

jPlayer for SocialScribe

USING JPLAYER FOR ANNOTATION & TRANSCRIPTION

Contents

Figures	iii
Installation	1
Taxonomy	2
Content Types	3
Audio Player	3
Manage Fields	3
Manage Display	4
Transcript	4
Manage Fields	4
Manage Display	4
Annotation	4
Manage Fields	5
Views	6
Taxonomy Terms	6
Roles	9
Transcribers	9
Reviewers	9
Reviewer Permissions	9
Transcription	11
Interface	11
Transcribing an Audio File	11
Reviewing a Transcript	14
Annotation	17
Annotating an Audio File	17
Viewing Annotations	18
All Annotations	18
Individual Terms	19
Troubleshooting	20
Common Errors	20
File Errors	20
Transcript Form Not Created	20

Webform Not Displayed	20
Annotations Not Appearing Correctly.....	21
Appendix	22
Modified Files.....	22
Keyboard Shortcuts for Transcription.....	22
Review Mechanism Extension	22

Figures

Figure 1: Taxonomy.....	2
Figure 2: Fields for Audio Player content type.....	3
Figure 3: File sources.....	3
Figure 4: Display for Audio Player content type	4
Figure 5: Fields for Transcript content type.....	4
Figure 6: Fields for Annotation content type.....	5
Figure 7: View format setting	6
Figure 8: View format error messages	6
Figure 9: Settings for Remote File URL field	7
Figure 10: Settings for Annotations view	8
Figure 11: Roles.....	9
Figure 12: Options block configuration.....	11
Figure 13: Options block visibility	11
Figure 14: Transcriber	12
Figure 15: Transcriber player	13
Figure 16: Last page of transcript form.....	13
Figure 17: Webform results	14
Figure 18: Reviewing a transcript	14
Figure 19: Last page of transcript form for reviewer	15
Figure 20: Final transcript	15
Figure 21: Annotation form	17
Figure 22: Controlled annotation.....	17
Figure 23: Uncontrolled annotation	18
Figure 24: Message for duplicate annotation	18
Figure 25: Viewing all annotations.....	19
Figure 26: Annotations by term	19

Installation

1. Download the modified jPlayer module from GitHub (<https://github.com/gurwinder44/jplayer>) and install it.
2. In addition to the dependencies, it is recommended that the following modules be installed and enabled for proper functioning of this module:
 - a. SaveGuard (<https://www.drupal.org/project/saveguard>)
 - b. Webform Steps (https://www.drupal.org/project/webform_steps)
3. Before enabling the module, jPlayer library files must be installed.
 - a. Download the jPlayer archive from <http://jplayer.org/download/>.
 - b. Navigate to the **jplayer/dist** directory inside the archive.
 - c. Find the following files inside **jplayer/dist**:
 - i. jquery.jplayer.js
 - ii. jquery.jplayer.min.js
 - iii. jquery.jplayer.swf
 - d. Upload the files to **sites/all/libraries/jplayer**.
4. Go to **sites/default/files** and create a directory called **Transcripts**. The XML files containing the transcript data will be saved in this directory.
5. **IMPORTANT:** The normal *Webform* module for Drupal 7 does not interact with this module to generate transcript forms. Please install the customized Webform module for SocialScribe (<https://github.com/gurwinder44/webform>).

Taxonomy

This module requires two vocabularies, one each for controlled and uncontrolled annotations. Below are the steps to create them.

1. In the admin toolbar, go to **Structure** → **Taxonomy** → **Add vocabulary**.
2. Enter the **name** as **Annotation Categories (Controlled)** and optionally add a description.
3. The newly created vocabulary will be listed under **Taxonomy**, like so:

Taxonomy is for categorizing content. Terms are grouped into vocabularies. For example, a vocabulary called "Fruit" would contain the terms "Apple" and "Banana".

[+ Add vocabulary](#)

[Show row weights](#)

VOCABULARY NAME	OPERATIONS		
+ Annotation Categories (Controlled)	edit vocabulary	list terms	add terms
+ Annotation Categories (Uncontrolled)	edit vocabulary	list terms	add terms
+ New	edit vocabulary	list terms	add terms
+ Tags	edit vocabulary	list terms	add terms

[Save](#)

Figure 1: Taxonomy

4. For controlled annotations, click on **add terms** to create a pre-defined list for the users to choose from. You will be able to add a description, relations to other terms and fields for the term. Nothing except the name is necessary for this module to function correctly.
5. Repeat steps 1 to 3 to create a new vocabulary named **Annotation Categories (Uncontrolled)**. There is no need to add terms to this vocabulary because it is for users to add whatever labels they want. Whenever a user adds an uncontrolled annotation, it will be added to this vocabulary by this module.

Content Types

Note: This part has also been covered in **metadata documentation**. If you followed that and already set up the metadata, please skip this section.

