

Windows WebView2 Plugin

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MS Edge WebView2

- A web content rendering engine for Windows
 - Analogous to CEF (Chromium Embedded Framework) and WPE (Web Platform for Embedded)
- System-wide installed runtime
 - WebView2 runtime is pre-installed on Windows 11
 - Most of Windows 10 devices have installed WebView2 runtime
- Zero-copy offscreen rendering is not supported
 - Designed for embedding web contents on UI
 - <https://github.com/MicrosoftEdge/WebView2Feedback/issues/547>

GStreamer webview2src Element

- (MSVC only) Cerbero/Monorepo build support
 - WebView2 SDK (NuGet package) will be automatically downloaded
- Offscreen rendering
 - Renders web content to hidden HWND via WinRT **UI.Composition** API
 - Reads back surface by using **Windows Graphics Capture API**
- GStreamer D3D11/12 integrated
 - Similar capture flow to d3d{11,12}screencapture element
- Audio capture – not supported
 - WebView2 mixes/feeds audio to audio device directly
 - Audio will be muted by GStreamer webview2 plugin

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- Navigation event support
 - Mouse events such as click/double-click, drag are supported
 - d3d11videosink and d3d12videosink can support double-click user event
 - Key events – Not implemented
- JavaScript injection via “javascript” property
 - Ex) Hide scrollbars and disable scrolling:
`gst-launch-1.0.exe webview2src location=https://gstreamer.freedesktop.org \`
`javascript="document.querySelector('body').style.overflow='hidden'" ! ...`

Thank you