Integrating Alma with the Aleph Central Catalog

Note

The Aleph Central Catalog Integration profile is an integration profile for specific Aleph central catalogs. This profile should be configured as part of the Alma implementation and cannot be configured without approval from Ex Libris Support.

Alma provides integration tools that enable you to participate in a shared Aleph central catalog environment. With this capability, bibliographic and holdings records and item-level inventory created in Alma can be reflected in the Aleph central catalog. In addition, when records in the Aleph central catalog are changed that have a corresponding record in the Alma database, the Aleph central catalog records that have changed can be retrieved using the Z39.50 protocol.

Alma supports this compatibility with the Aleph central catalog through the following institution-level functions in Alma:

- Copy cataloging from the central catalog to Alma
- Contribute changes to the central catalog from Alma
- Publish inventory to the central catalog from Alma
- Import changes from the central catalog to Alma

In order to work with the Aleph central catalog, both the Aleph central catalog system and each of the Alma member institutions must be configured. The following sections define the steps required to configure both Aleph and Alma:

- Aleph Configuration
- Alma Configuration

Aleph Configuration

This section describes the configuration that needs to be performed in Aleph to integrate an Alma institution with the Aleph central catalog.

To integrate an Alma member into Aleph:

1. Install the patch:
   1. Shutdown aleph – run aleph_shutdown before installing the patch.
   2. Download the Aleph patch for supporting the Aleph Center Alma member from the Ex Libris FTP server to your local server:

   ```bash
   ```

   3. Untar alma_patch.tar:
4. Install the patch:

Note
To install the patch, COBOL compilation should be possible on the server and the installed Perl module.

perl alma_patch_script.pl

You are prompted to insert the key of the month. Insert the key and press Enter:

user@aleph_server_name(a21_1) MAB01> perl alma_patch_script.pl
Encryption key, please! (monthly key, 18 digits): _

The patch should be successfully installed.

5. Clean the utf-files by running util/X/7.

6. Run aleph_startup to restart Aleph.

2. Set VST server definitions:

1. Enter the following:

vim $aleph_root/aleph_start.private

Requests are stored in the library defined as vst_library. By default, this is the USR00 library (as defined in aleph_start). If you want to use another library, define it in aleph_start.private as follows:

setenv vst_library XXXNN

Generally you should use the USR00. So, there is no additional entry in aleph_start.private that is necessary.

The server for the data replication interface (VST server) runs by default under port 522x. If you want to use another port, you may enter it in aleph_start.private:

setenv VST_SERVER_PORT nnnn
For example:

```
setenv VST_SERVER_PORT 4711
```

2. Enter the following:

```
vim $alephe_tab/tab_low_group
```

In `tab_low_group`, the local catalog IDs are defined. Z115 records are only created if a local catalog ID is present. A local catalog ID may represent 1 to n sublibrary codes. For every local system for which you want to generate Z115 messages, you need to define a sublibrary code.

For example:

```
1 2 3 4 5 6 7
!!!!!-!!!!!-!!!!!-!!!!!-!!!!!-!!!!!-
VST01 LOC28 VST02 LOC69 LOC70 LOC75
VST05 LOC75 VST06 VST06
```

The VST02 local catalog ID contains several sublibrary codes. If you correct a BIB record that contains at least one ownership verification from the VST02 list, a Z115 record for the correction is created. If the first ownership verification is generated for a BIB record or the last one is deleted, a Z115 record for creation or deletion is generated.

When correcting series or collective titles, Z115 records are created for all local catalog IDs. This applies to authority records as well. For holdings records, the table `tab_low_group` acts as concordance, since there is always one sub library code (OWN) per holdings record.

For Alma:

```
1 2 3 4 5 6 7
!!!!!-!!!!!-!!!!!-!!!!!-!!!!!-!!!!!-
ALMA ######
```

For libraries that use a parent-child link between records, you can configure that when a child BIB record is updated, a Z115 is created for its parent, in addition to the child's Z115 record.

In order to activate the above functionality, column 7 in `tab_low_group` should be set to 'Y'.

For example:
Parent record links are based on the definitions in the ./[bib_library]/tab/tab_relink_link table. Therefore, in order to activate the Send Parent functionality, tab_relink_link should be defined with all parent links.

For example:

```
! 1   2  3  4  5  6  7  8  9
!!!!!-!-!!!-!-!!!!!-!-!!!-!-!
010## a 001           DN    Y
```

3. Enter the following:

```bash
vim $alephe_unicode/tab_character_conversion_line
```

When sending messages via the VST server, a character conversion may be activated. The server sends the data - if no conversion is defined - as UNICODE characters (UTF8). You assign a conversion with the entry "UTF_TO_VST".

For example:

```
!!!!!!!!!!!!!!!!!!!!-!!!!!-!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!-!
UTF_TO_VST           ##### L line_utf2line_sb               unicode_to_8859_1    Y
```

If required, further conversion programs and tables may be implemented.

4. Activate the vst library.

Requests are generated only if this function is activated in the vst library. In order to do this, you need to add the following entries in the file_list of the vst library and initialize the Z115 table via UTIL A 17/1.

```
TAB z115 100K,128K,128K,128K,128K,128K 0K ts0,TS1D,TS1D,TS1D,TS1D,TS1D
IND z115_id 100K,128K,128K,128K,128K,128K 0K ts1,TS1X,TS1X,TS1X,TS1X,TS1X
```

**Note**

The size of the table depends on the number of expected requests. Requests are not automatically deleted. They should be manually deleted in regular intervals or archived.
In addition, the counter "last-vst-number" needs to be defined via UTIL G / 2. No prefix is assigned, and leading zeros must not be suppressed.

