Configuring Cataloging

To configure the metadata environment, you must have one of the following roles:

- **Catalog Administrator**
  
  This role is needed for editing MARC-based profiles using extension packs. To add, remove, and contribute extension pack files at the Community Zone level, the Add and Remove Extensions privilege and the Contributor privilege are required. With the Add and Remove Extensions privilege by itself, you can only add and remove extension pack files at the Institution level. See [Editing MARC-Based Profiles with Extension Packs](#).

- **General System Administrator**

This section is about configuring the metadata environment. The profiles configured in the Active Profiles section of the Metadata Configuration List page define the cataloging environment you use when working in the MD Editor. The bibliographic profiles available for you to configure on the Metadata Configuration List page is determined by the Active Registry/Registries set for your institution by Ex Libris. The following Active Registries can be configured for Alma:

- MARC 21
- UNIMARC
- KORMARC
- CNMARC
- Dublin Core
- MODS
- ETD
- DC Application Profiles

This section describes configuring the following characteristics of the MD Editor:

- Which metadata fields and subfields appear in the metadata editor and if they are repeatable
- If the subfields use a controlled vocabulary
- Normalization processes
- Validation processes

You configure the metadata fields from the options provided on the Metadata Configuration List page ([Configuration Menu > Resources > Cataloging > Metadata Configuration](#)).
See Working with Authority Records for additional information related to global and local authority records in Alma.

The Metadata Configuration List page displays a list of metadata profiles that are defined for the institution, a link to each profile, which cataloging family it belongs to, and which type of metadata profile it is (authority, bibliographic, or holdings).

### Viewing Metadata Profile Details

The Profile Details page provides the following tabs for viewing (and customizing) fields, normalization processes, and validation processes:

- General Information (DC Application Profiles only)
- Fields
- Forms
- Normalization Processes
- Validation Processes
- Validation Exception Profile List
- Other Settings

To view the details of a metadata profile:

1. On the Metadata Configuration List page (Configuration Menu > Resources > Cataloging > Metadata Configuration), select the link (such as MARC 21 Bibliographic) for the profile you want to view. The Profile Details page appears.
2. Select View in the row actions list for the profile details you want to view. The Field Details page appears.

EDITING PROFILE DETAILS

You can modify the details of a metadata profile using the options provided in the following tabs on the Profile Details page:

- General Information (DC Application Profiles only) – for more information, see DC Application Profiles - General Information Tab
- Fields – See Editing Fields.
- Forms – See Working with Forms.
- Normalization Processes – See Working with Normalization Processes.
- Validation Processes – See Editing Validation Processes.
- Validation Exception Profile List – See Working with Validation Exception Profiles.
- Other Settings – See Configuring Other Settings.

In addition, you can modify the metadata profile using extension packs. Refer to Editing MARC-Based Profiles with Extension Packs for more information.

EDITING FIELDS

From the Fields tab on the Profile Details page for a specific metadata configuration profile, you can edit the fields of a metadata profile as described in the procedure below. The fields that are available to edit are determined by profile link/type that you select (bibliographic, holdings, authority, or Qualified Dublin Core) on the Metadata Configuration List page.
To edit fields:

1. On the Metadata Configuration List page (Configuration Menu > Resources > Cataloging > Metadata Configuration), select the link (such as MARC 21 Bibliographic) for the profile you want to edit. The Profile Details page appears.

2. For fixed fields that offer a form in the MD editor for cataloging, enable Force Form Editing to require the use of the form for cataloging. When this feature is enable for a field, free-text cataloging is not an option in the MD Editor.

3. Select Customize (or Edit) in the row actions list for the field you want to edit. The Field Details page appears.

4. Edit the following field options (which may vary) to match your requirements:
   - Mandatory – Yes or No.
   - Description – Details for your reference.
   - Help URL – A URL that can be used for help. The help information that this URL points to appears on the Info tab in the MD Editor. If you leave this field blank, the default is to the Library of Congress cataloging standard.
Subfields – For each subfield, you can select Yes or No to indicate that the subfield is mandatory and/or repeatable.

- Select Assign Controlled Vocabulary in the row actions list for the subfield to which you want to assign a specific controlled vocabulary. The Profile Details page with the Create New CV Value section appears.

Assign Controlled Vocabulary

- Select a controlled vocabulary (CV) from the Choose Controlled Vocabulary drop-down list. The options in this list are configured in the Configuring Controlled Vocabulary Registry. The details of the controlled vocabulary that you select appear. Select Assign to save this selection.

For your convenience, you may use the Create New CV Value section to add controlled vocabulary terms. The terms that you add here only apply to the field that you are editing. If you want to use these terms with another/different field, use the Controlled Vocabulary Registry (see Configuring Controlled Vocabulary Registry) to create a CV that may be used for more than one field.

To add a new controlled vocabulary value in the Create New CV Value section, enter a code and description and select Add. When you are finished adding terms, select Assign.

- First Indicator – In the First Indicator section on the Field Details page, make any required changes.
- Second Indicator – In the First Indicator section on the Field Details page, make any required changes.

5. Select Save. The field changes are saved in the metadata profile.
6. Select **Deploy**.

### Restoring Profile Field Details

You can restore the profile details to the default values.

**To restore the default profile field details:**

1. From the Fields tab on the Profile Details page, select **Actions > Restore** in the row actions list for the profile details that you want to restore. The profile change that was locally customized is restored to the field’s default value.
2. Select **Deploy**.

### Editing MARC-Based Profiles with Extension Packs

Extension packs (.xml files) for the metadata profiles enable you to adapt MARC-based bibliographic, holdings, and authority profiles with additional fields, subfields, and indicator values, repeating/nonrepeating and mandatory/nonmandatory specifications and URLs for online help for regional needs. This includes the MARC 21, UNIMARC, and CNMARC profiles (but not Dublin Core). With the MARC profile extension packs, you can load and use regional adaptations to the MARC standard.

Extension packs created locally can be shared in the Community Zone by Catalog Administrators with the appropriate privileges. As a Community Zone contributor, you can add and delete extension pack .xml files in the Community Zone.

In addition to data fields, extension packs can include fixed fields such as the LDR and control fields 007 and 008. Changes to the fixed fields appear in the form editor drop-down lists in the MD Editor. See the table below for a summary of how profile elements are handled when adding extension packs.

<table>
<thead>
<tr>
<th>Profile Element</th>
<th>LDR</th>
<th>Control Field / Fixed Field</th>
<th>Data Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tags</td>
<td></td>
<td>Out-of-the-box fields and any customized fields that exist in the profile remain. New fields from the extension pack are added.</td>
<td>Out-of-the-box fields and any customized fields that exist in the profile remain. New fields from the extension pack are added.</td>
</tr>
<tr>
<td>Subfield codes</td>
<td></td>
<td>Out-of-the-box codes and any customized codes that exist in the profile remain. New codes from the extension pack are added.</td>
<td></td>
</tr>
<tr>
<td>Positions</td>
<td>Out-of-the-box positions that exist in the profile are removed. Any custom positions that exist in the profile remain.</td>
<td>Out-of-the-box positions that exist in the profile are removed. Any custom positions that exist in the profile remain.</td>
<td></td>
</tr>
<tr>
<td>Profile Element</td>
<td>LDR</td>
<td>Control Field / Fixed Field</td>
<td>Data Field</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>New positions from the extension pack are added.</td>
<td>New positions from the extension pack are added.</td>
<td></td>
</tr>
<tr>
<td>Position values</td>
<td>Out-of-the-box values that exist in the profile remain. Any custom values that exist in the profile are replaced by the new values from the extension pack.</td>
<td>Out-of-the-box values that exist in the profile remain. Any custom values that exist in the profile are replaced by the new values from the extension pack.</td>
<td></td>
</tr>
<tr>
<td>Indicator values</td>
<td></td>
<td>Out-of-the-box values that exist in the profile remain. Any custom values that exist in the profile are replaced by the new values from the extension pack.</td>
<td></td>
</tr>
<tr>
<td>Subfield controlled vocabulary</td>
<td></td>
<td>Out-of-the-box and custom values that exist in the profile are replaced by the new values from the extension pack.</td>
<td></td>
</tr>
</tbody>
</table>

See [Extension Pack .xsd](#) for the extension pack schema and the [Extension Pack .xml File Example](#) for additional information and an example .xml file.

For more information, see [Resource Management – MARC Extensions](#).

**Managing Extension Packs**

You can add an extension pack (.xml file) to your local MARC-based profile, or you can add an extension pack to the Community Zone to share with other institutions.

**To add or share an extension pack:**

1. Create an .xml extension file locally (see [Extension Pack .xml File Example](#) for more information).
2. From the Metadata Configuration List page ([Configuration Menu > Resources > Cataloging > Metadata Configuration](#)), select the link for the MARC-based profile you want to extend.
3. From the Fields tab, select an option in the **Add Extensions** menu.
   - To Institution
     - Use this option to add an .xml extension pack file to the profile you are configuring.
     - When you select this option, you may choose to add an extension pack .xml file to your MARC-based profile from the Community Zone or one of your local files.
If you select the Community Zone option, a list of Community Zone shared .xml files appears, and you can choose to download an extension pack .xml file to your local storage or add the extension pack .xml file directly to your profile.

4. To Community

Use this option to add an .xml extension pack file to the Community Zone for sharing with other institutions.

When you select this option, you are prompted to provide the following extension pack contribution details: name of the extension pack, description, name of the contact for the extension pack, the email address for the contact, and the .xml extension pack file.

5. Select Add Extensions.

For extension pack .xml files added to the Community Zone, the added file and the contribution message appear on the Shared Extensions page.

If during processing the system encounters more than one occurrence of the same value, the first occurrence is applied and the other redundant occurrences are ignored.

6. Review/confirm your changes.

7. Select Deploy.

To remove all extensions, select Remove Extensions and select Confirm in the confirmation dialog box.

