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1.0 OVERVIEW

OHMS is a system designed to enhance access to online oral histories (or other time-based media) in an efficient and affordable fashion. The primary purpose of OHMS is to create a framework, space, and user interface to enhance search and discovery of information in online audio and video by connecting textual searches of a synchronized transcript or of an index, to the corresponding moments in the online audio and video sources. OHMS was designed to create an interoperable and sustainable framework using simple and open formats and technologies. There are two main components of the OHMS system:

**OHMS Application:** The OHMS application is the online space where the preparation of resources is completed. This is the back-end, web-based application where metadata is imported or created, transcripts are uploaded and synchronized, or descriptive indexes are created. Upon completion, the interview record, which includes the synchronized transcript and/or time-coded index, is exported as a simple XML file. When this XML file is located on a web server, it interfaces with the content management system by way of the OHMS Viewer. The Louie B. Nunn Center for Oral History currently hosts the central installation of the OHMS application. Accounts are free.

**OHMS Viewer:** The viewer is where the public interacts with a resource originally prepared using the OHMS Application. When a user clicks on the appropriate link, the OHMS viewer loads. The viewer combines select interview-level metadata, intra interview-level metadata with the audio or video player. The OHMS viewer currently utilizes jPlayer (HTML5) for delivering the directly-linked audio/video ([http://jplayer.org/](http://jplayer.org/)), OHMS is also designed to work with Aviary, Kaltura, YouTube, Vimeo, Avalon, SoundCloud, and Brightcove streaming solutions.

1.1 OHMS VIEWER EXAMPLES

The following links are examples of the OHMS viewer in action:

- **OHMS Viewer:** synchronized transcript
- **OHMS Viewer:** interview index
- **OHMS Viewer:** synchronized transcript + interview index
- **OHMS Viewer:** bilingual index
- **OHMS Viewer:** transcript + translation
1.2 OHMS WORKFLOW SUMMARY

**OHMS Application** (preparing for public access)

- Create OHMS Application account (free) [https://oralhistoryonline.org](https://oralhistoryonline.org)
- Host audio or video in a location where OHMS can access/interact with the media.
- Log in to OHMS Application account.
- Import or create new OHMS “Interview” record.
  - Link OHMS record to online audio/video
- Synchronize transcript or index the interview
  - Save work
- Export OHMS XML file when work is completed

**OHMS Viewer** (making interviews public)

- Install and configure OHMS Viewer on your server.
- Place XML file into directory within installation of the OHMS Viewer
- From the Content Management System, link to the OHMS XML file which presents within the OHMS Viewer.
- From the Content Management System the user interacts with interview via the OHMS Viewer
2.0 OHMS APPLICATION: OVERVIEW

The OHMS application is a user-authenticated web application. The OHMS “Repository” is the dedicated space created for processing a specific group of resources and is originally established by a “Repository Administrator.” Once the “Repository” is established, the repository administrator(s) can add additional users associated with that repository. All accounts associated with a repository will only see materials associated with that repository when logged in with their individual username and password. Once an individual account is created, log into OHMS using the assigned username and password. When first logging in to an account, users will be asked to change the temporary password and accept a terms of service agreement.

![OHMS Application Login](image)

Once logged into the OHMS application, assigned users can begin to prepare oral history interview and other audio or video resources for public access. There are several major components of the OHMS application:

- **Interview Manager**: Central area to initiate an interview. Provides navigation to major functional areas of OHMS and the monitoring of workflow.

- **Metadata Manager**: Input or edit collection or item-level metadata.

- **Indexing Module**: Index/annotate an interview or audio or video resource.

- **Transcript Synchronization Module**: Place timecode into a transcript at corresponding locations.

- **Thesaurus Manager**: Manage controlled vocabularies used while indexing.

- **Interview Import**: Import item-level metadata to begin indexing and/or transcript synchronization.

- **User Management**: Assign rights and permissions for users assigned to the OHMS repository.
2.1 USER ROLES
The individual originally responsible for the OHMS Application repository is automatically assigned as the “Repository Administrator.” The “Project Editor” and “Project User” roles will only see records that they have been assigned by a repository administrator. All roles are assigned from the User Management page viewable only by the repository administrator. The following identifies the different roles that can be assigned and the rights that accompany those roles:

- **REPOSITORY ADMIN**
  - Repository management
  - Project management
  - Create, import, or delete records
  - Add or delete users and assign user roles
  - Resolve “Notes”
  - Create or import new records
  - Enter metadata
  - Export XML and CSV Files
  - Thesaurus management
  - Index and Synchronize

- **EDITOR**
  - Create, import, or delete records
  - Enter metadata
  - Export XML and CSV Files
  - Thesaurus management
  - Index and Synchronize
  - Submit Notes

- **USER**
  - View metadata
  - Index and Synchronize
  - Submit Notes

- **PROJECT EDITOR**
  - For interviews assigned: Create, import, or delete records
  - For interviews assigned: Enter metadata
  - For interviews assigned: Export XML and CSV Files
  - Thesaurus management
  - For interviews assigned: Index and Synchronize
  - For interviews assigned: Submit Notes

- **PROJECT USER**
  - For interviews assigned: View metadata
  - For interviews assigned: Index and Synchronize
  - For interviews assigned: Submit Notes
3.0 INTERVIEW MANAGER

The Interview Manager is the main hub of the OHMS application. The Interview Manager is where you:

A. Create new interview records
B. Input or edit item-level metadata
C. Initiate the indexing module
D. Upload transcript
E. Initiate transcript synchronization
F. Create or flag an item with a note
G. Preview completed interviews
H. Workflow management
I. Export the OHMS XML or CSV file
J. Batch export or delete records
K. Search repository records (this searches title, accession #, collection and series ID)
L. Add users to repository
M. Manage thesauri (used for indexing)
N. Import
O. Project Manager
P. Filter by Project
4.0 METADATA EDITOR

Item-level metadata can either be created in OHMS or imported and, therefore, retain metadata associated with the item throughout the OHMS process. OHMS utilizes metadata fields commonly associated with oral history.

