



Union Catalog System Usage and Setup

Version 20.0

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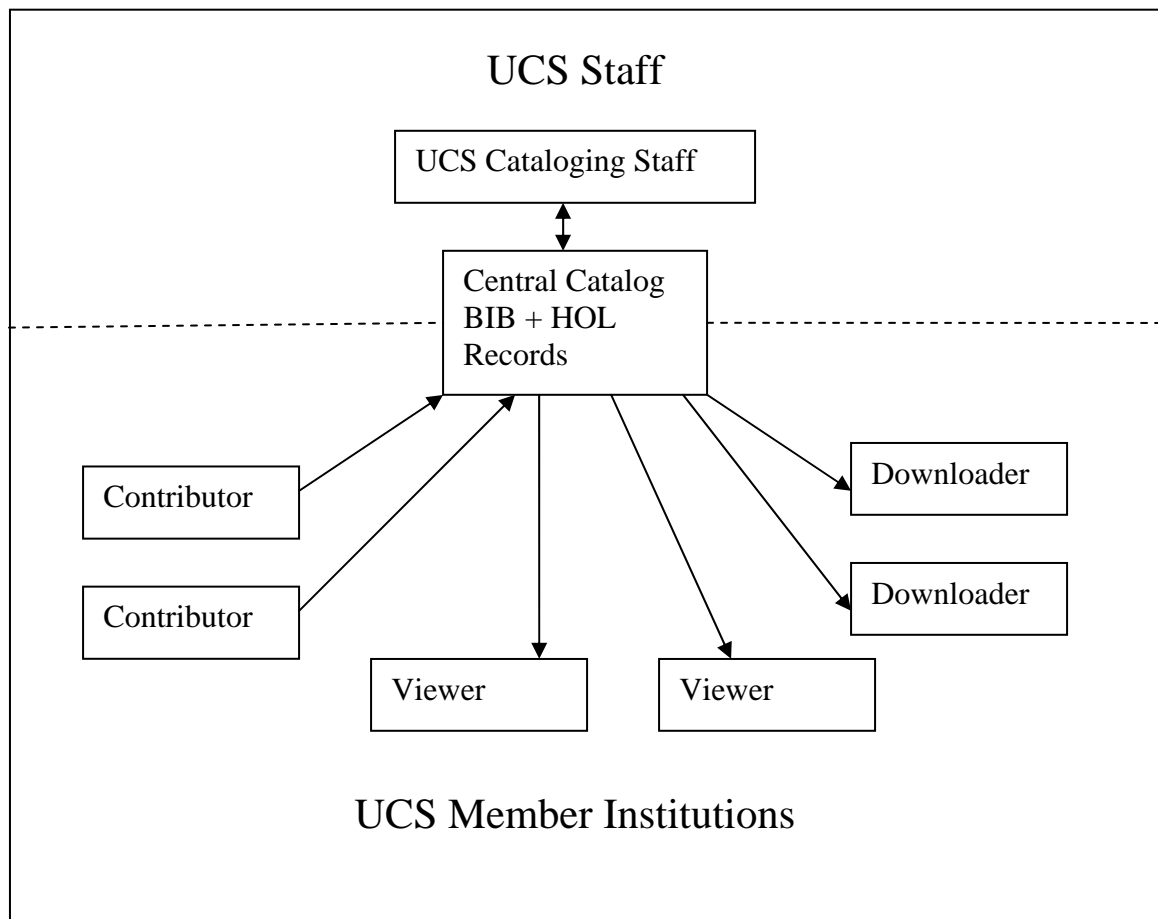
1 Overview

The Union Cataloging System (UCS) is a system where bibliographic and holdings data from various contributing libraries are joined together into one unified catalog.

The UCS system supports the uploading of records from various participating institutions into the Central Catalog and the download of cataloging information from the Central Catalog to the downloading institution's private catalog. The Central Catalog's staff updates the catalog records that have been uploaded to ensure data integrity and quality (in addition to the automatic system data integrity checks).

The end users of the Union Cataloging System (UCS) who add and download records are public libraries, academic libraries, and special libraries (scientific and technical libraries, for example), as well as other bibliographic data users such as book vendors and publication press.

The participating institutions, in addition to uploading catalog records, can supply their holdings information and can update it on an ongoing basis.



1.1 How is the Union Catalog Different from a Standard Aleph Catalog?

A Union Catalog differs from a standard catalog in a number of significant ways. For example:

- A Union Catalog contains the holdings of multiple libraries.
- A Union Catalog does not contain item records.
- A Union Catalogs is characterized by the frequent loading of records from contributing libraries.

Aleph has two Union Catalog models:

- Each library's bibliographic record is retained (i.e. there are multiple bibliographic records per title) with holdings data embedded in the bibliographic record.
- A single bibliographic record for each title with multiple holdings records linked to this single bibliographic record. This is the UCS model.

2 Union Catalog Structure

The Union Catalog is a standard Aleph catalog and is indexed and searched using standard Aleph tools.

Holdings data is held in a separate HOL library. The HOL records are linked to the bibliographic records with a separate record for each location.

2.1 Bibliographic Records in the Union Catalog

The UCS catalog is built using the Aleph union catalog and its mechanisms. This means that there is a single cataloging record for each title with a linked HOL record for each holdings library (location).

Multiple records for the same title are prevented through match and check_doc procedures, which compare a record with records in the database and prevent the addition of new records for the same title.

2.2 Holdings Records in the Union Catalog

The holdings data is held in linked HOL records. Each holdings record has an LKR field, which links it to a bibliographic record and an OWN field, which identifies the institution whose holdings are reported and is used for update control. Only the record owner (i.e. the contributing library) is allowed to update the record. Automatic fix_doc procedures are used to add the OWN field to new records.

Each holdings record has an SID field. The SID field is an Aleph proprietary field. It serves as a pointer from the record in the Union Catalog to the bibliographic record in the

local catalog. It contains information about the local library code and the system number in the local library.

The holdings record includes information such as library and call number, electronic location, and summary holdings.

There are no items in a Union Cataloging System. The items are maintained at each of the contributing member's ILS systems.

3 Creating the UCS Catalog

The UCS must be installed in its own Aleph environment, whether installed on a separate server or the same server as another Aleph application.

The following sections list the steps to be performed when creating the UCS catalog.

3.1 Creating Aleph Libraries

Note:

This chapter details the special setup and the considerations that differ from the instructions in the *How to Open a New Library - 18.01* document.

The following libraries need to be created:

- 1 BIB libraries
- 1 HOL library
- 1 USR library

There is no need for a separate ADM library; the USR library functions as the ADM library.

An AUT library may also be used.

The following name conventions, used for library types, are relevant for the UCS catalog:

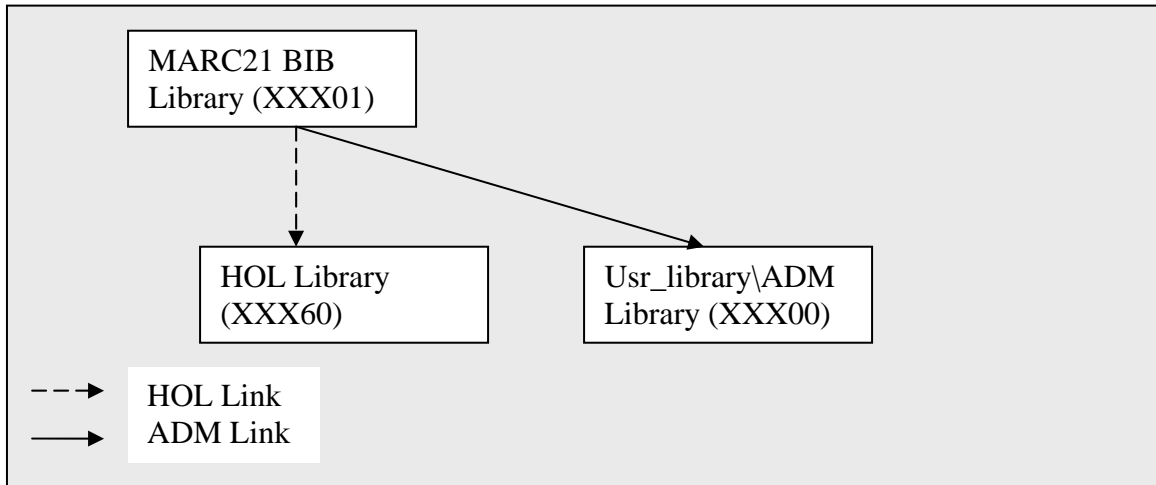
- xxx00 – For the usr_library library type
- xxx01-xxx09 – For the bibliographic records library
- xxx60-xxx69 – For the holdings records library

The following Aleph demo libraries are relevant for UCS as template libraries:

- USR00 – For usr_library (users - patrons and staff) and pw_library (password)
- USM01 – For the bibliographic records library that uses the MARC21 cataloging standards
- USM60 – For holdings records library

3.2 Setting Library Definitions

The following is a description of the relationship between UCS libraries.



