



CVAA Compliance Using Adobe Tools

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What's in the CVAA?

- The CVAA addresses multiple topics.
 - Previously-broadcast video must provide captions
 - 13" device size requirement removed – all devices that support internet-based video must support captions
 - Audio description and user interface regulations for video and players
 - Web conferencing
 - Real time text
 - More...
- Not solely focused on any group of users with disabilities
- This talk focuses primarily on captioning

Captioning Regulations

- In January 2012 the FCC released the Report & Order for closed captioning
- Compliance dates for broadcast video content delivered via the internet:
 - Prerecorded and unedited content – September 30, 2012
 - Live content – March 30, 2013
 - Edited content – September 30, 2013
- All full-length video programming previously shown with captions on TV must have captions when streamed online via IP.
- Captions of IP-delivered video programming must be at least the same quality as the captions shown on TV.

Related Regulations

Section 508 (June 2001)

- Law requires that government agencies providing video must provide captioning.

ADA

- Recent ruling (June 2012) by District Court judge in Massachusetts - ruled against Netflix's motion that it didn't need to provide captions since the ADA didn't apply to online businesses.

Globally

- Captioning and subtitling regulations exist in many countries and are emerging in more all the time.

Captioning standards and policy – ancient history (pre-2005)

- Every vendor creates their own format
 - QTtext, RealText, SAMI
 - Many other minor formats
- Broadcast captioning: CEA-608

Captioning standards and policy – history (2005-2010)

- W3C Timed Text Markup Language (TTML 1.0) developed (originally called DFXP)
- Flash CS3 captioning (and caption vendor support)
- <video> element and captioning
- Development of SMPTE-TT format
- CEA-708 phase-in

Captioning standards and policy – recent history (post-2010)

- SMPTE-TT plugin for OSMF
- Introduction of WebVTT by WHATWG
- TTML 1.0 Simple Delivery Protocol (<http://www.w3.org/TR/ttml10-sdp-us/>)
- Pending “recommended practice” documents from SMPTE-TT
 - 608 to SMPTE-TT conversion
 - 708 to SMPTE-TT conversion
- CVAA / FCC regulations come into force

SHARE DOWNLOAD SUBSCRIBE



cnet

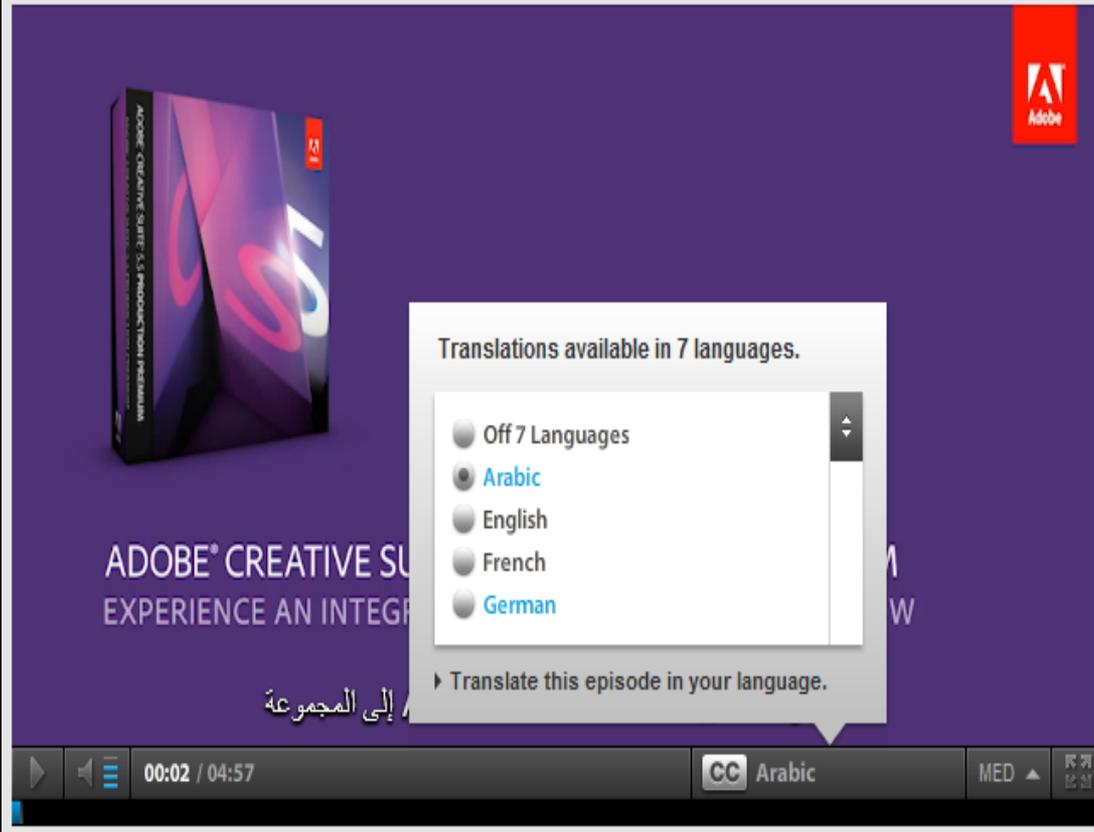
Next app is reminders. This is another thing you'll get.

