Integrations with External Systems
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Introduction

Alma integrates with external systems, such as vendor systems, Enterprise Resource Planning (ERP) systems, metadata management systems, and remote storage systems, via standard protocols, such as S/FTP.

Configuring integration with external systems includes the following steps:

1. Handling the data transition between Alma and the external system, including mapping the exported invoices’ fields to the external system fields. For details, see https://developers.exlibrisgroup.com/alma/integrations
2. Defining an external integration profile in Alma, explained in this guide. Also see Configuring Integration Profiles.

This section describes how to configure integration between Alma and external systems, and is organized according to the following areas: Acquisitions, Resource Management, Fulfillment, User Management, and Administration.

Note

If you are working with Alma in conjunction with MetaLib, you must configure your link resolver in MetaLib. For instructions, see the MetaLib System Configuration and Administration Guide.
Acquisitions

This section includes:

- Financial Systems
- Electronic Data Interchange (EDI)
- Real-Time Integration

In addition, you can import embedded order data (EOD) files and update orders after the delivery of shelf-ready material by importing records using an import profile. For more information, see Importing Records Using an Import Profile.
Financial Systems

To configure integration with financial systems (such as ERP systems), you must have the following role:

- General System Administrator

Alma acquisitions includes ordering and receiving materials from vendors, which involves handling orders and invoices by vendors. When these are managed in the institution’s financial system, information about/for the transactions must be imported from these systems into Alma, or exported to these systems from Alma. In this way, financial information about funds and orders are kept regularly synchronized with these systems.

For details on the integration between Alma and financial systems (including XSD and XML samples), see https://developers.exlibrisgroup.com/alma/integrations/finance.

To configure export to, and import from, a financial system, you configure FTP connections for the system and create integration profiles for the actions you want to perform. The integration profile enables you to define jobs that can be scheduled or run manually.

If the jobs are scheduled, they appear in the Scheduled tab on the Monitor Jobs page (see Viewing Scheduled Jobs). The jobs also appear in the Running/History tabs on the Monitor Jobs page when/after they run. The jobs are:

- Import Payment Confirmation – ERP Import Using Profile <integration profile>
  Imports payment confirmations from an ERP into Alma. This enables Alma to move paid items to the next step of the workflow.

- Export Invoices for Payment – ERP Export Using Profile <integration profile>
  Exports invoices from Alma to an ERP. The job exports each invoice to a separate file. The owner of the invoice is one of the fields in the file.

- Funds Allocation Loader – Fund Allocation Loader (called Update Fund Tx Job in the list of scheduled jobs)
  Imports up-to-date fund balances from a financial system into Alma. This changes the allocations of funds in Alma to match those in the ERP.

- Export Orders (PO) – Export Order (PO) Job (cannot be scheduled)
  Exports submitted POs from Alma to a financial system.

- Export PO Lines (POL) – Export PO Lines (POL) Job
  Exports closed or canceled PO lines from Alma to a financial system. The job can export only up to 1,000 PO lines. If more than 1,000 PO lines are marked for export, the job exports 1,000 of them and the job report page includes an alert suggesting that the user rerun the job to export any remaining PO lines.

Note

If a job encounters a connection problem (for example, the remote system cannot be reached or there is an FTP error), any remaining records are processed on the next successful run.
To configure the export and import of order and invoices:

1. Configure an S/FTP connection to be used by Alma and the financial system, as described in Configuring S/FTP Connections. (If you are working in a sandbox environment or pre-"Go Live" production environment, ensure that the S/FTP connection you configured is defined as an allowed S/FTP connection for your institution, as described in Configuring Allowed S/FTP Connections During Testing.)

2. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile. The first page of the integration profile wizard opens.

3. Perform the following actions on this page:
   1. Enter a code and name for the profile you are defining.
   2. From the Integration type drop-down list, select Finance.
   3. From the S/FTP connection type drop-down list, select the name of the FTP connection that you defined in step 1.
   4. Indicate the type of financial system with which you are integrating (for Ex Libris’ informational purposes). Note that this is mandatory.
      1. If you select Other from the list of systems, the System Description field appears for further system details.
   5. Optionally, enter a description of the integration you are configuring.

Note

The Default check box is not functional for this integration type.

4. Select Next. The second page of the wizard appears.
5. Perform the following actions in the Import Payment Confirmation, Export Invoices For Payment, Funds Allocation Loader, Import PO Approvals, Export Orders (PO), and Export PO Lines (POL) sections on this page.

1. Select Active or Non Active. Select Active to enable the import/export job to run. By default, Non Active is selected.

2. In the Input file path/Output file path fields, enter a subdirectory of the path specified when creating the S/FTP connection. For example, if you specified Alma in the Sub-directory field during S/FTP connection configuration and you enter payments in the Output file path field, the invoices are exported to the Alma/payments directory. When the action is Active, the file path is mandatory.

    **Note**
    
    The value of the Input file path field cannot be identical to any of the other Input file path or Output file path values.

3. Configure the following job specific fields:

   1. For a Funds Allocation Loader job, in the File Extensions field, select the type of file that is being imported for the fund allocation, .CSV (.csv) or Excel (.xls).

   2. For an Export Invoices For Payment job, select Split by Owner to split the files into separate files, one for each invoice owner (library). When split by owner, the exported file names are named <LibraryName>_<OwnershipType>...xml where <OwnershipType> is LBR for library or INT for institution. For example, BC01_LBR.

   3. For an Export Orders (PO) job, select Integrate by ERP Number if the PO requires ERP approval before
moving to the next stage of the process. When checked, a PO is exported to the ERP if it does not have an ERP number. POs are subsequently re-imported to Alma using the Import PO Approvals job. When unchecked, a PO is sent directly to the vendor at the same time that it is sent to the ERP.

4. From the Schedule drop-down list, select a predefined scheduling option. If you select Not scheduled, the invoice import/export job runs only when you manually run it (by selecting Run). For details, see To manually run a finance job. Note that the Export Orders (PO) job is not scheduled, it is simply invoked whenever a PO is ready to be sent to the ERP/vendor.

6. Select Save. The integration profile you configured appears in the Integration Profile List. If you scheduled a job, it appears on the Monitor Jobs page.

To manually run a finance job:

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Note

To run the export job, you must first activate the InvoicePaymentLetter letter, with the channel SUBMISSION; see Enabling/Disabling Letters.

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1. On the Integration Profile List page, locate the profile and select Edit in the row actions list. The General Information tab appears.
2. Select the Actions tab. The details you defined appear.
3. To run an import, export, funds allocation, or PO line export job immediately, select Run in the relevant section. The job is run and the file is sent to / taken from the configured FTP location. If email notifications are enabled in Alma, you receive notification via email.

In Export Invoices For Payment, leave the field Use updated XSD format as it is, unless XSD version 1 is required. For more information about XSD versions, see https://developers.exlibrisgroup.com...ations/finance.

To manually run an export of POs, select Rerun Failed Orders in the Export Orders (PO) section. All previously failed orders are sent for export, and a confirmation message appears at the top of the page.

To view the status of the job, the number of files processed, and so forth, see Viewing Running Jobs and Viewing Completed Jobs.

Note
The status Completed Successfully for a finance job does not mean that invoices were imported/exported successfully. Rather, it means that the job completed without error.
Electronic Data Interchange (EDI)

To configure EDI communication with vendors, you must have the following role:

- Vendor Manager

Electronic Data Interchange (EDI) is an automated method of communication between an institution and its vendors.

EDI requires files to be placed in a certain directory. Files to be sent to an EDI-enabled vendor are automatically exported by Alma to an FTP location where they are fetched by a vendor system. Files placed at the FTP location by an EDI-enabled vendor are automatically loaded and parsed by Alma.

The following acquisition activities are supported for EDI-enabled vendors:

- Sent from Alma to the vendor:
  - **Purchase orders (POs)**
  - **Claims** – Claims sent to the vendor regarding missing items. For vendors that support this feature, claims are sent using EDI instead of by email. EDI claims can be used for both one-time and continuous orders.
    
    Unlike POs, each EDI claim message contains a claim for a single PO line.
  - **Order cancellations** – For vendors that support this feature, cancellations are sent using EDI instead of by email.
    
    Unlike POs, each EDI cancellation message contains a cancellation for a single PO line.

- Sent from the vendor to Alma:
  - **Invoices**
  - **Order Responses: Shelf-Ready** – These responses contain barcodes and other item information for delivered items. After receiving the Order Response, Alma updates the relevant PO lines.
    
    For more details about shelf-ready processing and Order Response EDI files, refer to the [Shelf-Ready Processing using EDI](https://developers.exlibrisgroup.com/alma/integrations/edi) video (1:49 mins).
  - **Order Responses: Order Report** – These responses contain status information about orders: whether they were sent, backordered, or canceled, any fulfillment issues, if the delivery date changed, and so forth. Typically, Order Reports are sent daily from the vendor. The vendor and institution can arrange for some other frequency, such as weekly, or only if there are problems with the order.
    
    When an Order Report is received, the summary in the report is added as a note to the relevant PO lines. The status of items in the report may indicate that a PO line requires additional attention from the user.
  - **Order Responses: Claim Responses** – These responses are sent in response to claims sent from Alma. They appear in the Order Response Journal Claim section of the job report and the Notes tab of the relevant PO line.

The Manage EDI Tasks page contains a task list with order responses that require attention. See [Managing EDI Order Responses](https://developers.exlibrisgroup.com/alma/integrations/edi).

The EDI files that are created for EDI communication are based on the international standards for EDI transmission and should be agreed upon with each vendor prior to entering information in Alma. For a description of the EDI standards with which Alma operates, refer to [https://developers.exlibrisgroup.com/alma/integrations/edi](https://developers.exlibrisgroup.com/alma/integrations/edi).

For the purposes of EDI communication, Alma searches for matching PO and PO line numbers using a case-insensitive
search. Since normally PO line numbers are case-sensitive in Alma, multiple matches may be found during this search (for example, pol111 and POL111), in which case Alma will be unable to attach a PO line to the invoice. Therefore, please ensure that this does not occur if you are using EDI.

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**Note**

For a complete list of vendors who have successfully tested the EDI communication, see the Developer Network. EDI communication should work with any vendor that uses the EDI message types used by Alma, but the list is those that have been tested.

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**Configuring EDI for a Vendor**

When configuring EDI communication with a vendor, in addition to the vendor EDI code and EDI type, you must enter an EDI code and EDI type that the vendor uses for your institution. Optionally, you can also define an EDI code and type for each library served by the institution. When an EOD is received after an EDI has been loaded, you can reload the EDI.

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**Note**

If a vendor is defined as an EDI vendor for outgoing messages, all POs for all vendor accounts are sent via EDI. **POLs should have acquisition method "purchase" in order to be sent via EDI.** If you want to use the same vendor to send non-EDI messages, you must define another, non-EDI vendor and add the relevant accounts to this vendor.

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**To configure EDI communication with a vendor:**

1. On the Search Vendors page (**Acquisitions > Acquisitions Infrastructure > Vendors**) select a vendor. The Vendor Details page appears.
2. Select the **EDI Information** tab.
3. Enter the EDI information as required. A description of the fields is provided in the following table.

<table>
<thead>
<tr>
<th>Section</th>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor EDI Attributes</td>
<td>EDI code</td>
<td>A unique code for the vendor, per institution.</td>
</tr>
<tr>
<td></td>
<td>EDI type</td>
<td>The list is predefined by Ex Libris. You can choose from:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ 014 – EAN-13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ 091 – ID assigned by supplier</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ 092 – ID assigned by customer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ 31B – US-SAN</td>
</tr>
<tr>
<td></td>
<td>EDI naming convention</td>
<td>The list is predefined by Ex Libris. You can choose Alma's standard file naming convention (Standard, which is the default), or one of the following vendor</td>
</tr>
<tr>
<td>Section</td>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>naming conventions: <strong>Ebsco, Ingram, Harrassowitz, Brodart.</strong></td>
<td>This selection defines output file name.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ <strong>Standard</strong> creates the file name as edi.YYYYMMDD.HHMMSS.XXXXXX where XXXXXX is taken from the first six characters of the vendor account code.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The vendor account code should not contain any slashes or dots in the first six character as this will cause problems with the file name.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Proquest and YBP use the standard naming convention.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ <strong>EBSCO</strong> creates the file name as CLAIMS.FIL.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ <strong>Ingram</strong> creates the file name as HHmmSSSSXXX where the first 8 digits are taken from the computer's clock. The remaining three characters refer to the message type:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• epc - OSTENQ (order status enquiry)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• eph - ORDCHG (order change)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ <strong>Harrassowitz</strong> creates the file name as YYYYMMDDHHMMSS.EDI_VENDOR_CODE_edi.XXXXXX. EDI_VENDOR_CODE is the edi vendor code, Z70-EDI-VENDOR_CODE, and XXXXXX is the message type:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ORDERS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• OSTENQ - order status enquiry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ORDCHG - order change</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ <strong>Brodart</strong> creates the file name as YYYYMMDDHHMMSS.XXX.edi.orders with the date and time being taken from the computer's clock. As an example, if you sent a file on September 13, 2011 at 15:31:33 from vendor account SWT EDI the file name would be 20110913153133.SWT.edi.orders - SWT are the first three characters in the vendor EDI code.</td>
</tr>
<tr>
<td>EDI vendor format</td>
<td>Select:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Harrassowitz</strong> – Removes line feeds so that all information is provided on a single line. Can also be selected for Harrassowitz-like vendors.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Baker &amp; Taylor enriched</strong> – Includes enriched data that is customized for Baker &amp; Taylor. The GIR segment includes library and location information in two separate fields, even though the PO line may not include this data.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you are not working with one of these vendors, select <strong>Other</strong>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The other options appearing in this list are for future use.</td>
<td></td>
</tr>
<tr>
<td>Incoming</td>
<td>Whether the vendor submits EDI files, such as invoices or order responses. Both invoice and Order Response files are processed by Alma after being placed in the directory specified in the <strong>Input directory</strong> field. Both types of files are fetched by the same Alma service.</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Shelf Ready Parameters</td>
<td></td>
<td>If the vendor submits Order Responses, you may configure additional parameters to control the handling of the Order Responses. When this check box is selected, the fields <strong>Receive Items</strong>, <strong>Keep in Department</strong>, and <strong>Next Step</strong> appear. If there are changes in the item information, such as the barcode or policy, these are changed in Alma.</td>
</tr>
<tr>
<td>Receive Items</td>
<td></td>
<td>Sets the items specified by an Order Response as received. This updates the item's arrival date to the current date.</td>
</tr>
<tr>
<td>Keep in Department</td>
<td></td>
<td>If you selected <strong>Receive Items</strong>, select to indicate that further work is required before the material can be made available in a library. The step specified in <strong>Next Step</strong> is then applied to the item. For more information, see Receiving Physical Material.</td>
</tr>
<tr>
<td>Next Step</td>
<td></td>
<td>The step to apply to items that you keep in the department (see above). For the available options, see Receiving Physical Material.</td>
</tr>
<tr>
<td>Outgoing - Note that the relevant EDI letter must be enabled and can be configured</td>
<td>POs</td>
<td>Whether to enable EDI POs for the vendor.</td>
</tr>
<tr>
<td></td>
<td>Claims</td>
<td>Whether to enable EDI claims for the vendor. When set, Alma does not send claims by email.</td>
</tr>
<tr>
<td></td>
<td>Order Cancellation</td>
<td>Whether to enable EDI cancellations for the vendor. When set, Alma does not send cancellations by email.</td>
</tr>
<tr>
<td></td>
<td>EDI Vendor Note Fields</td>
<td>When <strong>POs</strong> is selected in the Outgoing section, this list offers the following options that can be added to the <strong>Note To Vendor</strong> field of the ORDERS EDI file:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ Fund Description</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ PO Line Type</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ Receiving Note</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ Rush</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ Reporting Code</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ Secondary Reporting Code</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ Tertiary Reporting Code</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See Configuring EDI Vendor Note Fields.</td>
</tr>
<tr>
<td>Input Job Parameters – Job Scheduling</td>
<td>Status</td>
<td>Whether the EDI communication is active or non-active. By default, <strong>Active</strong> is selected.</td>
</tr>
<tr>
<td></td>
<td>Schedule</td>
<td>The time at which the EDI job runs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>This is relevant only for invoices and not for POs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To run the EDI job immediately (as soon as the Alma system can accommodate it), select <strong>Run Now</strong> to the right of the <strong>Schedule</strong> box.</td>
</tr>
<tr>
<td></td>
<td>Run Now</td>
<td>Select to run the EDI job immediately.</td>
</tr>
<tr>
<td></td>
<td>Email</td>
<td>Configure who receives notification after the EDI jobs. Opens the Email</td>
</tr>
<tr>
<td>Section</td>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Notification</td>
<td>Notifications for Scheduled Jobs page. For more information, see Configuring Email Notifications for Scheduled Jobs.</td>
</tr>
<tr>
<td></td>
<td>Upload EDI</td>
<td>The EDI file to upload. To upload the file, select Add and Execute.</td>
</tr>
<tr>
<td></td>
<td>VAT expended from fund</td>
<td>Whether to have VAT specified at the invoice level in EDI invoices expended from funds. The field Expended from Fund on the Invoice Details page remains selected. The field is selected by default. Clear to leave Expended from Fund on the Invoice Details page unselected. A proportional amount of VAT is added in the Adjustment line for each invoice item.</td>
</tr>
<tr>
<td></td>
<td>Use VAT Code</td>
<td>Select to import the VAT code when using EDI. If your institution does not have the VAT Codes table populated, the field is disabled.</td>
</tr>
<tr>
<td>Input Job Parameters – Job Parameters</td>
<td>VAT Type</td>
<td>Select Inclusive, Exclusive, Line Exclusive.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ <strong>Exclusive</strong> - The total price of the invoice excludes the VAT. The VAT calculation is the Total line amount = Total price + VAT. So, for example, if the total invoice price is 100 USD and the VAT is 10% exclusive, the price is 100 USD and the VAT is 10 USD. The total line amount is 110 USD.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ <strong>Line Exclusive</strong> - The Total price of the invoice includes the VAT while the total line amount does not. Alma calculates the VAT for each invoice line and adds the amount to the lines.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ <strong>Inclusive</strong> - The total price of the invoice includes the VAT. The VAT calculation is Total Amount - (Total Amount / (1 + VAT Percentage) ). So, for example, if the total price is 100 USD, and the VAT is 10%, VAT = 100 - (100 /1.1) = 9.9. The price is 90.1 and the VAT amount is 9.9.</td>
</tr>
<tr>
<td></td>
<td>Do not prorate</td>
<td>Whether, when an invoice is loaded from an EDI file, overhead and discount amounts are charged to their own invoice lines instead of being prorated among all invoice lines.</td>
</tr>
<tr>
<td></td>
<td>Fund</td>
<td>The fund from which overhead and discount amounts are charged. This field appears only when Do not prorate is selected.</td>
</tr>
<tr>
<td>S/FTP Connection</td>
<td>Description</td>
<td>An optional description of the EDI submission details.</td>
</tr>
<tr>
<td></td>
<td>Max. number of files</td>
<td>Not in use. Accept the default value.</td>
</tr>
<tr>
<td></td>
<td>Max. file size</td>
<td>Not in use. Accept the default value.</td>
</tr>
<tr>
<td></td>
<td>Server</td>
<td>The IP address of the FTP server receiving the EDI files.</td>
</tr>
<tr>
<td></td>
<td>User name</td>
<td>The user name for the FTP server.</td>
</tr>
<tr>
<td></td>
<td>Port</td>
<td>The port to use on the FTP server, if the connection is not secure. This is generally port 21.</td>
</tr>
<tr>
<td></td>
<td>Password</td>
<td>The password for the FTP server.</td>
</tr>
<tr>
<td></td>
<td>Input directory</td>
<td>The name of the subdirectory in which the incoming EDI files are stored. If you enter / (a forward slash), Alma searches for incoming files in the root directory.</td>
</tr>
</tbody>
</table>

**Note**

These settings should match the settings in the FTP server.

The S/FTP connection requires full read and write permissions on the vendor's FTP server, or the test (and process) will fail.
<table>
<thead>
<tr>
<th>Section</th>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output directory</td>
<td></td>
<td>The default is <code>/</code>.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The maximum length for the full path to the file, including the path from FTP root directory + the filename, is 100 characters.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The vendor must define one input directory per institution.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The maximum length for the full path to the file, including the path from FTP root directory + the filename, is 100 characters.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The input directory must be different than the output directory. Alma does not validate this.</td>
</tr>
<tr>
<td>Max. file size</td>
<td></td>
<td>Not in use. Accept the default value.</td>
</tr>
<tr>
<td>Allow Navigation</td>
<td></td>
<td>Whether to enable access to other areas of the FTP site. The default is to allow navigation (check box selected).</td>
</tr>
<tr>
<td>FTP Server</td>
<td>Secured</td>
<td>Select if the FTP server is secured. The Authentication Method option appears when this option is selected.</td>
</tr>
<tr>
<td>Authentication</td>
<td>Method</td>
<td>Appears if FTP Server Secured is enabled. Select one of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ Username/password authentication - Use a user name and password.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ Key authentication (public key encryption) - When you select this, a public key appears. The public key is used to authenticate files received from Alma. When this option is selected, the password field is removed.</td>
</tr>
<tr>
<td>FTP mode</td>
<td></td>
<td>The mode used for sending the outgoing EDI files, from a list predefined by Ex Libris:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ ASCII – Each EDI file includes many lines, one for each segment (default).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ Binary – Each EDI file includes one long line.</td>
</tr>
<tr>
<td>Send command</td>
<td></td>
<td>The send command:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ Append – Does not overwrite a file on the FTP server if the existing file has the same name as the new file (default).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ Put – Overwrites a file on the FTP server if the existing file has the same name as the new file.</td>
</tr>
<tr>
<td>FTP passive</td>
<td>mode</td>
<td>Whether the client IP works in passive mode.</td>
</tr>
<tr>
<td>Test FTP</td>
<td></td>
<td>Select to verify that the S/FTP parameters entered are valid. In the event of invalid data, an error message displays at the top of the page.</td>
</tr>
<tr>
<td>Section</td>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Per Organization Unit EDI</td>
<td>Organization unit</td>
<td>An institution/library.</td>
</tr>
<tr>
<td></td>
<td>EDI code</td>
<td>The code used by the vendor for the organization unit.</td>
</tr>
</tbody>
</table>
|                              | EDI type               | EDI type:  
  - 014 – EAN-13  
  - 091 – ID assigned by supplier  
  - 092 – ID assigned by customer  
  - 31B – US-SAN                                                                 |
| EAN per Account code         | Account code           | Vendor accounts code.                                                                                                                       |
|                              | EAN code               | The EAN code to be mapped to the previously selected account code. Select Add EAN to add the code.                                           |

**Note**

An FTP process tries to connect to an external system for one minute before retrying. The process tries five times, in increments of one minute each, before failing. Any files remain where they are to be processed at the next time scheduled.

4. Select **Save** to store the information you entered.

**Note**

For Alma to use the S/FTP connection that you defined, you must allow the FTP server access to Alma. For details, see [Configuring Allowed S/FTP Connections During Testing](#).

See the Acquisitions customer parameter `invoice_split_additional_charges` for information on how additional charges are handled in EDI invoices.

---

**Monitoring EDI Jobs**

The following role can monitor a vendor’s EDI jobs:
To monitor EDI jobs:

On the Search Vendors page, locate the vendor whose EDI jobs you want to monitor and select **View history** in the row actions list (available only for EDI-enabled vendors). The Monitor Jobs page appears.

For more information, see [EDI Job Reports](#).

---

**Working with EDI Files**

**To work with EDI files:**

1. On the Search Vendors page, locate the vendor whose EDI incoming files you want to edit, delete, download, or reload, or for which you want to view a report, and select **View EDI files** in the row actions list (available only for EDI-enabled vendors).

2. On the Attachments page, select one of the following actions:
   - **Edit** – Add a file with a URL as an attachment to the EDI file.
   - **Delete** – Delete the EDI file from the list of files.
   - **Download** – Download the EDI file.
   - **Reload** – Reload the EDI file after confirming that the EOD was loaded. You must ensure that the EDI file was received before the EOD was processed and the EDI file did not find any incoming matches. When reloading an invoice EDI file, you receive a message that the invoice will be deleted. Select **Yes** to delete, or **No** to continue without deleting.

---

**Managing EDI Order Responses**

To manage EDI order responses, you must have one of the following roles:

- Purchasing Manager
- Purchasing Operator
You can manage EDI order responses of types **Claim Responses** or **Order Report** on the Manage EDI Tasks page *(Acquisitions > Purchase Order Lines > Manage EDI Tasks)*. For **Shelf-Ready** order responses, see [EDI Job Reports](#).

The page contains the list PO lines for which order responses were received in the last day. There are two tabs:

- **Review** – PO lines which require attention.
- **All** – All PO lines for which order responses were received.

You can filter the list of PO lines by:

- **Response type** – The status of the order at the vendor.
- **Response date** – The message date from the response. Typically, this is the date that the response was created, but it may be a future or past date.

The fields that appear for each PO line are:

- **Order Number** – The PO line number; select to view the PO Line page.
- **Order Description** – The PO line description; select to view the MARC Record Simple View page
- **Vendor** – Select to view the Vendor Details page.
- **Response Summary** – A free text summary of the order status
- **Response Type** – The status of the order at the vendor
- **Ordered Items** – The number of ordered items
- **Discrete Items** – The number of ordered items, excluding multiple copies of the same items
- **Split Delivery Items** – The number of items that were split into multiple deliveries
- **Dispatched Items** – The number of dispatched items
- **Backordered Items** – The number of backordered items
- **Pieces Delivered** – The number of physical objects sent; for example, an encyclopedia might contain 30 physical books.
- **Expected Delivery** – The expected delivery date

In the **Review** tab, you can perform the following tasks.

**Edit a PO line:**

Select **Edit PO Line** in the row actions list.

The PO Line Summary page appears.

**Change the expected date of a PO line:**
1. Select **Update Expected Receipt Date** in the row actions list.

   This is a shortcut that saves you from having to edit the entire PO line. A dialog box appears.

   ![Change Expected Release Date Dialog Box](image)

   **Change Expected Release Date Dialog Box**

2. Enter a new expected release date, enter an optional note, and select **Save**. The expected receive date is changed in the PO line and the item.

**Cancel a PO line:**

Select **Cancel PO Line** in the row actions list.

**Defer a PO line:**

Select **Defer PO Line** in the row actions list.

**Dismiss one or more notifications:**

- To dismiss a single line, select **Dismiss** in the row actions list.
- To dismiss several notifications at once, select the items, select **Dismiss Selected** from the drop-down list near the **Execute** button, and select **Execute**.
- To dismiss all alerts, select **Dismiss All** from the drop-down list near the **Execute** button, and select **Execute**.

**Edit an item:**

Select **Edit Resource** in the row actions list.

This takes you to the relevant editor page. For example, for physical items, this takes you to the Physical Items Editor page.
Real-Time Integration

For more information, see Real-Time Orders.
Resource Management

Note

- To import bibliographic and authority records, as well as embedded order data (EOD), using import profiles, see Record Import.
- To integrate remote digital repositories, configure the repository (see Managing Remote Digital Repositories) and run a digital import profile (see Managing Import Profiles).

This section includes:

- Exporting Metadata
- Importing Records from OCLC Connexion
- Upload Electronic Holdings from Ovid
- Upload Electronic Holdings from Elsevier
- Upload Electronic Holdings from ProQuest Ebook Central
- Setting Up OAI Integration
- External System Search
- Publishing and Inventory Enrichment (General Publishing)
- Publishing to PubMed
- Publishing to Primo
- Publishing to Primo Central
- Publishing to OCLC
- Publishing to COPAC
- Publishing to SUNCAT
- Publishing to Libraries Australia
- Publishing Electronic Holdings to Google Scholar
- Publishing to KERIS
- Publishing UNIMARC Records
- Z39.50 Search
- SRU/SRW Search
- Linked Data
- Alma Resolver Augmentation
- Resolver Proxies
- Configuring the Validity of EBSCOhost Full Text URLs
- Integrating Alma with the Aleph Central Catalog
- Sharing Alma Link Resolver Data Statistics with bX
• Integrating the SBN Italian Union Catalogue
• Webhooks
• Configuring the SWORD Server Integration Profile
• Integrating an Alma Institution with SUDOC
• Integrating a Non-Alma Member's Inventory from a Central System into a Bridge Institution Managed by a Network Zone
• Alma Network Zone Configuration for Integration with Aleph Members
• Integrating Alma with the Happiness® Gateway
• Upload Electronic Holdings from Springer
• Integrating Alma with the Netpunkt ILL System
• RSS Publishing
• Publishing Electronic Records to Central Discovery Index
Exporting Metadata

You can manually export repository data from Alma to an FTP directory. You do this by manually running one of the export jobs (type = Export). For more information, see Running Manual Jobs on Defined Sets.

Files exported by an export job are available to users on the Exported Processes From Last 30 Date page. See Viewing Files Exported Using Export Jobs.

When you export bibliographic records from an Alma institution (or use Alma general publishing or an API GET bib), Alma returns the MMS ID of the institution’s record in the MARC 001 field. In addition, Alma returns the associated MMS ID from the Community Zone and/or Network Zone in a MARC 035 field (when they exist) in the following manner:

- Institution Zone MMS ID (existing function, no change)

  `<controlfield tag="001">IZ_MMS_ID</controlfield>`

  Example:

  `<controlfield tag="001">9956347601866</controlfield>`

  Exported Institution Zone MMS ID

- Network Zone MMS ID with a prefix of (EXLNZ – Network Code)

  `<datafield tag="035" ind1=" " ind2=" ">
  <subfield code="a">(EXLNZ-NETWORK_CODE)NZ_MMS_ID</subfield>
  </datafield>`

  Example:

  `<datafield ind1=" " ind2=" " tag="035">
  <subfield code="a">(EXLNZ-DIALLIANCE_NETWORK)99108122250001451</subfield>
  </datafield>`

  Exported Network Zone MMS ID (with Prefix)

- Community Zone MMS ID with a prefix of (EXLCZ)

  `<datafield tag="035" ind1=" " ind2=" ">
  <subfield code="a">(EXLCZ)CZ_MMS_ID</subfield>
  </datafield>`

  Example:

  `<datafield tag="035" ind1=" " ind2=" ">
  <subfield code="a">(EXLCZ)9966348601867</subfield>
  </datafield>`

  Exported Community Zone MMS ID (with Prefix)

For information about institution MMS IDs in bibliographic records, see the Institution MMS ID in Bibliographic Records video (1:49 mins).
Importing Records from OCLC Connexion

To configure an OCLC Connexion integration profile, you must have the following role:

- General System Administrator

Metadata records from OCLC Connexion are uploaded to the Alma server on the port designated and opened by Ex Libris for this purpose (using port 5500 - ensure that this port is open for your institution as well). As part of the upload process, Alma applies the import settings (normalization, validation, and merge routines) defined in the integration profile that you configure for this purpose.

To import records from OCLC Connexion to Alma, you must perform the following actions:

1. Configure an OCLC Connexion integration profile in Alma (see below). Note that only one profile should be configured.
2. Configure OCLC Connexion (see below).
3. Export the OCLC records to Alma and ensure that they are properly imported into Alma (see below).

**Note**

The OCLC Connexion integration profile does not support unlinking records from the Alma Community Zone. As a result, records imported using the OCLC Connexion integration profile will be skipped if there is a pre-existing link to the Community Zone.

For information about publishing records to OCLC, see Publishing to OCLC.

To configure the integration profile for OCLC Connexion:

1. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Add External System. The first page of the integration profile wizard opens.
2. Perform the following actions on this page:
   1. Enter a code and name for the profile you are defining.
   2. In a member institution implementing a Network Zone, select Use network zone. For an explanation of this option, see Network-Managed Records in a Collaborative Network.
   3. For Integration type, select OCLC Connexion.

**Note**

The Default check box is not functional for this integration type.
3. Select **Next**. The second page of the wizard appears.

4. Configure the parameters using the information provided in the table below.

---

### OCLC Connexion Profile Fields

<table>
<thead>
<tr>
<th>Section</th>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
<td><strong>Target format</strong></td>
<td>From the drop-down list, select one of the following options to indicate the record format in which you want the records imported/stored in Alma:</td>
</tr>
<tr>
<td>Section</td>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Normalization</td>
<td>Correct the data using</td>
<td>The normalization rules file. For more information, see Working with Normalization Processes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>In addition to the normalization process selected for this parameter, the Alma import process automatically uses the MARC 21 Bib Initial Normalization rule.</td>
</tr>
<tr>
<td>Validation</td>
<td>Check the data using</td>
<td>The method to handle invalid data as it is being imported. For more information, see Working with Validation Exception Profiles. For integration profiles, Ex Libris recommends using the MarcXML Bib Import validation exception profile.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Non-serial match method</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The non-serial match method. For a detailed description and examples of some of these methods, see Match Methods – Explanations and Examples.</td>
</tr>
<tr>
<td>Merge</td>
<td>Merge method</td>
<td>How to merge the external record into the one already existing in Alma. Select from one of the following merge methods predefined by Ex Libris:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ <strong>Replace 245 and 035 OCLC if exist</strong> – Replaces all MARC fields in the Alma record with fields from the external records, except for fields 001, 245, and 035 (whose “a” subfields contain OCoLC or where the first indicator is 9 and the second indicator is #). Any 001, 245, or 035 fields in the Alma record are left in place, and any 245 or 035 fields in the external record are added to them.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ <strong>Overlay all fields but local</strong> – Replaces 035 fields in the Alma record with those from the external record unless the first indicator is 9 and the second indicator is #. In addition, replaces all other MARC fields in the Alma record with fields from the external records, except for fields 001 and 9XX.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ <strong>Keep only old value</strong> – Keeps all MARC field values in the Alma records.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◦ <strong>Conditional subject headings</strong> – Replaces all MARC fields in the Alma record with fields from the external records, except for fields 001, 035, 9XX, 65X, and 7XX. Any 001, 035, 9XX, 65X, or 7XX fields in the Alma record are left in place, and any 6xX or 7XX fields in the external record are added to them.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alternatively, if you defined merge rules in the MD Editor, you can select these rules from the Merge method drop-down list. The descriptions that were entered for the rules are displayed as the method names.</td>
</tr>
<tr>
<td>Section</td>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>Do not override/merge a record with lower brief version</td>
<td></td>
<td>Whether to override a more complete record (higher brief level) with a less complete record (lower brief level). In order to prevent a situation in which a good quality record is overlaid with a lower quality imported record, this parameter provides additional control when an imported record overlays or merges with an existing record. This option assumes that you do not want to overlay/merge a full or more descriptive record with a brief or less fully descriptive record. As a result, when this option is selected, the system checks/compares the brief level number (01-10) of the existing and imported records; and a record with a lower brief level number will not merge or overlay a record with a higher brief level number. For more information, see Working with Brief Record Levels.</td>
</tr>
<tr>
<td>Do not override/merge record with an older version</td>
<td></td>
<td>Whether to override an older record with a newer one. See the description in Creating/Editing an Import Profile: Match Profile.</td>
</tr>
<tr>
<td>Management Tags</td>
<td>Synchronize with External Catalog</td>
<td>The publishing option for the imported records: ◦ Publish holdings only ◦ Publish bibliographic records ◦ Don’t publish</td>
</tr>
<tr>
<td>Authorization</td>
<td>Password</td>
<td>A password controlled by each Alma institution and used by the OCLC Connexion client to connect to Alma. This must be the same password that you configure in OCLC Connexion (see below). Note that it is not the password that Alma uses to connect to OCLC Connexion/WorldCat as an external search resource, or the password used to log in to the Connexion client.</td>
</tr>
</tbody>
</table>

5. Select Save. The profile you configured appears in the Integration Profile List.

**To configure OCLC Connexion to communicate with Alma:**

1. Access OCLC Connexion and enter the user name and password that you received with your OCLC subscription. ◦ In the OCLC Connexion client (any version), select Tools > Options > Authorizations and enter your authorization number and password. ◦ In the OCLC Connexion Web application (http://connexion.oclc.org/), enter this information on the login page.
2. Access the OCLC Connexion export options (under Tools > Options > Export > Create in the Client, or under General > Admin > Export Options in the Web application).
3. In the Host Name box, enter your Alma domain name; see Your Alma Domain Names. Note that using accelerated servers is not supported.
4. In the Port or Port Number box, enter 5500.
5. Select the Send Local System Logon ID and Password (Client) or Send Logon ID (Web application) check box.
6. In the **Logon ID** box, enter your Alma institution code, such as 0100_INST.

7. In the **Password** box, enter the same password you entered for the OCLC Connexion profile in Alma (see the **Authorization** field, above). Note that this password is used by the Connexion client to log in to Alma.

In order to import records in correct UTF format the character set should be UTF-8 Unicode for bibliographic and authority records as shown below. This is defined in **Tools > Options > Export > Record Characteristics**.

![Record Characteristics](image)

**UTF-8 Format**

Ensure that the **Send User ID** and Permanent Connection check boxes are not selected.

For example:

![OCLC Gateway Export - Local System Settings](image)

**OCLC Client Export Options**
8. Select **OK** (Client) or **Save My Default** (Web application).

**To export an OCLC record to Alma:**

1. Locate the record you want to export and open it. For example:

   ![Example of Record to Be Exported]

   **Example of Record to Be Exported**

2. Select the **ActionExport** button (in the OCLC Connexion Client).
If the record is exported successfully, you receive a message similar to the following:

Example of Export Message

You can then search in Alma to view the record.
Upload Electronic Holdings from Ovid

You can automatically update your Ovid electronic portfolios using an integration profile, which saves you from having to manually upload them. The Ovid integration profile uses the KBART format to retrieve institution-specific portfolios. The profile identifies the subscription and purchase values in the KBART notes field for monographs in order to manage the Ovid subscription and Ovid purchase electronic collections separately. See the Prerequisite Tasks for Creating the Ovid Integration Profile section and the Creating the Ovid Integration Profile section for information regarding prerequisites and creating the Ovid integration profile.

For more information on uploading electronic holdings from Ovid, watch the Upload Electronic Holdings from Ovid video (2:27 mins).

Note

When uploading holdings using the Elsevier Upload Electronic Holdings integration profile, multiple Excel lines of the same ISSN and with different coverages are concatenated and uploaded as one portfolio with multiple coverages, provided Ex Libris Support has configured an internal parameter correctly.

Prerequisite Tasks for Creating the Ovid Integration Profile

Before you can begin automatically importing Ovid portfolios:

- Contact Ovid Customer Support to obtain the account information required for the integration profile. See Obtaining Your Ovid Account Information.
- Activate the Ovid electronic collections from the Alma Community Zone. See Activating the Ovid Electronic Collections from the Alma Community Zone.

Obtaining Your Ovid Account Information

In order to create an Ovid integration profile in Alma, contact Ovid Customer Support (support@ovid.com) and have them set up and provide you with the following account information:

- User name
- Password
- Ovid group name

After you have obtained these log-in parameters from Ovid, test them using the following URL format:

https://portal.ovid.com/Entitlements/api/Holdings/<Ovid group name>?UserName=<username>&Password=<password>

For example, if the user name is testuser@gmail.com, the password is testpassword, and the Ovid group name is testOvidgroup, the URL would be as follows:

https://portal.ovid.com/Entitlements/api/
Holdings/testOvidgroup?UserName=testuser@gmail.com&Password=testpassword

When you execute this URL, you should receive a tab-delimited KBART file. If the URL does not process successfully, contact Ovid Customer Support for assistance.

Activating the Ovid Electronic Collections from the Alma Community Zone

The Community Zone provides the following Ovid electronic collections:

- Books@Ovid Subscription Complete
- Books@Ovid Purchase Complete
- Journals@Ovid Complete

Search Alma to locate these electronic collections in the Community Zone and activate them prior to running the Ovid integration profile.

Note that only the electronic collection and its service need to be activated (select the Activate this electronic collection service and Make service available Full Text Service options). There is no need to activate any portfolios (select the Manual activation - activate electronic collection and manually select portfolios Activation Type option). The activation of the portfolios is done by the upload electronic holdings integration process.

Creating the Ovid Integration Profile

After you have successfully obtained your Ovid account information and activated the Ovid electronic collections from the Community Zone, you are ready to create your Ovid integration profile in Alma.

To create your Ovid integration profile:

1. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile.
2. For Integration Type, select the Upload Electronic Holdings option. The page dynamically updates.

Upload Electronic Holdings Type of Integration Profile

3. For Vendor, select OVID.

Note

When you run the Upload Electronic Holdings integration profile, the job report naming convention reflects the vendor option that you select for this parameter.
4. Select **Next**. Step 2 of the wizard appears.

5. Complete the Upload Electronic Holdings configuration section using the information in the table below.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active</strong></td>
<td>Select <strong>Active</strong> to make this an active profile. The default setting is <strong>Inactive</strong>.</td>
</tr>
<tr>
<td>User name</td>
<td>Enter the user name, password, and Ovid group account information that you received from Ovid.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>File format</td>
<td>Select the KBART file format.</td>
</tr>
<tr>
<td>Group</td>
<td>Use this parameter to select one or more groups from the list of multi-campus options in the drop-down list. This parameter is optional, so you may also choose to leave it blank. The Group parameter appears when you have the <code>multi_campus_inventory_management</code> customer parameter set to <code>true</code>. With the <code>multi_campus_inventory_management</code> customer parameter set to <code>true</code>, you can have multiple Ovid integration profiles. When you have obtained multiple Ovid group identifications from Ovid, you may want to create multiple integration profiles using that identification information. Note that when you have more than one active Ovid integration profile with one or more multi-campus selections made for the Group parameter, any additional active Ovid integration profiles must have one or more multi-campus selections made. In this situation, the Group parameter may no longer be left blank. When the Ovid integration profile job is run and multi-campus group information was configured, the multi-campus group information appears in the job report.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Select the scheduling option that you prefer to have the integration profile job run automatically. When you have the <code>multi_campus_inventory_management</code> customer parameter set to <code>true</code>, and multiple Ovid integration profiles, the first scheduling option that you select and save applies to all the subsequent, active Ovid integration profiles that you create. Note that when the scheduled job begins to run, all of the Ovid integration profiles that are set to <code>Active</code> are handled together by the job run. Any Ovid integration profiles set to <code>Inactive</code> are not handled as part of the scheduled job run.</td>
</tr>
</tbody>
</table>

6. Save the profile using one of the following options:
   - Select **Save**. The integration profile is scheduled and appears in the list of scheduled jobs (see Viewing All Scheduled Jobs).
   - Select **Save and Run Now**. This saves your profile settings and immediately queues the upload to run. The **Save and Run Now** button also appears on the Actions tab when you edit the profile. Note that when you edit your saved profile, the button appears as **Run Now**, and you can choose to manually run the upload job.

When you press **Save and Run Now** in a specific Ovid integration profile, all of the Ovid integration profiles that are set to **Active** are run as part of the job request. Any Ovid integration profiles set to **Inactive** are not run as part of selecting **Save and Run Now**. Selecting **Save and Run Now** from an **Inactive** integration profile does not run the job for that integration profile or any other Ovid integration profiles set to **Inactive**, but will run only for the **Active** profiles.

**Note**

This behavior of **Save and Run Now** is different from other integration profiles where selecting **Save and Run Now** runs the job request for integration profiles set to **Inactive**. This is a known issue. In order to have an Ovid integration profile run, it needs to be set to **Active**.
Preserving Previous Ovid Acquisition Details

If prior to the use of Upload Electronic Holdings from Ovid you managed Ovid titles in different Community Zone electronic collections and you want to preserve the acquisition details associated with those titles (such as PO lines and licenses), you can use the Move electronic portfolio information job to move PO lines and licenses to the Books@Ovid Subscription Complete, Books@Ovid Purchase Complete, and Journals@Ovid Complete electronic collections.

To do this, use the following steps:

1. Create a set of the content type electronic collections that includes the previous electronic collections in which you managed the Ovid titles.

2. Open the Run a Job - Select Job to Run page (Admin > Manage Jobs and Sets > Run a Job), and search for the Move electronic portfolio information job.

3. Select the Move electronic portfolio information job and select Next.

4. Select the set that you created above and select Next.

5. For the Target electronic collection, select the collection Books@Ovid Subscription Complete, Books@Ovid Purchase Complete, or Journals@Ovid Complete.

6. Select the Move PO lines and Move licenses options and complete the required information as needed.

7. Select Next and review/confirm the job summary information.

8. Select Submit.
Upload Electronic Holdings from Elsevier

You can both import and continuously update Elsevier electronic holdings by automatically retrieving the institution-specific holdings using an integration profile.

Prior to running an Elsevier integration profile job, you need to activate certain electronic collections. See Activating the Elsevier Electronic Collections from the Alma Community Zone for more information.

For more information, see Setting Up Continuous Update for Elsevier Portfolios Using an Integration Profile and this presentation (a .pptx file).

---

**Note**

When uploading holdings using the Elsevier Upload Electronic Holdings integration profile, multiple Excel lines of the same ISSN and with different coverages are concatenated and uploaded as one portfolio with multiple coverages, provided Ex Libris Support has configured an internal parameter.

---

Creating the Elsevier Integration Profile

To configure automatic uploading of electronic holdings for Elsevier:

1. Obtain an institution token from Elsevier. You can create an Elsevier token using the Elsevier admin tool. For more information, contact the Elsevier helpdesk for assistance.

2. Confirm that the Elsevier collections for which you are updating holdings are active collections in Alma. See Activating the Elsevier Electronic Collections from the Alma Community Zone for more information.

3. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles) select Add Integration Profile to open the External System wizard for configuring an integration profile.

4. In the Integration type field, select Upload Electronic Holdings. The other fields on the page change to reflect your selection.

5. In the Vendor field, select ELSEVIER.

---

**Note**

When you run the Upload Electronic Holdings integration profile, the job report naming convention reflects the
6. Add a description (optional) and select Next. The second page of the wizard appears.

![Job Report](image)

Configuring Upload Electronic Holdings Integration Profile, Part 2

7. Complete the Upload Electronic Holdings configuration section using the information in the table below.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>Select Active to make this an active profile. The default setting is Inactive.</td>
</tr>
<tr>
<td>Institution token id</td>
<td>Enter the institution token ID that you received from Elsevier.</td>
</tr>
<tr>
<td>File format</td>
<td>Select the KBART file format.</td>
</tr>
<tr>
<td>Group</td>
<td>Use this parameter to select one or more groups from the list of multi-campus options in the drop-down list. This parameter is optional, so you may also choose to leave it blank. The Group parameter appears when you have the <code>multi_campus_inventory_management</code> customer parameter set</td>
</tr>
</tbody>
</table>
With the `multi_campus_inventory_management` customer parameter set to `true`, you can have multiple Elsevier integration profiles. When you have obtained multiple Elsevier token IDs from Elsevier, you may want to create multiple integration profiles using that identification information.

Note that when you have more than one active Elsevier integration profile with one or more multi-campus selections made for the Group parameter, any additional active Elsevier integration profiles must have one or more multi-campus selections made. In this situation, the Group parameter may no longer be left blank.

When the Elsevier integration profile job is run and multi-campus group information was configured, the multi-campus group information appears in the job report.

8. Save the profile using one of the following options:

- Select **Save**. The integration profile is scheduled and appears in the list of scheduled jobs (see Viewing All Scheduled Jobs).

- Select **Save and Run Now**. This saves your profile settings and immediately queues the upload to run. The **Save and Run Now** button also appears on the Actions tab when you edit the profile. Note that when you edit your saved profile, the button appears as **Run Now**, and you can choose to manually run the upload job.

When you press **Save and Run Now** in a specific Elsevier integration profile, all of the Elsevier integration profiles that are set to **Active** are run as part of the job request. Any Elsevier integration profiles set to **Inactive** are not run as part of selecting **Save and Run Now**. Selecting **Save and Run Now** from an **Inactive** integration profile does not run the job for that integration profile or any other Elsevier integration profiles set to **Inactive**, but will run only for the **Active** profiles.

**Note**

This behavior of **Save and Run Now** is different from other integration profiles where selecting **Save and Run Now** runs the job request for integration profiles set to **Inactive**. This is a known issue. In order to have an Elsevier integration profile run, it needs to be set to **Active**.

---

### Activating the Elsevier Electronic Collections from the Alma Community Zone

The Community Zone provides the following Elsevier electronic collections:

- Elsevier ScienceDirect Books Complete
• Elsevier ScienceDirect Journals Complete

Search Alma to locate these electronic collections in the Community Zone and activate them prior to running the Elsevier integration profile.

Note that only the electronic collection and its service need to be activated (select the **Activate this electronic collection service** and **Make service available** Full Text Service options). There is no need to activate any portfolios (select the **Manual activation - activate electronic collection and manually select portfolios** Activation Type option). The activation of the portfolios is done by the upload electronic holdings integration process.

---

**Preserving Previous Elsevier Acquisition Details**

If prior to the use of Upload Electronic Holdings from Elsevier, you managed Elsevier titles in different Community Zone electronic collections and you want to preserve the acquisition details associated with those titles (such as PO lines and licenses), you can use the **Move electronic portfolio information** job to move PO lines and licenses to the Elsevier ScienceDirect Books Complete and Elsevier ScienceDirect Journals Complete electronic collections.

**To do this, use the following steps:**

1. Create a set of the content type electronic collections that includes the previous electronic collections in which you managed the Elsevier titles.

2. Open the Run a Job - Select Job to Run page (Admin > Manage Jobs and Sets > Run a Job), and search for the **Move electronic portfolio information** job.

3. Select the **Move electronic portfolio information** job and select **Next**.

4. Select the set that you created above and select **Next**.

5. For the **Target electronic collection**, select the collection Elsevier ScienceDirect Books Complete or Elsevier ScienceDirect Journals Complete.

6. Select the **Move PO lines** and **Move licenses** options and complete the required information as needed.

7. Select **Next** and review/confirm the job summary information.

8. Select **Submit**.
Upload Electronic Holdings from ProQuest Ebook Central

To configure an integration profile, you must have the following role:

- General System Administrator

- Read this page in its entirety for important information regarding actions required for both Alma and Ebook Central.
- Do not activate your Ebook Central integration profile in Alma until you have confirmed with ProQuest Support that your account was activated and Ebook Central files have begun publishing to Alma. If the Alma Ebook Central integration profile is activated and scheduled before ProQuest has started to publish the relevant files, the job will fail. See Creating an Ebook Central Integration Profile for more information.
- It is recommended that you test this capability in your sandbox prior to implementing it in your production environment.
  - In the sandbox environment, other integrations involving FTP are disabled by default. You can enable specific FTP addresses for communication by entering FTP host names/IP addresses in the FTP Include List mapping table (see Configuring Allowed S/FTP Connections During Testing). This enables the testing of FTP-related integrations with third-party systems. (This is not required on production environments.)
  - Specific to the sandbox environment, you need to allow access to the FTP where ProQuest delivers the feed files. Go to Configuration > General > External Systems > Allowed S/FTP connections, add a row with the following FTP information and select Save:
    - ftp.ebrary.com / ftp.ebrary.com
    Note that the holdings are from ftp.ebrary.com.
  - For institutions in production that have configured entries in the FTP Include List mapping table (Configuration > General > External Systems > Allowed S/FTP connections), you must also add a row with ftp.ebrary.com / ftp.ebrary.com. Note that the Allowed S/FTP connections configuration only applies to a production environment during your Alma testload. After your Go Live cutover, this is no longer used or needed.

The Alma Ebook Central Integration feature may be used by any institution that has access to titles via ProQuest Ebook Central. Institutions that participate in the PDA/DDA (Patron Driven Acquisition/Demand Driven Acquisition) program and institutions that do not participate in the PDA/DDA program can both take advantage of this facility to automatically activate the titles to which they have access via ProQuest Ebook Central. (Note that the PDA and DDA acronyms are used interchangeably.)

The automatic upload of electronic holdings for ProQuest Ebook Central provides institutions the ability to automatically activate/deactivate the electronic resources to which they have access via the ProQuest Ebook Central platform based on their Ebook Central site ID. This service eliminates the need for human intervention when activating the electronic resources of the Ebook Central platform for any electronic title whether it is part of a PDA/DDA program or individually owned/purchased titles.

In order to utilize this capability, you need to create an Alma Ebook Central integration profile that is identified as Active
and has a scheduling option selected. The Alma Ebook Central integration profile requires that you know your Ebook Central site identifier (siteID). See Creating an Ebook Central Integration Profile for more information.

Contact Ebook Support through the ProQuest Support Center to ask that automated holdings for Alma be enabled in Ebook Central.

You need to provide your Ebook Central site ID and specify if you would like both owned and DDA titles or just owned titles only to be sent to Alma.

If you are a member of a consortium on Ebook Central, the consortium-owned and DDA titles that are visible to patrons on your Ebook Central site along with your locally-held titles are sent to Alma.

### Working with the Alma Ebook Central Integration

The following describes how the Alma integration with Ebook Central works:

- The ProQuest Books division maintains an electronic collection named Ebook Central Perpetual Subscription & DDA Titles that is published to Alma’s Community Zone and gets updated weekly.

- After you have created an Alma Ebook Central integration profile that is set to **Active** and scheduled to run, no additional action is required to maintain the content of the Ebook Central Perpetual Subscription & DDA Titles collection. Maintenance of this collection is handled for you automatically by the integration job on a weekly basis.

- The ProQuest Books division weekly updates occur on Wednesday. In Alma, scheduling options are available for every day of the week (see Schedule).

- As communicated by ProQuest Ebook Central, Alma updates the locally activated Ebook Central Perpetual Subscription & DDA Titles electronic collection to include the portfolios that match the electronic resources available to you. This process may include adding new portfolios or deleting portfolios.

- The activated portfolios of the PDA/DDA program are associated with the Alma PDA profile called ProQuest Ebook Central-PDA. This allows you to identify titles that are part of the PDA/DDA program for analytical purposes (unless the Alma PDA profile is manually deleted).

The Alma PDA profile (ProQuest Ebook Central-PDA) is automatically created as a part of the Ebook Central Integration Profile. See Creating an Ebook Central Integration Profile for more information.
Note that after the Alma PDA profile is created, the associated PDA repository import profile is not used. Its status is set to inactive.

- As part of the ProQuest Ebook Central automatic upload of electronic holdings, a technical PO line is created for titles that were purchased as part of the DDA program with the following basic details:
  - Type: Electronic Book - One Time
  - Vendor: As defined in the Upload Electronic Holdings profile
  - Owner: as defined on the Upload Electronic Holdings profile
  - Material Type: Book

- When you choose to no longer participate in the Alma Ebook Central program, the feeds are no longer sent to Alma and the portfolios are deleted from the Ebook Central Perpetual Subscription & DDA Titles collection. Since the ProQuest Books division will block access to the portfolios that have not been purchased when you leave the PDA/DDA Ebook Central program, deleting those portfolios in Alma prevents patrons from encountering dead-end links.

---

**Creating an Ebook Central Integration Profile**

All electronic resources to which you have access via the Ebook Central integration profile are activated and managed by the process under the Community Zone collection called Ebook Central Perpetual Subscription & DDA Titles. As a result, prior to activating the Alma Ebook Central integration profile job, you need to confirm that the Community Zone Ebook Central Perpetual Subscription & DDA Titles electronic collection is active.

Note that only the electronic collection and its service need to be activated (select the **Activate this electronic collection service** and **Make service available Full Text Service** options). There is no need to activate any portfolios (select the **Manual activation - activate electronic collection and manually select portfolios** Activation Type option). The activation of the portfolios is done by the upload electronic holdings integration process.

If you already have the Ebook Central Perpetual Subscription & DDA Titles collection activated, the Upload Electronic Holdings from ProQuest Ebook Central process updates the existing portfolios preserving the local portfolio information such as PO line, licenses, notes, and so forth. It does not create duplicate portfolios under the Ebook Central Perpetual Subscription & DDA Titles.

---

**Note**

You need to activate the Ebook Central Perpetual Subscription & DDA Titles electronic collection before the Alma Ebook Central integration profile job is run and must not be activated more than once.

The Ebook Central Perpetual Subscription & DDA Titles electronic collection is not deleted/deactivated by the Alma Ebook Central integration profile job. The electronic collection is always manually managed, manually activated, and manually deactivated.

---

**To create an integration profile for Ebook Central:**

1. Open the Integration Profile List page (**Configuration Menu > General > External Systems > Integration Profiles**).
2. Select **Add Integration Profile**.
3. For the Integration Type parameter, select **Upload Electronic Holdings** from the drop-down list.
4. For the Vendor parameter, select **ProQuest Ebook Central** from the drop-down list.
5. Optionally, enter a description and select **Next**.

6. Complete the details in the Upload Electronic Holdings section using the information provided by the ProQuest Books division for the trial and referencing the table below.

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**ProQuest Ebook Central Integration Profile Wizard Step 2**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>Select <strong>Active</strong> to make this an active profile. The default setting is <strong>Inactive</strong>. Do not activate your Ebook Central integration profile in Alma until you have confirmed with ProQuest Support that your account was activated and Ebook Central files have begun publishing to Alma. If the Alma Ebook Central integration profile is activated and scheduled before ProQuest has started to publish the relevant files, the job will fail.</td>
</tr>
<tr>
<td>Ebook Central site ID</td>
<td>Enter the Ebook Central site identifier (siteID) provided by the ProQuest Books division. Your siteID can be located in your LibCentral or Ebook Central URLs. See the following URL formats: ◦ From the librarian interface LibCentral: <a href="https://EBOOKCENTRALSITEID.ebookcentral.proquest.com/libcentral">https://EBOOKCENTRALSITEID.ebookcentral.proquest.com/libcentral</a> ◦ From the patron interface: <a href="https://ebookcentral.proquest.com/lib/EBOOKCENTRALSITEID">https://ebookcentral.proquest.com/lib/EBOOKCENTRALSITEID</a> For universities with multiple Institution Zones, each institution can use the same siteID in its integration profile. Note that the siteID is not case sensitive.</td>
</tr>
<tr>
<td>PDA code</td>
<td>After you save this profile, the system automatically enters the ProQuest Ebook Central-PDA value for this parameter.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>PDA Code</strong></td>
<td>This PDA code is used to identify the portfolios that are part of the Ebook Central PDA/DDA program.</td>
</tr>
<tr>
<td><strong>Vendor</strong></td>
<td>Select the ProQuest vendor option from the browse list of available vendors.</td>
</tr>
<tr>
<td><strong>PO line owner</strong></td>
<td>Select the organization unit (such as Main Library) from the browse list of available units. This identifies the owner of the purchase order lines for those titles that will be purchased as part of the PDA/DDA program.</td>
</tr>
<tr>
<td><strong>Date of last processed files</strong></td>
<td>The date that appears for this parameter is pulled from the vendor file name of the last processed file from the run of the ProQuest Ebook Central integration profile job. For example, 17/10/2018 would appear for <strong>Date of last processed files</strong> if the following files were processed: DDAPurchaseCollection_OWNED_HOLDINGS_uni_2018-10-15.txt, DDAPurchaseCollection_DDA_HOLDINGS_uni_2018-10-16.txt, EbookCentral_Customers_HOLDINGS_2018-10-17.txt. This date is used when the job starts to verify that the files on the FTP server are newer (according to the date stamped in their name) than the date of this field. If the files on the FTP server are not newer than the date for this parameter, the job will not run.</td>
</tr>
</tbody>
</table>
| **Group**            | Use this parameter to select one or more groups from the list of options in the drop-down list for distributed access to electronic resources. The Group parameter appears when you have the `multi_campus_inventory_management` customer parameter set to true. When the `multi_campus_inventory_management` customer parameter set to true and you use the Group parameter, you can create multiple ProQuest Ebook Central integration profiles. The upload holdings job will run for the group or groups that you specify in the ProQuest Ebook Central integration profile with the Group parameter. After you have created one active ProQuest Ebook Central integration profile with one or more distributed access to electronic resources selections made for the Group parameter, each additional active ProQuest Ebook Central integration profile that you create must have one or more distributed access to electronic resources selections made for the Group parameter. You cannot leave the Group parameter blank for any additional ProQuest Ebook Central integration profile that you designate as Active. The first active ProQuest Ebook Central integration profile that you create using the Group parameter determines the values that must be set for the following profile parameters in subsequent active profiles that you create:  
  ◦ Vendor  
  ◦ PO line owner  
  ◦ Schedule  
  Note that for subsequent active profiles that are created, you need to leave the Schedule parameter set to Not |
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scheduled.</strong></td>
<td>All jobs that are run based on the subsequent active profiles that are created are run using the schedule specified in the first active group profile that you saved.</td>
</tr>
<tr>
<td>When you obtain multiple ProQuest Ebook Central site IDs from ProQuest, you may use those when create multiple integration profiles.</td>
<td></td>
</tr>
<tr>
<td>When the integration profile job is run and distributed access to electronic resources group information is configured, the distributed access to electronic resources group information appears in the job report.</td>
<td></td>
</tr>
<tr>
<td>Note that if you leave the Group parameter blank for the first active ProQuest Ebook Central integration profile that you create, the system assumes that you are creating the profile as an institution-wide vs. group-based integration profile and will not let you create any additional active profiles. Only when you use the Group parameter can you create multiple ProQuest Ebook Central integration profiles.</td>
<td></td>
</tr>
<tr>
<td><strong>Schedule</strong></td>
<td>See the explanation for <a href="#">Active</a>.</td>
</tr>
<tr>
<td>Select a scheduling option from the drop-down list to have this integration profile run automatically. Options are available for every day of the week (Sunday through Saturday). Optionally, you may choose to run the integration profile manually by selecting the <strong>Save and Run Now</strong> button.</td>
<td></td>
</tr>
<tr>
<td>After you save this profile, you may use the <strong>Save and Run Now</strong> button (located on the Actions tab of the saved profile) to run the job manually by selecting <strong>Edit</strong> in the row actions list of the ProQuest Ebook Central profile on the Integration Profile List page.</td>
<td></td>
</tr>
<tr>
<td>When you select <strong>Save and Run Now</strong>, the date is ignored from the <strong>Date of last processed files</strong> parameter, the job for the ProQuest Ebook Central integration profile is run, and the files that currently exist on the FTP server are processed by skipping the validation against the date for the <strong>Date of last processed files</strong> parameter.</td>
<td></td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td>If the electronic collection specified for the trial is not yet activated in the Community Zone, the job will not run when you use the <strong>Save and Run Now</strong> button.</td>
<td></td>
</tr>
</tbody>
</table>

7. Save the profile using one of the following options:

- Select **Save**. The integration profile is scheduled and appears in the list of scheduled jobs (see Viewing All Scheduled Jobs).

- Select **Save and Run Now**. This saves your profile settings and immediately queues the upload to run. The **Save and Run Now** button also appears on the Actions tab when you edit the profile.

Note that there may be cases when the job runs successfully, but no changes are made in Alma. This is because the holdings file provided by ProQuest which is used as input for the job is provided on a weekly basis. Therefore, if the job already ran and then runs again before a new file was provided by ProQuest, no changes are made. This does not mean that the job did not complete successfully but, rather, that no new changes were provided since the last run.

### Viewing the Job Report

Reporting is provided for the job that runs the ProQuest Ebook Central integration profile. Refer to the Monitor Jobs History tab (Admin > Manage Jobs and Sets > Monitor Jobs) to view the **Upload electronic holdings** report that is generated.
from running this job. See below for an example report.

Upload Electronic Holdings Report for ProQuest Ebook Central

The Job Events section provides links to the following lists:

- Activated portfolios assigned with PDA
  - This is a list of the portfolios from the DDA file.

Activated Portfolios Assigned with PDA

- Activated portfolios with new PO line
  - This list provides a mapping of the portfolios and the PO lines created for them.
Viewing Purchase Order Information

For portfolios associated with the ProQuest Ebook Central PDA/DDA program, a technical PO line is created. This purchase order information for a particular portfolio can be viewed on the Acquisition Information tab in the Electronic Portfolio Editor.

Note that ProQuest pricing is not sent as part of the ProQuest Ebook Central communication to Alma. Only the IDs are sent for the owned and DDA portfolios. You may manually update PO lines with fund and/or price information.

