

OpenMIC User Manual

Bibliographic Utility for analog and digital objects



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47 Davidson Road
Piscataway, NJ 08854

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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, the Institute of Museum and Library Services, and the National Science Foundation.

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 A provides a typical workflow diagram for digital objects in OpenMIC.

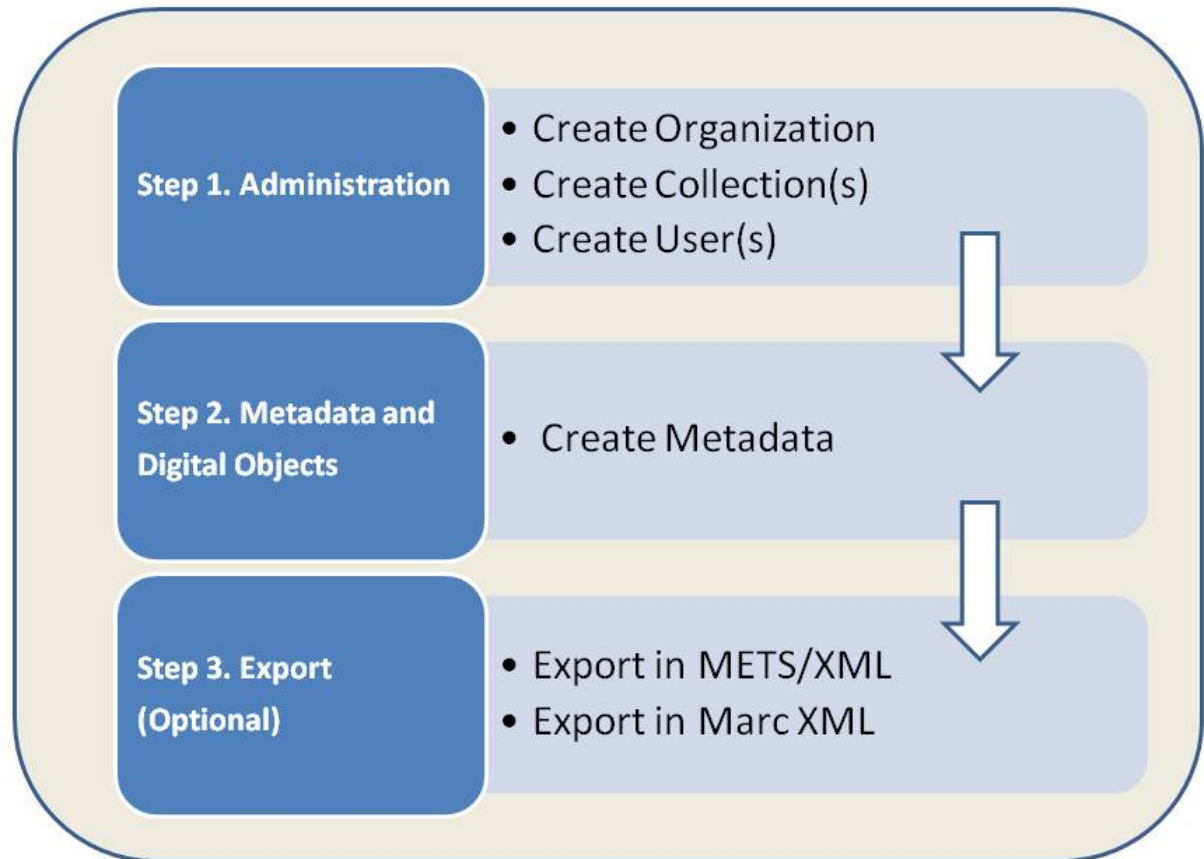
Section B provides a diagram showing the hierarchy of objects in OpenMIC.

Section C explains the different types of objects in OpenMIC.

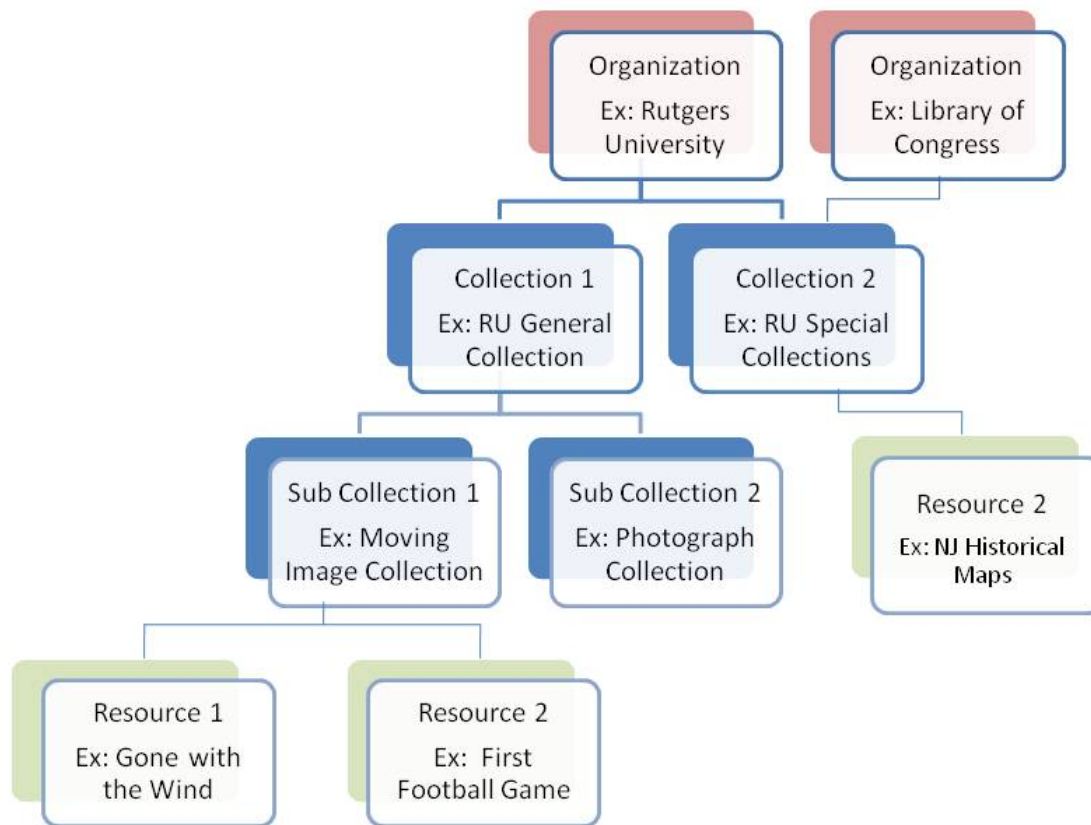
Section D provides detailed step-by-step instructions to create or maintain digital objects.

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

Section A: Workflow in OpenMIC



Section B: Object Hierarchy in OpenMIC



Section C: 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 D: Using OpenMIC

Note 1: Recommended Browsers – Firefox 1.0; Netscape 7.1 and above; IE7.0 and above.

Note 2: Disable pop-up blocking.

Note 3: Enable Cookies.

OpenMIC may be 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. Before you start creating metadata, you must create an organization record and at least one collection record.

Step 1: Administration

There should be only one organization record for each organization. You may create as many collections you need for each organization. You must have “manage collections” privilege to be able to create organization.

1.1) *Organization Management* (Figures 1.1.1 to 1.1.5)

Create Organization:

- i. Login as Super User.
- ii. Select **Digital Object Workflow Management System** from the OpenMIC Initial Screen.
- iii. Select **Administration**.
- iv. Select **Organization Management**.
- v. Select **Create New Organization**.
- vi. Enter Org ID, Organization Name, address, and contact information. You may use your organization’s Marc Org ID, if you have one.
- vii. Click **Save**.
- viii. Click **Exit** to return to the Digital Object Workflow Management System main screen.

Edit Organization:

- i. Login as Super User.
- ii. Select **Digital Object Workflow Management System** from the OpenMIC Initial Screen.
- iii. Select **Administration**.
- iv. Select **Organization Management**.

- v. Select the **Organization** you want to edit.
- vi. Click **Edit**.
- vii. Change metadata and click **Save**.
- viii. Click **Exit** to return to the previous 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 Object Workflow Management System** from the OpenMIC Initial Screen.
- iii. Select **Administration**.
- iv. Select **Organization Management**.
- v. Select the **Organization** to delete.
- vi. Click **Delete**.
- vii. Click **OK** to confirm deletion.
- viii. Click **Exit** to return to the previous screen.

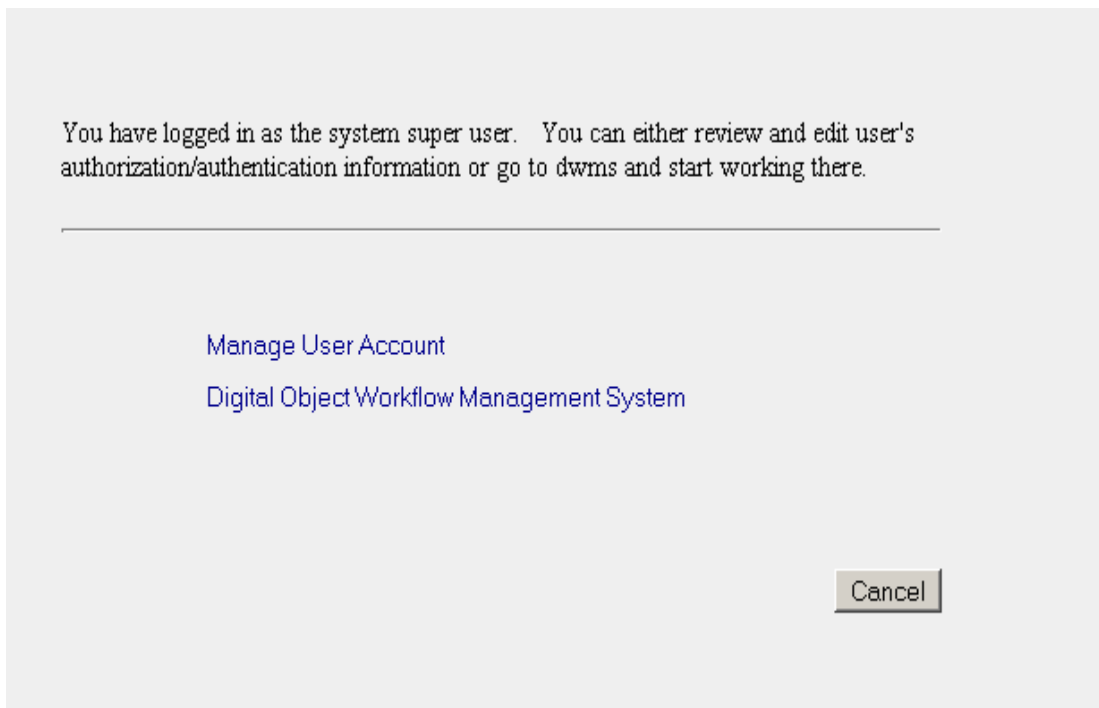


Figure 1.1.1: OpenMIC initial screen

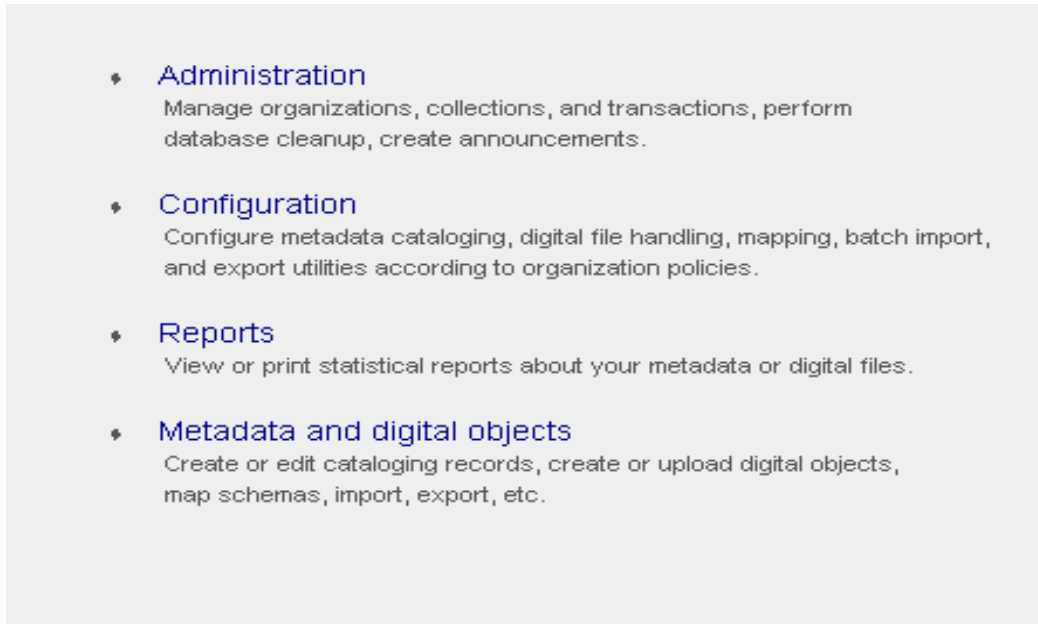


Figure 1.1.2: Digital Object Workflow Management System main screen

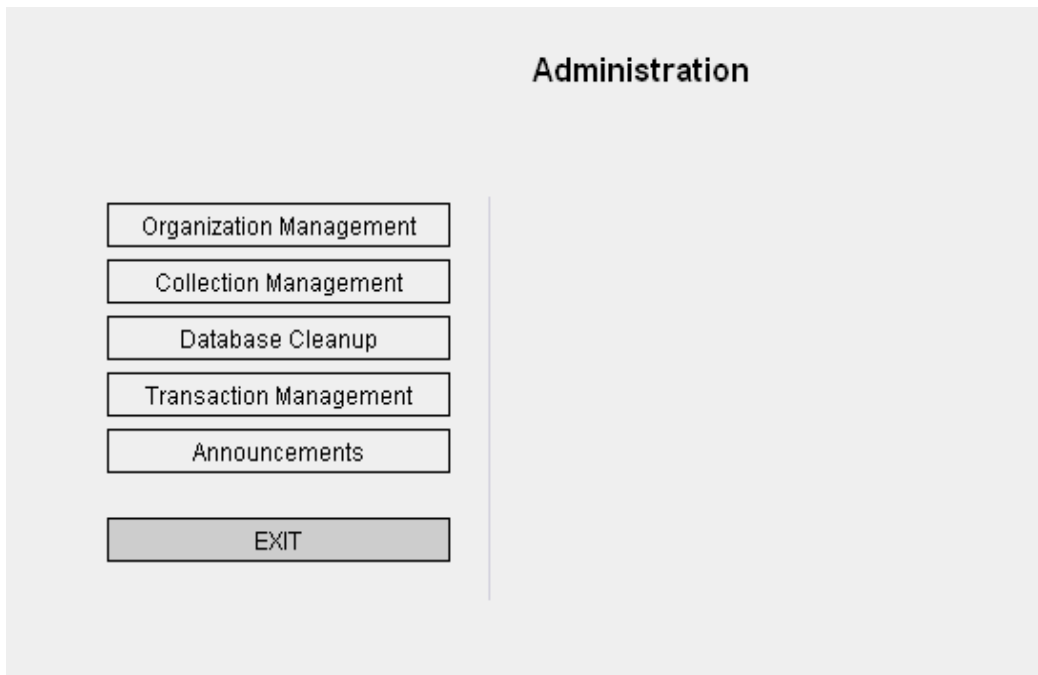


Figure 1.1.3: Administration screen

ORGANIZATION LIST		
Exit	Application Review	Delete Edit Create New Organization
	Organization	Status
<input type="radio"/>	Oregon Health & Science University Library	
<input type="radio"/>	Pacific Film Archive	
<input type="radio"/>	Walter J. Brown Media Archives & Peabody Awards Collections	
<input type="radio"/>	Smithsonian Institution Archives	
<input type="radio"/>	National Library of Medicine	
<input type="radio"/>	Library of Congress Motion Picture, Broadcasting, and Recorded Sound Division	
<input type="radio"/>	Fortunoff Video Archive for Holocaust Testimonies	
<input type="radio"/>	Northeast Historic Film	
<input type="radio"/>	ResearchChannel	

Figure 1.1.4: Organization List screen

Setup Organization

Organization ID: ID Source:
ID Value:

Organization Name:

Organization Address:

Contact Person:

Name:

Telephone:

Email:

Figure 1.1.5: Setup organization screen

1.2) *Collection Management (Figures 1.2.1 to 1.2.8)*

You may create as many collection objects 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 Parent Collection

- i. Select **Digital Object Workflow Management System** from the OpenMIC Initial Screen.
- ii. Select **Administration**.
- iii. Select **Collection Management**.
- iv. Go to the organization box and click **Add Collection**.
- v. Enter metadata for the collection. (Refer to the online Metadata Guide: [http://rucore.libraries.rutgers.edu/open/projects/openmic/.](http://rucore.libraries.rutgers.edu/open/projects/openmic/))
- vi. Click **Save**.
- vii. Click **Exit** to return to the Administration screen.

Create Sub-collection

- i. Select **Digital Object Workflow Management System** from the OpenMIC Initial Screen.
- ii. Select **Administration**.
- iii. Select **Collection Management**.
- iv. Go to the organization box and select the collection.
- v. Select **Add collection**. A message window will appear prompting you to confirm the action. Click **OK**.
- vi. Enter metadata.
- vii. Click **Save**.
- viii. Click **Exit** to return to the Administration screen.

Edit Collection/sub-collection

- i. Select **Digital Object Workflow Management System** from the OpenMIC Initial Screen.
- ii. Select **Administration**.
- iii. Select **Collection Management**.
- iv. Go to the organization box and select the **Collection** to edit.
- v. Click **Edit**.
- vi. Make changes and click **Save**.
- vii. Click **Exit** to return to the Administration screen.

Delete Collection/sub-collection

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

- i. Select **Digital Object Workflow Management System** from the OpenMIC Initial Screen.
- ii. Select **Administration**.
- iii. Select **Collection Management**.
- iv. Go to the organization that has the collection you want to delete.
- v. Select the **Collection** you want to delete.
- vi. Click **Delete**.
- vii. Click **Exit** to return to the Administration screen.

