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I. Understanding the MXF and MXF Client

I.a. What the MXF is and how it is used

The MXF (Metadata eXchange Format) is a locally-developed format for communicating information about digital files representing library materials such as books, journals, maps, and photographs. When we speak of “an MXF” we really mean a file of metadata recorded in MXF format. Some of the information that can be recorded includes:

*bibliographic metadata* -- information describing the book, journal, etc., such as its title and author

*structural metadata* -- information about how different images relate to each other in a complex document, e.g., how pages are ordered to form chapters

*technical metadata* -- information about the digital file itself, such as its filename, and when and how it was created.

The MXF can be used by a library to send metadata to FCLA, by FCLA to send metadata to a library, or by two libraries to exchange metadata with each other. When used to send metadata to FCLA, the MXF can include instructions to FCLA on how to process the metadata and related files.
I.b. Sending data to FCLA

The MXF should be sent to FCLA along with the files it describes. For example, if a library is sending PDF images of a book to FCLA for loading into Florida Heritage, an MXF and the PDF files it describes should be sent to FCLA together. Generally this means that the MXF itself and the files it describes should be placed in the same directory and FTPed as a single folder.

However, note that files should only be sent to FCLA if there is a reason to do so. For example, imagine that a library created TIFF masters, MrSid derivatives, and JPEG thumbnails for maps. The MrSid and JPEG images were intended to be loaded in the Visual Materials Collections server, and displayed to users. The TIFF masters were intended to be burned onto CD by the library itself, and stored locally as archival copies. In this case, even though for each map there are three image formats, only the MrSid and JPEG formats would have to be sent to FCLA and described in an MXF. On the other hand, if there were an agreement between the library and FCLA that FCLA would archive the TIFF or burn the TIFF onto a CD and send that back to the library, then the TIFF image would need to be sent to FCLA and described in the MXF.
I.c. The MXF Structure: Package, Entity, Division and File levels

The MXF is structured in four logical parts called “levels”: Package, Entity, Division and File.

When an MXF and the digital files it describes are sent to FCLA (or from FCLA to another library) the MXF itself and all the files transmitted together are called a package. A package usually contains information about a single bibliographic entity but if necessary multiple entities can be bundled up in a single package. For example, generally a package will contain a single book, but there is no reason (apart from the large size) that two books could not be sent together in a package. It might make sense to bundle several short items together, such as the metadata and image files for several maps.

The Package level contains information needed to process a single package. The type of information contained at the Package level includes:

- whether the package is new or a replacement for one sent earlier;
- who is sending the package and should be contacted if there are problems;
- specific processing instructions for the package, for example, whether to create derivative PDF files from images sent in the package, or whether to create MARC records from bibliographic data in the MXF;
- what file formats are included in the package;
- when the package was created.

The Entity level describes a single bibliographic entity, e.g. a single book, map, or photograph. For a serial, the bibliographic entity is the serial title, even if only one issue of the serial is being sent. The Entity level generally corresponds to what would be cataloged in the library catalog, even if a catalog record does not exist for the particular entity. The type of information indicated at the Entity level includes:

- the bibliographic description of the entity;
- what type of item it is (e.g. book, serial, map, photo...);
- what project(s) or collection(s) it belongs to (e.g. Florida Heritage, Literature for Children, etc.);
- a copyright statement;
- a statement of who created the digitized version.

The Division level describes a logical structural division of the entity. For example, a book may consist of a front cover, front matter, several chapters and a back cover. Each of these would be described by a set of data elements at the Division level. Because the structure of a publication is often hierarchical, Division level information can be nested. For example, if the entity is a serial title, there may be Division level information for articles nested within Division level information for issues nested within Division level information for volumes. Information that can be given at the Division level includes:
• what the structural subdivision is (e.g. a chapter, issue, article...)
• what it is called (e.g. “Chapter IV”)
• a bibliographic description of the subdivision

The File level pertains to digital files. For every file included with a package, there must be a description at the File level. The File level can include extensive information about the physical file, including but not limited to:

• the filename and file type
• when it was created and by what institution and individual;
• how it was created;
• what device (e.g. digital camera or scanner) created the file, and what device settings were used;
• for images, what the image characteristics are (e.g. bit depth, resolution, color space, descreening, etc.)

If a file was derived from a source file, then information about the source can also be given.
II. Preparing documents

II.a. Document structure

Before you begin creating MXF data, you must understand the structure of the document you are dealing with, and how it relates to the structure of the MXF. You will need to know what the bibliographic Entity is and what Divisions exist within the Entity. For each Division, you need to know what to call it, and what type of part it is.

If the document is a book, serial, or other textual work that will be displayed by the FCLA document server, the name of the Division is what will appear in the online table of contents that is displayed to the user. For example, if the Division is a chapter, the name of the Division might be something like “Chapter I” or “Chapter 1: Tallahassee” or “Tallahassee”. The name should generally be what appears in the printed table of contents of the work, although some Divisions like covers and other front matter have no equivalent in the printed TOC.

The type of part must be taken from a list. It is used primarily for statistical purposes. It includes such structural parts as: chapter, page, section, abstract, advertisement, volume, issue, article, part, main, section, suppl, cover, fonds, recordgrp, series, subgrp, subseries, box, file, item.

When creating the MXF, you should either have a work in hand, or else have a worksheet that lists all structural divisions of the work. The worksheet should list, for each Division, the name, type of part, and range of pages included in that Division.

II.b. Books

For a book, the Entity level will describe the book itself. Here are some suggestions on how to treat typical book divisions:

<table>
<thead>
<tr>
<th>division</th>
<th>Division name</th>
<th>Type of Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>permission*</td>
<td>Copyright permission</td>
<td>permission</td>
</tr>
<tr>
<td>front cover</td>
<td>Front cover or</td>
<td>cover</td>
</tr>
<tr>
<td></td>
<td>Front matter</td>
<td></td>
</tr>
<tr>
<td>inside of front cover</td>
<td>Front matter</td>
<td>cover</td>
</tr>
<tr>
<td>other preliminary matter, e.g. blank page</td>
<td>Front matter</td>
<td>section</td>
</tr>
<tr>
<td>table of contents</td>
<td>Table of Contents or</td>
<td>contents</td>
</tr>
<tr>
<td></td>
<td>Contents</td>
<td></td>
</tr>
<tr>
<td>foreword</td>
<td>Foreword</td>
<td>section</td>
</tr>
<tr>
<td>preface</td>
<td>Preface</td>
<td>section</td>
</tr>
</tbody>
</table>
II.c. Unitary visual materials (maps, posters, postcards, photographs)

Most visual materials are unitary, that is, they have only one part, the map, poster, photograph etc. itself. In this case the entity level describes the visual material, and there is only one division.

<table>
<thead>
<tr>
<th>division</th>
<th>Division name</th>
<th>Type of Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>map, poster, etc.</td>
<td>[type of object, e.g. map, poster, etc.]</td>
<td>main</td>
</tr>
</tbody>
</table>

II.d. Other formats

For how to treat divisions of other formats, see the chapters of this manual on “Special Formats” (e.g., Special Formats: Serials).
III. Basics of the MXF Client

III.a. Logging on

You need a username and password to log onto the MXF Client. If you don’t know your name and password, contact your site administrator.

III.b. Opening the Metadata Module

When you invoke the MXF Client, you will initially see a blank screen with a menu bar at the top. One of the options listed on the menu bar will be Module. Under Module there are three sub-options: Administration, Metadata and Scanning. Select Metadata.

III.c. Areas of the screen

The MXF Client screen is divided into 3 areas. [Areas].
The *Tree window* is on the upper left. This displays all Package, Entity, Division and File level information you have created as *nodes* in a hierarchical display called a “tree”. Whichever node is highlighted in the tree is the “current” node. In this example, “Copyright permission” is the current node.

The *Directory window* is on the upper right. The top of this window displays the current directory, and the lower portion lists any image files (.tif, .jpg, .sid) found in that directory.

The *Workform window* is at the bottom of the screen. This window has a data entry area for the metadata elements associated with the current node, for example, “Type of part”.

### III.d. The Tree Window

#### III.d.1. Using the Tree: Nodes, Parents and Children

Each of the four levels of the MXF are represented by nodes on the tree. [Tree]

There are four different kinds of nodes, each represented by different icons.
• Envelope icon = Package node. This is always the top-most, left-most node. In this example, its name is “MXF”.

• Book icon = Entity node. In this example, “FA00000033” is the Entity node.

• Folder icon = Division node. In this example, “Copyright permission”, “Front Matter”, etc. are Division nodes.

• Document icon = File node. In this example, “Page 1” is a File node. (Derived files have a slightly different icon. See “Creating Derived File nodes” below.)

The Workform window at the bottom always displays a metadata workform for the current node. The current node is the node that is highlighted on the tree.

There are Parent and Child nodes on the tree. A Parent is hierarchically higher. On the tree it appears to the left and above its Child nodes. A Child node appears below and to the right of its parent. In this example, the Division node “Chapter 1” is the parent of one Child node named “Page 1”.

III.d.2. Using the Tree: Functions and Navigation

When a node has Child nodes, there is a plus or minus before the node on the tree. A plus means that Child nodes are not shown. If you click the plus sign the node will be expanded to show Child nodes. A minus means that all Child nodes are displayed. If you click the minus, the Child nodes will be “rolled up” (not displayed) under the Parent node.

The arrow keys move you up and down the tree:

• up arrow = Takes you to the node immediately above the current node
• down arrow = Takes you to the node immediately below the current node
• left arrow = Takes you up to the parent of the current node. (The current node in our example is the node named Foreword; the left arrow would make the node named FA00000033 current.)
• right arrow = Expands any plus nodes to show the Child nodes beneath. (Also, in Windows 2000 systems, the right arrow will move you down the tree.)

The menu bar Tree option has many commands for manipulating nodes on the tree. Among other things, you can add, remove, copy, and rename nodes. The most common actions have shortcut key combinations consisting of holding the CTRL key while pressing one other key. For example, CTRL-a has the same function as Tree/Add node.
III.e. The Workform Window

III.e.1. Metadata Workforms

Each type of node has a different Workform, listing the data elements that pertain to that kind of node. The metadata Workform for the current node will appear in the workform window. In the example above (Section 3.d, “Tree”), the File node “Page 1” is the current node, so the workform for a File node displays.

Every workform has three areas. On the far left a label for the data element displays, e.g. “Type of part”, “Page name”. The label color tells you if a value for the element is required:

- black = optional
- red = required
- purple = conditionally required
- grey = supplied by the system

Purple labels always come in pairs; if one purple element is supplied, the other is required. For example, for an Entity node, “Bib record key” and “Bib record system” are purple. Both of these values can be left blank; however, if one is filled in, then the other must be also.

A grey label means the value of the element will be supplied by the system if possible. If the value is also grey, that means that you cannot change that value. For example, for a File node, the element “Checksum” (label and value both grey) is calculated by the system and cannot be changed. The element “File format” (label is grey, value is black) is calculated by the system but the value can be overtyped by an operator.

In the center of the workform there is a box for data entry. Values can be supplied in four ways:

1) by typing the value in the box
2) by selecting a value from a pulldown menu (down arrow on the right side of the box)
3) by setting a default (See “Setting Defaults” below)
4) by being automatically calculated by the Client program.

Values which are automatically calculated by the Client and cannot be changed are shown in grey.

On the right there are buttons for performing certain functions.

- browse = when the value of an element is a filename or directory name, you can browse through the directories known to your computer to find the name
- add new = if the element is repeatable, you can click this to add another instance of the element
• remove = you can click this to remove the element

At the very far right is a scroll bar for moving through a long workform.

