

## How to Add Audio Description (W3C-Approved Techniques) from 3Play Media

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# How to Add Audio Description (W3C-Approved Techniques)

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If you're wondering how to add audio description to video content, this post is for you.

Do you want your video to comply with accessibility laws, be more accessible to those with disabilities, and engage a larger audience? Adding audio description (in addition to other accessible elements such as closed captions and transcripts) will create a more accessible viewing experience.

## How to Add Audio Description (AD)

Audio description, also known as AD, may seem like a daunting task for those who are new to it. Often, the most efficient way to create audio description tracks is to outsource the process to a vendor who provides audio description services. However, this is not an option for everyone due to common barriers such as cost or lack of budget. You can create audio description tracks yourself. If you need help **creating audio description yourself**, W3C offers some great tips.

Whether you outsource your audio description to a vendor or create your own, finding a workable solution to publish audio descriptions and make them available to all viewers can be a challenge in itself.

**The World Wide Web Consortium (W3C)**, an international community that develops Web standards, lists several *sufficient techniques* for publishing description to audio-visual material. All of these methods are reliable ways to meet the **WCAG 2.1 audio description success criteria**.

### 1. Secondary AD Track (with Compatible Video Players)

Adding a secondary, user-selectable soundtrack is a user-friendly option. It allows viewers to toggle between the original soundtrack (without AD) and a secondary version of the soundtrack (with AD).

The option to publish a secondary audio description track is highly dependent on media player capabilities since most devices or video players can't merge multiple soundtracks.

For example, a viewer comes across a video file with two audio tracks, one with audio description. They can choose one of the two audio tracks in the media player, either without audio description. The secondary soundtrack may merge the original soundtrack with the audio description track. However, when using a platform that can simultaneously play two audio tracks, a secondary audio track containing just the description is sufficient. The latter option is the optimal user experience because it gives the user a choice to toggle audio description, just like closed captions.

## 2. Seperate Video with Audio Description

This approach adds the audio description to synchronized media by utilizing a second version of the movie where the original soundtrack and additional audio description merge into a single track.

In this case, the description is added to the original soundtrack during already-occurring pauses in dialogue and sound effects, ensuring that the description doesn't obscure original content. This method would require creating and publishing two versions of the same content, one with audio description and one without it.

For example, if you needed to publish a described recording of a music concert: The first version would include the music solely. In contrast, the second version would consist of both the music and narration describing the actions of the performers on stage.

## 3. Extended Audio Description

This approach is similar to the one above in that you would publish two versions of the same video. The difference, however, is that the second version would provide **extended audio descriptions**.

One of the main obstacles in creating audio description is trying to fit a vast amount of narrative information into a brief window of time (such as during natural pauses in dialogue). However, with extended description, the video momentarily pauses to allow more time for descriptions when needed. For extended AD, provide a version of the movie with extended audio descriptions and a version without description. Depending on your video player capabilities, publish the content so that audio descriptions can be turned on and off (refer to option one above).

## 4. Text-Based Audio Description

This method is considered an alternative to audio description and is better-suited for media that doesn't have important time-based information in the media's original video portion. For example, this technique would be sufficient for "talking head" videos such as a press conference or lecture where an individual speaks in front of a static background without critical visual elements to describe. This technique is not suitable for a situation where there are several speakers and where the identity of the speakers is not made clear in the audio track.

## 5. Integrated Descriptions at the Time of Recording

Integrating descriptions is a more proactive approach to publishing audio description and doesn't work for all scenarios. If you're in the process of creating or recording a new video, this method involves writing or including descriptions in the script that describe all relevant visual information.

This method works well if a speaker is recording a presentation with a slide deck. For instance, if the slide deck contains critical visual information, such as a statistical graph, the speaker can describe the graph in

detail during the recording.

## 6. WebVTT Description Track

This method is an advisory technique, as currently there isn't enough user agent support. This method may not be the ideal way to provide audio description. However, it may be appropriate when other methods are not possible or available to the publisher.