Audio Player

Create a new content type named **Audio Player** (machine name: **audio_player**), with the **title field label** as **Title**.

Manage Fields

Add or change the fields as shown below. Please make sure the machine names are exactly as they are in the image. Settings for individual fields, if other than default, are given below.

LABEL	MACHINE NAME	FIELD TYPE	WIDGET	OPERATIONS
+ Title	title	Node module element		
+ Audio	field_audio	File	File	edit delete
+ Player Audio File	field_player_audio_file	Entity Reference	Select list	edit delete
+ Transcript Form	field_transcript_form	Entity Reference	Select list	edit delete
+ Add new field				
<input type="text"/>		- Select a field type -	- Select a widget -	
Label		Type of data to store.	Form element to edit the data.	
+ Add existing field				
<input type="text"/>	- Select an existing field -		- Select a widget -	
Label	Field to share		Form element to edit the data.	

Figure 2: Fields for Audio Player content type

a. *field_audio*

The **allowed file extensions** for this module are **mp3, m4a, wav, webmv, oga**. Also, change the **File Sources** to only **Remote File**.

FILE SOURCES

Enabled sources

☐ Upload (default)

☐ Remote URL textfield

☐ Paste from clipboard (limited browser support)

☐ Autocomplete reference textfield

☐ File attach from server directory

☒ Remote File

Select the available locations from which this widget may select files.

AUTOCOMPLETE REFERENCE OPTIONS

FILE ATTACH SETTINGS

Figure 3: File sources

b. *field_player_audio_file*

Select **Audio File** as the **target bundle**.

c. *field_transcript_form*

Select **Webform** as the **target bundle**.

Manage Display

Change the **format** of the fields as shown below.

FIELD	LABEL	FORMAT	
Audio	Above	jPlayer - Player	Single jPlayer instance.
Hidden			
Player Audio File	<Hidden>	<Hidden>	
Transcript Form	<Hidden>	<Hidden>	

Figure 4: Display for Audio Player content type

Transcript

Create a new content type named **Transcript** (machine name: **transcript**), with **title field label** as **ID**.

Manage Fields

LABEL	MACHINE NAME	FIELD TYPE	WIDGET	OPERATIONS
ID	title	Node module element		
Transcript Player	field_transcript_player	File	File	edit delete
Transcript Display	body	Long text and summary	Text area with a summary	edit delete
Transcript Download	field_transcript_download	File	File	edit delete
Audio File	field_audio_file	Entity Reference	Autocomplete	edit delete
Add new field				
		- Select a field type -	- Select a widget -	
		Type of data to store.	Form element to edit the data.	
Add existing field				
		- Select an existing field -	- Select a widget -	
		Field to share	Form element to edit the data.	

Figure 5: Fields for Transcript content type

a. *field_transcript_player*

The **allowed file extensions** for this module are **mp3, m4a, wav, webmv, oga**. Also, change the **File Sources** to only **Remote File**.

b. *body*

Change the label to **Transcript Display** and select the **Filtered text (user selects text format)** option under **Text processing**.

c. *field_transcript_download*

Change the **allowed file extensions** to **xml**.

d. *field_audio_file*

Select **Audio File** as the **target bundle**.

Manage Display

Drag **Transcript Download** to the top, making it the first field to be displayed.

Annotation

Create a new content type named **Annotation** (machine name: **annotation**), with **title field label** as **ID**.

Manage Fields

LABEL	MACHINE NAME	FIELD TYPE	WIDGET	OPERATIONS
+ ID	title	Node module element		
+ Audio File	field_annotation_audio_file	Entity Reference	Select list	edit delete
+ Timestamp	field_timestamp	Text	Text field	edit delete
+ Controlled Annotations	field_controlled_annotations	Term reference	Select list	edit delete
+ Uncontrolled Annotations	field_uncontrolled_annotations	Term reference	Select list	edit delete
<div> <div>+ Add new field</div> <div> <input type="text"/> <div>- Select a field type -</div> <div>- Select a widget -</div> <div>Label</div> <div>Type of data to store.</div> <div>Form element to edit the data.</div> </div> </div>				
<div> <div>+ Add existing field</div> <div> <input type="text"/> <div>- Select an existing field -</div> <div>- Select a widget -</div> <div>Label</div> <div>Field to share</div> <div>Form element to edit the data.</div> </div> </div>				

Figure 6: Fields for Annotation content type

- field_annotation_audio_file*
Select **Audio File** as the **target bundle**.
- field_timestamp*
Change the **size of textfield** to **128**, and select the **Filtered text (user selects text format)** option under **Text processing**.
- field_controlled_annotations*
Change the **number of values** to **unlimited**, and select **Annotation Categories (Controlled)** as the **Vocabulary**. If the vocabulary does not exist, you will need to create it (refer to metadata documentation).
- field_uncontrolled_annotations*
Similar to controlled annotations, change the **number of values** to **unlimited**, and select **Annotation Categories (Uncontrolled)** as the **Vocabulary**.

