



# Building Hybrid Applications with VAST and WebView2

**Mariano Martinez Peck**  
Sr. Software Engineer

✉ [mpeck@instantiations.com](mailto:mpeck@instantiations.com)

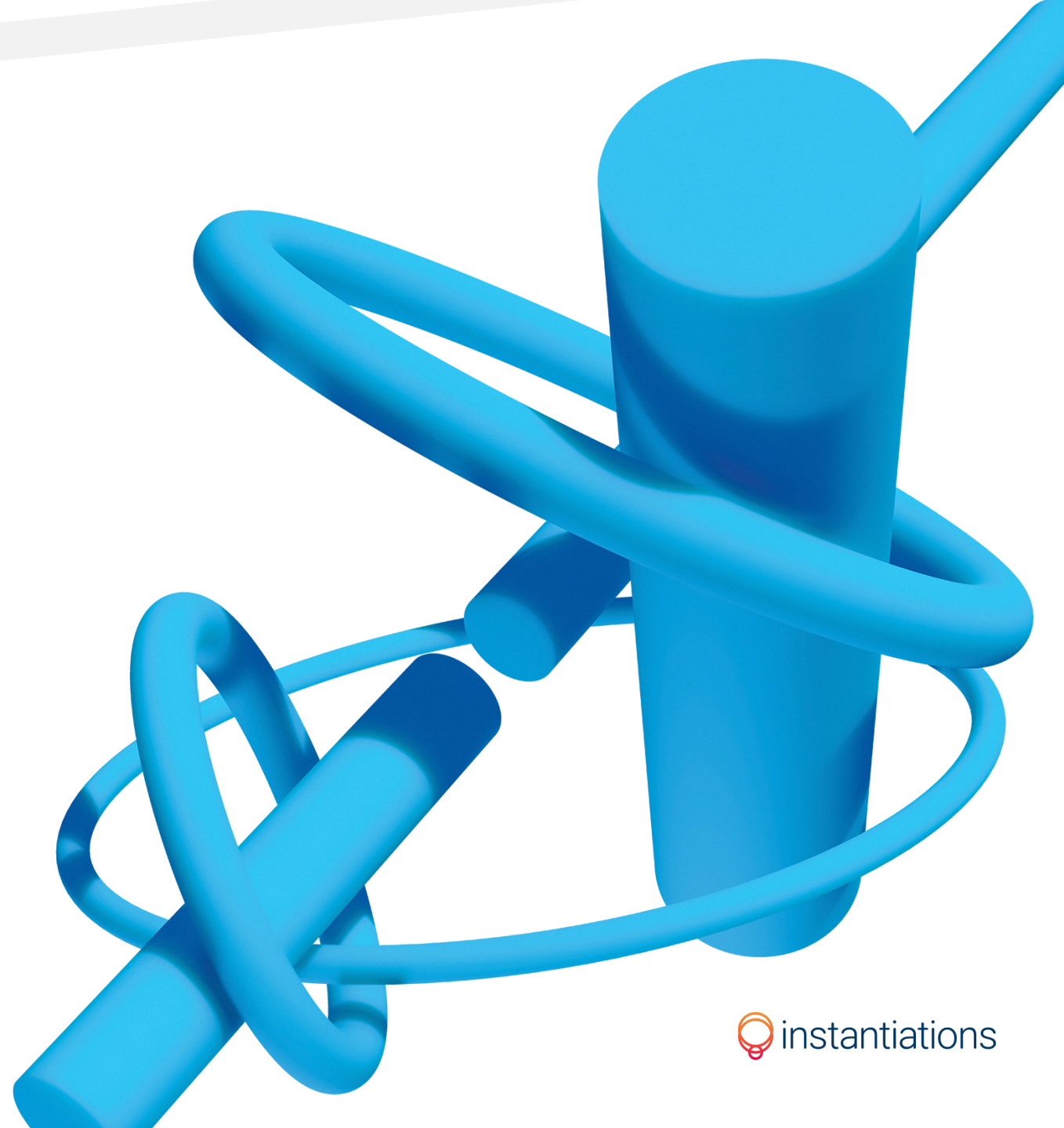
🐦 [@MartinezPeck](https://twitter.com/MartinezPeck)