1:09 / 2:30 CC

The image shows a video player interface. At the top, there are three buttons: 'SHARE', 'DOWNLOAD', and 'SUBSCRIBE'. The main content is a video of a man in a black polo shirt sitting at a desk with a laptop. The laptop screen displays a blue abstract background. A 'cnet' logo is visible in the bottom left corner of the video frame. A subtitle at the bottom of the video reads 'Next app is reminders. This is another thing you'll get.' Below the video frame is a playback control bar with a play/pause button, a progress bar, and a timestamp of '1:09 / 2:30'. To the right of the progress bar are icons for closed captions (CC), volume, and a full-screen button.

تجربة تدفق عمل متكامل بين الصوت والفيديو

Show: [Learn Premiere Pro CS5 & CS5.5](#)



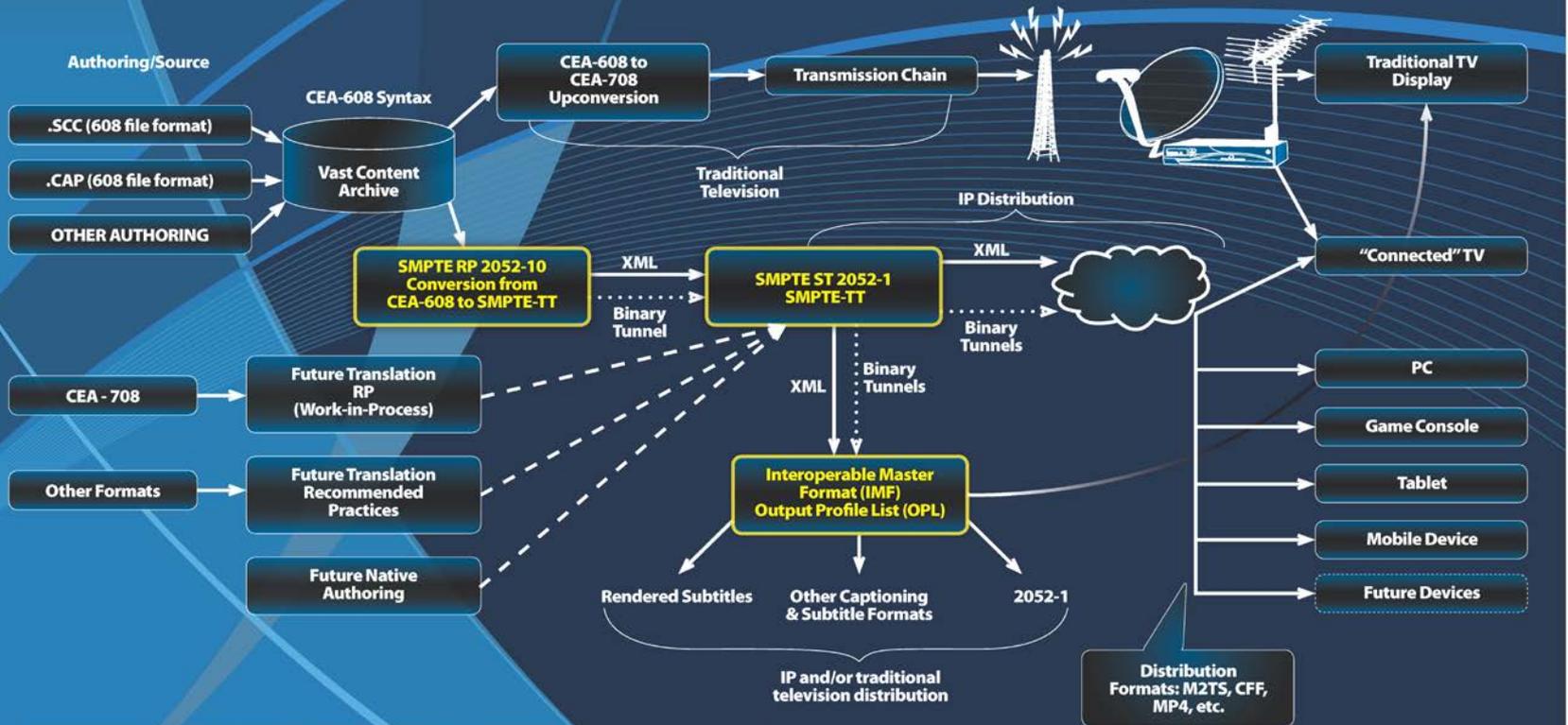
The screenshot shows a video player interface. On the left, there is a 3D rendering of the Adobe Creative Suite 5.5 Production Premium software box. In the top right corner of the video frame, the Adobe logo is visible. A white dialog box is overlaid on the video, titled "Translations available in 7 languages." It contains a list of language options with radio buttons: "Off 7 Languages", "Arabic" (which is selected and highlighted in blue), "English", "French", and "German". Below the list, there is a link that says "Translate this episode in your language." The video player's control bar at the bottom shows a play button, a volume icon, a progress bar at 00:02 / 04:57, a closed captioning (CC) button, and the selected language "Arabic".

Captioning is simple?



SMPTe 2052 CAPTION FLOW

SMPTe Timed Text is the key to making Internet video accessible to the deaf and hard of hearing. It has been adopted by the Federal Communications Commission as a safe harbor interchange and delivery format. This diagram shows the many workflows supported.



