the C and Java programming languages. Rome client applications are written in Java, a proven, powerful programming language for building user interfaces to client applications, and in HTML, Perl, and JavaScript. The initial release of Rome will also include an optional, Web-based staff client that will be best suited for K-12 sites in the first implementation.

Web Portal Client Requirements

The Web portal for patron searching is HTML-based and requires only a browser with Internet access to the Rome server. Web browsers are supported on a number of platforms (Windows, Macintosh, Linux, etc.).

While any brand or version browser will function with the portal, SirsiDynix has tested the following browsers and platforms:

- MS Internet Explorer 6.0 or higher on Windows
- Netscape 7.0 on Windows, Apple, Red Hat Linux
- Mozilla Firefox 1.0 on Windows, Apple OS X, Red Hat Linux
- Safari on Apple OS X

Later versions of Netscape and Mozilla Firefox using the Gecko 1.0 rendering engine are available on many versions of Unix (Sun Solaris, HP-UX, Free BSD), and while not specifically tested on all platforms, these should reliably render the portal application. Please consult your sales representative for additional information.

Staff Client Requirements

### WorkFlows Client - Requirements

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<tr>
<td>WorkFlows GL3.1</td>
<td>Windows 2000, XP, or Mac OS X (10.4 or higher on Intel or PowerPC)</td>
<td>Minimum: 700 MHz</td>
<td>Minimum: 512MB</td>
<td>100MB</td>
<td>1024 x 768 or better</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Note 1:** On workstations running the WorkFlows Java™ client, SirsiDynix recommends setting the virtual memory association to equal twice the amount of physical memory, at minimum. Please work with your PC administrator to check the virtual memory setting on each workstation running the WorkFlows Java Client, and increase the memory if necessary.

**Note 2:** On workstations running the WorkFlows Java client that will simultaneously run additional applications other than a browser, SirsiDynix strongly suggests that the workstation be configured with at least 1 gbyte of RAM.

**Note 3:** Macintosh users should run OS X.

**Note 4:** WorkFlows Java will not affect OPAC stations, which will continue to require a browser only.

**Note 5:** With the announcement that Microsoft has ceased support of Windows98, SirsiDynix will not continue to provide support for that platform for our client desktop applications. See the announcement at Microsoft for more details: [http://www.microsoft.com/windows/support/endofsupport.mspx](http://www.microsoft.com/windows/support/endofsupport.mspx).

### WorkFlows® Staff Client

Staff users at defined workstations will use the SirsiDynix WorkFlows Java client. WorkFlows provides a single, graphical client that spans all areas of library operations. Instead of merely automating manual procedures, WorkFlows enables libraries to redesign work tasks and streamline daily operations.

- The WorkFlows staff client features wizards that allow you to perform complex library tasks quickly and efficiently.
- WorkFlows makes even the most complex library operations simple, eliminating the need for time-intensive training and constant user manual consultation.
- WorkFlows supports group and individual logins.
- Your staff users can set preferences and default wizard properties once, and Rome will remember the settings.
- A staff operator logs in to WorkFlows® and may immediately access all wizards and functions for which she or he has authorization. No separate clients are required.
- All client function profiles and configurations are maintained on the Rome server and sent to the client using push technology. No user profiles are required on the Rome client, and the configuration update via push technology is done automatically with every login to the server. The use of client/server and push technology to create, maintain, and update client...
function profiles and configurations provides easy and cost-effective management of the distributed staff software across the network.

- If an end-user wishes to change functional properties, such as default values for creating and editing records, parameters can be set to session defaults and automatically saved for future use.

All modules and functions are available seamlessly to staff authorized to use them, regardless of the module with which they are associated. SirsiDynix delivers toolbars arranged to reflect typical activities associated with each module, but staff can create custom toolbars with wizards that span modules, if preferred.

Rome is fully configurable for staff access; each staff member can be assigned an individual login. One login per user ID accesses all module toolbars and wizards to which your system administrator has assigned the staff member(s). Your system administrator can customize the toolbars so that, for example, Circ staff can access one or several wizards from Cataloging. Your system administrator can also limit viewing and editing for specific record types to specific staff members.

In addition, WorkFlows Wizards Properties enable library managers to establish system-wide properties that define their Rome system’s look and feel. At the same time, desktop properties enable individual staff to set their own personal properties on their own PCs to accommodate session default values and personal comfort preferences.