With the appropriate privileges, you can delete extension pack .xml files that you contributed to the Community Zone: select Delete from the row actions list.
Extension Pack .xsd

See the .xsd file below that identifies the fields, subfields, indicators, and the values or characteristics that can be specified in the extension pack .xml file.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
  elementFormDefault="qualified" targetNamespace="http://com/exlibris/repository/mdprofile/xmlbeans"
  xmlns="http://com/exlibris/repository/mdprofile/xmlbeans">

<!-- marc_profile element definition -->
<xs:element name="marc_profile">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="leader_configuration" minOccurs="1" maxOccurs="1" />
      <xs:element ref="control_fields_list" minOccurs="1" maxOccurs="1" />
      <xs:element ref="data_fields_list" minOccurs="1" maxOccurs="1" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

<!-- XSD element definition -->
<!-- leader element definition -->
<xs:element name="leader_configuration">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="positions_list" minOccurs="1" maxOccurs="1" type="positionsListType" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

<!-- control_fields_list element definition -->
<xs:element name="control_fields_list">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="control_field_configuration" minOccurs="0" maxOccurs="unbounded">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="description" minOccurs="1" maxOccurs="1" type="xs:string" />
            <xs:element name="help_url" minOccurs="0" maxOccurs="1" type="xs:string" />
            <xs:element name="materials_type_list" minOccurs="1" maxOccurs="1" type="materialstypeListType" />
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Ex Libris, a ProQuest Company
<xs:complexType name="positionType">
  <xs:sequence>
    <xs:element name="description" minOccurs="1" maxOccurs="1" type="xs:string"/>
    <xs:element name="values" minOccurs="1" maxOccurs="1" type="valuesType"/>
  </xs:sequence>
  <xs:attribute name="start" type="customIntegerType" use="required"/>
  <xs:attribute name="end" type="customIntegerType" use="required"/>
</xs:complexType>

<xs:complexType name="valuesType">
  <xs:sequence>
    <xs:element name="value" minOccurs="0" maxOccurs="unbounded">
      <xs:complexType>
        <xs:simpleContent>
          <xs:extension base="xs:string">
            <xs:attribute name="code" type="codeType" use="required"/>
          </xs:extension>
        </xs:simpleContent>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="subfieldValuesType">
  <xs:sequence>
    <xs:element name="value" minOccurs="0" maxOccurs="unbounded">
      <xs:complexType>
        <xs:simpleContent>
          <xs:extension base="xs:string">
            <xs:attribute name="code" type="codeType" use="required"/>
          </xs:extension>
        </xs:simpleContent>
      </xs:complexType>
    </xs:element>
    <xs:attribute name="codeTable" type="xs:string"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="indicatorType">
  <xs:sequence>
    <xs:element name="description" minOccurs="1" maxOccurs="1" type="xs:string"/>
    <xs:element name="values" minOccurs="1" maxOccurs="1" type="valuesType"/>
    <xs:attribute name="mandatory" type="xs:boolean" use="optional"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType>
  <xs:element name="sub_field_configuration" minOccurs="0" maxOccurs="unbounded">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="description" minOccurs="1" maxOccurs="1" type="xs:string" />
        <xs:element name="values" minOccurs="0" maxOccurs="1" type="subfieldValuesType" />
        <xs:element name="materials_type_list" minOccurs="0" maxOccurs="1" type="materialstypeListType" />
      </xs:sequence>
      <xs:attribute name="code" type="subfieldCodeType" use="required" />
      <xs:attribute name="repeatable" type="xs:boolean" use="required" />
      <xs:attribute name="mandatory" type="xs:boolean" use="optional" />
    </xs:complexType>
  </xs:element>
</xs:sequence>
</xs:complexType>

<xs:complexType name="materialstypeListType">
  <xs:sequence>
    <xs:element name="material_type_configuration" minOccurs="0" maxOccurs="unbounded" type="materialtypeType">
      <xs:sequence>
        <xs:element name="positions_list" minOccurs="1" maxOccurs="1" type="positionsListType" />
      </xs:sequence>
      <xs:attribute name="name" type="xs:string" use="required" />
    </xs:element>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="materialtypeType">
  <xs:sequence>
    <xs:element name="positions_list" minOccurs="1" maxOccurs="1" type="positionsListType" />
  </xs:sequence>
  <xs:attribute name="name" type="xs:string" use="required" />
</xs:complexType>

<!-- XSD simple type definition -->
<xs:simpleType name="tagType">
  <xs:restriction base="xs:string">
    <xs:pattern value="[0-9]{3}" />
  </xs:restriction>
</xs:simpleType>

<xs:simpleType name="customIntegerType">
  <xs:restriction base="xs:string">
    <xs:pattern value="[0-9]+" />
  </xs:restriction>
</xs:simpleType>
Extension Pack .xml File Example

See the .xml file below for an example of an extension pack file that can be applied to a metadata profile.

Manually, not using extension packs, you can modify existing field information using the **Customize** action from the Fields tab on the Profile Details page as described in *Editing Fields*.

With the extension pack .xml file, you can add extra values (fields, subfields, and indicators) that are not part of the formal standard and update existing values (that are defined as part of the standard or that have been defined as part of a previous Add Extensions load) consistent with the schema identified in the .xsd above (in *Extension Pack .xsd*).

The extension pack enables you to create multiple unique extensions to the metadata profile so that extensions do not need to be included in a single file. You can load more than one extension pack .xml file. Each additional file that you load customizes only the fields specified in the additional file. If a field was previously customized by an extension pack .xml file and it is defined/customized in a subsequent extension pack .xml file that is added to the metadata profile, that field’s customization is overridden to reflect the most recent .xml file added.

---

**Note**

Any customizations you make using an extension pack are overridden when you select the **Restore** action.

---

For cases in which institutions may want to share a common regional extension pack .xml file, the Ex Libris Developer Network provides the facility for sharing these files. For example, see the blog in the Developer Network, [*How to add a MARC extension pack for German speaking countries*].

```xml
<?xml version="1.0" encoding="UTF-8"?>
<marc_profile xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="marc21_profile_configuration.xsd">
    <control_fields_list>
        <control_field_configuration mandatory="true" repeatable="false" tag="003">
            <description>PERSISTENT RECORD IDENTIFIER</description>
        </control_field_configuration>
    </control_fields_list>
</marc_profile>
```
<sub_fields_list>
<sub_field_configuration code="9" mandatory="false" repeatable="true">
<description>Former ISBN
</description>
</sub_field_configuration>
</sub_fields_list>
<data_field_configuration repeatable="true" mandatory="false" tag="024"
xmlns="http://com/exlibris/repository/mdprofile/xmlbeans"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<sub_fields_list>
<sub_field_configuration code="9" mandatory="false" repeatable="true">
<description>Former ISSN
</description>
</sub_field_configuration>
</sub_fields_list>
</data_field_configuration>
<data_field_configuration repeatable="false" mandatory="false" tag="689"
xmlns="http://com/exlibris/repository/mdprofile/xmlbeans"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<description>SUBJECT HEADING CHAIN</description>
<help_url>http://www.google.com</help_url>
<first_indicator_configuration>
<description>Type of subject heading chain</description>
<values>
<value code="0">Simple chain</value>
<value code="1">Complex chain</value>
</values>
</first_indicator_configuration>
<second_indicator_configuration>
<description>Undefined</description>
<values>
<value code="#">Undefined</value>
</values>
</second_indicator_configuration>
<sub_fields_list>
<sub_field_configuration code="a" mandatory="true" repeatable="false">
<description>Heading chain first element
</description>
</sub_field_configuration>
<sub_field_configuration code="b" mandatory="false" repeatable="true">
<description>Heading chain second element</description>
</sub_field_configuration>
<sub_field_configuration code="c" mandatory="true" repeatable="true">
<description>Type of chain</description>
<values>
<value code="0">GND chain</value>
<value code="1">DNB chain</value>
</values>
</sub_field_configuration>
</sub_fields_list>
</data_field_configuration>
Working with Forms

You can create a form that consists of a template of fields to be used when creating digital representations.

To create a form:

1. Select the **Forms** tab when configuring Qualified Dublin Core or MARC Bibliographic profiles.
2. Select **Add Form** and select one of the following:
   - **Staff-Mediated Deposit**
   - **Add Representation**
   - **Deposit**

   The following appears:

   ![Image of Metadata Form]

   **Metadata Form**

3. Fill in the fields of the form and select **Add Field**. The following appears:

   ![Image of Add a Field]

   **Add a Field**

4. Fill in the fields as follows:
   - **Property** – The property you want to add to the form.
   - **Label** – The label of the property.
   - **Field Size** – Select if you want the field to be short or long.
   - **Type** – Select the type of field, either Text (Single Line), Text Area, Date, or Hidden.
   - **Default Value** – Select a default value to appear in the form.
   - **Mandatory** – Select this option if you want the form to be mandatory.
5. Select **Save in List**. The property is added to the form.
6. Repeat the steps for adding fields to the form. Select **Preview** to see a preview of the form.
7. When you are finished adding fields to the form, select **Save**.

The form is available to be associated with a collection. For more information, see Managing Collections.

---

**Working with Normalization Processes**

Normalization processes are used to correct or update metadata records such as sorting a record’s fields, removing empty fields, or stripping out fields containing order information. Normalization processes can also be created to handle CJK transliterations in the MD Editor. After creating a normalization process, the process can be applied while cataloging in the MD Editor or by running a job that uses this process. See Configuring Processes for more information.

---

**Note**

Records added using an automated process, such as using an API or through a purchase request, are first normalized by the **Default** template, before being processed by any relevant normalization processes. See Working with Record Templates.

---

You can perform the following actions from the Normalization Processes tab on the Profile Details page (Configuration Menu > Resources > Cataloging > Metadata Configuration and select one of the profile links such as **MARC 21 Bibliographic**):

- Create a customized normalization process – Select **Add Process** to create a normalization process.

  The Process Details wizard steps you through the options.

  Shared (or Private) normalization rules defined and saved in the MD Editor from the Rules tab (refer to Working with Normalization Rules) using MARC Drool Normalization syntax are selectable options when you create a process that uses the **MarcDroolNormalization** or the **DcDroolNormalization** process from the Process List Pool section. See the following figures for an illustration of this relationship.
To add a process below for step-by-step details regarding how to create a process.

After a new process is saved in the Metadata Configuration, it also becomes available to run as a MARC 21 Bib normalization or Qualified DC normalization job. See Running Manual Jobs on Defined Sets for more information.

- Edit a normalization process – Select Edit from the row actions list. The settings for an existing normalization process appear on the following tabs:
  - General Information
Adding a Process

To add a process:

1. Select **Add Process** in the **Normalization Processes** tab on the Profile Details page (Configuration Menu > Resources > Cataloging > Metadata Configuration and select a profile link). The first page of the wizard appears. Optionally, you can also create processes from the Process List page (Configuration Menu > Resources > General > Processes).

   **Note**

   If you want to create a copy of an existing process, select **Copy** from the row actions list. Once you have copied the process, you can edit it as needed.

2. In the **General Information** section:
   - Enter the name and description for the process. These values will be visible to users on the Process List page.
   - In the **Status** field, select whether the process is enabled (**Active**) or not. A process that is disabled can be stored and edited in the system without being run. It can be enabled at any time.

3. Select **Next** and select **Add Tasks**.

4. Select tasks.

   This page contains a predefined list of tasks that you can include in your process (or task chain). You cannot define additional tasks and most of these tasks have fixed parameters. The normalization tasks allow you to select the normalization rules that you created in the MD Editor (refer to **Working with Normalization Rules**).

   The table below describes the tasks. Depending on the metadata configuration that you are editing, the tasks vary.

