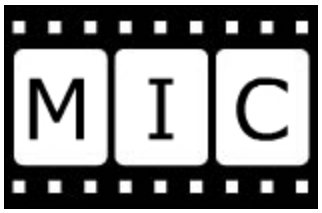
RUTGERS UNIVERSITY LIBRARIES



OpenMIC User Manual

Bibliographic Utility for analog and digital objects

Kalaivani Ananthan

Version 2.0
October 2008
Funded by the Library of Congress

Table of Contents

I. Introduction

OpenMIC is an open source, web-based bibliographic utility that can be used as a standalone application or integrated with other repository architectures by a wide range of organizations. It provides a complete metadata creation system for analog and digital materials, with services to export these metadata in standard formats.

The bibliographic utility features a METS data architecture which can be used in any METS-based or METS-compliant environment. It uses MODS as an underlying metadata schema for descriptive MD, NISO/AES standard for technical MD and PREMIS for source MD and rights MD. It outputs an XML wrapper for the METS components as a single object.

The bibliographic utility data model is primarily an event-based data model, intended to document what happens to a resource at a specific time and place. Preservation and condition events, provenance events, rights events, and descriptive events document what happens to a resource throughout its lifecycle. Details of the events can include associated entities (such as an exhibit curator) and associated objects (such as an exhibit catalog).

OpenMIC is a core application for the Moving Image Collections (MIC) initiative developed at the Rutgers University Libraries with funding from the Library of Congress.

II. Using this Manual

This manual assumes that the software has already been installed and configured. For installing the software, please see the OpenMIC installation and configuration manual.

This manual describes how to use OpenMIC to create and maintain metadata for analog and digital objects such as photographs, moving images etc.

There are five sections in this manual.

Section 1 provides a typical workflow diagram for digital objects in OpenMIC.

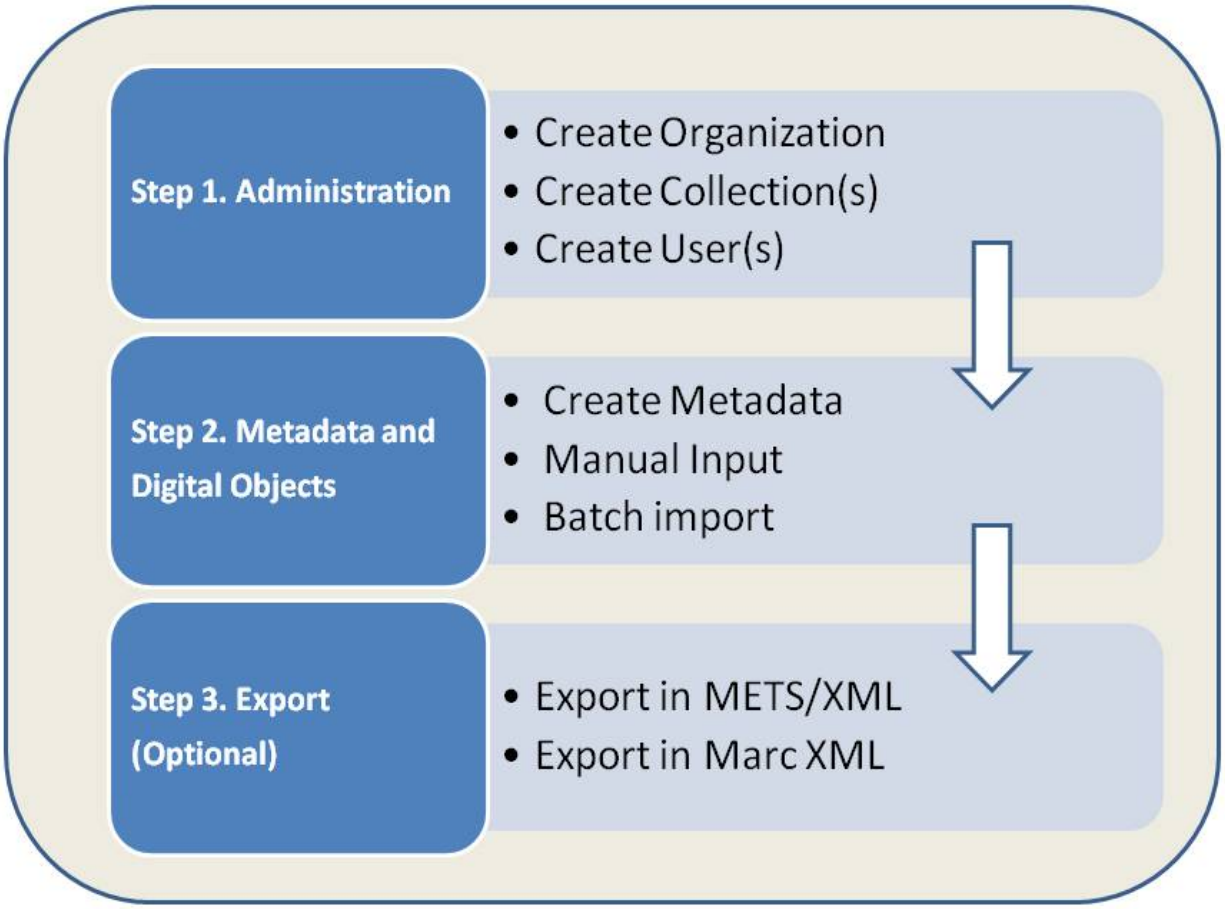
Section 2 provides a diagram showing the hierarchy of objects in OpenMIC.

Section3 explains the different types of objects in OpenMIC.

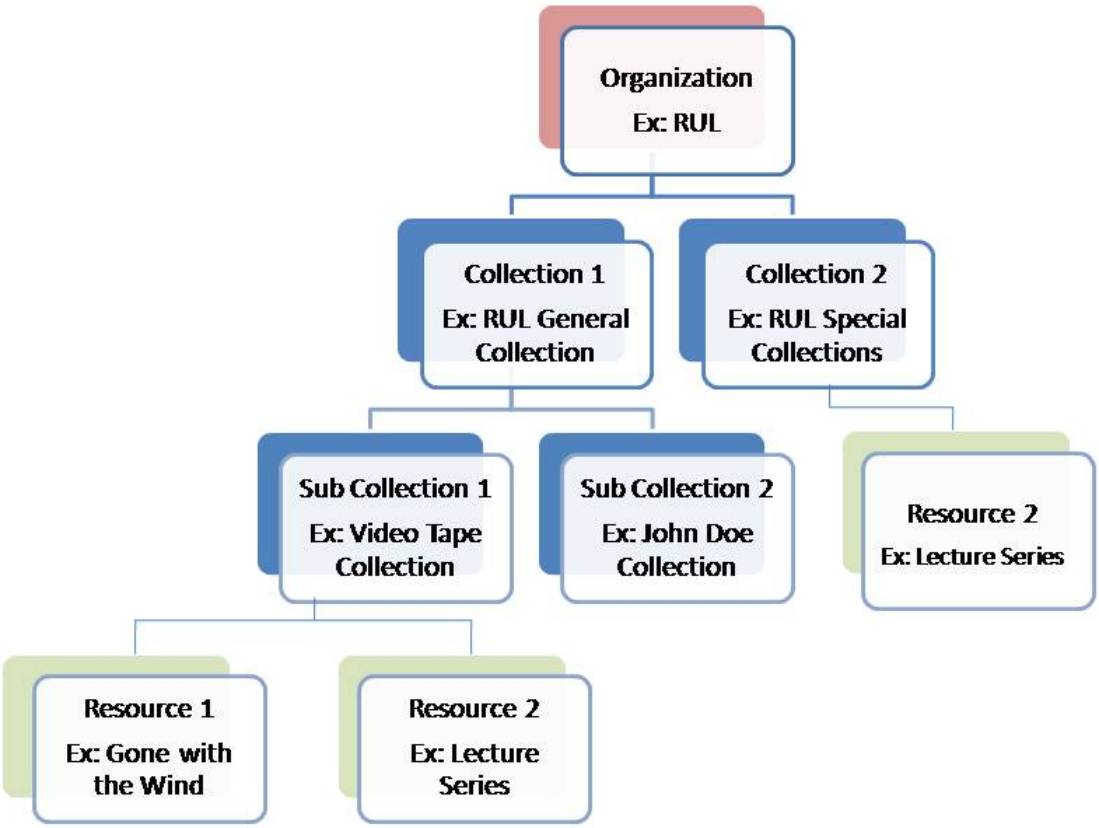
Section 4 provides detailed step-by-step instructions to create or maintain digital objects.

Section 5 provides detailed step-by-step instructions to perform other administrative tasks.

Section 1: Workflow in OpenMIC



Section 2: Object Hierarchy in OpenMIC



Section 3: Object Types in OpenMIC

1. Collection Object

A collection object is a special object that contains the information about the organization that holds the collection and the description of the collection.

2. Resource Object

A resource object is an item that contains information about the resource that is being digitized.

Section 4: Using OpenMIC

Note 1: Recommended Browsers – Firefox 1.0; Netscape 7.1 and above; IE5.0 and above

Note 2: Disable pop-up blocking

Note 3: Enable Cookies

OpenMIC is used to create and maintain metadata for analog and digital materials. The software can be used as a standalone system or can be integrated with other repositories. There are three basic steps to create metadata.

Step 1: Administration

Before you start creating metadata, you must create an organization record and at least one collection record. Please note that there should be only one organization record for each organization. You may create as many collections you need for each organization.

1.1) Organization Management

Create Organization:

i. Login as Super User.
ii. Select *Digital Workflow Management System* from the main screen.
iii. Select *Administration.*
iv. Select *Organization Management.*
v. Select *Create New Organization.*
vi. Enter *Marc Org ID, Organization Name, address, and contact information.*
vii. Click *Save.*

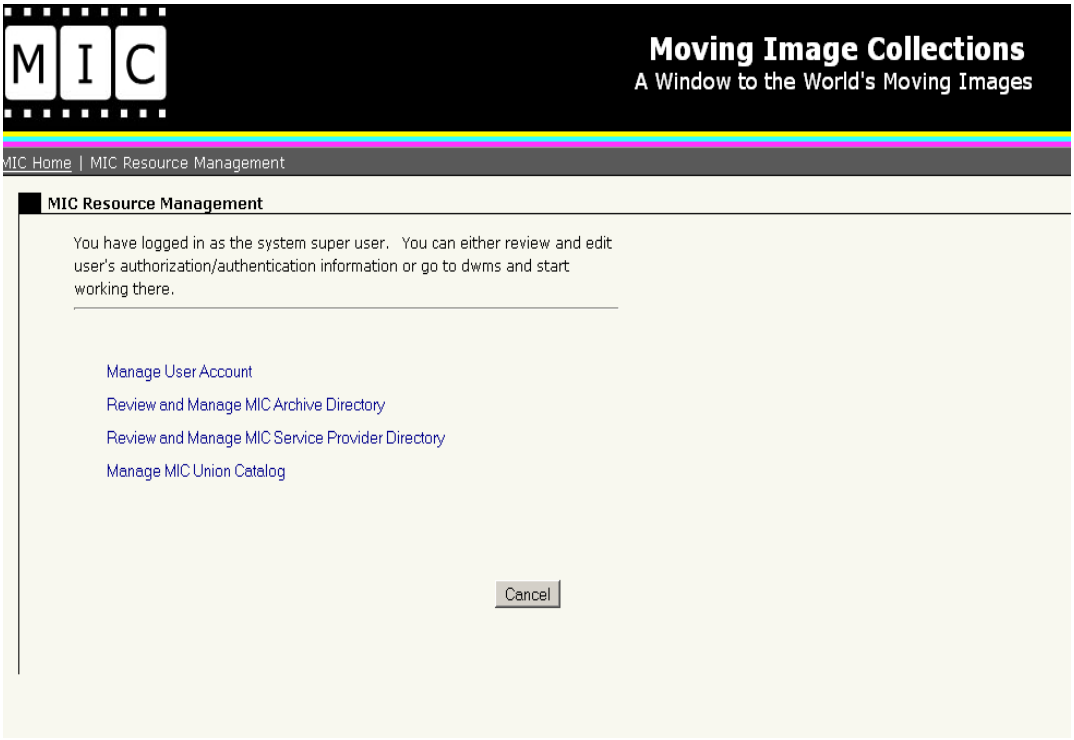


Figure 1.1.1: Main Screen

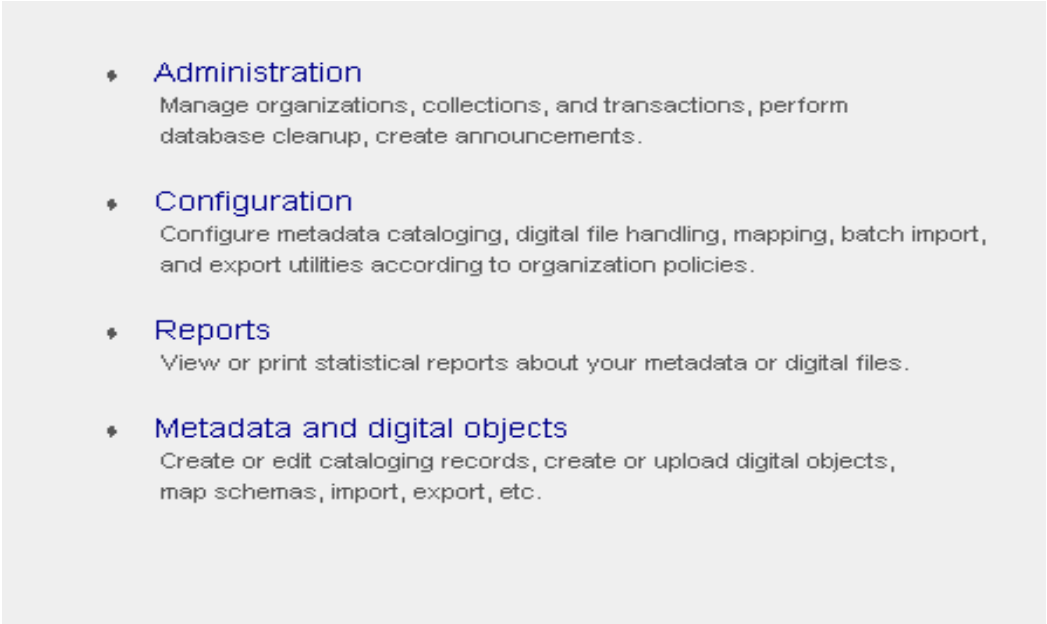


Figure 1.1.2: MIC Catalog Main screen

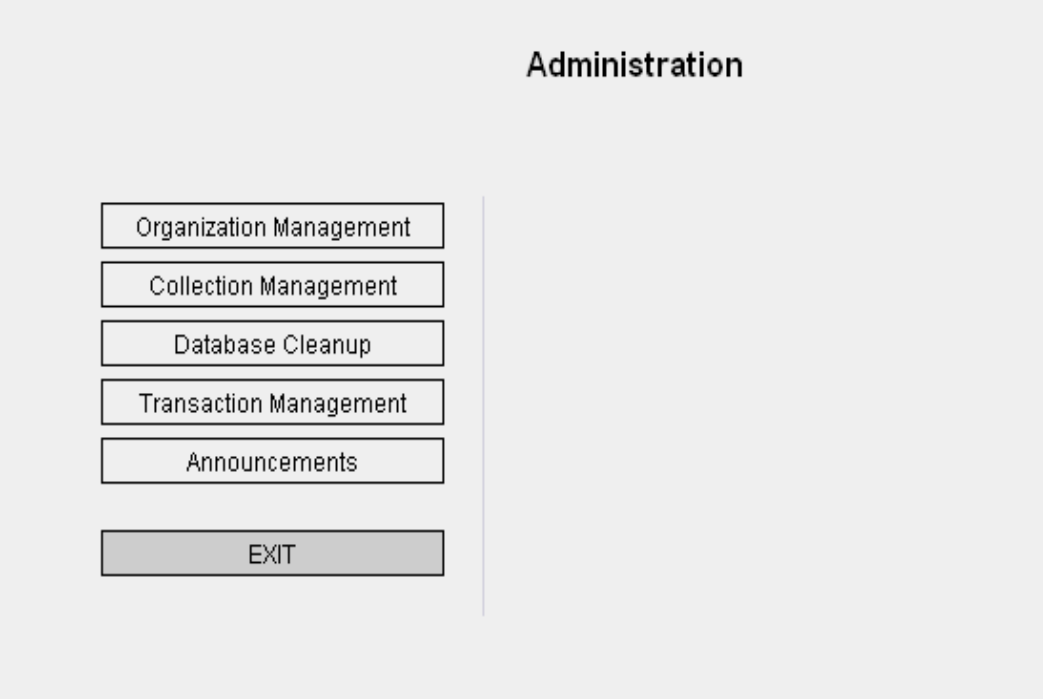


Figure 1.1.3: Administration Screen

Figure 1.1.4: Organization List Screen

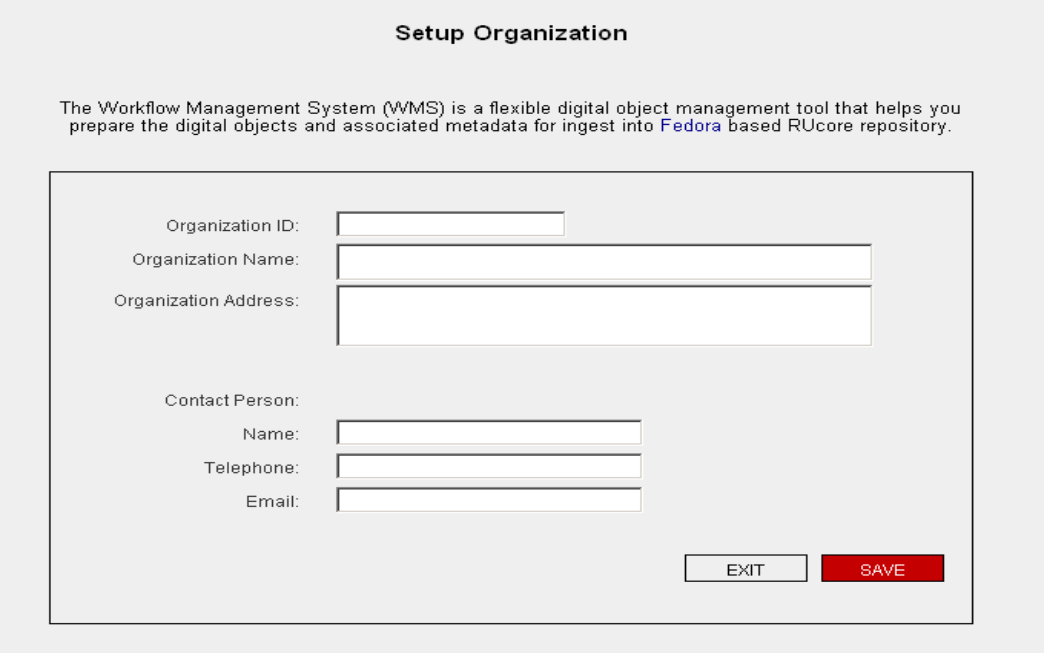


Figure 1.1.5: Create Organization Screen

Edit Organization:

i. Login as Super User.
ii. Select *Digital Workflow Management System* from the main screen.
iii. Select *Administration.*
iv. Select *Organization Management.*
v. Select *Organization.*
vi. Click *Edit.*
vii. Edit metadata and click *Save*.