Authentication and Security

Accounts/passwords exist at three levels: Operating System, Oracle (RDBMS), and Rome. With the Operating System, account and password protection is provided for the software, database, disk, memory, and networking capabilities. At the RDBMS level, Oracle accounts are utilized to own the RDBMS instance, data, etc., and provide role and access to the Rome service processes. At the Rome application software level, Rome maintains separate accounts, privileges, roles, and access for each and every user in the system. This allows for both broad and granular control over the modules and features a user can access. Account/password management tools are provided at all three levels, including Rome, and support granting, revoking, expiring, and renewing. Audit trails are provided by both Rome software and Oracle software logging capabilities. When encryption is performed at the networking layer, all traffic is protected/encrypted, not just the Workflows staff client data.

Users gain access to the system through the use of a user record. User records contain a user’s name, location information, USER ID, USER ALT ID, their PIN (Personal Identification Number), and their User Access profile. When using any SirsiDynix client, users identify themselves for authentication by supplying their USER ID or USER ALT ID and their PIN. Once a user is authenticated, his or her User Access profile defines the system functions he or she can access. Each User record in the system is assigned a User Profile that defines the complete set of system functions available to that user. Functions are broken down into actions (query/display, update, create, remove, duplicate, etc.) by database object (bib record, volume record, copy record, order record, fund record, etc.). Security configurations allow the
building of a matrix that defines the combination of actions and associated objects that a user is authorized to use.

Each patron record in Rome is required to contain a unique patron identification number. When a patron chooses to log in to the Web portal to review his or her account, renew items, place holds, etc., he or she is prompted for their patron ID and, at the library's option, a personal identification number (PIN) as an added security measure.

In addition, the Rome portal provides the ability to authenticate a user through an existing LDAP server. This functionality provides a single sign-on environment where a patron can log in once to their system and applications like the Rome portal recognize that pre-existing authentication and automatically log the user into the portal without the patron having to re-enter the patron’s user ID and password.

Another way of putting this is that the Rome portal is enabled to interface with an LDAP server to authenticate rights and access to the Rome ILS system against that user database. The portal recognizes whether the user has previously logged into their LDAP server and established authentication. If that hasn’t happened, then the patron will be presented with a login screen to enter their user ID and password.

Rome is Z39.50 standard-compliant on both the client side and the server side, so it gives your users access to the world of information—your libraries’ catalogs, catalogs of other systems with Z39.50 servers, other vendors’ databases, and any other Z39.50 or Internet resource. Rome also allows users to access the system from any Z39.50 client, or via the Web using EPS with Web browsers.

SirsDynix is informed of emerging standards by serving on various standards committees. As a voting member of NISO and a charter member of the Z-Standards Implementers Group (ZIG), SirsiDynix is a participant in the development of many industry standards.

Staff can extract/import data from and to Rome in basic flat ASCII text, making it available for loading into any external desired application. SirsiDynix also provides an optional Application Programmable Interface (API) to all modules of the Rome system. The API enables certified users to perform interactive input and output to Rome. All data elements of the integrated system can be retrieved and/or updated using these tools. Because it uses established templates and pre-determined database relationships, the API makes constructing reports and other database management tasks quick and easy. SirsiDynix offers an API package that includes complete training classes, full electronic documentation, API consulting support, listserv and Web forum subscriptions, and a special Help Desk for its API.

Our optional Application Programming Interfaces (APIs) subscription provides everything you need to retrieve and update the data elements in Rome. APIs will enable your local system administrator, following the API training, to
create additional report templates, custom interfaces to other systems, and other local customizations.

The API works with the middle tier of Rome's multi-tiered architecture. API users can create actual transactions either in batch or real-time and feed these to Rome. For example, users can establish a real-time interactive interface between the library and its other financial and personnel systems. API training gives your system administrator tools that allow:

• global selection, editing, removal, and formatting of records for a direct interface with the databases
• creation of custom reports
• tools that allow users to mimic global transactions, e.g., charging, discharging, etc.
• tools for data loading and data manipulation. e.g., import /export bibliographic, authority, user records

Our API interface is a scripting interface that uses Perl to interface with the API server. For each data object within Rome, a suite of global selection, editing, removal, and formatting (SERF) tools is provided. Example SERF queries, transaction structures, and external system linkage files are provided within the documentation. The documentation is maintained version-by-version with Rome's major releases, and all major and minor software releases are accompanied with Rome API release notes.

Partnering With SirsiDynix

For more information about SirsiDynix or Rome, please contact a SirsiDynix sales consultant or visit our Web site at www.sirsidynix.com

Even with so many features that will be available in the first release of Rome, our ongoing research and development efforts still continue to add new innovations. We adopt new technologies and standards when they are relevant to library automation.

And, of course, in addition to an unparalleled suite of products, SirsiDynix offers a comprehensive offering of services, including implementation and data services, training, customer support, and professional consulting.

When you choose SirsiDynix as your partner, you’ll choose a company that will meet and exceed your expectations—now and well into the future. We are equipped to provide solutions that enable your library to deliver managed information and enhanced services in a digital world.