As soon as Z115 is established and the related counter is defined, requests for the local catalog IDs from tab_low_group are written. Restart VST server.

3. Set Z39.50 definitions:
   1. Verify that the port is correct under $alephe_tab/z39_server/z39_server.conf.
   2. Change 'Z39' staff to ADMIN (User library) and add permissions for 'MAB01' library (Allow all common tab).
   3. In order to return UTF via Z39, change in ./alephe/tab/z39_server/z39_server_MAB01.conf the following:
      - out-record-syntax USMARC
      - out-record-format USMARC
      - out-record-char-conv
      - out-record-expand MAB2MARC
      - out-record-fix MB2MC

   The MAB2MARC section should have a matching section in tab_expand, and the MB2MC section should have a matching section in tab_fix.

4. Optionally, define a new base for Alma Z39.50 searches that use the new MB2MC conversion in order to keep the original settings (old MAB -> MARC conversion).

4. Convert MAB To MARC:
   1. Add a new section in ./[bib_library]/tab_expand similar to the following example:

   ```
   MAB2MARC expand_doc_bib_bib_mab2marc DOWN-MAX=10
   MAB2MARC fix_doc_clear DUP-FLD=Y
   ```

   2. Add a new section in ./[bib_library]/tab_fix (For Alma ) entry similar to the following example:

   ```
   MB2MC fixexp_docx_parallel INIT
   MB2MC fixexp_docx_parallel COPY,PTR-FROM=0,PTR-TO=I
   MB2MC expdoc_43obv_bib_bib_mab2marc DN-MAX=10,SRD-MAX=10
   MB2MC fix_doc_mab FUNC=OUTPUT,FILE=alma_obvsg.tab_fix_mab.bib_mab2marc
   MB2MC fix_doc_mab FILE=alma_obvsg.tab_fix_mabaseq.bib_mab2marc
   MB2MC fix_doc_clear DUP-FLD=Y
   MB2MC fix_doc_43obvos_recode_ind2tag
   MB2MC fixexp_docx_parallel COPY,PTR-FROM=0,PTR-TO=B
   MB2MC fixexp_docx_parallel FIXROUT,MBPR1,PTR-FROM=0,PTR-TO=H
   MB2MC fixexp_docx_parallel CAT,PTR-FROM=0,PTR2FROM=H
   MB2MC fixexp_docx_parallel FIXROUT,MBPR2,PTR-FROM=0,PTR-TO=W
   MB2MC fixexp_docx_parallel CAT,PTR-FROM=0,PTR2FROM=W
   MB2MC fix_doc_convtb FILE=alma_obvsg.convtb.bib_mab2marc.main
   ```
This fix routine should match the fix routine used in $alephe_tab/z39_server/z39_server_MAB01.conf for the line:

```
out-record-fix MB2MC
```

3. Define user-specific values via the global variables table.

The name of the table in $data_tab is `tab_globalvar_convtb.m2m`.

Copy the table ./[bib_library]/tab/ttt 49vbb.tab_globalvar_convtb.m2m to ./[bib_library]/tab/tab_globalvar_convtb.m2m and change the ISIL-Code user.

5. Convert MARC to MAB:

1. Add a new section in ./[bib_library]/tab_expand and/or ./[bib_library]/tab_fix (For Alma, in MAB01).

   The section is similar to the following example (only fix-lines):

   ```
   !!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!>
   MC2MB fix_doc_remove_punctuation_usm
   MC2MB fix_doc_convtb FILE=ttt.tab_fix_convtb.bib_marc2mab.49kobv_p0_tt_pp
   MC2MB fix_doc_convtb FILE=ttt.tab_fix_convtb.bib_marc2mab.49kobv_p1
   MC2MB fix_doc_convtb FILE=ttt.tab_fix_convtb.bib_marc2mab.49kobv_p2
   MC2MB fix_doc_clear DUP-FLD=Y
   MC2MB fix_doc_overlay TMARC2MABI
   MC2MB fix_doc_sort_mab
   ```
2. Set the merge of the input record and the DB record by adding a merge section as defined for `fix_doc_overlay` routine in `tab_fix`. See the template option in `.mab01/tab/addon_ttt_m2m.bib.tab_merge` table.

For example, for the above TMARC2MABI, add the following in `./[bib_library]/tab/tab_merge`:

```
1 2 3
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
TMARC2MABI merge_doc_overlay 08
```

3. In `./[bib_library]/tab/tab_merge_overlay`, add the merge definitions. The merge set should match the merge set defined in `tab_merge`. See the template option in the `./mab01/tab/addon_ttt_m2m.bib.tab_merge_overlay` table.

For example, for the above merge set '08' add the following lines:

```
1 2 3 4
!!-!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!
...
08 1 N ######
08 1 Y CAT##
08 1 Y LOW##
08 1 Y OWN##
08 2 Y ######
```

**Note**

When the LOW field is defined in `./[bib_library]/tab/tab_cat_hidden_fields` as a hidden field, remove the following line from the definition of `tab_merge_overlay` above:

```
08 1 Y LOW##
```

6. Configure update-doc-alma X-service:

1. To handle MARC-MAB conversion in 'update-doc-alma' X-Service, add fix routines for section 'ALMA1' in `./[bib_library]/tab/tab_fix`. Example of 'MARC to MAB' conversion for a MAB-ALEPH-Central Catalog:

```
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
ALMA1 fixexp_docx_parallel INIT
ALMA1 fix_doc_clear DUP-FLD=Y
ALMA1 fix_doc_mab2marc_rm_punct_usm
```
2. To enable the loading of records with long fields (over 2000 characters), add the following line in `/alephe/aleph_start.private`:

```bash
setenv ENABLE_LONG_FIELDS Y
```

4. To set the merge of the input record and the DB record, add a merge section as defined for `fix_doc_overlay` routine in `tab_fix`. Each member can have a different merge section.