HTML5 video allows for the use of a WebVTT description file. This file would be included as a `<track>` element with the "description." Screen readers should be able to read this file to provide descriptions to users. However, this functionality has minimal support across video players and is an imperfect method. Therefore, WebVTT description tracks may not be the best primary method for publishing audio descriptions.

## Audio Description Output Formats

If you utilize an audio description service, they may provide different audio description output formats.

Using the 3Play Media account system, you can instantly download your audio description files once they have been processed. Although accessibility laws may require audio description, many video players and online video platforms do not support description. Our service will provide multiple different output formats to alleviate any technical difficulties associated with audio description.

Your description files will stay in your account, allowing you to access any formats anytime.

The formats provided will include:

- A time-coded WebVTT audio description track that can be read by screen readers.

- A secondary MP3 or WAV audio file with synthesized speech of your description.

- A secondary MP3 or WAV audio file with synthesized speech of your description and the original audio.

- An MP4 video file with your streamed video, the original audio, and synthesized speech of your description.

- An audio description plugin that will allow your audio description file to play with video players that don't support multiple audio tracks or WebVTT description tracks

## Simple Audio Description Publishing with the 3Play Plugin

Most popular video players and platforms do not support WebVTT description tracks or secondary audio tracks – although there are exceptions. We provide the 3Play Plugin to make publishing audio description simple.

Our plugin is a simple embed that references your video. It plays the secondary audio description track along with your video, making it an excellent option for video players that don't support audio description in a usable way. It's also a great alternative to having to create a second version of the video with description.

**The example below shows how the 3Play Plugin lets users toggle the audio description track on and**

off alongside the main audio track. Try it out!

# WebVTT Captions: How to Create a Web Video Text Track File

A “Web Video Text Track” file, also known as WebVTT (.vtt), is a popular subtitle and caption file format. WebVTT was created in 2010 by the **Web Hypertext Application Technology Working Group (WHATWG)** to support text tracks in HTML5.

**WebVTT** was broadly based on the **SupRip format**, another popular caption format, and was even called WebSRT with the same .srt file extension. Later, it was renamed WebVTT and introduced with the tag for HTML5.

## How is WebVTT different from SRT?

Unlike the SRT format, WebVTT allows for description and metadata information to be included within the frames, which is not displayed to the viewer.

All WebVTT files start with the line “WebVTT,” while SRT files don’t use an SRT distinction and instead begin with a “1” for the first caption sequence.

In an SRT file, frames need to be separated by cue identifiers. In WebVTT, cue identifiers are optional.

In a WebVTT file, the timecodes are separated by full stops rather than commas.

WebVTT files must have a UTF-8 encoding, which is not required in an SRT file.

WebVTT files can support additional information, such as frame placement.

## What are the components of a WebVTT file?

A WebVTT file has two requirements and many optional components.

The **two requirements** are:

- WEBVTT at the beginning of the transcript.

- A blank line in between each caption frame to indicate the end of a sequence.

The **optional** components are:

- A byte order mark (BOM) telling the reader the file is encoded with **UTF-8**. An example of a BOM could

be EF BB BF.

A header to the right of the WEBVTT. There must be a single space between and must not include a newline or “– →”. You can use this to describe the file.

Comments: indicated by NOTE and on separate lines.

A sequence number to help keep captions organized.

Positioning information on the same line after the second timecode.

All sequences begin with a **timecode**. The time format used is **minutes:seconds**.

**milliseconds** or **hours:minutes:seconds.milliseconds**, with the milliseconds rounded to 3 decimal places.

A two-hash arrow separates each timestamp (“– →”).

You can use a hyphen to indicate the start of a caption, such as:

00:01.000 --> 00:04.000

- This is a speaker

- This is another line

Keep in mind that you do not want to have blank lines within a caption sequence. A blank line indicates the end of a sequence and should only be used to separate the captions in different timecodes.

**Comments** can be added, and the end-user will not see them. You can use comments to describe a file or keep reminders within the file. Comments must start with NOTE, followed by a space or a new line. Similar to a sequence, you cannot have a blank line between a single comment. You can include as many characters as you need within a comment.

