Mandarin Oasis™

Functional Specification ver 2.9.2
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Overview

The Mandarin Oasis Library Automation System is a native MARC database and search engine designed by Mandarin Library Automation specifically for library use. Mandarin Oasis is an ASP .NET-based program, created using C# program- ming and TCP/IP protocols. It runs on Microsoft .NET Framework 3.5 and is compatible with Windows 2008 Server.

Oasis meets the following international library automation standards

Standard	Description
USMARC	Records in Electronic Form
NISO Z39.2	Information Interchange Format
NISO Z39.23	Standard Technical Report Number Format and Creation
NISO Z39.43	Standard Address Number for the Publishing Industry
NISO Z39.47	Extended Latin Alphabet Coded Character Set for Bibliographic Use
NISO Z39.50	Information Retrieval Service Definition and Protocol Specification for Open Systems Interconnection
NISO Z39.9	International Standard Serial Numbering (ISSN)
ISO 2108	International Standard Book Numbering (ISBN)
ISO 2709	Format for Bibliographic Information Interchange

Oasis contains the following main library automation functions:
- Catalog (searching/OPAC, KidsOPAC and cataloging)
- Circulation
- Group Editor
- Reports
- Inventory

Optional modules include:
- Authority Control
- ZServer (Z39.50 server)
- Syndetic Solutions
- Textbook Module
- Serials and Acquisitions

Database Information

Oasis uses true MARC records that require no reinterpretation. This results in exceptionally fast data retrieval. The transaction rates and effect of the system on hardware is dependent on the hardware supplied, number of transactions in a given time period, and the number of simultaneous connections. Fixed and vari- able USMARC fields, subfields, leaders, tags, and indicators are used in the system. All MARC fields and subfields are indexed and searchable (except in authority and holding records). All record types (bibliographic, holding, patron, authority, equipment, transaction, and specialty databases) conform to a standard MARC record structure. The maximum record length is limited by the MARC standard when using a MARC format. The MARC standard is 100K per record and 10K per field.

Bibliographic, holding, patron, authority, and equipment records are contained separately in table structures. Each table can hold up to 2 billion records. An unlimited number of tables can be created, enabling Oasis to store any number of records. Tables can span multiple hard disks on multiple servers to accommodate libraries with large volumes of records. Special interest databases, such as community resource lists and reading lists, can be added to the Oasis system for customized local use.

Disk Storage Requirements

Disk storage requirements for Oasis can be estimated using 3 MB of hard disk space per 1,000 records. This amount takes into account the program, record, and stored transactions. Each 9.1 GB hard disk on a file server is capable of accommodating approximately 3 million records.

Security

Oasis uses an elaborate, hierarchical security scheme that enables the librarian to assign levels of access for cataloging, circulation, search options, and database maintenance functions. Security in Oasis is implemented through the use of Group Editor. Group Editor creates, customizes, and modifies the group permissions required to gain access to Oasis functions. Groups are created with customized sets of parameters and privileges. The three default group types are patron, item, and special reserve. An unlimited number of each group type can be created.

Oasis has many security measures in place to protect the integrity of the data- bases. Oasis uses AES 256-bit encryption when storing critical user information within dynamic data structures. All functions, except searching, can only be accessed using a login name and password. Passwords are stored in user records using strong encryption. Oasis allows logging in through Active Directory for connecting securely with third-party software such as student management systems or ebook vendors.

It is possible to set separate logins at the site and installation level. This is helpful for sites with multiple installations, such as a school district or a public library with several branches. A top-level login grants access to all installations.

Records marked for deletion are not removed from the database until a purge is performed. Various utilities, such as indexing and data repair, are available to the administrator if a problem arises in the databases.

Oasis includes support for SMTP authentication. Circulation and Catalog support SMTP authentication for sending emails, including messages to the librarian, hold notices, overdue and fine notices and other messages to the patron.

Display

The Oasis interface has two modes: Patron Mode and Librarian Mode. Patron Mode only allows the viewing and searching of records in the Catalog, but may allow access to My Account functions. Librarian Mode allows access to library functions such as Record Editor, Circulation, Group Editor, Inventory, and Reports. The level of access for each of these functions is granted in Group Editor. A Kids Catalog feature allows for a separate, child-friendly interface.

Customization

Oasis can be customized to meet a variety of users' needs. Librarians can:

catalog and display their collections in any language

- display the Oasis interface in any language
- display their library name and logo
- display pictures and links in the Bulletin Board area
- display item images in the Catalog, and item and patron images in Circulation
- change the Visual Catalog displays and searches in the Catalog

Unicode Compliance

Oasis supports Unicode™, a universal encoding standard that greatly simplifies the sharing of multilingual text. This allows libraries to catalog their collections in Hebrew, Arabic, Greek, Armenian, Chinese, and virtually any other language

Multilingual Interfaces

Users have the ability to select the interface language affecting window names, button names, text box names, and messages. Changing the interface language does not change the language of the information in the database. Interface languages available by default are English, Spanish, French, German, Italian, and Traditional & Simplified Chinese

M3 Server

M3 Server is a connectivity tool that allows Oasis to search the catalog database. It also acts as a usage monitoring tool, allowing administrators to view server information, TCP/IP port statistics, and database usage. Information about the activity of every port is contained in the log file.

M3 Server may be configured for users to search more than a single database at one time, as in a central server configuration. This tool should only be configured by Mandarin technical personnel, or by system administrators with the assistance of Mandarin technical personnel.

In the event a server in a multi-server environment is down, Oasis will proceed and load a functioning session.

