

Add closed captions, subtitles, etc. to your videos

INTRODUCTION

This section introduces the new HTML5 `<track>` element, useful for adding closed captions, subtitles, descriptions, and metadata to your videos. It comes with a new JavaScript API.

The `WebVTT` format used for describing a track file is also presented in this chapter.

Most of the major desktop browsers now support HTML5 captioning

- See [this compatibility table](#) for the up-to-date status of the different browsers. Also, please [check on caniuse.com](#) for information about the `<track>` element support by browsers.

Some definitions

- **closed captions** describe all relevant audio present in the video (fire, rain, birds, gun fights, etc.).
- **subtitles** are only for spoken words.

The accessibility features of TV programs often propose both options for people with hearing deficiencies.

TYPICAL USE: ADD A SUBTITLE/CAPTION TRACK TO A `<VIDEO>` ELEMENT

Important warning!!

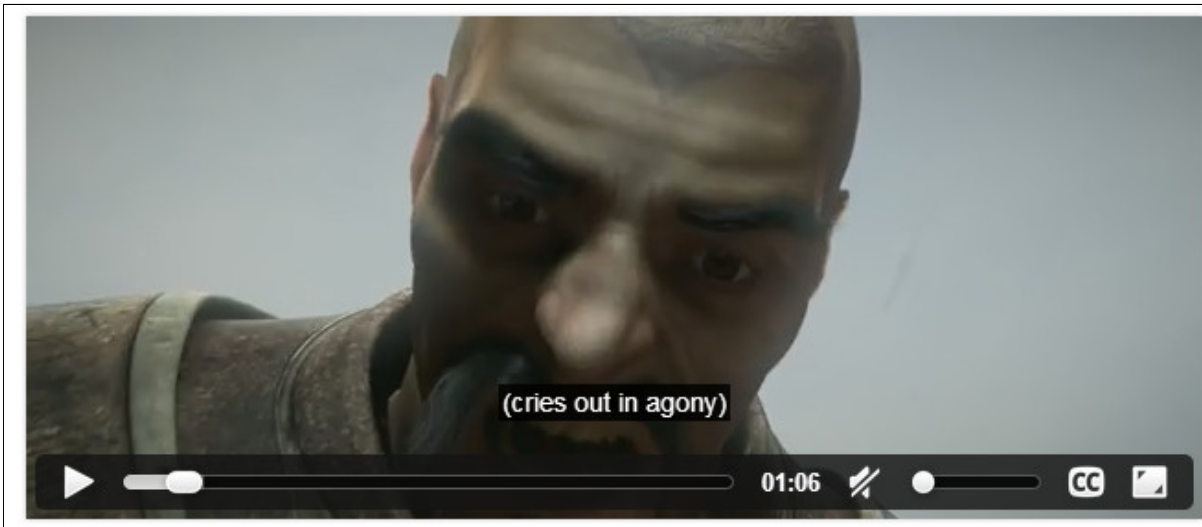
The `<track>` element cannot be used with a `file://URL`. Please use `http://` and a Web server. Your server must use a special MIME format for the `.vtt` files: `text/vtt;charset=utf-8` (set by default on most servers now).

Examples of the lines to add to an Apache Web server:

```
<Files mysubtitle.vtt>  
ForceType text/vtt;charset=utf-8  
</Files>
```

It might be worth mentioning that most browsers work fine with WebVTT even if the MIME Type is not set, **but Internet Explorer doesn't: in fact it will ignore WebVTT entirely unless the MIME Type is set correctly!**

Here is an example of a video element that includes a `<track>` element in the `.vtt` (WebVTT) format (line 7), original version at <http://www.jwplayer.com/html5/track/>, and we also cooked a version that is easier to study on jsbin: <http://jsbin.com/luyazi/2/edit>.



As seen in this screenshot, the example uses a `<track>` element to insert basic *captions* to the video: sounds and music are described, in addition to standard *subtitles* that correspond to what the different movie characters say.

```
<video height="272" width="640"
  poster="http://content.bitsontherun.com/thumbs/q1fx20VZ-640.jpg"
  crossorigin="anonymous"
  controls>
  <source src="http://demo.jwplayer.com/html5-report/sintel.mp4"
    type="video/mp4">
  <source src="http://demo.jwplayer.com/html5-report/sintel.webm"
    type="video/webm">
  <track src="http://demo.jwplayer.com/html5-report/sintel-captions.vtt"
10.    kind="captions" label="Closed Captions" default>
</video>
```

Notice that the `<track>` element at line 9 has an attribute named `kind` that indicates the type of the track that is included. Possible values are: `subtitles`, `captions`, `descriptions`, `chapters` or `metadata`.

The `<track>` element also has an attribute `default` that indicates that we want this track to

be displayed by default when reading the video.

We also used an attribute named `crossorigin` that is necessary just to run this demo, as it is required by the server that hosts the video from this example.

MULTIPLE TRACKS MAY BE INCLUDED IN A VIDEO ELEMENT

Multiple tracks are needed to support different languages, video captions for the hearing-impaired, subtitles, etc.

Below is an example ([from the specification](#)) that includes multiple `<track>` elements (subtitles for three languages and captions only for English):

```
<video src="brave.webm">
  <track kind=subtitles src=brave.en.vtt
    srclang=en
    label="English">
  <track kind=captions src=brave.en.hoh.vtt
    srclang=en
    label="English for the Hard of Hearing">
  <track kind=subtitles src=brave.fr.vtt
    srclang=fr
    lang=fr
    label="Français">
  <track kind=subtitles src=brave.de.vtt
    srclang=de
    lang=de
    label="Deutsch">
</video>
```

Note the use of some new attributes in the `<track>` element:

- `label`: the label value will be displayed in the GUI control that is included in the default HTML5 video player,
- `srclang`: gives the language for the text track data. The value must be a valid [BCP 47 language tag](#). This attribute must be present if [the element's kind attribute](#) is in the [subtitles state](#).

EXTERNAL RESOURCES (OPTIONAL, IF YOU WISH TO LEARN MORE)

- [The W3C specification for the `<track>` element](#)

- [The living W3C standard for the WebVTT format](#)
- [Examples of text tracks with JavaScript scripting](#)
- [HTML5 video with SRT subtitles](#)
- [Creating and validating WebVTT subtitles](#)
- [Silvia Pfeiffer's HTML5 Video Accessibility slides](#) give more examples of working with markup, as well as showing how to build chapter tracks for navigation and description tracks for screen readers.

KNOWLEDGE CHECK 2.3.1 (NOT GRADED)

What is the name of the element we must include inside a <video> element, in order to display captions and subtitles? Just type the name of the element, without < or > characters.

CHECK
