

Title: Guide to Creating Accessible Content for the Digital Information Virtual Archive (GCAC--DIVA)

Topic: User Guide

Brief Summary: GCAC--DIVA will provide support to users submitting digital files into the DIVA system in order to help ensure they meet accessibility requirements and best practices.

Authors: Bridget McCracken, Coordinator, Department of Public Administration, San Francisco State University; Christopher Read, Accessible Media Coordinator, Disability Programs & Resource Center, San Francisco State University and Andrew Roderick, Director of Information Technology, College of Behavioral and Social Sciences, San Francisco State University.

Description:

The Digital Information Virtual Archive (DIVA) is an online digital file management and sharing system for faculty. It provides a private work area where they can upload their personal digital files, a repository where campus digital collections can be stored and disseminated and content development tools from which learning materials can be created in ways that employ multiple media formats.

In too many cases, campus learning and scholarly resources languish in storage, bound as physical objects. Slide collections, audio and video works, museum-quality objects, or rare art pieces are unknown or inaccessible to the broader campus learning community. DIVA supports a wide range of digital files including: documents, images, video, audio and datasets and supports their use across disciplines across campuses.

The DIVA User Guide will address how to make various media content accessible to everyone, including people with disabilities. Furthermore, it will aid faculty in the decision-making process of creating alternate formats and simplify what can be a daunting and difficult process by offering tips on best practices.

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Any questions can be directed to the DIVA Team at divateam@sfsu.edu.

DIVA is the Digital Information Virtual Archive. Using DIVA, faculty and researchers at San Francisco State University can store, describe, organize, collaborate on, and securely share a wide variety of digital files with their colleagues, students, and the general public. DIVA allows instructors to share information and many types of media in accessible formats easily.

Giving your students access to DIVA

DIVA's file structure is presented to students as a series of courses, so pointing students toward the correct course is the first step to giving them access.

1. Give your students a [Permalink](#)

When accessing your course's page, go to Sharing and Access Control. Here you can set the settings of who is allowed to view your course. If you select any option other than "No one but me," you'll be given a Permalink to your course. This link will appear on your course page in a text box, where you can copy and paste it into a syllabus for your students.

2. Password protecting your course

DIVA allows you to protect your course with a specific password. To set this password, in Sharing and Access Control, select the "Only those people who enter the course password" option and then enter a unique password. When you tell your students how to access DIVA, you should give them this password with the Permalink so that they can easily get access.

3. Make it clear how you intend to use DIVA in your course

Explain to your students how often you intend to update the information on DIVA and how often they should check DIVA. If it is clear to the student how important the DIVA course page is to their assignments and class work, they will know how to fit it into their own workflow.

Organizing files in DIVA by importance and for ease of use

1. Folders

The DIVA course page is organized into folders represented as boxes. Use these folders to organize your files based on relevance and simplicity. When a student uses a [screenreader](#) to browse DIVA, it will detail the contents of the folder from top to bottom. For this reason, it is important to keep files organized within the folder as well as keeping less important information near the bottom. Further, the number of folders should be trimmed to only allow what is necessary and ensure each folder has a clear and expressive folder name. Here are some ideas on better ways to use folders for your course:

a. Week by Week

If you encourage your students to check your course on a weekly basis, you can organize your files in a structure of folders for each week. In each week's folder, you can place the files you want the student to view that week. This layout is easy to maintain and simple to follow from a student's perspective.

b. Topic

If you plan to have your students use DIVA more sparingly you can organize your content into folders by topic. To best achieve this, you would break your course down into themed sections and then organize the files accordingly. For example, if you taught a literature course you could organize the content into folders named after each story or novel your class reads.

c. Content type

Depending on how often you intend to have your students accessing DIVA, it may even be simpler to divide your content up by what format it falls under. For instance, create folders for video, audio, and documents. This is only recommended if you have a small number of assignments you plan to use DIVA to distribute.