Documentation

The **Oasis Users Guide**, which is provided online, describes how to install, configure, and use Oasis.

System Backup

The Oasis Library Automation System does not currently provide continuous backup. Mandarin recommends that the server be equipped with an automated backup system that can be used to schedule an unattended backup. Mandarin provides a backup utility that can be downloaded from the Mandarin Web site. A full backup should be performed weekly, and new and amended files should be backed up daily.

Users with Disabilities

Oasis offers features for handicapped users. Many of the features are built into Windows 7, Windows Vista and Windows XP operating systems and carry over into Oasis use. All of these settings can be changed in Control Panel's Accessibility Options section.

Users with a touch screen monitor can take advantage of Oasis' touch buttons and visual icons for selections. In addition, the font style and size in the Oasis interface can be modified for easier viewing.

Licensing

The Mandarin Oasis Library Automation System is site licensed and there is no restriction on the number of workstations that can access Oasis.

Catalog (OPAC)

The Catalog allows patrons to search the library collection from any computer with a Web browser. Patrons can determine if desired items are owned, how many copies are owned, their shelf location in the library, and whether or not they are available. Search results list all bibliographic records found matching the query. The patron can then determine availability and location, sort the list, and print the search results for a concise, comprehensive bibliography.

By default, records appear in a brief record format during viewing. With the click of a button, the expanded bibliographic record and item location information from the holding record can be displayed. The default record format can also be changed to any one of the following formats: bibliographic, full MARC, catalog card, brief labeled, compressed list, list, and expanded labeled.

The search results screen is the default bibliographic display. The record detail is the expanded labeled format. Search results can be sorted by author, call number, call number by prefix, copyright date, medium/author, medium/call number, medium/title, and title. Search results display an image of the cover of the item, when appropriate, along with additional item information, either from Google Books or through a subscription to Syndetic Solutions.

Media type symbols provide instant resource format recognition. Each record has a media symbol associated with it. The media type symbols used by the Catalog are: artifact, book, photo, music cassette, movie or slide, ebook, electronic media, journal, library kit, map, sheet music, book on tape, data CD, music CD, video recording, DVD, or online resource. Item availability is determined by color: a green square with a check mark for available, a red square with an X for on-loan status or otherwise unavailable, or a blue square for an electronic resource. Results are obvious with a quick glance. Book cover images can be displayed alongside items in the Results and Bookbag windows.

Oasis supports USMARC field 856 (electronic location and access), enabling patrons to link to cataloged Web sites or other electronic resources directly from the Catalog.

A Kids Catalog is available as a separate Patron Mode interface. The background graphics for this interface can be chosen by the user from a given selection.

Search Method

Oasis ignores and forgives variations in punctuation, such as apostrophes, quota- tion marks, brackets, and multiple continuous spacing. As defaults, the use of upper and lower case letters and special characters such as diacritics are ignored. However, Oasis can be configured to recognize these items. Entries conform to Z39.50 use attribute standards.

Three search methods are available: Standard, Enhanced, and Visual.

Note: The following parameters can be applied when performing a search: truncation asterisk (*) at the beginning or end of a keyword; wild card character (?) within a keyword; quotation marks (" ") around a phrase; and Boolean operators (AND, OR, and NOT) to connect keywords within a keyword text box.

Standard Search

Standard Search is a basic keyword search method that recognizes Boolean logic, truncation, and proximity. Patrons can search anywhere in a record, or search by subject, title, or author. If a patron searches and no matches are found, a close match may be displayed as a searchable link. With the optional Authority Control module, "See" and "See also" cross-references display with the search results, offering links to more appropriate headings used by the library or related headings that may also be useful.

Enhanced Search

Enhanced Search is a more advanced search method that offers search flexibility and options. Patrons can enter simple or complex keyword search queries, then select the fields and Boolean operators for the search. Patrons can browse a list of indexed entries to select keywords. Enhanced Search also offers customizable drop-down lists of search fields, allowing librarians to choose which fields of the MARC record are searchable.

As with Standard Search, "See" and "See also" cross-references display with the search results when using the optional Authority Control module.

Both Standard and Enhanced Search allow for filtering search results by reading level program: Lexile, Fountas and Pinnell, or Accelerated Reader. Oasis also includes a Material Type filter which can be customized by the library to include any identifiable subsets of the collection.

Oasis provides a URL to retrieve a particular search. This URL can be copied and saved or emailed to provide access to the same query at another time.

Visual Search

Visual Search is an easy point-and-click search method. Patrons click graphical buttons to narrow their searches from broad topics to more defined sub-topics, ultimately reaching search results. A topic button opens a sub-menu of additional buttons leading to more sub-menus, query buttons that launch database searches, and/or link buttons that access different applications or Web pages. A query button is linked to a pre-defined search query. Oasis includes over 60 pre-config- ured topic and query buttons.

The Visual Search interface is easily customized. Library staff can use their own captions and pictures, as well as change colors and add logos. Topic, query, and link buttons can be added, modified, and deleted. The number of levels before a search results list appears can be increased or decreased. Animation, sound, and visual properties on all button menus can be globally or individually modified, enabled, and disabled.

Search Features

Shelf Browse

Shelf Browse is available in the Details view of search results. It quickly locates records with a call number similar to that of a selected record. The patron can move one bibliographic record at a time forward or backward through the list. This is equivalent to looking at items to the left or right of a specific item on a library shelf.

Index Browse

Index Browse displays a list of indexed entries from which the patron can choose. This feature is particularly useful to patrons who are unsure of the terms to use in a search. Oasis provides browse indexes for authors, titles, subjects, call numbers, and URLs by default.