The “Metadata” link for an item is a navigational link to the metadata record for that item. This space is where the required information for initiating activities in OHMS takes place.

On the most basic level, in order to initiate work with an interview in the OHMS application, *four* metadata elements must be completed:

- Title
- Media format (audio or video)
- Media host
- Media connection (depends on your connection type and media host)
  - Media URL (for directly linking to an audio or video file or for use with YouTube)
  - Media Host ID Information (use for specific streaming solutions: Brightcove)
  - iFrame Embed code (use for specific streaming solutions: Kaltura, Vimeo, Avalon, SoundCloud)

Once these four elements are successfully established in OHMS, a record is created and the media connection is established and the item can be indexed, or a transcript can be synchronized (as soon as the text is uploaded). Not all of the fields utilized in the item-level metadata records will be visible in the OHMS Viewer (such as interview-level subjects and keywords). However, all of the interview-level fields remain associated with the resource in the XML document rendered by the OHMS Viewer. However, all of the metadata fields can be harvested by a digital library, archive, repository, or CMS and be used for migration of metadata or indexed for search.
4.1 METADATA FIELDS (INTERVIEW LEVEL)

The following is a list of interview-level metadata fields that are utilized by the OHMS application. Many of these elements are utilized by the OHMS Viewer, however, many elements in this set are not utilized by the OHMS Viewer but are included:

ADMIN AND DESCRIPTIVE

- **Repository**: (Auto-Assigned)
- **Title** (Required)
- **Accession Number**
- **Interviewee** (First Last)
- **Interviewer** (First Last)
- **Interview Date** (YYYY-MM-DD)
- **Date** (Non-preferred format) - utilized for partial dates (*Instead of the previous field*)
- **Collection ID**
- **Collection Name**
- **Collection Link** (hyperlink)
- **Series ID**
- **Series Name**
- **Series Link** (hyperlink)
- **Summary** (Interview-Level)
- **Keywords** (Interview-Level)
- **Subjects** (Interview-Level)

MEDIA AND TECHNICAL

- **Media Format** (audio or video)
- **Media File Host** (Choices vary by selection. See section 4.3 for more information.)

  - **Host** (directly linking to audio or video file)
    - Media URL (must be direct link to the audio or video file. For audio, .mp3 or .mp4 files are recommended, for video files, you will require HTML 5 delivery, requiring an H.264 encoded file in a .M4V container.
    - See Section 4.2 of this guide for details.

  - **Aviary**
    - Media URL
    - See Section 4.2 of this guide for details.

  - **YouTube**
    - Media URL
    - See Section 4.2 of this guide for details.

  - **Kaltura**
    - Requires iFrame embed code
    - See Section 4.2 of this guide for details.

  - **Avalon**
    - Utilizes both iFrame embed code or Media URL
    - See Section 4.2 of this guide for details.
• **SoundCloud**
  - Requires iFrame embed code
  - See Section 4.2 of this guide for details.

• **Brightcove**: Requires the following
  - Media Host Account ID
  - Media Host Player ID
  - Media Host Clip ID
  - See Section 4.2 of this guide for details.

- Duration
- Media Filename
- Format
- Type

**RIGHTS AND USAGE**
- Usage Statement
- Rights Statement
- Acknowledgement

**LANGUAGE**
- **Language** – Required if indexing or synchronizing 2 languages
- **Include Translation** – This checkbox activates the capability for an interview to be indexed in 2 languages, as well as the capability to upload a transcript and a translation and synchronize both versions.
- **Language for Translation** – This designates the “translated” language in the bilingual viewer.

**THESAURUS**
Choose thesauri for accessing controlled vocabularies in the indexing module. Pertains to the “Keywords,” “Subjects,” and “Titles” fields. Thesaurus must be uploaded in Thesaurus Manager or utilize “Library of Congress Subject Headings—Linked” (for the “Subjects” field).

- **Thesaurus (Keywords)**
- **Thesaurus (Subjects)**
- **Thesaurus (Titles)**

**TRANSCRIPT**
- **Transcript Sync Data** - Metadata created in OHMS after an interview transcript has been synchronized.
- **Transcript Sync Data (Translation)**

**MISCELLANEOUS**
- **CMS Record ID**

- **Alt Sync URL** – [Legacy] This field was originally utilized when OHMS was only able to synchronize transcripts with audio, not video. This field was used to synchronize the audio
exported from a video interview in order to synchronize. OHMS can now natively synchronize transcripts with video and, therefore, this field is no longer necessary for current OHMS functionality; however, it is being retained for backward compatibility.

- **OHMS XML filename** – This field predetermines the name of the exported xml file representing this record.

- **Use Restriction**

- **User Notes**—This field can be used for notes that an institution wants communicated to the public user each time the viewer is opened. The message can be closed by clicking on the X in the right corner. The User Note will reappear each time the public user switches between the transcript and the index.

### 4.2 DIGITAL MEDIA HOST

OHMS is not a media repository or streaming audio/video host. The audio or video files are not uploaded into OHMS. A record in OHMS must connect to the item either by a direct hyperlink or by adding pertinent streaming server information. Although you cannot synchronize a transcript without a media host selection, you can index offline media. See section 5.2 INDEXING OFFLINE AUDIO AND VIDEO. The media host section of the metadata editor contains multiple fields, which enables OHMS to effectively interface with the digital object via progressive download or a streaming server.

- First, you must tell OHMS whether you will be working with **Audio** or **Video**.

- Second, you must tell OHMS the **location** of the Audio or Video files by selecting your media delivery method from the dropdown menu.
If you are using direct linking (progressive download or HTML 5 delivery) to the media file located on a web server via URL, you will need to select “Host” when setting up your interview. In most cases, direct linking to the media file will only require populating the “media URL field.” This URL must be a direct link that ends with the audio or video file extension.