SMPTe is the preeminent standards development body in the motion imaging and media industry. SMPTe Standards help the industry make the connection between the development of key media technologies and the business drivers that facilitate interoperability and industry growth. Join the SMPTe standards process and participate in the development of future standards. To learn more about SMPTe Standards Committees go to <https://www.smpte.org/standards/engineering-committees>.

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How does Adobe support captioning for the CVAA?

Standards: Adobe participates TTML, SMPTE-TT, WCAG working groups, and participated on the FCC Video Programming Accessibility Advisory Committee (VPAAC).

Tooling: Adobe provides several tools which enable authors to create and offer accessible content.

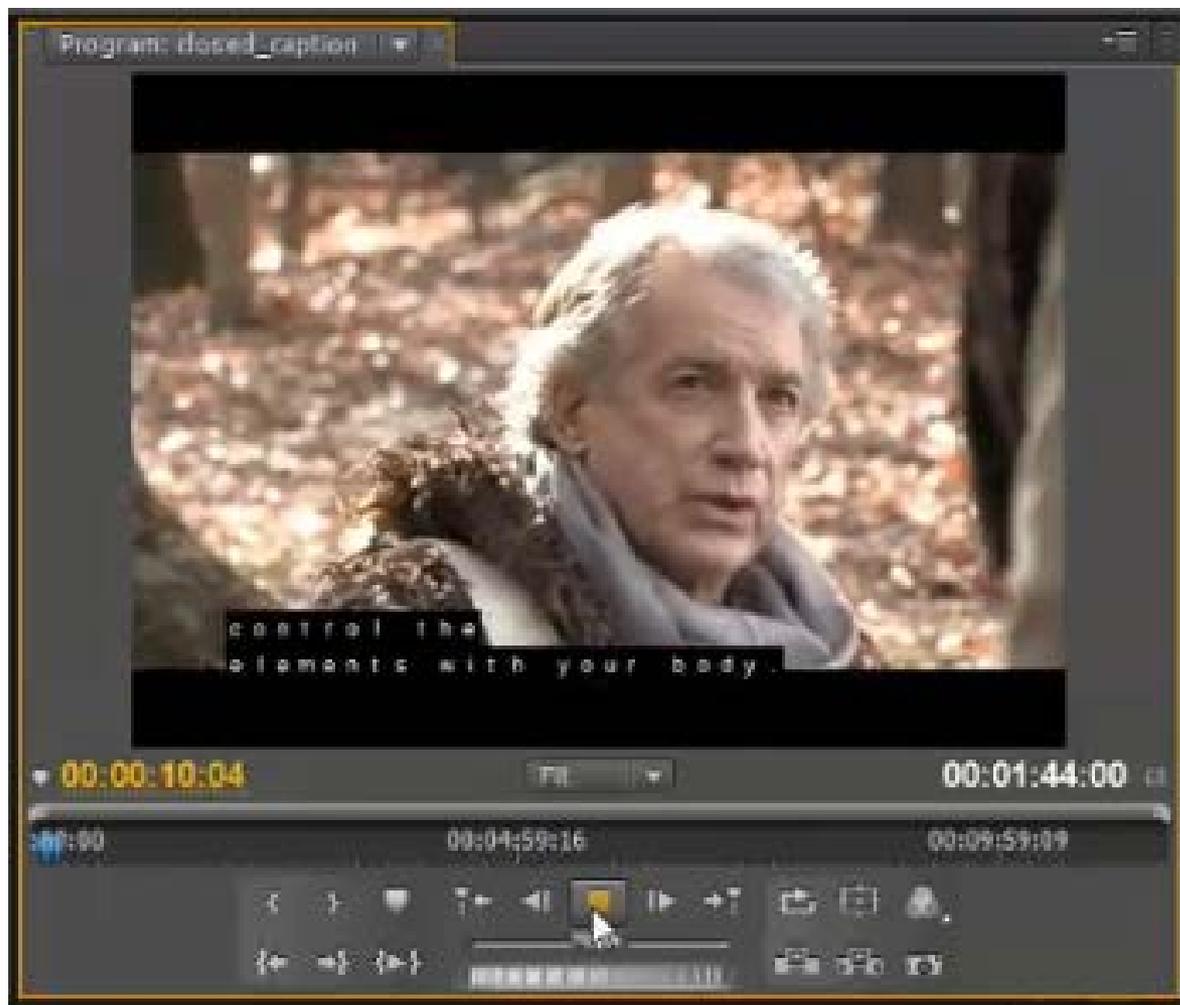
- **Adobe Premiere** – Professional video editor
- **Adobe Primetime / Adobe Media Encoder** – Professional video delivery
- **Open Source Media Framework (OSMF)** – Video/media player toolkit
- **Adobe Captivate** – Interactive educational content authoring tool
- **Adobe Connect** - Live online meetings
- **Adobe TV** – Product support videos

- Adobe Premiere Pro 6 offers video editors the ability to import closed captioning data and review results for accurate integration into video.
- Premiere Pro supports speech analysis and script alignment to help video production teams more easily support closed captioning in their workflows.
 - Import CEA-608 and CEA-708 caption data
- Premiere Pro supports caption data export for traditional or HD video, via 3rd party plugins.



