Building Diagram Frame Web Part

using the SPFx framework for better experience embedding Visio diagrams on modern pages

Nikolay Belykh

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About me

- Independent Software Developer/Consultant (Vienna)
- Former MVP (Visio, Office & services)

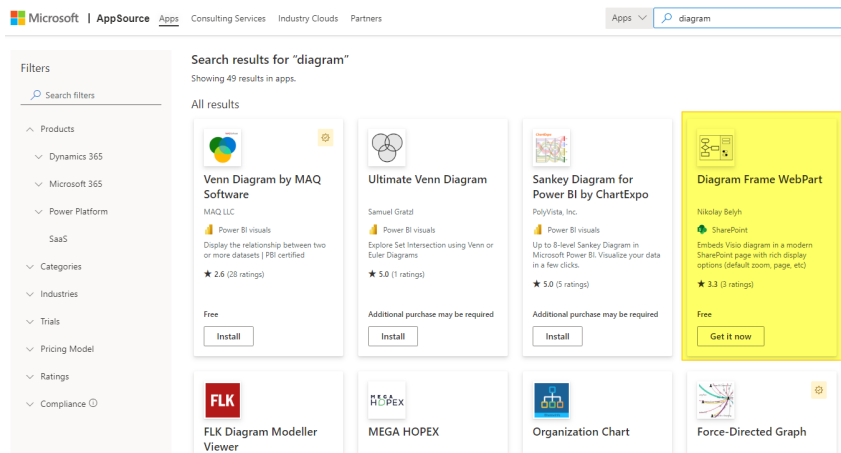https://unmanagedvisio.com

GitHub   nbelyh

Stack Overflow nbelyh

LinkedIn   nbelyh

VS Marketplace Nikolay Belykh

VisPlan

Overview

- ▶ Motivation: replacing classic Visio diagram web part
- ▶ Demo
- ▶ Hosting Visio Online API, wrapping office.js (code)
- ▶ Using FluentUI and SPFx controls for UI (code)
- ▶ Using Azure DevOps for build, SPFx localization extension for translation
- ▶ Submitting to the AppSource store, ISV portal, procedure and feedback
- ▶ Thank you (links)

Diagram Frame in Microsoft AppSource store

- Open-source web part published to the public AppSource store

- Available for any organization to install using the store UI

- Can be also installed "manually" by direct admin upload to app catalog

Motivation: Classic Visio web part and Diagram Frame web part

Visio Online API

- Allows Embedding Visio diagram in your app
- Provides basic methods for controlling the frame content and manipulating the diagram
- The diagram is embedded as an IFRAME
- Available as npm package(@microsoft/office-js @types/office-js)
- https://learn.microsoft.com/en-us/office/dev/add-ins/reference/overview/visio-javascript-reference-overview

Code overview, libraries used

- Project created using @microsoft/sharepoint yo webpart generator

- SPFx framework 1.15 (typescript, react)

- pnp-js (for convenient access to SharePoint)

- Fluent UI 8 (basic UI and adapt to the site theme)

- SPFx controls react (https://pnp.github.io/sp-dev-fx-controls-react)

  - Placeholder

  - File Picker (adapted)

- Custom property control implementation sample

"Infrastructure" tools used

▶ Azure DevOps (public pipeline, free for starter and open-source projects) connected to GitHub
https://dev.azure.com/unmanagedvisio/UV-GitHub-Public/_build?definitionId=18&_a=summary

▶ GitHub releases plugin

▶ SPFx localization extension (translating UI to other languages). CSV/XLSX file support by Elio Struyf:
https://marketplace.visualstudio.com/items?itemName=eliostruyf.vscode-spfx-localization

Publishing to the AppSource

▶ Need to register in Microsoft partner center

▶ The app is submitted via partner portal

▶ EULA, Privacy policies are important

▶ Review and testing loop took a few weeks (free)

▶ Many thanks to SPFx submission team for the guidance.

▶ https://learn.microsoft.com/en-us/sharepoint/dev/spfx/publish-to-marketplace-overview

Thank you

- Web Part GitHub repository:
- https://github.com/nbelyh/VisioOnlineSpfxWebPart
- App Source store:
- https://appsource.microsoft.com/en-us/product/office/wa200002491
- Web part website:
- https://unmanagedvisio.com/products/diagram-frame-sharepoint-visio-web-part

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