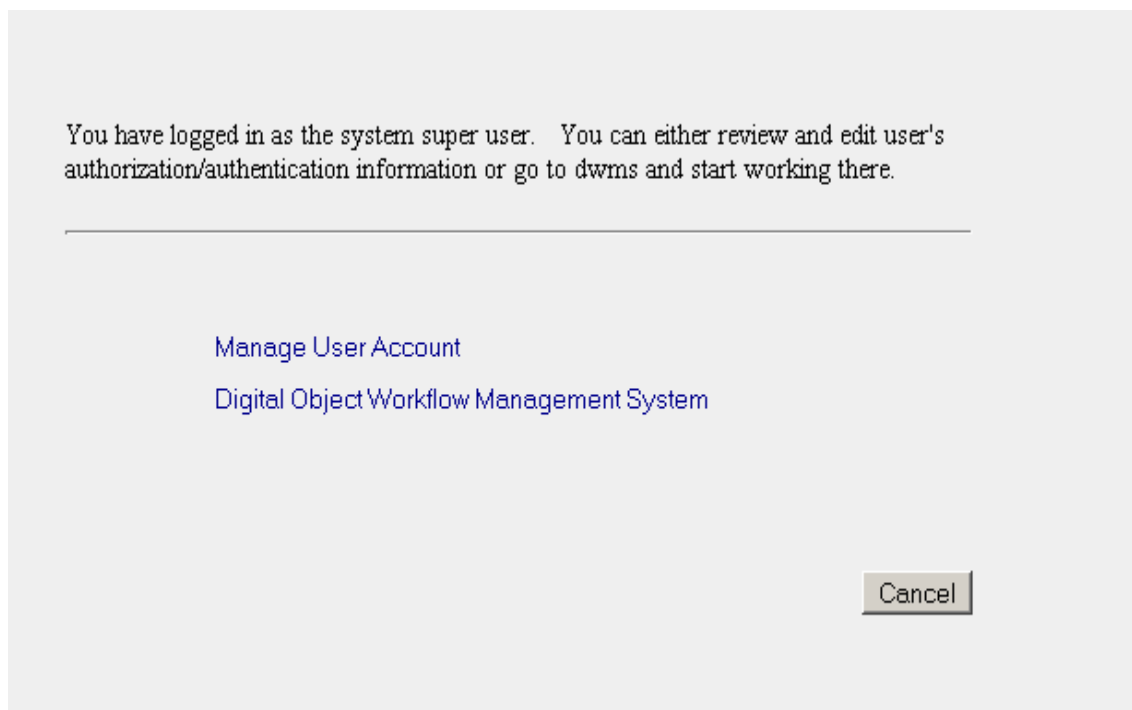


Figure 1.2.1: OpenMIC initial screen

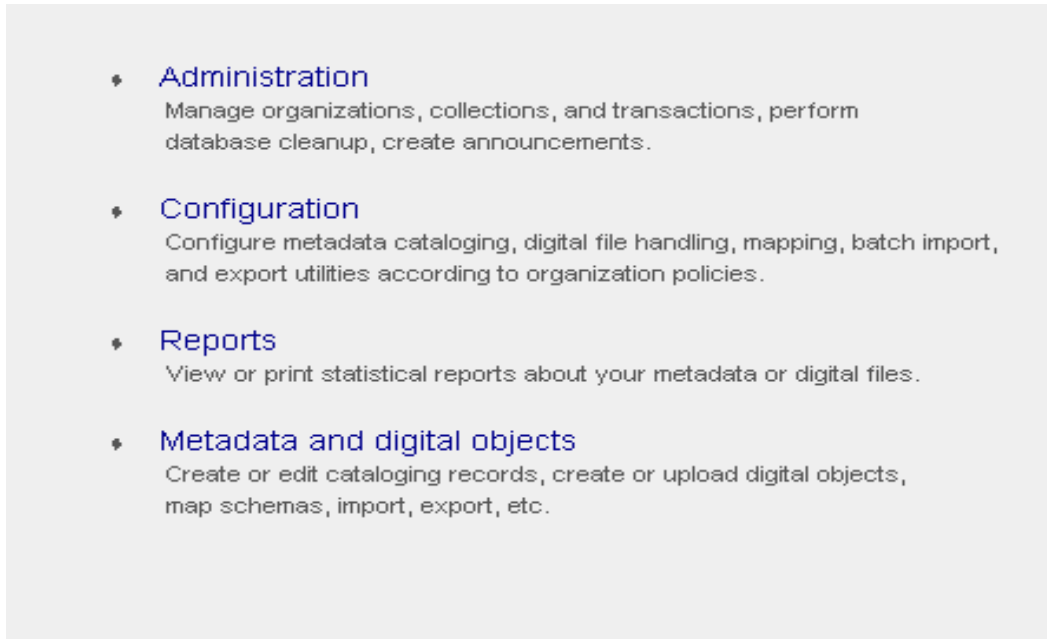


Figure 1.2.2: Digital Object Workflow Management System main screen

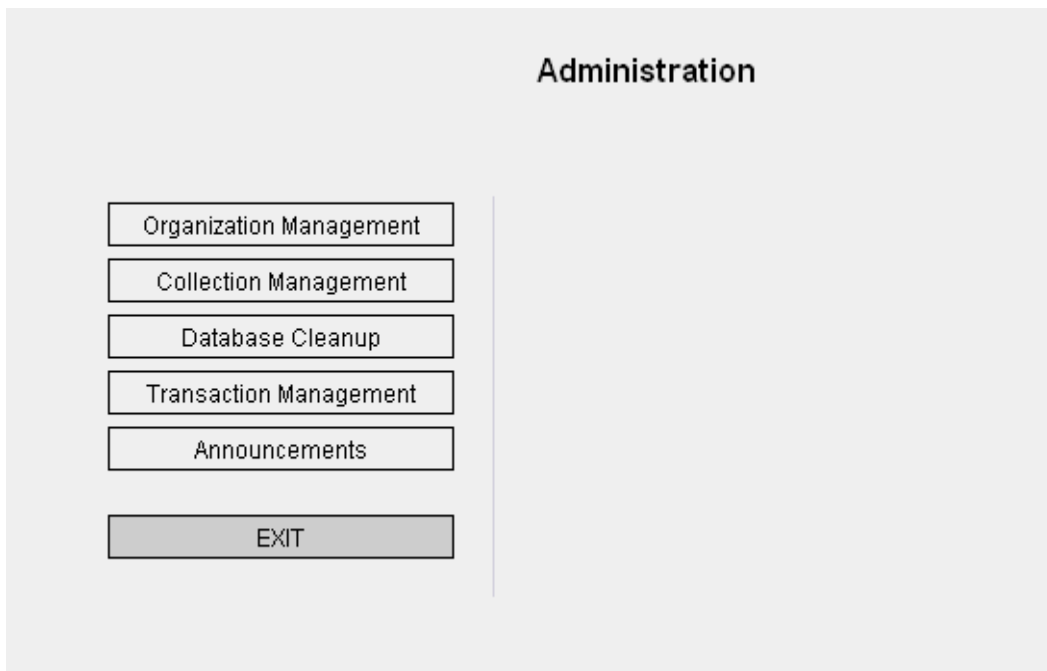


Figure 1.2.3: Administration screen

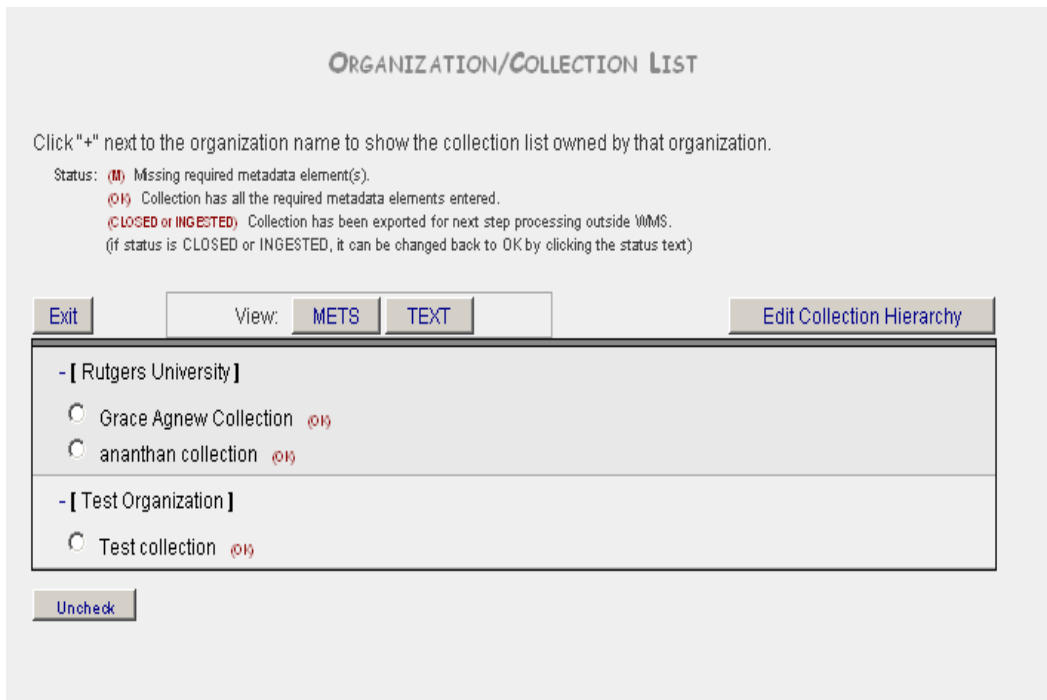


Figure 1.2.4: Organization/Collection List screen

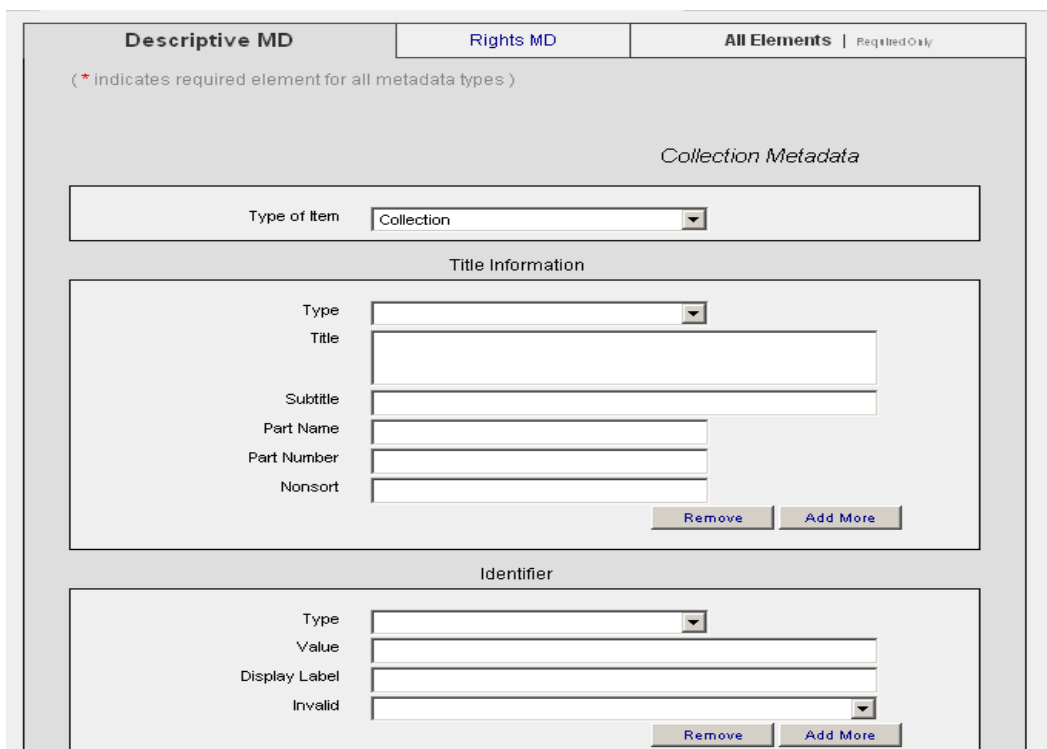
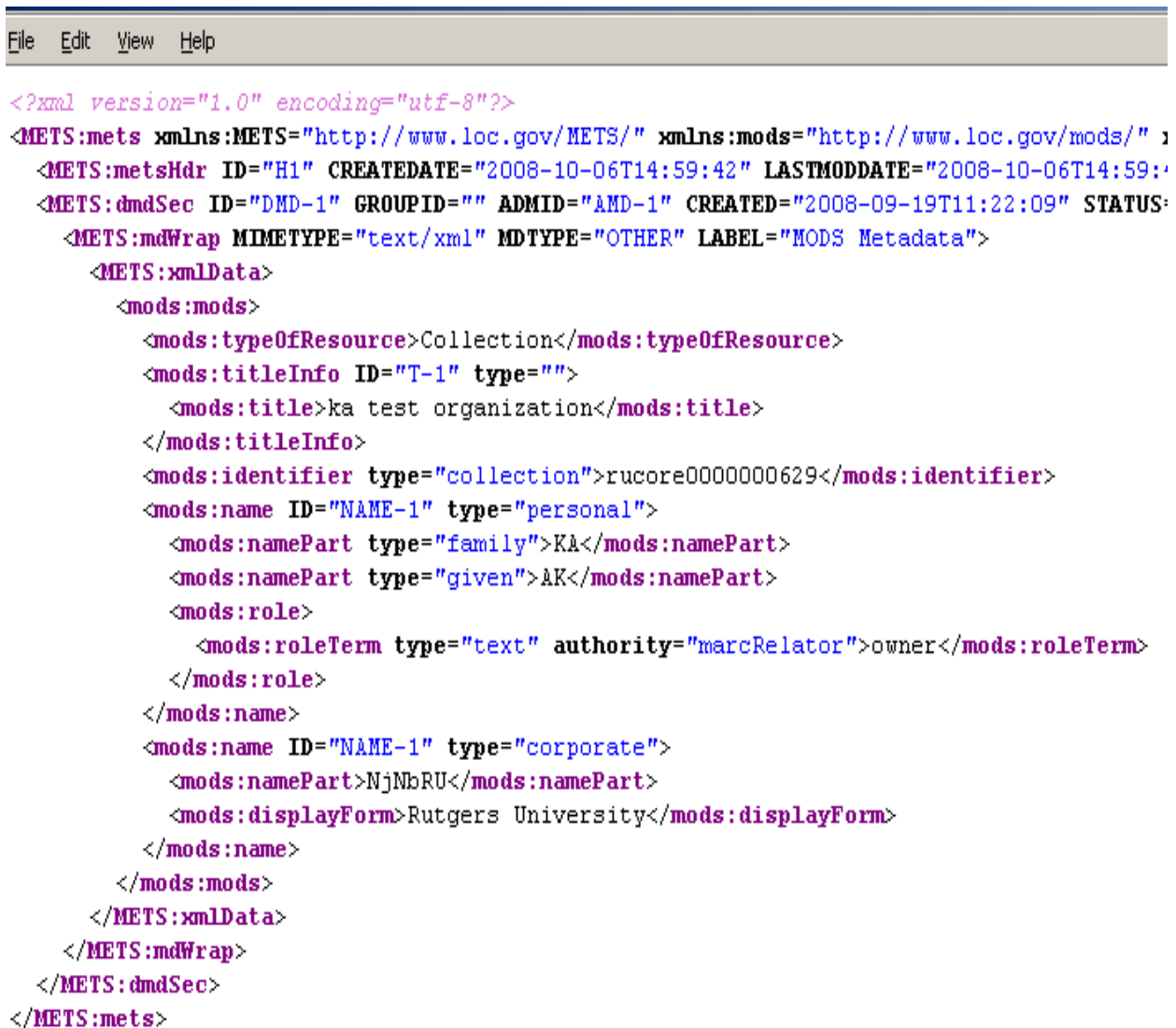


Figure 1.2.4: Metadata entry screen

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**. IE automatically displays the xml. If you are using other browsers, you will have to choose "View Page Source" to see the xml.
- iii. Click **Exit** to return to the Administration screen.



```
<?xml version="1.0" encoding="utf-8"?>
<METS:mets xmlns:METS="http://www.loc.gov/METS/" xmlns:mods="http://www.loc.gov/mods/" >
  <METS:metsHdr ID="H1" CREATEDATE="2008-10-06T14:59:42" LASTMODDATE="2008-10-06T14:59:42" >
    <METS:dmdSec ID="DMD-1" GROUPID="" ADMID="AMD-1" CREATED="2008-09-19T11:22:09" STATUS="OK" >
      <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 1.2.5: Collection record in METS XML