Views

The views required by the module are created and enabled automatically when the module is installed. One view that is required to correctly view annotations is provided not by jPlayer, but by the Views module. It is initially disabled and needs to be set up as described below.

Taxonomy Terms

When the **Views** module is enabled, a view for taxonomy terms is already created. However, to achieve a view similar to the one created by the module for all annotations (i.e. timestamps linked to audio files), this needs to be modified a little.

1. Locate the view named **Taxonomy term** and enable it. It will be towards the bottom of the list, along with other disabled views.
2. To begin editing the view, click on **Edit** to open the view configuration.
3. The default **format** is *Unformatted list*. Click on it and select **Table** from the window that pops up.

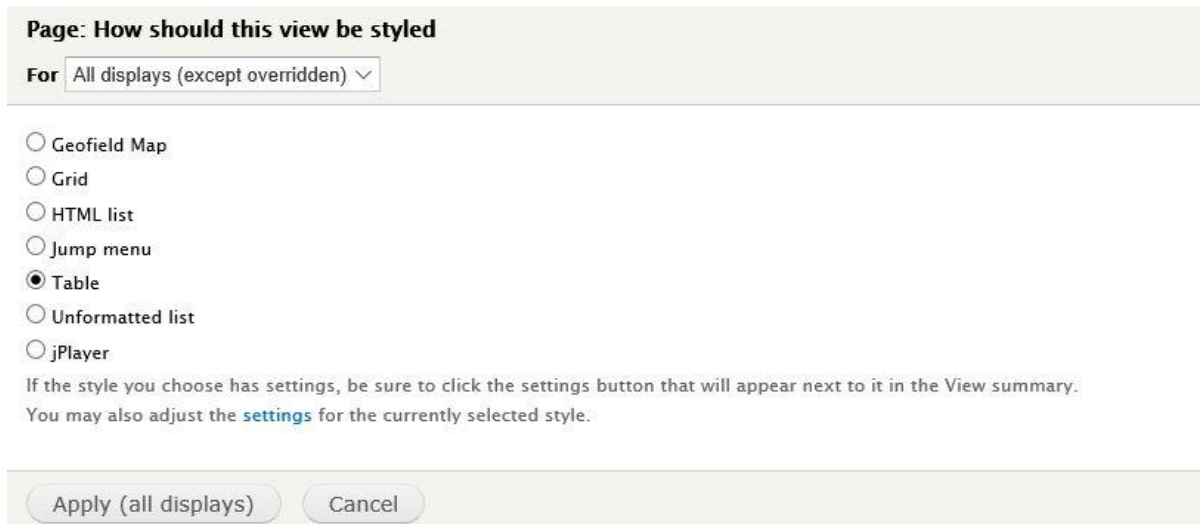


Figure 7: View format setting

There may be errors similar to the one shown below after applying the settings. Ignore them for now.




Figure 8: View format error messages

4. Before beginning to add fields, we need to create a relationship so fields of other content types can be accessed. To the right of the configuration window, there is an **Advanced** option. Click on it to expand it if it is collapsed. Next to **Relationships**, click on **Add**.

5. Look for and select “**Entity Reference: Referenced Entity (Content entity referenced from field_annotation_audio_file)**” in the list that appears. Note the identifier for this relationship.
6. The next step is to add fields to our view table. Look for the **Fields** section in the left column and click on **Add**.
7. Look for and select the fields given below in the list that appears. After selecting all the fields and clicking **Apply**, you will be asked for settings for each individual field, which are also described here.

Content: Audio File (Appears in node:annotation)
Check the **Exclude from display** box.

Content: Timestamp (Appears in: node:annotation)
Leave default settings.

Content: Controlled Annotations (Appears in: node:annotation)
Leave default settings.

Content: Uncontrolled Annotations (Appears in: node:annotation)
Leave default settings.

Global: Custom text
Change **Label** to **Annotations**.

Content: Remote File URL (Appears in: node:audio_file)
Select the **Relationship** that you created in step 5 from the select list, check the **Exclude from display** box, and change the **Formatter** to **jPlayer-Player**. Settings for the jPlayer formatter will appear; change the **Kind** to **Single** instead of **Playlist**.

Relationship

Content entity referenced from field_annotation_audio_file ▾

☒ Create a label
Enable to create a label for this field.

Label

Remote File URL

☒ Place a colon after the label

☒ Exclude from display
Enable to load this field as hidden. Often used to group fields, or to use as token in another field.