My Bookbag

My Bookbag allows a patron to temporarily store selected records throughout the course of the search for additional review or batch printing. My Bookbag records can be sorted, saved, e-mailed, printed, and downloaded in MARC format. If library staff enables the Persistent Bookbag feature, all items placed in My Bookbag will be saved between search sessions if the patron signs in anytime during his or her session.

Patrons may create and save multiple bookbags, and may save any bookbag as a bibliography, which is an html file with an identifiable URL.

Bulletin Board

The Bulletin Board is a simple way for library administrators to lead patrons to additional information. It consists of between four and six graphics in the Catalog header that can be customized by the library. The Bulletin Board buttons can be linked to local HTML files, such as the library home page or calendar, or to Web pages that the library wants patrons to view.

My Account

My Account is a feature that allows patrons to view their current transactions, past transactions, and personal information that is on record with the library. Use of My Account also allows for saving of bookbags and bibliographies, patron-initiated transactions such as reserves and renewals, and submission of comments for particular items.

Syndetic Solutions

Mandarin offers a subscription to Syndetic Solutions, which allows patrons to view cover images as well as summaries, reviews, and other content data for items in the collection through a link in the Catalog. For more information about Syndetic Solutions, see page 23.

Comments and Ratings

A feature is available to allow users to rate an individual item on a scale of one to five. The ratings for each item display on the search results as an average of all ratings posted for that item. If a patron signs in to My Account, he or she may submit a comment about the item. Comments are subject to review by library staff before they are publicly visible.

Record Fetch

Oasis includes a Z39.50 client that allows librarians to search Z39.50 sites and easily add items to their library catalogs from these sites. The Z39.50 "search and save" feature is seamlessly integrated as part of the Catalog. Since Oasis is Uni- code compliant, librarians can search for MARC records in virtually any language and save the resulting records directly into their local catalog. The Z39.50 search can be done for individual items or in batch mode.

Record Editor (Cataloging)

Cataloging is the process of describing an item in a library's collection in order to retrieve and control the item. The Oasis Record Editor, accessed through the Catalog, contains a full MARC editor used to create, modify, delete, and merge records. Fields and subfields can be added, deleted, and modified. Records can be duplicated and modified to create holdings. The field labels and tag structure con- form to USMARC standards, as defined by the Library of Congress. Record types are bibliographic, holding, patron, and equipment.

Bibliographic, holding, patron, authority, picture, and equipment records are contained separately in table structures. Each table can hold up to 2 billion records. An unlimited number of tables can be created, enabling Oasis to store any number of records. Tables can span multiple hard disks on multiple servers to accommodate libraries with large volumes of records.

Oasis recognizes both the USMARC fixed and variable length records. The maximum record length is limited by the MARC standard when using a MARC format.
The MARC standard is 100K per record and 4K per field. Oasis allows all fields of the MARC record to be indexed.

There is one bibliographic record for each separate catalog entry. An unlimited number of holding records can be associated with a single bibliographic record. Holding records must be linked to a bibliographic record. The Record Editor automatically assigns a sequential record number to each record in the system.

The Record Editor allows the MARC record to be customized in many ways. Additional fields or subfields can be added to MARC records to add local information using the MARC standard.

The Record Editor offers a Basic Editor and an Advanced Editor. The Basic Editor displays the MARC field labels as text and offers a limited number of field and sub-field choices. This editor is suitable for simple and quick record entry. The Advanced Editor displays the MARC field labels as numbers and offers every field and subfield choice available.

Templates
The Record Editor includes pre-configured templates using suitable fields to create distinct record differences. Additional templates can be created or existing templates can be modified to meet local needs. The Record Editor automatically fills in certain fields when a template is chosen, making the cataloging process easy. Templates in the Record Editor include: Book, Electronic Book, CD-ROM, Equipment, DVD Recording, Video Recording, Music CD, Notated Music, Mixed Material, Map, and more.

Pictures
Picture records can be imported individually or in batch mode in Oasis Catalog or by using the M3 Picture Manager utility in M3 Cataloging. M3 Cataloging is included on the Oasis CD.

Reports
All cataloging reports are run using the Oasis report generator.

Authority Control
The optional Authority Control module lets the library offer patrons the best possible access to the collection by displaying "See" and "See also" cross-references from terms they may search under to terms used by bibliographic records in the catalog.

Importing Records

Bibliographic and patron records formatted in MARC, ASCII delimited, ASCII fixed width, or UTF8 delimited or fixed width format can be imported. Fields in existing records must be mapped to the appropriate MARC field, or defaults can be selected. During import, duplicate bibliographic records can be imported or discarded, or can replace existing records. All holding records are imported. Barcodes can be generated during the import process. After the import process is complete, an Import Summary is cre- ated listing duration of import session, number of records in the import file, number of records imported successfully, any duplicate barcodes, and the barcode creation summary.

Oasis also accepts records in USMARC, MARC21, LCMARC, OCLC, RLIN, UTLAS, WLN, SDM (MARC), Bibliofile, Precision, Laserquest, and Marcive formats.

A utility can be used to automate the importing and updating of patron records, using data exported from a student management system.

Exporting Records

Records may be selected and exported as .txt files in MARC format.

Find and Replace

Find and Replace provides for advanced editing functions. Selected groups of bibliographic, holding or patron records can be manipulated together to correct mistakes or update headings, or to be deleted or purged. An Undo feature is included for backing out of changes.

