

Specification for Locations

Reviewed—20110203

Loc--1: Scope / Purpose

Location records are for describing any shelving locations—shelves, drawers, file cases, bins, walls, etc.—where archival materials can be and are stored.

The sum total of location records can serve as a shelf guide, providing a repository has created records for all its shelving space. They can also serve as a shelf list when container records for archival materials are linked to the location records. And they can serve as a means for calculating a repository's occupied and vacant shelving space.

Location records are primarily designed to track the permanent locations of archival materials, those locations at which the archival materials are to be found when not in use.

It is also possible to track archival content to a temporary location when it is in use, and monitor the history of all archival material stored in temporary locations (e.g., archival item(s) used in the repository reading room). This makes it possible for a repository to monitor the whereabouts of its material and its usage over time.

Location records are intended for physical shelving space and not for web accessible locations. Locations for materials accessible on the web are managed via URIs recorded as part of digital object records.

Loc--2: Record / template description

The location record is designed to support a broad range of options for specifying locations in diverse archival settings. The elements comprising the location record are:

- Building (**Required**)
- Floor
- Room
- Area
- Barcode (for the shelf, drawer, etc.) (**Required if Classification or Coordinate 1 Label / Indicator are not used**)

- Classification (**Required if Barcode or Coordinate 1 Label / Indicator are not used**)
- Coordinate1 Label (**Required if barcode or classification is not used**)
- Coordinate 1 Indicator(**Required if barcode or classification is not used**)
- Coordinate 2 Label
- Coordinate 2 Indicator
- Coordinate 3 Label
- Coordinate 3 Indicator
- Temporary Location

System control data

- Record Created Timestamp
- Last Modified Timestamp
- Record Created Staff Name
- Last Modified Staff Name

Four of the elements are for context terms (i.e., building, floor, room and area), seven of the terms are for location terms (i.e., barcode/classification and coordinates), and one is for temporary locations used by the repository. The building area is a required element, as it provides necessary context for the location terms.

The location terms are for shelving positions, which may be expressed by coordinate sets (label and alphanumeric indicator) devised by the repository. Up to three, nested coordinates are possible. They can be defined to support locations such as: A) range-section-shelf, B) mapcase-drawer-item, C) file cabinet-drawer, and D) wall. The first coordinate set (label and indicator) are required for all location records unless a barcode or classification expression is used instead.

Some repositories employ barcodes to identify shelf locations, while others use classification expressions. For any location record, a barcode or classification expression can be used in place of coordinates.

Finally, one element is provided for indicating temporary locations. It is assumed that all archival materials in the custody of a repository will have one permanent location where the material is stored when not in use. The temporary location is for indicating where

archival material is when it is in use. It is assumed that identification of temporary locations need not be as granular as that of permanent locations. Consequently, this field is defined as a pull down list that can be configured by the repository (e.g., 1) Reading room, 2) On Exhibit, 3) Conservation work, 4) Loaned to [Repository Name]). Temporary records can serve as the basis of a use history for specific physical content.

Loc--3: Location record processes

Location records can be created singly or in batches. Each record describes a unique location where a repository is able to store materials. Duplicate location records are not permissible.

Single record creation: users should be able to create a single location record at any time, either from the location record template or from any context record to which a location record can be linked (i.e., accession, resource, or resource component record). When the location record is created within a context record, the completion of the location records creation process results in establishing a link between the context record and the location record.

Batch record creation: users should be able to create a batch of records according to a specified definition. This batch function is only available from the location records manager and not from any other records manager. The creation of batch location records from the location records tool does not dynamically link content records to these location records, but these location records are available for linking to content records as needed.

Batch creation will adopt the following procedure:

- 1) User must enter value for Coordinate 1 Label and a start value and end value for Coordinate 1 Identifier.
- 2) User may enter value for Coordinate 2 Label, but then must enter a start value and end value for Coordinate 2 Identifier
- 3) User may enter value for Coordinate 3 Label, but then must enter a start value and end value for Coordinate 3 Identifier

For example creating a series of location coordinates using the location information below will generate 910 location records for 10 ranges containing 130 sections and 910 distinct selves:

	Label	Start	End
Coordinate 1	Range	1	10
Coordinate 2	Section	A	M
Coordinate 3	Shelf	1	7

Edit: users with the appropriate staff permissions should be able to edit a location record by selecting it, opening it, editing some part of it and then saving the updated record.