III.e.2. Repeatable elements

If an element is repeatable, an “Add new” button will display to the right of the data entry box. Element values can be repeated in two ways:

1) use “Add new” to add another data entry box for the element [Add new]

2) type in multiple values, separated by commas [Commas]
In the examples above, multiple values are entered for the data element “Project code(s)” in two different ways. These are equivalent to each other; neither method is better than the other. Use the method you prefer.
IV. Setting defaults

IV.a. When to use defaults

In general, before you create a new package, you will want to set defaults, or make sure that the defaults that are set are correct. Each user has his own set of defaults that persist until s/he changes them. Even if several people share a single workstation, each of them has his/her own defaults.

The values you supply when you set defaults will appear automatically on the metadata Workforms you use to enter data for a package. You can always type over a default value with some other value.

Generally you want to default values which will not change from package to package, such as the contributing institution. You may also want to default the values that most frequently occur. For example, a book may have three types of divisions: front matter, chapters and back matter. However, if most of the divisions will be chapters, you may want to set the default type of division at the Division level to “chapter”. Although this will have to be overridden some of the time, it will be correct most of the time.

IV.b. How to set defaults

To set defaults, select File/Defaults. A tree will appear in the Tree window, showing Package, Entity, Division and File nodes. Select (highlight) a node from the tree to set defaults for data elements at that level.
In the example above, “Package” was selected on the tree, and defaultable elements at the Package level are shown in the Workform window. In this case the operator has set “New Package?” to default to “yes” and “Contributing institution” to “FAU”, which would make sense for an FAU operator who mostly creates new packages. Defaults for some processing instructions (“make derivatives”, “target server” and “formats included”) are also set. Remember to use the scroll bar at the right side of the Workform window to see all defaultable elements.

In the next example, “Entity” was selected on the tree, and defaultable elements at the Entity level are shown in the Workform window.
Most operators will probably want to default their “Source institution” and the “Version statement” (which will only change once a year). If most work is being done for a particular type of material and project, then defaulting “Entity type” and “Project code(s)” also makes sense. It would not make sense to default elements such as “Bib record key” (the key of the NOTIS record cataloging the entity) as these would change from one entity to another. It is, however, a good practice to default "Bib record system." Since this is conditionally required with "Bib record key," it will help the operator remember to include the "Bib record key."

**IV.c. Clearing, saving and changing defaults**

To clear a default, simply blank out its value on the Workform.

To save defaults, select *File/Close* defaults. They will be automatically saved.

To change a default, just go into default mode by selecting *File/Defaults*, and change the value on the workform.
V. Creating a new MXF package

V.a. The Package control number

Every package must have a unique control number, called the “package control number” or sometimes, the “package id”. For packages to be contributed to FCLA, this number must begin with a 2-character institution or project code assigned to you by FCLA. The standard format is the 2-character code followed by a unique 8-character number, e.g. “UF00001234”. However, other formats may be accepted for certain projects. Before you create a new package, you must decide what the package control number will be.

The package control number is meant to identify a transmission (that is, a bunch of stuff FTPed together at some point in time). The package itself only exists for the length of time it takes to be created, transmitted, and processed. After a package control number is used once, it should not be used again, unless the entire package is re-transmitted for some reason (for example, if there was an error in the original package that prevented processing).

V.b. Setting the New Package directory

Every user should have his or her own directory for doing work with the MXF client. In our example, the user is Priscilla and the folder (directory) for MXF work is called “Digitized books”. Many MXF packages can be stored within the folder “Digitized books” at the same time.

Ordinarily, for a monograph or unitary work, each MXF package and the images it describes should be stored in the same folder to make it easier to FTP the entire package at one time. (To set up directories for a serial, see section X. Serials Issues, below.) Best practice is to give the folder the same name as the package control number. So, for example, if the package id is going to be FA00000033, then both the MXF file and the image files should be created in the folder named FA00000033.

In the example here, the directory structure is:

```
/Priscilla
   /Digitized books
      /FA00000033
```

To create a new MXF, select Package/New. A popup window will appear asking you where to put the new package [Package new].
Select the appropriate directory in the “Save in” box at the top of the popup window. Use the down arrow at the end of the box to navigate through the directories on your computer. To the right of the box, there are a set of buttons. The first button moves up one level, the second button creates a new folder (directory). If the appropriate directory (in this case FA00000133) does not already exist, use the “new folder” button to create it.

In this example, a new package named “FA00000133” is being created in the directory FA00000133.

**V.c. Setting the Image directory**

When the new package has been created, a Package level node will appear at the top of the Tree window [New Package].
A metadata Workform window for Package level information appears at the bottom of the screen. Note that defaults appear for some elements.

The Directory window at the upper right of the screen should show the directory that contains the images to be included in the package (assuming these images have already been created). When you create a new package, the directory containing the MXF package is automatically highlighted in the Directory window, and the name of that directory appears as the value of the Image directory element in the workform. If the image files to be included in the package are in a different directory from the MXF package, you will have to change the directory listed. Any image files in the directory will appear just below the directory listing.

NOTE: If, after creating a package, you move the package and associated images to a different location, you need to re-open the package and change the Image directory.

If image files have not been created yet, it does not matter which directory is highlighted in the Directory window.
V.d. **Package level Workform elements**

Package level Workform elements tell FCLA how to process what you have sent. See Appendix A for explanation of element meanings and use. See also instructions for specific formats of materials, such as serials.

VI. **Describing publications: Entities and Divisions**

VI.a. **Adding Entity nodes**

Every package must have at least one Entity level node. To add the node, make sure the Package node is highlighted on the tree, and select *Tree/Add node*.

A popup window will prompt you to add the node name [Add entity].
The Client assumes that any node added to the Package level will be an Entity node inserted as a Child to the Package Node, which is almost always the case.

The name of the node given in the popup is also called the “Entity ID”. For a work completely contained within one package (for example, a monograph all chapters of which are being sent at the same time), the Entity ID should be the same as the package control number. For a journal or other serial which may be sent over time in a number of packages (for example, volumes 1 and 2 in one package, volumes 3 and 4 in another), the Entity ID should be the characters “SN” followed by the 8-character ISSN of the serial (e.g. “SN00213392”). This allows all parts of the work to be brought together in the system, even if the parts are sent separately. In this example, since we are doing a complete book, the node name is the same as the package ID, “FA00000033”.

If you made a mistake typing the node name, go to the Tree window and right click on the node icon, then select Rename.

An Entity level workform appears in the Workform window, where you can now enter entity level information [Entity].

The Client assumes that any node added to the Package level will be an Entity node inserted as a Child to the Package Node, which is almost always the case.

The name of the node given in the popup is also called the “Entity ID”. For a work completely contained within one package (for example, a monograph all chapters of which are being sent at the same time), the Entity ID should be the same as the package control number. For a journal or other serial which may be sent over time in a number of packages (for example, volumes 1 and 2 in one package, volumes 3 and 4 in another), the Entity ID should be the characters “SN” followed by the 8-character ISSN of the serial (e.g. “SN00213392”). This allows all parts of the work to be brought together in the system, even if the parts are sent separately. In this example, since we are doing a complete book, the node name is the same as the package ID, “FA00000033”.

If you made a mistake typing the node name, go to the Tree window and right click on the node icon, then select Rename.

An Entity level workform appears in the Workform window, where you can now enter entity level information [Entity].
Note that there are two ways to supply a bibliographic description of the title:

1) If a NOTIS record exists, you can supply the NOTIS record key in “Bib record key” and “FCLANOTIS:QF” in “Bib record system”. This associates this package with the external bibliographic record.

2) If no NOTIS record exists, you can supply a complete Dublin Core description by filling in the elements “Title”, “Creator”, “Contributor” etc.

In both cases, you must supply the element “Title” at this level. This is used by FCLA staff to make sure the correct volume is being processed.

See Appendix A for explanation of Entity level element meanings and their use.

**VI.b. Adding Division nodes**

Only Division nodes display in the Table of Contents for an Entity. The rule of thumb is therefore to create a Division node for anything that should display in the TOC. Sometimes people wonder, if a section is only one page, if they need to create a Division
node for it or if they can simply add a File node in the appropriate place. Either method is acceptable. However, if you want it to display in the TOC, you must create a Division.

To create a Division, make sure that the parent node of the Division is highlighted in the Tree window and select Tree/Add node or use CTRL-a to add a node. Note that if a Division node is current, the Client assumes that the next node added will be a Division at the same level. If you are adding a File node or a child Division, you will need to change the default node type.  

For each Division, there are four data elements that you need to know how to use:

Node name
Type of part
[type of part] name
Title

You are prompted to enter the node name in the box that appears when you request “Add node”. This node name labels the node in the tree, and is also what will ordinarily appear in the online table of contents listing for the work. For example, if the Division is a chapter, the node name for the division might be something like “Chapter I” or “Chapter 1: Tallahassee” or “Tallahassee”. The node name should generally be what appears in
the printed table of contents of the work (unless it is a kind of division that doesn’t
ordinarily appear in a printed table of contents, or if the name is very long, as will be
explained below). In this example the node name is “Copyright permission”.

Once the Division node is created, the workform for Division level information will
appear at the bottom of the screen. In general, the only data element that needs to be
supplied at the Division level is “Type of part”, which is used primarily for statistical
purposes. The value for this element should be taken from the pull-down menu. Values
include such structural parts as: chapter, page, section, abstract, advertisement, volume,
issue, article, part, main, section, suppl, cover, fonds, recordgrp, series, subgrp, subseries,
box, file, item.

In the metadata workform, the label “[type of part] name” will vary depending on what
you enter for Type of part. For example, if you say that the type of part is “chapter”, then
the next element on the metadata workform will be labeled Chapter name. If the Type
of part is “section”, then the next element will be labeled Section name. In general, you
do not have to provide a value for this element. However, if the type of part is “chapter”
or “page” or some other unit that is numbered (e.g. Chapter 1, Chapter 2, Chapter 3...),
the number or name of the part exactly as it appears on the piece can optionally be given
in “Part name”. A value is required, however, if the Type of part is “volume” or “issue”,
in which case the Volume name should be the number of the volume, and the Issue name
should be the number of the issue. See “Describing Serials” below.

The element Title can usually be left blank. Anything entered in Title will be used
instead of the Node name in the table of contents displayed to the user. This is useful
when a title is very long. Typing in a long title as the node name can make the tree look
messy and hard to read. Instead, type an abbreviated form of the title as the node name,
and type the complete title in Title.

Additional bibliographic description can optionally be provided. For example, if the
Division is an article in a journal, then the author of the article might be supplied in
“Creator”.

See Appendix A for full explanation of Division level element meanings and their use.

**VI.c. Using Insert Range**

The Tree/Insert range function can be used whenever you have multiple Entity, Division
or File nodes whose names increment sequentially. (Insert range for File nodes is
described in “Describing physical files” below.) For example, if you have a book with
chapters numbered “Chapter 1” through “Chapter 10”, you can use Insert range to add ten
Divisions for the ten chapters.
Highlight the parent of the nodes you want to add. (That is, if you are adding a range of Entity nodes, highlight the Package node on the tree. If you are adding a range of Division nodes, highlight the Entity node on the tree.)

Select Tree/Insert range [Insert range].

A popup box will prompt you for information about the nodes to be added. In this example, we have a book with 10 chapters titled “Chapter 1”, “Chapter 2”, etc., so we filled in “Enter range name” with “Chapter” and filled in “Enter range values ...” to indicate we want the parts to be numbered from 1 to 10. We selected “chapter” as the “Type of Part”. If other bibliographic data was constant for all chapters, the information could be entered on this workform.

