

This document is an overview of the new features and functions in the Pachyderm 2.1 beta. It also covers known problems and unimplemented features which are still intended to be part of the final release of 2.1. A guide to converting media to Flash video is also included.

Highlights of version 2.1

Templates - Increased standardization and flexibility

Attributes and options are more consistent across all templates making template selection easier and providing more flexibility for Pachyderm authors. All templates now support the following:

- *Title and Subtitle Fields*
- *Standard Media Slots* - Media slots on all templates have been standardized so they can be assigned a picture, a video or and audio file, and a link to another screen, a document, or a link to an external url. No more dead-end templates that don't link to other templates.
- *Flash Video Support* - Flash videos (flv) can now be used in presentations and playback within the presentation screen. They also playback within screen previews while authoring. The first frame of a Flash video is displayed as a poster graphic if no picture file is assigned to the media slot. A guide for converting digital media files to Flash Video (flv) has been developed (see end of this document).
- *HTML Support in Text Fields* - Support in all text fields for HTML codes for bold, italics, underline, line breaks
, links, font tags with limitations and HTML entities in hexadecimal format. The font tag only supports font faces that are embedded, size and color.
- *Background Image Support* - a background image (and transparency level) can now be assigned to each screen in a presentation. The image replaces Pachyderm's default white background. A background image for the entire presentation can also be assigned manually by editing the presentation's root_boarder.xml file.
- *A Home button* in the border navigation that returns the user to the first screen of the presentation, regardless of their current location
- Distinctive icons for different kinds of links (screen, external website, link to a document. etc).

New Template Behaviors

Auto-resizing of image and text areas for portrait and horizontal images has been implemented for the Commentary, Enlargement, and Media Focus screens.

Video in all templates can be started and stopped by clicking in the video frame.

Phone Dial - Circles with no content are now invisible, and circles with media assigned but no link assigned display the picture, but are inactive when clicked. Circles with only text assigned display with a light blue fill. This provides a lot more flexibility in how each circle is used.

Slider - Clicking on a slider point (rather than mousing-over it) now changes the content focus. The slider point stays highlighted until the content focus is changed by clicking on another

slider point.

Exploration Entry - link order is now top to bottom on left, then top to bottom on right. A picture option for the 6 main link items is now available. A movie can be assigned to play in the central image position along with a link to another screen, a website, or a document.

Series - Including and audio track on the zoom screen for Series is now available. A popup text field is also available on the Series Zoom.

Series Zoom and Zoom - these two screens now function identically, except the Series Zoom supports only 1 audio file.

Accessibility Compliance

A number of features have been added to Pachyderm 2.1 to support 508 accessibility compliance for published presentations.

Accessibility Buttons

Accessibility function buttons have been added to the boarder area for all of the original Pachyderm templates. These buttons provide the following functions:

- **Info** - Provides a description to the screen reader of the structure of the template content
- **Audio** - Toggles interface sounds off or on
- **Contrast** - toggles screen contrast from normal to high contrast. Turns titles and semi-transparent overlays to solid black and white to increase contrast for the sight impaired
- **Font size** - Toggles font size from normal to large for sight impaired
- **Help** - provides help information for using Pachyderm presentations, including accessibility functions

Closed Caption Support

Support for Flash Video (FLV) with synchronized closed captions has been built into the media player in Pachyderm. Flash videos that have an uploaded caption data file will display a CC button that turns the closed captions on and off. The .dxfp standard is used for synchronized closed caption data. Information about how to generate appropriate caption data files can be found on the ELIXR website at: <http://elixr.merlot.org/creatingstories/>

Transcript Support - A transcript can also be uploaded for a piece of media (audio or video). The media player will display a transcript button if a transcript is available for a media asset.

