

# Chapter 10

## Describing Digital Objects

### Overview

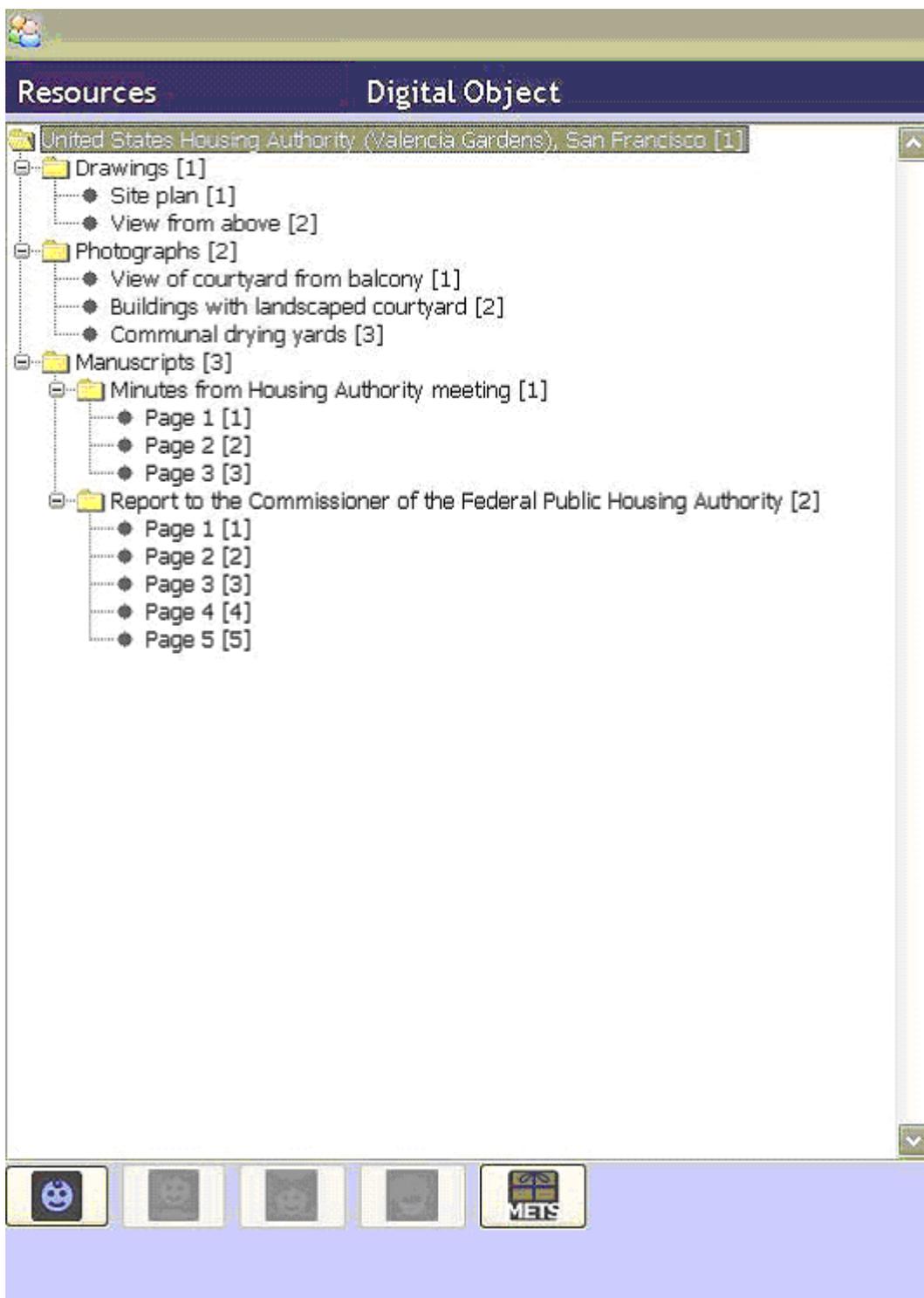
The Archivists' Toolkit™ enables the description of digital objects. Digital objects are digital content files that are accessible through a network by at least the repository's staff, if not end users. The digital object may be a digitized version of materials contained in an archival resource or born digital materials collected as an archival resource by a repository. The digital object may be a simple object or a complex object. A simple object is one in which the intellectual content of the object is contained in one digital content file. A digital image of the Golden Gate Bridge is a simple digital object. So too, is a TEI transcription of Melville's *Moby Dick*. A complex object is one in which the intellectual content is distributed over two or more digital content files. A digitized version of a 24-page diary would be a complex object since each page would be represented by a different digital image file. Complex digital files require structural metadata so that the parts of the whole will be presented in the right sequence to the end user. Finally, the Toolkit will produce an unbound or bound digital object. An unbound digital object is one in which the metadata record simply references the digital content file. A Dublin Core record that references a digital content file is an example of an unbound digital object. A bound digital object is one which the metadata and the digital content files are bound together through the use of a digital binder or wrapper. The Metadata Encoding and Transmission Standard (METS) is the digital wrapper probably best known in library environments. METS not only binds the metadata and digital content files, but supports expression of the structural relationship(s) existing among the content files. In sum, the digital object description record is designed to accommodate a broad range of repository needs and practices. The repository using this tool will benefit greatly if it develops a firm understanding for how it intends to manage and provide access to its digital objects and then formulates guidelines for producing the appropriate kind of digital objects.