```

Source: http://nifty.scc.nec.rueters.edu/~dwins/dwins_test/cacodi/DisplayPopUp.php?task=get_oxml&resource=database&resource=
File Edit View Help
<?xml version="1.0" encoding="utf-8"?>
<foxml:digitalObject xmlns:foxml="info:fedora/fedora-system:def/foxml#">
  <foxml:objectProperties>
    <foxml:property NAME="http://www.w3.org/1999/02/22-rdf-syntax-ns#type" VALUE="FedoraObject"/>
    <foxml:property NAME="info:fedora/fedora-system:def/model#state" VALUE="A"/>
    <foxml:property NAME="info:fedora/fedora-system:def/model#label" VALUE=""/>
  </foxml:objectProperties>
  <foxml:datastream ID="DC" STATE="A" CONTROL_GROUP="X" VERSIONABLE="true">
    <foxml:datastreamVersion ID="DC.0" MIMETYPE="text/xml" LABEL="Default Dublin Core Record" CRI
      <foxml:xmlContent>
        <oai_dc:dc xmlns:oai_dc="http://www.openarchives.org/OAI/2.0/oai_dc/">
          <dc:title xmlns:dc="http://purl.org/dc/elements/1.1/">ka test organization</dc:title>
          <dc:contributor xmlns:dc="http://purl.org/dc/elements/1.1/">KA, AK (owner)</dc:contributor>
          <dc:type xmlns:dc="http://purl.org/dc/elements/1.1/">Collection</dc:type>
          <dc:identifier xmlns:dc="http://purl.org/dc/elements/1.1/">rucore0000000629</dc:identifier>
        </oai_dc:dc>
      </foxml:xmlContent>
    </foxml:datastreamVersion>
  </foxml:datastream>
  <foxml:datastream ID="DMD-1" STATE="A" CONTROL_GROUP="X" VERSIONABLE="true">
    <foxml:datastreamVersion ID="DMD-1.0" MIMETYPE="text/xml" LABEL="Descriptive Metadata (MODS)">
      <foxml:xmlContent>
        <mods:mods xmlns:mods="http://www.loc.gov/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>
      </foxml:xmlContent>
    </foxml:datastreamVersion>
  </foxml:datastream>
  <foxml:datastream ID="RELS-INT" STATE="A" CONTROL_GROUP="X" VERSIONABLE="false">
    <foxml:datastreamVersion ID="RELS-INT.0" MIMETYPE="text/xml" LABEL="Datastream to preserve 1">
      <foxml:xmlContent>
        <rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#">
        </foxml:xmlContent>
      </foxml:datastreamVersion>
    </foxml:datastream>
  </foxml:digitalObject>

```

Figure 1.2.6: Collection record in FOXML

Metadata Entries

Descriptive:

Type Of Resource: Collection

Title Info:

Main Title: ka test organization

Identifier:

Type: collection

Identifier: rucore0000000629

Personal Name:

Family Name: KA

Given Name: AK

Name Role:

Role Type: text

Role Authority: marcRelator

Name Role: owner

Corp/Org Name:

Corp/Org Name: NjNbRU

Display Form: Rutgers University

Close

Figure 1.2.7: Collection record in TEXT

Collection Hierarchy Builder

The Collection Hierarchy Builder allows users to change the collection relationships after the collections have been already created. You may move an existing collection from its current location to a new location or associate a parent collection to more organizations.

Example: change a sub-collection of collection 1 owned by organization A to become a parent collection owned by organization B.

Change Collection Hierarchy

- i. Select **Digital Object Workflow Management System** from the OpenMIC initial screen.
 - ii. Select **Administration**.
 - iii. Select **Collection Management**.
 - iv. Select the **Collection**.
 - v. Click **Edit Collection Hierarchy**.
 - vi. You may either *move selected collection to a new location* or *associate selected collection with more organizations*. If you have selected to move the collection,
 - o Click **next step**.
 - o Select collection owner from the pull down.
 - o Select **parent collection** from the pull down, if the collection is a subcollection of another collection, or select **not a subcollection**.
 - o Click **submit**.
 - vii. If you are associating selected collection to more organizations,
 - o Click **next step**.
 - o Select collection owner from the pull down.
 - o Click **Submit**.
- ***** Note: The collection will be listed under both organizations. If you delete one collection, it will be removed from the other organization also. This feature has not been fully tested so please use this with caution!**
- viii. Click **Exit** to return to the Administration screen.

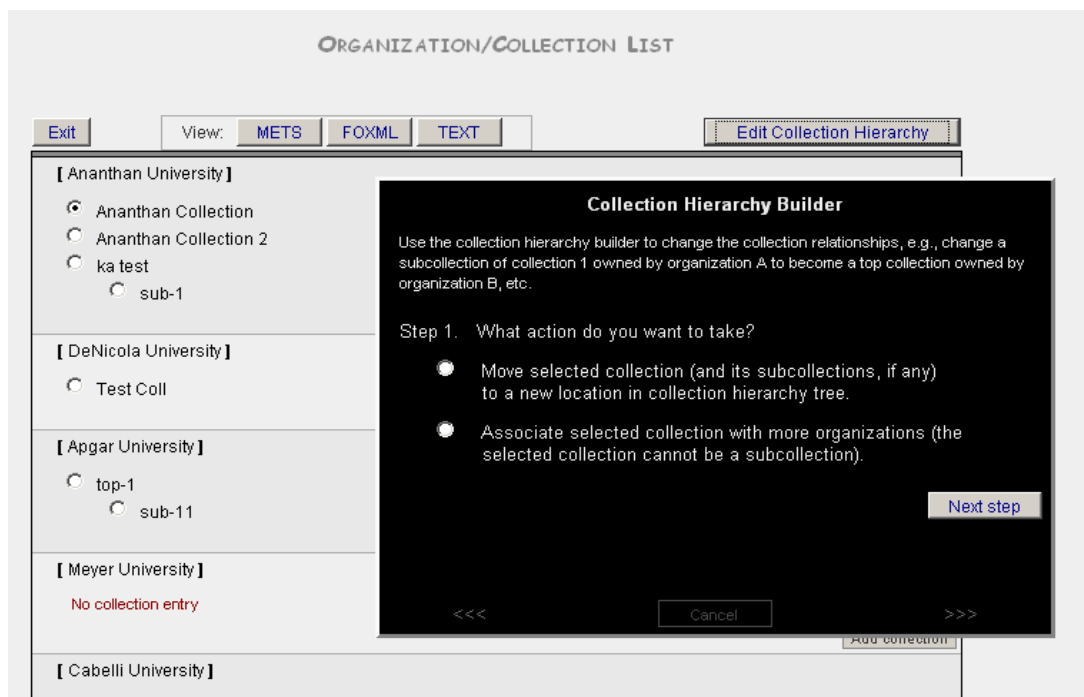


Figure 1.2.8: Organization/Collection Hierarchy Builder Screen

1.3) **User Management (Figures 1.3.1 to 1.3.5)**

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 in the Digital Provenance Metadata section. Each user account is associated with role(s). If a user account is not associated with a role, the user can not log in. A user with super user privileges will be able to perform all the tasks in the OpenMIC. To create and manage users, the user account must have “manage users” privilege.

Create User

- i. Select **Manage User Account** from the OpenMIC initial screen
- ii. Enter First Name, Last Name, Address (optional), Email, UserID, and password.
- iii. Retype **password**.
- iv. Click **Submit**.
- v. Next you need to assign a role or roles to this user. If there are no role(s) created for your organization, create role(s) before you proceed. (See Create Role.)
- vi. Select the user.
- vii. Click **Assign role(s)**.
- viii. Select **Organization** from the Organization pull down.
- ix. Select **MIC Utility** for Module.
- x. Select the **role** from the pull down list .
- xi. Click **Submit**.

- xii. Click **Cancel** to return to the OpenMIC Initial Screen *or* **Back** to return to User Account screen.

Create Role

- i. Select **Manage User Account** from the OpenMIC initial screen.
- ii. Select the user from the Registered Users screen.
- iii. Select the **Organization** from the pull down list.
- iv. Select **MIC Utility** from the pull down list for module.
- v. Click **edit roles**.
- vi. Enter role name and role description in the data entry box on Role-Privilege Relationship screen.
- vii. Select privilege(s) associated with this role.
- viii. Click **Submit**.
- ix. Click **Cancel** to return to the OpenMIC Initial Screen *or* **Back** to return to User Account screen.

Edit User

- i. Select **Manage User Account** from the OpenMIC initial screen.
- ii. Select the user from the Registered Users screen.
- iii. Edit user information.
- iv. Click **Submit**.
- v. To delete a previously assigned role:
 - o Click **Assign Role(s)**.
 - o Select the *role* under Current Role Assignment.
 - o Click **Delete**.
- vi. To change a previously assigned role:
 - o Click **Assign Role(s)**.
 - o *Select* the *role* under Current Role Assignment.
 - o Select a new role from the pull down.
 - o Click **Submit**.
- vii. Click **Cancel** to return to the OpenMIC Initial Screen *or* **Back** to return to User Account screen.

Edit Role

- i. If you are editing the role, click **Assign Role(s)**.

- ii. Select **Organization** from the pick list.
- iii. Select **Module**.
- iv. Select **Role** from the pick list.
- v. Click **Submit**.
- vi. Click **Cancel** to return to the OpenMIC initial screen.

Delete User

- i. Select **Manage User Account** from the OpenMIC Initial Screen.
- ii. Select user from the Registered Users screen.
- iii. Click **Delete User**.
- iv. Click **OK**.
- v. Click **Cancel** to the previous screen.

Delete Role (not implemented in the current version)

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; Enter Controlled Vocabulary terms
Manage User	Edit username; Edit password; Create User; Assign Role(s)			
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

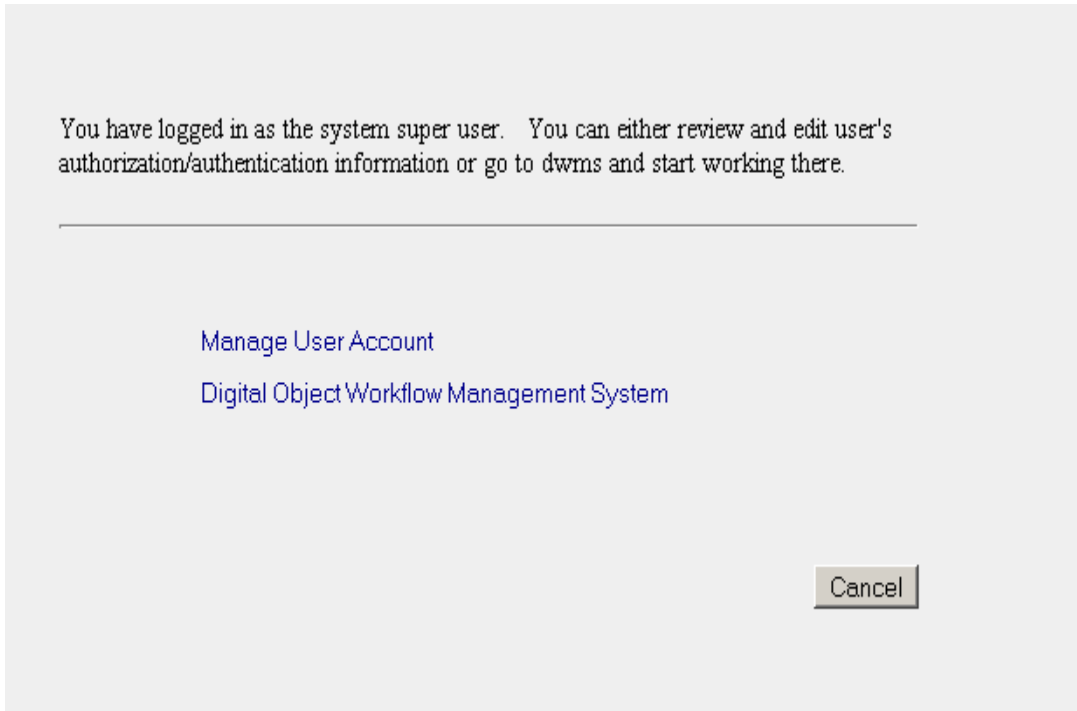


Figure 1.3.1: OpenMIC initial screen

User Account

First Name:

Last Name:

Address:

Email:

UserID (for login):

Password:

Re-type Password:

Figure 1.3.2: User account screen

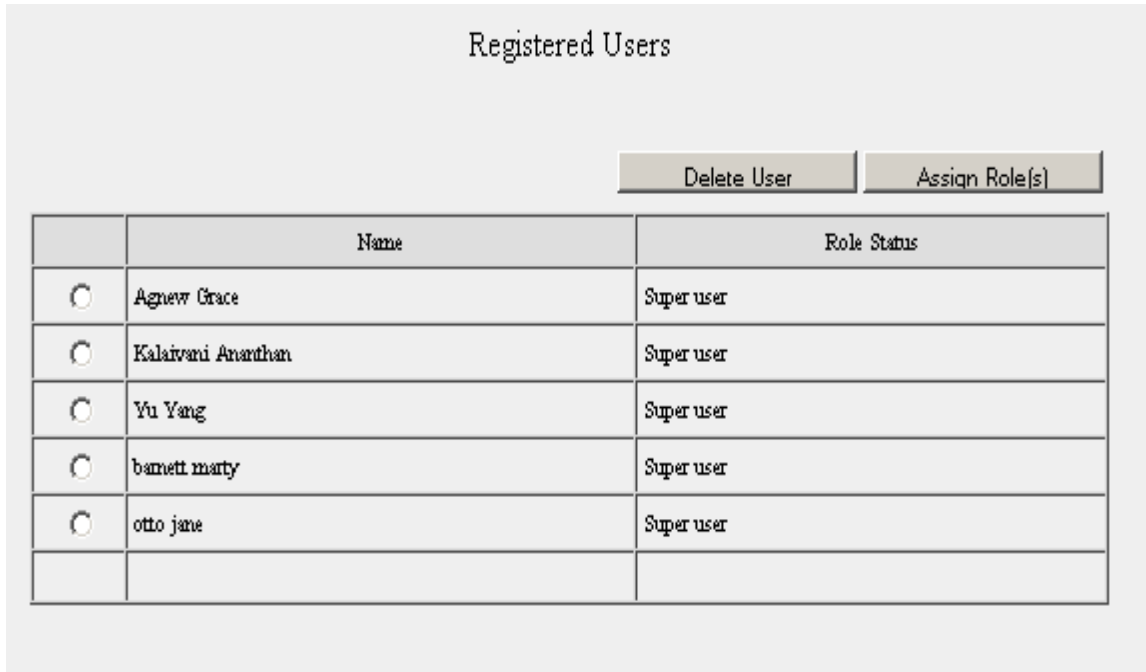


Figure 1.3.3: Registered Users screen

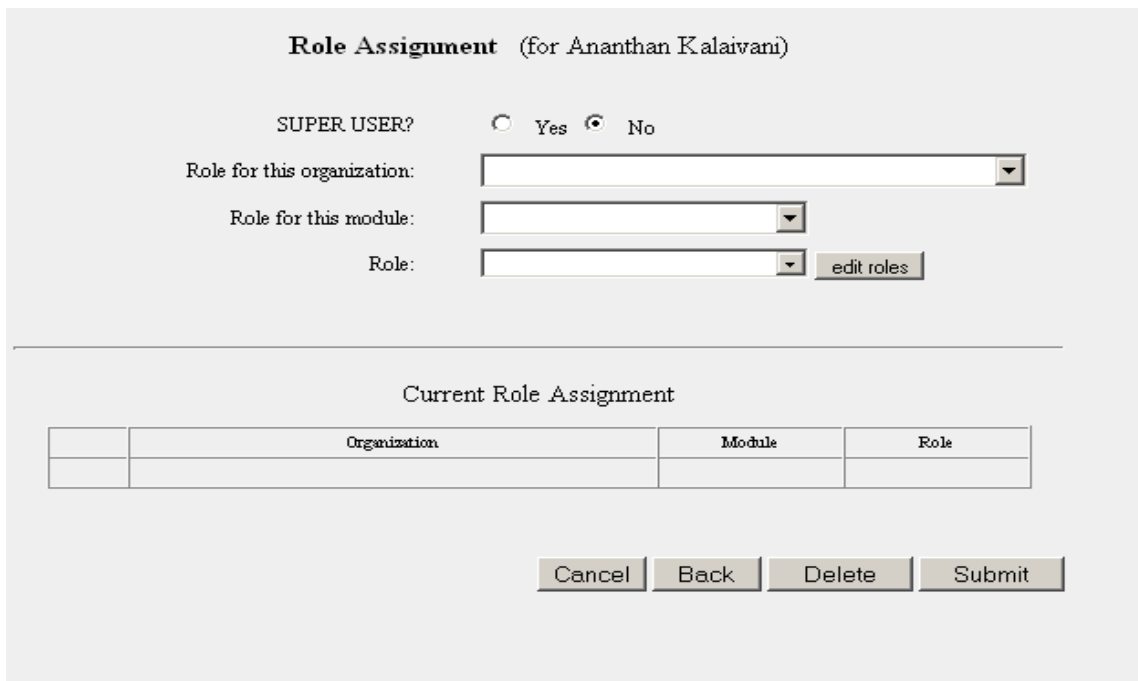


Figure 1.3.4: Role assignment screen

Role - Privilege Relationship

Roles for this module:

Existing Roles:

- Organization Manager
- Export Manager
- CV Manager
- Import Manager

Role Name:

Role Description:

Privilege:

- manage user
- manage collections
- configure cataloging utility
- mapping
- batch import
- export
- metadata cataloging
- view/generate report
- read only

Figure 1.3.5: Role – Privilege relationship sample screen

Step 2: Metadata and digital objects

You must have an organization record and collection record created before you start creating 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 (Manual Input) (Figures 2.1.1 to 2.1.9)*

Tips:

1. In some cases, all or many of the resources in a collection will share the 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 New Record* is selected.
2. Templates can be enabled for the entire collection or for a specific resource. To create and to enable a template, refer to section 2.1.1.
3. To enable a template for a specific resource, click on *Template* at top of the metadata entry screen, select a template, and click *Apply*.

- i. Select *Digital Object Workflow Management System* from the OpenMIC initial screen.
- ii. Select *Metadata and digital objects*.
- iii. Select *Collection* from the collection list.
- iv. Select *Metadata Cataloging*.
- v. Select *Start Cataloging*.
- vi. Click *Create New Record*.
- vii. Select *Digital Object Content Type*.
- viii. Enter metadata. For detailed information about the metadata elements, please refer to Metadata Guides found on the download page.
- ix. Click *Save* at top or bottom of the screen.
- x. Click *Exit* to return to the Start Cataloging Screen.

Edit Metadata

- i. Select *Digital Object Workflow Management System*.
- ii. Select *Metadata and digital objects*.
- iii. Select *Collection* from the collection list.
- iv. Select *Metadata Cataloging*.
- v. Select *Start Cataloging*.

- vi. Select the record you want to edit and click **Edit**.
- vii. Make metadata changes.
- viii. Click **Save**.
- ix. Click **Exit** to return to the Start Cataloging Screen.

Delete Metadata

- i. Select **Digital Object Workflow Management System** from the OpenMIC initial screen.
- ii. Select **Metadata and digital objects**.
- iii. Select **Collection** from the collection list.
- iv. Select **Metadata Cataloging**.
- v. Select **Start Cataloging**.
- vi. Select the record you want to delete.
- vii. Click **Delete**.
- viii. Click **OK**.
- ix. Click **Exit** to return to the Start Cataloging Screen.

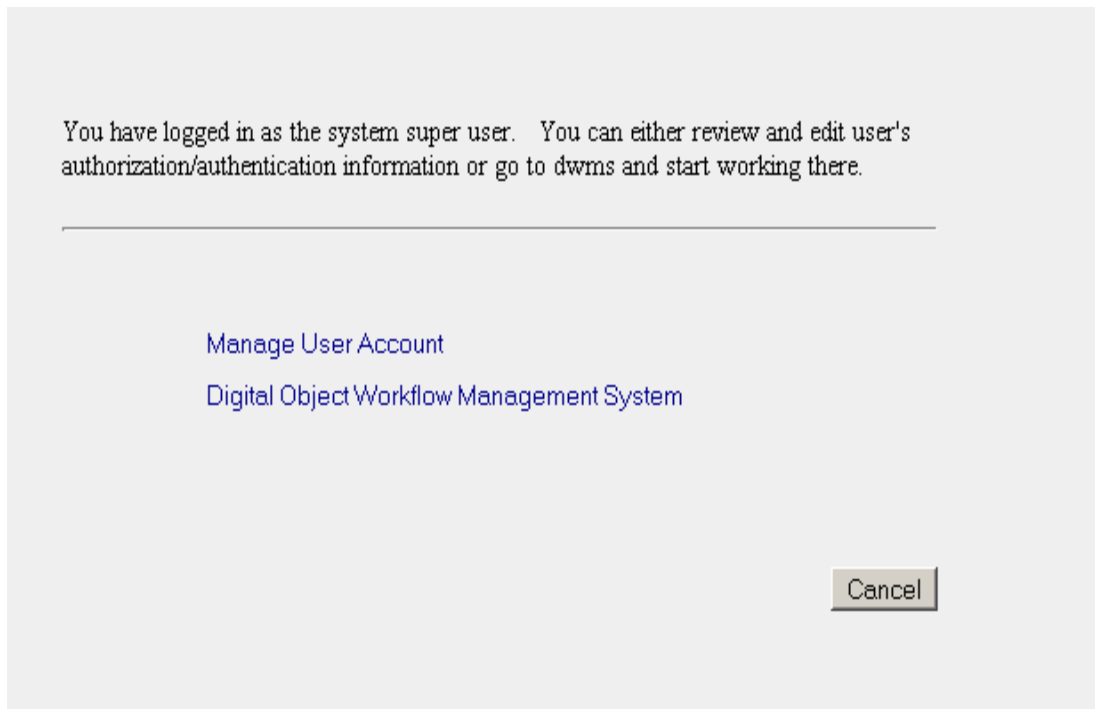


Figure 2.1.1: OpenMIC initial screen

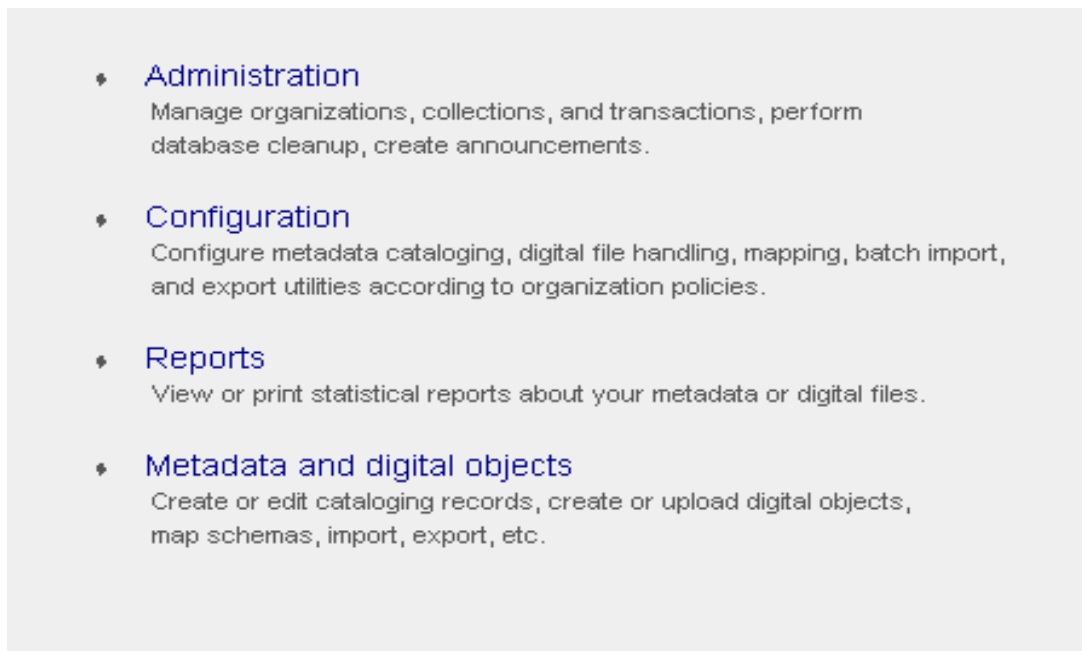


Figure 2.1.2: Digital Object Workflow Management System main screen



Figure 2.1.3: Organization - Collection List screen

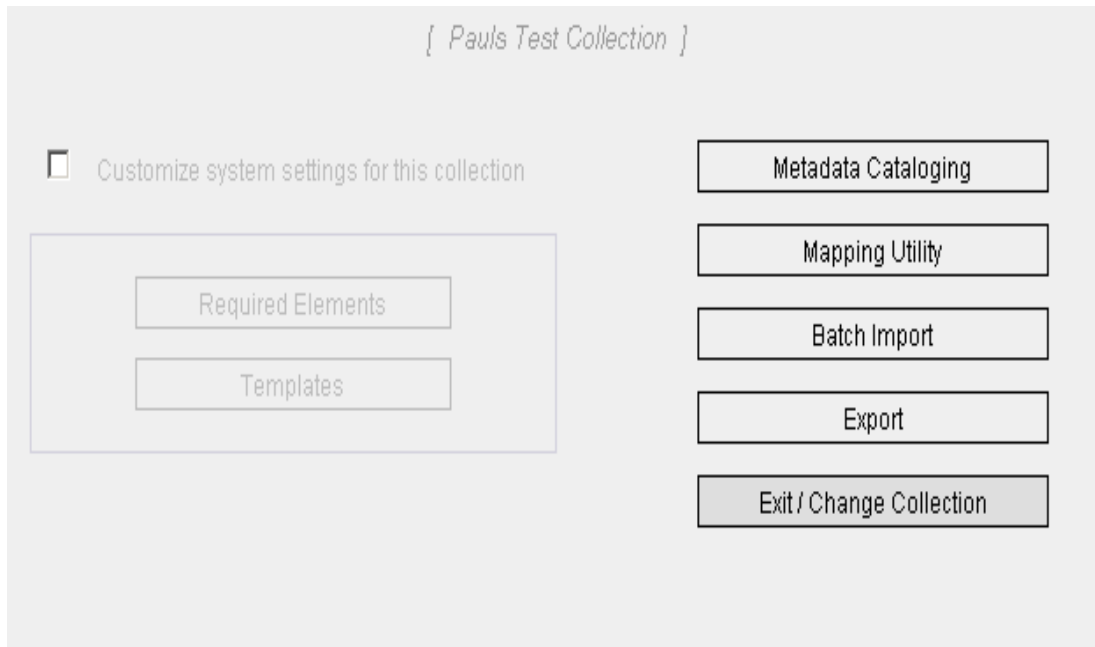


Figure 2.1.4: Main Bibliographic Utility screen

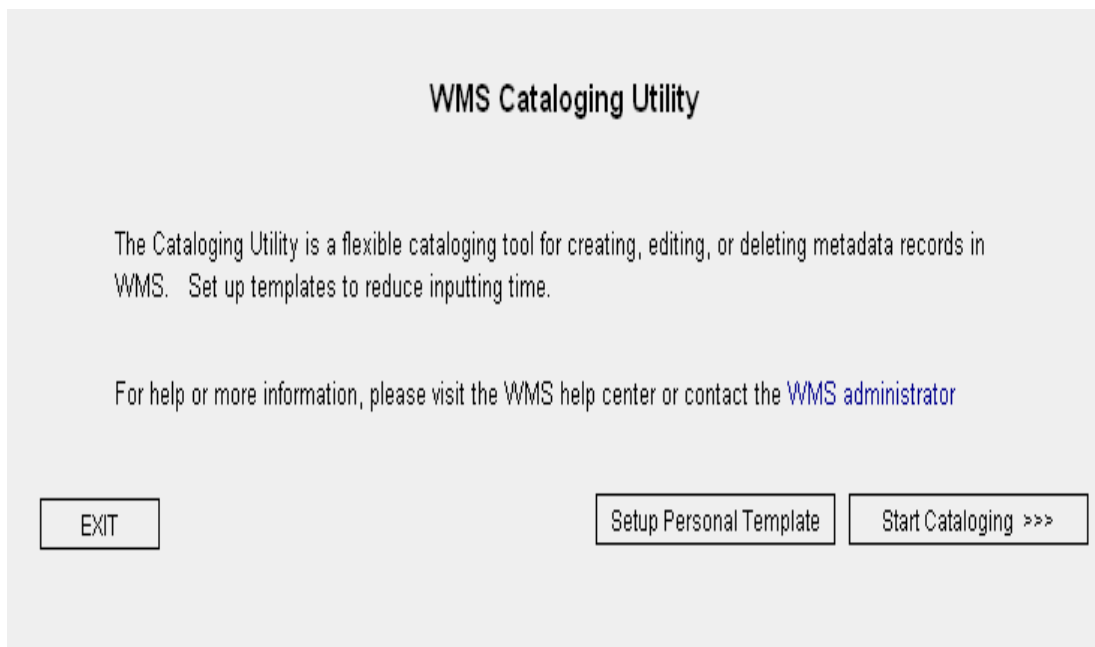


Figure 2.1.5: MIC Cataloging Utility screen

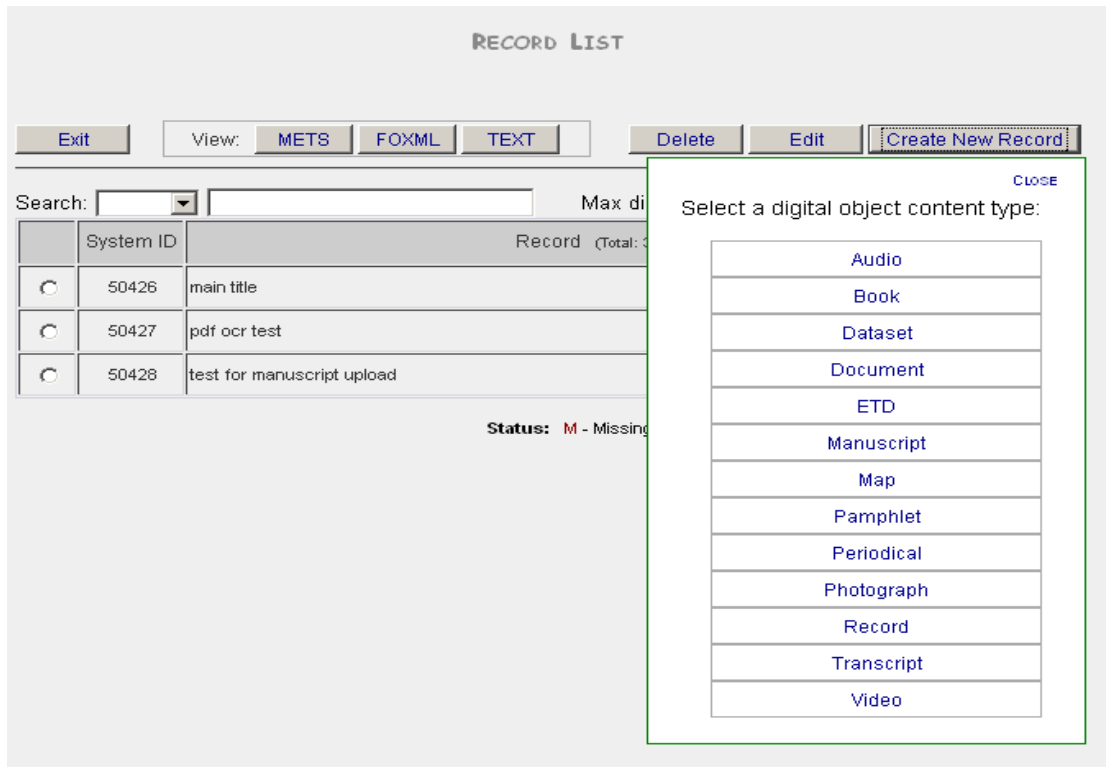


Figure 2.1.6: Metadata record list screen

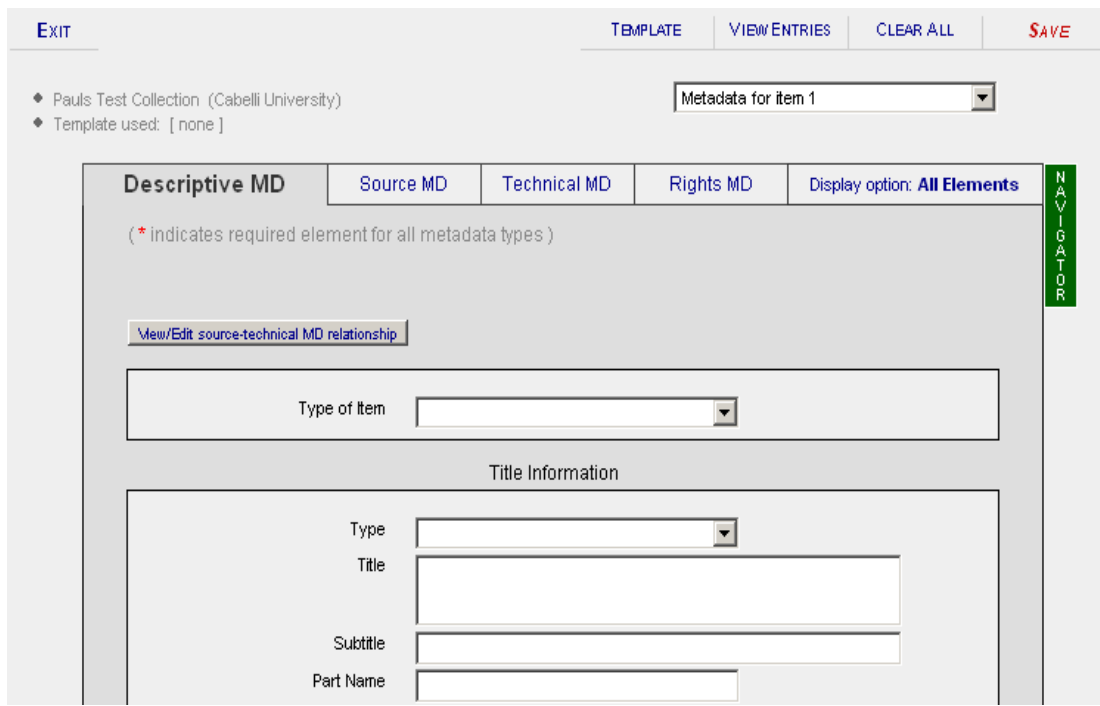
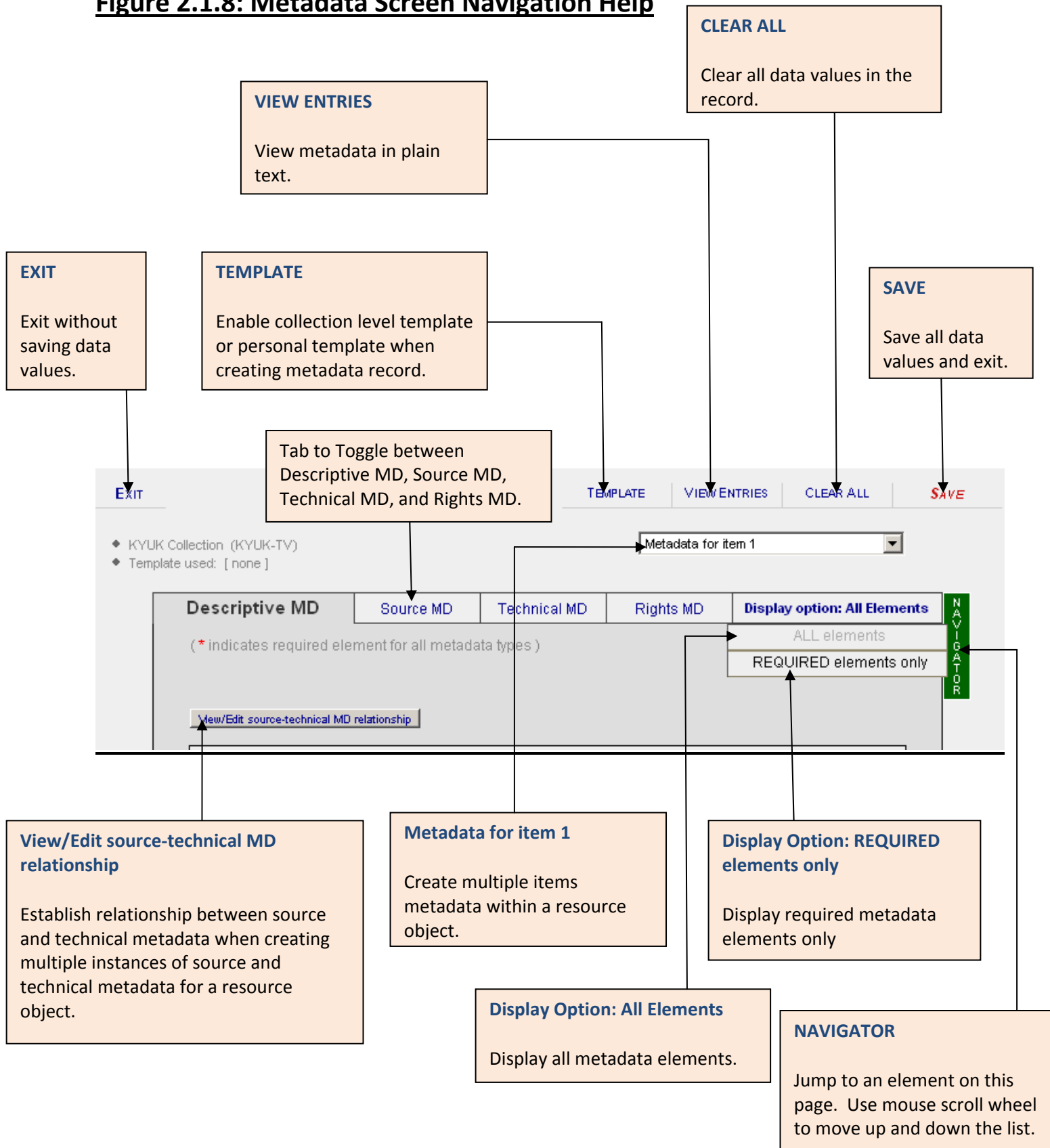


Figure 2.1.7: Descriptive metadata entry screen

Figure 2.1.8: Metadata Screen Navigation Help



View Metadata

- i. Select **Digital Object Workflow Management System** from the OpenMIC initial screen.
- ii. Select **Metadata and digital objects**.
- iii. Select **Collection** from the Organization List.
- iv. Select **Metadata Cataloging**.
- v. Select **Start Cataloging**.
- vi. Select the record. Select **METS, FOXML or TEXT**.
- vii. Click **Exit** to return to the Start Cataloging Screen.