   ![Task List Options](image)

   **Task List Options**

<table>
<thead>
<tr>
<th>Process Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>852 field normalization</td>
<td>Runs a task that takes the control number from the bibliographic record and places it in the correct subfield in the holdings record.</td>
</tr>
<tr>
<td></td>
<td>See <a href="#">Working with MARC 21 Holdings Profiles</a> for more information.</td>
</tr>
<tr>
<td>addBibToCollectionNormalizationTask</td>
<td>Assigns imported digital titles to a collection according to the value of the 787 field of the MARC record. For more information, see <a href="#">Managing Import Profiles</a>.</td>
</tr>
<tr>
<td>Add Hanja to Hangul Transliterations</td>
<td>Converts content such as a title from Hanja to Hangul by configuring source and target fields as shown below. For more information, see <a href="#">Working with CJK Transliterations in Cataloging</a>. This transliteration process can be used for MARC 21 Bibliographic and</td>
</tr>
<tr>
<td>Process Name</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Add Hanja to Hangul CK Transliterations</td>
<td>Converts content such as a title from Hanja to Hangul CK by configuring source and target fields as shown below. For more information, see <a href="#">Working with CJK Transliterations in Cataloging</a>. This transliteration process can be used for MARC 21 Bibliographic and MARC 21 Authority configurations plus any variety of MARC configurations such as KORMARC, UNIMARC, CNMARC, and so forth.</td>
</tr>
<tr>
<td>Add Hanja to Hangul MOE Transliterations</td>
<td>Converts content such as a title from Hanja to Hangul MOE by configuring source and target fields as shown below. For more information, see <a href="#">Working with CJK Transliterations in Cataloging</a>. This transliteration process can be used for MARC 21 Bibliographic and MARC 21 Authority configurations plus any variety of MARC configurations such as KORMARC, UNIMARC, CNMARC, and so forth.</td>
</tr>
<tr>
<td>Add Hanja to Pinyin Transliterations</td>
<td>Converts content such as a title from Hanja to Pinyin by configuring source and target fields as shown below. For more information, see <a href="#">Working with CJK Transliterations in Cataloging</a>. This transliteration process can be used for MARC 21 Bibliographic and MARC 21 Authority configurations plus any variety of MARC configurations such as KORMARC, UNIMARC, CNMARC, and so forth.</td>
</tr>
<tr>
<td>Add Hanzi to Pinyin Transliterations</td>
<td>Converts Chinese content to Pinyin.</td>
</tr>
<tr>
<td><strong>Configuration</strong></td>
<td>The configuration for this process requires that you specify the source and target fields/subfields from Hanzi to Pinyin.</td>
</tr>
<tr>
<td><strong>Hanzi to Pinyin Task Configuration</strong></td>
<td>When the normalization is processed, the first and second indicators in the target field are the same as the indicators in the source field. The transliterated words are placed in the target field/subfield and only the words that have more than one transliteration are placed in the angle brackets &lt; &gt; in the target field/subfield. The cataloger can then choose the right one and delete the others. Note that for the institutions that are configured for the Hong Kong Chinese searching language, the Hanzi to Pinyin transliteration process adds the most commonly used transliteration of the word to the record instead of providing all the possible transliteration options in angle brackets.</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td>If content exists in the target subfield, the normalization process will overwrite it.</td>
</tr>
<tr>
<td>Process Name</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Add Alternate Graphic Representation</td>
<td>Select the Add Alternate Graphic Representation option to identify the 880 field as the target for the Hanzi to Pinyin transliteration. When you use this option, you need to only specify the source fields. All subfields in the source fields will be transliterated to the 880 fields.</td>
</tr>
<tr>
<td>Transliterate Entire Record</td>
<td>Select the Transliterate Entire Record option to transliterate all fields in a record from Hanzi to Pinyin. This option appears after you have selected the Add Alternate Graphic Representation option. Since all fields will be transliterated (except for those without Chinese), there is no need to specify source fields in the task configuration.</td>
</tr>
<tr>
<td>Capitalization</td>
<td>For all MARC 21 fields that begin with a Chinese character and that are transliterated, the first transliterated character is capitalized.</td>
</tr>
</tbody>
</table>

Subfield deletion is not handled as part of this normalization process. To delete subfields, select a normalization process dedicated to that task.
<table>
<thead>
<tr>
<th>Process Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal Names</strong></td>
<td>When you use the Add Hanzi to Pinyin Transliterations normalization task and your institution is configured by Ex Libris with the Hong Kong searching language configuration, personal names located in $a of the 100, 600, 700, and 800 fields are handled in the following manner:</td>
</tr>
<tr>
<td>◦ The surname (the first transliterated CJK character) is first.</td>
<td></td>
</tr>
<tr>
<td>◦ A comma followed by a space is placed after the surname.</td>
<td></td>
</tr>
<tr>
<td>◦ The first letter of the surname and the first letter of the first name are capitalized.</td>
<td></td>
</tr>
<tr>
<td>◦ The transliterated names after the comma/space are concatenated.</td>
<td></td>
</tr>
<tr>
<td>See the example below for the Hong Kong transliteration as compared to the Chinese transliteration.</td>
<td></td>
</tr>
<tr>
<td>Hong Kong:</td>
<td></td>
</tr>
<tr>
<td>毛澤東 =&gt; Mao, Zedong</td>
<td></td>
</tr>
<tr>
<td>Chinese:</td>
<td></td>
</tr>
<tr>
<td>毛澤東 =&gt; mao ze dong</td>
<td></td>
</tr>
<tr>
<td>For more information, see <a href="#">Working with CJK Transliterations in Cataloging</a>. This transliteration process can be used for MARC 21 Bibliographic and CNMARC profiles.</td>
<td></td>
</tr>
<tr>
<td><strong>Add Kana to Hangul Transliterations</strong></td>
<td>Converts content such as a title from Kana to Hangul by configuring source and target fields as shown below. For more information, see <a href="#">Working with CJK Transliterations in Cataloging</a>. This transliteration process can be used for MARC 21 Bibliographic and MARC 21 Authority configurations plus any variety of MARC configurations such as KORMARC, UNIMARC, CNMARC, and so forth.</td>
</tr>
<tr>
<td><strong>Add Kana to Romanized Kana Transliterations</strong></td>
<td>Converts content such as a title from Kana to Romanized Kana by configuring source and target fields as shown below. For more information, see <a href="#">Working with CJK Transliterations in Cataloging</a>. This transliteration process can be used for MARC 21 Bibliographic and MARC 21 Authority configurations plus any variety of MARC configurations such as KORMARC, UNIMARC, CNMARC, and so forth.</td>
</tr>
<tr>
<td><strong>addMmsIdToDcIdentifier</strong></td>
<td>Adds the MMSID to the dc:identifier field of DC records.</td>
</tr>
<tr>
<td><strong>AuthorityGenerateControlNumberSequence</strong></td>
<td>Runs a task that generates a control number sequence for an authority record.</td>
</tr>
<tr>
<td><strong>BibGenerateControlNumberSequence</strong></td>
<td>Runs a task that generates a control number sequence for a bibliographic record.</td>
</tr>
<tr>
<td><strong>BibGenerateHandle</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CnmarcBibAdd005Task</strong></td>
<td>The 005 field is added only when saving in the MD Editor.</td>
</tr>
<tr>
<td><strong>CnmarcBibClearEmptyFieldsTask</strong></td>
<td>This process runs a task that deletes the bibliographic fields that are empty.</td>
</tr>
<tr>
<td><strong>CnmarcBibReSequenceTask</strong></td>
<td>This process runs a task that re-sequences the bibliographic fields according to their proper order—for example, 001, 100, 200, and so forth. Fields between 500 and 899 are not sorted (or sorted only by hundreds).</td>
</tr>
<tr>
<td><strong>CnmarcBibTag100OpenDateTask</strong></td>
<td>If the 100 field exists, the current date is placed at the beginning of 100 $a in positions</td>
</tr>
<tr>
<td>Process Name</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>CnmarcBibTag100Task</strong></td>
<td>Alma automatically inserts or corrects the dates in the 09-12 and 13-16 positions of the CNMARC 100 field according to the date entered in the CNMARC 210 $d (and 210 $h when it contains four consecutive digits). Additionally, the dates of 210 $d are standardized. For dates like 198? or 19?, for example, Alma replaces the question marks and spaces with “-” (hyphens).</td>
</tr>
<tr>
<td><strong>Create210BasedOn010</strong></td>
<td>This normalization process task adds the MARC 210 $a to the record and places the Chinese publisher in the 210 based on the ISBN in the MARC 010 $a and a table managed within Alma. After you create and save a normalization process with this task selected, you can use the Edit &gt; Enhance the Record option in the MD Editor to update records that you are cataloging. See Enhance the Record in the MD Editor - Edit Menu table on the Navigating the MD Editor page for more information.</td>
</tr>
<tr>
<td><strong>DcBibClearEmptyFieldsTask</strong></td>
<td>Runs a task that deletes the Dublin Core fields that are empty.</td>
</tr>
<tr>
<td><strong>DcBibResequenceTask</strong></td>
<td>Runs a task that resequences the Dublin Core fields according to their proper order.</td>
</tr>
</tbody>
</table>
| **DcDroolNormalization** | Runs the normalization rules that are selected as parameters in the DC Drool Normalization section when creating a process or on the Task Parameters tab when editing a process.  

**Note**  
Only normalization rules that are created as shared rules in the MD Editor are displayed in the drop-down list to be selected in the Dublin Core Normalization section.  

For more information regarding creating normalization rules see Working with Normalization Rules. |
| **Identifying Brief Level** | Runs a task that calculates the brief level of a record. |
| **Generate Chinese Author Call Number** | Runs a task (in CNMARC) that generates a Chinese author call number that is stored in the 905 field when, for example, Edit > Enhance the Record is selected while editing a record in the MD Editor.  
When you add a new process, select Add Tasks, select Generate Chinese Author Call Number, select Add and Close, and select Next in order to access and select an author number generation routine from the Choose Author Number Generation Routine drop-down list.  
Select one of the following author number generation routine options:  
◦ Chinese author number generation 090 routine 1  
  This is the call number generation routine for the CNMARC bibliographic records based on the General Chinese Author Number table that generates the author number in the 090 field using routine 1.  
◦ Chinese author number generation 090 routine 2  
  This is the call number generation routine for the CNMARC bibliographic records |
<table>
<thead>
<tr>
<th>Process Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>based on the General Chinese Author Number table that generates the author number in the 090 field using routine 2.</td>
</tr>
<tr>
<td></td>
<td>◦ Chinese author number generation 090 routine 3</td>
</tr>
<tr>
<td></td>
<td>This is the call number generation routine for the CNMARC bibliographic records based on the General Chinese Author Number table that generates the author number in the 090 field using routine 3.</td>
</tr>
<tr>
<td></td>
<td>◦ Chinese author number generation 905 routine 1</td>
</tr>
<tr>
<td></td>
<td>This is the call number generation routine for the CNMARC bibliographic records based on the General Chinese Author Number table that generates the author number in the 905 field using routine 1.</td>
</tr>
<tr>
<td></td>
<td>◦ Sequence based call number generation 090 routine 1</td>
</tr>
<tr>
<td></td>
<td>The next sequence will be generated in the 090 field.</td>
</tr>
<tr>
<td></td>
<td>◦ Sequence based call number maintenance 090 routine 1</td>
</tr>
<tr>
<td></td>
<td>This maintenance routine saves the sequence in Alma from the 090 field in the bibliographic record. This does not generate new sequences but, instead, saves existing sequences from the bibliographic record. This can be used after batch updates such as after migration or an MD import. This is used to make the Alma sequence and what is stored in the bibliographic record the same.</td>
</tr>
<tr>
<td></td>
<td>◦ Sequence based call number generation 905 routine 1</td>
</tr>
<tr>
<td></td>
<td>The next sequence will be generated in the 905 field.</td>
</tr>
<tr>
<td></td>
<td>◦ Sequence based call number maintenance 905 routine 1</td>
</tr>
<tr>
<td></td>
<td>This maintenance routine saves the sequence in Alma from the 905 field in the bibliographic record. This does not generate new sequences but, instead, saves existing sequences from the bibliographic record. This can be used after batch updates such as after migration or an MD import. This is used to make the Alma sequence and what is stored in the bibliographic record the same.</td>
</tr>
</tbody>
</table>

**Note**
- This routine should be used only when manually editing a record and not in any batch process.

Select the **Use when generating author number in MD Editor (F4)** parameter to enable, in the MD Editor, the type of author number generation selected in the **Choose Author Number Generation Routine** parameter.
<table>
<thead>
<tr>
<th>Process Name</th>
<th>Description</th>
</tr>
</thead>
</table>

**Generate MARC 21 Author Call Number**

Runs a task (in MARC 21) that generates a Chinese author call number that is stored in the 905 field when, for example, **Edit > Enhance the Record** is selected while editing a record in the MD Editor. This is the MARC 21 version of the Generate Chinese Author Call Number process.