Formatter

jPlayer - Player ▾

Kind

Single ▾

Autoplay

No ▾

Figure 9: Settings for Remote File URL field

Content: Title (Appears in: node:audio_file)

Select the **Relationship** that you created in step 5 from the select list, change the **Label** to **Audio File**, and check the option to **Link this field to the original piece of content**.

8. Next, go into the **Settings** for the **Table**, under **Format**. Here, all the fields selected above will be listed along with their configuration. Change the **Column** for the **Controlled Annotations** and **Uncontrolled Annotations** to **Annotations**, so that they appear together. For the **Annotations** field, specify the separator as a comma followed by a space.
9. Below the fields, there is an option to specify a grouping field. Change the **Grouping Field Nr. 1** option to be the **Remote File URL** field, which should now show up as **(Content entity referenced from field_annotation_audio_file) Remote File URL**.
10. This is how the final configuration page will look for this view.

TITLE
Title: None

FORMAT
Format: Table | Settings

FIELDS Add ▾
Content: Audio File (Audio File)
Content: Timestamp (Timestamp)
Content: Controlled Annotations (Controlled Annotations)
Content: Uncontrolled Annotations (Uncontrolled Annotations)
Global: Custom text (Annotations)
(Content entity referenced from field_annotation_audio_file) Content: Remote File URL (Remote File URL)
(Content entity referenced from field_annotation_audio_file) Content: Title (Audio File)

FILTER CRITERIA Add ▾
Content: Published or admin

SORT CRITERIA Add ▾
Content: Sticky (desc)
Content: Post date (desc)

PAGE SETTINGS
Path: /taxonomy/term/%
Menu: No menu
Access: Permission | View published content
HEADER Add
FOOTER Add
PAGER
Use pager: Full | Paged, 10 items
More link: No

Advanced

CONTEXTUAL FILTERS Add ▾
Content: Has taxonomy term ID (with depth)
Content: Has taxonomy term ID depth modifier

RELATIONSHIPS Add ▾
Entity Reference: Audio File

NO RESULTS BEHAVIOR Add

EXPOSED FORM
Exposed form in block: No
Exposed form style: Basic | Settings

OTHER
Machine Name: page
Comment: No comment
Use AJAX: No
Hide attachments in summary: No
Hide contextual links: No
Use aggregation: No
Query settings: Settings
Field Language: Current user's language
Caching: None
CSS class: None
Theme: Information

Figure 10: Settings for Annotations view

Roles

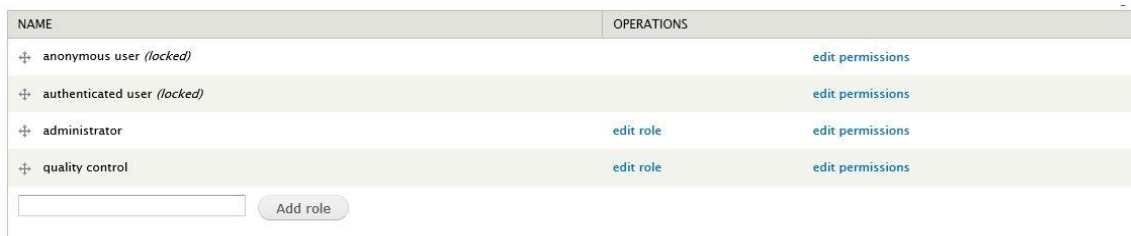
To implement a workflow for the transcription process, this module uses a review mechanism. All authenticated users are allowed to transcribe audio files. The transcript however, is only saved as a draft until a reviewer reviews it. Reviewers may approve it or send it back to the transcriber for editing. This process is described in further detail in the next section. This section deals with creating a new role to specify users as reviewers.

Transcribers

All authenticated users are allowed to transcribe. There is no need to create a separate role for transcribers.

Reviewers

1. Go to **People** in the admin toolbar.
2. Under the **Permissions** tab, there is an option to view or edit **Roles**.
3. By default, there are three roles provided: anonymous user, authenticated user and administrator.
4. At the bottom of the list, enter **quality control** and click on **Add**.
5. The role will be added to the list:



NAME	OPERATIONS
+ anonymous user (locked)	edit permissions
+ authenticated user (locked)	edit permissions
+ administrator	edit role edit permissions
+ quality control	edit role edit permissions

Add role

Figure 11: Roles

6. Click on **edit permissions** next to **quality control** to make sure users with this role have the correct permissions.