3.2.1 Defining the Libraries Relationship

Implementing the above relationship is done by setting \$Alephe_tab/library_relation as follows:

```
!1 2 3 4 5 6
!!!-!!!!!!-!!!!!!-!!!!!!-!!!!!!-!!!!!!>
ADM xxx01 xxx00

PAS xxx00 xxx01 xxx60

BIB xxx60 xxx01

HOL xxx01 xxx60
```

3.2.2 Defining the BIB Library

The \$data_tab/tab100 table of the BIB libraries must be set up to identify that the BIB library is a UCS union catalogue. This is done by setting the UNION-LIBRARY variable to 3, as follows:

```
UNION-LIBRARY=3
```

3.2.3 Defining the ADM and usr_library

Patron and staff information is stored in the `usr_library`. In case of a UCS, it also serves as a pseudo ADM library for some upload configurations. The `$alephe_root/aleph_start` file must have a definition such as the following:

```
setenv    usr_library      XXX00
```

3.3 Converting Existing Databases Into UCS

Existing databases may be converted and uploaded into the UCS by using an uploading batch service. This chapter describes the exact steps and configurations that are required for conversion.

3.3.1 Preliminary Steps

The following preliminary steps are required to be performed before the upload action is executed:

1. Create the last-loader-log-no counter in the BIB library. Creating the counter is done using the util G/2 utility.
This counter is required to successfully log the upload actions in the Z73 Oracle logger table.
2. Set the `tab_loader` table in the `usr_library data_tab` directory.
The `tab_loader` table is necessary in order to define parameters for the HOL record upload. A single row must be defined for every institution that is defined in the `tab_institution` table. The following columns must be defined for every institution:
 - Column 1: The institution code as is defined in `tab_institution`.
 - Column 2: The OWN code that is used for each institution code. This value must be equivalent to the institution code.
 - Column 3: OWN group code. This column must contain the same value for all rows. The value used is not important.
 - Column 5: HOL creation method. This column must be set to "4" for all institutions.
 - All other columns must be set to "0" for all institutions.

For example:

```
!      1              2              3      4 5 6 7 8
!!!!!!!!!!!!-!!!!!!!!!!!!-!!!!!!!!!!!!-!-!-!-!-!
011001      011001      GROUP      0 4 0 0 0
```

- Set the tab_mapping table in the usr_library data_tab directory. This table is necessary in order to map the fields of uploaded records into the fields of created HOL records. Separate mappings are required for each institution.

The following mappings must be defined for converting the #910 field when creating HOL records:

Source Record Field\Subfield	Target Record Field\Subfield	Meaning of field
910 \$\$a	852 \$\$a, 852 \$\$b, SID \$\$b	Institution code
910 \$\$b	8524 \$\$j	Call Number
910 \$\$i	866 \$\$a	Serial Vol/Iss Info
910 \$\$z	852 \$\$z	ILL Service type
910 \$\$u	866 \$\$a.	Serial Absent info
910 \$\$u	866 \$\$z 'MISSING' text	Serial Absent info
910 \$\$n	SID \$\$c	Local Unique Identifier

For example:

!	1	2	3	4	5	6	7	8
!!!!!!								
01####		910## a		8524 a		e/HOL	Y	Y
01####		910## az		8524 az			Y	Y
01####		910## a		8524 b			Y	Y
01####		910## b		8524 j			Y	Y
01####		910## iu		866 aa			Y	Y
01####		910## u		866 z		s/*/Missing/	Y	Y
01####		910## a		SID b		e/HOL	Y	Y
01####		910## a		SID b			Y	Y
01####		910## n		SID c			Y	Y

Note: The “e/HOL” command is mandatory in order to create separate HOL records for each institution.

- Set the check_doc table in the data_tab directory of the BIB libraries.
- Create a section that lists the check_doc procedures that are performed when a new record is created. For example:

!	1	2
!!!!!!		
UCS	check_doc_line	
UCS	check_doc_field_008	

- Set the check_doc_mandatory table in the data_tab directory of the BIB libraries.

- **Report File** – Report file name. The file is created in the data_print directory.

Input file comments:

- Since the input file of the batch service must be in Aleph Sequential format, input files of other formats must first be converted using standard Aleph processes such as the Convert MARC Records batch jobs (file-01 and file-02).
- The institution code is defined in the 049 tag of the record. The institution code must have a matching Aleph staff user record (Z66) with valid Z66-USER-OWN-CREATE and Z66-USER-CAT-LEVEL values. The new records is created with that OWN value and Cataloger Level. If no institution code is defined in the 049 field, then the institution code is set to **UCS**. This locks the BIB records for institution update.
- The holding data is held in the 910 field of the BIB record and is mapped to HOL record fields using the tab_mapping table. For example:

HOL Record field\subfield	Information
910 \$\$a	Institution code
910 \$\$b	Call Number
910 \$\$i	Serial Vol/Iss Info
910 \$\$z	Service type
910 \$\$u	Serial Absent info
910 \$\$n	Local Unique Identifier

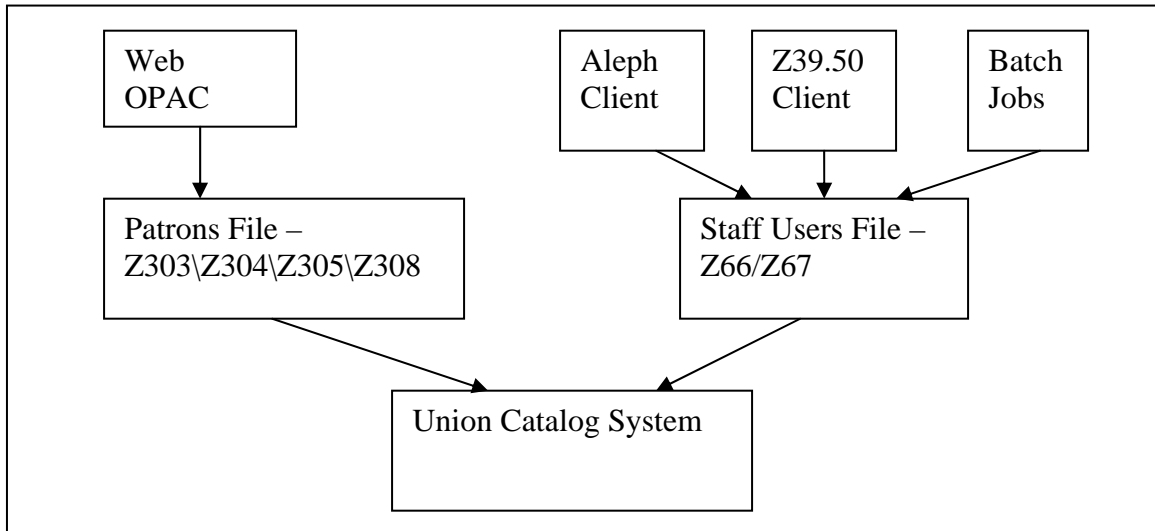
4 Union Catalog Users and Institutions

Union catalog users may use the following interfaces to search, view, upload, and download UCS records:

- Aleph GUI
- Aleph Web OPAC
- Batch jobs
- Z39.50 clients

For UCS users to access the Union Catalog via the Aleph GUI by Z39.50 clients or to upload records by a batch process, they have to be defined as Aleph staff users and have valid Z66/Z67 records.

For UCS users to access the Union Catalog from the Web OPAC, they have to be defined as Aleph patrons and have valid Z303\Z304\Z305\Z308 records.



4.1 User Definition Considerations

The following fields are relevant for defining UCS Aleph staff users:

- The Cataloger Level (Z66-USER-CAT-LEVEL) field defines the Cataloging level of the user. A predefined range is used for UCS staff only (e.g. 50-99). Member institution users are defined with a cataloging level that is lower than the UCS range (e.g. 00-49).
- The Cat. Own Permission (Z66-USER-OWN-CHECK) field defines the institution to which the user belongs.
- The Cat. Own ID (Z66-USER-OWN-CREATE) field defines the OWN that are created when the user uploads a record.

User Password Information

User: _____ Name: _____

Password: _____ Department: _____

User Library: _____ Note 1: _____

Cataloger Level: 00 Note 2: _____

Function Proxy: _____ EMail: _____

Cataloger Proxy: _____ Address: _____

Budget Proxy: _____ Telephone: _____

Order Unit/Sublibraries: _____ Expiration Date: 00/00/0000

Cat. OWN ID: _____ Last Alert Date: 00/00/0000

Cat. OWN Permission: _____ Blocked

Circ. Override Level: 00 Block Reason: _____

ILL Unit: _____ ERM User: _____

ERM Password: _____

OK Cancel Help

The following fields are relevant for defining Web OPAC UCS users:

Z303-PROFILE-ID – This field defines the institution to which the user belongs.