Deletion: users with the appropriate staff permissions should be able to delete a location record or batch of location record (contiguously or non-contiguously sequenced).

When a user attempts to delete a location record that is linked to a context record, the machine will indicate that the record cannot be deleted because is it linked and that the link has be deleted first

When a user attempts to delete a location record that is not linked to a context record, the machine will ask if the user is sure.

Loc--4: Displaying location records

As is the case with other modules, a user will be able to list and browse all the location records for his or her repository.

The browse list for location records will be configurable, in that a repository can choose which data elements to make viewable (all of the location data fields can be added to the browse list) and can modify the left to right sequence of the data elements.

Each column will also be sortable, and the whole browse list will support primary and secondary sorting.

The default data fields and their left to right sequence are:

From the location record:

Building

Room

Area

Coordinates (a conflation into one string of all coordinates in the format “Range 1 / Section 1 / Shelf 1”)

Temporary Location (only for Temporary Locations currently in use, that is, occupied by materials permanently located elsewhere)

From linked context records:

ID (accession ID or resource ID)

Title (accession title or resource title)

Containers (e.g., “Box 16/Folder 12,” “Record cartons 1-5,” “Reel 5”)

Within the browse list, staff users will be able:

- To list location records in order of building, room, area, and coordinates (i.e., a shelf list for each shelving area and all shelving types (range, mapcase, etc.) within an area that are used by a repository
- To list location records in order of those locations that are vacant and those that are occupied, sorted by building, room, area, and coordinates
- To list all temporary locations and the items currently located there

Besides displaying location records and the containers located there, the display template will also include functions for:

- Adding a single record
- Batch adding records
- Editing a location record, including its link attributes
- Removing location records
- Generating location record reports

Note, finally, that all staff users, with the exception of superusers, will be able to see only the location records for the repository with which they are associated. In addition, location records content should never be presented to public users.

Loc--5: Linking location records

Only container records for accession and resources are linked to location records, using a location management tool located within the accession and resource records. The basic links are:

- A container (or set of containers) from a given accession or resource may be linked to one and only one permanent location (or set of locations).
- A container (or set of containers) from a given accession or resource may be linked to one and only one “current” temporary locations
- A container (or set of containers) from a given accession or resource will retain links to all temporary location records with the status of “Previous”, thus enabling a history of use of the material.

When activated, the location manager tool will show two lists: 1) a list of all primary containers in the accession or resources as identified by the staff users and 2) a list of all locations available to the repository and not already occupied by other containers. The container list should be sorted in order of container identifier, and it should be divided into three columns: (left to right) 1) Containers, 2) Permanent Locations, and 3) Current Temporary Location. The location list should be sorted according to the location browse list settings but sortable, primary and secondary, according to the user’s preferences at the time of use. The user will then highlight a container (or set of containers) and a location (or set of locations) and indicate that the two should be linked. This link results in an assertion of the form: “the container identified is shelved at this location”.

There are several attributes associated with the link between a container record and a location record:

Location Status: all location links, either to permanent or temporary locations, are assigned a status of “Current” at the time the location link is made. When materials assigned to temporary locations are returned to their permanent locations, users will then change the status value to “Previous.”

Location start date: all location links, either to permanent or temporary locations, are assigned a date stamp at the time the location link is made

Location end date: all location links for temporary locations only are assigned an end date when the status is change from “Current” to “Previous”.

Location note: all location links include a note to be used to amplify the location statement in any way necessary.

In addition to associating location records to specific accession/resource content, the location management tool will also include a function for deleting, or removing a location link from specific content records. Users with the appropriate staff permissions will select one or more container / link statements and then choose the option to remove the location link. The user will be asked if s/he is sure about removing the links before executing the request. Only the link is removed. The location record(s) and container record(s) comprising the link are retained in the system and available for subsequent linking.

Last, the location management tool will also include a function for creating a single location record, which, when completed, will become available for linking to in the location management list.