```
<?xml version="1.0" encoding="utf-8"?>
<METS:mets xmlns:METS="http://www.loc.gov/METS/" xmlns:mods="http://www.loc.gov/mods/" xmlns:oai_d
  <METS:metsHdr ID="H1" CREATEDATE="2008-11-13T11:02:38" LASTMODDATE="2008-11-13T11:02:38" RECORDS
  <METS:dmdSec ID="DMD-1" GROUPID="" ADMID="AMD-1" CREATED="2008-10-24T08:59:22" STATUS="A">
    <METS:mdWrap MIMETYPE="text/xml" MDTYPE="OTHER" LABEL="MODS Metadata">
      <METS:xmlData>
        <mods:mods>
          <mods:typeOfResource>Text</mods:typeOfResource>
          <mods:titleInfo ID="T-1" type="">
            <mods:title>KA first test title</mods:title>
          </mods:titleInfo>
        </mods:mods>
      </METS:xmlData>
    </METS:mdWrap>
  </METS:dmdSec>
  <METS:amdSec ID="AMD-1">
    <METS:techMD ID="TMD-1.1" GROUPID="" ADMID="SMD-1.1" CREATED="2008-10-24T08:59:22" STATUS="A">
      <METS:mdWrap>
        <METS:xmlData>
          <rulib:RULTechMD>
            <rulib:preservationLevel>bit level</rulib:preservationLevel>
          </rulib:RULTechMD>
        </METS:xmlData>
      </METS:mdWrap>
    </METS:techMD>
  </METS:amdSec>
</METS:mets>
```

Figure 2.1.9: Metadata record in METS XML

```

<?xml version="1.0" encoding="utf-8"?>
<foxml:digitalObject xmlns:foxml="info:fedora/fedora-system:def/foxml#">
  <foxml:objectProperties>
    <foxml:property NAME="http://www.w3.org/1999/02/22-rdf-syntax-ns#type" VALUE="FedoraObject" />
    <foxml:property NAME="info:fedora/fedora-system:def/model#state" VALUE="A" />
    <foxml:property NAME="info:fedora/fedora-system:def/model#label" VALUE="" />
  </foxml:objectProperties>
  <foxml:datastream ID="DC" STATE="A" CONTROL_GROUP="X" VERSIONABLE="true">
    <foxml:datastreamVersion ID="DC.0" MIMETYPE="text/xml" LABEL="Default Dublin Core Record">
      <foxml:xmlContent>
        <oai_dc:dc xmlns:oai_dc="http://www.openarchives.org/OAI/2.0/oai_dc/">
          <dc:title xmlns:dc="http://purl.org/dc/elements/1.1/">KA first test title</dc:title>
          <dc:type xmlns:dc="http://purl.org/dc/elements/1.1/">Text</dc:type>
        </oai_dc:dc>
      </foxml:xmlContent>
    </foxml:datastreamVersion>
  </foxml:datastream>
  <foxml:datastream ID="DMD-1" STATE="A" CONTROL_GROUP="X" VERSIONABLE="true">
    <foxml:datastreamVersion ID="DMD-1.0" MIMETYPE="text/xml" LABEL="Descriptive Metadata (MOI)">
      <foxml:xmlContent>
        <mods:mods xmlns:mods="http://www.loc.gov/mods/">
          <mods:typeOfResource>Text</mods:typeOfResource>
          <mods:titleInfo ID="T-1" type="">
            <mods:title>KA first test title</mods:title>
          </mods:titleInfo>
        </mods:mods>
      </foxml:xmlContent>
    </foxml:datastreamVersion>
  </foxml:datastream>
  <foxml:datastream ID="TMD-1.1" STATE="A" CONTROL_GROUP="X" VERSIONABLE="true">
    <foxml:datastreamVersion ID="TMD-1.1.0" MIMETYPE="text/xml" LABEL="Technical Metadata 1" >
      <foxml:xmlContent>
        <rulib:RULTechMD xmlns:rulib="http://www.scc.rutgers.edu/">
          <rulib:preservationLevel>bit level</rulib:preservationLevel>
        </rulib:RULTechMD>
      </foxml:xmlContent>
    </foxml:datastreamVersion>
  </foxml:datastream>
</foxml:digitalObject>

```

Figure 2.1.10: Metadata record in FOXML

Metadata Entries

Descriptive:

Type Of Resource: Text

Title Info:

Main Title: KA first test title

Technical:

Preservation Level: bit level

Close

Figure 2.1.11: Metadata record in TEXT

2.1.1) Create Template (Figures 2.1.1.1 to 2.1.1.15)

There are two different templates available in the OpenMIC -- collection level and personal level. A collection level template will be applied to all resources within the collection by metadata creators. To create a collection level template, the user must have "Configure Cataloging Utility" permission. If the collection level template is set as a default template, it is applied to the metadata record automatically when Create New Record is selected. If it is not set as a default template, metadata creators can enable the template at the time they create the 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 the metadata record automatically when Create New Record is selected. If it is not set as a default template, metadata creators can enable the template at the time they create the metadata record.

Create collection level template:

- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select the collection from the Collection List.
- iii. Select **Customize system settings for this collection**.
- iv. Select **Templates**.
- v. Select **Create New Template**. You will get a screen similar to **Create New Record** screen.
- vi. You may either create a new template or use an existing metadata record as a new template.
 - a) To create a new template:
 - o Select **main** for Title Information Type.
 - o Enter Title for the template.
 - o Enter metadata.
 - o Click **Save**.
 - o If you want to save this template as a default template, click **Set Default** button.
 - b) To create a new template using an existing metadata record: (see figure 2.1.1.13)
 - o Select **Use Existing Metadata**.
 - o Select the metadata record to use as template.
 - o Click **Apply to Template**.
 - o Click **OK**.
 - o Select **main** for Title Information Type.
 - o Enter Title for the template.
 - o Click **Save**.
 - o If you want to save this template as a default template, click **Set Default button**.
 - c) Click **Exit** to return to the Main Bibliographic Utility screen.

Edit collection level template:

- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select the collection from the Collection List.
- iii. Select **Customize system settings for this collection**.
- iv. Select **Templates**.
- v. Select a **template** from the Template List.
- vi. Select **Edit**.
- vii. Make changes.
- viii. Click **Save**.
- ix. Click **Exit** to return to the Main Bibliographic Utility screen.

Delete collection level template:

- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select the collection from the Collection List.
- iii. Select **Customize system settings for this collection**.
- iv. Select **Templates**.
- v. Select a template from the Template List.
- vi. Click **Delete**.
- vii. Click **Exit** to return to the Main Bibliographic Utility screen.



Figure 2.1.1.1: Digital Object Workflow Management System main screen

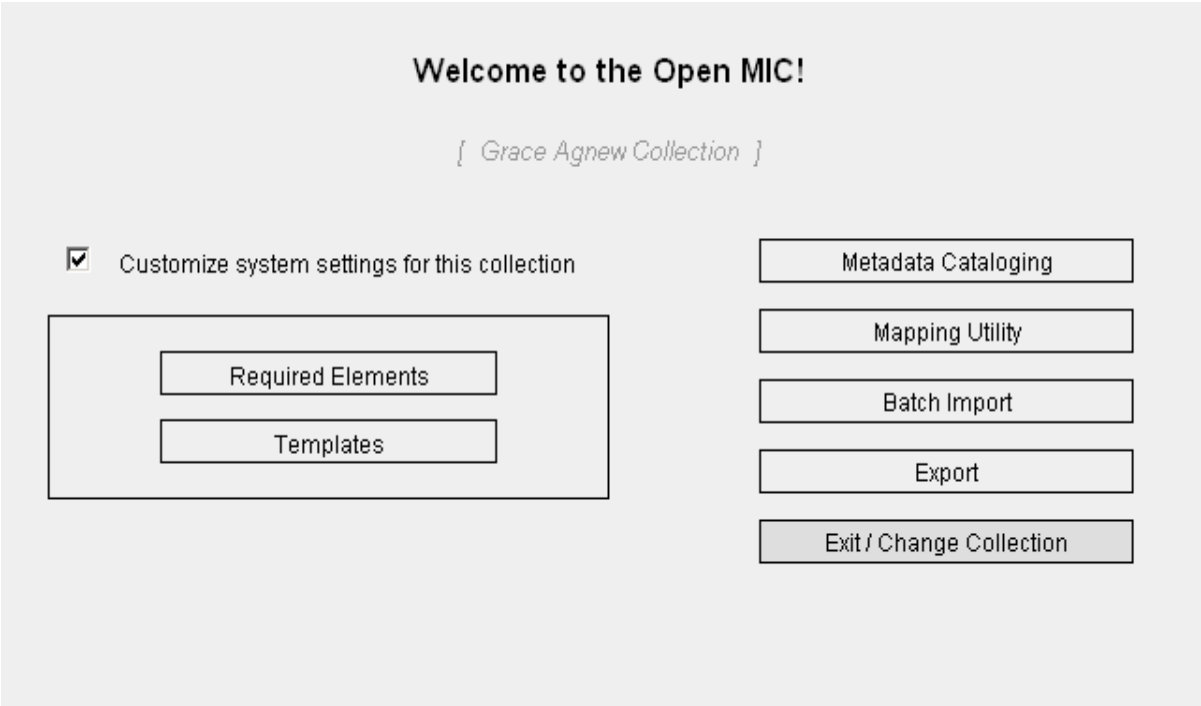


Figure 2.1.1.2: Main Bibliographic utility screen

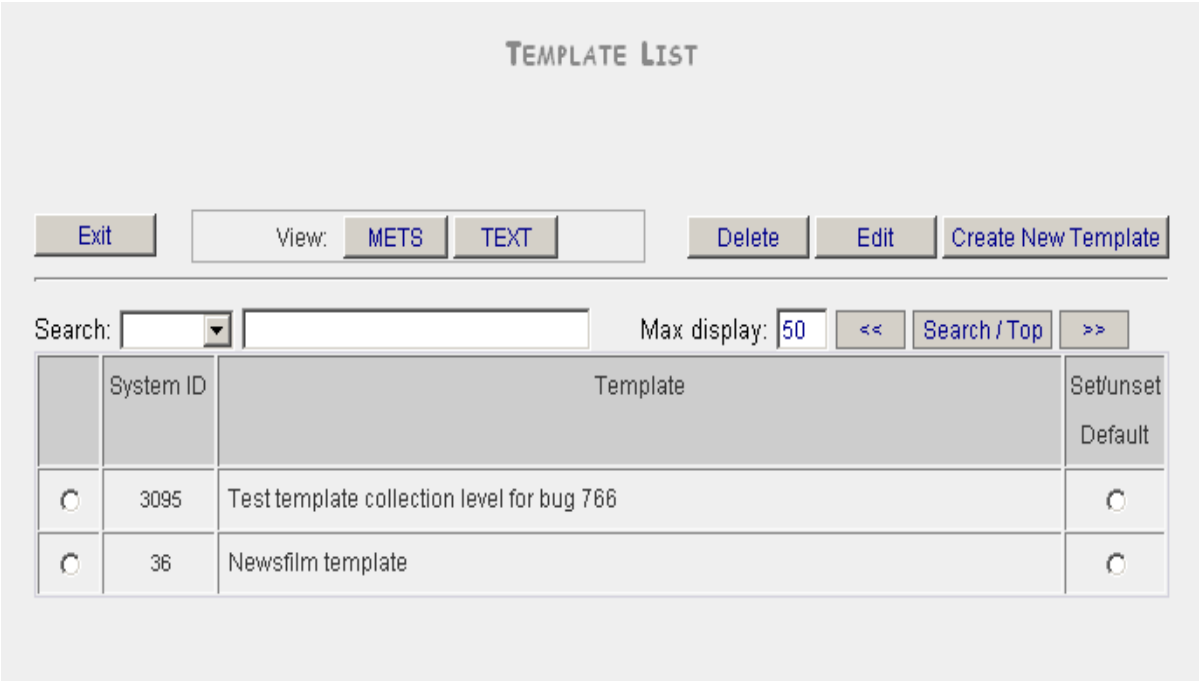


Figure 2.1.1.3: Template List screen

EXIT USE EXISTING METADATA VIEW ENTRIES CLEAR ALL SAVE

◆ KYUK Collection (KYUK-TV) Metadata for item 1

◆ Template used: [none]

Descriptive MD Source MD Technical MD Rights MD Display option: All Elements

(* indicates required element for all metadata types)

[View/Edit source-technical MD relationship](#) Collection Template

Type of item

Title Information

Type

Title

Subtitle

Part Name

NAVIGATOR

Figure 2.1.1.4: Template data entry screen

Existing Resource for Collection 6

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

Figure 2.1.1.5: Existing resource record Screen

View collection level template

- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select the collection from the Collection List.
- iii. Select **Customize system settings for this collection**.
- iv. Select the **Templates**.
- v. Select a **template** from the Template List.
- vi. Click **METS or TEXT**.
- vii. Click **Exit** to return to the previous screen.

```
<?xml version="1.0" encoding="utf-8"?>
<METS:mets xmlns:METS="http://www.loc.gov/METS/" xmlns:mods="http://www.loc.gov/mods/" xml
  <METS:metsHdr ID="H1" CREATEDATE="2008-11-21T14:38:46" LASTMODDATE="2008-11-21T14:38:46"
  <METS:dmdSec ID="DMD-1" GROUPID="" ADMID="AMD-1" CREATED="2008-11-21T14:14:16" STATUS="A
  <METS:mdWrap MIMETYPE="text/xml" MDTYPE="OTHER" LABEL="MODS Metadata">
    <METS:xmlData>
      <mods:mods>
        <mods:typeOfResource>MovingImage</mods:typeOfResource>
        <mods:titleInfo ID="T-1" type="">
          <mods:title>NYU Class template</mods:title>
        </mods:titleInfo>
        <mods:identifier type="micUCRecordID">1234</mods:identifier>
        <mods:language>
          <mods:languageTerm authority="local"></mods:languageTerm>
        </mods:language>
        <mods:genre authority="MIGFG-form">Animation</mods:genre>
        <mods:subject ID="SBJ-1" authority="aat"></mods:subject>
        <mods:targetAudience authority="GEM">Higher education</mods:targetAudience>
      </mods:mods>
    </METS:xmlData>
  </METS:mdWrap>
</METS:dmdSec>
</METS:mets>
```

.-

Figure 2.1.1.6: View template in METS XML

Metadata Entries

Descriptive:

Type Of Resource: MovingImage

Title Info:

Main Title: NYU Class template

Identifier:

Type: micUCRecordID

Identifier: 1234

Language:

Term Authority: local

Genre:

Genre Authority: MIGFG-form

Genre: Animation

Target Audience:

Audience Authority: GEM

Target Audience: Higher education

Close

Figure 2.1.1.7: View template in TEXT

Create personal template:

- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select the collection from the Collection List.
- iii. Select **Metadata Cataloging**.
- iv. Select **Setup Personal Template**.
- v. Select **Create New Template**. You will get a screen similar to *Create New Record* screen.
- vi. You may either create a new template or use an existing metadata record as a new template.
 - a) To create a new template:
 - Select **main** for Title Information Type.
 - Enter a Title for the template.
 - Enter metadata.
 - Click **Save**.
 - If you want to save this template as a default template, click **Set Default button**.
 - b) To create a new template using an existing metadata record: (see figure 2.1.1.13)

- Select **Use Existing Metadata**.
 - Select the metadata record to use as template.
 - Click **Apply to Template**.
 - Click **OK**.
 - Select **main** for Title Information Type.
 - Enter a Title for the template.
 - Click **Save**.
 - If you want to save this template as a default template, click *Set Default* button.
- vii. Click **Exit** to return to the Main Bibliographic Utility screen.

Edit personal template:

- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select the collection from the Collection List.
- iii. Select **Metadata Cataloging**.
- iv. Select *Setup Personal Template*.
- v. Select the template.
- vi. Select **Edit**.
- vii. Make changes.
- viii. Click **Save**.
- ix. Click **Exit** to return to the Main Bibliographic Utility screen.

Delete personal template:

- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select the collection from the Collection List.
- iii. Select **Metadata Cataloging**.
- iv. Select *Setup Personal Template*.
- v. Select the template.
- vi. Click **Delete**.
- vii. Click **OK**.
- viii. Click **Exit** to return to the Main Bibliographic Utility screen.

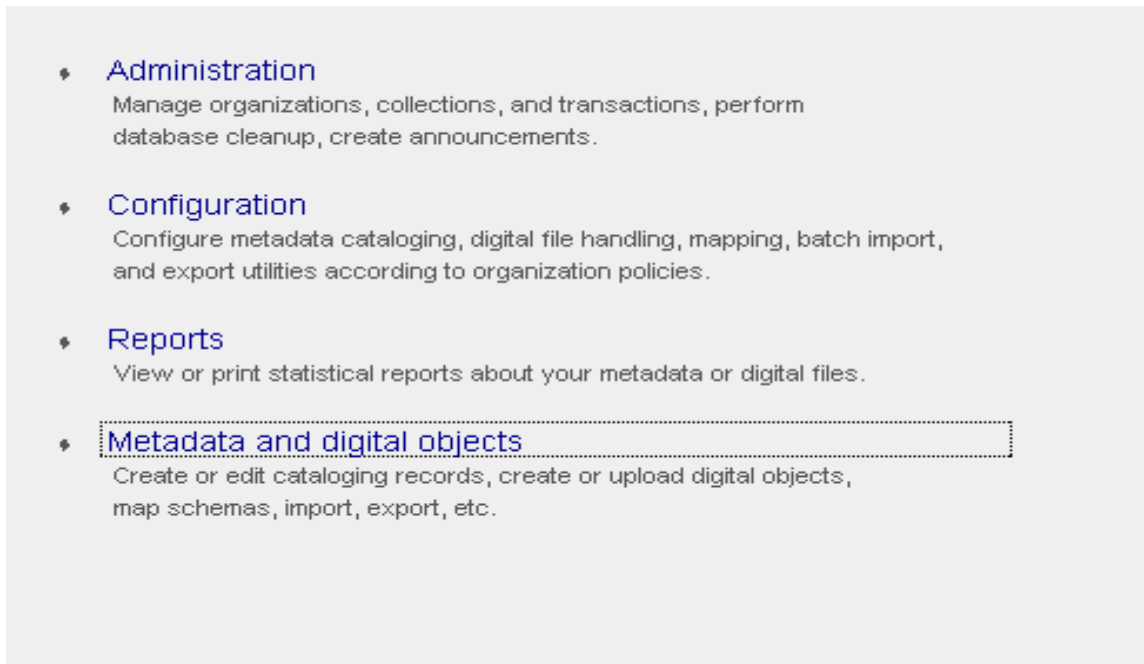


Figure 2.1.1.8: Digital Object Workflow Management System main screen

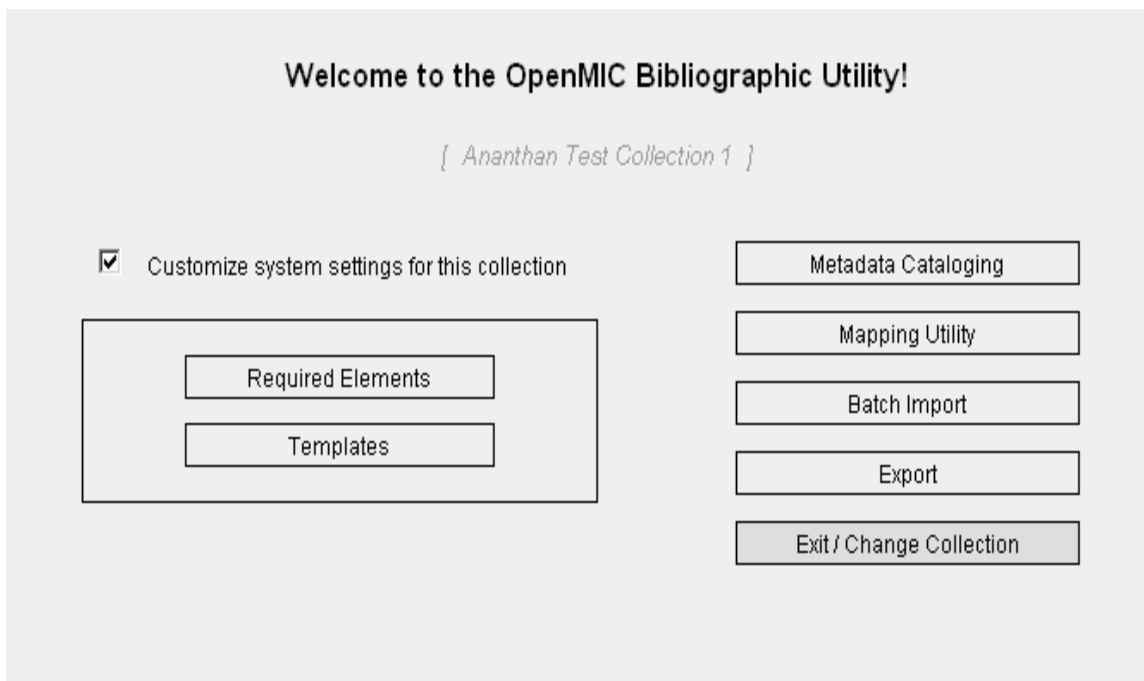


Figure 2.1.1.9: Main Bibliographic Utility screen

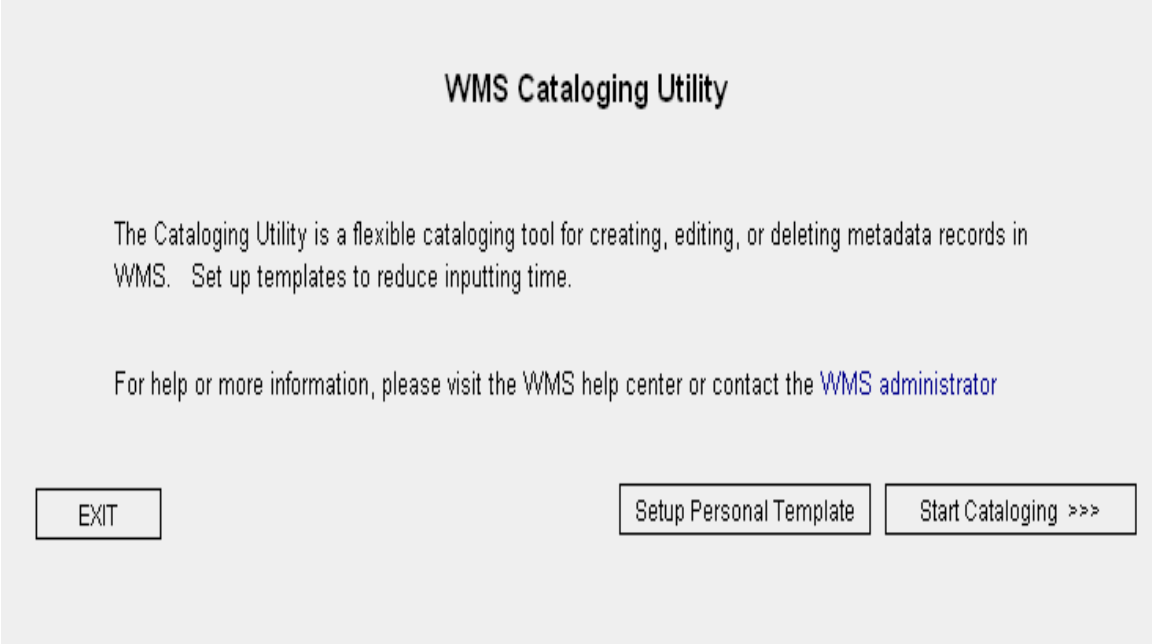


Figure 2.1.1.10: Cataloging Screen

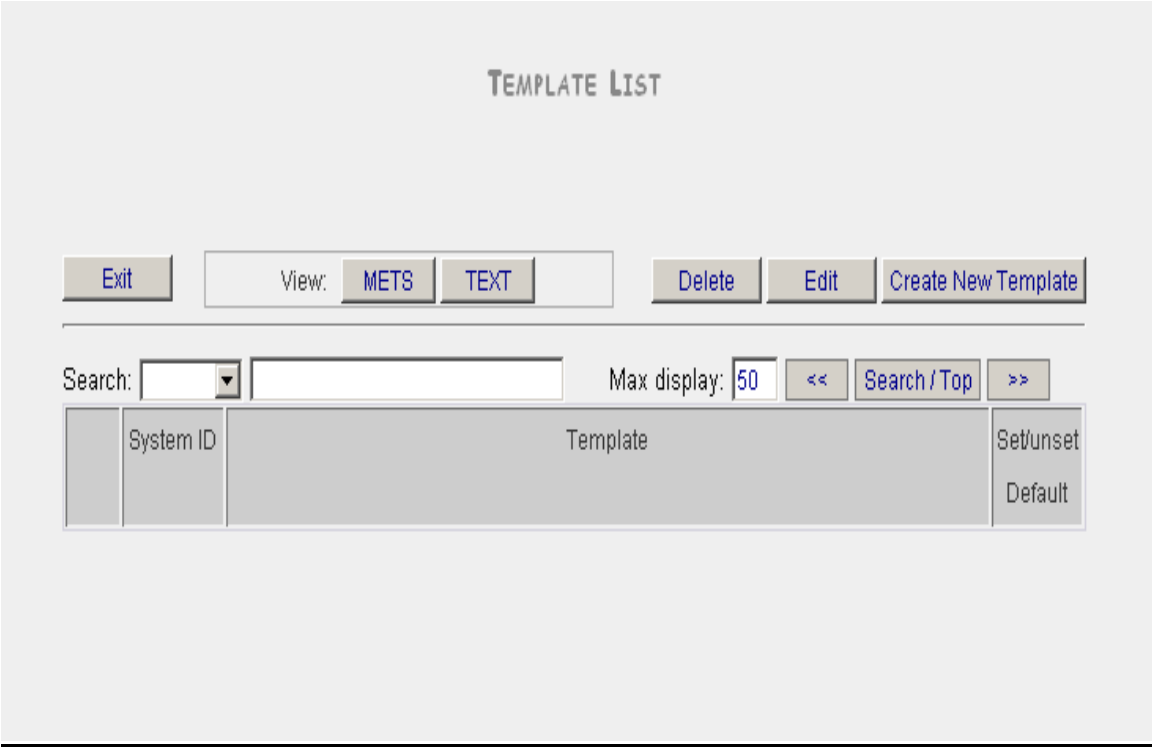


Figure 2.1.1.11: Template list screen

EXIT USE EXISTING METADATA VIEW ENTRIES CLEAR ALL SAVE

KYUK Collection (KYUK-TV) Metadata for item 1
 Template used: [none]

Descriptive MD Source MD Technical MD Rights MD Display option: All Elements NAVIGATOR

(* indicates required element for all metadata types)

View/Edit source-technical MD relationship User Template

Type of item []

Title Information

Type []
 Title []
 Subtitle []
 Part Name []
 Part Number []
 Nonsort []

Figure 2.1.1.12: Template data entry screen

Existing Resource for Collection 6

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

Figure 2.1.1.13: Existing metadata record screen

View personal template:

- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select the collection from the Collection List.
- iii. Select **Metadata Cataloging**.
- iv. Select **Setup Personal Template**.
- v. Select **Templates**.
- vi. Click **METS to view in XML or Text** to view in plain text.
- vii. Click **Exit** to return to the previous screen.