Preparing files for DIVA

DIVA puts a strong emphasis on the use of files that are uploaded into DIVA. These files can be anything from documents to multimedia items like photos and movies. When uploading files, DIVA requests you fill in a number of fields including a Title, Description, and Tags. The Title should be unique and easily distinguishable from the titles of other files you're placing in your course. Similarly, the Description should be expressive and explain in several sentences what the file contains. Adding Tags will allow others to easily locate your file through Search and it will also provide your students with related keywords that apply to your file.

Media in DIVA

DIVA allows you to incorporate many diverse multimedia elements into your courses. Images, audio, and video can all be added to enrich your courses and all three can be made easily accessible.

1. Images

When uploading Images, as with all files, the Description entered should explain the contents of the image in depth. This information will comprise the image's caption field when you add it into a DIVA web document. If a user is viewing your course with a screenreader, the Description is what will be read.

If you wish to include an image element into your coursework, but it is purely decorative and not necessary for that assignment, the Caption field should be emptied to make it invisible to the screenreader and avoid confusion.

2. Audio

Adding a transcription to an audio file allows users who are hard of hearing to use the file as well. It is recommended this transcription take the form of a [PDF](#) or TXT file, which would not require the user to purchase additional software. To affix the transcription to the file, navigate to the file itself in Manage Files and click Edit description/details. Here, you can click the green-plus sign and affix additional files. Browse your hard drive for the transcription and then add the file with its purpose

listed as “Alternative Format”. These can also be added during the upload procedure via the Attachments tab.

3. Video

DIVA supports closed-captions via the [Timed-Text XML](#) format. Several programs allow you to watch the video and add captions while the video plays and thus generate the correctly formatted Timed-Text XML document. These documents can be attached to the video file in the same way as Audio Transcriptions, but select Timed-Text XML Captions from the dropdown box when you add it.

4. Text

Accessible text documents are readable and structured for screenreaders. They also preserve the accuracy and intended order in the conversion of an image file to a text file. People with learning disabilities, the non-native English speaker, and those who are blind or have a visual impairment all benefit from documents that can be read out loud.

Below are some best practices for using two of the most commonly used text formats --Microsoft Word and Adobe PDF documents.

When creating Word documents, applying Heading styles and inserting Tables with column and row headings instead of using tabs makes documents easier to navigate with screenreaders.

Additional Resources:

-“Creating Accessible Documents in Word...”

[Download accessible PDF file of Guidelines for Creating Accessible Documents in Microsoft Word](#)

When working with Adobe Reader or Acrobat, below are some tests that you can take to identify the degree of accessibility of your document.

- ❑ **Test 1:** If you can double click on a word so that only the word is highlighted, then that is a good sign that the text is accessible and therefore readable to a screenreader.
- ❑ **Test 2:** If you are using Adobe Acrobat, you can listen to what text is readable by doing the following: Go to View>Read Out Loud>Activate Read Out Loud (Ctrl+Shift+Y) and then click on an area of text.
- ❑ **Test 3:** If the text shows up in a plain text file in the order that it was intended to be read, then it's structured well. Go to File>Save As>Text Accessible (in "save as type" dropdown menu). When you open the text file, you will see what a screenreader sees and the order that it will read the text.
- ❑ **Test 4:** If the accessibility checker "found no problems" in your document, then your document has met a minimum degree of accessibility.
Go to Advanced>Accessibility>Add Tags to Document
Go to Advanced>Accessibility>Full Check
Follow the instructions for remediation.

Avoid scanning paper. Without conversion software, scanning a document just creates an image of text which screenreaders do not read. Try searching for the material you are posting electronically before scanning. Finally, use Adobe Acrobat's accessibility checker as a starting point for accessibility remediation.

Additional Resources:

-“Creating Accessible Documents in Acrobat...”

[Download accessible DOC file of Creating Accessible Documents in Adobe Acrobat Professional](#)

Building New Content

It is possible to create new accessible content in DIVA with a number of DIVA's tools.