1. Global Patron Details | **2. Global Blocks and Notes**

Open Date: 28/06/89 Update Date: 26/07/07

Patron ID: 00000036 Pincode: 00000036

Barcode: 00000036 Barcode Verification: 00000036

Name: Aad_land, Dustin

Salutation: _____

Title: _____ Date of Birth: 00/00/0000

Gender: _____ Place of Birth: _____

ILL Unit: _____ Title Request Limit: 0000

ILL Total Limit: 0000 Language: CHN

ILL Active Limit: 0000 Budget: _____

Sponsor's ID: _____ Profile: 010099

Primary ID: _____ Home Library: _____

Proxy Type: 00 Dispatch Library: _____

Mail Attachment: H Data Export Consent

Send All Letters to Patron

4.2 Defining the UCS Users

There are two different types of UCS users:

- Users that belong to member institutions (contributors\viewers\downloaders)
- UCS staff users

4.2.1 Defining Member Institutions Users

Member institution users who wish to perform upload or download must be linked to a valid institution code.

4.2.2 Defining Institutions

Institutions are defined in a BIB library data_tab table named tab_institution.

The purpose of the tab_institution table is to define institution specific configurations. The table includes definitions of institution code, download ratio, record format allowed for load, and institution URL. Below is a description of the table:

- Column 1: Institution code (10 characters)
- Column 2: Download Ratio (10 numeric characters in the format: {7 digits}•{2 digits}).
- Column 3: Allowed Record Formats (30 characters).
This is a list of formats that the institution is permitted or not permitted to upload. The first character is "+" or "-" where:

"+": Indicates permitted formats

"-": Indicates non-permitted formats

Immediately following the "+" or "-" is a list of permitted or non-permitted list of formats (two characters), each separated by a comma.

Note: The formats that are listed in this column are the code equivalents of the records' format. The record format is taken from subfield \$\$k of the 245 field for MARC21 records, and from subfield \$\$b of the 200 field for UNIMARC records. The format is translated to codes by the tab_formats table.

- Column 4: Institution URL address (100 characters).

For example, consider the following setup:

tab_institution:

!	1	2	3	4
!!!!!!!!!!!!-!!!!!!!!!!!!-!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!				
!!!!!!!!!!!!!!!!!!!!!!!!!!!!				
011001	5.2	+01,02	http://www.nyc.gov.co/old	
011111	5.2	-04	http://www.university.co/F	

tab_formats:

!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!
01 Rare
02 Periodicals
03 Monograph
04 ##

This allows institution 011001 to upload MARC21 records only if they have the values “Rare” or “Periodicals” in subfield \$\$k of the 245 field. Institution 011111 is also allowed to load “Monograph” titles.

Note: The 245 \$\$k or 200 \$\$b values are compared with the tab_formats values only after going through filing using the 99 section of tab_filing.

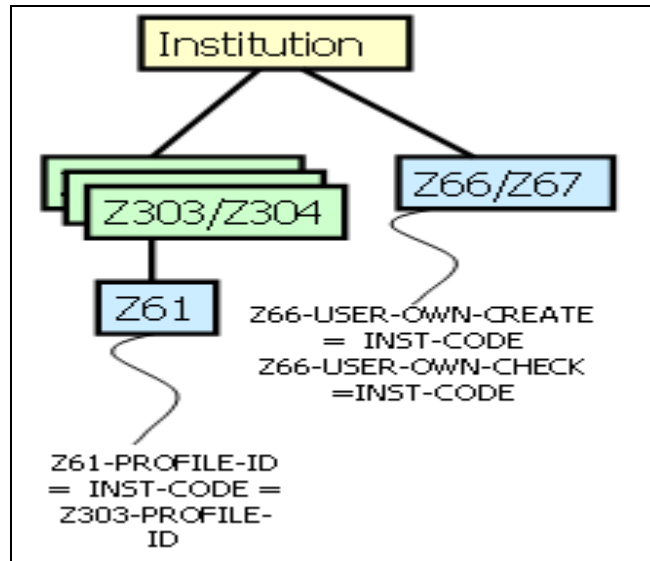
Defining Users :

There are three different types of users that access the Union Catalog:

- View only users – Such users merely have to be defined with a valid user (Z303 patron for Web OPAC or Z66 staff user) for logging into the system.
- Download users – Users that want to download UCS records must be defined as belonging to a valid institution.
 - GUI users – GUI users must have the tab_institution code of their institution defined in the Z66-USER-OWN-CHECK field.
 - Web OPAC users – Web OPAC users must have the tab_institution code of their institution defined in the Z303-PROFILE-ID field. This means that there must be a valid profile (Z61 record) with this profile ID.
- Upload users – Users that want to upload UCS records must be defined as belonging to a valid institution.
 - GUI users – GUI users must:
 - i. Have the tab_institution code of their institution defined in the Z66-USER-OWN-CREATE and Z66-USER-OWN-CHECK field.
 - ii. Have a cataloging level that is subject to the institution’s consideration but must be lower than the UCS range assigned to UCS catalogers.

For uploading by a batch process (see section 5.1) the institution code in tab_institution must also be defined as a staff (Z66) user. The user must have a valid cataloging level that is lower than the UCS s range assigned to UCS catalogers.

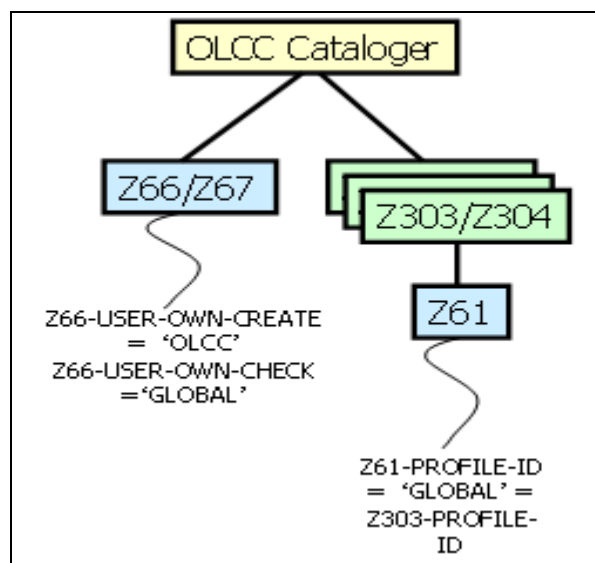
In other words, to upload records that belong to an institution that has the code 010099 in tab_institution, a user with Z66-USER-NAME = 010099 must be defined.



4.2.3 Defining UCS Staff

UCS staff can access the UCS records from the Web OPAC and GUI.

- GUI UCS users must have:
 - The value GLOBAL in their Z66-USER-OWN-CHECK field
 - The value UCS in their Z66-USER-OWN-CREATE field
 - A cataloging level that is within the UCS staff designated range
- Web UCS users must have the value GLOBAL in their Z303-PROFILE-ID field. This means that there must be a valid profile (Z61 record) with this profile ID.



5 Upload

The upload action is performed by a member institution or an UCS staff user who adds BIB and HOL information to the UCS catalog. The following actions take place when records are uploaded:

- UCS BIB records are created, updated, or deleted. Records are matched with existing records using Aleph match procedures.
- UCS HOL records are created or updated.
- If a new BIB record is created or if the BIB record is deleted, then an Upload event is recorded.

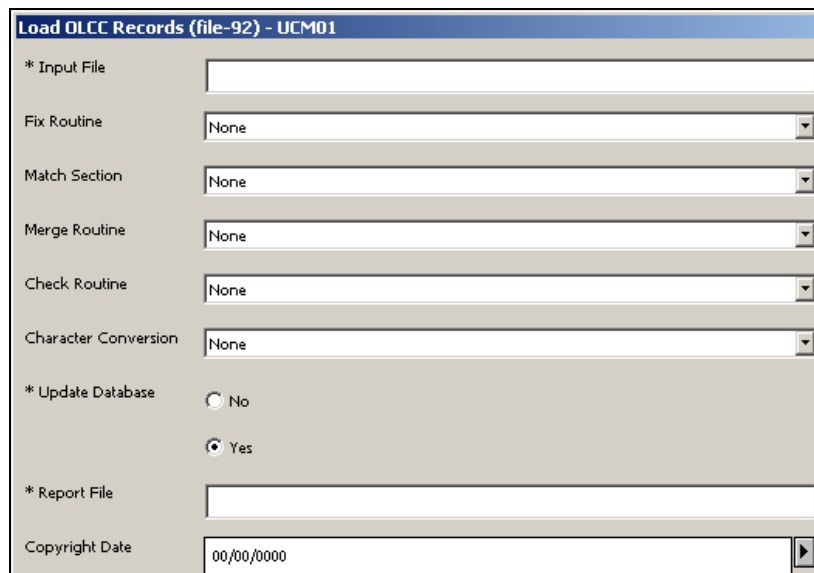
There are three available interfaces for performing an upload action:

- Batch Job
- From the Cataloging GUI
- From a Z39.50 Client

5.1 Batch Upload

5.1.1 Running the Batch Uploader

The upload action is done by executing the “Load OLCC Records (file-92)” batch job with an input file of the records intended for loading. For the preliminary configuration that is required, see section [3.3.1 Preliminary Steps](#).