```
<?xml version="1.0" encoding="utf-8"?>
<METS:mets xmlns:METS="http://www.loc.gov/METS/" xmlns:mods="http://www.loc.gov/mods/" xml
  <METS:metsHdr ID="H1" CREATEDATE="2008-11-21T14:38:46" LASTMODDATE="2008-11-21T14:38:46"
  <METS:dmdSec ID="DMD-1" GROUPID="" ADMID="AMD-1" CREATED="2008-11-21T14:14:16" STATUS="A
    <METS:mdWrap MIMETYPE="text/xml" MDTYPE="OTHER" LABEL="MODS Metadata">
      <METS:xmlData>
        <mods:mods>
          <mods:typeOfResource>MovingImage</mods:typeOfResource>
          <mods:titleInfo ID="T-1" type="">
            <mods:title>NYU Class template</mods:title>
          </mods:titleInfo>
          <mods:identifier type="micUCRecordID">1234</mods:identifier>
          <mods:language>
            <mods:languageTerm authority="local"></mods:languageTerm>
          </mods:language>
          <mods:genre authority="MIGFG-form">animation</mods:genre>
          <mods:subject ID="SBJ-1" authority="aat"></mods:subject>
          <mods:targetAudience authority="GEM">Higher education</mods:targetAudience>
        </mods:mods>
      </METS:xmlData>
    </METS:mdWrap>
  </METS:dmdSec>
</METS:mets>
```

Figure 2.1.1.14: Personal Template in XML

Metadata Entries

Descriptive:

Type Of Resource: MovingImage

Title Info:

Main Title: NYU Class template

Identifier:

Type: micUCRecordID

Identifier: 1234

Language:

Term Authority: local

Genre:

Genre Authority: MIGFG-form

Genre: Animation

Target Audience:

Audience Authority: GEM

Target Audience: Higher education

Close

Figure 2.1.1.15: Personal Template in TEXT

2.1.2) Define Collection Level Required Elements (Figures 2.1.2.1 to 2.1.2.3)

OpenMIC allows users with Cataloging Utility privilege to define collection level required elements. The elements that are set as required are validated by OpenMIC, and, if any elements are missing values, they are flagged with “M”.

- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select **Collection**.
- iii. Select **Customize system settings for this collection**.
- iv. Select **Required Elements**.
- v. Select appropriate metadata type.
- vi. Click on the element(s).
- vii. Go through each of the metadata types and select required field entry from the list.
- viii. Click **Save**.
- ix. Click **Exit** to return to the Main Bibliographic Utility screen.

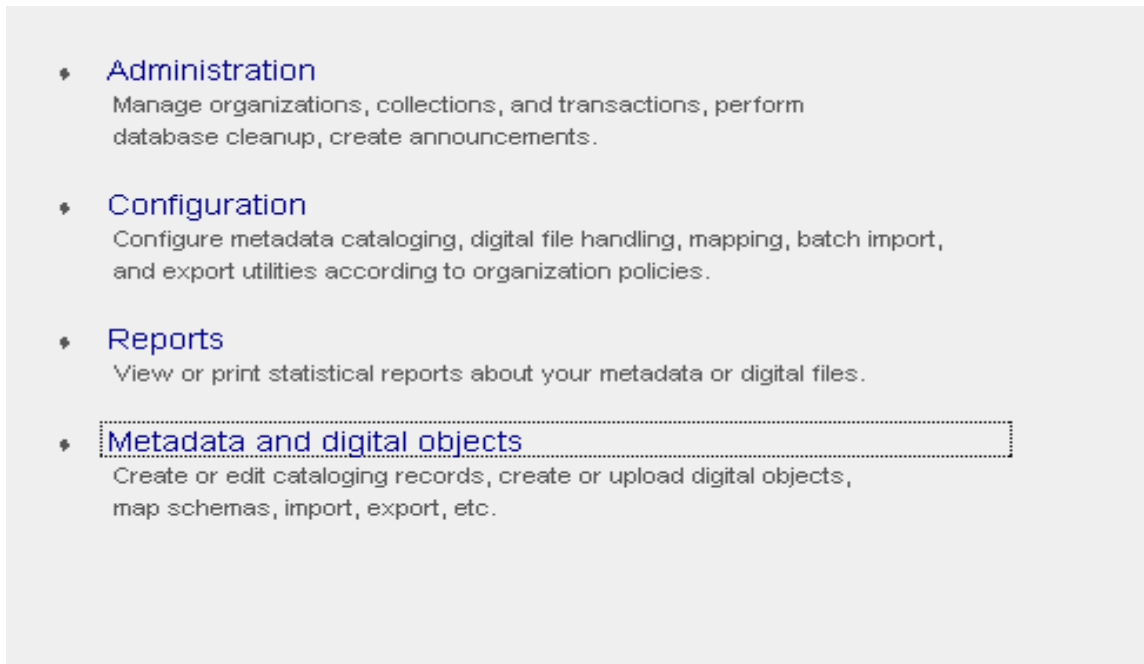


Figure 2.1.2.1: Digital Object Workflow Management System main screen

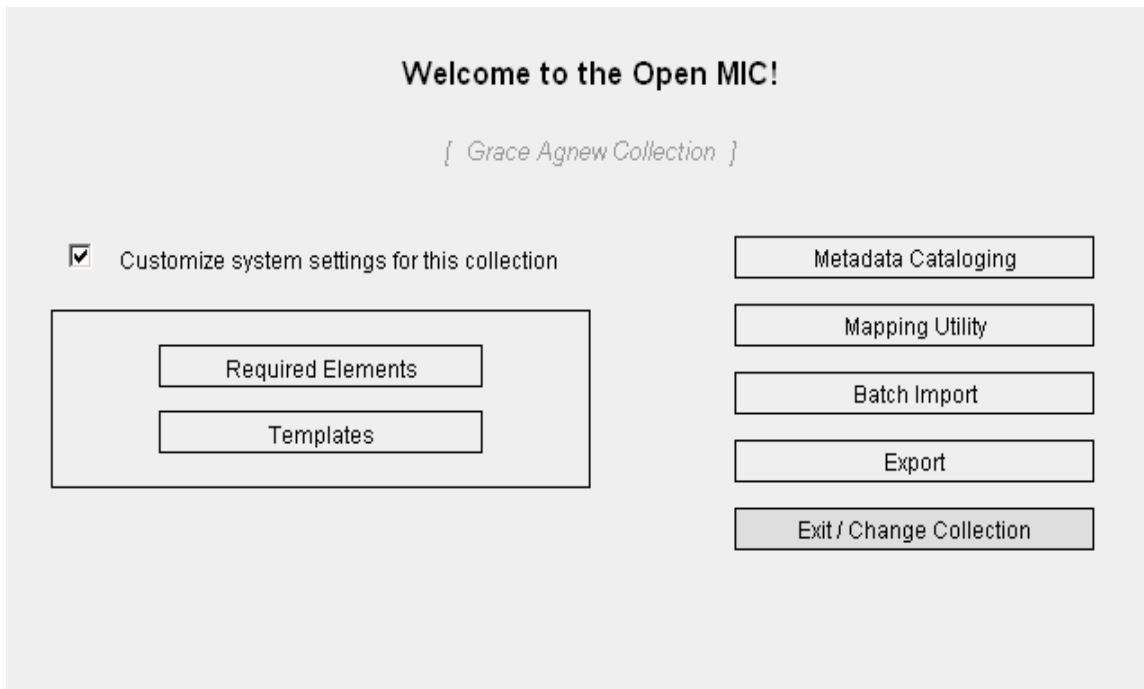


Figure 2.1.2.2: Main Bibliographic Utility screen

Required Elements

Define required elements for this collection.

(Select metadata type, then click an element on the left to move it to the required field list on the right.)

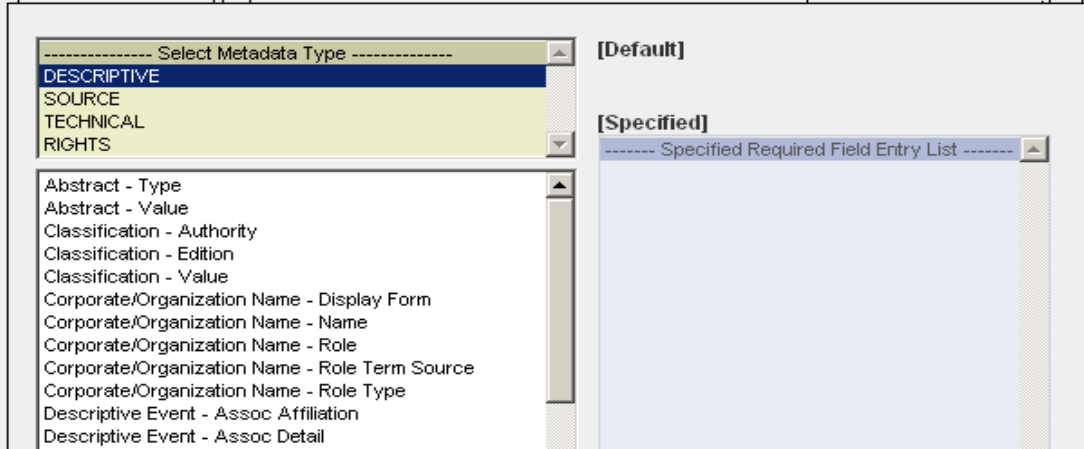


Figure 2.1.2.3: Define required elements screen

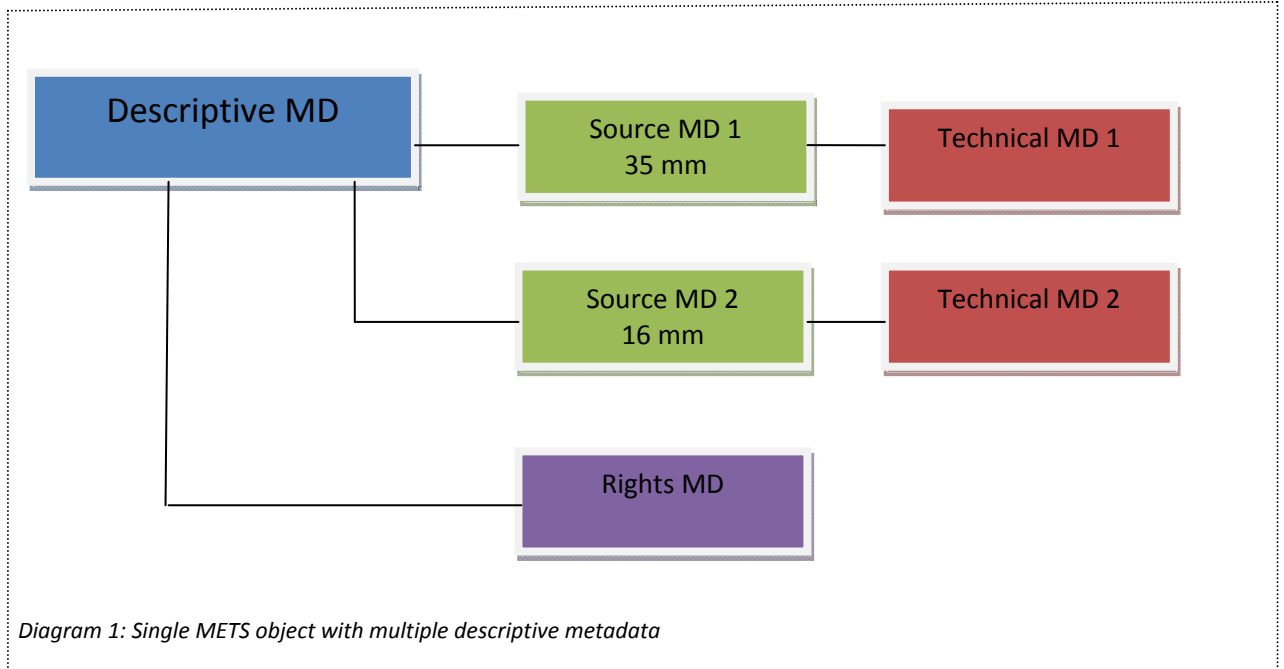
2.1.3) Create Multiple instances of metadata (Figures 2.1.3.1 to 2.1.3.9)

OpenMIC is delivered with an important functionality that allows users to create multiple instances of descriptive, source, technical, and rights metadata within a single METS object.

For example, a videotape can be made from a 16mm film which was made from a 35mm film. You may want to add source and technical metadata for both of these instances.

Create multiple instances of source and technical metadata for a single METS object:

Diagram 1 shows how multiple instances of source and technical metadata are tied together in a single METS object.



- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select **Collection** from the collection list.
- iii. Select **Metadata Cataloging**.
- iv. Select **Start Cataloging**.
- v. Click **Create New Record**.
- vi. Enter descriptive metadata.
- vii. Select **Source Metadata** and enter metadata.
- viii. Select **Add new source metadata** and add source metadata for the second instance.
- ix. Select **Technical Metadata** and enter metadata.
- x. Select **Add new technical metadata**.
- xi. Select **Source MD #2** in the window and enter technical metadata for the second instance.
- xii. Select **Rights MD** and enter rights metadata.
- xiii. Select **View-Edit source-technical MD relationship** to verify if the relationship is accurate.
- xiv. Click **Save**.
- xv. Click **Exit** to return to the Main Bibliographic Utility screen.

Edit multiple instances of source and technical metadata

- i. Select **Metadata and digital object** from the Digital Object Workflow Management main screen.
- ii. Select **Collection** from the collection list.
- iii. Select **Metadata Cataloging**.
- iv. Select **Start Cataloging**.
- v. Select Record and click **Edit**.
- vi. Select metadata type to edit.
- vii. Change metadata.
- viii. You may also edit the source-technical metadata relationship. Select **View/Edit source-technical MD Relationship**.
- ix. Select **Edit**.
- x. Select **Technical metadata set** and select the correct **source metadata set**.
- xi. Click **Submit**.
- xii. Click **Save**.
- xiii. Click **Exit** to return to the Main Bibliographic Utility screen.

Delete multiple instances of source and technical metadata

- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select **Collection** from the collection list.
- iii. Select **Metadata Cataloging**.
- iv. Select **Start Cataloging**.
- v. Select Record *and* click **Edit**.
- vi. Select **Source MD** or **Technical MD**.
- vii. Select **the instance** you want to remove.
- viii. Click **Remove**.
- ix. Click **Save**.
- x. Click **Exit** to return to the Main Bibliographic Utility screen.

View multiple instances of source and technical metadata

- i. Select **Digital Object Workflow Management System** from the OpenMIC initial screen.
- ii. Select **Metadata and digital objects**.
- iii. Select **Collection** from the Organization List.
- iv. Select **Metadata Cataloging**.
- v. Select **Start Cataloging**.
- vi. Select the record. Select **METS, FOXML or TEXT**.
- vii. Click **Exit** to return to the Start Cataloging Screen.

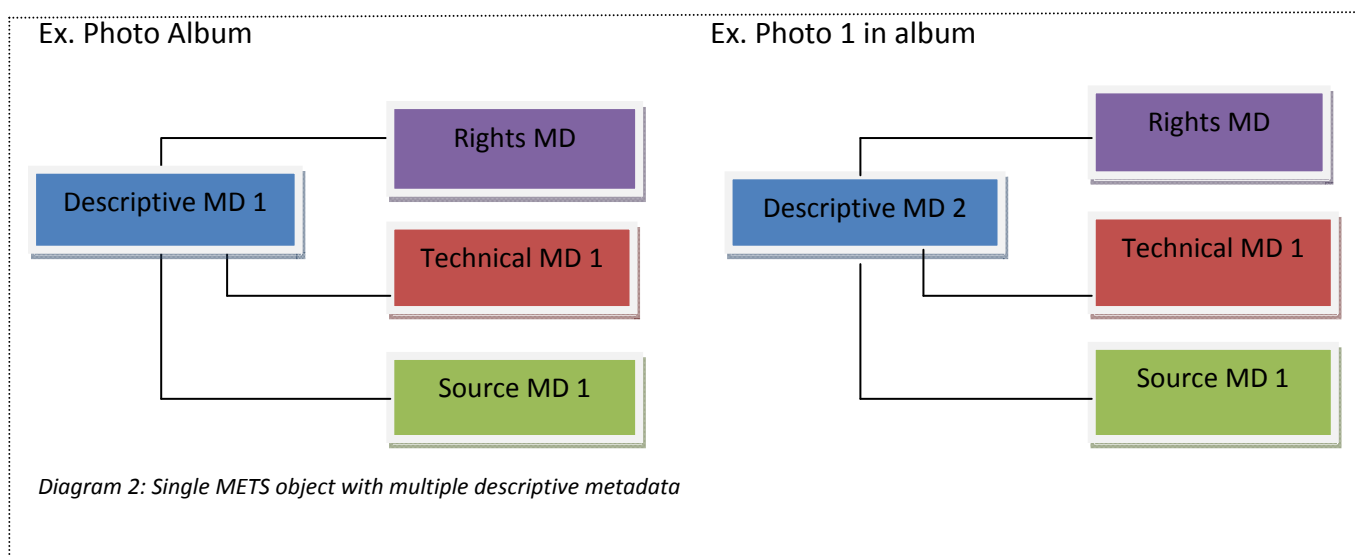
Create multiple instances of descriptive metadata for a single METS object

If you are cataloging a work containing multiple items that each item has its own metadata.

For example: A photo album containing 10 photographs.

You may want to describe the photo album as item 1 and then the individual photographs as second and so on.

Diagram 2 shows how multiple instances of descriptive, source and technical metadata tied together as a single METS object.



- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select **Collection** from the collection list.
- iii. Select **Metadata Cataloging**.
- iv. Select **Start Cataloging**.
- v. Click **Create New Record**.
- vi. Enter descriptive metadata.
- vii. Select **Source MD** and enter metadata.
- viii. Select **Technical MD** and enter metadata.

- ix. Select **Rights MD** and enter metadata.
- x. Select **Add metadata for another item of this work** from the drop down menu under “Metadata for item 1”.
- xi. Enter descriptive metadata.
- xii. Select **Source MD** and enter metadata.
- xiii. Select **Technical MD** and enter metadata.
- xiv. Select **Rights MD** and enter metadata.
- xv. Click **Save**.
- xvi. Click **Exit** to return to the Main Bibliographic Utility screen.

Edit multiple instances of descriptive metadata

- xiv. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- xv. Select **Collection** from the collection list.
- xvi. Select **Metadata Cataloging**.
- xvii. Select **Start Cataloging**.
- xviii. Select Record and click **Edit**.
- xix. Select metadata item to edit.
- xx. Change metadata.
- xxi. Click **Save**.
- xxii. Click **Exit** to return to the Main Bibliographic Utility screen.

Delete multiple instances of descriptive metadata

- xi. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- xii. Select **Collection** from the collection list.
- xiii. Select **Metadata Cataloging**.
- xiv. Select **Start Cataloging**.
- xv. Select Record and click **Edit**.
- xvi. Select metadata item to delete.
- xvii. Click **Remove**.
- xviii. Click **Exit** to return to the Main Bibliographic Utility screen.

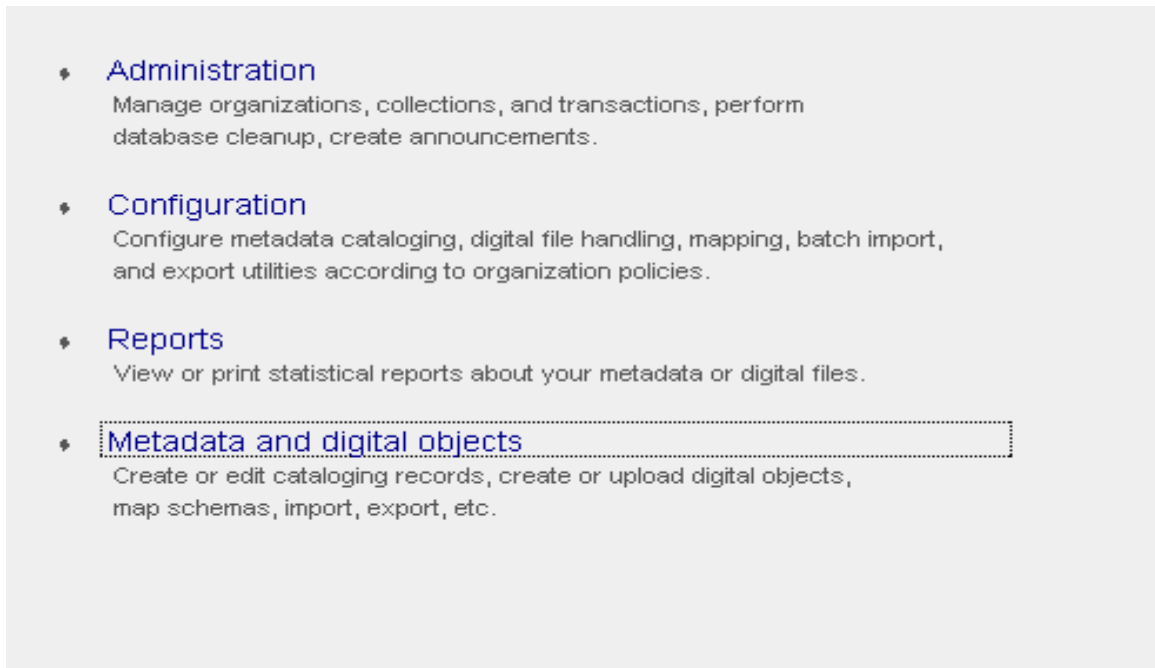


Figure 2.1.3.1: Digital Object Workflow Management System main screen

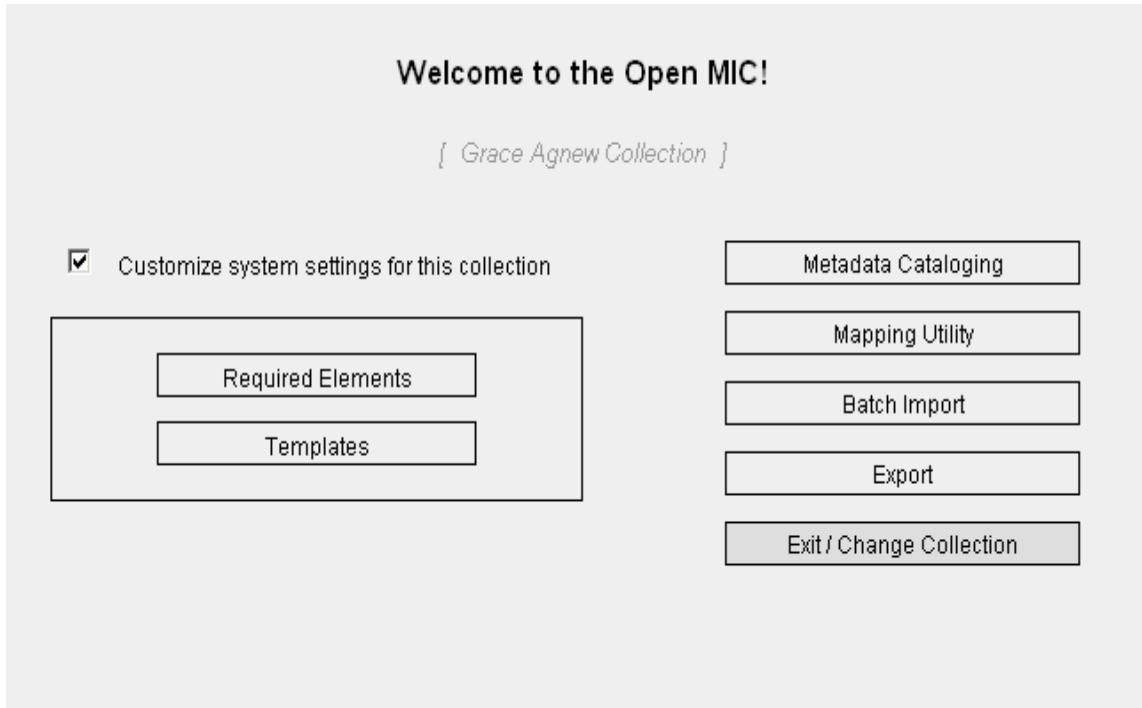


Figure 2.1.3.2: Main Bibliographic Utility screen

RECORD LIST

View:

Search: Max display:

	System ID	Record	Status
<input type="radio"/>	23	1 oversized card with a photograph of students on back	OK
<input type="radio"/>	24	2 posters with photographs and newspaper clippings	OK
<input type="radio"/>	25	2 posters with signatures and messages	OK
<input type="radio"/>	26	"1 cloth banner, 1 photograph, 1 letter"	OK
<input type="radio"/>	27	2 posters with messages and signatures	OK
<input type="radio"/>	28	"13 notes on construction paper, 1 poster"	OK

Figure 2.1.3.5: Metadata record list

◆ Ananthan Test Collection 1 (Ananthan University) Metadata for item 1
 ◆ Template used: [none]

Display option: **All Elements**

Source metadata 1
 Add new source metadata

Source Technical Information

Source Type

Local Bib ID

Type
 Value

NAVIGATOR

Figure 2.1.3.4: Source Metadata entry screen

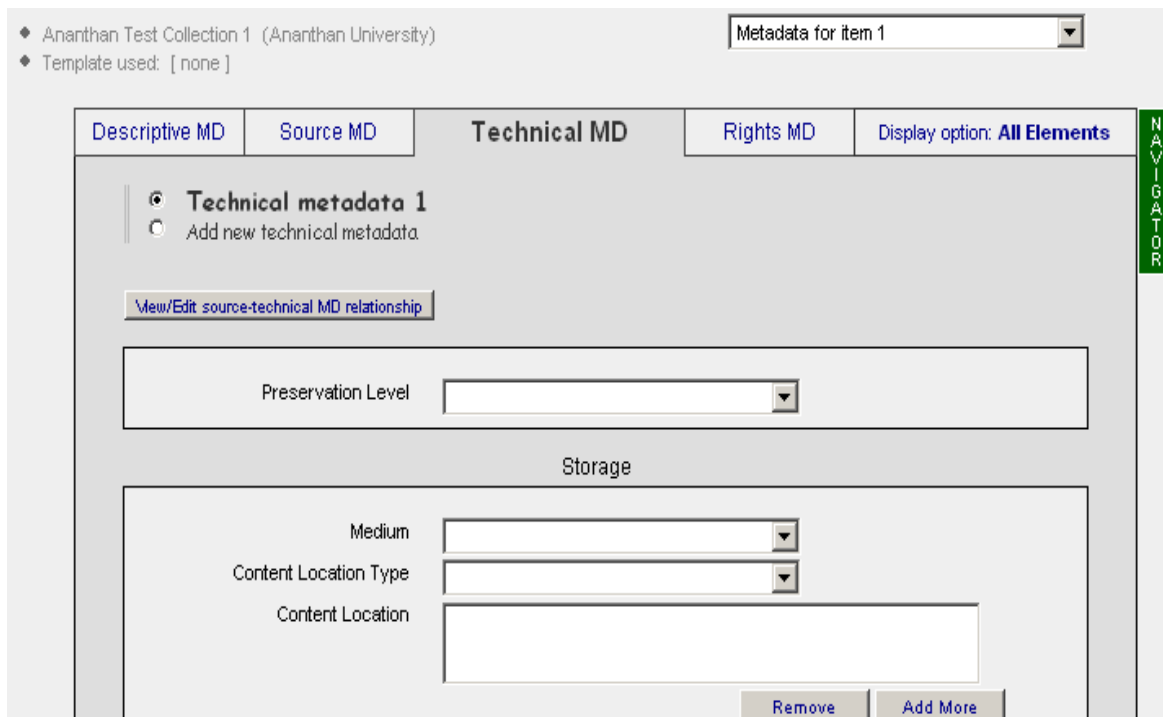


Figure 2.1.3.5: Technical Metadata entry screen

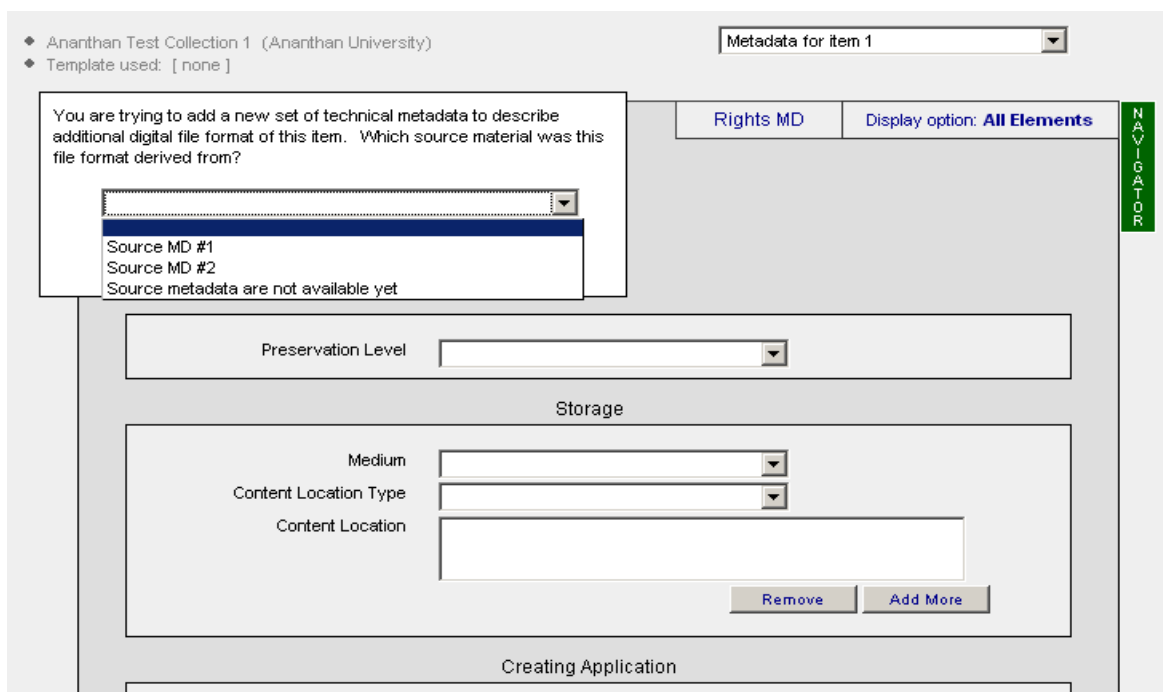


Figure 2.1.3.6: Adding new technical metadata

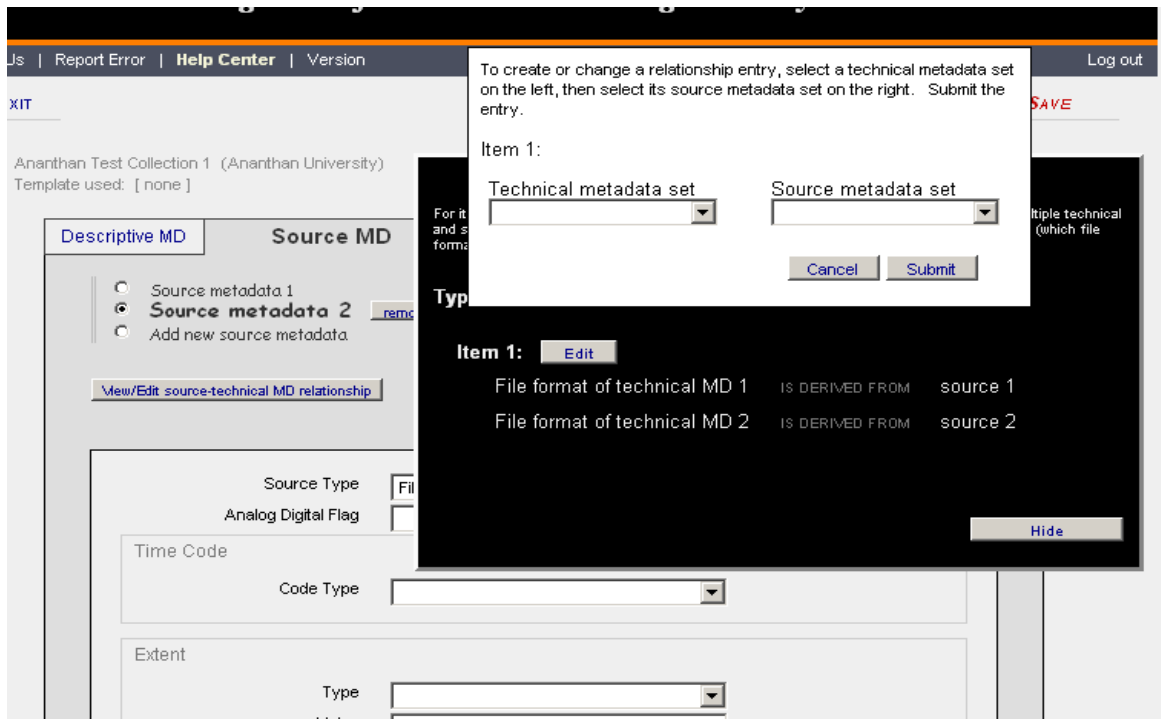


Figure 2.1.3.7: View/Edit source and technical MD relationship screen

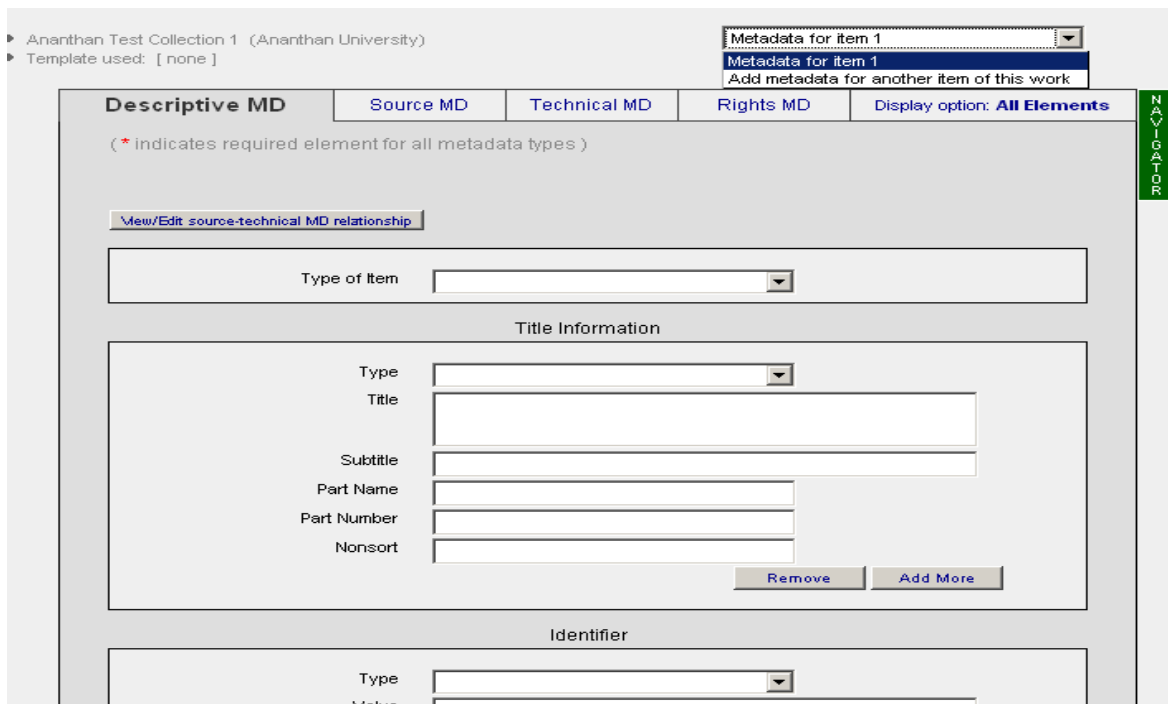


Figure 2.1.3.8: Multiple descriptive metadata screen