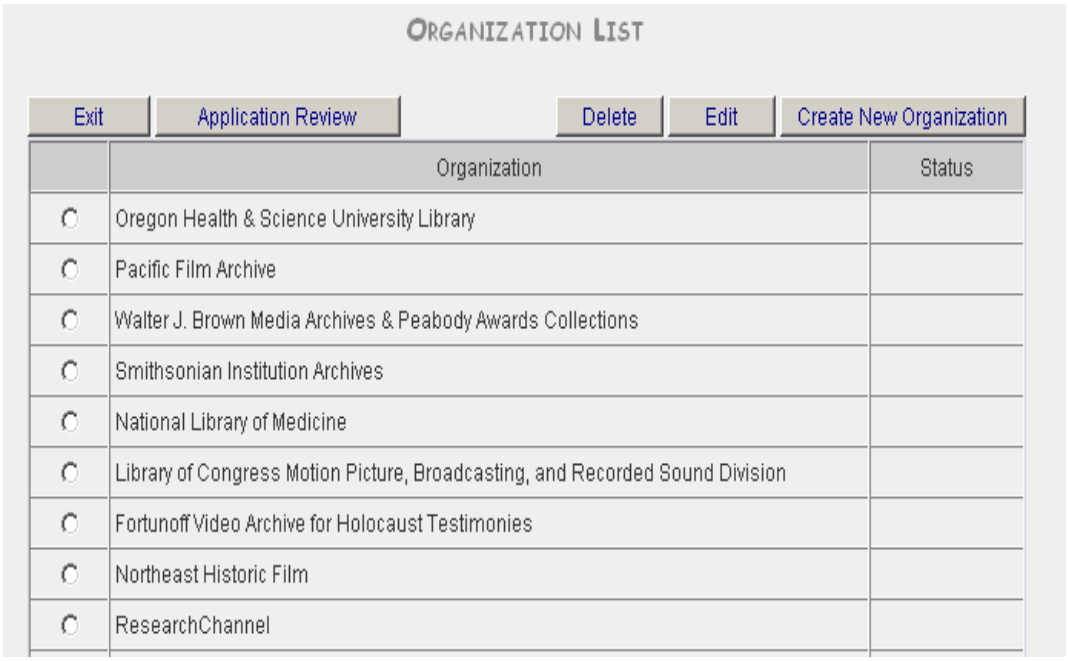


Figure 1.1.6: Organization List Screen

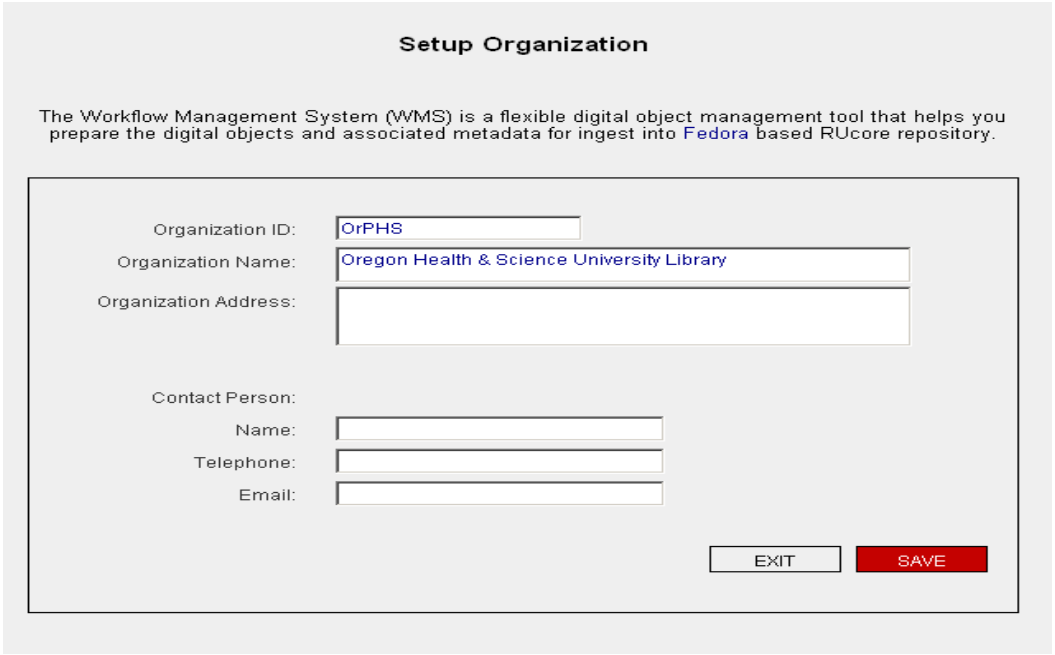


Figure 1.1.7: Edit Organization Screen

Delete Organization:

Note: Deleting Organization will delete all the collections and resources belong to this organization.

i. Login as Super User.
ii. Select *Digital Workflow Management System* from the main screen.
iii. Select *Administration.*
iv. Select *Organization Management.*
v. Select *Organization.*
vi. Click *Delete.*

Application Review:

This feature is not fully implemented in this version.

Figure 1.1.8: Organization List Screen

1.2) Collection Management

You may create as many collection objects you need for each organization. A collection object is a special object that contains the information about the organization that holds the collection and the description of the collection. It keeps all the resources that belong to a collection together for search and display.

Create Collection

i. Select *Digital Workflow Management System* from the main screen.
ii. Select *Administration.*
iii. Select *Collection Management.*
iv. Select *Organization.*
v. Click *Show Collection List.*
vi. Click *Create New Collection.*
vii. Enter metadata for the collection.
viii. Click *Save.*

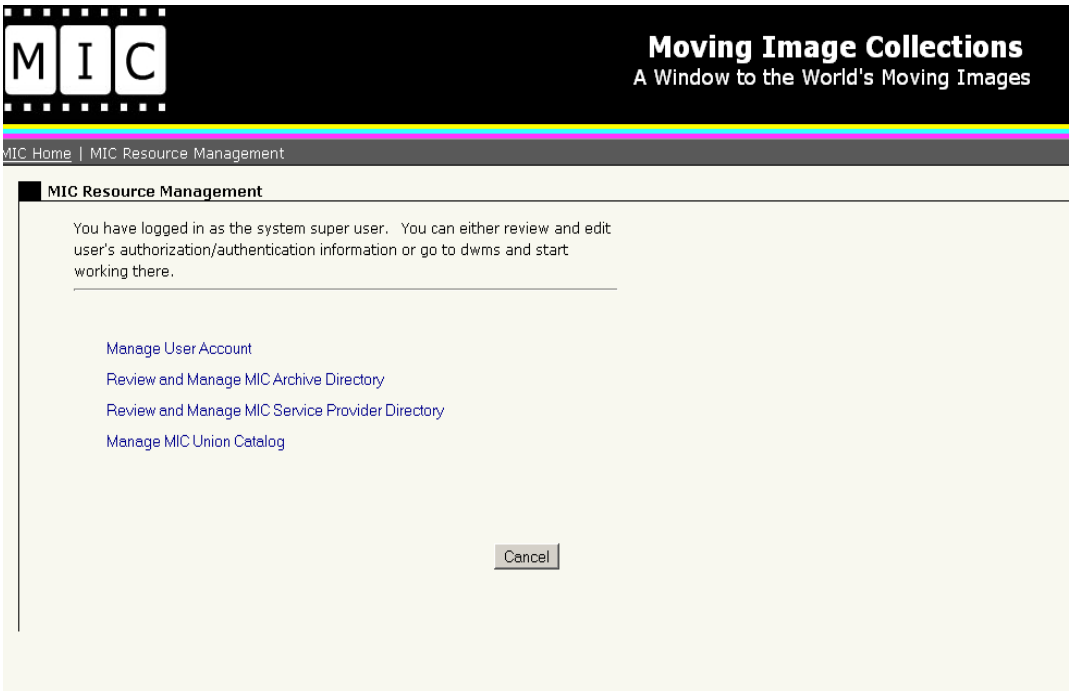


Figure 1.2.1: Main Screen

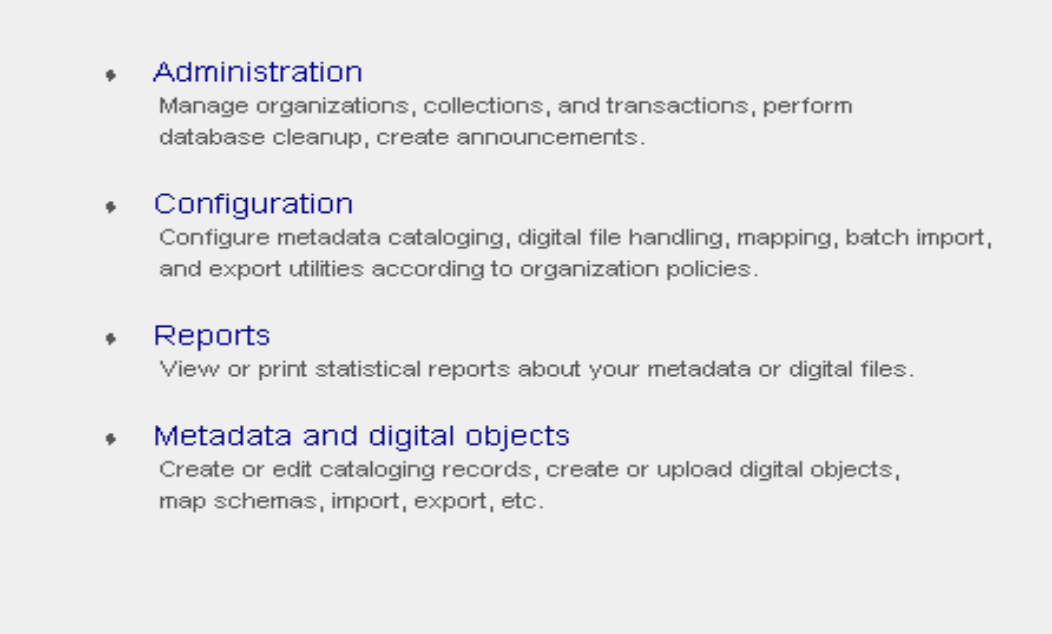


Figure 1.2.2: MIC Catalog Main Screen

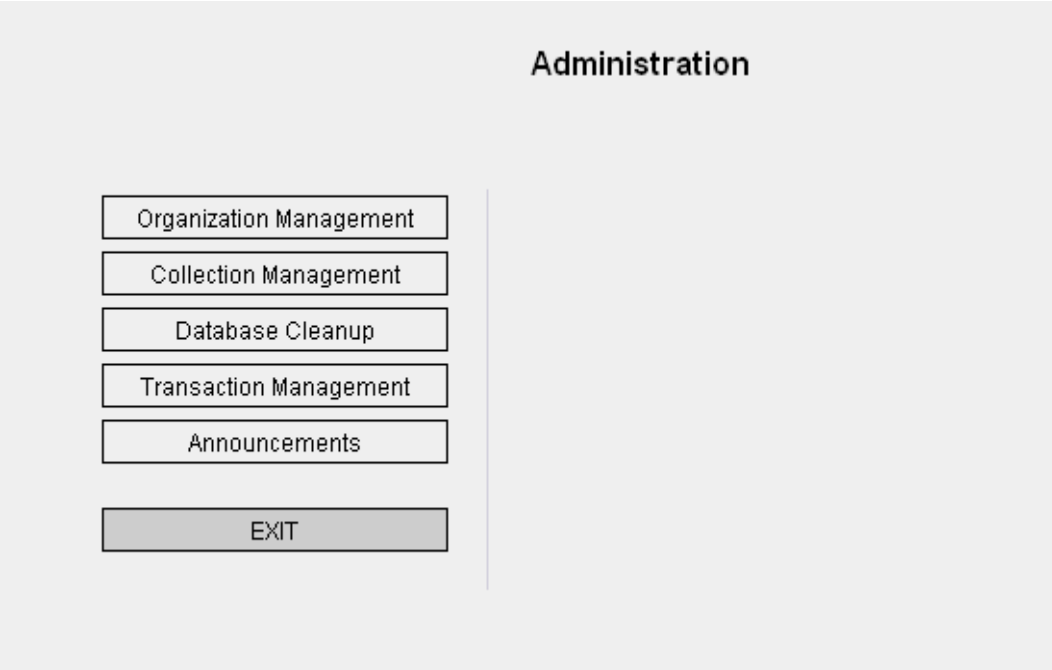


Figure 1.2.3: Administration Screen

Figure 1.2.4: Organization List Screen

Figure 1.2.5: Collection List Screen

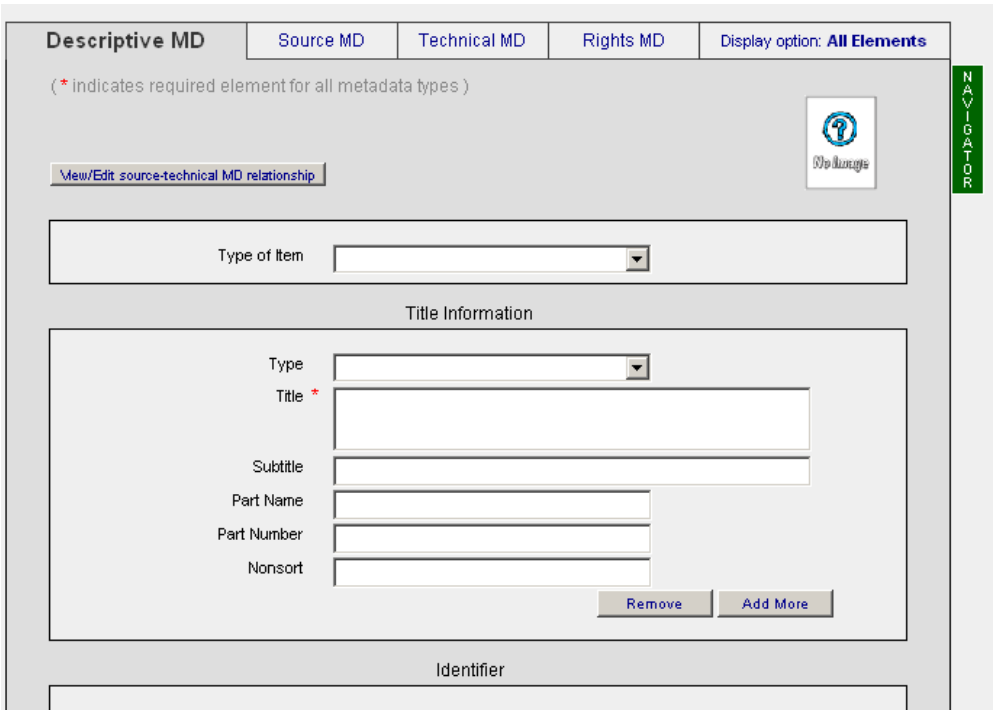


Figure 1.2.4: Metadata Entry Screen

Edit Collection

i. Select *Digital Workflow Management System* from the main screen.
ii. Select *Administration.*
iii. Select *Collection Management.*
iv. Select *Organization.*
v. Click *Show Collection List.*
vi. Select *Collection.*
vii. Click *Edit.*
viii. Edit metadata and click *Save*.

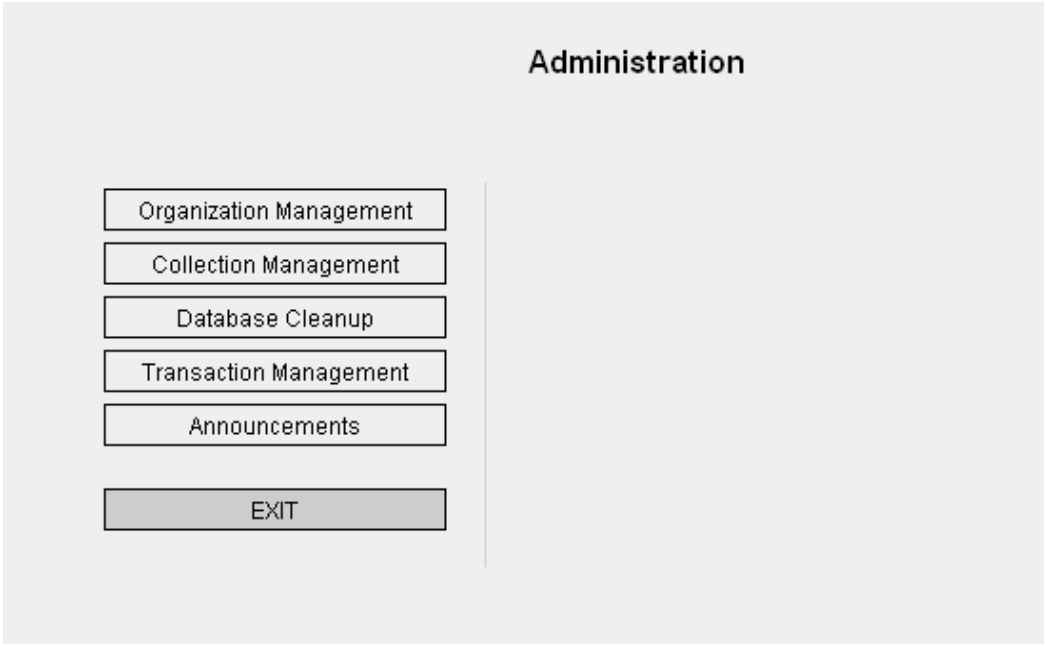


Figure 1.2.6: Administration Screen

Figure 1.2.7: Organization List Screen

Figure 1.2.8: Collection List Screen

Delete Collection

Note: Deleting collection will delete all the resources belong to the collection.

i. Select *Digital Workflow Management System* from the main screen.
ii. Select *Administration.*
iii. Select *Collection Management.*
iv. Select *Organization.*
v. Click *Show Collection List.*
vi. Select *Collection.*
vii. Click *Delete.*