The screenshot shows a configuration window titled "Load OLCC Records (file-92) - UCM01". It contains the following fields and options:

- * Input File: A text input field.
- Fix Routine: A dropdown menu with "None" selected.
- Match Section: A dropdown menu with "None" selected.
- Merge Routine: A dropdown menu with "None" selected.
- Check Routine: A dropdown menu with "None" selected.
- Character Conversion: A dropdown menu with "None" selected.
- * Update Database: Two radio buttons, "No" and "Yes", with "Yes" selected.
- * Report File: A text input field.
- Copyright Date: A text input field with "00/00/0000" and a right-pointing arrow button.

The parameters for the initial conversion upload action must be set as follows:

- Input File – The input file name. The file name must be in lower case and must be located in the data_scratch directory of the library.
- Fix Routine – The tab_fix section that is used to fix the uploaded records.
- Match Section – The tab_match section that is used to identify similar records.
- Merge Routine – The merge routine, as specified in tab_merge, that is performed when the uploaded record is matched and merged.
- Check Routine – A section that was defined in the check_doc configuration table for checking the uploaded records' validity.
- Character Conversion – Select the required character conversion.
- Update Database – Set this parameter to **No** if you only wish to create a report without actually uploading. Set this parameter to **Yes** if you wish to perform the upload.
- Report File – Report file name. The file is created in the data_print directory.
- Copyright Date – Use this field if the uploaded records should be copyright protected. The date entered in this field is used to set the copyright expiry date. For an explanation of the copyright protection feature, see section [7.5 Copyright Protection](#).

Input file comments:

- The input file of the batch service must be in Aleph Sequential format. Therefore, input files in other formats must first be converted using standard Aleph processes, such as the “Convert MARC Records” batch jobs (file-01 and file-02).
- The institution code is defined in the 049 tag of the record. The institution code must have a matching Aleph staff user record (Z66) with a valid Z66-USER-CAT-LEVEL value, with a Z66-USER-OWN-CREATE, and with a Z66-USER-OWN-CHECK that are equal to the institution code. For example, if institution 011001 wants to upload using the batch, a user such as the following must be defined:

User Password Information			
User:	011001	Name:	Demo Institution
Password:		Department:	
User Library:	USR00	Note 1:	
Cataloger Level:	00	Note 2:	
Function Proxy:		EMail:	
Cataloger Proxy:		Address:	
Budget Proxy:		Telephone:	
Order Unit/Sublibraries:		Expiration Date:	00/00/0000
Cat. OWN ID:	011001	Last Alert Date:	00/00/0000
Cat. OWN Permission:	011001	<input type="checkbox"/> Blocked	
Circ. Override Level:	00	Block Reason:	
ILL Unit:		ERM User:	
		ERM Password:	

New records are created with the OWN value and Cataloger Level of the Z66 values.

If no institution code is defined in the 049 field then the institution code is set to “OLCC”.

Updating existing records is subject to the standard OWN checks, based on the institution’s Z66-USER-OWN-CHECK field.

- In order to update or add a HOL record, the input file must also include the HOL record’s BIB record. Matching the HOL record is based not only on the HOL information but also on BIB matching.
- The holding data is held in the 910 field of the BIB record, and is mapped to HOL record field using the tab_mapping table. For example:

HOL Record field\subfield	Information
910 \$\$a	Institution code
910 \$\$b	Call Number
910 \$\$i	Serial Vol/Iss Info
910 \$\$z	Service type
910 \$\$u	Serial Absent info

5.1.2 Uploader Batch Flow

The loader performs the following actions:

- A character conversion is performed for each record, according to the selection in the job’s input parameters.
- The 049 field is checked. If the field is empty, a value of “OLCC” is used.
- The institution’s tab_loader values are retrieved.

1. Handling the BIB

A matching BIB record is searched for in the catalog, using the input match routine parameter.

If no matching records are found:

- The institution is checked. The tab_institution table is checked to see if the institution code exists and if the institution is allowed to upload the record type.
- The check doc routines are performed.
- The new BIB record is created, including the OWN and CAT fields.
- An upload event is created in the Z15 table.

If more than one matching record is found:

- The BIB record is rejected. The HOL information is also rejected since BIB matching was not successful. This reject is reported in the report.

If a single matching record is found:

- The institution's cataloging level (Z66-USER-CAT-LEVEL) is checked against the record's CAT field. If the institution's level is lower than the CAT field level of the record, then the BIB record is not updated. The HOL information is still accepted.
- If the BIB record is updated, the records are merged according to the merge routines that are defined in the batch job's input parameters.
- Delete BIB
The matched record is deleted if the input record has one of the following indications:
 - Position 06 of the LDR field has a value "d"
 - Position 23 of the LDR field has a value X'03'

The checks that are defined in the check_doc section OCLC-DELETE are tested. The record is deleted if the checks succeed.

If the BIB record is deleted, then a Z15 "Delete" event is created.

2. Handling the HOL

HOL data is extracted from the BIB record being uploaded.

If no matching BIB records are found, then the HOL record is created together with the BIB record upload.

If a single matching BIB record is found, the input record's HOL data is checked against the matched BIB record's HOL records. The HOL matching is done based on the following subfields of the 852 field: b,c,h,i,j,k,m,l.

- If no matching HOL record is found, then a HOL record is uploaded to the catalog. The tab_mapping definitions are used

to create new HOL record fields based on the existing ones (see 3.3.1) and a Z15 “HOL Upload” event is created.

- If a matching HOL record is found, then it is replaced by the input file’s HOL data. The tab_mapping definitions are used to create new HOL fields based on the existing ones.

Note: The holding data is held in the 910 field of the BIB record and is mapped to HOL record field using the tab_mapping table.

3. **Recording the Action**

If a new BIB or HOL record has been created as a result of the upload action, then an Upload Event is created in the Z15 table. The event reflects the type of upload, i.e. that is a batch action.

If a BIB record has been deleted as a result of the upload action, then a Delete Event is created in the Z15 table. The event reflects the type of deletion, i.e. a batch action.

5.2 **Cataloging GUI Upload**

Creating, updating, and deleting a record may also be done in the Cataloging GUI. Standard cataloging procedures are used, including OWN and Cataloging level checks.

The special routines that are carried out for UCS cataloging are:

- The institution is checked. The tab_institution table is checked to see if the institution code exists and if the institution is allowed to upload the record type. This is true also for HOL records.
- An upload event is created in the Z15 table. The event reflects the type of upload, i.e. that it is an online action. This is true also for HOL records.
- If a delete action has been performed, then a delete event is created in the Z15 table. The event reflects the type of deletion, i.e. that it is an online delete action.

When cataloging HOL records using the Cataloging GUI, the following setup in the HOL library’s tab_fix table enable the automatic population of the SID field and subfield \$\$a of the 852 field:

```
fix_doc_hol_852_ucs  
fix_doc_create_hol_sid_ucs
```


5.3 Z39.50 Client Upload

Uploading a record from a Z39.50 client is done using the standard Z39.50 Extended Services (ES) Request that is supported by Aleph for updating the database. Refer to the Aleph Z39.50 Server documentation for a description of the Aleph Z39.50 server, the required server side configurations, staff user privileges, etc. For the preliminary configuration that is required, see Section [3.3.1 Preliminary Steps](#).

The following UCS specific remarks should be noted when configuring the Z39.50 server to allow Z39.50 clients to upload to the UCS:

- The user ID with which the Z39.50 client accesses the Z39.50 server must be an Aleph staff user, defined according to the UCS user definition rules, as defined in part 4 of this document.
- A `z39_server_[BASE].conf` file must be configured in the `alephe/tab/z39_server` directory, where `[BASE]` is the name of the database to which the uploads are done.
- The “general settings” section of the `alephe/tab/z39_server/z39_server_[BASE].conf` must include the following line:

```
es-special-update
```

- All of the rules that apply for batch uploading (see 5.1) are true also for Z39.50 uploading. For example:
 - The record must belong to a valid institution, and the record’s format must be allowed according to `tab_institution`.
 - BIB deletion is done based on the incoming record’s LDR indications.
 - HOL records are uploaded together with the BIB records in which the HOL data is present.
 - The match, merge, and fix procedures that are used are all preset to “OLCC”.
- The owner of the uploaded record is determined by the incoming record information. In other words, the incoming record may have OWN or 049 fields with institution identification. If no OWN or 049 fields exist in the incoming record then the institution identification (Z66-USER-OWN-CHECK) of the Z39.50 user is used.
- The institution code must have a matching Aleph staff user record (Z66) with a valid Z66-USER-CAT-LEVEL value and with Z66-USER-OWN-CREATE and Z66-USER-OWN-CHECK that are equal to the institution code. For example, if a staff that belongs to institution 011001 wants to upload using Z39.50 client, a user such as the following must be defined:

New records are created with that OWN value and Cataloger Level.

