Archivists' Toolkit: Project Management Functional Area
(Revised June 24, 2006)

Outline

PM1- Repository Record

PM2: Use Permissions

PM2: Repository Data Rules

PM4: Project Management

PM5: Application Configuration

PM6: Record Tracking

Application / Project Management Functional Area

The project management functional area allows repositories to create efficiencies in the description process by recording information, such as a repository's operational hours or address that need be captured only once; by declaring default data values for identifiers and other data elements, thereby eliminating some keystrokes during the actual data input process; and by defining projects and establishing the set of names and / subjects that can be applied to resources belonging to the project definition. The project management function also allows repositories to help secure their data by establishing user accounts and different levels of access for different groups or categories of users.

Of these several options, only the repository record is an absolute requirement. Certain elements in the repository record must be completed before the AT application can be used. The other options in the application / project management area can be exercised later or not at all.

PM1   Repository Record
PM2   Use Permissions
PM3   Data Rules
PM4   Project Definitions
PM5   Application Configuration
PM6   Record Tracking

****

PM1- Repository Record

Once the AT application is installed on a local machine, a repository record must be created before the application can be used. The repository record serves two basic purposes.

First, it stores information such as a repository's contact information and identifying codes. This information serves as the source for the information that appears in the headers for EAD, EAC, and METS. Storing it in one place, at the repository level of description, alleviates the need for repetitive data entry at the resource level and makes revision easier.

EAD Header

```
<eadheader countryencoding="iso3166-1" repositoryencoding="iso15511"
langencoding="iso639-2b">
   <eadid countrycode="??" mainagencycode="???-??"
           publicid="-//[countrycode]: [mainagencycode]//TEXT
           [countrycode]::[mainagencycode]::[File Name]//EN"
            url="www.[server/directory]/[File Name].xml">
           File Name
   </eadid>
   <filedesc>
           <titlestmt>
                   <titleproper>[Finding aid title]
                   </titleproper>
                   <subtitle>[Finding aid subtitle]</subtitle>
                   <author>Finding aid prepared by [author].</author>
            </titlestmt>
           <publicationstmt
                   <date>[Date]</date>
                   <publisher>Repository Name</publisher>
           </publicationstmt>
   </filedesc>
   <profiledesc>
           <creation>Finding aid produced using the Archivists' Toolkit.
           <date>[Finding aid date]</date></creation>
   </profiledesc>
</eadheader>


METS Header

<metsHdr CREATEDATE="YYYY-MM-DDTHH:MM:SS">
       <agent ROLE="CREATOR" TYPE="Organization">
           <name>[Repository Name (repository code)]</mets:name>
           <note>Produced using the Archivists' Toolkit</mets:note>
       </agent>
```

****

```
</metsHdr>

EAC Header

<eacheader status="draft" langencoding="iso639-2b" scriptencoding="iso15924"
    dateencoding="iso8601" countryencoding="iso3166-1" ownerencoding="iso15511">
<eacid syskey="[file name]" system="[mainagency code]" countrycode="??"
    ownercode="[mainagency code]">[country
    code]::[mainagencycode]::[filename]</eacid>
<mainhist>
<mainevent maintype="create">
<name>[Agency name]</name>
<maindate calendar="gregorian" normal="YYYYMMDDTHH:MM:SS">[Date  /
    Time]</maindate>
<maindesc>Record generated using the Archvists' Toolkit.</maindesc>
    </mainevent>
    </mainhist>
<languagedecl>
<language languagecode="???" scriptcode="????">English in Latin Script.</language>
    </languagedecl>
<ruledecl>
<rule id="[rules code]">[Rules]</rule>
    </ruledecl>
<sourcedecl>
<source id="[source code]" syskey="????">
<title linktype="simple">[link information]</title>
<sourceinfo>[??????]</sourceinfo>
    </source>
    </sourcedecl>
    </eacheader>
```

Second, in a multi-repository implementation of the AT, the repository record serves to distinguish one repository's records, data rules, and project definitions from those of another repository using the same AT implementation.