To view the technical PO line information on the Acquisition Information tab in the Electronic Portfolio Editor:

1. Complete a search for the electronic portfolio whose purchase order information you want to view.
2. From the search results page, select the option to edit the portfolio.
3. On the Electronic Portfolio Editor page, select the Acquisition Information tab. The technical PO line information appears on this tab.

Preserving Previous Ebook Central Acquisition Details

If prior to the use of Upload Electronic Holdings from ProQuest Ebook Central you have managed Ebook Central titles in different Community Zone electronic collections and you want to preserve the acquisition details associated with those titles (such as PO lines and licenses), you can use the Move electronic portfolio information job to move PO lines and licenses to the new electronic collection Ebook Central Perpetual Subscription & DDA Titles.

To do this, use the following steps:

1. Create a set of the content type electronic collections that includes the previous electronic collections in which you managed the Ebook Central titles.
2. Open the Run a Job - Select Job to Run page (Admin > Manage Jobs and Sets > Run a Job), and search for the Move electronic portfolio information job.
3. Select this job and click **Next**.
4. Select the set that you have created above and click **Next**.
5. For **Target electronic collection**, select the collection **Ebook Central Perpetual Subscription & DDA Titles**.
6. Select **Move PO lines** and **Move licenses** and complete the required information as needed.
7. Select **Next** and review/confirm the job summary information.
8. Select **Submit**.

After the job completes, PO lines and licenses are moved from the previous Ebook Central electronic collections that you previously managed to the appropriate portfolios of the new Ebook Central Perpetual Subscription & DDA Titles.
Setting Up OAI Integration

The Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) is a low-barrier mechanism for developing and promoting interoperability standards that aim to facilitate the efficient dissemination of content across repositories. Data Providers are repositories that expose structured metadata through OAI-PMH. Service Providers then make OAI-PMH service requests to harvest that metadata. OAI-PMH uses six request types (“verbs”) that are invoked within HTTP. Using this functionality, Alma can publish metadata (as a Data Provider) which can then be harvested by external tools/repositories (Data Harvesters).

Configuring an OAI integration profile is the first step toward publishing through OAI. Configuring an OAI integration profile enables Alma to expose the records as OAI types and harvest them accordingly.

Once you configured the integration profile, you can set up a publishing profile. When that is complete, your OAI setup should be complete and your database ready to load. For information on setting up a publishing OAI profile, see Publishing and Inventory Enrichment.

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Note

If your institution already has an OAI integration profile, you cannot add a second one. However, you can edit the existing one.

See Making the Alma Repository Available via OAI for more information.

To set up an OAI integration profile:

1. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile. The first step of the two-step integration wizard appears.

2. From the Integration Type drop-down menu, select OAI Repository Definition. The page refreshes with relevant fields for the profile.

   Note

   The Default check box is not functional for this integration type.

3. Enter an optional Description for the integration profile, and select Next. Step 2 of the integration profile wizard appears.
4. Enter OAI Repository Definitions as required:
   - **Active / Non Active** (required) - Select **Active**.
   - **Repository Name** - The repository when calling the OAI API.
   - **Repository Base URL** - The fixed, auto-generated base URL for all OAI links, not editable.
   - **Protocol Version** - The protocol version used. The version is automatically entered for this parameter and is not editable.
   - **Admin Email** - The email address where you want communications related to the integration profile to be sent.
   - **Earliest Datestamp** - The first date stamp of the repository records (which can be used, for example, when querying the repository by date).
   - **Deleted Record** - This is automatically identified as **transient** and is not editable.
   - **Granularity** - The data/timestamp granularity is automatically identified as YYYY-MM-DDThh:mm:ssZ and is not editable. See [ISO 8601](https://en.wikipedia.org/wiki/ISO_8601) for an explanation of this format.
   - **Metadata Prefixes** - Select to open a page to enable or disable prefixes. Currently, only MARC 21 is supported. This page is a mapping table; for more information, see Mapping Tables. You can only enable or disable prefixes on this page.
   - **Allowed IPs** - Select to open a page to configure IP ranges for users/locations who can access the repository. This page is a mapping table (see Mapping Tables for more information). You can add, edit, or delete ranges on this page. For an IP range, use a hyphen with no spaces (-) between strings (Syntax corrections are noted in error messages). Allowed IPs are the IP addresses/ranges that have access to Alma OAI. Any IP that is not in this list gets an error response when one tries to access the Alma OAI. If no IP is defined in this mapping table, no one can access Alma via OAI requests.
   - **OAI Schema** - This is identified as **oai** and is not editable.
   - **Delimiter** - The delimiter is identified as a colon (:) and is not editable.
   - **Repository Identifier** - Enter a string that identifies the repository that is compliant with OAI-PMH requirements. The value should contain two strings with no special characters, separated by a period (for example, 01BC.INST).

Note

If you have previously configured an OAI integration profile, you are prompted to edit the existing profile.
Max bulk size for ListIdentifiers request - A value from 100 to 900 may be specified by Ex Libris. Contact Support to change this setting.

Max bulk size for ListRecords request - A value from 100 to 900 may be specified by Ex Libris. Contact Support to change this setting.

5. Select Save to complete the profile.

Because Alma allows for only one OAI setting, if you want to change anything in the integration profile, you must select Edit from the Actions menu and edit the existing profile.
External System Search

To configure a search profile to search external resources, you must have one of the following roles:

- Catalog Administrator
- Repository Administrator
- General System Administrator

You can perform an online search in an external resource. Any records in the search results can be imported, merged, or overlaid onto existing Alma records.

To enable the capability to search in an external resource:

1. Define the external resources you want to search and their characteristics (normalization process, merge method, and credentials, as needed). See Configuring External Search Resources.
2. Create a search profile that appears for the user in the Search cataloging profile drop-down list when searching resources. See Configuring Search Profiles.
Publishing and Inventory Enrichment (General Publishing)

To create a publishing profile, you must have one of the following roles:

- Catalog Administrator
- Repository Administrator
- General System Administrator

You can publish bibliographic and authority records to third-party systems. Alma publishing includes several features:

- Incrementally published data through files or OAI-PMH (Open Archives Initiative Protocol for Metadata Harvesting).
- Optionally enriching the data with non-bibliographic record data (such as inventory-related data).
- Normalization (reformatting) of the published data.
- Notification about inventory deletion.

Many of the enriching options below enable you to map information from inventory to the output. When you enrich the output, the output contains a merged record containing bibliographic fields and other fields, so that it all looks like one record. For each type of inventory, you select the output field into which you want to place the management or inventory information and then the subfield of that field into which to place each piece of data.

---

**Note**

If you are using Esploro, see [Publishing Research Assets to Primo](#) for information about research general profiles.

---

### Creating a General Publishing Profile

Use the following procedure to create a general publishing profile.

**To create a general publishing profile to an external target:**

1. On the Publishing Profiles page ([Resources > Publishing > Publishing Profiles](#)), select [Add Profile > General Profile](#). The first page of the Publishing Profile wizard appears.
2. Complete the following information.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Type</td>
<td>When available, select the type of record that you are publishing – bibliographic or authority. The remaining fields on the page change depending on what you select.</td>
</tr>
<tr>
<td>Profile Name</td>
<td>A unique profile name.</td>
</tr>
<tr>
<td>Profile Description</td>
<td>A free text description of the profile.</td>
</tr>
<tr>
<td>Publishing Parameters section</td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td>Select Active or Inactive.</td>
</tr>
<tr>
<td>Scheduling</td>
<td>Select a scheduling option. The exact times are dependent on your time zone and data center. If you select Not scheduled, the publishing profile does not run automatically.</td>
</tr>
<tr>
<td>Email Notifications</td>
<td>Specify the email addresses of users to receive email notifications when the publishing profile is complete. You can choose whether to send notifications for successful jobs and/or jobs that contain errors.</td>
</tr>
<tr>
<td>Content section</td>
<td></td>
</tr>
<tr>
<td>Set name</td>
<td>Select the set of records to publish. When you select an electronic collections set, the published content is the bibliographic or portfolio level associated with the set identified by your setting for Publish on (see below). Note that if you are publishing from the Network Zone, you cannot select an itemized set.</td>
</tr>
<tr>
<td>Filter Records</td>
<td>A filter for the set of records that you selected in Set name. The list of filters that appears is a list of the indication rules that you have created in the MD Editor. See Working with Indication Rules for more information. When you run the publishing job, the filter that you select is applied to the set of records after the enrichment of records occurs (if you specify enrichment, as shown below) and before the filtered set of records is normalized and published.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>Records in the selected set that match the true condition specified in the indication rule are filtered out of the set and not published.</td>
<td></td>
</tr>
</tbody>
</table>

**Note**

The filter rule should not be used if more than 50% of the set is filtered out and the set has more than 10,000 members. When you exceed these conditions, the publishing job runs very slowly. Any members that can be removed by the set definition should be done there and not in the filter rule.

**Publish on**

(Bibliographic records only)

The level at which the records are published.

- **Bibliographic level** (standard) – Publish records at the bibliographic level. If this option is selected, one bibliographic record is published containing the holdings, portfolio, and item details from the inventory data enrichment.
- **Holdings/portfolio level** – Publish records at the holdings or portfolio level. This option is useful if your institution needs to publish holdings records separately from the bibliographic record. When this option is selected, one bibliographic record is published for each unique holdings or portfolio associated with the bibliographic record. If one bibliographic record is associated with multiple holdings or portfolios, the bibliographic record is published multiple times.

**Note**

Additional normalization rules must be applied to remove the bibliographic information from the record.

- **Item/portfolio level** – Publish records at the item or portfolio level. When this option is selected, one bibliographic record is published for each unique item or portfolio associated with the bibliographic record. If one bibliographic record is associated with multiple portfolios or items, the bibliographic record is published multiple times. Alma displays a message to alert you to this method of output processing. This functionality may be useful for integration with external sources such as the Hathi Trust and Aurora (State Library of Queensland).

**Output format**

(Bibliographic records only)

An output format (The options that appear in this list are determined by the Active Registry settings for your system):

- MARC 21 Bibliographic
- UNIMARC
- KORMARC
- Dublin Core (Simple)
- Dublin Core (Qualified) - Note that crosswalking from MARC to qualified Dublin Core is not supported.
- MODS (This option is configured in Configuration > General > Integration Profiles > OAI Repository Definition integration profile > Metadata Prefixes)
- ETD-MS
- RDA/RDF

**Publishing Protocol section – FTP**

**FTP**

Select to publish the records using FTP. Once selected, the following fields appear:

**FTP configuration and Sub-directory**

FTP configuration field values come from your institution’s setup (see Configuring S/FTP Connections). The Sub-directory field is an additional relative path to the FTP configuration. For example, if you specified Alma in the Sub-directory field during S/FTP connection configuration and you enter exports in this field, the data is exported to the Alma/exports directory.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>For a pre-defined list of sites (maintained by Ex Libris), you can disable compression for an FTP connection used by a general publishing profile. After selecting one of the defined sites, select <strong>Disable file compression</strong>. The <strong>Compressed file extension</strong> field is removed from the page (since the extension is not used for this profile). The sites are ftp.exlibris.co.il and scp.oclc.org.</td>
<td></td>
</tr>
<tr>
<td>Records that were not modified since the last run are not published. Select this option to publish all the non-deleted records in the set (specified in the Content section of this profile) to the FTP file.</td>
<td></td>
</tr>
<tr>
<td>If this parameter is not selected, only records that were modified, created, or deleted since the last run are published to the FTP file.</td>
<td></td>
</tr>
<tr>
<td>If you work with third parties that require you to publish the whole set (because they are not able to work with a partial set/only modified records), select this parameter.</td>
<td></td>
</tr>
</tbody>
</table>

**Note**

This option is automatically selected for any existing profiles (prior to April 2019) that had the previous Publishing Mode **Full** option selected.

When the **Include all records each time file is published** parameter is selected, the job report from running this publishing profile contains the **Total records written to file** counter in addition to **Records processed** counter.

The **Total records written to file** counter shows the total number of records in the set, all of which are published since you selected the **Include all records each time file is published** parameter. The **Records processed** counter shows the number of records that were processed because they were modified since the last time the publishing job ran.

**Note**

Only MARC XML is compressed. When selecting MARC binary, the published files are not compressed.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of records in the file</td>
<td>The maximum number of records for each file published. Choose a maximum of 1,000, 5,000, or 10,000 records per file or select a single file option with no maximum records specified. The default is 1,000. This enables you to determine how many records are included in each file in order to align with external source requirements regarding file structure. Note that it is not recommended to choose the single file option when publishing large sets. Example: If a set of 25,000 records is published and the Number of records in file is set to 10,000 in the publishing profile, the resulting files are: ◦ File 1 = 10,000 records ◦ File 2 = 10,000 records ◦ File 3 = 5,000 records</td>
</tr>
<tr>
<td>Use default file name</td>
<td>Select Yes or No to indicate your preference to use or not use the default file name. See the following in this table for more information regarding the file naming conventions: ◦ File name prefix ◦ File name ◦ Disable file compression ◦ Compressed file extension Note that Ex Libris can configure the way that file name extension handling is done. For details, see the Alma June 2018 release notes for more information.</td>
</tr>
<tr>
<td>File name prefix</td>
<td>When you select Yes for Use default file name, you must specify a file name prefix. The output file is named in the following manner: <code>&lt;prefix&gt;_&lt;time stamp&gt;_&lt;job ID&gt;_&lt;new or update or delete&gt;..&lt;xml or mrc&gt;..&lt;tar.gz&gt;</code> You are only able to enter allowable characters in this field. The system automatically deletes any characters that are not permitted.</td>
</tr>
<tr>
<td>File name</td>
<td>When you select No for Use default file name, you must specify a file name. You may specify a static or dynamic file name in the following manner: ◦ Enter a single file name to be used for the publishing output that is created. ◦ For dynamic file names, enter the file name variables as indicated below. Use the information icon for assistance. <code>&lt;name of your choice&gt;_{JOB_ID}_{TIMESTAMP}</code> The <code>{JOB_ID}</code> inserts the publishing job ID in the file name. The <code>{TIMESTAMP}</code> inserts the date and time stamp in the following format: YYYYMMDD_HHMMSS[mmm]. This is year, month, day and hour, minutes, and seconds plus milliseconds. This creates a file with a name in the following format: <code>&lt;name&gt;_&lt;job ID&gt;_&lt;time stamp&gt;_&lt;new or update or delete&gt;..&lt;xml or mrc&gt;..&lt;tar.gz&gt;</code></td>
</tr>
</tbody>
</table>
When you use the dynamic file naming convention, the system generates new, additional files instead of overwriting a previous file with the new file and using the same name.

You are only able to enter allowable characters in this field. The system automatically deletes any characters that are not permitted.

### Publishing Protocol section – OAI

**OAI**

Select his option to publish using the OAI protocol, that is, publish the records so that they are exposed as an OAI set. OAI publishing profiles always publish records incrementally and the published records include deleted records.

If the target to which you are publishing cannot process record deletions, you can use FTP publishing with the option to include all records (see include all records each time file is published). Another option is to use the Rebuild Entire Index option available with the Republish action to republish the whole set as new that has the same result as the previously available (prior to April 2019) Full publishing mode.

If the institution configure Alma as an OAI repository (see Setting Up OAI Integration), it is able to see the published records by OAI set using the standard OAI-PMH protocol. Note that the format of the records (the content in the metadata element) is in the format selected as the output format, for example, MARC 21.

When OAI is selected, the parameters described below appear.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set Spec</td>
<td>A colon (:) separated list indicating the path from the root of the set hierarchy to the respective node. It must be unique for each set.</td>
</tr>
<tr>
<td>Set Name</td>
<td>The name of the set. The set must be defined according to the OAI requirements.</td>
</tr>
<tr>
<td>Metadata Prefix</td>
<td>The prefix on the output.</td>
</tr>
</tbody>
</table>

### Publishing Protocol section – Z39.50 (Bibliographic Records Only)

- **Host**
- **Port**
- **Database Name**
- **Group ID**
- **User Name**
- **Password**

Publish using Z39.50.

These settings must be provided by/coordinated with the group/service (such as KERIS) to which you are connecting. These are the target’s connection parameters.

3. Select **Next**. If you selected a MARC format as the output format, the following page appears.
If you selected Dublin Core (Simple or Qualified), ETD-MS, or MODS as the output format, the following page appears.

Normalization and Inventory Enrichment – Dublin Core and MODS

For authority records, only the Correct the data using normalization rules field appears.
4. Complete the fields for step 2 of the wizard using the table below that describes these fields. Many fields are self-explanatory, and not described below.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bibliographic Normalization section</strong></td>
<td></td>
</tr>
<tr>
<td>Correct the data using normalization rules</td>
<td>A normalization rule (if required, from one you previously created and saved). See <a href="#">Working with Normalization Rules</a>.</td>
</tr>
<tr>
<td>Linked data enrichment (MARC only)</td>
<td>Select to add the $0 (subfield zero) with linked data URIs to certain records when publishing. For detailed information, see <a href="https://developers.exlibrisgroup.com/alma/integrations/linked_data">https://developers.exlibrisgroup.com/alma/integrations/linked_data</a>. Note that when you select the RDA/RDF option for the Output format parameter (see above), the Linked data enrichment check box is automatically selected.</td>
</tr>
<tr>
<td><strong>Bibliographic Enrichment section (MARC only)</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Add Management Information | Select to add management information to the output record. When selected, the following parameters appear. Enter the following information:  
  - Repeatable field - Enter a field number into which to put management information in the output record (one that is not used by the bibliographic record); this field is mandatory. For example, if you enter 950, the output will contain `<datafield tag="950" ind1="" ind2="" > ... </datafield>`, with the information you enter in this area in subfields of this field.  
  - Publish suppressed records as deleted - Publish the suppressed records, but mark them as deleted. If this check box is cleared, they are published as is (they are enriched as well). This is selected by default.  
  - All other fields: For each item that you want included in the output file (if it exists), enter the subfield in which you want it to appear. The management information you can add includes: created by, create date, updated by, update date, suppress from publishing, originating system, originating system ID, originating system version, record format, cataloging level, and brief level. In each case enter just the subfield letter, such as b (not $b or $$b).  

These fields are maintained internally by Alma. Originating system fields represent information about the external system from which the record was imported. For information about cataloging level, see [Cataloging Privileges](#). For information about brief level, see [Working with Brief Record Levels](#). |
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add Holdings Information</td>
<td>Select to add holdings information to output. The output will contain a record with merged holdings and bibliographic record data. Holdings control fields (such as LDR) are added to the output as if they were bibliographic fields of the same number. Use <strong>Add inventory enrichment</strong> to add other holdings fields to the output as if they were bibliographic fields. Each time you select <strong>Add inventory enrichment</strong>, enter the holdings field number (<strong>Holding Tag</strong>) and subfield (<strong>Holding Subfield</strong>) and then enter the output field (<strong>Bib Tag</strong>) and subfield (<strong>Bib Subfield</strong>) in which you want to place it and select <strong>Add</strong>. For subfields, enter just the letter, such as b (not $b or $$b). For more details about adding holdings information, refer to the <a href="#">General Publishing Profile: Add Holdings and Item Info</a> video (8:16 mins). If you select <strong>Exclude suppressed record</strong>, suppressed holdings records will not be published. This field does not affect the publishing of the bibliographic records. Bibliographic records will continue to be published unless they are marked <strong>Suppress from Discovery</strong> (see <a href="#">Suppress from Discovery</a>). For all other fields: For each item that you want included in the output file (if it exists), enter the field and subfield in which you want it to appear: holdings created by, holdings create date, holdings updated by, holdings update date, library name, location name, and suppress from publishing. For subfields, enter just the subfield letter, such as b (not $b or $$b). If configured, you can also map the IE ID field/subfield for integration with Primo. Contact Ex Libris for more information.</td>
</tr>
<tr>
<td>Physical Items Enrichment</td>
<td>Select to add physical item information to the output. The output will contain a record with merged item and bibliographic record data. <strong>Note</strong> When you select <strong>Add Holdings Information</strong> and you select <strong>Exclude suppressed record</strong> to suppress holdings from publishing that are marked <strong>Suppress from Discovery</strong>, any items attached to the suppressed holdings will not be published, even when <strong>Add Items Information</strong> is selected.</td>
</tr>
<tr>
<td>Add Items Information</td>
<td>Enter the following information:</td>
</tr>
</tbody>
</table>
Field | Description
---|---

- Repeatable field - Enter a field number into which to put physical item inventory information in the output record (one that is not used by the bibliographic record); this field is mandatory. For example, if you enter 950, the output will contain `<datafield tag="950" ind1=" " ind2=" ">... </datafield>`, with the information you enter in this area in subfields of this field.

- All other fields: For each piece of inventory information that you want included in the output file (if it exists), enter the subfield in which you want it to appear. The inventory information you can add includes: item PID, barcode, copy ID, material type, item policy, item status (1/0), provenance, magnetic indication, enumeration A/B, chronology I/J, description, process type, permanent library/location, current library/location, call number type/call number, item call number type/item call number, temporary call number type/temporary call number, inventory number, inventory date, storage location, pages, pieces, notes (Public, Fulfillment, Internal 1-3, and Statistics 1-3), PO line number, due back date, receiving date, created by, created date, updated by, update date, the holdings ID for the holdings record linked to the item, campus of the current library (appears when distributed access restrictions for electronic resources are configured in a multi-campus environment), and physical condition. In each case enter just the subfield letter, such as b (not $b or $$b).

Items PID is an internal ID used primarily for publishing. For other fields, see Adding a New Book or Journal Article and Updating Item-Level Information.

Note that for item information such as library, location, and material type that may have both a code and description, only the code is published, not the description.

Note that you can use either the permanent library/location or the current library/location fields. When you use the current library/location fields, the output includes either the permanent library/location or the temporary library/location information, depending on the item’s library/location at the time of publishing.

Note that dates are published according to the UTC time zone.

For more details about adding item information, refer to the General Publishing Profile: Add Holdings and Item Info video (8:16 mins).

### Electronic Inventory Enrichment section (MARC only)

**Add Electronic Portfolio Information**

Select to add electronic inventory information to the output. The output will contain a record with merged portfolio and bibliographic record data.

Enter the following information:

- Repeatable field – Enter a field number into which to put electronic portfolio inventory information in the output record (one that is not used by the bibliographic record); this field is mandatory. For example, if you enter 950, the output will contain `<datafield tag="950" ind1=" " ind2=" ">... </datafield>`, with the information you enter in this area in subfields of this field.

- Subfields – For each piece of inventory information that you want included in the output file (if it exists), enter the subfield in which you want it to appear. The inventory information you can add includes: collection name, library, interface name, public note, coverage statement, Community Zone collection ID, created by, create date, updated by, update date, activation date, direct link, and available for information (see the following rows for details). In each case enter just the subfield letter, such as b (not $b or $$b). For information about these fields, see below, and also see Editing a Portfolio Using the Electronic Portfolio Editor.

- See the following rows for an explanation of certain fields.

**Portfolio PID**

The subfield (other than $8) into which to place the portfolio PID.

**Note**

By default, $8 contains the portfolio ID. Use this field if you prefer to have the portfolio ID stored in a subfield other than $8 and use a normalization rule to remove $8.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activation status</td>
<td>The subfield into which you want to place the activation value. The values displayed in this field are either Available or Not Available.</td>
</tr>
</tbody>
</table>
| URL Type subfield            | This information is pulled from the portfolio record as shown in the Electronic Portfolio Editor on the Linking tab. The URL type values are Static URL, Dynamic URL, and Parser Parameters. For stand-alone portfolios:  
  - static is published when Static URL is selected.  
  - dynamic is published when Dynamic URL is selected.  
  - Nothing is published when the URL Type subfield parameter is left blank. For electronic collection-linked portfolios, the settings on the portfolio (if defined) override the settings on the service and:  
  - static is published when the portfolio has URL type set to Static URL and the Static URL field is populated on the portfolio.  
  - dynamic is published when the portfolio has URL type set to Dynamic URL and the Dynamic URL field is populated on the portfolio.  
  - param is published when the portfolio has URL type set to Parser Parameters and the Parser parameters (override) field is populated on the portfolio. If the portfolio has no content in the Static URL, Dynamic URL, or Parser parameters (override) fields (regardless of the URL type selected):  
  - dynamic is published when the portfolio's service has URL type set to Dynamic URL and the Dynamic URL field is populated on the service.  
  - param is published when the portfolio's service has URL type set to Parser Parameters and the Parser parameters and/or Parser parameters (override) field is populated on the service.  
  - Nothing is published when the portfolio's service has no content in the Dynamic URL, Parser parameters, or Parser parameters (override) fields (regardless of the URL type selected). |
| Access URL subfield          | The subfield into which you want to place the access URL for the electronic resource.                                                                                                                     |
| Note                         | If you specify this field, you must enter the Link Resolver Base Resolver field.                                                                                                                             |
| Link Resolver Base URL       | The base URL for your link resolver. For the Alma Link Resolver, use the following format and insert your institution's information where indicated:  
  http://<Primo server host:port>/openurl/<Primo_institution_code>/<Primo_view_code>?  
  For Primo VE, use the following format:  
  https://<Primo_domain>/discovery/openurl?institution=<Alma_institution_code>&vid=<Primo_view_code>  
  &                                     |
<p>| Electronic Material Type     | This publishes the electronic material type of the electronic inventory that is from the electronic portfolio entity.                                                                                     |
| Library                      | This publishes the library name.                                                                                                                                                                          |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
</table>
| Proxy Selected subfield  | This information is pulled from the portfolio record as shown in the Electronic Portfolio Editor on the Linking tab. The Proxy selected parameter identifies the proxy profile used for authentication. When there is no combination of Proxy enabled set to Yes (in the portfolio record) and no Proxy selected value at the portfolio and group, portfolio, service and group, or service level (in the portfolio record), the resolver proxy settings are published. The resolver proxy settings are published in the following manner:  
  ◦ When there is a default Resolver Proxy integration profile with Always selected for the Use Proxy parameter, the published data contains true for Proxy Enabled and the definition from the resolver proxy integration profile for Proxy Selected.  
  ◦ When there is a default Resolver Proxy integration profile with Always not selected for the Use Proxy parameter and either the portfolio or the service (but not groups) has Proxy enabled set to Yes, the published data contains true for Proxy Enabled and the definition from the resolver proxy integration profile for Proxy Selected.  
  ◦ When there is a default Resolver Proxy integration profile with Always not selected for the Use Proxy parameter and neither the portfolio or the service has Proxy enabled set to Yes, the published data contains false for Proxy Enabled and the definition from the resolver proxy integration profile for Proxy Selected.  
  ◦ When there is not a default Resolver Proxy integration profile, the published data contains false for Proxy Enabled and no subfield is published for Proxy Selected.  
  Note the following:  
  ◦ Settings at the portfolio and group level override settings at the portfolio level  
  ◦ Settings at the portfolio level override service or default resolver proxy settings  
  ◦ Settings at the service and group level override settings at the service level  
  ◦ Settings at the service level override default resolver proxy settings |
| Proxy Enabled subfield   | This information is pulled from the portfolio record as shown in the Electronic Portfolio Editor on the Linking tab. The Proxy enabled options are Yes and No.  
  When the Proxy enabled parameter is set to No, see the Proxy Selected subfield explanation for how publishing is handled. |
| Interface Name           | This publishes the interface name.                                                                                                                                                     |
| Authentication Note subfield | This information (a note regarding authentication that is visible to patrons) is pulled from the portfolio record as shown in the Electronic Portfolio Editor on the Notes tab.  
  Authentication notes are published from:  
  ◦ The portfolio and groups or the portfolio if there is no portfolio and groups.  
  ◦ The service and groups or the service if there is no service and groups.  
  ◦ The electronic collection and groups of electronic collection if there is no electronic collection and groups. |
| Public Note              | This publishes the public note, if there is one.                                                                                                                                          |
| Internal Description subfield | This information (viewable by staff only) is pulled from the portfolio record as shown in the Electronic Portfolio Editor on the Notes tab. The data that is published is determined by all of the following:  
  ◦ The electronic portfolio record |
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>The related service</td>
</tr>
<tr>
<td>When there are notes from more than one entity, all notes are reported by repeating the subfield.</td>
<td></td>
</tr>
<tr>
<td>Coverage Statement</td>
<td>This publishes the coverage statement.</td>
</tr>
<tr>
<td>CZ Collection Identifier</td>
<td>This publishes the Community Zone electronic collection ID.</td>
</tr>
<tr>
<td>Collection ID</td>
<td>This publishes the ID associated with the Collection Name option. This is the ID for the institution-level electronic collection (not the Community Zone-level ID).</td>
</tr>
<tr>
<td>Collection Name</td>
<td>This publishes the electronic collection name.</td>
</tr>
<tr>
<td>License Code</td>
<td>This option publishes the electronic portfolio’s license. If the License field for the electronic portfolio is empty, the electronic collection license information is published instead.</td>
</tr>
<tr>
<td>License Name</td>
<td>This publishes the license name from the electronic portfolio entity (specific to the license code).</td>
</tr>
<tr>
<td>PO Line</td>
<td>This publishes the purchase order related to the electronic inventory.</td>
</tr>
<tr>
<td>Additional PO Line</td>
<td>This publishes the additional purchase orders that are related to the electronic inventory.</td>
</tr>
<tr>
<td>Created by</td>
<td>This publishes the created by information.</td>
</tr>
<tr>
<td>Create date</td>
<td>This publishes the created dated.</td>
</tr>
<tr>
<td>Updated by</td>
<td>This publishes the updated by information.</td>
</tr>
<tr>
<td>Update date</td>
<td>This publishes the updated date (when it was modified).</td>
</tr>
<tr>
<td>Activation date</td>
<td>This publishes the activation date.</td>
</tr>
<tr>
<td>Direct Link</td>
<td>This publishes the direct link information.</td>
</tr>
<tr>
<td>Available for Campus subfield</td>
<td>These fields appear only when distributed access restrictions for electronic resources are configured in a multi-campus environment or for institutions implementing a Network Zone. <strong>Available for Institution subfield</strong> appears only for institutions implementing a Network Zone.</td>
</tr>
<tr>
<td>Available for Library subfield</td>
<td></td>
</tr>
<tr>
<td>Available for Institution subfield</td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Service ID</td>
<td>This option publishes the ID of the service to which the electronic portfolio is related.</td>
</tr>
<tr>
<td>IE ID subfield</td>
<td>If configured, the subfield into which to place the IE ID of the electronic resource.</td>
</tr>
<tr>
<td>Note</td>
<td>This field is for integration with Primo. Contact Ex Libris for more information.</td>
</tr>
</tbody>
</table>

### New for June! Portfolio Coverage Information

| Repeatable field       | Enter a field number into which to put the coverage information in the output record (one that is not used by the bibliographic record); this field is mandatory. For example, if you enter 950, the output will contain `<datafield tag="950" ind1="" ind2="" ... </datafield>`, with the information you enter in this area in subfields of this field. |
| Portfolio id subfield  | For each piece of coverage information that you want included in the output file (if it exists), enter the subfield in which you want it to appear. See rows below for the coverage information you can add.ocy. |
| From Year subfield     | The Coverage and Embargo information is exported according to the selection made in the “Which coverage statement will be applied?” option in the portfolio editor’s Coverage tab: |
| Until Year subfield    | • Each value of every subfield publishes the value of its corresponding parameter from Date Information table and Embargo on the Portfolio Editor.                                                                 |
| From Month subfield    | • The published coverage information is simplified on the portfolio level in the following way:                                                                                                          |
| Until Month subfield   | • Rows that consist of date elements only (year/month/day) are consolidated into the minimum-possible representation of date range(s) that cover all the date ranges for this specific portfolio. This means that the exported date ranges completely cover the true availability of the portfolio. |
| From Day subfield      | • The simplification process does not occur for date-information rows that has Volume and/or Issue specified, these are published as-is.                                                                    |
| Until Day subfield     | • The embargo date range(s) are calculated as the coverage information, and published separately in the Embargo section.                                                                                   |
| From Volume subfield   |                                                                                                                                                                                                          |
| Until Volume subfield  |                                                                                                                                                                                                          |
| From Issue subfield    |                                                                                                                                                                                                          |
| Until Issue subfield   |                                                                                                                                                                                                          |

### New for June! Portfolio Embargo Information

| Repeatable field       | Enter a field number into which to put the embargo information in the output record; this field is mandatory. For |
### Field Description

**Example**: If you enter 950, the output will contain `<datafield tag="950" ind1="" ind2="" > ... </datafield>`, with the information you enter in this area in subfields of this field.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Portfolio ID</strong></td>
<td>For each piece of embargo information that you want included in the output file (if it exists), enter the subfield in which you want it to appear. See rows below for the embargo information you can add.</td>
</tr>
<tr>
<td><strong>Operator subfield</strong></td>
<td>See above.</td>
</tr>
<tr>
<td><strong>Number of Years subfield</strong></td>
<td>The number of years/months included/excluded (based on the selected operator) from the portfolio coverage.</td>
</tr>
<tr>
<td><strong>Number of Months subfield</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Digital Inventory Enrichment section</strong></td>
<td>Select to add local / remote digital representation inventory information to the output. The output will contain a record with merged representation and bibliographic record data.</td>
</tr>
<tr>
<td><strong>Add Digital Representation Information</strong></td>
<td>Select to add local / remote digital representation inventory information to the output. The output will contain a record with merged representation and bibliographic record data.</td>
</tr>
<tr>
<td><strong>Add Remote Representation Information</strong></td>
<td>Select to add local / remote digital representation inventory information to the output. The output will contain a record with merged representation and bibliographic record data.</td>
</tr>
</tbody>
</table>

#### Note

In the Embargo section of the output file, the "Operator" field exports the below operators. Since '<' and '>' characters are special characters in XML, using them within the XML content might cause errors in the output. Thus, these characters are encoded in the XML output as follows:

<table>
<thead>
<tr>
<th>Published Sign</th>
<th>Meaning</th>
<th>Meaning within the output</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;</td>
<td>&lt;= Less than or equals to</td>
<td>Most recent X year(s) available</td>
</tr>
<tr>
<td>&gt;</td>
<td>&gt;= Greater than or equals to</td>
<td>Most recent X year(s) not available</td>
</tr>
<tr>
<td>&lt;=</td>
<td>&lt; Less than</td>
<td>Most recent X year(s)-1 available</td>
</tr>
<tr>
<td>&gt;=</td>
<td>&gt; Greater than</td>
<td>Most recent X year(s)+1 not available</td>
</tr>
</tbody>
</table>

The number of years/months included/excluded (based on the selected operator) from the portfolio coverage.

For Dublin Core, ETD-MS, and MODS only the Repeatable field appears, which will contain the delivery URL of the representation.

Enter the following information:

- **Repeatable field** - Enter a field number into which to put digital representation inventory information in the output record (one that is not used by the bibliographic record); this field is mandatory. For example, if you enter 950, the output will contain `<datafield tag="950" ind1="" ind2="" > ... </datafield>`, with the information you enter in this area in subfields of this field. For Dublin Core, ETD-MS, and MODS, this is the only field that appears.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>◦ All other fields (local): For each piece of inventory information that you want included in the output file (if it exists), enter the subfield in which you want it to appear. The inventory information you can add includes: internal ID (PID), IE ID (see below for more information), delivery URL, thumbnail URL, label, public note, library, usage type, entity type, delivery description, created by, create date, updated by, and update date. For more information about these fields, see Adding a Representation.</td>
<td></td>
</tr>
<tr>
<td>◦ All other fields (remote): Same as above. The inventory information you can add includes: repository code, repository name, originating object ID, and linking parameters 1-3.</td>
<td></td>
</tr>
<tr>
<td>See the following rows for an explanation of certain fields.</td>
<td></td>
</tr>
<tr>
<td>IE ID subfield</td>
<td>If configured, the subfield into which to place the IE ID.</td>
</tr>
<tr>
<td>Note</td>
<td>This field is for integration with Primo. Contact Ex Libris for more information.</td>
</tr>
<tr>
<td>Collection Enrichment section (MARC only)</td>
<td>Select to add collection inventory information to the output. The output will contain a record with merged collection and bibliographic record data.</td>
</tr>
<tr>
<td>Add Collection Information</td>
<td>Select to add collection inventory information to the output. The output will contain a record with merged collection and bibliographic record data.</td>
</tr>
<tr>
<td>Enter the following information:</td>
<td></td>
</tr>
</tbody>
</table>
| ◦ Repeatable field - Enter a field number into which to put collection inventory information in the output record (one that is not used by the bibliographic record); this field is mandatory. For example, if you enter 950, the output will contain <datafield tag="950" ind1=" " ind2=" ">
...</datafield>, with the information you enter in this area in subfields of this field. For Dublin Core, ETD-MS, and MODS, this is the only field that appears. |
| ◦ All other fields: For each piece of inventory information that you want included in the output file (if it exists), enter the subfield in which you want it to appear. The inventory information you can add includes: collection name and collection ID. For more information, see Adding a Top Level Collection. |

5. Select **Save** to enter the profile in the database and return to the Publishing Profiles list page.

---

### Working with an Existing General Publishing Profile

Use the following procedure to work with existing general publishing profiles.

**To work with an existing general publishing profile:**

1. On the Publishing Profiles page (Resources > Publishing > Publishing Profiles), select **General Profiles** in the Publishing Profile Type filter.
2. Select one of the following row actions:
   ◦ **Edit** - Edit the profile.
   ◦ **History** - View the profile's run history.
   ◦ **Run** - Manually run the profile on demand. Note that you can also run a profile from inside the profile.
• **Republish** – Republish a subset, date range, or all of the records in the set, instead of an incremental update. Note that you can also run a profile from inside the profile. This action is only available for publishing profiles that you can edit.

When the Republish row action is selected, select one of the following publishing modes from the pop-up dialog box:

- **Date Range** – Enter a date range to identify the records in the set that you want to be published.

- **Republish Subset** – Select a separate (sub)set of records to publish. Note that you need to preplan your work for this option and have the set created that you want to use.

- **Rebuild Entire Index** – Republish the entire set and rebuild the entire publishing index. This option will recalculate the entire set and publish all the records as new. Use this option with caution. This action is not reversible.

Republish runs immediately (as soon as available in the job queue) when you select **Run Now**. There is no scheduling option for this action.

Note that when you select **Run Now**, Alma saves the profile. If you made changes to the profile in addition to selecting **Republish**, those actions are saved before the publishing job starts.

- **Contribute** - Contribute the publishing profile to the Community Zone where other institutions can copy and use the profile. For more information, see below.

- **Delete** - Delete the profile.

- **Duplicate** - Copy the profile.

When you edit a general publishing profile, the **Run** and **Republish** row actions are also available as buttons on the Publishing Profile Details page. These buttons perform the same actions as described in the procedure above. Note that when you use the **Run** and **Republish** buttons, they also save the profile.

### Sharing Publishing Profiles in the Community Zone

To share and copy shared publishing profiles, you must have one of the following roles:

- Purchasing Operator
- Purchasing Manager
- Repository Administrator
- Catalog Administrator
- General System Administrator

Institutions spend many hours creating publishing profiles to publish bibliographic and authority records to third-party systems. Many institutions publish to third-party systems. In order for these institutions to save time and effort, librarians can contribute publishing profiles to the Community Zone and copy and use publishing profiles that other institutions contributed to the Community Zone.

**Note**

The contribute feature is available only for general publishing profiles and not for other types of publishing profiles.

Contributed publishing profiles appear in the **Community** tab on the Publishing Profiles page (Resources > Publishing >
To contribute a publishing profile to the Community Zone:

1. From the row actions, select **Contribute** for a publishing profile on the Institution tab of the Publishing Profiles page.

   A confirmation message dialog box appears.

   **Publishing Profile Contribution Confirmation Message**

   You are about to contribute the following to the community.
   
   Publishing profile: Publishing Bibliographic Records to External System
   
   Profile name: Publishing Bibliographic Records to External System
   
   Description: Publishing Bibliographic Records to External System
   
   Contact person name: exl_impl
   
   Contact person email: nosuchmail@no.such.mail.com
   
   Are you sure you want to continue?

   Select **Confirm**. The profile appears in the **Community** tab and can be copied by any institution.

2. You can optionally change the **Profile name**.

3. It is recommended that you change the **Description** to include detailed information for institutions that will copy the profile. Include institution information such as the library information, FTP information, and/or vendor information.

4. You can optionally enter or change an email address for the **Contact person**.

5. Select **Confirm**. The profile appears in the **Community** tab and can be copied by any institution.

To view contributed publishing profiles and/or copy a contributed publishing profile:

1. Open the **Community** tab on the Publishing Profiles page (**Resources > Publishing > Publishing Profiles**).
To view more information about the profile, from the row actions, select View. The profile details appear.

2. Select Copy in the row actions list of the profile. The publishing profile is copied to your institution and the new profile is opened for editing. The profile is copied and its status is Inactive by default.

3. Edit the publishing profile details to match your requirements.

4. When you are done, select Save.

5. Select the Institution tab to view the profile that you copied.

To remove (unshare) a profile you contributed to the Community Zone:

Select Delete in the row actions list of the profile and select Confirm in the confirmation dialog box.

The profile is no longer available to other institutions. The profile is not deleted; you can continue to use it in the Institution tab. Also, if another institution copied the profile, this action has no effect on their copy.
Publishing to PubMed

To configure publishing to PubMed (managed by NLM), you must have one of the following roles:

- Catalog Administrator
- Repository Administrator
- General System Administrator

The Publish electronic record to PubMed publishing profile was deprecated. For more information about how to set up the PubMed Outside Tool to place a link on every PubMed record, see https://www.ncbi.nlm.nih.gov/books/NBK3803/#related.Outside_Tool.

You can share with PubMed your electronic journal inventory that is relevant to PubMed. By sharing this information, PubMed (managed by NLM) provides a visual indication for the PubMed titles to which the library has full-text access and access to them using the Alma Link Resolver. After creating and scheduling the publishing profile, a Publish Records to PubMed job is scheduled.

You can identify/customize the following details in the PubMed publishing profile:

- Your PubMed ID
- URL that identifies the icon/graphic file that displays in the PubMed search results
- Text for the link label that displays in the PubMed search results
- Primo base URL/Alma Link Resolver base URL for accessing the resource from the PubMed search results.

The XML file generated from Alma includes:

- PubMed ISSN (or EISSN) available in the Alma inventory
- Coverage information (from year/month/day until year/month/day) as available
- Embargo/rolling year information as available

Configuring the PubMed Publishing Profile

Use the procedure below to configure your PubMed publishing profile.

To configure a PubMed Publishing Profile:

Use the following table to complete the publishing profile configuration.

### PubMed Publishing Profile Configuration Options

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profile Name</td>
<td>A unique name for the profile.</td>
</tr>
<tr>
<td>Profile Description</td>
<td>A free text description of the profile.</td>
</tr>
<tr>
<td><strong>Submission Format section:</strong></td>
<td></td>
</tr>
<tr>
<td>Use default FTP configuration</td>
<td>Select to use the current FTP server identified by PubMed. The details for this FTP server appear when this parameter is selected. Note that when you select this parameter, the other FTP options are no longer available. The default option is the current recommended configuration option, officially supported by PubMed (Library LinkOut). It is recommended that you use it and not the manual FTP configuration option. The manual option remains available for customers who have a special workflow approved and working with Library LinkOut. (Issues related to the manual FTP workflow are not supported.) Additional information regarding Library LinkOut can be found at <a href="https://www.nlm.nih.gov/pubs/techbull/ma19/ma19_linkout_consolidation_announcement.html">https://www.nlm.nih.gov/pubs/techbull/ma19/ma19_linkout_consolidation_announcement.html</a>.</td>
</tr>
<tr>
<td>FTP configuration</td>
<td>Select the FTP configuration to use (see Configuring S/FTP Connections).</td>
</tr>
<tr>
<td>Subdirectory</td>
<td>The subdirectory in which the files should be placed for the FTP upload. For example, if you specified Alma in the subdirectory field for the S/FTP connection configuration, and you enter PubMed in this subdirectory field, the data is exported to the Alma/PubMed directory.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>File name prefix</td>
<td>The alphanumeric characters to use as the prefix for the file name that is created. Alma adds a sequence number (starting with 1) and a date suffix in the date/time format of YYYYMMDDhhmm and an extension of .xml. When there are more than 50,000 records, Alma creates a new file and the sequence number is incremented.</td>
</tr>
<tr>
<td><strong>Publishing Parameters section:</strong></td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td><strong>Active</strong> or <strong>Inactive</strong>.</td>
</tr>
<tr>
<td>Scheduling</td>
<td>Select the scheduling option for the profile to run. Alma can be scheduled to publish to PubMed every week on Monday. Note that PubMed takes the published files on the first Monday of the month. Full publishing mode is used to publish to PubMed.</td>
</tr>
<tr>
<td>Email Notifications</td>
<td>Specify which users and email addresses will receive email notifications after the publishing profile runs.</td>
</tr>
<tr>
<td><strong>PubMed Details section:</strong></td>
<td></td>
</tr>
<tr>
<td>Provider ID</td>
<td>The ID provided to you by PubMed.</td>
</tr>
<tr>
<td>Name Abbreviation and Get from LinkOut</td>
<td>When you select <strong>Use default FTP configuration</strong>, the <strong>Name Abbreviation</strong> field and <strong>Get from LinkOut</strong> action appear. Name Abbreviation is determined by PubMed and is required for the FTP file naming convention. Enter the Name Abbreviation or select one using <strong>Get from LinkOut</strong>. Library LinkOut provides the mapping for the Provider ID to Name Abbreviation. You must first enter your Provider ID for <strong>Get from LinkOut</strong> to work. See the tooltip icon for more information. Additional information regarding Library LinkOut can be found at <a href="https://www.nlm.nih.gov/pubs/techbull/ma19/ma19_linkout_consolidation_announcement.html">https://www.nlm.nih.gov/pubs/techbull/ma19/ma19_linkout_consolidation_announcement.html</a>.</td>
</tr>
<tr>
<td>Location of Alma icon</td>
<td>The URL address of an Alma Link Resolver icon (or other icon/graphic file of your choice) in the PubMed search results. The following icon is provided: http://&lt;Alma domain&gt;/view/link_resolver.gif This field is optional; an icon is only published only when specified.</td>
</tr>
<tr>
<td>Link label</td>
<td>The text to identify the link's title in the PubMed results (such as Link to Alma).</td>
</tr>
<tr>
<td>Link Resolver Base URL</td>
<td>The base URL for the Alma Link Resolver using the following format and inserting your institution's information where indicated: http://&lt;primo server host:port&gt;/openurl/&lt;primo institution_code&gt;/&lt;primo view_code&gt; Do not add a question mark (?) to the end of the URL. If you are unfamiliar with your base URL for the Alma Link Resolver, contact Ex Libris Support for assistance.</td>
</tr>
</tbody>
</table>

3. Select **Save**.

To publish the records manually, run the profile.
Publishing to Primo

To configure publishing to Primo, you must have one of the following roles:

- Catalog Administrator
- Repository Administrator
- General System Administrator

Because it is not necessary to run a publishing job to export bibliographic records for Primo VE, this section applies only to Primo. For details on how to export bibliographic records for Alma-Summon environments, see Publishing Bibliographic Records to Summon.

The Alma publishing process is run after the bibliographic, holdings, circulation data, and optional course reserves data has been populated in Alma. Alma exports the full set of records the first time and then exports the changed records daily. After Alma exports the records, Primo harvests and normalizes the exported records to be searched and viewed by end users via Primo’s Front End.

Note

- This Publish bibliographic records to Primo profile publishes all types of records, not just MARC 21 records. Note that you must configure separate pipes in Primo to support each output type.
- MODS records are converted to MARC21 upon publishing to Primo and do not require a separate configuration. Conversion is based on Library of Congress mapping.

If you encounter export issues that require advanced troubleshooting (for example, in cases where records were exported to the Primo server but were not published in Primo for some reason), contact Ex Libris support for assistance in running the Alma-Primo synchronization process.

For information about publishing information from the Network Zone, see Publishing Bibliographic Records to Primo When Working with a Network Zone.

Exporting Alma Records to Primo

The Primo publishing profile allows you to configure the settings used to publish the records to Primo, and is not used for Primo VE since the publishing is handled internally by the system.

In a collaborative network, the Network Zone can publish shared resources for the member institutions. For more information, see Publishing Bibliographic Records to Primo When Working with a Network Zone.

To publish Alma records to Primo:

1. Configure an S/FTP connection to be used by Alma and Primo (see Configuring S/FTP Connections). Make sure that port 22 on the Primo server is open to the Alma server.

2. On the Publishing Profiles Details page (Resources > Publishing > Publishing Profiles), select Edit in the row actions list for the Publish bibliographic records to Primo publishing profile. The Publishing Profile Details page for the Primo publishing profile appears.
3. Configure the Publishing Profile Details page parameters as follows.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Profile Details section:</strong></td>
<td></td>
</tr>
<tr>
<td>Profile Name and Description</td>
<td>Update these fields as required.</td>
</tr>
<tr>
<td><strong>Member Publishing Parameters section:</strong></td>
<td></td>
</tr>
<tr>
<td>The parameters in this section are for member institutions in a Network Zone.</td>
<td></td>
</tr>
<tr>
<td>Publishing mode</td>
<td>See <a href="#">Publishing Records to Member Institutions' Individual Primo Instances</a> for information on the <strong>Also publish network data</strong> option. When you select this option, the remaining profile options are limited to the ones that are relevant for this mode of publishing.</td>
</tr>
<tr>
<td>Member Publishing Format</td>
<td>Select <strong>Publish as single institution</strong> if you are a member institution and want to publish to Primo only the records available to you in your Institution Zone (which would not be the case for the scenario described here). See the examples below for the differences when you select or don’t select the <strong>Publish as a single institution</strong> option.</td>
</tr>
</tbody>
</table>

Example when **Publish as single institution** is selected:
### Parameter Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| <datafield tag="987" ind1=" " ind2=" ">
| &lt;subfield code="a">12259269</subfield> |
| </datafield> |
| <datafield tag="INT" ind1=" " ind2=" ">
| &lt;subfield code="a">E</subfield> |
| </datafield> |
| <datafield tag="INST" ind1=" " ind2=" ">
| &lt;subfield code="a">ALMA_UNIVERSITY</subfield> |
| &lt;subfield code="b">5164099790001858</subfield> |
| </datafield> |
| <datafield tag="MMS" ind1=" " ind2=" ">
| &lt;subfield code="b">99900178515201858</subfield> |
| &lt;subfield code="a">ALMA_UNIVERSITY</subfield> |
| </datafield> |

Example when **Publish as single institution** is not selected:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| <datafield tag="987" ind1=" " ind2=" ">
| &lt;subfield code="a">12259269</subfield> |
| </datafield> |
| <datafield tag="INST" ind1=" " ind2=" ">
| &lt;subfield code="a">ALMA_UNIVERSITY</subfield> |
| &lt;subfield code="b">E</subfield> |
| &lt;subfield code="c">5164099790001858</subfield> |
| </datafield> |
| <datafield tag="MMS" ind1=" " ind2=" ">
| &lt;subfield code="b">99900178515201858</subfield> |
| &lt;subfield code="a">ALMA_UNIVERSITY</subfield> |
| </datafield> |

### Publishing Parameters section:

- **Run full publishing**

  If this option is selected (for example, to publish headings enrichment data to Primo - see Exporting Alma Records to Primo below), Alma publishes all records, replacing previously published data. If this option is not selected, Alma publishes records that have changed since the last time they were published. This includes bibliographic records that were added, updated, deleted, and linked to inventory records that changed.

  **Note**
  
  Full publishing publishes only non-deleted records. You must also make sure that old records that have been deleted/suppressed from Alma are treated as expected. For this reason, it is recommended that you run incremental publishing to publish all recently deleted records as deleted, load the deleted record information into Primo using the regular, ongoing pipe (see Harvesting and Publishing Alma Records in Primo), run full publishing, and then load the published Alma records into Primo (again, using the regular, ongoing pipe).

- **Scheduling**

  Select one of the scheduling options.

- **Email Notifications**

  Specify which users and email addresses will receive email notifications when the publishing profile has completed.

- **Status**

  Select **Active**.

### Submission Format section:

- **FTP configuration**

  By default, the publishing process places the exported files in a directory that Primo uses to harvests the files. This field specifies a predefined profile that contains the FTP information. If the transfer fails, Alma includes a link to the published files in the publishing report.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-directory</td>
<td>The subdirectory in which the exported files are placed. For example, if you specified Alma in the Sub-directory field during S/FTP connection configuration and you enter Primo in this field, the data is exported to the Alma/Primo directory.</td>
</tr>
<tr>
<td>Content Options section:</td>
<td></td>
</tr>
<tr>
<td>Electronic, Physical, Digital,</td>
<td>The type of records that you want to publish.</td>
</tr>
<tr>
<td>and Collection</td>
<td>Note</td>
</tr>
<tr>
<td></td>
<td>To enable digital full-text publishing, contact Ex Libris Support.</td>
</tr>
<tr>
<td>Course information enrichment</td>
<td>Specify whether course reserve information is included with the bibliographic records. Note that course reserves are not published as independent records. Instead, Alma adds this information to the CNO field in the associated bibliographic record.</td>
</tr>
<tr>
<td></td>
<td>Note</td>
</tr>
<tr>
<td></td>
<td>Citation details are not published to Primo. Only the bibliographic record of the citation's attached inventory item (MMS record) is published.</td>
</tr>
<tr>
<td>Related records information</td>
<td>Specify whether related record information (which is stored in the PLK field) is included in the bibliographic records.</td>
</tr>
<tr>
<td>enrichment</td>
<td>Note</td>
</tr>
<tr>
<td></td>
<td>There is a maximum of 1002 PLK fields that can be published for a single record. If a record has more than 1002 related records, only 1002 PLK fields will exist in the publishing information.</td>
</tr>
<tr>
<td></td>
<td>Below is an XML example of the PLK field that includes information about the related record.</td>
</tr>
</tbody>
</table>
|                                 | &lt;datafield tag="PLK" ind1="" ind2="" &gt;  
  &lt;subfield code="a">Additional Form.&lt;/subfield&gt;  
  &lt;subfield code="b">99110387010001451&lt;/subfield&gt;  
&lt;/datafield&gt;                                                                                                                                                                                                 |
| Parent record enrichment        | If the Related records information enrichment field is enabled, this field allows you to attach parent title information to the PLK field. Title data is sent in the following subfields of the PLK field: d, e, f, g, h, i, m, and v. See the table below for a mapping of the MARC 21 245 field and the UNIMARC 200 field to the PLK subfields. |

Note
The directory must be configured in advance because Alma cannot create it.

Select the name of the S/FTP connection.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subfield Description</td>
<td>PLK Subfields</td>
</tr>
<tr>
<td>Other title information</td>
<td>d</td>
</tr>
<tr>
<td>Remainder of title / Other title information</td>
<td>e</td>
</tr>
<tr>
<td>Statement of responsibility / First Statement of Responsibility</td>
<td>f</td>
</tr>
<tr>
<td>Medium / General Material Designation</td>
<td>g</td>
</tr>
<tr>
<td>Number of part/section of a work / Number of a Part</td>
<td>h</td>
</tr>
<tr>
<td>Name of part / section of a work / Name of a Part</td>
<td>i</td>
</tr>
<tr>
<td>Title</td>
<td>m</td>
</tr>
<tr>
<td>Volume designation</td>
<td>v</td>
</tr>
</tbody>
</table>

Below is an XML example of the PLK field that includes title information from the parent record.

```xml
<datafield tag="PLK" ind1=" " ind2=" ">
  <subfield code="a">Additional Form.</subfield>
  <subfield code="b">99110387010001451</subfield>
  <subfield code="m">Harry Potter and the sorcerer's stone /</subfield>
  <subfield code="f"> by J.K. Rowling ; illustrations by Mary GrandPre.</subfield>
</datafield>
```

**Linked data enrichment**

Specify whether URIs can be entered in the 0 subfield of the relevant bibliographic fields.

**Headings enrichment**

Specify whether to publish headings enrichment data to Primo. For more information, see [Publishing Headings Enrichment to Primo](#) below. When you select this option, the field **Heading enrichment - enrich with "See Also" fields** appears.

**Note**

The addition of related terms is not supported out-of-the-box in Primo. Before activating this option, make sure that you have decided how to use the related terms in Primo and have updated your normalization rules as necessary. For more information, see [Other Implementation Considerations](#) below.

**Heading enrichment - enrich with "See Also" fields**

This appears when **Headings enrichment** is selected. Specify whether to include the 5XX see also fields when publishing headings enrichment data to Primo. For more information, see [Publishing Headings Enrichment to Primo](#) below.
Classification

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification enrichment</td>
<td>Specify whether to enrich bibliographic records published to Primo with classification data that includes preferred and nonpreferred terms. The classification data to be used for enrichment is identified in the bibliographic record's 084 where $2 indicates which classification scheme is used (such as RVK, BK, and MSC) and $a contains the call number that is used to link to the classification (authority) record. When selected and the publishing job is processed, the bibliographic records are enriched with preferred and nonpreferred terms taken from the 153 and the 70X/75X fields in the classification (authority) record that is linked by the bibliographic records' 084 fields and placed in 084 fields that are added to the published bibliographic records. For each 084 field in the Alma bibliographic record that is linked to a classification (authority) record and published to Primo, one or more 084 fields are added to the published record. For example, if the linked classification record contains one 153 field and two 7XX fields, three new 084 fields are added to the published record. $9 in the added 084 field will contain Y (yes) or N (no) to indicate if the term is preferred.</td>
</tr>
</tbody>
</table>

Physical Inventory Enrichment section:

- You can map holdings tags/subfields from the holdings record to tags/subfields in the published bibliographic record: Holding Tag, Holding Subfield, Bib Tag, and Bib Subfield.
- Select Add inventory enrichment and enter the information. Select Add to add the new mapping to the list.

Authority Enrichment section:

- Use the Authority Enrichment configuration to enrich the bibliographic record published to Primo with the content of any field from the bibliographic-linked authority record.
- Select Add Authority enrichment, and enter values for the following parameters:
  - Authority Tag – Enter the field number of the tag from the authority record that you want added to the published bibliographic record.
  - Value in Subfield '9' – Enter a descriptive value that is placed in $9 of the published record. You may enter the field number or some other descriptive text. In the following example, 382 was entered for the Value in Subfield '9' parameter.
- Authority Enrichment Configuration Example:
  - Authority Tag: 382
  - Value in Subfield '9': 382
  - Published Record Example:
    240 $9382 41-GND-300569947 0 (DE-101)040197913 0 http://d-nb.info/gnd/4019791-8 $a Violine |n 2 |n $2 gnd

4. Select Save. The modified publishing profile is saved. Data that meets the defined criteria is exported to the specified FTP location when the profile is run according to the selected schedule.
The Publishing to Primo job publishes up to 1000 relations for each bibliographic record.

For information on monitoring a publishing export job, see Viewing Running Jobs. For information on the job report, see Viewing Completed Jobs.

---

**Note**

Because job monitoring can report a successful completion even when the FTP has failed, it is important to check the job report for errors.

---

**Publishing Headings Enrichment to Primo**

Alma publishing to Primo options provide the capability to include headings enrichment data. For each MARC 21 or UNIMARC record published to Primo, Alma enables you to include the authority headings information to be used in Primo. New for June! Heading enrichments run once every 24 hours.

The focus of this section details Alma’s implementation of publishing headings enrichment data. In addition, there are implementation considerations for integrating this capability with Primo. See the Other Implementation Considerations section below that directs you to the Primo information you’ll need to complete your implementation.

---

**Note**

In Primo, UNIMARC records are supported out-of-the-box as of the May 2016 release.

---

For information regarding configuring headings enrichment, see Publishing to Primo. After you configure Publish bibliographic records to Primo to include the headings enrichment configuration option(s), your incremental publishing to Primo includes headings enrichment in the harvested records. This, of course, assumes that your Publish bibliographic records to Primo publishing profile is selected as an Active profile.

---

**Note**

The headings enrichment capability is relevant for Primo version 4.1.1 and later. Before configuring Alma for publishing headings enrichment data to Primo, you need to update your normalization rules in Primo. Additional Primo information is referenced below in the Other Implementation Considerations section. If you decide that you need to run a full publishing of records to Primo, see the instructions above under Run full publishing.

---

It is recommended that the Authorities – Preferred Term Correction job be set to Active when implementing and using the publishing headings enrichment to Primo capability. Otherwise, there may be instances when the Primo Browse list may show multiple preferred headings that ultimately link to the same authority in Alma.

---

**Headings Enrichment**

MARC 21 and UNIMARC records are enriched with information from related Alma authority records (either local or Community Zone authority records) for the following bibliographic record authorization fields:

- MARC 21 – 100-199, 600, 610, 611, 630, 648, 650, 651, 654, 655, 700, 710, 711, 730, 751, 752, 754, 800, 810, 811 or 830
- UNIMARC – 410, 411, 416, 500, 600, 601, 602, 605, 606, 607, 616, 617 700, 701, 702, 703, 710, 711, 712, 713, 720, 721, 722, 723, 730, 740, 741, or 742
Specifically, the enrichment includes the 1XX and 4XX, preferred and nonpreferred, information when available in the related authority record. This enrichment is provided with the selection of the **Headings enrichment** publishing parameter described in the procedure below.

This especially enhances the Primo search capability of nonpreferred (4XX) terms so that, for example, Mark Twain can be found with Samuel Clemens; and with the cross references to the Primo author and subject browse list, when the heading Samuel Clemens appears, it displays “See Twain, Mark.”

Optionally, headings enrichment authorization can also include the following 5XX **see also** authority fields when the **Heading enrichment – enrich with “See Also” fields** publishing parameter is selected as described in Publishing to Primo:

- MARC 21 – 500, 510, 511, 530, 548, 550, 551, 555, 562, 580, 581, 582, or 585
- UNIMARC – 500, 510, 511, 515, 530, 550, 580

See the table below for a description of how the enrichment is implemented.

<table>
<thead>
<tr>
<th>Subfield Change</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2</td>
<td>Contains the vocabulary code used for authorization. The current supported values include:</td>
</tr>
<tr>
<td></td>
<td>- LCSH</td>
</tr>
<tr>
<td></td>
<td>- LCNAMES</td>
</tr>
<tr>
<td></td>
<td>- MESH</td>
</tr>
<tr>
<td></td>
<td>- LCAC</td>
</tr>
<tr>
<td></td>
<td>If the second indicator of the field is 4 or 7, $2 is not overwritten.</td>
</tr>
<tr>
<td>$0 (subfield zero)</td>
<td>Contains the Alma authority record ID. If the field in the MARC 21/UNIMARC record is authorized using authority records in Alma (either local or Community Zone authority records), $0 is added. Other $0 considerations include:</td>
</tr>
<tr>
<td></td>
<td>- If the original field already has a value in $0 (from another system), it is replaced with Alma’s authority record ID.&gt;</td>
</tr>
<tr>
<td></td>
<td>- If Alma does not have an authority record for a heading, no $0 is added to the field.</td>
</tr>
<tr>
<td></td>
<td>- If the field has a value in $0, but the field is not authorized in Alma, $0 is deleted.</td>
</tr>
<tr>
<td>$9</td>
<td>Contains Y, N, R, or &lt;value&gt;.</td>
</tr>
<tr>
<td></td>
<td>- Y=The term in the authorized field is preferred.</td>
</tr>
<tr>
<td></td>
<td>- N=The term in the authorized field is nonpreferred.</td>
</tr>
<tr>
<td></td>
<td>- R=The term in the authorized field is from a 5XX see also field.</td>
</tr>
<tr>
<td></td>
<td>- &lt;value&gt;=For tags that you specify using the Authority Enrichment configuration, you need to specify a value to be inserted for $9 when the bibliographic record is enriched for publishing. See Authority Enrichment for more information.</td>
</tr>
<tr>
<td></td>
<td>$9 is added to every field in the original MARC 21/UNIMARC record that is authorized.</td>
</tr>
<tr>
<td>$L</td>
<td>Contains the language information (for multilingual authorities).</td>
</tr>
</tbody>
</table>

For fields associated with authority records that contain preferred and nonpreferred terms, record enrichment processing is handled in the following manner:

- A field with the same tag as the original, authorized field is added to the MARC record.
• $0 and $2 are added to this new field with the same values as the ones contained in the original field.

• $9 is added to the new field with the value Y for preferred, the value N for nonpreferred, the value R, and <value> as described in the table above and in the additional information/example below.