- The Z15 event that is created upon Z39.50 upload is the same as a for batch upload. The event reflects the type of upload, i.e. that it is a batch action. A Z15 event is also created if a new HOL record has been created. If a delete action has been performed then a delete event is created in the Z15 table. The event reflects the type of deletion, i.e. that it is a batch action.

6 Search and View

6.1 Search

A catalog search can be conducted using the following interfaces:

- Standard Aleph GUI client searching tools
- Standard Web OPAC searching tools
- Z39.50 clients

6.2 BIB Record View

A record is fully displayed only if the viewer is one of the following:

- UCS staff.
- A member of the institution that uploaded the record
- A member of an institution that downloaded the record

If none of the above is true, the user sees only a partial view of the record. The exact fields that are displayed are set in the tab_display_fields table, which is set up in the BIB libraries' data_tab directory. The table has the following format:

```
! COL 1. 5; ALPHA_NUM, UPPER; #;
!           Field code;
!           Field code;
```

For example:

```
!!!!
LDR
FMT
100##
24###
```

6.3 Holdings View

The Web OPAC full view of the bibliographic records can be configured to display the record's holdings data in addition to the bibliographic data. This can be done using standard Aleph expand and Web OPAC display configurations.

The Web OPAC displays the holdings information on a separate line for each library that owns holdings of the BIB title. The following is a list of fields displayed for each holdings library:

- Library Name – The name of the library. The library name field serves as a link to the institution's local catalog.
- Call Number – The holding's call number. The call number is taken from the following HOL record fields and set information :
 - 852 field, subfield \$\$k (prefix)
 - 852 field, subfields \$\$hij (usually mutually exclusive)
- Service Provided – A description of the services that the local library provides for the holdings. For example, "Document delivery service provided".
- Notes – A textual note supplied by the local library.

BIB Data

LC No. ND619.T85 G36 2005
 ISBN 8836606067
 Geographic Area e-it—
 Main Entry Galleria d'arte moderna (Florence, Italy).
 Title La Galleria d'arte moderna di Palazzo Pitti : storia e collezioni / a cura di Carlo Sisi ; saggi di Vanessa Gavioli, Carlo Sisi ; schede delle opere di Silvestra Bietoletti ... [et al.] ; fotografie di Carlo Cantini.
 Imprint Cinisello Balsamo (Milano) : Silvana, c2005.
 Descr. 319 p. : col. ill. ; 29 cm.
 Bibliogr. Includes bibliographical references (p. 314-317).
 Corp. Sub. Galleria d'arte moderna (Florence, Italy) — Catalogs.
 Subject - Lib. Cong. Painting, Italian — Italy — Tuscany — 19th century — Catalogs.
 Painting, Italian — Italy — Tuscany — 20th century — Catalogs.
 Painting — Italy — Florence — Catalogs.
 Add. Entry Sisi, Carlo.
 Gavioli, V. (Vanessa)

Library	Call Number	Service Provided	Notes
National Library of China	2-2006/J231-	Document delivery service	
National Library of China	285.46/G166	provided. PhotoCopy delivery service provided.	

Holdings Data

Choose format: [Standard format](#) [Catalog card](#) [Citation](#) [Name tags](#) [MARC tags](#)

6.3.1 Filling the BIB Records with HOL Information

In order to fill the HOL records with the information that is displayed in the Web OPAC, the following steps must be taken.

The tab_locations table is required for setting parameters that are specific to the institution, such as the institution name and a call number prefix.

A demo table is found in the USM90 demo library. The table can be located in the BIB library's data_tab directory, the data_files directory, or the data_scratch directory. The table is loaded to the Z124 Oracle table, as is described in the following steps.

In tab_locations, there must be a single line for each member institution. Only 4 columns are required for each row of the member institution:

- Column 1: Mandatory. The institution code.
- Column 5: Mandatory. A unique code value for each institution.
- Column 8: Mandatory. A descriptive campus name.
- Column 9: Optional. Call number prefix.

For example:

```
! 1          2      3      4      5      6      7      8          9
!!!!!!!!!!!!-!!!!-!!!!!!-!!!!!!-!!!!!!-!!!!!!-!!!!!!-!!!!!!-!!!!!!
011001          A          National Library
```

1. Add the Z124 table to the Oracle tables of the BIB library by performing the following steps:

a. Define the following lines in the file_list of the BIB library.

TAB	z124	1M	1M	ts0
IND	z124_id	1M	1M	ts1

Note: The sizes and table spaces may change depending on the installation's needs.

b. Execute util A/17/1 to create the Z124 table in the BIB library.

c. Run the p_load_z124 process in order to load Z124 with the tab_locations information.

- If the tab_locations table is in the data_files directory, run the process as follows:

```
csh -f $Aleph_proc/p_load_z124 <BIB Library>,z124,n,n,n,n
```

- If the tab_locations table is in the data_tab directory, run the process as follows:

```
csh -f $Aleph_proc/p_load_z124 <BIB Library>,../tab/tab_locations,z124,n,n,n,n
```

- If the tab_locations table is in the data_scratch directory, run the process as follows:

```
csh -f $Aleph_proc/p_load_z124 <BIB Library>,../scratch/tab_locations,z124,n,n,n,n
```

2. In the tab_expand table of the BIB library's data_tab directory, define the two new expand programs for the UCS Web OPAC holding display:

WEB-FULL	expand_doc_bib_hol_ucs	
WEB-FULL	expand_doc_ucs_hol	DIRECT=N, SORT=1
WEB-FULL-1	expand_doc_bib_hol_ucs	
WEB-FULL-1	expand doc ucs hol	DIRECT=N, SORT=1

3. Subfield \$\$z of the 910 field in the HOL records of local libraries can contain a code which is used to convey information about the services that the local

owner provides for the holdings. This one digit number, that may be recorded in this field, is translated by the \$aleph_error_<lng>/www_f_heading file. The values 5400 - 5409 are reserved for this purpose with the fourth digit of the error code being the 910 field code.

For example, consider the following setup:

```
5400 L No Inter Library Loan service provided.
5401 L Inter Library Loan service provided.
5402 L Document delivery service provided.
5403 L PhotoCopy delivery service provided.
```

This causes a HOL record with the value 2 to have the following message displayed in the OPAC Service Provided column:

“Document delivery service provided.”

A value of 23 results with the following message being displayed:

“Document delivery service provided. PhotoCopy delivery service provided.”

6.3.2 Displaying HOL Information

In order to view the holdings display, the following line must be added to the tab100 table of the BIB library:

```
X852-HOLDING=Y
```

The following fields must be defined in the tab_display_fields table of the BIB library’s data_tab directory, in order to support the holding view for all users.

- HOL
- 852
- 866
- SID

The tab01.<lng> table in the BIB library’s data_tab directory must have entries for the following fields in the order described below. This is required for sorting the displayed holdings information:

D	SID	00 0000	SID	LSystemId
D	852	00 0000	852	LLocation
D	866	00 0000	866	LHoldings-Bibliographic

The following HTML files set the displayed information:

```
full-set-head-1-ucs
full-set-head-2-ucs
full-set-body-1-ucs
```

These files may be configured to set what information should be displayed and what should not. For example, removing call number information from the display is done by configuring these HTML pages.

7 Download

The download action involves a member institution download of searched records to a local destination. The downloaded file may be in one of two formats:

- MARC (ISO 2709)
- MARC_XML

The download action has the following consequences:

- The downloading institution can be billed according to UCS defined criteria.
- UCS defined hidden fields are included in the downloaded record and are subsequently viewable in the OPAC for the downloading institution.
- The download action is recorded in an event table.

Downloading an UCS record may be done using any of the following interfaces:

- Web OPAC
- Cataloging GUI
- Z39.50 client
- Download batch job

7.1 Web OPAC Download

The user that is logged into the Web OPAC and wants to download a record, must be defined as a valid OPAC user that belongs to a valid institution (see Section [4.2.1 Defining Member Institutions Users](#)). Performing the download action is done by OPAC Save/Mail action when choosing the MARC format or the MARC_XML format.

Mail or Save a Document

You have 2 options:
- Send the record by e-mail (by entering an e-mail address), or
- Save the record locally on your PC (by leaving the e-mail blank)
The record will be formatted according to your choice.

Record format
Select Predefined Format: Card Format
OR
Create Your Own Format: MARC Tags
Name Tags
MARC Format
ALEPH Sequential
OPAC Format
 ASCII (recommended / default) ISO 8859-1 (Roman character sets)
 ISO 10646-1 (Unicode character sets) ISO 8859-1 (Roman character sets)

Subject
Name
E-mail
Text (optional)

Notes Subject System Number

Choosing one of the above mentioned formats results in:

- The record being saved in the required format.
- A download event being recorded in the Z15 table.
- The hidden fields being displayed for the institution's members.