Reviewer Permissions

In general, the **quality control** role should have the same permissions as an **authenticated user**. You may give more permissions to the reviewer if you wish. However, make sure that at least the following permissions are given:

1. **Administration menu**
 - a. Access administration menu
2. **Node**
 - a. Administer content
 - b. View published content
 - c. View own unpublished content

- d. *Annotation*: Create new content
- e. *Annotation*: Edit any content
- f. *Annotation*: Delete any content
- g. *Audio File*: Create new content
- h. *Audio File*: Edit any content
- i. *Audio File*: Delete any content
- j. *Audio Player*: Create new content
- k. *Audio Player*: Edit any content
- l. *Audio Player*: Delete any content
- m. *Collection*: Create new content
- n. *Collection*: Edit any content
- o. *Collection*: Delete any content
- p. *Transcript*: Create new content
- q. *Transcript*: Edit any content
- r. *Transcript*: Delete any content
- s. *Webform*: Create new content
- t. *Webform*: Edit any content
- u. *Webform*: Delete any content

3. *Webform*

- a. Access all webform results
- b. Edit all webform submissions

Transcription

Interface

The module provides a block with 2 buttons to transcribe or annotate an audio file. This block must be enabled by the administrator, however.

1. Go to **Structure** on the admin toolbar and click on **Blocks**.
2. Under **Disabled**, find a block named **Options** and change its **REGION** to **Content**.
3. Save the configuration; the same block should now show up under **Content**.
4. Click on **Configure** and scroll down to the **Visibility Settings**.
5. Under **Pages**, make the following changes:

Visibility settings

Pages Restricted to certain pages	Show block on specific pages <input checked="" type="radio"/> All pages except those listed <input type="radio"/> Only the listed pages
Content types Audio File	
Roles Not restricted	Transcriber/* Annotator/*
Users Not customizable	

Specify pages by using their paths. Enter one path per line. The "*" character is a wildcard. Example paths are *blog* for the blog page and *blog/** for every personal blog. *<front>* is the front page.

Figure 12: Options block configuration

6. Under **Content types**, check **Audio File**.

Visibility settings

Pages Restricted to certain pages	Show block for specific content types <input type="checkbox"/> Annotation <input type="checkbox"/> Article <input checked="" type="checkbox"/> Audio File <input type="checkbox"/> Audio Player <input type="checkbox"/> Basic page <input type="checkbox"/> Collection <input type="checkbox"/> Transcript <input type="checkbox"/> Webform
Content types Audio File	
Roles Not restricted	
Users Not customizable	

Show this block only on pages that display content of the given type(s). If you select no types, there will be no type-specific limitation.

Figure 13: Options block visibility

7. Save the block. Now when you visit any audio file page, there will be 2 buttons: **TRANSCRIBE** and **ANNOTATE**.

Transcribing an Audio File

1. From an audio file page, click the **TRANSCRIBE** button to begin transcribing.

- The transcription page will open, containing an audio player and a transcript form. As you will see, the transcript form has multiple pages and each page has 6 textfields labelled as segments. Each segment corresponds to 5 seconds of audio, and each page of the form corresponds to 30 seconds. The transcriber in action will look something like this:

Transcribing: ATSLP INFO01

ViewEdit

Submitted by [admin](#) on Tue, 05/17/2016 - 18:22

Audio:

Now playing: SEGMENT 12

⏮

⏪

⏩

⏭

01:00

04:33

🔊

▸ ATSLP(INFO01)1%2001%20Family.mp3

ATSLP INFO01 Transcript Form

Segment 7

the suburb of Interviewee: In a suburb of Atlanta

Segment 8

Interviewer: Okay, will you tell me just a little bit, talk about you

Segment 9

Name, where they're from. How you got here, etc.

Segment 10

Interviewee: I'm from South Carolina, from Greenwood. A very s

Segment 11

a cotton mill town. We moved here when I was about

Segment 12

six years old to Atlanta. My father was

Save Draft

Previous

Next

Figure 14: Transcriber

- When you first play the audio, you will notice it plays a 5-second clip. The segment being played is displayed on the player.

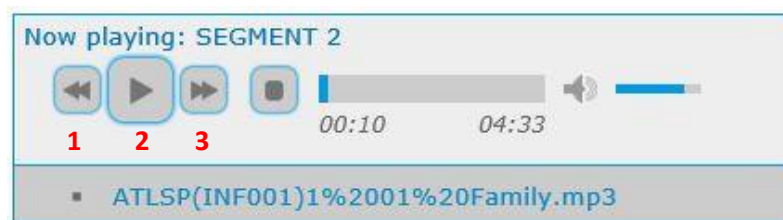


Figure 15: Transcriber player

The buttons labelled 1, 2 and 3 above represent **PREVIOUS**, **REPLAY** and **NEXT** respectively.

PREVIOUS plays the previous segment. If it is the first segment, it replays the first segment. The keyboard shortcut for **PREVIOUS** is '['.

REPLAY replays the current segment. The keyboard shortcut for **REPLAY** is 'J'.

NEXT plays the next segment. If the current segment is the last segment, it starts over and plays the first segment. The keyboard shortcut for **NEXT** is '\'.

