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# Real-Time Communications with Microsoft Edge

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 Windows 10



# Edge Realtime Platform (Current Status)

<https://developer.microsoft.com/en-us/microsoft-edge/platform/status/>

 ASM.js	SUPPORTED	Build Number 10532+ 
 Async Functions	SUPPORTED	Build Number 14986+ 
 Canvas	SUPPORTED	Build Number 10240+ 
 H.264/AVC for RTC	SUPPORTED	Build Number 15019+ 
 HTTP/2	SUPPORTED	Build Number 10240+ 
 HTTP/2 Server Push	SUPPORTED	Build Number 10240+ 
 HTTP Live Streaming (HLS)	SUPPORTED	Build Number 10240+ 
 HTTP Strict Transport Security (HSTS)	SUPPORTED	Build Number 10240+ 
 Media Capture and Streams	SUPPORTED	Build Number 10240+ 
 Opus Audio Playback	SUPPORTED	Build Number 14316+ 



# Edge Realtime Platform (Current Status, Cont'd)

<https://developer.microsoft.com/en-us/microsoft-edge/platform/status/>

 Screen Capture	SUPPORTED	Build Number 17134+ 
 Streams API: ReadableStream	SUPPORTED	Build Number 16299+ 
 Streams API: WritableStream	SUPPORTED	Build Number 16299+ 
 TLS 1.2	SUPPORTED	Build Number 10240+ 
 VP8 for RTC	SUPPORTED	Build Number 15019+ 
 VP9 Video Playback	SUPPORTED	Build Number 14291+ 
 Web Audio API	SUPPORTED	Build Number 10240+ 
 WebGL (Canvas 3D)	PREFIXED	Build Number 10240+ 
 WebM Container	SUPPORTED	Build Number 14291+ 

# Edge Realtime Platform (Current Status, Cont'd)

<https://developer.microsoft.com/en-us/microsoft-edge/platform/status/>

	Web Notifications	SUPPORTED	Build Number 14342+ 
	WebRTC – Object RTC API	SUPPORTED	Build Number 10547+ 
	WebRTC – WebRTC v1.0 API	SUPPORTED	Build Number 15019+ 
	WebSocket	SUPPORTED	Build Number 10240+ 
	Web Speech API (synthesis)	SUPPORTED	Build Number 14316+ 
	WebVR	SUPPORTED	Build Number 15002+ 

# Edge Realtime Platform (Roadmap)

<https://developer.microsoft.com/en-us/microsoft-edge/platform/status/>

 Audio Output Devices API	UNDER CONSIDERATION	
 Media Capture from Canvas	UNDER CONSIDERATION	
 Media Capture from HTML Media Element	UNDER CONSIDERATION	
 MediaRecorder	UNDER CONSIDERATION	★ 931 Votes
 OGG Container	IN DEVELOPMENT	★ 6190 Votes
 RTC Data Channels	UNDER CONSIDERATION	★ 3361 Votes
 TLS 1.3	IN DEVELOPMENT	★ 257 Votes
 Web Speech API (Speech Recognition)	UNDER CONSIDERATION	★ 1029 Votes

