

Hosting Media for Web Pages



Shawn Wildermuth

MICROSOFT MVP, SPEAKER AND INSTRUCTOR

@shawnwildermuth <http://wilder minds.com>



Overview



Hosting Media for Web Pages

- Media formats
- Where to host your media
- Progressive Download vs. Streaming
- Using captions



Codecs and Containers



- Codecs are format of actual media
- Containers are file-types
- Typically, browser needs to support both

Audio Formats for the Web

Codec	Container	MIME Type	Browser Support*
PCM	.wav	audio/wav	No IE
MP3	.mp3	audio/mp3	IE9 + All
AAC	.mp4	audio/mp4	IE9 + All
Vorbis	.ogg	audio/ogg	Chrome, Firefox, Opera
Vorbis	.webm	audio/webm	Chrome, Firefox, Opera
Opus	.flac	audio/flac	Chrome, Firefox, Opera

* *Browser Support is always changing.*

Some plugins can help support on certain browsers

See shawnw.me/html5-audio for up to date specs.



Video Formats for the Web

Codec	Container	MIME Type	Browser Support*
H.264	.mp4	video/mp4	All Browsers
H.265	.mp4	video/M265	Android and Safari only
VP8	.webm	video/webm	No IE, Safari or Edge
VP9	.webm	video/webm	No IE, Safari or Edge
AV1	.webm	video/webm	No IE, Safari or Edge
Theora	.ogg	video/ogg	No IE, Safari or Edge

** Browser Support is always changing.*

Some plugins can help support on certain browsers

See shawnw.me/html5-video for up to date specs.



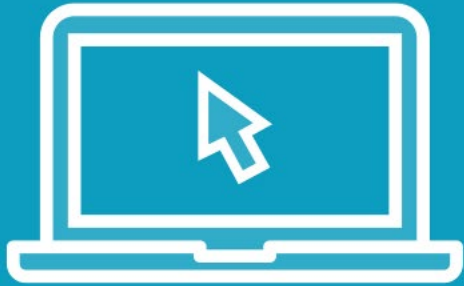


Understanding Sources

- Sources are a list of media files
- Browser picks media it supports
- Order not important