Additionally, while a segment is being played, you can pause/play the player using the keyboard shortcut '='.

4. Enter the text in the appropriate segment as you play the audio. Use the navigation controls mentioned above as you transcribe. Because the 4 keys ([, J, \ and =) are used as shortcuts for the player, they cannot be typed as a part of the transcript. The keyboard shortcut bindings can be changed in the module code, as described in the appendix.
5. Once you reach the end of a page, use the **NEXT** and **PREVIOUS** buttons at the bottom of the form to navigate between the pages of the transcript form. If you installed the *Webform Steps* module mentioned in the [Installation section](#) of this document, you can go back to any page of the form by simply clicking on the progress bar. Please note that even though you can **go back to any page** you **can only go forward one page at a time**.
6. Repeat for all other pages as you transcribe the rest of the audio file. Once you transcribe the last segment of the audio, clicking **NEXT** will take you to a page with a **Comments** text area. This is where a reviewer can add comments after reviewing the transcript, in case it is not approved.

Figure 16: Last page of transcript form

- As you transcribe, remember to save your transcript as a draft frequently. Data is **NOT automatically saved**. If you leave the transcript form page and come back later, you will only be able to continue from the last point when you saved the form as a draft. If the **SaveGuard** module is enabled, a warning will be generated if there is unsaved data and a user tries to leave the page.
- The last page of the transcript form also has a button to **Submit for Review**. This will save a draft of the transcript and send an email to all reviewers (users with *quality control* role) that a transcript has been submitted for review. This ends the transcription process.

Reviewing a Transcript

Note: These instructions are for reviewers only.

- Once you get an email saying that a transcript is ready for review, log in and find the transcript form under **Content**. As of now, you will need to rely on the author of the transcript (which is included in the email) to find the transcript that needs review. The node in question will be of type *webform* and named "<name of audio file> Transcript Form".
- Viewing the transcript form node will initially display a blank copy of the form. To view the transcript submission, click on the **Results** tab. A table showing a single submission for this webform will open.

Home » ATSLP INF001 Transcript Form

Submissions Analysis Table Download Clear

Showing 1 – 1 of 1.

#	SUBMITTED	USER	IP ADDRESS	OPERATIONS
1 (draft)	05/17/2016 – 18:43	admin	209.147.144.38	view edit delete

Figure 17: Webform results

- In the table above, click on **edit** to view the submission itself.

Segment 1

Segment 2

Interviewer: Will you state your name and the date into the micro

Segment 3

to see if it is working.

Segment 4

Interviewee: Janis February 8 2003.

Segment 5

Interviewer: This community is Interviewee: Tucker Interviewer: And

Segment 6

Interviewee: Georgia Interviewer: And Tucker is

Save Draft Next

Transcript Edit

Transcribing: ATSLP INF001

Submitted by admin on Tue, 05/17/2016 – 18:22

Audio:

00:01 04:33

ATSLP(INF001)1%2001%20Family.mp3

Figure 18: Reviewing a transcript

The transcript, as it was submitted, will open at its last page. Click on the first page on the progress bar to go back to the beginning. An audio player is displayed on the bottom, so you can listen to the audio file and verify the transcript.

4. Navigation controls for the transcript form are the same. The audio player, however, does not play in segments during review. Details about the player view can be found in the appendix.
5. The last page for a reviewer is slightly different.

Submission information

Form: ATSLP INF001 Transcript Form
 Submitted by admin
 Tue, 05/17/2016 - 18:43
 209.147.144.38

Comments

This transcript could not be approved because...

Only for quality control use. Reviewers can add their notes if a transcript is being marked for editing.

Save Draft Return for Editing Previous Submit

Figure 19: Last page of transcript form for reviewer

There are different buttons provided to a reviewer. **Return for Editing** does not make any changes to the form, but instead sends an email to the original author that the transcript was not approved and needs attention. You can add any comments, such as the reason for returning the transcript or what changes need to be made, to the comment box on this page.

6. Alternatively, if everything is in order and this transcript is ready to be submitted, click on **Submit** and a transcript node will be created.

ATLSP(INF001)1 01 Family.mp3 Transcript

View Edit Devel

Submitted by admin on Tue, 05/17/2016 - 14:00

Transcript Download:
☐ transcript1_1463515204.xml

Transcript Player:
 Now playing: SEGMENT 3
 00:15 04:33
 ATLSP(INF001)1%2001%20Family.mp3

00:00:00

00:00:05 Interviewer: Will you state your name and the date into the microphone

00:00:10 to see if it is working.

00:00:15 Interviewee: Janis February 8 2003.

00:00:20 Interviewer: This community is Interviewee: Tucker Interviewer: And the state. Interviewee:

Figure 20: Final transcript

The final transcript node displays an audio player along with a segment-by-segment transcript underneath. Clicking the button next to each timestamp, plays that segment.