Loc--6: Business rules

1. Location records are for indicating the shelving locations, permanent or temporary, available to a repository.
2. Location records may be created singly for each specified location or in batches
3. Location records may be created as needed or in advance to be used later
4. A valid location record requires a value for "building" and either a value for "Coordinate 1 Label" and "Coordinate 1 Indicator," a "Barcode," or a "Classification" (and system control data)
5. Location records may be edited.
6. Location records may be deleted only if they are not linked to container records. Otherwise the link between location and containers must first be removed.
7. Managing the locations of controlled archival materials is accomplished by linking the container records for an accession or resource to one or more location records.
8. A container may be linked to only one permanent location
9. A container may be linked to only one temporary location record with the status = "Current"
10. A container may be linked to one or more temporary location record(s) with the status = "Previous"

11. A timestamp is automatically provided whenever a permanent or temporary location link is made.
12. An additional timestamp is automatically provided when the status of a temporary location link is changed from “Current” to “Previous”
13. Location links may be removed without deleting either the container record or the location record, and must be removed before the location records can be deleted
14. All the locations available to a repository and defined in the application can be listed and variously sorted in a location browse screen, with an indication of what is stored at any occupied location
15. The materials occupying a location record are displayed in a single location record.
16. All locations to which accessions or resources are linked display as part of the accession, resource, or resource component record
17. The locations data will support the several reports described in the last section of this specification

Loc—7a: Required task sequence for single location record

1. Select option to create single location record
2. Enter a value for the Building element
3. Enter a value for the Coordinate 1 label element
4. Enter a value for the Coordinate 1 identifier element
5. Or, instead of 2-4, enter a value for the Barcode element
6. Or, instead of 2-5, enter a value for the Classification element
7. Click on Save

Loc—7b: Optional task sequences for single location record

1. Add a value for Floor
2. Add a value for Room

3. Add a value for Area
4. Add a value for Coordinate 2 label
5. Add a value for Coordinate 2 identifier
6. Add a value for Coordinate 3 label
7. Add a value for Coordinate 3 identifier
8. Change the repository to which the location record is associated to (permissions restricted)

Loc—8a: Required task sequence for batch location records

1. Select option to generate batch location records
2. Enter a value for the Building element
3. Enter a value for the Coordinate 1 label element
4. Enter a value for the starting Coordinate 1 identifier element
5. Enter a value for the ending Coordinate 1 identifier element
6. Click on Generate

Note: Barcodes and Classification values cannot be generated in batches and are thus not options on the batch record generator for location records

Loc—8b: Optional task sequences for batch location records

1. Add a value for Floor
2. Add a value for Room
3. Add a value for Area
4. Enter a value for the starting Coordinate 2 identifier element
5. Enter a value for the ending Coordinate 2 identifier element
6. Enter a value for the starting Coordinate 3 identifier element
7. Enter a value for the ending Coordinate 3 identifier element

8. Change the repository to which the location record is associate (permissions restricted)

Loc--9: User intentions / Application response sequence

User intention (Required fields in <i>italics</i>)	Application response / action
<i>Select option to create a new location record from either within location module or location management tool</i>	
	Displays single location record template, showing association to user's repository
<i>Record building and either coordinate 1 value and identifier or barcode or classification indicator</i>	
Record any optional location properties	
<i>Save the completed record</i>	
	Application will indicate the location record cannot be saved and display the reason for that, typically, either because the location record is a duplicate or because all required data has not been provided
	Otherwise application will indicate the location record has been saved and the location record will appear in the browse list of location records

User intention (Required fields in <i>italics</i>)	Application response / action
<i>Select option to create a batch of new location records from within location module</i>	

	Displays batch location record template, showing association to user's repository
<i>Record building and coordinate 1 value and identifier</i>	
Record any optional location properties	
<i>Select option to generate completed location records</i>	
	Application will indicate the location records cannot be generated and display the reason for that, typically, either because the location record(s) duplicate records already in the database or because all required data has not been provided
	Otherwise application will indicate the location records have been generating, noting the number generated, and the new location records will appear in the browse list of location records

User intention (Required fields in <i>italics</i>)	Application response / action
<i>In the location record browse screen, select a record to edit and then either double click on the selection or click on the edit option</i>	
	Displays selected record