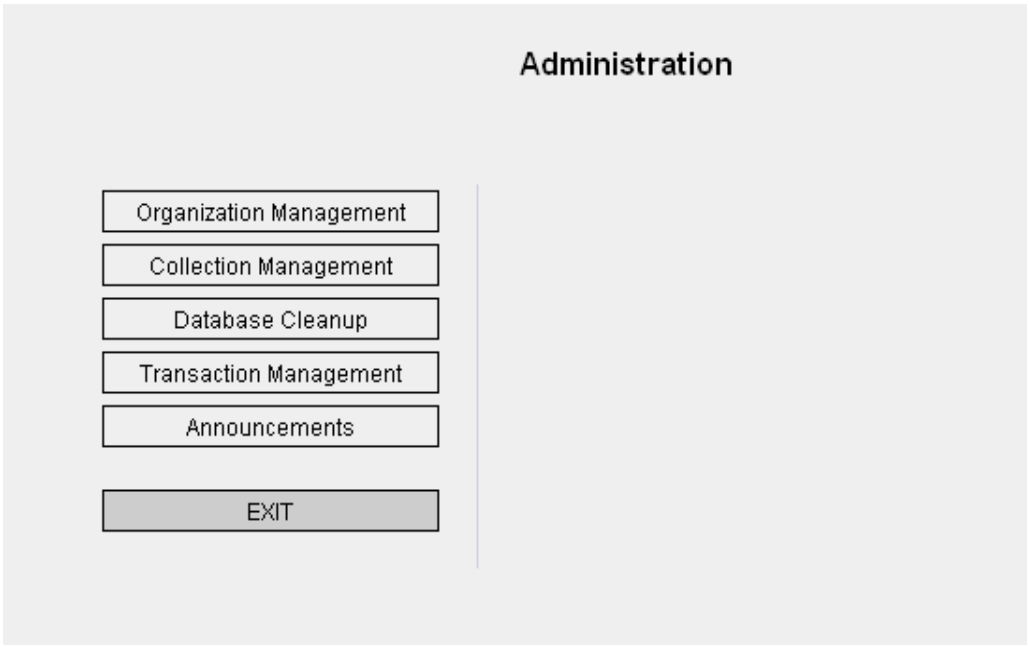


Figure 1.2.9: Administration Screen

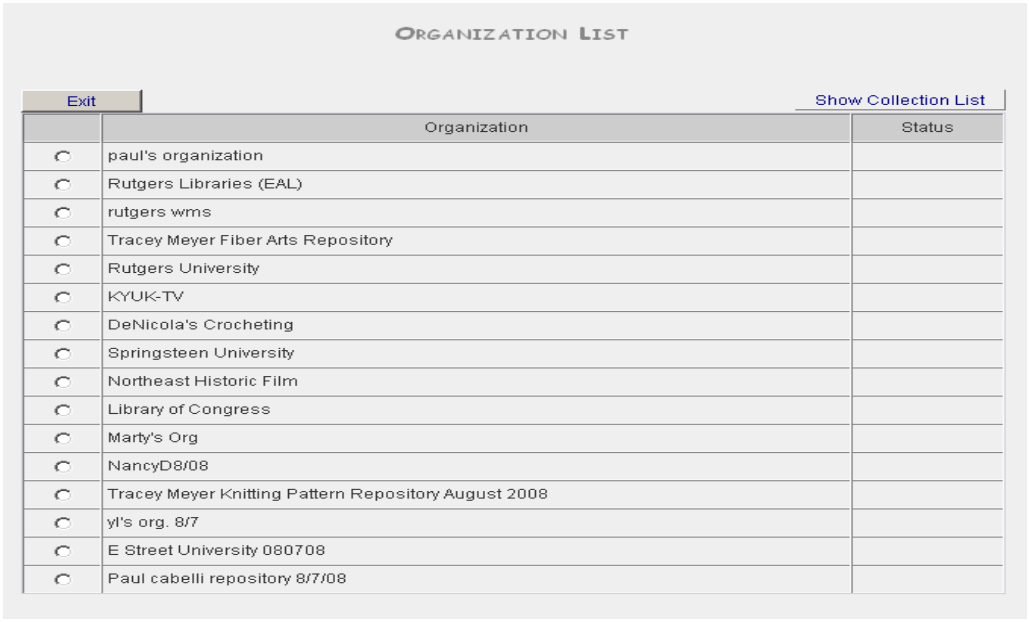


Figure 1.2.10: Organization List Screen

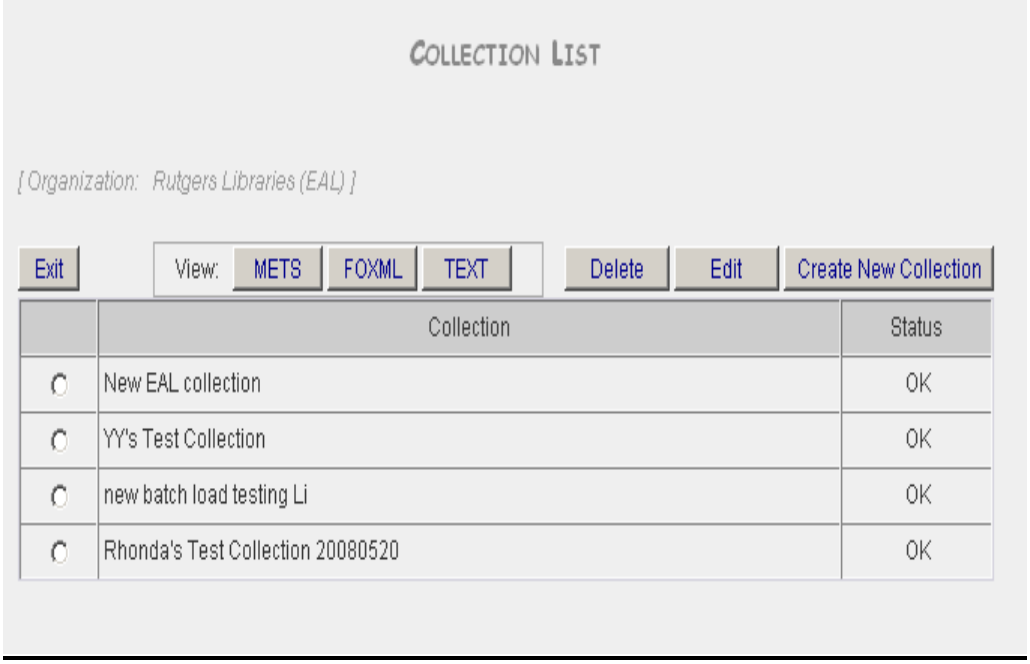


Figure 1.2.11: Collection List Screen

View Collection

There are three options available to view a collection record: METS, FOXML (Fedora Object XML for Fedora repositories), and TEXT.

i. Select the collection you want to view from the collection list.
ii. Click *METS, FOXML, or TEXT*.

File Edit View Help

```
<?xml version="1.0" encoding="utf-8"?>
<METS:mets xmlns:METS="http://www.loc.gov/METS/" xmlns:mods="http://www.loc.gov/mods/" x
  <METS:metsHdr ID="H1" CREATEDATE="2008-10-06T14:59:42" LASTMODDATE="2008-10-06T14:59:
  <METS:dmdSec ID="DMD-1" GROUPID="" ADMID="AMD-1" CREATED="2008-09-19T11:22:09" STATUS=
    <METS:mdWrap MIMETYPE="text/xml" MDTYPE="OTHER" LABEL="MODS Metadata">
      <METS:xmlData>
        <mods:mods>
          <mods:typeOfResource>Collection</mods:typeOfResource>
          <mods:titleInfo ID="T-1" type="">
            <mods:title>ka test organization</mods:title>
          </mods:titleInfo>
          <mods:identifier type="collection">rucore0000000629</mods:identifier>
          <mods:name ID="NAME-1" type="personal">
            <mods:namePart type="family">KA</mods:namePart>
            <mods:namePart type="given">AK</mods:namePart>
            <mods:role>
              <mods:roleTerm type="text" authority="marcRelator">owner</mods:roleTerm>
            </mods:role>
          </mods:name>
          <mods:name ID="NAME-1" type="corporate">
            <mods:namePart>NjNbRU</mods:namePart>
            <mods:displayForm>Rutgers University</mods:displayForm>
          </mods:name>
        </mods:mods>
      </METS:xmlData>
    </METS:mdWrap>
  </METS:dmdSec>
</METS:mets>
```

Figure 1.2.12: Collection Record in METS

Figure 1.2.13: Collection Record in FOXML for Fedora Repositories

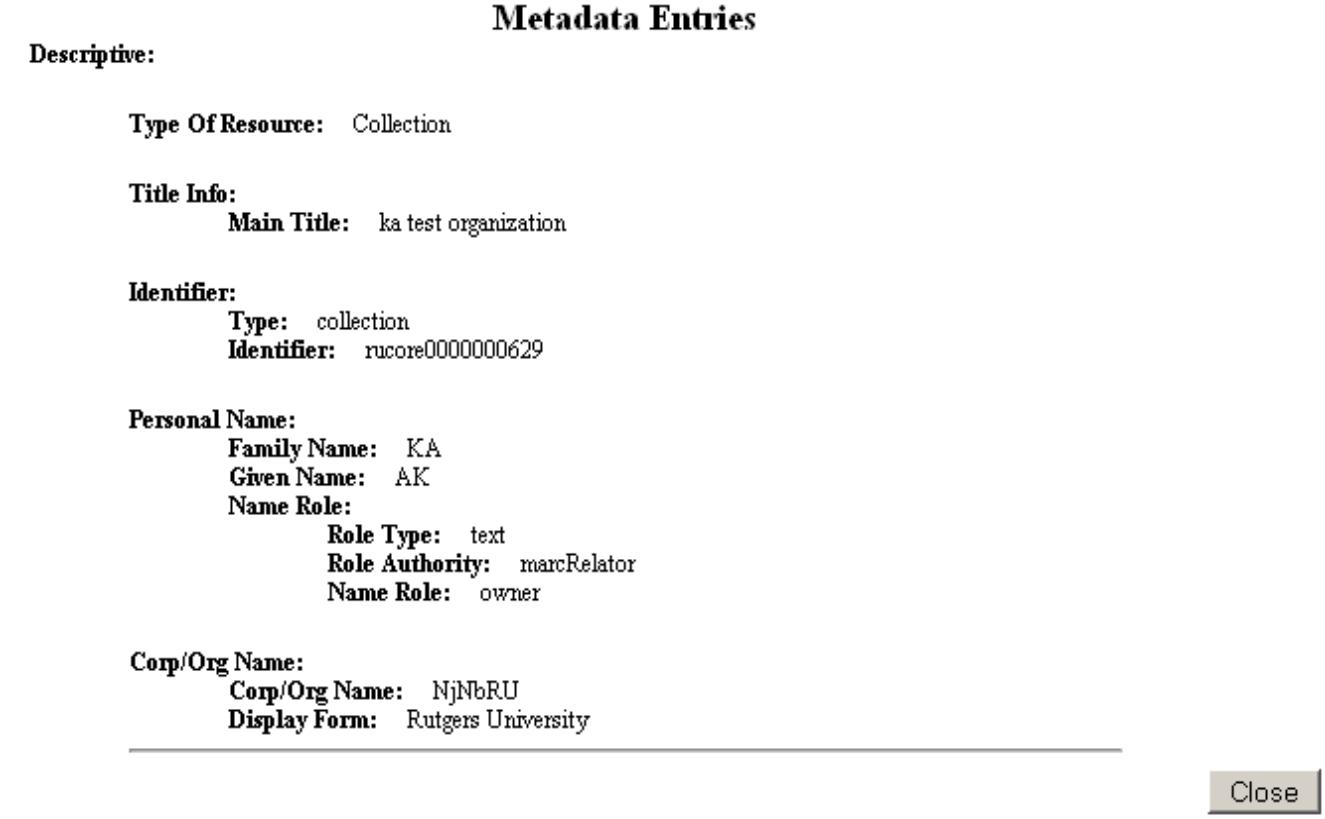


Figure 1.2.14: Collection Record in TEXT

1.3) User Management

It is strongly recommended to create individual user accounts to be able to keep track of the work performed by the users. The user information such as user name and email is written in the xml. Each user account is associated with role(s).

Create User

i. Select *Manage User Account* from the main screen
ii. Enter *First Name, Last Name, Address (optional), Email, UserID, password.*
iii. Retype *password.*
iv. Click *Submit.*
v. Next you need to assign role to this user. If there are no role(s) created for your organization, create role(s) before you proceed.
vi. Select the user.
vii. Click *Assign roles.*
viii. Select the appropriate role for this user.
ix. Click *Submit.*

Create Role

i. Select *Organization* from the pull down list.
ii. Select *WMS Utility* from the pull down list for module.
iii. Click *edit roles.*
iv. Enter *role name and role description* in the data entry box on Role-Privilege Relationship screen.
v. Select privilege(s) associated with this role. See Table 1. for associated permissions for each role.
vi. Click *Submit.*

Privileges	Permissions			
	User	Organization	Collection	Metadata
Super User	Create user; Edit user; Delete user; Create roles; Edit roles; Delete roles	Create organization; Edit organization; Delete organization	Create collection; Edit collection; Delete collection; View collection; Setup required elements; Create collection level template; Edit collection level template; Delete collection level template; View collection level template	Create or revise metadata mapping; Upload sample records; Check map; Batch import of metadata records; Batch export of metadata records; Create personal template; Edit personal template; Delete personal template; Create metadata record; Edit metadata records; Delete metadata record; View metadata record;
Manage User	Edit username Edit password			
Manage Collections	Edit username Edit password	Edit organization	Create collection; Edit collection; Delete collection; View collection	
Configure Cataloging Utility	Edit username Edit password		Setup required elements; Create collection level template; Edit collection level template; Delete collection level template; View collection level template	
Mapping	Edit username Edit password			Create or revise metadata mapping; Upload sample records; Check map
Batch Import	Edit username Edit password			Batch import of metadata records
Export	Edit username Edit password			Batch export of metadata records
Metadata Cataloging	Edit username Edit password			Create personal template; Edit personal template; Delete personal template; Create metadata record; Edit metadata records; Delete metadata record; View metadata record
View/Generate Reports	Not implemented	Not implemented	Not implemented	Not implemented
Read Only	Not implemented	Not implemented	Not implemented	Not implemented