# Screen Capture in Edge

- In the 2018 Creator's Update, Edge is the first browser to support the W3C Screen Capture API, which enables screen capture without plugins, extensions or whitelists.
- Specification: <https://w3c.github.io/mediacapture-screen-share/>
- [Promise](#)<MediaStream> `getDisplayMedia(optional MediaStreamConstraints constraints);`
- Returns a MediaStream with only a video MediaStreamTrack (no audio)
- *Constraints* does not influence the selection.
- Example:

```
var constraints = {
  video: true
};

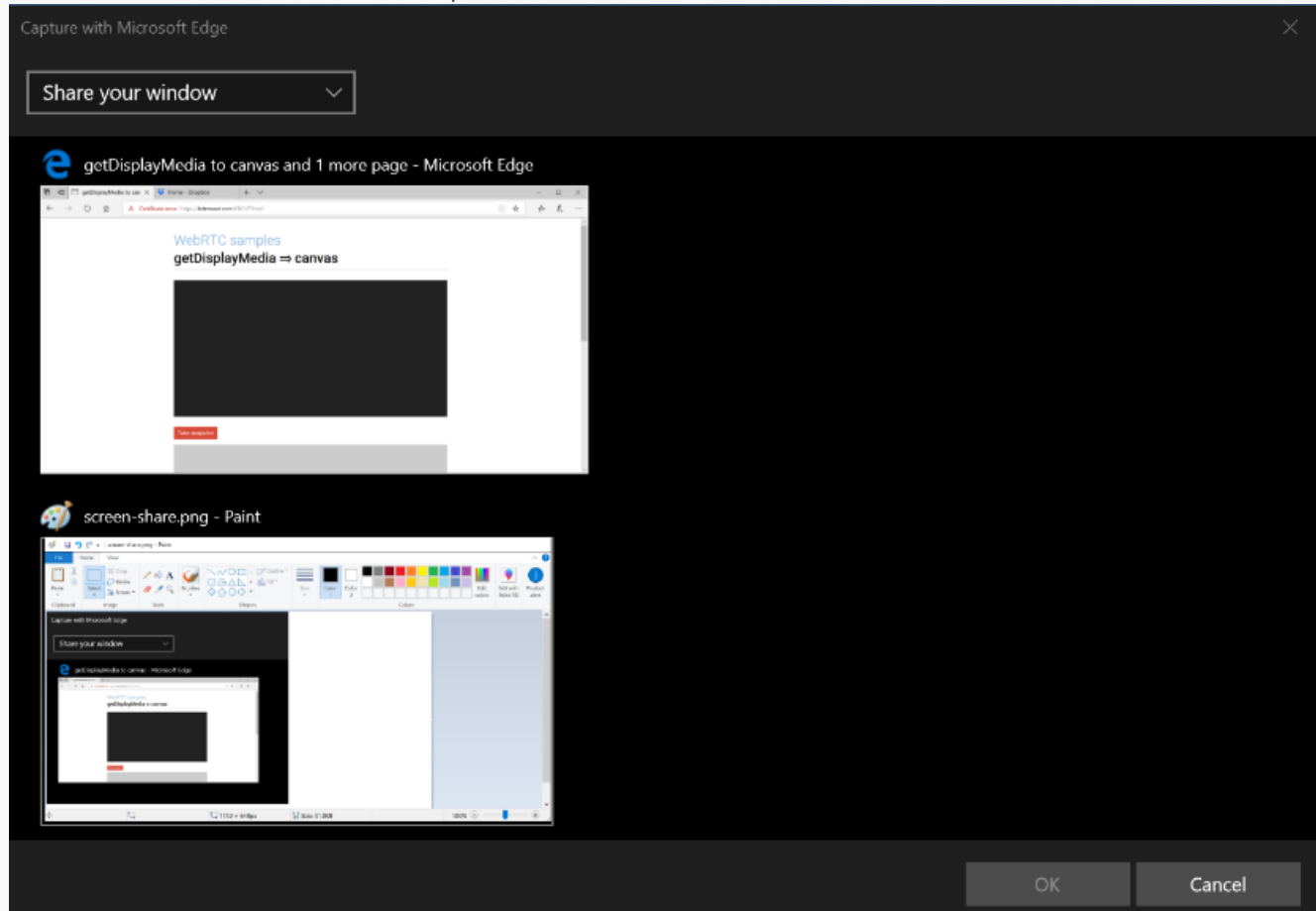
function handleSuccess(stream) {
  video.srcObject = stream;
}

function handleError(error) {
  console.log('navigator.getDisplayMedia error: ', error);
}

navigator.getDisplayMedia(constraints).
  then(handleSuccess).catch(handleError);
```

# Screen Capture in Edge (cont'd)

- While being captured, the chosen application or display will have a yellow border drawn around it which is not included in the capture frame.
- Application windows being captured will return black frames while minimized (though they will still be enumerated in the picker); if the window is restored, rendering will resume.



For more information: <https://blogs.windows.com/msedgedev/2018/05/02/bringing-screen-capture-to-microsoft-edge-media-capture-api/#R8UCK3MuRBzU1vAh.97>



Questions?