Edit the record as desired	
<i>Save the update record</i>	
	Application will indicate the updated location record cannot be saved and display the reason for that, typically, either because the updated location record is now a duplicate or because some required data is now lacking
	Otherwise application will indicate the location record has been saved

User intention (Required fields in <i>italics</i>)	Application response / action
<i>In location record browse screen, select one or more location records (contiguous or non-contiguous) to delete</i>	
<i>Select option to delete records</i>	
	Application will request if user is sure about deleting the location records selected: "Are you sure you want to delete N records?" "N" is the number of location records the user has requested to be deleted
<i>User responds Yes</i>	
	If any location records are linked to containers, application will respond: "Cannot delete N location records because they are linked to container records. Please remove link in order to delete the location records."

	<p>“N” is the number of location records in the set to be deleted that are linked to container records.</p> <p>Meanwhile, any location records in the set requested to be deleted that are not linked to container records are deleted</p>
	If no location records are linked to container records, all the records requested to be deleted are deleted
	Deleted location records are immediately removed from the list of location records
<i>User responds No</i>	
	Application reverts to state prior to when request to delete location records was started

User intention (Required fields in <i>italics</i>)	Application response / action
<i>From an accession record or resource record, selection option to manage locations (location management tool)</i>	
	<p>Application displays a list of primary containers defined for the accession or resource and list of locations available to the repository.</p> <p>Container list also contains columns for permanent locations and current temporary locations. Any locations already assigned to containers are listed in those columns.</p>
<i>Select container(s) to be assigned to a location (multiple containers can be assigned to one location, but containers</i>	

<i>can only be assigned to one location at a time. To add container to second, third, etc. location, the process needs to be repeated)</i>	
<i>Select location, permanent or temporary, to be linked to container(s), thus indicating where the containers are located in the repository's shelving area(s)</i>	
<i>Select the option to Add Location Link</i>	
	<p>Application will add</p> <ul style="list-style-type: none"> • status="Current" to locationLinkStatus • current timestamp to locationLinkStartDate
	<p>Locations are appended to containers in container list, with permanent locations being listed in the permanent location column and temporary locations in the current temporary location column</p>

User intention (Required fields in <i>italics</i>)	Application response / action
<i>From an accession record or resource record, selection option to manage locations (location management tool)</i>	
	<p>Application displays a list of primary containers defined for the accession or resource and list of locations available to the repository.</p> <p>Container list also contains columns for permanent locations and current temporary locations. Any locations already assigned to containers are listed in</p>

	those columns.
<i>In container list, select container-location statement to be edited</i>	
<i>Double click on container-location statement or click on Edit Location Link option</i>	
<p>Edit the link attributes:</p> <ul style="list-style-type: none"> • For temporary locations, change location link status from “Current” to “Previous” (For permanent locations, the location link status cannot be changed to “Previous”) • Add a note amplifying the location link 	
<i>Save the updated link</i>	
	Application will add a timestamp for the location link end date.
	<p>Application responds that link has been updated.</p> <p>If the status for a temporary location was changed from “Current” to “Previous”, the temporary location no longer appears in the container list as a current location.</p>

User intention (Required fields in <i>italics</i>)	Application response / action
<i>From an accession record or resource record, selection option to manage locations (location management tool)</i>	
	Application displays a list of primary containers defined for the accession or resource and list of locations available to

	<p>the repository.</p> <p>Container list also contains columns for permanent locations and current temporary locations. Any locations already assigned to containers are listed in those columns.</p>
<i>In the list of containers, select one or more permanent locations</i>	
<i>Or select one or more temporary locations</i>	
<i>Select option to Remove Location Link</i>	
	<p>Application asks if user is sure about removing location links:</p> <p>“Are you sure you want to remove N permanent locations?”</p> <p>Or</p> <p>“Are you sure you want to remove N temporary locations?”</p> <p>“N” is the number of permanent or temporary location links the user has asked to be removed</p>
<i>User answers Yes</i>	
	<p>Selected locations are removed from the list of containers, indicating they are no longer linked to the containers</p>
<i>User answers No</i>	
	<p>Machine reverts to state before container – location statements were selected.</p>