- If you are linking directly to a media file, you should be aware of transcoding/compression strategies for optimizing the performance of your data file.

If you are using a streaming service, the OHMS Application and the OHMS Viewer must be programmed to integrate with that service in order to remotely control the streaming service’s player. Currently, OHMS works with the following streaming services:

- YouTube
- Kaltura
- Avalon
- Brightcove
- SoundCloud
- Aviary

Once you select your streaming service, the Metadata Editor will provide you the fields required to integrate with that service.

- If you are working with YouTube you will need to make your video “public” in the YouTube settings. Simply insert the link generated (or the identifier associated with the “share” link) into the media URL field.

- If you are using Kaltura, SoundCloud, Vimeo, or Avalon, you must paste the iFrame embed code into the “Kaltura/SoundCloud/Vimeo/Avalon iFrame Embed Code” field.

- If you are using Avalon:
  - Select Media Host = Avalon
  - If you know the direct URL for the Avalon media object, then use the Media URL field to store the value and save the record. This only works on some resources, e.g., https://pawpaw.dlib.indiana.edu/master_files/nv9352841/embed
  - If you know the embed code, then do not use the Media URL field, and instead use the "Kaltura/ SoundCloud/ Vimeo/ Avalon Embed Code” field.
  - Some embed codes use a direct URL in the code, e.g.,

    ```
    iframe title=""Finding A History of the Black Man in Indiana" - OR 206"
    src="https://media.dlib.indiana.edu/master_files/n009w557j/embed"
    ```
In this case, simply add that to the field and save the record.

- Some embed codes use a PURL in the code, e.g.,

  <iframe title=""Bustin' Loose: Breaking Racial Barriers in the Music Industry"
  Lecture at Neal Marshall Black Culture Center"
  src="https://purl.dlib.indiana.edu/iudl/j03c97mr7z?urlappend=%2Fembed"
  width="600" height="337" frameborder="0" webkitallowfullscreen
  mozallow fullscreen allowfullscreen"></iframe>

  In this case, you MUST ALSO ADD the "Avalon Target Domain" value, e.g., https://media.dlib.indiana.edu to the "Avalon Target Domain" field. This value MUST have http:// or https:// at the beginning of the string. So you will have added the embed code and the target domain and then you can save the record.

  o If you are using **SoundCloud**, you must paste the iFrame embed code into the “**Kaltura/SoundCloud iFrame Embed Code**” field.

  o If you are using **Vimeo** you must paste the iFrame embed code into the “**Kaltura/SoundCloud iFrame Embed Code**” field.

  o If you are using **Kaltura** you must paste the iFrame embed code into the “**Kaltura/SoundCloud iFrame Embed Code**” field.

  o If you are working with **Brightcove**, you will need to place the host account, player, and item ID numbers into the appropriate fields and choose Brightcove as your media host in order to access the media file.

  - **If you are using Aviary**, use the “**Media Embed URL**” and enter the url into the **Media URL** field in OHMS. The Aviary **Media Embed URL** is obtained from Resources Files record in the “Media” section.

  - **If you are direct-linking** to an audio or video the OHMS player (OHMS Application and the OHMS Viewer) will work with .mp3, .m4a and .wav audio files as well as .m4v and .mp4 video files. The user experience will be dependent on users’ internet connection, so we recommend that you explore formats and setting combinations that optimize performance in the HTML5 or progressive download/non-streaming environment.
4.3 IMPORTING METADATA

Item level metadata can be imported into OHMS in order to initiate the creation of a transcript sync data or an interview index, or to re-import an OHMS XML file in order to update or edit the record.

Initial Import of Metadata:
Initial import of metadata into OHMS can be accomplished utilizing both CSV and XML files. The CSV import feature is designed to function for batch import of records and migration of data and requires structuring data in accordance with the authorized OHMS CSV Template. Records can also be imported in the form of an OHMS XML file in which the data was formerly exported from OHMS or it has been constructed in accordance with the OHMS XML schema.

* Batch XML files can be uploaded together if they are zipped up in a single directory.

Import Recommendation:
The CSV import feature is designed for initial (batch) setup of metadata records for OHMS processing. If you are on a Mac and using Microsoft Excel, it is recommended that you format the CSV file as a Windows formatted .csv. Current importable (CSV) fields include:

- Title (required)
- Accession #
- Interviewee (multiple values separated by a semicolon “;”)
- Interviewer (multiple values separated by a semicolon “;”)
  - Date (interview date—must be structured as YYYY-MM-DD or MM/DD/YYYY)
- Collection ID
- Collection Title
- Series ID
- Series Title
- Summary
- Subjects (multiple values separated by a semicolon “;”)
- Duration
- Media URL
- Video ID
- Usage
- Rights
- Funding
• Format  
• Language  
• Type  
• Transcript Sync Data  
• CMS Record ID  
• Date Non Preferred Format  
• XML Filename  
• Alt Sync URL  
• Use Restrictions  
• Keywords (multiple values separated by a semicolon “;”)  
• It is important that your Date field retains the structure YYYY-MM-DD or MM/DD/YYYY or else the import will fail.

Note: The .csv file that you can export from OHMS is not designed to be imported back in to OHMS. Do not use a .csv exported from OHMS as a template for importing metadata, it will not import correctly. See section 11.1 of this guide for more detail on the .csv export feature.

4.4 IMPORTING AN OHMS XML FILE

There will be circumstances when an OHMS XML file will need to be imported back in to the appropriate repository in the OHMS Application. For example:

• Fix typos or mistakes  
• Make additions or changes to the metadata  
• Add an index or a transcript

Simply choose “Import” and upload the selected xml file.

Batch XML files can be uploaded together if they are zipped up in a single directory.
4.5 METADATA EDITOR: BI-LINGUAL INDEXING AND SYNCHRONIZATION

The OHMS Viewer has the capability for bi-lingual presentation of an index, as well as the capability to present a synchronized transcript and a synchronized translation.