When the popup workform is filled out, click OK. The range of nodes will be added as the last set of children under the highlighted parent node. [Range added]
The normal workform for the first added node will be displayed. You can now add information unique to this chapter if any.
VII. Describing physical files

VII.a. Adding File nodes

There are three ways to add a File node:

1. Drag method. If images already exist in the directory, then the best way to add file nodes is to drag the images from the Directory window to the Tree window. After creating the Division in which the image belongs, right click on the image in the Directory window and drag it directly onto the Division node in the Tree window. [Drag]

A subordinate node for the file will appear, and File level metadata will appear in the Workform window. The file name, file format, and file creation date and time will automatically be supplied to the workflow. [Drag done]

To drag multiple files at the same time, click on the first file, press and hold CTRL, and click on the other file(s). Continue holding the left mouse key down after selecting the last file, and drag the group.
2. Node method. If you are creating the metadata before you have the images, then you can create a File node by highlighting the Division and selecting Tree/Add node. By default, the Client will assume you are adding another Division; change the default node type from “div” to “file”.

3. Range method. If you are creating the metadata before you have the images, there will be an image for each page, and the images will be predictably named with the page number, the easiest way to create the File nodes is to use the Insert range function. [Insert page range]
Highlight the node for the chapter or other Division to which the pages belong. In this example we are inserting page images for Chapter 1. Select Tree/Insert range and a popup window will appear. For “Enter range name” we enter “Page” so the pages will be named “Page 1”, “Page 2”, etc. There are six pages in chapter 1 so we enter the range values from 1 to 6. We select range type “file” so these will be file nodes, and the “Type of part” is page.

The program supplies a default directory for the element File name, and a default file type. In this example the directory is m:\user\Priscilla\DigitizedBooks\FA00000033\ and the file type is “image/tiff”. If the box “Supply Filename” is checked, when the Range function is enacted, the actual file names will be supplied automatically using the directory name, the range values, and the file type. So, for example, the first File node created will be given the filename m:\user\Priscilla\DigitizedBooks\FA00000033\1.tif.

When all the information has been entered, click OK. The range will be automatically created. The Workform for the first of the added nodes will display, so you can add any information necessary. [Page range added]
VI.b. Creating Derived File nodes

If you have a file derived from another file in the same package, for example, a JPEG image derived from a TIFF image, you can create a Derived File node for the derived file. A Derived node automatically records information about the source file that can be useful in the archival management of the derived file. If you do not plan to manage the derived file archivally, there is no need to create a Derived node.

To create a Derived node, highlight the node for the source file. In this example it is the “copyright” node for the TIFF image. Select Tree/Derive node. A new node with the same name as the source node will appear. [Derive]
The program assumes the derived file has the same filename, but a different file type, as
the source file. Your cursor will be in the metadata workform for the new node, at the end
of the default filename, so you can add the new file type.

VI.c. Copying Files

Sometimes a file needs to appear in more than one place in the Tree. For example, a
new chapter may begin on the same page that the previous chapter ended on, so the file
for that page needs to appear under two chapter Divisions. In this case you have two
options:

- you can create a new File node for the page by either using the “Add node” function
  or dragging the file again from the Directory window;
- you can use the “Copy node” and “Paste Node” functions to copy the first file node to
  the second location.

To use copy and paste, highlight the node to be copied and select Tree/Copy Node
(CTRL-N). Then highlight the node under which you want to copy to appear, and select
Tree/Paste Node (CTRL-P). The new node will appear with the same name as the copied
node, followed by (copy). [Copy node]
When you copy a File node all the data entered on the File workform for the first node automatically carries over to the copy, so you won’t have to re-enter any information. This can be an advantage over using the Add Node method. It is an advantage over dragging the file node twice only if you supplied non-default information after dragging.

**VI.d. Viewing files**

Sometimes it can be helpful to view a file to see what page or section it represents. To view an image file, highlight the file name in the Directory window, and use View/Image. The image will appear in a popup window, which can be resized using the mouse. You can also highlight the file name and use CNTL-I to view the image. The
popup window will also allow you to move from one image to another, using back and forward arrows.

**VI.e. File workform elements**

The file workform has several required elements but most of them can be defaulted or supplied by the system.

“Type of part” at the File level can generally be defaulted using File/Defaults. For example, if you are sending a book of page images as TIFF files and their derivative JPEGs, it would make sense to default “Type of part” at the File level to “page”.

“File name” is automatically supplied when you use the drag method to create the node.

“File format” will be supplied by the program if it can get this from the extension on the filename.

“File size” will be supplied by program when the image is present in the Image Directory and the information is present in the image header.

See Appendix A for full explanation of File level element meanings and their use.
VII. Tree manipulation

VII.a. Inserting nodes

The Add Node function will, by default, add the new node as a child to whatever node is highlighted as the current node on the tree. It is possible to insert nodes in other places by changing the default position from “child” on the Add Node popup box.

- Current node  
  * default position of add node

“Previous” will add a node directly above and at the same level as the current node.

- Position of added node  
  * Current node

“Next” will add a node below and at the same level as the current node. The new node will be placed after any children of the current node.

- Current node  
  * child of current node  
  * Position of added node

“Last” will add a node as the last node in the tree at the same level of the current node.

- Current node  
  * Node  
  * Node  
  * Position of added node

VII.b. Rearranging nodes

Nodes can be moved from one place in the tree to another by dragging and dropping the node to be moved onto another node. The node will be added as the previous peer of the node on which it is dropped.

For example, say that by mistake you have inserted nodes out of order, such that the tree is ordered as follows:

- Parent  
  * Child 2  
  * Child 3  
  * Child 1
You can drag and drop the node Child 1 up to Child 2. The node will be inserted before Child 2 at the same level and the nodes will now be in order:

*Parent
*Child 1
*Child 2
*Child 3

**VIII. VALIDATING PACKAGES**

When you are finished creating a package, you should check it using the *Package/Validate* function. This will tell you how many errors and possible errors (warnings) there are. [Validate]

When you clear the popup box by pressing Enter or clicking “OK”, a table of errors will display. [Error table].
Although the message in the “message” column may be truncated, you can display the full message by either double-clicking the error line (the full message will appear in a pop-up box) or by holding the cursor over the error message (the full message will display as a mouse-over).

If the error concerns bad data in the metadata Workform, you can see where the error occurred by double clicking the error line and clearing the pop-up error message. The affected node will be highlighted in the Tree window, and the cursor will be placed in the data entry box of the Workform that contains the bad data. In order that you can see this, the table of errors is minimized. You can bring it back to the foreground in the normal way, by clicking its icon in the task bar.

You can initiate validation at any time during package creation. FCLA recommends that you validate periodically, after adding 10-15 page files. This step performs the function of calculating the checksum values for each image, which can take some time, depending on the size of the image file and the power of the computer. By validating frequently, final validation goes more quickly. Validation is automatically performed by the system when XML output is requested. Errors must be fixed before the MXF package can be output as XML. Warnings will not prevent the output of XML.

For a list of error and warning messages and their meanings, see APPENDIX C.
IX. OUTPUT TO XML

When you finish creating your package, you need to output it as XML before sending it to FCLA or another library.

Select Package/Output to XML. First the MXF Client will automatically Validate the data (see Validating Packages above). If there are errors, they must be fixed, and Output to XML requested again. If there are warnings, you can either correct them or simply click OK.

The MXF Client will then create an XML file and display popup message box telling you the name of the XML file created.

If on the View menu, XML Tree on Output is checked, the Client will also open a new window showing the XML in tree format. Like the Package tree, the XML tree can be manipulated to expand and contract nodes by clicking the plus and minus boxes in front of the node. You can get rid of the tree by closing the window. XML trees cannot be saved, but can be recreated by redoing Output to XML.

The XML output file is saved by default in the Package directory. To view the XML file, select View/XML File. You can also view the XML from outside the Client using Notepad or a similar application. Never edit an XML output file directly.
X: SPECIAL FORMATS: SERIALS

The MXF allows flexible handling of serials, which may have many levels of hierarchy (e.g. volumes, issues, articles). However, for serials to be processed correctly, it is important to understand and follow special rules and conventions.

If many issues of a serial are to be digitized, it is required that each issue has to be sent to FCLA in a separate package. There is no requirement that issues be received in order. The important thing to remember is that the node name of the Entity (Entity ID) is what ties all information for a single serial run together. If a serial is sent in several packages, the Package ID must be unique for each package, but the Entity ID must be the same.

X.a. Directory setup for serials

When you set up directories for your serial package, one and only one subdirectory should be created for each serial issue:

```
\UF80001549 [package ID]
 \SN00130098 [entity ID]
 \1_1 [directory for images for volume 1 number 1]
```

Please use only numeric characters for the name of the subdirectory for each serial issue. If the name of the subdirectory contains non-numeric character, the package will be rejected.

Examples of valid directory setup:

```
\UF80001549 [package ID]
 \SN00130098 [entity ID]
 \1 [directory for images for volume 1 with only one issue]
```

```
\UF80001549 [package ID]
 \SN00130098 [entity ID]
 \1998_004 [directory for images for volume 1998 number 4]
```

```
\UF80001549 [package ID]
 \SN00130098 [entity ID]
 \123-124 [directory for a combined issue number 123 and 124]
```

Examples of invalid directory setup:

```
\UF80001549 [package ID]
 \SN00130098 [entity ID]
 \vol1_no1 [directory for images for volume 1 issue number 1]
```
X.b. Package level information

Create the package in the highest level directory you are using for the serial. In the example above, you would create the package in the directory UF8001549.

Package ID (Node name). When you create the package node, the Package ID (node name) should be in the standard package ID format, consisting of the 2-character institution or project code followed by an 8-character numeric value, e.g. “UF80013549”.

Image directory. All images being sent in the package should be in a single directory (that is, the subdirectory for each serial issue). Set the Image directory to that directory. In the example above this would be “...\SN00130098\1_1”.

Make records. For some serials you may want author/title bibliographic records created for each article published. If this is the case, select “analytics, article” as the value of “Make records”.

Make derivatives. For some serials, you may want a PDF file created for every article in the serial. For other serials, you may want to create a PDF for each issue instead. Select “pdf/article” or “pdf/issue” if you want either of these options.

Please note that you have to use sensible “Type of Part” for division nodes that you want to create or wrap PDF files. If you select “pdf/article”, the following “Type of Part” nodes will be expected to appear: article, advertisement, contents, correspondence, cover, editorial, index, section, permission. If you select “pdf/issue”, nodes with the following “Type of Part” will be expected to appear: issue, permission. In other words, even though you select “pdf/article” or “pdf/issue” for “Make derivatives”, but if you don’t use any of these “Types of Part” for any nodes, no PDF file will be created.

X.c. Entity level information

Entity ID (Node name). The node name of a serial entity must be the characters “SN” followed by the 8-character ISSN of the serial. For example, if the ISSN is 0123-4567, then the Entity ID (node name) for a UF serial must be “SN01234567”. That way, even if volumes or issues are sent in multiple packages, there is a unifying identifier that ties all the pieces together as parts of the same serial.

Some older serial titles do not have ISSNs or some materials you want to package as serial are not serials. In this case there are two options: apply for a retrospective ISSN, or
assign a pseudo-ISSN. Instructions on how to apply for a retrospective ISSN, or assign a pseudo-ISSN are available at [http://palmm.fcla.edu/strucmeta/pseudoissn.html](http://palmm.fcla.edu/strucmeta/pseudoissn.html)

Entity type. Must be “serial”.

### X.d. Division level information

Most serials will have at least three levels of hierarchy at the Division level: volume, issue (number), and the contents of the issue (articles, correspondence, editorials, etc.). This is represented on the Tree as parent and child nodes: the Division for the volume is the parent of the Division for the issue, which is the parent for the Divisions for the articles within the issue.