Adobe Premiere Pro

- Play back and display 608 and 708 closed captions, sync'd to your video sequence and viewable in the Program Monitor.



- Importing caption data is a simple menu item.

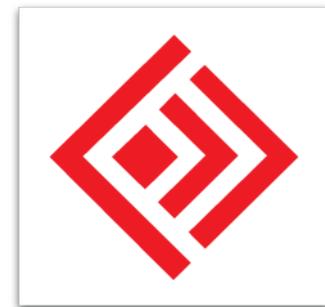


- Enabling display of captions for the Program Monitor can be enabled and disabled.



Adobe Primetime / Adobe Media Server

- Supports streaming of video with embedded Closed Captions (in 608 & 708 format) for live, linear and video on demand streaming
- Support for in-band captions today, originating from 608/708 caption data (caption data within the H264 SEI NALU as specified in ANSI/SCTE 128 2010 Section 8)
- Customers streaming video to Apple IOS devices using the HLS format will have the caption data streamed to the device
- Working with encoding partners
- AMS 5.01 captioning support:
http://help.adobe.com/en_US/adobemediaserver/devguide/WS5262178513756206232b27a91396cda04c9-8000.html





[Hide](#)



00:00:00
You are watching "The Old Gods and the New" with Interactive Features on.



Open Source Media Framework

- OSMF supports captioning via TTML, SMPTE-TT, and embedded caption metadata.
- OSMF supports audio description via “late binding audio”:
<http://tinyurl.com/latebinding>



open source
media framework

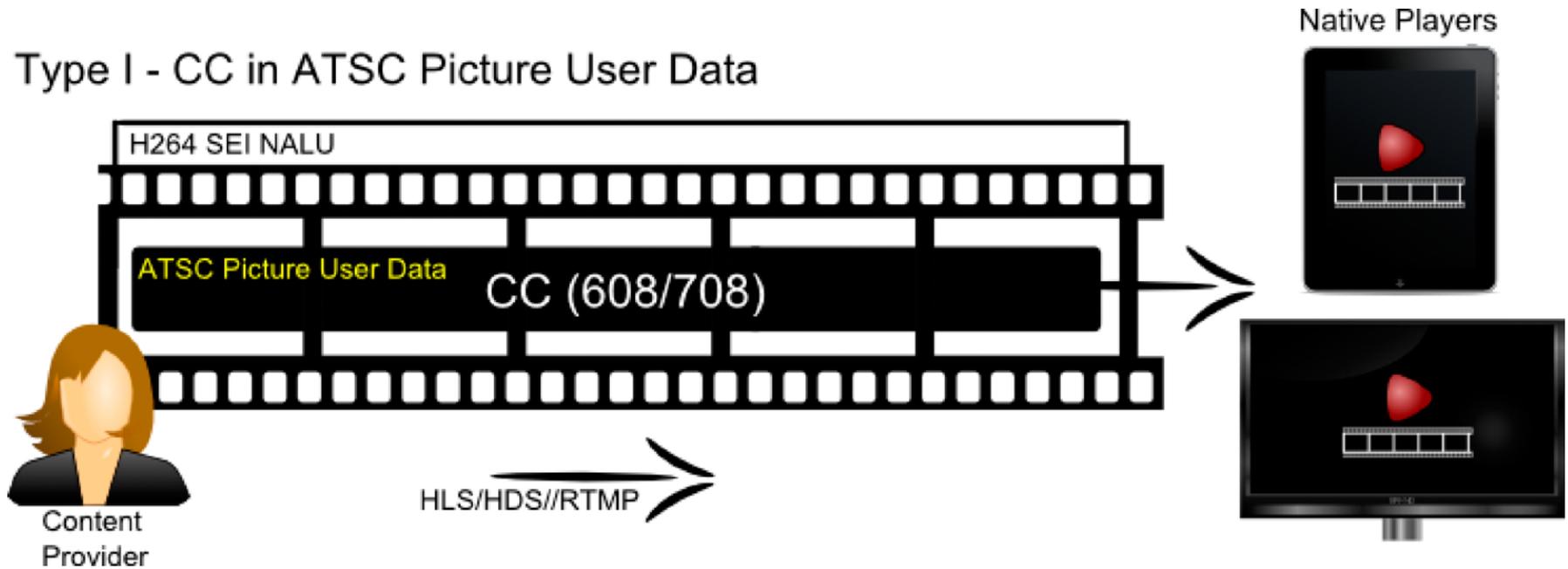
OSMF caption display capabilities

- Support for pending rules regarding user control of:
 - Character color
 - Character opacity
 - Character size
 - Fonts
 - Caption background color and opacity
 - Character edge attributes
 - Caption window color
 - Language
- Accessible player controls.
- Demo