• The values of the other subfields for the new field are copied from the authority record field.

If you optionally select the Heading enrichment – enrich with “See Also” fields publishing parameter (as described in the Publishing to Primo section), record enrichment processing is handled in a similar manner with $9 containing the value R to indicate that the content is from a 5XX see also field.

See the illustration below for an example of the headings enrichment implementation.

```xml
<datafield tag="100" ind2="" ind1="1">
  <subfield code="a">Schumaker, Ward.</subfield>
  <subfield code="2">LCNAMES</subfield>
  <subfield code="0">41-LIBRARY_OF_CONGRESS-n 93026393</subfield>
  <subfield code="9">Y</subfield> (preferred)
</datafield>
<datafield tag="245" ind2="0" ind1="1">
  <subfield code="a">Dance! /</subfield>
  <subfield code="c">Ward Schumaker.</subfield>
</datafield>
<datafield tag="250" ind2="" ind1="">
  <subfield code="a">1st ed.</subfield>
</datafield>
<datafield tag="260" ind2="" ind1="">
  <subfield code="a">San Diego :</subfield>
  <subfield code="b">Harcourt Brace,</subfield>
  <subfield code="c">©1996.</subfield>
</datafield>
<datafield tag="300" ind2="" ind1="">
  <subfield code="a">1 volume (unpaged) :</subfield>
  <subfield code="b">color illustrations ;</subfield>
  <subfield code="c">21 x 28 cm</subfield>
</datafield>
```
A number of animals demonstrate some of the many different ways to dance, from bumping and romping to swirls and plie's.
Other Implementation Considerations

You need to verify that your Primo normalization rules are tailored to address the additional headings enrichment fields to align with your requirements. See the Configuring the Normalization Rules section in the Primo documentation for more information. This documentation first explains the browse section and then explains the rules per template including the Alma MARC Template. Also note that:

- In general, the rules need to be updated in the following ways:
  - The Browse section needs be updated so that Browse headings including cross-references can be created.
  - A number of rules (detailed in the Primo documentation) have to be updated to prevent non-preferred terms from being used in display, facets, dedup, and sort.
- The Alma MARC Template (in Primo) has been updated to support the Alma headings enrichment from Primo V4.1 with some corrections added in V4.5. As a result, it is likely that you already have the necessary rules in place; or if not, possibly you may have already updated your rules. To verify the status of your rules, first check the Browse section. If there are no rules in the Browse section, the rules will have to be updated. If there are rules in the Browse section, the rules are most likely updated but you should also check that the other fields as identified in the Normalization Rules Template section of the Primo documentation have been updated.

You can update your Primo normalization rules using the following options:

- Synchronize with Template - This option is described in Implementation and Upgrade Information
- Copy this Target to another Mapping Set - This option is described in Editing Normalization Rules Sets

For Primo Total Care installations, follow the usual procedure of contacting Support for template normalization rule changes (non-preconfigured feature changes) to have your normalization rules updated to incorporate headings enrichment data.
The Output of the Publishing Process

The output files of the Alma Primo publishing job are placed in the defined FTP directory location of the publishing profile. The publishing process places all MARC 21 records directly on the FTP directory location specified, while automatically creating a separate subdirectory for any non-MARC 21 metadata format used by your institution, where relevant. This may include a subdirectory named unimarc for UNIMARC records and (if so configured by Ex Libris) dc for Dublin Core records. If your institution uses any non-MARC 21 formats, you will need a separate Primo pipe harvest setup for each format, adding the appropriate subdirectory unimarc or dc to the pipe’s FTP source directory definition. For instance, if Alma is publishing to an FTP in directory a/b/c, the MARC 21 pipe in Primo will set the source directory as a/b/c. However, if the same institution uses UNIMARC or Dublin Core, the source directory set for those pipes would need to be set as a/b/c/unimarc or a/b/c/dc, respectively. For more information on publishing to the Primo sandbox from an Alma sandbox, see Alma-Primo Sandbox Integration.

The publishing process output directory contains the archived and compressed (*.tar.gz) files with the following naming conventions:

- **IEP*.tar.gz** – Contains bibliographic records with the print inventory.
- **IEE*.tar.gz** – Contains records with electronic inventory.
- **IED*.tar.gz** – Contains records with digital inventory.
- **IE_MMS*.tar.gz** – Contains records with no inventory attached.

Each tar.gz file contains 100 Alma records.

---

**Note**

Course reserves data is not published as a separate record type. It is embedded in the published P (physical), E (electronic), and D (digital) records.

---

The Format of Published Data

Alma publishes data in XML format. Alma modifies published MARC XML records to include the following data:

---

**Note**

The format delineated below for publishing is not the same as the format used for the GET BIB API and SRU. For details on these formats, see [https://developers.exlibrisgroup.com/alma/apis/bibs/](https://developers.exlibrisgroup.com/alma/apis/bibs/)

---

- **Alma Intellectual Entity ID** – Stored in the header of the published record, and used as the base for the record ID in Primo:

  ```xml
  <header status="new">
  <identifier>urm_publish:21239404420001021</identifier>
  </header>
  ```
- **001** – Contains the MMS ID.
- **INT** – Indicates the entity type, which is stored in the $$a subfield. Alma publishes the following record types to Primo:
  - **P** (Physical) – Indicates that the exported bibliographic record has an associated holdings record (with or without items). P is the default value (even if there are no associated holdings records) if the criteria for D, E, or C are not met.
  - **D** (Digital) – Indicates that the exported bibliographic record has an associated representation. For more information, refer to the TYP field.
  - **E** (Electronic) – Record is one of the following electronic types:
    - Electronic – Indicates that the bibliographic record has an associated portfolio.
    - Electronic Collection – Records of this type do not have any associated portfolios but are distinguished from other electronic records with the ECT field.
  - **C** (Collection). Indicates that the type of record is a collection and may contain mixed types of material.
- **TYP** – Indicates the entity type of digital records, which is stored in the $$a subfield.
- **AVA** – This field is created for print materials only. It contains location and availability information for the published record and related records in the following subfields:
  - **$$8** – Contains the MMS ID of the holdings record. This subfield is not used by Primo, but customers who use the Retrieve Bibs REST API and SRU can retrieve it.
  - **$$a** – Institution code
  - **$$b** – Library code
  - **$$c** – Location display name
  - **$$d** – Call number
  - **$$e** – Availability (such as available, unavailable, or check_holdings)
  - **$$f** – Total items
  - **$$g** – Non-available items
  - **$$j** – Location code
  - **$$k** – Call number type - If a location uses an accession number, this subfield is not published.
  - **$$p** – Priority
  - **$$t** – Textual representation taken from the MARC 866, 867, and/or 868 fields. This subfield is not used by Primo, but customers who use the Retrieve Bib REST API and SRU can retrieve it. This subfield is repeatable.
- **AVD** – This field is created for digital materials only. It is published for bibliographic records with digital inventory. It contains the following subfields:
  - **$$a** – Institution code
  - **$$b** – Representation PID
  - **$$c** – Representation type: REPRESENTATION or REMOTE_REPRESENTATION
  - **$$d** – Remote repository name (if this is a remote representation)
  - **$$e** – Representation's label
  - **$$f** – Public note
- **AVE** – This field contains "available for" group information (Available Electronic; see Configuring Distributed Access to Electronic Resources) in the following subfields:
  - **$$i** – contains a single e-resource's "available for" institution code
• **$Sc** – contains a single e-resource's "available for" campus code
• **$Sl** – contains a single e-resource's "available for" library code

**Note**

If you have defined a separate Primo institution per Alma campus, this field is the basis for defining the Primo institution in the PNX records. Otherwise, you can use this information to create search scopes and search campus-specific e-resources.

• **CAT** – For each MARC21 050 field, the **Creates Journal Categories File** job creates up to three levels of journal categories by mapping the LCC number stored in the 050 $a subfield to Columbia's Hierarchical Interface to LC Classification (HILCC) and stores the categories in the following subfields: **a** (level 1), **b** (level 2), and **c** (level 3). For more details, see [https://www1.columbia.edu/sec/cu/libraries/bts/hilcc/](https://www1.columbia.edu/sec/cu/libraries/bts/hilcc/).

For example, a record with an LCC number of **N7445** creates the following category levels.

```
<datafield tag="CAT" ind1=" " ind2=" ">
  <subfield code="a">Arts_Architecture_Applied_Arts</subfield>
  <subfield code="b">Visual_Arts</subfield>
  <subfield code="c">Visual_Arts_General</subfield>
</datafield>
```

• **COL** – This field contains collection information in the following subfields:
  • **a** – Parent collection ID
  • **b** – Collection title
  • **c** – Collection name
  • **A** – The owning institution. Currently, this field is added only for centralized publishing, but it will be used for standard publishing in the future.

• **CNO** – This field contains course reserve list information in the following subfields:
  • **$Sa** – Institution code
  • **$Sb** – Start date
  • **$Sc** – End date
  • **$Se** – Department name
  • **$Sf** – Department code
  • **$Sg** – Course instructors
  • **$Sj** – Course name
  • **$Sk** – Course code and section
  • **$Sl** – Section ID
  • **$So** – Searchable IDs
  • **$Sr** – Course year
Note

The CNO contains the course details but not the citation details. If the reading list citation is an article in a journal held by the library, in order for the article information to appear in Primo, the article must be cataloged as an MMS record. It is not enough to enter the article details in the reading list citation and then attach it to the resource which is the bibliographic record of the journal. The attached resource is published to Primo, not the reading list citation.

- **ECT** – When populated, indicates that the electronic record is an electronic collection.
  - $$a$$ – set to database

- **INST** – Contains the institution code (needed for the records of type E, for which AVA is not created). Note that the institution code is stored in the $$a$$ subfield. If the Available Electronic functionality is used, the institution may be indicated in the AVE field only.

  For collaborative networks that are using centralized publishing, the $$b$$ subfield contains the entity type instead of the INT field. For example, if the entity is a collection, the $$b$$ subfield would contain a C.

  For Alma-D and Alma-C records, the $$c$$ subfield contains the Alma Intellectual Entity ID, which the alma_thumb2 template uses to display thumbnails.

- **OWN** – This field contains ownership information (Ownership) in the following subfields and is not included in the Alma MARC - Template template:
  - $$i$$ – contains a single e-resource ownership associated with the bibliographic record (the institution ID)
  - $$l$$ – contains a single e-resource ownership associated with the bibliographic record (the library)

- **PLK** – This field contains linking information from MARC 76X-78X and 830 fields. The use of this data requires you to define additional normalization rules in Primo. For additional enrichment, see Parent Record Enrichment.
  - $$a$$ – contains the MARC relationship between this record and the record to which it links.
  - $$b$$ – contains the MMS ID of the record to which this record links.
Publishing to Primo Central

As a link resolver, Alma publishes the activation status of electronic holdings (all unsuppressed holdings) to Primo Central in an institutional holdings file, which Primo Central then uses to determine the full text availability of electronic holdings for each institution. To publish electronic holdings to Primo Central, you must configure and run a publishing profile in Alma.

When working with a Network Zone, the system publishes electronic holdings from the Network Zone and each member institution at the same time and creates the following, respectively:

- One institutional holdings file for each "Available for" group that has been defined in the Network Zone. Each "Available for" group corresponds to each of the member institutions.
- One institutional holdings file from each member institution.

Each week, the system merges the above institutional holdings files into a single institutional holdings file so that it can be harvested by Primo Central.

Configuring the Publishing Profile

To configure publishing to Primo Central, you must have one of the following roles:

- Catalog Administrator
- Repository Administrator
- General System Administrator

The publishing profile allows you to configure the settings used to generate the electronic holdings file that Primo Central uses to update the status indicators. This process should be run weekly to make sure that the holdings information is accurate.

The Electronic Profiles section in the Publish electronic records to Primo Central job allows you to define profiles for groups of libraries and campuses that are defined as inventory management groups in a multicampus configuration. This allows the publishing job to create additional holdings files at the campus/library level so that Primo Central can determine the full-text availability per Alma campus/library (each of which can be defined separately as a Primo institution, or all together as one Primo institution).

For more information about publishing electronic records per campus/library, see the Library-Level Publish to Google Scholar and Primo Central video (4:08 mins).

To configure the publishing profile for Primo Central publishing:

1. On the Publishing Profiles Details page (Resources > Publishing > Publishing Profiles), select Edit in the row actions list for the Publish electronic records to Primo Central profile. The Publishing Profile Details page opens.
2. In the Publishing Parameters section, select Active or Inactive and select a scheduling option.

**Note**
If your institution works with a Network Zone, this export process must be run at the Network Zone the day before it is run at each member institution. This allows updates to the Network Zone inventory to be included in the holdings file for each member institution.

3. Select Email Notifications to specify which users and email addresses will receive email notifications when the publishing profile is complete.

4. If each group of campuses/libraries in a multicampus configuration is defined as a Primo institution, define a profile for each group of campuses and libraries. Otherwise, continue to the next step:
   1. Select Add Profile.
   2. Enter a name for campus or library in Profile name with no spaces. Optionally add a description.
   3. Select Add and Close.
   4. Select Edit in the row actions list to edit the new profile. The Publishing Profile Details page appears.

5. In the Electronic profile members section, select Add another member to add members to the profile group (select either campuses or libraries, or both).
   - Campus – Select a campus and select Add Campus.
   - Library – Select a library and select Add Library.
   6. Select Save to save the changes to the member profile.

5. Select Save to save the changes to the export publishing profile.
Data that meets the defined criteria is exported to the institutional holdings file when the profile is run according to the selected schedule.

For information on monitoring a publishing export job, see Viewing Running Jobs. For information on the job report, see Viewing Completed Jobs.

---

The Output of the Publishing Process

The publishing job writes the holdings information to the following file for standard configurations:


For multicampus configurations, the publishing job writes the holdings information to the following file for each group of campuses/libraries:

https://<Alma domain>/rep/getFile?institution_code=<Alma_Institution_Code>&file=institutional_holding&member_code=<profile_name>

For more information, see Configuring Primo Central to Use the Institutional Holdings File.

---

Publishing to Primo Central in a Multicampus or Available For Environment

---

**Note**

For Primo VE configuration information, see Multicampus Setup in Primo VE.

---

If inventory management groups are set up to offer different electronic services to different libraries and/or campuses, Primo must take this into account, too. Primo must account for:

- The Primo Central index profile (per each group)
- The Alma OpenURL definition (per each group)

When you publish to Primo Central in a multicampus / available for environment, add a separate publishing profile for each campus that corresponds to an inventory management group. Creating a profile for each inventory management group allows each group to retrieve its own resources from Primo Central.

Each group should have its own central index profile, because:

- Each group subscribes to different electronic materials, so each group should see a different set of resources activated from the Primo Central index.
- The indication of availability on the results (full-text availability) is different for each group.
- Each profile must take its relevant holdings file according to the Publishing to Primo Central Profile that was set up.

You must add an Alma OpenURL definition for each group. Since each Primo institution is set to work with one of the groups, ensure that the electronic services that are provided are for the correct campus. This is done as described above in Adding Access to Resources by Adding a Campus to an OpenURL. In addition, see Alma Multicampus Setup in Primo regarding Primo integration details.
Configuring Primo Central to Use the Institutional Holdings File

In order for Primo Central to update the status indicators for the institutional holdings, it must know where the published holdings file is stored. Although the holdings file should be updated weekly, this configuration needs to be set only once, which may occur while registering your institution with the Primo Central service. For more information, see Primo Central.

Note

- You can assign only one institutional holdings file per Client UID (or PC Key). If you are already a Primo Central customer and you want to use the PC for Alma, you must register a new client, get a new PC Key, and link the PC Key to the Primo institution that is integrated with Alma. This will also allow you to create an independent environment to test the integration of Alma and Primo Central.

- When using Primo in a multicampus environment, you must define a Primo institution for each PC publishing profile to register separate holdings files per inventory management group. For more information, see Alma Multicampus Setup in Primo.

- When using Primo VE in a multicampus environment, you must define a PCI profile for each campus/library and assign each to a view to register separate holdings files per inventory management group. For more information, see Multicampus Setup in Primo VE.

To set the URL of the holdings file:

1. Access the back office for the PCI service:
   - For Primo: In the Primo Back Office, select Profile next to the PC Key field in the Institution Wizard (Primo Home > Ongoing Configuration Wizards > Institution Wizard). This button does not appear until you have registered your Primo institution to use Primo Central.
   - For Primo VE: In Alma, select View my Profile on the Central Index and Proxy Setup page (Configuration Menu > Discovery > Other > Central Index and proxy set-up). This button does not appear until you have registered your Primo institution to use Primo Central.

   The main menu on the My Profile page opens to allow you update your Primo Central settings.

2. Select My Client Applications to display the list of clients associated with your institution.

3. Select the client application that was used to register the Primo Central service in Primo.

4. Select Edit Client Attributes.

5. In the Institutional holdings file URL field, use the following format to enter the URL for the holdings file:
   - For standard configuration:

   - For multicampus configuration (member_code should be set to the name of the PC publishing profile):
     https://<Alma domain>/rep/getFile?institution_code=<Alma_Institution_Code>&file=institutional_holding&member_code=<profile_name>
Publishing to OCLC

To configure publishing to OCLC, you must have one of the following roles:

- Catalog Administrator
- Repository Administrator
- General System Administrator

If you are transitioning to Alma production from an environment where you have been synchronizing your records with OCLC WorldCat, see Transitioning to Alma Production from a Previous System that was used to Synchronize with OCLC WorldCat for important instructions.

Overview of Publishing to OCLC

OCLC provides two different types of WorldShare Data Sync options that Alma users can utilize to update their holdings in WorldCat.

- The typical way to publish is based on the bibliographic level with an indication of the existence of inventory. This can be done by using the predefined publishing profile Publish bibliographic record (DataSync) to OCLC.

- It is also possible to publish holdings level information, such as call numbers, owning location, and shelving location. This option of publishing is necessary for physical journals and other multi-volume works where the range/coverage is important (such as for ILL purposes). This can be done by using the predefined publishing profile Publish your Local Holdings Records (LHRs) to OCLC.

Publishing to OCLC exports records to a predefined FTP location from which OCLC retrieves them and synchronizes them with the WorldCat records. For information about publishing to OCLC in a collaborative network implementing a Network Zone, see the note in Managing Records in a Network Zone. Also see the job Bib OCLC Republish Set of Titles for a republishing titles when, for example, the institution changes its name.

---

**Note**

Bibliographic records whose associated holdings records have been deleted are published as deleted records.

---

For importing records from OCLC, see Importing Records from OCLC Connexion.

For use case examples, see Publishing to OCLC.

---

When are Records Exported?

A record is exported in the following cases:

- The record was changed or added since the last export job ran.

Changes include any modifications to a bibliographic record and any information that enriches it (such as holdings and item changes) according to the configuration of the publishing profile that you use such as the Publish bibliographic record (DataSync) to OCLC publishing profile or the Publish your Local Holdings Records (LHRs) to OCLC publishing profile (see the procedure Publishing Print Holdings to OCLC for more information).
A staff user has manually selected the record to be exported (which is also known as forced export).

This can be done with **Force export to WorldCat** from the Metadata Editor *(Tools > Set Management Tags > Force export to WorldCat)*.

Which Records are Exported?

The record is set to **Publish bib/Publish holdings only** in the MD Editor *(Tools > Set Management Tags > Export to WorldCat)*.

![Export to WorldCat Options in the MD Editor](Image)

See **Export to WorldCat** in [*MD Editor — Tools Menu*](#) for more information.

See the table below for a summary of the OCLC Publishing Jobs and the Alma Set Management Tags.

<table>
<thead>
<tr>
<th>Job Name</th>
<th>Set Management Tags (set on bibliographic records in the MD Editor)</th>
<th>Records Synchronized with OCLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publish bibliographic record (DataSync) to OCLC</td>
<td>Don't publish</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Publish holdings only</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Publish bib</td>
<td>Bibliographic records</td>
</tr>
<tr>
<td>Publish your Local Holdings Records (LHRs) to OCLC</td>
<td>Don't publish</td>
<td>None</td>
</tr>
<tr>
<td>(Used mostly for serials)</td>
<td>Publish holdings only</td>
<td>Holdings records</td>
</tr>
<tr>
<td></td>
<td>Publish bib</td>
<td>None</td>
</tr>
</tbody>
</table>

The Publish Bibliographic Record value for the publish to external catalog (OCLC) management tag is the default value in the following scenarios:
• MD Editor (new bibliographic record and copy cataloging)
• Quick cataloging (new item, new portfolio, and Fulfillment citation)
• Order a bibliographic record from the Community Zone
• Simple view - copy to catalog / link

---

**Note**

When you use the **Publish your Local Holdings Records (LHRs) to OCLC** publishing profile, only holdings records related to a bibliographic record with an OCLC number in the 035 field are published to OCLC.

---

**Note**

It is possible to use the index Tag sync external catalog in the advanced search to locate records that are marked for publishing (see [Using Advanced Search](#) for more information).

---

**What is the Content of the Exported Records?**

The following content is exported when publishing to OCLC:

- **Publish bibliographic record (DataSync) to OCLC** publishing profile
  
  With this profile, bibliographic records data including holdings information (if the profile is configured to include it) is published. If the bibliographic record does not include an OCLC number, OCLC sends a file with the mapping of the OCLC number to the library’s MMS ID. More information about loading this file can be found in [How to create/import OCLC numbers from an Excel file into existing Alma records](#).

- **Publish your Local Holdings Records (LHRs) to OCLC** publishing profile
  
  With this profile, data from the holdings record along with field 004 with the OCLC number taken from the related bibliographic record is published.

---

**Embedded Holdings Information**

When you use **Publish bibliographic record (DataSync) to OCLC**, it is possible to publish embedded holdings information within the published record. In order to do this, you need to configure the following:

- **Configuration Menu > Resources > Record Export > Map Holdings fields into Bib record OCLC**
- **Configuration Menu > Resources > Record Export > Institution OCLC symbol**
Publishing Deleted Records

Records are published as deleted (LDR/05 = ‘d’) in one of the following cases:

- **Publish bibliographic record (DataSync) to OCLC** publishing profile
  - The bibliographic record is deleted in Alma
  - All holdings of a bibliographic record have been deleted (even if the bibliographic record itself still exists)
  - The bibliographic record was marked as **Don't publish** after it has been published at least once

- **Publish your Local Holdings Records (LHRs) to OCLC** publishing profile
  - The holdings record is deleted in Alma
  - The bibliographic record related to the holdings record was marked as **Don't publish** after it has been published at least once

Publishing Related Records to OCLC

The Alma publishing to OCLC process supports handling related records when the **Publish bibliographic record (DataSync) to OCLC** and the **Publish your Local Holdings Records (LHRs) to OCLC** publishing profiles are run. Holdings information for bibliographic records that are part of a bound-with relationship is properly published to provide an accurate representation of the inventory at the holdings library.

See [Configuring Related Records for Physical Inventory](#) for more information regarding related records.

When you catalog related records (create or delete), the MMS - Build Record Relations job needs to run first before the related record information can be published to OCLC. The MMS - Build Record Relations job is scheduled to run once per day. See [Viewing All Scheduled Jobs](#) for more information.

Initial Publishing Activities with OCLC

Prior to running your ongoing automatic synchronization process with OCLC, you need to communicate with OCLC regarding your institution symbol and library codes and coordinate your configuration requirements. See the procedure below.

For more information, see [Resource Management - Publishing to OCLC using separate library codes and symbols](#).

To complete your initial publishing activities:

1. Contact OCLC and obtain an institution code symbol. If you want a specific library / location combination to have its own separate code symbol that overrides the institution-level symbol, you must coordinate this with OCLC and map the library / location code to the assigned symbol in the Institution OCLC Symbol mapping table ([Configuration Menu > Resources > Record Export > Institution OCLC symbol](#)).
2. Open a synchronization project with OCLC. Each such project has a project ID, which is used for data transfer activities between the institution / library and OCLC.

3. Contact OCLC and obtain a collection ID.


---

**Note**

The OCLC publishing integration profile requires an S/FTP connection configured for passive mode. Ensure that **FTP Passive Mode** is checked in the FTP connection used for this profile.

---

5. When you use the Publish bibliographic record (DataSync) to OCLC publishing profile, it is possible to publish embedded holdings information within the published record. In order to do this, you need to configure the Map Holdings fields into Bib record OCLC mapping table (Configuration Menu > Resources > Record Export > Map Holdings fields into Bib record OCLC).

For example, the illustration below shows the mapping of the holdings 852 $a to 900 $b. You can enter any number as the targetCode.

---

6. Customize one of the following types of print publishing profiles provided in Alma or create an electronic publishing profile to meet your requirements:

   - **Publish bibliographic record (DataSync) to OCLC** – Use this profile to synchronize bibliographic records with embedded holdings information with the information available for your institution / library in the OCLC WorldCat catalog.

   - **Publish your local holdings records (LHRs) to OCLC** – Use this profile to synchronize holdings information
only with the holdings information available for your institution / library in the OCLC WorldCat catalog. See the procedures Publishing Print Holdings to OCLC and Publishing Electronic Holdings to OCLC for more information.

---

### Publishing Print Holdings to OCLC

Synchronizing your libraries’ print holdings from Alma to WorldCat can be accomplished with the Publish bibliographic record (DataSync) to OCLC or Publish your local holdings records (LHRs) to OCLC publishing profiles provided with Alma. Refer to the following procedure to tailor either of these profiles for your use. A scheduled job for Publishing to OCLC - Bibliographic Records is created.

To configure an OCLC print publishing profile:

1. Open the Publishing Profiles Details page (Resources > Publishing > Publishing Profiles).

2. On the Publishing Profile page, edit either Publish bibliographic record (DataSync) to OCLC or Publish your holdings records (LHRs) to OCLC (see Initial Publishing Activities with OCLC). The Publishing Profile Details page opens.

![Publishing Profile Details Page](image)

3. Use the following table to complete the parameters on the Publishing Profile Details page.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Profile Details section:</strong></td>
<td></td>
</tr>
<tr>
<td>Profile name</td>
<td>The profile name.</td>
</tr>
<tr>
<td>Profile description</td>
<td>An optional description.</td>
</tr>
<tr>
<td>OCLC institution symbol</td>
<td>The institution code symbol previously agreed upon with OCLC. See the Institution OCLC Symbol mapping table configuration described above in the Initial Publishing Activities with OCLC section for more information. The value specified in the OCLC institution symbol parameter can be overridden by the library or library and location level OCLC symbol code specified in the Institution OCLC Symbol configuration (Configuration Menu &gt; Resources &gt; Record)</td>
</tr>
</tbody>
</table>

---

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<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export &gt; Institution OCLC symbol</td>
<td>This is a required field.</td>
</tr>
<tr>
<td>Project ID</td>
<td>The synchronization project ID previously agreed upon with OCLC (see the configuration process outline above). The Project ID or Collection ID must be entered along with the required OCLC institution symbol. If you are working with the old OCLC format, enter a Project ID. If you are working with the new OCLC format, enter a Collection ID.</td>
</tr>
<tr>
<td>Collection ID</td>
<td>The collection ID previously agreed upon with OCLC (see the configuration process outline above). If this field is populated, the published file name includes the institution symbol and collection ID. If this field is not populated, the published file name does not include the collection ID. For information as to when this is required by OCLC, contact OCLC. The Project ID or Collection ID must be entered along with the required OCLC institution symbol. If you are working with the old OCLC format, enter a Project ID. If you are working with the new OCLC format, enter a Collection ID.</td>
</tr>
</tbody>
</table>

### Publishing Parameters section:

| Publishing mode: Incremental | Whether to publish your ongoing OCLC record changes (since the prior update) in Alma to the FTP server that is used for OCLC publishing and ultimately to OCLC for processing. The schedule of the publishing job is determined by the scheduling option that you select in the OCLC publishing profile. This publishing mode is intended to be run on a regular basis. |

| Publishing mode: Baseline | This is a one-time-use option. Select this if you are an institution that is migrating from a different ILS where OCLC records have been maintained and exchanged with OCLC, and the goal is to continue the exchange of records with OCLC on the Alma system from where the other ILS left off (using the existing OCLC account that was used with the previous ILS). This option is intended for use – once – immediately after the database is migrated to Alma and before any OCLC records are changed in Alma. This option publishes the whole set of OCLC records (that is, all the records that are marked for publishing to OCLC as described in When Records are Exported) to an Alma publishing index (an internal manifestation of the set in Alma specific to Baseline publishing to OCLC), but does not create any files on the FTP server used for OCLC publishing. Once the publishing job completes, Alma automatically sets the Publishing mode in the OCLC publishing profile to Incremental for the ongoing incremental publishing updates with OCLC.

**Note**
The scheduling and running of the Baseline publishing job should be incorporated into the process immediately following the Alma cutover to production.

| Publishing mode: Full | Alma publishes all the OCLC records (that is, all the records that are marked for publishing to OCLC as described in When Records are Exported) to the FTP server used for OCLC publishing. This option is intended for institutions that create a new OCLC account for processing records for the first time (such as libraries that did not work with OCLC publishing in their previous system before Alma) or for sites that did work with OCLC previously, but have decided to undertake a full reclamation project with OCLC in order to republish all records from Alma to OCLC, again. Once the publishing job completes, Alma automatically sets the Publishing mode in the OCLC publishing profile to Incremental for the ongoing incremental publishing updates with OCLC. |

| Status | Select **Active**. |
| Scheduling | Select one of the scheduling options. If you select **Not scheduled**, the export job for this publishing profile does not |
### Profile Details for OCLC Electronic Holdings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profile name</td>
<td>A unique profile name.</td>
</tr>
</tbody>
</table>

### Submission Format section:

<table>
<thead>
<tr>
<th>FTP configuration</th>
<th>Select the name of the S/FTP connection. For detailed information on FTP requirements, see the <a href="#">OCLC documentation</a>.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subdirectory</td>
<td>An optional subdirectory of the path specified when creating the S/FTP connection. For example, if you specified Alma in the Sub-directory field during S/FTP connection configuration and you enter OCLC in this field, the data is exported to the Alma/OCLC directory.</td>
</tr>
</tbody>
</table>

#### Note

OCLC retrieves the data from the FTP directory every night at about 2:00 AM (Eastern Standard Time). The publishing process should be scheduled so that it does not interfere with OCLC’s data collection process.

4. Select **Save**. The modified publishing profile is saved. Data that meets the defined criteria is exported to the specified FTP location when the profile is run.

For information on monitoring a publishing export job, see [Viewing Running Jobs](#). For information on the job report, see [Viewing Completed Jobs](#).

When publishing bibliographic records to OCLC, the maximum number of records per file that can be published is 90K. This complies with OCLC standards described in the [OCLC documentation](#). If there are more than 200,000 records to be exported, multiple data files are created with up to 200,000 records in each file.

---

### Publishing Electronic Holdings to OCLC

Synchronizing your libraries’ electronic holdings from Alma to WorldCat can be achieved using Alma’s publishing platform.

Once you set up the publishing platform (according to the steps below), Alma will publish your electronic holdings to WorldCat on a scheduled basis resulting in synchronization of every change to your electronic holdings with WorldCat. A scheduled job for **Publishing to OCLC - Holding Records** is created.

**To publish electronic holdings to OCLC:**

1. Create the set of electronic holdings that you want to synchronize with WorldCat. See [Adding Logical Sets](#) for instructions.

2. Create a general publishing profile. See [Publishing and Inventory Enrichment](#), and use the details provided in the following table to customize your profile configuration.

<pre><code>| Parameter       | Description                        |
|-----------------|------------------------------------|
| Profile name    | A unique profile name.             |
</code></pre>
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profile description</td>
<td>Use the description to further identify the publishing profile for OCLC electronic holdings.</td>
</tr>
<tr>
<td></td>
<td><strong>Publishing Parameters section:</strong></td>
</tr>
<tr>
<td>Status</td>
<td>Select <strong>Active</strong>.</td>
</tr>
<tr>
<td>Scheduling</td>
<td>Select the schedule.</td>
</tr>
<tr>
<td>Email Notifications</td>
<td>Specify which users and email addresses will receive email notifications when the publishing profile has completed.</td>
</tr>
<tr>
<td></td>
<td><strong>Content section:</strong></td>
</tr>
<tr>
<td>Set name</td>
<td>Select the set that you created for electronic publishing in step 1.</td>
</tr>
<tr>
<td>Publish on</td>
<td>Select <strong>Bibliographic level</strong>.</td>
</tr>
<tr>
<td>Output format</td>
<td>Select <strong>MARC 21 Bibliographic</strong>.</td>
</tr>
<tr>
<td></td>
<td><strong>Publishing Protocol section:</strong></td>
</tr>
<tr>
<td>FTP, OAI, or Z39.50</td>
<td>Select the <strong>FTP</strong> check box.</td>
</tr>
<tr>
<td>FTP configuration</td>
<td>Select the FTP configuration that you created for OCLC (see <a href="#">Configuring S/FTP Connections</a>). Your FTP configuration should include the following configuration parameters:</td>
</tr>
<tr>
<td></td>
<td>◦ FTP Server=ftp2.oclc.org</td>
</tr>
<tr>
<td></td>
<td>◦ UserName=the one assigned to you by OCLC</td>
</tr>
<tr>
<td></td>
<td>◦ Password=the one assigned to you by OCLC</td>
</tr>
<tr>
<td></td>
<td>◦ Sub-directory=wckb/in/data</td>
</tr>
<tr>
<td>Physical format</td>
<td>Select <strong>XML</strong>.</td>
</tr>
<tr>
<td>Number of records in file</td>
<td>Select <strong>One File</strong>. (All records published to OCLC should be in one file.)</td>
</tr>
<tr>
<td>Use default file name</td>
<td>Select <strong>No</strong>.</td>
</tr>
<tr>
<td>File name</td>
<td>Specify HOLDINGS_&lt;registry_id&gt;.xml-marc where &lt;registry_id&gt; is your WorldCat Registry ID (also known as your OCLC Institution ID) for your library. If you have questions regarding your WorldCat Registry ID, contact OCLC customer support (<a href="mailto:support@oclc.org">support@oclc.org</a>).</td>
</tr>
</tbody>
</table>

3. Select **Next**, and use the details provided in the following table to complete the remainder of the profile configuration.

### Data Enrichment for OCLC Electronic Holdings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Electronic Inventory Enrichment section:</strong></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add Electronic Portfolio Information</td>
<td>Select this.</td>
</tr>
<tr>
<td>Repeatable field 866</td>
<td>u</td>
</tr>
<tr>
<td>Access URL subfield u</td>
<td></td>
</tr>
<tr>
<td>Link Resolver Base URL</td>
<td>Enter your link resolver base URL.</td>
</tr>
<tr>
<td></td>
<td>Enter the base URL for the Primo service page redirect to the Alma Link Resolver using the following format and inserting your institution’s information where indicated:</td>
</tr>
<tr>
<td></td>
<td>http://&lt;primo server host:port&gt;/openurl/&lt;primo institution_code&gt;/&lt;primo view_code&gt;?</td>
</tr>
<tr>
<td>Collection Name subfield x</td>
<td></td>
</tr>
<tr>
<td>Coverage Statement subfield a</td>
<td></td>
</tr>
<tr>
<td>CZ Collection Identifier subfield t</td>
<td></td>
</tr>
</tbody>
</table>

4. Select **Save**.

---

**Transitioning to Alma Production from a Previous System that was used**
to Synchronize with OCLC WorldCat

You can continue processing incremental changes to OCLC WorldCat (versus reloading your entire database) when you switch from a previous system to Alma production. To do this:

- Create the OCLC publishing profile using the one-time baseline option
- Run the OCLC publishing profile while the one-time baseline option is set to create a starting point in your database from which Alma can continue with the incremental updates to OCLC.

See the following procedure for instructions regarding how to configure the OCLC publishing profile using the one-time baseline option for establishing the starting point from which Alma can continue with your incremental updates to OCLC WorldCat.

You must run the special one-time-use publishing profile/job on your first day or very close to your first day in Alma production and before making changes to your cataloging records.

Your bibliographic records with an OCLC-prefixed 035 field are automatically flagged during migration for bibliographic OCLC publishing. If your records need to be flagged differently:

- Use Alma’s Repository Search to create a set that reflects your relevant OCLC records at that point in time.
- Run the Synchronize Bib records with external catalog job with the Synchronize with External Catalog parameter in the TaskParameters: MmsTagSyncExternal section set to Publish bibliographic records or Publishing holdings only to mark/flag the set of records to be published to OCLC. This step may also be used to unmark a set of records to prevent them from being published.

Note

If Don’t publish is selected, the records are published as deleted (a d is added to the LDR position 5).

See Running Manual Jobs on Defined Sets for more information.

For marking individual records (versus a set of records), use the MD Editor and the Publish bib/Publish holdings only Tools options (Tools > Set Management Tags > Export to WorldCat). See Export to WorldCat in MD Editor – Tools Menu for more information.

- Once your OCLC records are flagged, search the repository using Tag Sync External Catalog to verify the records that have been marked for OCLC processing.

Tag Sync External Catalog Advanced Search Parameter

After you have addressed these workflow considerations, you are ready to configure your OCLC baseline publishing profile and run the publishing job using this profile.

To configure and run the OCLC publishing profile for the transition to Alma production:

1. See Publishing Print Holdings to OCLC to create your one-time-use OCLC publishing profile except use the Publishing Profile Details page settings described in the table below.
### Publishing Profile Details Page Parameters (for Transition Profile)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Profile Details section:</strong></td>
<td></td>
</tr>
<tr>
<td>Profile name</td>
<td>A unique profile name.</td>
</tr>
<tr>
<td>Profile description</td>
<td>Modify the description to further identify this profile.</td>
</tr>
<tr>
<td>OCLC institution symbol</td>
<td>The institution/library code symbol previously agreed upon with OCLC (see step 1 in the configuration process outline above).</td>
</tr>
<tr>
<td>Project ID</td>
<td>The synchronization project ID previously agreed upon with OCLC (see step 2 in the configuration process outline above).</td>
</tr>
<tr>
<td><strong>Publishing Parameters section:</strong></td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td>Select <strong>Active</strong>.</td>
</tr>
<tr>
<td>Scheduling</td>
<td>Select <strong>Not scheduled</strong>. Note that you need to contact Ex Libris to run this job manually.</td>
</tr>
<tr>
<td>Publishing mode: Baseline</td>
<td>This is a one-time-use option. Select this to migrate from a different ILS where OCLC records have been maintained and exchanged with OCLC, and the goal is to continue the exchange of records with OCLC on the Alma system from where the other ILS left off (using the existing OCLC account that was used with the previous ILS). This option is intended for use – once – immediately after the database is migrated to Alma and before any OCLC records are changed in Alma. This option publishes the whole set of OCLC records to an Alma publishing index (an internal manifestation of the set in Alma specific to Baseline publishing to OCLC), but does not create any files on the FTP server used for OCLC publishing. Once the publishing job completes, Alma automatically sets the Publishing mode in the OCLC publishing profile to Incremental for the ongoing incremental publishing updates with OCLC. Note The scheduling and running of the Baseline publishing job should be incorporated into the process immediately following the Alma cutover to production.</td>
</tr>
<tr>
<td>FTP configuration</td>
<td>Select the name of the S/FTP connection that you have established/coordinated with OCLC. This is the FTP from which OCLC can retrieve records to be synchronized with the WorldCat records. Note Since the Baseline option that you select for Publishing mode does not create any files on the FTP server used for OCLC publishing and Alma automatically sets the Publishing mode in the OCLC publishing profile to Incremental after the Baseline publishing is completed, you can select the ongoing, incremental FTP configuration that you have established with OCLC.</td>
</tr>
</tbody>
</table>
### Parameter Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subdirectory</td>
<td>An optional subdirectory of the path specified when creating the S/FTP connection. For example, if you specified Alma in the Sub-directory field during S/FTP connection configuration and you enter OCLC in this field, the data is exported to the Alma/OCLC directory.</td>
</tr>
</tbody>
</table>

2. **Save** your profile settings.

3. After your transition job completes, reconfigure the **Scheduling** parameter to set up your OCLC publishing profile for ongoing incremental publishing with OCLC WorldCat records.
Publishing to COPAC

To configure publishing to COPAC, you must have one of the following roles:

- Catalog Administrator
- Repository Administrator
- General System Administrator

Alma provides publishing support for the Consortium of Online Public Access Catalogues (COPAC), a UK-based union catalog.

Initial Publishing to COPAC

Prior to running your ongoing automatic synchronization process with COPAC, you need to coordinate and process an initial publishing of the Alma records that you want exposed in COPAC.

To do an initial publishing with COPAC:
Read this procedure in its entirety before you begin to ensure that you have completed any necessary prerequisites for each of the steps.

1. Communicate with COPAC to let them know that you will be running an initial publishing of records from Alma and discuss any profile configurations that need to be coordinated between your institution and COPAC.
   1. Prepare for your communication with COPAC by familiarizing yourself with the Alma publishing profile details in Publishing and Inventory Enrichment (General Publishing), and by reviewing any shared information in the Ex Libris Developer Network. (For an example, refer to https://developers.exlibrisgroup.com/blog/Publishing-to-Copac-Experience-of-the-University-of-York.)
   2. Prepare a checklist of questions that should address the following Alma configuration requirements:
      - FTP configuration details (see Adding S/FTP Connections for additional information)
      - MARC output format (MARC 21 binary or MARC 21 XML)
      - File size preference (1,000, 5,000, or 10,000 records per file or one single file)
      - File naming convention (prefix) for published files
      - Publishing schedule

COPAC Catalog Example
For your initial publishing job, you will want to run it manually from Alma. For ongoing publishing, you will probably want to set your publishing profile to publish automatically on a certain repeating frequency.

2. Create the logical set of records that you want to publish to COPAC. See Creating Logical Sets.

If you need to normalize these records before publishing, refer to Working with Normalization Rules for more information and/or use the normalization options provided on the Data Enrichment tab of the publishing profile (see the example below).

Data Enrichment Tab (Publishing Profile)

3. With the information that you have gathered, create the Alma publishing profile for publishing to COPAC using the procedure in Publishing and Inventory Enrichment (General Publishing). See below for an example of the Profile Details tab.
4. According to your pre-arranged schedule with COPAC, run your initial load publishing job.

   1. Access the COPAC publishing profile that you have configured (Resources > Publishing > Publishing Profiles).

   2. Select Run in the row actions list.

   3. Check the History tab on the Monitor Jobs page (see Viewing Completed Jobs) to determine the status of your COPAC publishing job.

5. Follow up with COPAC to confirm that your publishing job was successfully received and that your files have been loaded into the COPAC database.

6. Configure your COPAC publishing profile for the ongoing publishing of your records to COPAC. See the next section, Ongoing Publishing to COPAC.
Ongoing Publishing to COPAC

Once you have completed your initial publishing job with COPAC and confirmed that your files have been loaded into the COPAC database, you are ready to begin the incremental/ongoing process of updating your records in COPAC. Alma general publishing is designed to do one initial full upload of records with the necessary logic incorporated to identify the incremental changes to each previous upload and only publish those records that have changed since the last publishing job was run. As a result, republishing a full load is not provided as an option.

For ongoing publishing, you may find it easier to set your publishing profile to run automatically on a repeating schedule.

To configure your COPAC publishing job for a repeating schedule:

1. On the Publishing Profiles Details page (Resources > Publishing > Publishing Profiles), select Edit in the row actions list for the publishing profile that you created for the initial upload to COPAC.

2. Modify the Scheduling parameter to match your preference.

3. Select Save.
Publishing to SUNCAT

To configure publishing to SUNCAT, you must have one of the following roles:

- Catalog Administrator
- Repository Administrator
- General System Administrator

Alma provides publishing support for the Serials Union Catalogue (SUNCAT), a freely available source of information about serials holdings in the United Kingdom.

Initial Publishing to SUNCAT

Prior to running your ongoing automatic synchronization process with SUNCAT, you need to coordinate and process an initial publishing of the Alma records that you want exposed in SUNCAT.

To do an initial publishing with SUNCAT:

Read this procedure in its entirety before you begin to insure that you have completed any necessary prerequisites for each of the steps.

1. Communicate with SUNCAT to let them know that you will be running an initial publishing of records from Alma and discuss any profile configurations that need to be coordinated between your institution and SUNCAT.

   1. Prepare for your communication with SUNCAT by familiarizing yourself with the Alma publishing profile details in Publishing and Inventory Enrichment (General Publishing), and by reviewing any shared information in the Ex Libris Developer Network. (For an example, refer to https://developers.exlibrisgroup.com/blog/Publishing-to-SUNCAT-Experience-of-the-University-of-York.)

   2. Prepare a checklist of questions that should address the following Alma configuration requirements:
• FTP configuration details (refer to Adding S/FTP Connections for additional information.)
• MARC output format (MARC 21 binary or MARC 21 XML)
• File size preference (1,000, 5,000, or 10,000 records per file or one single file)
• File naming convention (prefix) for published files
• Publishing schedule

For your initial publishing job, you will want to run it manually from Alma. For ongoing publishing, you will probably want to set your publishing profile to publish automatically on a certain repeating frequency.

2. Create the logical set of records that you want to publish to SUNCAT. See Creating Logical Sets.

If you need to normalize these records before publishing, refer to Working with Normalization Rules for more information and/or use the normalization options provided on the Data Enrichment tab of the publishing profile (refer to the example below).
3. With the information that you have gathered, create the Alma publishing profile for publishing to SUNCAT using the procedure in Publishing and Inventory Enrichment (General Publishing). See below for an example of the Profile Data Enrichment Tab (Publishing Profile).
4. According to your pre-arranged schedule with SUNCAT, run your initial load publishing job.
   1. Access the SUNCAT publishing profile that you have configured (Resources > Publishing > Publishing Profiles).
   2. Run the SUNCAT publishing profile.
   3. Check the History tab on the Monitor Jobs page (see Viewing Completed Jobs) to determine the status of your SUNCAT publishing job.

5. Follow up with SUNCAT to confirm that your publishing job was successfully received and that your files have been loaded into the SUNCAT database.

6. Configure your SUNCAT publishing profile for the ongoing publishing of your records to SUNCAT. See the next section, Ongoing Publishing to COPAC.

---

**Ongoing Publishing to SUNCAT**

Once you have completed your initial publishing job with SUNCAT and confirmed that your files have been loaded into the SUNCAT database, you are ready to begin the incremental/ongoing process of updating your records in SUNCAT. Alma
general publishing is designed to do one initial full upload of records with the necessary logic incorporated to identify the incremental changes to each previous upload and only publish those records that have changed since the last publishing job was run. As a result, republishing a full load is not provided as an option.

For ongoing publishing, you may find it easier to set your publishing profile to run automatically on a repeating schedule.

To configure your SUNCAT publishing job for a repeating schedule:

1. On the Publishing Profiles Details page (Resources > Publishing > Publishing Profiles), select Edit in the row actions list for the publishing profile that you created for the initial upload to SUNCAT.
2. Modify the Scheduling parameter to match your preference.

Scheduling Parameter

3. Select Save.
Publishing to Libraries Australia

To configure publishing to Libraries Australia, you must have one of the following roles:

- Catalog Administrator
- Repository Administrator
- General System Administrator

Note

In order to work with Libraries Australia, an Ex Libris Support/Professional Services representative must configure a customer parameter. Check with Ex Libris to confirm that this parameter has been configured correctly.

Alma provides support for publishing records to Libraries Australia. This includes profiles that can be configured for initial and ongoing publishing, holdings mappings, and National Union Catalogue (NUC) definitions.

Overview of Publishing to Libraries Australia

You can automatically synchronize bibliographic records with embedded holdings information with the Libraries Australia (LA). Alma supports the NUC symbols issued by the LA. After creating and scheduling the publishing profile, the Upload Holdings to Libraries Australia job is scheduled.

In Alma, each institution that synchronizes its bibliographic/holdings records with the LA must have a NUC code (symbol). Also, specific libraries may have a NUC symbol that overrides the institution’s NUC code (see To configure a library NUC symbol that is different from the institution’s NUC symbol below).

Limited information about the holdings is embedded in the bibliographic records. Holdings information is sent together with the bibliographic records when the bibliographic records are marked to be synchronized with the national catalog, Libraries Australia.

Field 984 in the bibliographic record is used to contain the holdings information. Specifically, the 984 $a contains the NUC code; and the 984 $c may be configured to contain a call number or a label such as HELD (to indicate that the library has holdings).

Bibliographic records are exported to the LA with embedded holdings information when the following conditions are met:

- The bibliographic record is set or marked to be published, which can be handled in the following manner:
  - The record is set to Publish bib in the MD Editor (Tools > Set Management Tags > Export to Libraries Australia) as shown in the figure below.

    If the same record is subsequently set to Don't publish in the MD Editor, Alma supports publishing this record to the LA so that the LA is synchronized to know that this is a suppressed record.
Additionally, holdings records can be marked for suppression by the following methods:

- Location configuration

  On the Edit Physical Locations page (Configuration Menu > General > (select the correct location in configuring) > Locations > Physical Locations; select Edit in the row actions list for the relevant location), select Suppress from Discovery.

- Using the MD Editor

  Mark an individual holdings record for suppression in the MD Editor by selecting Tools > Set Management Tags > Suppress from Discovery when the holdings record to be suppressed is the active record on the MD Editor page.
• Running the Synchronize MMS with national catalog job to mark records to publish in bulk. For more information, see Running Manual Jobs on Defined Sets and step 2 of To do an initial publishing with Libraries Australia.

• Records can be marked to publish to Libraries Australia as part of the record import process using an import profile. (This is the recommended practice when the import will result in records ready to publish to Libraries Australia, to ensure an optimal, ongoing update process for Libraries Australia.) For more information, see Creating/Editing an Import Profile: Set Management Tags.

• The bibliographic record or any holdings record linked to the bibliographic record changed since the last time it was published, or a staff user has manually selected the record to be exported, which is also known as forced export. (Select Force export to Libraries Australia from the MD Editor's Tools > Set Management Tags menu, refer to the figure below.)

• The appropriate publishing profile has been properly defined and enabled (refer to the procedure To configure the Libraries Australia publishing profile:).

The export contains two separate files of bibliographic records with embedded holdings information. One file contains the new and updated holdings, and the other file contains deleted bibliographic records. These can be identified by the following naming convention (refer to the table below for an explanation of the naming convention):

\[ <\text{NUC\_CODE}>-<\text{process\_type}>.<\text{format\_id}><\text{sequence}> \]

Example: NCLN-B.D66

<table>
<thead>
<tr>
<th>File Name Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUC_CODE</td>
<td>The NUC code as identified in the configuration.</td>
</tr>
<tr>
<td>process type</td>
<td>• B - For bibliographic records uploaded with or without holdings</td>
</tr>
</tbody>
</table>
### File Name Component

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D – For deleting bibliographic records</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>format.id</th>
</tr>
</thead>
<tbody>
<tr>
<td>The format ID of D (data) is used. Sequence The sequence is a running number of file uploads. The numbers are recycled after reaching the upper limit (99). The last sequence number used is saved as part of the publishing profile. When the sequence number reaches 99, it restarts with 00.</td>
</tr>
</tbody>
</table>

Alma normalizes bibliographic records for export to LA in the following manner:

- Local fields (59X and 9XX) are excluded from the record to be published.
- If 019 $a exists, the contents of the 019 $a are written to the 001 field in the export file. If there is no content for 019 $a, the 001 field is removed.
- The value of the Alma MMS ID (from 001) is copied to the 035 $a
  
  There is only one 035 field in the export files (that contains the MMS ID in $a) except for instances where (OCoLC) is specified in the other 035 $a.
- The 090 and 091 fields and $9s are omitted.

For each holdings record that needs to be published, Alma creates a 984 holdings information field in the export file. Content from the 852 field (subfields k, h, i, j, l, and m) is used to build the 984 field for export to LA. This is handled in the following manner:

- The 852 field is retrieved from the holdings record.
- The NUC code is retrieved from one of the following:
  - The library NUC code mapping table
  - The configured institution NUC code
- A new 984 field is added to the bibliographic record.
- The 984 $a is set to the NUC code retrieved above.
- The 984 $c is set with either the normalized value of the call number from the holdings record or the label value such as HELD as set on the Publishing Profile Details page (see To configure the Libraries Australia publishing profile).
- When a bibliographic record is deleted or suppressed from publishing to LA, it contains `d` in the leader position 5 and `deleted` is specified in the 984 $c (see the example below).

```xml
<datafield tag="984" ind1=" " ind2=" ">
  <subfield code="a">SUA:A</subfield>
  <subfield code="c">deleted</subfield>
</datafield>
<datafield tag="984" ind1=" " ind2=" ">
  <subfield code="a">SUA:B</subfield>
  <subfield code="c">deleted</subfield>
</datafield>
<datafield tag="984" ind1=" " ind2=" ">
  <subfield code="a">SUA:C</subfield>
  <subfield code="c">deleted</subfield>
</datafield>
```
• When one holdings record is deleted, all other holdings will be published as an update.

• When one holdings record is updated, only this updated holdings record will be published with the new information.

• When bibliographic record information is changed, all holdings which are not deleted will be published as an update.

• There can be repeating subfields. In the example below, $c and $d are repeating entries. Other subfields, determined by your mapping, may be repeating subfields.

```xml
<datafield tag="984" ind1=" " ind2=" ">
  <subfield code="a">NUC_TEST</subfield>
  <subfield code="c">MICROFILM 3502-3508</subfield>
  <subfield code="d">Vol. 1 (1967)-v. 7 (1974)</subfield>
</datafield>

<datafield tag="984" ind1=" " ind2=" ">
  <subfield code="a">SUA-R</subfield>
  <subfield code="c">JJ73397-73400</subfield>
  <subfield code="d">Vol. 8 (1974)-v. 11 (1978)</subfield>
  <subfield code="c">375.905 H674</subfield>
  <subfield code="d">Vol. 1, no. 1-v. 37, no. 4 (Nov. 1967-Aug. 2004)</subfield>
</datafield>
```

• Other 984 subfields are set according to the configured mapping information (see To configure the holdings mapping for Libraries Australia).

• When multiple holdings exist, the output is one 984 per NUC, where the $a contains the NUC code, the $c is repeatable with the call number of all the holdings for that NUC/library. Other subfields, that are mapped from the mapping table, are repeatable, too.

---

**Note**

Normalized MARC records are transformed to ISO 2709/MARC-8.

Note that if the Upload Holdings to Libraries Australia job fails, the records that are marked for publishing will continue to remain marked for publishing until the Upload Holdings to Libraries Australia job runs successfully. This is true even if you run the Synchronize MMS with National Catalog job before running the Upload Holdings to Libraries Australia job again. The synchronization job does not remove the publishing indication/flag (publish or don’t publish), that is, unless someone in the interim actually changed the flag. The job report that is available for the failed job should also be referenced for indications of what happened such as errors, skipped records, and FTP issues.

## Publishing Related Records to Libraries Australia

The Alma publishing to Libraries Australia process supports handling related records when the Publish holdings to Libraries Australia publishing profile is run. Holdings information for bibliographic records that are part of a bound-with relationship is properly published to provide an accurate representation of the inventory at the holdings library.

See Configuring Related Records for Physical Inventory for more information regarding related records.

When you catalog related records (create or delete), the MMS - Build Record Relations job needs to run first before the related record information can be published to Libraries Australia. The MMS - Build Record Relations job is scheduled to run once per day. See Viewing All Scheduled Jobs for more information.
Prior to running your ongoing automatic synchronization process with Libraries Australia, you must coordinate and process an initial publishing of the Alma records that you want exposed to Libraries Australia.

To do an initial publishing with Libraries Australia:
Read this procedure in its entirety before you begin to insure that you have completed any necessary prerequisites for each of the steps.

1. Communicate with Libraries Australia to let them know that you will be running an initial publishing of records from Alma and prepare any profile configurations that need to be coordinated between your institution and Libraries Australia.

2. Mark the bibliographic records that you want published to Libraries Australia using the MD Editor (see the information provided under Overview of Publishing to Libraries Australia)
   Alternatively, run the Synchronize MMS with national catalog job to mark one or more sets of records; for more information, see Running Manual Jobs on Defined Sets

3. Identify the holdings records to be published. More specifically, mark the holdings records that you want suppressed.
   You can suppress holdings records, as a group, based on their location; or you can suppress individual records using the MD Editor. See Location configuration and Using the MD Editor for more information.

4. Configure your Libraries Australia publishing profile. See Libraries Australia Publishing Profile (the next section) with particular attention to the following:
   ◦ Select Run full publishing for your initial upload.
     (After Alma has successfully completed running your initial load, it removes the Run full publishing selection in your profile in preparation for you to move on to the ongoing phase of publishing.)
   ◦ Select Not Scheduled from the drop-down list for your scheduling option. You will want to confirm with Libraries Australia the success of your initial load before setting the publishing profile to run automatically.
   ◦ Confirm that you have an FTP configuration created that addresses your requirements.

5. Run your initial load publishing job.
   1. Access the Upload Holdings to Libraries Australia publishing profile that you have configured (Resources > Publishing > Publishing Profiles).
   2. Select Run from the row actions list.

6. Confirm with Libraries Australia that your initial load has completed successfully.

7. Configure your Upload Holdings to Libraries Australia publishing profile for the ongoing publishing of your records to Libraries Australia.

Libraries Australia Publishing Profile
Use the instructions below to configure the Alma publishing profile for Libraries Australia.

To configure the Libraries Australia publishing profile:

2. **Publishing Profiles Details Page**

3. Edit the profile details to match your requirements (see the table below for a description of the options).

### Publishing Profile Details Page Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Profile Details:</strong></td>
<td></td>
</tr>
<tr>
<td>NUC code</td>
<td>Enter the code/symbol by which the institution is identified to the Libraries Australia. For a library or library and location (with a NUC symbol that is different from the institution’s, the symbol needs to be specified in the <strong>Symbol</strong> field located in the Institution NUC Symbol configuration (<a href="#">Resource Management &gt; Resource Configuration &gt; Configuration Menu &gt; Record Export &gt; Institution NUC symbol</a>). The symbol specified in the Symbol field overrides what is specified in the NUC Code field on the Publishing Profile Details page.</td>
</tr>
</tbody>
</table>

Institution NUC Symbol Mapping Table

<table>
<thead>
<tr>
<th>Library Code</th>
<th>Symbol</th>
<th>Location Code</th>
<th>Updated By</th>
<th>Last Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Publishing Parameters:</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Run full publishing</td>
<td>Select this to complete your initial publishing to Libraries Australia. See <a href="#">Initial Publishing to Libraries Australia</a> for more information.</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td>Specify the status of the profile as active or inactive. <strong>Note</strong> Only active profiles will be run.</td>
</tr>
<tr>
<td><strong>Scheduling</strong></td>
<td>Select a scheduling option.</td>
</tr>
<tr>
<td><strong>Email Notifications</strong></td>
<td>Specify which users and email addresses will receive email notifications when the publishing profile has completed.</td>
</tr>
<tr>
<td><strong>984 Content - Physical Holdings:</strong></td>
<td></td>
</tr>
<tr>
<td>Call number or Label</td>
<td>Select the Call number option for the call number to be mapped for export. Alternatively, select the Label option and enter a label in the field next to this option to have the label you entered be mapped for export. In the example below, HELD is mapped for export (indicating that the institution/library has holdings).</td>
</tr>
<tr>
<td><strong>984 Content - Electronic Holdings:</strong></td>
<td></td>
</tr>
<tr>
<td>Publish Electronic Holdings / Label</td>
<td>Select the Publish Electronic Holdings option to publish holdings to Libraries Australia, and enter the label content that you want to appear for the electronic holdings. The default label content for this parameter is Online: Not available for loan. <strong>Note</strong> This capability is effective for electronic holdings that are published to Libraries Australia when the electronic holdings bibliographic records are new or updated and are flagged with the Export to Libraries Australia set management tag set to Publish bib.</td>
</tr>
<tr>
<td><strong>Submission Format:</strong></td>
<td></td>
</tr>
<tr>
<td>FTP configuration</td>
<td>Specify the FTP configuration to use. Select the FTP configuration that contains the appropriate server, port, user name, and password for the connection (see Configuring S/FTP Connections).</td>
</tr>
<tr>
<td>Subdirectory</td>
<td>An optional subdirectory in which the files should be placed for the FTP upload. For example, if you specified Alma in the Sub-directory field during S/FTP connection configuration and you enter LA in this field, the data is exported to the Alma/LA directory.</td>
</tr>
</tbody>
</table>

4. **Select Save.**

The next time that the Libraries Australia publishing profile is run with the Physical Holdings and Electronic Holdings parameters selected, the records are handled in the following manner:
 Alma creates one 984 field and all the associated holdings information for records that have both electronic and physical holdings with the same NUC code. For example:

```
984 $a NSL $c M Q823.912/ WI87.1/ 4 $c Online: Not available for loan
```

The first $c holds the physical information, and the second $c holds the electronic information. Since the electronic holdings do not have call numbers, only the label is published in $c for the electronic holdings.

See the next section Holdings Mapping for Libraries Australia for more information.

Mapping of the NUC is handled in the following manner:
- If the portfolio has an owning library, the owning library’s NUC is used.
- If there is no portfolio owning library NUC, the NUC of the collection’s owning library is used.
- If there is no portfolio or collection owning library NUC, the default NUC identified in the NUC Code parameter of the publishing profile is used.

Only active portfolios are processed for publishing.

A NUC is sent as deleted only when all the holdings (both print and electronic) are deleted. When only the print holdings is deleted, the records are sent as updated with only the electronic holdings.

---

### Holdings Mapping for Libraries Australia

The publish to Libraries Australia job creates the 984 $a and $c. If you want to map additional 984 fields to be published to Libraries Australia, they need to be mapped in the mapping table described in the procedure below. You do not need to map the call number (from 852 k, h, i, j, l, and m) to 984 $c because this is already done by the system.

You configure holdings mappings for Libraries Australia on the On the Map Holdings Fields into Bib Record - For Publishing to Libraries Australia mapping table ([Configuration Menu > Resources > Record Export > Map Holdings Field into Bib Record for Libraries Australia](#)). For more information about mapping tables, see Mapping Tables.

**Libraries Australia Holdings Mapping Configuration Page**

To configure the holdings mapping for Libraries Australia:

Enter the holdings mapping configuration details to match your requirements.
<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holdings Tag (field)</td>
<td>The holdings MARC field from which the content is to be mapped to the bibliographic MARC field.</td>
</tr>
<tr>
<td>Holdings Subfield</td>
<td>The subfield from which the content is to be mapped for the export file. The following 852 subfields are ignored: h, i, j, k, l, and m.</td>
</tr>
<tr>
<td>Bibliographic Tag (field)</td>
<td>The bibliographic MARC field to be mapped for the export file. By definition, this is the 984 field.</td>
</tr>
<tr>
<td>Bibliographic Subfield</td>
<td>The subfield that will contain the content of the mapped holdings subfield. Libraries Australia’s RIS documentation specifies the following allowed subfields: d, e, f, g and h. Subfield a and c are automatically mapped by the publishing process and do not require configuration here.</td>
</tr>
</tbody>
</table>

**Configuring a Library NUC**

You can configure a library’s NUC symbol that is different from the NUC of the Alma institution on the Institution External Symbol Libraries Australia mapping table ([Configuration Menu > Resources > Record Export > Map Holdings Field into Bib Record for Libraries Australia](#)). For more information about mapping tables, see [Mapping Tables](#).

To configure a library NUC symbol that is different from the institution’s NUC symbol:

Enter the **Library Code** (as found in the 852 $$b$$) and the **Symbol** (unique to the library and different from the NUC code specified for the institution on the Publishing Profile Details page).
Publishing Electronic Holdings to Google Scholar

To configure publishing to Google Scholar, you must have one of the following roles:

- Catalog Administrator
- Repository Administrator
- General System Administrator

To publish electronic holdings to Google Scholar, you must configure the Publish electronic records to Google Scholar publishing profile. This schedules the Publishing to Google Scholar job. Run the job weekly to make sure that holdings information is accurate. This publishing profile contains the settings used by Google Scholar to display holdings information for your institution.