1. [DIVA Web Documents](#)

If you're looking to create new content to share over the web, DIVA Web Documents are an easy and accessible way to

achieve this. Screenreaders will read content in the order that it is inserted into the document. DIVA Web documents allow you to incorporate images, videos, and audio into your documents. See the Media in DIVA section for more details on how to make these media accessible.

2. [Podcasts](#)

A great way to distribute audio lectures is through a media podcast. Students can subscribe to your podcast with their media player software and then transfer it over to their portable music devices. If you would like to use an audio podcast, be sure to include transcriptions as mentioned before.

3. Blogging

We're developing a tool that will allow teachers to maintain a blog through their DIVA Account. Similar to the DIVA Web Documents function, this will allow easy creation of accessible content just by creating your entries with the tool.

Key Terms for DIVA

Below are some common key terms used in reference to accessible content.

Screenreader

Computer software that will read accessible text out loud.

Examples: **Jaws** is a common application used by the blind.

Kurzweil is a common application used by people with learning disabilities. More and more software products are designing a built-in read out loud feature, such as **Acrobat**.

OCR

Optical Character Recognition. OCR software translates images into text.

Examples: **OmniPage** and **Abbey Fine Reader** are two of the strongest applications that produce the highest accuracy rate of character recognition. Acrobat has a built-in OCR feature, but is less robust and ultimately less accurate.

Alternate Text

Brief but meaningful descriptions assigned to images or graphic elements.

Examples: In MS Word, double click on an image element, such as a photo or the SF State logo. Go to the tab “Web”. There is the entry field for “alternative text”. A screenreader would read out loud the information typed there when the cursor reached that graphic element.

Closed Captions

A text transcript of dialog and sounds that appears at the bottom of the video image. It is often created in post-production and can be seen on a television monitor or projection screen when this feature is activated.

PDF

An ordinary PDF, a Portable Document Format , is a document-encoding process developed by Adobe that maintains the page layout, fonts, and graphics. An accessible PDF is an ordinary PDF that can be read by everyone, including those who use screenreaders. (Software that has read out loud capabilities is sometimes referred to as a screenreader.)

Permalink

Short for "permanent link". A permalink is a URL or web address that points to a specific page on a website that will not change. In DIVA, "permalinks" are used for Course Areas, Digital Files, and other resources so users can link to them without worry of the link changing.

Podcast

Podcasts are digital media files (commonly audio) which are distributed over the Web using syndication feeds for playback on computers or media players like iPods. Podcasts are typically released in regular time intervals (such as weekly) in series related to a topic. In DIVA, faculty can use Podcasts to easily distribute audio files to students.

Timed Text XML

Timed Text is the method by which captions can be added to digital video files and is a standard of the W3C. The method allows for a text

transcript to be synchronized to the timing of video playback. Software applications allow users to create the synchronization.

DIVA Web Document

A DIVA Web Document (DWD) is a web-based rich-media document that can be created within the DIVA platform for a variety of purposes. DWD's can employ text, images, audio, video, list of digital files, and rss feeds to allow faculty to easily create compelling materials for students. These can be re-shared within the DIVA environment or output as PDF files (where audio or video is not included).

DIVA Accessibility Resources

<http://www.sfsu.edu/access/>

<http://www.calstate.edu/accessibility/resources/>

<http://www.w3.org/WAI/quicktips/>

<http://www.webaim.org/intro/>

<http://www.webaim.org/standards/508/checklist.php>

http://www.jeroenwijering.com/?item=Making_Video_Accessible

The following web sites have a free captioning tool that allows you to add captions to YouTube video clips “in-house”. Captioned YouTube videos are also posted on the following two websites that can be used in class:

www.tubecaption.com

www.overstream.net

The Google Video site has a limited collection of captioned videos. www.videos.google.com (use search criteria: “videos with captions”)

www.harkle.com is a search engine that allows you to find captioned Internet-based video clips that are currently available on the Web.