Note: When choosing either the MARC or MARC_XML formats the only option for saving is by saving on the local PC. The e-mail option is not valid.

Below are examples of a record saved in MARC format and in MARC_XML format:

MARC XML:

```
<?xml version = "1.0" encoding = "UTF-8"?>
<collection xmlns=http://www.loc.gov/MARC21/slim" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.loc.gov/MARC21/slim
http://www.loc.gov/standards/marcxml/schema/MARC21slim.xsd">
<record xmlns="http://www.loc.gov/MARC21/slim" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.loc.gov/MARC21/slim
http://www.loc.gov/standards/marcxml/schema/MARC21slim.xsd">
<leader> nam 22 a 4500</leader>
<controlfield tag="001">000000407</controlfield>
<controlfield tag="005">20050228093349.0</controlfield>
<controlfield tag="008">050131s2005 cc ab 000 0 eng d</controlfield>
<datafield tag="020" ind1=" " ind2=" ">
<subfield code="a">7119037498</subfield>
</datafield>
<datafield tag="040" ind1=" " ind2=" ">
<subfield code="a">CcBjTSG</subfield>
</datafield>
<datafield tag="043" ind1=" " ind2=" ">
<subfield code="a">a-cc-pe</subfield>
</datafield>
<datafield tag="090" ind1=" " ind2=" ">
<subfield code="a">H319.4</subfield>
<subfield code="b">S575</subfield>
</datafield>
<datafield tag="245" ind1="0" ind2="0">
<subfield code="a">Sights with stories in old Beijing </subfield>
<subfield code="c">[translated and edited by Zhenru Xiong].</subfield>
<subfield code="k">monograph</subfield>
</datafield>
<datafield tag="260" ind1=" " ind2=" ">
<subfield code="a">Beijing :</subfield>
<subfield code="b">Foreign Languages Press,</subfield>
<subfield code="c">2005.</subfield>
</datafield>
</record>
```

MARC:


```

00787nam 2200241 a
450000100100000000500170001000800410002702000150006804000120008304300120009509000170010724500940012
425000120021826000470023030000340027744000160031165000650032765000650039270000190045709600110047691
0004700487049001100534-000000407-20050228093349.0-050131s2005 cc ab 000 0 eng d- a7119037498- -
aCcBjTSG- aa-cc-pe- aH319.4bS575-00aSights with stories in old Beijing /c[translated and edited by Zhenru Xiong].-
kmonograph- a1st ed.- aBeijing :bForeign Languages Press,c2005.- a203 p. :bill., map ;c18 cm.- 0aPanda books- 0aFolk
literaturezBeijing (China)vTranslations into English.- 0aChinese fictionzBeijing (China)vTranslations into English.-1 -
aXiong, Zhenru.- aH319.4- a011001b2C-2005/H319.4/S575n001130478z23- a011001-

```

Downloading with the Save\Mail option is available in the following locations:

- From a record's Full View
- From a Brief View of a result list
- From a folder in the user's e-Shelf.

Note : The institution profile (which is defined as the Web OPAC user's profile) must be allowed to performed the Save\Mail action.

7.1.1 Required Configurations

The \$alephe/www_f_lng/include-select-format file must be configured to include the MARC and MARC_XML download options. The MARC_XML format must use an identification code of 004 and the MARC format must use 005. For example:

```

<option value=004 $$FXX-S"004">DownLoad MARC_XML</option>
<option value=005 $$FXX-S"005">DownLoad MARC</option>

```

7.2 Catalog GUI Download

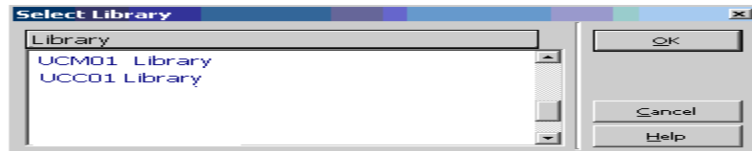
Downloading a record from the Catalog GUI may be done in one of two ways:

- Using the Cataloging\Duplicate Record (Control+N) menu option.
- Using the Search tab Print/Send button.

7.2.1 Duplicate Record (Control+N)

A member institution staff user may use the Cataloging GUI to view UCS catalog records. As these records have not been downloaded yet, they are displayed in a partial format, as defined by the UCS staff (see Section [6.2 BIB Record View](#)).

The user who is viewing the UCS catalog record may use the Cataloging\Duplicate Record menu option to create a copy of the same record for the local institution's catalog. After selecting the menu option, the user is shown the BIB database to which he is permitted to download. For example:



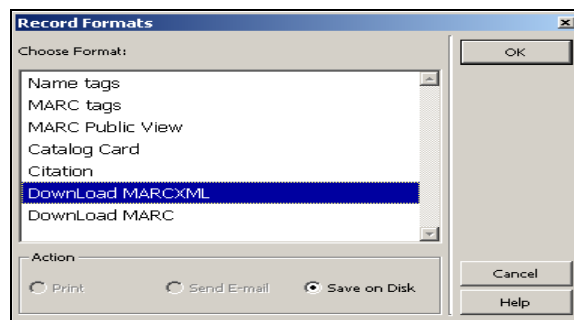
After selecting the database, the record is duplicated (in full format) for the selected database, and a download event is created.

7.2.2 Search Tab Print/Send Button

The Cataloging GUI client may be used to search for records on the UCS catalog. When records are found, they are displayed in the Search Tab in partial format, as configured by the UCS staff (see [6.2 BIB Record View](#)). The user performing the search may use the Print/Send option to download the record to his local PC.



Choosing the Print/Send option allows the user to select the download format:



Choosing the MARC or MARCXML formats results in:

- The record being saved in the required format on the local PC
- A download event being recorded in the Z15 table
- The hidden fields being displayed for the institution's members

Note: When choosing either the MARC or MARCXML formats, the only option for saving is to save on the local PC. The e-mail option is not valid in this case. Also note that the staff user must be defined as belonging to a valid institution (see Section [4.2.1 Defining Member Institutions Users](#)).

Refer to Section [7.1 Web OPAC Download](#) for an example of the MARC and MARCXML formats.

7.2.3 Configuring the Print/Send Button

The pc_tab_sear.eng table, located in the data_tab directory of the BIB library, must be configured to include the MARC and MARCXML download options. The MARCXML format must use an identification code of 004, and the MARC format must use 005. For example:

PF UCM01	L DownLoad MARCXML	004
PF UCM01	L DownLoad MARC	005

7.3 Z39.50 Client Download

Downloading may be performed by using a Z39.50 client.

Downloading a record from a Z39.50 client is done using the standard Z39.50 Present Service that is supported by Aleph for viewing records that have been found on the target's database using a previous Search Service. However, in order for the Present action to be registered as a download action, the requesting Z39.50 client's configuration must set the "element set name" of the request to be "union-download".

Refer to the Aleph Z39.50 Server documentation for a description of the Aleph Z39.50 server, the required server side configurations, staff user privileging, etc.

The following UCS specific remarks should be noted when configuring the Z39.50 server to allow Z39.50 clients to download from the UCS:

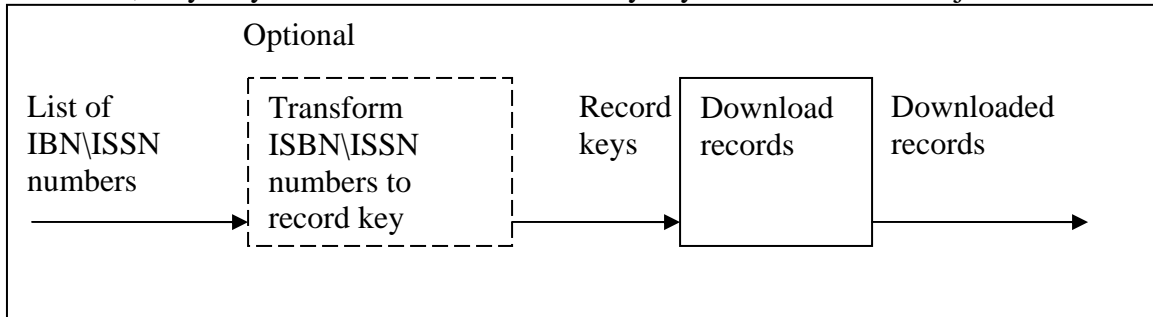
- The user ID with which the Z39.50 client accesses the Z39.50 server must be an Aleph staff user, defined according to the UCS user definition rules, as defined in Section [4 Union Catalog Users and Institutions](#).

