# Avalon Collections Guide

This documentation is for Release 7.x.

- Release 6.x: v328
- Release 5.x: v.319.
- Release 4.0: v.307
- Release 3.x: v.284
- Release 2: v.221
- Release 1: v.124

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## Introduction

The Avalon Collections Guide for Avalon Media System explains Avalon features, functionality, and how to navigate the system. It is designed for the collection Manager, Editor, or Depositor, whomever is responsible for uploading content, editing content, or providing content for playback through Avalon. See your system administrator for issues that relate to configuring Avalon "under the hood."

### Definitions

- **Authenticated users** - A user who can access Avalon using a valid identifier and authentication combination supported by your institution. Publicly accessibly items do not require authentication for access.
- **Collection** - A collection is a grouping of items for administrative and discovery purposes. Items belong to one and only one collection.
- **Collection Staff** - Collection staff refers to individuals that have been assigned specific roles for a collection: managers, editors and depositors. Administrators are also considered collection staff although they are not listed per collection. Collection staff have set permissions to edit, delete, publish items based on their assigned roles.
- **File/Section** - A single media file (i.e. sound recording, moving image) that is part of an item; one or more files can exist for a single item (e.g. 3 mp4 files combined to form an entire movie, 6 wav files together make up the recording of an entire orchestra concert, or a sound file and a moving image file together represent a video with accompanying lecture commentary).
- **Item** - A single item (media object) accessible through one Avalon page; consists of one or more media files and metadata describing the media file(s).
- **Unit** - A unit is a grouping of collections for administrative and discovery purposes. Usually, a unit will map to an administrative unit. Collections belong to one and only one unit. A collection's unit is just a label: there are no privileges associated with units.

### Accessibility

See the Accessibility entry for information regarding the accessibility of the Avalon site and media player.

### Logging In

1. On the Avalon home page, click "Sign in>>" (upper right)
2. At the Login page, enter your username and password, click Login/Sign In Button.

If you log in and do not have editing rights, you must be added to at least one collection as a manager, editor, or depositor. Use the "Contact Us" form linked in the footer of the Avalon site to request access or contact your system administrator.

## Browsing and Searching

Browsing and searching is powered by Blacklight and Solr indexing. Flexible search features include Unicode support, Advanced Full-Text Search Capabilities, and faceted searching to help end users and Collection Staff refine their search results. Avalon also auto-generates search suggestions. Avalon provides multiple sorting options for search results, including relevancy sorting, and allows the user to set the number of results shown per page. Once items are added to Avalon, Near Real-Time indexing occurs. No additional steps are needed to index newly added or changed items.

Boolean Commands (AND, OR, NOT) and Truncation are not supported by Avalon at this time.

By default, Avalon uses Solr's DisMax Query Parser (or dismax), which is designed to process simple phrases without a need for any complex syntax. There is support for + (required) and - (excluded) words, as well as the use of quotes for phrase searching.

Solr also comes with an Extended DisMax Query Parser (edismax), which supports the capabilities of dismax as well as:

- Boolean operators AND, OR, and NOT in addition to + and -
- Parenthesis groupings for complex queries

- Wildcards
- Range queries on Numeric and Date fields (e.g., 1963 TO 1971)
- Better "proximity boost" matching
- Smart partial escaping

Avalon does not use edismax by default. Contact your system administrator to make changes to the Solr configuration.

The following table shows which fields by default are faceted and indexed for searching:

| Field | Faceted | Searchable | Notes |
|---|---|---|---|
| Descriptive | | | |
| Title | ☐ | ☑ | |
| Publication date | ☑ | ☑ | Combined with Creation date as Date facet |
| Main contributor | ☑ | ☑ | |
| Creation date | ☑ | ☑ | Combined with Publication date as Date facet |
| Summary | ☐ | ☑ | |
| Contributor | ☐ | ☑ | |
| Publisher | ☐ | ☑ | |
| Language | ☑ | ☑ | |
| Physical Description | ☐ | ☑ | |
| Related Item | ☐ | ☐ | |
| Genre | ☑ | ☑ | |
| Subject | ☐ | ☑ | |
| Time Period | ☐ | ☑ | |
| Location | ☐ | ☑ | |
| Permalink | ☐ | ☐ | |
| Terms of Use | ☐ | ☑ | |
| Other Identifier | ☐ | ☐ | |
| Table of Contents | ☐ | ☑ | |
| Notes | ☐ | ☑ | |
| Section labels | ☐ | ☑ | |
| Captions | ☐ | ☐ | |
| Organizational/Technical | | | |
| Collection | ☑ | ☑ | |
| Unit | ☑ | ☑ | |
| Format | ☑ | ☐ | |
| Published | ☑ | ☐ | |
| Created by | ☑ | ☐ | |
| External Group | ☑ | ☐ | |
| Date Digitized | ☑ | ☑ | |
| Date Ingested | ☑ | ☑ | |