Table 1: User Privileges and Permissions

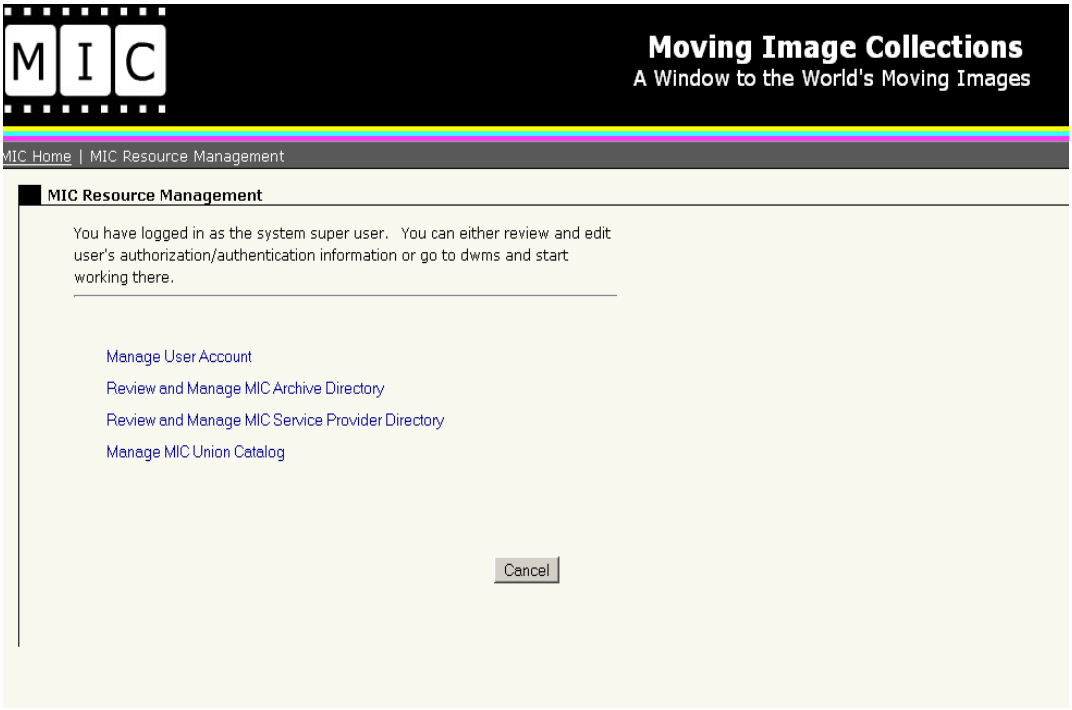


Figure 1.3.1: Main Screen

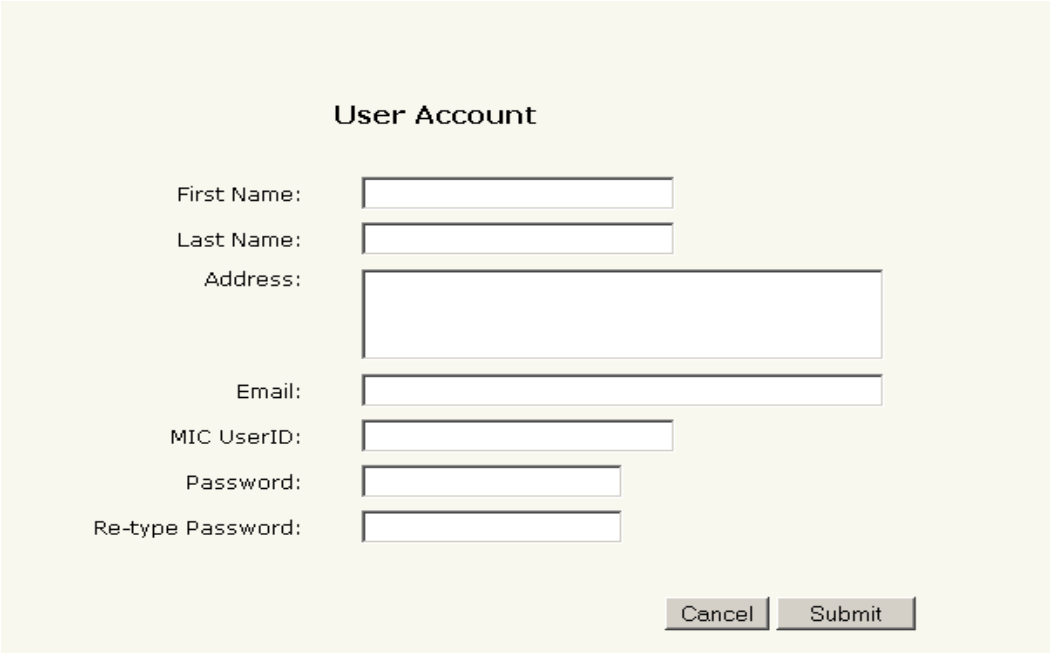


Figure 1.3.2: Create User Account Screen

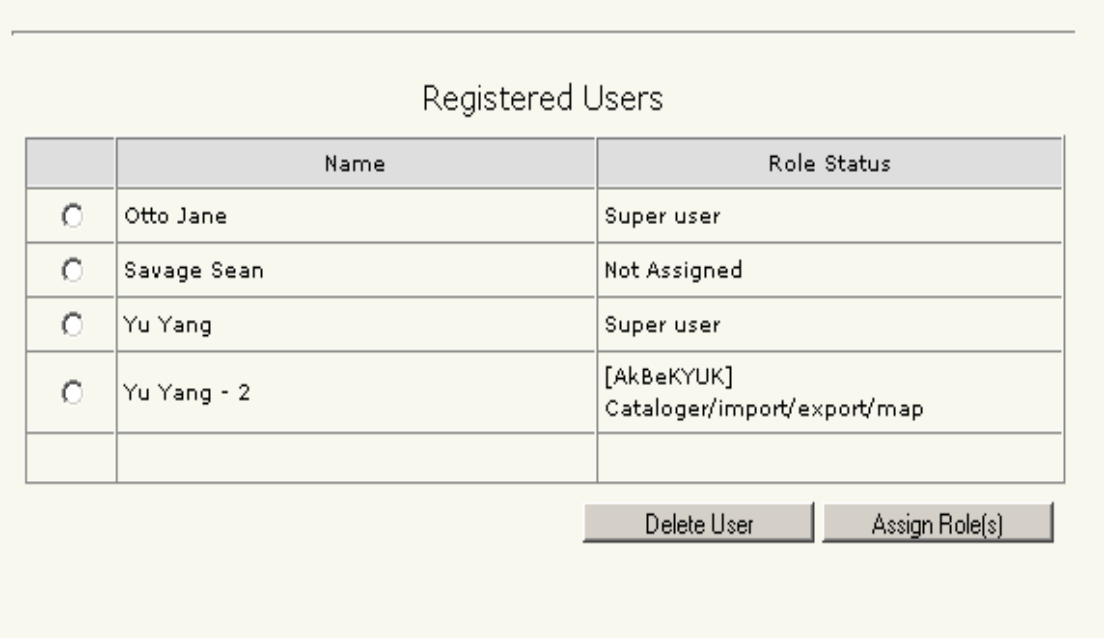


Figure 1.3.3: Registered Users Screen

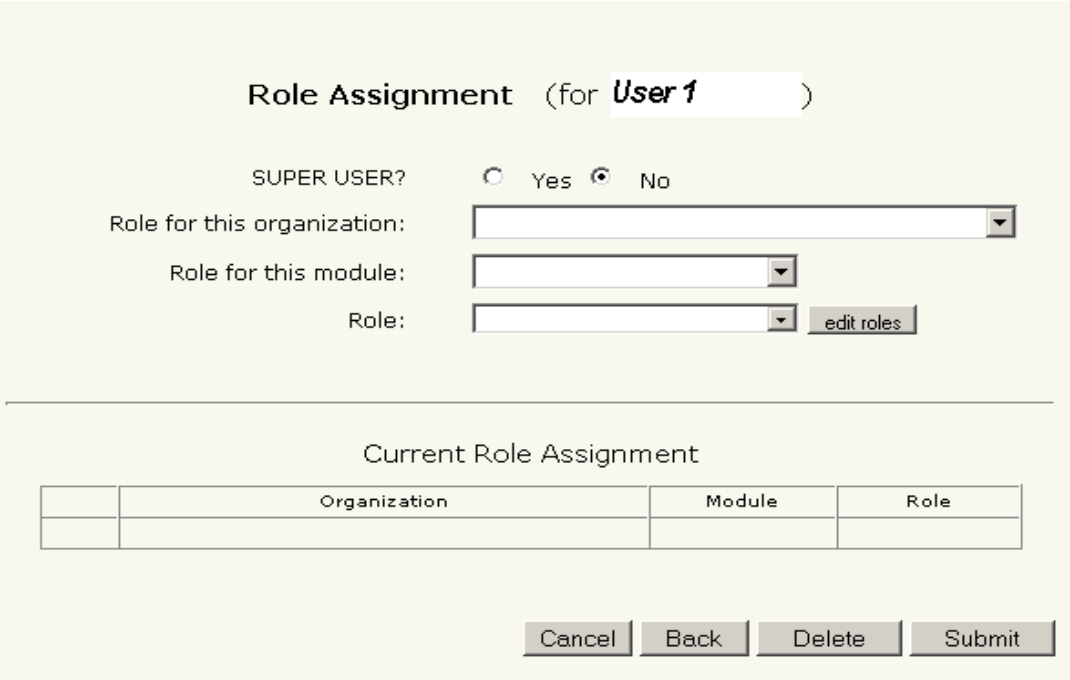


Figure 1.3.4: Assign Role Screen

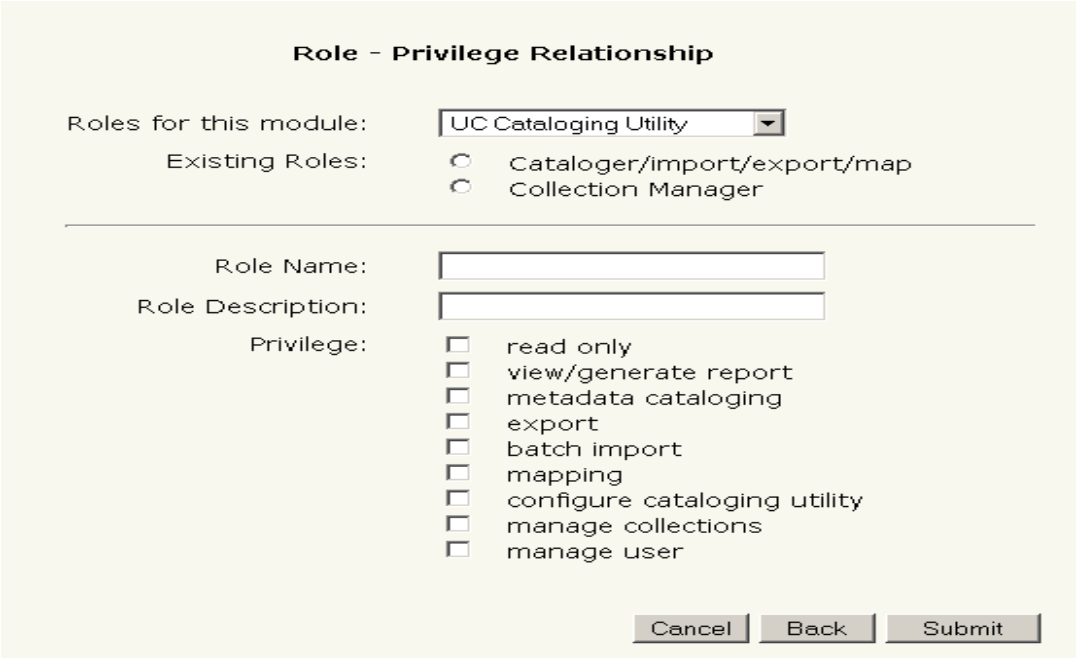


Figure 1.3.5: Role – Privilege Relationship Screen

Edit User

i. Select *Manage User Account* from the main screen.
ii. Select user from the Registered Users screen.
iii. Edit user information and click *Submit*.

Edit Role

i. If you are editing the role, click *Assign Role.*
ii. Select *Organization* from the pick list.
iii. Select *Module.*
iv. Select *Role* from the pick list.
v. Click *Submit.*

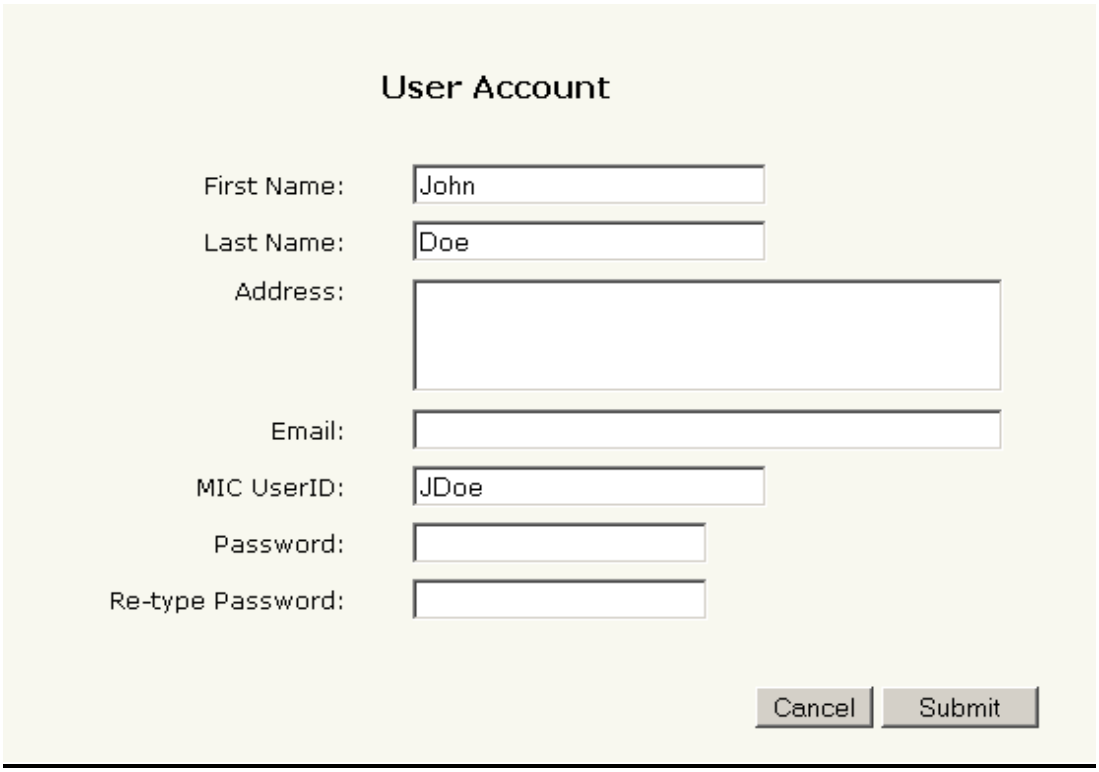


Figure 1.3.6: Edit User Screen

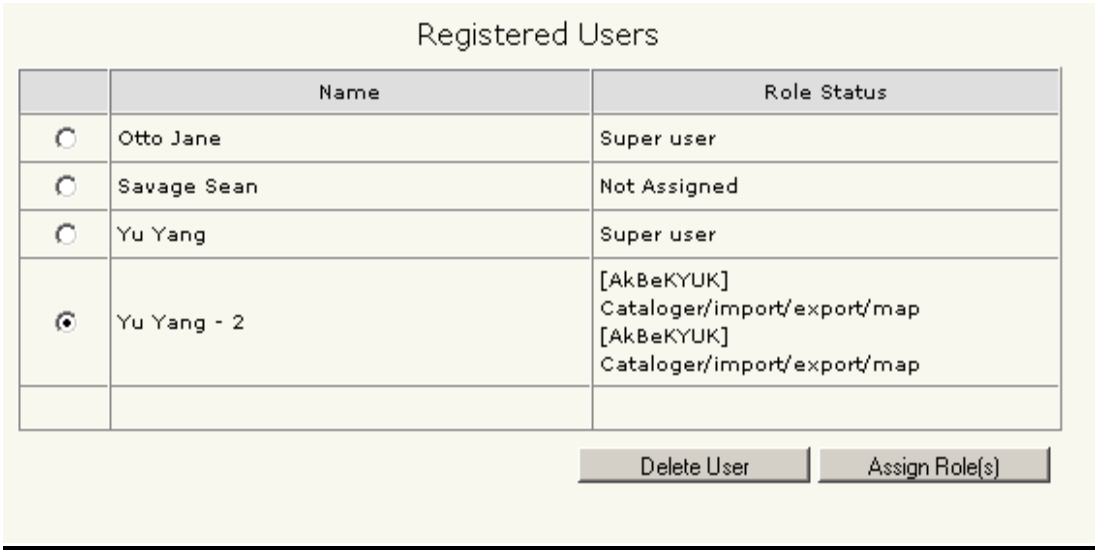


Figure 1.3.6: Registered User Screen

Delete User

i. Select *Manage User Account* from the main screen.
ii. Select user from the Registered Users screen.
iii. Click *Delete User.*

Delete Role (not implemented in the current version)

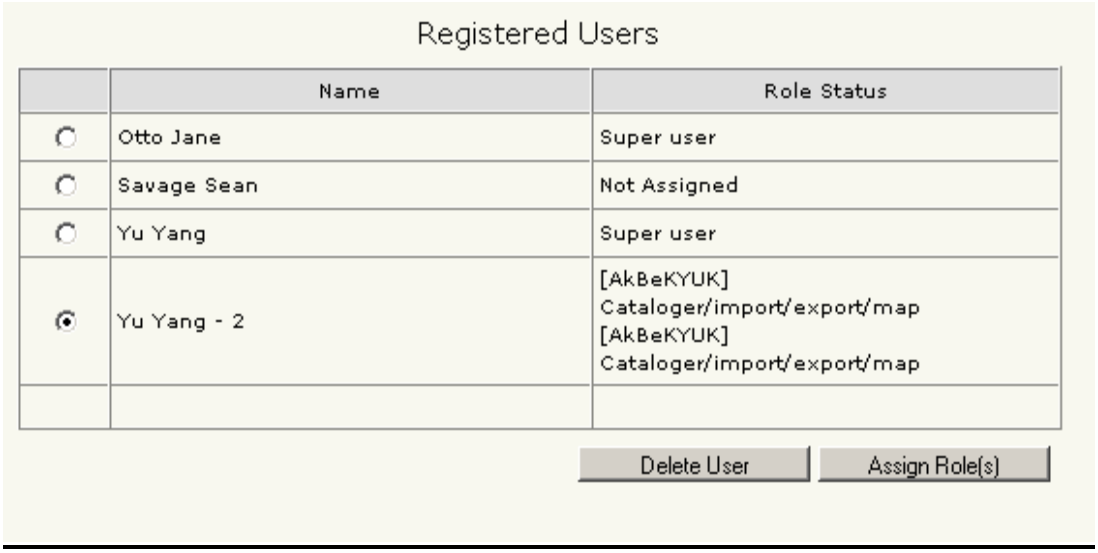


Figure 1.3.7: Registered User Screen

Step 2: Metadata Management

You must complete Step 1 prior before you are able to create metadata. There are two ways to create metadata in OpenMIC.

1) Create metadata manually. This option allows users to create one metadata record at a time.
2) Batch import. This option allows users to batch load metadata from an existing database.

2.1) Create Metadata Manually

i. Select *Manage MIC Union Catalog.*
ii. Select *Metadata and digital object.*
iii. Select *Collection* from the collection list.
iv. Select *Metadata Cataloging* from the welcome screen.
v. Select *Start Cataloging.*
vi. Click *Create Metadata.*
vii. Enter metadata. For information about the metadata elements, please refer to Metadata Guides found on the download page.
viii. Click *Save.*

Tips:

1. In some cases, all or many of the resources in a collection will share same metadata. Some technical metadata and rights metadata might be identical. The template utility allows collection managers and metadata creators to create generic records that contain default data. When a template is enabled, this default data is added to the metadata record automatically when *Create Metadata* is selected.
2. Templates can be enabled at the collection level or at resource level. To enable a template at resource level, click on *Template,* select *template* from the template list and click *Apply.*

   Refer to 2.1.1 to create template.

Metadata Screen Navigation Help

CLEAR ALL

Clear all data values in the record.

VIEW ENTRIES

View metadata in plain text.

EXIT

Exit without saving data values.

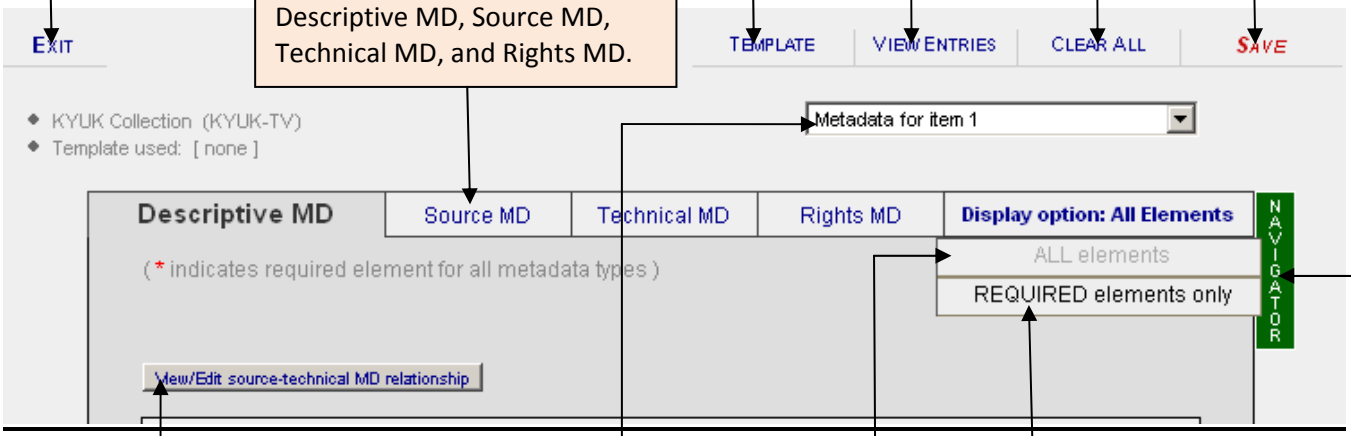
TEMPLATE

Enable collection level template or personal template when creating metadata record.

SAVE

Save all data values and exit.

Tab to Toggle between Descriptive MD, Source MD, Technical MD, and Rights MD.



View/Edit source-technical MD relationship

Establish relationship between source and technical metadata when creating multiple instances of source and technical metadata for a resource object.

Metadata for item 1

Enter multiple descriptive metadata for a resource object.

Display Option: REQUIRED elements only

Display required metadata elements only

Display Option: All Elements

Display all metadata elements.

NAVIGATOR

Jump to an element on this page. Use mouse scroll wheel to move up and down the list.