The following information is published to Google Scholar:

- Title
- Identifiers - Note that only records with ISSN/ISBN identifiers (coming from the 022/020 fields) are published.
- Full coverage, if it exists

When working with a Network Zone, Alma publishes electronic holdings from the Network Zone and each member institution at the same time and creates the following, respectively:

- One institutional holdings file for each "Available for" group that has been defined in the Network Zone. Each "Available for" group corresponds to each of the member institutions.
- One institutional holdings file from each member institution.

Each week, the system merges the above institutional holdings files into a single institutional holdings file so that it can be harvested by Google Scholar.

To configure the publishing profile for Google Scholar:

1. On the Publishing Profiles Details page (Discovery > Publishing > Publishing Profiles), select Edit in the row actions list for the Publish electronic records to Google Scholar publishing profile. The Publishing Profile Details page for Google Scholar appears.
2. Configure the fields in the profile.

### Registration Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Publishing Parameters:</strong></td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td><strong>Active</strong> or <strong>Inactive</strong>.</td>
</tr>
<tr>
<td>Scheduling</td>
<td>The publishing schedule.</td>
</tr>
<tr>
<td>Email Notifications</td>
<td>Specify which users and email addresses will receive email notifications.</td>
</tr>
<tr>
<td><strong>Registration Parameters:</strong></td>
<td></td>
</tr>
<tr>
<td>Display Name</td>
<td>The display name for your institution/campus in the Google Scholar preferences. If no name is provided, the display name defaults to the institution name.</td>
</tr>
<tr>
<td>Keywords 1/2/3/4/5</td>
<td>The keywords (such as the school’s nickname) that enable users to find the library when configuring their preferences in Google Scholar. This field is optional and has a limit of five words or 30 characters.</td>
</tr>
<tr>
<td>Label of resolver links</td>
<td>The label for the link that appears in Google Scholar search results. This field is mandatory and has a limit of 25 characters.</td>
</tr>
</tbody>
</table>

**Note**

For multicampus configurations, the Publishing Profile Details page opens and displays the Electronic profiles section, which allows you to configure Google Scholar settings per campus. For more information, see [Adding a Profile for a Multicampus Configuration](#).
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>electronically)</strong></td>
<td>For example: ViewIt@MyU</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td>If you have an old Google Scholar account, it is recommended that you set a new label for testing purposes, so that you can distinguish between your old and new systems. Following verification, you can change the label back to its required setting.</td>
</tr>
<tr>
<td></td>
<td>Note that your old label must be decommissioned after “Go Live,” when you start working with Google Scholar productively.</td>
</tr>
<tr>
<td>Label of resolver links (when article does not exist electronically)</td>
<td>The label for the link that appears in Google Scholar search results. This field is mandatory and has a limit of 25 characters. For example: GetIt@MyU</td>
</tr>
<tr>
<td>OpenURL base</td>
<td>The value is the base URL of the Alma services page. This field is mandatory and has a limit of 1024 characters.</td>
</tr>
<tr>
<td></td>
<td>◦ Use the following format for Alma-Summon: https://&lt;Alma_domain&gt;/openurl/&lt;Institution_code&gt;/&lt;View_code&gt;</td>
</tr>
<tr>
<td></td>
<td>◦ Use the following format for Primo (new UI) and Primo VE: https://&lt;Primo_domain&gt;/openurl/&lt;Institution_code&gt;/&lt;View_code&gt;</td>
</tr>
<tr>
<td></td>
<td>Where the base URL includes the following elements:</td>
</tr>
<tr>
<td></td>
<td>◦ Alma_domain – Specify the domain name used to access Alma.</td>
</tr>
<tr>
<td></td>
<td>◦ Primo_domain – Specify the domain name used to access the end user interface for Primo/Primo VE.</td>
</tr>
<tr>
<td></td>
<td>◦ Institution_code – For Primo, specify the institution code defined in Primo. For Primo VE and Alma-Summon environments, specify the institution code defined in Alma.</td>
</tr>
<tr>
<td></td>
<td>◦ View_code – Specify the code of your services page view.</td>
</tr>
<tr>
<td></td>
<td>For Primo, specify the code that is defined for your discovery view with the Views Wizard in the Primo Back Office.</td>
</tr>
<tr>
<td></td>
<td>For Primo VE, specify the code that is defined for your discovery view on the View Configuration page. For example: 01MY_INST:MyView.</td>
</tr>
<tr>
<td></td>
<td>For Alma-Summon, specify the code that is defined for your Services page on the View Configuration page. For example: 01MY_INST:Services.</td>
</tr>
<tr>
<td></td>
<td><strong>Example for Primo VE:</strong> <a href="https://mylibrary.primo.exlibrisgroup.com/openurl/01MY_INST/01MY_INST:MY_VIEW">https://mylibrary.primo.exlibrisgroup.com/openurl/01MY_INST/01MY_INST:MY_VIEW</a></td>
</tr>
<tr>
<td></td>
<td><strong>Example for Summon:</strong> <a href="https://na01.alma.exlibrisgroup.com/openurl/01MY_INST/01MY_INST:Services">https://na01.alma.exlibrisgroup.com/openurl/01MY_INST/01MY_INST:Services</a></td>
</tr>
<tr>
<td></td>
<td><strong>Example for Primo (new UI):</strong> <a href="https://primo2.prod.hosted.exlibrisgroup.com/openurl/01MY_INST/01MY_INST/MY_VIEW">https://primo2.prod.hosted.exlibrisgroup.com/openurl/01MY_INST/01MY_INST/MY_VIEW</a></td>
</tr>
<tr>
<td>Patron IP range</td>
<td>The range of library IP addresses that allow users to see your links without selecting your institution under Google Scholar Settings &gt; Library links (see the figure Google Scholar Library Links in Verifying Google Scholar Data). This field is optional</td>
</tr>
</tbody>
</table>
### Parameter Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter no more than 256 IP ranges separated with semicolons. For example: 123.12.12.*;122.10.10.1-123.10.10.80</td>
<td></td>
</tr>
<tr>
<td>Show resolver links only to users that come from your IP range?</td>
<td>Whether users must perform searches from within the specified IP ranges to see your links in Google Scholar search results. This field is mandatory. The valid values are yes and no. The default value is no, which is recommended unless your links reveal sensitive information.</td>
</tr>
<tr>
<td>Contact Information for Technical Issue</td>
<td>Enter your institution’s contact information in First name, Last name, and Email address.</td>
</tr>
</tbody>
</table>

3. Select **Save** to save the changes.

Make sure that you have scheduled the Google publishing job to run either Saturday or Sunday. Google’s harvesting process begins on Mondays and may not finish until Thursday of that week.

The label you configured is visible on the live Google Scholar site, which is why it is recommended that you initially configure your profile using a test label. If you are concerned about the display of a test label during implementation, it is recommended that you do not test Google Scholar until after “Go Live.” (In any event, your old label should not be decommissioned until after “Go Live.”)

4. Verify that your Google Scholar data is correct (see below, Verifying Google Scholar Data).

---

### Adding a Profile for a Multicampus Configuration

For multicampus configurations, the **Publish electronic records to Google Scholar** publishing profile job includes an **Electronic Profiles** section, which allows you to configure different Google Scholar registration parameters per groups of libraries and campuses that are defined as inventory management groups in a multicampus configuration (each of which can be defined separately as a Primo institution, or all together as one Primo institution). This allows you to publish separate holdings information per campus.

For more information about publishing electronic records per campus/library, see the [Library-Level Publish to Google Scholar and Primo Central](#) video (4:08 mins).

**To add a Google Scholar profile:**

1. After adding email addresses while adding a Google Scholar profile (see Publishing Electronic Holdings to Google Scholar), select **Add Profile** to open the Add Profile dialog box.
2. Specify a name for campus or library in Profile name.

3. Select Add and Close to return to the Publishing Profile Details page.

4. Edit the new profile. The Publishing Profile Details page for the selected profile opens.
5. In the **Electronic profile members** section, select **Add another member** and then use the following fields to add members to the profile group:
   - **Campus** – Select a campus from the drop-down list and select **Add Campus**.
   - **Library** – Select a library from the drop-down list and select **Add Library**.
6. Complete the profile, as described in Publishing Electronic Holdings to Google Scholar.

Verifying Google Scholar Data

After publishing records to Google Scholar or updating Google registration settings, this section describes how to verify your updates to Google Scholar.

To verify that your Google Scholar data is accessible:

1. Access the Google Scholar page (http://scholar.google.com/).
2. Configure the library links settings in Google Scholar. This allows you to view links to articles from your library. If you have configured IP ranges for Google Scholar, the settings should default to your institution’s registered names when accessed from machines within the registered IP ranges.

To verify the default settings or modify the settings in Google Scholar:

1. Select Settings.
Configuring Library Links in Google Scholar

2. Select Library links under Scholar Settings.

3. Search for your library, select it, and select Save.

3. Search Google Scholar for an article that is available at your library, and select the link for your institution. If the availability of the article is unknown or unavailable, you may need to select More to access the link for your library.
4. Verify that you are redirected to Primo and can access articles as expected.

**Note**

If you completed the configuration instructions above, the required amount of time has elapsed, and links for your institution do not appear in Google Scholar, open a support case in order to complete your Google Scholar registration.
Publishing to KERIS

To configure publishing to KERIS, you must have one of the following roles:

- Catalog Administrator
- Repository Administrator
- General System Administrator

Libraries in Korea can work directly with the KERIS central catalog and automatically publish holdings to the KERIS central catalog on an ongoing basis. This ensures that KERIS has timely and accurate holdings information for its centrally provided services.

To configure a General Profile for publishing to KERIS:

1. On the Publishing Profiles Details page (Resources > Publishing > Publishing Profiles), select Add Profile > General Profile. The Publishing Profile Details page opens.

   ![Publishing Profile Details Page]

2. Enter the publishing profile parameters to match your requirements for publishing to KERIS.
   - Depending on the type of records to be published, select MARC 21 Bibliographic or KORMARC Bibliographic for the Output format parameter.
   - Select Z39.50 for the Publishing Protocol and enter the values that you identified/coordinated with KERIS for the
following Z39.50 parameters:

▪ Host
▪ Port
▪ Database Name
▪ Group ID
▪ User Name
▪ Password

◊ See the procedure in Publishing and Inventory Enrichment (General Publishing) for additional information regarding creating a General Profile.

3. Select **Next**.

4. Complete the following sections using the details provided in the procedure in Publishing and Inventory Enrichment (General Publishing).

◊ Bibliographic Normalization
◊ Physical Inventory Enrichment
◊ Electronic Inventory Enrichment
◊ Digital Inventory Enrichment
◊ Collection Enrichment

5. Select **Save**. The publishing profile is saved. If you selected a scheduling option, the profile becomes a scheduled Publishing job (Publishing Platform Job <profile name>) on the Monitor Jobs page. See Viewing Scheduled Jobs.
Publishing UNIMARC Records

To configure publishing UNIMARC records, you must have one of the following roles:

- Catalog Administrator
- Repository Administrator
- General System Administrator

Libraries can publish UNIMARC records using a General Profile to automatically publish records on an ongoing basis.

To configure a General Profile for publishing UNIMARC records:

1. On the Publishing Profiles Details page (Resources > Publishing > Publishing Profiles), select Add Profile > General Profile. The Publishing Profile Details page appears.

2. Enter the publishing profile parameters to match your requirements. In particular, when you have more than one active registry such as UNIMARC and MARC 21, specify your preferred output format for publishing. See the procedure in Publishing and Inventory Enrichment (General Publishing) for additional information regarding creating a General Profile.

---

Ex Libris, a ProQuest Company
The registry that is defined in Alma as your preferred registry appears as the default for **Output format**.

Once you have saved the Publishing Profile, you cannot change/edit **Output format** later.

Depending on the format of your source set, Alma will convert the bibliographic records to the format that you have selected. If your set contains UNIMARC records, and you have selected MARC 21 as the output format, Alma will convert the records to the MARC 21 format for publishing. If your set contains a combination of UNIMARC and MARC 21 bibliographic records, Alma will convert the records (the UNIMARC ones or the MARC 21 ones, depending on the output format that you selected) to the publishing output format that you have selected.

As part of your output selection, you can specify the **Binary** or **XML** format as the **Physical format** parameter in the FTP Publishing Protocol.
Also, notice that Metadata Prefix dynamically changes to match your selection in Output format.

3. Select Next and complete the remaining profile settings to match your requirements.
4. When you are finished, select Save.
Z39.50 Search

To configure a Z39.50 Server profile, you must have the following role:

- General System Administrator

An institution’s catalog can be made searchable by external applications. This may be required for a number of purposes. For example, if the institution serves as a copy cataloging source or participates in a resource sharing network, it’s catalog may need to be searched externally.

For general information about the Z39.50 protocol, see [http://www.loc.gov/z3950/gateway.html#about](http://www.loc.gov/z3950/gateway.html#about)

If a Z39.50 Server integration profile is configured, Alma listens for incoming Z39.50 searches. If an incoming request is detected, Alma returns a Z39.50 response, which includes record information in either MARC or OPAC format, depending on your client configuration.

### Note

- Only one Z39.50 profile can be configured for an institution.
- If you open your institution's catalog for a Z39.50 search, Ex Libris may add it to the pool of external search resources available for copy cataloging.
- The following attributes are supported by Alma: Term (1016, 1017); Author (1, 1003, 1004); Subject (21); Title (4); ISBN (7); ISSN (8); Date (31); Identifier (12); OCLC Number (1211).
- You must configure the Alma IP address, port, and database name on the Z39.50 client machine. The IP address/port to configure is: `<Alma server>:1921` (or `210`, if you are working with Refworks – see [Configuring a Z39.50 Refworks Client](#)). Note that these ports are open to all, with no restriction on specific IP addresses; there is therefore never any need to add new IP addresses on the Alma side. The database name to use is the Alma institution code—for example, `60univ_inst`. For information about your Alma server domain, see [Your Alma Domain Names](#).
- For filtering Alma’s Z39.50 response at a campus level in a multicampus environment, you must add the campus code to the database name that is configured on the Z39.50 client machine using the following format: `base (institution ID)/<campus code>`. For example, `base 60univ_inst/Springfield` may be used at the client Z39.50 machine where `60univ_inst` = the Alma institution code and `Springfield` = the Alma campus code. When this is implemented, Alma’s Z39.50 search and present results are displayed/filtered only for resources that are owned by the campus (and its libraries). This enables institutions in a multicampus environment to provide results that belong only to libraries identified within the selected campus.
- When doing an external search using Z39.50 and retrieving 10,000 or more records, Alma responds with an error message when it retrieves the next bulk of records exceeding the 10,000 limit. Z39.50 integration is intended for integrating Alma search with other automated systems for the purposes of interlibrary loan, copy catalog, or selection. Using Z39.50 integration for other workflows, such as performing bulk exports of records, is not supported.

The following rules govern the return of MARC record information:

- MARC holdings records are returned only if the Enrich with holdings check box is selected (see the procedure below). Selecting the Enrich with holdings parameter enriches the MARC 21 results with MARC 21 holdings fields such as the 852.
- MARC holdings records are returned only for permanent locations.
• Suppressed MARC holdings records (Suppress from discovery is selected for the record in the MD Editor) are excluded.

• MARC holdings records from suppressed locations (Suppress from discovery is selected for the location; see Configuring Physical Locations) are excluded.

• Suppressed MARC bibliographic records (Suppress from discovery is selected for the record in the MD Editor) and their associated holdings records are excluded.

The following rules govern the return of OPAC record information:

• OPAC holdings records are returned for both permanent and temporary locations (on holding per location).

• Suppressed OPAC holdings records (Suppress from discovery is selected for the record in the MD Editor) are excluded.

• OPAC holdings records from suppressed locations (Suppress from discovery is selected for the location; see Configuring Physical Locations) are excluded.

• Suppressed OPAC bibliographic records (Suppress from discovery is selected for the record in the MD Editor) and their associated holdings records are excluded.

Alma Z39.50 server support includes UNIMARC support for Network Zone records, which are enriched with information from member institutions. When a Z39.50 call to Alma specifies the UNIMARC format, Alma responds with the Z39.50 presentResponse output in UNIMARC format. The availability indication is handled using the following UNIMARC format:

• MARC 852 field
• $a Location – Institution code
• $6 Linkage – MMS ID
• $9 Local field – P (print) / E (electronic) / D (digital)

When more than one material type is available for an institution, such as print and electronic, the 852 field will contain multiple $9 entries.

Configuring a Z39.50 Search Type Integration Profile

For each institution, there can be only one Z39.50 Server integration profile.

To configure a Z39.50 search type of integration profile:

1. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile. The first page of the integration profile wizard appears.

2. Enter a code and name for the profile you are defining.

3. From the Integration type drop-down list, select Z39.50 Server.

   Note

   The Default check box is not functional for this integration type.

4. Select Next.

5. Complete the export parameters using the information provided in the table below.
## Z39.50 Export Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User Name / Password</strong></td>
<td>Enter a user name and password (optional) for Alma to communicate with the Z39.50 client machine.</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td>The Z39.50 user name and password are case insensitive and can include:</td>
</tr>
<tr>
<td></td>
<td>◦ No more than 10 characters</td>
</tr>
<tr>
<td></td>
<td>◦ Uppercase/lowercase letters, digits, and underscores</td>
</tr>
<tr>
<td></td>
<td>For example, if you set the user name/password to Alma_12_34, it is possible to authenticate with all of the following options: alma_12_34, ALMA_12_34, and alMA_1234.</td>
</tr>
<tr>
<td></td>
<td>If a user name and password are configured, Alma cannot be searched unless the user name and password are provided.</td>
</tr>
<tr>
<td><strong>Allow Access</strong></td>
<td>Select this parameter to enable the Z39.50 client machine to access Alma.</td>
</tr>
<tr>
<td><strong>Enrich with Holdings</strong></td>
<td>Select this parameter to include holdings information, in addition to bibliographic information, in the Z39.50 response that Alma returns.</td>
</tr>
<tr>
<td><strong>Enrich with Members Availability</strong></td>
<td>If you are configuring this profile on a Network Zone, select this parameter to return member institution ownership in the Z39.50 response.</td>
</tr>
<tr>
<td></td>
<td>Only requests to the Network Zone include the ownership of member institutions. The returned information includes the institution, the bibliographic record (MMS ID), and the format (physical, electronic, or digital). This feature supports more efficient queries by collaborative network members, and is often required for third-party integration and resource sharing purposes.</td>
</tr>
<tr>
<td></td>
<td>Member institution ownership information is returned in the following MARC 21 852 subfields:</td>
</tr>
<tr>
<td></td>
<td>◦ $a - Institution code</td>
</tr>
<tr>
<td></td>
<td>◦ $6 - MMS ID</td>
</tr>
<tr>
<td></td>
<td>◦ $9 - P (print), E (electronic), or D (digital)</td>
</tr>
<tr>
<td><strong>Enrich with Representations</strong></td>
<td>Select this parameter to have non-remote representation information exposed to the external system.</td>
</tr>
<tr>
<td><strong>Enrich with Remote Representations</strong></td>
<td>Select this parameter to have remote representation information exposed to the external system.</td>
</tr>
<tr>
<td><strong>Apply Normalization</strong></td>
<td>Select this parameter to normalize Alma bibliographic records prior to any additional enrichment and being presented to an external system as a result of a Z39.50 request. Normalization can be applied to MARC 21, KORMARC, UNIMARC, and CNMARC bibliographic records using the following normalization processes provided out of the box or by customizing these processes with normalization rules that you create: Marc21 Bib normalize on external search, KORMARC Bib normalize on external search, UNIMARC Bib normalize on external search, or CNMARC normalize on external search.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Diagram" /></td>
</tr>
</tbody>
</table>

**Example Normalization Rule from the CNMARC Bibliographic Metadata Configuration Profile**

The normalization rules that are provided remove the following information from the bibliographic record: 590 local note (MARC 21), 590 local note (KORMARC), 900 local field (UNIMARC), and 300 general note (CNMARC). See [Working with Normalization Rules](#) for more information.

**Note**

Since the enrichment process is performed after the normalization process has completed, the normalization process will not affect fields added by enrichment.

The normalization rules that are provided out of the box use the following drools files (specified on the Task Parameters tab): drools/remove590.dslr, drools/remove900.dslr, and drools/remove300.dslr.

**Example Drools File from the Cnmarc Bib normalize on Z39.50/SRU search Normalization Rule**

For more information, see [Working with Normalization Processes](#).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppress records based on “Suppress from External Search” tag</td>
<td>Select this parameter to exclude records with a <strong>Suppress from External Search</strong> tag from being exposed to the external system.</td>
</tr>
</tbody>
</table>

6. Select **Save**.

After you have saved the Z39.50 Server integration profile, the following row actions are available for this profile:

- **Edit**
- **Manage in Network** – This action is only available in the Network Zone. Select this action to distribute this configuration to member institutions using the **Distribute network administration changes to members** job. See [Centrally Managing Configurations in a Network Zone](#) and [Distribute Network Administration Changes to Members](#) for more information.
- **Stop Network Management** – This action is only available in the Network Zone. Select this action to disable distribution of this configuration to member institutions when using the **Distribute network administration**
changes to members job. See Centrally Managing Configurations in a Network Zone and Distribute Network Administration Changes to Members for more information.

- Unlink from Network – This action is only available for member institutions. When the Z39.50 Server integration profile is distributed to a member institution (that is, the integration profile is linked to the Network), the member institution may select the Unlink from Network action to disconnect from the Network Zone version of the integration profile and modify it for local use.

- Job History
- Delete

---

**Configuring a Z39.50 Refworks Client**

**To configure a Z39.50 Refworks client:**

1. In the Refworks client administrative application, select **Search > Online Catalog or Database**. The Online Catalog or Database dialog box opens.

2. Select the **Request a Z39.50 Site** link. The Request dialog box opens.

   ![Request a Z39.50 Site](image)

3. In the **Z39.50 Site Name** box, enter the name that you want to display for your institution in Refworks.

4. In the **Details** field, enter the following:

   - **Server** – The Alma server: <Alma domain>

   ![Example Refworks Client Settings](image)

   **Note**

   For APAC countries, you must use the alternate Alma domain <Alma alternate domain>. See Your Alma Domain Names.

   - **Port** – Specify 210
   - **Database** – This is the Alma institution code, such as 01_EXL_INST
   - **User and password**, if defined in Alma

5. Select **Send request**.

---

**Example Refworks Client Settings**

The following is an example of one Alma customer’s Refworks client settings (note that this has not been verified by Ex Libris):
• **URL:** university.alma.exlibrisgroup.com (see [Your Alma Domain Names](#))

• **Port:** 210

• **Database:** 01_EXL_INST

• **Record Syntax:** USmarc

• **Element Set Name:** F

• **Import Filter:** MARC Format

• **Character Set:** ANSEL/ALA/USmarc

• **Requires Password:** No

• **Any Field:** 1016

• **Author Field:** 1003

• **Year Field:** 31

• **Title Field:** 4

• **Keyword Field:** 21
SRU/SRW Search

To enable SRU/SRW searches, you must have the following role:

- General System Administrator

Alma enables you to open your institution to SRU/SRW (search retrieval via URL/Web service, an XML based protocol) searches for the purpose of integration with external systems that want to search the Alma repository. To activate this capability, each institution must define and activate its own SRU Server integration profile and also indicate whether to return availability information in the response to SRU queries.

Note

When doing an external search using SRU (Search/Retrieve via URL) and retrieving 10,000 or more records, Alma responds with an error message when it retrieves the next bulk of records exceeding the 10,000 limit. SRU integration is intended for integrating Alma search with other automated systems for the purposes of interlibrary loan, copy catalog, or selection. Using SRU integration for other workflows, such as performing bulk exports of records, is not supported.

For details on performing SRU requests, see the following pages in the Alma Developer Network:

- SRU
- How to configure SRU and structure SRU retrieval queries

Configuring an SRU Server Type Integration Profile

For each institution, there can be only one SRU Server integration profile.

To configure the SRU Server integration profile for your institution:

2. Enter a unique code for the new integration type.
3. Enter a unique name for the new integration type.
4. Select SRU Server for Integration Type.
   
   Note
   
   The Default check box is not functional for this integration type.

5. Select Next.
6. Configure the SRU integration profile using the parameter explanations in the table below.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active</strong></td>
<td>Select this parameter to enable the bibliographic options.</td>
</tr>
<tr>
<td><strong>Add Availability</strong></td>
<td>Whether to include the availability information—which is stored in the AVA (physical availability), AVE (electronic availability), and AVD (digital availability) fields—in responses to SRU query requests. For more information, see the Retrieve Bib API.</td>
</tr>
</tbody>
</table>
| **Enrich with Members Availability (for the Network Zone)** | Whether to retrieve holdings availability for each member of the network when the network institution uses the SRU protocol to complete a search.  

**Note**  
- Dublin Core (simple and qualified) format and all MARC schemas (including UNIMARC and CNMARC) are supported for SRU/SRW. The following crosswalk are supported:  
  - From Dublin Core and MARCXML to every other format (Dublin Core, MARCXML, CNMARCXML, KORMARCXML, and UNIMARCXML)  
  - From every format (Dublin Core, MARCXML, CNMARCXML, KORMARCXML, and UNIMARCXML) to Dublin Core and MARCXML.  
  Crosswalks between CNMARCXML, KORMARCXML, and UNIMARCXML are not supported.  
- When the conversion from the original record's format to the requested format is unavailable, Alma returns the original record. For more information, see the Developer Network.  
  - For Dublin Core records with representations, the DC identifier field is added with a URL for each representation.  

For MARCXML, the holdings availability indication is handled using the following MARCXML format:  
- MARC 852 field  
- $a Location – Institution code  
- $6 Linkage – MMS ID  
- $9 Local field – P (print) / E (electronic) / D (digital)  
When more than one material type is available for one institution such as print and electronic, the 852 field contains multiple $9 entries. |
| **Add Representation Information** | Whether to have non-remote representation information exposed to the external system. |
| **Add Remote Representation Information** | Whether to have remote representation information exposed to the external system. |
| **Apply Normalization** | Select this parameter to normalize Alma bibliographic records prior to any additional enrichment and being presented to an external system as a result of a Z39.50 request. Normalization can be applied to MARC 21, KORMARC, UNIMARC, CNMARC, and Dublin Core bibliographic records using the following normalization processes provided out of the box or by customizing these processes with normalization rules that you create:  

- Dublin Core (simple and qualified) format and all MARC schemas (including UNIMARC and CNMARC) are supported for SRU/SRW. The following crosswalk are supported:  
  - From Dublin Core and MARCXML to every other format (Dublin Core, MARCXML, CNMARCXML, KORMARCXML, and UNIMARCXML)  
  - From every format (Dublin Core, MARCXML, CNMARCXML, KORMARCXML, and UNIMARCXML) to Dublin Core and MARCXML.  
  Crosswalks between CNMARCXML, KORMARCXML, and UNIMARCXML are not supported.  
- When the conversion from the original record's format to the requested format is unavailable, Alma returns the original record. For more information, see the Developer Network.  
  - For Dublin Core records with representations, the DC identifier field is added with a URL for each representation. |
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marc21 Bib normalize on external search, KORMARC Bib normalize on external search, UNIMARC Bib normalize on external search, CNMARC normalize on external search, and Qualified Dublin Core Bib normalize on SRU search.</td>
</tr>
</tbody>
</table>

Example Normalization Rule from the CNMARC Bibliographic Metadata Configuration Profile

The normalization rules that are provided remove the following information from the bibliographic record: 590 local note (MARC 21), 590 local note (KORMARC), 900 local field (UNIMARC), and 300 general note (CNMARC). See Working with Normalization Rules for more information.

**Note**

Since the enrichment process is performed after the normalization process has completed, the normalization process will not affect fields added by enrichment.

These normalization rules use the following drools files (specified on the Task Parameters tab): drools/remove590.dslr, drools/remove900.dslr, and drools/remove300.dslr.

Example Drools File from the Cnmarc Bib normalize on Z39.50/SRU search Normalization Rule

For more information, see Working with Normalization Processes.

<table>
<thead>
<tr>
<th>Username / Password</th>
<th>Enter a user name and password if you want SRU/SRW search queries authenticated (using Basic authentication). If the SRU/SRW search query does not provide a user name and password (when you have configured them in your integration profile) or provides an incorrect username or password, the response to the SRU request indicates that the request is not authorized. If you do not specify a user name and password in the SRU Server integration profile, SRU/SRW search queries are not authenticated.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppress records from external search</td>
<td>Select this parameter to exclude records with a Suppress from External Search tag from being exposed to the external system.</td>
</tr>
</tbody>
</table>

Holdings Options (ISO 20775)
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Your ISIL code needs to be configured to work with the Holdings Options for SRU responses. See <a href="#">ISIL Code</a> for configuration information.</td>
</tr>
</tbody>
</table>

**Note**

There is a known issue with portfolios activated from the community zone. These are sometimes considered as non-serial; and therefore, the SRU response does not include their coverage and other related information.

**Active**

Select this parameter to enable the SRU ISO 20775 holdings schema. The Availability Calculation Options appear. Select one or more of the following Availability Calculation Options if you want them excluded from the availability calculations:

- Exclude Items Not On Shelf
- Exclude Items Not Requestable For Resource Sharing
- Exclude Electronics and Digital Resources

**Availability Calculation Options**

With holdings SRU, you get more inventory detail on your queries. See an example of query results below.
Select one or more of the options below to identify what should be presented in the search results as available inventory. The search results will show the number of items (copies count) and a calculated availability count determined by the options you select for this parameter (see the illustration below). If none of the following options are selected, the query results will indicate that all items are available all of the time.

- Exclude Items Not On Shelf – Select this option to have the query result consider only the inventory that is on the shelf as available.
- Exclude Items Not Requestable For Resource Sharing – Select this option to have the query result consider only the inventory that is requestable for resource sharing as available.
- Exclude Electronics and Digital Resources (For Future Use) – This feature will be implemented in a later release.

### SRU Copy Information

```
<holdingSimple>
  <copiesSummary>
    <copiesCount>5</copiesCount>
    <status>
      <availableCount>0</availableCount>
    </status>
  </copiesSummary>
</holdingSimple>
```

7. Select **Save**.

After you have saved the SRU Server integration profile, the following row actions are available for this profile:

- **Edit**
- **Manage in Network** – This action is only available in the Network Zone. Select this action to distribute this
configuration to member institutions using the **Distribute network administration changes to members** job. See [Centrally Managing Configurations in a Network Zone](#) and [Distribute Network Administration Changes to Members](#) for more information.

- Stop Network Management – This action is only available in the Network Zone. Select this action to disable distribution of this configuration to member institutions when using the **Distribute network administration changes to members** job. See [Centrally Managing Configurations in a Network Zone](#) and [Distribute Network Administration Changes to Members](#) for more information.

- Unlink from Network – This action is only available for member institutions. When the SRU Server integration profile is distributed to a member institution (that is, the integration profile is linked to the Network), the member institution may select the **Unlink from Network** action to disconnect from the Network Zone version of the integration profile and modify it for local use.

- Job History

- Delete
Linked Data

To configure a linked data integration profile, you must have the following role:

- General System Administrator

Linked Data is a set of best practices for publishing and connecting structured data on the Web. Alma implements a RESTful API that exposes linked data in JSON-LD format. For detailed information regarding the implementation of this capability, see https://developers.exlibrisgroup.com/alma/integrations/linked_data in the Ex Libris Developer Network and the procedure below for configuring a linked data integration profile.

Note

This API works only on production environments and not on sandbox environments.

To configure the linked data integration profile for your institution:

2. Enter a unique code for the new integration type.
3. Enter a unique name for the new integration type.
4. Select Linked Data for Integration Type.
5. Select Next. Page 2 of the wizard appears.

Configuring a Linked Data Profile (Page 2)

6. On page 2 of the wizard, specify the following fields:
   - **Active** - Select to enable the profile.
   - **Alternative Context URL** – Leave empty to use the default context, https://open-na.hosted.exlibrisgroup.com/alma/contexts/bib. If you want to use a different context object, enter its URL here. The @context field of the JSON-LD will refer to this context object.

7. Select Save.

For information regarding linked data accessed from the Repository Search results, see Linked Data from the Repository Search Results.

For information regarding linked data accessed from the MD Editor Linked Data tab, see Using Linked Data While Working with Bibliographic Records.
Alma Resolver Augmentation

To configure a resolver augmentation definition profile, you must have the following role:

- General System Administrator

The Alma resolver augmentation function is a component of the Alma Link Resolver process that enhances OpenURL metadata with DOI, OAI, and PubMed (managed by NLM) information. This occurs as an internal process within Alma.

As it relates to the Alma resolver augmentation function, the goal of the Alma Link Resolver is to provide patrons access to electronic resources that they have identified using OpenURL-compliant discovery tools such as Google Scholar, PubMed, Primo, and so forth. Since there are many variables that affect the format of a link used to access a resource, these links are not static but, instead, are calculated links. These calculated links are created dynamically by the Alma Link Resolver process and the capabilities provided by the Alma resolver augmentation.

The following illustration highlights the workflow for this process where the patron has requested to view a resource and the OpenURL-compliant tool that they used has passed an OpenURL string to Alma for processing. As part of the Alma process, the OpenURL string is enhanced by the Alma resolver augmentation capability; and the enriched OpenURL is then used by Alma to locate one or more matching bibliographic records that may be available to the patron. Subsequently, the patron is presented a display with links to all the available resources.
For a more-comprehensive explanation of the Alma Link Resolver process, options, and a demonstration of functions, view the video provided in the link below.

Learn more about Alma and link resolving in the Alma Link Resolver video (1 hr 2:49 mins).

For institutions where Primo is available, see Configuring the Primo Front End for Alma’s Link Resolver for information about configuring the Services Page in Primo to work with the Alma Link Resolver.
Alma Resolver Augmentation Configuration

The Resolver Augmentation integration profile defines the parameters that are used from the following systems to augment the incoming OpenURLs:

- DOI \( (rft_id=\text{info:doi}) \)
- OAI \( (rft_id=\text{info:oai}) \)
- PubMed (NL0) \( (rft_id=\text{info:pmid}) \) - Note that Alma attempts to enrich the incoming URL using DOI. If this does not succeed, Alma attempts to enrich the incoming URL using the PMID.

### Note

You can define only one resolver augmentation profile for each institution; all three of the above systems can be defined in this profile.

---

To configure an OpenURL Resolver Augmentation type of integration profile:

1. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile. The first page of the integration profile wizard opens.
2. From the Integration type drop-down list, select Augmentation.

### Note

The Default check box is not functional for this integration type.

3. Select Next. The second page of the wizard appears.
4. For the DOI, OAI, and/or PubMed definitions, select whether you want the profile to be active. Only active profiles run.
   - For the DOI definition, enter a user name and password to use for accessing the CrossRef database.
   - For the CrossRef setup, you may also need to use the Primo services page base URL.
   - For detailed information on setting up the PubMed LinkOut tool for Alma, see this Tech Blog.
   - Effective 1-December-2018, PubMed requires a customer-specific API key. Contact PubMed to obtain an API key and update the PubMed Definitions section of the Augmentation integration profile with the API key that you receive.

   ![PubMed Augmentation API Key](http://example.com/pubmed_api_key.png)

   **PubMed Augmentation API Key**

   Note that if you do not include a PubMed API key, Alma continues to augment using the existing syntax; but there is no guarantee regarding how long PubMed will remain backward compatible.
5. Select Save. The profile is saved.
To test an OpenURL source:

1. Request a test account from an OpenURL-enabled source such as Google Scholar.
2. In order to use the Alma Link Resolver (and the Alma Resolver Augmentation function), use your Primo services page base URL. This URL should return a message requesting you to enter search parameters.
Resolver Proxies

To configure a resolver proxy profile, you must have the following role:

- General System Administrator

To enable off-campus users to access full text services at different vendor sites, you must define a proxy server, which is used to authenticate these users.

The Alma Link Resolver responds to an incoming OpenURL and changes it to an electronic link by automatically including additional proxy information in the resolved URL. Some institutions use a single proxy server, in which case one proxy profile should be defined. If an institution uses several proxy servers, a proxy profile should be defined for each proxy server. You must then define the relevant proxy for each electronic collection, service, or portfolio. See the following for additional proxy information:

- Linking Information Tab Options – describes the Linking Information tab options of the Electronic Service Editor
- Electronic Collection Editor Tabs and Fields – describes the Additional Information tab options of the Electronic Collection Editor
- Electronic Portfolio Editor Page – describes the Linking Information tab options of the Electronic Portfolio Editor

The following table presents a description of the relationships between the proxy-enabled setting for electronic collections, services, and portfolios. Portfolios inherit the proxy-enabled setting from the service-level, proxy-enabled setting to which they are attached. As a result, you do not need to set a portfolio-level, proxy-enabled setting unless you want it to be something different from the service-level setting (in which case, you would leave the Proxy selected field on the service level blank). The electronic collection proxy-enabled settings are not inherited by portfolios.

<table>
<thead>
<tr>
<th>Proxy Enabled for Electronic Collection Level</th>
<th>Proxy Enabled for Service Level</th>
<th>Proxy Enabled for Portfolio Level</th>
<th>Proxy Enabled Setting Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Redirected to resource</td>
</tr>
<tr>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Redirected to proxy login</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Redirected to proxy login</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Portfolio inherits service setting</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>The electronic collection does not inherit proxy settings from the service or portfolios. If a proxy profile is selected on the service level, portfolios inherit the proxy setting from the service level. To set the proxy for the portfolio level, leave the Proxy selected field of the service-level setting blank.</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Redirected to the resource</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The Electronic Collection proxy is not inherited by the service or portfolio level</td>
</tr>
<tr>
<td>Proxy Enabled for Electronic Collection Level</td>
<td>Proxy Enabled for Service Level</td>
<td>Proxy Enabled for Portfolio Level</td>
<td>Proxy Enabled Setting Results</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------------------------</td>
<td>----------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Redirected to proxy login</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Redirected to proxy login; Portfolio inherits the service setting</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Redirected to proxy login</td>
</tr>
</tbody>
</table>

To configure a resolver proxy definition type of integration profile:

1. On the Integration Profile List page ([Configuration Menu > General > External Systems > Integration Profiles]), select **Add Integration Profile**. The first page of the integration profile wizard appears.

2. Select **Resolver Proxy** for **Integration Type**.

3. Enter a name (Code) for the profile you are defining and, optionally, enter a description.

4. Select **Default** if you want the profile you are defining to be the default proxy definition profile. (If you previously defined another profile as the default profile, clear the **Default** selection in the other profile before selecting **Default** in this profile). If the proxy is set as the default, and **Actions** (see below) is set to **Always**, then this proxy is used for resolving any resource, even resources that do not have **ProxyEnabled=Yes**.

5. Select **Next**. The second page of the wizard appears.

6. Select the type of proxy server that you want to configure for this profile. The following options are available:
   - Biblio-Pam – This server proxy uses the following URL structure:
     The `<Biblio-PAM URL>` portion of the structure is the vendor-provided URL from Biblio-PAM.
     The `<shortened target URL>` is the target URL without the `http://` or `https://`.
     - `https://<Biblio-PAM URL>/http/<shortened target URL>`
     - `https://<Biblio-PAM URL>/https/<shortened target URL>`
   - EZProxy – This option uses the following URL structure where `$@` is the placeholder for the target URL:
     - `https://www.ezproxy.unibo.it/login?$@`
See [EZProxy URL Database](#) for more information.

- **HAN** – This option uses the following URL structure:
  
  - `http://<HAN server>/hanapi/?hash=<HASH>`

  **Enter the** `http://<HAN server>` **portion for the** Proxy url **parameter.**

  The remainder of the URL structure is constructed by Alma and appended to the portion of the URL that you entered in the Proxy url parameter.

  For the HAN proxy server type, you need to enter a **Salt** parameter. The **Salt** parameter is a free text field that may contain any alpha-numeric value. The value that you enter must identically match the salt value in the HAN proxy server configuration in your HAN account. When you create the HAN salt value in your HAN account, copy it to the **Salt** parameter in Alma.

- **LIBProxy**

- **OpenAthens**

  - **OpenAthens Redirector** – This option uses the following URL structure:
    
    - `https://<OpenAthens Redirector URL>?url=<encoded target URL>`

    **Enter** `https://go.openathens.net/redirector/<your domain>` **for the** Proxy url **parameter.**

    The **<OpenAthens Redirector URL>** portion of the structure is the vendor-provided URL from OpenAthens.

    **Enter** `https://go.openathens.net/redirector/<your domain>` **for the** Proxy url **parameter.**

    The `?url=` portion of the URL is added by Alma.

    The `<encoded target URL>` is the target URL in its encoded form.

    Note that even though Redirector is not a proxy server, the Alma proxy server configuration can be used.

- **WAM**

  Note that you should omit the `0-` at the beginning of your proxy URL.

7. Enter the proxy URL as provided by the vendor (including http:// or https://) and the proxy IP address.

8. Select one of the following values for Use Proxy:

  - **Always** – The proxy is used for any resolving.
    
    If this proxy is selected as default, it is used for any resolving, even for resources (services, collections, or portfolios) with **EnableProxy=No**.

    If this proxy is not selected as default, it is used for resources where **EnableProxy=Yes** and this proxy is selected.

    **Note**

    This configuration overrides the configuration in the Network Zone.

  - **Never** – This proxy is never used for resolving, even if it is enabled and selected for a particular resource.

  - **Selective** – This proxy is used for resources where **EnableProxy=Yes** and this proxy is selected (this is
equivalent to selecting **Always** for a non-default proxy).

Even if this proxy is selected as the default, it must be added to the resource explicitly.

9. Select **Save**. The profile is saved.
Configuring the Validity of EBSCOhost Full Text URLs

To configure the Link Resolver Plugin integration profile, you must have the following role:

- General System Administrator

Alma can check the validity of a full-text URL before presenting it to the end user through the View It services menu. This functionality is only available for EBSCOhost Full-Text URLs.

The EBSCO Link Resolver Plugin performs external checks using an API that determines the most accurate available URL for the full text.

To enable the link resolver plugin capability with EBSCO:

1. On the Integration Profiles List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile.
2. Select Link Resolver Plugin from the Integration Type drop-down list.
3. Select EBSCO from the Vendor drop-down list.
4. Select Next. Step 2 of the Link Resolver Plugin integration profile appears.

5. Select Active.

6. Enter the API User ID provided to you by EBSCO. The API User ID is an EBSCO authentication string that is customer specific and consists of three parts, separated by periods, custid.groupid.profileid where:
   - custid is the EBSCO admin customer id
   - groupid is the Group ID in EBSCOhost where the database resides
   - profileid is the Profile ID in EBSCOhost where the database resides

For example: s123456.main.eit. The structure of this authentication string is identical to the target information for Z39.50 Connections.

Contact your EBSCO representative if you do not already have this information.

Note

Ex Libris uses the API User ID to retrieve the list of databases per customer. Therefore, the user ID should be the same profile used with EIT, and your EIT profile should include all the full-text databases.

For more information about setting up an EBSCOhost API (EIT) account, see https://connect.ebsco.com/s/article/
7. Select **Find All Services**. This does a repository search for all services that use the EBSCO Link Resolver Plugin. Alma’s advanced search also provides a **Link Resolver Plugin** condition to locate electronic collections that were updated by the CKB to use the EBSCO Link Resolver API. Select **Back**.

8. Select **Save**.

The Link Resolver Plugin integration profile is used to validate the full-text link for those EBSCOhost collections that were defined by the CKB as applicable for the validation check. If for some reason the external checking process is unable to complete successfully, Alma defaults to its previous behavior (before the availability of the Link Resolver Plugin) of using the target parser in the CKB to calculate the link.

---

**Additional Usage Information and Considerations**

- **Local configuration** – The Link Resolver Plugin parameter is provided as an option on the Linking Information tab of the Electronic Service Editor page when defining local electronic collections. Ex Libris expects that the services will be provided through the CKB and that use of this option locally will be limited and carefully/wisely used.

- **Parser parameters DB specification** – When the DB specified in the **Parser parameters** on the Linking Information tab (see below) does not match what is found through the Link Resolver Plugin API validation, the results are filtered. That is, the link is calculated using the results from the external checking process performed with the Link Resolver Plugin.
In cases where there may be a service disruption and the Link Resolver Plugin API is unable to complete the validation with an external resource, the available DB specification is used and is not filtered for display on the Link Resolver View It tab. Alma defaults to its previous behavior (before the availability of the Link Resolver Plugin) of using the target parser in the CKB to calculate the link.

• Network Zone configuration – When implementing a Network Zone, the Link Resolver Plugin integration profile must be created for the network institution and for all the member institutions.
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. **Set VST server definitions:**
   
   1. Enter the following:

   ```bash
   vim $alephe_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:
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:

```bash
setenv VST_SERVER_PORT nnnn
```

For example:

```bash
setenv VST_SERVER_PORT 4711
```

2. Enter the following:

```bash
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:

```bash
! 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:
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 \texttt{tab\_low\_group} should be set to 'Y'.

For example:

\begin{verbatim}
  ! 1 2 3 4 5 6 7
  !!!!!-!!!!-!!!!-!!!!-!!!!-
  ALMA ##### Y
\end{verbatim}

Parent record links are based on the definitions in the \texttt{./[bib\_library]/tab/tab\_relink\_link} table. Therefore, in order to activate the Send Parent functionality, \texttt{tab\_relink\_link} should be defined with all parent links.

For example:

\begin{verbatim}
  ! 1 2 3 4 5 6 7 8 9
  !!!!!-!!!-!!!-!!!-!!!-!!!-
  010## a 001 DN Y
\end{verbatim}

3. Enter the following:

\begin{verbatim}
  vim $alephe_unicode/tab\_character\_conversion\_line
\end{verbatim}

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:

\begin{verbatim}
  UTF_TO_VST ###### L line\_utf2line\_sb unicode\_to\_8859\_1 Y
\end{verbatim}

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.

---

2. **Set Z39.50 definitions Aleph z39_server**

1. Verify that the port is correct under $alephe_tab/z39_server/z39_server.conf.

2. **MAB environment:**
   - Change 'Z39' staff to ADMIN (User library) and add permissions for 'MAB01' library (Allow all common tab).

   For **USMARC environment:**
   - Change 'Z39' staff to ADMIN (User library) and add permissions for 'USM01' library (Allow all common tab).

3. In order to return UTF via Z39, change in ./alephe/tab/z39_server/z39_server_MAB01.conf (or z39_server_USM01.conf) the following:

   **MAB environment:**
   - The MAB2MARC section should have a matching section in tab_expand, and the MB2MC section should have a matching section in tab_fix.
   - out-record-syntax USMARC
   - out-record-format USMARC
   - out-record-char-conv
   - out-record-expand MAB2MARC
   - out-record-fix MB2MC

   **USMARC environment:**
   - The Z39_SERVER section should have a matching section in tab_expand, and the "Z39_server" section should have a matching section in tab_fix/tab_expand.
   - out-record-syntax USMARC
   - out-record-format USMARC
   - out-record-char-conv
4. Optionally, (MAB environment only) - 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). See details in the sections below: Convert MAB To MARC.

5. Optionally, (USMARC environment) - define a new base for Alma Z39.50 searches that use a new expand "Z39_SERVER" that adds the 003 field with a predefined code, and 035 field that contains the System number from 001 + Prefix from 003. See Expand - Add 003 and 035.

3. Convert MAB To MARC: (MAB environment only)

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 документ 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 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
MB2MC fixexp_docx_parallel FIXROUT,MBOS1,PTR-FROM=B,PTR-TO=1
MB2MC fixexp_docx_parallel PARFUNC,copyfld,"LDR,LDRMC",PTR-FROM=0,PTR-TO=1
MB2MC fixexp_docx_parallel FIXROUT,MBOS2,PTR-FROM=1,PTR-TO=2
MB2MC fixexp_docx_parallel PARFUNC,43obvos_catlink,PTR-FROM=0,PTR2FROM=2,PTR-TO=0
MB2MC fixexp_docx_parallel FIXROUT,MBNOM,PTR-FROM=I,PTR-TO=M
MB2MC fixexp_docx_parallel FIXROUT,MBNOM,PTR-FROM=I,PTR-TO=M
MB2MC fixexp_docx_parallel CAT,PTR-FROM=0,PTR2FROM=M
MB2MC fixexp_docx_parallel USECODE=Y
MB2MC fix_exp_mab2marc_synind_880lnk
MB2MC fix_doc_convtb FILE=alma_obvsg.convtb.bib_mab2marc.post_01
MB2MC fix_doc_convtb FILE=alma_obvsg.convtb.bib_mab2marc.upd_linkd
MB2MC fixexp_docx_parallel FIXROUT,MBNOM,PTR-FROM=I,PTR-TO=M
MB2MC fixexp_docx_parallel CAT,PTR-FROM=0,PTR2FROM=M
MB2MC fixexp_docx_parallel USECODE=Y
```
In MAB environment - 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. In MAB environment 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 ./mab01/tab/ttt 49vbv.tab_globalvar_convtb.m2m to ./[bib_library]/tab/tab_globalvar_convtb.m2m and change the ISIL-Code user.

4. Convert MARC to MAB: (MAB environment only)

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 |
   | !!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!> |
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:

```plaintext
!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:

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

5. **Expand - Add 003 (Prefix) and 035 (System number + Prefix) (USMARC environment)**

In tab_expand, add (xxx01 $data_tab):

```plaintext
! Z39_SERVER expand_doc_sysno
Z39_SERVER fix_doc_do_file_08 alma.fix
Z39_SERVER fix_doc_create_035_1
IZ39_SERVER fix_doc_create_035
```

The 'alma.fix' is defined as follow (xxx01 $data_tab/import/):

```plaintext
! 2 3 4 5 6 7 8 9
!-!-!-!-!-!-!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```
The prefix - 'ALM' in the above example - is defined also in Alma, in the Aleph integration profile. This is used for the contribution from Alma to Aleph via the X-service.

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

1. **In MAB environment:** 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
   ALMA1 fixexp_docx_parallel COPY,PTR-FROM=0,PTR-TO=M
   ALMA1 fix_doc_convtb FILE=alma_obvsg.convtb.bib_marc2mab.pre_01
   ALMA1 fixexp_docx_parallel COPY,PTR-FROM=0,PTR-TO=O
   ALMA1 fix_doc_convtb FILE=alma_obvsg.convtb.bib_marc2mab.49dnb_p0_tt_pp
   ALMA1 fix_doc_convtb FILE=alma_obvsg.convtb.bib_marc2mab.49dnb_p1
   ALMA1 fix_doc_convtb FILE=alma_obvsg.convtb.bib_marc2mab.49dnb_p2
   ALMA1 fix_doc_convtb FILE=alma_obvsg.convtb.bib_marc2mab.post_01
   ALMA1 fixexp_docx_parallel FIXFUNC,fix_doc_convtb,"FILE=alma_obvsg.convtb.bib_marc2mab.osc",PTR-FROM=O,PTR-TO=O
   ALMA1 fixexp_docx_parallel CAT,PTR-FROM=0,PTR2FROM=O
   ALMA1 fixexp_docx_parallel FIXFUNC,fix_doc_convtb,"FILE=alma_obvsg.convtb.bib_marc2mab.nomapp",PTR-FROM=M,PTR-TO=M
   ALMA1 fixexp_docx_parallel CAT,PTR-FROM=0,PTR2FROM=M
   ALMA1 fix_doc_char_conv_z GND-UTF-TO-UTF
   ALMA1 fix_doc_clear DUP-FLD=Y
   ALMA1 fix_doc_sort
   ALMA1 fix_doc_overlay ALMA1MC2MB
   ALMA1 fix_doc_sort
   ```

**Note**

The fix section can be sent as a parameter to the X-service. In this case, each member should have a section defined in tab_fix with the above lines.

To enable the loading of records with long fields (over 2000 characters), add the following line in ./alephe/
aleph_start.private:

```sh
setenv ENABLE_LONG_FIELDS Y
```

2. 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`:

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

3. 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:

```plaintext
!1 2 3          4
!!-!-!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
...
! For Alma X-service
AA 1 N ####
AA 1 Y CAT##
AA 1 Y OWN##
AA 1 Y OSC##
AA 2 Y ####
```

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:

```plaintext
!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!>
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:

```plaintext
!  2  3  4  5  6  7          8                          9
```
• Add the LOW index to 
  ./[bib_library]/tab/tab00.LNG (field codes and names):

  ![LOW index example]

• 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):

  ![LOW filing example]

• Verify that the match configuration in 
  ./[bib_library]/tab/tab_match contains the following line:

  ![Match configuration example]

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

  ![Merge line example]

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

  ![Overlay lines example]
• 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 |
|---|---|---|---|---|
| !-!!!!!!!!-!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!-!-!!!!!!!!!!!!!!-!!!!!!!!!!!!!!- !-!!!!!!!-!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!-|
| W2 08:56:00 Y MAB01 p_file_02 MAB01,all_alma_inventory,all_alma_inventory.seq,06, |
| W2 08:56:00 Y MAB01 p_manage_36 MAB01,all_alma_inventory.seq,all_alma_inventory.seq.new,all_alma_inventory.seq.upd,all_alma_inventory.seq.dup, IDN, |
| W2 08:56:00 Y MAB01 p_manage_18 MAB01,all_alma_inventory.seq.upd,all_alma_inventory.seq.upd.rejected,all_alma_inventory.seq.upd.doc_log,OLD,,FULL,MERGE,M,,LOADHOL, |
| W2 08:56:00 Y MAB01 p_manage_18 MAB01,all_alma_inventory.seq.new,all_alma_inventory.seq.new.rejected,all_alma_inventory.seq.new.doc_log,NEW,,FULL,MERGE,M,,LOADHOL, |
| W2 08:56:00 Y MAB01 p_manage_37 MAB01,DOC_LIST,b_manage_36,000000000,000000000,manage_37.out,LOWRM,Y,MASTER, |

This performs the following:

1. The 'untar-alma' script runs and unants 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:

   ```
   ! 1 2 3 4 5 6 7 8
   !!!!!-!!!!-!!!!!!!-!!!!!!!-!!!!!!!-!!!!!!!-!!!!!!!-!!!
   001  IDN
   ```

2. **Verify that match configuration in ./hol_library/tab/tab_match contains the following line:**

   ```
   ! 1 2 3
   !!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
   HOL  match_doc_uid  I-IDN
   ```

3. **Add the following line to ./hol_library/tab/tab_merge:**

   ```
   ! 1 2 3
   !!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!> LOADMABHOL merge_doc_overlay 07
   ```

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

   ```
   !1 2 3 4
   !!-!-!!!!!!!!!!!!!!!!!!!!!
   07 2 C #####
   07 1 Y #####
   ```

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

   ```
   ! 2 3 4 5 6 7 8 9
   ```
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:

```
wget --ftp-user=USER --ftp-password='PASSWORD' ftp://ftp.exlibris.co.il/Aleph/Pub_Aleph_mab_hol_..._new.xml.tar.gz
```

---

The addition to `job_list`:

```
! 2 3 4 5
!!-!!!!!!!-!!-!!!!!!-!!!!!!!-
! 2 3 4 5 6 7
!!-!!!!!!!-!!-!!!!!!-!!!!!!!-!!-
...
!Alma load holdings
!Load holdings
W2 10:04:00 Y  MAB60  p_file_02  MAB60,all_new_pub_aleph_mab_hol,all_pub_aleph_mab_hol_pre.seq,06,
W2 10:05:00 Y  MAB60  p_file_08  MAB60,all_pub_aleph_mab_hol_pre.seq,all_pub_aleph_mab_hol_seq,all_pub_aleph_mab_hol_pre.seq.rej,fix_alma_001
W2 10:06:00 Y  MAB60  p_manage_36  MAB60,all_pub_aleph_mab_hol.seq,all_pub_aleph_mab_hol_seq.new,all_pub_aleph_mab_hol_seq.upd,all_pub_aleph_mab_hol_seq.dup,HOL,
W2 10:08:00 Y  MAB60  p_manage_18  MAB60,all_pub_aleph_mab_hol.seq.new,all_pub_aleph_mab_hol_seq.new.rejected,all_pub_aleph_mab_hol_seq.new.doc_log,NEW,,FULL,MERGE,M,LOADMABHOL,
W2 10:10:00 Y  MAB60  p_manage_18  MAB60,all_pub_aleph_mab_hol_seq.upd,all_pub_aleph_mab_hol_seq.upd.rejected,all_pub_aleph_mab_hol_seq.upd.doc_log,OLD,,FULL,MERGE,M,LOADMABHOL,
```
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:

```
W2 13:00:00 N untar-alma chs -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,all_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_pre.rej,fix_alma_001
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,
```

**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:

```
wget --ftp-user=USER --ftp-password='PASSWORD' ftp://ftp.exlibris.co.il/Aleph/Pub_Aleph_mab_hol..._del.xml.tar.gz
```
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` adds 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:

   **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:

   ```
   wget --ftp-user=USER --ftp-password='PASSWORD' ftp://ftp.exlibris.co.il/Aleph/Pub_Aleph_mab_hol...,new.xml.tar.gz
   ```

   **addition to** `job_list`:

   ```
   !2345

   !!-!!!!!!!-!-!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!>
   ```
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>Central Catalog System</td>
<td>Select <strong>Aleph</strong> as the central catalog system type that you are configuring.</td>
</tr>
</tbody>
</table>

**Note**
- You must select **System > Aleph** on this page, even though you also selected it on the first page.
- Only one Central Catalog Integration profile can be configured per institution.

<table>
<thead>
<tr>
<th>Contribution Configuration (contribution server setup)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Host</strong></td>
</tr>
<tr>
<td><strong>Port</strong></td>
</tr>
<tr>
<td><strong>Library</strong></td>
</tr>
<tr>
<td><strong>System Number Prefix</strong></td>
</tr>
<tr>
<td><strong>Fix routine in central catalog</strong></td>
</tr>
<tr>
<td><strong>Username</strong></td>
</tr>
<tr>
<td><strong>Password</strong></td>
</tr>
<tr>
<td><strong>Allow Delete</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Central Catalog Record Changes Configuration (VST server setup)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Host</strong></td>
</tr>
<tr>
<td><strong>Port</strong></td>
</tr>
<tr>
<td><strong>Local catalog ID</strong></td>
</tr>
<tr>
<td><strong>Username</strong></td>
</tr>
<tr>
<td><strong>Password</strong></td>
</tr>
<tr>
<td><strong>Active</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Schedule</th>
<th>To schedule the import process, select a schedule from the drop-down list. The available options are:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>◦ Not scheduled</td>
</tr>
<tr>
<td></td>
<td>◦ Every 12 hours, starting at 11:00</td>
</tr>
<tr>
<td></td>
<td>◦ Every 6 hours, starting at 05:00</td>
</tr>
<tr>
<td></td>
<td>◦ Hourly</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Bibliographic Library Codes (Comma Separated)</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>
</tbody>
</table>
| **Choose merge routine**                  | 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:  ▪ Overlay all fields but local  ▪ Replace 245 and 035 OCoLC if exist  ▪ Conditional subject headings  ▪ Keep only old value  

**Note**

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.                                                                                                                                                                                                                                                                                                                                                     |
| **Non preferred record action during merge** | Select one of the options **Delete**, **Suppress**, or **Keep it** 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. See Retrieving Changed Records from the Aleph Central Catalog for more information.                                                                                                                                                                                                                                                                       |
| **Update preferred record call number during merge** | 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.                                                                                                                                                                                                                                                                                                                                                                                                      |
| **Data Retrieval Configuration (Z39.50)**  | **Host**  
The IP address of the Aleph central catalog.  
**Port**  
The Aleph central catalog port to send the Z39.50 calls.  
**Base**  
The database in Aleph to send the Z39.50 query.  
**Search Attribute**  
The unique identifier of the location of the system number in the central catalog (equivalent to the Marc 001 field).  
**Username**  
The user name to send to the Aleph central catalog for z39.50.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

**Note**

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

**Ex Libris, a ProQuest Company**
<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>
<tr>
<td><strong>Repository Import Profile</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>
| **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.

---

**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**.
• File name patterns – You can leave this option blank.
• Cross walk – Select **No**.
• Target format – Select **MARC 21 Bibliographic**.