#### X.d.1. Volumes.

Node name. The node name for the volume should be what you want to display in the online table of contents. In other words, if you would like the table of contents to display as:

Volume 1  
Volume 2  
Volume 3

then you must record the node names for the volumes as “Volume 1”, “Volume 2”, “Volume 3” etc.

If you want the chronology of the volume to display as part of the table of contents, then you must include that in the node name as well:

Vol. 1 (1898/1899)  
Vol. 2 (1899/1900)

It is important that you record all node names for volumes and issues consistently throughout the entire serial run. Recommended practice is to use either “Volume x (year)” or “Vol. x (year)” as this gives the most information to the reader.

Type of part. The *Type of part* for a volume must be “volume”.

Volume name. This is required for a serial. It must be the numeric designation of the volume. E.g. if this is volume 43, the *Volume name* must be “43”.

Date. This is required for a serial. The date in this field will be used to make a chronology tracing for the date of publication of the original materials. Use the date of publication for the volume in hand. For volumes that don't actually have real publication
dates printed in, you need to infer the date or determine a probable date of publication and enter this in brackets with a question mark, e.g. [1923?]. The date will be displayed as “Publication date” for the item in Textual Collections as well as for sorting the search results according to “date ascending”, “date descending”. The date in this field will also be used for statistical purposes.

X.d.2. Issues

Issue nodes are created as children of the parent volume node. Please note that for annuals or serials that only have volumes, issues nodes are not required.

Node name. As with volumes, the node name for the issue should be what you want to display in the online table of contents. In other words, if you would like the table of contents to display as:

Number 1
Number 2
Number 3
then you must record the node names for the issues as “Number 1”, “Number 2”, “Number 3” etc.

If you want the chronology of the issue to display as part of the table of contents, then you must include that in the node name as well:

No. 1 (Spring)
No. 2 (Summer)

It is important that you record all node names for volumes and issues consistently throughout the entire serial run. Recommended best practice is to use either “Number x” or “No. x” and to put the chronology in parenthesis.

Type of part. The Type of part for an issue must be “issue”.

Issue name. This is required for a serial when applicable. It must be the alphanumeric designation of the issue. E.g. if this is issue 3, the Issue name must be “3”.

Date. This is required for a serial when applicable. The date in this field will be used to make a chronology tracing for the date of publication of the original materials. Use the date of publication for the issue in hand. For issues that don't actually have real publication dates printed in, you need to infer the date or determine a probable date of publication and enter this in brackets with a question mark, e.g. [1923?]. The date will be displayed as “Publication date” for the item in Textual Collections as well as for sorting the search results according to “date ascending”, “date descending”. The date in this field will also be used for statistical purposes. Note that the Date recorded for the issue should be the same as the Date used for the volume. [Issue]
X.d.3. Contents of issues

Issues of serials generally contain material such as letters to the editor, articles, advertisements, etc. Each article or other section should be a child node under the parent node for the Issue.

Node name and Type of part. The name of the node (Division name) should be what you want to appear in the online table of contents for the issue. If the node is an article, you should generally use the title of the article; however, if the title is very long, then use a short form as the node name, and put the complete title in Title. If the node is some section of the issue that does not have a name, make up some descriptive heading, e.g. “Letters”. Here are suggestions on how to treat journal divisions:

<table>
<thead>
<tr>
<th>division</th>
<th>Division name</th>
<th>Type of Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>permission*</td>
<td>Copyright permission</td>
<td>permission</td>
</tr>
<tr>
<td>volume</td>
<td>Volume X</td>
<td>volume</td>
</tr>
<tr>
<td>issue</td>
<td>Number X</td>
<td>issue</td>
</tr>
<tr>
<td>front cover</td>
<td>Front cover or Front matter</td>
<td>cover</td>
</tr>
<tr>
<td>Inside of front cover</td>
<td>Front matter</td>
<td>Cover</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>Table of contents</td>
<td>Table of Contents or contents</td>
<td></td>
</tr>
<tr>
<td>Letters to the editor</td>
<td>[name of letters section]</td>
<td>Correspondence</td>
</tr>
<tr>
<td>Article</td>
<td>[name of article]</td>
<td>Article</td>
</tr>
<tr>
<td>Abstract (within article)</td>
<td>Abstract</td>
<td>Abstract</td>
</tr>
<tr>
<td>Advertisements</td>
<td>Advertisements</td>
<td>Advertisements</td>
</tr>
<tr>
<td>Editorial</td>
<td>Editorial</td>
<td>Editorial</td>
</tr>
<tr>
<td>Index</td>
<td>Index</td>
<td>Index</td>
</tr>
<tr>
<td>Inside of back cover</td>
<td>Back matter</td>
<td>Back matter</td>
</tr>
<tr>
<td>Back cover</td>
<td>Back cover or</td>
<td>Back matter</td>
</tr>
<tr>
<td></td>
<td>Cover</td>
<td>Cover</td>
</tr>
</tbody>
</table>
Date. You do not need to supply a date here if one was provided at the issue level.

Creator. If the Division node is for an article with one or more named authors, you should enter the name of the author in this element. Repeat the element for multiple authors.

An example of a serial showing many sections as contents is given below. [Serial]

**X.e. Serial title changes**

For a serial with title changes, a unique Entity ID should be created when the title changes. The Entity ID is a unifying identifier that ties all the pieces under each title together.

Alternative title. This field is used to trace preceding title(s) or/and succeeding title(s) for serials with title changes. You must record the preceding title in the form of “Preceding title: preceding title”, and the succeeding title as “Succeeding title: succeeding title”, e.g. “Preceding title: Report of the Board of Control of the State Institutions of Higher Learning of Florida for the biennium ending ....”, “Succeeding title: Report of Florida Board of Regents”.
XI. SPECIAL FORMATS: MAPS AND PHOTOS

Single sheet maps and photos can be added to the FCLA Document Loader as single page documents, or can be added to the FCLA Visual Materials Collections server. If a map is destined for a Visual Materials Collection, there must be two images of the map supplied: a MrSid (.sid) vector image, and a JPEG thumbnail. Data entry for maps is quick and easy, as most of the required Workform information can be defaulted.

XI.a. Directory structure

Each single-sheet map or photo is treated as an Entity. A package can contain a single map/photo entity, or multiple map/photo entities. If your package contains a single map/photo entity, the directory structure can be very simple: a single directory to hold the package and images.

\UF00005678 [packageID -- should be the same as the Entity ID]

If the package contains multiple map entities, then a directory should be created with the name of the Package ID, and subdirectories for each map should be named for the map Entity IDs.

\UF800000019 [packageID]
\UF00005678 [directory for first map]
\UF00005679 [directory for second map]

XI.b. Package level information

Package ID (Node name). When you create the package node, the Package ID (node name) should be in the standard package ID format, consisting of the 2-character institution or project code followed by an 8-character numeric value, e.g. “UF80013549”.

Image directory. If all images being sent in the package are in a single directory (that is, if you are sending a single map at a time) set the Image directory to that directory. If multiple maps are being sent, set the Image directory to the highest level directory.

Make records. If maps are to be processed into a Visual Materials Collection, Make records should specify “map”.

Make derivatives. If maps are to be processed into a Visual Materials Collection, all map derivatives should be sent in the package, and no Make derivatives instructions should be specified.
Target server. If maps are to be processed into a Visual Materials Collection, the Target server should be “IC”.

Formats included. If maps are to be processed into a Visual Materials Collection, the two Formats included should be “Image/jpeg” and “Image/sid”.

**XI.c. Entity level information**

Entity ID (Node name). The node name of a map entity should be the two-character institution or project code followed by a 8-digits to create a unique identifier. The Entity ID should be the same as that entered in the bibliographic record for the map in the 035 field.

Entity type. Should be “map”.

Project code(s), Bib record key, Bib record system, and Title should always be supplied.

Copyright. A copyright statement should generally not be supplied, as this is will be taken from the associated bibliographic record.

**XI.d. Division level information**

Maps/photos intended for a Visual Materials Collection will not require any Division nodes. The File nodes for the map images can be moved directly under the Entity node.

**XI.e. File level information**

File nodes for the map image can be moved directly under the Entity node.

Type of part. Type of part should be “main”. [Map]
**XI.f. Related Images**

For more information on Related Images see “File Level” in *Editing Guide To Map & Photo Metadata*.

**Metadata for Image Files**

Images that are related in some way, such as the front and back of postcards, can be displayed together in Visual Collections when “Other Views” is selected from the full image display page. In order to associate the related images there are several elements that need to be entered when creating the MXF.

Packages with non-related images contain only one image file, per image type, per package, and all of the descriptive metadata are entered at the entity level in the MXF. Packages for related images, however, contain two or more related images and the file section for each image contains the descriptive metadata that is specific to that named image file only, and is different from the other file(s) in the package. Any metadata that the images share in common can be entered at the entity level. If all of the metadata are the same, i.e., if all of the elements such as title, creator, date, etc. are the same, they can be entered at the entity level. If any of the metadata is different it must be entered at the file level.

**MARC record creation**

MARC records are created from the entity level metadata only. Metadata at the file level will be displayed on the Web but will not become part of the MARC record.

**New Elements for Related Images**

There are four new required elements at the file level for ‘Related Image’ files. These elements will indicate where the thumbnail images will be displayed in the “Other Views” web page.
For example if you have nine images that you want to display together in “Other Views” as follows:

<table>
<thead>
<tr>
<th>1,1</th>
<th>1,2</th>
<th>1,3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,1</td>
<td>2,2</td>
<td>2,3</td>
</tr>
<tr>
<td>3,1</td>
<td>3,2</td>
<td>3,3</td>
</tr>
</tbody>
</table>

For the image you want displayed in the upper left-most part of the web page, you would code “Display Row”=1 and “Display Column”=1, and so on. Keep in mind that four normal size thumbnails will fit across a web page, while only three map thumbnails will fit across a web page.

Each of the thumbnail image groupings in “Other Views” will show “Display Face” and “Display Type” at the top of the group of related images.

For example:  front|summary

Each new combination of “Display Face” and “Display Type” will give a new grouping display in “Other Views”. The number of thumbnails can vary for each grouping.

For example:

<table>
<thead>
<tr>
<th>front</th>
<th>summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1</td>
<td>1,2</td>
</tr>
</tbody>
</table>
To show the front and back of a postcard you would get the following display in “Other Views”:

<table>
<thead>
<tr>
<th>back/detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1</td>
</tr>
<tr>
<td>1,2</td>
</tr>
<tr>
<td>2,1</td>
</tr>
<tr>
<td>2,2</td>
</tr>
</tbody>
</table>

![Visual Collections](image)

[View full image](image)  [View description](image)  [View other views](image)

Return to search results  << previous item  next item >>

Front | Summary

Baia Honda Bridge

Back | Summary

Baia Honda Bridge

[Continue reading](image)
Image File Naming

In order to distinguish between multiple images in packages of ‘Related Images’ the file names must differ. Each file name must include a suffix with an incremental number after a dash (-).
For example, in the package named UF00005000, which contains three images, the files would be named, UF00005000-1, UF00005000-2, UF00005000-3, and so on.
APPENDIX A: WORKFORM ELEMENTS

PACKAGE LEVEL

New Package?
This must be “yes” or “no”. If this is a revision of a package sent to FCLA earlier with the same control number, New Package should be “no”. Otherwise, New Package should be “yes”.

Contributing institution
This element indicates the institution that did the scanning and/or metadata creation. Ordinarily a short code for the institution (e.g. “FAU” “UF” “FGCU”) is sufficient. This is for “manual” use only, and helps to identify who should be contacted if problems exist.

Image directory
This must be set to the fully qualified directory name of the directory containing the images for this package. If images are in multiple subdirectories, Image directory should be set to the next higher level directory containing the subdirectories. The Client will supply this directory name by default as the path to all image names. The Client will also check that all images in this directory and its subdirectories are referenced in the package, and give a warning message if any are not.