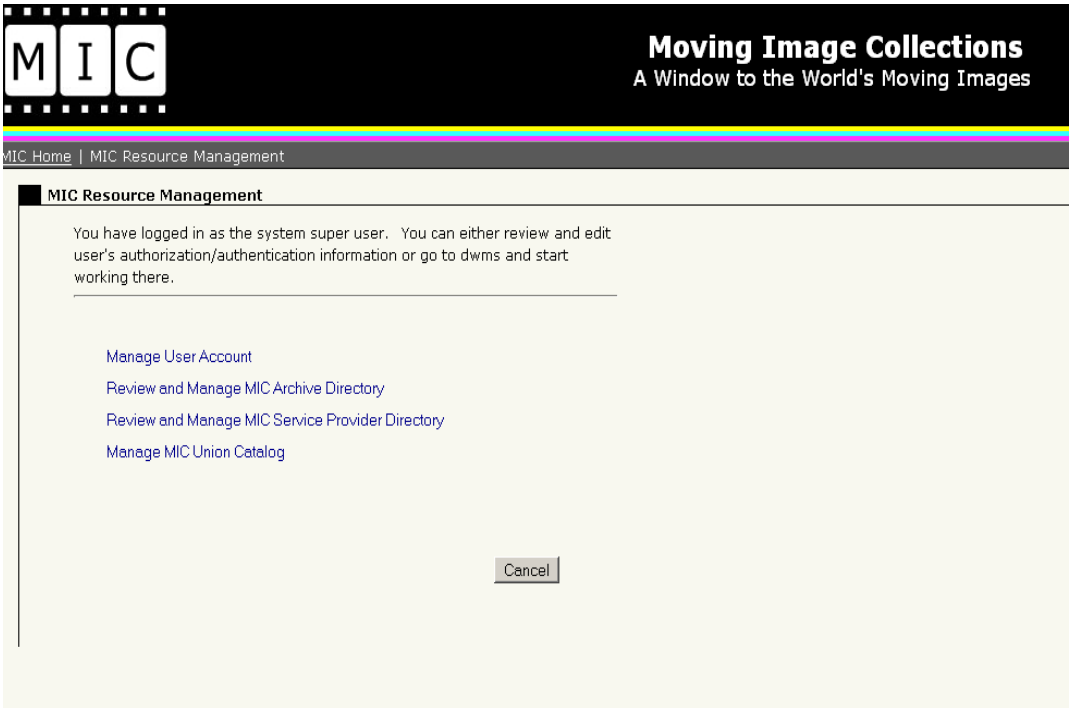


Figure 2.1.1: Main Screen

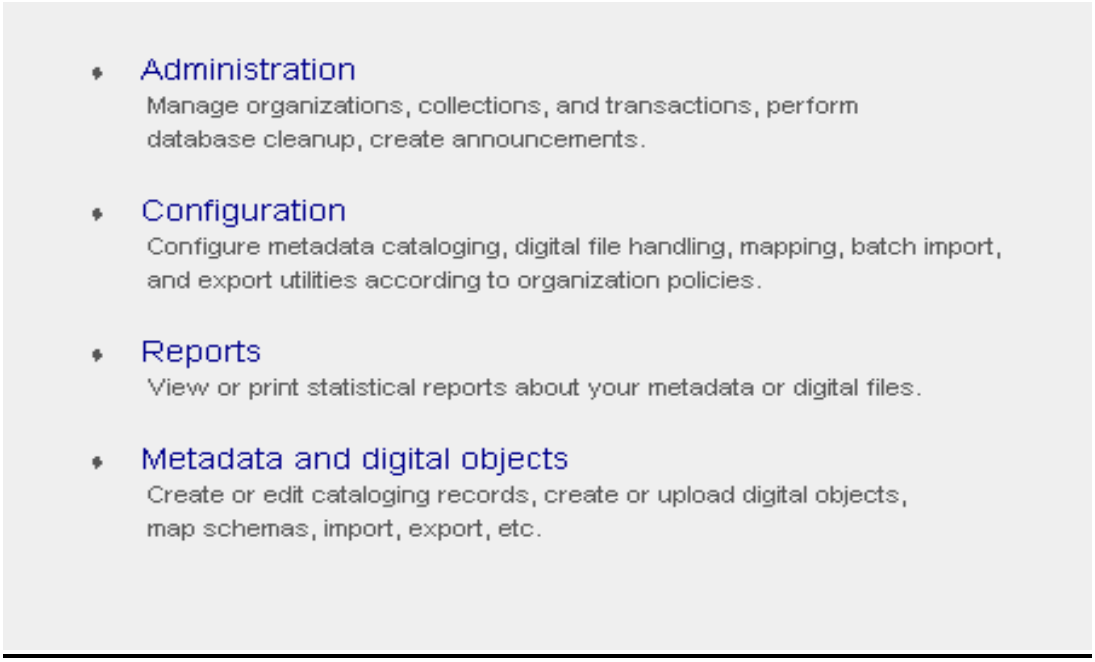


Figure 2.1.2: MIC Catalog Main Screen

Figure 2.1.3: Collection List Screen

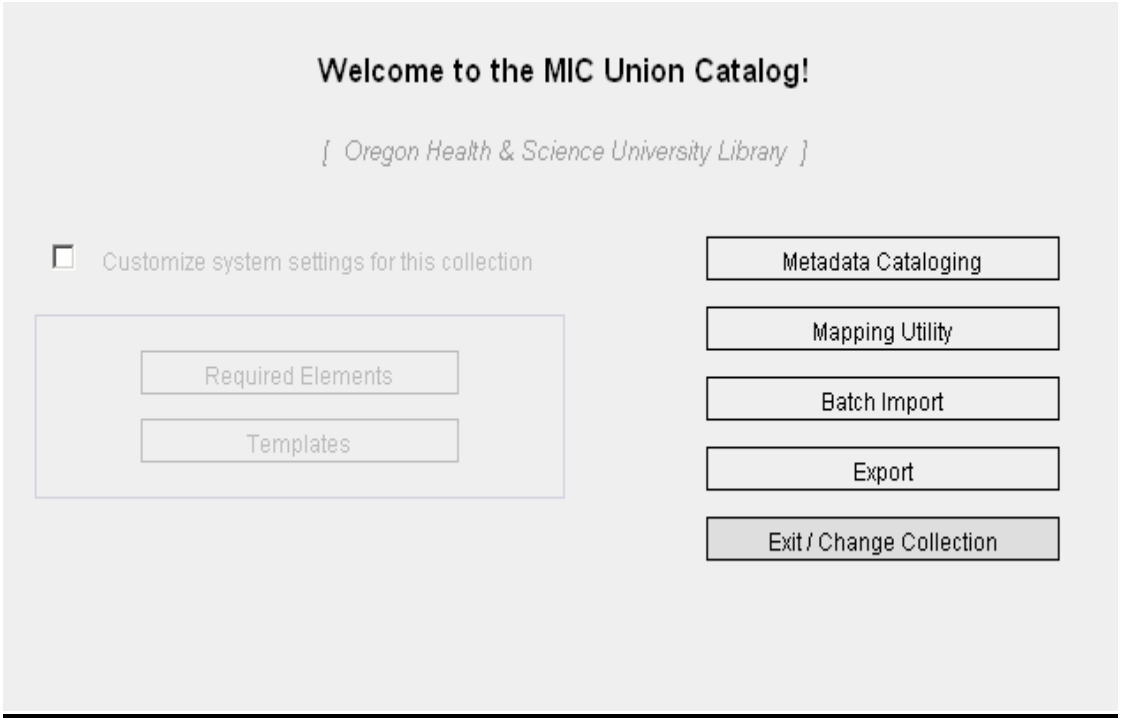


Figure 2.1.4: Cataloging Screen

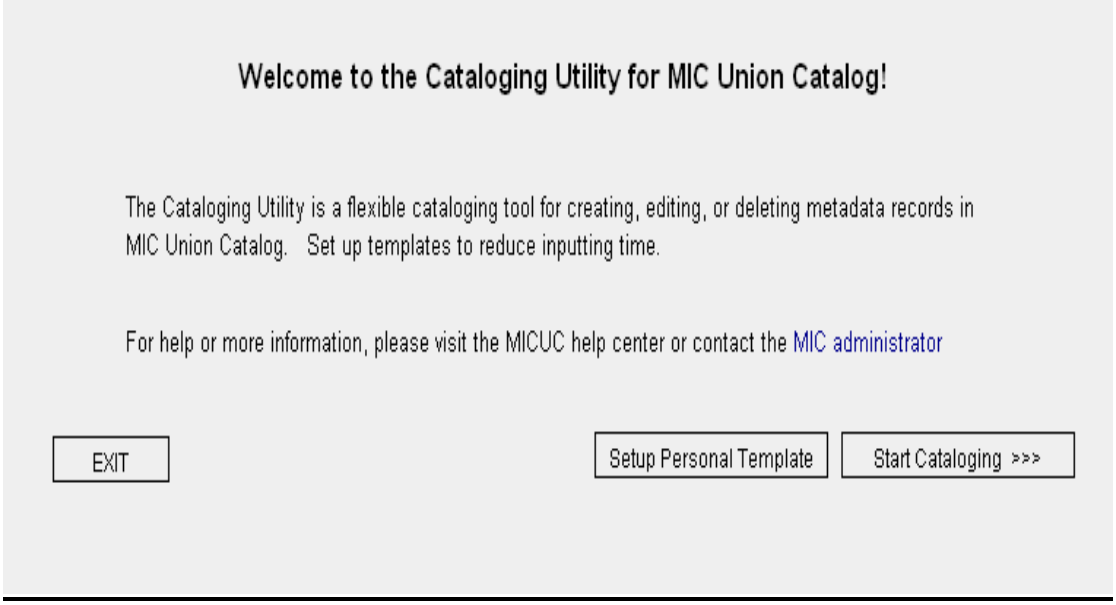


Figure 2.1.5: Start Cataloging Screen

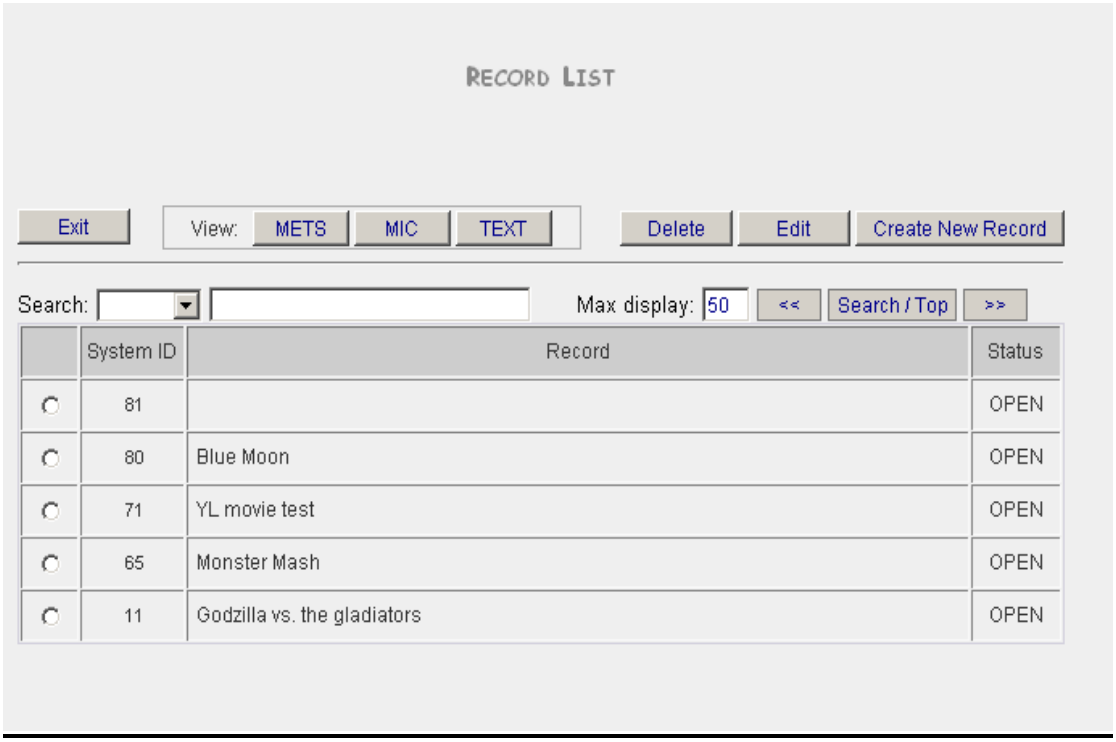


Figure 2.1.6: Metadata Record List Screen

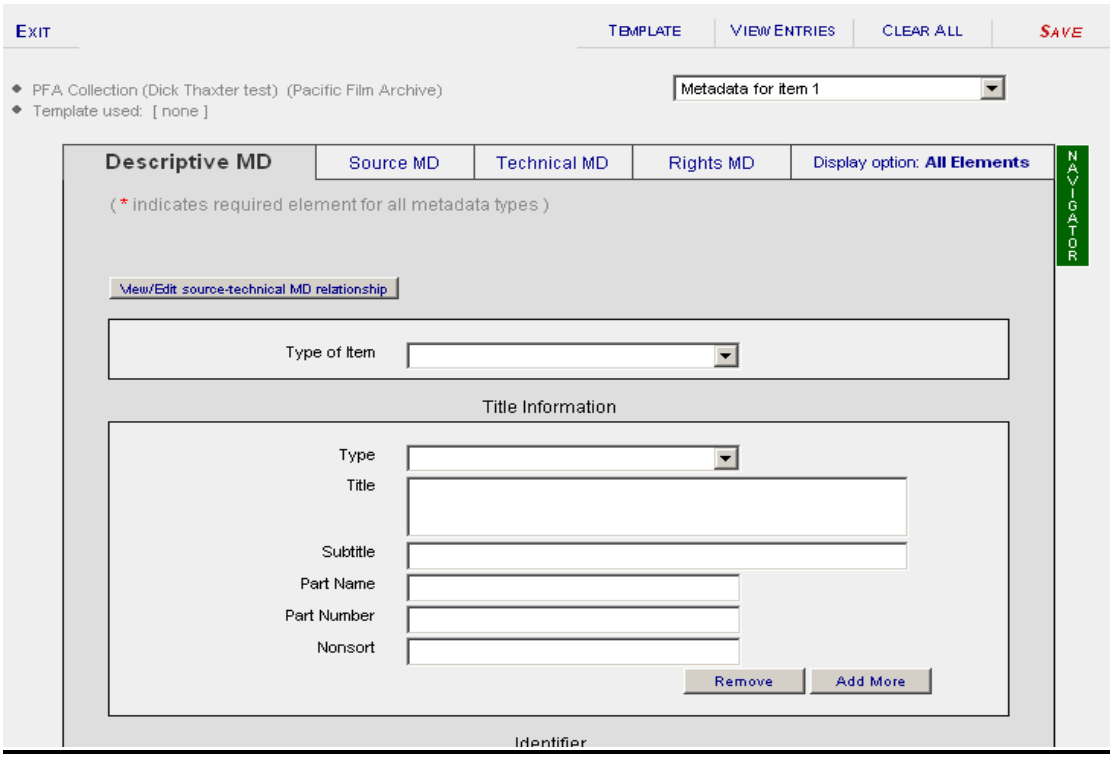


Figure 2.1.7: Descriptive Metadata Entry Screen

2.1.1) Create Template

There are two levels of template available in the OpenMIC -- collection level and personal level. To create a collection level template, the user must have "Configure Cataloging Utility" permission. A collection level template can be applied to all resources within the collection by metadata creators who have access to the collection. If the collection level template is set as a default template, it is applied to metadata record automatically when C*reate Metadata* is selected. If it is not set as a default template, metadata creators can enable the template at the time they create metadata record.

A personal level template is created by metadata creator. Templates created at this level are available only to the owner of the template. If a personal level template is set as a default template, it is applied to metadata record automatically when C*reate Metadata* is selected. If it is not set as a default template, metadata creators can enable the template at the time they create metadata record.

Follow the steps below to create collection level template:

i. Select *Metadata and digital objects* from the MIC Catalog screen.
ii. Select *Customize system settings for this collection*
iii. Select *Template.*

iv. Select *Create New Template.* You will get a screen similar to *Create Metadata* screen.
v. Enter data values that will be shared by all the resources in this collection.
vi. Click *Save.*
vii. If you want to save an existing metadata record as a template, select *Use Existing Metadata.*
viii. Select the record to use as template.
ix. Click *Apply to Template.*
x. All the data values from the selected metadata record will be auto populated in the record. Enter main title for this template.
xi. Click *Save.*
xii. If you want to save this template as a default template, click *Set Default* button.