Entering/uploading Accessibility Info

Accessibility metadata (transcripts, caption data files, alt text, etc.) can be entered or uploaded into Pachyderm for each media asset. This is most commonly done while making final edits to a presentation, and is accomplished using the Edit Media Metadata link in the screen editor. Each piece of media in the presentation has an Edit Media Metadata link, and it can be used to add alt text, long description text, a transcript, a caption data file, or a Media Label to an asset. Adding accessibility metadata can also be done when uploading media into Pachyderm, or when using the Media search function of Pachyderm by clicking on the Edit Media link in the search results.

Screen Reader Support

Support for screen reader functions has been added into the standard Pachyderm templates. This includes appropriate read order of screen elements, access to alternate text and long descriptions for media, and keyboard navigation and control of screen functions. Testing and debugging of read order for screen readers and keyboard navigation is still in process.

Easier Customization of Published Presentations

Many more modifications to a published presentation can now be made without the use of the Flash authoring environment or Flash skills. This is because most of a published presentation's content is now stored as standard image/media files and xml text files. This means changes to the presentation can be made by simply replacing media files, or by using standard graphics/media programs or a simple text editor.

Also, many attributes of the look-and-feel of a presentation can be altered by simply replacing images in the presentation's icons folder, or by editing the root_boarder.xml file. Modifications that can be made this way include:

Changing the boarder color

Adding an image, text, or a link to the border

Assigning a global background image - replaces Pachyderm's default white background

Swapping out link icons or media controller graphics

Swapping out a presentation media file

Editing presentation text, media transcripts, or caption files

Easier Customization/authoring of templates

For those with Flash authoring skills, deeper customization and authoring of templates has also been improved. Some template functionality has been "componentized" so that all templates utilize the same component for the same functionality. This simplifies adding to or updating functionality, and simplifies adding these functions to new templates.

Media Player Component - An integrated media player component is used by all the templates. The media player knows how to display pictures, Flash video, mp3 audio, and supports closed captions, transcripts, and links to external urls.

Scroll Text Component - Provides scrolling text field functionality

Known Problems in Pachyderm 2.1:

- Accessibility: Tab order for Keyboard navigation and screen reader order still need adjustments.
- The Expand/Collapse function in the authoring environment does not maintain its state when the browser window is refreshed.
- Occasionally, Flash videos may be displayed scaled to an extremely small size. Workaround: refresh the browser window

Some 2.1 Features not implemented yet

Implement dynamic information in the screen info (i) and the help (?) screens

Setting the text field on the Series Zoom screen to "show" or "hide" as the default

Full Screen media playback template
Timeline/Multi-compare and SWF player templates

Guide for Flash Video (.flv) conversion

By Joel Bennett, CSU CDL

The following information for converting digital video files to Flash Video format is provided so that users can take advantage of the Flash Video playback capabilities of Pachyderm 2.1. If you have existing videos in .mov or other formats, or cannot generate .flv files from the application you do video editing with, you can use the tools below to convert your files to .flv format.

Windows Users

There is a free application on Windows, called Super, which will convert most video file types to Flash 7 format. If you want your videos in Flash 8 format, which is higher quality, we recommend you purchase Flix Standard for \$39. If you want to view a quality comparison between Flash 7 and Flash 8 compression see the link below.

Mac Users

Flix Standard, the application mentioned above for converting to Flash 8 on Windows, is also available for the Mac (\$39).

If you want to view a quality comparison between Flash 7 and Flash 8 compression go to the link below.

http://130.157.145.22:8081/pachyderm_2_1/presentations/FLVcomparisonsorensonvp679/?wosid=RRaaOev7rOEKfUVZ4nQXrM

Recommended Compression Settings for Flash Videos

Below are recommended compression settings for creating Flash videos for Pachyderm 2.1 with tools like the ones mentioned above.

Frame size: 320 x 240 or 400 x 300
Frame Rate: 15 fps
video Bitrate: 230 or 330
Audio bitrate: 64

More detailed information on Flash video settings can be found at:

http://www.adobe.com/devnet/flash/articles/flv_encoding_02.html