Video Accessibility in Adobe Flash

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VIDEO REQUIREMENTS
Accessible Video Requirements

- Captions for deaf and hard of hearing users
  - And for searchability
- Accessible Controls
  - Screen reader accessible
  - Screen magnifier accessible
  - Keyboard accessible
- Audio (video) Description for visually impaired users
- Full screen captions/subtitles
- Access to transcript for users who are deaf-blind
- And possibly…
  - Ability to pause video when loaded
  - Visual appeal
WCAG 2.0 Perspective

- **WCAG 2.0** ([http://www.w3.org/TR/WCAG20](http://www.w3.org/TR/WCAG20)) requires equivalents for audio and video, as well as accessible controls.

- Definition of “Alternative for time-based media”

<table>
<thead>
<tr>
<th>Media</th>
<th>Captions</th>
<th>Video Description</th>
<th>“alternative for time-based media”</th>
<th>Signing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio-only</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Video-only</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Audio in synchronized media</td>
<td>A</td>
<td>AA (live)</td>
<td>AAA (live)</td>
<td>AAA</td>
</tr>
<tr>
<td>Video in synchronized media</td>
<td>AAA (extended)</td>
<td></td>
<td>A</td>
<td>AAA (full screenplay)</td>
</tr>
</tbody>
</table>
The Section 508 Advance Notice of Proposed Rulemaking is in keeping with WCAG 2.0 rules for video accessibility

http://www.access-board.gov/sec508/refresh/draft-rule.htm
Captions

- Captions online have become much more commonplace.
- Lots of tools available to support creating captions
  - YouTube
  - MAGpie
  - Automatic Sync
  - Softel
  - DocSoft
  - Subtitle Horse
  - Many more
Accessible Flash with Video at US Dept. of Education

- Flash with accessible video controls and captions at DoEd.
YouTube Captioning

- Offers captioning support

My father yells, "What you gonna do with your life?"
YouTube Captioning

- Offers multiple language support
YouTube Captioning

- YouTube now offers automatic captions
  - Employs Speech To Translation to generate transcript
  - Utilizes programmatic alignment of text to audio to generate captions
  - Uploading transcripts also possible for more accurate results.
CreatureDiscomforts.org

- Offers transcripts, subtitles, and sign language
That’s not true though.
Alternative Viewing of YouTube Videos

- Accessible HTML controls using Flash Player’s JavaScript API
- http://icant.co.uk/easy-youtube/

YouTube Address: [youtube.com/watch?v=CPZXdcP0RPg](http://youtube.com/watch?v=CPZXdcP0RPg)

You can go to the YouTube video you want to watch and copy and paste the address at the top into this box.
Captions provided for many videos

Popular Episodes

Lie To Me: The Best Policy
Season 1 : Ep. 7  (43:54)
More: Lie To Me
Channel: Drama

Family Guy: The Juice Is Loose
Season 7 : Ep. 9  (21:53)
More: Family Guy

* But where are those good old-fashioned values *
Video Description

- Video description and audio description are the same thing.
- Video description is still rare online.
- Few tools support video description
  - MAGpie
  - Audio editing tools for recording description files
- Demonstration of video description
Accessible Controls

- Flash provides the most accessible controls for embedded video.
- Accessibility is handled automatically in the default video playback controls in CS4.
Accessible User Interface

There are artifacts with both images and writing, like books with illustrations.

Robert Sharer
Shoemaker Professor of Anthropology
University of Pennsylvania
Adding captions and accessible controls in Flash CS4
How Does Captioning Work in Flash?

- The FLVPlaybackCaptioning component supports two methods:
  - Embedded caption data in cue points
  - Parsing DFXP caption data and creating ActionScript cue points, by TimedTextManager
  - Cue points are triggered at specific times and displayed
What’s the easiest way to get an accessible interface?

If you don’t have the Flash Authoring tool, you can use these to get support for captions and an accessible interface:

- CC for Flash
  - [http://ncam.wgbh.org/webaccess/ccforflash](http://ncam.wgbh.org/webaccess/ccforflash)
- JW FLV Player
  - [http://jeroenwijering.net](http://jeroenwijering.net)
Resources

Adobe Links

- Adobe Accessibility Resource Center
  [adobe.com/accessibility](http://adobe.com/accessibility)

- Adobe Accessibility Blog
  [blogs.adobe.com/accessibility](http://blogs.adobe.com/accessibility)

- Flash Captioning information

- Flash Captioning DevNet Article

DFXP

- W3C DFXP (Distribution Format Exchange Profile)
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