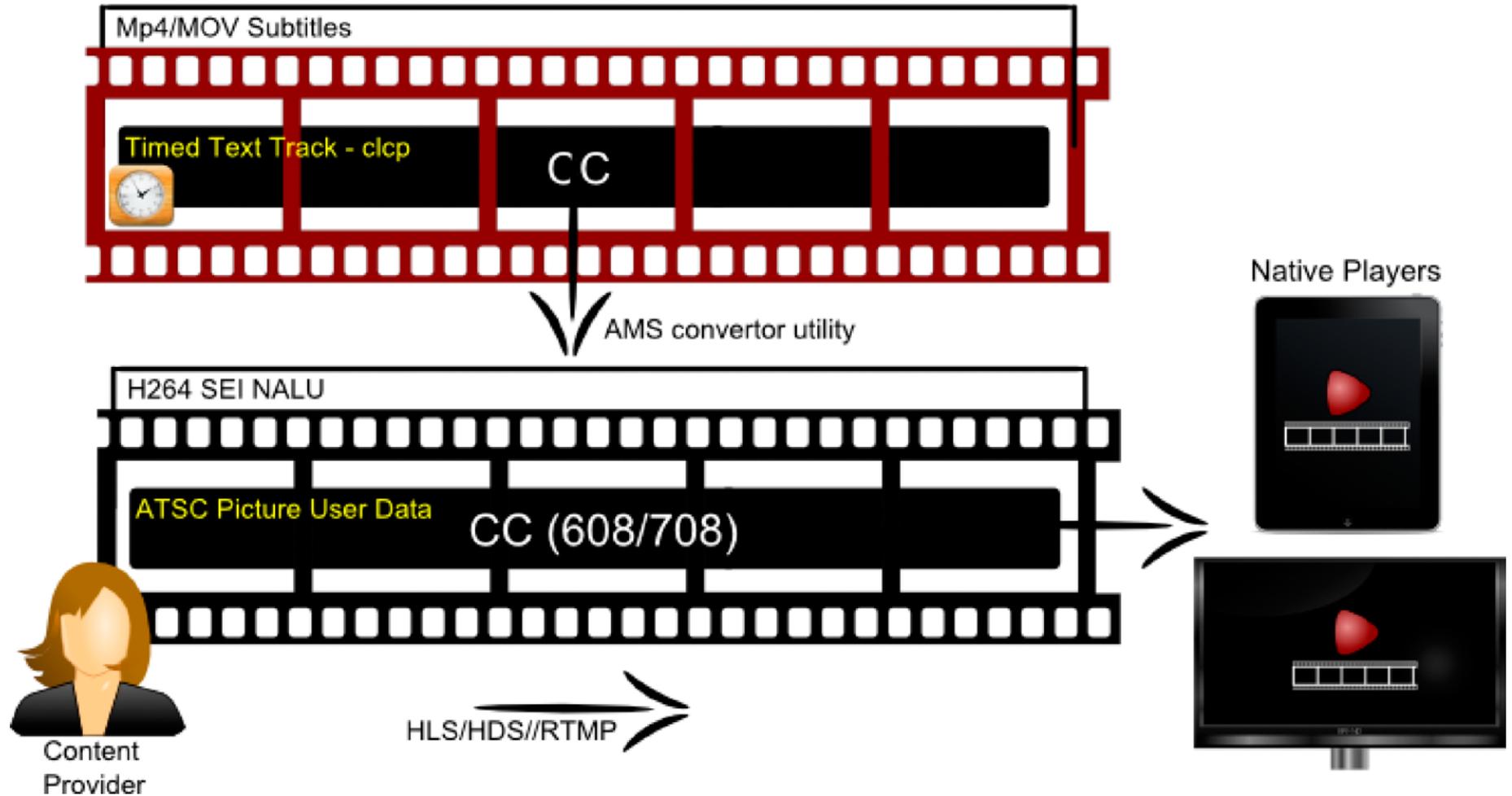
Overview of caption delivery process

Type I - CC in ATSC Picture User Data



Overview of caption delivery process

Type II - Extracting CC in Timed Text Track

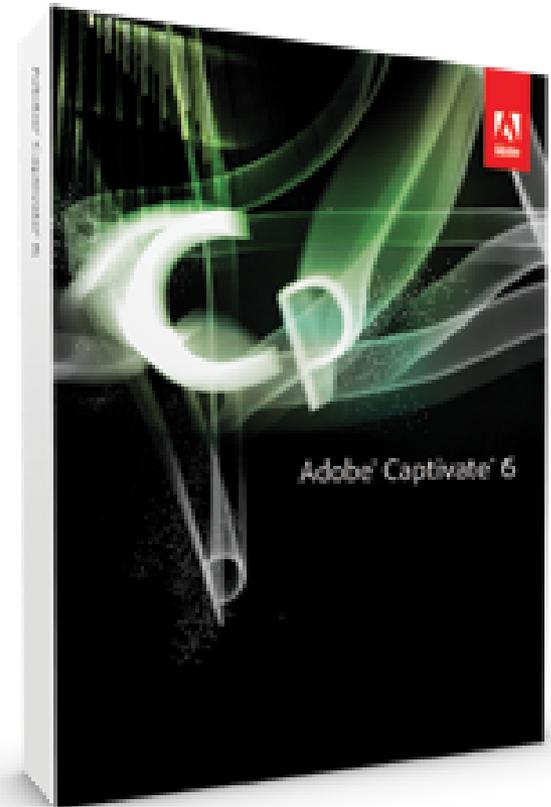


Open Source Media Framework



Adobe Captivate

- Adobe Captivate supports closed captioning for eLearning presentations and demonstrations.
- Authors utilize the built-in closed captioning tool in Adobe Captivate to author captions.