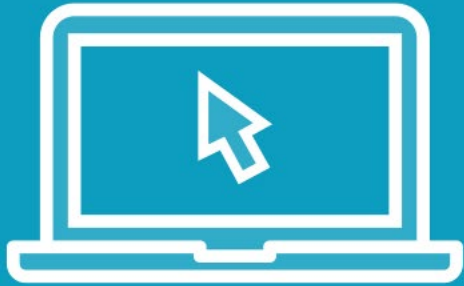
Demo



Using Different Audio Types



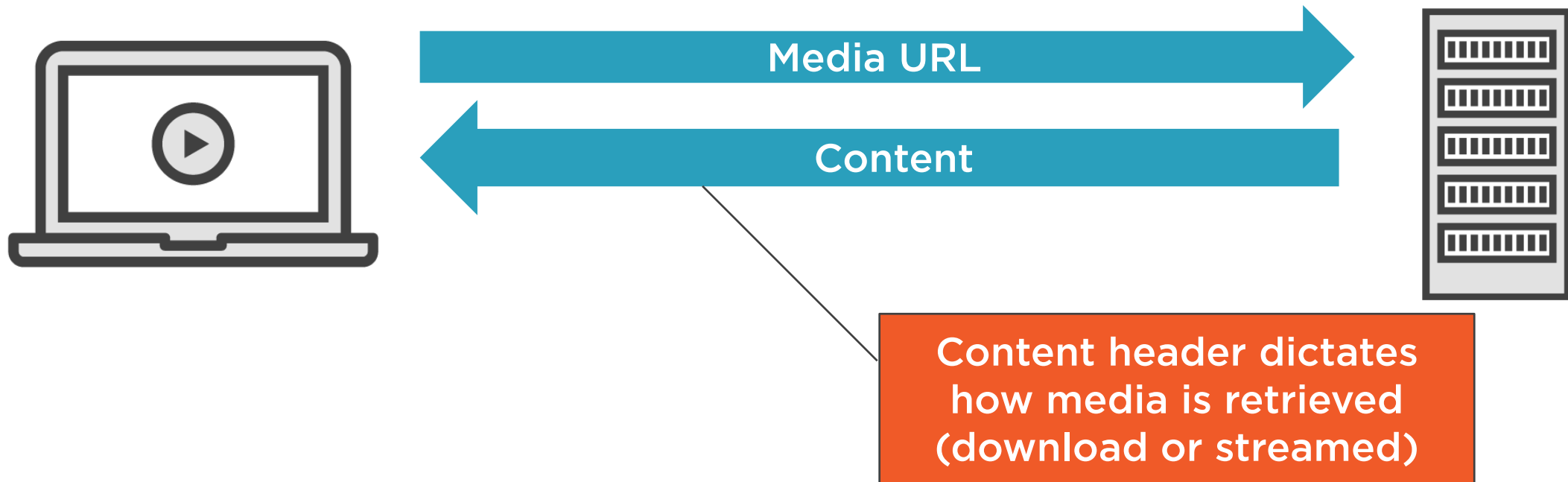
Demo



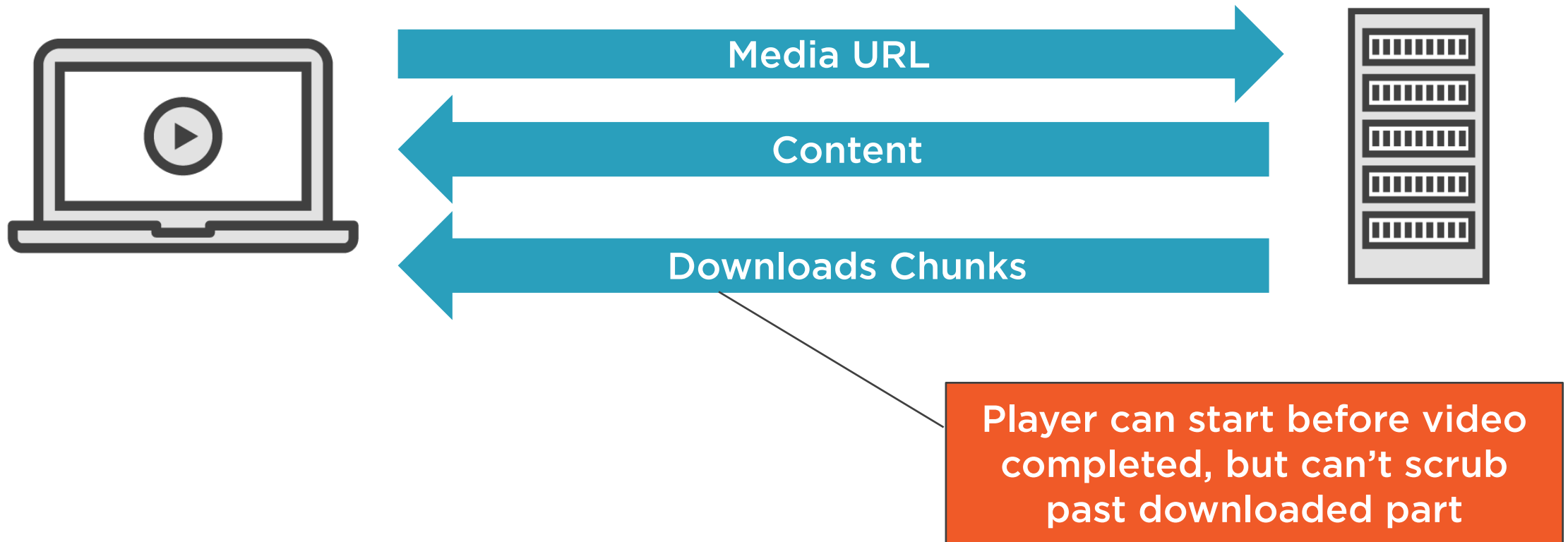
Using Different Video Types



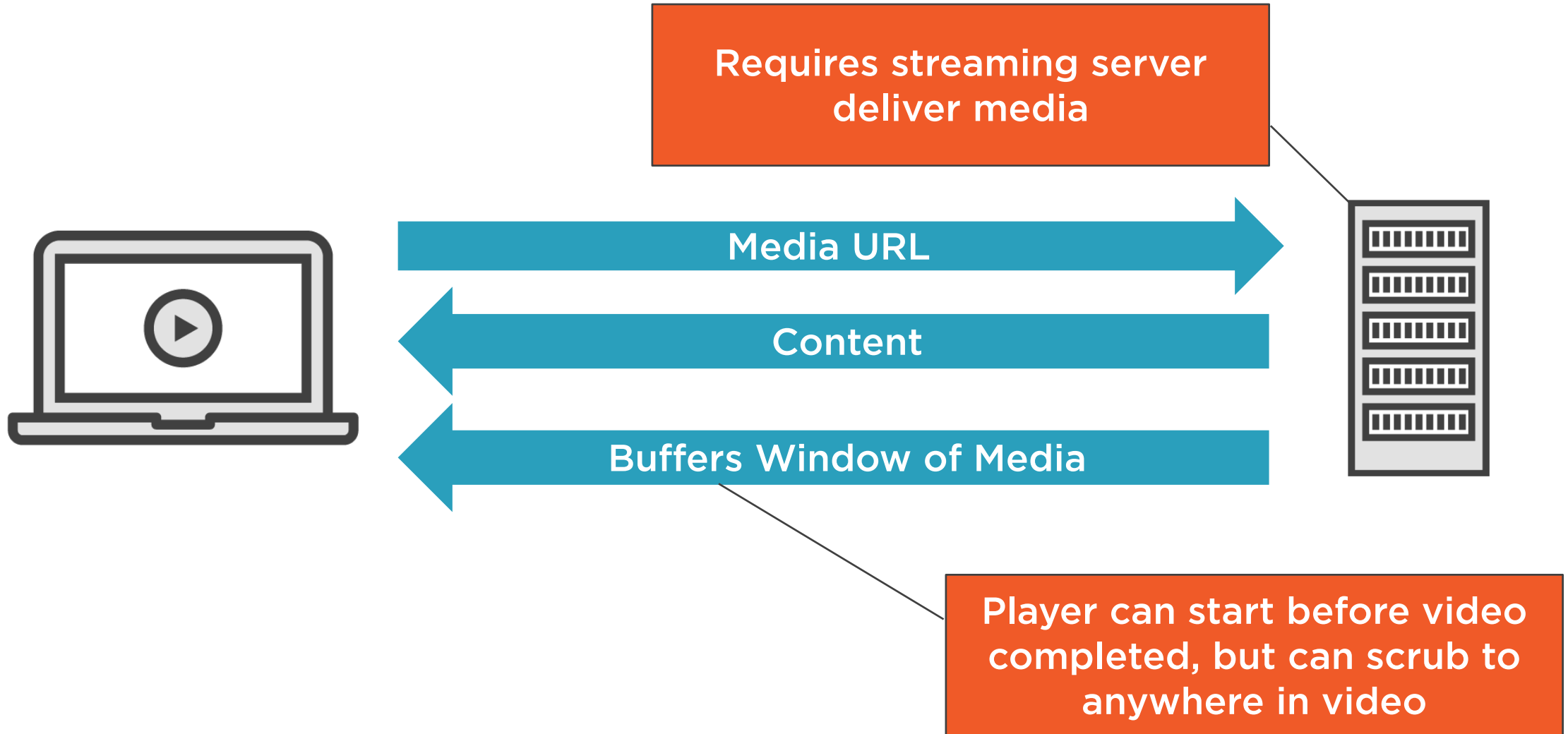
Delivering Media to the User