# Player and Controls

Avalon uses the MediaElement.js player for playback of both audio and video files.

Player controls - When viewing the Avalon player in the browser window, player controls can be found below the video. When in fullscreen mode, hover your mouse over the bottom area of the picture and you will see player controls appear.

- To start and pause the player, click the center Play button (for video) or the Play button in the bottom left corner.
- To advance quickly through the audio or video, click on the timeline bar at the desired point, or scrub forward.
- To adjust volume within the player, click on the desired level in the speaker loudness icon. To mute, click the speaker icon.
- To go to full screen for video playback, click on the square icon located in the bottom right corner of the player.
- To switch between playback quality tiers, click on the gear icon located on the bottom right corner of the player.

To view a specific section when available, click the desired section for playback under the Section heading below the player.

To share the recording, you can click the Share button below the player then copy the relevant share link or embed code.

- Share the permanent URL for the item, or for one of the sections if the item contains more than one file.
- Embed the player in another web page by clicking on the Embed tab under the player and then copying the embed code. Pasting the code into the HTML of another web page will embed the media. If the video is access-restricted, authorized users will be prompted to authenticate before being able to access the media. Note: Embedding does not work in all environments (see Known Issues for Player Embedding).

Mobile viewing:  Avalon works on iOS and Android devices.

See Known Issues for Player & Controls

# Avalon Metadata

Descriptive metadata (the metadata fields available to describe an item for search and discovery purposes) are stored as MODS XML. All other metadata properties related to administrative, technical, and structural metadata (between files and above) are stored as RDF properties from various ontologies. Structural metadata applied within a single media file is stored as custom XML for providing navigation within the media player. See Avalon Metadata for complete details regarding the different types of metadata used in Avalon.

# Creating Units

In Avalon, Units are used to define ownership and responsibility of collections and their items. Each collection must belong to a unit and collections can belong to only one unit. Each item within a collection can be discovered using Avalon's search bar or browsing the Unit facet.

In order to create or update unit names, the unit configuration file must be updated. Please contact your system administrator for assistance (see Managing Units).

# Creating a Collection

If you are creating a collection for real use, as a pilot or in production, review the advice in Managing Collections Efficiently before deciding on your workflow.

1. You must be logged in as a manager in Avalon to create a collection. If you are not a manager, request to be added to the Manager group by an Avalon administrator (see Collection Members Roles).
    a. A note on manager access: Manager access will not automatically give access to view or edit other collections within that unit. To gain access to other collections in a unit, a manager for those other collections will need to add you in a staff role (manager, editor, or depositor).
2. Log in to Avalon.
3. Click the Manage Content button to access the My Collection(s) page.
4. Click the Create Collection button.
5. An inset window will appear containing the New Collection form. Enter a Name and Description for the collection and select the Unit to contain the collection from the drop-down menu. If the Unit you wish to use does not appear in the drop-down list, contact your system administrator to add the Unit to Avalon.
6. Click the Create Collection button on the New Collection form.
7. You will be automatically assigned as Manager of this new collection.

## Collection Members Roles

Avalon has 4 default roles:

- **Administrator** - Administrators are a select few who have responsibility for providing an Avalon-based service. The administrators assign people to the manager role and maintain the list of units. Administrators are the only ones who can see and modify items in any collection. This role is typically limited to system administrators and administrative unit managers. Administrators do not need to be added to individual collections since they can view, edit, and delete any items in Avalon.