Make records
Indicates if bibliographic records are to be created by FCLA programs from data in this package.

“analytics, article” = make a bibliographic records for every Division with type=”article”.
“analytics, chapter” = make a bibliographic record for every Division with type=”chapter”.
“title, xx” = make a bibliographic record for the entity, and put it in the Institution Group named by the xx.
For example, “title, QC” will make a MARC record for the title in QC.

If omitted, no bibliographic records are created.

Make derivatives
Indicates if derivative images should automatically be created by FCLA programs from master images in this package. Only one pdf derivative level may be selected.

“image/jpeg” = create a JPEG derivative for each TIFF image sent with the MXF
“pdf/article” = create a PDF file at the article level; this includes a PDF for each Division with a “type of part” article, advertisement, contents, correspondence, cover, editorial, index or section.
“pdf/chapter” = create a PDF file at the chapter level; this includes a PDF for each Division with a “type of part” chapter, advertisement, bookplate, contents, correspondence, cover, editorial, index or section.
“pdf/issue” = create a PDF file at the issue level; this includes a PDF for each Division with a “type of part” issue.
“pdf/main” = create a PDF file at the main level; this includes a PDF for each Division with a “type of part” main.
“pdf/volume” = create a PDF file at the volume level; this includes a PDF for each Division with a “type of part” volume or issue.

If omitted, no derivatives are created.

Target server
Indicates which system(s) the files are intended for.
   “DL” or “TC” = Text collection server, for page images and PDF files
   “FT” = Text collection server, for SGML encoded full text and page images
   “IC” = Image collection server, for collections of visual materials such as maps and photographs

Formats included
The formats of digital files included in the package. Use the authority list in the pulldown menu.

Timestamp
Date and time of package creation. Supplied by the system and cannot be changed.

ENTITY LEVEL

Entity type
Enter monograph, serial, etc. from pulldown.

Source institution
This is the institution that holds the original from which the contributed material was digitized. If the original entity was “born digital”, such as an ETD (electronic thesis or dissertation) the source institution is the institution holding the digital original.

Project codes(s)
Enter all project codes applicable to this entity.

Version statement
Must use or default a value from the pulldown.

Copyright
If the source material is under copyright, a statement indicating the material is under copyright and was digitized with permission of the rights holder is required.

Bib record key
If a NOTIS record exists for this entity, supply the NOTIS record number in the form AAA9999 here.

Bib record system
This indicates the system and file in which the record with the specified “Bib record key” will be found. For NOTIS records, use either “FCLANOTIS:QC” or “FCLANOTIS:QF” depending on whether the bib data is in the institution group QC or QF.

Title
The title of the entity as it appears on the piece or as it would appear in a catalog record. This is required at the Entity level, even if there is an external bibliographic record, to serve as a double check that the correct bibliographic record has been referenced.

NOTE: The elements below, from Creator to xxx are part of an optional bibliographic description which should not be used if a NOTIS record exists for the entity.

Alternative title
A second or alternative title for the entity. For a serial, this could be a former or succeeding title.

Creator
The name of the primary author of the entity.

Contributor
The name of a secondary author, editor, illustrator or other person or organization associated with the entity.

Publisher
The publisher of the entity. Use this data element to record the publisher of the source material (e.g., Hawthorne Press) not of the electronic version (e.g. University of Florida).

Subject
LC Subject headings, or keywords, or other descriptors that describe the content of the entity.

Description
A free text narrative description of the content of the entity. If the description is an Abstract, use the Abstract element instead.

Abstract
An abstract of the content of the entity.

Table of Contents
The table of contents of the entity. This will not be used in generating a table of contents display, but may be used to provide searchable keywords in the catalog system.
Description note
Do not use; use Description instead.

Description release
A version, release or edition statement pertaining to the entity. Use this to describe the source material, not the digitized version.

Rights
Use Copyright for a short statement of copyright status and permission to digitize. Use Rights for a longer explanation of complex terms and conditions.

Extent
Size of the entity. Use for filesize of the digital version. If the digital version is made up of many small files, you can estimate the total filesize here, but indicate it is an estimate and how it is derived, e.g. “Roughly 5MB in 15 PDF files”.

Medium
?

Type
?

Coverage
Use for the geographical or temporal coverage of the content of the entity. For example, “1860-1864” or “Alachua County”.

Date
A date associated with the entity. This date is used for statistical purposes. If describing a serial, see the chapter in this manual, Special Formats: Serials, for instructions how to record this date.

Creation date
Creation date of the digital version.

Publication date
Publication date of the source or digital version, if formally published. Do not use for the date of making a digitized entity available on the web.

Modification date
The date of last change of the entity.

Identifier
You can use this to record any standard number(s) assigned to the entity, such as ISSN or ISBN, as well as digital identifiers such as DOI.

Source
Do not use.

Is part of
If the entity is part of a larger publication (for example, a map that is reproduced from an atlas, or a book issued in series) give bibliographic information for the larger publication here.

Has part
If the entity has component parts, you can give a bibliographic description of the parts here.

Is version of
If the entity is a bibliographic version of another entity, you can describe the other entity here. Do not use for physical versions (i.e. for TIFF and MrSid versions).

Is format of
If the entity is a derivative of another physical representations (e.g. a sid file made from a TIFF) you can describe the source version here.

Has format
If the entity has other physical representations, you can describe them here. (Use “Is format of” instead if this version was derived from another representation.)

Language
The language of the content of the entity, if not English. E.g. “French”.

Thesis degree
If the entity is an ETD, then enter the degree granted here, e.g. “B.A”, “M.S.”, “PhD”.

Thesis discipline
If the entity is an ETD, then enter the department in which the degree was granted here, e.g. “Organic chemistry”.

Thesis grantor

Thesis level

DIVISION LEVEL

Type of part
Select from pulldown. The type of structural part that this division represents, e.g. “chapter”, “article”, “volume”. Be as specific as possible, but if no part name in the pulldown seems to apply, use “section”. Use “main” for the main part of an ETD, if represented by a single PDF.
[type of part] name
The label for this element will change depending on the type of part chosen, i.e. if Type of part is “chapter”, then this label will say “Chapter name”. Use this element when the parts have formal numbering that consist of the part designation and some alpha or numeric enumeration, e.g. “Chapter 1”, “Part II”.

Namespace reference(s)
Do not use.

Note: Remaining elements, from Title through Thesis level, are essentially the same as at the Entity level. However, the meaning of the bibliographic data pertains to this particular Division instead of the entire entity. E.g., Title refers to the title of the Division.

**FILE LEVEL**

Note: If the file is for Visual Collections and there is more than one file in the package, bibliographic data that is specific to an image file needs to be entered at the file level. The elements, from Title to Thesis, are essentially the same as at the Entity Level. However, the bibliographic data pertains to this particular file rather than to the whole entity. If an element is the same for all the images in a package, it can be entered at the entity level. (See XI.f. Related Images for a full explanation of Related Images.)

Type of part
Select from pulldown. The type of structural part that this file represents. For example, a PDF of a book chapter would have Type of part “chapter”. A TIFF of a book page would have Type of part “page”.

[type of part] name
The label for this element will change depending on the type of part chosen, i.e. if Type of part is “chapter”, then this label will say “Chapter name”. Use this element when the parts have formal numbering that consist of the part designation and some alpha or numeric enumeration, e.g. “Chapter 1”, “Part II”.

File name
The fully qualified filename (including extension) of the file, e.g. m:\user\Priscilla\DigitizedBooks\FA00000033\1.tif.

File format
The MIME Type (Internet media type and subtype) of the file, and the version of the file if applicable; e.g. “image/tiff 6.0”, “application/pdf x.x.”

File order
Files will be ordered by default in the same sequence as the metadata describing them. If some other order is required, you can use File order to give an absolute ordering. If any
one file in a package has a **File order**, then all files in the package must. This element is generally not used.

**Filesize**
File size in bytes. This is supplied by the client from the file header whenever possible. When you must supply a value, be sure to give the value in bytes, and do not include any unit designation, e.g. “543210” not “5.4 MB”.

**Checksum**
A calculated checksum for the file. This will be supplied by the Client and cannot be altered.

**Checksum type**
The type of checksum calculated. This will be supplied by the Client and cannot be altered.

**Timestamp**
The date and time of file creation. This is supplied by the Client from the file header when possible.

**File id**
An internal identifier supplied by the Client.

**Creating institution**
The institution responsible for image creation. This should be given at the level of the library, rather than of the university or library department, e.g. “University of Florida, University Libraries”.

**Creating individual**
The person who actually created the image via scanning, digital camera, etc. The individual’s department or other information can be supplied if there is a possibility of confusion, e.g. “George Smith, Digital Library Center”.

**Creation method**
How the image was created, for example, “Scanned from paper” or “Output from MS Word in PDF format”.

**Software used**
The name of the software package used to create the file, e.g. “Adobe Capture”.

**Software version**
The version of the software used, e.g. “5.2”.

**Name of compression scheme**
If the file is compressed, the name of the compression scheme used.
Compression
The compression ratio, or other textual information about compression apart from the name of the scheme.

Note: The Following four elements (Display Row, Display Column, Display Type, Display Face) are required only in packages that have one or more Related Images in a package. (see Appendix F for a full explanation of Related Images.)

Display Row
The row number where the thumbnail image will display when ‘Other Views” is selected.

Display Column
The column number where the thumbnail image will display when “Other Views” is selected.

Display Type
The value that will display at the top of the group of thumbnail images when “Other Views” is selected. Values are sum (summary), and det (detail). If not entered, will default to “sum”.

Display Face
The Second value that will display at the top of the group of thumbnail images when “Other Views is selected. Values are: front, back right, left, top and bottom. If not entered, will default to front.

Capture
A textual description of the capture method. It is better to use Capture device used and Type of capture device.

Capture device used
The make and model of the digital camera or scanner used.

Type of capture device
Select from pulldown.

Scanner settings
If the capture device was a scanner, record the settings in Gamma, Brightness, Contrast, etc. and set Scanner settings to “yes”.

Gamma/Brightness/Contrast/Saturation/Percentage
Record the settings used to drive the scanner used as capture device.

Camera settings
Do not use.

Light source
Textual description of source of light used when scanning.

Tracking id
If you have an internal tracking id number for this batch of images, you can include it here.

Image bit depth
Record as a number, e.g. 1, 16, 24.

Image resolution
For example, 600 DPI.

Storage segment
For TIFF images, whether recorded as strip or tile. Select from pulldown.

Storage planar configuration
For planar formats only, whether the image is chunky or planar. If not applicable, use “unknown”.

Unit of sampling frequency
Inch, centimeter, etc. Select from pulldown.

Sampling plane
The reference plane for sampling frequency. Select from pulldown.

Image dimensions (horizontal)
The number of pixels in the sampling frequency unit in the image width.

Image dimensions (vertical)
The number of pixels in the sampling frequency unit in the image length.

Image color space
Color space (color mode) of image, e.g. linear RGB.

Color management
Description of any process used to improve consistency of color across capture, display, and output devices.

Color lookup table
Color lookup table used.

Targets included
Textual information about color bar or greyscale bar used as internal target.

Type of target included
Either “color” or “greyscale”, select from pulldown.
Descreening software
Software used for descreening.

Descreening settings
Settings used with descreening software.

Orientation
Either “portrait” or “landscape”, select from pulldown.

Derived from (filename)
If this file was derived from another file (e.g., a JPEG image made from a TIFF), you can give the filename of the source file here. Alternatively, if the source file is described in this MXF package, you can leave this element blank and give the File id of the source file in the following element. NOTE if you use the Client’s Derive Node function, this is automatically supplied.