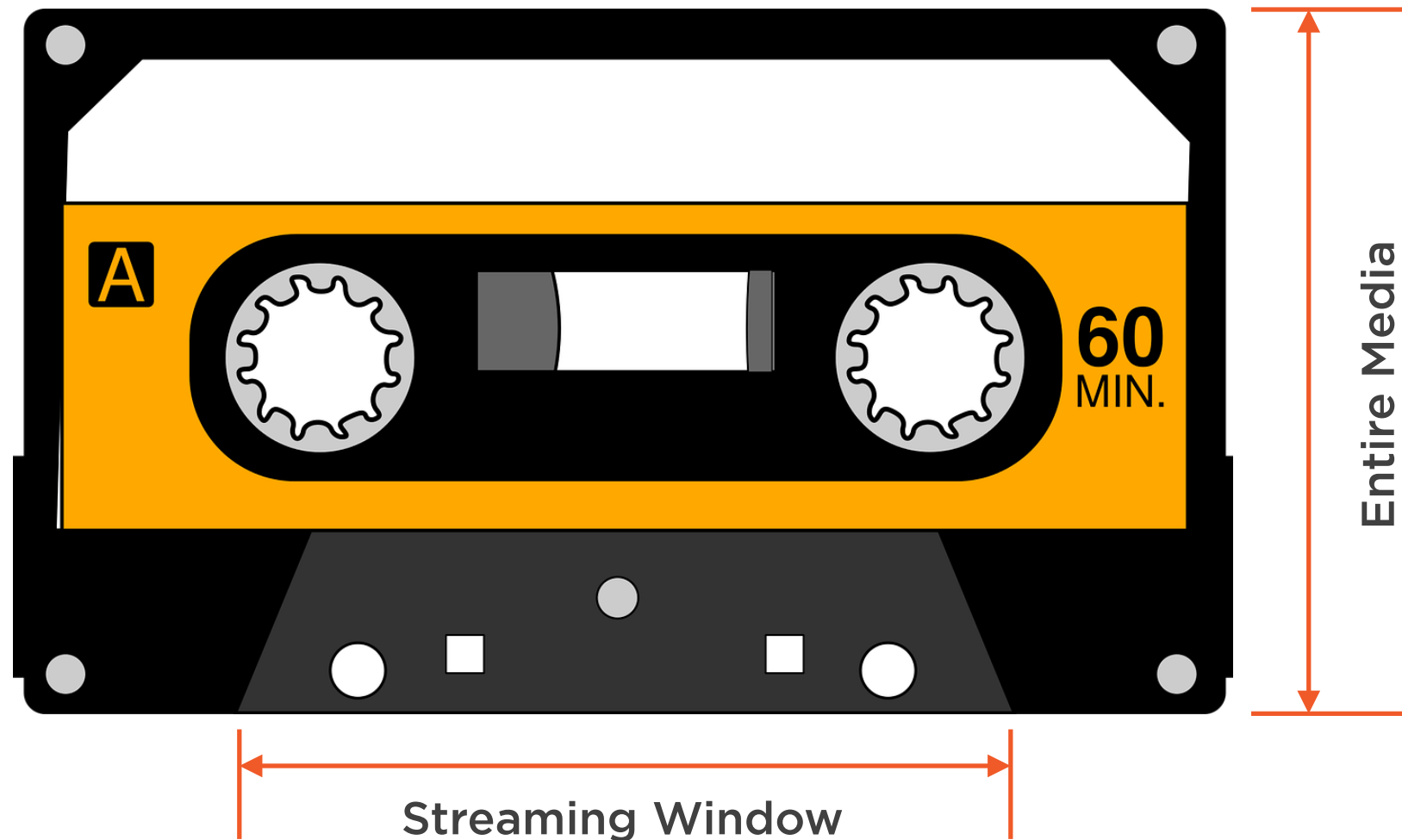
How Progressive Downloading Works



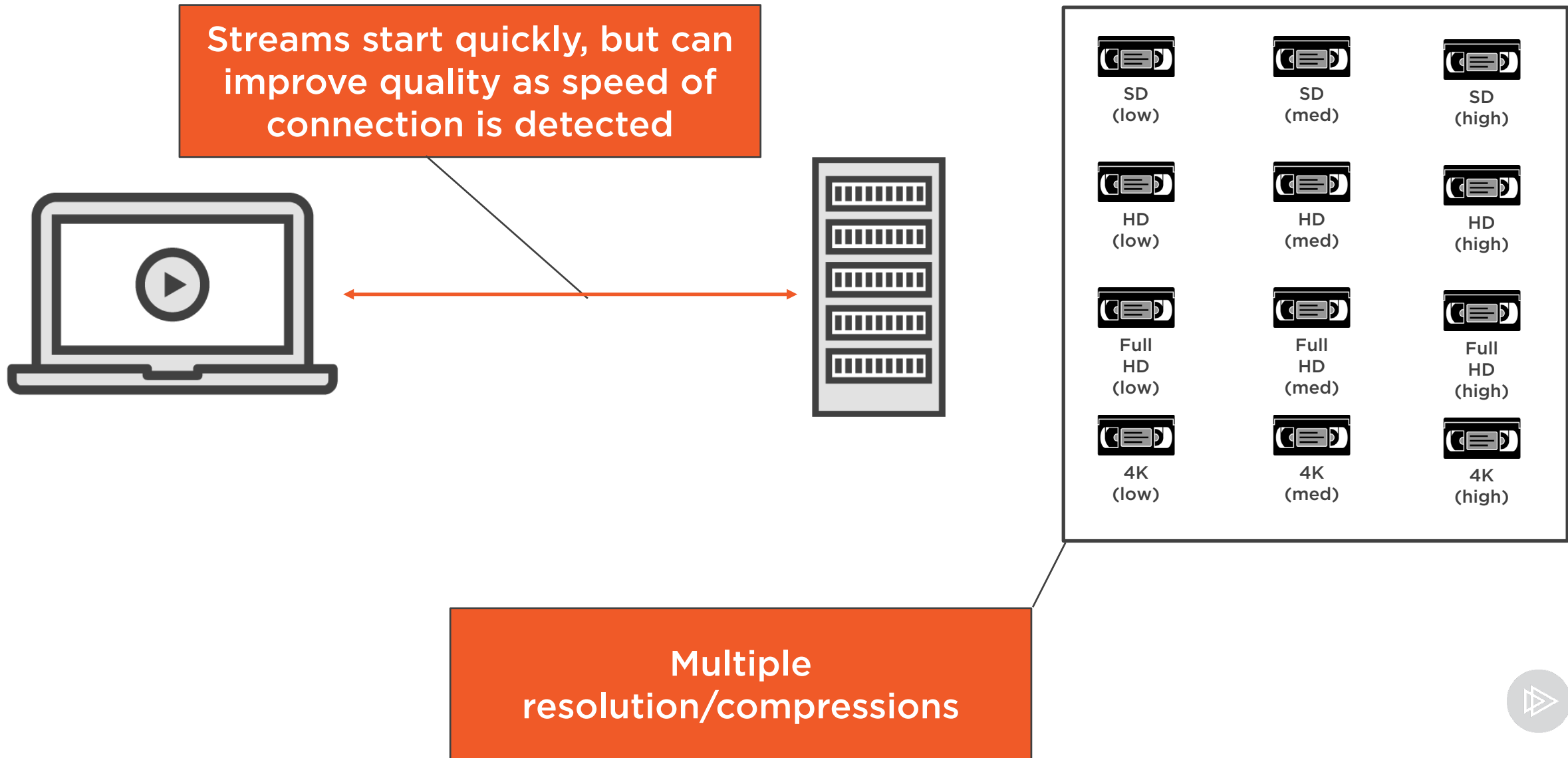
How Streaming Works



How Streaming Works



How Adaptive Streaming Works





Captioning

- Text overlays
- Often used for closed captioning
- Supports multiple languages



Demo



Using Captioning





Hosting on Public Websites

- You can use YouTube, Vimeo, etc.
- Low cost and handles streaming
- Doesn't protect your content



Demo



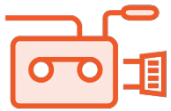
Embedding Video from Public Websites



What We've Learned



Video Codecs are the way in which video is delivered



Understand how video is delivered, you can choose the right way



Sometimes just relying on third parties is the right choice too



Coming Up Next:

Using JavaScript to Control Media