- **Manager** - Managers are those within a given unit who have overall accountability for the collection building within Avalon. Managers create collections and assign editor and depositor roles for those collections. They set the default access controls for items added to a collection and they also step in when a published item needs to be revised or deleted.

- **Editor** - Editors have supervisory responsibility for the ingest and description process (i.e. collection building). They can assign depositor roles, change the name or description of a collection, and modify access controls for individual items in a collection.

- **Depositor** - Depositors add media to a collection and describe it with metadata. They can publish items but not unpublish. They can only modify or delete unpublished items.

To see the exact permissions for each role, please refer to the Collection Member Roles.

## Assigning/Removing Collection Members

1. Once a collection has been created, you must log in as a manager or editor to assign roles in that collection.
    a. Managers can assign editors and depositors. Editors can only assign depositors.
2. Log in to Avalon.
3. Click the Manage Content button to access the My Collection(s) page.
4. Click the name of the collection to be edited.
5. Under the members section, add email addresses under Managers, Editors or Depositors to assign roles to those users. There is no limit to the number of email addresses listed under each role.
    a. If you are in the Manager group, you can only be assigned under Managers. Avalon will automatically list you under Manager.
6. Click Add.
7. To remove an email from a role, click on the "X" following the email address.

a. Each collection must have at least one manager. You will see an error message if you attempt to delete the only listed manager and Avalon will prevent that deletion from occurring. Collections do not require assigned editors or depositors.

## Editing a Collection

1. You must be logged in as a manager or editor in Avalon to edit a collection.
2. Log in to Avalon.
3. Click the Manage Content button to access the My Collection(s) page.
4. Click the name of the collection to be edited.
5. Click the Edit Collection button from the collection page.
6. Edit the Name, Description, and/or Unit on the Edit Collection Info form.
7. Click the Update Collection button on the Edit Collection form.

## Deleting a Collection

At this time, Avalon does not allow deletion of the contents of a collection in a single procedure. The content in a collection must be moved to a different collection. If items need to be deleted from Avalon, each item must be deleted at the item level. Collections that do not contain any items can be deleted without any additional steps.

1. You must be logged in as a Manager in Avalon to delete a collection.
2. Log in to Avalon.
3. Click the Manage Content button to access the My Collection(s) page.
4. Click the Delete button next to the collection to be deleted.
5. You will be asked to confirm before the collection is deleted. If there are items in the collection, you will have to select another collection from the drop-down menu to which the items in the current collection can be moved before proceeding to delete the current collection. If you do not have another collection into which the items can be moved, you will not be allowed to delete the collection.

# Creating a Single Item

1. You must be logged in as at least a Depositor in Avalon to create an item.
2. Log in to Avalon.
3. Click the Manage Content button to access the My Collection(s) page. Choose the collection to which you want to add content, then click the Create An Item button from that collection page.
4. In Manage file(s), files may be uploaded through the web using the Select button, or by importing from a dropbox using the Open Dropbox button.
5. If uploading through the web, use the Select button to browse to one or more files and click Open to load. When the file name appears in the box under the label "Upload through the web", click Upload, Change or Remove. Then click Save or Save and continue; note that the Upload button must be clicked before saving or no file will be uploaded. If multiple files are selected, only the first file name will appear in the box. Unless you are certain the file meets Avalon's strict streaming standards, do not check the Skip Transcoding box (see the skip transcoding subsection of File Management below).
6. If using the Open Dropbox button, choose files from the file dropbox location and click Attach Selected Files. Unless you are certain the file meets Avalon's strict streaming standards, do not check the Skip Transcoding box (see the skip transcoding subsection of File Management b elow).
7. Multiple files may be uploaded at once or by repeatedly using the Select or Open Dropbox button to upload one file at a time. However attaching files from multiple pages of the dropbox is not possible. You must attach files on separate pages in the dialog box at different times.
8. After clicking Upload, a Section label may be entered; click Save to save this label. This step is not necessary for items with only one media file. "Sections" only appears if there are multiple files for one item. Note: Section label will be overridden if structure is defined for a section (see Structure section below).
9. If one or more files for the new item are video files, use the Thumbnail box to change the thumbnail that will be used for the static display of the video file. The default setting is 2 seconds. Audio files do not have an editable thumbnail offset and display defaults to an illustration of headphones.
10. After uploading and labeling files has been completed, click Save and continue to move to the Resource Description step.