**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.
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 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"
```
LOW Field Normalization Example:

end

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

removeField "7**
removeField "8**
removeField "9**
end

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

Holdings Normalization

Holdings Normalization Example:

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.a" 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"
Holdings Normalization Example:

end

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

Items Normalization Example:

rule "Move Aleph BIB ID to 001"
priority 2
when
TRUE
then
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.

Process Configuration General Information

Process Configuration Selected Process

Process Configuration Drools File Key

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 Profile Details

**Profile Name**: CC Availability Publishing Profile for the Aleph Central catalog

#### Bibilographic Normalization
- **Connect the data using normalization rules**: Normalization
- **Linked Data enrichment**: unchecked

#### Bibliographic Enrichment
- **Add Management Information**: unchecked

#### Physical Holdings Enrichment
- **Add Holdings Information**: unchecked

<table>
<thead>
<tr>
<th>#</th>
<th>Holding Tag</th>
<th>Holding Subfield</th>
<th>Lib Tag</th>
<th>Lib Subfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>853</td>
<td>-</td>
<td>853</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Additional Holdings Fields
- **Created by field**: Subfield
- **Created date field**: Subfield
- **Updated by field**: Subfield
- **Update date field**: Subfield
- **Library name field**: Subfield
- **Location name field**: Subfield
- **Suppress from publishing field**: Subfield
- **Exclude suppressed records**: unchecked

#### Physical Items Enrichment
- **Add Items Information**: unchecked

#### Electronic Inventory Enrichment
- **Add Electronic Portfolio Information**: checked
- **Repeateable field**: 852
- **Portfolio PID**: B8
- **Access URL subfield**: Library subfield
- **Electronic Material Type subfield**: Collection Name subfield
- **Coverage Statement subfield**: License Name subfield
- **Collection ID subfield**: Additional PID subfield
- **License Code subfield**: Create date subfield
- **PO Line subfield**: Updated by subfield
- **Created by subfield**: Updated date subfield
- **Updated by subfield**: Available for Campus subfield
- **Available for Institution subfield**: Available for Library subfield
- **Activation date subfield**: Service ID subfield

#### Digital Inventory Enrichment
- **Add Digital Representation Information**: checked
- **Repeateable field**: 852
- **Internal identifier (PID) subfield**: Delivery URL subfield
- **Thumbnail URL subfield**: Label subfield
- **Public Note subfield**: Library subfield
- **Usage Type subfield**: Entity type subfield
- **Delivery Description subfield**: Created by subfield
- **Updated by subfield**: Create date subfield
- **Update date subfield**: Service ID subfield

#### Collection Enrichment
- **Add Collection Information**: unchecked
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

**Bibliographic Normalization**
- Correct the data using normalization rules
- Linked data enrichment

**Bibliographic Enrichment**
- Add Management information

**Physical Holdings Enrichment**
- Add Holdings information

<table>
<thead>
<tr>
<th>Holdings Tag</th>
<th>Holdings Subfield</th>
<th>BB Tag</th>
<th>BB Subfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS2</td>
<td>-</td>
<td>IS2</td>
<td>-</td>
</tr>
<tr>
<td>LDR</td>
<td>-</td>
<td>009</td>
<td>-</td>
</tr>
</tbody>
</table>

**Additional Holdings Fields**
- Created by field
- Created date field
- Updated by field
- Updated date field
- Library name field
- Library name field
- Location name field
- Location name field
- Exclude suppressed records

**Physical Item Enrichment**
- Add Item information

**Electronic Inventory Enrichment**
- Add Electronic Portfolio Information
  - Reportable field: IS2
  - Library ID
- Access URL subfield
- Electronic Material Type subfield
- Interface Name subfield
- Coverage Statement subfield
- Collection ID subfield
- License Code subfield
- PO Line subfield
- Created by subfield
- Updated by subfield
- Activation date subfield
- Available for Campus subfield
- Available for Institution subfield
  - Activation Status
  - Link Resolver Base URL
  - Library subfield
  - Public Note subfield
  - GC Collection Identifier subfield
  - Collection Name subfield
  - License Name subfield
  - Additional PO Line subfield
  - Create date subfield
  - Update date subfield
  - Direct Link subfield
  - Available for Library subfield
  - Service ID subfield

**Digital Inventory Enrichment**
- Add Digital Representation Information
  - Add Remote Representation Information
  - Reportable field: IS2
- Internal Identifier (MS) subfield
- Thumbnail URL subfield
- Public Notes subfield
- Usage Type subfield
- Delivery Description subfield
- Updated by subfield
- Delivery subfield
- Label subfield
- Library subfield
- Entity Type subfield
- Created by subfield
- Create date subfield
- Create date subfield

**Collection Enrichment**
- Add Collection Information

---

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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
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.
Integration Profile

aleph

Code
Integration Type
aleph
Central Catalog Integration

General Information  Actions  Contact Info

CENTRAL CATALOG SYSTEM

System * Aleph

CONTRIBUTION CONFIGURATION

Host * dc
Port * 1
Library * Main
System Number Prefix * D
Fix routine in central catalog
Username
Password
Allow Delete
Correct the data using normalization rules

CENTRAL CATALOG RECORD CHANGES CONFIGURATION

Host * dc
Port * 1
Local Catalog ID * V
Username * M
Password * ********
Active * Active  Inactive
Schedule * Not scheduled
Bibliographic Library Codes (Comma Separated)
Last Harvest ID
Choose merge routine
Non preferred record action during merge
Delete
Suppress
Keep it
Update preferred record call number during merge

Run
Aleph Central Catalog Integration Profile Actions Tab

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>
<tbody>
<tr>
<td>Records Processed</td>
<td>• Updated record Ids&lt;br&gt;• New record Ids&lt;br&gt;• Records marked for delete&lt;br&gt;• Records marked for merge</td>
</tr>
<tr>
<td>Results</td>
<td>• Failed to delete records&lt;br&gt;• Records with inventory that cannot be deleted&lt;br&gt;• Records not added (manual validation)&lt;br&gt;• Records linked to CZ&lt;br&gt;• Records skipped by filter&lt;br&gt;• Merged record Ids&lt;br&gt;• Failed to merge records&lt;br&gt;• Validation errors&lt;br&gt;• Failed to update/delete record&lt;br&gt;• Failed to search record in Z39 server</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• No results from Z39 Server</td>
</tr>
<tr>
<td></td>
<td>• Total records deleted</td>
</tr>
<tr>
<td></td>
<td>• Record not deleted - record id does not exist</td>
</tr>
</tbody>
</table>

**Aleph Central Catalog Integration Job Report**

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.

![Contribute Record to Central Catalog](image)

See Contribute Record to Central Catalog for more information.

**Note**

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

```plaintext
$form['con_lng'] = 'lng';
```

For example:

```plaintext
$form['con_lng'] = 'ger';
```

**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.

---

**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).

![External Search for an Aleph Central Catalog](image)

External Search for an Aleph Central Catalog

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.
Sharing Alma Link Resolver Data Statistics with bX

Introduction

bX Recommender is a service that enhances the discovery experience by providing relevant recommendations for articles and ebooks. These recommendations are based on link resolver usage data that is harvested from many academic institutions around the world. This page describes how to share your institution's link resolver data with the bX Recommender service.

For information on how to register and enable bX recommendations for discovery, see:

- Primo: [bX Recommendations for Primo](#)
- Primo VE: [Configuring bX Recommendations for Primo VE](#)

Configuring the Link Resolver Statistics Integration Profile

The bX Link Resolver Statistics integration profile configures the settings associated with sharing your institution's link resolver data with the bX Recommender service. The information that is shared with bX is anonymous and does not include patron, IP, or institution details. Specifically, this is handled in the following manner:

- Patron personal information (including username or user_id) is not stored when patrons use the Alma Link Resolver.
- When statistics are sent to bX, the institution’s IP is not sent to bX. Instead null is sent. Also, the institution ID or institution name is not sent in the statistics data sent to bX.
- During the process of loading Alma Link Resolver statistics to bX, the institution_id is included in the bX output file name; but this is only done to monitor that the data transfer to bX has been successful.
- When the data has been loaded, bX puts all the statistics data from all available contribution files (from the various Alma contributing institutions) into a single pool under a general Alma institution name. This means the statistics data in bX is not associated with a specific per-institution identifier. It is only associated with the general Alma institution name.

Only current and future statistics are shared. Historical data statistics are not shared with the service.

To share your institution's link resolver data statistics:

1. On the Integration Profile List ([Configuration Menu > General > External Systems section > Integration Profiles](#)), select Edit in the row actions list for the bX Link Resolver Statistics external integration profile.
2. Select the Actions tab.
3. Specify the following fields in the **Statistics Publish Job Parameters** section:

   ◦ **Active Export Electronic Statistics to bX** – Select **Active** to share your link resolver’s data. Otherwise, select **Inactive**.

   ◦ **Schedule Link Resolver Statistics to bX** – Select how often you want to share data to the bX service.

4. Select **Save**.

The results of this integration can be monitored using the **Export Context object to BX** job on the Monitor Jobs page (**Admin > Manage Jobs and Sets > Monitor Jobs**). Select the **Data services** job category to narrow the selection of jobs that appear in the Scheduled, Running, and History tabs. For more information, see **Viewing Completed Jobs**.
Integrating the SBN Italian Union Catalogue

Alma supports an institution's use of the SBN Italian Union Catalogue (Servizio Bibliotecario Nazionale) with the following functions:

- Search from Alma
- Copy catalog from SBN to Alma
- Contribution and localization
- Alignment for bibliographic and authority records (under construction)

Configuring the SBN Central Catalog Integration

You configure the SBN Central Catalog integration using an Alma central catalog integration profile.

The central catalog integration profile can be created at the Institution level or the Network Zone level and used by member institutions.

To configure a central catalog integration profile for SBN:

1. From the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile. The first step of the External System configuration wizard appears.
2. Enter a Code and Name for the integration profile.
3. Select Central Catalog Integration for Integration Type.
4. Select SBN as the system type in System.
5. Select Next. The next step of the configuration wizard appears.
6. Select SBN for System (Note: you must select System > SBN again on this page, even though you also selected it on the first page). The page refreshes and the following appears:
Central Catalog Integration Profile for SBN

**Note**

Only one central catalog integration profile can be configured for each institution.

7. Enter the following information.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integration Level</strong></td>
<td></td>
</tr>
<tr>
<td>Level 1</td>
<td>Download (search the SBN Union Catalogue and copy records from your search results).</td>
</tr>
<tr>
<td>Level 2</td>
<td>This level is for future development.</td>
</tr>
<tr>
<td>Level 3</td>
<td>Download, upload (contribute to the SBN Union Catalogue), and localize SBN Union Catalogue bibliographic and/or authority records.</td>
</tr>
<tr>
<td>Level 4</td>
<td>This level is for future development.</td>
</tr>
<tr>
<td><strong>System Configuration</strong></td>
<td></td>
</tr>
<tr>
<td>System Base URL</td>
<td>The IP address, port, and URL of the SBN server.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Username</td>
<td>The user name used to form the authentication string sent to SBN.</td>
</tr>
<tr>
<td>Password</td>
<td>The password used to form the authentication string sent to SBN.</td>
</tr>
<tr>
<td>Library</td>
<td>The library code assigned by SBN for your institution that is used for authentication.</td>
</tr>
<tr>
<td>User ID</td>
<td>The library ID used for library authentication.</td>
</tr>
</tbody>
</table>

Select **Yes** or **No**.

If you select **Yes**, location information is obtained from the SBN Union Catalogue and added to the record in the UNIMARC 899 field. When the 899 fields are added to the UNIMARC record, only the 899 fields are added/replaced, not the entire record.

When you complete an external search (see Using External Search with the SBN Union Catalogue Integration Profile), the 899 field appears in your search results as shown in the example below. Since the 899 is a repeatable field, it may appear more than once in the search results record.

If you select **No**, the 899 fields will not appear in your search results.

Pole Code
Optionally, specify a pole code for the UNIMARC 899 $2, for example ALM 01. When a pole code is specified in this configuration, only the 899 fields that have a $2 that equals the pole code will remain in the UNIMARC record returned to Alma.

SBN to Alma Fields
Select to edit the SBN To Alma Fields mapping table, which maps the following SBN MARC fields to local UNIMARC fields in Alma. For more information about mapping tables, see Mapping Tables. When you are done, select Customize.

- **tipoMateriale**
- **livelloAutDoc**
- **naturaDoc**
- **EXTDB**
- **tipoAuthority**
- **naturaTitAccesso**
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution Configuration</td>
<td><strong>Repository Import Profile</strong> Select the import profile that you created for importing records that have been contributed to the SBN Union Catalogue. All of the logic configured in the import profile for merge/overlay, normalization, and so forth is used when processing your search results using the external search function (see Using External Search with the SBN Union Catalogue Integration Profile). When you use Contribute Record to Central Catalog (File &gt; Contribute Record to Central Catalog) and Manage Location Information (Tools &gt; MARC Bibliographic &gt; Manage Location Information) in the MD Editor, the local record is overridden with the record from SBN unless the import profile's action upon match is merge. In that case, the merge method that is defined in the import profile is used. The primary record in the merge rule is the SBN record.</td>
</tr>
<tr>
<td>Authority Import Profile</td>
<td>Select the authority import profile that you created for this purpose. See Managing Import Profiles for more information about creating an authority import profile. This parameter is required for working with SBN authority records when using Search External Resources (Resource Management &gt; Cataloging &gt; Search External Resources). The authority import profile is where you specify the vocabulary code.</td>
</tr>
<tr>
<td>Allow Delete</td>
<td>Whether to enable deletion of a record in the SBN Union Catalogue. Integration Level 3 (that indicates you are a contributor) needs to be selected in the Integration Level section of the configuration in order for the user to delete contributed records.</td>
</tr>
</tbody>
</table>
| Merge Routine for Copy Cataloging | 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 and how similar records are merged during contribution to SBN. The primary record in the merge rule is the SBN record. See Working with Merge Rules for more information. |
<p>| Correct the data using normalization | Select a normalization rule from the drop-down list that you previously configured for bibliographic records. When you configure this option, records are normalized before they are sent to SBN as part of the contribution |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>rules</td>
<td>process.</td>
</tr>
<tr>
<td>Correct authority data using normalization rules</td>
<td>Select a normalization rule from the drop-down list that you previously configured for authority records. When you configure this option, records are normalized before they are sent to SBN as part of the contribution process.</td>
</tr>
<tr>
<td><strong>Bibliographic Alignment Configuration - UNDER CONSTRUCTION</strong></td>
<td>Configure the options in this section in order to batch update/import your changed bibliographic records from SBN into Alma. Bibliographic alignment uses the import profile that you selected in the Contribution Configuration section for the Repository Import Profile parameter. For the SBN integration job that is run for bibliographic alignment, see the SBN Job Report for Bibliographic and Authority Alignment section for more information.</td>
</tr>
<tr>
<td>Bibliographic Material Type to Import</td>
<td>Use this option to select the type of bibliographic records that you want to import from SBN to Alma. The following are the material type options available: Mondero, Antico, Musica, Grafica, Cartografico, Audiovisivo, Electronico, or All (types).</td>
</tr>
<tr>
<td>SBN Natura</td>
<td>Use this option to specify the nature of the record that you want to import. You can select one or more of the following: Monografia, Seriale, Collana, Titolo non significativo, Record analitico.</td>
</tr>
<tr>
<td>Aut Level From / Aut Level To</td>
<td>Specify the authority level (cataloging level) range (from/to) using the following options: 05, 51, 71, 90, 95, 96, or 97.</td>
</tr>
<tr>
<td>SBN List Identifier</td>
<td>This parameter is used in cases where SBN is unable to respond back with data immediately. This happens if the request is too big and SBN is unable to respond back immediately to Alma with the changed records for Alma to import. This tends to happen when no date range is specified in the Alma SBN integration profile. When this occurs, SBN's process is to send an email to the institution's administrator that contains an SBN list identifier (ID). In these cases, Alma pulls the SBN list identifier from the email and automatically places it in this parameter in the SBN configuration profile. The next time that the SBN integration job runs, it uses the ID specified in the SBN List Identifier parameter to pull the records that SBN prepared for your institution. Note that you may also run the SBN integration job manually from the SBN configuration profile after the administrator is notified that the SBN list was completed. See Schedule for more information. When the SBN list identifier ID is used during a run of the SBN integration job, the Import Start Date and Import To Date parameters are ignored. After the SBN integration job completes its run, it removes the ID that it used from the SBN List Identifier parameter.</td>
</tr>
<tr>
<td>SBN block number</td>
<td>This is the identifier for the set of the records created by SBN when the number of the records found as a result of the bibliographic Alignment request is high.</td>
</tr>
<tr>
<td>Import Start Date / Import</td>
<td>Optionally, you can import changed records from SBN based on a date range that you specify with these parameters. Enter the dates using the following format as shown in the Granularity parameter: YYYY-MM-DD.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| To Date and Granularity     | Since this parameter is optional, the Import Start Date and Import To Date parameters are handled in the following manner:  
  ◦ If the Import To Date is empty, the SBN integration job uses either the current date or the Import Start Date plus 30 days, whichever is sooner.  
  ◦ You may manually enter a specific value for Import To Date, and that value will be used the next time the SBN integration job is run.  
  ◦ After the SBN integration job finishes, whatever value was used as the Import To Date is placed in the Import Start Date and the value in the Import To Date is cleared.  
  ◦ If there is no value in either the Import To Date or the Import Start Date, the job runs without a date range; and the values are not automatically updated.                                                                                                                                                                                                                                                                                                                                 |
| Merge method                | Select a merge method from your list of import rules for import processing. See Working with Merge Rules for more information.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Non preferred record action | Select one of the following options to indicate how you want to handle the nonpreferred records during merge processing:  
  ◦ Delete  
  ◦ Suppress  
  ◦ Keep it                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Active                      | Select the Active option to enable this profile.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Schedule                    | Select a scheduling option from the drop-down list to have the job run automatically.  
  When you edit this profile, subsequent to saving it the first time, there is a Run button that appears with the Schedule parameter that you can use to manually run the SBN integration job.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Authority Alignment         | Configure the options in this section in order to batch update/import your changed authority records from SBN into Alma. Authority alignment uses the import profile that you selected in the Contribution Configuration section for the Authority Import Profile parameter. For the SBN integration job that is run for authority alignment, see the SBN Job Report for Bibliographic and Authority Alignment section for more information.                                                                                                                                                                                                                                                                                                                                                     |
| Material Type to Import     | Use this option to select the type of authority records that you want to import from SBN to Alma. The following are the material type options available: Autori, Titoli Uniformi, Titoli Uniformi Musica, Soggetti, Descrittori, Luoghi, Classificazione Dewey, Marche, and Repertopri.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| SBN List Identifier         | This parameter is used in cases where SBN is unable to respond back with data immediately. This happens if the request is too big and SBN is unable to respond back immediately to Alma with the changed records for Alma to import. This tends to happen when no date range is specified in the Alma SBN integration profile.  
  When this occurs, SBN's process is to send an email to the institution's administrator that contains an SBN list identifier (ID). In these cases, Alma pulls the SBN list identifier from the email and automatically places it in this parameter in the SBN configuration profile. The next time that the SBN integration job runs, it uses the ID specified in...
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>the SBN List Identifier</td>
<td>parameter to pull the records that SBN prepared for your institution. Note that you may also run the SBN integration job manually from the SBN configuration profile after the administrator is notified that the SBN list was completed. See Schedule for more information.</td>
</tr>
<tr>
<td>When the SBN list identifier ID is used during a run of the SBN integration job, the Import Start Date and Import To Date parameters are ignored.</td>
<td></td>
</tr>
<tr>
<td>After the SBN integration job completes its run, it removes the ID that it used from the SBN List Identifier parameter.</td>
<td></td>
</tr>
<tr>
<td>SBN block number</td>
<td>This is the identifier for the set of the records created by SBN when the number of the records found as a result of the authority Alignment request is high.</td>
</tr>
<tr>
<td>Import Start Date / Import To Date and Granularity</td>
<td>Optionally, you can import changed records from SBN based on a date range that you specify with these parameters. Enter the dates using the following format as shown in the Granularity parameter: YYYY-MM-DD.</td>
</tr>
<tr>
<td>Since this parameter is optional, the Import Start Date and Import To Date parameters are handled in the following manner:</td>
<td></td>
</tr>
<tr>
<td>• If the Import To Date is empty, the SBN integration job uses either the current date or the Import Start Date plus 30 days, whichever is sooner.</td>
<td></td>
</tr>
<tr>
<td>• You may manually enter a specific value for Import To Date, and that value will be used the next time the SBN integration job is run.</td>
<td></td>
</tr>
<tr>
<td>• After the SBN integration job finishes, whatever value was used as the Import To Date is placed in the Import Start Date and the value in the Import To Date is cleared.</td>
<td></td>
</tr>
<tr>
<td>• If there is no value in either the Import To Date or the Import Start Date, the job runs without a date range; and the values are not automatically updated.</td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>Select the Active option to enable this profile.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Select a scheduling option from the drop-down list to have the job run automatically.</td>
</tr>
<tr>
<td>When you edit this profile, subsequent to saving it the first time, there is a Run button that appears with the Schedule parameter that you can use to manually run the SBN integration job.</td>
<td></td>
</tr>
</tbody>
</table>

8. Select **Save**.<br><br>See [External Systems](#) for more information regarding configuring external system integration profiles.

### Configuring the Task UnimarcBibAdd005Task for SBN / UNIMARC

For institutions using SBN / UNIMARC, the task UnimarcBibAdd005Task needs to be removed from the Task List for the following normalization processes in the UNIMARC metadata configuration:

- Unimarc Bib Initial Normalization
- Unimarc Bib normalize on save
SBN Job Report for Bibliographic and Authority Alignment

(UNDER CONSTRUCTION)

When the SBN integration job is run for bibliographic alignment or authority alignment, the system creates an SBN job report that provides the following information:

- Job Report Header
  - Process ID
  - Finished on (date / timestamp)
  - Status (completed successfully / failed)
  - Records processed
  - Started on (date / timestamp)
  - Total run time
  - Status date (date / timestamp)
  - Records with exceptions

- General Information – This section provides a description of what was processed, the parameters sent to SBN. This section also identifies if there was an error response from SBN.

- Records Processed – This section describes what SBN sent to Alma.
  - Records marked for update
  - Records marked for delete
  - Records marked for merge

See Working with UNIMARC Fields, Normalization, and Validation for more information.
• Results – This section provides a record count for the following types of 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

With the row actions in the Results section, you can preview the record IDs for the affected records.

With the row actions in the Results section, you can preview the record IDs for the affected records.

<table>
<thead>
<tr>
<th>Preferred Record ID</th>
<th>Non Preferred Record ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALE0001747</td>
<td>ALE0001736</td>
</tr>
<tr>
<td>ALE0001747</td>
<td>ALE0001746</td>
</tr>
<tr>
<td>ALE0001747</td>
<td>ALE0001594</td>
</tr>
<tr>
<td>ALE0001747</td>
<td>ALE0001735</td>
</tr>
</tbody>
</table>
For general information regarding job reports, see Viewing Completed Jobs.

Using External Search with the SBN Union Catalogue Integration Profile

After you have configured the SBN Union Catalogue integration profile, the name of the integration profile (previously configured) 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).

When you select the SBN profile, the following search options appear:

The Search drop-down list provides the following options:

- SBN Bibliographic Records (see Searching for SBN Bibliographic Records)
- SBN Authority Records (see Searching for SBN Authority Records)

See Searching External Resources for more information.

After you have entered your search criteria, select Search (or press Enter). The search results appear in the MD Editor with the options to View or Import individual records.

The SBN records are converted to UNIMARC prior to being viewed or imported.

When you import and save an SBN record in Alma, the SBN ID is moved to the 035 field and a dedicated SBN prefix is added. So, for example, the 035 field may have an entry like (SBN)AQ1V022395 or (SBN)ANAV066478.

Note

For institutions migrating to an Alma/SBN environment, it is important to note that when existing records are migrated and the SBN ID is saved to the 035 field in Alma, the dedicated SBN prefix should be added as part of the migration process to ensure that matching works for the migrated records.
Searching for SBN Bibliographic Records

After selecting the **SBN Bibliographic Records** option for Search, select the CercaDatiTit(1), CercaDatiTit(2), CercaDatiTit(3), CercaDocMusicaType, CercaDocGraficaType, CercaDocCartograficoType, CercaDocAudiovisivoType, CercaDocElettronicoType, ElementoAutLegato, and/or ArrivoLegame option(s) to enter the following search criteria:

### CercaDatiTit(1) Search Criteria

### CercaDatiTit(2) Search Criteria

### CercaDatiTit(3) Search Criteria
### CercaDocMusicaType Search Criteria

<table>
<thead>
<tr>
<th>campo</th>
<th>descrizione</th>
<th>esempio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titolo</td>
<td>Nome del titolo in italiano</td>
<td></td>
</tr>
<tr>
<td>Artista</td>
<td>Nome dell’artista</td>
<td></td>
</tr>
<tr>
<td>Genere</td>
<td>Genere del lavoro</td>
<td></td>
</tr>
<tr>
<td>Data</td>
<td>Data di pubblicazione</td>
<td></td>
</tr>
<tr>
<td>Note</td>
<td>Note per la rassegna</td>
<td></td>
</tr>
<tr>
<td>Nome apice</td>
<td>Nome apice del lavoro</td>
<td></td>
</tr>
<tr>
<td>Tipo</td>
<td>Tipo di musica</td>
<td></td>
</tr>
<tr>
<td>Data di compimento</td>
<td>Data di compimento</td>
<td></td>
</tr>
<tr>
<td>Note di compimento</td>
<td>Note di compimento</td>
<td></td>
</tr>
<tr>
<td>Numero d'opera</td>
<td>Numero d'opera</td>
<td></td>
</tr>
<tr>
<td>Numero catalogo</td>
<td>Numero catalogo</td>
<td></td>
</tr>
<tr>
<td>Data compimento</td>
<td>Data compimento</td>
<td></td>
</tr>
</tbody>
</table>

### CercaDocGraficaType Search Criteria

<table>
<thead>
<tr>
<th>campo</th>
<th>descrizione</th>
<th>esempio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titolo</td>
<td>Nome del titolo in italiano</td>
<td></td>
</tr>
<tr>
<td>Artista</td>
<td>Nome dell’artista</td>
<td></td>
</tr>
<tr>
<td>Genere</td>
<td>Genere del lavoro</td>
<td></td>
</tr>
<tr>
<td>Data</td>
<td>Data di pubblicazione</td>
<td></td>
</tr>
<tr>
<td>Note</td>
<td>Note per la rassegna</td>
<td></td>
</tr>
<tr>
<td>Nome apice</td>
<td>Nome apice del lavoro</td>
<td></td>
</tr>
<tr>
<td>Tipo</td>
<td>Tipo di grafica</td>
<td></td>
</tr>
<tr>
<td>Data di compimento</td>
<td>Data di compimento</td>
<td></td>
</tr>
<tr>
<td>Note di compimento</td>
<td>Note di compimento</td>
<td></td>
</tr>
<tr>
<td>Numero d'opera</td>
<td>Numero d'opera</td>
<td></td>
</tr>
<tr>
<td>Numero catalogo</td>
<td>Numero catalogo</td>
<td></td>
</tr>
<tr>
<td>Data compimento</td>
<td>Data compimento</td>
<td></td>
</tr>
</tbody>
</table>

### CercaDocCartograficoType Search Criteria

<table>
<thead>
<tr>
<th>campo</th>
<th>descrizione</th>
<th>esempio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titolo</td>
<td>Nome del titolo in italiano</td>
<td></td>
</tr>
<tr>
<td>Artista</td>
<td>Nome dell’artista</td>
<td></td>
</tr>
<tr>
<td>Genere</td>
<td>Genere del lavoro</td>
<td></td>
</tr>
<tr>
<td>Data</td>
<td>Data di pubblicazione</td>
<td></td>
</tr>
<tr>
<td>Note</td>
<td>Note per la rassegna</td>
<td></td>
</tr>
<tr>
<td>Nome apice</td>
<td>Nome apice del lavoro</td>
<td></td>
</tr>
<tr>
<td>Tipo</td>
<td>Tipo di cartografia</td>
<td></td>
</tr>
<tr>
<td>Data di compimento</td>
<td>Data di compimento</td>
<td></td>
</tr>
<tr>
<td>Note di compimento</td>
<td>Note di compimento</td>
<td></td>
</tr>
<tr>
<td>Numero d'opera</td>
<td>Numero d'opera</td>
<td></td>
</tr>
<tr>
<td>Numero catalogo</td>
<td>Numero catalogo</td>
<td></td>
</tr>
<tr>
<td>Data compimento</td>
<td>Data compimento</td>
<td></td>
</tr>
</tbody>
</table>

### CercaDocAudiovisivoType Search Criteria

<table>
<thead>
<tr>
<th>campo</th>
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<th>esempio</th>
</tr>
</thead>
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<tr>
<td>Artista</td>
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<td></td>
</tr>
<tr>
<td>Genere</td>
<td>Genere del lavoro</td>
<td></td>
</tr>
<tr>
<td>Data</td>
<td>Data di pubblicazione</td>
<td></td>
</tr>
<tr>
<td>Note</td>
<td>Note per la rassegna</td>
<td></td>
</tr>
<tr>
<td>Nome apice</td>
<td>Nome apice del lavoro</td>
<td></td>
</tr>
<tr>
<td>Tipo</td>
<td>Tipo di audiovisivo</td>
<td></td>
</tr>
<tr>
<td>Data di compimento</td>
<td>Data di compimento</td>
<td></td>
</tr>
<tr>
<td>Note di compimento</td>
<td>Note di compimento</td>
<td></td>
</tr>
<tr>
<td>Numero d'opera</td>
<td>Numero d'opera</td>
<td></td>
</tr>
<tr>
<td>Numero catalogo</td>
<td>Numero catalogo</td>
<td></td>
</tr>
<tr>
<td>Data compimento</td>
<td>Data compimento</td>
<td></td>
</tr>
</tbody>
</table>

### CercaDocElettronicoType Search Criteria

<table>
<thead>
<tr>
<th>campo</th>
<th>descrizione</th>
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</tr>
</thead>
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<td></td>
</tr>
<tr>
<td>Genere</td>
<td>Genere del lavoro</td>
<td></td>
</tr>
<tr>
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<td>Data di pubblicazione</td>
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<td>Note</td>
<td>Note per la rassegna</td>
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</tr>
<tr>
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<td>Nome apice del lavoro</td>
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</tr>
<tr>
<td>Tipo</td>
<td>Tipo di elettronico</td>
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</tr>
<tr>
<td>Data di compimento</td>
<td>Data di compimento</td>
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</tr>
<tr>
<td>Note di compimento</td>
<td>Note di compimento</td>
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</tr>
<tr>
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<td>Numero d'opera</td>
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</tr>
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<td></td>
</tr>
<tr>
<td>Data compimento</td>
<td>Data compimento</td>
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</table>

### ElementoAutLegato Search Criteria

<table>
<thead>
<tr>
<th>campo</th>
<th>descrizione</th>
<th>esempio</th>
</tr>
</thead>
<tbody>
<tr>
<td>TipoAuthority</td>
<td>Tipo Authority</td>
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<tr>
<td>T001</td>
<td>T001</td>
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<tr>
<td>RelatorCode</td>
<td>Relator Code</td>
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### ElementoAutLegato Search Criteria

<table>
<thead>
<tr>
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<th>descrizione</th>
<th>esempio</th>
</tr>
</thead>
<tbody>
<tr>
<td>idUnivDoc</td>
<td>ID dell’Univocità</td>
<td></td>
</tr>
<tr>
<td>TipoLegatoDoc</td>
<td>Tipo Legato Doc</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Share</td>
<td>Share</td>
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</tr>
</tbody>
</table>

Ex Libris, a ProQuest Company
See the tables below for a list of the available search options:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T001 – Search the 001 field</td>
<td>Use this parameter to search the 001 field (record identifier).</td>
</tr>
<tr>
<td>NumSTD – Search by standard number (ISBN, ISSN, and so forth)</td>
<td>Select one of the following options from the drop-down list:</td>
</tr>
<tr>
<td></td>
<td>• ISBN</td>
</tr>
<tr>
<td></td>
<td>• ISSN</td>
</tr>
<tr>
<td></td>
<td>• ISMN</td>
</tr>
<tr>
<td></td>
<td>• Numero Bibliografia nazionale</td>
</tr>
<tr>
<td></td>
<td>• Numero pubbl. governative</td>
</tr>
<tr>
<td></td>
<td>• Numero di lastra (per musica a stampa)</td>
</tr>
<tr>
<td></td>
<td>• Cataloghi collettivi stranieri</td>
</tr>
<tr>
<td></td>
<td>• Bibliografie stranieri</td>
</tr>
<tr>
<td></td>
<td>• Numero editoriale (per musica a stampa)</td>
</tr>
<tr>
<td></td>
<td>• ACNP (Archivio Collettivo nazionale dei Periodici)</td>
</tr>
<tr>
<td></td>
<td>• CRP (Catalogo regionale piemontese dei periodici)</td>
</tr>
<tr>
<td></td>
<td>• BOMS (Bollettino delle opere moderne straniere)</td>
</tr>
<tr>
<td></td>
<td>• Y</td>
</tr>
<tr>
<td>numeroStd</td>
<td>Enter a numeric value.</td>
</tr>
<tr>
<td>paeseStd</td>
<td>Enter a country value.</td>
</tr>
<tr>
<td>notaStd</td>
<td>Enter text.</td>
</tr>
<tr>
<td>TitoloCerca - Search by title</td>
<td>Enter a search string.</td>
</tr>
<tr>
<td></td>
<td>An asterisk (*) may be used for right truncation.</td>
</tr>
<tr>
<td>stringa</td>
<td>Enter search criteria.</td>
</tr>
<tr>
<td>titoloCLET</td>
<td>Enter search criteria.</td>
</tr>
<tr>
<td>editoreKey</td>
<td>Enter search criteria.</td>
</tr>
<tr>
<td>Tipo Ord - Sort order of the output list</td>
<td>Select a value of 1-5 from the drop-down list.</td>
</tr>
<tr>
<td>TipoCerca – Type of search</td>
<td>Select one of the following options from the drop-down list:</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>• Moderno</td>
<td></td>
</tr>
<tr>
<td>• Musica</td>
<td></td>
</tr>
<tr>
<td>• Antico</td>
<td></td>
</tr>
<tr>
<td>• Grafica</td>
<td></td>
</tr>
<tr>
<td>• Cartographica</td>
<td></td>
</tr>
</tbody>
</table>

CercaDatiTit(2)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tito Materiale – Filter on material type</strong></td>
<td>Select one of the following options from the drop-down list:</td>
</tr>
<tr>
<td>• Moderno</td>
<td></td>
</tr>
<tr>
<td>• Musica</td>
<td></td>
</tr>
<tr>
<td>• Antico</td>
<td></td>
</tr>
<tr>
<td>• Grafica</td>
<td></td>
</tr>
<tr>
<td>• Cartographica</td>
<td></td>
</tr>
</tbody>
</table>

| **T105 – Filter on the coded data field (textual material, monographic)** | Select one of the following options from the drop-down list: |
| • Bibliografia                  |                                                                  |
| • Catalogo                      |                                                                  |
| • Indice                        |                                                                  |
| • Abstract o sunto              |                                                                  |
| • Dizionario                    |                                                                  |
| • Enciclopedia                  |                                                                  |
| • Directory                     |                                                                  |
| • Descr. progetti               |                                                                  |
| • Statistica                    |                                                                  |
| • Programmed text book          |                                                                  |
| • Brevetto                      |                                                                  |
| • Standard                      |                                                                  |
| • Dissertazione o tesi          |                                                                  |
| • Leggi e decreti               |                                                                  |
| • Tabella numerica              |                                                                  |
| • Report Tecnico                |                                                                  |
| • Prove per esami               |                                                                  |
| • Ricerche letterarie           |                                                                  |
| • Trattati                      |                                                                  |

<p>| <strong>Natura SBN – Filter on the SBN nature of the title</strong> | |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Select one of the following options from the drop-down list:</td>
</tr>
<tr>
<td></td>
<td>• Monografia</td>
</tr>
<tr>
<td></td>
<td>• Tit. non signif</td>
</tr>
<tr>
<td></td>
<td>• Record Analitico</td>
</tr>
<tr>
<td></td>
<td>• Seriale</td>
</tr>
<tr>
<td></td>
<td>• Collana</td>
</tr>
</tbody>
</table>

LivelloAut_Da – Filter on the SBN level

|       | Select one of the following options from the drop-down list: |
|       | • 51 |
|       | • 71 |
|       | • 90 |
|       | • 95 |
|       | • 96 |
|       | • 97 |

LivelloAut_A – Filter on the SBN level

|       | Select one of the following options from the drop-down list: |
|       | • 05 |
|       | • 51 |
|       | • 71 |
|       | • 90 |
|       | • 95 |
|       | • 96 |
|       | • 97 |

SotoTipoLegame – Filter based on the link with a special material type

|       | Select one of the following options from the drop-down list: |
|       | • P |
|       | • I |
|       | • L |
|       | • A |
|       | • E |
|       | • T |

Guida – Filter on the type of record and on the bibliographic level

<p>| Tipo | Select one of the following options from the drop-down list: |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• mat. a stampa</td>
</tr>
<tr>
<td></td>
<td>• mat. manoscritto</td>
</tr>
<tr>
<td></td>
<td>• part mus a stampa</td>
</tr>
<tr>
<td></td>
<td>• part mus manoscritte</td>
</tr>
<tr>
<td></td>
<td>• mat. cartog a stampa</td>
</tr>
<tr>
<td></td>
<td>• mat. cartog manoscritti</td>
</tr>
<tr>
<td></td>
<td>• mat. video proiezioni</td>
</tr>
<tr>
<td></td>
<td>• audioreg non musicali</td>
</tr>
<tr>
<td></td>
<td>• audioreg musicali</td>
</tr>
<tr>
<td></td>
<td>• mat. graf. bidimens</td>
</tr>
<tr>
<td></td>
<td>• risor elettr</td>
</tr>
<tr>
<td></td>
<td>• multimediali</td>
</tr>
<tr>
<td></td>
<td>• oggetti tridimensionali</td>
</tr>
</tbody>
</table>

Livello Bib
Select one of the following options from the drop-down list:
• monografia
• seriale
• analitico

CercaDatiTit(3)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T100 Range – This provides filters for the fixed positions in field 100 for the search that you specify in CercaDatiTit(1) using 100 $a position 8, 100 $a position 9, and 100 $a position 13.</td>
</tr>
</tbody>
</table>

T100_Da
Select one of the following options from the drop-down list on which to filter:
• None
• period corrente
• period cessata
• period sconosciuta
• monogr in un anno
• riproduzione
• mon data incerta
• mon su piu anni
• data copyright
• data rilascio/produzione
• data dettagliata
• data sconosciuta
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a_100_9</td>
<td>Enter the value on which to filter.</td>
</tr>
<tr>
<td>a_100_13</td>
<td>Enter the value on which to filter.</td>
</tr>
</tbody>
</table>

**T100_A**

Select one of the following options from the drop-down list on which to filter:

- None
- period corrente
- period cessata
- period sconosciuta
- monogr in un anno
- riproduzione
- mon data incerta
- mon su piu anni
- data copyright
- data rilascio/produzione
- data dettagliata
- data sconosciuta

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a_100_9</td>
<td>Enter the value on which to filter.</td>
</tr>
<tr>
<td>a_100_13</td>
<td>Enter the value on which to filter.</td>
</tr>
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</table>

**CercaDocMusicaType**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impronta (012)</strong></td>
<td></td>
</tr>
<tr>
<td>1a parte</td>
<td>Enter search criteria for 012 $a position 1.</td>
</tr>
<tr>
<td>2a parte</td>
<td>Enter search criteria for 012 $a position 2.</td>
</tr>
<tr>
<td>3a parte</td>
<td>Enter search criteria for 012 $a position 3.</td>
</tr>
<tr>
<td>nota</td>
<td>Enter text.</td>
</tr>
</tbody>
</table>

**Designazione specifica musica a stampa (125)**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Codice presentazione</td>
<td>Enter search criteria for 125 $a position 0.</td>
</tr>
<tr>
<td>Tipo testo letterario</td>
<td>Enter search criteria for 125 $b.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td><strong>Dati codificati musica (128)</strong></td>
<td></td>
</tr>
<tr>
<td>Organico sintetico</td>
<td>Enter search criteria for 128 $b.</td>
</tr>
<tr>
<td>Organico analitico</td>
<td>Enter search criteria for 128 $c.</td>
</tr>
<tr>
<td>Tipo elaborazione musicale</td>
<td>Enter search criteria for 128 $d.</td>
</tr>
<tr>
<td><strong>Filtro su titolo uniforme musicale (928)</strong></td>
<td></td>
</tr>
<tr>
<td>Forma della coomposizione</td>
<td>Enter search criteria for 928 $a.</td>
</tr>
<tr>
<td><strong>Filtro su titolo uniforme musicale (929)</strong></td>
<td></td>
</tr>
<tr>
<td>Numero d'ordine</td>
<td>Enter search criteria for 929 $a.</td>
</tr>
<tr>
<td>Numero d'opera</td>
<td>Enter search criteria for 929 $b.</td>
</tr>
<tr>
<td>Numero catalogo tematico</td>
<td>Enter search criteria for 929 $c.</td>
</tr>
<tr>
<td>Data composizione</td>
<td>Enter search criteria for 929 $d.</td>
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</table>

**CercaDocGraficaType**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dati codificati materiale grafico (116)</strong></td>
<td></td>
</tr>
<tr>
<td>Tipo specifico di materiale</td>
<td>Enter search criteria for 116 $a position 0.</td>
</tr>
<tr>
<td>Supporto primario</td>
<td>Enter search criteria for 116 $a position 1.</td>
</tr>
<tr>
<td>Colore</td>
<td>Enter search criteria for 116 $a position 3.</td>
</tr>
<tr>
<td>Tecnica per disegni/dipinti</td>
<td>Enter search criteria for 116 $a position 4.</td>
</tr>
<tr>
<td>Tecnica per stampe</td>
<td>Enter search criteria for 116 $a position 10.</td>
</tr>
<tr>
<td>Designazione di funzione</td>
<td>Enter search criteria for 116 $a position 16.</td>
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</table>

**CercaDocCartograficoType**

<table>
<thead>
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<th>Field</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Dati codificati materiale cartografico (120)</strong></td>
<td></td>
</tr>
<tr>
<td>Colore</td>
<td>Enter search criteria for 120 $a position 0.</td>
</tr>
<tr>
<td>Meridiano di origine</td>
<td>Enter search criteria for 120 $a position 9.</td>
</tr>
<tr>
<td><strong>Dati codificati materiale cartografico scala e coordinate (123)</strong></td>
<td></td>
</tr>
<tr>
<td>Tipo scala</td>
<td>Enter search criteria for 123 $a.</td>
</tr>
<tr>
<td>Scala orizzontale</td>
<td>Enter search criteria for 123 $b.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Scala verticale</td>
<td>Enter search criteria for 123 $c.</td>
</tr>
<tr>
<td>Estremi longitudine Ovest</td>
<td>Enter search criteria for 123 $d.</td>
</tr>
<tr>
<td>Estremi longitudine Est</td>
<td>Enter search criteria for 123 $e.</td>
</tr>
<tr>
<td>Estremi longitudine Nord</td>
<td>Enter search criteria for 123 $f.</td>
</tr>
<tr>
<td>Estremi longitudine Sud</td>
<td>Enter search criteria for 123 $g.</td>
</tr>
</tbody>
</table>

**CercaDocAudiovisivoType**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Videoregistrazioni, film, immagini proiettate</strong></td>
<td></td>
</tr>
<tr>
<td>Tipo di video</td>
<td>Select one of the following options from the drop-down list:</td>
</tr>
<tr>
<td></td>
<td>• None</td>
</tr>
<tr>
<td></td>
<td>• Film</td>
</tr>
<tr>
<td></td>
<td>• Immagine proiettata</td>
</tr>
<tr>
<td></td>
<td>• Videoregistrazione</td>
</tr>
<tr>
<td>Tecnica per videoregistrazioni e film</td>
<td>Select one of the following options from the drop-down list:</td>
</tr>
<tr>
<td></td>
<td>• Animazione</td>
</tr>
<tr>
<td></td>
<td>• Azione dal vivo</td>
</tr>
<tr>
<td></td>
<td>• Animazione ed azione dal vivo</td>
</tr>
<tr>
<td></td>
<td>• Non specificata/sconosciuta</td>
</tr>
<tr>
<td></td>
<td>• Altro</td>
</tr>
<tr>
<td><strong>Audioregistrazioni</strong></td>
<td></td>
</tr>
<tr>
<td>Formato di distribuzione</td>
<td>Select one of the following options from the drop-down list:</td>
</tr>
<tr>
<td></td>
<td>• None</td>
</tr>
<tr>
<td></td>
<td>• disco</td>
</tr>
<tr>
<td></td>
<td>• nastro (bobina aperta)</td>
</tr>
<tr>
<td></td>
<td>• nastro (cassetta)</td>
</tr>
<tr>
<td></td>
<td>• nastro (cartuccia)</td>
</tr>
<tr>
<td></td>
<td>• registrazione filo</td>
</tr>
<tr>
<td></td>
<td>• cilindro</td>
</tr>
<tr>
<td></td>
<td>• rullo (piano e organo)</td>
</tr>
<tr>
<td></td>
<td>• film (sound film)</td>
</tr>
<tr>
<td></td>
<td>• Altro</td>
</tr>
</tbody>
</table>
### CercaDocElettronicoType

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tipo di risorsa elettronica</td>
<td>Select one of the following options from the drop-down list:</td>
</tr>
<tr>
<td></td>
<td>• None</td>
</tr>
<tr>
<td></td>
<td>• Dati numerici</td>
</tr>
<tr>
<td></td>
<td>• Programma informatico</td>
</tr>
<tr>
<td></td>
<td>• Dati grafici</td>
</tr>
<tr>
<td></td>
<td>• Dati testuali</td>
</tr>
<tr>
<td></td>
<td>• Dati bibliografici</td>
</tr>
<tr>
<td></td>
<td>• Set di caratteri</td>
</tr>
<tr>
<td></td>
<td>• Gioco</td>
</tr>
<tr>
<td></td>
<td>• Suono</td>
</tr>
<tr>
<td></td>
<td>• Multimedia interattivo</td>
</tr>
<tr>
<td></td>
<td>• Sistema o servizio on line</td>
</tr>
<tr>
<td></td>
<td>• Sconosciuto</td>
</tr>
<tr>
<td></td>
<td>• Combinazione</td>
</tr>
<tr>
<td></td>
<td>• Altro</td>
</tr>
</tbody>
</table>

### ElementoAutLegato

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TipoAuthority</td>
<td>Select one of the following options from the drop-down list to filter on the authority linked to the bibliographic record:</td>
</tr>
<tr>
<td></td>
<td>• None</td>
</tr>
<tr>
<td></td>
<td>• AU = Autori</td>
</tr>
<tr>
<td></td>
<td>• TU = Titoli uniformi</td>
</tr>
<tr>
<td></td>
<td>• UM = titoli uniformi musica</td>
</tr>
<tr>
<td></td>
<td>• SO = Soggetti</td>
</tr>
<tr>
<td></td>
<td>• DE = Descrittori</td>
</tr>
<tr>
<td></td>
<td>• LU = Luoghi</td>
</tr>
<tr>
<td></td>
<td>• CL = Classificazione Dewey</td>
</tr>
<tr>
<td></td>
<td>• MA = marche</td>
</tr>
<tr>
<td></td>
<td>• RE</td>
</tr>
</tbody>
</table>

<p>| T001        | Enter a search value for the 001 field.                                     |
| Stringa     | Enter a search string on which to filter your search results.               |
|             | An asterisk (*) may be used for right truncation.                           |
| RelatorCode | Enter the code for additional filtering on the authority type.              |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArrivoLegameDoc</td>
<td>Enter the ID of a related record on which to filter your search results.</td>
</tr>
<tr>
<td>TipoLegameDoc</td>
<td>Select one of the following options from the drop-down list:</td>
</tr>
<tr>
<td></td>
<td>• None</td>
</tr>
<tr>
<td></td>
<td>• tutti</td>
</tr>
<tr>
<td></td>
<td>• Campo 410</td>
</tr>
<tr>
<td></td>
<td>• Campo 422</td>
</tr>
<tr>
<td></td>
<td>• Campo 430</td>
</tr>
<tr>
<td></td>
<td>• Campo 431</td>
</tr>
<tr>
<td></td>
<td>• Campo 434</td>
</tr>
<tr>
<td></td>
<td>• Campo 440</td>
</tr>
<tr>
<td></td>
<td>• Campo 447</td>
</tr>
<tr>
<td></td>
<td>• Campo 451</td>
</tr>
<tr>
<td></td>
<td>• Campo 461</td>
</tr>
<tr>
<td></td>
<td>• Campo 463</td>
</tr>
<tr>
<td></td>
<td>• Campo 464</td>
</tr>
</tbody>
</table>

### Searching for SBN Authority Records

After selecting the **SBN Authority Records** option for Search, select the CercaDatiAut, CercaAutoreType, CercaMarcaType, CercaTitoloUniformeMusicaType, CercaLuogoType, and/or CercaOtherTypes option(s) to enter the following search criteria:
In the authority search results, Alma supports the display of titles for standard and nonstandard fields to include the

CercaAutoreType Search Criteria

CercaMarcaType Search Criteria

CercaTitoloUniformeMusicaType Search Criteria

CercaLuogoType

CercaOtherTypes
following:

- 2XX
- 676
- 921
- 930
- 931

See the tables below for a list of the available search options:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TipoAuthority</td>
<td>Select one of the following options from the drop-down list:</td>
</tr>
<tr>
<td></td>
<td>• None</td>
</tr>
<tr>
<td></td>
<td>• AU = Autori</td>
</tr>
<tr>
<td></td>
<td>• TU = Titoli uniformi</td>
</tr>
<tr>
<td></td>
<td>• UM = titoli uniformi musica</td>
</tr>
<tr>
<td></td>
<td>• SO = Soggetti</td>
</tr>
<tr>
<td></td>
<td>• DE = Descrittori</td>
</tr>
<tr>
<td></td>
<td>• LU = Luoghi</td>
</tr>
<tr>
<td></td>
<td>• CL = Classificazione Dewey</td>
</tr>
<tr>
<td></td>
<td>• MA = marche</td>
</tr>
<tr>
<td></td>
<td>• RE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CanaliCerca</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>stringa</td>
<td>Enter a search string.</td>
</tr>
<tr>
<td>T001</td>
<td>Enter a numeric value.</td>
</tr>
<tr>
<td>T015</td>
<td>Enter a numeric value.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>T005 Range</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DataDA</td>
<td>Enter a date (YYYY-MM-DD) using the calendar.</td>
</tr>
<tr>
<td>DataA</td>
<td>Enter a date (YYYY-MM-DD) using the calendar.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LivelloAut Da- Filter on the SBN level</th>
<th>Select one of the following options from the drop-down list:</th>
</tr>
</thead>
</table>

Note
You first need to make a selection for TipoAuthority.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LivelloAut</td>
<td>Filter on the SBN level</td>
</tr>
<tr>
<td></td>
<td>Select one of the following options from the drop-down list:</td>
</tr>
<tr>
<td></td>
<td>• None</td>
</tr>
<tr>
<td></td>
<td>• 05</td>
</tr>
<tr>
<td></td>
<td>• 51</td>
</tr>
<tr>
<td></td>
<td>• 71</td>
</tr>
<tr>
<td></td>
<td>• 90</td>
</tr>
<tr>
<td></td>
<td>• 95</td>
</tr>
<tr>
<td></td>
<td>• 96</td>
</tr>
<tr>
<td></td>
<td>• 97</td>
</tr>
<tr>
<td>FormaNome</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one of the following options from the drop-down list:</td>
</tr>
<tr>
<td></td>
<td>• None</td>
</tr>
<tr>
<td></td>
<td>• solo accettati</td>
</tr>
<tr>
<td></td>
<td>• solo rinvii</td>
</tr>
<tr>
<td>RelatorCode</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The default is an empty text field.</td>
</tr>
<tr>
<td>Tipo Ord</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select 1, 2, 3, 4, or 5 from the drop-down list.</td>
</tr>
<tr>
<td></td>
<td>The default is 1.</td>
</tr>
<tr>
<td>TipoCerca</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one of the following from the drop-down list:</td>
</tr>
<tr>
<td></td>
<td>• Autore</td>
</tr>
<tr>
<td></td>
<td>• Musica</td>
</tr>
<tr>
<td></td>
<td>• Marca</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>• Luogo</td>
<td></td>
</tr>
<tr>
<td>• Soggetto</td>
<td></td>
</tr>
<tr>
<td>The default is <strong>Autore</strong>.</td>
<td></td>
</tr>
</tbody>
</table>

### CercaAutoreType

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>paroleAut</td>
<td>Enter your search term(s).</td>
</tr>
<tr>
<td>tipoNome</td>
<td>Select one of the following options from the drop-down list:</td>
</tr>
<tr>
<td></td>
<td>• None</td>
</tr>
<tr>
<td></td>
<td>• A</td>
</tr>
<tr>
<td></td>
<td>• B</td>
</tr>
<tr>
<td></td>
<td>• C</td>
</tr>
<tr>
<td></td>
<td>• D</td>
</tr>
<tr>
<td></td>
<td>• E</td>
</tr>
<tr>
<td></td>
<td>• R</td>
</tr>
<tr>
<td></td>
<td>• G</td>
</tr>
</tbody>
</table>

### CercaMarcaType

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>paroleAut</td>
<td>Enter your search term(s).</td>
</tr>
<tr>
<td>Repertorio</td>
<td>Enter your search criteria.</td>
</tr>
<tr>
<td>Citazione</td>
<td>Enter your search criteria.</td>
</tr>
<tr>
<td>b_921</td>
<td>Enter your search criteria.</td>
</tr>
<tr>
<td>e_921</td>
<td>Enter your search criteria.</td>
</tr>
</tbody>
</table>
Finding Bibliographic Records Linked to SBN Authority Records

When you search the SBN Union Catalogue for authority records (Search External Resources), the results list action **Linked bibliographic records** enables you to find any bibliographic records linked to the SBN authority record in your search results.
Finding Bibliographic Records Linked to SBN Bibliographic Records

When an SBN bibliographic record includes an indication of a related record linked to it (specified in the 996 field with $a D such as 996 $a TD), the Linked bibliographic records button appears next to the title in the search results. You can select this button to access the linked SBN records.

Cataloging and Contributing Records to the SBN Union Catalog

New, updated, and deleted bibliographic and/or authority records can be contributed to the SBN Union Catalogue using the Alma MD Editor. A record that you work with in the MD Editor is contributed to the SBN Union Catalogue by selecting Contribute Record to Central Catalog from the File menu in the MD Editor.

The Contribute Record to Central Catalog option for the SBN Union Catalogue is only available after you have created an SBN central catalog integration profile (see Configuring the SBN Central Catalog Integration Profile).

When a contribution is completed successfully, the message Record was successfully contributed to the central catalog and saved in Alma appears beneath the MD Editor menu toolbar.
If the contribution fails, the pop-up message Contribution has failed. The error returned from the central catalog: <ERROR>. Do you want to overwrite your local copy with the record from the central catalog? Yes/No appears. By selecting Yes, the local copy in Alma is entirely overwritten.

SBN bibliographic and authority records are identified in the following manner:

- UNIMARC 994 $a SBN_BIB
- UNIMARC 994 $a SBN_AUT

When you create new records in Alma and select Contribute Record to Central Catalog, the 994 $a information is added to the record. Using the MD Editor search for external resources function, you can search for your contributed record and verify that, in fact, the 994 $a was added. Note that 994 is the out-of-the-box field specified for this purpose, but a different field can be configured by using the SBN to Alma Fields option in the integration profile.

When records are contributed to the SBN Union Catalogue, SBN checks for duplicates. When duplicates are found, the pop-up message Similar records were found in SBN. Would you like to view them before contributing? Yes/No appears in Alma.

If you select No, the record is contributed to the SBN Union Catalogue.

If you select Yes, the similar record appears in the split screen view of the MD Editor with the following available actions:

- View
- Import
- Copy and Overlay
- Copy and Merge
- Merge Preview

If you choose not to take any of these actions, you can select Contribute Record to Central Catalog again; and select No to contribute the record.

When the Allow Delete parameter is selected in the SBN central catalog integration profile and the UNIMARC 035 contains the SBN record identifier (BID) and prefix, the File > Delete Record option can be selected for an open record in the MD Editor to submit a deleted record to the SBN Union Catalogue. A pop-up confirmation message in Alma prompts you to confirm your deletion request by selecting Yes or No.

If your contribution processes successfully in the SBN Union Catalogue, the deletion status is sent back to Alma; and the record is also deleted from the Alma local repository.

---

Creating the SBN Union Catalogue BID

Using named sequences configured with Alma’s Control Number feature and the BibGenerateControlNumberSequence normalization task, a bibliographic record can be updated with a BID number in the UNIMARC 035 $a. Subsequently, when the record is contributed to the SBN Union Catalogue, Alma copies the BID number from the UNIMARC 035 $a to the UNIMARC 001 field. See Configuring Control Numbers for more information.
Sending Location Information and Updating the UNIMARC 899 Field in Alma

While editing UNIMARC bibliographic or authority records in the MD Editor, the Manage Location Information option (Tools > MARC Bibliographic > Manage Location Information or Tools > MARC Authorities > Manage Location Information) can be used to send location information to SBN regarding materials that you own. This is done when you add, update, or remove location information.

In order for this feature to work successfully, the following conditions need to be met:

- Your Central Catalog Configuration integration profile needs to be configured for Integration Level 2 or higher. See Configuring the SBN Central Catalog Integration Profile for more information.
- The Add 899 parameter needs to be set to Yes in the Central Catalog Integration profile (see Add 899), and the record that you are editing needs to have an 899 field with $2 that contains your identification information provided to you by SBN (a combination of an alphabetic and numeric code).

To send location information to SBN:

1. Open a UNIMARC record in the MD Editor.
2. Make the 899 $2 the focal point in the record.
3. Select Tools > MARC Bibliographic > Manage Location Information (Alt+Shift+L) for bibliographic records or Tools > MARC21 Authorities > Manage Location Information (Alt+Shift+L) for authority records. (Note that the MARC labeling is a known issue to be fixed in a future release.) The Manage Location Information pop-up appears.

4. Select one of the Action options (Add, Update, or Remove) and one of the Information Type options (Possesso, Gestione, or Tutti); and select OK. When the location information has been successfully submitted to SBN, $8 is updated in the 899 field with the Information Type option that you selected.

5. Save the record.
Searching the 899 Field in Alma

The UNIMARC 899 local field is indexed so that you can search any 899 subfield using simple and/or advanced repository search in Alma. In order to use this capability, you first need to enable the local_field_899 search index code in the Search Configuration (Configuration Menu > Resources > Search Configuration > Search Indexes). See Configuring Search for more information.

After you have enabled the local_field_899 search index code, you can access the local field 899 search option in the drop-down list for an All titles search.

Deleting Records Contributed to SBN

If your SBN integration configuration profile is configured for Integration Level 3 or higher, you may delete contributed records from SBN when working with UNIMARC records in the MD Editor.

To delete records contributed to SBN:

1. Open the UNIMARC record in the MD Editor that you want to delete.
2. Select File > Delete Record. The Confirmation Required popup appears.

   SBN Delete Confirmation Popup

   The Delete the record in Central Catalog check box is selected by default.

   If your SBN integration configuration profile does not have the Allow Delete check box selected, the Delete the record in Central Catalog check box will not appear in the Confirmation Required popup.

3. Select Yes to delete the record in the SBN central catalog and the Alma database.
Linking to SBN Authority Records

Bibliographic records are linked to SBN authority records by the SBN authority record ID that is stored in $3 of the 7XX field.

Adding 7XX $3 for Linking

In addition to manually adding the 7XX $3 to a bibliographic record, Alma provides the capability to automatically locate the relevant authority record, during record contribution to SBN, and add it’s ID to $3 of the 7XX field when $3 is missing as shown in the example below.

When $3 is missing from the record you are editing and you contribute that record to SBN (File > Contribute Record to Central Catalog in the MD Editor), Alma does the following:

- If no authority record ID exists in the 7XX field, Alma checks SBN for a matching authority record based on the value in the 7XX field (using all subfields in the 7XX field).
- If a match is found, Alma automatically adds the record ID to the $3.
- If no match is found, Alma creates and contributes an SBN authority record, and adds the record ID of the new record to the 7XX $3.
Webhooks

To configure a webhooks definition profile, you must have the following role:

- General System Administrator

Webhooks are user-defined HTTP callbacks that are usually triggered by some event, and include information on the results or status of that event.

Alma is able to send a webhook when one of the following occurs:

- A job run has finished running (using either the Alma UI or an API).
- A user is updated.
- One of the following notifications is sent:
  - Ful Cancel Request Letter (letter code: FulCancelRequestLetter)
  - Loan Status Notice (letter code: FullItemChangeDueDateLetter)
  - On Hold Shelf Letter (letter code: FulPlaceOnHoldShelfLetter)

Webhooks for these letters must be activated in the Letter Activity code table. For detailed information on these webhooks, see https://developers.exlibrisgroup.com/alma/apis/xsd/rest_webhook_notifications.xsd.

For more information on webhooks, see the Developer Network.

In order for a webhook to be activated, Alma must have a webhooks integration profile configured.

To configure a Webhooks type of integration profile:

1. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile. The first page of the integration profile wizard opens.
2. From the Integration type drop-down list, select Webhooks and enter a code and name for the profile.
3. Select Next. The second page of the wizard opens.
4. Select **Activate** to activate the webhooks integration profile. Until the profile is activated, the status reads **Pending activation**.

5. Enter the listener URL for the **Webhook Listener URL** and secret code in **Secret**. For information on the values to be entered here, see the Technical Information table in [Webhooks](#).

6. Select whether the message type should be **XML** or a **JSON**.

7. Under **Subscriptions**:
   - Select **Job finish** to send a webhook when a job run has finished running (using either the Alma UI or an API).
   - Select **Notifications** to send a webhook when one of the following notifications is sent: **FulCancelRequestLetter**, **FulUserBorrowingActivityLetter**, **FulItemChangeDueDateLetter**, **FulPlaceOnHoldShelfLetter**. Select **Configure Notification Types** to activate the webhooks for these letters in the [Letter Activity code table](#). For detailed information on these webhooks, see the [Developer Network](#).
   - Select **Users** to send a webhook when user information is updated. This includes all user changes for which history is registered, including changes made by the Users job. Note that user changes using an API do not cause a webhook to be sent. In the **User groups** box, select the the user groups that will trigger a webhook to be sent. If no user groups are specified, a webhook will be sent for all user groups.
   - Select **Requests** to send a webhook when a hold, booking, move, digitization, or work order request is created, closed, or placed on the hold shelf.
   - Select **Loans** to send a webhook when a loan is created, returned, or declared lost.
   - Select **BIB records** to send a webhook when a BIB record is changed.
   - Select **Physical items** to send a webhook when a physical item is changed.

8. Select **Save**. The profile you configured appears in the Integration Profile List.

**Note**

- After the integration profile has been defined, you can select View Log from the list of integration profile actions. This option enables you to view a log of webhook events. The URL and payload elements of the table may then be searched.
- If webhook attempts fail, emails are sent to all the email addresses stipulated in the Webhooks profile’s Contact...
Information tab.

- In Premium Sandbox environments, all the Subscription boxes are cleared automatically, effectively deactivating the integration profile. This is because the webhook actions that take place in the Sandbox environment land on the listener server the same as production data, which results in mixing test data and production data. If you want to activate the integration profile on a Sandbox environment, select the relevant subscriptions on this page and proceed as instructed in step 7 above.
Configuring the SWORD Server Integration Profile

You can integrate Alma with a SWORD Server to submit files for deposit to the Alma repository. SWORD (Simple Web-service Offering Repository Deposit) is an interoperability standard that allows digital repositories to accept the deposit of content from multiple sources in different formats.

You do this using an integration profile.

To integrate with the SWORD server:

1. From the Integration Profile List (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile.
2. From the Integration Type drop-down list, select SWORD Server.
3. Enter an optional description and select Next. The second step of the wizard appears.

   **Note**

   You can only define one instance of the SWORD Server integration profile. The Default check box has no functionality.

---

**SWORD Integration Profile Definitions**

4. Select Active or Non-Active.
5. Enter a user name and password.

   You use the base URL with the user name and password in your SWORD client's configuration to deposit files into the Alma repository.

6. Select Save to save the profile.

   **Note**

   For additional information concerning the SWORD API, see the Developer Network.
Integrating an Alma Institution with SUDOC

Alma supports a workflow that provides integration with SUDOC, the French National Catalog. With this capability, bibliographic record changes can be imported from SUDOC into Alma. This is handled with email exchanges between an Alma library and ABES, the SUDOC Cataloging Services. See SUDOC Workflow for more details of the workflow. The following is an example of the email sent to ABES that triggers the start of the import procedure:

From: <Library Email Address>
Date: <Date>
Subject: GET TITLE DATA
To: <ABES Email Address>

GTD_ILN=trytr
GTD_YEAR=2017
GTD_FILE_TO=SUDOC_FTP
GTD_ORDER=TR123*
GTD_REMOTE_DIR=SUDOC_FTP_DIR

This email initiates a process in ABES that creates files of changed records placed in the ABES FTP/SFTP server and sends a response email with a subject line of **GTD Status: 0** and a list of the files created. The schedule for sending the trigger email is defined in the Alma SUDOC central integration profile. See Configuring the Central Catalog Integration Profile for SUDOC.

SUDOC Workflow

The SUDOC integration workflow processes in the following manner:

- **Integration Job:**
  - Per the scheduled frequency, the integration profile samples the incoming mail to check if new files located in ABES FTP server (waiting for import).
  - Per the scheduled frequency, an email is sent from the library to ABES to request library updates (with the subject GET TITLE DATA and the content as described above in the body of the email).
  - If new emails (with the GTD Status: 0) are detected with the list of files, the job accesses the ABES FTP/SFTP server and gets the files (per the FTP/SFTP server details set in the SUDOC import profile). ABES manages the files on the FTP/SFTP server.
  - If the GTD status is something other than 0, the files are not processed and an error is reported.
  - Files included in successful emails (with the GTD Status: 0) are processed by the SUDOC import job.

- **Import Job:**
  - For a successful email (with GTD Status: 0), the SUDOC import profile handles the files (with the status OK) and the library’s repository is updated.
  - In cases where more than one file is placed in the ABES FTP/SFTP server, the files are processed one by one according to their chronological order.
Only type A (bibliographic updates) are processed. Any other type is reported as an error.

---

**Configuring the Central Catalog Integration Profile for SUDOC**

In order to integrate with SUDOC, you must configure a Central Catalog Integration profile.

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

1. From the Integration Profile List page ([Configuration Menu > General > External Systems > Integration Profiles](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 **Next**. The next page of the Integration Profile configuration appears.
5. Complete the integration profile using the table below for more information.

<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>SUDOC (file based)</strong> as the central catalog system type that you are configuring.</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td>Only one Central Catalog Integration profile can be configured per institution.</td>
</tr>
<tr>
<td><strong>System Configuration</strong></td>
<td></td>
</tr>
<tr>
<td>Abes Email</td>
<td>Enter the ABES email address to which the GET TITLE DATA email is sent from the library's email account (not an Alma email account).</td>
</tr>
<tr>
<td>Library ILN</td>
<td>Enter the library number as identified by SUDOC. This number will be part of the GET TITLE DATA email sent to ABES.</td>
</tr>
<tr>
<td>Library Email</td>
<td>Enter the library's email address from which emails are sent to ABES requesting updates. The subject line of these emails must be GET TITLE DATA.</td>
</tr>
<tr>
<td>Email Server Host</td>
<td>Enter the IP address of the library's email server (not an Alma server).</td>
</tr>
<tr>
<td>Email Server Port</td>
<td>Enter the port number of the library's email server (not an Alma server).</td>
</tr>
</tbody>
</table>
6. Select Save.

Configuring an Import Profile for the ABES/SUDOC Integration Processing

For records that change in the ABES/SUDOC central catalog that you want to incorporate into your Alma catalog, you need to configure an Alma import profile. In order for this Alma import profile to work properly, there are certain configuration parameters in it that need to coincide with the parameters that you specified in the SUDOC Central Catalog Integration profile described in the section above, Configuring the Central Catalog Integration Profile for SUDOC.

To configure an import profile for ABES/SUDOC integration processing:

1. From the Import Profiles page (Resources > Import > Manage Import Profiles), select Add New Profile.
2. Select the Repository profile type and select Next.
3. Enter your import profile details for the steps of the wizard and using the table below for an explanation of your parameter options.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Username</td>
<td>Enter the user name for the library's email server.</td>
</tr>
<tr>
<td>Password</td>
<td>Enter the password for the library's email server.</td>
</tr>
<tr>
<td>FTP Server</td>
<td>Enter the address/IP for the ABES FTP/SFTP server.</td>
</tr>
<tr>
<td>FTP Sub Directory</td>
<td>Enter the FTP directory in which the files are placed by ABES.</td>
</tr>
<tr>
<td>Order Number</td>
<td>Enter the library order number that will be included in the GET TITLE DATA email sent to ABES.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Select one of the scheduling options to define the frequency of sending an email to ABES and sampling the incoming box to look for new files from ABES. You may also manually run this integration profile by selecting Run.</td>
</tr>
</tbody>
</table>

SUDOC Import Profile

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wizard Step 2:</td>
<td></td>
</tr>
<tr>
<td>Profile Details</td>
<td></td>
</tr>
<tr>
<td>Profile Name</td>
<td>Enter a name for your SUDOC import profile.</td>
</tr>
<tr>
<td>Profile Description</td>
<td>Use this parameter to further describe and identify the profile that you are creating.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Originating System</td>
<td>Select the SUDOC system from the list of options.</td>
</tr>
<tr>
<td>File name patterns</td>
<td>Enter the prefix pattern used by ABES for the files that are stored in the ABES FTP/SFTP server. For example:</td>
</tr>
<tr>
<td></td>
<td>◦ For files that begin with TR, use <code>^TR</code></td>
</tr>
<tr>
<td></td>
<td>◦ For files that end with RAW, use <code>RAW$</code></td>
</tr>
<tr>
<td></td>
<td>◦ To retrieve file type A when file type A and file type B is provided, use <code>A</code></td>
</tr>
<tr>
<td>Import Protocol</td>
<td>Select FTP from the drop-down list.</td>
</tr>
<tr>
<td>Crosswalk</td>
<td>Select No.</td>
</tr>
<tr>
<td>Physical Sources Format</td>
<td>Select Binary.</td>
</tr>
<tr>
<td>Encoding</td>
<td>Select UTF-8.</td>
</tr>
<tr>
<td>Source Format</td>
<td>Select UNIMARC Bibliographic.</td>
</tr>
<tr>
<td>Target Format</td>
<td>Select UNIMARC Bibliographic.</td>
</tr>
<tr>
<td>Status</td>
<td>Select Active when you are ready to begin using the import profile.</td>
</tr>
<tr>
<td>Scheduling</td>
<td></td>
</tr>
<tr>
<td>Files to import</td>
<td>Select New.</td>
</tr>
<tr>
<td>Scheduler Status</td>
<td>Select Active in order to select a Scheduler option.</td>
</tr>
<tr>
<td>Scheduler</td>
<td>Select a scheduling option from the drop-down list that matches your requirements.</td>
</tr>
<tr>
<td>Email Notifications</td>
<td>Select Email Notifications and enter the email addresses to be used for notifications regarding the scheduled jobs.</td>
</tr>
<tr>
<td>FTP Information</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Enter a description of the FTP/SFTP.</td>
</tr>
<tr>
<td>Server</td>
<td>Enter the FTP/SFTP server address. This should match the information in the central catalog profile that you created. See Configuring the Central Catalog Integration Profile for SUDOC.</td>
</tr>
<tr>
<td>Port</td>
<td>Enter the port number for the FTP/SFTP server.</td>
</tr>
<tr>
<td>User Name</td>
<td>Enter the user name for the FTP/SFTP server.</td>
</tr>
<tr>
<td>Password</td>
<td>Enter the password for the FTP/SFTP server.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Input Directory</td>
<td>Enter the FTP directory in which the files are placed by ABES.</td>
</tr>
<tr>
<td>Max. Number of Files</td>
<td>Enter the maximum number of FTP files.</td>
</tr>
<tr>
<td>Max. File Size</td>
<td>From the drop-down list, select the maximum file size for a single file.</td>
</tr>
<tr>
<td>Size type</td>
<td>From the drop-down list, select the size type (MB, GB, or TB).</td>
</tr>
<tr>
<td>FTP Server Secured</td>
<td>Select this check box for secured server.</td>
</tr>
<tr>
<td>FTP Passive Mode</td>
<td>Select this check box for passive mode.</td>
</tr>
<tr>
<td>Test Connection</td>
<td>Select <strong>Test Connection</strong> to confirm that the parameters you have set work properly.</td>
</tr>
</tbody>
</table>

**Wizard Step 3:**

**Filter**

Filter Out the Data Using | Select the normalization option that matches your requirements for filtering.                                                                                      |

**Normalization**

Correct the Data Using | Select the normalization rule that matches your requirements for correcting the data.                                                                       |

**Validation Exception Profile**

Handle invalid data using | Select **UnimarcXML Bib Metadata Editing On Save**.                                                                                                               |

**Wizard Step 4:**

**Match Profile**

Serial match method | Select 035 (Other System Identifier) Match Method.                                                                                                               |

System Identifier Prefix | Specify the system identifier prefix, if there is one.                                                                                                           |

Non Serial match method | Select 035 (Other System Identifier) Match Method.                                                                                                               |

System Identifier Prefix | Specify the system identifier prefix, if there is one.                                                                                                           |

**Match Actions**

Handling method | Select **Automatic**.                                                                                                                                 |

Upon match | Select **Overlay**.                                                                                                                                 |

Merge/Overlay | Select the following:                                                                                                                                      |
<p>|              | ◦ Merge method – Overlay all fields but local                                                                                                             |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>◦ Select Action – Select one of the following actions that matches your requirements:</td>
<td></td>
</tr>
<tr>
<td>▪ Allow bibliographic record deletion</td>
<td></td>
</tr>
<tr>
<td>▪ Do not override/merge a record with lower brief version</td>
<td></td>
</tr>
<tr>
<td>▪ Unlink bibliographic records from Community Zone</td>
<td></td>
</tr>
<tr>
<td>▪ Do not override/merge record with an older version – Select <strong>Disabled</strong>.</td>
<td></td>
</tr>
</tbody>
</table>

**Automatic Multi-Match Handling**

<table>
<thead>
<tr>
<th>Select Action</th>
<th>Select one of the following options, if needed, that matches your requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>◦ Disregard matches for bibliographic CZ linked records</td>
<td></td>
</tr>
<tr>
<td>◦ Disregard invalid/canceled system control number identifiers</td>
<td></td>
</tr>
<tr>
<td>◦ Prefer record with the same inventory type (electronic/physical)</td>
<td></td>
</tr>
<tr>
<td>◦ Skip and do no import unresolved records</td>
<td></td>
</tr>
</tbody>
</table>

**Merge Records and Combine Inventory for Multi-Match**

<table>
<thead>
<tr>
<th>Merge and Combine</th>
<th>Select <strong>Disabled</strong>.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferred record</td>
<td>Select <strong>Record with the most items</strong>.</td>
</tr>
<tr>
<td>Secondary record</td>
<td>Select <strong>Delete</strong>.</td>
</tr>
<tr>
<td>Merge method</td>
<td>Select <strong>Overlay all fields but local</strong>.</td>
</tr>
<tr>
<td>Update holding call number</td>
<td>Select this option if you want to update the holdings call number when importing.</td>
</tr>
</tbody>
</table>

**Handle Record Redirection**

<table>
<thead>
<tr>
<th>Canceled record field/ Canceled record subfield</th>
<th>Specify the field/subfield for the canceled record.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canceled record</td>
<td>Select <strong>Delete</strong>.</td>
</tr>
<tr>
<td>Merge method</td>
<td>Select <strong>Overlay all fields but local</strong>.</td>
</tr>
<tr>
<td>Update holding call number</td>
<td>Select this option if you want the holdings call number updated.</td>
</tr>
</tbody>
</table>

**No Match**

| Upon no match | Select **Import**. |

**Wizard Step 5:**

**Set Management Tags for all the Records Imported Using this Profile**

<p>| Suppress record/s from publish/delivery | For the imported records, select this option if you want these records to be suppressed. |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synchronize with OCLC</td>
<td>Select <em>Don't publish.</em></td>
</tr>
<tr>
<td>Synchronize with Libraries Australia</td>
<td>Select <em>Don't publish.</em></td>
</tr>
</tbody>
</table>

Wizard Step 6:

Inventory Operations

Select *None.*

4. Select **Save**.

**SUDOC Job Report**

When the SUDOC integration profile job and import jobs have completed, the following type of job report is produced for successful and failed jobs.

**SUDOC Job Report – Successful**

**SUDOC Job Report – Failed**
Integrating a Non-Alma Member's Inventory from a Central System into a Bridge Institution Managed by a Network Zone

**Note**
The Aleph Bridge Integration profile is an integration profile for specific use cases. This profile should be configured as part of the Alma implementation and cannot be configured without approval from Ex Libris Support.

For use cases where an Alma Network has non-Alma members that utilize an Aleph central catalog and want the Network Zone inventory to represent all members, the Aleph Bridge Integration profile is designed to integrate the non-Alma member inventory (holdings, items, and electronic information) into bridge members in the Alma Network Zone. See [Configuring the Aleph Bridge Integration Profile](#) for more information.

This implementation assumes that the Aleph central catalog can publish the inventory information, attached to a bibliographic record, in dedicated fields such as 200, OWN, and Z30. It also assumes that the ADM code that identifies the member is available for each holdings or item record in order to import the inventory to the appropriate bridge member. The inventory from the Aleph central catalog is published to a single FTP location from where the Aleph Bridge Integration profile is able to import and process the files. Note that Alma expects that only the existing inventory of each member will be published each time, and will do a full replace of the inventory that previously existed in the Alma bridge institution, with the inventory that was published from the Aleph bridge.

### Configuring theAleph Bridge Integration Profile

In order to integrate a non-Alma member's inventory from a central Aleph system into a bridge institution, an Aleph Bridge Integration profile must be created in the Network Zone. In this use case, the Network Zone manages the process.

**To configure an Aleph Bridge Integration profile in the Network Zone:**

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 **Aleph Bridge Integration** from the **Integration Type** drop-down list.
4. Select **Next**. The next page of the Integration Profile configuration appears.
5. Complete the integration profile using the table below for more information.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inventory Import Configuration</strong></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>Select <strong>Active</strong> when you are ready to use this as an active profile.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Select the schedule that you prefer for running the Aleph Bridge Integration profile. You may also choose to run this job manually. See <strong>Run</strong> for more information.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>FTP Configuration</td>
<td>Select the FTP configuration from the drop-down list that identifies where the published files from the Aleph central catalog are located.</td>
</tr>
<tr>
<td>External System Prefix</td>
<td>Enter the prefix that identifies the external system of the non-Alma records. In Alma’s bibliographic records, this prefix is stored in the 035 field to distinguish it as a non-Alma record.</td>
</tr>
<tr>
<td>ADM Code to Alma Institution Code</td>
<td>Use this ADM code mapping table to map Aleph library ADM codes to an Alma shadow member institution in the Alma Network Zone. This configuration option should be used when there are several Aleph libraries that each have a unique ADM code but are mapped to the same Alma bridge institution.</td>
</tr>
</tbody>
</table>
| To enter ADM codes for libraries: | 1. Select **ADM Code to Alma Institution Code**.  
2. Select **Add Row**.  
3. Enter the **ADM Code** for a library and the **Alma Institution Code** (configured for the institution by Ex Libris), and select **Add Row**.  
4. Repeat the step above for each library that requires a unique code. See the example below.  
5. Select **Customize** to save your mapping.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Run                          | After you have configured and saved the Aleph Bridge Integration profile, you can return to this profile and use **Run** to manually run the integration process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Holdings Mapping            | Select **Holdings Fields Mapping** to create the holdings mapping from the FTP file(s) source to the Alma target.  
On the Mapping Table page that appears, select **Add Row**, and enter the following information:  
• Source Tag  
• Source Subfield  
• Source settings for the first and second indicator (separated by a comma)  
For indicators that are to be left blank, use the hash tag (#).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>◦ Target Tag</td>
<td></td>
</tr>
<tr>
<td>◦ Target Subfield</td>
<td></td>
</tr>
<tr>
<td>◦ Target settings for the first and second indicator (separated by a comma)</td>
<td></td>
</tr>
<tr>
<td>For indicators that are to be left blank, use the hash tag (#).</td>
<td></td>
</tr>
<tr>
<td>Select Add Row and repeat the Add Row procedure for each tag that needs to be mapped.</td>
<td></td>
</tr>
<tr>
<td>When you are finished adding rows, select Customize.</td>
<td></td>
</tr>
</tbody>
</table>

**Item Mapping**

Since items in Alma are created with a fixed form, the parameters in the Item Mapping section directly correspond to the parameters in Alma's Physical Item Editor. As a result, the only thing that needs to be indicated is the source subfield (from the Aleph central catalog file) for each of the following parameters:

- Material Type subfield
- Item ID subfield
- Library subfield
- Location subfield
- Barcode subfield
- Item policy subfield
- Item Call Number subfield
- Inventory number subfield
- Inventory date subfield
- Description subfield
- Holdings ID subfield
- Institution Code
- Item date subfield (saved to the modification date in Alma)

**Default (material type)**

Specify the material type that you want identified as the default in situations where the received item does not have a material type specified.

**Material Type Mapping**

Select Material Type Mapping and enter the Aleph material type label that will be found in the FTP file(s). When the record is stored in Alma, it will be stored with the corresponding Alma material type identification. Three Aleph Material Type columns are provided for you to enter three different possible Alma material type that may occur in the FTP file(s) for the one Alma material type identified in this mapping table.

6. Select Save.

**Aleph Bridge Integration Job Report**

When you run the Aleph Bridge Integration job, a report is created that contains the following information:
• Institution Name
• Processed holdings/items – Count of processed holdings/items by the import job.
• Failed holdings – Count of holdings failed to import to Alma.
• Failed items – Count of items failed to import to Alma.
• Failed record details – Each failed holdings and/or item record is identified by member code and record ID. An error message is provided for each failed record. Optionally, this event information can be exported to an Excel file.

To view this report:

1. Open the Monitor Jobs page (Admin > Monitor Jobs) and select the History tab.
2. Select Report from the row actions list for the Aleph Bridge Integration report.
3. Select the Member bar to expand the report results to view the results for each bridge institution (member) in Alma.

Aleph Bridge Integration Report Results

4. Select the Failed records row action. The Job Events section appears with links to the details for the holdings and item records that failed and an option to export the job events to an Excel file.

Job Events

5. Select the links to view the record failure details and/or export the event information to an Excel file.

Ex Libris, a ProQuest Company
Alma Network Zone Configuration for Integration with Aleph Members

This document describes the workflows and configurations needed to support hybrid consortia where the network zone is in an Alma network zone and some of the members use Aleph or Alephino as their library systems. In this case, the Alma Network Zone is the master of all bibliographic and authority records. The Alma network is therefore responsible for all cataloging as well as publishing the bibliographic data for other members to use. Each member is the master of its own inventory. In order to keep the network up-to-date with the inventory information of each member, non-Alma members publish their inventory information to the Alma network zone as well.

The components of this integration consist of the following: an Alma network zone, an Aleph bridge institution, Aleph/Alephino members, Alma members, and Alma bridge institutions to represent the Aleph/Alephino members in Alma.

The following diagram illustrates the workflows that the integration provides:

Aleph-Based Networks with Alma as the Central Catalog

In order to configure an Alma network zone to work with Aleph members, three procedures must be implemented. Each one requires configurations in Alma and in Aleph:

- Bibliographic Record Synchronization
- Cataloging Bibliographic Records in the Alma Network Zone from the Aleph Members
- Importing Inventory Information of Non-Alma members to the Alma Network Zone

The Alma Network Zone is the central catalog of the consortia. This means that it controls the consortia records (bibliographic and authority records). Those members that are not currently in Alma are able to continue to use the Aleph bridge as their central catalog. Therefore, the bridge needs to be kept up-to-date and synchronized with the Alma Network Zone.
Alma Configuration

This section deals with the configuration of the Alma Network Zone publishing to the Aleph Bridge.

1. Create a set in Alma in order to publish the bibliographic records. The following are examples of sets:
   - All titles (Other System number = <ISIL code of the organization>)
   - All titles (Tag Suppressed equals No)

2. Create normalization rules so that matching is performed correctly in the Aleph bridge by entering the text below. The rules modify the published records so that the unique identifier of the record is placed in the 001 and the Alma unique identifier is placed in the 035.

   ```plaintext
   rule "Copy MMS ID from 001 to 035"
   priority 2
   when
     (TRUE)
   then
     addSystemNumber "035.a" from "001" prefixed by ""
     prefix "035.a" with "(ALMA)" if(exists "035.a.99**")
     removecontrolField "001"
   end