Circulation

Oasis Circulation allows libraries to:

- Display patron and item status
- Process and display loans, returns, renewals, reserves, and holds
- Book equipment and rooms
- Attach messages to patron or item records
- Process fines and issue refunds
- Apply processing fees
- Upload, attach, and display patron and item pictures
- Send e-mail notifications to patrons who have overdue items, owe fines, or reserved items that are now available
- Record patron claims of lost, previously paid, never had, and previously returned
- Configure the library schedule, including specific due times and general due days
- Set up a session-based due date
- Pre-process barcodes to strip leading zeroes
- Upload transactions conducted off-line
- Use multiple (duplicate) barcodes across multiple databases
- Print lists of patron and item transactions, sorted by various details and filtered by patron group and/or transaction type
- Create temporary holding records
- Display and print patron and item history, filtered by transaction type
- View related records (barcode, transaction, and picture) for a patron or item
- Reserve items by title or by specific barcode
- Set items to In-Transit status between library locations
- Print various receipts by transaction or patron
- Specify different time zones for different Oasis installations

In addition, bibliographic, holding, and patron records can be added or edited, and records can be searched. Oasis allows library staff to define all circulation param- eters, and authorized users can override any parameter.

Features

Circulation Window

The Circulation window consists of three panes, the two upper panes display basic information about the patron and item, and the lower pane displays transaction information for the patron or item. For security, a time-out period can be chosen that clears the window after a selected number of seconds has expired.

The Patron and Item labels are hyperlinks which, when clicked, open a window that allows viewing the full MARC of the patron (or item) and the related barcode, group, and transaction records.

Circulation Calendar

The Circulation calendar is used to set up loan period rules, library hours, and holidays. Within Circulation the librarian has the ability to backdate the circulation date (helpful for evening book drops) and temporarily override typical loan periods to process circulation exceptions. Loan periods can consist of any period of time, including hours. The calendar provides for adjusting loan periods to accommodate holidays and closed hours.

Fine Calculation

An overdue item's status changes from "Overdue Loan" to "Fine" when the item is returned. Fines are then calculated by the system. Closed days can be excluded from fine calculations. Patrons can pay the full fine amount, make a partial payment, or exclude an item from payment until a future date. Librarians have the ability to forgive fines, and add a processing fee. The system calculates the amount of change back from a fine paid. Fines can be marked as previously paid if the patron claims that the fine was already paid. Oasis allows item status to be changed to "Lost," "Claimed Returned," or "Claimed Never Had" to accommodate those situations. Librarians can issue refunds. Oasis keeps a history of fines for each patron that can be displayed from the payment screen.

Quick Returns

Quick Return is designed for situations such as book drop returns. Patron messages are not displayed since it is assumed that patrons are not present. Quick Return does alert when a hold is attached to an item.

In-House Circulation Returns

In-House Circulation is designed to "return" items that were removed from shelf positions and left on library tables or desks, presumably used at the library though not checked out. This feature is used to track in-library usage of the collection.

Self-Check/Self-Returns

Oasis allows self-check and self-return transactions without the assistance of a librarian. For system security, the patron cannot perform any other type of circulation transaction; the patron's only options are self-check, self- return, or log out. Self mode can be set up so patron and item transactions do not display.

Loan or Return Multiple Items

Librarians can check out or return multiple items after entering a single patron without having to re-enter the patron barcode for each item.

Item and Patron History

Librarians can display the transaction history of an item or patron. If privacy is an issue, this feature can be disabled.

Item and Patron Status

Items can be searched, and the current location or condition of a particular item can be displayed. Any number of customized statuses can be created to accommo- date local needs. Patron status can also be created and assigned.

Booking

This feature is used to reserve an item such as a conference room or piece of equipment for a future day and/or time. Booking is available for a single day, a range of days, or for specific hours. Items and pieces of equipment can be grouped into sets for ease of circulation. The system maintains equipment holding records including information concerning date added, collection, item type, storage location, serial number, inventory number, equipment price, date purchased, last ser- vice, next service, condition, and notes. Room holding records include room
collection, item type, size, capacity, handicap access, elevator access, media equipment assigned to the room, and notes.

Holds

Oasis alerts library staff when materials on reserve are returned and placed on hold, displaying the name of the patron who reserved the item and instructions to notify the patron. Oasis can also be configured to automatically send the patron an e-mail notification.

Oasis can print a hold form to be placed with the item. The system allows library staff to specify a last acceptable date for a hold, after which time the material is no longer needed. The system clears holds not filled by such dates and automatically readjusts the holding queue.

Reports

Circulation provides transaction reports to monitor library status and activity. The types of transactions reported consist of loans, fines, holds, reserves, bookings, overdue loans, or all transactions. Reported transactions can be displayed for the current day, a specified number of days, or all transactions. In addition, bookings can be displayed for the future. Additional reports can be generated using the Oasis report generator.

Group Editor

Oasis uses an elaborate, hierarchical security scheme that enables the librarian to assign levels of access for cataloging, circulation, searching, and database maintenance functions. Security in Oasis is implemented through the use of Group Editor. Group Editor creates, customizes, and modifies the group permissions required to gain access to Oasis functions. Groups are created with customized sets of parameters and privileges. The three default group types are patron, item, and special reserve. An unlimited number of each group type can be created. Items and patrons can be moved in batches to different groups for quick updating.