In order to prepare to create a bi-lingual index or to synchronize a transcript and a translation you must

1. Identify the primary language
2. Check the “Include Translation” box
3. Identify the secondary language for translation

4.6 METADATA EDITOR: IMPORTANT NOTES

• **Required fields:** Title, media format, and applicable media delivery information, depending on your delivery platform (Media Host, Media URL, Media Host Account, Player and Item ID numbers, or the iFrame embed codes).

• **Media host:** This section determines the delivery source of the media file. If you are using a streaming media host such as YouTube, Kaltura, Vimeo, Avalon, Brightcove, or SoundCloud, selecting this option provides the information necessary for OHMS to work with these streaming services. If using Avaolin, Brightcove or Kaltura, see the specifics above in section 4.3 for requirements.

• **Media URL:** This is the web location for the digital audio or video. If you are not using a streaming service that requires additional information, the Media URL must be populated with a direct link to the media file in order to function in OHMS.

• **Transcript sync data:** Data for this field is automatically created by OHMS after syncing the transcript and is therefore remains empty during setup or metadata creation.

• **Thesaurus (keywords, subjects, titles):** Assignment of a thesaurus for titles, subjects or keywords that will be autosuggested while indexing a particular interview. Repository administrators and editors can upload a thesaurus in these categories. (See section 6.0 of this guide for more information.)

• **Use Restriction:** This field does not impact the OHMS Viewer but has been added as a field. Use of this field can serve to potentially flag restricted content prior to putting an OHMS XML file/interview online. This field is both importable and exportable in the OHMS XML and CSV files.

• **OHMS XML Filename:** The input in this field determines the filename of the exported xml file. This will make it easier to determine each interview's OHMS Viewer hyperlink. This field is both exportable and importable via the OHMS XML.

• **Keywords:** This field functions much like the Subjects field to transport interview level metadata. This field is both importable and exportable in the OHMS XML and CSV files and does not impact the OHMS Viewer.
• **Acceptable Date Formats:** OHMS has been updated to accept a wider variety of date formats. It now accepts dates in the form of mm/dd/yyyy which is the default date format in Microsoft Excel.

• **Collection/Series Links:** These fields are used to provide hyperlinks to users in order to navigate to an item’s associated collection or series record. This allows users to return to an online finding aid or to an online catalog record from the OHMS Viewer.

### 5.0 INDEXING MODULE

The indexing module is deployed by clicking an item’s “Index” button in the Interview Manager.

Activating the indexing module for the first time will present the player accompanied by the “Tag Now” button.

### 5.1: INDEXING CONTROLS AND WORKFLOW

- In order to begin indexing an item, you must press the “Play” button on the player (JPlayer, YouTube, Vimeo, Avalon, Brightcove, Soundcloud, or Kaltura).

- The audio or video must be playing in order to create an index point. This is created by pressing the “Tag Now” button at the appropriate moment.

- When pressing “Tag Now” the indexer is presented with the tag data module. This includes player controls and a series of empty descriptive fields.
The indexer can control the player within the tagging module. The player backtracks a few seconds each time the tagging module is activated.
5.2: INDEXING OFFLINE AUDIO AND VIDEO

Since the release of the OHMS Application v.3.0.1, a user can index an interview using “offline” audio or video. If there is no media host information in the item metadata record (media URL or embed code), the user can continue to index an item using a local player, and manually enter time code into the index point.

- Manually enter time code in the “Timestamp” field. If manually entering timecode for indexing offline media, time code must be entered as HH:MM:SS. If the time code is not properly formatted the segment cannot be saved.
5.3 INDEX MODULE METADATA FIELDS
An OHMS Index segment contains the following metadata fields:

- Time Stamp
- Segment Title (required)
- Partial Transcript
- Keywords (semi-colon delimited)
- Subjects (semi-colon delimited)
- Segment Synopsis
- GPS Coordinates
- GPS Zoom
- GPS Description
- Hyperlink
- Link Description

**Time Stamp**
A corresponding time stamp is created as soon as an indexer presses the “Tag Now” button. This time stamp may need to be adjusted in order for the segment to correlate to the intended moment. This field can be used in conjunction with a thesaurus to control or suggest terms. (See section 6.0 of this guide for more information.)

**Segment Title**
Segment titles are required. The Segment titles function as chapter titles for the item’s index.

**Partial Transcript**
Utilized to include a partial transcript of the segment.

**Keywords**
Allows for multiple entries, separated by a semi-colon. This field can be used in conjunction with a thesaurus to control or suggest terms. (See section 6.0 of this guide for more information.)

**Subjects**
Allows for multiple entries, separated by a semi-colon, and can be used in conjunction with a thesaurus to control or suggest terms. (See section 6.0 of this guide for more information.)

**Segment Synopsis**
The segment synopsis is designed to contain a descriptive summary of the segment.

**GPS Coordinates**
This field enables geo-referencing content which interfaces (for the public user) with Google Maps. Coordinates are entered in the format "XX.XXX, YY.YYY", where X is latitude (north or south) and Y is longitude (east or west). **Note: There must be a space following the comma.**

**GPS Zoom**
This dropdown field enables the indexer to determine a custom default zoom level presented to the public user within the OHMS Viewer. Choices include a scale ranging from 1 (world view) to 21 (street view). The default view is set at 17.

**GPS Description**
This field serves as a descriptive label for the specified GPS coordinates.
### Hyperlink
This field allows a hyperlink to be present, connecting the segment to an external resource of any type. If the link is an image file, image will present to the public user in the form of a lightbox. Link to a webpage will open in a separate tab.

### Link Description
This field serves as a descriptive label for the specified hyperlink.

#### 5.4 USING A THESAURUS IN THE INDEX MODULE

The segment **title**, **subjects** and **keywords** fields in the Index Module can utilize an assigned thesaurus to facilitate use of controlled vocabularies. A custom thesaurus can be uploaded for each of the three fields.