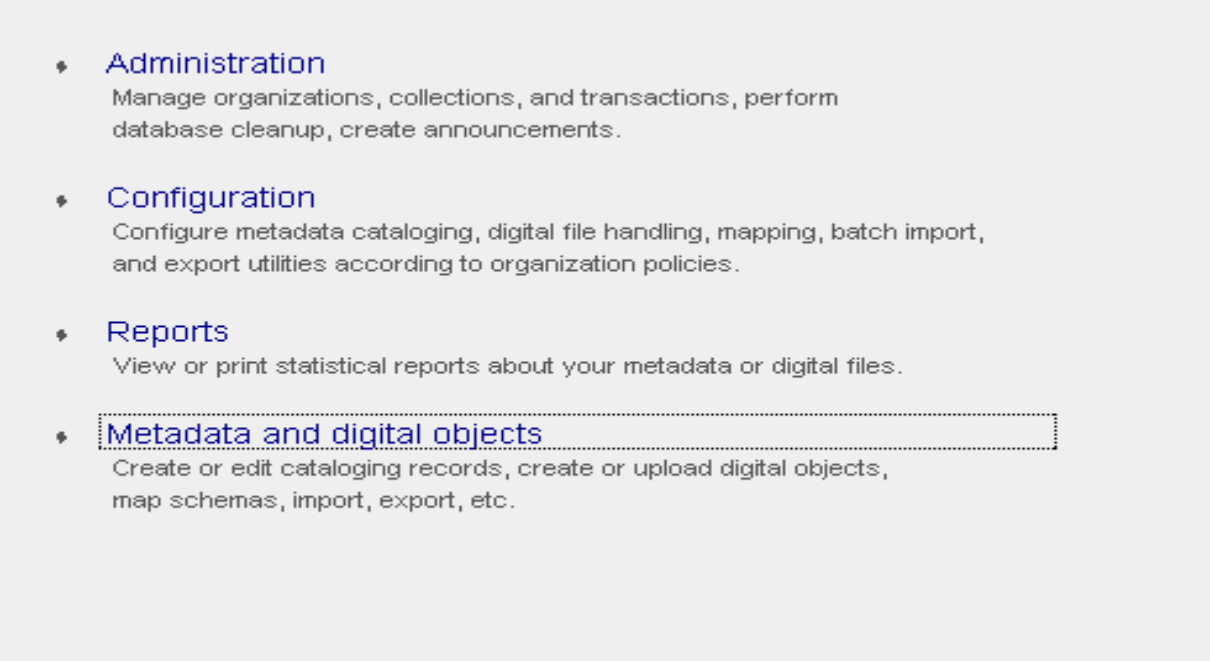


Figure 2.1.1.1: OpenMIC Main Screen

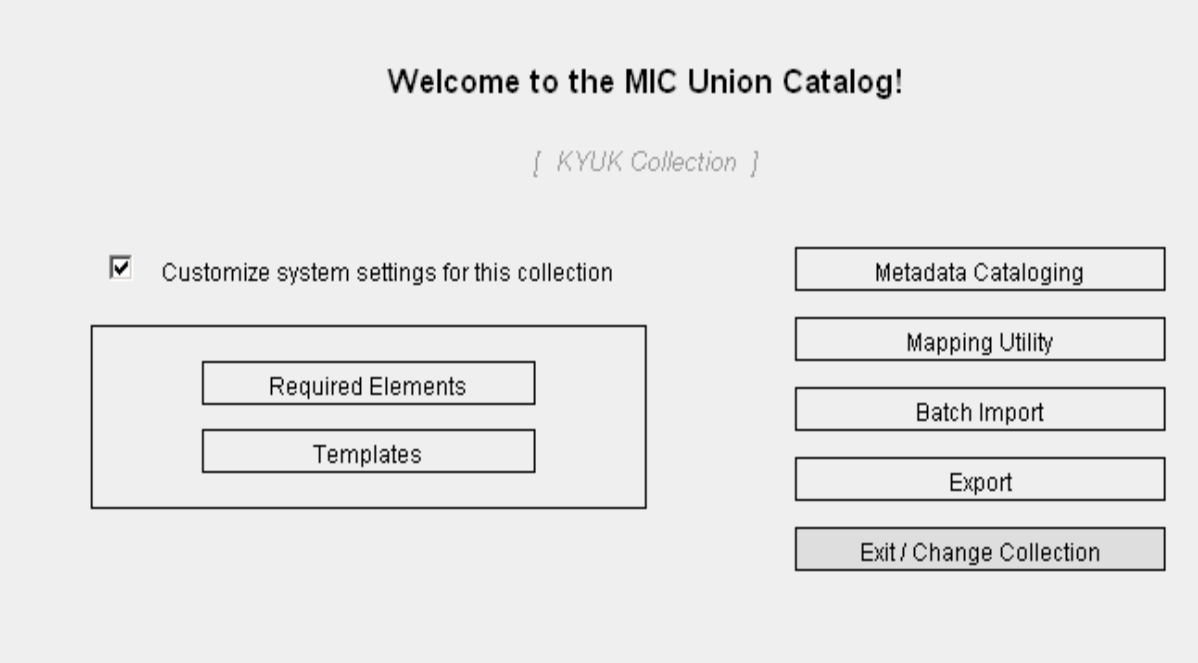


Figure 2.1.1.2: Main Cataloging Screen

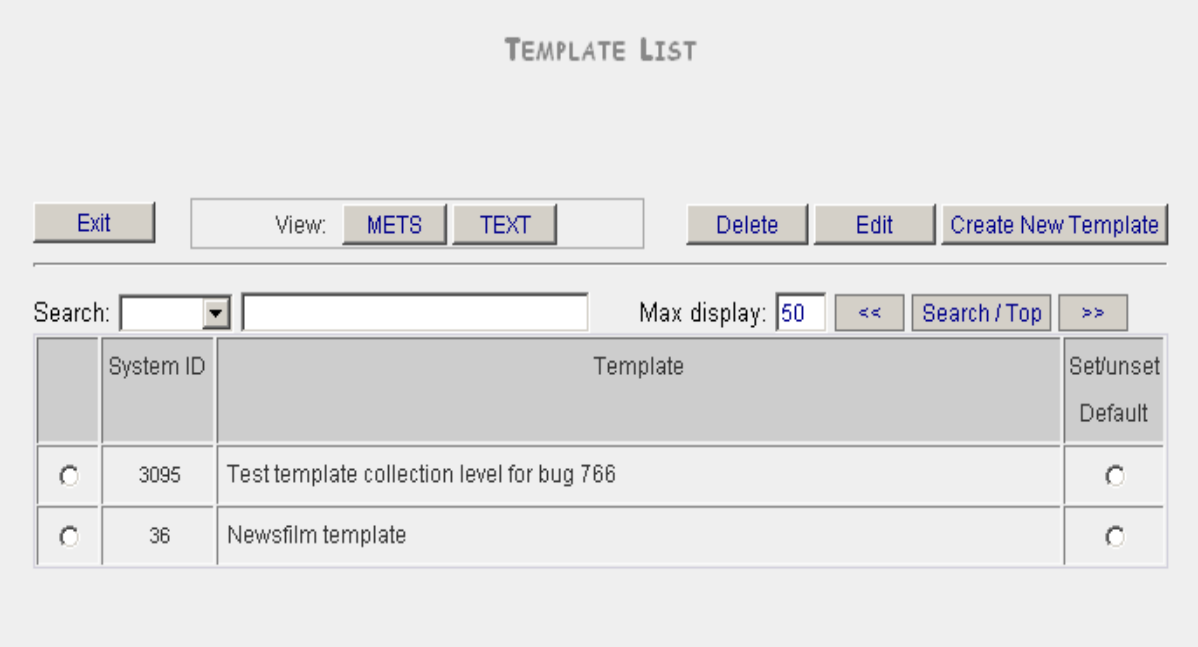


Figure 2.1.1.3: Template list screen

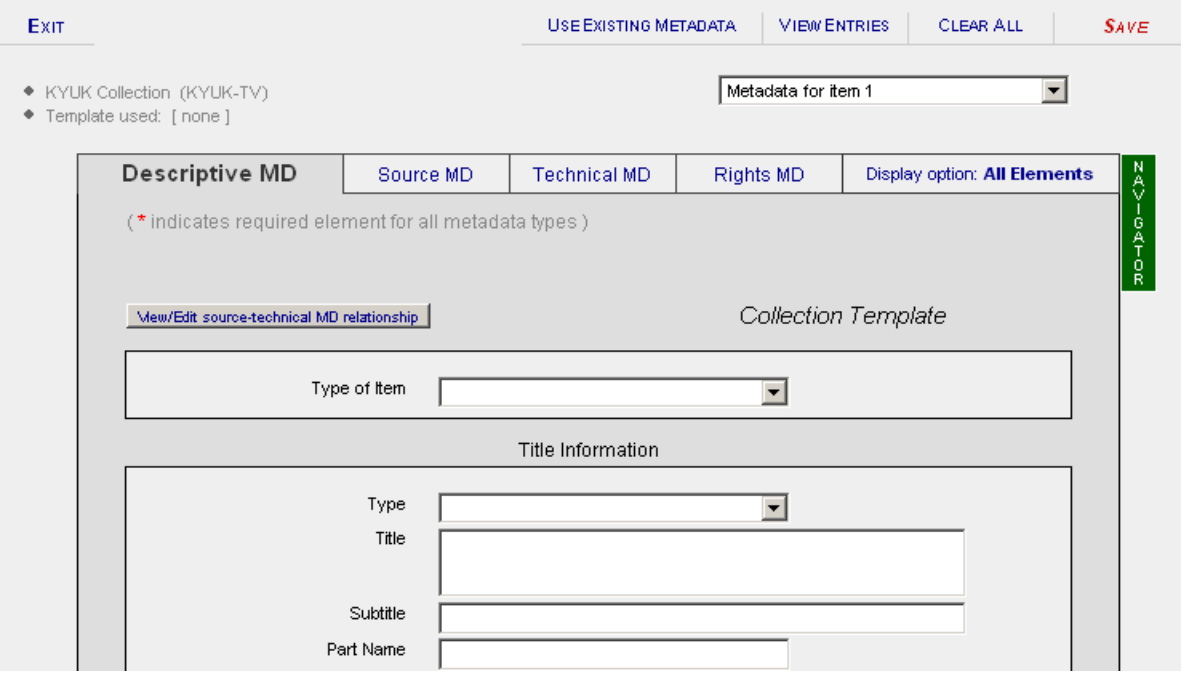


Figure 2.1.1.4: Template data entry screen

Existing Resource for Collection 6

	Resource Name	Created Date
○	Hallmark hall of fame.	
○	Winter mind	
○		
○	test for locationPhysicalLocation source value	
○	Test of technical metadata data dictionary	
○	Knitting from knitting template	
○	Test for source disappearing after required field display invoked	
○	Michael [loves] Nancy	
○	Eniwan I Luk Rose	
○	Vanua-Tai, of land and sea	
○	Solid sistas documentary	
○	Days made of fear	
○	Boy of Baghdad	
○	Las Claves de la masacre	
○	49th Star	

Figure 2.1.1.5: Existing metadata record screen

Follow the steps below to create personal template:

i. Select *Metadata and digital objects* from the MIC Catalog screen.
ii. Select *Metadata Cataloging.*
iii. Select *Setup Personal Template.*
iv. Select *Create New Template.* You will get a screen similar to *Create Metadata* screen.
v. Enter data values that will be shared by all the resources in this collection.
vi. Click *Save.*
vii. If you want to save an existing metadata record as a template, select *Use Existing Metadata.*
viii. Select the record to use as template.
ix. Click *Apply to Template.*
x. All the data values from the selected metadata record will be auto populated in the record. Enter main title for this template.
xi. Click *Save.*
xii. If you want to save this template as a default template, click *Set Default* button.

Figure 2.1.1.6: OpenMIC main screen

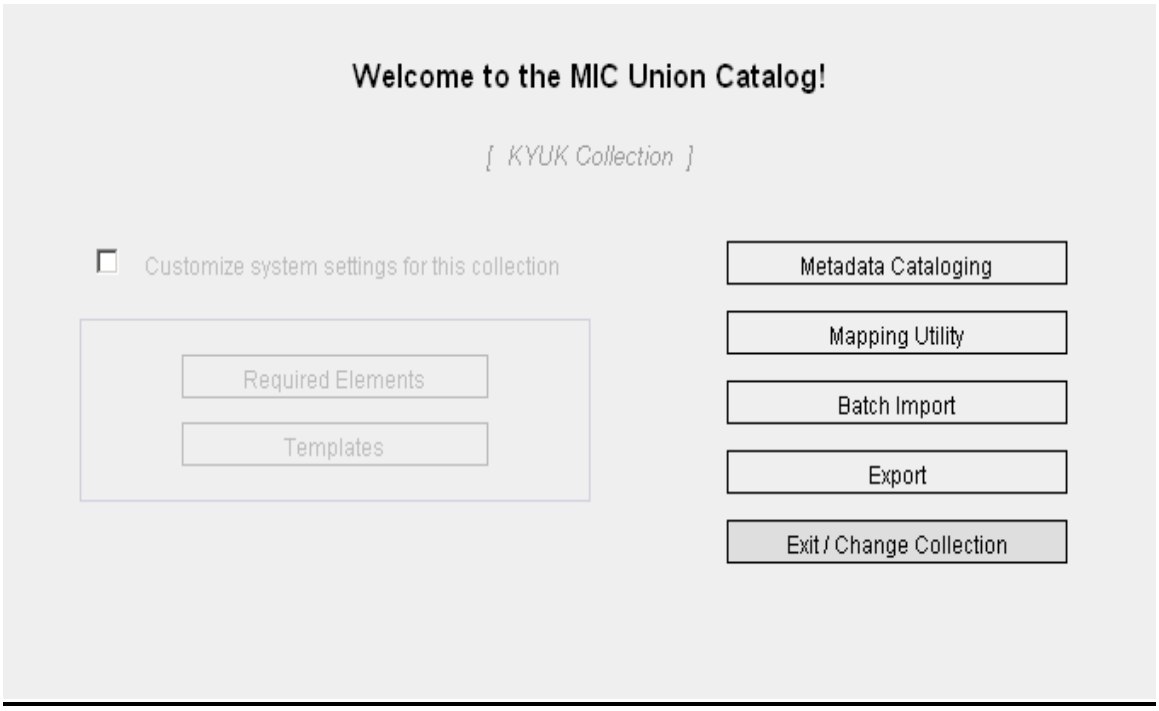


Figure 2.1.1.6: Main Cataloging Screen

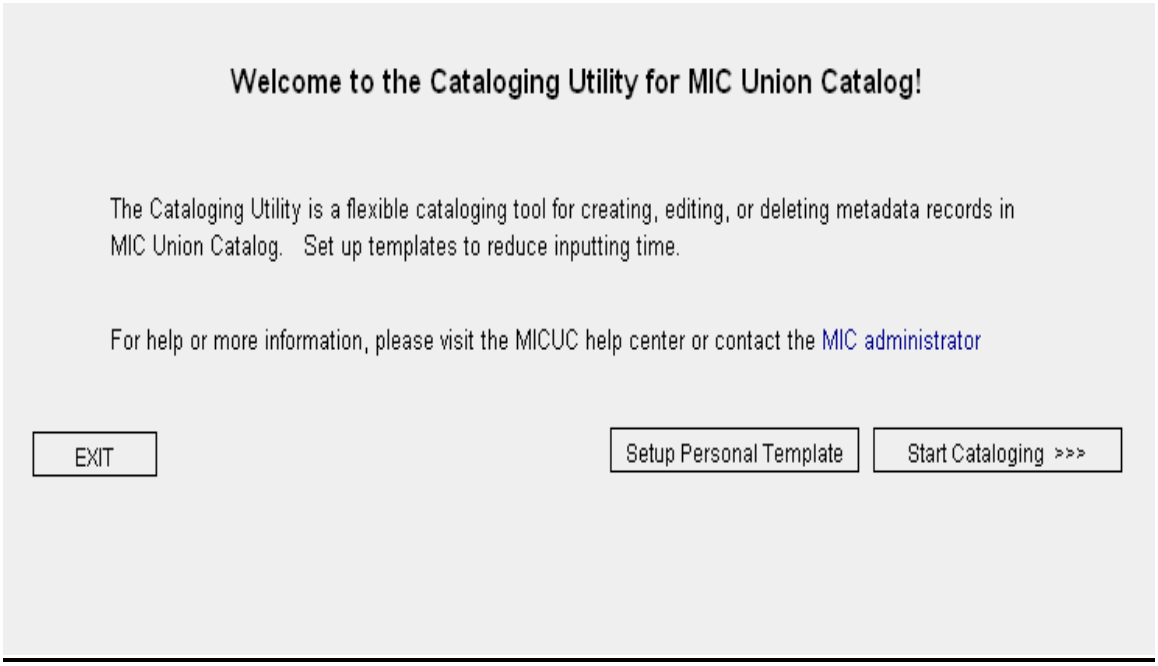


Figure 2.1.1.7: Cataloging Screen

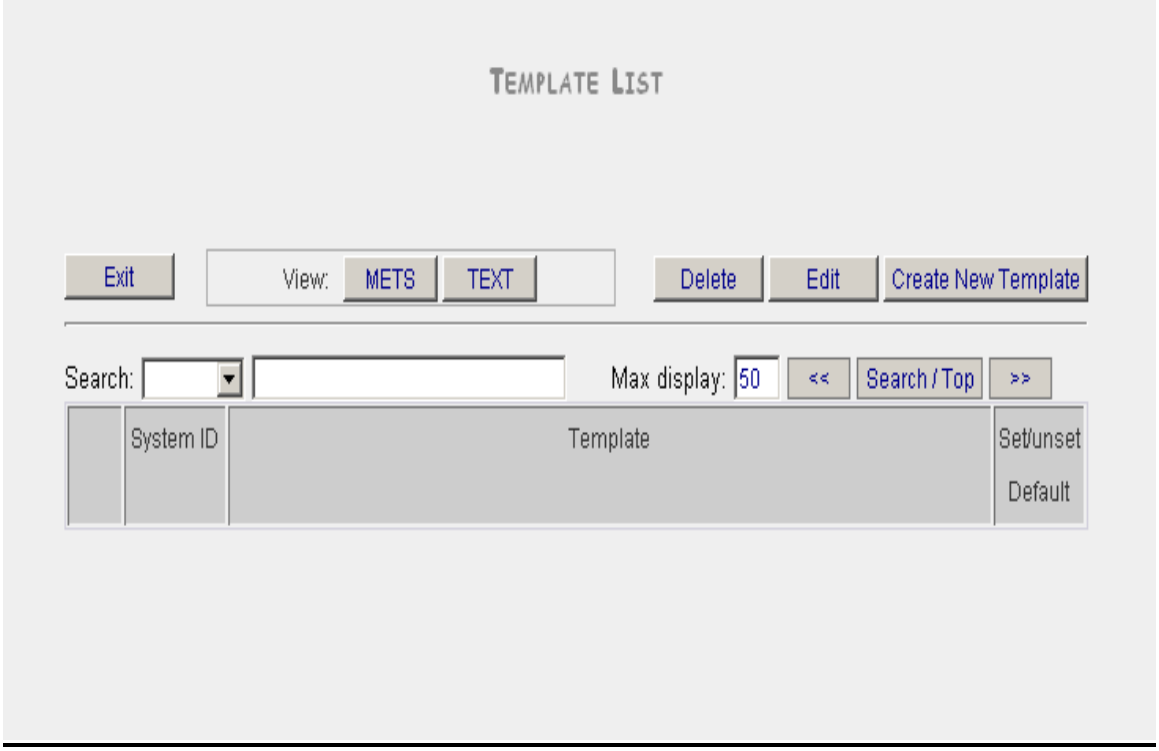


Figure 2.1.1.8: Template list screen

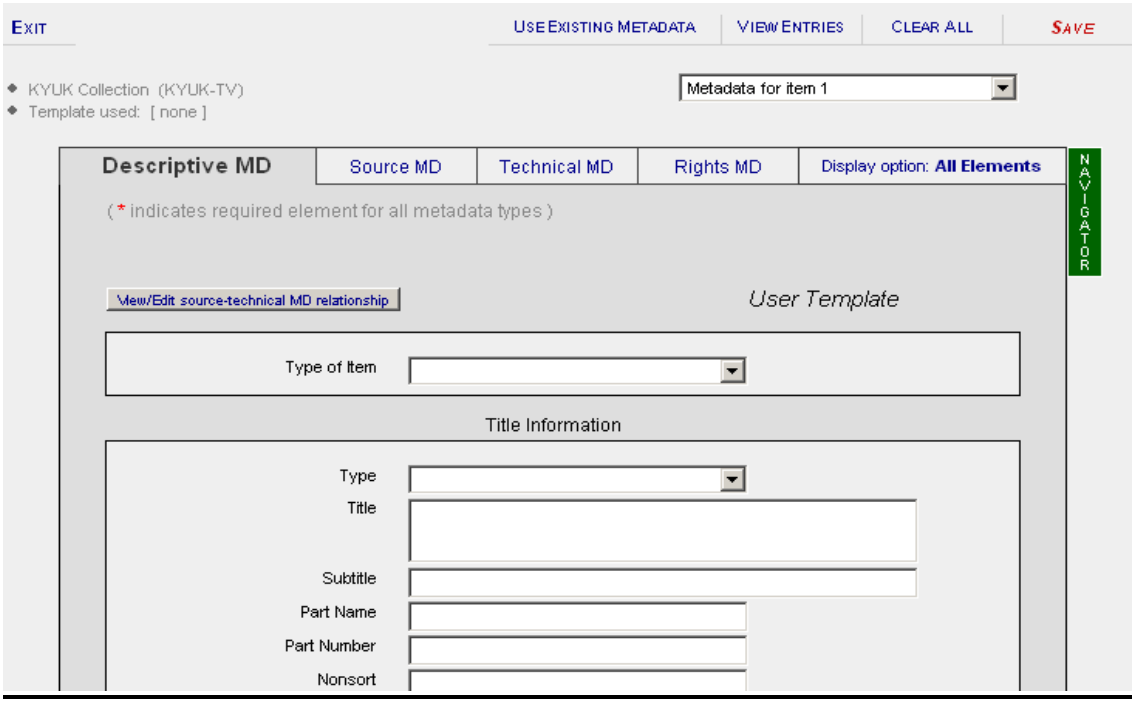


Figure 2.1.1.4: Template data entry screen

Existing Resource for Collection 6

	Resource Name	Created Date
○	Hallmark hall of fame.	
○	Winter mind	
○		
○	test for locationPhysicalLocation source value	
○	Test of technical metadata data dictionary	
○	Knitting from knitting template	
○	Test for source disappearing after required field display invoked	
○	Michael [loves] Nancy	
○	Eniwan I Luk Rose	
○	Vanua-Tai, of land and sea	
○	Solid sistas documentary	
○	Days made of fear	
○	Boy of Baghdad	
○	Las Claves de la masacre	
○	49th Star	
○	Continuous Journey	

Figure 2.1.1.5: Existing metadata record screen

2.1.2) Create Multiple instances of metadata

2.2) Batch load existing metadata

Metadata from existing database(s) can be batch loaded into OpenMIC. The OpenMIC has built-in MARCXML and MODS XML mapping tools which allow the metadata creators to automatically maps metadata into the OpenMIC database. If metadata is in any other format, you need to map your data elements to OpenMIC database using the Mapping Utility.