- The Present Settings section of the `alephe/tab/z39_server/z39_server_[BASE].conf` must allow the required download format, as supported by the Z39.50 server. The MARC format is supported for Z39.50 server Present by setting the `out-record-syntax` variable to `USMARC`. The MARCXML format is not supported for Z39.50 server. There are other XML options, such as setting the `out-record-syntax` to `XML` and receiving the records in Dublin Core.

A Z39.50 download Z15 event is created. The event reflects the type of download, i.e. that it is a Z39.50 action.

7.4 Download Batch Job

Batch downloading is done by a batch job that accepts an input file of record numbers. If the downloading institution has a list of ISBN\ISSN numbers that are required for download, they may be transformed to record keys by an additional batch job.



7.4.1 Transforming ISBN\ISSN to Record Keys

Transforming a list of ISBN\ISSN numbers to record keys may be done by using the “Retrieve Records by Direct Index (ret-06)” batch job. The batch job accepts an input file of ISBN or ISSN numbers and the index to be searched, such as ISBN. The job produces an output file of record keys.

Input direct index values for which no matching record was found is reported in a rejects file.

7.4.2 The Download Action

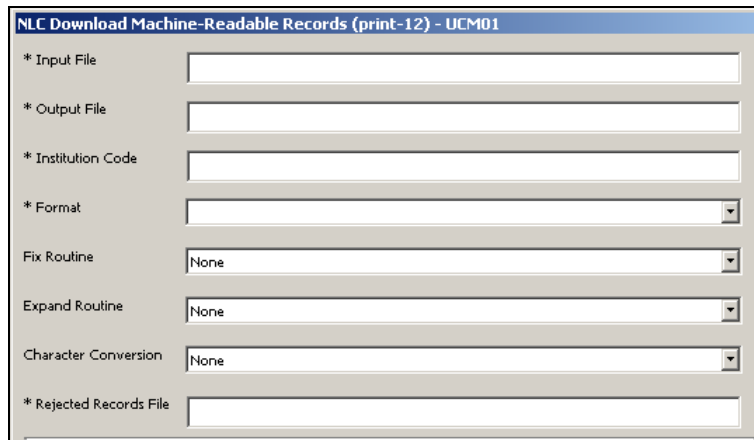
Downloading UCS catalogs records may be done by using a batch job. The batch job receives an input file with record numbers in the format of <Doc Number><Library>, for example:

```
000052023UCM01
000048015UCM01
000023141UCM01
```

The input file can be created by Aleph retrieval jobs, such as “Retrieve Catalog Records (ret-01)” and “Retrieve Records Using CCL (ret-03)” or by saving records on the server following a Web OPAC or GUI search.

The job’s output is a file of downloaded records, either in MARC format or in MARCXML format, depending on the user selection. In addition, download events are created.

The batch job is named “NLC Download Machine-Readable Records (print-12)”.



The screenshot shows a web-based form titled "NLC Download Machine-Readable Records (print-12) - UCM01". The form contains several input fields and dropdown menus:

- * Input File: A text input field.
- * Output File: A text input field.
- * Institution Code: A text input field.
- * Format: A dropdown menu.
- Fix Routine: A dropdown menu with "None" selected.
- Expand Routine: A dropdown menu with "None" selected.
- Character Conversion: A dropdown menu with "None" selected.
- * Rejected Records File: A text input field.

Input parameters:

- Input File – The name of the input file, located in the \$alephe_scratch directory.
- Output File – The name of the output file, created in the library’s data_scratch directory. The output file includes the downloaded records in MARC or MARCXML format.
- Institution Code – A valid tab_institution code. The download events are created for this institution.
- Format – Format of the downloaded record. May be MARC (005) or MARCXML (004).
- Fix Routine – The tab_fix fixing that is performed on the downloaded records.
- Expand Routine – The downloaded records may be expanded using the tab_expand routine that is set in this parameter.

- Character conversion – The records are in UTF-8 format. This parameter can be used when character conversion is required.
- Rejected Records File – This file includes the record keys of all the record for which the download action failed due to copyright limitations. The file is created in the \$data_scratch directory.

Note: An Aleph Staff user must be defined with the ID, the Z66-USER-OWN-CREATE, and Z66-USER-OWN-CHECK fields set to the institution ID. For example, downloading for the institution 011001 requires defining a user as follows:

7.5 Copyright Protection

Catalog Records may be copyright protected from download. A copyright protected record is downloadable only by the contributing library.

Copyright protection is set in the record's COP field. For example:

COP	<u>a</u>	011001
	<u>c</u>	20080330
	<u>n</u>	this is a note

- Subfield \$\$a denotes the ID of the institution that has contributed the copyright protected record.
- Subfield \$\$c denotes the expiry date of the copyright protection. Copyright protection that should not be limited by date must have the value 99999999 in this field.
- Subfield \$\$c is a note field.

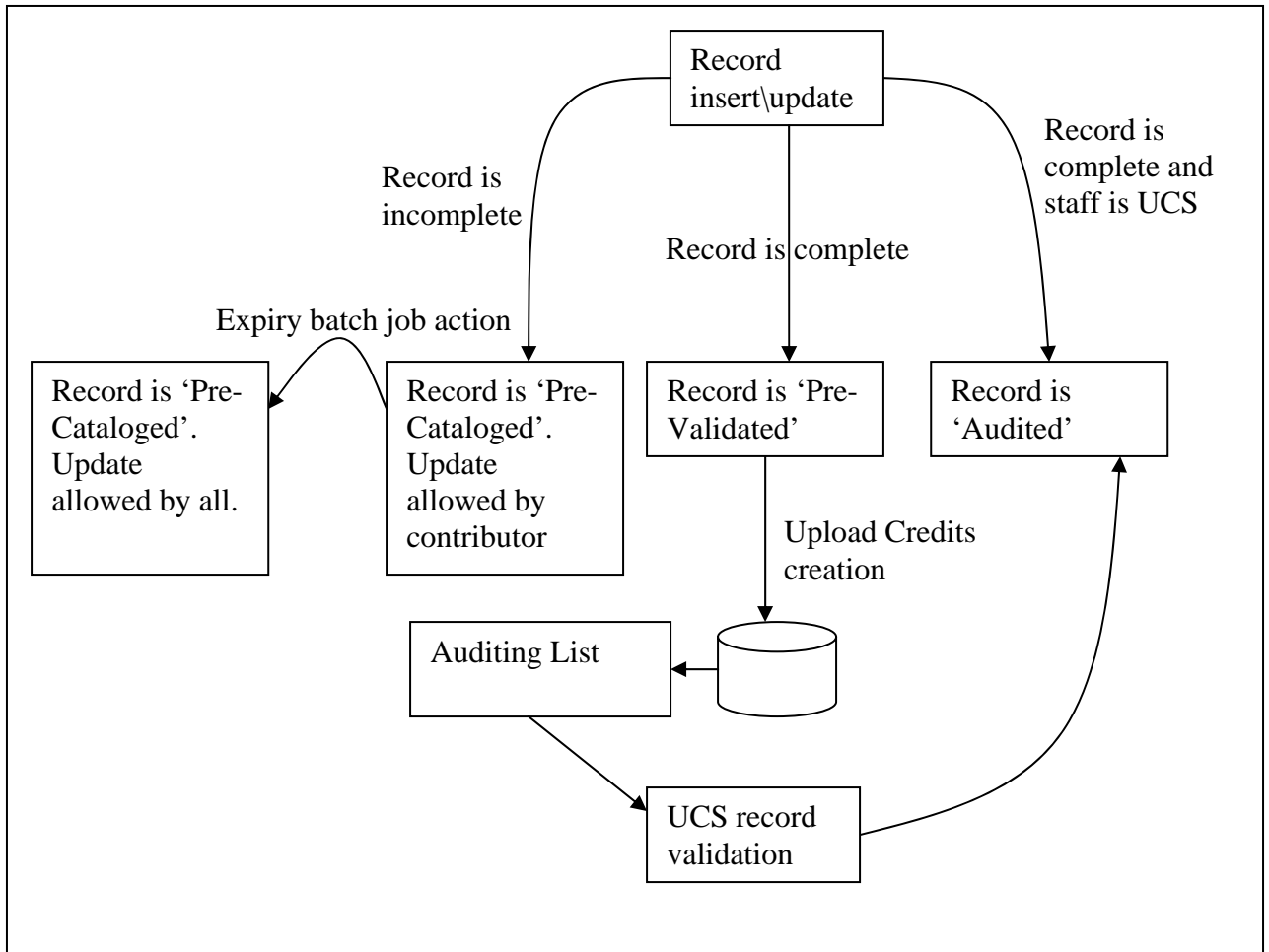
8 Catalog Record Life Cycle

Records that have been uploaded to UCS by the member institutions may be found in one of three distinct stages of their cataloging process:

- **Pre-Cataloged**
Institutions may optionally upload their fast cataloged BIB data records to the UCS catalog for the purpose of later completing its BIB information. Such incomplete records are identified by the system as “Pre-Cataloged” and are characterized by the following rules:
 - No HOL record may be attached to the Pre-Cataloged records. Upload of HOL records is rejected by the system.
 - No upload credits are granted for uploading or editing Pre-Cataloged record.
 - If the Pre-Cataloged record does not get completed after a library set number of days or hours (hence the “expiry period”), the system allows any other member institution to complete the record’s BIB information. The expiry is counted from the last time the record was updated, and is done automatically.