Each of these fields can be assigned a different thesaurus for a particular interview. If a thesaurus has been uploaded and assigned in the metadata manager, terms will be suggested based on a partial keying of letters. For example, if the indexer begins typing “segrega” in the subjects field, all of the terms in the assigned thesaurus containing “segrega” will be suggested. The indexer selects the term desired and the term is automatically dropped into the subjects field.

This feature requires a thesaurus to be uploaded, and then assigned to the interview. (See section 6.0 of this guide for more information).

#### 5.5 THESAURUS ASSIGNMENTS

During the metadata setup process for a record, you can assign an uploaded or linked thesaurus to a particular field (Keywords, Subjects, Titles). Once you save that record, the corresponding fields in the Indexing Module for that interview will be assigned appropriately and the thesaurus will function as described in section 5.4.

Beginning with the OHMS Application version 2.2.17, the “Subject” thesaurus can utilize a “Linked” version of the Library of Congress Subject Headings.
5.6 BI-LINGUAL INDEXING

As mentioned in section 4.5 (BI-LINGUAL INDEXING AND SYNCHRONIZATION) you must indicate in the metadata record that you intend to utilize the bi-lingual functionality of OHMS. Once you have identified a primary and secondary language and you have checked the box “Include Translation,” the OHMS Indexing Module will present the indexer with two fields for each element instead of the default single field. The primary and secondary languages are listed at the top of each field.

5.7 NOTES ABOUT INDEXING INTERVIEWS

Indexing is an incredibly subjective process and can be as comprehensive as you choose. For models on indexing and the Nunn Center’s approach, we recommend consulting the Nunn Center’s guide, Indexing Interviews in OHMS: An Overview, as well as the companion video tutorial.

6.0 THESAURUS MANAGER

In order to utilize a thesaurus and the controlled vocabulary functionality while indexing in OHMS, a thesaurus must be uploaded. These thesauri contain terms that will be auto-suggested in the keyword and subject fields of the indexing module. This practice helps to manage consistency in titles and descriptive terms. Thesauri can be assigned for the following fields in the interview index:

- Title
- Subjects
- Keywords

Thesauri must be uploaded as a single-column .CSV file. See section 6.1 of this guide for specifics regarding formatting your .csv file.

Beginning with the OHMS Application version 2.2.17, the “Subject” thesaurus can utilize a “Linked” version of the Library of Congress Subject Headings. Headings have been harvested via the Library of
Congress Linked Data service and become an optional thesaurus for the “Subjects” fields in the Indexing Module. You do not need to upload anything to utilize this functionality. You just need to assign the “Library of Congress Subject Headings (Linked) in the “Thesaurus (Subjects) field of that particular record in the Metadata Module.

6.1 UPLOADING A THESAURUS

When uploading a thesaurus:

- The .csv file must be a single column.
- If utilizing Mac and using Microsoft Excel, it is recommended to format the .csv as a Windows formatted .csv.
- It is recommended that the uploaded thesaurus be assigned descriptive title and a version number so that a replacement file can be uploaded in order to add terms or revise a thesaurus.
- Thesaurus Upload Troubleshooting: If the thesaurus upload is failing, typically this indicates the presence of a special character such as an ampersand (&) which needs to be “escaped” for utilization in an XML environment. For example: Utilize & instead of simply typing &.
7.0 TRANSCRIPT SYNC MODULE
The purpose of the transcript sync module is to efficiently create time code references within an uploaded transcript. This will enable the linking of a public user’s search of the text to the corresponding moments in the online audio/video interview. OHMS presents a user friendly, efficient method to drop time code into a transcript at regular intervals that include: :30, 1, 2, 3, 4, and 5-minute intervals.

7.1 UPLOADING A TRANSCRIPT
In order for the “sync” function to be enabled, you must first upload the document. The transcript must be saved as a .docx, .doc, or .txt saved in Unicode UTF-8).

It is recommended that you format your transcript with speaker identification followed by a colon with a line break between speakers.

<table>
<thead>
<tr>
<th>Title</th>
<th>Accession Number</th>
<th>Collection ID</th>
<th>Series ID</th>
<th>Metadata</th>
<th>Index</th>
<th>Transcript</th>
<th>Sync</th>
<th>Notes</th>
<th>Status</th>
<th>Export</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview with A.B. &quot;Happy&quot; Chandler, November 8, 1978</td>
<td>1978OH177 Clem 040</td>
<td>OH Clem</td>
<td>Clem 001</td>
<td>Metadata</td>
<td>Index</td>
<td>Transcript</td>
<td>Sync</td>
<td>Notes</td>
<td>Status</td>
<td>Export</td>
</tr>
</tbody>
</table>

7.2 TRANSCRIPT TIME CODE AND AUTO-SYNCHRONIZATION
OHMS will automatically recognize timecode embedded in a transcript and will auto-synchronize the transcript. If the uploaded transcript contains timecode that conforms to OHMS intervals (00:00:30, 00:01:00, 00:02:00, 00:03:00, 00:04:00, and 00:05:00), there will be no need to manually synchronize the transcript. Timecode in the transcript must be formatted [HH:MM:SS] and be placed at the location of the corresponding text.

The following is a sample:

BEAM: --during Prohibition. Then, [00:02:00] when Prohibition was over, uh, he, my grandfather, Park Beam, had been a distiller, of course, all his life. And he was working with Jim down here to get this distillery started...
Upon upload of a transcript, there will be a prompt to select the sync interval in the transcript being imported. The selected interval must correspond to the intervals embedded in the transcript or the uploaded file will not validate.

7.3 INITIATING TRANSCRIPT SYNCHRONIZATION

Once you have uploaded a transcript, you can begin the sync process. The “Sync” column of the interview manager will indicate an interview’s eligibility for the transcript sync process.