   rule "Move AC number from 035 to 001"
   priority 1
   when
     (exists "035.a.<isil code>**")
   then
     removeControlField "001" if(existsControl "001")
     copyField "035.a" to "999.a" if (exists "035.a.<isil code>**")
     replaceContents "999.a.<isil code>" with ""
     copyControlField "999.a" to "001"
     removeField "999"
   end
   ```

   For more information on normalization rules, see Working with Normalization Rules.

3. Configure a normalization process that uses the normalization rules you configured. For more information, see Configuring Processes.

4. Create a publishing profile with the following details. For more information on publishing profiles, see Publishing Profiles.
   - **Profile Details**
     - **Scheduling**: Hourly
     - **Publishing Mode**: Incremental
     - **Publishing on**: Bibliographic level
     - **Output format**: MARC 21 Bibliographic (record will undergo MARC 21 to MAB crosswalk in the Aleph Bridge side)
- **Publishing protocol**: FTP (Published files will be located on Aleph Bridge FTP. These files will be read in an Aleph job list and processed automatically into the Aleph Bridge catalog.) For more information on configuring an FTP account in Alma, see Configuring S/FTP Connections.

- **Data Enrichment**

  For the **Correct the data using normalization rules** field, enter: Publishing BIB records.

5. Configure the BIB Redirection Fields (Configuration > Resources > Cataloging):

   ![BIB Redirection Fields](image)

   This configuration table sets the parameters for updating BIB records when the action of **Merge Bibliographic Records and Combine Inventory** takes place at the Alma Network Zone. The information of the BIB updates (redirection data) is published to the Aleph bridge so that the data is replicated in the Aleph members.

   The values entered in this configuration table define the policy for storing the record ID of the secondary bibliographic record (the one that is moved to the main record) within the primary one (the one to which the merge was done).

   1. In the **Merged Record ID Tag** and **Subfield** fields, enter the BIB field and subfield of the primary record that stores the BIB ID of the secondary record.
   2. In the **Identifier Type** field, select **Other system number (035$$a)**.
   3. In the **System Identifier Prefix** field, select the system identifier prefix.

   For more information, see Configuring BIB Redirection Fields.

---

**Aleph Configuration**

This section describes the loading of Bibliographic records in Aleph from Alma. This includes loading new bibliographic records (no match in Aleph database), updating existing records (unique match in Aleph database), and deleting existing records (unique match in Aleph database).

1. The 001 field must be indexed. To verify that the oo1 index exists in `./[bib_library]/tab/tab11_ind`, enter the following:

   ![001 Index Example](image)

2. Verify that match configuration in `./[bib_library]/tab/tab_match` contains the following lines:
3. Verify that the MARC to MAB conversion is defined for section "MC2MB" in tab_fix.

Note
The MC2MB section is used as a parameter for the Aleph loader (manage-18).

The following is an example of a MARC to MAB conversion in ./[bib_library]/tab/tab_fix:

```
!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!>
MC2MB fixexp_docx_parallel INIT
!--
MC2MB fix_doc_clear DUP-FLD=Y
MC2MB fix_doc_mab2marc_rm_punct_usm
MC2MB fixexp_docx_parallel COPY,PTR-FROM=0,PTR-TO=M
MC2MB fix_doc_convtb FILE=alma_obvsg.convtb.bib_marc2mab.pre_01
MC2MB fixexp_docx_parallel COPY,PTR-FROM=0,PTR-TO=O
!--
MC2MB fix_doc_convtb FILE=alma_obvsg.convtb.bib_marc2mab.49dnb_p0_tt_pp
MC2MB fix_doc_convtb FILE=alma_obvsg.convtb.bib_marc2mab.49dnb_p1
MC2MB fix_doc_convtb FILE=alma_obvsg.convtb.bib_marc2mab.49dnb_p2
!--
MC2MB fix_doc_convtb FILE=alma_obvsg.convtb.bib_marc2mab.post_01
!--
MC2MB fixexp_docx_parallel FIXFUNC,fix_doc_convtb,"FILE=alma_obvsg.convtb.bib_marc2mab.osc",PTR-FROM=O,PTR-TO=O
MC2MB fixexp_docx_parallel CAT,PTR-FROM=0,PTR2FROM=O
MC2MB fixexp_docx_parallel FIXFUNC,fix_doc_convtb,"FILE=alma_obvsg.convtb.bib_marc2mab.nomapp",PTR-FROM=M,PTR-TO=M
MC2MB fixexp_docx_parallel CAT,PTR-FROM=0,PTR2FROM=M
!--
MC2MB fix_doc_char_conv_z GND-UTF-TO-UTF
MC2MB fix_doc_clear DUP-FLD=Y
MC2MB fix_doc_sort
!--
!!MC2MB fix_doc_overlay TMARC2MABI
MC2MB fix_doc_sort
```

4. Configure the merge process.
   1. Add the following line to ./[bib_library]/tab/tab_merge:


COL 1 is the routine name, COL 2 defines the merge program to use, and COL 3 defines the arguments.

**Note**
This routine is used as a parameter for the Aleph loader (manage-18).

2. Add the following lines to ./[bib_library]/tab/tab_merge_overlay:

```
! 1 2 3 4
!!!-!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
20 2 N ######
20 2 Y CAT##
20 1 Y OSC##
20 2 Y OWN##
20 1 Y ######
!!!!!!!!!!!!!!!!!!!!
```

COL 1 value 20 refers to the argument that was set in tab_merge COL 3.

COL 2 defines the merge direction. A value of 2 is the database record and a value of 1 is the input file.

COL 3 is action: C retains the field only if it does not appear in the other document. Y for the original record (1) retains the field. For the copied record (2) copies the field.

For the database record (COL 2 value 2) – retain existing field only if it does not appear in the input record.

For the input record (COL 2 value 1) – retain the input and copy the field into the database record.

**Note**
To make sure that values from the MARC 21 record are not overridden/lost when a record is contributed from an Aleph member it is strongly recommended that all fields be mapped in the MARC 21 to MAB conversion and that the value from the MARC record be taken in this import process.

5. Configure the redirection process (move BIB to BIB):

1. In ./xxx01/tab/tab_move_record, add the following line:

```
! 1 2 3
!!!!!!!!!!!-!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
BIB-BATCH  BIB-BATCH  move_cen_bib_to_bib_batch
```
2. In ./aleph/pc_b_ing/p-manage-18.xml, add the following lines:

```xml
<control>
  <hidden>
    <argname>F15</argname>
    <value>882$$w</value>
    <size>6</size>
  </hidden>
</control>
```

Before:

```xml
</dialog>
```

And add the following line at the end of the file:

```xml
<!-- Param: P-REDIRECTION-FIELD X(6). F15 -->
```

**Note**

The **redirection field** and subfield (the 'F15' parameter of p-manage-18) in the example configuration above is "882$$w".

It must be the same field and subfield tag for redirection as configured in the Alma publishing profile and provided in the Alma input file.

3. Add a **RELINK-DOC** message with **MESSAGE-TYPE=g** if not defined in ./xxx01/tab/tab_z105. For example:

```xml
RELINK-DOC      g MAB01 LOC01
```

6. Load the bibliographic records from Alma to Aleph by adding the following lines to ./alephe/tab/job_list. This reads the published files from Alma on an hourly basis:

```
! 2 3 4 5 6 7  
!!-!!!!!!!!-!-!!!!!!!!!!!!!!!!!!!!-!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!
W2 D1      N untar-alma  csh -f /exlibris/aleph/a21_1/aleph/proc/untar_files /exlibris/aleph/alma/obv/ /exlibris/aleph/a21_1/mab01/scratch pub_bib_record
W2 D1      Y MAB01 p_file_02      MAB01,all_new_pub_bib_record,pub_new.seq,06
  ! Output File 2 - contain those records that find a unique match in the database.
W2 D1      Y MAB01 p_manage_36      MAB01,pub_new.seq,pub_new.seq.out.36.1,pub_new.seq.out.36.2,pub_new.seq.out.36.3,ALM,
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new.seq.out.36.1,pub_new.seq.out.36.2,pub_new.seq.out.36.3,MC2MB,OLD,NEW,OLD,MC2MB,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new.seq.out.36.1,pub_new.seq.p-18.rej,pub_new.seq.p-18.log,OLD,MC2MB,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new.seq.out.36.1,pub_new.seq.p-18.rej,pub_new.seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new.seq.out.36.1,pub_new.seq.p-18.rej,pub_new.seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new.seq.out.36.1,pub_new.seq.p-18.rej,pub_new.seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new.seq.out.36.1,pub_new.seq.p-18.rej,pub_new.seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new.seq.out.36.1,pub_new.seq.p-18.rej,pub_new.seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new.seq.out.36.1,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2MB,FULL,APP,MC2MB,old
W2 D1      Y MAB01 p_manage_18      MAB01,pub_new.seq,pub_new_seq.p-18.rej,pub_new_seq.p-18.log,NEW,MC2MB,FULL,APP,MC2MB,old,NEW,MC2B
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:

```
wget --ftp-user=USER --ftp-password='PASSWORD' ftp://ftp.exlibris.co.il/Aleph/Pub_Aleph_mab_bib_..._new.xml.tar.gz
```

The lines added to job_list perform the following:

- The untar-alma script runs and untars the Alma published deleted file and moves it to $data_scratch (under [bib_library]).
- The p_file_02 converts the Alma MARC XML file to an Aleph Sequential file.
- The p_manage_36 runs and locates the matching Aleph record in the central DB.
- The p_manage_18 runs twice – 1 time for adding new records and 1 time for updating existing records.

Define the first parameter (W2) in job_list.conf to run each day that Alma publishes the Bibliographic information and the second parameter (D1) in job_list.conf to run once in an hour.

Replace mab01 with your [bib_library].

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

7. Delete bibliographic records by adding the following lines to ./alephe/tab/job_list to delete bibliographic records from Alma to Aleph. This reads the published files from Alma on an hourly basis:

```
! 2 3 4 5
!!-!!!!!!!!-!-!!!!!!!!!!!!!!-!!!!!!!!!!!!!!>
! 2 3 4 5 6 7
!!-!!!!!!!!-!-!!!!!!!!!!!!!!-!!!!!-!!!!!!!!!!!!!!!!!!!!!!-!!!!!!
W2 D1 N untar-alma csh -f /exlibris/aleph/a21_1/aleph/proc/untar_files /exlibris/aleph/alma/obv /exlibris/aleph/alma/a21_1/mab01/scratch pub_bib_record
W2 D1 Y MAB01 p_file_02 MAB01,all_delete_pub_bib_record,pub_delete.seq,06
! Output File 2 - contain those records that find a unique match in the database.
W2 D1 Y MAB01 p_manage_36 MAB01,pub_delete.seq,pub_delete.seq.out.36.1,pub_delete.seq,out.36.2,pub_delete.seq,out.36.3,ALM,
W2 D1 Y MAB01 p_manage_18 MAB01,pub_delete.seq,out.36.2,pub_delete.seq.p-18.rej,pub_delete.seq.p-18.log,OLD,MC2MB,,FULL,DELDOC,M,,master,01,
!!!!!!!!!!!!!!!!!!!!
```
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:

```
wget --ftp-user=USER --ftp-password='PASSWORD' ftp://ftp.exlibris.co.il/Aleph/Pub_Aleph_mab_bib_...._delete.xml.tar.gz
```

The lines added to job_list perform the following:

- The untar-alma script runs and untars the Alma published deleted file and moves it to $data_scratch (under [bib_library]).
- The p_file_02 converts the Alma MARC XML file to an Aleph sequential file.
- The p_manage_36 runs and locates the matching Aleph record in the central DB.
- The p_manage_18 deletes the matched records from Aleph (no match = error).

Define the first parameter (W2) in job_list.conf to run each day that Alma publishes the holdings information and the second parameter (D1) in job_list.conf to run once an hour.

Replace mab01 with your [bib_library].

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

The following is an example of job_list.conf:

```
!1 2 3 4 5
!!----!-!!!!!-!!!!!-!!!!!
W2 WYYYYYNN
D1 D 09:00 21:00 01:00
```

For members that are not using Alma and are part of a consortia with an Alma network zone, Aleph remains the central catalog. Cataloging new, updated, and deleted bibliographic records is done in the Aleph bridge. In order to catalog a record, the bridge needs to call the Alma network zone. If it receives a successful response, the bridge can save the record locally as well.

**Alma Configuration**

The following outlines the configuration needed in the Alma network zone to enable it to receive cataloging requests from the Aleph bridge.

1. Generate an API key for cataloging in the developer’s network.
The API key must be supplied when using the Alma APIs. Customers generate the API key for their use from the Ex Libris Developer Network [generate API key]. This API key has to be included in the Aleph configuration. For more information about using the Alma APIs please refer to: https://developers.exlibrisgroup.com/alma/apis.

2. Generate a unique identifier.

**Note**

This configuration is the same as the configuration required for generating the unique numbers for records cataloged in Alma institutions.

Creating a unique identifier in the Alma network zone requires the following configurations:

1. Configure a control number sequence according to the following image. For more information, see Configuring Control Numbers.

![Control Number Configuration](image1)

**Control Number Configuration**

2. Configure a normalization process to use the control number sequence according to the following image. For more information, see Configuring Processes.

![Normalization Process Configuration](image2)

**Normalization Process Configuration**

3. Create the MmsTagSuppressed normalization task so that all records created in the Alma network zone using the Alma API are not suppressed.

4. Create a MARC 21 Bibliographic normalization process with the MmsTagSuppressed task.

**Note**

This process is used by the Aleph bridge in the cataloging process. Take note of the process ID, which you need later, so that the Aleph bridge can use this process.
Aleph Configuration

To update the Alma network zone when creating, updating, or deleting a record via the Aleph GUI, perform the following configurations.

1. Configure a new pc_server-defaults flag by adding the following line to ./alephe/pc_server_defaults:

```
setenv bib_update_alma Y
```

When this flag is defined and set to Y, the new functionality is activated.

2. Add the following configuration table to /alephe/tab/alma_center.conf. This table contains the ALMA API definitions.

```
GENERAL
alma_url=<Alma URL>
inst_code=<Inst code>
api_url=<API Url>
prefix=<ISIL code>
```

Note

Validation will take place in the Network Zone before saving the record. The validation includes the MARC 21 Bib match validation and MARC 21 Bib validation on save normalization profiles.
The following describes the elements of the table:

- **alma_url** - the Alma domain of the network zone i.e. https://<Alma domain>
- **inst_code** - institution code of the network zone
- **api_url** - a call to an Alma API should be directed to the geographic location of your library, as follows:
  - America: [https://api-na.hosted.exlibrisgroup.com](https://api-na.hosted.exlibrisgroup.com)
  - Europe: [https://api-eu.hosted.exlibrisgroup.com](https://api-eu.hosted.exlibrisgroup.com)
  - Asia Pacific: [https://api-ap.hosted.exlibrisgroup.com](https://api-ap.hosted.exlibrisgroup.com)
  - Canada: [https://api-ca.hosted.exlibrisgroup.com](https://api-ca.hosted.exlibrisgroup.com)
- **prefix** - the prefix for the unique identifier as it appears in the 035 field in the Alma MARC 21 records. The prefix should be surrounded by brackets.
- **validate** - true/false. Indicate if the new record should be checked for validation. If true, the validation process is performed before saving the record. It is recommended that the value be set to true as otherwise records are inserted without validation.
- **normalization** - the ID of the normalization process that is applied on the cataloged records that you obtained above.
- **api_key** - To use an Alma API with an external application, define the application in the API portal and receive an API key. For more information, see [Using Alma APIs](#).

---

**Note**

Aleph calls the Alma API with the validate stale version `true` to verify that the 005 field of the MARC record is identical to that of the record in the database.

---

3. Add the following ALMAU and ALMAL sections to ./[bib_library]/tab/tab_fix to handle the conversion from MAB to MARC when sending the Aleph record to Alma and to handle the MARC to MAB when receiving an answer from Alma and loading the record to Aleph.

For **ALMAU**:

```plaintext
! For Alma center save record - MAB to MARC
!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!>
ALMAU fixexp_docx_parallel INIT
ALMAU fixexp_docx_parallel COPY,PTR-FROM=0,PTR-TO=I

!!------- expand bib-bib-link informations ( and hol-infos)
ALMAU expdoc_43obv_bib_bib_mab2marc DN-MAX=10,SRD-MAX=10
```

---

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Ex Libris, a ProQuest Company
!!------ mab-internal -> mab-external
ALMAU fix_doc_mab        FUNC=OUTPUT,FILE=alma_obvsg.tab_fix_mab.bib_mab2marc
ALMAU fix_doc_mab        FILE=alma_obvsg.tab_fix_mabaseq.bib_mab2marc
ALMAU fix_doc_clear      DUP-FLD=Y

!!------ mab-external -> marc / main-routines ...
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!>

!!-- - - recoding original script fields
ALMAU fix_doc_43obvos_recode_ind2tag

!!-- - - save current state as basic for separate handlings / OS, local, ...
ALMAU fixexp_docx_parallel   COPY,PTR-FROM=0,PTR-TO=B

!!-- - - mab->marc / pre handling - append MH-fields to MU-records
!!-- - - mab->marc / pre handling - append sepcial WK-fields
ALMAU fixexp_docx_parallel   FIXROUT,MBPR1,PTR-FROM=0,PTR-TO=H
ALMAU fixexp_docx_parallel   CAT,PTR-FROM=0,PTR2FROM=H
ALMAU fixexp_docx_parallel   FIXROUT,MBPR2,PTR-FROM=0,PTR-TO=W
ALMAU fixexp_docx_parallel   CAT,PTR-FROM=0,PTR2FROM=W

!!-- - - mab->marc / main handling for basic fields
ALMAU fix_doc_convtb        FILE=alma_obvsg.convtb.bib_mab2marc.main

!!-- - - mab->marc / parallel for original script fields
ALMAU fixexp_docx_parallel   FIXROUT,MBOS1,PTR-FROM=B,PTR-TO=1
ALMAU fixexp_docx_parallel   PARFUNC,copyfld,"LDR,LDRMC",PTR-FROM=0,PTR-TO=1
ALMAU fixexp_docx_parallel   FIXROUT,MBOS2,PTR-FROM=1,PTR-TO=2
ALMAU fixexp_docx_parallel   PARFUNC,43obvos_catlink,PTR-FROM=0,PTR2FROM=2,PTR-TO=0
ALMAU fix_doc_mab2marc_synind_880lnk

!!------ marc - formal post preparations
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!>

!!-- - - common post work - 01
ALMAU fix_doc_convtb        FILE=alma_obvsg.convtb.bib_mab2marc.post_01

!!-- - - add ISIL to link-ID's
ALMAU fix_doc_convtb        FILE=alma_obvsg.convtb.bib_mab2marc.upd_lnkidn

!!-- - - find no-mapping field  (-> 9740[su] $$[FV]... )
ALMAU fixexp_docx_parallel   FIXROUT,MBNOM,PTR-FROM=I,PTR-TO=M
ALMAU fixexp_docx_parallel   PARFUNC,43obvos_catlink,PTR-FROM=0,PTR2FROM=2,PTR-TO=0

!!-- - - sort + clear
ALMAU fix_doc_sort_marc21    USECODE=Y
ALMAU fix_doc_clear          DUP-FLD=Y

If sections MBPR1, MBPR2, MBOS1, MBOS2, and MBNOM do not exist in tab_fix, add the following:
!!!======== separate parallel-routines (for MaB to marc) !!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!>

MBPR1 fix_doc_convtb  FILE=alma_obvsg.convtb.bib_mab2marc.pre_h_fields
MBPR2 fix_doc_convtb  FILE=alma_obvsg.convtb.bib_mab2marc.pre_wk_fields
MBOS1 fix_doc_convtb  FILE=alma_obvsg.convtb.bib_mab2marc.os1
MBOS2 fix_doc_convtb  FILE=alma_obvsg.convtb.bib_mab2marc.os2
MBNOM fix_doc_convtb  FILE=alma_obvsg.convtb.bib_mab2marc.nomapp

For ALMAL:

!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!>

!!!======== main-routine  ALMAL (for marc 2 mab) !!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!>

ALMAL fix_doc_mab_001_from_035 (AT-OBV)
ALMAL fixexp_docx_parallel INIT
!!--
ALMAL fix_doc_clear  DUP-FLD=Y
ALMAL fix_doc_mab2marc_rm_punct_usm
ALMAL fixexp_docx_parallel COPY,PTR-FROM=0,PTR-TO=M
ALMAL fix_doc_convtb  FILE=alma_obvsg.convtb.bib_marc2mab.pre_01
ALMAL fixexp_docx_parallel COPY,PTR-FROM=0,PTR-TO=O
!!--
ALMAL fix_doc_convtb  FILE=alma_obvsg.convtb.bib_marc2mab.49dnb_p0_tt_pp
ALMAL fix_doc_convtb  FILE=alma_obvsg.convtb.bib_marc2mab.49dnb_p1
ALMAL fix_doc_convtb  FILE=alma_obvsg.convtb.bib_marc2mab.49dnb_p2
!!--
ALMAL fix_doc_convtb  FILE=alma_obvsg.convtb.bib_marc2mab.post_01
!!--
ALMAL fixexp_docx_parallel FIXFUNC,fix_doc_convtb,"FILE=alma_obvsg.convtb.bib_marc2mab.osc",PTR-FROM=O,PTR-TO=O
ALMAL fixexp_docx Parallel CAT,PTR-FROM=0,PTR2FROM=O
ALMAL fixexp_docx_parallel FIXFUNC,fix_doc_convtb,"FILE=alma_obvsg.convtb.bib_marc2mab.nomapp",PTR-FROM=M,PTR-TO=M
ALMAL fixexp_docx_parallel CAT,PTR-FROM=0,PTR2FROM=M
!!--
ALMAL fix_doc_char_conv_z GND-UTF-TO-UTF
ALMAL fix_doc_clear  DUP-FLD=Y
ALMAL fix_doc_sort
ALMAL fix_doc_overlay ALMA1MC2MB

4. In ./[bib_library]/tab/tab_merge add the following line if it does not already exist. (If the AA argument is already
ALMA1MC2MB is the section defined in tab_fix for the ALMAL section for the fix_doc_overlay function.

5. Add a new section to ./[bib_library]/tab/tab_merge_overlay:

| AA 1 N ###### |
| AA 1 Y CAT## |
| AA 1 Y OWN## |
| AA 1 Y OSC## |
| AA 2 Y ###### |

AA is the section defined in tab_merge.

This section describes the configuration necessary to import inventory information from the Aleph Bridge to the Alma Network Zone. A job imports the inventory information of non-Alma members into Alma bridge institutions. This allows the network zone to view inventory information for all Alma and non-Alma members in the same way.

**Alma Configuration**

Create an integration profile with the following information:

- Inventory Import Configuration section
  - Scheduling option – Daily
  - FTP Configuration
    - External System Prefix (to filter any records with other prefix in 035 field [e.g (AT-OBV)000012345])
  - Holdings Mapping section – the MAB holdings information is published in several fields (OWN, 200), which should be mapped to the corresponding fields in MARC 21 Holdings
  - Item Mapping section – Aleph exports the item information to the Z30 field. Based on the Aleph configuration, the configuration specifies which item information is located in which Z30 subfield.

For more information, see Integrating a Non-Alma Member’s Inventory from a Central System into a Bridge Institution Managed by a Network Zone.

**Aleph Configuration**

1. Add the following line to ./[bib_library]/tab/tab_expand to add the holding information to Aleph publishing:

| !!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!> |
| ALMAP expand_doc_bib_hol_mab_alma |
The above expand routine adds the holding record information with the following additions:

- A holding ID for each holding field in subfield 0.
- ADM Code - added in OWN$$c based on the sub-library code in OWN$$a.

2. Add the following line to ./[bib_library]/tab/tab_expand to add the item (z300) information to Aleph publishing:

```
ALMAP expand_doc_bib_z30
```

The above expand routine adds all item information based on the configuration in the ./[bib_library]/tab/expand_doc_bib_z30 table.

3. Add the following lines to ./[bib_library]/tab/expand_doc_bib_z30, in addition to the item’s regular fields, to add the ADM code to the item:

```
adm-code          y space      N
z30-material      m space      X
z30-sub-library   1 space      N
z30-sub-library   A space      Y
z30-collection    2 space      N
```

The third column defines the subfield into which the ADM code is expanded.

This needs to correspond to the definitions in Alma in the integration profile that you created in the Alma Configuration section.

The table should include definitions of all of the item’s fields that are mapped to the subfields defined in Alma.

4. Add the following lines to ./[bib_library]/tab/tab_publish to extract ALEPH records for Alma publishing:

```
ALMA-FULL         N ALMAP MAB_XML
```
- Col 1 - is the publishing set for Alma.
- Col 4 – Is the fix/expand routine applied before the record is extracted. Use the expand routine defined above.
- Col 5 - Determines the format of the published records.

5. Run the **Initial publishing (p-publish-04)** job for all records at the beginning of the project implementation. This can be done from the GUI services or with a command line. For example:

   ```csh
   csh -f $aleph_proc/p_publish_04 MAB01, ALMA-FULL,000000000,999999999,04,DOC,
   ```

   Set the customer BIB library in the first parameter and the publishing set defined for Alma in the second parameter.

6. Run the **Create Tar File for ALEPH Published Records (publish-06)** job for all records at the beginning of the implementation with the **Update Date** flag set to **Y**. This can be done from the GUI services or via command line. For example:

   ```csh
   csh -f $aleph_proc/p_publish_06 MAB01, ALMA-FULL,DOC,000000000,999999999,00000000,99999999,,/exlibris/aleph/acc_publish,Y,04,,Y,
   ```

   - Set the customer BIB library in the first parameter.
   - Define the publishing set for Alma in the second parameter.
   - Set the path parameter (the 9th parameter) to any location on the Aleph server.

7. Execute publishing on your desired frequency. To run the ongoing publishing add the following lines to ./alephe/tab/job_list:

   ```
   W2 13:00    Y                      MAB01 p_publish_06                   MAB01, ALMA-FULL,LAST-DATE,000000000,999999999,00000000,99999999,,/exlibris/aleph/acc_publish/,Y,04,,Y,
   ```

   1. Define the first parameter (W2) in job_list.conf to run each day to publish the items/holdings information from Aleph to Alma.
   2. Replace mab01 with your [bib_library].
   3. Set the third parameter to **LAST-DATE** to get the changes from the last run.
   4. Set the path parameter to any location on the Aleph server.
   5. Set the **Update Date** flag to **Y**.

8. The published file is located on the Aleph server. To transfer it from the Aleph server to the FTP/Alma server, use an FTP utility or a command, for example, run the following:

   ```
   ```
Integrating Alma with the Happiness® Gateway

To configure an integration profile, you must have the following role:

- General System Administrator

For institutions that need to enrich Japanese text using the Happiness transliteration tool, you need to create an integration profile for that purpose. With a properly configured integration profile, you can send a record with the primary Japanese script (Kanji + Kana with no spaces or punctuation between some or all words) from the MD Editor to Happiness using the Enhance the Record feature and, depending how you have configured Happiness, receive back an enriched record with the Morphemes, Kana, and Romanji fields.

Configuring Alma for Happiness

In order to integrate Happiness with Alma, you must use the Metadata External Enhancement integration type option.

To configure Alma to work with the Happiness transliteration tool:

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 Metadata External Enhancement for Integration Type.
4. Select Happiness - Japanese Transliteration Tool as the system type for External System.
5. Optionally, select Default if you want this profile to be your default integration profile, and enter a Description to provide more detail for the profile that you are creating.
6. Select Next.
7. On the Definitions page, select Active, enter the URL address for the Happiness server, and enter the Happiness user name and password as needed.
8. Select Save.

Using the MD Editor to Enrich Japanese Records

After you have created the Metadata External Enhancement integration profile for the Happiness transliteration tool, you can use the MD Editor to enrich records using the Happiness - Japanese Transliteration Tool option.

To enrich a Japanese record using the MD Editor, open or create the bibliographic record that you want to update using Happiness, select Enhance the Record (Edit > Enhance the Record); and from the Choose Normalization Type list of options, select the integration profile that you created with the Happiness - Japanese Transliteration Tool option.
Happiness Integration Profile Option

The Happiness transliteration tool determines which field to enrich and returns the transliterated record to Alma. After the enriched record from Happiness appears in the MD Editor and you save the record, normal MD Editor record processing operations such as validation and so forth are available for editing the updated record.
Upload Electronic Holdings from Springer

You can update Springer electronic holdings for journals and books by automatically retrieving the institution-specific holdings using an integration profile.

Prior to running a Springer integration profile job, you need to activate certain electronic collections. See Activating the Springer Electronic Collections from the Alma Community Zone for more information.

For information regarding the Springer job report, see Upload Electronic Holdings - Springer.

Scheduled job information is provided in the Scheduled Jobs table (see Upload electronic holdings - SPRINGER).

For more information, see the E Resources - Upload Electronic Holdings from Springer presentation (a .pptx file).

Creating the Springer Integration Profile

To configure the Springer integration profile for uploading electronic holdings:

1. Obtain an institution token from Springer.
2. Confirm that the Springer electronic collections for which you are updating holdings are active collections in Alma. See Activating the Springer Electronic Collections from the Alma Community Zone for more information.
3. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles) select Add Integration Profile to open the External System wizard for configuring an integration profile.
4. For the Integration Type parameter, select Upload Electronic Holdings.
5. For the Provider parameter, select Springer.
6. Add a description (optional) and select Next.
7. Complete the Upload Electronic Holdings configuration section using the information in the table below.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>Select Active to make this an active profile. The default setting is Inactive.</td>
</tr>
<tr>
<td>Institution token id</td>
<td>Enter the institution token ID that you obtained from Springer.</td>
</tr>
<tr>
<td>File format</td>
<td>Select the KBART file format.</td>
</tr>
<tr>
<td>Group</td>
<td>Use this parameter to select one or more groups from the list of multi-campus options in the drop-down list. This parameter is optional, so you may also choose to leave it blank. The Group parameter appears when you have the multi_campus_inventory_management customer parameter set</td>
</tr>
</tbody>
</table>
With the `multi_campus_inventory_management` customer parameter set to `true`, you can have multiple Springer integration profiles. When you have obtained multiple Springer token IDs from Springer, you may want to create multiple integration profiles using that identification information.

Note that when you have more than one active Springer integration profile with one or more multi-campus selections made for the Group parameter, any additional active Springer integration profiles must have one or more multi-campus selections made. In this situation, the Group parameter may no longer be left blank.

When the Springer integration profile job is run and multi-campus group information is configured, the multi-campus group information appears in the job report.

8. Save the profile using one of the following options:

   ◦ Select **Save**. The integration profile is scheduled and appears in the list of scheduled jobs (see Viewing All Scheduled Jobs).

   ◦ Select **Save and Run Now**. This saves your profile settings and immediately queues the upload to run. The **Save and Run Now** button also appears on the Actions tab when you edit the profile. Note that when you edit your saved profile, the button appears as **Run Now**, and you can choose to manually run the upload job.

   When you press **Save and Run Now** in a specific Springer integration profile, all of the Springer integration profiles that are set to **Active** are run as part of the job request. Any Springer integration profiles set to **Inactive** are not run as part of selecting **Save and Run Now**. Selecting **Save and Run Now** from an **Inactive** integration profile does not run the job for that integration profile or any other Springer integration profiles set to **Inactive**, but will run only for the **Active** profiles.

**Note**

This behavior of **Save and Run Now** is different from other integration profiles where selecting **Save and Run Now** runs the job request for integration profiles set to **Inactive**. This is a known issue. In order to have a Springer integration profile run, it needs to be set to **Active**.
• SpringerLink Books - AutoHoldings (Community Zone Collection ID = 613860000000000883)

Search Alma to locate these electronic collections in the Community Zone and activate them prior to running the Springer integration profile.

Note that only the electronic collection and its service need to be activated (select the Activate this electronic collection service and Make service available Full Text Service options). There is no need to activate any portfolios (select the Manual activation - activate electronic collection and manually select portfolios Activation Type option). The activation of the portfolios is done by the upload electronic holdings integration process.

Preserving Previous Springer Acquisition Details

If prior to the use of Upload Electronic Holdings from Springer you managed Springer titles in a different collection(s) and you want to preserve the acquisition details associated with those titles (such as PO lines and licenses), you can use the Move electronic portfolio information job to move PO lines and licenses to the SpringerLink Journals - AutoHoldings and SpringerLink Books – AutoHoldings collections.

To do this, use the following steps:

1. Create a set of the content type electronic collections that includes the previous collections in which you managed the Springer titles.

2. Open the Run a Job - Select Job to Run page (Admin > Manage Jobs and Sets > Run a Job), and search for the Move electronic portfolio information job.

3. Select the Move electronic portfolio information job and select Next.

4. Select the set that you created above and select Next.

5. For the Target electronic collection, select the collection SpringerLink Journals - AutoHoldings or SpringerLink Books – AutoHoldings.

6. Select the Move PO lines and Move licenses options and complete the required information as needed.

7. Select Next and review/confirm the job summary information.

8. Select Submit.
Integrating Alma with the Netpunkt ILL System

With the Netpunkt integration, Alma is able to take OpenReceipt messages from the Netpunkt Danish ILL system and create resource sharing borrowing requests in Alma. This is done by mapping the Netpunkt OpenReceipt message fields to Alma resource sharing request fields and creating an Alma resource sharing borrowing request. For more information, see the sections below and the NETPUNKT ILL section that is located in the Developer Network.

Configuring a Netpunkt Resource Sharing Integration Profile

You need to create an integration profile for managing the communication between Alma and Netpunkt (the Danish ILL system) that sends the OpenReceipt messages to Alma for resource sharing borrowing requests.

To configure Alma for communication with Netpunkt:

1. Open the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles).
2. Select Add Integration Profile.
3. Enter the basic profile identification details as described in the table below.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code / Name</td>
<td>Enter a code and name that makes it easy to identify the Netpunkt profile in the list of other profiles.</td>
</tr>
<tr>
<td>Integration Type</td>
<td>Select the Resource Sharing Integration option from the drop-down list.</td>
</tr>
<tr>
<td>Default</td>
<td>Select this check box if you want the Netpunkt integration profile to appear as the default integration profile.</td>
</tr>
<tr>
<td>Description</td>
<td>Enter additional details to further describe this profile for later identification.</td>
</tr>
</tbody>
</table>

4. Select Next.
5. Enter the integration configuration details using the table below.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Definitions</td>
<td>Select Netpunkt from the drop-down list of options.</td>
</tr>
<tr>
<td>Password</td>
<td>Enter the password that is sent in the OpenReceipt message that is used for authentication. When Alma receives the OpenReceipt message, it matches the password from that message (that is located in the &lt;authenticationPassword&gt; tag) to the password entered in this parameter of the integration profile. This parameter is optional. Note that if you specify a password in this configuration and no password is sent in the &lt;authenticationPassword&gt; tag of the OpenReceipt message, the message is rejected.</td>
</tr>
</tbody>
</table>
User identifier type

Select an identifier type from the drop-down list of preconfigured options. See Managing User Identifiers for more information. Note that user identifier types are configured by Ex Libris.

This parameter is used to identify the requesting user for the borrowing request.

The Primary Identifier option is the default. You can select any identifier type that matches the type that is sent by Netpunkt.

6. Select **Save**.

OpenReceipt Mapping

The Netpunkt OpenReceipt request fields map to the Alma resource sharing borrowing request fields in the following manner:

<table>
<thead>
<tr>
<th>OpenReceipt Message Fields</th>
<th>Alma Resource Sharing Borrowing Request Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>OrderReceipt</td>
<td></td>
</tr>
<tr>
<td>orderId</td>
<td>external_id</td>
</tr>
<tr>
<td>requesterId</td>
<td>owner</td>
</tr>
<tr>
<td>author</td>
<td>author</td>
</tr>
<tr>
<td>authorOfComponent</td>
<td>author</td>
</tr>
<tr>
<td>responderId</td>
<td>partner</td>
</tr>
<tr>
<td>callNumber</td>
<td>call_number</td>
</tr>
<tr>
<td>copy</td>
<td>format</td>
</tr>
<tr>
<td>mediumType</td>
<td>requested_media</td>
</tr>
<tr>
<td>creationDate</td>
<td>created_date</td>
</tr>
<tr>
<td>lastModification</td>
<td>last_modified_date</td>
</tr>
<tr>
<td>language</td>
<td>requested_language</td>
</tr>
<tr>
<td>pickUpAgencyId</td>
<td>pickup_location</td>
</tr>
<tr>
<td>OpenReceipt Message Fields</td>
<td>Alma Resource Sharing Borrowing Request Fields</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>needBeforeDate</td>
<td>last_interest_date</td>
</tr>
<tr>
<td>articleFirstNote/latestRequesterNote</td>
<td>note</td>
</tr>
<tr>
<td>title/titleOfComponent</td>
<td>title</td>
</tr>
<tr>
<td>issn</td>
<td>issn</td>
</tr>
<tr>
<td>isbn</td>
<td>isbn</td>
</tr>
<tr>
<td>publicationDate/publicationDateOfComponent</td>
<td>year</td>
</tr>
<tr>
<td>publisher</td>
<td>publisher</td>
</tr>
<tr>
<td>placeOfPublication</td>
<td>place_of_publication</td>
</tr>
<tr>
<td>edition</td>
<td>edition</td>
</tr>
<tr>
<td>volume</td>
<td>volume</td>
</tr>
<tr>
<td>issue</td>
<td>issue</td>
</tr>
<tr>
<td>pagination</td>
<td>pages</td>
</tr>
</tbody>
</table>

**Routing the LookupUser and OpenReceipt Messages**

The NCIP V1/V2 LookupUser and OpenReceipt messages from Netpunkt are routed to the correct Alma institution determined by the institution code or the ISIL code (institution or library level) that is sent in the `<ToAgencyId>` tag of the LookupUser and OpenReceipt messages. The institution ISIL code or the library ISIL code is configured in Alma’s Organization Unit Details (Configuration Menu > General > Libraries > Add a Library or Edit Library Information). See Configuring the Institution and Its Libraries for more information.
RSS Publishing

To set up an RSS feed, you must have one of the following roles:

- General System Administrator
- Repository Administrator
- Catalog Administrator

An RSS (Rich Site Summary) feed pushes records to the discovery interface (Primo), identifying new items published or added to the inventory. You can use this to create a new book list.

The library items included in the RSS feed are determined by the configuration settings and relative date spans in the RSS publishing profile.

Internet Explorer fully supports RSS. Firefox offers some support, and Chrome does not support RSS at all. To use RSS with a browser other than IE, consult the help for that browser to find an add-on or work-around.

---

**Note**

See [How to Set Up an RSS Feed New Book List](#) presentation on setting up RSS feeds.

---

New RSS Feed Workflow

Creating a new RSS feed includes the following steps:

1. Create a physical items set (see [Saving and Reusing Search Queries](#))
   
   Use this step to identify the set of records within which you expect to locate your list of new books. You will need this set name when configuring the RSS publishing profile.

2. Create the RSS discovery URL (see [Creating the RSS Discovery URL](#))

3. After you have identified all the parts and created the RSS discovery URL that you need to use for your new book list process, enter the URL in `rss_discovery_url` (see [Configuring Other Settings](#)).

4. Create an RSS publishing profile (see [Configuring an RSS Publishing Profile](#))

5. Create the RSS feed URL (see [Creating the RSS Feed URL](#))

6. Optionally, confirm that new books have been added/received to your database (within the set that you saved above).

7. Confirm that the RSS publishing profile successfully completed processing on the Monitor Jobs page (see [Viewing Completed Jobs](#)).

8. Use the RSS feed URL to view the new book list by entering the URL into a browser and viewing the results in Primo. See [The RSS Feed Job](#).

---

Configuring an RSS Publishing Profile

To implement RSS:
1. Configure a publishing profile that includes a definition of new that is between 90 and 2 days ago (see the Max number of days ago and Min number of days ago settings described in the procedure below related to the definition of new).

2. Create and/or select a physical items set to use with the RSS publishing profile.

3. Define a new customer parameter, rss_discovery_url (Configuration Menu > General > General Configuration > Other Settings), that links to Primo at the institution level. See Creating the RSS Discovery URL.

The RSS feed can then be run (see The RSS Feed Job).

To configure the RSS feed:


2. Select Add Profile and select the RSS option. The Publishing Profile Details page appears to a blank RSS profile.

3. Configure the RSS publishing profile using the table below.

<table>
<thead>
<tr>
<th>RSS Publishing Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Field</strong></td>
</tr>
<tr>
<td>Profile Details</td>
</tr>
<tr>
<td>Profile name</td>
</tr>
<tr>
<td>Profile description</td>
</tr>
<tr>
<td>Status</td>
</tr>
<tr>
<td>Scheduling</td>
</tr>
<tr>
<td>Email Notifications</td>
</tr>
<tr>
<td>RSS Feed Parameters</td>
</tr>
<tr>
<td>RSS feed name</td>
</tr>
<tr>
<td>Language</td>
</tr>
<tr>
<td>RSS feed title</td>
</tr>
<tr>
<td>RSS feed description</td>
</tr>
<tr>
<td>Display Location</td>
</tr>
</tbody>
</table>
### Field Description

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>RSS version 2.0</td>
<td>Select this checkbox to publish RSS feeds using RSS 2.0 XML.</td>
</tr>
<tr>
<td>Select Population</td>
<td></td>
</tr>
<tr>
<td>Set name</td>
<td>The set of physical items to which the RSS action is applied.</td>
</tr>
<tr>
<td>Max number of days ago</td>
<td>The maximum number of days past to look for new items for the feed. New is determined by the item’s Receiving date identified on the Physical Item Editor page. The default number of days is 60. This number cannot exceed 90.</td>
</tr>
<tr>
<td>Min number of days ago</td>
<td>The minimum number of days past to look for new items. The default is 2, and two days is the minimum to ensure synchronization with the Primo. This number cannot exceed the Max number of days ago.</td>
</tr>
</tbody>
</table>

4. Select **Save**. The Publishing Profile list page appears with the new RSS feed publishing profile listed.

---

### Creating the RSS Discovery URL

The RSS discovery URL defines the base URL that Alma uses to generate the deep links to the items listed in all of your RSS Publishing feeds.

For Primo VE, use the following template to define your RSS discovery URL:

```
http://<Primo_domain>/discovery/
search?vid=<view_code>&tab=<search_slot>&search_scope=<scope_code>&query=any,contains,@@ALMA_MMS_ID@@
```

- **Primo_domain** – Specify the domain that you use for Primo's UI.
- **view_code** – Specify your view’s code in Primo VE. For more details, see Configuring Discovery Views for Primo VE.
- **search_slot** – Specify the code for the search profile slot in the view. For more details, see Configuring Search Profile Slots.
- **scope_code** – Specify the code of the scope to which you want to search. For more details, see Configuring Search Profiles for Primo VE.

An example of a functional RSS discovery URL may look something like the following for Primo VE:

```
https://myprimo.exlibrisgroup.com/discovery/
search?vid=MY_INST:MINES&tab=Everything&search_scope=MyInst_and_CIquery=any,contains,@@ALMA_MMS_ID@@
```

For Primo, use the following template to define your RSS discovery URL:

```
http://<Primo_domain>/primo_library/libweb/action/dlSearch.do?institution=<institution_code>&vid=<view_code>&tab=<tab_code>&search_scope=<scope_name>
```
- **Primo_domain** – Specify the domain that you use for Primo's UI.
- **institution_code** – Specify Primo's institution code, which is defined with the Institution Wizard in the Primo Back Office. For more details, see Institution Wizard.
- **view_code** – Specify Primo's view code, which is defined with the Views Wizard in the Primo Back Office. For more details, see Configuring Primo Views.
- **tab_code** – Specify the view's tab code, which is defined with the Views Wizard in the Primo Back Office. For more details, see Configuring View Tabs. If not specified, the system uses the view's default.
- **scope_name** – Specify the name of the scope to which you want to search, which is defined with the Views Wizard in the Primo Back Office. For more details, see Configuring Search Scopes. If not specified, the system uses the view's default.
- **source_code** – Specify the source code, which is defined with the Data Sources page in the Primo Back Office (see Configuring the Data Source). If your institution is a member of a collaborative network, leave this value blank.

For more information on using the parameters for the Brief Search deep link, see Brief Search Deep Link in the Developer Network.

An example of a functional RSS discovery URL may look something like the following for Primo:

```
http://demo.primo.exlibrisgroup.com:1701/primo_library/libweb/action/dlSearch.do?institution=EXLDEV1_INST&vid=Alma&tab=default_tab&search_scope=Alma&query=any,contains,primo_alma@@ALMA_IND@@
```

Once you have defined your RSS discovery URL, you can enter it in the **rss_discovery_url** parameter that is located on the Mapping Table page of Other Settings (Administration > General Configuration > Configuration Menu > General Configuration section).

### Creating the RSS Feed URL

The RSS feed URL retrieves the records in the RSS feed. After each time that the RSS publishing job is run, the RSS feed includes records in the results with items that have a receiving date that meets the criteria for **minimum/maximum number of days ago** that you set in the RSS publishing profile. These records make up the list of new books for your new book list. Patrons may sign up for the RSS feed by selecting a link to the RSS feed URL, which has been placed in Primo or on another library web page. The following template is used to create the RSS feed URLs, which can be verified by viewing the completed job report for the RSS publishing profile:

```
http://<Alma_domain>/rep/getFile?institution_code=<institution_code>&file=<RSS_feed_name>&type=RSS
```

- **Alma_domain** – Specify your Alma domain (see Your Alma Domain Names).
- **institution_code** – Specify the code that is assigned to your institution in Alma.
• **RSS_feed_name** – Specify the name of the RSS feed, which is defined in the RSS publishing profile:

![RSS Feed Parameters](image)

**RSS Feed Name from the RSS Publishing Profile**

The following is an example of an RSS feed URL:

```
http://demo.alma.exlibrisgroup.com:1801/rep/getFile?institution_code=EXLDEV1_INST&file=library_science_RSS_name&type=RSS
```

---

**The Publishing RSS Feed Job**

After you have completed the RSS feed publishing profile, the Publishing RSS feed job runs according to the schedule defined in the profile.

To view the progress of the job, find it using the Publishing filter on the Monitor Jobs page (see Viewing Running Jobs and Viewing Completed Jobs) or select History from the row actions list for the RSS profile on the Publishing Profile page. For completed jobs, select Report from the row actions list to open the Job Report page.

In addition to the files created as a result of the RSS feed job Alma generates a summary link (displayed on the Job Report page) for each RSS job in the following format:

```
http://<Alma domain>/rep/getFile?institution_code=<Alma Institution Code>&file=<RSS feed name>&type=RSS
```

This is the same URL format described in Creating the RSS Feed URL. To display the results of the RSS feed publishing profile, that is, the new book list, select the link provided on the Job Report page, or copy/paste the RSS feed URL that you created in the section Creating the RSS Feed URL into a browser.