Derived from (file id)
If this file was derived from another file (e.g., a JPEG image made from a TIFF) included in this MXF package, you can give the File id of the source file here. This is an alternative to giving the filename in the previous element. NOTE if you use the Client’s Derive Node function, this is automatically supplied.

Derived from (description)
If this file was derived from a non-digital original, or if the relationship between the source file(s) and this file more complex than a one-to-one derivation, use this element for a textual description of the files involved and their relationship to each other.

Source dimensions (horizontal)
Horizontal (width) dimensions of a non-digital source file scanned to make this file, e.g. “35”. Do not include the unit of measurement here, but in the Unit of source dimensions element.

Source dimensions (vertical)
Vertical (height) dimensions of a non-digital source file scanned to make this file, e.g. “50”. Do not include the unit of measurement here, but in the Unit of source dimensions element.

Unit of source dimensions
The unit of measurement for horizontal and vertical dimensions of the source, e.g. “cm.”.

Namespace reference(s)
Do not use.

Note: Remaining elements, from Title through Thesis level, are essentially the same as at the Division and Entity levels. However, the meaning of the bibliographic data pertains
to this particular File. As a general rule, bibliographic description should be given at the Entity and or Division levels, and not at the File level.

An exception to this rule is made for “Related Images”. If there is more than one JPEG image in an MXF package, i.e., one or more related images, the bibliographic description must be given at the file level if the element values differ for the images. For example, if the images have different titles and descriptions, these must be indicated at the file level. Bibliographic description that is shared between images is indicated at the Entity level.
Appendix B: How the MXF is encoded

The MXF is encoded in XML. Data elements are delimited by start tags and end tags. Start tags look like this:

-tagName-

End tags look like this:

-/tagName-

The value of the data element is usually given between the start and end tags, e.g.

-<projects> FHP </projects>- means the value of the data element “projects” is “FHP”.

Some data elements have attributes, or more specific sub-elements. In this case they are shown within the start tag in attribute="value" format:

-<file format="image/tiff 6.0" filesize="32605">-

Elements can be nested within other elements, in which case the meaning is taken to be hierarchical. For example, there may be two elements nested as follows:

-<div type="chapter"> ... ... <div type="page"> ... 
</div>-

In this case, it is understood that the page is contained within the chapter. (Note that although this kind of nesting is often represented graphically using indentation, the actual XML is not indented.)

The MXF Client software is designed to hide the actual XML syntax of the MXF from the person doing the data entry. Rather than seeing start tags and end tags, you see screen labels and boxes for entering data. When all the information has been entered, you can tell the Client to export the data in the appropriate XML format.
APPENDIX C: VALIDATION MESSAGES

The MXF Client has two kinds of Validation Messages: Errors and Warnings. An Error must be fixed before XML can be output. Warnings do not have to be fixed.

Appendix C.1. Error messages

The following are Error messages:

"No value specified for [required element]"
   The cursor will be at the required element in the Workform. Some value must be supplied.

"The name “Volume name” or “Issue name” value (in the metadata workform) for a volume or issue contained within a serial entity must be numeric."
   If the Entity type is “serial” and the Division node’s Type of part is “volume” or “issue”, then the Volume name or Issue name field must have some value. For example, if you are describing Volume 43, then Volume name should be “43”.

"[filename] is not an existing file."
   In a File node, the file identified in File name was not found in the Image directory for the package, or in any of the subdirectories of the Image directory.

"The 'Derived from' value [file id] is not a valid file id from this package"
   If you use the “Tree/Derive node” function to create a derived file node, the source node must exist in the package at the time of validation. If you get this error message, somehow the source file must have been removed from the Image directory.

"The specified image is not in the path given in the package level image directory."
   A file node references a file that was not found in the image directory specified in the Package level field Image directory.

Appendix C.2. Warning messages

The following are Warning messages:

"No images have been referenced in this package."
   The package does not refer to any files. That can only happen if the package does not contain any File nodes, since a Filename is required on the File workform.
“Unable to determine image directory.”

“Image directory cannot be located, XML file will be stored in the package directory.”

"The file [file path] exists in the image directory, but is not referenced in the package."

The directory designated on the Package workform as the Image directory contains certain files that are not referenced in the package. This message will only appear if the filetypes of the unreferenced files are .tif, [what else]
Organizing your workflow and using shortcuts, defaults and control keys can speed data entry significantly. Here are some suggestions for a few common cases.

**a. Book, images exist**

In this example, there are TIFF and JPEG images for every page of a book.

a.1. Set up your new package and Package node.
a.2. Set up your Entity node for the book.
a.3. Create nodes for all Divisions:
   - Have the Table of Contents or Division List in front of you.
   - For nodes with unique names (e.g. Copyright permission through Foreword):
     Use CTRL-a (Add node) to create the first Division under the Entity node.
     Hit the back arrow (up one level) to highlight the Entity node again.
     Use CTRL-a (Add node) to create the next Division.
     Hit the back arrow (up one level) to highlight the Entity node again.
     Continue creating Division nodes with CTRL-a and back arrow until done.
   - For nodes with sequentially numbered names (e.g. Chapter 1 through 10):
     Use CTRL-s (Insert Range) to create nodes for these Divisions.
a.4. When all Divisions have been created, create File nodes for the images:
   - For each division, highlight the TIFF images for the pages in that division (Hold CTRL down and click the image names).
   - Drag the TIFFs from the Directory Window to the appropriate Division in the Tree Window.
   - For each TIFF, highlight the TIFF node and use CTRL-d (Derive node) to create a derived node for the JPEG.
APPENDIX E: TRAINING EXERCISES

Exercise 1: Book worksheet

Preparing a worksheet. To create an MXF you need to know the structure of the publication. If you won’t have the publication in front of you when you make the MXF, you can record the important information on a worksheet. In this exercise, because we don’t have the source publication even to make the worksheet, you will have to pretend you do by inferring the information from the online version in Florida Heritage.

1. Read Section I “Understanding the MXF” and Section II, “Preparing Documents”.

2. In Florida Heritage, look up the title, *Conjured into being: Zora Neale Hurstons Their Eyes were watching God*. Fill out Worksheet 1 (empty) on the following page.

The “Division Name” is what will appear in the table of contents display. “Type of Part” must be taken from the following list: abstract, advertisement, article, box, chapter, contents, correspondence, cover, editorial, file, item, main, page, part, permission, recordgroup, section, series, subgroup, subseries, suppl, volume. Fill in “Page or range” when the division consists of numbered pages (e.g. “i-vii”).

“Comments” can be used to record the filename, if other than the page number. (There is a convention to name files the same as the pages, e.g. the TIFF file for page 1 would be 1.tif.) Since you don’t know the filenames for this exercise, you can omit this information. “Comments” can also be used to record additional bibliographic information for the section, such as an author or long title.

The first entry is filled in for you.

3. Compare your filled-out worksheet with Worksheet 1 (completed). Yours does not have to look exactly like this but be sure you are comfortable with the differences.
<table>
<thead>
<tr>
<th>Division Name</th>
<th>Type of Part</th>
<th>Page or range (n-n)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Matter</td>
<td>section</td>
<td></td>
<td>approval, title</td>
</tr>
<tr>
<td>Division Name</td>
<td>Type of Part</td>
<td>Page or range (n-n)</td>
<td>Comments</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------</td>
<td>---------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Front Matter</td>
<td>section</td>
<td></td>
<td>approval, title</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>contents</td>
<td>ii</td>
<td></td>
</tr>
<tr>
<td>Abstract</td>
<td>abstract</td>
<td>iii-v</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>chapter</td>
<td>1-11</td>
<td></td>
</tr>
<tr>
<td>Free indirect</td>
<td>chapter</td>
<td>12-16</td>
<td></td>
</tr>
<tr>
<td>discourse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signifying</td>
<td>chapter</td>
<td>17-23</td>
<td></td>
</tr>
<tr>
<td>Conjuring</td>
<td>chapter</td>
<td>24-28</td>
<td></td>
</tr>
<tr>
<td>Signifying/</td>
<td>chapter</td>
<td>29-33</td>
<td></td>
</tr>
<tr>
<td>Conjuring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td>chapter</td>
<td>34-38</td>
<td></td>
</tr>
<tr>
<td>Literature cited</td>
<td>section</td>
<td>39-41</td>
<td></td>
</tr>
</tbody>
</table>
**Exercise 2: New package**

This exercise will use the images in the SF00000012 folder. Before beginning, create a directory for your MXF work. For example, this might be called “/path/yourName/MXFwork”. Copy the SF00000012 folder into /MXFwork. Pretend you are at USF, creating an MXF to transport these images to FCLA for loading.

1. Read sections III “Basics of the MXF Client”, IV “Setting Defaults”, and V “Creating a New MXF package”.

2. Log into the MXF Client.

3. Set the following Defaults:

   **Package:**
   - New package? (yes)
   - Contributing institution (FSU)
   - Make derivatives (application/pdf)
   - Target server (DL)
   - Formats included (image/jpg, image/tiff)

   **Entity:**
   - Source institution (USF)
   - Version statement (Electronic version created 2001...)
   - Bib record system (FCLANOTIS:QF)

   **Division:**
   - Type of part (chapter)

   **File:**
   - Type of part (page)
   - Image format (image/tiff)

4. Create a new package named “SF00000012”. Set Image Directory on the metadata workform to the correct directory. Make sure the correct directory is in the Directory window and that the images are listed. Fill in any missing information on the metadata Workform at the Package level.

5. When you are done, compare your completed workform with the examples below. [Exercise 2-1, Exercise 2-2]. They don’t need to be identical but be sure you understand any differences.
6. Close the package by selecting Package/Close. Close the Metadata Module by clicking the close box at the right of the top Menu bar. Close the MXF Client by clicking the close box in the upper right-hand corner.
Exercise 3: Adding Entity and Division level information

In this exercise you will use the worksheet you created in Exercise 1 to add Entity and Division nodes to the tree. Assume there is already a NOTIS catalog record for this title in the QF (PALMM) institution, and that its NOTIS record number is AAA1070.

1. Open the MXF client, using your username and password.

2. Open the Metadata module (Module/Metadata).

3. Open the Package for SF00000012: Select Package/Open. A popup box will suggest the last package file that you had open. If this is correct (it should be) highlight the name of the package and click Open. Note that the correct Image directory will display in the Directory Window, and the Package workform displays.

4. Create an Entity node: Select Tree/Add node. The Client assumes you want to add an Entity node as a child to the Package node; this is correct. Type the name of the Entity Node in the box. For non-serial publications, this should be the same as the name of the Package Node, so enter “SF00000012” and click OK or hit Enter. The Entity node will appear on the tree, and an Entity workform will display.

5. Add Entity level information: Fill out the Entity workform. Make sure you have filled out Bib record key (AAA1070) and Title (Conjured into being: Zora Neale Hurstons Their Eyes were watching God).

6. Create a Division node: Use CTRL-a (same as Tree/Add node). The Client assumes you want to add a Division node as a child to the Entity node; this is correct. Type the name of the Division node in the box. This should be whatever you recorded on the worksheet -- it will display in the table of contents for this entity. If you followed the sample worksheet, it should say “Front Matter”.

7. Add Division level information: Probably the only thing you need to look at is “Type of part”. You may have to change the default to match what you have on your worksheet. If you followed the sample worksheet, it should say “section”.

8. Add remaining Divisions: Make the Entity node the current node. If the Tree window is active, just hit the Left arrow to take you to the parent of the current node, which will be the Entity node. If the Workform window is active, press F2 to make the Tree window active, then Left arrow. Alternatively, you can just click the Entity node to make it current, but using the mouse is usually slower than the other methods.