When you add a new process, select **Add Tasks**, select Generate Chinese Author Call Number, select Add and Close, and select Next in order to access and select an author number generation routine from the Choose Author Number Generation Routine drop-down list.

- Cutter number generation 090 routine 1
  
  This is the call number generation routine for the MARC 21 bibliographic records based on the General Chinese Author Number table that generates the author number in the 090 field using routine 1.

- Cutter number generation 090 routine 2
  
  This is the call number generation routine for the MARC 21 bibliographic records based on the General Chinese Author Number table that generates the author number in the 090 field using routine 2.

- Cutter number generation 090 routine 3
  
  This is the call number generation routine for the MARC 21 bibliographic records based on the General Chinese Author Number table that generates the author number in the 090 field using routine 3.

- Cutter number generation 090 routine 4
  
  This is the call number generation routine for the MARC 21 bibliographic records based on the General Chinese Author Number table that generates the author number in the 090 field using routine 4.

- Cutter number generation 905 routine 1
  
  This is the call number generation routine for the MARC 21 bibliographic records based on the General Chinese Author Number table that generates the author number in the 905 field using routine 1.

- Sequence based call number generation 090 routine 1
  
  The next sequence will be generated in the 090 field.
<table>
<thead>
<tr>
<th>Process Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>❚ Sequence based call number maintenance 090 routine 1</td>
<td>This maintenance routine saves the sequence in Alma from the 090 field in the bibliographic record. This does not generate new sequences but, instead, saves existing sequences from the bibliographic record. This can be used after batch updates such as after migration or an MD import. This is used to make the Alma sequence and what is stored in the bibliographic record the same.</td>
</tr>
<tr>
<td>Note</td>
<td>This routine should be used only when manually editing a record and not in any batch process.</td>
</tr>
<tr>
<td>❚ Sequence based call number maintenance 905 routine 1</td>
<td>This maintenance routine saves the sequence in Alma from the 905 field in the bibliographic record. This does not generate new sequences but, instead, saves existing sequences from the bibliographic record. This can be used after batch updates such as after migration or an MD import. This is used to make the Alma sequence and what is stored in the bibliographic record the same.</td>
</tr>
<tr>
<td>Note</td>
<td>This routine should be used only when manually editing a record and not in any batch process.</td>
</tr>
<tr>
<td>MARC Normalization Rules</td>
<td>Runs the normalization rules that are selected as parameters in the Task Parameters tab.</td>
</tr>
<tr>
<td>MARC21 Expand Holding By 863/4/5 Task</td>
<td>Runs a task that adds an 863/864/865 summary statement holdings field. See <a href="#">Working with MARC 21 Holdings Profiles</a> for more information.</td>
</tr>
<tr>
<td>MARC21 Expand Holding By 866/7/8 Task</td>
<td>Runs a task that adds a description to the 866/867/868 textual holdings fields. See <a href="#">Working with MARC 21 Holdings Profiles</a> for more information.</td>
</tr>
<tr>
<td>Marc21AuthClearEmptyFieldsTask</td>
<td>Runs a task that deletes the authority fields that are empty.</td>
</tr>
<tr>
<td>Marc21AuthResequenceTask</td>
<td>Runs a task that resequences the authority record fields according to their proper order.</td>
</tr>
<tr>
<td>Marc21BibClearEmptyFieldsTask</td>
<td>Runs a task that deletes the bibliographic fields that are empty.</td>
</tr>
</tbody>
</table>

Note
This routine should be used only when manually editing a record and not in any batch process.

Note
This routine should be used only when manually editing a record and not in any batch process.

Select the Use when generating author number in MD Editor (F4) parameter to enable, in the MD Editor, the type of author number generation selected in the Choose Author Number Generation Routine parameter.

When you select this option for normalization, pressing F4 in the MD Editor will cause the system to use the author number generation routine identified in this profile instead of the regular author number generation.
<table>
<thead>
<tr>
<th>Process Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marc21BibResequenceTask</td>
<td>Runs a task that re-sequences the bibliographic fields according to their proper order—for example, 001, 100, 200, and so forth.</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td>Fields between 500 and 899 are not sorted (or sorted only by hundreds). The 689 field (relevant for German markets only) is sorted by its indicators.</td>
</tr>
<tr>
<td>Marc21createControlNumber</td>
<td>Runs a task that creates a new control number from the bibliographic records’ 001 and 003 fields and places it in the 035 field.</td>
</tr>
<tr>
<td>Marc21HoldingClearEmptyFieldsTask</td>
<td>Runs a task that deletes the holdings fields that are empty.</td>
</tr>
<tr>
<td></td>
<td>See <a href="#">Working with MARC 21 Holdings Profiles</a> for more information.</td>
</tr>
<tr>
<td>Marc21HoldingResequenceTask</td>
<td>Runs a task that resequences the holdings fields according to their proper order.</td>
</tr>
<tr>
<td></td>
<td>See <a href="#">Working with MARC 21 Holdings Profiles</a> for more information.</td>
</tr>
<tr>
<td>MARC21 Holding Fix 001 Field</td>
<td>Writes a 001 field to the holdings record.</td>
</tr>
<tr>
<td></td>
<td>See <a href="#">Working with MARC 21 Holdings Profiles</a> for more information.</td>
</tr>
<tr>
<td>MarcDroolNormalization</td>
<td>Runs the normalization rules that are selected as parameters in the Marc Drool Normalization section when creating a process or on the Task Parameters tab when editing a process.</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td>Only normalization rules that are created as shared rules in the MD Editor can be selected in the Marc Drool Normalization section.</td>
</tr>
<tr>
<td></td>
<td>For more information regarding creating normalization rules see <a href="#">Working with Normalization Rules</a>.</td>
</tr>
<tr>
<td>MmsTagSuppressed</td>
<td>Runs a task that suppresses/unsuppresses the bibliographic records from discovery.</td>
</tr>
<tr>
<td>Process Name</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>according to the selected value <strong>True</strong> or <strong>False</strong> (<strong>True</strong> for records to be suppressed from publishing to Primo and <strong>False</strong> to allow records to be published to Primo).</td>
</tr>
<tr>
<td>MmsTagSyncExternal</td>
<td>Runs a task that sets the synchronization policy for the bibliographic records with the external catalog according to one of the following selected values:</td>
</tr>
<tr>
<td></td>
<td>- <strong>Publish bibliographic records</strong> – Marks bibliographic records to be included in exports.</td>
</tr>
<tr>
<td></td>
<td>- <strong>Publish holdings only</strong> – Marks holdings records to be included in exports.</td>
</tr>
<tr>
<td></td>
<td>- <strong>Don’t publish</strong> – Marks records to be excluded from exports.</td>
</tr>
<tr>
<td>MmsTagSyncNationalCatalog</td>
<td>Runs a task that sets the synchronization policy for the bibliographic records with the national catalog according to one of the following selected values:</td>
</tr>
<tr>
<td></td>
<td>- <strong>Publish bibliographic records</strong> – Marks bibliographic records to be included in exports.</td>
</tr>
<tr>
<td></td>
<td>- <strong>Don’t publish</strong> – Marks records to be excluded from exports.</td>
</tr>
<tr>
<td>Sort Subfields Task</td>
<td>Select this task to sort the order of subfields for a specific field during normalization. After you have added this task to the Process Details - Add Tasks page and you select Next, the Sort Subfields Task section appears where you can customize the order of subfields for a specific field for up to ten different fields.</td>
</tr>
<tr>
<td></td>
<td>When there are other subfields in the field that are not specified in the sort order, they are appended after the sorted subfields in their original order. Any fields that are not customized for sorting maintain their original subfield order. The sorting customization is case sensitive. The lowercase and uppercase versions of a letter are treated separately.</td>
</tr>
<tr>
<td>UnimarcBibAdd005Task</td>
<td>The 005 field is added only when saving in the MD Editor.</td>
</tr>
<tr>
<td>UnimarcBibClearEmptyFieldsTask</td>
<td>This process runs a task that deletes the bibliographic fields that are empty.</td>
</tr>
<tr>
<td>UnimarcBibReSequenceTask</td>
<td>This process runs a task that re-sequences the bibliographic fields according to their proper order—for example, 001, 100, 200, and so forth. Fields between 500 and 899 are not sorted (or sorted only by hundreds).</td>
</tr>
<tr>
<td>Process Name</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>UnimarcBibTag100OpenDateTask</td>
<td>If the 100 field exists, the current date is placed at the beginning of 100 $a in positions 00-07 using the YYYYMMDD format.</td>
</tr>
<tr>
<td>UnimarcBibTag100Task</td>
<td>Alma automatically inserts or corrects the dates in the 09-12 and 13-16 positions of the UNIMARC 100 field according to the date entered in the UNIMARC 210 $d (and 210 $h when it contains four consecutive digits). Additionally, the dates of 210 $d are standardized. For dates like 198? or 19?, for example, Alma replaces the question marks and spaces with ”-” (hyphens).</td>
</tr>
<tr>
<td>Update originating system information</td>
<td>Use this option to set up the Originating System Version used for version prevention when importing records with <strong>Upon match</strong> Overlay or Merge options and Consider Originating System or Ignore Originating System options selected. Records stored in the system prior to the September 2015 release, do not have the Originating System Version information. Alma provides the ability to set up this information using a process automation job with <strong>Update originating system information</strong> selected from the Process List Pool. For records imported after the September 2015 release, the Originating System and Originating System Version are added automatically.</td>
</tr>
</tbody>
</table>

**Note**

As you process these existing records from prior to the September 2015 release, be aware that the normalization task will not modify any records linked to the Community Zone.

See the procedure [To configure normalization for managing the Originating System and Originating System Version information](#) for steps regarding how to set up a process using **Update originating system information**.

5. Select **Add and Close**.

6. Use the up and down arrows to arrange the order in which the tasks are to be performed.

7. Select **Next**. The next page of the wizard appears.

   Depending on the tasks that you selected, the parameters that appear will vary.

8. Select **Save**.

### Configuring Normalization for Managing the Originating System

**To configure normalization for managing the Originating System and Originating System Version information:**

1. On the Process List page ([Configuration Menu > Resources > General > Processes](#)), select **Add Process**.

2. Select the following options for the parameters identified below and select **Next**:
   - Business Entity – Bibliographic title
   - Type – MARC 21 Bib normalization (or other option type depending on your environment)

3. Complete the General Information section and select **Next**.

4. Select **Add Tasks** and select **Update originating system information**.

5. Select **Add and Close**, and select **Next**.

6. Select any of the following parameters according to your requirements:
Update Originating System – The originating system that you want identified in the imported record’s metadata.