For example, for the above `ALMA1MC2MB`, add the following in `./[bib_library]/tab/tab_merge`:

```
!   1                   2                               3
!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!>
ALMA1MC2MB merge_doc_overlay              AA
```

5. In `./[bib_library]/tab/tab_merge_overlay`, add the merge definitions. The merge set should match the merge set defined in `tab_merge`.

For example, for the above merge set `AA`, add the following lines:

```
!1 2 3 4
!!-!-!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```
7. Configure the load holdings information (Bib record LOW field):

This section describes the loading of Holding information on the Bibliographic record, using the LOW field.

1. To handle deletion of LOW field,

    add the following line in ./[bib_library]/tab/tab_fix with the required section:

    
    !!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!>
    LOWRM fix_doc_do_file_08 delete_low_fields

2. To delete the LOW field via a fix routine,

    verify that the ./[bib_library]/tab/import/delete_low_fields table contains the following line:

    ! 2 3 4 5 6 7 8 9
    !-!!!!!-!!-!-!!!-!!-!!-!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
    1 LOW##                     DELETE-FIELD-COND              Y,$$uDEL

• Add the LOW index to ./[bib_library]/tab/tab00.LNG (field codes and names):

    !2 3 4 5 6 7 8 9 10 11
    !-!!!!!-!!-!!!-!!!!-!!!!-!!!!-!!!!-!!!!-!!!!-!!!!-!!!!-!!!!-
    H LOW## IND 07 00 00 LOW - Local Owner

• Add the LOW filing to ./[bib_library]/tab/tab_filing (definition of filing and normalization routines). The filing section should match the definition in tab00.LNG.

  For example (of tab_filing):

    !1 2 3 4
    !!-!!!!-!!!!-!!!!-!!!!-!!!!-!!!!-!!!!-!!!!-!!!!-!!!!-!!!!-!!!!-
    ! * for LOW
    07 suppress
    07 to_blank -
• Verify that the match configuration in ./[bib_library]/tab/tab_match contains the following line:

```
! 1                 2                              3

!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
ALM   match_doc_gen                  TYPE=IND,TAG=001,CODE=IDN
...```

• Add the following line to ./[bib_library]/tab/tab_merge:

```
!   1                   2                               3
!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!>
LOADHOL    merge_doc_alma_overlay         09```

• Add the following lines to ./[bib_library]/tab/tab_merge_adv_overlay:

```
!1 2 3 4   5   6    7     
!!-!-!-!-!!!!!-!-!!!!!!!!!!!>
! Alma load holdings
09 1 # Y ######
09 1 # U LOW##
09 2 # N ######
09 2 # Y LOW##```

• To load holdings information from Alma to Aleph, add the following lines to ./alephe/tab/job_list.

This loads changes from Alma on a daily basis:

```
!     2     3        4                   5
!!-!!!!!!!!-!-!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!>
!     2     3        4               5               6                    7
!!-!!!!!!!!-!-!!!!!!!!!!!!!!!!!!!!-!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!
!Load holdings
W2 12:35:00 N untar-alma           csh -f /exlibris/aleph/a23_3/aleph/proc/untar_files /exlibris/aleph/alma/```
This performs the following:

1. The ‘untar-alma’ script runs and untars the Alma published file and moves it to $data_scratch (under [bib_library]).
2. The p_file_02 converts the Alma MARC XML file to an Aleph Sequential file.
3. The p_manage_36 runs and locates the matching Aleph record in the central DB.
4. The p_manage_18 runs twice:
   - To merge the matched records with Aleph records using ‘LOADHOL’ merge routine
   - To insert new records to Aleph
5. The p_manage_37 deletes the LOW fields using the LOWRM fix routine

   • Define the first parameter (‘W2’) in job_list.conf to run each day that Alma publishes the holdings information.
   • Replace mab01 with your [bib_library].
   • Replace the parameters of the untar_files with the correct path of your environment.
   • Configure the load holdings records information:

This section describes the loading of Holding records into the HOL library.

1. Verify that "001" index exists in ./[hol_library]/tab/tab11_ind.
   
   For example:

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>!!!!!!-!!!!-!!!!!!!!-!!!!-!!!!!!!!!!!!!!!!!!!!!-!</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001</td>
<td>IDN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Verify that match configuration in ./[hol_library]/tab/tab_match contains the following line:
3. Add the following line to ./hol_library/tab/tab_merge:

```
LOADMABHOL merge_doc_overlay 07
```

4. Add the following lines to ./hol_library/tab/tab_merge_overlay:

```
07 2 C #####
07 1 Y #####
```

5. Add a new configuration file ./hol_library/tab/import/fix_alma_001 with the following lines:

```
1 001 CHANGE-SUBFIELD ,a
```

6. New or updated Holding records:
Add the following lines to ./alephe/tab/job_list to load new or updated holdings from Alma to Aleph. This loads changes from Alma on a daily basis:

Note
It is assumed that the published file is located on the Aleph server.
If it is not, transfer it from the FTP server using an ftp utility or a command, for example, run the following:
This performs the following:

1. The `move_files` script runs and cleans / moves aside the input files generated in the previous run.
2. The `untar-alma` script runs and untars the Alma published file and moves it to `$data_scratch` (under [hol_library]).
3. The `p_file_02` converts the Alma MARC XML file to an Aleph Sequential file.
4. The `p_file_08` add subfield 'a' to tag '001'
5. The `p_manage_36` runs and locates the matching Aleph record in the central DB.
6. The `p_manage_18` runs twice:
   - To merge the matched records with Aleph records using 'LOADHOL' merge routine
To insert new records to Aleph

7. Define the first parameter ("W2") in job_list.conf to run each day that Alma publishes the holdings information.

8. Replace mab60 with your [hol_library].

9. Replace the parameters of the untar_files with the correct path of your environment.

10. Delete holding records:

    Add the following lines to ./alephe/tab/job_list to delete holdings from Alma to Aleph.

    This loads changes from Alma on a daily basis:

    ```
    !Alma delete holdings
    !Delete holdings
    !W2 13:00:00 N untar-alma  csh -f /exlibris/aleph/a23_2/aleph/proc/untar_files /exlibris/aleph/load_holdings /exlibris/aleph/a23_2/mab60/scratch pub_aleph_mab_hol
    W2 11:23:00 Y   MAB60 p_file_02   MAB60,all_delete_pub_aleph_mab_hol,hall_del_pub_aleph_mab_hol_pre.seq,06,
    W2 11:23:00 Y   MAB60 p_file_08   MAB60,all_del_pub_aleph_mab_hol_pre.seq,all_del_pub_aleph_mab_hol.seq,all_del_pub_aleph_mab_hol.seq.new,all_del_pub_aleph_mab_hol.seq.dup,HOL,
    W2 11:23:00 Y   MAB60 p_manage_36   MAB60,all_del_pub_aleph_mab_hol.seq,all_del_pub_aleph_mab_hol.seq.new,all_del_pub_aleph_mab_hol.seq.upd,all_del_pub_aleph_mab_hol.seq.dup,HOL,
    W2 11:23:00 Y   MAB60 p_manage_18   MAB60,all_del_pub_aleph_mab_hol.seq,all_del_pub_aleph_mab_hol.seq.new,all_del_pub_aleph_mab_hol.seq.upd,all_del_pub_aleph_mab_hol.seq.dup,HOL
    ```

    This performs the following:

    1. The untar-alma script runs and untars the Alma published deleted file and moves it to $data_scratch (under [hol_library]).
    2. The p_file_02 converts the Alma MARC XML file to an Aleph Sequential file.
    3. The p_file_08 add subfield 'a' to tag '001'
    4. The p_manage_36 runs and locates the matching Aleph record in the central DB.
    5. The p_manage_18 deletes the matched records from Aleph (no match = error).
11. Define the first parameter (W2) in `job_list.conf` to run each day that Alma publishes the holdings information.

12. Replace mab60 with your [hol_library].

13. Replace the parameters of the `untar_files` with the correct path of your environment.

- Configure load items information:

  This section describes the process of Create Items in Aleph center (manage-60).

  1. In the BIB library, create the following directory. Place the tar files of the items to load in this directory.

     ```
     mkdir ./[BIB library]/items_to_center
     ```

     **Note**
     The files in this directory should be zipped tar files, ending with `.tar.gz`. When the file name contains the word `new`, the items in the file are loaded as new/updated items. When the file name contains the word `delete`, the items in the file are handled as deleted items.

  2. Add the following lines to load new, updated, or deleted items from Alma to Aleph:

     ```
     addition to `job_list`:
     ```

     ```
     ! 2 3 4 5
     !-!!!!!!!!-!-!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!>
     ! 2 3 4 5 6 7
     !-!!!!!!!!-!-!!!!!!!!!!!!!!!!!!!!-!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!
     !Alma load items
     W2 10:10:00 Y                      MAB01 p_manage_60                    MAB01
     ```

     The service can be configured to run several times a day by defining additional lines of `p_manage_60` job in different run hours.

---

**Alma Configuration**

This section describes the configuration required in Alma to integrate an Alma institution with the Aleph central catalog.
Configuring the Central Catalog Integration Profile for Aleph

In order to use an Aleph central catalog, you must configure a Central Catalog Integration profile.

**To configure a Central Catalog Integration profile:**

1. From the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select **Add Integration Profile**.
2. Enter a **Code** and **Name** for the integration profile.
3. Select **Central Catalog Integration** from the **Integration Type** drop-down list.
4. Select **Aleph** as the system type in **System**.
5. Select **Next**. The next page of the Integration Profile configuration appears.
6. Fill in the fields according to the following table:
## Central Catalog Integration

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Central Catalog System</strong></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>Select <strong>Aleph</strong> as the central catalog system type that you are configuring.</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td>- You must select <strong>System &gt; Aleph</strong> on this page, even though you also selected it on the first page.</td>
<td></td>
</tr>
<tr>
<td>- Only one Central Catalog Integration profile can be configured per institution.</td>
<td></td>
</tr>
<tr>
<td><strong>Contribution Configuration (contribution server setup)</strong></td>
<td></td>
</tr>
<tr>
<td>Host</td>
<td>The IP address of the Aleph central catalog.</td>
</tr>
<tr>
<td>Port</td>
<td>The port of the Aleph central catalog.</td>
</tr>
<tr>
<td>Library</td>
<td>The Aleph library in which the document is updated.</td>
</tr>
<tr>
<td>System Number Prefix</td>
<td>The library unique system number prefix (for example, DE-604).</td>
</tr>
<tr>
<td>Fix routine in central catalog</td>
<td>Enter the fix routine to be used by Aleph.</td>
</tr>
<tr>
<td>Username</td>
<td>The user name in Aleph.</td>
</tr>
<tr>
<td>Password</td>
<td>The password in Aleph.</td>
</tr>
<tr>
<td>Allow Delete</td>
<td>Select to enable the deletion of records in the central catalog.</td>
</tr>
<tr>
<td><strong>Central Catalog Record Changes Configuration (VST server setup)</strong></td>
<td></td>
</tr>
<tr>
<td>Host</td>
<td>The IP address for the VST server in the Aleph central catalog.</td>
</tr>
<tr>
<td>Port</td>
<td>The Aleph central catalog port to send the TCP/IP call.</td>
</tr>
<tr>
<td>Local catalog ID</td>
<td>Used to identify the library in Aleph.</td>
</tr>
<tr>
<td>Username</td>
<td>The user name to send to the Aleph central catalog.</td>
</tr>
<tr>
<td>Password</td>
<td>The password to send to the Aleph central catalog.</td>
</tr>
<tr>
<td>Active</td>
<td>Select <strong>Active</strong> for the import profile to be active or <strong>Non-active</strong> for the profile to be non-active.</td>
</tr>
<tr>
<td>Schedule</td>
<td>To schedule the import process, select a schedule from the drop-down list. The available options are:</td>
</tr>
<tr>
<td>- Not scheduled</td>
<td></td>
</tr>
<tr>
<td>- Every 12 hours, starting at 11:00</td>
<td></td>
</tr>
<tr>
<td>- Every 6 hours, starting at 05:00</td>
<td></td>
</tr>
<tr>
<td>- Hourly</td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td>When this job runs, the lock on records that are being edited is ignored and the record is imported.</td>
</tr>
<tr>
<td><strong>Bibliographic Library Codes</strong></td>
<td>Enter the Aleph library codes that hold the bibliographic records (comma separated).</td>
</tr>
<tr>
<td><strong>Last Harvest ID</strong></td>
<td>This field is populated after the first successful run of the process, indicating that start point of the next run. You can edit this value if you want to retrieve data from a specific record ID.</td>
</tr>
<tr>
<td><strong>Choose merge routine</strong></td>
<td>When records are redirected, you can choose how the old record is merged with the new one. Select a merged routine based on the merge rules defined by your institution. For example:</td>
</tr>
<tr>
<td></td>