Adobe Captivate

Slide Audio

Add/Replace Edit Closed Captioning

38

Name: Recording1 Duration: 00:00... | Playhead: 00:00:02 | Selected: 00:00:00

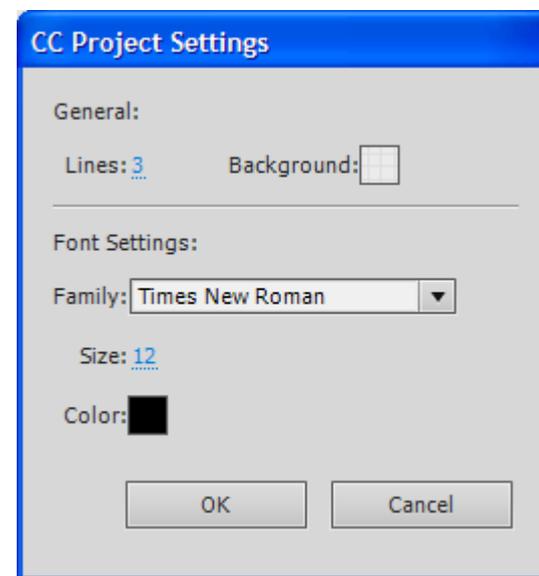
CC Project Settings...

Row	Start Time	End Time	Caption
▼ 1	0: 0: 0:5	0: 0: 1:7	This is a test
▼ 2	0: 0: 1:7	0: 0: 3:0	This is only a test
▼ 3	0: 0: 3:0	0: 0: 3:7	

Settings... Import (F6)... Library... Captions & Slide Notes... Save Close

Adobe Captivate

- Adobe Captivate authors are provided with options to control the display appearance of the captioning.
- End users are provided with a caption toggle, but are not currently able to modify the caption appearance.