Use CTRL-a to create a new node. The default node type (division, child) should be correct. Enter the Division node name here, and the correct “Type of part” on the workform. Repeat for all remaining divisions on your worksheet. (Tip: if the default “Type of part” was correct and you did not need to enter anything in the Workform window, the Tree window will be the current window. Hitting the Left arrow will take
you to the parent of the current node, which will be the Entity node. This is faster than clicking on the Entity node.

9. When you are done, compare your work to the example below. [Exercise 3]. Be sure you understand any differences.

Exercise 4: Adding File level information and finishing the Package

In this exercise you will finish the package you started building in Exercise 2 and 3.

1. Open the Package for SF00000012. If you left the tree in expanded form (with all nodes showing) it should still be expanded. If any node is compressed (preceded by a plus), click on the plus to expand it, or select Tree/Expand all.

2. Make nodes for TIFF files: Using your worksheet to relate pages to divisions, copy over the TIFF images for the first division. In this example, the first division is Front Matter and there are two pages in it, represented by 1.tif and 2.tif. To move more than one image at a time, hold down the CTRL key while clicking on the name of each image in the Directory window. Then clicking on one of the images, drag it over to the correct node.

3. Make nodes for derivatives: Click on the first TIFF (1.tif) and check that the Workform data is correct. Then use Tree/Derive node or CTRL-d to create a node for the derivative JPEG. The cursor will be at the end of the default File name in the Workform window; type the file type (.jpg) and press ENTER. Default information for the JPEG image will be supplied.

4. Make remaining file nodes: Continue making nodes for the TIFF and JPEG files by dragging the TIFF files from the Directory window and making derivative nodes for the JPEGs.

5. Validate and output the package. Make sure that “View/XML Tree on Output” is not checked. Select Package/Output to XML. This will cause the MXF client to validate the data you have entered. There will be a popup box giving the number of errors and warnings. Click “OK” to clear the box, then use PF5 to review each error in turn. Correct any errors found and repeat “Package/Output to XML” until no errors occur. You will get a message saying the XML file has been created.

6. Now select “View/XML Tree on Output” so that it is checked. Select “Package/Output to XML” again. Note that this time you see a tree version of the output XML file. If you want to continue viewing the tree for other packages, leave “XML Tree on Output” checked, otherwise turn it off.

APPENDIX F: MXF Quick Guides for Textual Materials

Before creating MXF for your textual materials, it is very important to understand and decide on the correct entity type for your materials. Currently, Textual Collections supports three entity types for all the textual materials, monograph, multipart and serial.

A monograph (a single part monograph or single volume monograph) is an item complete, or intended to be complete, in one part.

A serial is a publication issued in successive parts, bearing numerical or chronological designations, and intended to be continued indefinitely. Examples include journals, periodicals, newspapers, and annuals (reports, yearbooks, etc.)

A multipart (a multipart monograph or multi-volume monograph) is an item complete, or intended to be complete, in a finite number of separate parts.

MXF: Quick Guide for Monograph

Submission A complete work with all chapters and other sections should be sent in one package to FCLA.

Directory setup for monograph

\SF00000012 [package ID]

JPEG, TIFF, PDF, XML, SGML, DTD, etc

Package Level information

Package ID (Node) 10-digit ID in the standard package ID format, consisting of the 2-character institution or project code followed by an 8-character numeric value, e.g. “FI12345678”, “FA12345678”.

Image directory The directory where image files are found. In the example above this would be “...\SF00000012\”.

Make records Use “title, QF” or “title, QC” if you want a MARC record made from the metadata in the MXF. In general, records should only go in QF if they have valid authority-controlled name and subject headings.
Make derivatives

Select “pdf/chapter” if you want PDF files created according to the division nodes of the following “Type of Part”: chapter, advertisement, bookplate, contents, correspondence, cover, editorial, index, main, section, permission.

The PDF files created based on JPEGs you send us will be displayed parallel to the JPEG version of the item in Textual Collections.

Target server

Use “DL” or “TC” to send JPEG page images and have us create the SGML file to be loaded into Textual Collections.

Use “FT” to send JPEG and/or PDF images and your own fulltext SGML file for us to load directly into Textual Collections.

Entity Level information

Entity ID (Node)  Monograph entity ID should be the same as the package ID. In the example above this would be SF00000012.

Entity type  “monograph”

Source institution  The institution who holds the original from which the material was digitized. The institution code supplied here will govern the “Print Source” statement in the full citation of the item in Textual Collections.

For example, if you supply “FIU”, the “Print Source” statement will be “Digitized from original source held at Florida International University Libraries”; if you supply “FAU”, the “Print Source” will say “Digitized from original source held at Florida Atlantic University Libraries”.

Project code(s)  Supply only one primary project code and any applicable sub-project code(s). Make sure this is consistent with what is recorded in 852$b of the bib record, if such a bib record exists.

For project code(s), see http://allegro.fcla.edu/ProjectCodes.cfm

Version statement  Either select a version statement from the pull-down or enter a statement that describes the origin of the digital version, e.g. “Electronic version created yyyy, State University System of Florida.” Version statement will be displayed in full citation of the item in Textual Collections.
Bib Record Key  If a NOTIS record exists, supply the NOTIS record key in the form of AAA1234 here. This associates this package with the external bibliographic record.

Bib record system  Use either “FCLANOTIS:QF” or “FCLANOTIS:QC” to indicate the system and file in which the record with the specified “Bib record key” will be found.

“Bib record key” and “Bib record system” must come in pairs. The bibliographic record will be used to extract descriptive metadata and displayed as “citation” for the item in Textual Collections.

Title  The title of the monograph. This is required.

Rights  Use for a statement of rights related to the original or digitized version. If the material is under copyright and digitized with permission, note this here. In Textual Collections, the Rights is displayed as Rights Information.

Do not use Copyright to record this information.

Division Level information

Most monographs will have at least one Division level. A monograph generally contains logical structural parts such as chapters, table of contents, index, cover, etc. Each of these parts or other section should be a division node. Each of the division nodes usually parents a number of file nodes which contain the page images. However, there is no reason that division nodes cannot be nested in division nodes.

Node name  The name of the node (Division name) should be what you want to appear in the online table of contents for the item. If the node is a chapter, you should generally use the title of the chapter; however, if the title is very long, then use a short form as the node name, and put the complete title in Title. If the node is some section of the item that does not have a name, make up some descriptive heading, e.g. “Letters”.

Type of part  Commonly used value: permission, cover, contents, section, chapter, index, cover.

Title  Title can usually be left blank. It’s used only when a title is very long. Anything entered in Title will be used instead of the Node name in the table of contents displayed to the user. Typing in a long title as the node name can make the tree look messy and hard to read. Instead, type an abbreviated form of the title as the node name, and type the complete title in Title.
File Level information

File nodes should be children nodes under the parent nodes for the contents of book divisions. File nodes generally contain page images. There are several required elements at the file level, but most of them can be supplied by the system automatically.

Type of Part  Usually use “Page”.

File name  Automatically supplied when you browse and select the file or use the drag method to create the file node.

It is recommended that if you have different file formats for the same page image, they should use the same filename, but with different file extension.

File format  Automatically supplied by the system if it can get this from the extension on the filename.

It is required that if you have different file formats for the same page image, you have to create sibling file nodes for them continuously. For example, if you have both “cover.tif” and “cover.jpg” for the Cover page image, the file nodes for “cover.tif” and “cover.jpg” should come in pair consecutively.

File size  Automatically supplied by the system when the information is present in the image header.
An example of a monograph showing many sections as contents.
**MXF: Quick Guide for Multipart**

**Submission**  All parts have to be wrapped in one package and sent to FCLA together.

**Directory setup for multipart**

When set up directories for your multipart package, you must create a separate subdirectory for each part/volume:

```
\UF80001549 [package ID]
  \ UF80001549 [entity ID]
    \1 [images for volume 1]
    \2 [images for volume 2]
    ....
    etc.
```

Use **numeric characters** only for the name of the subdirectory for each part/volume.

**Package Level information**

<table>
<thead>
<tr>
<th>Package ID (Node)</th>
<th>10-digit ID in the standard package ID format, consisting of the 2-character institution or project code followed by an 8-character numeric value, e.g. “FI12345678”, “FA12345678”.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image directory</td>
<td>Set the Image directory to the directory corresponding to the Entity ID. In the example above this would be “…\UF80001549\ UF80001549”.</td>
</tr>
<tr>
<td>Make records</td>
<td>Use “title, QF” or “title, QC” if you want a MARC record made from the metadata in the MXF. In general, records should only go in QF if they have valid authority-controlled name and subject headings.</td>
</tr>
<tr>
<td>Make derivatives</td>
<td>Select “pdf/chapter” if you want PDF files created according to the division nodes of the following “Type of Part”: chapter, advertisement, bookplate, contents, correspondence, cover, editorial, index, main, section, permission. The PDF files created based on JPEGs you send us will be displayed parallel to the JPEG version of the item in Textual Collections.</td>
</tr>
</tbody>
</table>
Target server

Use “DL” or “TC” to send JPEG page images and have us create the SGML file to be loaded into Textual Collections.

Use “FT” to send JPEG and/or PDF images and your own fulltext SGML file for us to load directly into Textual Collections.

Entity Level information

Entity ID (Node)  Multipart entity ID should be the same as package ID.

Entity type  “multipart”

Source institution  The institution who holds the original from which the material was digitized. The institution code supplied here will govern the “Print Source” statement in the full citation of the item in Textual Collections.

For example, if you supply “FIU”, the “Print Source” statement will be “Digitized from original source held at Florida International University Libraries”; if you supply “FAU”, the “Print Source” will say “Digitized from original source held at Florida Atlantic University Libraries”.

Please be aware of the difference between “Contributing institution” at the package level and “Source institution” at the entity level.

Project code(s)  Supply only one primary project code and any applicable sub-project code(s). Make sure this is consistent with what is recorded in 852$b of the bib record, if such a bib record exists.

For project code(s), see http://allegro.fcla.edu/ProjectCodes.cfm

Version statement  Either select a version statement from the pull-down or enter a statement that describes the origin of the digital version, e.g. “Electronic version created yyyy, State University System of Florida.” Version statement will be displayed in full citation of the item in Textual Collections.

Bib Record Key  If a NOTIS record exists, supply the NOTIS record key in the form of AAA1234 here. This associates this package with the external bibliographic record.
<table>
<thead>
<tr>
<th>Bib record system</th>
<th>Use either “FCLANOTIS:QF” or “FCLANOTIS:QC” to indicate the system and file in which the record with the specified “Bib record key” will be found.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>The title of the multipart. This is required.</td>
</tr>
<tr>
<td>Rights</td>
<td>Use for a statement of rights related to the original or digitized version. If the material is under copyright and digitized with permission, note this here. In Textual Collections, the Rights is displayed as Rights Information. Do not use Copyright to record this information.</td>
</tr>
<tr>
<td>Division level information</td>
<td></td>
</tr>
<tr>
<td>Most multipart will have at least two levels of hierarchy at the Division level: volume and the contents of the volume (chapters, index, table of contents, etc.). This is represented on the Tree as parent and child nodes: the Division for the volume is the parent of the Divisions for the contents of the volume.</td>
<td></td>
</tr>
<tr>
<td>Volume Node</td>
<td></td>
</tr>
<tr>
<td>Node name</td>
<td>The node name for the volume should be what you want to display as part of the title for the item in Textual Collections, e.g. “Part X: part title”</td>
</tr>
<tr>
<td>Type of part</td>
<td>Use “volume”.</td>
</tr>
<tr>
<td>Volume name</td>
<td>This is required for a multipart. It must be the numeric designation of the volume, e.g. if this is volume 1, the</td>
</tr>
</tbody>
</table>
**Volume name** must be “1”. If there isn’t a numeric designation, you have to establish one.