<td>◦ Overlay all fields but local</td>
</tr>
<tr>
<td></td>
<td>◦ Replace 245 and 035 OCoLC if exist</td>
</tr>
<tr>
<td></td>
<td>◦ Conditional subject headings</td>
</tr>
<tr>
<td></td>
<td>◦ Keep only old value</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td>For information on configuring Alma to take an identifier from the secondary record and place it in the primary record when merging records, see Configuring BIB Redirection Fields.</td>
</tr>
<tr>
<td><strong>Non preferred record action during merge</strong></td>
<td>Select one of the options <strong>Delete</strong>, <strong>Suppress</strong>, or <strong>Keep it</strong> to indicate how the secondary (nonpreferred) record from a merger of records (in the Aleph central catalog) is to be handled when synchronized with the records in your Alma database.</td>
</tr>
<tr>
<td></td>
<td>See Retrieving Changed Records from the Aleph Central Catalog for more information.</td>
</tr>
<tr>
<td><strong>Update preferred record call number during merge</strong></td>
<td>Select this option to indicate that when records are merged in the Aleph central catalog and, subsequently, synchronized with your Alma database (when the Aleph central catalog job is run), the holdings call number should be updated in the preferred record that remains in your Alma database.</td>
</tr>
<tr>
<td><strong>Data Retrieval Configuration (Z39.50)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Host</strong></td>
<td>The IP address of the Aleph central catalog.</td>
</tr>
<tr>
<td><strong>Port</strong></td>
<td>The Aleph central catalog port to send the Z39.50 calls.</td>
</tr>
<tr>
<td><strong>Base</strong></td>
<td>The database in Aleph to send the Z39.50 query.</td>
</tr>
<tr>
<td><strong>Search Attribute</strong></td>
<td>The unique identifier of the location of the system number in the central catalog (equivalent to the Marc 001 field).</td>
</tr>
<tr>
<td><strong>Username</strong></td>
<td>The user name to send to the Aleph central catalog for z39.50.</td>
</tr>
</tbody>
</table>
## Configuring the Import Profile for the Aleph Central Catalog Integration Profile

Bibliographic records that are changed in the Aleph central catalog and that are relevant to your Alma institution are imported to Alma using an Alma import profile configured for this purpose. The import profile that you create is specified in the Repository Import Profile parameter in the Aleph Central Catalog Integration profile (see Repository Import Profile).

Create a new Alma import profile using the steps for creating an import profile of type Repository (see Repository) and the configuration instructions below for the specific Aleph central catalog configuration.

In the Profile Details section, select the following options:

- **Originating system** – From the drop-down list, select the Aleph consortial catalog originating system.
- **Import protocol** – Select `Upload File/s`.
- **Physical source format** – Select `XML`.
- **Source format** – Select `MARC 21 Bibliographic`.
- **Status** – Select `Active`.

---

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Password</strong></td>
<td>The password to send to the Aleph central catalog for z39.50.</td>
</tr>
</tbody>
</table>

**Repository Import Profile**

Select a repository import profile on which the bibliographic import is based. Specifically, the import profile needs to specify matching on the Aleph central catalog prefix. See Configuring the Import Profile for the Aleph Central Catalog Integration Profile for more information.

**Note**

When copy cataloging directly from ZDB in the MD Editor to create a record, only an identifier with the ZDB prefix exists. There is no identifier with the Aleph central catalog prefix in that record. This would cause no match to be found when importing the record even though there should be a matching record.

To address this situation, the logic for the Aleph Central Catalog Integration profile import job includes looking for a match based on the ZDB prefix in a 035 field when there is no match based on the 035 prefix defined in the import profile.

**Merge Routine for Copy Cataloging**

From the merge rules defined by your institution, select a merge routine for copy cataloging. These rules address some of the following merge considerations when you perform copy cataloging:

- Overlay all fields but local
- Replace 245 and 035 OCoLC if exist
- Conditional subject headings
- Keep only old value

This merge routine determines how the external record will be merged with the existing one when copy cataloging. See Working with Merge Rules for more information.

7. Select **Save**.

See External Systems for more information regarding configuring external system integration profiles.
• File name patterns – You can leave this option blank.
• Cross walk – Select No.
• Target format – Select MARC 21 Bibliographic.

![Image](image.png)

**Import Profile Details Section for Importing from the Aleph Central Catalog**

In the Match Profile, Match Actions, Automatic Multi-Match Handling, and No Match sections, select/enter the options described below:

**Match Profile Section**

• Serial match method – Select the **035 (Other System Identifier) Match Method**.
• System Identifier Prefix (for serial match method) – Enter the library ISIL code (International Standard Identifier for Libraries and Related Organizations) of the Aleph central catalog. This corresponds to the system number in the MARC 035 field on which to match.
• Non Serial match method – Select the **035 (Other System Identifier) Match Method**.
• System Identifier Prefix (for non serial match method) – Enter the library ISIL code (International Standard Identifier for Libraries and Related Organizations) of the Aleph central catalog. This corresponds to the system number in the MARC 035 field on which to match.

**Match Actions**

• Handling method – Select Automatic.
• Upon match – Select Merge.

**Match Actions - Merge/Overlay**

• Merge method – Select the relevant merge method. Selecting **Overlay all fields but local** saves all local fields and replaces all other fields with the record from the Aleph central catalog.
• Select the following actions:
  ◦ **Allow bibliographic record deletion** (if records deleted in the Aleph central catalog should be deleted from the Alma institution)
  ◦ **Unlink bibliographic records from community zone**
  ◦ **Do not override/ merge record with an older version** – Disabled

**Automatic Multi-Match Handling**

• Select the **Prefer record with the same inventory type (electronic/physical)** option.

**No Match**
• Select the **Import** option for the **Upon no match** parameter.

---

**Configuring Publishing Profiles for Integration with the Aleph Central Catalog**

Publishing profiles must be configured in order to publish inventory information from the Alma institution to the Aleph central catalog. In order for the integration to work, availability must be published. Optionally, item and holdings information may be published. In order to share availability, holdings, and item information, three publishing profiles need to be created for availability (LOW field), holdings, and items. See [Publishing and Inventory Enrichment (General Publishing)](#) for the steps to create a publishing profile and the details in the following sections that describe the configuration specifications for integrating with the Aleph central catalog:

- [Publishing Availability Configuration](#)
- [Publishing Holdings Configuration](#)
Publishing Items Configuration

Prerequisites for your publishing profiles include a set, normalization rules, and a process for each normalization rule (see below).

Set

When you create a publishing profile, the profile parameters require that you specify a set for publishing. Prior to configuring your publishing profiles, create a set using the following advanced repository search criteria:

- Find - All titles
- Tag Suppressed condition = No
- Other System Number condition = <ISIL code>

Normalization Rules

Normalization rules need to be created for both the availability, holdings, and items publishing profiles. See below for examples and the Working with Normalization Processes section for instructions.

The following normalization rule example is for the availability publishing profile:

LOW Field Normalization