Required Tasks List

1. Enter repository name

2. Enter institutional code (ISO 15511)

3. Enter country code (ISO 3166-1)

Optional Tasks List

1. Enter institution address (street, city, region, country, mail code)

2. Enter other contact information (telephone, FAX, e-mail address)

3. Enter URL for repository web site

4. Define User Permissions

5. Define Date Rules / Formulas

6. Define Projects

7. Configure Application

8. Record any repository notes

Elements

- Repository Name
- Repository Address 1
- Repository Address 2
- Repository Address 3
- Repository City / Town
- Repository State / Region
- Repository Country
- Repository Mail Code
- Repository Telephone
- Repository FAX
- Repository EMAIL
- Repository URL

- Repository Country Code
- Repository Agency Code

- Repository Note
- Repository Note Label
    i. Access Policy
    ii. Collection Policy
    iii. Hours of Operation
    iv. Repository History
    v. Repository Description
- Repository Note Sequence

****

PM2: Use Permissions

Once the repository record is completed, the AT is ready to be used—by anybody with access to the machine / servers on which the application is installed. While this may be satisfactory in a few implementations of the application, it is likely repositories using the AT will want to restrict access to some of the information and functionality of the application from some of their users.

The AT provides the means to assign a user to one of five classes or groups of users. The classes represent an expanding sequence of functionality and access. Class 0, for instance, represents access to all the functionality present and information stored in the AT, while Class 4 represents access to very basic data entry functions for describing already accessioned resources and their components. The access classes are defined in the table below:

Access Level	Read / Write	Read	Perform Function	Not View
Class 0	All for all repositories using a single implementation	All for all repositories	Linking lookup lists to data elements Linking names and subjects to projects Linking names and subjects to accessions Linking names and subjects to resource, resource component, and digital objects Linking names to names Linking locations to containers All reports / outputs	
Class 1	For only the records of a certain identified repository Repository records User records Data rules / defaults Project definitions	All records for a certain identified repository	For the records only of a certain identified repository: Linking lookup lists to data elements Linking names and subjects to	Any records for any other identified repository

****

	Application configuration Accession records Resource records Resource component records Digital object records Instance records Container records Location records Name records Name contact records Subject records [In class 1, records from one identified repository are bounded off from the records of another identified repository in those cases where two or more repositories are using the same implementation of the AT.]		projects Linking names and subjects to accessions Linking names and subjects to resource, resource component, and digital objects Linking names to names Linking locations to containers All reports / outputs	
Class 2	Data rules / defaults Project definitions Application configuration Accession records Resource records Resource component records Digital object records Instance records Container records Location records Name records Name contact records Subject records	Repository records User records	Linking names and subjects to projects Linking names and subjects to accessions Linking names and subjects to resource, resource component, and digital objects Linking names to names Linking locations to containers	User passwords
Class 3	Accession records Resource records Resource component records		Linking names and subjects to accessions	Data rules / defaults Project definitions Application configuration

****

	Digital object records Instance records Container records Location records Name records Subject records		Linking names and subjects to resource, resource component, and digital objects Linking locations to containers	Name contact records Linking names to names
Class 4	Resource records Resource component records Instance records Container records	Accession records Digital object records Name records Subject records Location records	Linking names and subjects to resource and resource component Linking locations to containers	Data rules / defaults Project definitions Application configuration Name contact records Linking names to names
Class 5	May search database using interface limited to searching accession and resources by title, name (creator, source, subject, subject, and keyword in notes. May not enter any data into the database, only into the search query form.			May not view data entry or configuration screens No name contact information displayed.

Roughly, the access classes correspond to the following categories of users:

- Application Manager: Class 1
- Project Manager   Class 2
- Advanced Data Entry Staff   Class 3
- Beginning Data Entry Staff   Class 4
- Reference Staff   Class 5

The larger a repository's staff and the more distributed in levels its descriptive work is, the more useful will the AT access levels be. They will be of almost no use for a repository that has only one staff person.

****

Required Tasks List

1. Assign user to a repository

2. Record username

3. Record user password

4. Assign access class

Optional Tasks List

1. Record user full name

2. Record User Title

3. Record User Department

Elements

- User Repository Assignment
- User ID
- User Password
- User Access Class
- User Full Name
- User Title
- User Department

****

PM3: Repository Data Rules

To establish consistency of data across resource descriptions and to eliminate redundancy of the same data, the AT allows repositories to define formulas for the accession and resource identifiers and for dates and to record default values for sixteen fields.

Accession IDs and Resource IDs

Accession and resource identifiers are key elements for relating records one to another and for producing coherent descriptions of archival resources before and after processing. The AT provides four elements that may be configured to support a wide range of accession and resource identifiers and the automated incrementing of both. Repositories may type the field as being either a date field (limited to YYYY), a numeric field (limited to 4 digits), or a string field (limited to 15 characters). A default value may be assigned to each field. If one is assigned, that value will be displayed in new accession or resource record and remain there until edited. In addition, a look up list may be created and associated with any one of the four fields. Indeed, each of the four elements may have its own look up lists associated with it. Finally, repositories will be able to indicate if they want the accession or resource ID to increment automatically. Automatic incrementing of accession and resource identifiers requires that at least one of the elements be a numeric field. However, only one numeric of the four can numerically increment.