- “No T”: No transcript has been uploaded.
- “No AV”: No hyperlink is present in the media URL field of an interview’s metadata.
- “No AV/T”: No transcript has been uploaded and no hyperlink is present in the media URL field of an interview’s metadata.
- “Sync”: Sync appears if media is present in the metadata and a transcript has been successfully uploaded. If “sync” is present it will be linkable and the transcript is ready to sync.

To initiate the transcript sync process, click “Sync” in the “Sync” column that corresponds to the record/transcript you wish to synchronize. This will open the transcript sync module containing the text, the appropriate player, along with a controller for that player to the right.

7.4 SYNCHRONIZING A TRANSCRIPT
In preparation for synchronizing a transcript, you must select a sync-interval in the dropdown menu situated above the player. This will determine the sync-interval duration during the synchronization process as well as the sync-interval duration when the transcript is presented publicly in your OHMS viewer.

By design, the OHMS transcript sync module enables you to expedite the synchronization workflow by focusing on the seconds preceding the placement of the time-sync marker (which varies depending on the selected interval). This “lead-time” is intended to facilitate the location of the text that corresponds to the audio or video moment in preparation of placing the time marker. The default lead-time is 10 seconds. You can shorten or lengthen this lead time by changing the lead-time next to the clock.

1) The audio or video will begin upon opening the transcript sync module / pressing the “play” button on the player.

2) Click the forward button, you will be taken to the next location depending on the interval you have chosen.

3) You will hear two chimes. Your first chime (lower pitched) is a warning, indicating that you have ten seconds (or otherwise specified lead-time) to locate the corresponding section of the transcript.

4) When you have found the text in the transcript that corresponds to what you hear, follow along.

5) At the minute mark, a second chime (higher pitched) will ring.

6) When the second chime rings, click on the appropriate word in the transcript that is heard during (or closest to) this chime. Clicking on the corresponding word places a time code marker into the text (marked in green). If you succeed in placing the marker, you are automatically taken to the next interval (00:01:50). If you fail to place the marker in the allotted time, the same audio segment will replay after the post roll completes (default is 10 seconds). It will continue to repeat until the marker is placed.

7) You can adjust the sync point by rewinding back or forwarding to the appropriate segment. This is indicated by the clock and the minute-interval counter. Then you can correct your sync placement when the bell rings on the minute.
You must save your work prior to exiting or your sync data will be lost. There are save buttons at the top and bottom of the transcript. It is strongly recommended that you save your work periodically during the synchronization process.
7.5 MAKING MINOR EDITS DURING TRANSCRIPT SYNC

If at any time during the syncing process you wish to correct or edit the transcript, you can click the "Edit Transcript" button at the top or bottom of the transcript. This will automatically save the points you have already synced, and take you to the editing module. From here, you may make changes to the transcript, but be aware that this may change the placement of any sync points further along in the transcript.

The “Edit Transcript” feature in the Transcript Sync module is designed for minor edits only. Substantive edits should be made on the original .txt version of the transcript and will require you to re-upload the transcript. Substantive edits will alter the line breaks and, therefore, alter sync points following the substantive edit.

7.6 TRANSCRIPT SYNC: HINTS AND REMINDERS

- Using the control+f / command+f keyboard shortcut in order to search for a word you hear in the 10-second lead time to quickly locate the Sync point in the transcript. The default 10-second lead is adjustable, you can go faster or slower if needed.

- It is recommended that you do not upload the transcript with title or disclaimer pages prior to the beginning of the actual transcript, as this will interfere with your time-code syncing efforts.
7.7 TRANSCRIPT SYNC: LINKABLE FOOTNOTES

The OHMS Application and the OHMS Viewer respond to linkable footnotes placed in the document. These footnotes can contain text as well as hyperlinks. The OHMS utilizes BBCode in order to create linkable endnotes. This BBCode must be placed in the .txt document that is uploaded to the OHMS Application.

In order to implement linkable footnotes, utilize double brackets [[text]] in the text of the transcript

[[footnote]]1[/footnote]]

[[footnote]]2[/footnote]]

The following is the footnote code placed at the end of your document for a standard note containing text, followed by a note containing text and a hyperlink:

[[footnotes]]

[[note]]Sample Text[/note]]

[[note]] Sample Text[link]http://www.oralhistoryonline.org[/link][/note]]

[/footnotes]]

The following is an example:

*Footnote Coding in Transcript Text:*

This old bunch, it's a, and two of my best buddies was Booker Noe[[footnote]]1[/footnote]] and Elmer T. Lee[[footnote]]2[/footnote]] [[footnote]]3[/footnote]], which we just lost--(laughs)--Elmer T. and Booker But us three would get together--(laughs)--it was a lot of fun in that day and time. We enjoyed being with each other and had a great time doing it.

*Footnote Coding at End of Transcript:*

[[footnotes]]

[[note]]Frederick "Booker" Noe II was the Master Distiller at Jim Beam Distillery and was the grandson of Jim Beam. Booker Noe passed away in 2004.[/note]]

[[note]]Elmer T. Lee was the Master Distiller at Buffalo Trace Distillery. Lee passed away in 2013.[/note]]

[[note]]Nunn Center Interview with Elmer T. Lee, October 30, 2008, Buffalo Trace Distillery Oral History Project. [[link]https://kentuckyoralhistory.org/ark:/16417/xt708k74tx0z#tab-2[/link]] [/note]]

[/footnotes]]
7.8 SYNCHRONIZING A TRANSCRIPT AND A TRANSLATION

If you intend to synchronize both a transcript and a translation, you will be prompted to do so in the transcript upload dialogue box.

Following upload, you will be ready to synchronize. If you upload a transcript and a translation, you will need to synchronize both separately. You will synchronize each the same way you would synchronize a single transcript. Press “Save” when you complete the synchronization of the primary language. Then select the translation button and repeat the process.
8.0 THE INTERVIEW MANAGER “NOTES” FEATURE

The notes function in OHMS can serve many purposes. These include flagging interviews with audio or video malfunctions, flagging interviews that need to be reviewed for possible restriction, or other issues that need to be addressed by your repository's administrator. Clicking "Notes" in the interview manager allows you to write a note explaining an issue.