See Known Issues for Content Creation

## Previewing an Item

- Previewing an item allows the Collection members to see the item in the media player and test playback before allowing anyone else to view the item. The media player shows with the same controls that end users will see and the playback will reflect the playback experience for end users.
- After previewing an item, the collection Manager can choose to "Publish" the item, making it available to end users based on the Access Control settings for the item. If an item is already published, the collection Manager can choose to "Unpublish" the item, removing it from end user access.

## Editing an Item

When viewing an item that you can edit, you will see an Edit button above the audio or video player. Clicking the Edit button allows authorized users to manage files by assigning labels, to upload additional files, change metadata about the item in the Resource Description page, reorder multiple files in the Structure page, edit who can access the item in the Access Control page, and Preview how the item will appear.

## Changing the Thumbnail and Poster Images for a Video

For video, the default setting for the poster image and thumbnail is two seconds into playback. There are two ways to change the poster image and thumbnail of a video. One way is to click Edit in the item page, go to Manage file(s), and change the Thumbnail (seconds) for the first file. Click Save or Save and Continue to keep your changes. Thumbnail (seconds) can also be set for individual video sections but will not appear in search results if they are not the first section.

The other way to set a custom thumbnail and poster image is on the Preview page. After initiating playback of a video in the player, click the camera icon in the lower right corner of the player window at a frame in the video you wish to use as the new thumbnail/poster image. Avalon will ask you to confirm your selection and the poster image will update automatically.

See Known Issues for Thumbnail/Poster Images

See Setting the Thumbnail Image for a Video Item

## Deleting an Item

- Items can be deleted by managers at any time during the edit process or when accessing an item using Browse, search, or a URL. Details about how derivatives and associated metadata are handled for deleted Avalon items or single media files that are part of an Avalon item are described in the File Management section.
- To delete an Avalon item, click the red button marked "Delete" on the playback page or "Delete this item" when accessing the editing menu. You will be asked to confirm before the item is deleted.
- To delete a media file from a multi-file Avalon item, access the file and click Edit, then go to Manage file(s). Click the Delete button in the right column next to the file or files to be deleted, then click on Save or Save and continue.
- Note that clicking on the file in the playback or Preview pages and then clicking Delete will delete the entire Avalon item.

# File Management

If you are creating a collection for real use, as a pilot or in production, review the advice in Managing Collections Efficiently before deciding on your workflow.

- Types of files, size of files, etc
  - Avalon uses FFmpeg for transcoding. For a list of source file formats and codecs that are supported, see the FFmpeg Supported Source Formats and Codecs documentation.
  - There is an individual file size limit of 250MB when uploading files manually through the Avalon web interface.
  - There is no practical limit on the maximum file size of a source file uploaded to the system through the Avalon dropbox or through the batch upload feature.
  - File names cannot include the following characters: `[ ] < > | &`
- Automatic handling of master files
  - Avalon can be configured at the system level to take one of several actions after the master file has been processed. The master file can be either:
    - left in place
    - moved to another location
    - deleted
- Thumbnails
  - Thumbnails are captured at the 2 second mark of video files by default. To change this, see Changing the Thumbnail and Poster Images for a Video. When the item is audio, the thumbnail will be an illustration of headphones. When the item contains audio and video, the thumbnail will be an illustration of headphones and a screen.
- Encoding profiles
  - Avalon utilizes a component called Opencast Matterhorn to process files uploaded to the system. The types of files that the system produces for streaming are determined by encoding profiles specified in Matterhorn. Users will notice that when their files are processed, they have the option of three tiers of video playback ("Low", "Medium" and High") and two tiers of audio playback ("Medium" and "High"). Having different tiers of playback allows your end user to get the best playback experience in their playback environment (i.e. combined factors of software, hardware, internet bandwidth, etc.)
  - Opencast Matterhorn utilizes the encoding software FFmpeg to create derivatives of source files. Each encoding profile designates FFmpeg settings for derivative file creation. These settings are customizable in the encoding profiles.
  - If you wish to edit encoding profiles by changing their titles or FFmpeg encoding options, creating a new encoding profile requires creating a configuration file and placing it in the encoding profiles watch folder of Matterhorn. Contact your system administrator to edit encoding profiles.
- Skip Transcoding
  - Users may designate the Skip Transcoding option so Avalon does not create derivatives from the video or audio file being uploaded. This is useful for uploaders who already have encoded content that may be served to users without further processing. Even though derivatives are not created, Avalon still extracts metadata, creates poster and thumbnail images, and distributes the files to the streaming server.
  - Users may designate skip transcoding either through web upload or batch upload. Files added to the dropbox do not have the option for skip transcoding.
  - Use AAC encoded mp4 files for audio and H.264 encoded mp4 files for video. Some file types, such as mp3, will not work with the Adobe Media Server. See Avalon Derivatives.
  - To skip transcoding through web upload, select your files in the "Upload through the web" section and click the Skip Transcoding box. Click upload and proceed through the workflow after the file has been successfully attached.
  - To skip transcoding in batches, follow instructions on the Batch Ingest Package Format page, adding a column heading after each file listed.
    - To skip transcoding in batches for multiple files to be ingested as individual quality selections, format the manifest file and package layout following instructions on the Batch Ingest Package Format page
  - To skip transcoding on files uploaded from the dropbox, select skip transcoding. This option will affect all files added at that time.