```plaintext
LOW Field Normalization Example:

rule "Move Aleph BIB ID to 001"
priority 6
when
(exists "035.a.(<ISIL code>)")
then
removeControlField "001"
removeField "900" if (exists "900")
copyField "035.a" to "900.a" if (exists "035.a.*<ISIL code>*")
copyControlField "900.a" to "001"
replacecontrolcontents "001.{0,8}" with ""
end

rule "Combine 852"
priority 5
when
(exists "852")
then
combineFields "852" excluding "a"
end

rule "Add Library code to LOW field when 852 exist"
priority 4
```
LOW Field Normalization Example:

when
(exists "852")
then
addField "LOW.a.<library code>" if (not exists "LOW.a.<library code>")
end

rule "Add Delete tag to 852.u for deleted BIB"
priority 3
when
(existsControl "LDR.{5,1}.d")
then
addField "LOW.a.<library code>" if (not exists "LOW.a.<library code>")
replacecontents "LOW.u" with "DEL" if (exists "LOW.u")
addSubField "LOW.u.DEL" if (not exists "LOW.u")
end

rule "Add Delete tag & Library code when there is no 852"
priority 2
when
(not exists "852")
then
addField "LOW.a.<library code>" if (not exists "LOW.a.<library code>")
addSubField "LOW.u.DEL" if (not exists "LOW.u")
end

rule "Remove all BIB fields but 001 & LOW"
priority 1
when
(TRUE)
then
removeControlField "002"
removeControlField "003"
removeControlField "004"
removeControlField "005"
removeControlField "006"
removeControlField "007"
removeControlField "008"
removeControlField "009"
removeField "01*"
removeField "02*"
removeField "03*"
removeField "04*"
removeField "05*"
removeField "06*"
removeField "07*"
removeField "08*"
removeField "09*"
removeField "1*"
removeField "2*"
removeField "3*"
removeField "4*"
removeField "5*"
removeField "6*"
removeField "7*"
removeField "8*"
removeField "9*"
end
The following normalization rule example is for the holdings publishing profile:

<table>
<thead>
<tr>
<th>Holdings Normalization Example:</th>
</tr>
</thead>
</table>