Repositories are not required to predefine their accession and resource IDs. Manually entered IDs will be validated for uniqueness. However, predefining the accession and resource IDs can save many keystrokes over the long run. And repositories are not required to use all four fields.

As always, default values may be overwritten at the point of data entry. Also, repositories need not exercise the option to express default values. If a repository does not, then the corresponding field will be empty when a new accession or resource record is created.

In outputs the discrete elements of the accession or resource IDs will be separated with a double hypen "--" .

Date Forms

In addition to accession and resource id formulas, repositories will be able to preselect the form of date to by used for data entry and display, e.g., mm/dd/yyyy; yyyy/mm/dd, Month DD, YYYY, etc.

Data Defaults:

Besides defining the formulas for accession IDs, resource IDs, and location records, a repository may define several default values for some of the records. Data entry efficiency can be increased by defining default values for data elements that typically have the same

****

value across all or most records. For instance, a repository may use subject terms only from the Library of Congress Subject Headings. In that event, the repository may way want to define LCSH as the default value for the source of subject term element. Doing so will alleviate the need to select that value from the pull down list at the element each time a new subject record is created. When a repository wants to use a different value, it may do so at the point of data entry.

Repositories using the option to set default values should first configure the applicable lookup lists and then set defaults on the basis of what values are included in the repository specific lookup lists.

Optional tasks

1. Define the repository's formula for accession identifiers

2. Define the repository's formula for resource identifiers

3. Set default data values

Elements:

- Accession ID 1 Data Type
- Accession ID 1 Default Value

- Accession ID 2 Data Type
- Accession ID 2 Default Value

- Accession ID 3 Data Type
- Accession ID 3 Default Value

- Accession ID 4 Data Type
- Accession ID 4 Default Value

- Accession ID Increment (1, 2, 3, or 4)

- Resource ID 1 Data Type
- Resource ID 1 Default Value

- Resource ID 2 Data Type
- Resource ID 2 Default Value

- Resource ID 3 Data Type
- Resource ID 3 Default Value

****

- Resource ID 4 Data Type
- Resource ID 4 Default Value

- Resource ID Increment (1, 2, 3, or 4)

- Default Acquisition Type
- Default Languages / Language Code
- Default Finding Aid Language / Language Codes
- Default Extent Type
- Default Description Rules
- Default Instance Type
- Default Container 1 Type
- Default Container 2 Type
- Default Container 3 Type
- Default File Version Location
- Default Subject Source
- Default Name Source
- Default Name Rule
- Default Name Link Function
- Default Name Link Creator / Subject Role
- Default Name Link Source Role

****

PM4: Project Management

Many repositories organize some of their archival resources into what are sometimes called metacollections, which often have a formal name such as the Archive for New Poetry, Downtown Collection, 20th Century Science, University Archives, etc.

The AT provides the means to define such metacollections as project areas. Repositories can record the formal title and description of a project area, which can be included as part of standardized and administrative reports. Repositories can also identify the individual resources that belong to the project area.

The primary utility of defining projects in Version 1.0 of the AT is to allow repositories to constrain the names and subject terms that can be applied to resources assigned to a project area. The project manger can specify what names or subject terms can be applied to the project and, hence, to each resource belonging to the project. The data entry staff, when adding names or subject terms to resource or resource component records, will see and be able to select only from the values that the project manager has permitted to be used. This strategy gives the project manage much greater control over the controlled access headings that will be applied to a resource and, at the same time, saves the data entry staff time by not requiring them to look through an entire list of either name or subject term values.

The project record will display the project title, and, if recorded, the project description, all the resources belonging to the project, and the names and subjects permitted to be linked to members of the project

Required Tasks

1. Record a title for a project area

2. Link one or more resources to the project title

Optional Tasks

1. Record a description / collection profile for the project area

2. Link name records (name, function, role) to the project record

3. Link subject terms to the project record

Elements

- Project Title

****

- Project Description

PM5: Application Configuration

Repositories are able to re-configure the AT application in a few basic ways that serve to integrate the application into the local work environment.   They are able to modify input forms outputs or reports. However, repositories are not able to modify the database structure of the application.