        - A successfully processed item with skip transcoding from the dropbox interface will not offer multiple qualities for playback, only the file(s) that have been uploaded.
- Date Ingested values
    - For web ingest, this date automatically will be set to the date the ingest process completes.
    - Ingest via batch or the api will set the date as above unless a date is provided in the batch manifest or though the api.
    - These dates will not be visible to normal users, but will be browseable via a Limit By facet by administrators and collection managers.
- Date Digitized Field
  (NOTE: different than Date Ingested value, this is when the original media was initially digitized, not ingested into Avalon).
    - For web ingest, this date automatically will be set to the date the ingest process completes.
    - Ingest via batch or the api will set the date as above unless a date is provided in the batch manifest or though the api.
    - These dates will not be visible to normal users, but will be browseable via a Limit By facet by administrators and collection managers.

- Troubleshooting
    - To replace a content file:
        - Navigate to the Manage file(s) section when editing an item, locate the new content file(s) through the Web upload section or import the file(s) from the dropbox after placing them in the appropriate dropbox directory (contact your system administrator for dropbox location and connection information). Upload the file(s) and wait a moment for them to attach to the resource. Delete the incorrect content file(s) from the item in the Manage file(s) section of edit mode, then Save at the bottom of the Manage file(s) form.
    - To correct metadata errors for an item:
        - Click the Edit button for an item and navigate to the Resource Description section. Correct metadata about the item and click Save at the bottom of the form to save your changes.
- Deleting Items
    - Deleting a single item deletes the record from the database and the derivatives created for each media file.
    - Deleting a specific content file (i.e. section) will only delete that content file. To replace a specific file in any Avalon item, navigate to the Manage File(s) step for that item. Delete the specific file or files and replace the file with a new one. Processing for that file will begin again.
    - Deleting File(s)/Batch(es) from the dropbox only deletes files within the dropbox and not within their respective Avalon items. Collection managers can delete files and batches from the dropbox to make space or to keep the dropbox organized. Files and metadata for batch operations do not display in the dropbox view in the Avalon interface, so batches must be deleted directly from the dropbox directory.

## Uploading via Web

- Web ingest is used for manual upload of one or more media items.
    - There is an individual file size limit of 250MB when uploading a file manually through the Avalon Web interface.
    - The Avalon Web interface allows for labels to be added to individual sections of a multipart Avalon item.
    - Avalon items can be created without associating media. Metadata and access control information can be created first which allows for collection managers to come back to that Avalon item and associate the correct media at a later time. You must click "Save and continue" to progress through the steps even if no changes are made.
    - Deleting files -
        - Deleting a single Avalon item deletes the record from the database and the derivatives created for each media file.
        - Deleting a content file of an Avalon item does not automatically delete that content file and its derivatives. If you would like those items deleted, follow the prompt “Several clean up jobs have been sent out. Their statuses can be viewed by your sysadmin at /var/www/avalon/shared/log/matterhorn_cleanup.log”