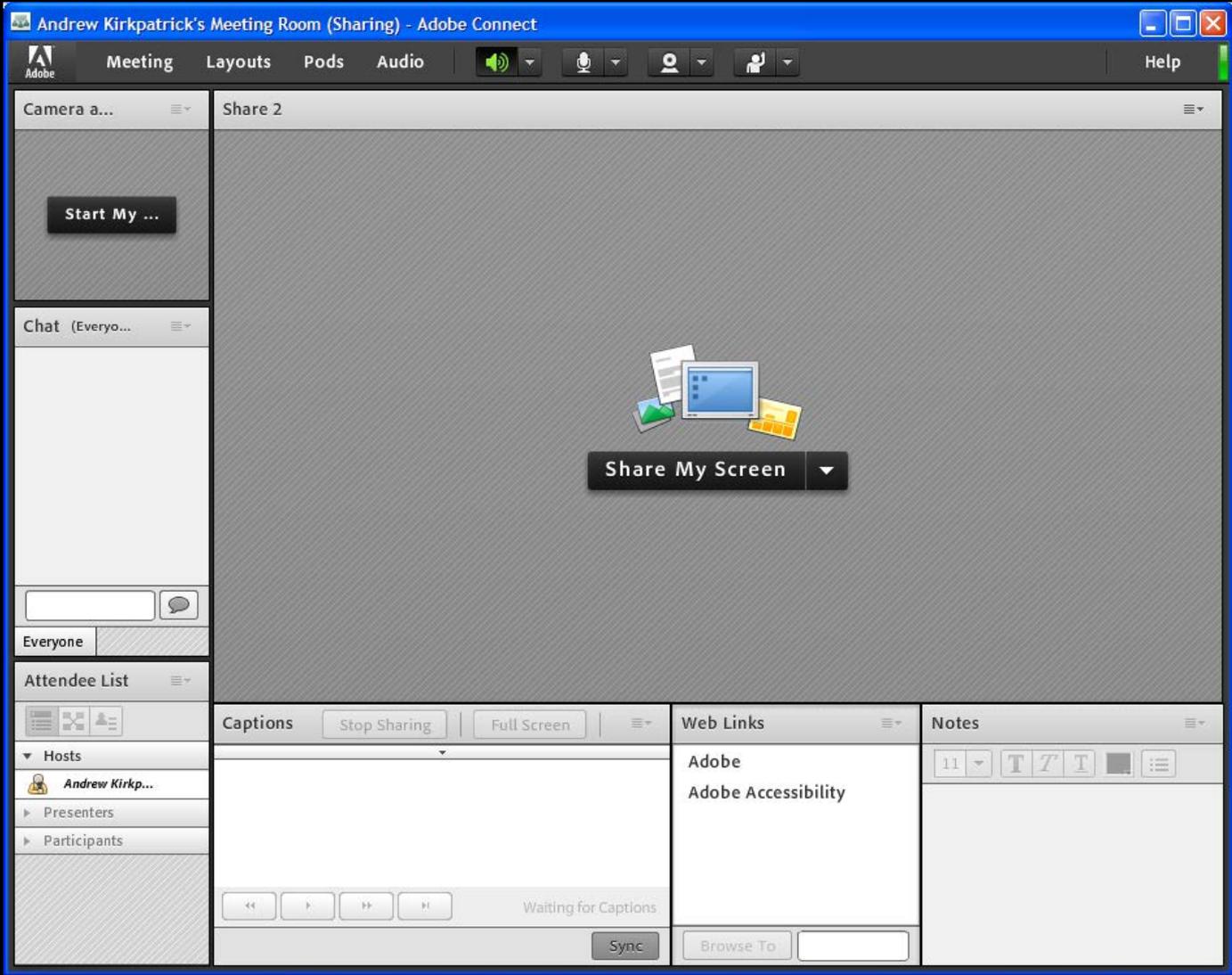


Adobe Connect

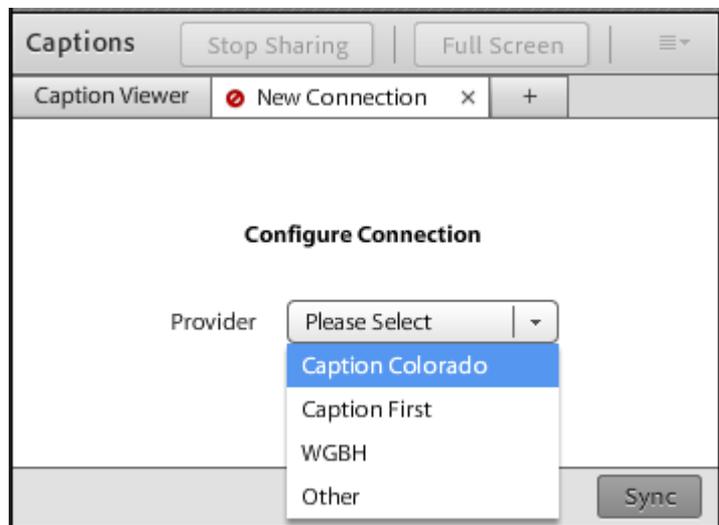
- Adobe® Connect™ is an enterprise web conferencing solution for online meetings, eLearning, and webinars.
- Current version is 9



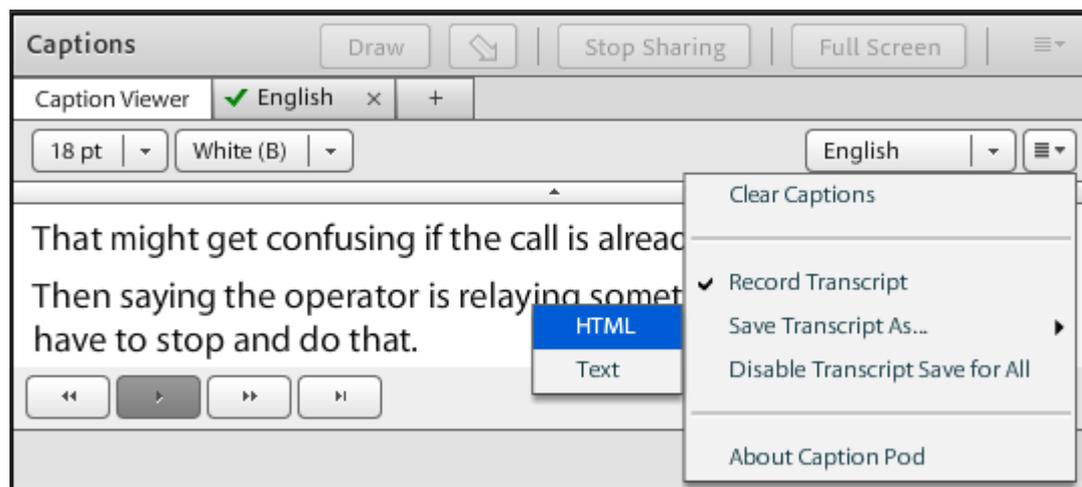
Adobe Connect



- Adobe Connect offers support for real-time closed captioning.
- Vendors that support captioning in Connect include:
 - Caption Colorado (<http://www.captioncolorado.com>)
 - WGBH Media Access Group (<http://access.wgbh.org>)
 - Caption First (<http://www.captionfirst.com>)
 - Streamtext (<http://www.streamtext.net>)