![RSS Feed URL Entered into a Browser](image)

**RSS Feed URL Entered into a Browser**

Either method opens a page similar in format to the figure below that contains a list of items matching the date span criteria that you provided in the publishing profile. This is your new books list.
Records with keywords "library science" and new items

RSS feed for all new items with keyword "library science"

Libraries and library science - a design manual
Sunday, June 08, 2014 11:53 AM
Library - Main Library, Location - ULINC, Call number - BM 296

Pyrology, or, Fire chemistry: a science interesting to the general philosopher, and an art of infinite importance to the chemist, mineralogist, metallurgist, geologist, agriculturist, engineer (mining, civil, and military), &c., &c. /
Sunday, June 08, 2014 11:53 AM
Library - Main Library, Location - ULINC, Call number - XP 3845

African journal of library, archives & information science.
Sunday, June 08, 2014 11:53 AM
Library - Main Library, Location - ULINC, Call number - Z865.2.A35 A33

RSS Feed Results/New Books List

When you select the link for one of the records in the RSS feed results list (the new books list), the item opens in your discovery tool/Primo as shown in the figure below.
Publishing Electronic Records to Central Discovery Index

Alma publishes the activation status of electronic holdings (all unsuppressed holdings), as well as the CDI search activation to the Central discovery index (CDI) in an institutional holdings file, which CDI then uses to determine the full text availability of electronic holdings, as well as the collections to be searched for each institution. To publish electronic holdings to Primo Central, you must configure and run a publishing profile in Alma.

When working with a Network Zone, the system publishes electronic holdings from the Network Zone and each member institution at the same time and creates the following, respectively:

- One institutional holdings file for each "Available for" group that has been defined in the Network Zone. Each "Available for" group corresponds to each of the member institutions.
- One institutional holdings file from each member institution.

Each week, the system merges the above institutional holdings files into a single institutional holdings file so that it can be harvested by Central Discovery Index.

Configuring the Publishing Profile

To configure publishing to Central Discovery Index, you must have one of the following roles:

- Catalog Administrator
- Repository Administrator
- General System Administrator

The publishing profile allows you to configure the settings used to generate the electronic holdings file that Central Discovery Index uses to update the status indicators. This process should be run daily to make sure that the holdings information is accurate.

The Electronic Profiles section in the Publish electronic records to Central Discovery Index job allows you to define profiles for groups of libraries and campuses that are defined as inventory management groups in a multicampus configuration. This allows the publishing job to create additional holdings files at the campus/library level so that Central Discovery Index can determine the full-text availability per Alma campus/library (each of which can be defined separately as a Primo institution, or all together as one Primo institution).

To configure the publishing profile for Central Discovery Index publishing:

1. On the Publishing Profiles Details page (Resources > Publishing > Publishing Profiles), select Edit in the row actions list for the Publish electronic records to Central Discovery Index profile. The Publishing Profile Details page opens.
2. In the **Publishing Parameters** section, select **Active** or **Inactive** and select a scheduling option.

### Note

If your institution works with a Network Zone, this export process must be run at the Network Zone before it is run at each member institution. This allows updates to the Network Zone inventory to be included in the holdings file for each member institution.

3. Select **Email Notifications** to specify which users and email addresses will receive email notifications when the publishing profile is complete.

4. If each group of campuses/libraries in a multicampus configuration is defined as a Primo institution, define a profile for each group of campuses and libraries. Otherwise, continue to the next step:
   1. Select **Add Profile**.
   2. Enter a name for campus or library in **Profile name** with no spaces. Optionally add a description.
   3. Select **Add and Close**.
   4. Select **Edit** in the row actions list to edit the new profile. The Publishing Profile Details page appears.

5. In the Electronic profile members section, select **Add another member** to add members to the profile group (select either campuses or libraries, or both).
   - **Campus** – Select a campus and select **Add Campus**.
   - **Library** – Select a library and select **Add Library**.

6. Select **Save** to save the changes to the member profile.

5. Select **Save** to save the changes to the export publishing profile.
Data that meets the defined criteria is exported to the institutional holdings file when the profile is run according to the selected schedule.

For information on monitoring a publishing export job, see Viewing Running Jobs. For information on the job report, see Viewing Completed Jobs.

The Output of the Publishing Process

The publishing job writes the holdings information to the following file for standard configurations:

https://<Alma domain>/rep/
getFile?institution_code=<Alma_Institution_Code>&file=cdi_institutional_holding

For multicampus configurations, the publishing job writes the holdings information to the following file for each group of campuses/libraries:

https://<Alma domain>/rep/
getFile?institution_code=<Alma_Institution_Code>&file=cdi_institutional_holding&member_code=<profile_name>

Publishing to Central Discovery Index in a Multicampus or Available For Environment

Note

For Primo VE configuration information, see Multicampus Setup in Primo VE.

If inventory management groups are set up to offer different electronic services to different libraries and/or campuses, Primo must take this into account, too. Primo must account for:

- The Central Discovery Index profile (per each group)
- The Alma OpenURL definition (per each group)

When you publish to Central Discovery Index in a multicampus / available for environment, add a separate publishing profile for each campus that corresponds to an inventory management group. Creating a profile for each inventory management group allows each group to retrieve its own resources from Central Discovery Index.

Each group should have its own central index profile, because:

- Each group subscribes to different electronic materials, so each group should see a different set of resources activated from the Central Discovery Index index.
- The indication of availability on the results (full-text availability) is different for each group.
- Each profile must take its relevant holdings file according to the Publishing to Central Discovery Index Profile that was set up.

You must add an Alma OpenURL definition for each group. Since each Primo institution is set to work with one of the groups, ensure that the electronic services that are provided are for the correct campus. This is done as described above in Adding Access to Resources by Adding a Campus to an OpenURL. In addition, see Alma Multicampus Setup in Primo regarding Primo integration details.
Configuring CDI to Use the Institutional Holdings File

In order for CDI to update the status indicators for the institutional holdings, it must know where the published holdings file is stored. Although the holdings file should be updated weekly, this configuration needs to be set only once, which may occur while registering your institution with the Primo Central/Central Discovery Index service. Registration for Primo Central will also work for CDI, no new registration is required.

Note

- You can assign only one institutional holdings file per Client UID (or PC Key). If you are already a Central Discovery Index customer and you want to use the PC for Alma, you must register a new client, get a new PC Key, and link the PC Key to the Primo institution that is integrated with Alma. This will also allow you to create an independent environment to test the integration of Alma and Central Discovery Index.
- When using Primo in a multicampus environment, you must define a Primo institution for each PC publishing profile to register separate holdings files per inventory management group. For more information, see Alma Multicampus Setup in Primo.
- When using Primo VE in a multicampus environment, you must define a PCI profile for each campus/library and assign each to a view to register separate holdings files per inventory management group. For more information, see Multicampus Setup in Primo VE.

To set the URL of the holdings file:

1. Access the back office for the PCI service:
   - **For Primo**: In the Primo Back Office, select Profile next to the PC Key field in the Institution Wizard (Primo Home > Ongoing Configuration Wizards > Institution Wizard). This button does not appear until you have registered your Primo institution to use Central Discovery Index.
   - **For Primo VE**: In Alma, select View my Profile on the Central Index and Proxy Setup page (Configuration Menu > Discovery > Other > Central Index and proxy set-up). This button does not appear until you have registered your Primo institution to use Central Discovery Index.

   The main menu on the My Profile page opens to allow you update your Central Discovery Index settings.

2. Select **My Client Applications** to display the list of clients associated with your institution.
3. Select the client application that was used to register the Central Discovery Index service in Primo.
4. Select **Edit Client Attributes**.
5. In the Institutional holdings file URL field, use the following format to enter the URL for the holdings file:
   - **For standard configuration**:
     
     ```
     ```
   - **For multicampus configuration** *(member_code)* should be set to the name of the PC publishing profile:
     
     ```
     ```

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Fulfillment

This section includes:

- **Courses and Reading Lists**
  - Configuring Course Loading
- **Resource Sharing Partners**
  - British Library Document Supply Service (BLDSS)
- **Importing Resource Sharing Borrowing Requests From an External System**
- **Requests to Remote Storage Facilities**
- **Dematic Automated Storage Retrieval System (ASRS)**
- **Self-Check Machines**
- **SMS Communications**
- **RFID Support**
- **Configuring the WPM Education E-Payment System**
Courses and Reading Lists

To import courses from a course management system – See Configuring Course Loading.

Ex Libris maintains an internal tool to import reading list information in bulk. Contact Ex Libris support for assistance.

For information on working with the course management Web services, see https://developers.exlibrisgroup.com/alma/apis/courses

Leganto customers only:

Ex Libris Leganto is an online solution for instructors and librarians to collaboratively create and process reading lists and manage citations. For more information about Leganto, see the Leganto Product Description. In particular, see Configuring External Services for Leganto. For UK customers, Leganto can be integrated with the DCS; see Integrating with the UK's Digital Content Store (DCS). For NA customers, you can clear copyrights through the CCC; see Clearing Copyrights Through the Copyright Clearance Center (CCC).

Alma enables you to integrate the Alma-supplied reading list citations and their statuses into a Course Management System (CMS), and provide a link that can be used from within the CMS to view the services that the library can supply for a given citation. If you are running Leganto, you can configure authentication between Leganto and your course management systems – See Configuring Learning Tools Interoperability (LTI).
Configuring Course Loading

To configure the Course Loading integration profile, you must have one of the following roles:

- Fulfillment Administrator
- General System Administrator

For general information about courses, see Managing Courses. For information about course rollover, see Rolling Over Courses (Alma) and Leganto Course Rollover (Leganto).

You can import course information from your course management system. Alma supports this using the Course Loader integration profile that runs on the schedule you configure. You can also manually run the profile after it is configured, and you can edit or delete the profile.

The course information must be in a tab-separated value file (not comma-separated) in a dedicated directory on an FTP server accessible by Alma, saved either as a .txt or .csv file.

Note
The first row can contain comma-separated values because it is assumed to be a header row, and is ignored.

Note
- The FTP directory must not be used for any other purposes.
- Each file must have a valid date stamp. The profile loads only a file with a date stamp later than the last time that the profile ran.
- The file must be in UTF-8 or ASCII format with CRLF line termination.

The file must contain a list of courses, one on each line, with the following columns, in order. Each line indicates a course that is new, changed, deleted, or rolled over (see the Operation column).

- The values in the following columns can contain comma-separated values because the commas are only used to separate between values within a column. Each is described in more detail in the Course Loader Fields table below:
  - MULTI_SEARCH_ID
  - MULTI_INST
  - CAMPUS_AND_PARTICIPANTS
- All columns must be present, even if values for a column in a row/all rows are not included.
- Key fields are Code and Section ID. These fields identify the course; however, only Code is mandatory. Valid values in the Course Title and Processing Department fields are also mandatory. Operation is mandatory (but see below). All other fields are optional.
- Only the first line with a specific code and section ID is processed. Any subsequent lines with the same code and section raise an error and are ignored.
- Start Date and End Date, and Submit By Date must be strings in the format specified in the integration profile. Number of Participants, Weekly Hours, and Year are integer fields. All other fields are strings.
- Old Course Code and Old Course Section are only required if the Operation field has the value ROLLOVER; see below.
• You can edit a course in a subsequent file by including a line with the same Code and Section ID.
  ◦ By default, only the Number of Participants and Instructor fields are changed; changes in other fields are ignored. You can select various checkboxes to change this behavior (see below).
  ◦ Changing the number of participants is informational only; it does not change the status of any citations attached to reading lists associated with the course.
  ◦ Changing the instructors changes who can associate a reading list with the course. It does not change any reading lists already associated with the course.
• When editing a course and a field is marked for overwrite (see overwrite options in step 8, below), or when rolling over a course, then entering a plus sign (+) as a value in the field instructs the job to keep the old value in this field (as if overwrite was not selected). If the old field contained multiple values, all old values are kept. Any other value (including an empty value) is used in place of the old value.

New Field Value When Editing Course

<table>
<thead>
<tr>
<th>The field in the input file is ...</th>
<th>left empty</th>
<th>a plus sign (+)</th>
<th>any other value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overwrite selected</td>
<td>Empty (old value is removed)</td>
<td>Old value</td>
<td>New value</td>
</tr>
<tr>
<td>Overwrite not selected</td>
<td>Old value</td>
<td>Old value</td>
<td>Old value</td>
</tr>
</tbody>
</table>

For any of the Searchable ID fields, if + is entered as a value in addition to other values, then the old values are kept and all other entered values are added as additional values.

Course Loader Fields

<table>
<thead>
<tr>
<th>Field</th>
<th>Code (in example file, below)</th>
<th>Description</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Code (mandatory)</td>
<td>COURSE_CODE</td>
<td>Mandatory. Up to 50 char. If using the LTI integration profile, this field must match the course identifier imported using the LTI integration profile.</td>
<td></td>
</tr>
<tr>
<td>Course Title (mandatory)</td>
<td>COURSE_TITLE</td>
<td>The course name</td>
<td>Up to 255 char</td>
</tr>
<tr>
<td>Section ID</td>
<td>SECTION_ID</td>
<td>Course section ID. Courses are divided into sections to better organize resources and activities for students. Each section may be taught by a different faculty member, have a separate description, and contain as many resources as the faculty member requires.</td>
<td>Not mandatory, but see note, above. Up to 50 char.</td>
</tr>
<tr>
<td>Academic Department</td>
<td>ACAD_DEPT</td>
<td>The academic department code. Use a code (not label or name) from the Academic Department table; any other value is ignored. See Configuring Academic Departments.</td>
<td></td>
</tr>
<tr>
<td>Processing Department</td>
<td>PROC_DEPT</td>
<td>The processing department code. Use a code (not label or name) from the Processing Department table; any other value is ignored. See Configuring Processing Departments.</td>
<td></td>
</tr>
<tr>
<td>Term1</td>
<td>TERM1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term2</td>
<td>TERM2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term3</td>
<td>TERM3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term4</td>
<td>TERM4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Code (in example file, below)</td>
<td>Description</td>
<td>Values</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Start Date</td>
<td>START_DATE</td>
<td>Start date of the course. If not entered, the value is taken from <code>course_start_date</code>, or the current date if it is not defined.</td>
<td>String in the format specified in the integration profile.</td>
</tr>
<tr>
<td>End Date</td>
<td>END_DATE</td>
<td>End date of the course. If not entered, the value is taken from <code>course_end_date</code>, or the current date if it is not defined.</td>
<td>String in the format specified in the integration profile.</td>
</tr>
<tr>
<td>Number of Participants</td>
<td>NUM_OF_PARTICIPANTS</td>
<td></td>
<td>Integer up to 10 char.</td>
</tr>
<tr>
<td>Weekly Hours</td>
<td>WEEKLY_HOURS</td>
<td></td>
<td>Integer up to 10 char.</td>
</tr>
<tr>
<td>Year</td>
<td>YEAR</td>
<td>Course year</td>
<td>Integer up to 19 char.</td>
</tr>
<tr>
<td>Searchable ID 1</td>
<td>SEARCH_ID1</td>
<td>Course ID(s), if you are using additional course IDs in the CMS that are different from the course code you entered above.</td>
<td>Up to 50 char. When editing or rolling over a course, if a + is entered here, then any IDs added in the Searchable ID columns are merged with any existing IDs in the course.</td>
</tr>
<tr>
<td>Searchable ID 2</td>
<td>SEARCH_ID2</td>
<td></td>
<td>A list of searchable IDs, separated by commas (,). There is no character limit for this field. Use this field to enter multiple search IDs in one column. When editing or rolling over a course, if a + is entered anywhere in here, then any IDs added in the Searchable ID columns are merged with any existing IDs in the course.</td>
</tr>
<tr>
<td>All searchable IDs</td>
<td>MULTI_SEARCH_ID</td>
<td>The list of all of the searchable IDs. You can use this field instead of the above 2 fields.</td>
<td>A list of instructors separated by commas (,). There is no character limit for this field. When editing or rolling over a course, if a + is entered anywhere in here, then any instructors added in any instructor columns are merged with any existing instructors in the course (note that this feature does not work for rollovers).</td>
</tr>
<tr>
<td>Instructor 1</td>
<td>INSTR1</td>
<td></td>
<td>An Alma user's primary identifier. Any value that does not match an existing user in Alma is ignored. If the user does not already have the Instructor role, you can configure that Alma adds the role. You can also configure whether a newly added instructor is automatically added as an owner to any existing reading lists for the course. See Configuring Reading List Ownership. When editing a course, if a + is entered here, then any instructors added in any instructor columns are merged with any existing instructors in the course (note that this feature does not work for rollovers).</td>
</tr>
<tr>
<td>Instructor 2</td>
<td>INSTR2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor 3</td>
<td>INSTR3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor 4</td>
<td>INSTR4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor 5</td>
<td>INSTR5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor 6</td>
<td>INSTR6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor 7</td>
<td>INSTR7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor 8</td>
<td>INSTR8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor 9</td>
<td>INSTR9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor 10</td>
<td>INSTR10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Instructors</td>
<td>MULTI_INST</td>
<td>The list of all of the instructors. You can use this field instead of the above 10 fields.</td>
<td>A list of search IDs, separated by commas (,). There is no character limit for this field. When editing or rolling over a course, if a + is entered anywhere in here, then any IDs added in the Searchable ID columns are merged with any existing IDs in the course.</td>
</tr>
<tr>
<td>Operation (mandatory)</td>
<td>OPERATION</td>
<td>This field is technically only mandatory in either of the following cases:</td>
<td>Empty, NEW, UPDATE, DELETE, or ROLLOVER.</td>
</tr>
<tr>
<td>Field</td>
<td>Code (in example file, below)</td>
<td>Description</td>
<td>Values</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------------------------</td>
<td>-------------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The value is <strong>DELETE</strong> or <strong>ROLLOVER</strong>, or • You enter any values in any of the remaining fields on the line (below).</td>
<td>If left empty, the course is added if no such course with the same code and section already exists in Alma; otherwise the course is edited. See the note, above. If set to <strong>DELETE</strong>, the associated course (identified by the first and third columns (Code and Section ID)) is deleted from Alma. If set to <strong>ROLLOVER</strong>, see the next two fields.</td>
</tr>
<tr>
<td>Old Course Code</td>
<td><strong>OLD_COURSECODE</strong></td>
<td>The information from the old course is copied to the new course.</td>
<td>When <strong>Operation</strong> is set to <strong>ROLLOVER</strong>, enter the old course code here and the old course section in the next field. These fields are not required if <strong>Operation</strong> is not <strong>ROLLOVER</strong>.</td>
</tr>
<tr>
<td>(rollover only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Old Course Section ID</td>
<td><strong>OLD_COURSESECTION</strong></td>
<td>The information from the old course is copied to the new course.</td>
<td>When <strong>Operation</strong> is set to <strong>ROLLOVER</strong>, enter the old course section in this field and the old course code in the previous field. These fields are not required if <strong>Operation</strong> is not <strong>ROLLOVER</strong>.</td>
</tr>
<tr>
<td>(rollover only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submit By Date</td>
<td><strong>SUBMIT_LISTS_BY</strong></td>
<td>String in the format specified in the integration profile.</td>
<td></td>
</tr>
<tr>
<td>Campuses and Campus Participants</td>
<td><strong>CAMPUS_AND_PARTICIPANTS</strong></td>
<td>If a campus code is not defined in Alma, the campus is created with the name `&lt;code&gt; not found. The number of participants is optional.</td>
<td>The list of campus codes, separated by commas. Each code can include the number of participants after a vertical bar, as follows: `&lt;code&gt;</td>
</tr>
<tr>
<td>Reading List Name</td>
<td><strong>READING_LIST_NAME</strong></td>
<td>If the Reading List Name field is empty, the old name is used along with any suffix specified (if any) from the On rollover reading list name suffix field in the Course Loader integration profile.</td>
<td>When <strong>Operation</strong> is set to <strong>ROLLOVER</strong>. Up to 255 char.</td>
</tr>
</tbody>
</table>

See an example file [here](http://example.com).

**To configure a course loading integration profile:**

1. Create an S/FTP connection for the integration profile. For more information, see [Configuring S/FTP Connections](http://example.com).

   **Note**
   This profile requires a unique, dedicated directory on the FTP server.

2. Ensure that the Activate/Deactivate Courses job is enabled. See [Configuring Fulfillment Jobs](http://example.com).

3. On the Integration Profile List page ([Configuration Menu > General > External Systems > Integration Profiles](http://example.com)), select **Add Integration Profile**. The Integration Profile page appears.

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4. In the **Integration type** field, select **Course Loader**. The page refreshes with different fields.

5. Enter a **Code** and **Name** for the profile.

6. Select the **S/FTP connection** for the profile. You can also enter an optional **Description**. Note: the **Default** field is reserved for future use.

7. The **System** field is mandatory and for Ex Libris’ information purposes only.

8. Select **Next**. The second page of the wizard appears.
9. Configure the following fields:

- **Active** - Whether this profile is active or inactive. An inactive profile cannot be scheduled or run.
- **Input File Path** - If the course file information is located in a subdirectory at the FTP connection, enter the subdirectory. Otherwise, enter /.
- **Delete associated reading lists when deleting a course** - Whether reading lists (and associated sections and citations) are deleted from Alma when their associated course is deleted. When not selected, the reading list remains in Alma without a course association.

If any courses are deleted, the profile’s job report indicates the number of deleted courses.

- **When deleting associated reading lists, delete copyright records** - Whether to also delete the copyright information about a deleted reading list if you enabled the previous setting (Delete Associated Reading List when Deleting a Course); this information is normally preserved for record keeping.

- **Add instructor role to users** - Whether to automatically add the Instructor role to all users listed in columns as instructors.
- **Date format** - The expected date format for date fields (for example, MM/dd/yyyy). For permitted values, see
- **Overwrite options** - Whether new values overwrite existing values for: instructors, number of participants, course title, academic department, processing department, term, start date, end date, weekly hours, and year.

- **Rollover options** - When performing a rollover, select whether:
  - **On rollover include archived lists** - Whether to include archived lists.
  - **On rollover delete existing reading lists** - Whether the old lists are removed.
  - **On rollover copy citation tags** - Whether citation tags are copied.
  - **On rollover copy section tags** - Whether section tags are copied.
  - **On rollover citation statuses** - Whether to copy the citation statuses, recalculate them (When recalculated, some may automatically be set to **Complete**; see Configuring Default Statuses for Citations/Reading Lists. All others are set to **Ready for Processing**.), or set all citations to **Being Prepared**.
  - **On rollover reading list statuses** - The status of the new reading lists: **Being Prepared**, **Ready for Processing**, **Complete**, or **Rolled Over**.
  - **On rollover reading list publication statuses** - Whether to copy the reading lists' publication statuses or set the new ones to **Draft**.
  - **On rollover copy copyright approvals or copyright status** - Whether to copy any existing copyright records or manual statuses (**Copy**), not copy existing records or statuses (**None**), or submit all new citations for copyright approval (**Recalculate**). Note that a DCS license type and status is copied, regardless of what this is set to; see Integrating with the UK’s Digital Content Store (DCS). If a copyright record is copied, the copyright approval date range is updated to the course's date range.
  - **On rollover list creation mode** - **Multiple** (create a new reading list for each course) or **Single** (if the reading list already exists, attach it to the new course). This option is relevant when multiple courses can be associated with a single reading list. As an example, if, in your file, you would like to roll over course C1 to C2 and also roll over course C1 to C3, the following will happen:
    - This option is set to **Multiple** - Two lists are created, one associated with C2, and one associated with C3.
    - This option is set to **Single** - One list is created, associated with both courses C2 and C3.
  - **On rollover copy public note** - Whether to copy citations' public notes.
  - **On rollover copy private note** - Whether to copy the citation's fulfillment notes.
  - **On rollover copy student discussion** (Leganto only) - Whether to copy student discussions. The names of the users are removed from each comment.
  - **On rollover copy reading list owners** - Whether to copy the reading list's owners.
  - **On rollover send owner subscription letter** - Whether to send an owner subscription letter after the completion of a rollover.
  - **On rollover copy reading list collaborators** - Whether to copy the reading list's collaborators.
  - **On rollover reset old list owners** - Whether to reset the old list owners.
  - **On rollover, existing permalinks will point to the new list once the list is published** - Whether existing permalinks should point to the new list (once it is published) or remain pointing to the old list.
  - **On rollover, copy syllabus** (Leganto only) - Whether to copy the reading list's syllabus.
  - **On rollover Copy Assignee** - Whether to copy the reading list's assignee.
  - **On Rollover copy only newest list** - Whether to copy only the newest list during rollover. This avoids duplicated lists during rollover if, for some reason, multiple lists are associated to your course.
• **On rollover:**
  - **Keep course instructors** - Keep the existing course instructors, and ignore the instructors in the uploaded file.
  - **Overwrite course instructors** - Remove the old instructors and add the instructors from the file.
  - **On rollover visibility of old reading list** (Leganto only) - Select the publication status of the old list after a rollover (the new list will be in Draft). Leave blank to keep the existing publication status, whatever it is.
  - A list's copyright clearance is reset on rollover. However, if a creative commons license is declared for the citation, this declaration is rolled over.
  - Select when you want the profile to run. The scheduling options vary depending on your time zones, but include not scheduled, every 6 hours, every day, every week, and every month.

10. Select **Save** to save the profile.

You can see the job on the list of scheduled jobs. See [Viewing Scheduled Jobs](#).

**To manually run a course loading profile:**

1. On the Integration Profile List page ([Configuration Menu > General > External Systems > Integration Profiles](#)), select **Edit** in the row actions list for the course loader integration profile. The profile appears with the **General Information** tab pre-selected.

   ![Integration Profile](image)

   **Note**
   The **Contact Info** tab is reserved for future use.

2. Select the **Actions** tab. The **Actions** tab appears.

3. Select **Run** to run the profile. The job number appears on the page.
You can monitor the job on the Monitor Jobs page. See Viewing Running Jobs and Viewing Completed Jobs.

To edit a course loading profile:

1. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Edit in the row actions list for the course loader integration profile.
2. Enter any changes (see To manually run a course loading profile, above) and Select Save. The profile is modified.

To delete a course loading profile:

On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Delete in the row actions list for the course loader integration profile, and then select Confirm in the confirmation dialog box. The profile is deleted.
Resource Sharing Partners

To configure the communication between Alma and resource sharing systems, you must have the following role:

- Resource Sharing Partners Manager

Resource sharing partners can be created to define the types of request/receive communication that can take place between Alma and a resource sharing system.

- NCIP – Communication between Alma and resource sharing systems, such as OCLC Navigator, OCLC iLLiad, VDX, and Relais D2D, via NCIP 2.0 messages. Note that Alma supports the OCLC CIRC ILL and Relais application profiles for both borrowing and lending, as well as the responder role for the following NCIP messages: RequestItem, CheckOutItem, CheckInItem, AcceptItem, LookupUser.
  - Alma notifies the partner when an item renewal is requested by sending a RenewItem message to the partner with item information and a desired due date. The partner responds with a pending status and possibly a DateOfExpectedReply. The partner system may also notify Alma about the status of the renew request. Alma receives an NCIP CirculationStatusUpdated message with a circulation status of
    - Renew Still Pending - Marks the request as Renew Requested.
    - Item Not Renewed - Manages the request as it does when a renew request is rejected.
  - Checking in a single request with multiple items will create a CheckInItem request for each of the items.

- ARTEmail – Communication between Alma and the British Library resource sharing system.

- ISO – Communication between Alma and another resource sharing (Alma or non-Alma) system.

- Email – The sending of borrowing requests by the Alma borrowing partner via email.

  Email requests are sent in XSL format. The XSL used for formatting the email is FulOutGoingEmailLetter.xsl and is configurable on the Configuration Files page (see Customizing Letter XSL Style Sheets).

- SLNP – Communication between Alma and the ZFL server for the resource sharing workflow in Germany.

  Full integration details with this partner are available in the Alma Developer Network at https://developers.exlibrisgroup.com/alma/integrations/resource_sharing/broker/SLNP.

- BLDSS – Communication between Alma and the British Library resource sharing system. For more information, see British Library Document Supply Service.

  The Service/Speed element of the CreateOrder message is mapped to the levels of service table. The BLDSS mapping levels are:
  - EXPRESS_LOCAL - Immediate Download
  - RUSH_LOCAL - 2 Hours
  - PRIORITY_LOCAL - 24 hours
  - NORMAL_LOCAL - Within 4 days

  The BLDSS levels of service map to Alma's levels of service as follows:
For more information on levels of service, see Configuring Levels of Service.

- **External Systems** - Used to receive a resource through the CCC GetItNow service.
- **RapidILL** - Used to create borrowing requests in RapidILL using the InsertRequest RapidILL API.
- **Fulfillment Network** - For institutions configured as a fulfillment network, a partner record is entered in order to use the resource sharing framework for the fulfillment network request. For more information, see Automated Fulfillment Network Requests (AFN).

For detailed information on broker-based resource sharing between Alma and various systems, see https://developers.exlibrisgroup.com/alma/integrations/resource_sharing/broker.

---

**Note**

In order to create a partner that works with SBN ILL, an ISO partner must be created in Alma.

---

**To configure a resource sharing partner:**


   ![Resource Sharing Partner Page – General Information](image)

2. Enter a code and name for the resource sharing partner. Note that the code can contain only alphanumeric
3. In the **Profile type** field, select the type of protocol you want to create. Options are:
   - ARTEmail
   - BLDSS
   - Email
   - External System
   - ISO
   - ISO 18626
   - NCIP
   - NCIP-P2P
   - RapidILL
   - SLNP

   **Note**
   To learn more about the **NCIP-P2P** protocol, please refer to the [Developer Network](#).

4. Optionally, select **Inactive** from the **Status** drop-down list if you do not want the partner to be active.

   **Note**
   The status affects only peer-to-peer requests, such as ISO, but does not affect broker managed requests, such as NCIP. NCIP requests are still received, even if an NCIP type profile is marked inactive.

5. Select the resource sharing system with which you are integrating from the **System type** drop-down list (for Ex Libris’ informational purposes). Note that this is mandatory.

   For a profile with an External System profile type, select **CCC GetItNow** as the System Type (this is the default).

   When an NCIP profile is configured, the indicated broker types must be configured with the following parameters:

   - **Relais**
     - Request pushing method = OpenURL
       
       The URL is defined as follows, where the XXX and YYY values are provided to each institution by Relais:
       
       ![URL](https://h7.relais-host.com/<XXX>/loginRFT.jsp?LS=<YYY>)
     - Add User to Login = Yes
     - Enable Service for Guest User = No
     - Loan Period = <Free text, which is displayed in the Get It tab>
   
   - **OCLC Navigator**
     - Request pushing method = Link
       
       The Navigator system cannot receive an OpenURL as input; the configurable link can only be a static link. To configure a dynamic link to the Navigator system, use General Electronic Services (see [Adding a General Electronic Service](#)).
• Enable Service to Guest User = Yes

Navigator requires a new login when being accessed.

• Loan Period = <Free text, which is displayed in the Get It tab>

○ INN Reach

• Request pushing method = Link

A link is created by a General Electronic Service with an OpenURL template, as described in Adding a General Electronic Service.

• Enable Service for Guest User = No

INN Reach does not trigger an authentication process, as authentication is expected to have taken place before accessing the INN Reach request form.

• Loan Period = <Free text, which is displayed in the Get It tab>

○ ILLiad

• Request pushing method = Link

A link is created by a General Electronic Service with an OpenURL template, as described in Adding a General Electronic Service.

• Add user login to URL = No

ILLiad requires logging in again

• Enable service for guest user = Yes

• Loan Period = <Free text, which is displayed in the Get It tab>

The configured brokers display as links on the Primo Get It tab. For more information about brokers in the Get It tab, see More Information About Resource Sharing Broker in Get It.

○ General Electronic Services – Displays a Primo link to an external service (such as Amazon), as an additional way to retrieve resources. You can also create rules to assign different links to be used for different resources (such as for a book or DOI). For details, see Adding a General Electronic Service.

○ Display Logic Rules – Indicates when a certain broker link will display or be hidden in Primo (see Configuring Display Logic Rules).

6. Enter values in the Average supply time, Delivery delay, and Currency fields, and select the Supports borrowing and/or Supports lending check boxes.

If you select Supports borrowing and/or Supports lending, choose one of the workflows from the drop-down list options predefined by an administrator (in Configuration Menu > Fulfillment > Resource Sharing > Workflow Profiles). For details on configuring workflow profiles, see Configuring Workflow Profiles.

---

Note

The workflows selected here control the actions that can be performed on the borrowing and lending request task lists for the defined partner.

7. In the Delivery delay field, enter the number of days needed for delivery of the item. The due date calculated when the received item is loaned to the requesting patron is automatically advanced by the number of days indicated in this
field.

For example, if the due date when receiving the item is June 5, 2013 and **Delivery Delay = 4**, the **Due Date** value displays on the Patron Services page as June 1, 2013, to allow 4 days for item delivery and ensure that the item arrives by its 'actual' due date of June 5.

For more information about managing the due date for an interlibrary loan, see the [Interlibrary Loan With Due Date video](https://example.com) (7:01 mins).

8. The **Local Status** field appears for institutions that centrally manage their partner records in the Network Zone. It allows an individual institution to locally deactivate a partner record even though the partner is active for the collaborative network.

9. In the **Locate profile** field, select a locate profile to determine how the partner’s catalog is to be searched. The **Holding code** and **Institution Code** fields appear. **Institution Code** is a display field that shows the Alma institution code that is configured for the selected locate profile. This field must be populated in order to use links (rather than attachments) for the digital shipment of a resource sharing request if the institutions are not part of the same network zone. For details on locate profiles, see Configuring Locate Profiles and Configuring Copyright Management.

10. If an incoming NCIP message cannot identify the partner, the NCIP partner that has the **Default Partner** check box selected is used.

11. In the **Holding code** field, enter a library or campus code. The locate process for the partner searches the library/campus indicated by the value in this field.

   Specifying a holdings code enables you to:
   - Determine whether a requested resource is available at a specific campus of a potential supplier.
   - Request the resource from that lender only if the resource is owned at the requested campus.

12. For peer-to-peer partners, selecting the **Automatic Claim** field enables the **Time to Claim (days)** field. This triggers an automatic claim letter (RSBorrowerClaimEmailLetter) when a configured period of time is reached. For example, when the **Automatic Claim** check box is selected and the **Time to Claim (days)** field is set to 7, if a request was sent 7 days ago and the request's status is still **Sent**, a claim letter is automatically triggered and the request status is set to **Claimed**.

13. For peer-to-peer partners, selecting the **Automatic Cancel** field enables the **Time to Cancel (days)** and **Cancellation Reason** fields. The cancelation uses the same workflow as the manual cancel partner option and sends an automatic cancelation notification to the partner and continues through the rota.

---

**Note**

For the cancelation and claim action to take place, you must activate the Resource Sharing Claiming and Cancellation job using the Fulfillment Jobs Configuration page. See Configuring Fulfillment Jobs.

---

14. In the **Contact Information** tab, add address, phone number, and email information for the resource sharing partner (for informational purposes only; information for sending the resource sharing request is entered in the Parameters tab – see the following step). For instructions, see Adding User Contact Information.

15. In the **Parameters** tab, configure the resource sharing parameters. For more information, see Partner Parameters below.
16. Select Save. The resource sharing partner is created and appears on the Resource Sharing Partner List page.

The partner can then be selected from the Partner drop-down list (accessible when selecting the Edit, Duplicate, or Send options on the Resource Sharing Borrowing Requests page) or Supplied to drop-down list (accessible when selecting the Edit or Duplicate options on the Resource Sharing Lending Requests Task List page).

---

**Note**

A Notes tab is available when editing the resource sharing partner (Actions > Edit).

---

**Partner Parameters**

**ARTEmail Parameters**

Enter the ARTEmail email address. In addition, for each customer ID you add, you must enter a code and password. Optionally, if you want to enable the ability to send requests to an alternate physical location or email address (which you can select to do in the Request Attribute section of the Creating a Borrowing Request page), you may select the Supports ADD request check box. You may also select keyword codes—that is, request values—to include. (Refer to the British Library's Guide to ARTEmail for an explanation of these values.) These define the communication that is possible vis-a-vis the resource sharing partner.
### NCIP Parameters

Configure parameters as described in the following table.

<table>
<thead>
<tr>
<th>Section</th>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information</td>
<td>User identifier type (Required)</td>
<td>The identification type that will be used to match users when a message contains a user ID. Select one of the options predefined by an administrator. See <a href="#">Viewing Additional User Identifier Types</a>.</td>
</tr>
<tr>
<td></td>
<td>Request pushing method (Required)</td>
<td>Select the type of link — <strong>OpenURL</strong> or <strong>Link</strong>—that will be used to push the request into the resource sharing system. If you select <strong>OpenURL</strong>, the <strong>Add user auto login</strong> field appears.</td>
</tr>
<tr>
<td></td>
<td>URL template</td>
<td>The URL that is used to send patrons from Primo to the resource sharing library’s Web site.</td>
</tr>
<tr>
<td></td>
<td>Broker System NCIP URL</td>
<td>The URL to communicate with the NCIP broker.</td>
</tr>
<tr>
<td></td>
<td>Add user auto login to URL</td>
<td>Select <strong>Yes</strong> to add a user’s login credentials to the URL, thereby logging the user in automatically upon accessing the URL. This field displays only when <strong>Request pushing method = OpenURL</strong>. Select <strong>Yes</strong> when configuring integration with a Relais system (see <a href="#">Configuring Alma/Broker Integration</a>).</td>
</tr>
<tr>
<td></td>
<td>Enable service for guest user</td>
<td>Indicates whether the link to the partner displays in Primo when the patron is not logged in.</td>
</tr>
<tr>
<td></td>
<td>Disable service when</td>
<td>Select the parameters upon which the service is to be disabled. Possible values are:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>Never</strong> – The service is never disabled.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>When resource is owned by the campus</strong> – The service is disabled when physical items for the resource are owned by the campus.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>When resource is self-owned by campus and available</strong> – The service is disabled when physical items for the resource are owned by the campus and are available (that is, they are not involved in a process).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>When resource is owned by the library</strong> – The service is disabled when there are physical items for the resource that are owned by the library.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>When resource is owned by the library and available</strong> – The service is disabled when there are physical items for the resource that are owned by the library, are in place, and are in an open location.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>When a guest user or a user without a configured campus performs any of the campus-level disabling activities, Alma disables/hides the service based on a self-ownership check done on the institution level.</td>
</tr>
<tr>
<td></td>
<td>Loan period</td>
<td>The amount of time the user has before having to return the item to the resource sharing library. (This may be seen by patrons in Primo.)</td>
</tr>
<tr>
<td>Section</td>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Request Item</td>
<td>Default library owner</td>
<td>The resource sharing library which manages the borrowing request created by this profile.</td>
</tr>
<tr>
<td></td>
<td>Download Certificate</td>
<td>This button is used to authenticate the TCP communication for encrypted messages sent to Alma using the SLNP protocol.</td>
</tr>
<tr>
<td></td>
<td>Button</td>
<td>The button appears for NCIP partners after the partner has been saved the first time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For more information on the certificate, see the Developer Network.</td>
</tr>
<tr>
<td></td>
<td>Resource sharing library</td>
<td>The single resource sharing library that is supported for all actions. Select from a list predefined by an administrator.</td>
</tr>
<tr>
<td></td>
<td>Bibliographic record ID type</td>
<td>Select a parameter by which resource sharing requests are to be searched. Possible values are:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• OCLC Control Number</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• MMS ID</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• LCCN</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ISBN_ISSN</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Taken from message – Indicates that the bibliographic record ID type is to be taken from the NCIP message sent by the partner. The relevant value is one of the other values available in this field, and is taken from the BibliographicRecordIdentifierCode tag in the message.</td>
</tr>
<tr>
<td>Check Out Item</td>
<td>Default library (Required)</td>
<td>The resource sharing library to be used as the default, if there are multiple resource sharing libraries.</td>
</tr>
<tr>
<td></td>
<td>Default location (Required)</td>
<td>The temporary location at the resource sharing library that will be assigned to an item that is shipped to a resource sharing borrower. Select from a list predefined by an administrator.</td>
</tr>
<tr>
<td></td>
<td>Default item policy (Required)</td>
<td>The policy that will be attached to an item that is shipped to a resource sharing borrower. Select from a list predefined by an administrator.</td>
</tr>
<tr>
<td>Accept Item</td>
<td>Default location (Required)</td>
<td>The temporary location at the receiving library. Select from a list predefined by an administrator.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This location is assigned to an item that is shipped to a resource sharing borrower, unless a different location has been assigned by a Temporary Item Creation Rule.</td>
</tr>
<tr>
<td></td>
<td>Resource sharing library</td>
<td>The resource sharing library, if there are multiple resource sharing libraries.</td>
</tr>
<tr>
<td></td>
<td>Default pickup library</td>
<td>The default pickup location to which temporary items are transferred when an item arrives for a borrowing request. Select from a list of libraries predefined by an administrator.</td>
</tr>
<tr>
<td>Section</td>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>Automatic receive</td>
<td>Select to enable receiving resource sharing items automatically. Automatic receiving enables staff to register a Receive action in the broker system, without having to repeat the Receive action in Alma. Enabling this option allows multiple AcceptItem requests to be processed for a single multi-item borrowing request. This is applicable if the requests contain the same request ID but different barcodes and the request ID is active. If the option is not enabled, multiple requests will be created with the same request ID.</td>
<td></td>
</tr>
<tr>
<td>Receive desk</td>
<td>Select a desk at which the item is to be received. The available options are the desks of the library that is specified in the Default library owner field. The value you select indicates the location where the item arrives when the AcceptItem message is received. This field displays only when Automatic receive is selected.</td>
<td></td>
</tr>
<tr>
<td>Look Up User</td>
<td>An NCIP message is sent when a patron attempts to create a request at the resource sharing system.</td>
<td>Select whether authentication should or should not be required for the resource sharing library's Web site. When working with a Relais broker, select No.</td>
</tr>
<tr>
<td>Export to Third Party</td>
<td>Export to third party Used for ILLiad. See ILLiad parameters below.</td>
<td></td>
</tr>
<tr>
<td>Create User Fiscal Transaction</td>
<td>A received NCIP message can create a request fee.</td>
<td>Create fee using - Ignore Message - The message amount should be ignored. The charges for request fee and creation and receive fee will be done by the AcceptItem message (current functionality). This is the default value in order to keep prior functionality. - Amount from message - Create the fee with the value received in the message. - Calculate percentage from message - Create the fee as a percentage of the value received in the message. When this value is selected, the Percentage Amount field is displayed and is mandatory. Enter the percentage of the value received in the message that will create the fee. - Amount from TOU - Use the Borrowing Resource Sharing Terms of Use to calculate the fee. When the NonReturnableFlag is present, the digital format will be used as input. When the flag is not present, the physical format will be used as input.</td>
</tr>
</tbody>
</table>

**Note**

You must also configure the following parameters on the NCIP partner:

- The NCIP URL, in the following format: https://<Alma domain>/view/NCIPServlet
- The AgencyID, which is your Alma institution code
- The ApplicationProfileType, which is the code defined on the Resource Sharing Partner page (see step 2 above)
NCIP Peer-to-Peer Parameters

- **Supports ADD request** – Select this box if you want to enable the ability to send requests to an alternate physical location or email address (which you can select to do in the Request Attribute section of the [Creating a Borrowing Request page](#)).

- **User identifier type** – The identification type that will be used to match users when a message contains a user ID. Select one of the options predefined by an administrator. See [Managing User Identifiers](#).

- **Server** – Enter the partner’s server name (or IP address).

- **Institution code** – Enter the partner’s Alma institution code.

- **Partner symbol** – The symbol by which the ILL partner is referred. The symbol must be unique to all other partner and ISO symbols. This includes NCIP-P2P, SLNP, and ISO partners.

- **Request Expiry** – Configure when the partner’s lending settings expire. Choose from the following:
  - **No expiry** – The request does not expire
  - **End by interest date** – The request expires on the date specified in the **Needed by** field on the Resource Sharing Borrowing Request page (displayed when creating a borrowing request).
  - **Expiry time** – The **Expiry time** field appears, where you enter a number. This value indicates the number of days after the request has been sent to the lender that the request expires.

- **Send requester information** – Select for resource sharing requests sent via the specified partner to contain the requester’s information.

- **Shared barcodes** – Select to enable sharing item barcodes between lending and borrowing institutions.

- **Email Address** – Used for sending overdue notifications.

- **Resending Overdue Days Interval** – A whole number that indicates the number of days for recurring overdue notifications.

An additional option available for NCIP peer-to-peer configuration is the **Lookup Agency** button. Selecting this button contacts the partner and returns their supported protocol or other information the partner wishes to transmit to assist in the partner configuration process. You may also set your institution’s information that will be transmitted to other partners by customizing the **resource_sharing_protocol** parameter of the Fulfillment mapping table. For information on modifying this value, see [Configuring Other Settings](#).

NCIP peer-to-peer supports sending a general message to the partner institution.

ISO Parameters

**Note**

- Alma supports the following ISO Resource Sharing messages: **ILL Request, Shipped, Received, Returned, Checked-In, Answer – Unfilled, Cancel/Cancel Reply**, and **General Messages**.

- ISO partners can fulfill digital resource sharing requests using the link document delivery option.

- **Supports ADD Address** – Select to include the requester’s email in the ILL request, enabling the lending partner to send the shipped resource directly to the requester.

- **Server** – the partner’s server or IP address. If the partner also uses Alma, use the Alma domain (see [Logging Into and Out of the User Interface](#)) as the server.
- **Port** – the partner’s ILL port number. If the partner also uses Alma, this is port 9001.

- **ISO symbol** – the symbol by which the ILL partner is referred. The symbol must be unique to all other partner and ISO symbols. This includes NCIP-P2P, SLNP, and ISO partners.

- **Request Expiry** – configure when the partner’s lending settings expire. Choose from the following:
  - **No expiry** – The request does not expire
  - **Expire by interest date** – The request expires on the date specified in the **Needed by** field on the Resource Sharing Borrowing Request page (displayed when creating a borrowing request).
  - **Expiry time** – The **Expiry time** field appears, where you enter a number. This value indicates the number of days after the request has been sent to the lender that the request expires.

- **Send requester information** – Select for resource sharing requests sent via the specified partner to contain the requester’s information

- **Shared barcodes** – Select to enable sharing item barcodes between lending and borrowing institutions. If both the lending and borrowing partners have this option selected, the lending library sends a barcode with the **Shipped** message, and the borrowing library uses the **Shipped** message to determine the lender item’s barcode. The barcode displays as the **Temporary Barcode** value on the Receiving Items page (displayed when selecting **Receive** for a borrowing request), and can be used for identifying the received item when accessing the Received Items page (see Receiving Items).

- **Ignore Lender Shipping Cost** - Select this check box to use the borrower's set cost. When the check box is not selected, the lender-side costs override the borrower's cost. Note that when the check box is not selected, the borrowing institution's cost is overridden even if the lender has not communicated a cost value, i.e. it will be considered as if a value of 0 is communicated to the borrower.

- **Resending Overdue Days Interval** – A whole number that indicates the number of days for recurring overdue notifications.

---

**Email Parameters**

- **Email address** - The email address to which resource sharing borrowing requests are to be sent. Note that if you are working in a sandbox environment or in a pre-“Go Live” production environment, the entered address must be added to the Email Include List Mapping Table in **General Configuration > Configuration menu > External Systems > Allowed Emails**. For details, see Configuring Allowed Emails.

- **Resending Overdue Days Interval** – A whole number that indicates the number of days for recurring overdue notifications.

---

**ILLiad Parameters**

ILLiad may be set up in Alma in a peer-to-peer rota as a supplier of last resort (see Peer-to-Peer Resource Sharing in the Resource Sharing Guide). To do so, find the section, **Export to Third Party**, at the bottom of the parameters tab.

For the **Export to Third Party** radio button, select either **Using Email** or **Using API**.

If you select email, enter the email address for ILLiad request notifications in **Export email address**. Note that ILLiad must be configured to upload emails sent to the configured address and use them to create an internal borrowing request.

If you are using the API for exporting borrowing requests to ILLiad, enter the **URL** and **API key**, as supplied by ILLiad. Additionally, enter the name of the XML tag to populate with the external request ID in **Export request ID name tag**.
Enter the name of the tag to populate with the external request ID. ILLiad will be able to use this request ID for further NCIP communications with Alma. Using this option allows you to continue receiving updates using NCIP. The value of this tag must be coordinated with ILLiad.

The **Close Request when Exported** defines whether the borrowing request will be closed after export to ILLiad or will be managed under the same borrowing request. If ILLiad NCIP integration has been configured, setting this parameter to false will enable to continue receiving updates about the request from ILLiad via NCIP throughout its ILLiad lifecycle.

Also see the [Developer Network blog entry](#).

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### SLNP Parameters

- **Supports ADD Address** – Select to include the requester’s email in the ILL request, enabling the lending partner to send the shipped resource directly to the requester.
- **Server** – The partner’s server name (or IP address)
- **Port** – The partner’s ILL port number
- **Partner symbol** – represents the library Sigel. The symbol must be unique to all other partner and ISO symbols. This includes NCIP-P2P, SLNP, and ISO partners.
- **Request Expiry** – configure when the partner’s lending settings expire. Choose from the following:
  - **No expiry** – The request does not expire
  - **Expire by interest date** – The request expires on the date specified in the *Needed by* field on the Resource Sharing Borrowing Request page (displayed when creating a borrowing request).
  - **Expiry time** – The *Expiry time* field appears, where you enter a number. This value indicates the number of days after the request has been sent to the lender that the request expires.
- **Send requester information** – Select for resource sharing requests sent via the specified partner to contain the requester’s information
- **Shared barcodes** – Select to enable sharing item barcodes between lending and borrowing institutions. If both the lending and borrowing partners have this option selected, the lending library sends a barcode with the *Shipped* message, and the borrowing library uses the *Shipped* message to determine the lender item’s barcode. The barcode displays as the *Temporary Barcode* value on the Receiving Items page (displayed when selecting *Receive* for a borrowing request), and can be used for identifying the received item when accessing the Received Items page (see [Receiving Items](#)).
- **Email Address** – The email address for sending overdue notifications
- **Resending Overdue Days Interval** – A whole number that indicates the number of days for recurring overdue notifications.

---

### Fulfillment Network Parameters

- **Customer Code** - The Alma customer code of the fulfillment network partner.
- **URL** - The Alma URL of the fulfillment network partner.
- **Request Expiry** - configure when the partner’s lending settings expire. Choose from the following:
  - **No expiry** – The request does not expire
  - **Expire by interest date** – The request expires on the date specified in the *Needed by* field on the Resource Sharing Borrowing Request page (displayed when creating a borrowing request).
- **Expiry time** – The **Expiry time** field appears, where you enter a number. This value indicates the number of days after the request has been sent to the lender that the request expires.

### BLDSS Parameters

- **Base URL** – Enter the partner’s URL.
- **Account** – The account number supplied by the British Library.
- **Password** – Enter the account password.
- **Digital Format** – Select the type of file transfer.
- **Send requester information** – Include requester information in resource sharing requests sent using the specified partner.
- **Allow Asynchronous Request** – Enable sharing item barcodes between lending and borrowing institutions.

### RapidILL Parameters

It is possible to configure a dedicated RapidILL partner. If configured, Alma will automatically export borrowing requests that have been assigned to the RapidILL partner, and create an equivalent **borrowing** request in RapidILL. The Alma request will be automatically closed with a status of **Exported to Third Party**, and the request will be further managed in the RapidILL system. The export action takes place when the **Send** action is triggered (manually or automatically) for the request with the active RapidILL partner.

If the request cannot be fulfilled by RapidILL, for example in the case where the requested resource is not lendable in RapidILL, then the **Send** action will be rejected and the request will automatically move on to the next partner on the rota, or get canceled when there are no other partners that can fulfill the request.

This enables the library to set RapidILL as a partner in the rota, so that all requests will automatically be exported for fulfillment via RapidILL, unless the request cannot be fulfilled by RapidILL. In this case the request will propagate through the Alma rota.

- **URL** – Mandatory – The URL defaults to [https://rapid.exlibrisgroup.com/rapidpiservice.asmx](https://rapid.exlibrisgroup.com/rapidpiservice.asmx), which is the RapidILL production server.
- **Username** – Mandatory
- **Password** – Mandatory
- **Requesting Rapid Code** – Mandatory
- **Requesting Branch Name** – Mandatory – If your institution has multiple RapidILL branches, each branch needs a different partner.

The values for configuring these fields are supplied by RapidILL

- **Send Requester Information** – Whether requester information is included in the API.
- **Supports ADD Address** – Determines whether alternative email/address entered by patron are sent in the API. Disabled by default. This has the effect of determining whether the RapidILL request will be for sending the resource to the requesting library email or to the patron email.
- **Close Request when Exported** - When selected, the request is closed when exported and the request status is updated to **Exported to 3rd party**. This is the default. When the check box is not selected, the request remains active after it is exported to Rapid, and the request status is updated to **Sent to partner**. This allows the request to remain viewable in Primo even though it has been exported. Requests that are left open must be manually closed.
British Library Document Supply Service (BLDSS)

The British Library Document Supply Service (BLDSS) APIs create a seamless integration between your library and the British Library for resource sharing. The APIs are integrated into Alma's resource sharing and allow for all of the actions that are part of the process of requesting British Library material to be performed from within Alma as part of Alma's internal workflows.

British Library Online Account Setup

To set up your British Library online account:

1. To request the API, you need to know your British Library Business Account number (Customer Code), for example, 87-1234, and your Authorisation Code (ART Password), for example, A1B2C34. If you do not know your Authorisation Code, use the following procedure to retrieve it:

   1. Access Business Account Administration: https://businessaccount.bl.uk/Ui/BusinessAccountLogin.aspx. Login requires an Administrator or Account Manager role. If you do not have a personal login for On Demand, create one using the register link at: https://ondemand.bl.uk/onDemand/home. To obtain the necessary role to confirm the API, contact your Account Manager if you have one, or British Library Customer Services if you don't.

   2. Select View/Change next to the required account.

   3. In the On Demand Ordering Options tab, see the Authorisation Code at the bottom of the page:

      ![British Library Account Setup](image)

      British Library Account Setup

2. Contact Ex Libris Support to notify Ex Libris of your account number. Ex Libris Support notifies the library that the account is linked to Alma.

3. Log in to application management: https://api.bldss.bl.uk/applications/ to confirm that Alma has been linked to the account. Alma appears in the list of applications to which the client is registered (such as AlmaExTestApp). Select the Created button. The button changes to Confirmed.

![Applications to Which the Client Is Registered](image)
Alma Configuration

• Locate Profile - A locate profile of type BLDSS must be created. For more information, see Adding Locate Profiles.

Note
The Alma locate process communicates with the partner’s server. If the communication process fails, the locate will still be considered a success, leaving the partner on the rota. When this happens, the record ID is not recorded so the send request process will fail. The resulting message is "Cannot send a request that was not located." Should this occur, manually re-run the locate from the action on the task list. If this problem happens repeatedly, contact Ex Libris support to adjust your timeout settings.

• Partner Record - A partner record of type BLDSS must be created. For more information, see Resource Sharing Partners.

Alma Workflow Components

• Activate Job - Two jobs entitled Update BLDSS Requests are found in the Monitor Jobs scheduler. One or both of them must be activated in order to receive status updates from the British Library. The British Library system posts status updates on their server. The Update BLDSS Requests job retrieves the updates. If both jobs are activated, status retrieval will be done twice a day.

• BLDSS Facet - In addition to the Active Partner facet which allows you to select BLDSS to display only BLDSS requests, there is a facet to filter on a particular BLDSS status. The BLDSS statuses are independent of Alma statuses because they are the statuses supplied by the British Library.

• BLDSS Renewals - An option exists on the British Library account setup to automatically renew loans. If this option has been selected, an outstanding loan will automatically receive a status update of Renew Requested. It is recommended that you use the Status facet and select all BLDSS loans with a Renew Requested status. Manually renew the loan using the Renew Requested action. The request status will change to Renewed by partner. Make sure the partner’s lending workflow profile includes Staff Renewal and does not include Renewal Response.

For more information about the BLDSS APIs, see More information About Using BLDSS APIs.
Importing Resource Sharing Borrowing Requests From an External System

To import resource sharing borrowing requests from an external system, you must have the following role:

- General System Administrator

This feature enables importing resource sharing borrowing requests from an external system into Alma.

To import borrowing requests from an external system, configure a Resource Sharing Integration profile in Alma. The borrowing requests are then imported by running the Import resource sharing requests using profile <profile name> job. In order to successfully import requests where the library code differs between Libris and Alma, a library mapping must be completed. For more information, see Mapping Alma Library Codes to External Library Codes for Libris ILL. If the import is done without the library code mapping being defined, the import will fail.

After requests are imported from the external system, additional processing of the requests (such as sending, receiving, canceling, and so forth) is performed in Alma.

To configure a resource sharing integration profile:

1. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile. The External System page appears. This is the first page of a two page wizard.

2. In the Code field, enter a code for the integration profile.
3. In the Name field, enter a name for the integration profile.
4. In the Integration type field, select Resource Sharing Integration from the drop down list.
5. Optionally, in the Description field, enter a description for the profile.
6. Select Next. The second page of the wizard appears.
7. In the **System** field, select the external system name. For the Netpunkt option, see [Integrating Alma with the Netpunkt ILL System](#) for more information.

8. When selecting Libris, the following options are displayed:

   1. In the **System base URL** field, enter a URL for the external system.
   2. In the **Library code** field, enter the code of your library as used by the external system.
   3. In the **Resource sharing library** field, select a resource sharing library to which imported requests are to be transferred.
   4. Optionally, select the **Authentication** check box to require authentication from the external system before requests can be imported into Alma.
   5. In the **Active** field, select **Active** to activate the profile.
   6. In the **Harvest start date** field, enter a date according to the granularity specified in the **Granularity** value. This indicates the date from which borrowing requests are imported into Alma, until the current date. For example, if **2015-04-01** is specified as the Harvest start date, all borrowing requests with a date between April 1, 2015 and the current date are imported by the profile.
   7. In the **Schedule** field, select a schedule for the import of requests, as follows:
      1. **Not scheduled** – The import is not scheduled and will not take place
      2. **Every day at {TIME}** – The import is scheduled to occur every day at a specific time
      3. **Every {DOW} at {TIME}** – The import is scheduled to take place on a specific day of the week at a specific time

9. Select **Save**. The **Import resource sharing requests using profile <profile name>** job is scheduled according to the value selected above. The job can be monitored on the Monitor Jobs page; see [Viewing Running Jobs](#).

After running the **Import resource sharing requests using profile <profile name>** job, the imported requests appear on the Resource Sharing Borrowing Requests page (**Fulfillment > Resource Sharing > Borrowing Requests**).

**To monitor the configured resource sharing integration profile:**

1. On the Integration Profile List page (**Configuration Menu > General > External Systems > Integration Profiles**), select **Job History** from the row actions list for the configured resource sharing integration profile. The Job History page displays the results of the various jobs that have run in Alma.

2. Select **Report** from the row actions list for the **Import resource sharing requests using profile <profile name>** job.
The job results appear on the Process Results page.

3. Select **Preview records** to open the Events Report page and view details on the specific request.

To learn more about creating Locate Profiles and associating them with Partners see the [Locate Resource before Sending Borrowing Request](#) video (11:20 mins).

---

**Note**

When a request is imported for Libris, the partners that are attached to the request are found by partner code, regardless of case.
Requests to Remote Storage Facilities

To configure a remote storage type of integration profile, you must have the following role:

- General System Administrator

To associate a remote storage profile with a remote storage facility, or update the locations that use the remote storage facility, you must have the following role:

- Fulfillment Administrator

When Alma places a resource request on an item that belongs to a remote storage location, an automatic job exports the requested information to a defined FTP location. The remote storage system then retrieves the file and processes it. To configure remote storage, see Configuring Remote Storage Facilities.

The files placed at the FTP location adhere to the rules defined in the external_sys_remote_storage_export_requests.xsd file (for details, see https://developers.exlibrisgroup.com/alma/apis/xsd/external_sys_remote_storage_export_requests.xsd).

To configure the export of requests to a remote storage system, perform the following actions:

1. Configure an S/FTP connection to be used by Alma and the remote storage system (see Configuring S/FTP Connections).
2. Configure a remote storage type of integration profile (see below).
3. Associate the remote storage profile with a remote storage facility (see below).
4. Update the physical locations that use this remote storage facility (see below).

Note

For information on running and monitoring the remote storage export job after you have configured all of the above, see Manually Exporting to Remote Storage.

For details on the remote storage integration types supported by Alma, see the following sections:

- NCIP based remote storage integration
- Dematic Automated Storage Retrieval System (ASRS)

Configuring Remote Storage

To configure a remote storage type of integration profile:

1. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile. The first page of the integration profile wizard opens.
2. Perform the following actions on this page:
   1. Enter a code and name for the profile you are defining.
   2. From the Integration type drop-down list, select Remote storage.
3. From the System drop-down list, select the type of remote storage system.

4. From the S/FTP connection type drop-down list, select the name of the FTP connection that you previously defined.

5. Optionally, enter a description of the integration you are configuring.

3. Select Next. The second page of the wizard opens.

4. Select the Integration type. The XML settings are seen below:

5. In the Export Requests section:
   1. Select whether you want the profile to be active. Note that only active profiles can be run.
   2. In the Export File Path field, enter a subdirectory of the path specified when creating the S/FTP connection. For example, if you specified Alma in the Sub-directory field during S/FTP connection configuration and you enter remote storage in the Export file path field, the invoices are exported to the Alma/remote storage directory.
   3. Under Request types to export for schedule, select Yes for the request types you want to export with scheduled integration profile export jobs.
   4. In the Schedule frequency field, select the frequency by which the export job is to run.
   5. Under Request types to export for running job, select Yes for the request types you want to export with manually run integration profile export jobs.

6. Select Save. The profile you configured appears in the Integration Profile List.

When the scheduled/manual job runs, one barcode is sent per request, and the following new fields are displayed in the XML:
When configuring a Dematic ASRS remote storage integration profile for a Dematic ASRS system, you must run the Inventory Remote Storage Update job (see https://developers.exlibrisgroup.com/alma/apis/xsd/external_sys_remote_storage_export_requests.xsd).

To associate a remote storage profile with a remote storage facility:
See Configuring Remote Storage Facilities.

To update the physical locations that use the remote storage facility:
See Configuring Physical Locations.

Manually Exporting to Remote Storage

To manually run and monitor the remote storage export job:

On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Actions > Edit for the remote storage profile you defined, select the Actions tab, ensure that the Active radio button in the Export Requests section is selected, and then select Run.

The job runs as soon as the system can accommodate it. If email notifications are enabled in Alma, you receive notification via email.

You can view the status of the job, the number of files processed, and other data by selecting Job history from the row actions list for the appropriate remote storage profile on the Integration Profile List page.

Note

The status Completed Successfully does not mean that requests were exported successfully. Rather, it means that the job completed without error.

You can use the row actions menu to access a more detailed job report, including statistics on the number of request records and request records with exceptions processed (View), events that occurred during the job processing (Events), and a report of errors (Error reporting).
Dematic Automated Storage Retrieval System (ASRS)

To configure ASRS functionality, you must have the following role:

• General System Administrator

To place requests for remote storage items, you must have the following role:

• Fulfillment Services Operator

An Automated Storage and Retrieval System (ASRS) is a system for storing library resources using special cost-effective storing techniques, and based on an automated system which is used whenever a resource needs to be retrieved from the storage. The ASRS utilizes an automated retrieval machine and a special integrated software control system to provide fully automated, high density media archiving.

The Automated Remote Storage must be notified each time items are added or removed from the remote storage. Alma uses the Inventory Remote Storage Update job to send messages to the remote storage so that the ASRS can update its own database of inventory stored in the remote storage.

Additionally, Alma sends a message to the remote storage whenever a request is created, so that the ASRS system can automatically pull the proper bin off the shelf and supply the requested item.

To use Dematic ASRS, perform the following actions:

• Configure Dematic ASRS (see Configuring Dematic ASRS)
• Request a Dematic ASRS item (see Requesting a Dematic ASRS Item)
• Update Dematic ASRS inventory (see Running the ASRS Update Job)

For a typical ASRS request workflow and other frequently asked questions about using automated storage and retrieval systems in Alma, see Closed Storage, ASRS.

Configuring Dematic ASRS

Configuring Dematic ASRS includes the following steps:

• Configure a Dematic ASRS integration profile – See Configuring a Dematic ASRS Integration Profile
• Configure Stunnel – See https://developers.exlibrisgroup.com/alma/integrations/remote_storage/ASRS
• Configure remote storage – See Adding a Remote Storage Facility.
• Configure locations – See Adding a Physical Location.