Administrators will be automatically notified by email when a note is created. They can click on the notes column to read the note and mark it "Resolved" when the issue has been fixed. If a note is unresolved, the "Notes" indicator in the interview manager will be red. When resolved, the button will turn green.
9.0 WORKFLOW MANAGEMENT

The OHMS interview manager has a workflow management component to demonstrate the processing and quality control status as well as an overall status update. The Nunn Center uses this feature to communicate readiness to various participants in the OHMS workflow (indexers, sync-ers, archivists, digital library representatives). An indexer can use the workflow status to mark that an interview has been started but is not completed, indicate which phase of the process the interview is in, and indicate that the interview has been completed.

Processing
The status component of workflow management is handled individually through the metadata, indexing, and transcript syncing modules. Each page has a drop-down menu that allows you to choose from four options to set the status of each component.

Changing the status of these modules will automatically change the color of that module's indicator in the interview manager, giving you a visual indication of the status. Upon creation of the record pending a status change, the record will present black. A change of status will change the color accordingly:

- No Status: black
- “Pending”: blue
- "In Process": darker blue
- "Ready for QC": red
- "Active QC": purple
- "Complete": green

The indexing module also has an additional option: "Not Applicable", which will change the color of the word "Index" to gray in the interview manager.

Status
The status measurement is a way to communicate to other team members where the interview is in the overall OHMS process. Because we often have multiple interviews from different projects that are processed all at once, it is helpful to have an “at-a-glance” view of their statuses. Additionally, it is useful to have final confirmation that the OHMS export and the archival ingest of the XML file has been
completed so that you can remove the interview from the OHMS application, in preparation for making it publicly accessible via the OHMS viewer. This process is automated based upon the status of each module within the interview manager. An interview automatically begins with a blue "In Process" status. When all status indicators for an interview are green (or gray, indicating that they are not applicable), the status indicator will automatically turn green indicating that the interview is "Complete".

10.0 THE PREVIEW VIEWER

As soon as an interview has been loaded into OHMS and has active links to a media source, a preview option will be available.

Clicking on the preview option activates the OHMS viewer where you can preview the interview index or transcript synchronization as the user would experience it. This function helps optimize the effectiveness of the quality control phase. This is a back-end viewer used for preview purposes, and is only accessible to those given permission to log into the OHMS application.
11.0 EXPORTING THE OHMS XML FILE

When you are satisfied with the interview's level of processing, the XML file must be exported for use with the OHMS Viewer. Upon clicking the “XML” export link, an XML document will be created and downloaded with a filename derived from the “OHMS XML filename” field in the interview. If no filename is present in the field, it will default to the interview's accession number. It is recommended that you change the filename to the interview’s unique identifier. Upon completion of your indexed or synchronized interview:

- You will need to export the OHMS XML file either individually or using the batch export function. The exported file will be auto named, unless you specify in the metadata field “XML Filename” the name you want for the exported file.

The simple XML file that is exported by OHMS is designed for portability and interoperability. This XML file contains data from each of the fields present in the Metadata Module, includes the uploaded transcript with corresponding sync information, as well as the contents of an index.

There are fields present in the exported OHMS XML file that do not render in the OHMS Viewer. These fields are present in order to, potentially, utilize the OHMS XML file as a vehicle for transporting metadata, in addition to enabling the core functionality provided by the OHMS Viewer.
11.1 EXPORTING A CSV VERSION OF YOUR DATA

This functionality has been added with the purpose of transporting metadata from OHMS to a content management system. Although transcript and index data is included in the CSV export, the CSV export contains no OHMS functionality.

This export has been added to include a convenient way of transporting metadata from OHMS to a CMS such as Omeka or CONTENTdm. The OHMS XML is still required for the OHMS Viewer to function. Transcript and index contents are included in the exported CSV file as a potentially simple method for incorporation of the transcript and index-level metadata into the global search of a CMS. However, the contents of these fields in the CSV file are not intended for public viewing (all formatting has been removed).
12.0 THE PROJECT MANAGER
The OHMS Project Manager creates the ability to organize interviews and manage indexing and synchronization workflow.

- Initiate the Project Manager by clicking on the “Projects” button

The Project manager functions to present summary information about an OHMS project. The Project manager includes the following information:

- Collection and/or Series ID
- Date Created
- Project status, as well as the
- Project progress

The following actions can be taken by Repository Administrators from this page:

- Add a new project
- Select project by clicking on “Project Title”
- View interviews associated with this project in the “Interview Manager” by clicking on the “IM View”
- Export the OHMS XML Files for that project in a batch export (.zip file).
• Edit Project Details
• In the “Select Batch Action” dropdown menu a Repository Administrator can delete selected project.

12.1 SETTING UP A NEW PROJECT
Click on the “Add Project” button in order to create a new project. You can assign the following to the new project:

• Project Name (Required)
• Project Description
• Project Mode

The Project Mode determines how interviews are added to an OHMS Project.

• Manual Mode: Repository Administrator manually selects which interviews are added to the project.
• Auto Add Mode: Identify a single element present in an OHMS metadata record that will enable OHMS to automatically add interviews to a project. Selection of an Auto Add element will ensure that any future recorded created or imported into OHMS will be automatically added to the corresponding project. Project Mode can be shifted into Manual Mode to manually add interviews, at which point Auto Add mode will need to be re-engaged.

The following elements are eligible for the Auto Add feature:
  o Auto Add: Collection ID
  o Auto Add: Collection Title
  o Auto Add: Series ID
  o Auto Add: Series Title

Reminder, OHMS Project information is for organizational management purposes and is not present in the OHMS XML export.

12.2 PROJECT MANAGEMENT BASICS
You access your project details by choosing the linkable project title from the Project Manager page.
The Project Details page will open for the selected project. If you configured your project mode to Auto–Add mode, the project will be auto-populated in accordance with the pre-selected Auto-Add criteria.