🌐 [/in/mariano-martinez-peck](https://www.linkedin.com/in/mariano-martinez-peck)



# Agenda

- A little bit of history...
- WebView2
- Hybrid applications
- Demos
- Q&A



**A little bit of history...**

# How it started

- The browser was Internet Explorer (IE) back then
- Users would normally embed simple web pages into native apps
  - Using IE OLE controls
- VAST already provided support for OLE



# How it is going

- On February 2023, IE was permanently disabled
- The supported browser is now Edge (Chromium)
- Users now embed complex web content into native apps
  - Using new Edge WebView2 framework
- **New VAST WebView2 integration through OLE (Coming to VAST 2024!)**

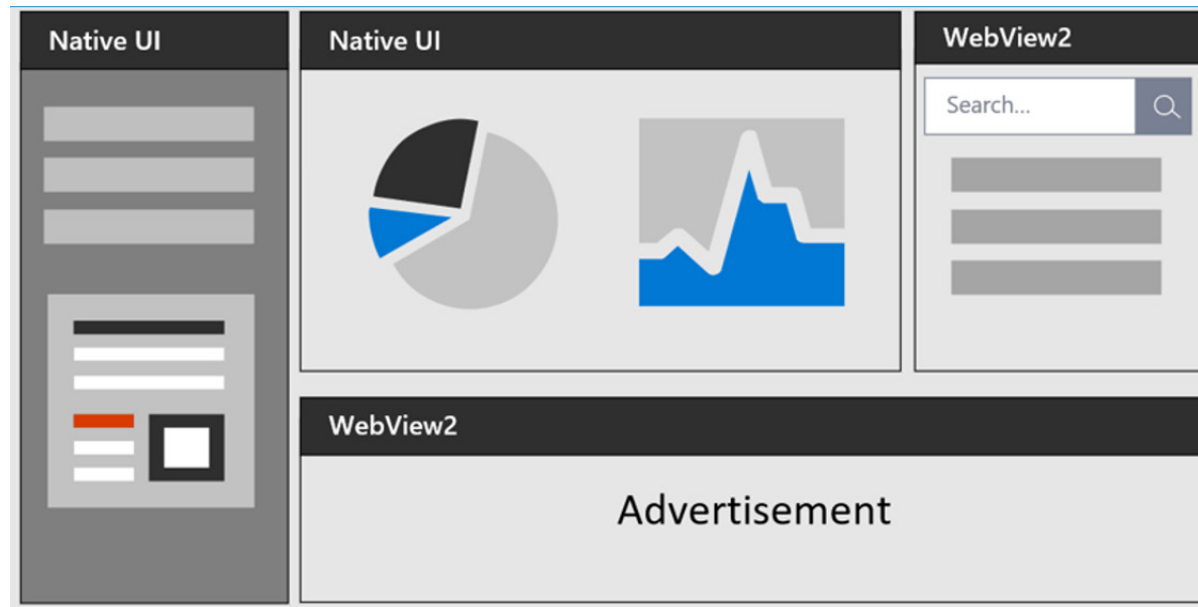




# WebView2

# What is WebView2

- A framework to embed web content (HTML, CSS, and JavaScript) in native applications