Comments can look like this:

WEBVTT – You can use a comment as a title

NOTE

This is a comment on a new line

1

00:00:00.00 --> 00:00:04:440 align:middle line:90%

These are caption frames  
from a sample file

NOTE This is a comment on the same line

#### COMMENTS:

- Are indicated by NOTE
- Can be on the same line or a separate line as a NOTE
- Should be separated from sequences by a blank line
- Can have zero to as many characters as necessary
- Can be placed anywhere

**Cue settings** indicate the positioning of the caption. These are added after the second timecode with a space in between. You can use cue settings to indicate where the captions will be placed and positioned. You can also indicate the width of the text area and alignment of the text. You can also use cue settings to make the text **bold**, *italic*, or underlined.

Here is an example:

00:01.000 --> 00:04.000 line:0 position:20% size: 60% align: middle  
Cue setting example

**Track tags** are used to specify time text tracks. You can define the type of track with a “kind” attribution. There are five kinds: subtitles, captions, descriptions, chapters, and metadata. By default, a < track > tag will be a subtitle unless defined otherwise.

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## Create your own WebVTT Files with our free guide

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# Why should I use a WebVTT file?

WebVTT is a popular captioning format. The benefit of using WebVTT is that you can add additional information such as frame placement, styling, and comments.

WebVTT is also the format choice for **HTML5** video.

Some of the most common platforms that use WebVTT are:

Vimeo

Brightcove

JW Player

Video.js

YouTube

# How to create your own WebVTT file

You can either create a WebVTT file yourself or hire a **professional captioning company**. With a professional service, you can avoid having to figure out timecodes or worry about positioning. If time is a constraint, a professional vendor is a great option.

If you decide to make captions yourself, follow the steps below to create your own WebVTT file from scratch. The instructions are slightly different depending on the operating system you use (Mac or Windows PC).

# For Windows users:

Open a new file on **Notepad**.

First, type “WEBVTT” to indicate this is a .vtt file, then press enter twice to leave a blank line. *Note: You can include a title or comment before your caption sequence. If you decide to include a comment, either do it on the same line as “WEBVTT” or press enter and start a new NOTE.*

Enter the beginning and end timecode using the following format:

hours:minutes:seconds.milliseconds – -->hours:minutes:seconds.milliseconds

**00:00.000 --> 00:04.440**

If you choose to add a sequence indicator, such as a “1,” do so on a separate line above the timecodes. Then press “enter.” *Note: To add cue settings, put a space between the second timecode and add position, size, alignment, etc.*

In the next line, begin your captions. Try to keep a 32-character limit with 2 lines per caption so the viewer doesn’t have to read too much and the caption doesn’t take up too much screen space. Also, make sure your captions are compliant with captioning guidelines.\*

After the last text line in the sequence, press “enter” twice. Make sure to leave a blank line to indicate a new caption sequence.

*Here are two examples of the same WebVTT file. You can see how comments, sequence numbers, and cue settings are used.*

WEBVTT – Here is a title

00:00:00.00 --> 00:00:04.440 align:middle:90%

These are caption frames  
from a sample file.

00:00:04.440 --> 00:00:06.570 align:middle line:90%

They’re timed well and  
spelled wonderfully.

NOTE Here is a note

00:00:06.570 --> 00:00:08.540 align:middle line:90%

WEBVTT

1

00:00:00.00 --> 00:00:04.440 align:middle:90%

These are caption frames  
from a sample file.

2

00:00:04.440 --> 00:00:06.570 align:middle line:90%

They’re timed well and  
spelled wonderfully.