Patron Groups

Each patron record must be assigned to a group to establish circulation privileges. Patron groups may exist for many patron types, such as general, VIP, volunteer, or staff member. The following settings are established in the patron group:

- **General** – establishes identification information such as name, description, and card expiration
- **Circulation Blocks** – customizes the patron group's rights to add, modify, place, remove, and override messages
- **Circulation Limits** – customizes the circulation quantity limits for the patron group
- **Circulation Access** – sets the rights of group members to access Circulation functions
- **OPAC Access** – sets the rights of group members to access My Account and other features available in the OPAC
- **Cataloging Access** – sets the rights of group members to access Cataloging functions
- **Utilities** – sets access privileges for Inventory, Report Generator, Configuration Editor, and Group Editor functions
- **Members** – displays, adds group members to or removes from the group; allows for editing of individual member records
- **Item Group Overrides** – overrides item parameters for the specific patron group
- **Group Access** – specifies which patron groups have access to the group, as well as the default patron and item groups created by members of this group

Item Groups

Each holding record must be assigned to a group to establish the item's circulation parameters. Item groups may exist for many item types, such as general collection, periodicals, equipment, or reference. The following settings are established in the item group:

- **General** – establishes identification information such as name and description of the group
- **Circulation Periods** – sets circulation time frames and fine amounts for the group
- **Members** –displays, adds items to or removes from the group; allows for editing of individual bibliographic or holding records within the group
- **Group Access** – specifies which patron groups have access to the group

Special Reserve Groups

These groups accommodate unusual circulation restrictions for special items and, if necessary, patrons. For instance, a special reserve group can be created to reserve selected science books used by students involved in a four-week project. The following settings are established in the special reserve group:

- **General** – establishes identification information such as name, description, and access to the group
- **Item Members** – adds items to the group
- **Circulation Period** – sets circulation time frames and fine amounts for the group
- **Circulation Limits** – sets circulation quantity limits for the group
- **Patron Members** – adds patrons to the group
- **Group Access** – specifies which patron groups have access to the group

Reports

Oasis features a flexible report generator that allows librarians to select the exact type of report they need. Reports can be displayed on the screen, printed, or saved to a file. Barcodes, spine labels, book pocket cards, multi-page forms, address labels, index cards, and letters can also be printed.

The available reports are divided into the following categories:

- Fine Letter, List, or Notice
- Overdue Letter, List, or Notice
- Bibliographic or Item List
- Booking Report
- Equipment List or Form
- Patron List
- Statistical Report
- Transactions List
- Labels

In many of these categories, the librarian can specify a type of list, select a date or date range, and choose other report details.

Inventory

Oasis Inventory allows the librarian to conduct a full or partial inventory of the library's holdings. A full inventory involves scanning the entire collection during one time period. A partial inventory involves scanning portions of the collection at any time throughout the year. Inventory compares the scanning results to the contents of the holdings database. Nine reports are generated:

- Newly Found Items
- Missing Items, including newly missing and previously marked missing
- Items with Invalid Barcodes
- Misplaced Items
- Loan Shelved Items
- No Barcode Items
- Duplicate Barcode Items
- Out of Range(s) Items
- Inventory Statistics

After the reports are compiled, they can be printed to reconcile the inventory. The reports can also be saved to a file and exported from the Oasis system. Inventory can be run to reconcile equipment as well.

If inventory cannot be completed at one time, the items that have already been processed can be saved and retrieved in order to continue the inventory process at a later time.

Authority Control

Mandarin Authority Control is an optional module that fully implements Authority Control and adheres to the Library of Congress MARC 21 Authority Format standard.

Oasis supports MARC 21 Authority Format "See from" (4XX) and "See also from" (5XX) tracings, which automatically create "See" and "See also" cross-references in the Catalog. "See" references send patrons from terms they may search under, which are not used in bibliographic records, to related terms found in the library's bibliographic records. "See also" references inform patrons about other headings that may be useful. Cross-references greatly increase searching success for users.

Using Authority Control

By installing Mandarin M3 Cataloging, Oasis users can manage authority records and access all of the Authority Control functionality available in M3. All authority record management, including importing, creating, and editing records, must be performed in M3 Cataloging. Changes made to authority or bibliographic records in M3 Cataloging are automatically and seamlessly implemented in Oasis.

Once M3 Cataloging is installed, Authority Control allows librarians to quickly link authorized name, subject, and series title authority headings to bibliographic records. Authority headings are created by national bibliographic agencies or other approved institutions for use in bibliographic records. Authorized name, name/title, and series (uniform title) headings adhere to AACR 2 or other descriptive cataloging rules, and authorized subject headings follow subject heading system/thesaurus conventions such as the Library of Congress Subject Headings or other agency subject systems.

Linking bibliographic records to headings provided by an authorized source ensures consistent, high quality terminology in a library's records. This eliminates common problems such as variant versions of headings, which cause inconsistent search entry points. Authority Control also allows authorized users to create new headings and local authority records, increasing consistency in forms of headings and dramatically improving users' access time.

Licensing

Authority Control is site licensed per collection and there is no restriction on the number of workstations that can access it.

Authority Database

Mandarin hosts an online Library of Congress authority database that is updated continuously and available to Oasis users on an annual subscription basis.

- This real-time online authority database provides over 5 million subject and name headings.
- As headings are added, or as existing headings are modified, Mandarin libraries are able to import and immediately utilize this data.
- The Authority Control module automatically connects using the Internet to retrieve needed records.
- The process is seamless, and automatically corrects headings in bibliographic records without staff intervention.

Licensing

The subscription to the Library of Congress authority database is site licensed annually per collection and there is no restriction on the number of client work- stations that can access the database.