From the Project Details page, a repository administrator can:

- View only the selected project in the Interview Manager. This will navigate away from the Project Management page.
- Navigate to the Metadata, Index, and Sync modules for that particular interview
- Update the overall project status. Choices include:
  - Pending
  - In Process
  - Inactive
  - Complete
- View Interview Status and the Date Assigned
- Shift project mode from Auto-Add to Manual or from Manual to Auto-Add.
- Remove an interview from a Project. This does not delete the interview from your OHMS Repository, it simply removes it from the project.
- Assign Interviews to a particular user
12.3 ASSIGNING INTERVIEWS TO SPECIFIC USERS

The project management module allows a repository administrator to “assign” specific interviews to specific users or editors. As indicated in section 2.1 a repository admin can assign “Project Users” and “Project Editors.” Project Users and Project Editors have the same rights as the standard “User” and “Editor,” however, upon logging in to their OHMS account they will only see interviews assigned to them.

- For a User or an Editor to be eligible to be assigned an interview, they must be designated as a “Project User” or a “Project Editor” roles in the User management.
- Only Project Users and Project Editors will appear in the project management assignment list.
- A repository admin can select the assignee. The assignment will be saved when the Repository Admin selects a Project User or a Project Editor and saves that assignment.

In the User Management record for a particular User or Editor, a Repository Admin can view interviews assigned to that users, as well as view the status of progress, date assigned, and the current assignment status.
13.0 THE OHMS VIEWER

OHMS is a two-part system that includes the OHMS Application (where you do the preparatory work) and the OHMS Viewer (where you deliver the recording to the user). Although you can preview your work inside the OHMS Application, this is not meant to be a public access point. In order to provide the OHMS user experience (searchable time-synchronized transcripts or indexes) for your online audio or video, you will need to:

- Install the latest version of the OHMS Viewer in your environment and configure the OHMS Viewer to work in your environment
- Export the OHMS XML file from the OHMS Application
- Place the OHMS XML file in your environment (in accordance with the viewer configuration)
- Link to the OHMS XML file

13.1 INSTALLING AND CONFIGURING THE OHMS VIEWER

You will need to consult the various guides for specific information regarding the installation of your OHMS Viewer (http://www.oralhistoryonline.org/documentation/), however, there are some basic principles that we will outline here:

- Identify where you will be installing your OHMS Viewer. The OHMS Viewer requires a basic LAMP server environment and works well in either an enterprise or in a third-party, shared hosted environment (such as Godaddy.com or Reclaim Hosting).

- Download the latest version of the OHMS Viewer (http://www.oralhistoryonline.org/start-using-ohms/)

- Configure your OHMS Viewer. There are some basic steps for viewer configuration. Most importantly, you will need to tell the OHMS Viewer where you will be placing your OHMS XML files and identifying from which OHMS Repository your XML files originated (Repository Name).

- Link to the XML file from your Content Management System or website.

- Some institutions are utilizing iFrames to embed the OHMS Viewer into systems such as CONTENTdm, Omeka, or Wordpress.
• Place the downloaded XML file in the designated “Cachefiles” directory identified during OHMS Viewer installation.

13.2 LINKING TO YOUR OHMS XML FILE

Construct a hyperlink to the XML file to call up the OHMS viewer. Part 1 of the URL will always remain the same, linking to the location of the OHMS viewer. Part 2 will always be the corresponding filename for the OHMS XML file, placed in the cachefiles subdirectory of the OHMS viewer.

Place hyperlink in appropriate location of CMS. When transporting interviews into a content management system like Omeka this is one of the fields that can be automatically imported from the OHMS XML.

This link can be generated automatically and placed into the OHMS XML file automatically. This can be useful if your workflow could be constructed to harvest those links from the XML and utilized by the content management system you are using. In order to take advantage of this feature, repository admins can enter a default viewer location. As long as the metadata element “XML Filename” is populated for the particular item you are exporting, OHMS will combine the root location of the OHMS Viewer with the specified “XML filename, forming a functional link that populates the OHMS “XML Location” field in the exported XML file.
13.3 UPGRADING YOUR OHMS VIEWER

- Make offline copy of:
  - config.ini file located in the config subdirectory.
  - cachefile subdirectory (or directory configured to house the OHMS xml files).
- Download the latest version of the OHMS Viewer. Unzip download.
- Access your viewer on the server (via ftp or web interface).
- Change the filename of the old viewer.
  - Example: If previous version of OHMS Viewer is called OHMS_Viewe, change to OHMS_Viewe_3.3.1
- Create new directory labeled OHMS_Viewe or what your previous viewer was called.
- Copy your archived config.ini in the new config directory.
- Copy your archived cachefiles subdirectory into the root of the new viewer directory.

Note: the new viewer does not contain a config.ini or a cachefiles directory. You had to set this up upon initial setup. Please back these up regularly, but especially before an update/upgrade to a new version of the viewer.

14.0 REMINDERS

- The OHMS Application is hosted by the University of Kentucky Libraries and is periodically updated for you. In some circumstances, these updates require scheduled downtime. The OHMS Viewer, however, is an entity that you install and manage. It is recommended that you keep your OHMS Viewer up to date and back up your cachefile (xml files) directory regularly. It is also recommended to maintain a copy of the configured viewer config.ini file.

- Internet Explorer is not recommended for the OHMS Application at this time. This does not involve the public side of the OHMS Viewer, just the OHMS Application. Compatibility for accessing the OHMS Application is optimal when using Firefox, Chrome, or Safari.

- The OHMS transcript sync and indexing modules create time-dependent metadata. You should not make any changes to the media time-code after processing in OHMS. Any edits that change the duration of the interview will alter the location of the sync markers and index points, and thus disrupt the correspondence between markers and content.

- It is strongly recommended that you preserve your OHMS XML files following export. These will be critical for re-importing for updating information in a record or fixing a rare typo.