See Known Issues for Creating Single Item

## Uploading via a file dropbox

- Avalon’s dropbox is used to import large files over 250MB (this has no association to dropbox.com).
    - Uploading files - Large media files are placed in a dedicated Avalon dropbox (a file server usually connected via SFTP or a mapped network drive). Contact your system administrator for dropbox location and connection information. Starting with release 3, dropboxes are in sub-folders with the name of the related collection instead of there being just one system-wide dropbox.
    - Once files are copied to the collection's dropbox, collection members can go to the Create an Item option or Edit option for an item within a collection to open the dropbox and attach selected files to an Avalon item. File processing begins once media is attached from the dropbox.
    - When creating a new item, you go through the workflow in order of adding resource descriptions, ordering structure and access control.
    - Selecting the Skip Transcoding option will affect all items being uploaded from the dropbox.
    - Deleting files from the Avalon dropbox - If your Avalon instance is not configured to automatically delete or move master files after processing, you can delete files from the Avalon Dropbox through the web interface or directly on the server where the dropbox is located:

        - Through the Avalon dropbox - Choose the Create an Item option or Edit option for an item within a collection. From within Manage file(s), click the Open dropbox button. Checkmark the files you want to delete and click Remove Selected Files. Deleted files will be permanently removed from your Avalon Dropbox folder on the server where it is hosted.
        - Through the dropbox folder on a server - Connect to your Avalon dropbox folder directly on the server where it is hosted. Delete files manually. Deleted files will be permanently removed from your Avalon dropbox.

## Uploading via Batch

- Avalon's Batch Ingest feature provides a method of building one or more media items at one time from content and metadata uploaded outside the user interface. A batch ingest is started by uploading an Ingest Package (the combination of content and metadata) consisting of one Manifest File and one or more Content Files to the Avalon dropbox.
- To format a Manifest File as an xls, see Batch Ingest Package Format for a batch spreadsheet template and instructions on the metadata fields that can be included in a batch ingest.
- When formatting a batch, all content and metadata files are placed in a dedicated collection-specific Avalon dropbox (a file server usually connected via SFTP or a mapped network drive). Contact your system administrator for dropbox location and connection information.
- Upon loading the batch in the dropbox, Avalon checks to see if the spreadsheet is formatted properly and if all the files are copied to the server. Avalon sends an email to the address listed in the spreadsheet either confirming that all is well and the batch is processing OR reporting problems with the batch (e.g. missing files or incorrect formatting). Upon completion of the batch, Avalon sends an email of success or failure.
- Handling errors for Avalon items within a batch
- 
    - Sometimes a batch ingest will result in an exception (e.g. one or more content files failing to ingest). You will receive this information through an email message after your batch ingest processes. If a content file failure occurs, the following steps can be tried to ingest the content again:
        - Avalon form: Re-ingest a single Avalon item (i.e. one row of the batch ingest spreadsheet) by placing all content files for that item in the collection's dropbox directory. Once processed, the content files will be available from the Import from a dropbox feature in the Manage file(s) section of an item.
        - Reload spreadsheet: Re-ingest a single Avalon item or set of items by reducing the batch spreadsheet to only those failed items and reload the spreadsheet to the same location as before. This will run the batch for the failed content files only.
        - If a single Avalon item with multiple content files has one or some of those files fail (but not all), either delete that item from Avalon and use the Reload spreadsheet method to load the entire item again or use the Avalon form method to add those failed content files to the dropbox and append them to the appropriate item in Avalon.
    - If your Avalon instance is configured to automatically delete or move master files after processing, you will have to put the master files back in the dropbox before reprocessing items.

## Resource Description

- Metadata
    - Avalon utilizes Metadata Object Description Schema (MODS) for organizing descriptive metadata.
    - When creating a new Avalon item, use the Resource Description form to create basic metadata about the item. Clicking on the question mark image next to the form field name will expand with helpful instructions. In some cases, instructions will recommend controlled vocabularies (e.g. see help for Genre and Subject for examples). Other times, instructions contain formatting recommendations (such as Publication Date and Creation Date). Please be sure to verify that metadata is being entered properly so that Avalon can make the best use of the information you provide about your items for search and discovery.
    - Authorized users can edit the metadata at any time by clicking the Edit button on the item page and editing metadata in the Resource Description section.
    - Two metadata elements are required for each Avalon item: Title and Publication Date. These elements are identified with an asterisk (*).