This stage is optional, and the institution may upload a record that is already fully cataloged.

- **Pre-Validated**
After the contributing institution has completed the record, it is regarded as complete and requires final UCS validation prior to becoming a finalized UCS record. Pre-Validated records are characterized by the following rules:
 - HOL records may be uploaded by all institutions and be attached to the BIB record.
 - Upload credits are granted according to the system defined parameters.
 - Pre-Validated records are included in a Auditing List report that are run routinely by UCS to list the records that require UCS validating.
- **Audited**
The last stage in the process of uploading a member institution record is an auditing that is carried out by UCS staff, based on an input list of “Pre-Validated” records.



8.1 Record Status

8.1.1 The QUA Field

The status of the record, i.e. whether it is “Pre-Cataloged”, “Pre-Validated” or “Audited”, is based on the contents of a proprietary “QUA” field. The field is automatically managed by the system, as described below.

The field uses the following values in the \$\$a subfield to specify the record’s status:

- N – Pre-Cataloged
- Y – Pre-Validated
- A – Audited

This field can be used to create logical bases that exclude only “Pre-Cataloged” records. The logical base may be used to filter the OPAC display and the search results. Other logical bases can be defined to facilitate other required views of the catalog.

8.1.2 The “fix_doc_qualified_ucs” Fix Routine

A fix_doc routine must be inserted in the INS2 section of tab_fix, to facilitate the automatic updating of the QUA field with every record creation or update.

The fix_doc routine, named "fix_doc_qualified_ucs " accepts as parameters the list of fields whose existence is interpreted to mean that the record is complete. The routine checks the existence of the fields, and updates or creates the QUA field as follows:

- If the fields exist then the single subfield \$\$a of the field is set to Y.
- If the fields exist and the cataloger is identified as UCS staff (the Cataloger’s OWN ID is “OLCC”), the single subfield \$\$a of the field is set to A
- If at least one of the fields does not exist, the single subfield \$\$a of the field is set to N

For example, consider the following tab_fix setup:

```
INS2 fix_doc_qualified_ucs 245##,1001#
```

In the above example, the QUA field is updated with “Y” only if both fields 245## and 1001# exist. If the updating cataloger is UCS staff, the status is automatically set to “A”. If either field is absent, the QUA field is created or updated with N.

The maximum number of allowed fields in this table is 16.

Note:

In order to add the new field 'QUA' to the list of valid fields, add the following lines to the check_doc_line table of the BIB library:

```
! 2 - 4 5 6 7
!!-!!-!!!!-!!!---!-!-!
AL XX QUA -
AL XX QUA a 1 1
```

8.2 The Auditing List

The Auditing List is generated by UCS staff, for the purpose of retrieving the catalog records that have been fully cataloged by member institutions, but have not yet been confirmed by UCS Staff. The list is created by the “NLC Retrieve Auditing Records (ret-11)” batch job, which is found in the “Retrieve Catalog Records” Services menu.

The job can be run to retrieve only records that have been completed within a specific date range. It is recommended to run the job daily, producing daily reports of records that have been completed the previous day only.

The job creates its output file in the `alephe_scratch` directory. The record keys are stored in the format of:

<Record Number><Library>

For example:

000045178UCS01

The “Sort Catalog Records (ret-21)” batch job can be used to sort the output file. A print job, such as “Print Catalog Records - Custom Format (print-01)” or “Print Catalog Records - Columnar Format (print-08)”, can be used for printing the retrieved records’ information.

8.3 Record Expiry

Member institutions may upload incomplete records, i.e. records that are in a Pre-Cataloged stage. However, UCS may change the incomplete records’ OWN field if the record is not completed within a period of time that has been defined by UCS. This allows another institution to complete the record and gain the credits for its upload.

This functionality is achieved in two stages:

1. Obtaining the list of expired records
2. Changing records to “Expired”

8.3.1 Obtaining the List of Expired Records

This step creates a list of records that are Pre-Cataloged and have not been changed within a UCS defined number of days or hours. Obtaining the list of expired records is done using the existing “Retrieve Catalog Records (ret-01)” batch job. The job is run to retrieve records for which the last update date and hour is earlier than the expiry date and hour.

The following is required for the “Retrieve Catalog Records (ret-01)” batch job to retrieve the expired records:

Set up tab_expand

The expand_doc_last_cat routine must be added to the RET section of tab_expand (in the BIB library). This expand routine creates a LAS field, populated with the exact same information as is in the records latest CAT field. For example:

```
LAS L $$aCATH$$b00$$c20040307$$iUSM01$$h1200
```

Run “Retrieve Catalog Records (ret-01)”

The “Retrieve Catalog Records (ret-01)” must be run with the following paramters:

1. Update “From” and “To” date – Only records that have been last updated today
2. LAS field – Only records for which the \$\$h subfield value is between the previously checked “To” limit and the expiry limit. For example, if the expiry is after three hours and the job is run every hour, the job can be run to retrieve records for which subfield \$\$h of the LAS field is between 4 hours ago and 3 hours ago.
3. QUA field – Only records for which the QUA field is N.

8.3.2 Changing Records to “Expired”

This step receives the output of the previous step as input. It changes the records’ OWN field to PUBLIC, allowing institutions other than the contributor to update the record.

This step is implemented by using the "Fix catalog records (manage-37)" batch job. The job must be executed to run a tab_fix section that includes the fix routine fix_doc_do_file_08, with a data_tab/import table name as parameter. The data_tab/import table must include a script that changes the OWN to PUBLIC.

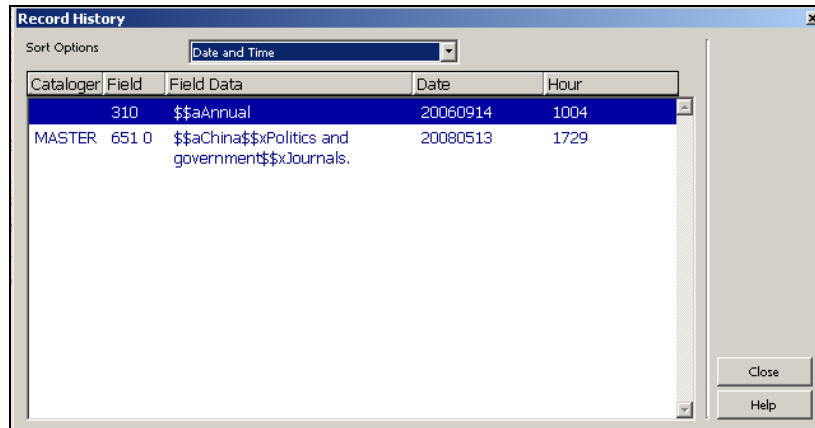
For example:

1. “Fix catalog records (manage-37)” is run with the fix routine EXP
2. tab_fix is set:
EXP fix_doc_do_file_08 change_own_ucs
3. The data_tab/import/change_own_ucs table includes a script such as the following:

```
!
!  2  3  4  5  6  7  8  9
!-----!-----!-----!-----!-----!-----!-----!-----!-----!-----!
1 OWN                                DELETE-FIELD
2 LDR                                ADD-FIELD      OWN ,L,$$aPUBLIC
```

8.4 Record History

Selected fields may be set up for tracking the bibliographic records' changes. Every change in one of the selected fields triggers saving the old value in a special record. The bibliographic record's history may then be viewed using the Edit/View Record History menu option in the Cataloging GUI.



The information is stored in the Z00T Oracle table:

Setting which fields are tracked is done by setting the fix_doc_track fix routine in the tab_fix table of the BIB library. The tracked fields are listed in the Parameters column (Col. 3) of tab_fix. For example:

```

! 1                2                3
!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!>
INS2  fix_doc_track                100##,310##,500##,651##

```

Note that if there are mutiple occurances of a field, only the first one is tracked. In the above example, if the record has a 10010 field and a 10011 field, then only the one that is found first in the document is tracked.

In order to add the Z00T table to the BIB libraries' Oracle tables, do the following:

1. Add the following two lines to the file_list tables of the BIB libraries:

```

TAB z00t 2M,128K,4M,128M,960M,960M 0K ts0,TS1D,TS2D,TS3D,TS4D,TS4D
IND z00t id 1M,128K,4M,128M,128M,960M 0K ts1,TS1X,TS2X,TS3X,TS3X,TS4X

```

Note: The sizes are an example. Other sizes and table spaces might be required for the installation.

2. Run util a/17/1 to create the table and its indexes.