Union Catalogs

Oasis allows users to create, maintain, and communicate using the following union catalog models. A wide area network (WAN) or dedicated Internet connection (static IP address) for each library site is required to set up a union catalog.

Classic Merged Model

A classic merged union catalog, running on one or more central servers, provides information to all affiliated libraries from a single MARC database. The union catalog takes bibliographic and holding records from each participating library and merges them into a single database. This centralized database contains a single master bibliographic record for each title in the union collection and separate holding records identifying location, call number, and barcodes at the site level. Duplicate barcode records are merged and associated holding records, each containing a unique holding symbol (location code) identifying the owning library, are re-linked to the "master" bibliographic record. Individual library sites can use Mandarin's scoping feature to browse their local collection, selected collections, or all collections in the union catalog. The system links to affiliated libraries using either a WAN or the Internet. A T1 line is highly recommended for adequate communications performance. This model runs on a central server solution.

NOTE: There is an additional charge for the creation of the classic merged union catalog. Charges vary according to the number of sites and records.

- **Catalog Searching** – If all affiliated libraries run Oasis, no additional software is required. Patrons can select from any library location for item information.

- **Circulating from the Union Catalog** – Circulation occurs independently at each individual library. Transactions update the associated holding records instantaneously over the WAN. There are no local databases and the shared database only exists on the union server.

- **Cataloging and Maintenance** – Reports and batch processing, such as import and export, are run at the central site only. Merged union catalogs can be updated centrally or locally:

  - If cataloging is performed centrally, record edits can be made to either the bibliographic record or the linked holding records. Changes are immediately displayed in the Oasis Catalog. New records can be imported in batches with automatic system checks for duplicates. If duplicates are found, the system can add new holding information to the existing bibliographic record. If the system has both a merged union catalog and individual catalogs at each location, the union catalog system can output a file of new and updated records for downloading into the local site catalogs. Software can also be installed, allowing remote libraries to automatically download bibliographic and/or holding records when newly added items are scanned.

  - Independent libraries can also edit records from remote sites, if desired.

Virtual Union

Oasis (with custom configuration) allows any multiple-site library running Oasis to be part of a virtual union catalog. If a merged database is not desired or if libraries are not directly affiliated, libraries can participate in a virtual union catalog but maintain their collections separately. A virtual union catalog is created by installing M3 Server and Oasis on all library automation servers; no client soft- ware is needed at the library sites. M3 Server software can be configured so patrons can search single or multiple databases simultaneously. There is a charge for customizing the software based on the number of library collections. This model runs on central server or local server solutions.

- **Catalog Searching** – A directory is created that includes the IP address of each par- ticipating library. Once this is defined, Catalog searchers can select all sites or spe- cific sites for searching. When a search is executed, results are returned along with library locations. Duplicate records are not automatically removed in a virtual union catalog.

- **Circulating from the Union Catalog** – Circulation occurs at each individual library.

- **Cataloging and Maintenance** – Reports are generated and cataloging is updated at each individual library.

Virtual Union Catalog with Oasis and Z39.50 Protocol

Z39.50 software is required for a virtual union catalog if libraries not using Oasis or M3 are participating union catalog members. Library sites not using Oasis or M3 must have Z39.50 client software to access and search bibliographic information. They must also have Z39.50 server software so Oasis can broadcast their bibliographic information and allow it to be searched by other libraries. Performance is dependent on the total number of sites, circulation and patron workstations, and the communications infrastructure (T1 lines are recommended). This model runs on central server or local server solutions.

- **Catalog Searching** – A directory is created that includes the IP address of each participating library. Once this is defined, Catalog searchers can select all sites or specific sites for searching. When a search is executed, results are returned along with library locations. Non-Oasis sites require Z39.50 services to be searched by Oasis. The sites running Oasis need to be configured to search the non-Oasis sites using Z39.50. When searching non-Oasis sites, holding and transaction information is not usually available. Duplicate records are not automatically removed in a virtual union catalog.

- **Circulating from the Union Catalog** – Circulation occurs at each individual library.

- **Cataloging and Maintenance** – Reports are generated at each individual library. Virtual union catalogs can be updated centrally or locally:

- If cataloging is performed centrally, bibliographic records can be imported in batches from remote building sites to the specific record col- lections on the central server.

- If cataloging functions are performed at the local site level, cataloging can be restricted to authorized staff and specific record collections. Updates at the site level are immediately displayed in that site's Catalog.

ZServer (Z39.50 Server)

The Mandarin ZServer (Z39.50 server software) optional module allows anyone with Internet access and Z39.50 client software to access the library catalog. ZServer is Z39.50 level three compliant.

Virtual Union Catalog

A virtual union catalog is an aggregation of individual databases containing cat- alog collections. ZServer allows any library to be part of a virtual union catalog. A virtual union catalog can be created by installing ZServer on all library automation servers and commercially available Z39.50 client software on all client workstations. When a search is executed, results can be gathered from an individual collection, selected collections, or all collections in the directory. Results are returned, as well as item locations. Performance will depend on the total number of sites, circulation and patron workstations, and the communications infrastructure (T1 lines are recommended).

Licensing

ZServer is installed on the user's library automation server(s). ZServer is site licensed and there is no restriction on the number of client workstations that can access the database via ZServer. A ZServer license can be used by a maximum of five sites; there is an additional per site charge for more than five sites.

Syndetics Solutions

Syndetic Solutions, Inc. is a provider of specialized, quality bibliographic data designed to enhance library online catalogs. It acts as a centralized collection and distribution center of content data and cover images, offering a wealth of descrip- tive information relating to all types of books, videos, DVDs, CDs, and audio books.