- Suggestions for controlled vocabulary use
    - Some fields in Avalon have recommended controlled vocabularies. Genre, all types of Subjects (Location, Time Period) and names of Creators and Contributors should come from a controlled vocabulary when available. The contextual help accompanying the fields in the Resource Description form contains links to recommended vocabularies. Additionally, the Batch Ingest Package Format specifies controlled vocabularies for those fields.

- Import of MARC Bibliographic Data
    - Avalon supports automatic import of MARC bibliographic data from integrated systems such as a catalog database, OPAC, or library management system. Ask your System Administrator if your instance of Avalon is configured for this feature.
    - Within the Resource Description page of an Avalon item in the web interface, use the dropdown menu in the "Bibliographic ID" section to select the type of data being imported, and then input the ID for the data you are importing in the text field. Click the "Import" button and all available MARC fields will be imported to the resource description. Save your imported data by clicking the "Save" button. Please note that when importing data this way, any preexisting descriptive metadata will be deleted with the exception of data in the Other Identifiers field. The ID used for the import will automatically be added to the Other Identifiers list. If there was a previously entered import ID, it will be removed from the Other Identifiers list.
    - When importing MARC bibliographic data through batch ingest, use the "Bibliographic ID" and "Bibliographic ID Label" in the manifest file to specify the type of data being imported and the ID for the data being imported. Follow instructions in the field names section on the Batch Ingest Package Format page for this feature.

## Structure

- Multiple content files within a single Avalon item
    - If a single Avalon item is made up of multiple content files, those content files can be uploaded separately to the item, labeled individually, given different thumbnails (for video files only) and reordered at any time. If there is more than one content file, each content file will be listed on the Avalon item's page and can be selected for individual playback. Labels specific to these content files can be helpful for users to better understand the content of the item. If no label is provided for a content file, the file name will be listed. You must click Save or Save and continue at the bottom of the Manage file(s) page for labels to persist.
- Defining structure within a single content file
    - Structure can also be defined within a single content file. To do this, go to the "Structure" section of an Avalon item and add or edit structure using either the Raw XML or Graphical forms. Screen shots describing this process can be found on Adding Structure to Files Using the Graphical XML Editor.
    - Alternatively, structure files can be included in a batch ingest package. For each file in the spreadsheet with a filename like "filename.mp4", if a file exists in the same directory called "filename.mp4.structure.xml" it will be attached as structure to that file. See the Batch Ingest Package Format - Adding structure files via batch for more details.
    - NOTE: Defining structure within a single content file is an advanced feature. It is possible to define structures that will not work within the media player (time stamps and order can be defined so they do not match the actual content). Proceed with caution.

- Adding captions to a content file
    - Captions can be added to a content file from the Structure edit page by clicking the "+" button in the Captions column and then clicking the "Upload" button and choosing a WebVTT or WebSRT file from your local file system.
    - Alternatively, caption files can be included in a batch ingest package. For each file in the spreadsheet with a filename like "filename.mp4", if a file exists in the same directory called "filename.mp4.vtt" it will be attached as captions to that file.

# Access Control

See Avalon LTI Tool for information about configuring Avalon for use in Learning Management Systems (LMS).