<https://learn.microsoft.com/en-us/microsoft-edge/webview2/>



# But, technically speaking...WebView2

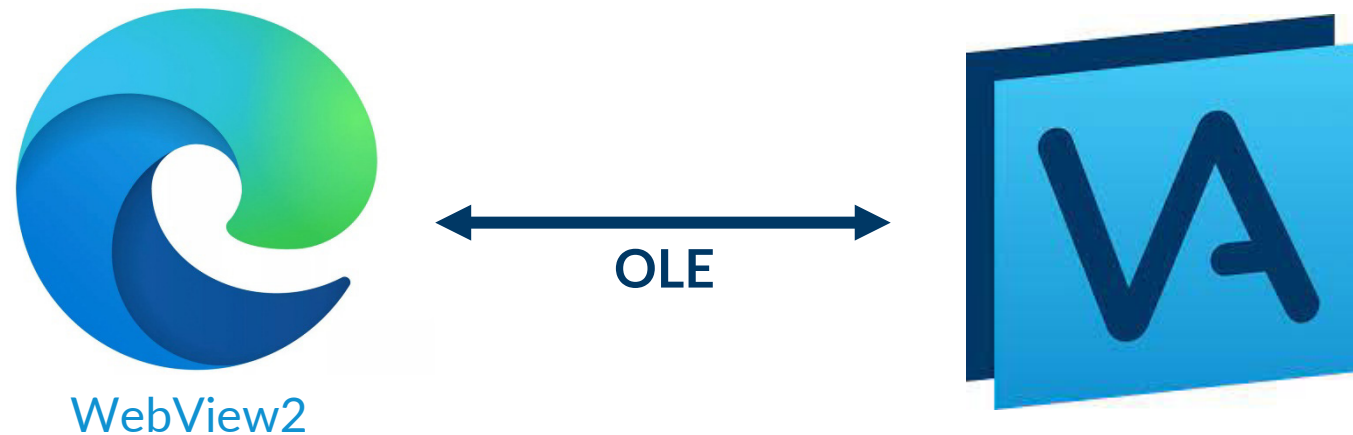
- Uses Edge rendering engine
- Provides an OLE interface
- Needs a WebView2 Runtime (stripped-down version of Edge) installed on client machine
- So far only works on Windows 10/11
  - Linux and MacOS on Microsoft's roadmap



WebView2

# WebView2 integration in VAST

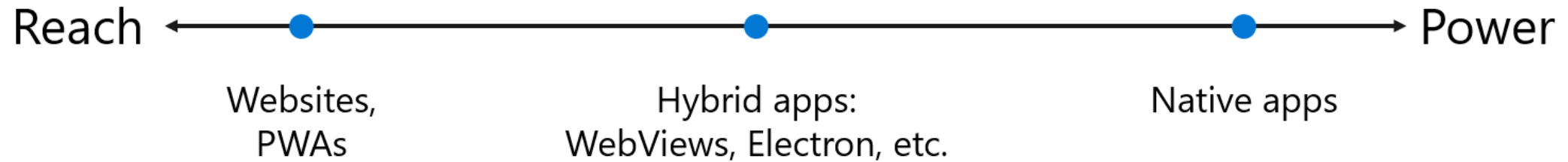
- Uses OLE
- Allows bi-directional communication between Smalltalk and Javascript
  - Invoke JS functions from Smalltalk
  - Map Smalltalk messages to JS functions
  - Handle JS events in Smalltalk



# Hybrid applications

# What is a hybrid application?

- No need to decide between a native app or web app
- Re-use existing libraries, tools etc. from both worlds
- Incremental adoption of web technologies in existing native apps



<https://learn.microsoft.com/en-us/microsoft-edge/webview2/>

# Hybrid applications status

- There are other examples of hybrid apps even before WebView2
  - Electron, Chromium Embedded Framework (CEF), Tauri, among others
- Microsoft is already adopting WebView2 usage
  - Office 365, Teams, OneDrive, etc.

Demos!



A close-up shot of Morpheus from the movie The Matrix. He is bald, wearing dark sunglasses, and has a serious, intense expression. The background is blurred. The text is overlaid on the image in a bold, white, sans-serif font with a black outline.

**WHAT IF I TOLD YOU**

**YOU HAVE BEEN LIVING IN  
THE DEMO SINCE THE BEGINNING**

# Questions?

Thanks for attending!

**Mariano Martinez Peck**  
Sr. Software Engineer

✉ [mpeck@instantiations.com](mailto:mpeck@instantiations.com)

🐦 [@MartinezPeck](https://twitter.com/MartinezPeck)

🌐 [/in/mariano-martinez-peck](https://www.linkedin.com/in/mariano-martinez-peck)

## Contact

General Inquiry  
[info@instantiations.com](mailto:info@instantiations.com)

Sales  
[sales@instantiations.com](mailto:sales@instantiations.com)

Support  
[vast-support@instantiations.com](mailto:vast-support@instantiations.com)

North America, Toll Free  
**855 476 2558**

International  
**+1 503 263 0058**