7. The transcript is also formatted into a TEI-compliant XML file and available to download. The file can be viewed or downloaded from the link under ***Transcript Download***, just above the player.
8. The transcript form and audio player corresponding to this transcript are deleted as soon as the final transcript is created, and cannot be recovered. Please make sure everything is correct before finally submitting the transcript.

Annotation

Annotating an Audio File

1. Whenever you wish to add an annotation as the audio file is being played, click on the **Annotate** button. After you submit the annotation, you will be able to return to the audio file page and continue from the time it was paused.
2. Clicking the Annotate button opens the annotation form. The first thing asked is the type of annotation. We provide 2 options, **Controlled** and **Uncontrolled**, corresponding to the taxonomy vocabularies created as specified in the [Taxonomy section](#) of this document.

Annotating: ATLSP(INFoo1)1 o1 Family.mp3

View

Edit

Devel

Audio:

⏮

⏪

⏩

⏭

00:25

04:33

🔊

▪ ATLSP(INFoo1)1%2001%20Family.mp3

ATLSP(INFoo1)1 o1 Family.mp3 Annotation Form

Type *

☐ Controlled

☐ Uncontrolled

Figure 21: Annotation form

3. Selecting **Controlled** will immediately provide a list of all the terms in the **Annotation Categories (Controlled)** vocabulary. You may then select any one and click **Submit** to save it. The annotation, along with a timestamp and a reference to the audio file, will be saved as a node.

ATLSP(INFoo1)1 o1 Family.mp3 Annotation Form

Type *

☒ Controlled

☐ Uncontrolled

Select Annotation *

☐ Entertainment

☐ Family

☐ Perception

Figure 22: Controlled annotation

4. Selecting **Uncontrolled** will open a text field, where you may enter a custom label for that time in the audio file. Submitting this annotation will not only save it, but also create a term and add it to the **Annotation Categories (Uncontrolled)** vocabulary.

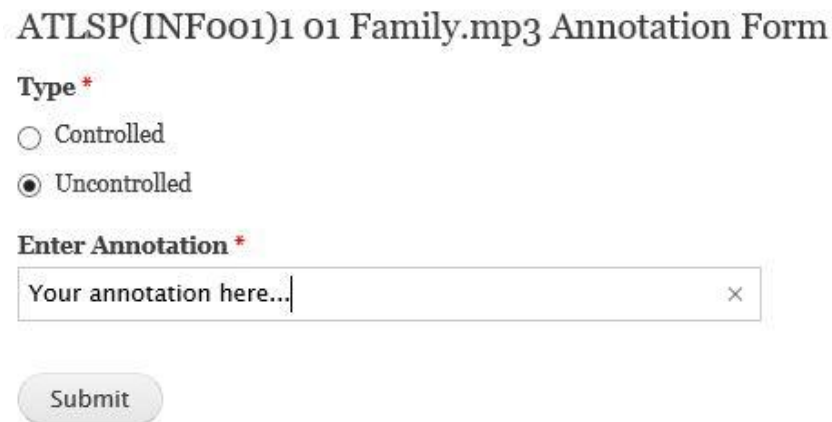


Figure 23: Uncontrolled annotation

If the term you enter was entered previously and saved to the vocabulary, it will not be created again. It will, however, be saved as an annotation node. In this case, you will get the following message upon submission:



Figure 24: Message for duplicate annotation

5. Adding multiple annotations at the same time in the same audio file will not create new annotation nodes. Instead, the annotations will be added as multiple term references in the same node.

Viewing Annotations

All Annotations

The module creates and enables a view to display all the annotations, called **Annotations**. A menu entry should also be created by the same name. To view these annotations, navigate to the **Annotations** tab on the menu and you can find all the annotations displayed along with the corresponding timestamp, grouped by audio file. An example with a few annotations for two audio files is shown in the image below.

There are buttons next to each timestamp, clicking which will play the corresponding audio file beginning at that time. If there is a large number of audio files in multiple collections, it may be easier to search by term instead.

Remote File URL:

- ATLSP(INF001)1%2001%20Family.mp3

Timestamp	Annotations	Audio File
00:00:25	Dwellings	ATLSP(INF001)1 01 Family.mp3
00:00:43	Family, Perception, RandomLabel	ATLSP(INF001)1 01 Family.mp3

Remote File URL:

- ATLSP(INF018)1%2012%20Perception.mp3

Timestamp	Annotations	Audio File
00:00:18	Perception, Random	ATLSP(INF018)1 12 Perception.mp3

Figure 25: Viewing all annotations

Individual Terms

Clicking on any annotation term opens a page listing all the nodes containing term references to that term. The default view can be overridden by the view provided by the Views module. Once the view is set up as described in the previous section, visiting a term page will show all the timestamps and audio files containing that term. An example is shown in the image below.