### Digital object and digital object component records

Two types of records, digital object records and digital object component records, are available for describing digital objects. A digital object record represents a unitary digital object, which may be a simple object or a complex object. Digital object component records are for expressing the structure of complex digital objects. They may contain metadata as rich as that in the digital object record or metadata that consists of little more than a label and a file version.

### The hierarchical interface

As you describe a digital object and its component parts in the Toolkit, each new record will be reflected in the hierarchical interface.



In the hierarchical view, a folder represents the digital object (United States Housing Authority in this instance), or any component which contains additional components. Components that have no children are represented with a bullet. The title, label, or date is displayed for every component record. To display the contents of a component, click on the + to the left of a folder, and the Toolkit will display all of the components within it. To collapse the list, click on the - to the left of an open folder. To display the record for any component, click on the title, label or date of the component. This helps you navigate directly to a given record for editing or review.

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Note: The graphical navigation displays for the Mac are slightly different, for example, an arrow graphic is used to depict a component with subcomponents instead of a +. Otherwise the navigational capabilities are the same.

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To insert a new component into the description, use the buttons found below the hierarchical interface. Keep in mind that the context for the following buttons is the component currently selected and displayed in the record window.



The **Add Child** button will open a new component record that is hierarchically subordinate to the context record.



The **Add Sibling** button will open a new component record that is at the same level as the context record, and that follows the context record within the sequence.



The **Delete Node** button will delete the selected component and all of its children. If you wish to delete the component but not its children, you must reorder the components first, so that they are no longer part of the component you wish to delete.

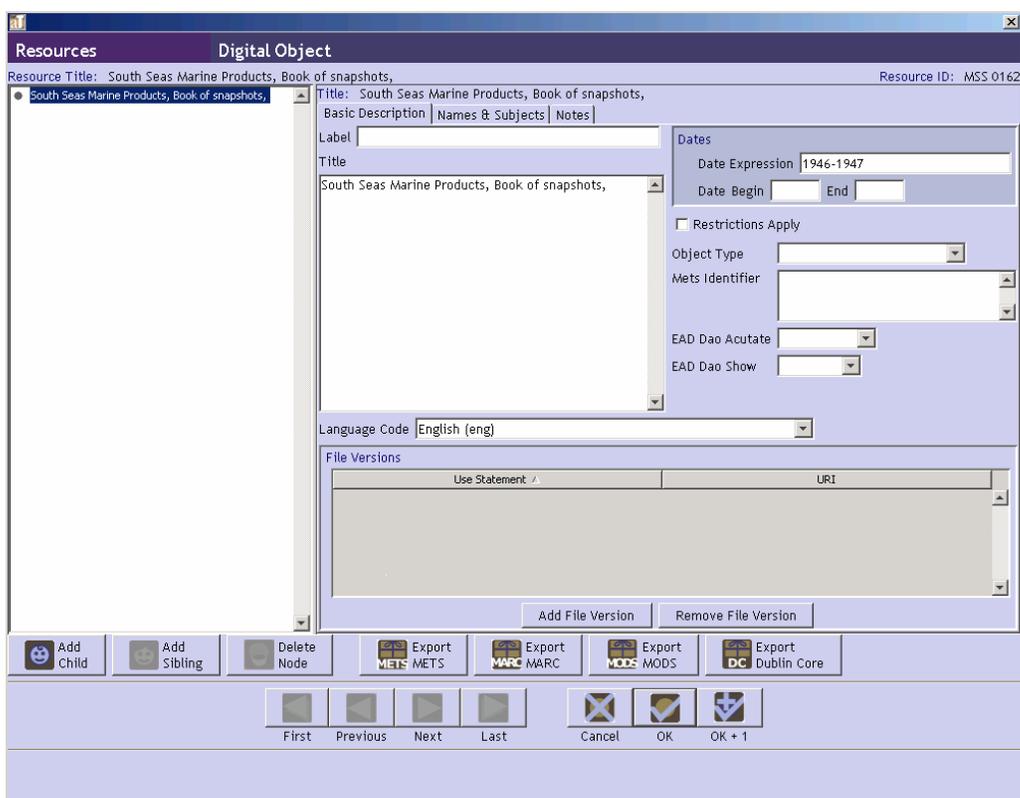
## Basic steps for creating a digital object record

1. From the **Resource Record** or a **Resource Component Record**, select the  button.
2. Select **Digital Object** on the list of instance type and click **OK**.

