Who we are

- Office of Accessibility, State of Minnesota
- Policies, procedures, best practices
- MN Accessibility website (mn.gov/mnit/accessibility)
Area of Focus
After completing this session, attendees will be able to:

• Explain the key components of an accessible video or multimedia
• Articulate multiple business cases for making media accessible
• Design the appropriate solution for different media delivery channels
• Differentiate between workaround solutions and accessible media
• Propose next steps for making media accessible at his/her workplace
Not a “How-to” course

Check Resources page and our website for more information
Let’s Get Started: General Concepts

#A11Y
What is accessible media?

• **Captioning**: synchronized, accurate text with (when appropriate) speaker ID and sound effects

• **Audio description**: integrated and added versions

• **Transcript**: complete, formatted transcript

• **Player**: usable by keyboard and assistive technology (AT)

• **User-controlled**: no auto-play; the ability to pause, rewind, step back
Other key terms to know

• Live
• Recorded/offline/on-demand
• Webinar/webcast/webconference
• CART
  • Communication Access Realtime Translation
• SEO
  • Search Engine Optimization
Benefits of accessible media: creator

• Increased SEO (can Google hear?)
• Improve site visitor metrics
• Increased employee retention
• Reduce risk profile
Benefits of accessible media: user

• All users have access to the information
• Better understanding and retention through multiple sources
• Can watch in noisy environments
• Can watch without audio
• Can listen without video
• Can read offline
Risk

- ADA/Section 504
- 21st Century Act (CVAA)
- FCC Quality Order (Feb 2014)

Technical standards

- WCAG 2.0
- Section 508
General guidelines to live by

- Flash is only mostly dead
- Check before you link
- Do you know your audience?

- What’s your container?
  - Check for native support
  - Avoid auto-play when possible
  - Most do not have AD support
    - May need two versions
  - Workarounds
Lay the groundwork

• Start with a policy. So it’s not just you. Teamwork helps.
• Establish practices to support the policy
• Build a checklist to implement the practice
You’ve got a policy
Impacts all multimedia including but not limited to:
• live and recorded video
• webcasts
• webinars
• web conferences
• closed circuit TV...

When does the policy require captioning?
• Live: it depends
  • RSVP: require a request
  • No RSVP: caption it!
• Recorded: always!
Captioning: Quick Review

Minnesota IT services is the information technology agency for Minnesota's
• Ensures access by people who can’t hear well
• Supports auditory information
• Improves content retention

...in addition to the benefits noted earlier
Who creates recorded captioning?

• It depends...
  • How long is it?
  • How is the material recorded?
  • How do users access the media?
  • What is the media’s purpose?

• What about automated captioning?
Who creates live captioning?
Why Description Matters

• Extends access to those who can’t see well
• Increases flexibility for those who don’t have access to a monitor
• Promotes universal design

...in addition to the benefits noted earlier
Who creates recorded description?

Trained audio describers

• Detailed review of program
• Create description script
• Record second audio file
• Third-party describers are more common at plays and similar stage productions

• For live media, script key visuals or describe as you talk

• When presenting slides, think: is there any critical visual information you need to provide?

• Advance handouts are useful
Transcripts: Quick Review

[dial tone humming]

[phone beeping]

>> Welcome to the State of Minnesota's Conference Center.

Enter your conference code followed by the pound or hash sign.

Thank you.

If you are the leader, press star now.

Please enter your leader pin followed by the pound or hash sign.

[various conversations]

>> Jennie: Linda Shoemaker is online.

>> Kim: I'm still upset about the use of buttons.
Why Transcripts Matter

• Alternate mode of access & reference
• Extends access to those who don’t see well or have cognitive difficulties with audio or visual media
• Enables more efficient understanding for some users

...in addition to the benefits noted earlier
What’s in a transcript?

• Complete text of audio
• Speaker ID (if multiple speakers)
• Accessible format (such as well-tagged PDF or ordered text file)
• YouTube bonus: timed with video
What about the player?

• Container vs. roll your own

• Issues to watch for:
  • Keyboard accessible
  • Spacebar: pause/start regardless of focus
  • CC button
  • AD button
  • Transcript
  • Interactive transcript
  • Interpreter window
Player examples

Creating a New Table
Meet a Geophysicist: Harmony Colella

Able Player Video Demo #3:
Video player with text-based audio description (VTT)

For additional demos see the Index of Able Player Examples.

Harmony Colella, a postdoctoral research fellow, talks about an earthquake as a child in Southern California. "EarthScope Chronicles" series.

(Terrill) It's important for web designers and developers.

Terrill Thompson, Technology Accessibility Specialist.
And I was just amazed that there was a process that could cause so much shaking.

And after we surveyed what kind of damage was caused.
Let’s talk about linking and auto-play

• Linking, or how you give the user access to the media

• Auto-play, or whether the user can control access
  • Container dependency
  • Check for user settings
Link and auto-play examples

• Hyperlink with meaningful text, such as this **DPS Speed Excuses video**

• Link preview

• Embedded video
Linking to external video
Linking to SharePoint doesn’t count, right?
Who’s your friend?
Let’s dive a little
Live media channels

• Social Media Broadcast
  • YouTube, Facebook, Periscope, Instagram, etc.