Update Originating System Version – The date that you want stored in the record’s metadata. This date is used when you select the prevent overlay/merge options in your import profile for processing record matches (see Creating/Editing an Import Profile: Match Profile). The format of this date parameter is MM/DD/YYYY. The format of the Originating System Version is YYYYMMDDhhmmss.f (where hhmmss.f is hours, minutes, seconds, and a fraction of a second and the 24-hour clock is used). When normalization occurs with this parameter specified, Alma enters YYYYMMDD000000.0. Zeroes are entered for the hhmmss.f portion of the Originating System Version.

Note
When using metadata import, Alma pulls the date and time (that is formatted as YYYYMMDDhhmmss.f) from the 005 control field of the imported record for the Originating System Version field. See the figure below for an example of the 005 control field and the date/time format.

005 20140113085714.0

005 Control Field

The normalization process updates the Originating System Version field according to the date entered or selected from the calendar in the Originating System Version parameter. When you run a MARC 21 Bib normalization job, for example, that uses a normalization process with a date selected for the Originating System Version parameter, the date that you specify is applied to all the records in the set that you select for the job.

Update Existing Originating System Version Values – Whether the originating system version you selected (above) overwrites any existing version. If not selected, the existing version remains as it is.

7. Select Save.

To run the process that you just created to update the Originating System Version information on a set of records, follow the steps on the Running Manual Jobs on Defined Sets page. Optionally, you can modify/override the Originating System and/or Originating System Version parameters when you run the job.

Editing Validation Processes

The following are the out-of-the-box validation processes:

- MARC 21 Bib match validation – Defines the way in which validation is handled when a bibliographic record match is performed during the import process or in the MD Editor
- MARC 21 Bib validation on save – Defines the way in which validation is handled when importing MARC records using an import profile, copy cataloging via an external resource (such as WorldCat or LoC), and saving a bibliographic
You can edit these processes, but you cannot create new validation processes.

If the process is not currently required but may be required in the future, you can disable it in the Active column.

**To edit a validation process:**

1. Select the **Edit** row action for the validation process that you want to edit from the **Validation Processes** tab on the Profile Details page (Configuration Menu > Resources > Cataloging > Metadata Configuration and select a profile link).

   ![Validation Processes Tab](image)

   **Validation Processes Tab**

   The Process Details page opens to the General Information tab for the validation process.

   ![Validation Process General Information Tab](image)

   **Validation Process General Information Tab**

2. Edit the validation details as required by selecting the validation process tabs (General Information, Task List, and Task Parameters) to access the information you want to modify. From the Task List tab, the validation tasks described in the table below are available for the **Marc21 Bib matches validation** and **Marc21 Bib validation on save** validation processes.

<table>
<thead>
<tr>
<th>Validation Tasks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validation vocabulary data Sub-Fields MARC21</td>
<td>Validates vocabulary data.</td>
</tr>
<tr>
<td>Validation Recognized Fields MARC21</td>
<td>Validates that all fields are recognized by profile.</td>
</tr>
<tr>
<td>Validation Mandatory MARC21</td>
<td>Validates the existence of mandatory fields.</td>
</tr>
<tr>
<td>Validation Repeatable MARC21</td>
<td>Validates the repeatable fields.</td>
</tr>
<tr>
<td>Validation Fixed Fields Positions MARC21</td>
<td>Validates legitimate data in the control field.</td>
</tr>
<tr>
<td>Validation Variable Fields MARC21</td>
<td>Validates legitimate data in the indicators.</td>
</tr>
<tr>
<td>Validation Recognized Sub-Fields MARC21</td>
<td>Validates that all sub-fields are recognized by profile.</td>
</tr>
</tbody>
</table>

Ex Libris, a ProQuest Company
<table>
<thead>
<tr>
<th>Validation Tasks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validation Mandatory Sub-Fields MARC21</td>
<td>Validates the existence of mandatory subfields.</td>
</tr>
<tr>
<td>Validation Repeatable Sub-Fields MARC21</td>
<td>Validates repeatable subfields.</td>
</tr>
<tr>
<td>Marc21BibFindMatchesValidationTask</td>
<td>Marc21Bib find if it has matches validation.</td>
</tr>
<tr>
<td>Validation vocabulary data Sub-Fields MARC21</td>
<td>Validates vocabulary data.</td>
</tr>
<tr>
<td>Validating alternate graphic representation</td>
<td>Validates alternate graphic representations.</td>
</tr>
<tr>
<td>Validate Bib_Heading authorized</td>
<td>Validates if bibliographic headings are authorized.</td>
</tr>
<tr>
<td>Validate Local Call Number Uniqueness MARC21</td>
<td>Use this task to verify that the local call number is unique across all bibliographic records in the repository. For this task, you can specify the following task parameters (from the Task Parameters tab): 090, 091, 092, 093, 094, 095, 096, 097, 098, and 099. In the case where not all 09X fields are selected, the uniqueness check is for the same 09X field in other bibliographic records. So, for example, if you select the 093 field in the BIB fields for call number validation list, the validation check does a comparison of all other bibliographic 093 fields in the repository to determine if there are any duplicate call numbers. In the case where all 09X fields are selected, the uniqueness check is for any 09X field in other bibliographic records. So, for example, if the bibliographic record has a local call number stored in the 093 field, the validation check does a comparison of all other bibliographic 09X fields (not just the 093 field) in the repository to determine if there are any duplicate call numbers. As a shortcut, you may select the x next to the 09X field to remove it from the list. For more information, see How to make a check on the uniqueness of the 090 call number when saving a record in the metadata editor (.docx file).</td>
</tr>
<tr>
<td>Validate Empty Fields in New MARC21 Bibliographic</td>
<td>After you add the Validate Empty Fields in New MARC21 Bibliographic validation task to the task list, select the Task Parameters tab and identify the fields that you want to validate are empty. (This is also available for the KORMARC, UNIMARC, and CNMARC bibliographic metadata configuration profiles.)</td>
</tr>
</tbody>
</table>
Fields to Validate as Empty

To set up a special error or warning message for this validation check, you need to create a validation exception profile. See Working with Validation Exception Profiles for more information.

This validation check is for new records only, not existing records that you are updating.

For each functionality that uses the validation process (MD Editor, API, import, PO line, and quick cataloging), an error or warning message is provided when the validation identifies that a field specified on the Task Parameters tab is not empty. In the MD Editor, for example, the messages appear in the following manner when 009 is configured as a field to check on the Task Parameters tab:

Field Not Empty Validation Messages

<table>
<thead>
<tr>
<th>Validation Form of Material MARC21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validates that the form of material in the 006 field (position 0) matches the material type in the leader (LDR).</td>
</tr>
</tbody>
</table>

3. Select **Save**.

---

**Working with Validation Exception Profiles**

Validation exception profiles are used to determine the severity of validation issues. When an issue is found an error or warning message is provided. Validation exception profiles can be accessed from the Validation Exception Profile List tab.
on the Profile Details page ([Configuration Menu > Resources > Cataloging > Metadata Configuration](#) and select a profile link). The following are the out-of-the-box validation exception profiles:

- MARC XML Bib Import – When defining an import profile, you define the validation exception profile to be used during the import. It is recommended that you select this exception profile to handle invalid data as it is being imported.
- MARC XML Bib Metadata Editing on Save – This exception profile is used when copy cataloging via an external resource (such as WorldCat or LoC) and when saving a bibliographic record in the MD Editor.

Unlike validation profiles (see [Editing Validation Processes](#)), you can define additional exception (severity) profiles. You can also edit or copy the existing profiles or delete the ones that you create and manage.

---

**Note**

For information on configuring an error message to be displayed when adding 9XX fields to Network Zone records, see [Preventing the Addition of Local Fields to Network Zone Records](#).

---

**Adding a Validation Exception Profile**

To add a validation exception profile:

1. On the Profile Details page ([Configuration Menu > Resources > Cataloging > Metadata Configuration](#) and select a profile link), select the Validation Exception Profile List tab.

   Select **Add Validation Severity Profile**.

   ![Add Validation Severity Profile](#)

   **Creating Validation Exception Profile**

   ---

   **Note**

   You can also copy an existing validation exception profile to create a new one by selecting the **Copy** row action and modifying it to match your requirements (see **Editing a Validation Exception Profile**).

   ---

2. Enter the following for the validation exception profile:
   - Name (required) and description for the severity validation profile you want to add
Select **Error** or **Warning** to indicate the default severity. The default severity determines whether violations of the field-level parameters defined in the **Fields** tab (for example, mandatory, non-repeatable) are treated as warnings (which can be overridden) or as errors (which must be resolved).

3. Select **Add Validation Severity Profile**. The profile is added to the list of Validation Exception Profiles. See **Editing a Validation Exception Profile** for information about adding a message to your validation exception profile.

### Editing a Validation Exception Profile

**To edit a validation exception profile:**

1. From the **Validation Exception Profile List** tab on the Profile Details page (Configuration Menu > Resources > Cataloging > Metadata Configuration and select a profile link), select the **Edit** row action for the validation exception profile that you want to update.
2. In the General Information area, make changes to name, description, or default severity as required.
3. In the Message area, select the **Delete** row action to delete unwanted messages.
4. Select **Add Validation Severity Exception** and select a validation exception message from the Message drop-down list.

   - The syntax of the messages in the **Message** drop-down list is not configurable.

5. Select **Add Validation Severity Exception**.
6. Select **Save Profile Details** and select **Back**.

### Configuring Other Settings

From the Other Settings tab on the Profile Details page for metadata configuration (Configuration Menu > Resources > Cataloging > Metadata Configuration and select a profile link), you can:

- Select a Brief Level Rule (see **Setting the Brief Level Rule Default in the Metadata Configuration**)
- Select parameters to handle certain fields in a particular manner when saving records (see **Configuring Other Settings Parameters**)

### Configuring Other Settings Parameters

Other Settings parameters are provided for handling the 003, the 035, and the 880 $6 fields when saving records. Use these parameters in the following manner:

- Disable 003 deletion – Select this parameter to maintain the contents of the 003 field when you save records. When this parameter is not selected, the default behavior when saving a record is to delete the 003 field after concatenating its contents with the MMS ID from the 001 field to build an ID like (OCoLC)35397863 that is placed in the 035 field.
- Exclude generation of 035 based on MMS ID – Select this option to turn off the automatic generation of the 035 field that concatenates the contents of the 003 field with the MMS ID from the 001 field when saving records.
- Generate 035 from 001 only – (UNIMARC bibliographic and authority metadata configuration profiles only) Select this option to create a 035 field from the contents of the 001 field (MMS ID) when saving records.
• Add alternate graphic representation script code – Use this parameter to add or omit the linked-to script language indication in $6 when the 880 is created. When you select this parameter, the script language indicator is added to $6 in the 880 field. See Working with Linked 880 Fields in Bibliographic Records for more information.

## Working with UNIMARC Fields, Normalization, and Validation

Similar to the support Alma provides for MARC 21, Alma provides support for UNIMARC validation and normalization. Alma uses the settings in the validation and normalization profiles when importing records and when working with records in the MD Editor.

For UNIMARC, additional validation function has been implemented for fixed fields (1XX) that have a subfield.