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Note: A digital objects record window will appear over the resources record window.

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The following data will be copied from the resource or resource component record from which the digital object is created: **Title**, **Date Expression**, **Date Begin**, **Date End**, **Language Code**, all notes the repository allows for the digital object, and all linked name and subject records. A repository should modify, delete, or augment the copied data where pertinent.

3. Enter a **Title**.
4. Enter a **Date Expression** and/or **Begin Date** and **End Date** for the digital object.
5. Select the **Object Type** from the list of object types.

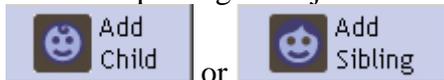
6. Save the record by pressing the  button at the bottom right corner of the window.

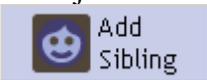
If you are entering multiple records, the  button will save the record you are working in and open a new record.

**Caution!** If the record does not include one of the required elements, either the **Date Expression** or the **Date Begin** and **Date End** fields, the Toolkit will indicate that the record cannot be saved because one or more of the required fields is not complete. The **Title** and **Object Type** fields are recommended and a warning message is displayed when they are not complete, however the record will be saved even if they are empty.

## Basic steps for creating a digital object component record

1. From an open digital object record or digital object component, press either the



or  buttons. Siblings can only be added to digital object component records.

 A screenshot of the 'Digital Object' toolkit window. The title bar reads 'Resources Digital Object'. The main area shows a form for editing a record titled 'South Seas Marine Products, Book of snapshots,'. The form has tabs for 'Basic Description', 'Names & Subjects', and 'Notes'. Fields include 'Label', 'Title', 'Date Expression', 'Date Begin', 'Date End', and 'Language Code'. A 'File Versions' table is visible at the bottom of the form. The bottom toolbar contains buttons for 'Add Child', 'Add Sibling', 'Delete Node', 'Export METS', 'Export MARC', 'Export MODS', 'Export Dublin Core', 'First', 'Previous', 'Next', 'Last', 'Cancel', 'OK', and 'OK + 1'.

2. Enter at the least either a **Date Expression** OR a **Date Begin** and **Date End**.



3. Save the record by pressing the  button at the bottom right corner of the window.



If you are entering multiple records, the  button will save the record you are working in and open a new record.

**Caution!** If the record does not include one of the required elements listed above, the Toolkit will indicate that the record cannot be saved because one or more of the required fields is not complete. The incomplete fields will be indicated in the error message. The required field(s) must be completed in order to save the record.

## Digital object data elements

## The Basic Description Tab

1. **Title.** *Recommended for digital object records.* The title is copied over to the digital object record from the resource or resource component record to which the digital object record is linked. The title may be kept as copied or edited to something more specific and descriptive of the digital object.

Examples:

1: Resource title: William W. Wurster /  
Wurster, Bernardi & Emmonds Collection

Digital object title: United States Housing  
Authority (Valencia Gardens), San Francisco  
A group of materials from a collection  
presented as a single complex digital object  
and linked from the resource record.

2: Resource title: Oral History of John Arthur  
McGowan

Digital object title: Oral History of John  
Arthur McGowan

A single digital audiorecording linked to an  
item level resource record.

3: Resource title: Around South America

Digital object title: Around South America

A single digital videorecording linked to  
an item level resource record.

2. **Language Code.** Copied over to the digital object record from the resource or resource component record to which the digital object record is linked. Otherwise, select the code for the language that describes the digital object as a whole and, at the digital object component level, describes a particular component part of the digital object if it differs from the language expressed at the parent level. You may jump to the appropriate place in the list by typing the first few letters of the language you are seeking.

Examples:

English; eng

French; fre

3. **Dates.** A number of elements are available for recording the dates of creation of the materials. Dates can be entered in integer form (**Date Begin, Date End**), and/or as a free-text string (**Date Expression**). Integer dates are used to support computer processing of date information (e.g.,

searching). The date expression is designed for human readability, and allows for the use of qualifiers, such as “circa” or “before”. It is the date expression that displays to end-users.

- a. If you wish, you may only enter a **Date Expression** rather than using the fields for integer dates. However, doing so may limit your ability to support searching by date.

DACS Reference: 2.4

Examples:

Between 1925 and 1953  
ca. 1911  
1913-1998

- b. **Integer Dates. (Date Begin, Date End)**. Integer dates must be entered in years only; no days or months can be included.

Enter inclusive dates using the **Date Begin** and **Date End** fields. The Toolkit will not allow you to save a record if a begin date is entered without an end date (e.g. a single date), or if the end date comes before the begin date.