```
rule "Delete 852 when 852.8 doesn't exist"
priority 7
when
(exists "852")
then
removeField "852" if (not exists "852.8")
end

rule "Move Aleph BIB ID to 012.a"
priority 6
when
(exists "035.a.(<ISIL code>)*")
then
copyField "035.a" to "012.a" if (exists "035.a.*(<ISIL code>)*")
replaceContents "012.a.(<ISIL code>)*" with ""
end

rule "Add Library code to 012 $l"
priority 5
when
(TRUE)
then
addField "012.l.<library code>"
end

rule "Convert holdings Marc to Mab when 852 exist"
priority 4
when
(exists "852")
then
removeControlField "001"
copyControlField "852.8" to "001"
copyField "852.a." to "200.b." if (exists "852.a")
copyField "852.b." to "OWN.a." if (exists "852.b")
copyField "852.c." to "200.g." if (exists "852.c")
copyField "852.h." to "200.f." if (exists "852.h")
end

rule "Remove BIB LDR only if holdings LDR lies in 009"
priority 3
when
existsControl "009"
then
removeControlField "LDR"
changecontrolField "009" to "LDR"
end

rule "Remove all BIB fields but 001 & 012"
priority 2
when
(TRUE)
then
removeControlField "002"
removeControlField "003"
```

Ex Libris, a ProQuest Company
Holdings Normalization Example:

```
removeControlField "004"
removeControlField "005"
removeControlField "006"
removeControlField "007"
removeControlField "008"
removeControlField "009"
removeField "01**" if (not exists "012")
removeField "02**"
removeField "03**"
removeField "04**"
removeField "05**"
removeField "06**"
removeField "07**"
removeField "08**"
removeField "09**"
removeField "1**"
removeField "2**" if (not exists "200")
removeField "3**"
removeField "4**"
removeField "5**"
removeField "6**"
removeField "7**"
removeField "8**"
removeField "9**"
end

rule "Combine 012 & 200"
priority 1
when
(TRUE)
then
combineFields "012" excluding ""
combineFields "200" excluding ""
end
```

The following normalization rule example is for the items publishing profile:

Items Normalization

```
rule "Move Aleph BIB ID to 001"
priority 2
when
TRUE
then
removeControlField "001"
copyField "035.a" to "999.a" if (exists "035.a.*<ISIL code>*")
replacecontents "999.a.(<ISIL code>)" with ""
copycontrolField "999.a" to "001"
end