Configuring a Dematic ASRS Integration Profile

To configure a Dematic ASRS integration profile

1. On the Integration Profiles List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile. The first page of the integration profile wizard opens.
2. In the Code and Name fields, enter a code and name for the profile, respectively.
3. In the Integration type field, select Remote Storage. The System (for Ex Libris’ informational purposes) field appears.

4. In the System (for Ex Libris’ informational purposes) field, select Dematic ASRS.

5. Select Next. The second page of the wizard opens.

6. In the Integration type field, select Dematic ASRS. The page refreshes and displays additional fields.

![External System Page – Page 2 of Wizard](image)

7. In the Remote host name field, which is the same value as the hostname in the Alma Incoming entry in the Stunnel configuration's Connect field.

8. In the Remote port field. This value is the same port as in the Alma Incoming entry in the Stunnel configuration's Accept field.

9. In the User Identifier Type field, select the identifier that will be used to match users. See Managing User Identifiers.

10. In the Active inventory remote storage job field, select Active.

11. In the Schedule inventory remote storage job field, select the relevant scheduling for the inventory job to run the job automatically.

12. Select Save to save the profile.

---

**Requesting a Dematic ASRS Item**

To request a Dematic ASRS item:

1. From the search bar, search for a title or item whose location is connected to remote storage, or whose integration profile has a type of ASRS Remote Storage.

2. Select Request to place a request. If an ASRS item is available to fulfill the request, the item's Process Type = Requested on the Repository Search page.

3. The request displays on the Resource Request Monitoring page (Fulfillment > Resource Requests > Monitor Requests & Item Processes) with Workflow Step = Request Communicated to Storage.
When an ASRS system needs to be automatically updated by Alma with the addition (Item Add) or removal (Item Delete) of items from the remote storage facility, the Inventory Remote Storage Update job must be activated (see the procedure in Running the ASRS Update Job, below).

The Item Delete message is only sent when:
- The previous current location is storage and the current location is not a storage location, or they are not the same remote storage location.
- The permanent location is not a storage location.

The Item Add message will now only be sent when the item's current location is changed from a non-storage location to a storage location and the previous permanent location was not a storage location (or not the same storage location).

Running the ASRS Update Job

To run the job to update the ASRS with inventory changes:

1. Ensure the Dematic ASRS integration profile is configured, as described in Configuring a Dematic ASRS Integration Profile.

2. On the Integration Profiles List page (Configuration Menu > General > External Systems > Integration Profiles), select from the following options:
   - To schedule the Inventory Remote Storage Update Job to run automatically, select the interval to run the job in the Schedule inventory remote storage update job field, and select Save.
     The scheduled job appears on the Monitor Jobs page (see Viewing Scheduled Jobs) with the name Inventory Remote Storage Update <Integration Profile Name>.
   - To run the Inventory Remote Storage Update Job manually, select Run Inventory Remote Storage Update Job.
     The job's output appears in a job report. For more information on job reports, see Viewing Job Reports.
Self-Check Machines

To configure a self-check type of integration profile, you must have the following role:

- General System Administrator

To associate a self-check profile with a circulation desk, you must have the following role:

- Fulfillment Administrator

Learn about Self-Check machines in the Integration with Self-Service Systems video (23:24 mins).

Alma receives and acts upon received SIP messages from SIP 2.0 self-check machines and returns responses to these machines. For details on the integration with self check systems, see https://developers.exlibrisgroup.com/alma/integrations/selfcheck

To configure the communication between Alma and a self-check machine, you must perform the following actions:

1. Configure a self-check type of integration profile (see the procedure below).

2. Associate the self-check profile with a circulation desk (see the procedure below). The self-check machine will be able to provide services only to locations that are serviced by this circulation desk. (Note that a circulation desk, if defined as a primary circulation desk, can service other libraries – see Configuring Fulfillment Services Between Libraries Within an Institution).

3. Configure a secure transmission between Alma and the self-check machine, following the instructions located in the Ex Libris Developer Network: https://developers.exlibrisgroup.com/alma/integrations/selfcheck/stunnel. These procedures should be performed after you configure a self-check integration profile in Alma.

A separate self-check profile and corresponding certificate (see step 5) are required for each group of self-check machines that have different capabilities (for example, one for machines that support fee payments and another for machines that support only check-in/checkout). A separate profile is also mandatory for each machine that is linked to a separate circulation desk, as each profile can be linked to only one circulation desk. Note that the certificate you obtain is valid as long as the integration profile exists, regardless of any changes made to the profile.

Note

If your institution is in the implementation phase, you cannot perform this step. Contact your Ex Libris project manager to perform this for you.

Note

The format of dates for self-check machine messages is determined by the system_time_format parameter (Configuration Menu > General > General Configuration > Other Settings). If this parameter contains the z symbol, the time zone is included in the date sent in self-check machine messages.

To configure a self-check type of integration profile:

1. On the Integration Profiles List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile. The first page of the integration profile wizard opens.
2. Perform the following actions on this page:
   
   1. In the Code and Name fields, enter a code and name (respectively) for the profile you are defining.
   2. From the Integration type drop-down list, select Self-check.
   3. In the System (for Ex Libris’ informational purposes) field, indicate the type of self-check system with which you are integrating. Note that this is mandatory.
       1. If you select Other from the list of systems, the System Description field appears for further system details.
   4. Optionally, in the Description field, enter a description of the integration you are configuring.

3. Select Next. The second page of the wizard opens.
4. Under **General Information**, perform the following actions:
   - In the **SC Identifier** field, enter any string.
   - Select whether you want the self-check machine to send the following to Alma:
     - **Error correction** – Select **Yes** for Alma to send/receive sequence numbers and checksums as part of the relevant messages. If this capability is enabled on the self-check machine, it must be enabled here as well. If you do not want to use this option, select **No** and turn it off also on the self-check machine.
     - **Alert** – Select **Yes** for Alma to send/receive alert messages.
     - **Item transfer** – Item transfer messages (not currently supported)
   - **SC language** – select the language in which Alma and the self-check machine communicate.
   - **Retries allowed** and **Timeout period** – enter the number of times you want Alma or the self-check machine to try to send a message following a failure of the first message to reach its destination, and the amount of time, in seconds, between each retry.

---

**Note**

Note that the recommended number of retries allowed is 2-5 and the recommended timeout period is 50-70 seconds.

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- **Checkin, Checkout, Renew Policy, Fee Payments, Return Message** – Select the actions to be supported (Yes/No) between Alma and the self-check machine. (Note that **Return message** is not currently supported.)

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**Note**

If you are using a 3M self-check machine, the **checkin** option must be set to **Yes**, due to a 3M requirement for enabling initial communication. If you do not want the check-in action to be allowed, ensure that you block it when configuring your 3M self-check machine.

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- **Extension type** – select **Extended fines and fees** (**Extended check-in** is not currently supported) to enhance your self-check messages (SIP2) with additional fields. This option includes the following elements for each open charge in the SIP2 Patron Information Response message and allows self-check users to view this information (if available) when requested:

---

**Note**

Not all self-check machines support this option. This option should not be selected for self-check machines that handle only loans and returns (and not payment).

- EB - Barcode of the item that is linked to the charge (such as for an overdue/lost item)
- ET - Title of the item that is linked to the charge
- EC - Cash transaction type code
- ED - Cash transaction type description
- EF - Sum
- EK - Fee ID
- BZ - Payment transaction number
• **Item Identifier** – select the type of ID—**Barcode**, **Call number**, or **Item ID**—used to match physical items when incoming messages contain item IDs.

• **Authentication required** – select **Yes** if you want the patron to be required to supply a password. Note that the PIN code can be updated by the patron in Primo only if the `use_pincode_for_selfcheck_machine` parameter is set to **true** in the Customer Parameters table (see Configuring Other Settings).

• **Allow Fulfillment Network Users (supported for fully unique identifiers only)** - select **Yes** and set the `network_users_unique_identifiers` parameter to **Full** for Alma to search for the user locally, then in fulfillment network members. The search stops when a match is found and the linked account is created automatically. When the `network_users_unique_identifiers` parameter is set to **None**, or the field is set to **No**, Alma searches only local users in response to SIP2 messages.

• The **Close Process** field defines how Alma handles a currently active work order on the item (if any), or a purchase order line that is waiting to be received. For example, if the item is in acquisition and being received from the vendor, or if the item has an active work order (such as an acquisitions technical worker order). This field enables you to to remove work orders from items by scanning their barcodes at the self check machine or to receive an ordered item at the self check machine.

  ▪ If you select **Yes**, Alma marks the existing work order as **Done**. For example, for a purchased item arriving from a vendor, Alma receives the item, just as if the user selected **Receive** on the Receive New Material page (see Receiving New Physical Material). The item is send to its permanent location (using a transit for resheling request). If there is a different currently active work order or request on the item, then Alma marks the workflow as **Done** and continues the item's workflow.

  ▪ If you select **No**, Alma does not change the status of any existing work order. The default value is **No**.

• **Prevent Requested Items Check In** – select **Yes** to prevent checking in requested items and instruct the patron to return the item at the circulation desk.

• For a secure TCP connection, select **Download Certificate** to download and save the certificate so that it can be used when configuring Stunnel (see step 3 in the introductory section above).

5. Select **Save**. The profile you configured appears in the Integration Profile List.

To associate a self-check profile with a circulation desk:

1. Open the Circulation Desks page (Configuration Menu > Fulfillment > (ensure you have selected the correct library in the location drop down list) > Library Management > Circulation Desk).

2. Select **Edit** from the row actions list for the circulation desk you want to associate with the previously defined self-check profile, or select the **Add Circulation Desk** button to create a new circulation desk with which you want to associate the self-check profile.

3. On the Circulation Desk – General Details page, under **Self-Check Information**, select the **Has self-check** check box and select a previously defined self-check profile from the **Integration profile** drop-down list. The password for the self-check machine is automatically listed in the **Terminal password** field. (For information on the other fields on this page, see Configuring Circulation Desks.)

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Ex Libris, a ProQuest Company
Self-Check Information Section

Verify that the Circulation Desk associated with the self-check profile does not have the Reading Room Desk check box selected. Otherwise, items that are checked out via self-check at this desk will not get desensitized.

4. Select Save to store your changes to the circulation desk.
SMS Communications

To configure SMS communications, you must have the following role:

- General System Administrator

As part of a library’s processes, Alma produces various notifications for the library’s users. The notifications may be sent to a user by email, or printed. Some of the notifications may also be sent as SMS messages to the user’s mobile phone. Using SMS messages as the notification channel is now quite popular, as this has become an efficient and effective way in which to contact users.

For details on configuring SMS communications, see https://developers.exlibrisgroup.com/alma/integrations/sms

SMS communication is enabled for the following notification types:

- On Hold Shelf Letter (SmsFulPlaceOnHoldShelfLetter)
- Courtesy Letter (SmsFulUserLoansCourtesyLetter)
- Overdue Notice Letter (SmsFulUserOverdueNoticeLetter)
- Change Due Date (SmsFulItemChangeDueDateLetter)
- Request Cancellation (SmsFulCancelRequestLetter)
- Lost Loan (SmsFulLostLoanLetter)
- Lost Loan Notification (SmsFulLostLoanNotificationLetter)
- Borrowing Activity (SmsFulUserBorrowingActivityLetter)
- Fines\Fees Notification Letter (SmsFulFinesFeesNotificationLetter)
- Shortened Due Date Letter (SmsFulShortenedDueDateLetter)

SMS messages are sent to users only if preferred SMS numbers are indicated. For more information about the letters, see Configuring Alma Letters.

To configure SMS communication with patrons, you must perform the following actions:

1. Configure an S/FTP connection to be used by Alma and the SMS service provider (see Configuring S/FTP Connections).
2. Configure an SMS type of integration profile (see below).

3. Ensure that the SMS channel of notification is activated (see below).

4. Define the format of the notification (see https://developers.exlibrisgroup.com/alma/integrations/sms).

**To configure an SMS type of integration profile:**

1. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile. The first page of the integration profile wizard opens.

2. Perform the following actions on this page:
   1. From the Integration type drop-down list, select SMS Communication.
   2. From the S/FTP connection type drop-down list, select the name of the FTP connection that you previously defined.
   3. Optionally, enter a description of the integration you are configuring.

3. Select Next. The second page of the wizard opens.

4. In the Export section:
   1. Select whether you want the profile to be active. Note that only active profiles can be run.
   2. In the Sub-directory field, enter a subdirectory of the path specified when creating the S/FTP connection. For example, if you specified Alma in the Sub-directory field during S/FTP connection configuration and you enter SMS in this Sub-directory field, the invoices are exported to the Alma/SMS directory.

5. Select Save. The profile you configured appears in the Integration Profile List.

**Note**

The name and code are defined for you by the system (both as SMS).

3. Select Next. The second page of the wizard opens.

4. In the Export section:
   1. Select whether you want the profile to be active. Note that only active profiles can be run.
   2. In the Sub-directory field, enter a subdirectory of the path specified when creating the S/FTP connection. For example, if you specified Alma in the Sub-directory field during S/FTP connection configuration and you enter SMS in this Sub-directory field, the invoices are exported to the Alma/SMS directory.

5. Select Save. The profile you configured appears in the Integration Profile List.

**Note**

You can create only one SMS Communication integration profile per institution.

**To ensure that the SMS channel of notification is activated:**

On the Letter Configuration table (Configuration Menu > General > Letters > Letters Configuration), ensure that the desired letter with the SMS channel is enabled.

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Letter with SMS and Email Channels Enabled
If it is not enabled, select the **Customize** button, select the slider so that it becomes blue, and then select **Save**.

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**Note**

Most letters that have an SMS option also have a second letter entry with the **EMAIL** channel. This letter type is enabled by default; users who receive the letter by SMS will also receive notification by email, unless you disable this setting.
RFID Support

To configure an RFID integration profile, you must have the following role:

- General System Administrator

You can use RFID readers for scanning item barcodes and for registering their check-out and check-in. For a list of supported RFID devices, see https://developers.exlibrisgroup.com/alma/integrations/rfid. After the RFID integration profile is added, a connection icon appears in the main menu bar as long as a location is selected from the Currently At drop-down.

Note

The RFID icon appears only if an RFID integration profile is defined and set as active, and you have selected a location.

For more information about RFID Support, see the RFID support video (1:51 mins).

If the RFID connection is not currently active, it appears as follows.

Alma Menu Bar - RFID Disconnected

Select the connection icon to open an RFID communication pop-up window. This enables the communication with the reader and must be left open in order to read from or write to the reader.

RFID Communication Window

The connection icon on the menu bar changes to show that the connection has been made.

Alma Menu Bar - RFID Connected

The active connection is maintained for each user and desk/department. When switching to a new desk, you must activate the connection again by selecting the connection icon.

Select the blue icon next to the search bar to activate the RFID reader to read the barcode of the item that is currently at the counter, and display the item. All input boxes that accept a barcode show the blue icon as long as the RFID connection is active. These boxes are found in the following locations: Scan In, Return Items, Patron Services, Repository Search, Receive New Material, Physical Item Editor, Quick Cataloging, and Persistent Search (throughout Alma). Additionally, while on a screen that has the icon to read a barcode, the keyboard shortcut, Alt+A, activates the reader to display the listing.
When searching for physical items, the search result will display the RFID Security Status.

When scanning a multi-part item using RFID, if one or more of the resources has not been scanned, a message will be displayed indicating that not all of the item resources were scanned.

Using the RFID reader to scan and loan an item disables the security bit on the RFID tag. Returning the item re-enables the security tag.

To configure the RFID integration profile:

1. On the Integration Profiles List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile.
2. Enter Code and Name of the profile.
3. Select RFID from the Integration Type drop down list.
4. Select the RFID system that you are using from the System drop down list, and select Next. Supported systems are:
   ◦ Bibliotecha - Liber8Connect Link
   ◦ 3M - 896
   ◦ Seret
   ◦ Nedap
   ◦ Other
      • If you select Other from the list of systems, the System Description field appears for further system details.
5. Select the Active check box to make this an active RFID definition. Note: the profile is inactive by default.
6. Enter the URL for the RFID system to which your RFID device is attached.
7. Configure and/or review the following definitions:
   ◦ RFID Material Type Definition (see the Configuring the RFID Material Type Definition section below)
   ◦ RFID Item Policy Definition (see the Configuring the RFID Item Policy Definition section below)
   ◦ Mapping of RFID Fields to Alma Fields (see the Mapping the RFID Fields to Alma Fields section below)

Note

◦ The Nedap system is used only for check in and check out and does not allow updating the tag itself. Therefore, the mapping definitions are unavailable for Nedap RFID profiles.
◦ When Other is selected in the System field on page 1 of the integration profile, the Item Information Update field appears. In this case, the definitions appear only after selecting the check box.
◦ If IPs need to be configured for the RFID readers, the reader IPs need to be configured on the circulation desk configuration as well, for example when working with Nedap, or with some RFID vendors that integrate with the Alma Other RFID Integration profile type. See Adding a Circulation Desk.

8. Select Save.

For more information on configuring RFID, see https://developers.exlibrisgroup.com/alma/integrations/RFID.

Configuring the RFID Material Type Definition

Since the RFID reader requires numeric content (that varies among RFID vendor implementations), the RFID Material Type Code Table provides you the ability to map alphabetic material type codes that you currently have defined in Alma to numeric values. The RFID Material Type Code Table uses the Physical Material Type Code Table definitions. See Configuring Physical Item Material Type Descriptions for more information.

To configure the RFID Material Type Code Table:

1. On the Integration Profiles List page (Configuration Menu > General > External Systems > Integration Profiles), open your RFID Integration Profile and select the RFID Material Type Definition link. The RFID Material Type code table page appears.
   In a Network environment, the Manage Table in Network options appear.

 ![RFID Material Type Code Table Configuration in the Network - Manage Table in Network Button](image)
2. In the Create a New Code Table Row section, select one of the existing material type codes from the Code dropdown list, enter a numeric value for the Description (mandatory), and select Add Row. Continue adding rows for each Alma material type to which you want to assign a numeric value for the RFID reader.

If you need to create a new material type in addition to what is provided in the drop-down list, use the Physical Material Type Code Table configuration options. See Configuring Physical Item Material Type Descriptions for more information.

3. Select Customize (or Save if you have previously edited this code table).

---

### Configuring the RFID Item Policy Definition

Since the RFID reader requires numeric content (that varies among RFID vendor implementations), the RFID Item Policy code table provides you the ability to map alphabetic item policy codes that you currently have defined in the system to numeric values.

**To configure the RFID Item Policy code table:**

1. On the Integration Profiles List page (Configuration Menu > General > External Systems > Integration Profiles), open your RFID Integration Profile and select the RFID Item Policy Definition link. The RFID Item Policy code table page appears.

   In a Network environment, the Manage Table in Network options appear.
2. In the Create a New Code Table Row section, select one of the existing item policy codes from the Code drop-down list, enter a numeric value for the Description (mandatory), and select Add Row. Continue adding rows for each Alma item policy to which you want to assign a numeric value for the RFID reader.

3. Select Customize (or Save if you have previously edited this code table).

Mapping the RFID Fields to Alma Fields

The Mapping of RFID Fields to Alma Fields link displays the RFID Fields mapping table settings. The settings on this page determine what information is written to the RFID tag. From this page, you can see which fields are enabled to be written to the RFID tag. In addition, you can see one of the following Alma field settings that has been mapped to each of the RFID tag fields:
If you need to customize the field mapping or which fields are enable to be written to the RFID tag, contact Support for assistance.

## Configuring Library Codes for RFID

Since the RFID reader requires numeric content (that varies among RFID vendor implementations), the Alma library configuration ([Configuration Menu > General > Libraries section > Add a Library or Edit Library Information](#)) provides a field for specifying a numeric code value in addition to the alphanumeric code used within Alma. For example, the 3M LibraryID parameter requires a numeric (integer) value. The **Code for RFID** field needs to be configured in order to write RFID content. This field is only visible when the RFID connection is active.

For more information, see [Adding/Editing Institution Libraries](#).

## Configuring Location Codes for RFID

Since the RFID reader requires numeric content (that varies among RFID vendor implementations), the Alma location configuration ([Configuration Menu > Fulfillment > Locations > Physical Locations](#) when configuring a specific library)
provides a field for specifying a numeric code value in addition to the alphanumeric code used within Alma. The **Location Code for RFID** field needs to be configured in order to write RFID content. This field is only visible when the RFID connection is active.

For more information, see Configuring Physical Locations.

### Transaction Log

The RFID Communication window that opens when you select the connection icon can be expanded to display a list of request and response RFID transaction activity. Use this log to help resolve any failed transaction with your RFID communication. Include a copy of this log with any RFID Salesforce issue that you may submit.

For more information, see https://developers.exlibrisgroup.com/alma/integrations/RFID.
Configuring the WPM Education E-Payment System

The WPM Education E-Payment System allows Alma users to pay fines and fees using My Account in Primo. Once the request is initiated in Primo and processed in the payment system and Alma, both Alma and the WPM Education E-Payment System send payment receipt emails to the user.

Note

The WPM Education online payment system is available to UK customers only.

The WPM Education E-Payment System must first be configured in Alma to enable online payments. Refer to the appropriate section to configure the Pay Fine link:

- For Primo, see Configuring the Pay Fine Link.
- For Primo VE, see Configuring the WPM Education E-Payment System for Primo VE.
- For Alma-Summon, see Configuring the WPM Education E-Payment System for Alma-Summon.

The following role is needed to configure the WPM Education E-Payment System:

- General System Administrator

To configure the WPM Education E-Payment System in Alma:

1. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile. The first page of the External System wizard opens.

   ![External System Page 1](image)

   External System Page 1

2. Perform the following actions on this page:

   1. Enter a code and name for the WPM Education E-Payment system.
   2. From the Integration type drop-down list, select Online Payment.
   3. Select WPM Education from the System drop-down list.
4. Select **Next**. The External System - Actions Section opens.

External System Page 2 - Actions Section

5. Select **WPM Education** from the **Fines and Fees Payment Type** drop-down list. The WPM Education Definitions subsection appears in the Actions section.

External System Page 2 - WPM Education Definitions

3. Enter the required fields on this page. Much of this information is specific to your institution and must be provided by the online payment system provider. The **Redirect URL** field allows the online payment system to redirect the patron to the specified URL after the transaction has completed.

4. Select **Save**.
Note

- Alma always sends `payoption="L"` in the XML. This is not configurable.
- Single line payment in WPM is not supported in Alma. Alma currently sends only one payment element with the total amount the user owes.
- There is no need for any IP ranges to be open for a post from WPM back to Alma. There are no limitations for http to Alma.
- This integration option is relevant only for UK customers as WPM only provides services in the UK.
- For Primo VE, it is possible to integrate also other payment systems, see Configuring the Pay Fine Link for Primo VE.
User Management

This section includes:

- [Student Information Systems](#)
- [Bursar Systems](#)
Student Information Systems

To configure a Student Information Systems (SIS) profile, you must have the following role:

- General System Administrator

Alma can export/import users to/from a Student Information System (SIS).

To import users, the SIS must place a zip file containing an XML file with all the users into a defined S/FTP location. Alma fetches the file, parses the information, and uploads the users (of type External) according to the parameters defined in the SIS integration profile.

---

**Note**

All primary and additional identifiers must be unique for users, including for the same user.

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You might want to export users to the SIS, for example users that owe the library money or have certain blocks. This enables the SIS to block these users from certain activities until they clear their outstanding obligations to the library.

For a detailed overview of user management in Alma, see [https://developers.exlibrisgroup.com/alma/integrations/user-management](https://developers.exlibrisgroup.com/alma/integrations/user-management). Note that your external authentication system must be up and running before you can begin Alma implementation.

For details on SIS integration, see [https://developers.exlibrisgroup.com/alma/integrations/user-management/sis](https://developers.exlibrisgroup.com/alma/integrations/user-management/sis)

---

**To configure a User type of integration profile:**

1. On the Integration Profile List page ([Configuration Menu > General > External Systems > Integration Profiles](#)), select **Add Integration Profile**. The first page of the integration profile wizard appears.

![Users Integration Profile Wizard – Page 1](image)

2. On the first page of the wizard, enter the following information.
   1. Enter a code and name for the profile you are defining.
   2. From the **Integration type** drop-down list, select **Users**.
   3. From the **S/FTP connection type** drop-down list, select the name of the FTP connection that you previously defined.
   4. Indicate the type of SIS with which you are integrating (for Ex Libris’ informational purposes). Note that this is mandatory.
   5. Optionally, enter a description of the integration you are configuring.
   6. Select **Next**. The second page of the wizard appears.
3. On the second page of the wizard, enter the following information.

### Users Integration Profile Fields

<table>
<thead>
<tr>
<th>Section</th>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Import</strong></td>
<td><strong>Active</strong></td>
<td>Whether the job is active. If the job is active, it will run according to the selected scheduling option. If it is inactive, it will not run. The job is called Users IMPORT using &lt;integration profile name&gt;.</td>
</tr>
<tr>
<td>(used for the initial import of users. A record is not imported if a matching record is found. Manually run this once, or once per year. Afterwards, use the Synchronize section / job.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Record Type</strong></td>
<td>The type of user record to create in Alma: <strong>Contact</strong>, <strong>Public</strong>, or <strong>Staff</strong>. For more information on selecting the record type, see <a href="https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch">https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch</a>.</td>
<td></td>
</tr>
<tr>
<td><strong>Input File Path</strong></td>
<td>A subdirectory of the path specified when creating the secure FTP connection (required). For example, if you enter <strong>Alma</strong> in the <strong>Sub-directory</strong> field during secure FTP connection configuration (note that it is mandatory to specify a value in this field) and you enter <strong>SIS_import</strong> in the <strong>Input file path</strong> field, the SIS files are imported to the <strong>Alma/SIS_import</strong> directory (under the root FTP directory).</td>
<td></td>
</tr>
<tr>
<td><strong>User XSD Version</strong></td>
<td>Select version 1 or 2. Note that 2 should be used. For detailed information about these versions, see <a href="https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch">https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch</a>.</td>
<td></td>
</tr>
<tr>
<td><strong>Create Sample File</strong></td>
<td>Select an existing user and select <strong>Create Sample File</strong> to create a new user XML file from an existing user. This enables you to preview the way in which a user XML file should be structured.</td>
<td></td>
</tr>
<tr>
<td><strong>Active</strong></td>
<td>Whether the job is active. If the job is active, it will run according to the selected scheduling option. If it is inactive, it will not run. The job is called <strong>Users SYNCHRONIZE using &lt;integration profile name&gt;</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Record Type</strong></td>
<td>The type of user record to create in Alma: <strong>Contact</strong>, <strong>Public</strong>, or <strong>Staff</strong>. For more information on selecting the record type, see <a href="https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch">https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch</a>.</td>
<td></td>
</tr>
<tr>
<td><strong>Match ID Type</strong></td>
<td>The predefined unique identifier type in Alma to use as the identifier with which you want to match existing Alma users. For detailed information on match IDs, see <a href="https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch">https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch</a>.</td>
<td></td>
</tr>
<tr>
<td><strong>Synchronization Type</strong></td>
<td><strong>Swap all</strong>, which means that all existing user records will be replaced by matching incoming user records. For detailed information on the synchronization workflow, see <a href="https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch">https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch</a>.</td>
<td></td>
</tr>
<tr>
<td><strong>Unmatched Record</strong></td>
<td>Whether Alma adds a new user record if it has failed to find a matching record, or rejects the incoming record if no match is found for it. By default, the records are added.</td>
<td></td>
</tr>
<tr>
<td><strong>Input File Path</strong></td>
<td>A subdirectory of the path specified when creating the secure FTP connection (required). For example, if you specified <strong>Alma</strong> in the <strong>Sub-directory</strong> field during secure FTP connection configuration (note that it is mandatory to specify a value in this field) and you enter <strong>SIS_import</strong> in the <strong>Input file path</strong> field, the SIS files are imported to the <strong>Alma/SIS_import</strong> directory (under the root FTP directory).</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Schedule</strong></td>
<td></td>
<td>If you select <strong>Not scheduled</strong>, the job runs only when you manually run it. For details, see the following sections <strong>Manually Importing/Exporting SIS Information</strong> and <strong>Manually Synchronizing SIS Information</strong>. The available scheduling options differ depending on your data center.</td>
</tr>
<tr>
<td><strong>User XSD Version</strong></td>
<td></td>
<td>Version 1 or 2. Note that version 2 should be used. For detailed information about these versions, see <a href="https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch">https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch</a>.</td>
</tr>
</tbody>
</table>
| **Integration Profile Used For (Esploro only)** | | Appears only if Esploro is enabled for your institution. Select one of the following:  
  - **User and Researchers** – If you include both user and researcher information in your file.  
  - **Users only** – If you include only user information (no researcher fields) in your file.  
  - **Researchers only** – If you wish to add or update only the researcher information of the user. Note that each user must include the primary identifier of an existing Alma user and that other user information, if included in the file, will not be added or updated by the loader. |
| **Select Researcher Fields To User (Esploro only)** | | Appears only if Esploro is enabled for your institution. Select one of the following:  
  - **All Researcher Fields**  
  - **Selected Researcher Fields** – When selected, select one or more fields to update from the quick pick list that appears. |
<p>| <strong>Export User By Conditions</strong> | | (used to export users that should be blocked due to unpaid fines) Users exported include users with fines greater than the threshold and users with blocks, either based on the configured block types or all blocks if none are configured. If a user has fine greater than the threshold OR the user has a block, then the user will be exported. |
| <strong>Active</strong> | | Whether or not the job is active. If the job is active, it runs according to the selected scheduling option. If it is inactive, it will not run. The job is called <strong>Users EXPORT using &lt;integration profile name&gt;</strong>. |
| <strong>User ID Type</strong> | | See the above explanation for <strong>Match ID type</strong>. |
| <strong>User Groups</strong> | | The user group(s) to which the users that you want to export belong. If no value is specified, users belonging to any of the configured user groups are exported. |
| <strong>Block Types</strong> | | The previously defined block types (see <a href="https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch">Configuring Block Preferences</a>) whose associated users you want to export. If no value is specified, users matching any of the configured block types are exported. |
| <strong>Fine/Fee Age (days)</strong> | | The users (of the selected groups and with the selected block types) whose fines/fees are older than the stipulated number of days are exported. By default, this number is 0. |
| <strong>Threshold Amount</strong> | | The users (of the selected groups and with the selected block types) whose fines/fees exceed the stipulated threshold are exported. By default, the threshold amount is 0. |
| <strong>User with</strong> | | Select this check box to include only users that have active loans. |</p>
<table>
<thead>
<tr>
<th>Section</th>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Loans</td>
<td></td>
<td>When User with Active Loans is selected, this field appears. Users with active loans will be included in the export if the loan types match the loan types selected.</td>
</tr>
<tr>
<td>Active Loan Types</td>
<td></td>
<td>A subdirectory of the path specified when creating the S/FTP connection. For example, if you specified Alma in the Sub-directory field during S/FTP connection configuration and you enter SIS_export in the Output file path field, the SIS files are exported to the Alma/SIS_export directory (under the root FTP directory).</td>
</tr>
<tr>
<td>Output File Path</td>
<td></td>
<td>If you select Not scheduled, the job runs only when you manually run it. For details, see the following sections Manually Importing/Exporting SIS Information and Manually Synchronizing SIS Information. The available scheduling options differ depending on your data center.</td>
</tr>
<tr>
<td>Schedule</td>
<td></td>
<td>Whether the job is active. If the job is active, it runs according to the selected scheduling option. If it is inactive, it will not run. The job is called Users EXPORT_USERS using &lt;integration profile name&gt;.</td>
</tr>
<tr>
<td>Export Users</td>
<td></td>
<td>Select one or more user groups to identify the patron records to be considered for export.</td>
</tr>
<tr>
<td>Days Since Creation</td>
<td></td>
<td>Set a condition, in number of days, that identifies when to include a patron record in the export. This parameter indicates the number of days since the patron record was created in Alma. The patron record that meets this criterion must also be a member of one of the user groups selected in the User Groups parameter in order for the patron record to be exported. For example, if you specify 10 here, patron records that were created in the past 10 days are included in the export.</td>
</tr>
<tr>
<td>Days Since Update</td>
<td></td>
<td>Set a condition, in number of days, that identifies when to include a patron record in the export. This parameter indicates the number of days since the patron record was updated in Alma (see example in Days since creation). The patron record that meets this criterion must also be a member of one of the user groups selected in the User Groups parameter in order for the patron record to be exported.</td>
</tr>
<tr>
<td>Days Since Deletion</td>
<td></td>
<td>Set a condition, in number of days, that identifies when to include a patron record in the export. This parameter indicates the number of days since the patron record was deleted in Alma (see example in Days since creation). The patron record that meets this criterion must also be a member of one of the user groups selected in the User Groups parameter in order for the patron record to be exported.</td>
</tr>
<tr>
<td>Output File Path</td>
<td></td>
<td>A subdirectory of the path specified when creating the secure FTP connection. For example, if you specified Alma in the Sub-directory field during secure FTP connection configuration and you enter SIS_Export in the Output File Path field, the files are exported to the Alma/SIS_Export directory (under the root FTP directory).</td>
</tr>
<tr>
<td>Section</td>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>Schedule</td>
<td>If you select <strong>Not scheduled</strong>, the job runs only when you manually run it. For details, see the following sections Manually Importing/Exporting SIS Information and Manually Synchronizing SIS Information. The available scheduling options differ depending on your data center.</td>
</tr>
<tr>
<td></td>
<td>User XSD Version</td>
<td>Version 1 or 2. Note that version 2 should be used. For detailed information about these versions, see <a href="https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch">https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch</a>.</td>
</tr>
<tr>
<td><strong>Online Import</strong> (Used to import users from a student management system)</td>
<td>Active</td>
<td>Whether or not the function is active. If the function is active, a process accesses the student management system to fetch the user's information, if it exists. If the function is not active, the process will not run. The default is non-active.</td>
</tr>
<tr>
<td></td>
<td>Base URL</td>
<td>The host/port to which the API calls regarding the user changes will be sent. Mandatory if the Online import action is Active. Note that this should be a REST API which has user information in the format described on the <a href="https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch">Developer Network</a>.</td>
</tr>
<tr>
<td></td>
<td>User Name</td>
<td>User name for the HTTP basic authentication credentials. Optional. If left empty, the requests will be sent without credentials.</td>
</tr>
<tr>
<td></td>
<td>Password</td>
<td>Password for the HTTP basic authentication credentials. Optional. If left empty, the requests will be sent without credentials.</td>
</tr>
</tbody>
</table>

4. **Select** Save. The profile is saved. For information on the **Contact Info** tab when editing the profile, see [Adding User Contact Information](https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch).

**Note**

When the Export Users job is run based on the integration profile you have created, the export process creates an XML file in the format that is used by the Import and Synchronize actions (refer to the Import section and Synchronize section defined under the Actions section on the Actions tab of the integration profile you saved). An XSL file may be used to alter the format. The XSL file is available and customizable in Customize Letters (see [Configuring Alma Letters](https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch)).

---

**Manually Importing/Exporting SIS Information**

**To manually run and monitor an SIS import/export:**

When editing the profile, in the **Import/Export** section of the **Actions** tab, ensure that the **Active** radio button is selected and select Run.

The job runs as soon as Alma can accommodate it. A file that is imported is marked so that it is not run again. If email notifications are enabled in Alma, you receive an email notification of an import and Alma sends notifications to the SIS of an export.

To view the status of the job, the number of files processed, and other data, select **Job history** in the row actions list for the appropriate User profile on the Integration Profile List page.
Manually Synchronizing SIS Information

To manually run and monitor an SIS synchronization:

When editing the profile, in the Synchronize section of the Actions tab, select Run.

The synchronization job runs as soon as Alma can accommodate it. The file that is synchronized is marked so that it is not run again. If email notifications are enabled in Alma, you receive an email notification.

To view the status of the job, the number of files processed, and other data, select Job history in the row actions list for the appropriate User profile on the Integration Profile List page.

Note

The status Completed Successfully does not mean that all files were imported or exported successfully. Rather, it means that the job completed without error.

If you import a user whose primary identifier matches a primary identifier of one of the existing users, a User rejected on identifier event is generated.

Note

The status Completed Successfully does not mean that all files were synchronized successfully. Rather, it means that the job completed without error.

If there is more than one file to be imported to Alma for synchronization, the files are read in the order that they are stored in the zip file. If a user appears more than once in the files, the first instance of the user will process. All of the user's remaining duplicate records will fail.

For more information on the synchronization process, see https://developers.exlibrisgroup.com/alma/integrations/user-management/sis/synch.
Bursar Systems

To configure a bursar integration profile, you must have the following role:

- General System Administrator

As part of a library’s processes, patrons can be charged with various fines and fees, such as signing up for a course, extra education services, and so forth. For example, if a patron returns a loaned book after its due date, the patron is charged for each day following the due date. For details, see Managing User Fines and Fees and Configuring Fines/Fees Behavior.

Many institutions handle patron-related charges in a dedicated bursar system. This can be the institution’s ERP system or a system that is in charge of patron-related finance. You can export fine and fee information from Alma to your bursar system as an XML file. Alma generates unique IDs for every exported transaction in order to match it up when the transaction is later re-imported (for more information, see Configuring Bursar Transaction IDs). Alma also exports an internally created ID, which the institution cannot configure. This ID can also be used at import time for matching transactions.

After creating and scheduling the bursar integration profile, the Export to Bursar Using Profile <profile name> job is scheduled. The status for exported fines and fees is set to Closed. Once the exported fines and fees are handled in the bursar system, they can be re-imported into Alma using the Import from Bursar using Profile <integration profile name> Fines and Fees job. In that case the status for exported fines and fees is set to Transferred.

For example: If Alma or a librarian adds a fine to a patron (for example, $10 for a lost item), the fine appears as a positive value in Alma. When the integration profile runs, the balance due for the patron is reduced to 0, since Alma passes the responsibility for handling and collecting the fine to the bursar system. If the patron subsequently has a negative fine (for example, -$10 after the patron finds and returns a lost item), a negative value appears in Alma. Once again, this value is reduced to 0 once the integration profile runs.

Once a fine/fee has been exported, it is considered active if the Import section has been activated on the integration profile. Therefore, the user cannot be deleted until the payment is received from the bursar. This applies to manual deletions, the Purge User Records job, and the Bulk Fine Waiving job. It will not be possible to purge a user that has exported fines/fees. If the allow_activity_on_transferred_finesfees parameter is set to false and the user has exported fines/fees, the fees will also not be waived. Additionally, both jobs include the exported fines/fees when calculating the waive threshold.

If the Import section has not been activated then exported fines/fees will be considered closed and handled just as paid fines/fees are.

For details, see https://developers.exlibrisgroup.com/alma/integrations/bursar

---

**Note**

- Alma exports fines and fees for expired users as well.

---

**To configure a bursar type of integration profile:**

1. Ensure that you have set up an FTP connection (see Configuring S/FTP Connections) for this service to use.
2. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles), select Add External System. The first page of the integration profile wizard appears.
3. Enter a code and name for the profile you are defining.

4. For **Integration type**, select **Bursar**.

5. For **S/FTP connection type**, select the FTP connection.

6. Select the system type in **System**. If you select **Other**, optionally enter additional system details in **System Description**.

7. Optionally, enter a description of the integration you are configuring.

8. When you are done, select **Next**. The second page of the wizard appears.

9. Enter the following information.

<table>
<thead>
<tr>
<th>Section</th>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Export</strong></td>
<td><strong>Active</strong></td>
<td>Only active profiles can be scheduled.</td>
</tr>
<tr>
<td></td>
<td><strong>Time before export</strong> (days)</td>
<td>The amount of time, in days, that you want Alma to wait before exporting the fines and fees to the bursar system. This is a mandatory field.</td>
</tr>
<tr>
<td></td>
<td><strong>Minimum amount for user</strong></td>
<td>The minimum amount of debt that a user must reach before the user’s fines and fees are exported (to be used in order to avoid exporting many small charges). In calculating the user’s balance for this purpose, Alma first considers all other parameters defined in the profile (fine and fee age, owner, and type). If the total amount of exportable fines and fees is below the minimal amount, the fines and fees are not exported.</td>
</tr>
</tbody>
</table>
### Section Field Description

**Note**
- To include credits, enter 0 in this field or leave the field blank.
- Decimal points should not be entered in this field.

<table>
<thead>
<tr>
<th>Section</th>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>User identifier type</td>
<td>The identification type used to match users when a file contains a user ID. Select one of the options predefined by an administrator. See Viewing Additional User Identifier Types.</td>
<td></td>
</tr>
<tr>
<td>User groups</td>
<td>The user groups whose fine and fee information is exported. If this field is left blank, Alma exports the fine and fee information for all user groups.</td>
<td></td>
</tr>
<tr>
<td>Fine/Fee types to export</td>
<td>The types of fines/fees to export. When this field is entered, only fines/fees of the specified types are exported. If this field is left blank, Alma exports the fine and fee information regardless of type.</td>
<td></td>
</tr>
<tr>
<td>Institutional fine/fee</td>
<td>Whether the fines and fees of the institution are exported to the bursar system.</td>
<td></td>
</tr>
<tr>
<td>Library fine/fee</td>
<td>Patron fines and fees are exported for items that are owned by the selected libraries at the time that the fine or fee is created. If this field is left blank, Alma does not export any library fine/fee information. Note that if the Institutional fine/fee is set to No, at least one library must be selected; if no libraries are selected, the Institutional fine/fee must be set to Yes.</td>
<td></td>
</tr>
<tr>
<td>Output file path</td>
<td>A subdirectory of the path specified when creating the S/FTP connection. For example, if you specified Alma in the Sub-directory field during S/FTP connection configuration and you enter bursar in the Output file path field, the fine/fee information is exported to the Alma/bursar directory (under the root FTP directory).</td>
<td></td>
</tr>
<tr>
<td>Schedule</td>
<td>A scheduling option. The times are pre-configured by Ex Libris for daily, weekly, and monthly run options.</td>
<td></td>
</tr>
<tr>
<td>Import</td>
<td>Only active profiles can be scheduled.</td>
<td></td>
</tr>
<tr>
<td>Input file path</td>
<td>A subdirectory of the path specified when creating the S/FTP connection. For example, if you specified Alma in the Sub-directory field during S/FTP connection configuration and you enter bursar in the Import file path field, the fine/fee information is imported from the Alma/bursar directory (under the root FTP directory).</td>
<td></td>
</tr>
<tr>
<td>Schedule</td>
<td>A scheduling option. The times are pre-configured by Ex Libris for daily, weekly, and monthly run options.</td>
<td></td>
</tr>
</tbody>
</table>

10. Select **Save**. The profile is saved.

**To manually run and monitor the bursar export or import jobs:**

On the Integration Profile List page, select **Edit** in the row actions list for the bursar profile you defined and select the **Actions** tab. Ensure that the **Active** radio button is selected for the section and select **Run** at the bottom of the corresponding section.

The job runs as soon as the system can accommodate it. If email notifications are enabled in Alma, you receive notification via email.

To view the status of the job, the number of files processed, and other data, select **Job history** in the row actions list for the
profile on the Integration Profile List page.

---

**Note**

The status *Completed Successfully* does not mean that records were imported or exported successfully. Rather, it means that the job completed without error.
Authentication

This section includes:

- Supporting LDAP
- SAML-Based Single Sign-On/Sign-Off
- CAS-Based Single Sign-On/Sign-Off
- OpenAthens LA Proxy Support
- Social and Email Login
- Primo Login Using Email
- Ex Libris Identity Service
- OpenID Connect
Supporting LDAP

To configure an LDAP type of integration profile, you must have the following role:

- General System Administrator

Alma Lightweight Directory Access Protocol (LDAP) support shares similar characteristics with other Ex Libris LDAP-supported products while providing user name mapping specific to Alma.

For a detailed overview of Alma LDAP support, see https://developers.exlibrisgroup.com/alma/integrations/user-management/authentication/inst_idp/ldap

---

Note

Ex Libris recommends that you use the same LDAP profile for both the production server and the sandbox. In this case, no additional configuration of LDAP is required on the sandbox after a refresh. For more information, see Recommended Configuration to Account for Sandbox Refresh.

---

To configure an LDAP type of integration profile:

1. On the Integration Profile List page (Administration > General Configuration > Configuration Menu > External Systems > Integrations Profile), select Add Integration Profile. The first page of the integration profile wizard opens.
2. Perform the following actions on this page:
   1. Enter a name and code for the LDAP profile you are defining.
   2. From the Integration type drop-down list, select LDAP.
   3. Indicate the type of LDAP system with which you are integrating (for Ex Libris’ informational purposes). Note that this is mandatory.
      1. If you select Other from the list of systems, the System Description field appears for further system details.
   4. Optionally, enter a description of the integration you are configuring.
3. Select Next. The second page of the wizard opens.

LDAP Profile – Page 1
4. Select **Actions** to indicate that LDAP is active and available for use.

5. Under **LDAP Definitions**, enter the LDAP authentication configuration parameters specific to your institution for the LDAP server interaction, as described in the following table.

**Note**

You can define up to five LDAP definitions.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host</td>
<td>Enter the host name of the remote LDAP server through which LDAP is accessible.</td>
</tr>
<tr>
<td>Port</td>
<td>Enter the port for the remote LDAP server.</td>
</tr>
<tr>
<td>Use secure connection</td>
<td>Select this check box to use the SSL protocol to communicate with the LDAP server.</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td>This is the only supported option.</td>
</tr>
<tr>
<td>Use TLS</td>
<td>Select the check box to convert the existing connection to use Transport Layer Security (TLS) 1.2, which provides an encrypted connection.</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td>This requires LDAP version 3 or later.</td>
</tr>
<tr>
<td>Connection timeout</td>
<td>Specify your preference for the timeout value in milliseconds. The default value is 60000 – one minute for the connection timeout.</td>
</tr>
<tr>
<td>Initial bind DN</td>
<td>Enter the full DN (distinguished name) for the initial bind.</td>
</tr>
<tr>
<td>Initial bind password</td>
<td>Enter the DN password for the initial bind.</td>
</tr>
<tr>
<td>DN for binding before each search</td>
<td>Use this parameter to specify the DN when you want to use dynamic password binding instead of a hard-coded password for the initial bind.</td>
</tr>
<tr>
<td>Convert password from UTF to charset</td>
<td>Leave this field empty.</td>
</tr>
<tr>
<td>Response encoding</td>
<td>Enter UTF8 if response encoding is required. This setting is used to encode the LDAP response before sending it back to the calling application. The only possible value is UTF8.</td>
</tr>
<tr>
<td>Search base 1 (through Search base 5)</td>
<td>Enter the full path search in the LDAP directory tree to the user. The system searches the LDAP tree to locate the user’s record based on the <strong>Search base</strong> and <strong>Search filter</strong>.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td>The <strong>Search base</strong> and <strong>Search filter</strong> parameters can be repeated to search in more than one tree. If the results of the Search base/Search filter are not unique (or a zero-size result), the search step is repeated for the next provided Search base/Search filter.</td>
</tr>
<tr>
<td>Search filter 1 (through Search filter 5)</td>
<td>Enter the parameter by which you want to filter the results to return only one object. The system searches the LDAP tree to locate the user’s record based on the <strong>Search base</strong> and <strong>Search filter</strong>. (See the note above.)</td>
</tr>
<tr>
<td>Map Primary Identifier</td>
<td>Enter the name of an LDAP attribute, such as <strong>CN</strong>. This attribute is mapped by Alma to serve as the user identifier.</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td>The Alma user name must match one of the LDAP identifiers, such as <strong>CN</strong>. If it does not, the authentication succeeds but the user is not allocated any permissions/roles.</td>
</tr>
</tbody>
</table>

6. Select **Save**. The profile you configured appears in the Integration Profile List.
SAML-Based Single Sign-On/Sign-Off

To configure a SAML type of integration profile, you must have the following role:

- General System Administrator

Alma supports the SAML 2.0 Web Browser SSO profile. This enables Alma to exchange authentication and authorization information, allowing a user to sign in or out of an external system and be automatically signed in or out of Alma, or vice versa.

Following Alma profile activation and third-party configuration, your institution’s support staff changes the Alma login shortcut to the following URL (see Your Alma Domain Names): https://<Alma domain>/SAML.

For a detailed overview of SAML-based SSO, see https://developers.exlibrisgroup.com/alma/integrations/user-management/authentication/inst_idp/saml.

---

**Note**

If your production server and the sandbox use the same SAML identity provider, Ex Libris recommends that you use the same authentication profile in both environments. In this case, no additional configuration of SAML is required on the sandbox after a sandbox refresh. If your production server and the sandbox use different SAML identity providers, see Recommended Configuration to Account for Sandbox Refresh for more information.

---

To configure a SAML type of integration profile:

1. On the Integration Profile List page (Administration > General Configuration > Configuration Menu > External Systems > Integration Profiles), select Add Integration Profile. The first page of the integration profile wizard appears.
2. Enter a code and name for the integration profile.
3. Select the **SAML** option from the Integration Type drop-down list.
4. From the System drop-down list, select the system to be used for authentication such as Shibboleth.
5. Select **Next** to complete the remaining configuration parameters.
6. You can populate the profile information from metadata. To use a metadata link, select the **Metadata Link** option and provide the location of the link in the **Metadata file link** field. To use a metadata upload, select the **Metadata upload** option and select the file in the **Upload IDP metadata file** field.

7. Select **Default SAML profile** to configure the profile as the default.

8. If the profile was not automatically populated with metadata (in the above steps), enter the settings for the **IDP issuer**, **IDP Login URL**, **User ID Location**, **User ID Attribute Name**, **IDP Logout URL**, and **IDP Single Logout Service**, and **Sign Single Logout Requests**. For more information on these fields, see [https://developers.exlibrisgroup.com/alma/integrations/user-management/authentication/inst_idp/saml](https://developers.exlibrisgroup.com/alma/integrations/user-management/authentication/inst_idp/saml).

9. Select an **Alma metadata file version**. When creating a new profile, two options are available, The self-signed **Version 2025** and **Signed certificate**. When editing an existing profile, three options are available, the self-signed **Version 2025**, **Signed certificate**, and whichever certificate you were using previously. **Version 2025** expires in December 2025 and the **Signed certificate** expires in January 2021. If you opt to use a previous certificate, Alma continues to accept it, even after the expiration date. If you edit an existing profile and select a new certificate, once you save the profile, the previous certificate becomes unavailable. Before changing your certificate, you must check with your IT department.

10. In **Certificate upload method**, select the type of certificate to upload (see [https://developers.exlibrisgroup.com/alma/integrations/user-management/authentication/inst_idp/saml](https://developers.exlibrisgroup.com/alma/integrations/user-management/authentication/inst_idp/saml)). Alma accepts certificate file uploads, free-text certificate entry, and JKS files. If **JKS file** or **certificate file** is selected, a field will be displayed to select the file from the user's file system. If **Free-text certificate** is selected, a field is displayed to accept the text of the certificate. A note beside the field indicates if a certificate has already been uploaded.

---

**Note**

As of January 1, 2017, Alma no longer supports certificates using the MD5withRSA encryption algorithm. For more information, see [https://blogs.oracle.com/java-platform-group/entry/strengthening_signatures](https://blogs.oracle.com/java-platform-group/entry/strengthening_signatures).

11. When an authenticated SAML user logs in that does not have an existing Alma user, if you want a new Alma user to
be automatically created, select **Active** in the Self Registration section.

1. Enter the **User Group**, **Resource Sharing Library**, and **Statistical Category** that you want to have assigned to the automatically created user.

2. You can also define the mapping of SAML attributes to their corresponding user fields in Alma by selecting the **Mapping of assertion fields to Alma fields** link.
   1. Enter the Alma field name in the **Code** field. Enter the SAML assertion code in the **Description**.
   2. Select **Customize**.

12. Select **Save**.

---

**Note**

To use a profile that is not the default, use the `/SAML/idpCode/[profile code]` suffix in the Alma URL.

---

**Replacing a Signed Certificate**

If you need to replace your Signed Certificate, you must do it with both Alma and Primo VE, in coordination with your IDP.

Send the certificate file to your IT department along with the new metadata that is produced by selecting the appropriate link below (inserting your university’s base Alma or Primo VE URL in place of `<ALMA_VE_BASE_URL>`):


https://<ALMA_VE_BASE_URL>/view/saml/metadata?VERSION=SIGNED_2021 (Jan 2021 DigiCert)

Make note of the date and time that the IDP will switch the certificate. As close as possible to that time, follow the process in step 9, above, to select the new certificate in the integration profile.

When either the institution or the IDP upgrades their certificate, the login will not work until the other switches over as well. This is why it is important to note when the IDP is switching over to minimize the down time.
CAS-Based Single Sign-On/Sign-Off

To configure a CAS integration profile, you must have the following role:

- General System Administrator

Alma supports CAS single sign-on using an integration profile, including ECAS. This enables a user to sign in or out of an external system and be automatically signed in or out of Alma, or vice versa. After signing in to Alma, you are redirected to your CAS page to sign in. When sign-in is successful, you are automatically directed back to Alma.

Following Alma profile activation and third-party configuration, your institution’s support staff changes the Alma login shortcut to the following URL (see Your Alma Domain Names):

https://<Alma domain>/CAS.

If your institution requires the ability to authenticate with multiple CAS IdPs, create a CAS integration profile for each IdP. The Alma URL for a profile is /https://<Alma domain>/CAS/[profile code]. Alma uses the profile that is identified by the profile code. Using the URL without the profile code uses the CAS profile marked as the default.

For a detailed overview of CAS-based single sign-on, see the Developer Network.

---

**Note**

If your production server and the sandbox use the same CAS service, Ex Libris recommends that you use the same authentication profile in both environments. In this case, no additional configuration of CAS is required on the sandbox after a sandbox refresh. If your production server and the sandbox use different CAS services, see Recommended Configuration to Account for Sandbox Refresh for more information.

---

To add a CAS integration profile:

1. On the Integration Profiles page (Configuration Menu > General > External Systems > Integration Profiles), select Add Integration Profile. The first page of the integration profile wizard appears.

Integration Profile General Information Tab

2. Enter profile information, specifying CAS as the Integration Type. Select Next. The Actions page of the integration profile appears.
3. If you have multiple CAS profiles, you can select **Default CAS profile** for only one. This is the profile that will be used when the URL does not specify an idpCode. Enter the CAS host URL provided to you by your CAS provider. For questions on URLs, consult your institution’s support staff.

4. Add the URL, as described above. The URL typically ends with `/cas`.

5. If you are using ECAS and require additional parameters, enter them as a string. For example, `assuranceLevel=LOW&ticketTypes=SERVICE`. **Parameters are:**
   - **assuranceLevel**: **TOP** (default), **HIGH**, **MEDIUM**, **LOW**
   - **ticketTypes**: **SERVICE**, **PROXY**, **DESKTOP** (**SERVICE,PROXY** is the default)
   - **proxyGrantingProtocol**: **PGT_URL**, **CLIENT_CERT**, **DESKTOP** (no default)

6. When you are done, select **Save**.
OpenAthens LA Proxy Support

To configure proxy support for OpenAthens LA (Local Authentication), you must have the following role:

- General System Administrator

Alma provides support for the OpenAthens LA (Local Authentication) proxy server.

To configure Alma for the OpenAthens LA proxy server:

1. On the Integration Profile List page (Administration > General Configuration > Configuration Menu > External Systems > Integration Profiles), select Add Integration Profile. The first page of the integration profile wizard opens.
2. For Integration Type, select Resolver Proxy.
3. Enter a name and select Next.
4. In the Proxy Definitions section, you can now select OpenAthens from the Proxy server type drop-down list.
5. Complete the remaining proxy options (see Resolver Proxies) and select Save.
Social and Email Login

To configure social login profiles, you must have the following role:

- General System Administrator

Facebook, Google, or Twitter may be used to log in to Alma and Primo (when working with Alma) accounts. The setup below is required to enable the option to email users with an invitation to use social login. The email option may be found in the Manage Users interface for an individual user, or can be sent in bulk in the Update/Notify Users job. The email letter is Social Login Invite Letter (letter code: SocialLoginInviteLetter). An additional letter, Social Login Account Attached Letter (letter code: SocialLoginAccountAttachedLetter), is sent after attaching a user account to a social logic provider. For library staff, the email includes a link which can be used to quickly log in to Alma. A user can also sign in to Primo using email. The email letter for this is Login Using One Time Token Letter (letter code: LoginUsingOneTimeTokenLetter).

Related information:

- For a detailed overview of social logins, see the Developer Network.
- For information on Primo VE configuration, see Configuring User Authentication for Primo VE.
- For information on Primo configuration, see Using Social Networks for User Authentication.
- For more information on email login, see Primo Login Using Email.

Note

Ex Libris recommends that you use the same social authentication profile on both the sandbox and the production server. In this case, no additional configuration of social login is required on the sandbox after a refresh. For more information, see Recommended Configuration to Account for Sandbox Refresh.

To configure a social login integration profile:

1. Ensure that the required social network user identifiers are configure for your institution. See Managing User Identifiers.
2. On the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles) select Add Integration Profile.
3. Enter the external system information:
   1. Enter (Profile) Code and Name.
   2. Select Social/Email Login as the integration type.
   3. Select the connecting system. Available options are:
      - Facebook
      - Google
      - Twitter
      - Email
4. Select Next. The Social/Email Login configuration dialog box appears:

![Social/Email Login Integration Profile]

4. The login section defines the required attributes for the OAuth protocol to establish authentication with the external application. The App ID and App Secret are provided by the social network. Select the Allow Login to Alma check box to allow staff to log in to Alma using social/email login or the standard login process. Clear the check box to disable the ability for staff members to use the social/email login option.

5. When self-registration is set to Active, Alma creates a user for any unregistered user logging into Primo with social authentication. Select a user group to be assigned to the newly created users. Resource sharing library and statistical category may also be assigned to the user if selected in the self-registration setup. Self-registration is relevant only for patrons.

6. Select Save.

7. Each user must have their social login identifier added to their user account. See Managing User Identifiers (Tab).
A user can sign in to Primo using various options to log in via social networks or email. An integration profile must also be configured for email. See Social and Email Login.

**To log in using a link in an email sent to a registered user with a defined email address:**

1. Open a Primo session and select **Sign In**. A log in window appears with all social/email options for logging in, as determined by the configured Social/Email integration profiles. Select **Sign in with Email**.

   ![Primo Email Login](image)

   **Primo Email Login**

   This dialog box can be configured using the mashup.css file. The text can be modified in the Social Login Labels table. For more information, see Configuring Social Login Labels.

2. Enter the email address of a registered user. Select **Send**.

   ![Primo Email Login - Enter Email Address](image)

   **Primo Email Login - Enter Email Address**
3. If the email address belongs to a registered user, an email is sent to the user.

![Email Notification]

**Note**

As a security precaution, the same confirmation message appears regardless of whether the email address is defined in Alma or not. However, if the user is blocked or otherwise not permitted to log in, the user will see a message to this effect after trying to log in using the link.

4. When the email is received, select the login link from the letter. Selecting the link must be done on the same device on which the user wishes to access Primo.

![Login using your email address]

Dear Sir/Madam

To login, click here and follow the instructions provided.
This link will expire in one hour.

Sincerely,
Clean Training
Jerusalem

**Login letter**

The link in the email is active for one hour. This letter is the Login Using One Time Token Letter (letter code: LoginUsingOneTimeTokenLetter). For more information, see Configuring Alma Letters.
Ex Libris Identity Service

The Ex Libris Identity Service is based on a dedicated identity management solution. This service replaces the internal authentication method previously used by Alma customers. All passwords for internal Alma users are stored in the Ex Libris Identity Service, which is hosted by Ex Libris in its data centers. For more information on this service, see [https://developers.exlibrisgroup.com/alma/integrations/user-management/authentication/exl_identity_service](https://developers.exlibrisgroup.com/alma/integrations/user-management/authentication/exl_identity_service).

The following password considerations are applicable with the Ex Libris Identity Service:

- The password strength cannot be configured.
- The password does not have an expiry date.
- The password locks for 30 minutes after five unsuccessful login attempts.
- When a staff user enters a wrong user and password combination on the Alma login page, the error message includes a [Forgot password?](#) link, which links to the reset password page. In order to display a Forgot Password option in Primo/PrimoVE, a configuration update is required. For more information, see the knowledge article, [How to add a "Forgot My Password" link to the login page in the new UI when using Alma for authentication](#).

Identity service labels can be configured in the Internal Login Messages code table. See [Configuring Identity Service Labels](#).

For Alma users, a Reset Password Letter is sent to an individual user by selecting the **Reset your password for the identity service** option in the Send message drop-down list on the User Details page. The letter is sent to a group of users by running the Update/Notify Users job and selecting the **Identity Service mail** option in the Send notification to user drop-down list on the job parameters page.

---

**Note**

- The new password must be at least eight characters long and cannot include the user name or any commonly used password.
- When the Reset Password letter is sent by the Update/Notify Users job or from the Send Message drop-down list, the link is active for one week. When the letter is sent from the Forgot Password? link, it is active for one hour.
- In the Reset Password screen, users are asked to enter their user names or email addresses. If users enter their user names, emails are sent to the users' preferred addresses. If users type in email addresses, the system searches for the specified email addresses and if they are located, uses these email addresses even if they aren't the preferred addresses. If an email address is not located or belongs to more than one user, no email is sent.

For more information on logging into Alma, see [Logging Into and Out of the User Interface](#).
OpenID Connect

To configure an OpenID Connect type of integration profile, you must have the following role:

- General System Administrator

Alma integration supports the OpenID Connect standard for user authentication. See OpenID Connect and OpenID Connect - Wikipedia for more information.

When an Alma staff user (or Primo VE patron) attempts to login, user authentication can be processed using systems that support the OpenID Connect standard such as Auth0 and Azure. This works in a manner similar to the social login process in Alma. See the following for more information:

- Developer Network Authentication section – See the Developer Network.
- Primo VE – See Configuring User Authentication for Primo VE.

If you want to use this method of authentication, you need to create and configure an OpenID Connect integration profile.

Creating an OpenID Connect Integration Profile

Use the instructions below to create and configure an OpenID Connect integration profile for user authentication.

To create an OpenID Connect integration profile:

1. Open the Integration Profile List page (Configuration Menu > General > External Systems > Integration Profiles).
2. Select Add Integration Profile.
3. From the Integration Type drop-down list, select OpenID Connect.
4. Select a System option from the drop-down list that represents the OpenID Connect authentication system that you are using.
5. Enter a code and name for this integration profile. Note that the name that you enter is used as part of the label for the log-in menu. See below for an example.

Integration Profile Name Example
6. Select **Next** and enter the following information provided by the OpenID Connect authentication system such as Auth0 or Azure.
   ◦ App ID
   ◦ App Secret
   ◦ Authorization endpoint
   ◦ Token endpoint

7. Select **Active** if you want to begin using this integration profile after saving it.

8. Select **Save**.
Integrations with External Systems Tutorials

- EDI (Electronic Data Interchange)
- EOD Import
- External Resources Search
- Finance
- How to Fill Out the Integration Form
- LDAP Authentication
- Repository Import
- Resolver Proxy
- SAML-Based User Authentication
- Self-Check Machines
- Student Information System
Automatic Upload of Electronic Holdings

The following table lists the available providers from which you can automatically upload electronic holdings into Alma.

<table>
<thead>
<tr>
<th>Provider</th>
<th>Upload Frequency</th>
<th>See More</th>
</tr>
</thead>
<tbody>
<tr>
<td>Springer</td>
<td>Weekly</td>
<td>[Upload Electronic Holdings from Springer]</td>
</tr>
<tr>
<td>Elsevier</td>
<td>Weekly</td>
<td>[Upload Electronic Holdings from Elsevier]</td>
</tr>
<tr>
<td>ProQuest Ebook Central</td>
<td>Weekly</td>
<td>[Upload Electronic Holdings from ProQuest Ebook Central]</td>
</tr>
<tr>
<td>Ovid</td>
<td>Weekly</td>
<td>[Upload Electronic Holdings from Ovid]</td>
</tr>
</tbody>
</table>

* The specific schedule of the upload is determined in each provider's integration profile.