• Webcast
  • WebEx, Adobe Connect Pro, GoToMeeting, Blackboard

• Video
  • Skype, Google Hangouts, Zoom

• Roll your own
  • FCC Live
Determine container supports

• Does the container support captioning?
  • Be sure to test before you drive

• If no captioning support
  • Can you use something else?
  • CART as a workaround
    • Post a second URL
Consult CART provider

- Caption overlay for viewing by all
- Second URL for separate captioning window
- Include in webcast/video announcement
• Meeting Center: CC supported
• Training Center: No native CC option
• Event Center: No native CC option
WebEx CC Settings

In the “Schedule a Meeting” option:

• Select link to “Advanced Scheduler”

• From “Required Information” timeline, select “Meeting Options”

• Select “Enable Closed Captioning”

• Select “Save as template” link
WebEx – Quick CC

Enable captioning before starting meeting

• Create a template for scheduled meetings
• No template options for Personal/Meet Now room

• In meeting room, from top menu, Meeting>Options>General >Enable Closed Captioning
Enable captioning panels
Assign Captioner

- Right click CC icon by presenter for menu options
• Robust support for inserting captions into feed

• Work with your caption provider
  • Can be a CART writer or other live caption service provider
  • Must use supported software
• Can use TV format (608/708 files)

• Live stream delivery options:
  • Total Eclipse
  • Case CATalyst
  • CaptionMaker
  • StreamText.net
Recorded media

• Social media channels (YouTube, FB, etc.)
• Websites, emails (GovDelivery)
• Archived live webcasts and webinars
• E-learning
Example: YouTube (recorded)

• Robust captioning support
  • Create automated captions for transcript
  • Upload transcripts and caption files
  • Edit caption file
  • Synchronize transcript

• Look in Video Manager for features
  • Or: Creator Studio>Video Manager>Videos

• Challenge: still autoplay. Link with “[Video]”
YouTube: Where to find cc edit
Captioning options in YouTube

Manage subtitles and closed captions: English

SELECT METHOD

Choose how you want to add subtitles or closed captions to this video:

- Upload a file
- Transcribe and auto-sync
- Create new subtitles or CC
Editing captions in YouTube
Publishing captions in YouTube

• Note “community contributions” option

• Video language: prompt should occur when launching the caption/subtitle feature
Roll your own

Hosting on webserver or streaming server

• Step 1: Pick a good player
  • Disable auto-play
  • Full keyboard control
  • Independent volume control
  • Support captioning
  • Bonus: support audio description

• Step 2: Caption the video
  • Amara
  • WGBH’s Cadet
  • Telestream’s CaptionMaker/MacCaption

• Step 3: store caption file with same name in same folder as video
  • VTT, srt, sbv, TTML, SAMI
Another way to think of poor color contrast is to think of trying to listen to someone while in a noisy, crowded room. To hear an example of poor color contrast, select the speaker icon below. You can also download a transcript of the audio by selecting the Download Transcript button.
Let’s talk Description

- Audio Description, a.k.a. Video Description
  - It’s required
  - It’s very expensive
  - It can be included in the script

- Moral: plan ahead
Scripting your media

Next, select the desired style, Heading 1, from the Styles Gallery Pane, or press Alt+Ctrl+1.
When you need help with Description

- Reference DescriptionKey.org for expectations
  - Guidelines for description preparation and script
  - Unique description voice

- Hiring a provider
  - Review script in advance
  - Require high-quality audio
  - Ensure appropriate file format
  - Delivery: separate link or access within player?
WebVTT: The Web Video Text Tracks Format
W3C Working Draft 13 July 2017

This version:
https://www.w3.org/TR/2017/WD-webvtt-20170713/

Latest published version:
https://www.w3.org/TR/webvtt/

Editor’s Draft:
https://w3c.github.io/webvtt/

Previous Versions:
https://www.w3.org/TR/2015/WD-webvtt-20151208/

Test Suite:
http://github.com/w3c/web-platform-tests/tree/master/webvtt

Editor:
Simon Pieters (Opera Software ASA)

Former Editors:
Silva Pfeffer (NICTA)
Philip Jagenstedt (Opera Software ASA)
Ian Hickson (Google)

Participate:
GitHub w3c/webvtt (new issue, open issues, legacy open bugs)
Commit:
GitHub w3c/webvtt/commits
@webvtt


Abstract
This specification defines WebVTT, the Web Video Text Tracks format. Its main use is for marking up external text track resources in connection with the HTML <track> element. WebVTT files provide captions or subtitles for video content, and also text video descriptions [MAUR], chapters for content navigation, and more generally any form of metadata that is time-aligned with audio or video content.
State of MN multimedia “toolkit”

Multimedia
Know how to make multimedia with audio and video accessible to everyone.

Media Accessibility Checklists
Here are some checklists to help ensure that you're creating accessible multimedia. These checklists are not comprehensive or specific to a particular software or social media provider. They provide reminders of the different components that make up accessible multimedia.

Linking to Video Checklist
1. Complete text of audio is present.
2. Captions match the timing of the video.
3. Captions use complete sentences.
4. Speakers are identified.
5. Autoplay does not occur (work around: announce in text prior to link).
6. Audio description is present or not needed.
7. Meaningful text used on link.

Transcript
1. Complete text of audio.
• **State of Minnesota Accessibility site** (mn.gov/mnit/accessibility)
  • Multimedia toolkit

• **WCAG 2.0 quick reference** (w3.org/WAI/WCAG20/quickref/)

• **Described and Captioned Media Program** (DCMP.org)
  • Captioning Key (captioningkey.org)
  • Description key (descriptionkey.org)

• **WebAIM on accessible media** (webaim.org/techniques/captions/)

• Terrill Thompson on **Text-based audio description** and player support

• **Able Player demos** (ableplayer.github.io/ableplayer/demos/)

• Henny Swan’s blog on **accessible media players** (iheni.com/accessible-media-player-resources/)
Gaps? Questions?
Please give us feedback!
Thank you!

Jay Wyant
Chief Information Accessibility Officer

Jennie Delisi
Accessibility Analyst

MNITAccessibility@state.mn.us