DACS Reference: 2.4

Examples:

1922  
1900

4. **Restrictions Apply**. Yes/no field indicating if access restrictions apply to the materials being described. The **Restrictions Apply** element is applied to the digital object as a whole and not any component parts. If the digital object record is marked restricted, it is assumed that all component parts are to be restricted as well.
5. **Object Type**. *Recommended for digital object records*. A single descriptor for indicating the predominant type of the resource. The list of values is based on the MODS <typeOfResource> element, and thus cannot be modified. The **Object Type** is applied to the digital object as a whole only and not to the component parts.
6. **Mets Identifier**. The METS ID associated with the digital object. If a METS ID is present, the digital object as a whole will be listed as a single <dao> element in an EAD and this identifier will be referenced.
7. **EAD DAO Actuate**. A control element for indicating how a digital object produced as part of an EAD finding aid is to behave, that is, whether a link is enacted automatically or must be requested by a user. The Actuate attribute is used in conjunction with the Show attribute. The default values are 1) none, meaning no action occurs with respect to the link; 2) onLoad, meaning the object is displayed automatically; 3) onRequest, meaning the object is displayed when a user requests it; and 4) other, meaning some other action occurs with respect to the link.

8. **EAD DAO Show.** A control element for indicating whether a digital object linked to an EAD finding aid appears at the point of the link, replaces the existing link, or appears in new window. The Show attribute is used in conjunction with the Actuate attribute. The default values are: 1) embed, the target resource displays at the point of the link; 2) new, the target resource appears in a new window; 3) none, no target resource displays; 4) other, some other action takes place with respect to the target resource; and 5) replace, the target resource replaces the local resource that initiated the link.
9. **File Version.** File versions are for recording the URI and the intended use of the digital content file(s) corresponding to a digital object record or digital object component record. See Adding File Versions below.

## The Names & Subjects Tab

Use the **Names & Subjects** tab to add names as creator or subject, and to add topical subject terms to any component level of a digital object record. See Chapters 11 and 12 for instructions.

## The Notes Tab

The **Notes** tab provides 20 notes that can be added at any component level of a digital object record. They are the same basic notes available to resource and resource component records, but do not include the structured data elements, like bibliography, that are available in resource and resource component records. See Chapter 9 for definitions of the notes.

## Adding file versions

The file version record is for identifying the digital content files that correspond to the description recorded in a digital object record or digital object component record. The file versions recorded at the same node are understood to be equivalent in respect to content, in the way a tiff, jpeg, and gif can be different format versions of the same image. File versions that are not equivalent in respect to content should be recorded at separate and appropriately sequenced nodes if the digital object is to be rendered via a METS record with a “page” turner application.

Use the following instructions to add one or more file versions to a digital object or digital object component description record.

1. From either the **Digital Object Record** or **Digital Object Component Record**, select the  button.

2. Enter the **URI** for the digital content file corresponding to the digital object record or digital object component record.
3. Select the appropriate **Use Statement** from the drop-down list.

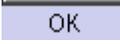
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Note: The **Use Statement** is used in the METS record for indicating the use for which the digital content file is intended. Some files are intended only for preservation, e.g. a tiff or high quality audio file, while other files, because they require less bandwidth, are intended for use by end users. Such files could be a jpeg or a lower quality audio file.

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4. If desired, select a value for **DAO Actuate** and/or **DAO Show** for the file version.



5. Save the record by pressing the  button at the bottom right corner of the window.



If you are entering multiple records, the  button will save the record you are working in and open a new record. The record will not be saved unless both the **URI** and file **Use Statement** attribute values are recorded.

## Relationships with other records

Managing digital objects requires linking other records to digital object and digital object component records. These include:

1. **Creator(s)**. Adding creator information to the record involves linking the digital object or digital object component record to one or more name records. See Chapter 12.
2. **Subject Name(s)**. As with creators, adding a name as subject to a digital object or digital object component record involves linking to a name record. See Chapter 12.

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Note: A source may not be linked to a digital object or digital object component record. The source for a digital object is represented in the resource record to which the digital object record is linked.

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3. **Subject(s)**. Adding topical, geographic, genre, and other headings to digital object and digital object component records requires linking to one or more subject records. See Chapter 12.

## Digital object exports

Several digital object exports can be generated from the **Digital Object** record including:

1. **MARCXML record**. Digital Object level catalog record output in MARCXML with references to the content file(s).
2. **Dublin Core record**. Digital Object level Dublin Core metadata record with references to the content file(s).
3. **MODS record**. Digital Object and Digital Object Component level descriptive metadata for objects with references to the content file(s).
4. **METS record**. A binding of the descriptive and structural metadata for Digital Object and Digital Object Component(s) with references to the content files. METS records can be exported with descriptive metadata in either the MODS or DC metadata standards.