Syndetic Solutions serves both booksellers and publishers alike by consolidating and standardizing data formats, and by providing the most cost efficient method of both gathering and disseminating the data for the widest audiences possible.

Mandarin offers an optional subscription to Syndetic Solutions, which allows patrons to access content data for items in the collection through a link in the Oasis Catalog. Patrons can view:

- Cover images
- Summaries
- Fiction and biography profiles
- Author notes
- Excerpts
- Table of contents
- Book reviews

Licensing

Syndetic Solutions is site licensed annually and there is no restriction on the number of client workstations that can access Syndetic Solutions.

Text book Module

The Mandarin Textbook Module is an optional module that enables librarians to store and manage textbook information. Textbook data such as title, author, and all publication information can be entered as a bibliographic record. Any number of copies can be added, and multiple copies can be added at once. Barcodes can be attached to each textbook and scanned when textbooks are loaned or returned from students or staff.

Oasis Inventory provides a method for recording missing textbooks that are kept in storage rooms. The system allows the school to determine loan periods that can be assigned by semester, day, week, month, year, or hour. In addition, reports can be generated by homeroom, student, teacher, subject, and so on. Lists of items not returned can be produced for teaching staff.

Licensing

The Textbook Module is site licensed and there is no restriction on the number of workstations that can access the Textbook Module.

Serials and Acquisitions

Mandarin Serials and Acquisitions is a tracking and purchasing application that automates serials receiving, routing, claims, and reports, as well as the acquisi- tions needs of today's libraries. With this application, librarians can track a serial through a 10-year subscription or publication period. It also replaces time-con- suming manual purchasing and receiving procedures; error prone, manual accounting; and inconvenient paper files with fast, automated purchasing methods, automatic fund calculation and entry, and automated purchase orders, records, and reports.

Features include:

- Automates the serial receipt schedule, creating a forecast, so the system knows when to expect each issue. Even irregular publication schedules are easily accommodated.
- Calculates budgets, balances, encumbrances, and transactions as each acquisitions transaction is performed.
- Displays current budget status and actual balances. An early warning alert of fund depletion can be set based on a library-specified value.
- Generates routing slips and purchase orders, records the receipt of each item, and generates invoices.
- Allows purchase orders to be received in full or part. The system allows for items to be returned to the vendor for exchange, credit, or refund.
- Monitors and updates status of purchase orders.
- Provides notification of overdue items and a convenient procedure to ini- tiate claim action, including customizable claim letters, on vendors that are reported to have delinquent orders.
- Creates reports displaying information allowing instant vendor, serial, item, account, and purchase order analysis. Reports can be viewed, printed, or exported to a file.
- Allows customization and limiting of user access privileges by function and level of access.
- Utilizes security profiles to add and modify user privileges, and provide password protection.

Licensing

Mandarin Serials and Acquisitions is site licensed and there is no restriction on the number of client workstations that can access Serials and Acquisitions.

Training

ONLINE TRAINING

Mandarin offers online training sessions for customers who are experienced with Mandarin software, but need instruction on the use of new features or a particular aspect of Oasis. Since these sessions are conducted via the Internet using software licensed by Mandarin, customers only need to have Internet access and a telephone to participate.

ON-SITE TRAINING

Mandarin offers on-site training tailored to an individual library's needs. Generally, a group of six or fewer participants will require two days of training to become self-sufficient with Oasis. An extra day should be added for optional modules such as Authority Control or Serials and Acquisitions. For larger groups, additional training days are recommended.

Training Outlines

Training Outlines could be customized to specific library needs.

Service and Support

OASIS SERVICE AND UPDATE AGREEMENT

The Mandarin Oasis Library Automation System includes, at no additional charge, a one-year Oasis Service and Update Agreement (SUA). This agreement includes technical support, software updates, utilities, Mandarin e-mail list membership, access to Customer's Corner and the Knowledge Base on the Mandarin Web site, and the Mandarin newsletter. Renewals to the SUA can be pur- chased annually.

After the first year, the Oasis SUA can be purchased for the local or district level. Local level support allows each library site to contact Mandarin's technical support team directly for assistance. District level support allows only district personnel to contact Mandarin's technical support team for assistance. Contact Mandarin Customer Service for current SUA pricing.

Technical Support

Mandarin's technical support team is available via modem, fax, e-mail, FTP, and toll-free telephone 24 hours a day, seven days a week, 365 days a year. Most calls are answered immediately. After-hours calls are taken by a voice message system and technicians are immediately paged. If the situation warrants, Mandarin tech- nicians are able to dial in to the library's system, using a modem and communica- tion software, and work as if on-site. Bilingual technical support in Spanish is also available.

Mandarin technicians are located in the corporate headquarters in Boca Raton, Florida, and in branch offices in New York and Puerto Rico.

Mandarin is a Microsoft Authorized Educational Reseller with MCSEs (Microsoft Certified Systems Engineers), CNEs (Certified Netware Engineers), CCNAs (Cisco Certified Network Associates), and MCPs (Microsoft Certified Professionals) on staff.

On-Site Assistance

Mandarin has technicians available for on-site maintenance or second level tech- nical assistance, such as troubleshooting software and hardware issues, consulting on hardware upgrades, capacity planning, and performance analysis. Maximum guaranteed response time is determined based on the situation.