Default normalization processes have been created for UNIMARC bibliographic record normalization. See the Task List Options table for more information.

The UNIMARC metadata profile includes the standard UNIMARC local fields. Specifically, the 9XX local fields are available in the UNIMARC profile. This includes subfields a through z and 0 through 9, plus blank and 0 through 9 values for the first and second indicators.

### To work with the UNIMARC normalization tasks:

1. Select the **UNIMARC Bibliographic** link in the Metadata Configuration List page (Configuration Menu > Resources > Cataloging > Metadata Configuration). The Profile Details page appears.
2. Select the **Normalization Processes** tab. The following default normalization processes appear on the **Normalization Processes** tab:
   - Unimarc Bib Initial Normalization
   - Unimarc Bib normalize on save
   - Unimarc Bib Re-sequence
   - Unimarc Bib Re-sequence And Clear empty fields
3. Select **Edit** from the row actions list for one of the normalization processes and select the **Task List** tab to view the UNIMARC tasks provided.
4. When you are finished, select **Save**.

### To view an example of the 9XX UNIMARC fields available in the Metadata Configuration profile:

1. Select the **UNIMARC Bibliographic** link in the Metadata Configuration List page (Configuration Menu > Resources > Cataloging > Metadata Configuration). The Profile Details page opens on the Fields tab.
2. Locate one of the 9XX fields.
3. Select **Customize** from the row actions list to view the subfields and indicators available for customizing.
4. Expand the Subfields, First Indicator, and Second Indicator sections to view the customizable options.

To view the UNIMARC validation field changes:

1. Select the UNIMARC Bibliographic link in the Metadata Configuration List page (Configuration Menu > Resources > Cataloging > Metadata Configuration). The Profile Details page opens on the Fields tab.
2. Filter the Fields tab by selecting the 1XX: Coded Information Block option.
3. For field 100, select View from the row actions list. The Field Details page appears.
4. Expand the Positions section to view the positions being validated.

The following position validations have been added for UNIMARC:

◦ Date entered on file
◦ Type of Publication Date
◦ Publication Date 1
◦ Publication Date 2
5. When you are finished, select Back until you return to the Metadata Configuration List page.

Managing UNIMARC Local Authority Records

As a multi-format library solution, Alma supports the use of UNIMARC authority records for the purpose of authority control. Alma provides the capability for managing UNIMARC local authority records (and associating them to bibliographic records using the F3 functionality in the MD Editor). From the Metadata Configuration List page, you can create your own UNIMARC authority profile for managing local authorities. In addition, you can create authority record import profiles designed to import UNIMARC records.
To create a UNIMARC local authority profile:

1. On the Metadata Configuration List page (Configuration Menu > Resources > Cataloging > Metadata Configuration) select Add Local Authority. The Add Local Authority pop-up window appears.

2. Complete the parameters required for the UNIMARC local authority profile.
   ◦ Name – Enter the vocabulary name that you want to display on the Local Authority Registry page for the profile.
   ◦ Code – Enter the vocabulary code name that you want to display when configuring your import profile, for example.
   ◦ Family – Select UNIMARC from the drop-down list.
   ◦ Type – Select one of the following types from the drop-down list:
     ▪ Subject
     ▪ Name
     ▪ Names and Subjects
     ▪ Classification
   ◦ Direct ID prefix – Enter the ID prefix if one is used.
   ◦ Multilingual – Select Yes or No from the drop-down list.

3. Select Add and Close. The local authority registry that you created appears in the list on the Local Authority Registry page.

4. Select Save. Your local authority profile appears in the list on the Metadata Configuration List page.

5. Select the UNIMARC Authority link to open the Profile Details page and configure fields, normalization, and validation similar to MARC 21.

6. When you have completed making changes to the profile details, select Deploy.

To create a UNIMARC authority import profile:

See Managing Import Profiles.

Working with KORMARC Fields, Normalization, and Validation

Similar to the support Alma provides for MARC 21, Alma provides support for KORMARC validation and normalization. Alma uses the settings in the validation and normalization profiles when importing records and when working with records in the MD Editor.

Default normalization processes have been created for KORMARC bibliographic record normalization.

To work with the KORMARC normalization tasks:

1. Open the Metadata Configuration List page (Configuration Menu > Resources > Cataloging > Metadata Configuration).

2. Select the KORMARC Bibliographic link. The Profile Details page appears.

3. Select the Normalization Processes tab. The following default normalization processes appear on the Normalization Processes tab:
   ◦ Kormarc Bib normalize on save
   ◦ Kormarc Bib Re-sequence
Kormarc Bib Re-sequence And Clear empty fields

4. Select **Edit** from the row actions list for one of the normalization processes and select the **Task List** tab to view the KORMARC tasks provided.

5. When you are finished, select **Save**.

**Working with CNMARC Fields, Normalization, and Validation**

Similar to the support Alma provides for MARC 21, Alma provides configuration options for CNMARC fields, normalization and validation for bibliographic and authority records. See [Editing Profile Details](#) and [Working with Authority Records](#) for more information.

Alma uses the settings in the validation and normalization profiles when importing records and when working with records in the MD Editor.

Default normalization processes have been created for CNMARC bibliographic record normalization.

**To work with the CNMARC normalization tasks:**

1. Open the Metadata Configuration List page ([Configuration Menu > Resources > Cataloging > Metadata Configuration](#)).
2. Select the **CNMARC Bibliographic** link. The Profile Details page appears.
3. Select the **Normalization Processes** tab. The following default normalization processes appear on the Normalization Processes tab:
   - Cnmarc Bib Initial Normalization
   - Cnmarc Bib normalize on save
   - Cnmarc Bib normalize on Z39.50/SRU search
   - Cnmarc Bib Re-sequence
   - Cnmarc Bib Re-sequence And Clear empty fields
4. Select **Edit** from the row actions list for one of the normalization processes and select the **Task List** tab to view the CNMARC tasks provided. See the [Task List Options](#) table for an explanation of normalization tasks.
5. When you are finished, select **Save**.

**Working with Dublin Core Fields, Normalization, and Validation**

Similar to the support Alma provides for MARC, Alma provides support for Dublin Core validation and normalization. Alma uses the settings in the validation and normalization profiles when importing records and when working with records in the MD Editor.

Default normalization processes have been created for Dublin Core bibliographic record normalization.

**To work with the Dublin Core normalization tasks:**

1. Open the Metadata Configuration List page ([Configuration Menu > Resources > Cataloging > Metadata Configuration](#)).
2. Select the **Qualified Dublin Core** link. The Profile Details page appears.
3. Select the **Normalization Processes** tab. The following default normalization processes appear on the
Normalization Processes tab:

○ Add BIB to Collection
○ Qualified DC Bib normalize on save
○ Qualified Dublin Core Bib normalize on Z39.50/SRU search

4. Select Edit from the row actions list for one of the normalization processes and select the Task List tab to view the Dublin Core tasks provided.

5. When you are finished, select Save.

Working with DC Application Profiles

Alma provides two customizable Dublin Core profiles to which you can add local fields. These local fields can be used to contain metadata needed by your institution that is not supported by the standard Dublin Core format.

The Dublin Core application profiles that you configure are available wherever there is an option to select a record format:

• In the MD Editor, when adding fields to a Dublin Core record (Resources > Open Metadata Editor).
• In the Record Format field, when adding a representation in the Record Format field (Resources > Add Digital Representation).
• In the Record Format field, when adding a new collection (Resources > Manage Collections).
• In the Target Format field, when configuring import profiles (Resources > Manage Import Profiles).
• In the Bibliographic record formats to include field, when running the Export Digital Titles job (Admin > Run a Job).
• In areas where you configure the metadata that appears in Alma:
  ○ In Search Indexes, where you configure the fields that are searchable in the Alma repository (Configuration > Resources > Search Configuration > Search Indexes).
  ○ In Delivery Profiles Metadata, where you configure the metadata fields that are displayed when viewing digital content in the Alma Viewer (Configuration > Fulfillment > Delivery Profiles Metadata).

The DC Application profiles appear in the list of profiles when it is configured in your active registry:
DC Application Profiles in List of Profiles

DC Application Profiles - General Information Tab

Select a DC Application profile to display the Profile Details page. In addition to the tabs available for the other profiles (see Viewing Metadata Profile Details), the General Information tab appears:

DC Application Profiles General Information Tab

You can enter a name and description for the profile. Select Active to activate the profile.

Adding Fields to DC Application Profiles

You can add local fields to the DC Application profiles.

From the Fields tab on the Profiles Details page, select Add Field. Select one of the options that appear:

- Standard – add a standard qualified DC field. The following appears:

  Add Standard Field

  1. From the Field drop-down list, select a qualified DC field.
  2. Enter a description for the field.
  3. Select a language occurrence.
  4. Select if you want the field to be mandatory: Yes/No.
5. Select if you want the field to be repeatable: Yes/No.

- Local – add a local DC field. The following appears:

![Add Local Field](image)

Add Local Field

1. From the **Code** field, select a code for the local DC field.
2. Enter a name for the local DC field.
3. Enter a description for the local DC field.
4. Select a language occurrence.
5. From the **Refines** field you can select a simple DC field that will contain the value of the local field when it is exported.
6. Select if you want the field to be mandatory: Yes/No.
7. Select if you want the field to be repeatable: Yes/No.
8. Select if you want the field to be private: Yes/No. If you select Yes, the field is not exported (but it is indexed).

The field is added to the profile.

---

**Working with the GND Authority Profile**

A GND profile is available that enables Alma to better integrate with the GND authority records. This feature includes:

- Search indexes that make it easier to find GND records (see the GND Authority Search Index Mapping section)
- Field/subfield definitions that assist with cataloging

The GND Authority profile is of particular interest to institutions cataloging and contributing records to the GND. While cataloging GND authority records in the Alma MD Editor, the GND Authority profile assists with your GND contributions by having:
• All the GND fields defined, including mandatory definitions
• GND controlled vocabularies in place
• Specific normalization rules

For institutions that have MARC 21 Bibliographic configured as the Active Registry, both the MARC 21 Authority and the GND Authority profile options will be available on the Metadata Configuration List page (Configuration Menu > Resources > Cataloging section > Metadata Configuration).

The configurable fields on the Fields tab and normalization and validation processes are specific to the GND standard.

For information regarding GND indexes, see Configuring Search Indexes.

---

**Working with MARC 21 Holdings Profiles**

Working with MARC 21 holdings profiles is similar to working with the bibliographic and authority profiles. They all manage configuration options on the following tabs:

- Fields
- Normalization Processes
- Validation Processes
- Validation Exception Profile List

The differences between them have to do with the fields that are being managed (normalized and validated). Due to the similarities, reference the viewing, editing and configuring sections above for detailed steps in navigating the Metadata Configuration profiles when you work with the MARC 21 Holding link for profile configurations (Configuration Menu > Resources > Cataloging section > Metadata Configuration).

See the table below for MARC 21 Holding profile process options.