Record Elements

Repositories may re-label any element appearing on a record, using in place of the AT provided term a term that is more suitable for the repository's work practices or linguistic environment. Re-labeling may be done for a few select elements on a record, or it may be done for an entire record. Thus, were a Francophone library using the AT, it could re-label all the records with French terms.

Repositories can also edit or completely over-write the element definition and examples provided by the AT. These examples appear in the user interface as rollover text when the cursor is paused on an element label or a field input frame.

Repositories may select or deselect elements to appear in the search editor. For example, one repository may choose to have the search editor for accessions to include searching only on title and type of resource. Another repository might also want to include date of accession.

Repositories may also select or deselect elements to appear as sortable terms in the "list all" view. For example, one repository may wish the "list all" for subjects to include only subject terms and subject sources and to allow sorting of the list on just those two terms. But another repository may want to include subject rules and subject scope notes and allow sorting on all four terms.

Finally, repositories may assign a lookup list to the application if they so desire. It may be one of the default lookup lists that ships with the AT, a modified version of one of those lists, or a list newly created by the repository for one of the AT fields.

Lookup Lists

The AT application will ship with 23 lookup lists. Structurally, these lists are distributed over three types: 1) lists that may be wholly edited, 2) lists that include some terms that may not be changed, and 3) lists that may not be edited at any time.

For lists of type 1 and 2, repositories may add, delete, or merge terms (except for those terms in type 2 lists that may not be modified). Indeed, all the items on the list may be deleted and be replaced with other lists, should a repository want to do so.

****

Repositories may also create a completely new list (always a type 1 list) and assign it to a field in a record. It can be a field that already has a list assigned to it, in which case the newly assigned list takes the place of the earlier list. Or it can be to a field that did not have a list previously assigned to it.

Reports

To generate reports, the Archivists' Toolkit utilizes the Open-Source tool JasperReports. Jasper Reports utilizes an xml syntax that directly calls data from Java methods in the Archivists' Toolkit. The user is enabled to retrieve a formatted output from the various functional areas of the Toolkit and to save the retrieved data in html .pdf, rtf, csv, xls, jrprint and .xml formats.

The Archivists' Toolkit ships with a group of "generic" reports for each of its functional areas, but the operator may easily add to or modify these reports per the needs of her or her own repository. In addition, reports may be shared across AT implementations. A more in-depth description of JasperReports, its xml syntax, and functionality is available in the Jasper Reports manual, which may be purchased from Jasper Reports at http://jasperreports.sourceforge.net/more.docs.html.

Users may edit or create their own AT reports using a simple text editor. However, excellent GUI tools are available that work with JasperReports. One such application is iReport which may be downloaded at no cost at: http://ireport.sourceforge.net/ (a user manual is available for purchase).

PM6: Record Tracking

The record tracking function serves to identify uniquely each record in an implementation of the Archivists' Toolkit and to provide the means for tracking the creation and editing of records. The record audit function enables repositories

1. to assign a unique record number to each record, assuring its distinctness from all other records in a given implementation;

2. to distinguish their records from the records created by other repositories in a multiple repository implementation of the AT by assigning repository identification information (institutional codes and department name) to each record;

3. to define the boundary in which uniqueness of values is assessed (i.e., some values are required to be unique only within an institutional context)

4. to identify when a record was created and by whom; and

5. to identify when a record was last edited and by whom

The record tracking function is completely automated and utilizes variables such as institutional name and user names that are stored in the application / project management records. The record function is performed as part of the record save process for each new record that is created and for each time a record is modified.

The record tracking information will display as part of the record template interface. However, the information cannot be edited from the template.

The record tracking information can be added to the search editor so that a repository can search the database, for example, to see how many accession records were created in the last six months or how many resource records were created by a staff member in the last fiscal year.

PM6a: Business Rules

1. Record tracking information is for uniquely identifying every record in an AT implementation and for tracking record creation and editing.

2. Record tracking information is automatically derived from application management records (institutional codes, department names, user IDs) and from machine states (date / time)

3. Record tracking information is added to every record extant in an implementation of the Archivists' Toolkit.

<div align="center">************</div>

4. Record tracking information is displayed as part of the record template, but the information may not be edited from within the template.

5. Record tracking information does not display as part of the search displays, that is, when the search interface (Class 5 access) is used, no record tracking information is present in the display. .

6. For newly created records, record tracking information is added to the record as part of the save record process

7. For modified records, record tracking information is updated as part of the save record process.

PM6b: Inputs (automatically generated from login and machine environment)

- AT record no.
- Repository Identifier
- Record creator (User ID)
- Record creation date
- Record modifier (User ID)
- Record modified date