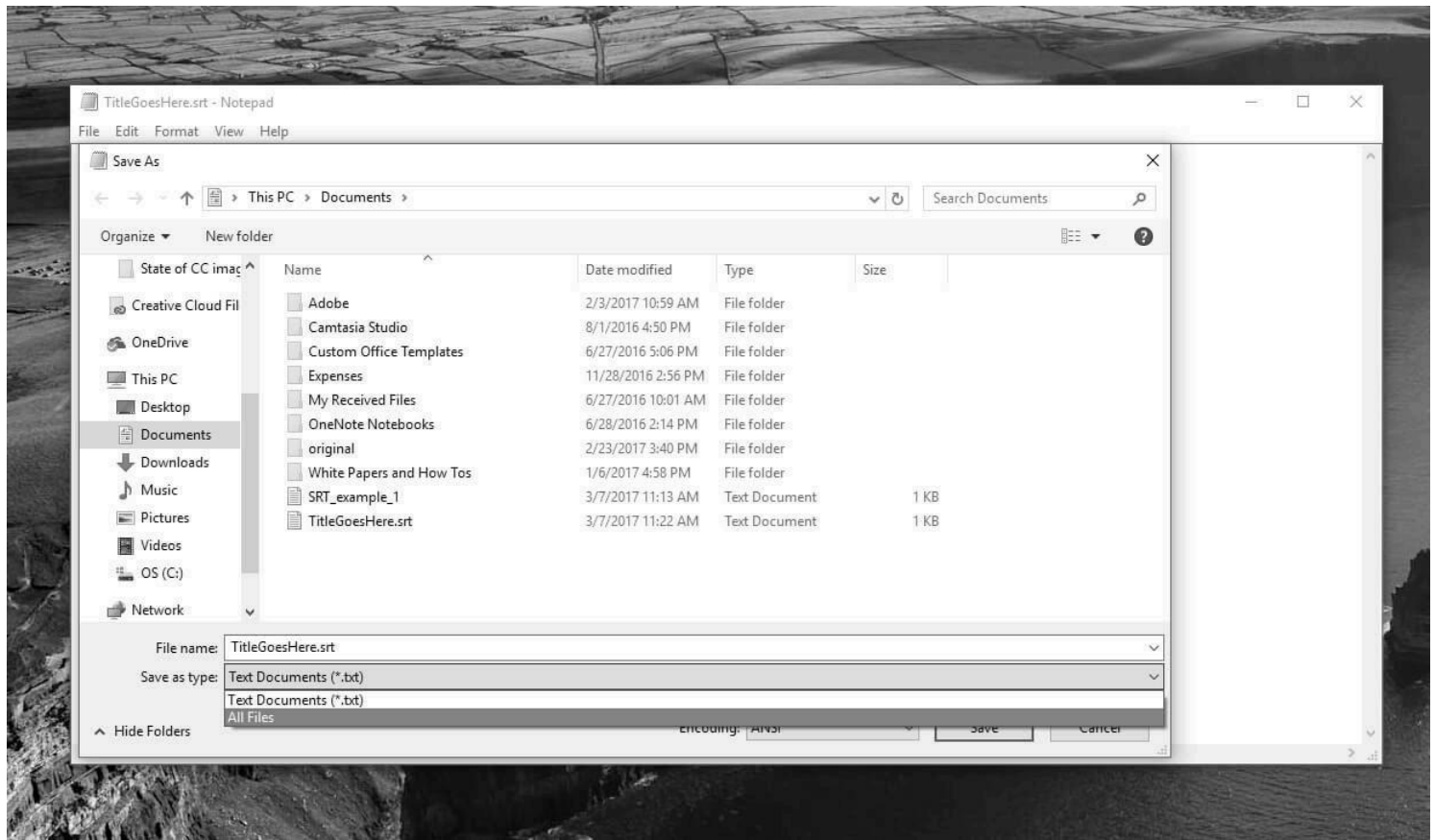
NOTE Here is a note

Repeat the steps until you have a completed transcript.

To save, go to File → Save.

Under “File Name,” type the name of your transcript using “.vtt” at the end.

Under “Save as type:” select “All Files.”



Then hit save.

Congratulations! You are now ready to upload your captions.

*\*For more information on legal requirements and closed captioning guidelines, refer to our white papers:*

## Captioning laws and guidelines

**For online video previously aired on television:**

**Are You Compliant? FCC Updates for Closed Captioning**

**CVAA Online Video Captioning Requirements and Deadlines**

**For all federal government and federally subsidized entities who create online video:**

**Section 508 & 504: Captioning and Web Accessibility Requirements**

**WCAG 2.0: Web Accessibility in the 21st Century**