```

<METS:metsHdr ID="H1" CREATEDATE="2008-11-26T10:22:57" LASTMODDATE="2008-11-26T10:22:57" RECORDSTATUS="
<METS:dmdSec ID="DMD-1" GROUPID="" ADMID="AMD-1" CREATED="2008-11-26T10:22:54" STATUS="A">
  <METS:mdWrap MIMETYPE="text/xml" MDTYPE="OTHER" LABEL="MODS Metadata">
    <METS:xmlData>
      <mods:mods>
        <mods:typeOfResource>StillImage</mods:typeOfResource>
        <mods:titleInfo ID="T-1" type="">
          <mods:title>Multiple Instance test</mods:title>
        </mods:titleInfo>
      </mods:mods>
    </METS:xmlData>
  </METS:mdWrap>
</METS:dmdSec>
<METS:amdSec ID="AMD-1">
  <METS:sourceMD ID="SMD-1.1" GROUPID="" ADMID="TMD-1.1" CREATED="2008-11-26T10:22:54" STATUS="A">
    <METS:mdWrap>
      <METS:xmlData>
        <rulib:RULSourceMD>
          <rulib:sourceTechnical>
            <rulib:sourceType>Film</rulib:sourceType>
          </rulib:sourceTechnical>
        </rulib:RULSourceMD>
      </METS:xmlData>
    </METS:mdWrap>
  </METS:sourceMD>
  <METS:sourceMD ID="SMD-1.2" GROUPID="" ADMID="TMD-1.2" CREATED="2008-11-26T10:22:54" STATUS="A">
    <METS:mdWrap>
      <METS:xmlData>
        <rulib:RULSourceMD>
          <rulib:sourceTechnical>
            <rulib:sourceType>Film</rulib:sourceType>
          </rulib:sourceTechnical>
        </rulib:RULSourceMD>
      </METS:xmlData>
    </METS:mdWrap>
  </METS:sourceMD>
  <METS:techMD ID="TMD-1.1" GROUPID="" ADMID="SMD-1.1" CREATED="2008-11-26T10:22:54" STATUS="A">
    <METS:mdWrap>
      <METS:xmlData>
        <rulib:RULTechMD>
          <rulib:preservationLevel>bit level</rulib:preservationLevel>
        </rulib:RULTechMD>
      </METS:xmlData>
    </METS:mdWrap>
  </METS:techMD>
  <METS:techMD ID="TMD-1.2" GROUPID="" ADMID="SMD-1.2" CREATED="2008-11-26T10:22:54" STATUS="A">
    <METS:mdWrap>
      <METS:xmlData>

```

Figure 2.1.3.9: Multiple source and technical metadata in METS XML

Figure 2.1.3.10: Multiple descriptive metadata in METS XML

2.2) Batch load existing metadata (Figures 2.2.1 to 2.2.13)

Metadata from existing database(s) can be batch loaded into OpenMIC. The OpenMIC has built-in MARCXML and MODS XML mapping tools (developed by Library of Congress) which automatically map metadata into the OpenMIC database. If metadata is in any other format, you will need to map your data elements to OpenMIC database using the Mapping Utility using the “in-house” option. Follow the instructions below to batch load metadata from existing database(s).

A: Map data elements

- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select **Mapping Utility**.
- iii. Select **MIC internal MD (METS)** to map your metadata elements.
- iv. Select **Create or Revise Mapping**.
- v. You may either create a new mapping *or* edit an existing mapping.
- vi. To create a new mapping:
 - o Enter a map name.
 - o Select a schema of your records.
 - o If you have selected **MARC (xml) or MODS (xml)**, mapping is automatically provided by OpenMIC. The Library of Congress has marc/mods to xml conversion tools that you can download to create marc xml file.
 - Click **Save**.
 - Proceed to step viii.
 - o If you have selected “in-house (text)”, you must map metadata elements from the in-house database to OpenMIC database. You also need to export the metadata in .txt format from the native database.
 - a) Provide field list.
 - Enter the name of the elements in the same order as it appears in the in-house database.
 - If there are more than 10 elements in the database, click **More fields**.
 - Use edit tools “<<” and “x” to insert or remove data elements from the field list.
 - Enter the field delimiter used in metadata text file.
 - Click **Update Fields**.
 - b) Map metadata fields.

- 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 delete mapping of an element, click on the radio button.
 - If the data elements have multiple values, enter the value separator in the “**Multi-value Separator**” box in the mapping results window.
 - When you are done with mapping, click **Save**.
- vii. Click **Exit** to return to the MIC Mapping Utility main screen.
- viii. Upload sample records. Before starting the batch import, it is recommended to view mapping of sample records.
 - Click **Upload Sample Records** from the MIC Mapping Utility main screen.
 - Select the sample file from the pull down list.
 - Browse and Upload a sample text file. It is recommended to prepare a sample file to test mapping.
 - Click **Submit**.
- ix. Select **Check Map** from the Mapping Screen.
 - Select **Mapping for review**.
 - Sample records will be displayed on the screen.
 - Select a record and click on **TEXT or XML (METS)**.
 - Review uploaded records. If you are satisfied with the mapping results, proceed to batch import.
- x. Click **Exit** to return to the Main Bibliographic Utility screen.

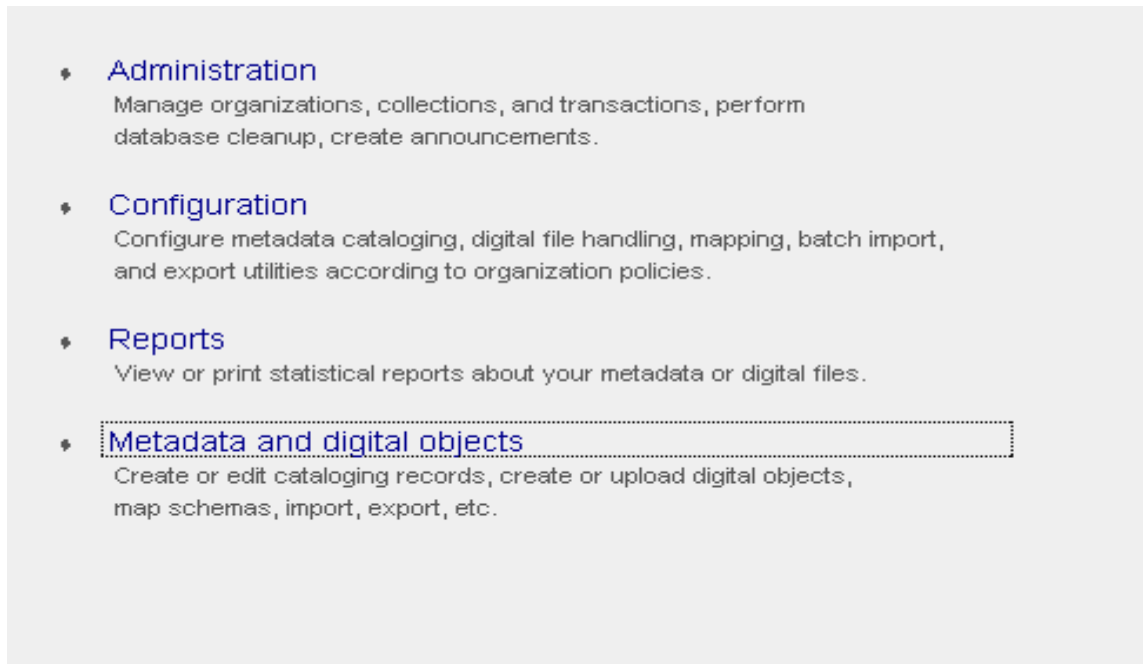


Figure 2.2.1: Digital Object Workflow Management System main screen

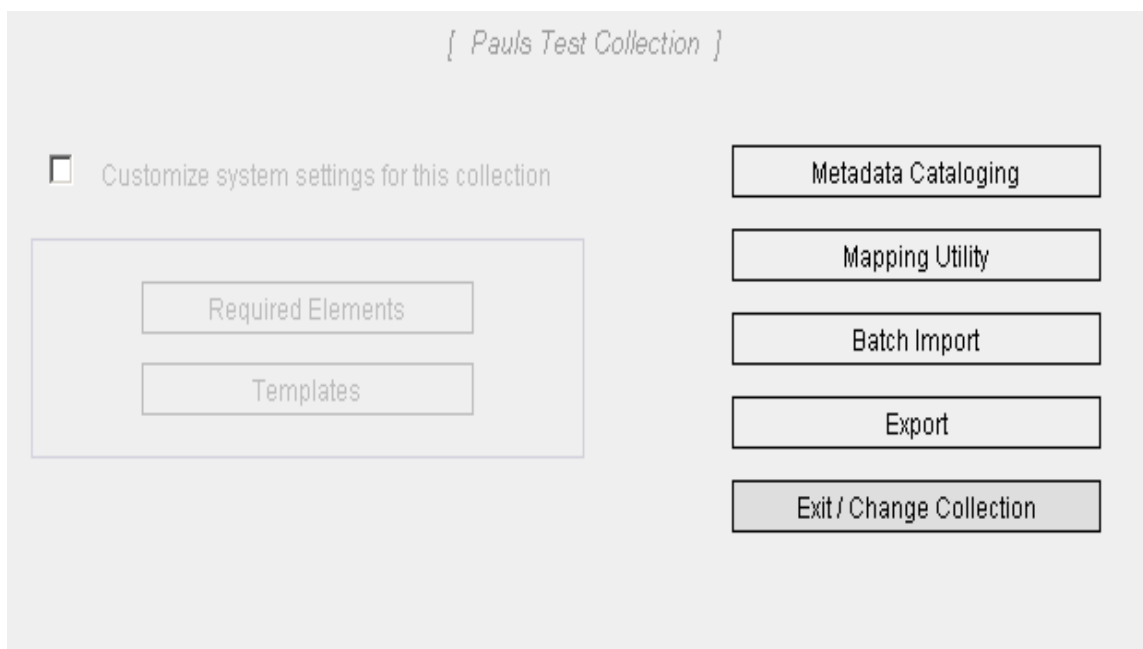


Figure 2.2.2: Main Bibliographic Utility screen

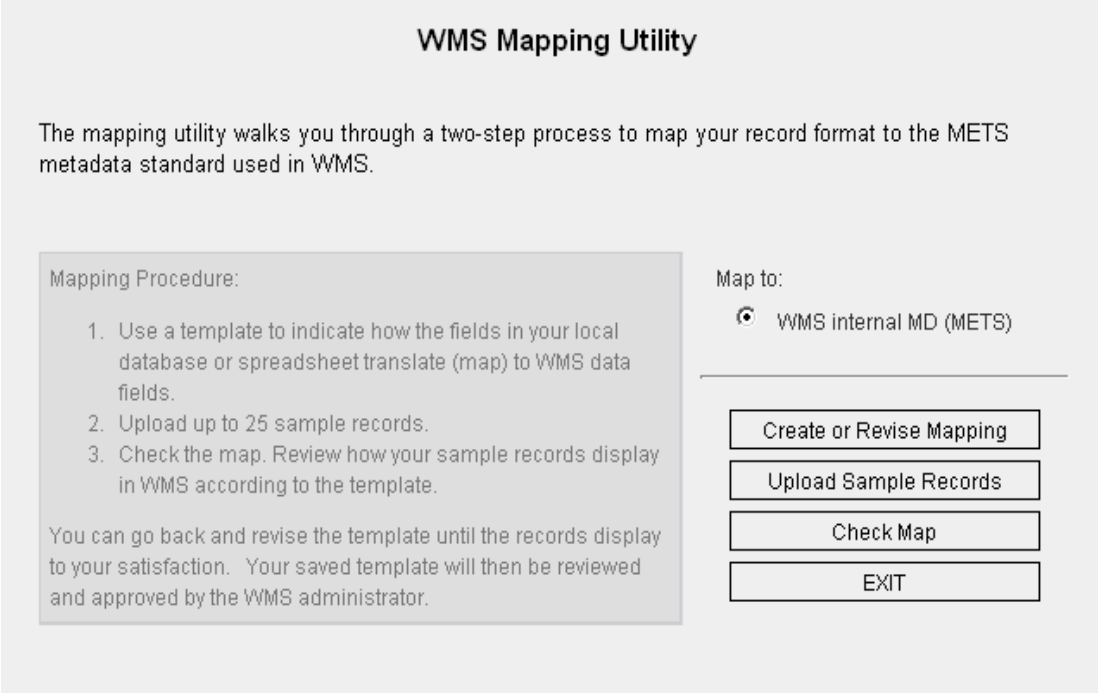


Figure 2.23: MIC Mapping Utility main screen

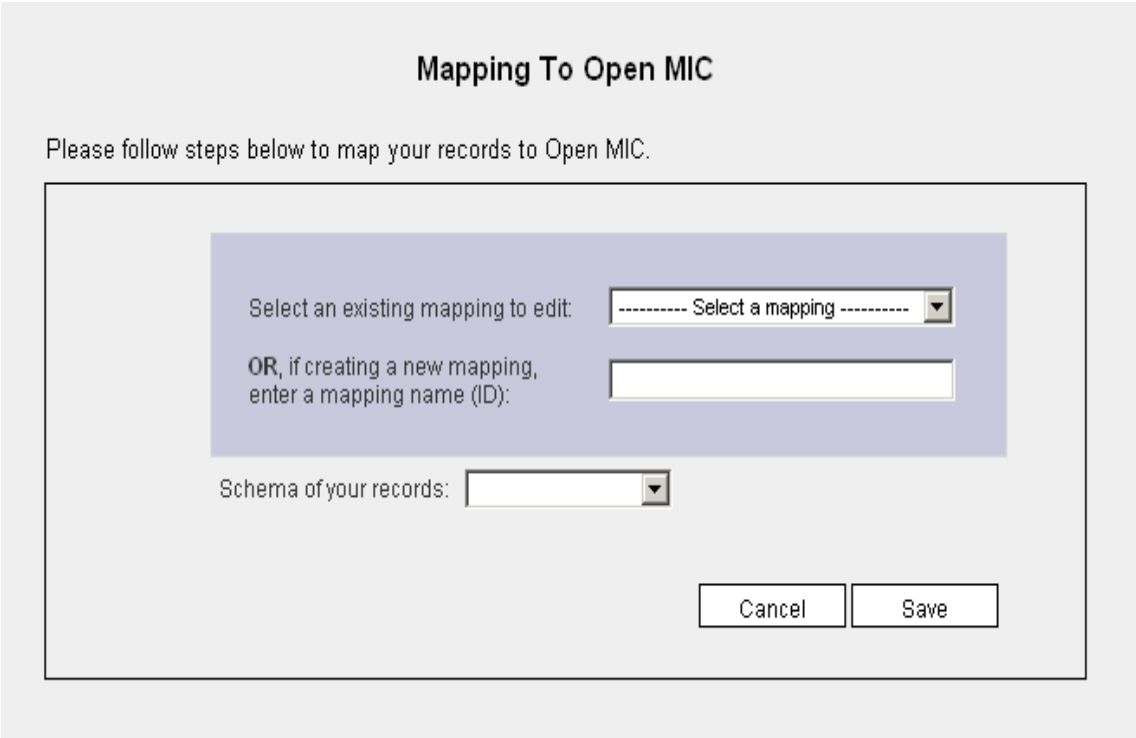


Figure 2.2.4: Mapping screen

Please follow steps below to map your records to MIC Union Catalog.

Enter a name (ID) for the mapping:

OR

Select an existing mapping to edit:

Schema of your records:

Step 1. Provide field list

Please enter the field names in exact order of the fields in your metadata **txt** file (even if the field has no values):

Order	Field Name	Edit Tool
1	<input type="text"/>	<< X
2	<input type="text"/>	<< X
3	<input type="text"/>	<< X
4	<input type="text"/>	<< X
5	<input type="text"/>	<< X
6	<input type="text"/>	<< X
7	<input type="text"/>	<< X
8	<input type="text"/>	<< X
9	<input type="text"/>	<< X
10	<input type="text"/>	<< X

Edit Tool: << Insert before this field. X Remove this field. [more fields](#)

Figure 2.2.5: In-house mapping screen 1

Step 2. Map Metadata Fields

To do the mapping, select an In-house DB element (left), then a matching element in our system (right). Repeat the step until done:

In-house DB Element	Target Element
<input type="text" value="genre"/>	<input type="text" value="Descriptive metadata"/> <ul style="list-style-type: none"> Table of Contents Type of Resource Element MIC Portal ID Main Title SubTitle Main Title - Type Main Title - Part Name Main Title - Part Number Main Title - Nonsort Identifier - Type Identifier Identifier - Display Label Identifier - Invalid Language - Term source Language Language - Term Type Language - Object Part Genre Source Genre

MAPPING RESULT

(Click radio button to remove from the list)

	In-house DB Element	Multi-value Separator	Target Element
<input type="radio"/>	title	<input type="text"/>	Main Title
<input type="radio"/>	genre source	<input type="text"/>	Genre Source

Figure 2.2.6: In-house mapping screen 2

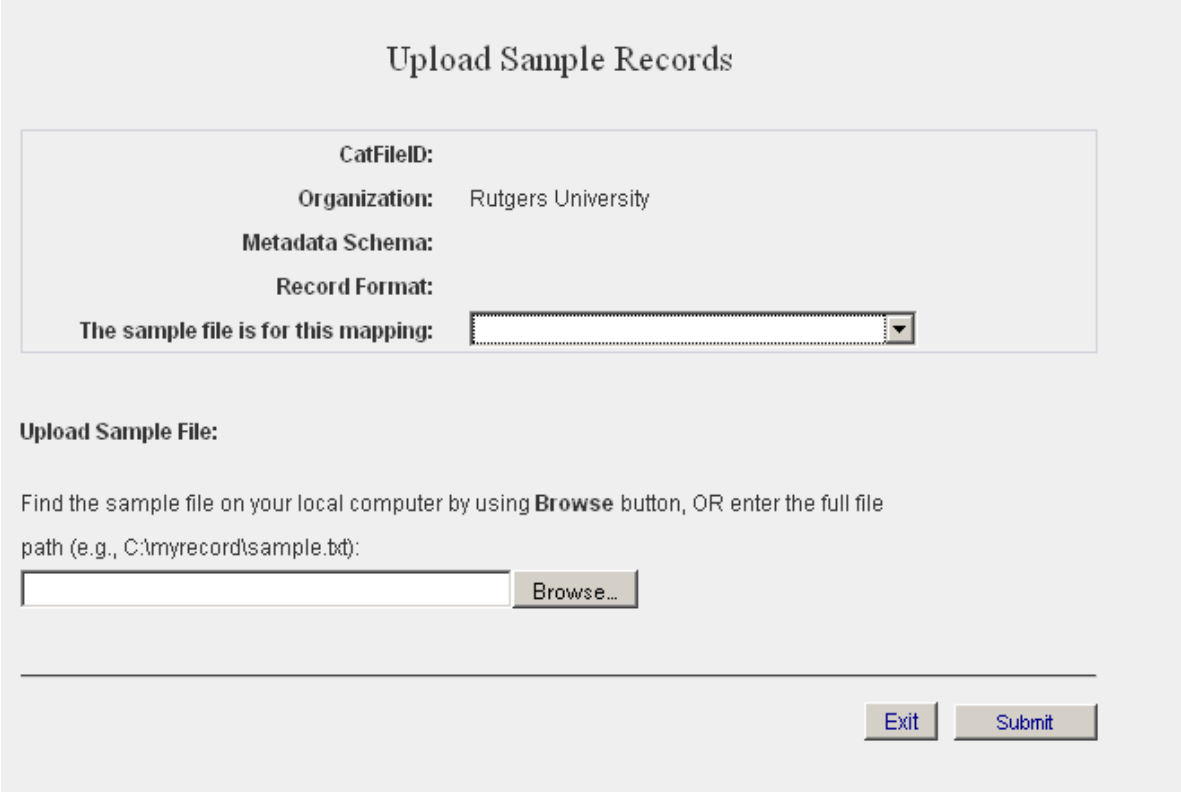


Figure 2.2.7: Upload sample records screen

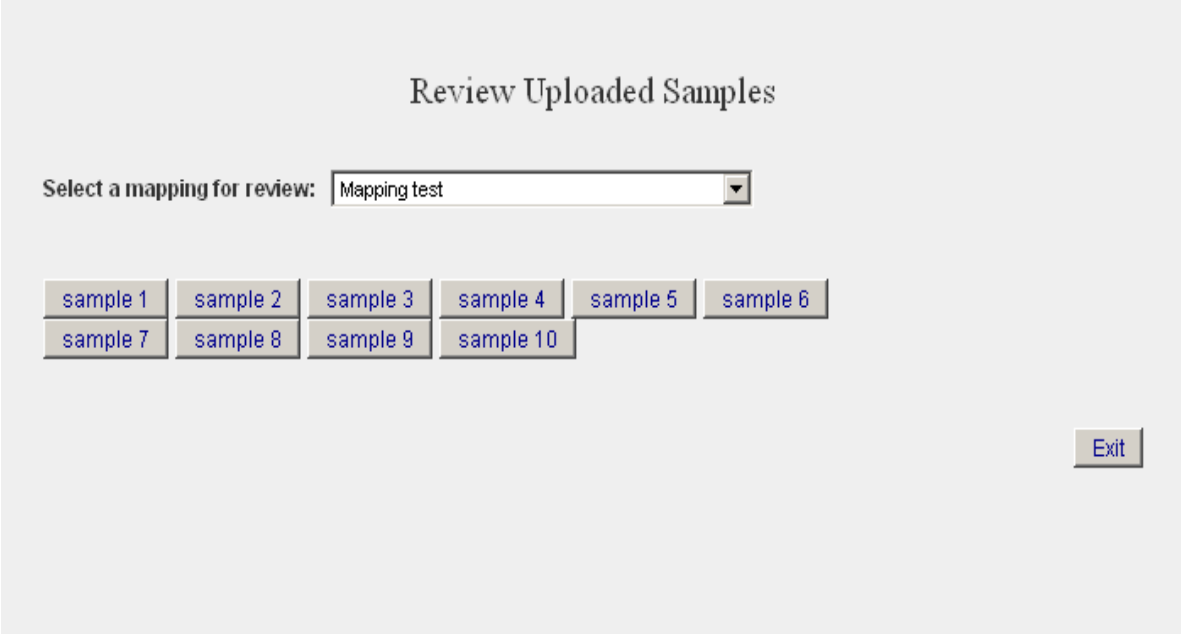


Figure 2.2.8: Review sample records screen

B: Batch Import (Figures 2.2.9 to 2.2.13)

- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select **Collection** from the collection list.
- iii. Select **Batch Import** from the Main Bibliographic Utility screen.
- iv. Select **Metadata Schema**.
- v. Select **Record Format** (XML for MARC and MODS; TXT (tab-delimited) for in-house (text)).
- vi. Select **Mapping Name**.
- vii. Select **“Yes”** if the file has already been uploaded, otherwise, select **“No”**.
- viii. If you have selected **“Yes”**, select **Show Step2**.
- ix. Select **an uploaded file to import** from the pull down and click **Import**.
- x. If you have selected **“No”**, you will be prompted to select the location of the file.
- xi. Select **“Local Computer”** if the file is on the PC; otherwise, select **“Server”**.