**Date**

This is required for a multipart. The date in this field will be used to make a chronology tracing for the date of publication of the original materials. Use the date of publication for the volume in hand. For volumes that don't actually have real publication dates printed in, you need to infer the date or determine a probable date of publication and enter this in brackets with a question mark, e.g. [1923?]. The date will be displayed as “Publication date” for the item in Textual Collections as well as for sorting the search results according to “date ascending”, “date descending”. The date in this field will also be used for statistical purposes.

**Contents of volume Nodes**

Multipart is multi-volume monograph. Each volume generally contains logical structural parts such as chapters, table of contents, index, cover, etc. just like monograph does. Each of these parts or other section should be a division node nested under the volume node.

**Node name**

The name of the node (Division name) should be what you want to appear in the online table of contents for the item. If the node is a chapter, you should generally use the title of the chapter; however, if the title is very long, then use a short form as the node name, and put the complete title in **Title**. If the node is some section of the item that does not have a name, make up some descriptive heading, e.g. “Letters”.

**Type of part**

Commonly used value: permission, cover, contents, section, chapter, index, cover.

**Title**

Title can usually be left blank. It’s used only when a title is very long. Anything entered in **Title** will be used instead of the Node name in the table of contents displayed to the user. Typing in a long title as the node name can make the tree look messy and hard to read. Instead, type an abbreviated form of the title as the node name, and type the complete title in **Title**.

**File Level information**
File nodes should be children nodes under the parent nodes for the contents of volume divisions. File nodes generally contain page images. There are several required elements at the file level, but most of them can be supplied by the system automatically.

<table>
<thead>
<tr>
<th>Type of Part</th>
<th>Usually use “Page”.</th>
</tr>
</thead>
<tbody>
<tr>
<td>File name</td>
<td>Automatically supplied when you browse and select the file or use the drag method to create the file node.</td>
</tr>
<tr>
<td></td>
<td>It is recommended that if you have different file formats for the same page image, they should use the same filename, but with different file extension.</td>
</tr>
<tr>
<td>File format</td>
<td>Automatically supplied by the system if it can get this from the extension on the filename.</td>
</tr>
<tr>
<td></td>
<td>It is required that if you have different file formats for the same page image, you have to create sibling file nodes for them continuously. For example, if you have both “cover.tif” and “cover.jpg” for the Cover page image, the file nodes for “cover.tif” and “cover.jpg” should come in pair consecutively.</td>
</tr>
<tr>
<td>File size</td>
<td>Automatically supplied by the system when the information is present in the image header.</td>
</tr>
</tbody>
</table>
**MXF: Quick Guide for Serial**

**Submission**

Each issue of the serial has to be sent to FCLA in a separate package, the Package ID must be unique for each package (issue), but the Entity ID must be the same for all issues.

For a serial with title changes, a unique Entity ID should be created when the title changes. The Entity ID is a unifying identifier that ties all the pieces under each title together.

**Directory setup for serials**

`\UF80001549` [package ID]  
`\SN00130098` [entity ID]  
`\1_1` [directory for volume 1 issue number 1]

Use **numeric characters** only for the name of the subdirectory for each serial issue.

**Package Level information**

Package ID (Node) 10-digit ID in the standard package ID format, consisting of the 2-character institution or project code followed by an 8-character numeric value, e.g. “FI12345678”, “FA12345678”.

Image directory The subdirectory for each serial issue. In the example above this would be “...\SN00130098\1_1”.

Make records Use “title, QF” or “title, QC” if you want a MARC record made from the metadata in the MXF. In general, records should only go in QF if they have valid authority-controlled name and subject headings.

Make derivatives Select “pdf/article” if you want a PDF file created for every article in the issue, the division nodes of following “Type of Part” will be wrapped into PDFs: article, advertisement, contents, correspondence, cover, editorial, index, section, permission. Select “pdf/issue” if you want a PDF file created for the issue, the division nodes of the following “Type of Part” will be wrapped into PDFs: issue, permission.
The PDF files created based on JPEGs you send us will be displayed parallel to the JPEG version of the item in Textual Collections.

**Target server**

Use “DL” or “TC” to send JPEG page images and have us create the SGML file to be loaded into Textual Collections.

Use “FT” to send JPEG and/or PDF images and your own fulltext SGML file for us to load directly into Textual Collections.

**Entity Level information**

**Entity ID (Node)**

Serial entity ID must consist of the 2-character “SN” and the 8-character ISSN of the serial. For example, if the ISSN is 0123-4567, then the Entity ID must be “SN01234567”. The entity ID stays the same for all the issues regardless of the package IDs that are used.

Some older serial titles do not have ISSNs or some materials you want to package as serial are not serials. In this case there are two options: apply for a retrospective ISSN, or assign a pseudo-ISSN. Instructions on how to apply for a retrospective ISSN, or assign a pseudo-ISSN are available at [http://palmm.fcla.edu/strucmeta/pseudoissn.html](http://palmm.fcla.edu/strucmeta/pseudoissn.html)

**Entity type**

“serial”

**Source institution**

The institution who holds the original from which the material was digitized. The institution code supplied here will govern the “Print Source” statement in the full citation of the item in Textual Collections.

For example, if you supply “FIU”, the “Print Source” statement will be “Digitized from original source held at Florida International University Libraries”; if you supply “FAU”, the “Print Source” will say “Digitized from original source held at Florida Atlantic University Libraries”.

**Project code(s)**

Supply only one primary project code and any applicable sub-project code(s). Make sure this is consistent with what is recorded in 852$b of the bib record, if such a bib record exists.
For project code(s), see http://allegro.fcla.edu/ProjectCodes.cfm

<table>
<thead>
<tr>
<th>Version statement</th>
<th>Either select a version statement from the pull-down or enter a statement that describes the origin of the digital version, e.g. “Electronic version created yyyy, State University System of Florida.” Version statement will be displayed in full citation of the item in Textual Collections.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bib Record Key</td>
<td>If a NOTIS record exists, supply the NOTIS record key in the form of AAA1234 here. This associates this package with the external bibliographic record.</td>
</tr>
<tr>
<td>Bib record system</td>
<td>Use either “FCLANOTIS:QF” or “FCLANOTIS:QC” to indicate the system and file in which the record with the specified “Bib record key” will be found.</td>
</tr>
<tr>
<td></td>
<td>“Bib record key” and “Bib record system” must come in pairs. The bibliographic record will be used to extract descriptive metadata and displayed as “citation” for the item in Textual Collections.</td>
</tr>
<tr>
<td>Title</td>
<td>The title of the serial. This is required.</td>
</tr>
<tr>
<td>Rights</td>
<td>Use for a statement of rights related to the original or digitized version. If the material is under copyright and digitized with permission, note this here. In Textual Collections, the Rights is displayed as Rights Information.</td>
</tr>
<tr>
<td></td>
<td>Do not use Copyright to record this information.</td>
</tr>
<tr>
<td>Alternative title.</td>
<td>This field is used to trace preceding title(s) or and succeeding title(s) for serials with title changes. You must record the preceding title in the form of “Preceding title: preceding title”, and the succeeding title as “Succeeding title: succeeding title”, e.g. “Preceding title: Report of the Board of Control of the State Institutions of Higher Learning of Florida for the biennium ending ...”, “Succeeding title: Report of Florida Board of Regents”.</td>
</tr>
</tbody>
</table>

**Division level information**

Most serials will have at least three levels of hierarchy at the Division level: volume, issue (number), and the contents of the issue (articles, correspondence, editorials, etc.). This is represented on the Tree as parent and child nodes: the Division for the volume is...
the parent of the Division for the issue, which is the parent for the Divisions for the articles within the issue.

**Volume Node**

**Node name**

The node name for the volume should be what you want to display as part of the title for the item in Textual Collections. It is important that you record all node names for volumes and issues consistently throughout the entire serial run. Recommended practice is to use either “Volume x (year)” or “Vol. x (year)” as this gives the most information to the reader. For example, “Volume 1”, “Vol. 1 (1898/1899)”.

“The Florida Historical Quarterly volume 1 issue 1”

**Type of part**

Use “volume”.

**Volume name**

This is required for a serial. It must be the numeric designation of the volume, e.g. if this is volume 43, the *Volume name* must be “43”. If there isn’t a numeric designation, you have to establish one.

**Date**

This is required for a serial. The date in this field will be used to make a chronology tracing for the date of publication of the original materials. Use the date of publication for the volume in hand. For volumes that don't actually have real publication dates printed in, you need to infer the date or determine a probable date of publication and enter this in brackets with a question mark, e.g. [1923?]. The date will be displayed as “Publication date” for the item in Textual Collections as well as for sorting the search results according to “date ascending”, “date descending”. The date in this field will also be used for statistical purposes.

**Issue Node**

Issue node is created as child of the parent volume node. Please note that for annuals or serials that only have volumes, issues node is not required.

**Node name**

As with volumes, the node name for the issue should be want to display as part of the title for the item in Textual Collections. It is important that you record all node names for volumes and issues consistently throughout the entire serial run. Recommended best practice is to use either
“Number x” or “No. x” and to put the chronology in parenthesis. For instance, “Number 1”, “No. 1 (Spring)”.

“The Florida Historical Quarterly volume 1 issue 1”

**Type of part**  
Use “issue”.

**Issue name**  
This is required for a serial when applicable. It must be the numeric designation of the issue. E.g. if this is issue 3, the *Issue name* must be “3”. If there isn’t a numeric designation, you have to establish one.

**Date**  
This is required for a serial when applicable. The date in this field will be used to make a chronology tracing for the date of publication of the original materials. Use the date of publication for the issue in hand. For issues that don't actually have real publication dates printed in, you need to infer the date or determine a probable date of publication and enter this in brackets with a question mark, e.g. [1923?]. The date will be displayed as “Publication date” for the item in Textual Collections as well as for sorting the search results according to “date ascending”, “date descending”. The date in this field will also be used for statistical purposes. Note that the Date recorded for the issue should be the same as the Date used for the volume.

**Contents of Issues Nodes**

Issues of serials generally contain material such as letters to the editor, articles, advertisements, etc. Each article or other section should be a child node under the parent node for the Issue.

**Node name**  
The name of the node (Division name) should be what you want to appear in the online table of contents for the issue in Textual Collections. If the node is an article, you should generally use the title of the article; however, if the title is very long, then use a short form as the node name, and put the complete title in *Title*. If the node is some section of the issue that does not have a name, make up some descriptive heading, e.g. “Letters”.

**Type of part**  
Commonly used values: permission, cover, contents, correspondence, article, abstract, advertisements, editorial, index.
Title

Title can usually be left blank. It’s used only when a title is very long. Anything entered in Title will be used instead of the Node name in the table of contents displayed to the user. Typing in a long title as the node name can make the tree look messy and hard to read. Instead, type an abbreviated form of the title as the node name, and type the complete title in Title.

Creator

If the Division node is for an article with one or more named authors, you should enter the name of the author in this element.

File level information

File nodes should be children nodes under the parent nodes for contents of issue divisions. File nodes generally contain page images. There are several required elements at the file level, but most of them can be supplied by the system automatically.

Type of Part

Usually use “Page”.

File name

Automatically supplied when you browse and select the file or use the drag method to create the file node.

It is recommended that if you have different file formats for the same page image, they should use the same filename, but with different file extension.

File format

Automatically supplied by the system if it can get this from the extension on the filename.

It is required that if you have different file formats for the same page image, you have to create sibling file nodes for them continuously. For example, if you have both “cover.tif” and “cover.jpg” for the Cover page image, the file nodes for “cover.tif” and “cover.jpg” should come in pair consecutively.

File size

Automatically supplied by the system when the information is present in the image header.
An example of a serial showing many sections as contents.