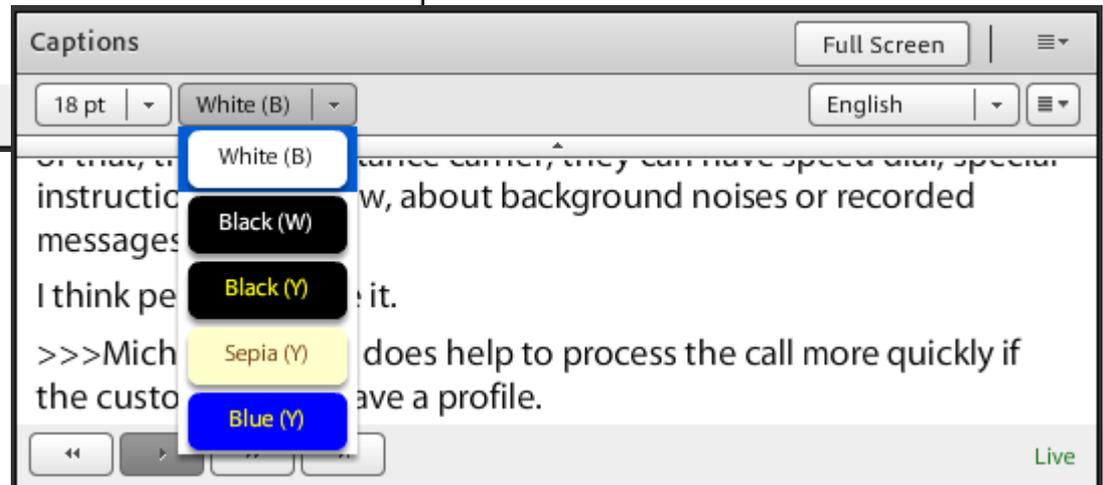
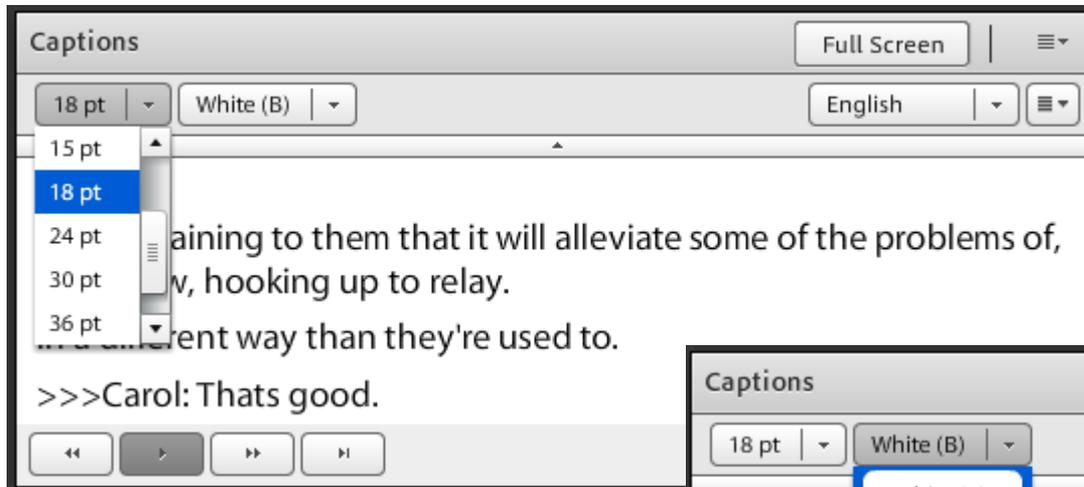


- Captions from recorded sessions are also recorded.
- The Connect 9 caption pod can record a transcript of captions, offers exports in HTML and text.
- Captions can be turned off by any user



Adobe Connect

- Users have control over display – multiple font sizes and five color and contrast display options
- Users also have playback controls to enable review of missed



Adobe TV

- Adobe TV offers videos to support use of Adobe tools.
- Adobe TV supports TTML captions in the media player.

ADOBE TV

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SHOW: [GOVERNMENT CUSTOMER SHOWCASE](#)

Omgevingen op het vlak van water en ruimte

Last year, VROM started the 1 logo project.

00:21 / 04:19

- Videos with closed captions are clearly indicated.



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▶ GS-01: THE BASIC ADOBE PREMIERE PRO WORKFLOW	00:02:28	CC	★ ★ ★ ★ ★	☰ +
▶ GS-02: UNDERSTANDING PIXEL ASPECT RATIO	00:05:22	CC	★ ★ ★ ★ ★	☰ +
▶ GS-03: IMPORTING FILES INTO ADOBE PREMIERE PRO	00:05:30	CC	★ ★ ★ ★ ★	☰ +
▶ GS-04: MAKING A ROUGH CUT IN ADOBE PREMIERE PRO	00:04:07	CC	★ ★ ★ ★ ★	☰ +
▶ GS-05: EXPORTING A STILL FRAME	00:01:58	CC	★ ★ ★ ★ ★	☰ +
▶ GS-06: APPLYING TRANSITIONS IN ADOBE PREMIERE PRO	00:06:09	CC	★ ★ ★ ★ ★	☰ +

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Runtime	CC	Average Rating	My Library
00:16:06		★ ★ ★ ★ ★	☰ +
00:07:29		★ ★ ★ ★ ★	☰ +
00:03:23	CC	★ ★ ★ ★ ★	☰ +
00:04:42	CC	★ ★ ★ ★ ★	☰ +
00:05:23	CC	★ ★ ★ ★ ★	☰ +
00:08:36	CC	★ ★ ★ ★ ★	☰ +
00:13:13	CC	★ ★ ★ ★ ★	☰ +
00:07:44	CC	★ ★ ★ ★ ★	☰ +
00:11:10	CC	★ ★ ★ ★ ★	☰ +
00:02:23	CC	★ ★ ★ ★ ★	☰ +

Adobe Links

- adobe.com/accessibility | blogs.adobe.com/accessibility

SMPTE-TT

- smpte.org/standards/st2052-1-2010.pdf

TTML / DFXP / WebVTT

- W3C TTML 1.0 (w3.org/TR/ttaf1-dfxp/)
- TTML 1.0 Simple Delivery Profile (w3.org/TR/ttml10-sdp-us/)
- WebVTT (dev.w3.org/html5/webvtt/)



Adobe