Follow steps below to batch load metadata from existing database(s).

Step 1: Mapping Data elements

i. Select *Metadata and Digital objects* from the OpenMIC Main Screen.
ii. Select *Mapping Utility.*
iii. Select *Simple MIC Display* to map MIC elements or *Full METS/MODS* to map your metadata elements.

iv. Select *Create or Revise Mapping.*
v. If you have selected, *Simple MIC Display* option in step iii, you will get MIC Mapping Template Screen (figure 2.2.1.2). Follow the screen instructions to map your metadata elements.
vi. If you have selected, *Full METS/MODS* option, you will get a screen to enter a map name and to select schema of your records (figure 2.2.1.3). Enter name and select schema.
vii. Click *save.*
viii. If you have selected *MARC (xml) or MODS (xml),* mapping is automatically provided by OpenMIC. Proceed to step 2.
ix. If you have selected *In-house (text),* you must map metadata elements from the in-house database to the OpenMIC database. You also need to export the metadata in .txt.
x. Enter the name of the elements in the same order as it appears from the in-house database.
xi. If there are more than 10 elements in the database, click *More fields.*
xii. Use edit tools "<<" and "X" to insert or remove data elements from the list.
xiii. Enter the field delimiter used to create your text file.
xiv. Click *Update Fields.*
xv. You will get a screen to map the in-house data elements to the OpenMIC database.
xvi. Select the element on the left side of the window from the in-house database and select the appropriate OpenMIC database element. This will automatically map these two elements and these elements will appear in the mapping list. To edit mapping, click on the radio button.
xvii. If the data elements have multiple values, enter the value separator in the "Multi-value Separator" box in the mapping results window.
xviii. When you are done with mapping, click *Save.*
xix. Now you can upload the text file to check mapping before starting the batch import.
xx. Select the sample file from the pull down list.
xxi. Browse and Upload a sample text file. It is recommended to prepare a sample file to test mapping.
xxii. Click *Submit.*
xxiii. Select *Check Map* from the Mapping Screen.
xxiv. Sample records will be displayed on the screen.
xxv. Select a record and click on TEXT or XML (METS) to view the mapping.
xxvi. Review uploaded records. If you are satisfied with the mapping results, proceed with batch import.