Dwellings

ViewEditDevel

Remote File URL:

▶

■

00:0002:12

🔊

ATLSP(INF018)1%2012%20Perception.mp3

Timestamp	Annotations	Audio File
<div>▶</div> <div>00:01:00</div>	Entertainment, Dwellings	ATLSP(INF018)1 12 Perception.mp3

Remote File URL:

⏸

■

00:2504:33

🔊

ATLSP(INF001)1%2001%20Family.mp3

Timestamp	Annotations	Audio File
<div>▶</div> <div>00:00:25</div>	Dwellings	ATLSP(INF001)1 01 Family.mp3

Figure 26: Annotations by term

Troubleshooting

Common Errors

When using the module, particularly for the first time, you may encounter a number of common errors and warnings associated with Drupal including, but not limited to, the following:

- *Notice: Undefined variable: some_variable in some_function() (line ### of /home/username/socialscribe/sites/all/modules/jplayer/jplayer.module).*
- *Notice: Undefined index: und in some_function() (line ### of /home/username/socialscribe/sites/all/modules/jplayer/jplayer.module).*
- *Notice: Trying to get property of non-object in some_function() (line 605 of /home/hettelj/public_html/gazing/gazing/sites/all/modules/jplayer/jplayer.module).*
- *Warning: array_flip(): Can only flip STRING and INTEGER values! in DrupalDefaultEntityController->load() (line 175 of /home/hettelj/public_html/gazing/gazing/includes/entity.inc).*

Such errors usually occur if some fields of content types used by this module either do not exist, or are not the way the module expects it to be. To resolve these and other similar errors, please **make sure that the metadata is created exactly as specified in the documentation**. Pay special attention to the **machine names** and **types**.

File Errors

If you see this error:

- The specified file *temporary://file_id* could not be copied, because the destination directory is not properly configured. This may be caused by a problem with file or directory permissions.

It means that a directory was not created for transcripts in your **sites/default/files** directory. Create a directory called **Transcripts** as described in the [installation instructions](#) in this document.

Transcript Form Not Created

If you click on **TRANSCRIBE** and are led to a page with no audio player, a transcript form with a single segment, and a warning saying:

- **Something went wrong. Start over?**

There is a problem specifically with the **Remote File URL** field in the **Audio File** content type. Check the metadata documentation and verify if it was created correctly. **The transcript form and transcriber player created for that particular audio file must be manually deleted** before trying again.

Webform Not Displayed

Sometimes, the webform (transcript form or annotation form) does not appear on the transcription or annotation page because of URL mismatches. Make sure the **PathAuto** module is **disabled** before transcribing or annotating.

Annotations Not Appearing Correctly

If the annotations do not appear as described in the [Viewing All Annotations](#) section, it is likely that the view was not created correctly by the module. Add a relationship and fields similar to how it is done for the [taxonomy term view](#).

Appendix

Modified Files

The following files from the original jPlayer module were modified:

1. *jplayer.tpl.php*
Added an HTML element (id=jp-segment) to display the segment number on the player.
2. *jplayer.css*
Added styles for the **PLAY** buttons in transcripts and annotations.
CSS class for transcript buttons: **trbutton**.
CSS class for annotation buttons: **anbutton**.
3. *jplayer.info*
Added dependencies.
4. *jplayer.module* and *jplayer.js*
These two files have been heavily modified. Custom code has been marked off and explained with comments wherever possible.

The following files have been added:

1. *jplayer.views_default.inc*
Added code to create views required by this module: one to display an audio player while reviewing the transcript, on the webform edit page; and one to display all the annotations.

Keyboard Shortcuts for Transcription

These are specified in *jplayer.js*, lines 18 – 23:

```
// Key codes for keyboard shortcuts
var codes = {
  previous: 219, // [ key
  replay: 221,  // ] key
  next: 220,    // \ key
  pause: 187    // = key
};
```

You can replace the numerical values with the JavaScript KeyboardEvent values for whichever keys you would like to use as shortcuts. A helpful tool to find key codes for different keys can be found here: <https://css-tricks.com/snippets/javascript/javascript-keycodes/>.

Review Mechanism Extension

Currently, a reviewer has to go to the transcript form (webform) node, go to **Results** → **Edit** to review the transcript. A better implementation of this is described in this section.

A view can be created which displays all transcripts currently waiting to be reviewed. Reviewers can then simply click on links in this view to be taken directly to webform's edit page. The direct link for the edit

page is of the form: www.mydrupalsite.com/node/nid/submission/sid/edit, where *nid* is the **node ID** of the transcript form, and *sid* is the **submission ID** of the transcript form.

Views module allows this to be easily implemented using contextual filters and relations. Refer to the Views documentation for details.