rule "Remove all BIB fields but 001"
priority 1
when
```
Items Normalization Example:

(TRUE)
then
removeControlField "002"
removeControlField "003"
removeControlField "004"
removeControlField "005"
removeControlField "006"
removeControlField "007"
removeControlField "008"
removeControlField "009"
addControlField "009.<library code>"
removeField "01**
removeField "02**
removeField "03**
removeField "04**
removeField "05**
removeField "06**
removeField "07**
removeField "08**
removeField "09**
removeField "1**
removeField "2**
removeField "3**
removeField "4**
removeField "5**
removeField "6**
removeField "7**
removeField "8**
removeField "9**
end

Process

For each normalization rule that you create, you need to create a process that can be selected from the Correct the data using normalization rules drop-down list in the publishing profile that you create. See Creating Processes for more information.

For the processes that you create for working with the Aleph central catalog, you need to specify the following:

- Business Entity – Select Bibliographic title.
- Type – Select MARC 21 Bib normalization.
- Process – Select MarcDroolNormalization.
- Drools File Key – Select the name of the normalization rule that you created.

See the screen shots below for an example of the process created for the availability normalization rule.
Publishing Availability Configuration

For the availability publishing profile that you create to use with the Aleph central catalog, add a **General Profile** with the following specifications:

**Wizard Step 1**

- Enter a profile name.
- Select one of the daily scheduling options from the drop-down list.
- Specify the name of the set that you created earlier for the publishing profile.
- Select the **Bibliographic level** for the **Publish on** parameter.
- Select the **MARC 21 Bibliographic** output format.
- Select the **Incremental** publishing mode.
• Select FTP for the publishing protocol. See Configuring S/FTP Connections for instructions to configure an FTP account.

Wizard Step 2

• Select the LOW field normalization rule that you created for the availability publishing profile from the Correct the data using normalization rules drop-down list.

• Select Add Holdings Information and map the 852 holdings tag to an 852 bibliographic tag.

• Select Add Electronic Portfolio Information and specify:
  ◦ Mapping to the 852 as a repeatable field
• Mapping the portfolio PID to $8
• Mapping the library to $b

• Select **Add Digital Representation Information** and specify:
  • Mapping to the 852 as a repeatable field
  • Mapping the internal identifier (PID) to $8
  • Mapping the library to $b
Publishing Holdings Configuration

For the holdings publishing profile that you create to use with the Aleph central catalog, add a General Profile with the following specifications:

Wizard Step 1

- Enter a profile name.
- Select a scheduling option from the drop-down list.
- Specify the name of the set that you created earlier for the publishing profile.
- Select the Holdings/Portfolio/Representation level for the Publish on parameter.
- Select the MARC 21 Bibliographic output format.
- Select the Incremental publishing mode.
- Select FTP for the publishing protocol. See Configuring S/FTP Connections for instructions to configure an FTP account.
Wizard Step 2

- Select the holdings normalization rule that you created for the holdings publishing profile from the Correct the data using normalization rules drop-down list.

- Select Add Holdings Information and map:
  - the 852 holdings tag to an 852 bibliographic tag
  - the LDR to the 009 bibliographic tag

- Select Add Electronic Portfolio Information and specify:
  - Mapping to the 852 as a repeatable field
  - Mapping the Portfolio PID to $8
  - Mapping the library to $b

- Select Add Digital Representation Information and specify:
○ Mapping to the 852 as a repeatable field
○ Mapping the internal identifier (PID) to $8
○ Mapping the library to $b
Holdings Publishing Profile Wizard Step 2
Publishing Items Configuration

For the items publishing profile that you create to use with the Aleph central catalog, add a General Profile with the following specifications:

Wizard Step 1

- Enter a profile name.
- Select a scheduling option from the drop-down list.
- Specify the name of the set that you created earlier for the publishing profile.
- Select the Item/Portfolio level for the Publish on parameter.
- Select the MARC 21 Bibliographic output format.
- Select the Incremental publishing mode.
- Select FTP for the publishing protocol. See Configuring S/FTP Connections for instructions to configure an FTP account.
Wizard Step 2

- Select the items normalization rule that you created for the holdings publishing profile from the **Correct the data using normalization rules** drop-down list.
- Select **Add Items Information** and specify:
  - Mapping to the ITM field as a repeatable field
  - Mapping the Item PID subfield to $a
  - Mapping the Item Policy subfield to $d
  - Mapping the Description subfield to $e
Mapping the Permanent library subfield to $g
Mapping the Inventory number subfield to $k
Mapping the Barcode subfield to $b
Mapping the Material type subfield to $c
Mapping the Process type subfield to $f
Mapping the Permanent location subfield to $n
Mapping the Call number subfield to $i
Mapping the Item call number subfield to $j

- Select Add Electronic Portfolio Information and specify:
  - Mapping to the PRT field as a repeatable field
  - Mapping the Portfolio PID to $a
  - Mapping the Coverage Statement subfield to $e
  - Mapping the library to $g
Retrieving Changed Records from the Aleph Central Catalog

After you have created and saved the integration profile for the Aleph central catalog, the Actions tab of the integration profile provides the option to manually run the job that retrieves changed records from the Aleph central catalog.
Select **Run** to submit the job.

**Using Run to Retrieve Changed Records from the Aleph Central Catalog**

---

**Note**

When this job runs, the lock on records that are being edited is ignored and the record is imported.

---

**Aleph Central Catalog Integration Job Report**

After you run the Aleph Central Catalog Integration job, check the History tab on the Monitor Jobs page (**Administration > Manage Jobs > Monitor Jobs**) to view the results.

Alternatively, from the Integration Profile List page (**Configuration Menu > General > External Systems > Integration Profiles**), select **Actions > Job History** in the row containing the Aleph Central Catalog Integration profile. The Job History page appears. From the Job History page, select **Actions > View** for the completed job to display the Job Report page. Expand the Records Processed and Results sections to view the counts (number of records) for the following:

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
</table>
| Records Processed | • Updated record Ids  
                   | • New record Ids  
                   | • Records marked for delete  
                   | • Records marked for merge |
| Results         | • Failed to delete records  
                   | • Records with inventory that cannot be deleted  
                   | • Records not added (manual validation)  
                   | • Records linked to CZ  
                   | • Records skipped by filter  
                   | • Merged record Ids  
                   | • Failed to merge records  
                   | • Validation errors  
                   | • Failed to update/delete record  
                   | • Failed to search record in Z39 server  
                   | • No results from Z39 Server  
                   | • Total records deleted  
                   | • Record not deleted - record id does not exist |
In these sections, you may optionally select Preview Records to see the record details.

No Results from Z39 Server Failure

When Z39 server failures occur as in the job results for Failed to search record in Z39 server and No results from Z39 Server, Alma keeps the records from these failed attempts and processes them, again, the next time the job is run.

Using Contribute Record to Central Catalog

After you have configured the Aleph Central Catalog Integration profile, the Contribute Record to Central Catalog option (File > Contribute Record to Central Catalog) in the MD Editor is available for you to use.
Originating System Version for the Aleph Central Catalog

For bibliographic records stored in Alma, the 005 field contains the Alma date and time version information. For each record that Alma stores in the Alma database that has a corresponding record in the Aleph central catalog database, Alma stores the originating system version for the Aleph record in a separate location.

Subsequently, when Alma contributes a record to the Aleph central catalog, it replaces the Alma version information in the 005 field with the Aleph originating system version information that it previously stored separately. This is done in order for the Aleph central catalog to identify which version of its record is being updated by the Alma contribution.

Note

To use a language other than English, insert the following parameter into the POST URL:

```
$form

{"con_lng"} = 'lng';
```

For example:

```
$form("con_lng")
   = 'ger';
```
Using External Search with an Aleph Central Catalog Integration Profile

After you have configured the Aleph Central Catalog Integration profile, the profile appears as an option to select from the Search Cataloging Profile drop-down list of available Search External Resources options in the Alma MD Editor (Tools > Search External Resources).

See Searching External Resources for more information.

When you select to use the Aleph central catalog profile from the Search External Resources in the MD Editor, the System Number parameter can be used to search the 001 field of the records in the Aleph central catalog.