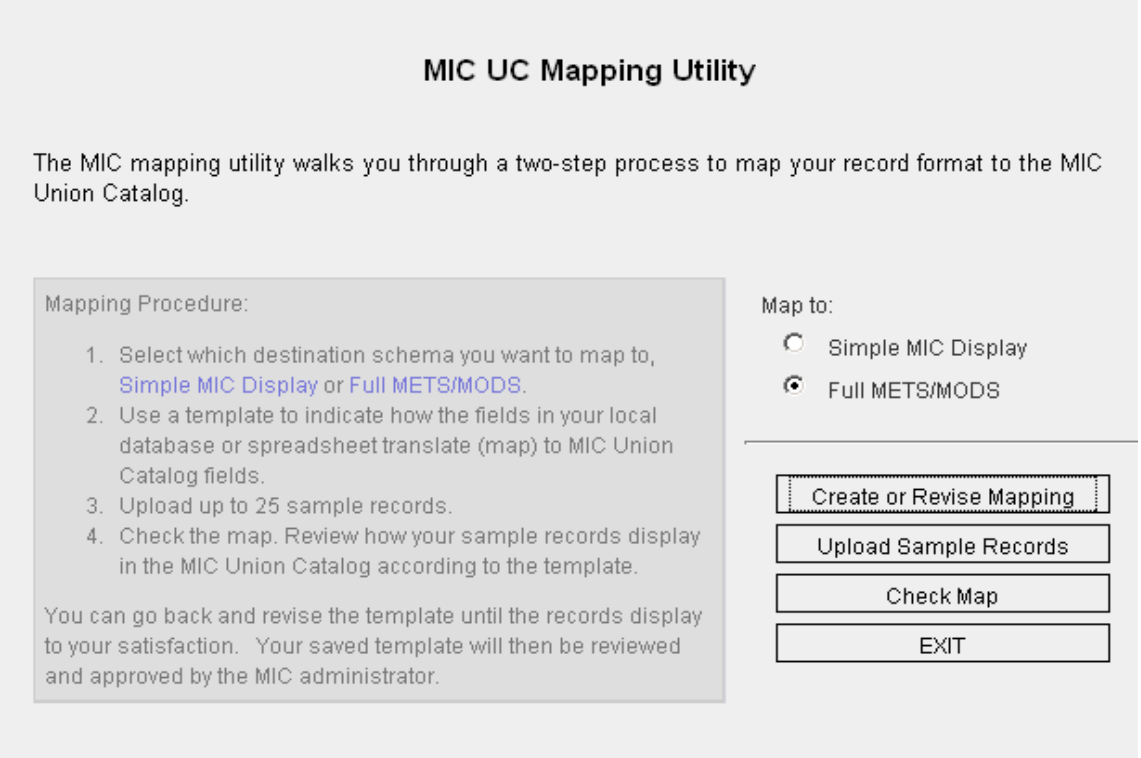


Figure 2.2.1.1: Mapping Screen

Figure 2.2.1.2: Simple MIC Mapping Template screen

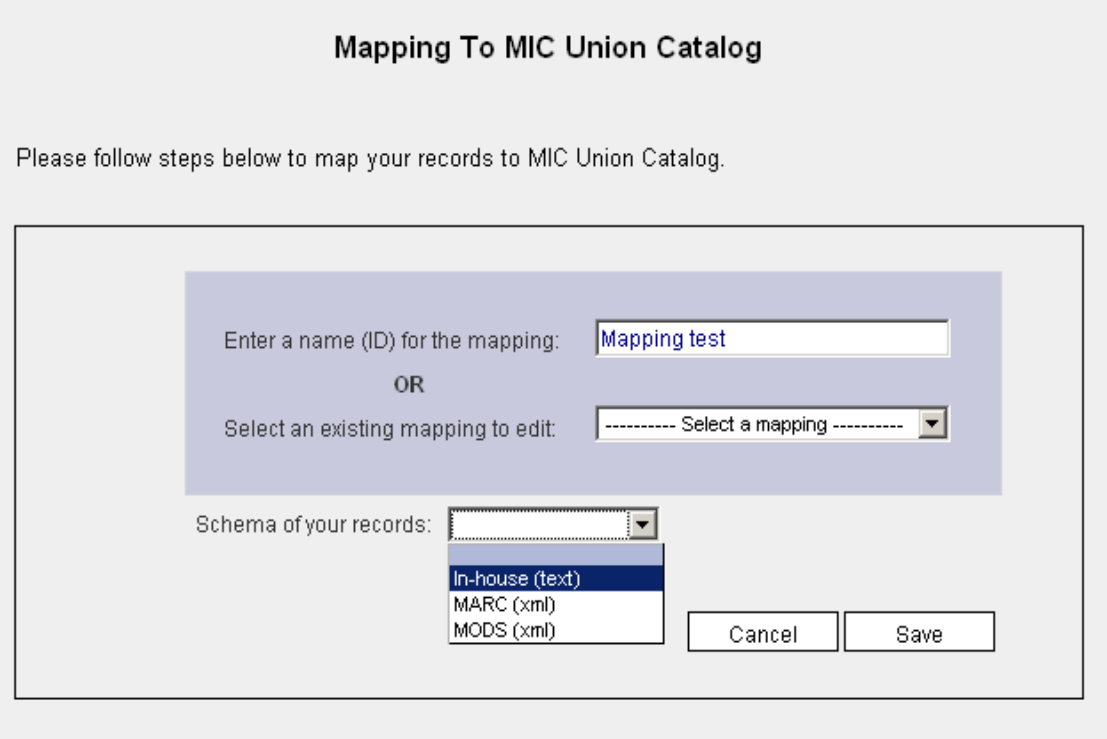


Figure 2.2.1.3: MIC Mapping Screen

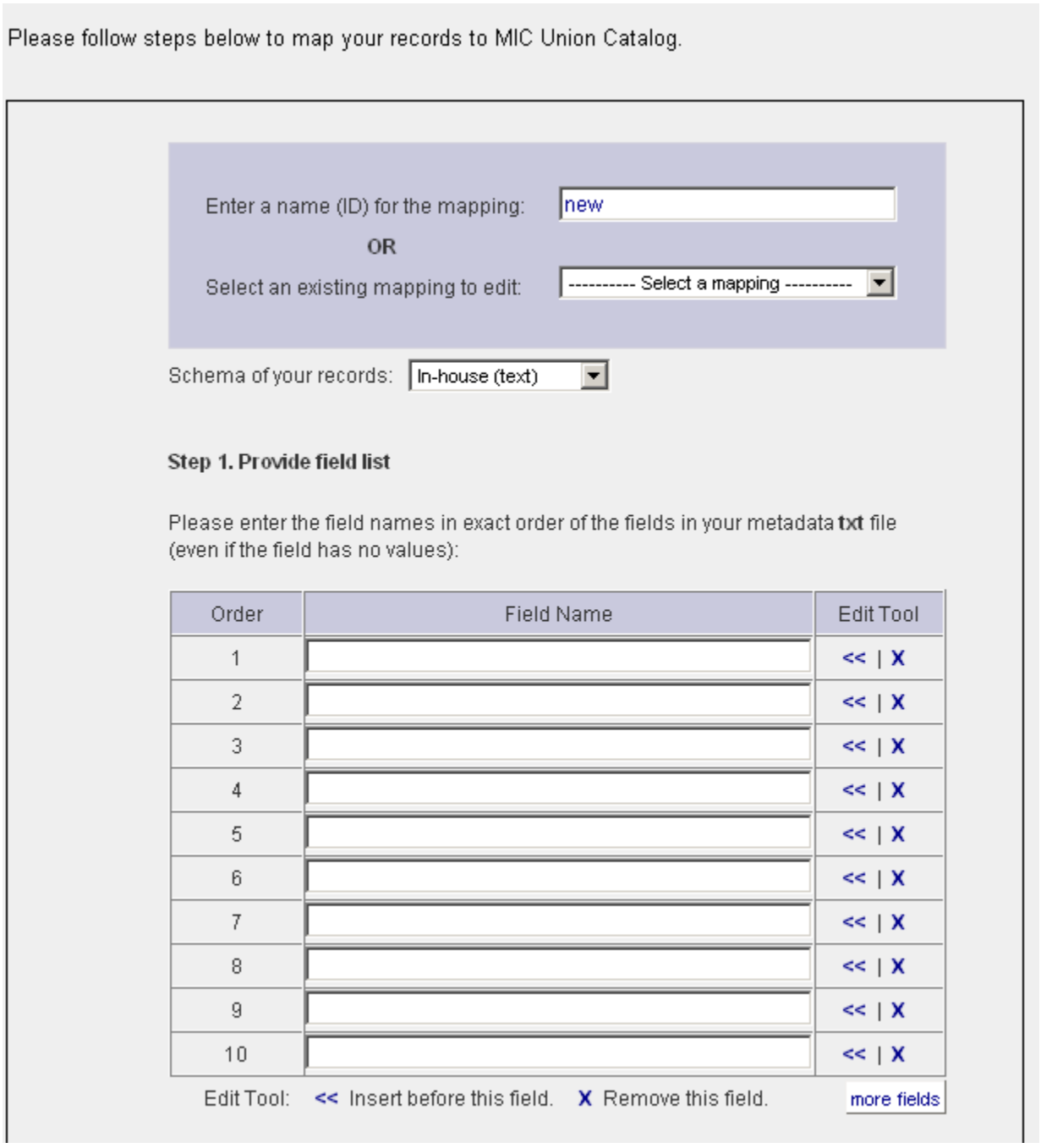


Figure 2.2.1.4: Mapping Field List Screen 1

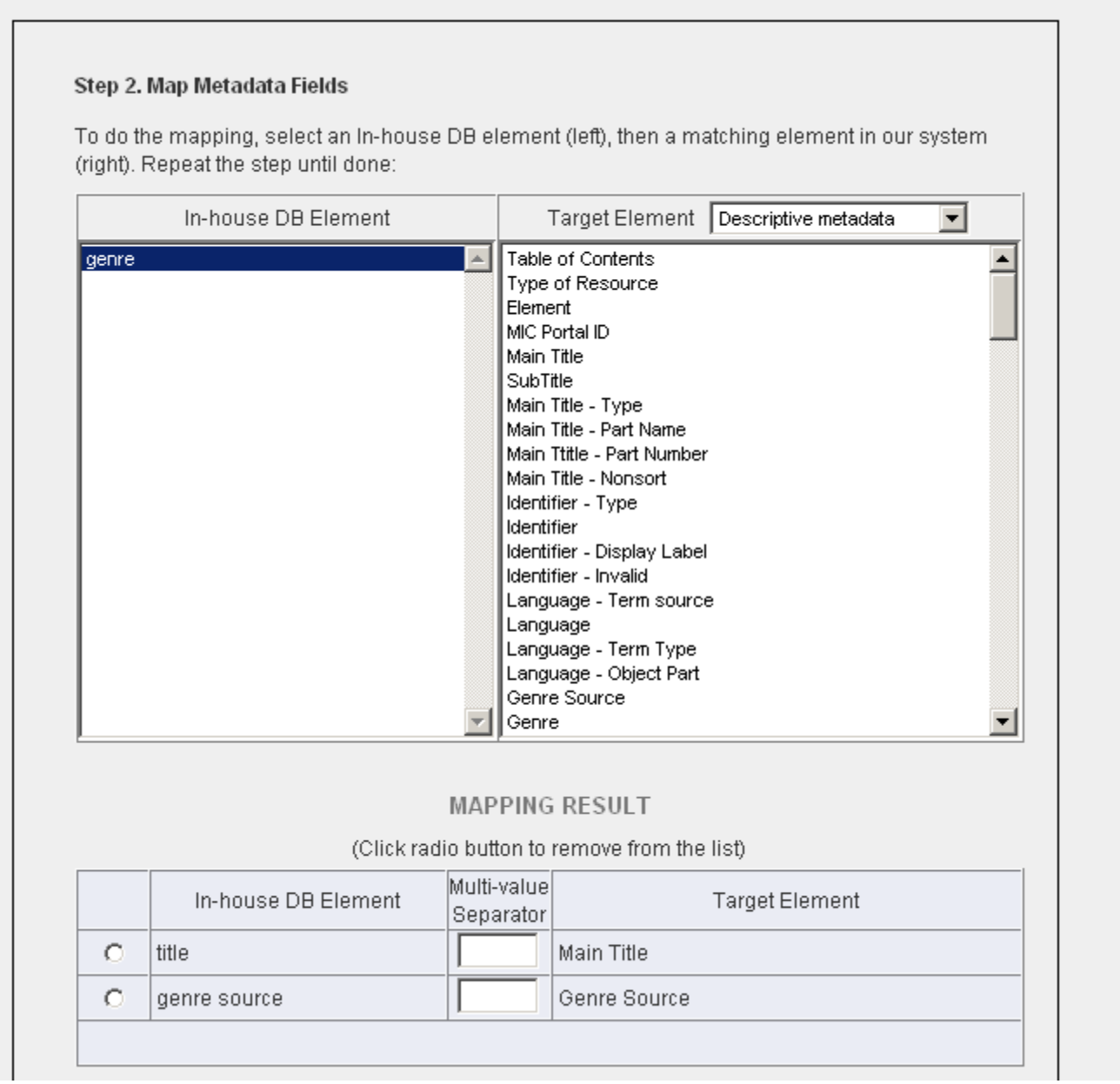


Figure 2.2.1.5: Mapping Field List Screen 2

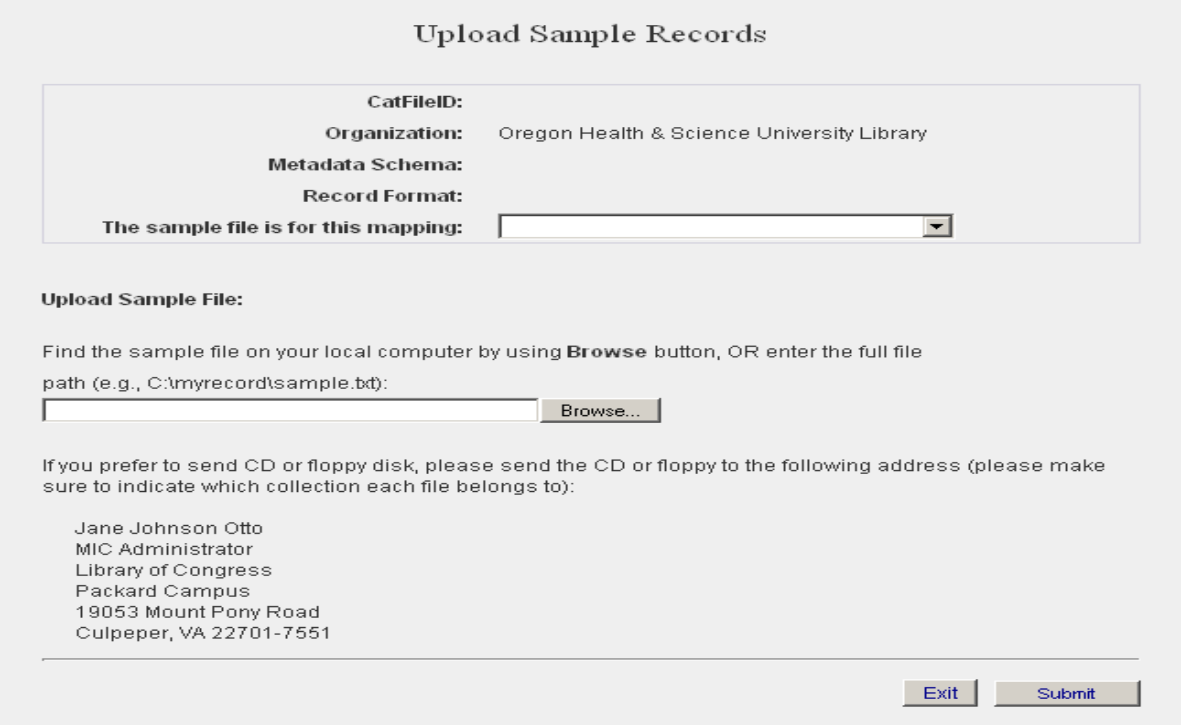


Figure 2.2.1.6: Upload Text File Screen

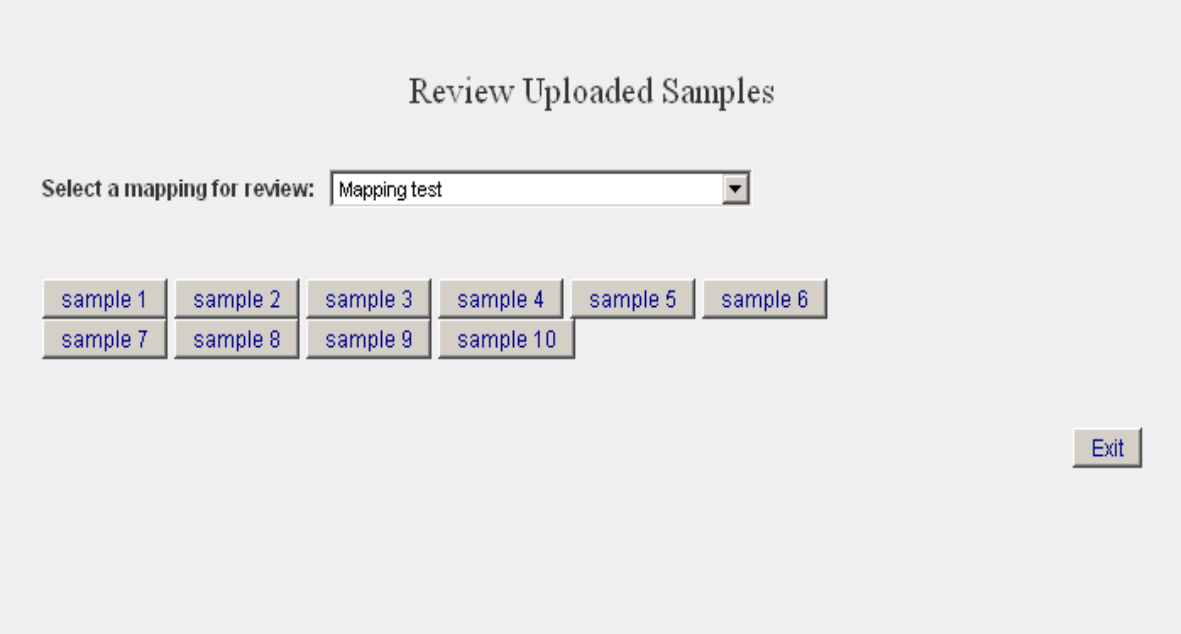


Figure 2.2.1.7: Review Sample Records Screen

Step 2: Batch Import

i. Select *Batch Import* from the Main cataloging Screen.
ii. Select *Metadata Schema*.
iii. Select *Record Format* (XML for MARC and MODS; TXT (tab-delimited) for in-house (text).
iv. Select *Mapping Name.*
v. Select "*Yes*" if the file has already been uploaded, otherwise, select "*No*".
vi. Select *Show Step2.*
vii. If you have selected "Y*es*", select *an uploaded file to import* from the pull down.
viii. If you have selected "*No*", you will be prompted to select the location of the file.
ix. Select "*Local Computer"* if the file is on the PC; otherwise, select *"Server".*
x. Click *Show Step 2.*
xi. If you have selected "*Local Computer",* browse and select the file.
xii. Click *Upload/Import.*
xiii. If you have selected "*Server",* enter the absolute path of the file.
xiv. Click *Upload/Import.*
xv. Click *Refresh* check the status of the import.
xvi. Once the import is completed, you will be able to review the records in the metadata record list.

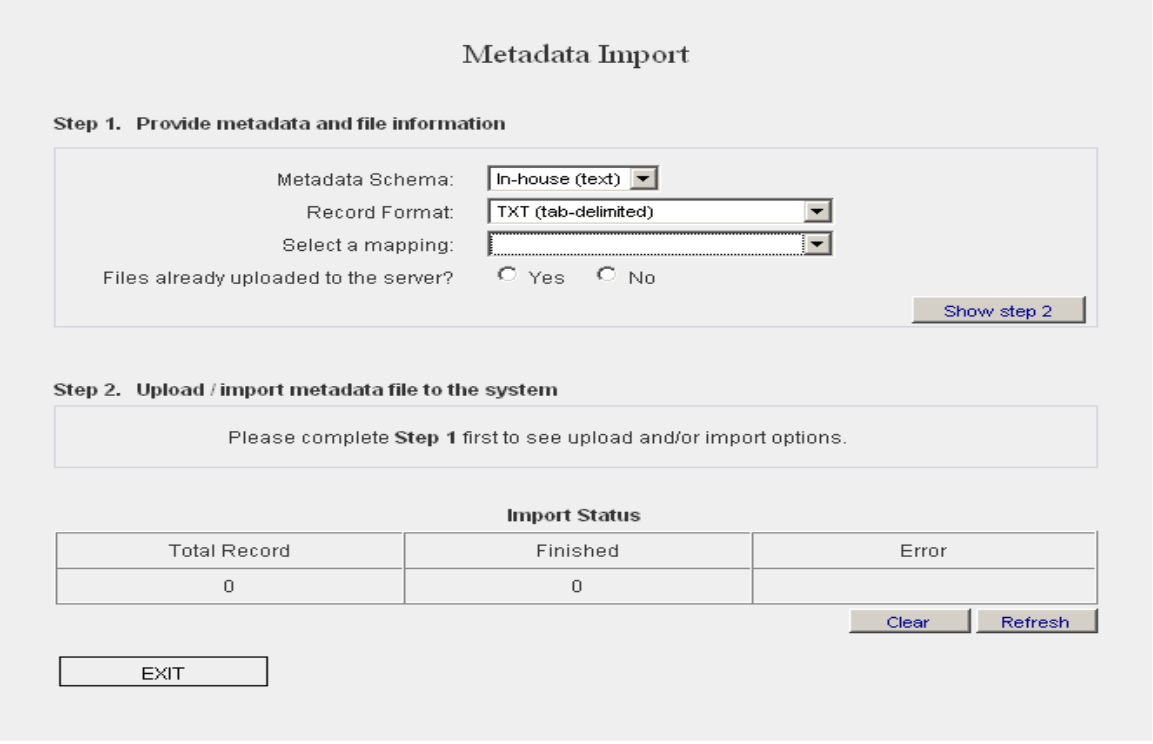


Figure 2.2.1.8: Metadata Import Selection Screen

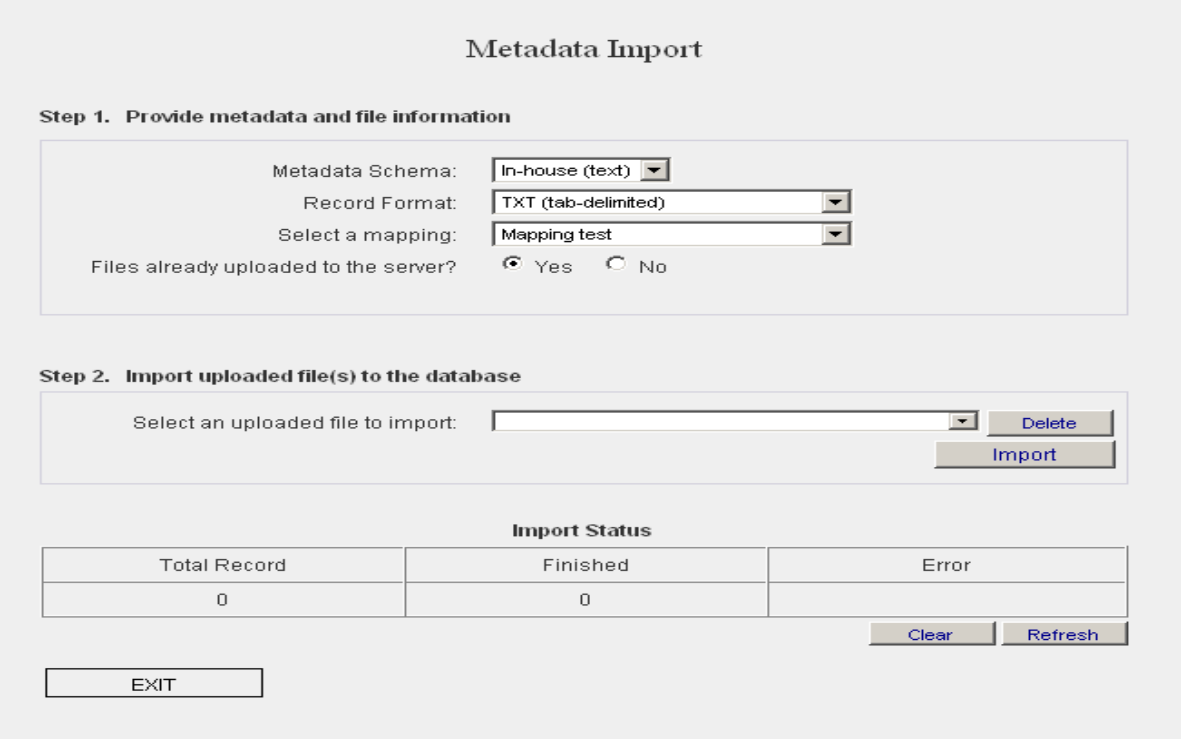


Figure 2.2.1.9: Metadata Import File Upload/import Screen 1

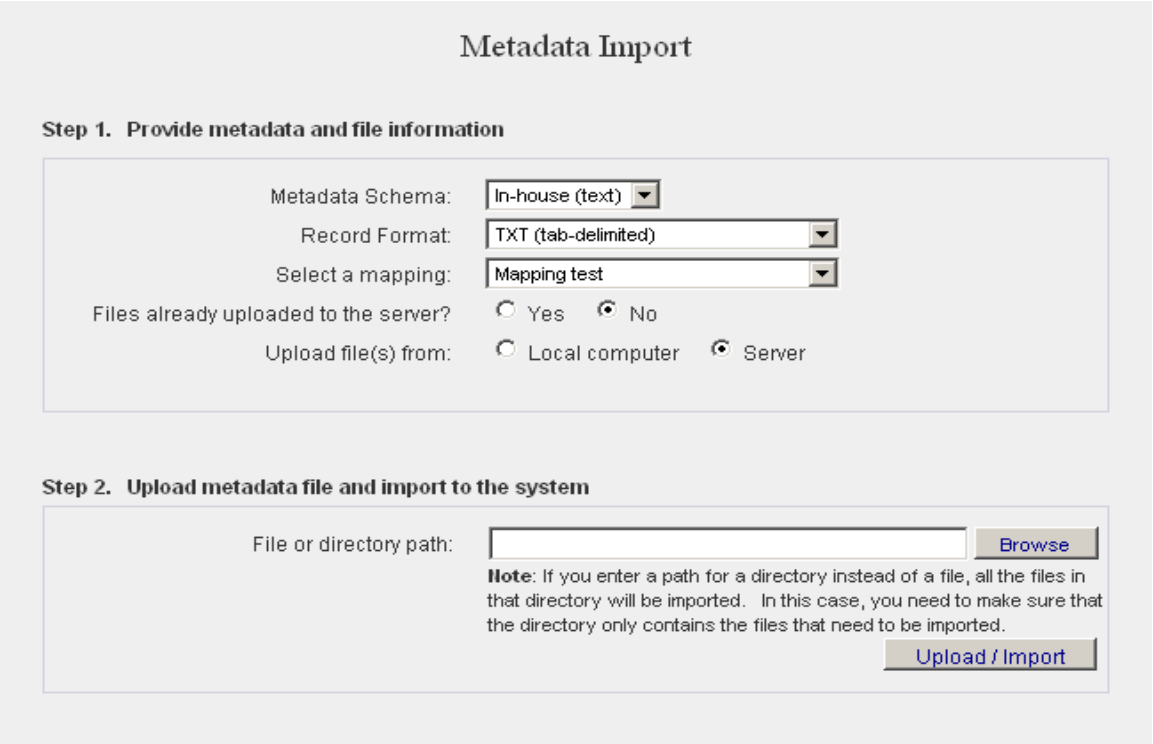


Figure 2.2.1.10: Metadata File Upload /import Screen Screen 2

Step 3: Export (Optional)

There are two possible scenarios when you may want to export records:

1) Organization using a repository may export the bibliographic records in the OpenMIC database as METS and convert to your repositories native schema using third-party tools or XSLT transformations provided by you.
2) Organization with no repository may export a copy of the bibliographic records in the OpenMIC database as METS and made available to an XML search and retrieval facility, such as Lucene or Zebra.

Note: Organization with Fedora repository may use OpenMIC to manage metadata. You need to add the file section in the xml before ingesting into fedora repository or wait until OpenWMS is ready for download.

Follow steps below to export records:

i. Select *Export* from the Main Cataloging Screen.
ii. Select *Export Format* (METS).
iii. Select *Export Destination (*File).
iv. File export option will automatically be set to "*one record per file".*
v. Select *File Name Prefix.*
vi. *Specify record(s) to export*.

- There are three options available. "All records of this collection" will export every record in the collection in a separate file under the export directory configured by the system administrator.
- If "A subset of this collection "is selected, a pop-up box will be prompted to select a range to export.
- If "Single record" is selected, a pop-up box will be prompted to select a record to export.

vii. Click *Export.*
viii. Click *Refresh* to monitor the progress of export.

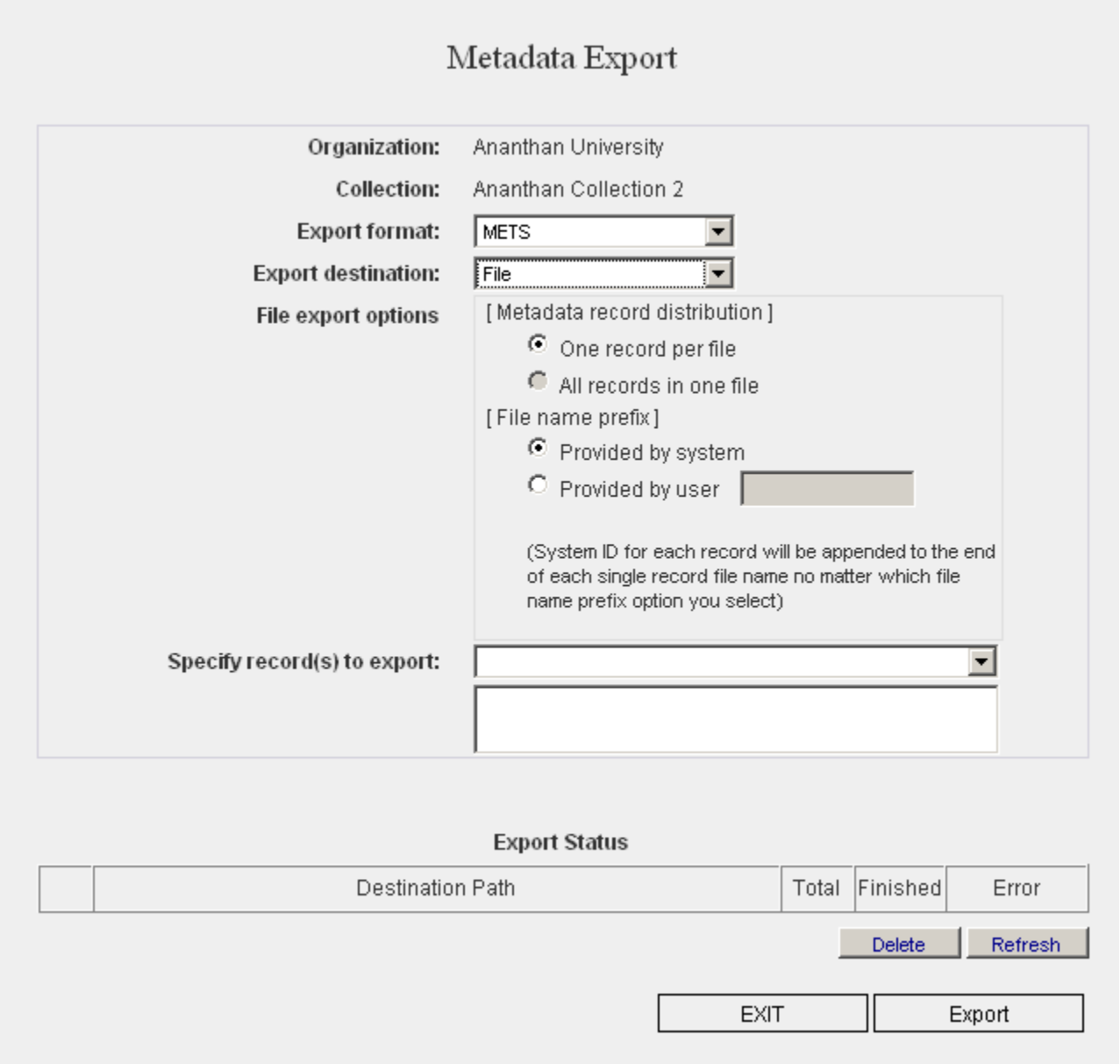


Figure 3.1: Export Screen