- xii. Click **Show Step 2**.
- xiii. If you have selected **“Local Computer”**, browse and select the file.
- xiv. Click **Upload/Import**.
- xv. If you have selected **“Server”**, enter the absolute path of the file.
- xvi. Click **Upload/Import**.
- xvii. Click **Refresh** check the status of the import.
- xviii. Once the import is completed, you will be able to review the records in the metadata record list. Exit from the import screen and select **Metadata Cataloging**. If there are any errors, review the records failed, and reload them.
- xix. Click **EXIT** to return to previous screen.

◆ Administration

Manage organizations, collections, and transactions, perform database cleanup, create announcements.

◆ Configuration

Configure metadata cataloging, digital file handling, mapping, batch import, and export utilities according to organization policies.

◆ Reports

View or print statistical reports about your metadata or digital files.

◆ Metadata and digital objects

Create or edit cataloging records, create or upload digital objects, map schemas, import, export, etc.

Figure 2.2.9: Digital Object Workflow Management System main screen

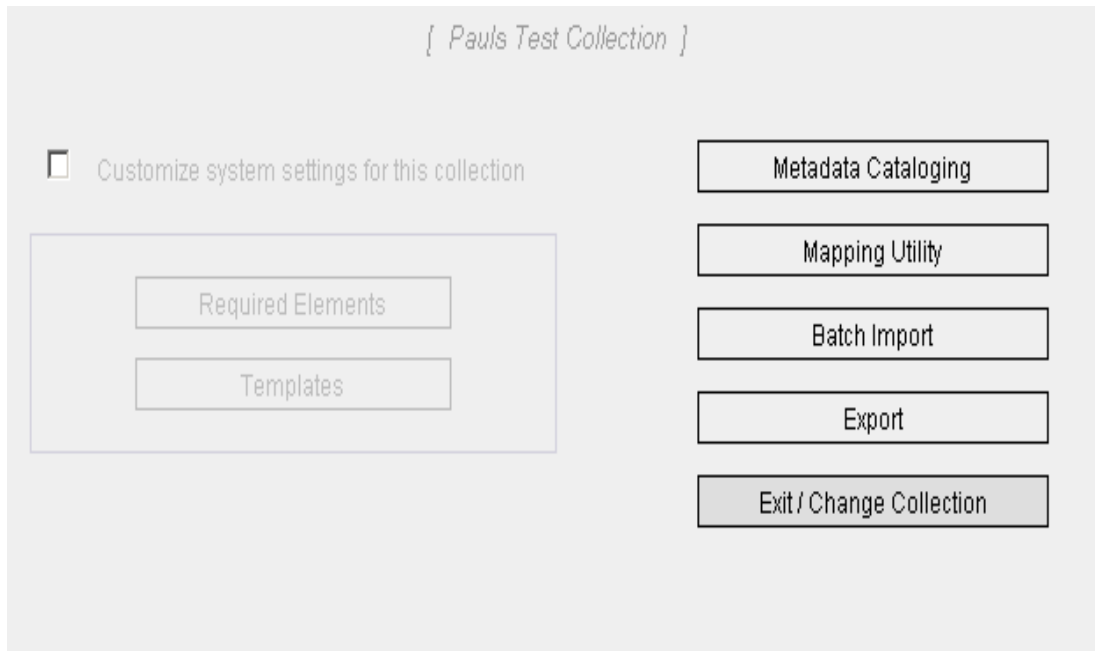


Figure 2.2.10: Main Bibliographic Utility screen

Metadata Import

Step 1. Provide metadata and file information

Metadata Schema:

Record Format:

Select a mapping:

Files already uploaded to the server? Yes No

[Show step 2](#)

Step 2. Upload / import metadata file to the system

Please complete **Step 1** first to see upload and/or import options.

Import Status

Total Record	Finished	Error
0	0	

[Clear](#) [Refresh](#)

[EXIT](#)

Figure 2.2.11: Metadata Import screen 1

Metadata Import

Step 1. Provide metadata and file information

Metadata Schema:

Record Format:

Select a mapping:

Files already uploaded to the server? Yes No

Step 2. Import uploaded file(s) to the database

Select an uploaded file to import:

[Delete](#)

[Import](#)

Import Status

Total Record	Finished	Error
0	0	

[Clear](#) [Refresh](#)

[EXIT](#)

Figure 2.2.12: Metadata Import screen 2

Metadata Import

Step 1. Provide metadata and file information

Metadata Schema:

Record Format:

Select a mapping:

Files already uploaded to the server? Yes No

Upload file(s) from: Local computer Server

Step 2. Upload metadata file and import to the system

File or directory path:

Note: If you enter a path for a directory instead of a file, all the files in that directory will be imported. In this case, you need to make sure that the directory only contains the files that need to be imported.

Figure 2.2.13: Metadata Import screen 3

Step 3: Export (Optional) (Figures 3.1 to 3.3)

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

- 1) Organizations 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) Organizations 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: Organizations 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 OpenMIC is ready for download. Visit <http://rucore.libraries.rutgers.edu/open/> for OpenMIC project details.

Follow the instructions below to export records:

- i. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- ii. Select **Collection** from the collection list.
- iii. Select **Export** from the Main Cataloging Screen.
- iv. Select **Export Format** (METS).
- v. Select **Export Destination** (File).

- vi. Click **one record per file** for file option.
- vii. Select **File Name Prefix**.
- viii. **Specify record(s) to export**. There are three options available.
 - o “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.
 - o If “A subset of this collection “is selected, a pop-up box will be prompted to select a range to export.
 - o If “Single record” is selected, a pop-up box will be prompted to select a record to export.
- ix. Click **Export**.
- x. Click **Refresh** to monitor the progress of export.
- xi. Click **EXIT** to return to previous screen.

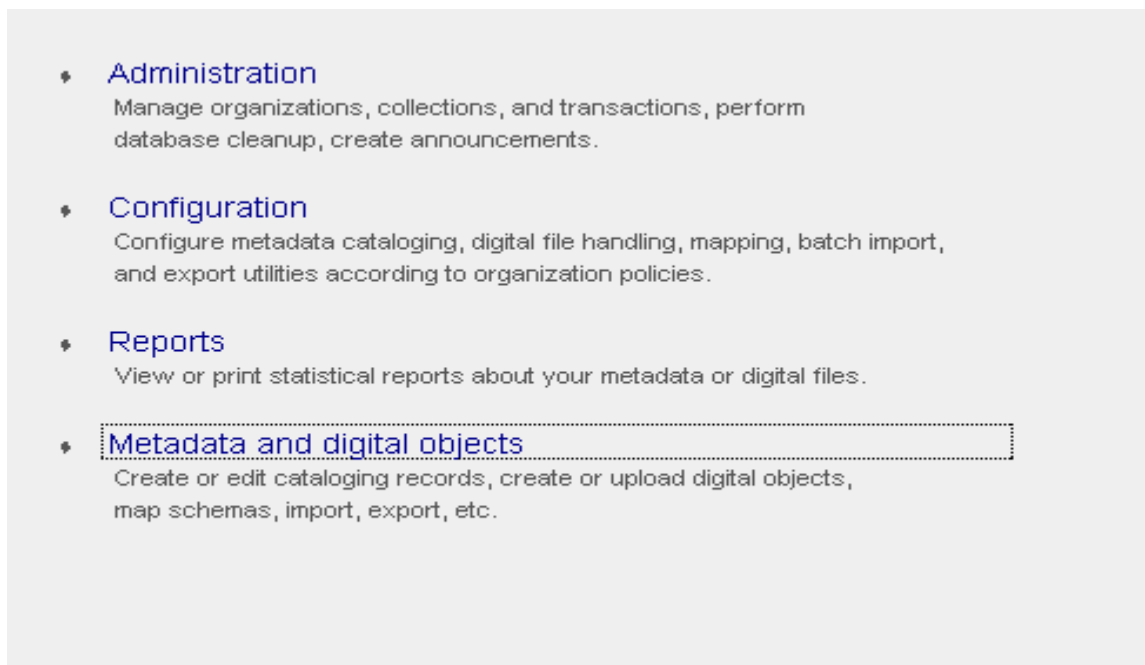


Figure 3.1: Digital Object Workflow Management System main screen

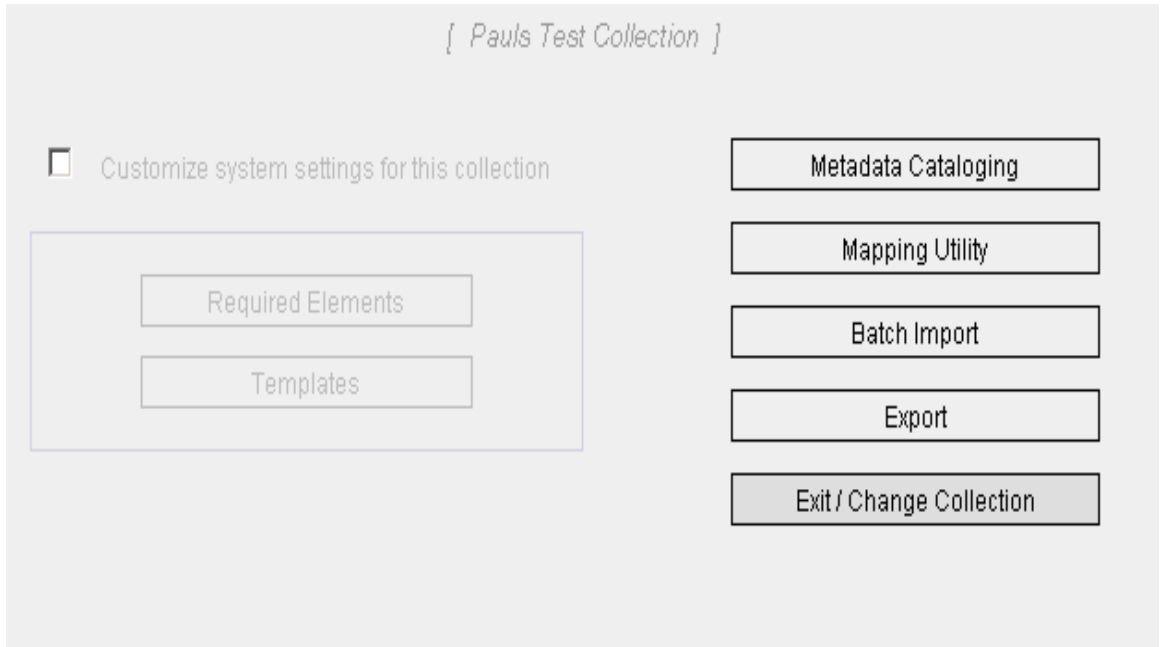


Figure 3.2: Main Bibliographic Utility screen

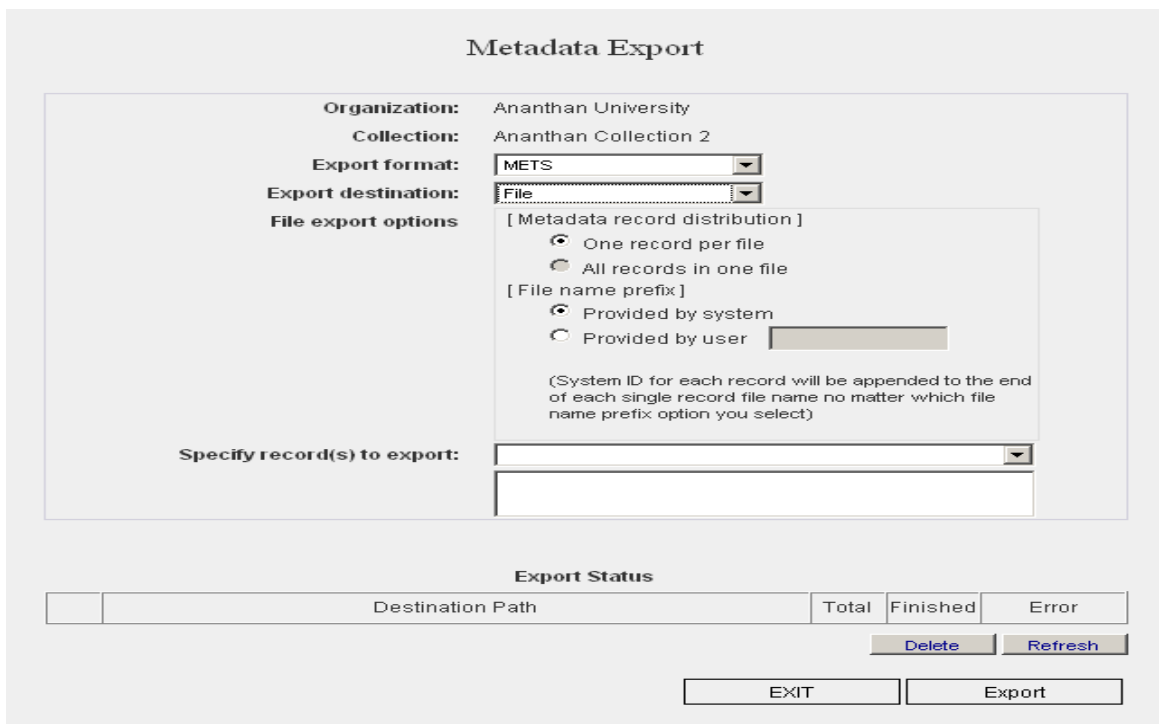


Figure 3.3: Metadata export screen

Section E: Other Administrative Functions

The OpenMIC is delivered with a controlled vocabularies module and a database cleanup module that are available to users with Super User privilege or the user accounts with cataloging utility privilege.

5.1) Controlled Vocabularies (Figures 5.1.1 to 5.1.9)

Using the Controlled Vocabulary module, you may:

- 1) Add a new term source authority to an element; or
- 2) Add terms to an authority; or
- 3) Add locally defined terms; or
- 4) Add terms to a controlled vocabulary list with no associated term source authority.

Add Controlled Vocabularies

- i. Select **Digital Object Workflow Management System** from the OpenMIC Initial Screen.
- ii. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- iii. Select **collection** from the collection list.
- iv. Select **Metadata Cataloging**.
- v. Select **Start Cataloging**.
- vi. Click **Create New Record**.
- vii. Select **Metadata section**.
- viii. To add a new term source authority to an element:
 - o Locate the element name on the metadata input form.
 - o Select **ADD/EDIT TERMS** radio button under Term Source.
 - o Enter the name of the term source authority. Note that terms will be displayed in the same order it was entered.
 - o Click **Submit**. The name you entered will appear as a radio button under Term Source.
 - o Click **Exit** to return to the Metadata record list screen.
- ix. Add terms to an authority:
 - o Locate the element name on the metadata input form.
 - o Select the **Term Source**.
 - o Select **ADD/EDIT TERMS** from the pull down next to the element name to which you want to add terms.
 - o Enter the values in the box. Separate each term with semicolon. The terms will be displayed in the same order as they were entered.
 - o Click **Submit**.

- Click **Exit** to return to the Metadata record list screen.
- x. Add locally defined terms :
 - Locate the element name on the metadata input form.
 - Select **Local** for Term Source.
 - Select **ADD/EDIT TERMS** from the pull down next to the element name you want to add terms.
 - Enter the values in the box. Separate each term with semicolon. The terms will be displayed in the same order as they were entered.
 - Click **Submit**.
 - Click **Exit** to return to the Metadata record list screen.
- xi. Add terms to a controlled vocabulary with no associated authority:
 - Locate the element name on the metadata input form.
 - Select **add/edit/delete terms** from the pull down next to the element name you want to add terms.
 - Enter the values in the box. Separate each term with semicolon. The terms will be displayed in the same order as they were entered.
 - Click **Submit**.
 - Click **Exit** to return to the Metadata record list screen.

Edit Controlled Vocabularies

- i. Select **Digital Object Workflow Management System** from the OpenMIC Initial Screen.
- ii. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- iii. Select **collection** from the collection list.
- iv. Select **Metadata Cataloging**.
- v. Select **Start Cataloging**.
- vi. Click **Create New Record**.
- vii. Select **Metadata section**.
- viii. To edit a term source authority to an element:
 - Locate the element name on the metadata input form.
 - Select **ADD/EDIT TERMS** radio button under Term Source.
 - Change the name of the term source authority. Note that terms will be displayed in the same order it was entered.
 - Click **Submit**. The name you entered will appear as a radio button under Term Source.
 - Click **Exit** to return to the Metadata record list screen.

- ix. Edit terms in a term source authority:
 - Locate the element name on the metadata input form.