Problem Solving Process

Software problems are handled in the following manner:

1. Customer calls Mandarin Technical Support Team via toll-free number.
2. Technician records problem and details in problem database.
3. Technician works immediately to resolve problem with customer on phone (first call solution).
4. If problem cannot be resolved with customer on phone, other support options are discussed and agreed upon (remote site maintenance, transfer of data by FTP, and so on).
5. Open problems are addressed by Level 3 technical support, management, quality assurance, or product development (according to severity and time of call).

Problem Severity Definitions

- Severity 1 – Total loss of service
- Severity 2 – Performance degradation that impacts customer
- Severity 3 – Low customer impact

- Severity 4 – No impact to customer service

Severity 1 problems are given immediate attention by a technical support team, including management and senior level technicians, until resolved. Severity 1 and Severity 2 problems that are not resolved within one day are forwarded to quality assurance department for research, resolution, or workaround. After problem res- olution is reached, the customer is contacted and assisted with implementing the resolution.

Problem Severity Statistics

Most calls are answered immediately. All calls, regardless of severity, are responded to within 60 minutes.

The three most common problems for which Mandarin receives support calls are:

- installation of library automation software by non-technical personnel
- networking issues
- special customized software installations

Software Updates

Mandarin software updates are distributed on CD or via the Mandarin Web site (http://www.mlasolutions.com) to all customers with a current SUA. Documentation updates can also be obtained from the Mandarin Web site. Updates to M3 and Oasis software are released approximately twice a year.

Software Corrections

Urgency of software corrections made will be determined by the severity of the problem. A Severity 1 problem will be worked on immediately and continuously until resolution. A Severity 2 problem will be worked on immediately and continuously until resolution. Program corrections will be provided for Severity 1 and Severity 2 problems as soon as possible. A Severity 3 or Severity 4 problem will be corrected in the next program release.

Mandarin E-mail List Membership

Mandarin hosts an e-mail list exclusively for Mandarin customers. Mandarin posts notices about updates and upgrades, as well as periodic technical tips.

Mandarin Newsletter

Impressions, Mandarin's customer newsletter, is periodically mailed to all customers with a current SUA. The newsletter is used to communicate new software developments, user tips, and library-related news.

User Suggestions

Users can suggest enhancements to the software by emailing or calling Mandarin directly. Suggestions are recorded and presented to the Mandarin Advisory Board for comment. These comments are compiled and submitted to the developers for feasibility and scheduling.

Web Hosting

Mandarin's Web hosting service provides fast and reliable Internet access to a library's collection, relieving the library of database management responsibilities and ensuring patrons uninterrupted access to the system. This is a cost-effective solution for libraries that do not have the budget, equipment, or bandwidth to host Oasis.

With Mandarin's Web hosting, a library's Oasis system is served by the latest and most reliable servers. Equipment is protected by a secure firewall and connected to users via two T1 lines. Mandarin's highly qualified technical staff monitors and maintains the system.

Benefits include:

- Patrons can access the library collection 24 hours a day, seven days a week from any computer with an Internet connection.
- Mandarin's technical staff performs all updates, as well as server and connectivity maintenance.
- The amount of Internet traffic on the library's network is reduced, eliminating the inconvenience of slower response time.
- The library does not incur the expense of Web servers, T1 lines, or support staff for Oasis.

Minimum System Requirements

SERVER			
Requirements	Hardware	Operating System	Other Requirements
Minimum Requirements	Intel Pentium4 @ 2GHz * 1 GB RAM * 2 GB free space	Windows® Server 2003 or later. Include 32 or 64 bit	IIS 6.0 or later** Microsoft® .NET Framework 3.5*** Redistributable Package 1.1***
Recommended for fewer than 5 sites*	Intel Pentium4 @ 3GHz * 4 GB RAM * 2 GB free space		
Recommended for 5 sites*	Dual-core Intel Xeon @ 2GHz * 8 GB RAM * 2 GB free space		
Recommended for 10 sites*	Quad-core Intel Xeon @ 2GHz * 8 GB RAM * 3 GB free space		
Recommended for 20 sites*	Dual Quad-core Intel Xeon @ 2GHz * 16 GB RAM * 4 GB free space		
Recommended for more than 20 sites*	Requirements will be determined based on needs		

* SITE: Defined as a Location or Library with an average of 1,000 circulation transaction per day.

** The number of users connecting to Oasis can greatly influence the hardware requirements.

  The requirements listed here are guidelines; your actual requirements may vary.

*** If the Oasis setup does not detect these on your system, they will be installed automatically.

WORKSTATION	
Web Browser	Other Requirements
Microsoft Internet Explorer 7 or later OR Firefox 3 or later	JavaScript™ enabled Java™ Java Runtime Environment (for viewing online help) Adobe® Reader® 6.0 or later (for viewing reports) Monitor's resolution should be set to 1024x768 or higher

Ordering & License

You can **instantly order** the fully licensed version of Mandarin Oasis at automation@mlasolutions.com or call 561 995 4010 opt 2.

Please visit www.mlasolutions.com for pricing information.

Contacts & Credits

POSTAL ADDRESS

Mandarin Library Automation, Inc.

P.O. Box 272308

Boca Raton, FL 33427-2308

PHONES AND FAX

(800) 426-7477 Toll-free

(561) 995-4010 Local

(561) 995-4065 Fax

REGULAR OFFICE HOURS

M-F 8:30AM - 5:00PM EST

TECHNICAL SUPPORT HOURS

24x7x365 - 24 hours/day, 7 days/week

BY EMAIL

Sales & Marketing: automation@mlasolutions.com

Customer Service: automation@mlasolutions.com

Technical Support: support@mlasolutions.com

Webmaster: webmaster@mlasolutions.com