<table>
<thead>
<tr>
<th>Process Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Normalization Processes:</strong></td>
<td></td>
</tr>
<tr>
<td>MARC 21 Holding normalize from BIB</td>
<td>This process is used to normalize MARC 21 holdings from bibliographic records. It provides the following process options in the Process List Pool section on the Task List tab when you edit this process:</td>
</tr>
<tr>
<td></td>
<td>• 852 field normalization</td>
</tr>
<tr>
<td></td>
<td>• MarcDroolNormalization</td>
</tr>
<tr>
<td></td>
<td>• marc21HoldingClearEmptyFieldsTask</td>
</tr>
<tr>
<td></td>
<td>• marc21HoldingResequenceTask</td>
</tr>
<tr>
<td></td>
<td>• MARC21 Expand Holding By 866/7/8 Task</td>
</tr>
<tr>
<td></td>
<td>• MARC21 Expand Holdings By 863/4/5 Task</td>
</tr>
<tr>
<td></td>
<td>• MARC21 Holding Fix 001 Field</td>
</tr>
<tr>
<td>MARC 21 Holding normalize on save</td>
<td>This process is used to normalize MARC 21 holdings record when the holdings record is saved in the MD Editor. It provides the following process options in the Process List Pool section on the Task List tab when you edit this process:</td>
</tr>
<tr>
<td></td>
<td>• 852 field normalization. Note that the call number value in field 852 is not updated on save if it already exists.</td>
</tr>
<tr>
<td>Process Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| MARC 21 Holding Re-sequence And Clear empty fields | This process is used when resequencing and clearing empty fields. It provides the following process options in the Process List Pool section on the Task List tab when you edit this process:  
  - 852 field normalization  
  - MarcDroolNormalization  
  - marc21HoldingClearEmptyFieldsTask  
  - marc21HoldingResequenceTask  
  - MARC21 Expand Holding By 866/7/8 Task  
  - MARC21 Expand Holdings By 863/4/5 Task  
  - MARC21 Holding Fix 001 Field |
| Validation Processes:                     | This process is used to validate holdings record contents when the holdings record is saved in the MD Editor. Select Edit to configure the validation processes.  
  **General Information Tab**  
  From the General Information tab, the status for the MARC 21 Holding validation on save validation process can be set to Active or Inactive.  
  **Task List Tab**  
  The following process options are provided on the Task List tab in the Process List Pool section:  
  - Validation Recognized Fields MARC 21  
  - Validation Mandatory MARC 21  
  - Validation Repeatable MARC 21  
  - Validation Fixed Fields Positions MARC 21 Holding  
  - Validation Variable Fields MARC 21  
  - Validation Recognized Sub-Fields MARC 21  
  - Validation Mandatory Sub-Fields MARC 21  
  - Validation Repeatable Sub-Fields MARC 21  
  - Validation Library and Location MARC 21 Holding  
  - Duplicate Validation MARC 21 Holding  
  - Call Number and Accession Number Validation  
  - Duplicate Validation MARC 21 Holding Other Title  
  Select processes from the Process List Pool (select Add to Selection) and prioritize the processes in the Processes Selected section that you want performed to validate holdings records when they are saved in the MD Editor. |
<table>
<thead>
<tr>
<th>Process Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Task Parameters Tab</strong></td>
<td>When you select the Duplicate Validation MARC 21 Holding Other Title process on the Task List tab, the Check different locations for duplicate call numbers check box appears on the Task Parameters tab. Select this check box to have the validation check performed on holdings records in different locations. If this check box is not selected, the validation check is performed only on the holdings records in the current location.</td>
</tr>
</tbody>
</table>
| **Validation Exception Profile List:** | Validation exception profiles are used to determine the severity of validation issues. When an issue is found an error or warning message is provided. The following out-of-the-box profile is provided when you configure the MARC 21 Holding profile:  
• MarcXML Holding Metadata Editing On Save  
Unlike validation profiles, you can define additional exception (severity) profiles by selecting Add Validation Severity Profile. The following severity messages can be configured:  
• New Library and location: {LIBRARY-CODE}{Location} are not in scope (see an example in the procedure below)  
• {INDICATOR-VALUE} is not a valid code for First indicator for field {FIELD}  
• {INDICATOR-VALUE} is not a valid code for Second indicator for field {FIELD}  
• {POSITION-VALUE} is not a valid code for position {POSITION} for field {FIELD}  
• Accession Number is a mandatory field.  
• Accession Number is not unique within this location.  
• Automatic generation of Call Number failed. There are no values in the Bibliographic record appropriate for the selected call number type  
• Call number is not valid.  
• Field {FIELD} is not listed in profile  
• Field {0} must be empty  
• Holding for a different title already exists for BIB MMS ID: {MMS-ID}  
• Holding for a different title at this location already exists for BIB MMS ID: {MMS-ID}  
• Holding for this title at this location already exists.  
• Library is a mandatory field.  
• Library {LIBRARY-CODE} does not exist in this institution.  
• Location is a mandatory field.  
• Mandatory field {FIELD} is empty  
• Mandatory field {FIELD} is missing  
• Mandatory sub-field "{SUB-FIELD}" is missing in field {FIELD} |
<table>
<thead>
<tr>
<th>Process Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Missing data for First indicator in field {FIELD}</td>
</tr>
<tr>
<td></td>
<td>• Missing data for Second indicator in field {FIELD}</td>
</tr>
<tr>
<td></td>
<td>• Missing data for material type for field {FIELD}</td>
</tr>
<tr>
<td></td>
<td>• Missing data for position (POSITION) in field {FIELD}</td>
</tr>
<tr>
<td></td>
<td>• Multiple occurrences were found for non repeatable field {FIELD}</td>
</tr>
<tr>
<td></td>
<td>• Multiple occurrences were found for non repeatable sub-field &quot;{SUB-FIELD}&quot; in field {FIELD}</td>
</tr>
<tr>
<td></td>
<td>• Original Library and location: {LIBRARY-CODE}{Location} are not in scope</td>
</tr>
<tr>
<td></td>
<td>• Physical Location {LOCATION} does not belong to library {LIBRARY-CODE}</td>
</tr>
<tr>
<td></td>
<td>• Record has {{MATCHES-ANOUNT}} match(es)</td>
</tr>
<tr>
<td></td>
<td>• Sub-field &quot;{SUB-FIELD}&quot; is not listed in profile for field {FIELD}</td>
</tr>
</tbody>
</table>

To add a validation severity exception to the MarcXML Holding Metadata Editing On Save profile for library/location not in scope:

1. From the list of actions, select **Edit** to modify the MarcXML Holding Metadata Editing On Save validation exception profile.
2. Select **Add Validation Severity Exception**.
3. From the Message drop-down list, select **New Library and location: {LIBRARY-CODE}\{Location} are not in scope**.
4. Enter an asterisk for the LIBRARY-CODE and LOCATION options.
5. Select **Add Validation Severity Exception**.
6. Select **Error**.
7. Select **Save Profile Details**.

With this profile setup, the system checks the user scope, then this profile definition for the library/locations that are not in the scope and all that are not in the scope should are blocked with an error.

---

**Controlling the Display and Access of Global Authorities in the MD Editor**

**Note**

The capability described in this section is specific to institutions that have had their authority usage policy configured by Ex Libris for local authorities.

When enabled by Ex Libris, you can control which global authorities can be viewed and/or accessed in the MD Editor on the Metadata Configuration List page (Configuration Menu > Resources > Cataloging section > Metadata Configuration). On this page you can tailor the display of authority record options for your work in the MD Editor. When your system is configured for working with local authority records, the Authority Vocabularies section of the Metadata Configuration List page provides the following additional columns:

- Managed Locally
The Managed Locally column allows you to identify which authority vocabularies you want to appear in the MD Editor. In order to do this, you may enable or disable the vocabulary in this column.

- Managed in Community

The Managed in Community column identifies the vocabularies that are maintained in the Community Zone. This column is for informational purposes only. There is no option to enable or disable the vocabulary row in this column.

For institutions that want to limit the number of options in the MD Editor that appear to only those authority vocabulary options that are commonly used versus all that might be available, the Managed Locally column allows you to do that.

In addition to the MD Editor, the selections that you make in the Managed Locally column also determine which authority vocabularies appear in the import profile. Specifically, these selections affect the following areas:

- **Templates** and **Records** tabs in the MD Editor
- **File > New** record options in the MD Editor
- **Vocabulary code** parameter’s drop-down list of options on the Import Profile Details page

To change the global and local authority vocabularies that appear in the MD Editor:


    The **File > New** options list in the MD Editor displays the vocabulary options that are identified as Managed Locally in the metadata configuration.
2. Enable the vocabularies in the Managed Locally column to identify the vocabularies that you want to appear in the MD Editor (and the Import profile).

---

**Configuring Controlled Vocabulary Registry**

To configure the Controlled Vocabulary Registry, you must have one of the following roles:

- Catalog Administrator
- General System Administrator

Alma supports validation of subfield values based on a controlled vocabulary (a list of acceptable values for that subfield). Alma supplies several controlled vocabularies out-of-the-box (OTB), and you can implement additional ones.

**To implement a controlled vocabulary (CV):**

1. Create a controlled vocabulary.
2. Assign the controlled vocabulary to a specific MARC 21 subfield.

See the procedure in [Editing Fields](#) and the steps that describe editing field options.

You configure controlled vocabularies (CVs) from the Metadata Configuration List page ([Configuration Menu > Resources > Cataloging > Controlled Vocabulary Registry](#)).
You can perform the following actions on this page:

- View a controlled vocabulary details (select View from the row actions list)
- Add a controlled vocabulary (see Adding/Editing a Controlled Vocabulary)
- Add or delete controlled vocabulary code values (see Adding/Editing a Controlled Vocabulary)
- Restore a modified out-of-the-box controlled vocabulary (select Restore from the row actions list)
- Delete a controlled vocabulary that you added (select Delete from the row actions list)

Adding/Editing a Controlled Vocabulary

You can add or edit a controlled vocabulary.

To add a controlled vocabulary:

1. On the Controlled Vocabulary Registry page (Configuration Menu > Resources > Cataloging > Controlled Vocabulary Registry), select Add CV. The Controlled Vocabulary Details page opens.

2. Enter a name and description.

   This name and description then appear on the Controlled Vocabulary Registry page and in the drop-down list of options for Choose Controlled Vocabulary when you assign a controlled vocabulary to a MARC 21 subfield in the metadata configuration profile. See Step 4 in the Editing Fields above. Note that only after you assign a controlled vocabulary to a MARC 21 subfield can this vocabulary be used in the MD Editor as shown in Step 4 below.

3. After you have added at least one controlled vocabulary name, select Save to save any further changes to the description.

4. In the Add new value area, enter a code and a description. Note that the code can contain spaces or special characters, but cannot contain a subfield delimiter.

   The code that you enter is the term that is validated or provided as an option when entering a record in the MD Editor.
In the 245 $h example above, the codes that you enter appear first in each row, and the description appears to the right of each code in parentheses.

The description for the code that you enter in the CV registry can provide additional information regarding the term that you entered.

5. In the Add new value area, enter a code and a description. Note that the code can contain spaces or special characters.

6. Select Add. The code value is added to the list of controlled vocabulary registries.

7. Repeat steps 3 and 4 to add any additional code values (terms).

8. Select Delete beside any code value to delete it. A warning appears if you try to delete a code value that was originally included in an out-of-the-box vocabulary.

