

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>) requires equivalents for audio and video, as well as accessible controls.
- Definition of “Alternative for time-based media”

Media	Captions	Video Description	“alternative for time-based media”	Signing
Audio-only			A	
Video-only			A	
Audio in synchronized media	A AA (live)		AAA (live)	AAA
Video in synchronized media		AA AAA (extended)	A AAA (full screenplay)	

Section 508 ANPRM

- 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.
- <http://federalstudentaid.ed.gov/mystory/>



Home About "My Story" Media Info



YouTube Captioning

- Offers captioning support



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.

Add New Captions or Transcript

File

Type
 Caption file (includes time codes)
 Transcript file (English only) (*beta*)

Language:
Name (optional):

[Return to Available Tracks](#)

Captions and subtitles help viewers with hearing disabilities and people who speak other languages to enjoy your videos. To learn more about this feature, see the [Help Center](#).

Important: By clicking "Upload file", you are representing that the uploaded text does not violate [YouTube's Terms of Service](#), and that you own all copyrights in this video and caption track or have authorization to upload the video with captions.

- Offers transcripts, subtitles, and sign language

Play the Ads

Select a TV Ad



Select a Radio Ad ▶ 1|2|3|4|5|6|7|8|9

View the scripts ▶ TV Ads: 1|2|3|4|5|6|7|8
▶ Radio Ads: 1|2|3|4|5|6|7|8|9



Subtitles : Sign Language



← Back



← Back



Alternative Viewing of YouTube Videos

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

The screenshot displays a web interface for watching YouTube videos. At the top, a green header contains the text "YouTube Address:" followed by a text input field containing the URL "youtube.com/watch?v=CPZXdcP0RPg" and a yellow "Load" button. Below this, a green box contains the instruction: "You can go to the YouTube video you want to watch and copy and paste the address at the top into this box." The main content area features a video player showing a man in a suit speaking at a podium with microphones. The video player has a "YouTube" logo in the bottom right corner and a "Volume" label next to a blue volume bar. To the left of the video player, under the heading "Video Size", there are three buttons: "Small" (which is selected and has a dotted border), "Medium", and "Large". At the bottom of the interface is a row of seven large, colorful icons for video controls: play (green), previous (blue), pause (yellow), stop (red), volume (grey), mute (grey), and full screen (grey).



Today on CNET

Product videos

CNET Tech Shows

News Videos

What's Hot

Buzz Report

Twitter backlash



Internet Explorer 8



iPhone

iPhone OS 3.0

advertisement



Play Video



GADGET OF THE WEEK



The Gadget of the Week is the Dell Adamo.

0:21 / 4:04

Play Video | Stop | Previous | Next | Full Screen | CC | email | download | share | subscribe | HD On Off



- 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](#)



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

Inspect (32-bit UNICODE Release) (HWND: 0x...

File Edit Options Navigation Action Help

How found: Mouse move (931,578)
Info: hwnd=0x000B0548 32bit class="MacromediaFlashPlayerActiveX"
IAcc = 0x0018071C VarChild:[VT_I4=0x0]
Interfaces: IEnumVARIANT IOleWindow
Impl: Remote native IAccessible
Annotation ID: [not supported]

Name: "Welcome Message"
Value: none [mnfd]
Role: client
State: focused,focusable
Location: {l:654, t:209, w:389, h:421}
Description: none [mnfd]
Kbshortcut: none [mnfd]
DefAction: none [mnfd]
Parent: none [screen]
Help: none [mnfd]
Help Topic: none [mnfd]
ChildCount: 6
Window: 0x000B0548 class="MacromediaFlashPlayerActiveX" style=0x560
Children: none [mnfd] : animation : normal
"OVERVIEW" : text : read only
"Pause" : push button : focusable
"Robert Sharer
Shoemaker Professor of Anthropology
University of Pennsylvania" : text : read only
"Volume Mute On" : push button : focusable
"Hide Captions" : push button : focusable
Selection: none [mnfd]
Ancestors: [No Parent]

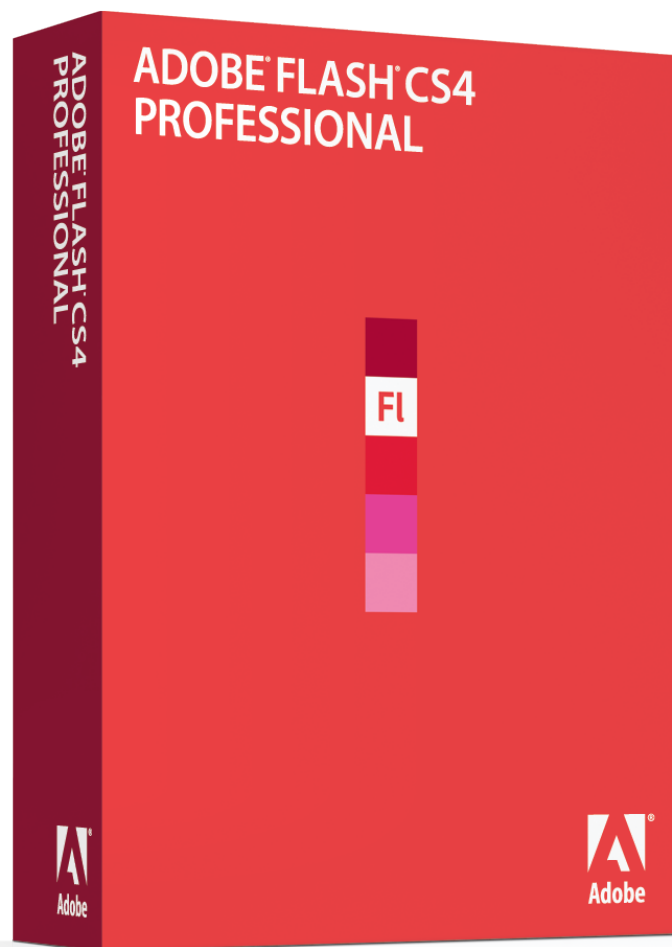
COLUMBIAN ARTIFACTS HOME

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

OVERVIEW

Robert Sharer
Shoemaker Professor of Anthropology
University of Pennsylvania

Adding captions and accessible controls in Flash CS4



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>
- JW FLV Player
 - <http://jeroenwijering.net>

Adobe Links

- Adobe Accessibility Resource Center
adobe.com/accessibility
- Adobe Accessibility Blog
blogs.adobe.com/accessibility
- Flash Captioning information
<http://www.adobe.com/accessibility/products/flash/captions.html>
- Flash Captioning DevNet Article
http://www.adobe.com/devnet/flash/articles/video_captionate.html

DFXP

- W3C DFXP (Distribution Format Exchange Profile)
<http://www.w3.org/TR/2006/CR-ttaf1-dfxp-20061116>

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ADOBE® ACCESSIBILITY