Loc--10: Location data elements

Element	Definition	Type	Default Values	Required
locationBuilding	The name of the building in which the materials are shelved,(e.g., "Geisel Library")	String		Yes
locationFloor	The floor on which the materials are shelved, (e.g., "Second floor," "Second," "2", "2 nd ," etc.)	String		
locationRoom	The name of the room in which the materials are shelved, (e.g., "Mandeville Special Collections," "University Archives," "City Records Dept.", etc.)	String		
locationArea	The area in which the materials are shelved,	String		

	(e.g., "Manuscript stacks," "Map cases," etc.)			
locationBarcode	A barcode used to identify a location, such as a shelf or a drawer.	String		Yes, if locationCoordianteOneLabel and locationCoordianteIndicator or locationClassification are not used
locationClassification	A classification indicator, such as LC class number, used to identify a section of a shelving area	String		Yes, if locationCoordianteOneLabel and locationCoordianteIndicator or locationBarcode not used
locationCoordinateOneLabel	A label for the first shelving coordinate in a hierarchy of coordinates, (e.g., "Range" for range-section-shelf, "Mapcase" for mapcase-drawer, "Lateral cabinet" for lateral cabinet-drawer,	String		Yes, if locationBarcode or locationClassification are not used

	etc.)			
locationCoordinateOneIndicator	An alphanumeric indicator for expressing the identity of sequential position of the coordinate,(e.g., “1”, “A,” “A1A,” etc.)	String		Yes, when locationCoordinateOneLabel is used
locationCoordinateTwoLabel	A label for the second shelving coordinate in a hierarchy of coordinates, (e.g., “Section” for range-section-shelf, “Drawer” for mapcase-drawer, “Drawer” for lateral cabinet-drawer, etc.)	String		
locationCoordinateTwoIndicator	An alphanumeric indicator for expressing the identity of sequential position of the coordinate, (e.g., “1”, “A,” “A1A,” etc.)	String		Yes, when locationCoordinateTwoLabel is used

locationCoordinateThreeLabel	A label for the third shelving coordinate in a hierarchy of coordinates, (e.g., "Shelf" for range-section-shelf)	String		
locationCoordinateThreeIndicator	An alphanumeric indicator for expressing the identity of sequential position of the coordinate, (e.g., "1", "A," "A1A," etc.)	String		Yes, when locationCoordinateThreeLabel is used
locationTemporary		Config pull down	Conservation Exhibit Loan Reading room	
nameRecordCreatedTimestamp		Timestamp		Yes

nameRecordLastModifiedTimestamp		Timestamp		Yes
nameRecordCreatedStaff		String		Yes
nameRecordLastModifiedStaff		String		Yes

Loc--11: Location link Attributes elements

Element	Definition	Type	Default Values	Required
locationLinkStatus	For indicating that the location, permanent or temporary, is current, or, in the case of temporary location, is no longer in effect.	Non-config pull down	<ul style="list-style-type: none"> • Current • Previous 	<p>Yes. Whenever a location record is linked to a container record, the value is set to "Current"</p> <p>For temporary location records, the user may set to value to</p>

				"Previous"
locationLinkStartDate	The date, inherited from the machine, when the location link was made.	Timestamp		Yes
locationLinkEndDate	The date, inherited from the machine, when the status for a temporary location is changed from "Current" to "Previous"	Timestamp		Yes, for temporary locations with status = "Previous"
locationLinkNote	A note for amplifying the location statement in any way necessary	String		

Loc--12: Imports

None are supported independent of an Archon, AT, ArchivesSpace migration.

Loc--13: Exports

None are supported independent of an Archon, AT, ArchivesSpace migration.

Loc--14: Reports

- Location, permanent / temporary for a specified container or set of containers
- Location(s), permanent / temporary, for a specified accession or resource
- Repository shelf list (all identified permanent locations, sorted by stack coordinates, but also sortable into occupied and vacant using properties of shelved containers)
- Location guide for all accessions/resources and their permanent locations, sorted by accession or resource identifier or title
- List of all temporary locations with materials currently stored there sorted by accession or resource title/identifier (a snapshot of all materials not in their permanent locations)
- List of all temporary locations with materials currently or previously stored there for a specified period of time (sortable by location and specific accession/resource identifier and thus, for example, revealing use of material in reading room or for exhibits)