 - Select the **Term Source**.
 - Select **ADD/EDIT TERMS** from the pull down next to the element name to which you want to change terms.
 - Change the terms in the box. Separate each term with semicolon. The terms will be displayed in the same order as they were entered.
 - Click **Submit**.
 - Click **Exit** to return to the Metadata record list screen.

- x. Edit locally defined terms :
 - Locate the element name on the metadata input form.
 - Select **Local** for Term Source.
 - Select **ADD/EDIT TERMS** from the pull down next to the element name to which you want to change terms.
 - Change the terms in the box. Separate each term with semicolon. The terms will be displayed in the same order as they were entered.
 - Click **Submit**.
 - Click **Exit** to return to the Metadata record list screen.

- xi. Edit terms in a controlled vocabulary list with no associated authority:
 - Locate the element name on the metadata input form.
 - Select **add/edit/delete terms** from the pull down next to the element name to which you want to change terms.
 - Change the terms in the box. Separate each term with semicolon. The terms will be displayed in the same order as they were entered.
 - Click **Submit**.
 - Click **Exit** to return to the Metadata record list screen.

Delete Controlled Vocabularies

- i. Select **Digital Object Workflow Management System** from the OpenMIC Initial Screen.
- ii. Select **Metadata and digital objects** from the Digital Object Workflow Management main screen.
- iii. Select **collection** from the collection list.
- iv. Select **Metadata Cataloging**.
- v. Select **Start Cataloging**.
- vi. Click **Create New Record**.
- vii. Select **Metadata section**.
- viii. Delete a term source authority from an element:

- Locate the element name on the metadata input form.
- Select **ADD/EDIT TERMS** radio button under Term Source.
- Delete the name of the term source authority. Note that terms will be displayed in the same order it was entered.
- Click **Submit**. The name you entered will appear as a radio button under Term Source.
- Click **Exit** to return to the Metadata record list screen.

ix. Delete terms from an authority:

- Locate the element name on the metadata input form.
- Select the **Term Source**.
- Select **ADD/EDIT TERMS** from the pull down next to the element name to which you want to delete terms.
- Enter the values in the box. Separate each term with semicolon. The terms will be displayed in the same order as they were entered.
- Click **Submit**.
- Click **Exit** to return to the Metadata record list screen.

ix. Add locally defined terms :

- Locate the element name on the metadata input form.
- Select **Local** for Term Source.
- Select **ADD/EDIT TERMS** from the pull down next to the element name to which you want to delete terms.
- Enter the values in the box. Separate each term with semicolon. The terms will be displayed in the same order as they were entered.
- Click **Submit**.
- Click **Exit** to return to the Metadata record list screen.

x. Add terms to a controlled vocabulary with no associated authority:

- Locate the element name on the metadata input form.
- Select **add/edit/delete terms** from the pull down next to the element name to which you want to delete terms.
- Enter the values in the box. Separate each term with semicolon. The terms will be displayed in the same order as they were entered.
- Click **Submit**.
- Click **Exit** to return to the Metadata record list screen.

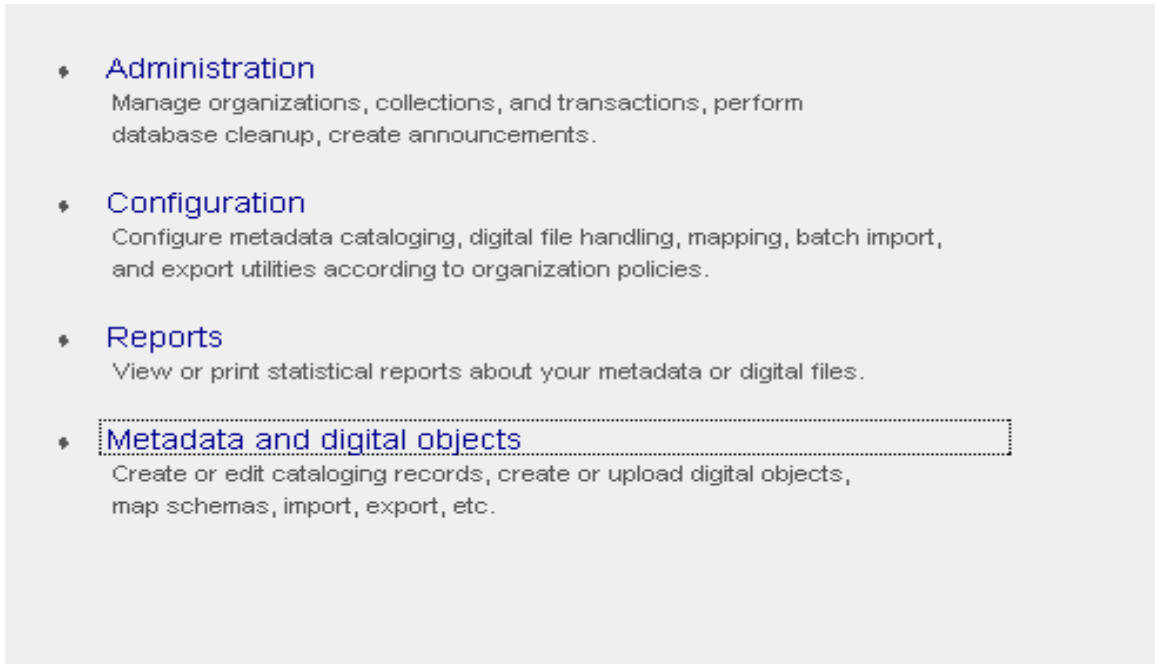


Figure 5.1.1: Administration screen

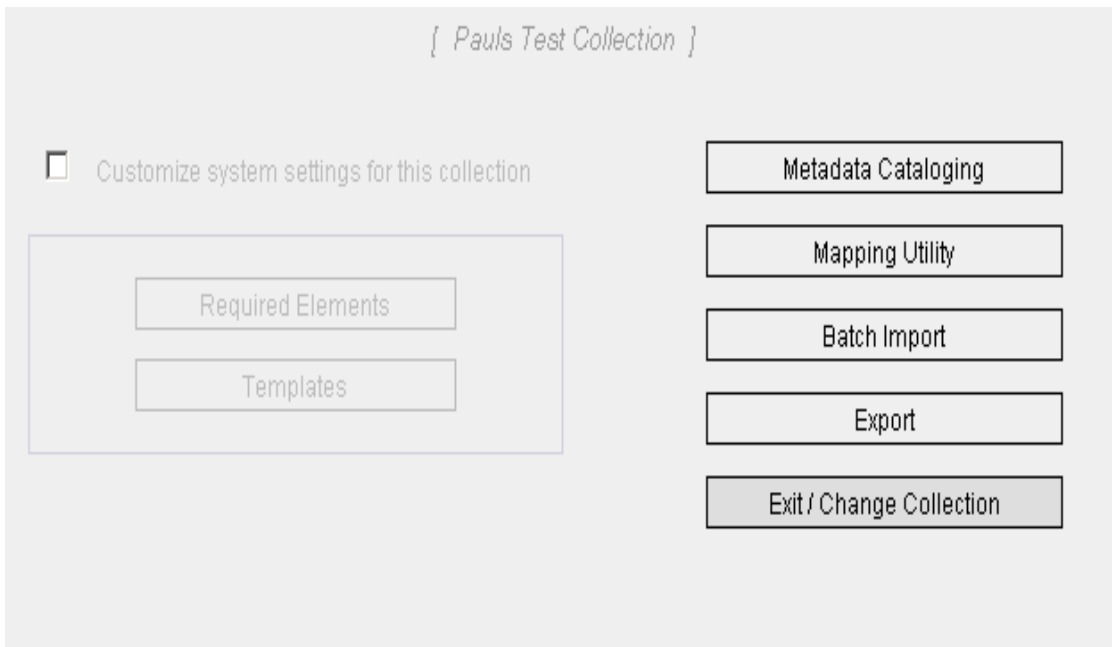


Figure 5.1.2: Main Bibliographic Utility screen

RECORD LIST

View:

Search: Max display: <<"/>

	System ID	Record	Status
<input type="radio"/>	23	1 oversized card with a photograph of students on back	OK
<input type="radio"/>	24	2 posters with photographs and newspaper clippings	OK
<input type="radio"/>	25	2 posters with signatures and messages	OK
<input type="radio"/>	26	"1 cloth banner, 1 photograph, 1 letter"	OK
<input type="radio"/>	27	2 posters with messages and signatures	OK
<input type="radio"/>	28	"13 notes on construction paper, 1 poster"	OK

Figure 5.1.3: Metadata record list

◆ KYUK Collection (KYUK-TV) Metadata for item 1
 ◆ Template used: [none]

Descriptive MD	Source MD	Technical MD	Rights MD	Display option: All Elements
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(* indicates required element for all metadata types)

[View/Edit source-technical MD relationship](#) *User Template*

Type of item

Title Information

Type	<input type="text"/>
Title	<input type="text"/>
Subtitle	<input type="text"/>
Part Name	<input type="text"/>
Part Number	<input type="text"/>
Nonsort	<input type="text"/>

NAVIGATOR

Figure 5.1.4: Metadata entry screen

Language

Term source

iso639-2b

rfc3066

Local (Enter free text for [languageTerm])

ADD/EDIT TERMS

Language Term

Term Type

Object Part

Figure 5.1.5: Add term source authority screen 1

Language

Term source

iso639-2b

rfc3066

Local (Enter free text for [languageTerm])

ADD/EDIT TERMS

Language Term

Term

Object

Term source

Use the box below to add, edit, or delete the terms, make sure you separate each term with ';'. Note that order matters. The terms will be displayed in the same order as you enter them.

Term s RADFG

Figure 5.1.6: Add term source authority screen 2

The screenshot shows a web form titled "Language". It has several fields and options:

- Term source:** Radio buttons for "iso639-2b", "rfc3066" (selected), "Local (Enter free text for [languageTerm])", and "ADD/EDIT TERMS".
- Language Term:** A dropdown menu.
- Term Type:** A dropdown menu with "switch to free text box" and "ADD/EDIT TERMS" (highlighted in blue).
- Object Part:** A text input field.
- Buttons:** "Remove" and "Add More" buttons at the bottom right.

Figure 5.1.7: Add term to a term source authority screen 1.

This screenshot shows the same "Language" form as Figure 5.1.7, but with a dialog box open over the "Language Term" field. The dialog box is titled "Language Term" and contains the following text:

Use the box below to add, edit, or delete the terms, make sure you separate each term with ';'. Note that order matters. The terms will be displayed in the same order as you enter them.

Below the text is a large empty rectangular box for entering terms. At the bottom of the dialog are "Cancel" and "Submit" buttons.

Figure 5.1.8: Add term to a term source authority screen 2.

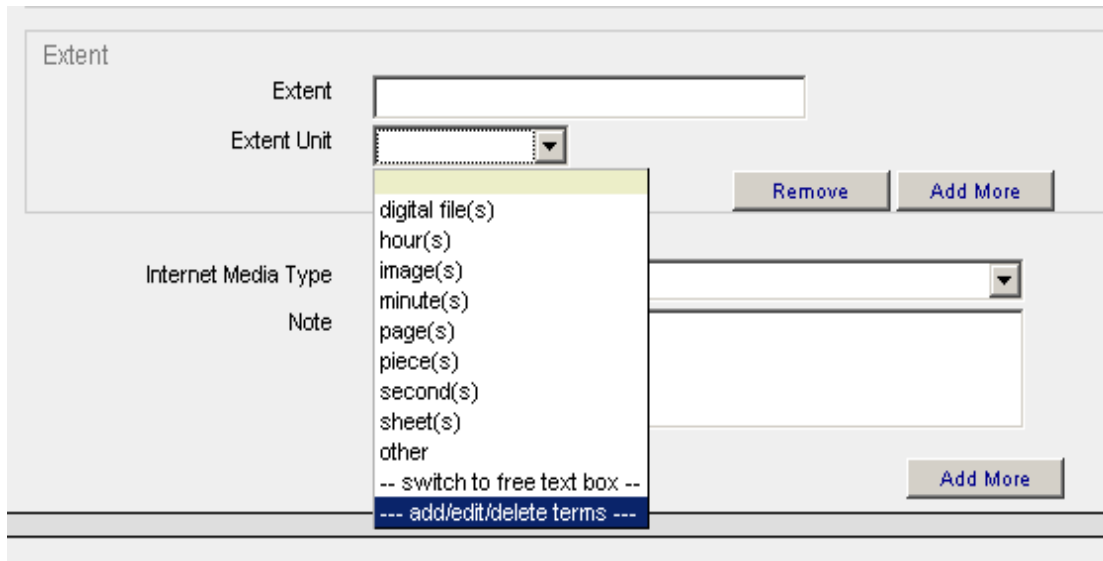


Figure 5.1.9: Add term to an element with no associated term source authority screen.

5.2) Database Cleanup (Figures 5.2.1 to 5.2.6)

This module allows users to bulk delete metadata records. You may delete one of all records from the selected collection using this module.

- i. Select *Digital Object Workflow Management System* from the OpenMIC initial screen.
- ii. Select *Administration*.
- iii. Select *Database Cleanup*.
- iv. Select *Select or Change Collection here*.
- v. Select *Collection*.
- vi. Select the record(s) to delete. If you want to delete all the records in this collection, choose *Select All*.
- vii. Click *Delete*.

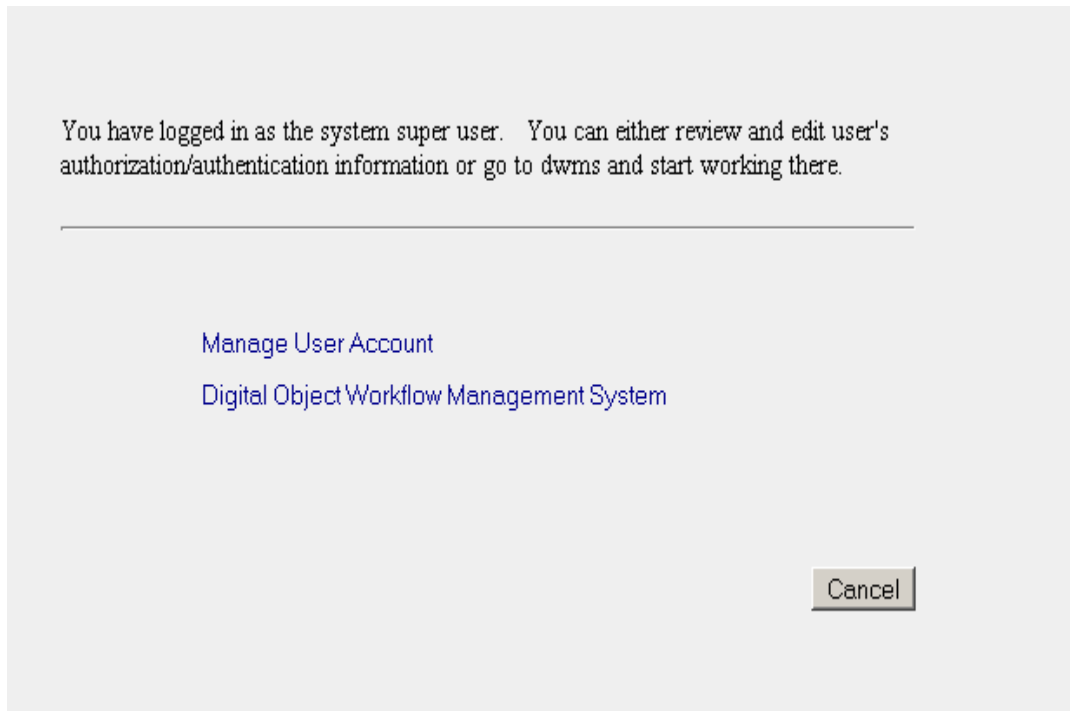


Figure 5.2.1: OpenMIC initial screen

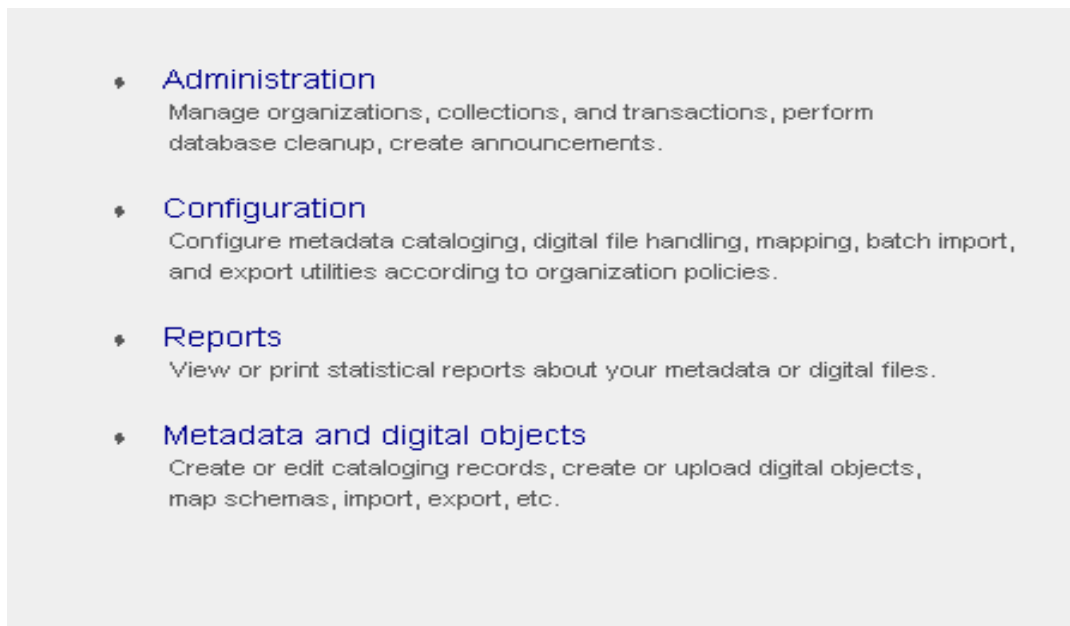


Figure 5.2.2: Digital Object Workflow Management System main screen

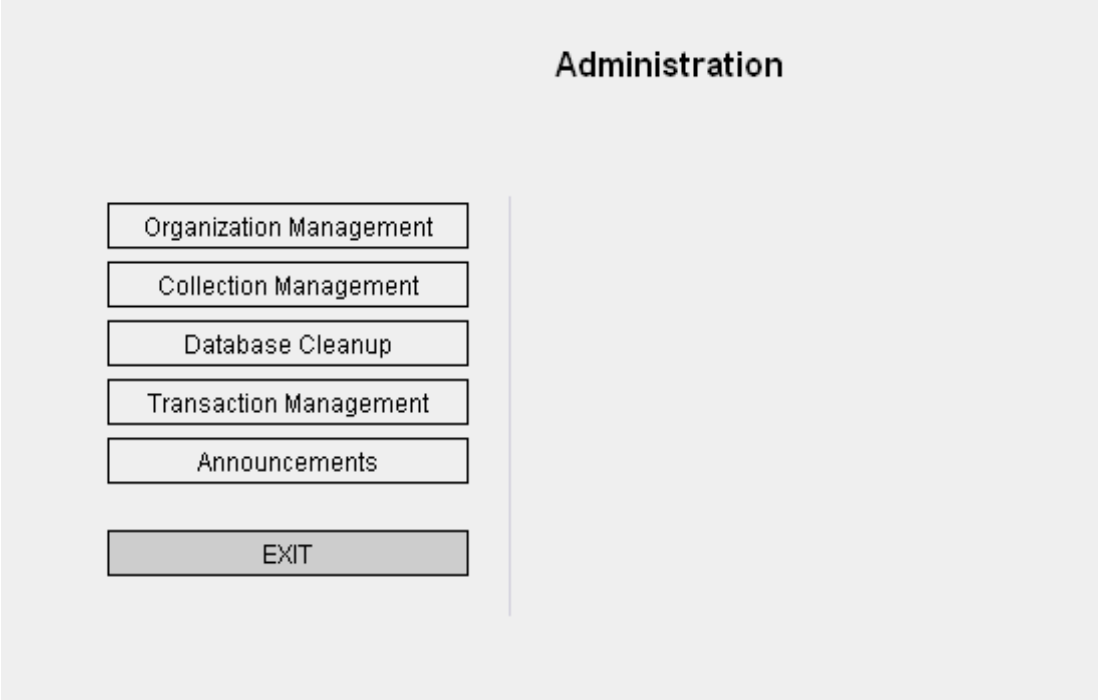


Figure 5.2.3: Administration screen

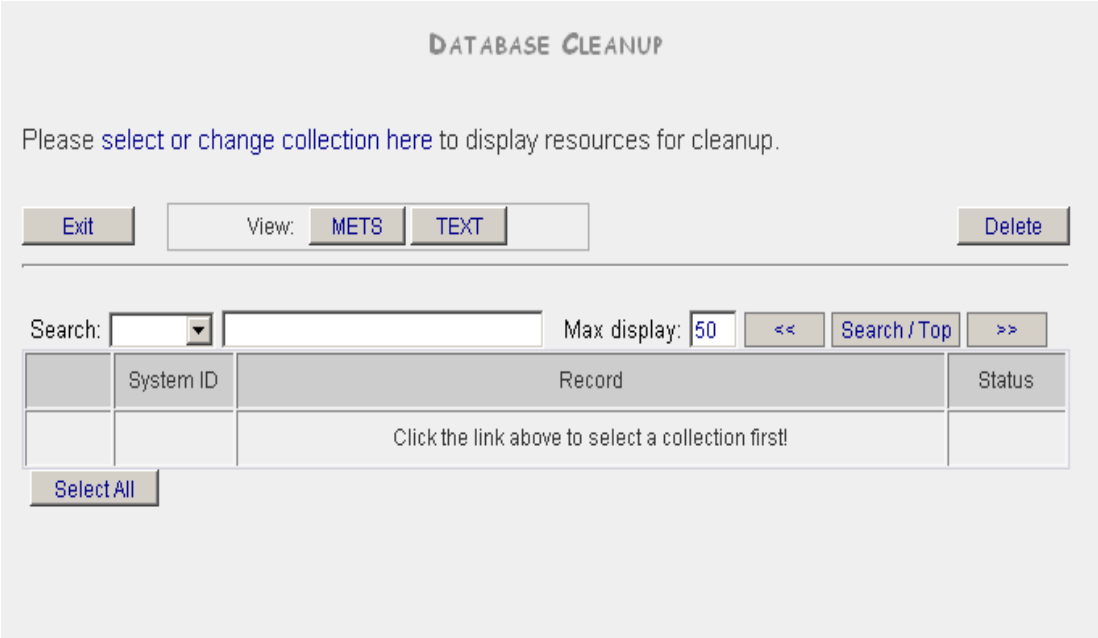


Figure 5.2.4: Database cleanup screen

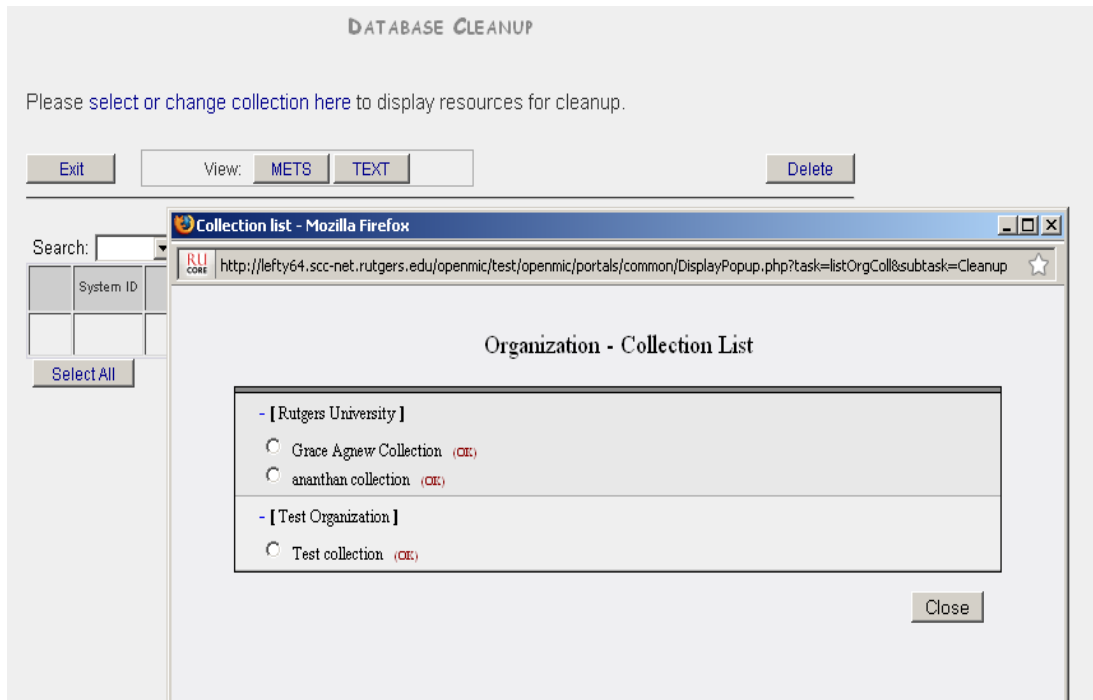


Figure 5.2.5: Organization List Screen

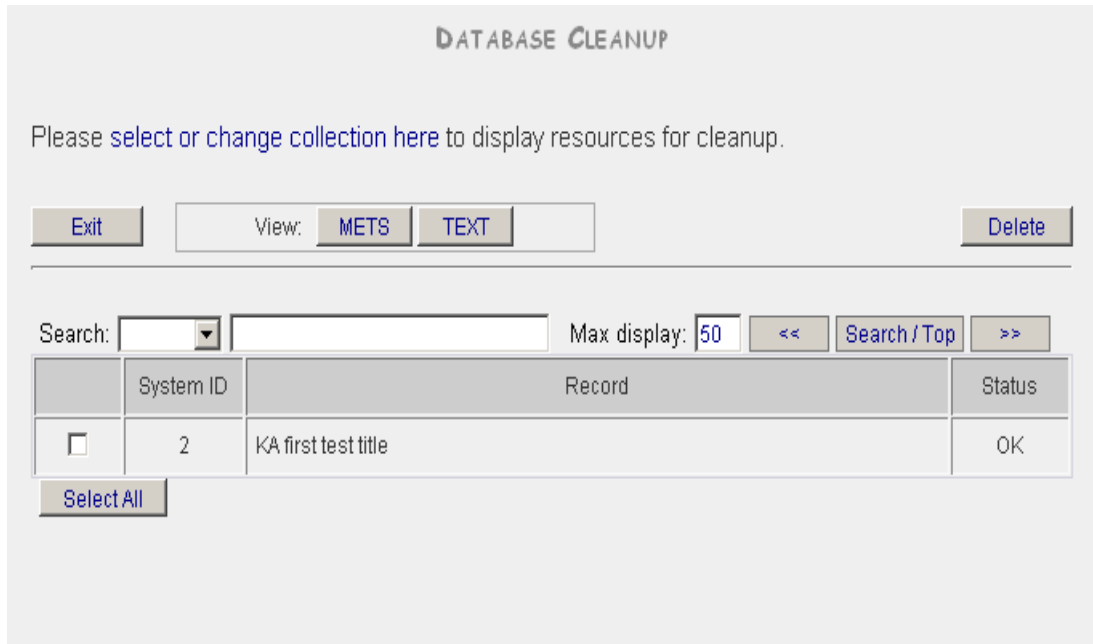


Figure 5.2.6: Database cleanup screen

5.3) *Transaction Management (Not implemented in this release)*

5.4) *Announcements (Not implemented in this release)*