- Avalon provides stream-level protection for desktop and mobile streams through session token validation. Tokens are passed between Avalon and the streaming server (Adobe Media Server or Red5) when a valid Avalon session exists. These tokens last for 20 minutes.
- Access control options must be adjusted manually in the Avalon user interface. Batch uploaded items that are designated to be Published automatically default to the Collection member only access control option.
    - Available to general public:  Anyone can view items with this setting without being logged in.
    - Authenticated users only:  Only users that can log in to Avalon can view these items.
    - Collection members only:  Only collection members (Managers, Editors, and Depositors) can view these items
    - Assign special access to:  Designated individuals, groups, or users visiting from specified IP addresses or address ranges can view these items. Special access will be limited to specified date ranges if dates are provided. Users in the Collection members group can always see these items.
    - Hide from search results:  This option exists for items you wish to keep available via URL only. Items with this setting cannot be discovered via search or browse.
    - Published vs. Unpublished:  Unpublished items are only viewable to collection members. To make Avalon items viewable to other users, you must publish the item. Publishing an item occurs in the Preview section of the process.
    - Assigning special access to an External Group provides a method to deliver course-specific content through a Learning Management System (LMS) or to grant access to groups managed through an external LDAP service configured by a system administrator.
- A user can share a unique URL to an Avalon item or section. The item and section URLs can be found on the item's page by clicking the Share button underneath the video or audio player. The item will be accessible only to users who are authorized to have access through the access control options.
- To set up temporary access for a user who is unaffiliated with your institution, contact your system administrator.

## Managing Groups

Avalon has two default group categories: System and Ad Hoc Groups

- System Groups - System groups are configured by a system administrator.

    - *administrator* - users listed under the administrator group have the ability to do anything in Avalon including viewing all items, creating and editing items, and creating and editing collections. Adminstrators also have automatic access to the group_manager group so they can add any user to the other system groups.
        - Only administrators can add other administrators to the administrator group.
    - *manager* - users listed under Manager group are able to create and manage collections. They have the ability to assign collection member roles to their collections. They can edit, publish, and unpublish all items under their collections.
        - Only administrators and group_manager members can add to the manager group.
    - *group_manager* - group_manager members can create ad hoc groups, add or remove members to existing ad hoc groups, and create or remove groups to share specific collections or items with a designated user group. group_manager members can add members to the manager group.
        - Administrators are the only members that can add members to group_managers.

- Adhoc Groups - Group managers can create new groups to share specific items with designated user groups. These groups will have view access only.

    - No ability exists in the interface to edit policies for groups. To add users to a group, enter their Avalon username as displayed in the upper right corner upon logging in. This is usually an email address.
    - Ad hoc groups can be edited and deleted by other Group Managers or Administrators.
    - Group names should not include blank spaces. Avalon is not case-sensitive so it will not allow a group named "test" and "TEST."

Avalon can optionally be configured by system administrators to utilize "External Groups" for item access. These are similar to Adhoc Groups described above, but group membership is determined by external systems, such as LDAP or LMS/LTI. Access to any collection or item can be granted to one or more external groups by adding those groups via the Access Control sections of Collection and Item Edit screens.  See the Access Control section above.

See Known Issues for Group Management

# Sharing via URL/Permalink

- Items and sections of items that are published can be easily shared by clicking the Share button below the player and copying the URLs provided in the Object or Section fields of the Share this resource tab. Access will be determined by access control level on the item.
- To copy a specific section, select the section from the Sections list below the player, then copy the URL shown in the Section field under the Share this resource tab.
- These URLs are permanent links that are created for each item and for each section of an item. For more details (including how to define permalinks used at your institution), see Permalinks in the Avalon Media System Technical Documentation.

- Optionally, Avalon also allows preexisting PURLs or Handles to be entered for any object and its sub parts. This is done on the Resource Description (for the item as a whole) and Manage File(s) (for an item's sub parts) Item Edit pages. Tooltips have been added to these pages to assist with this feature.
- If an item does not contain sections, there will still be URLs for both Object and Section under the Share this resource tab. Either URL will work to share the entire item in this case.

See Known Issues for Sharing via URL/Permalink

# Bulk Editing

When multiple items are viewed in a search page, you can select one or more items with check boxes in the right hand column. When boxes are checked, then they are selected. Click the “Manage Selected Items” option displayed in the top navigation bar which lists the number of items selected. The Selected Items page will then provide the following Bulk Editing features:

- Update Access Control: Manage access control settings for multiple items.
- Move: Move multiple items to other collections.
- Publish: Publish or unpublish multiple items.
- Delete: Delete multiple items.

Roles and permissions will determine the range of bulk editing actions available to a particular user. If a user has selected multiple items and the user does not have the same permissions to perform the various Bulk Editing actions across all items, then only those items with correct permissions will be successfully edited.