9. Select Cancel to return to the Controlled Vocabulary Registry page.

To edit a controlled vocabulary:

1. On the Controlled Vocabulary Registry page (Configuration Menu > Resources > Cataloging > Controlled Vocabulary Registry), select Actions > Configure or Actions > Edit. The Controlled Vocabulary Details page opens.

2. Continue with the steps described in the above procedure, starting from step 3.

Configuring Author Number Lists

To configure Author Number Lists, you must have one of the following roles:

- Catalog Administrator
- General System Administrator

Generating author numbers (call numbers) requires the use of author number lists. Alma provides standardized author number lists. Using the Author Number Lists configuration option, you can select one or more author number lists, depending on your requirements, to generate author numbers. See Configuring Standard Author Number Lists for more information.

When generating author numbers, the system uses Latin text to locate and generate the automatic author number. If the source text (in a control field such as 100 $a) used by the author number generator in Alma is non-Latin text, the non-Latin text needs to be transliterated to Latin text first. By default, the system uses ICU (International Components for Unicode) for transliteration. If the ICU transliteration results do not meet your requirements, you can customize your own transliteration file to be used instead of the ICU transliteration method. See Configuring Customized Transliteration for Author Number List Generation for more information.
Configuring Standard Author Number Lists

Use the Author Number Lists configuration option to enable one or more standardized author numbers lists to be used for generating author numbers automatically. The following standardized author number lists are available:

- cutter_three_figure_cn.txt
- cutter_three_figure_kor.txt
- lee_jai_chul_1.txt
- lee_jai_chul_2.txt
- lee_jai_chul_3.txt
- lee_jai_chul_4.txt
- lee_jai_chul_5.txt
- lee_jai_chul_6.txt
- lee_jai_chul_7.txt
- lee_jai_chul_8.txt

The cutter_three_figure_cn.txt option contains the Chinese author information, and the cutter_three_figure_kor.txt option contains the Korean author information.

The lee_jai_chul<1-8>.txt options contain the Lee Jai Chul method (see Lee Jai Chul Method Logic) for generating Korean author numbers and can be used with MARC 21 or KORMARC records. One or more of these .txt files may be enabled in the Author Number Lists configuration. As part of the logic of the Lee Jai Chul method, a list of the most popular last names in Korean is maintained by Ex Libris and contains the following last names: ?, ?, ?, ?, ?, ?, ?, ?.

See the instructions below for configuring this capability.

After the Author Number Lists mapping table is configured, you can automatically generate the author number for the local call number field in the MD Editor (using Edit > Generate Author Number). See Generating Author Numbers Automatically and Generating the Author Numbers Automatically for the 090 Local Call Number Field in a KORMARC Bibliographic Record for additional details.

To configure the Author Number Lists mapping table:

1. On the Author Number Lists mapping table (Configuration Menu > Resources > Cataloging > Author Number Lists), select the Customize row action in the row that contains the author number mapping table that you want to use. For more information about mapping tables, see Mapping Tables.

2. Confirm that the Target Tag and Target Subfield options are customized to match your requirements. Make changes if
Lee Jai Chul Method Logic

The Lee Jai Chul method is implemented in Alma using the following logic:

- The Korean author name is expected to exist in the field in which the cursor is positioned. If no name is found in this field, an author number is not generated.
- The first Hangul character from the author name is stored, and the second Hangul character from the author name is broken down into Hangul Jamo using a Hangul consonant and vowel table (with two or three Jamo per Hangul such as 도 > ㄷ and ㅗ). If the first character of the author name is one of the most popular last names, the code from the mapping table for the first Jamo (consonant) and second Jamo (vowel) is concatenated. Otherwise, the code is taken from the mapping table for the first Jamo.
- The generated author number is a string that is the result of the manipulation of the first and second Hangul characters described in the previous bullet. This string is placed in the field/subfield that is identified in the Author Number Lists configuration.
- The author number may be changed by the cataloger after it is generated.
- If the parameter set by Ex Libris for the Lee Jai Chul method (for author last names) contains an asterisk (*), then all the names are considered the most popular.

This logic has the following exceptions:

- When the 5th, 6th, or 8th tables of the Lee Jai Chul method are used and if the first Jamo isㄱ, the second Jamo is coded regardless of the first character being one of the most popular last names. For example when using the 5th table, 추경석 > 추14 (not “추1”).
- If the numeric code for the first Jamo has two digits, there is no need for assigning a code to the second one. For example when using the 2nd table, 정필모 > 정84.
- For cases of an author name separated by a comma, the comma and the space after it are copied to the generated author number. For example when using the 5th table, 밴 마가렛 > 밴, 3.
- When the user-defined call number distinction task in the validation on save process is configured (see MARC 21 Holding validation on save), a duplication check is run for an identical author number in the whole repository. If a duplicate is found, the system displays a message to the cataloger.
- Some tables have dependencies that are taken into consideration. For example when using the 3rd table:
  - 3 v ㄱ -ㄱㄊ 1
    This mean that if the value of the first Jamo is notㄱ, ㄊ, or ㄋ, the code for the second Jamoㄱ is 1.
  - 3 v ㄱ ㄱㄊ 3
    This mean that if the value of the first Jamo isㄱ or ㄊ, the code for the second Jamoㄱ is 3.

Configuring Customized Transliteration for Author Number List Generation

If the ICU default transliteration method (see Configuring Author Number Lists) does not address your requirements, you may configure a custom transliteration file to use as part of the author number list generation process. The custom transliteration file needs to contain the following three columns separated by tabs:

- Hangul (in hexadecimal code points)
• Romanized Hangul
• Description of the character

See below for a partial example of a custom file. In this example, the first two columns are used by Alma for the custom transliteration; and the third column provides a more descriptive reference for the user of the content in the first two columns for each row.

```plaintext
!======================================
! tab_cutter_three_normal
!======================================

! Normalization mapping table
! For Cutter-Three scheme
! COL 1. 4; Hangul in Hexadecimal code points
! COL 2. 15; Romanized Hangul;
! COL 3. 25; TEXT; Description of the character;
! Must begin with #;
!!!!-!!!!-!!!!-!!!!-!!!!-!!!!-!!!!-!!!!
AC00 ga  # 가 to ga
AC01 gag  # 가 to gag
AC04 gan  # 감 to gan
AC07 gad  # 가도 to gad
AC08 gal  # 갈 to gal
AC10 gam  # 감 to gam
AC11 gab  # 갈 to gab
AC13 gas  # 갈시 to gas
AC15 gang # 갑시 to gang
AC16 gaj  # 갑 to gaj

Custom Transliteration File for Author Number Generation

To configure Alma with your custom transliteration file:

1. Select the Local Transliteration Table for Author Number Generation configuration option (Configuration Menu > Resources > Cataloging > Local Transliteration Table for Author Number Generation). The local_transliteration_author_number.txt page appears.

2. Copy/paste your custom transliteration file in the space provided for Content.

3. Select Save.
Configuring Cataloging Levels for Contribution to Externally Managed Authorities

You can edit authority records in the MD Editor for externally managed systems such as GND or BARE; see Cataloging Externally Managed Authority Records. To configure cataloging levels for contributions, your institution must be configured by Ex Libris Support to allow authority contributions to the Community Zone from external systems. In addition, your institution must be configured to work with cataloging levels in Alma (see Cataloging Privileges).

Each external system stores the cataloging level of a record in a predefined field. To align Alma's cataloger permission levels with the external system's cataloging levels, use the Cataloging Level Mapping for External Authority configuration mapping table (Configuration Menu > Resources > Cataloging > Cataloging Level Mapping for External Authority).

The Cataloging Level Mapping for External Authority configuration that you create identifies how the mapping between Alma cataloging permission levels and the external cataloging levels will be validated in the MD Editor when you are creating and editing externally managed authority records for contribution.

The following is an example for GND.

To configure Cataloging Level Mapping for External Authority contributions:

1. On the Cataloger Level to Vocabulary Code mapping table (Configuration Menu > Resources), select Add Row to map an Alma cataloging level to an external system cataloging level.
   1. Select one of the Alma cataloging levels. The cataloging levels are determined by the Cataloger Permission
2. Enter one of the external system's cataloging levels to map to the Alma cataloging level that you selected.

3. Select True or False to indicate whether the mapping that you're creating for the level is the default mapping. Since the mapping table allows you to specify many-to-many relationships, as shown in the figure above where 40 maps to 4, 5, and 6 and 4 maps to 30 and 40, you need to indicate which one is the default mapping.

4. Select the relevant vocabulary.

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**Note**

Current options are GND and BARE.

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5. Select Add Row.

If you need to change a mapping, select the Delete action for the mapping you want to change and create a new mapping.

2. When you are finished making your configuration changes, select Save or Save and Distribute. See Centralized Management of Configuration Tables for more information, including an explanation of Stop Network Management.

With the Cataloging Level Mapping for External Authority configuration set, the MD Editor can determine whether the cataloger has the necessary Alma cataloging level for a given authority record being edited. If Alma detects that the cataloger may have insufficient permissions to successfully contribute the authority record, Alma displays a confirmation dialog box.

Since the external system controls which contributed records are accepted or rejected, Alma leaves that determination to the external system and does not block the user from editing the authority record even when it detects that the cataloger may have insufficient permissions. As a result, the ability to edit an authority record in Alma does not guarantee that it will be accepted when contributed.

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**Configuring Multiple Access Points for CNMARC 6XX Fields**

Use the CNMARC 6XX Category configuration option for identifying the CNMARC 6XX fields that should have multiple access points. See Using Multiple Access Points for CNMARC 6XX Fields for more information.

**To configure CNMARC 6XX headings control fields:**

1. Select CNMARC 6XX Multiple Heading Configuration in the Cataloging section of the Resource Management configuration (Configuration Menu > Resources > Cataloging > CNMARC 6XX Multiple Heading Configuration). The CNMARC 6XX Category mapping table appears. For more information about mapping tables, see Mapping Tables.
2. Select Add Row, enter the 6XX field, its description, and select Add Row for the 6XX field that you want to have segmented.

3. Repeat step 2 for all the 6XX fields that you want to add to the CNMARC 6XX Category mapping table.

4. When you have finished adding 6XX fields, select Customize.

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**Configuring Multiple Access Points for UNIMARC**

Use the UNIMARC Multiple Authority ID configuration option for customizing the UNIMARC 600-602 and 604-607 fields for multiple access points. See [Using Multiple Access Points for UNIMARC](#) for more information.

**To customize the UNIMARC Multiple Authority ID configuration option:**

1. Select **UNIMARC Multiple Authority ID configuration** in the Cataloging section of the Resource Management configuration ([Configuration Menu > Resources > Cataloging > UNIMARC Multiple Authority ID configuration](#)). The list of UNIMARC 6XX fields controlled by multiple authority records appears. For more information about mapping tables, see [Mapping Tables](#).
2. Enable or disable the 6XX fields that you want to use for multiple authority identification and modify the Description field to match your preference.

3. When you have finished, select Customize.

**MARC Slim Configuration**

You can map MARC fields to labels that are used to create forms. To map MARC fields to labels, open the MARC21 Slim mapping table (Configuration Menu > Resources > Cataloging > MARC Slim Configuration). For more information about mapping tables, see Mapping Tables.

Enter the label, the MARC field tag, and the MARC subfield code for the MARC field you want to map. The label of the mapped MARC field is available to be used in a form. For more information, see Working with Forms.