



ESRI DEVELOPER WORKSHOP 2022



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ArcGIS Experience Builder



May 13, 2022 | Tallink Spa & Conference Hotel | Sadama 7, Tallinn
<https://arcg.is/37GjtSR>

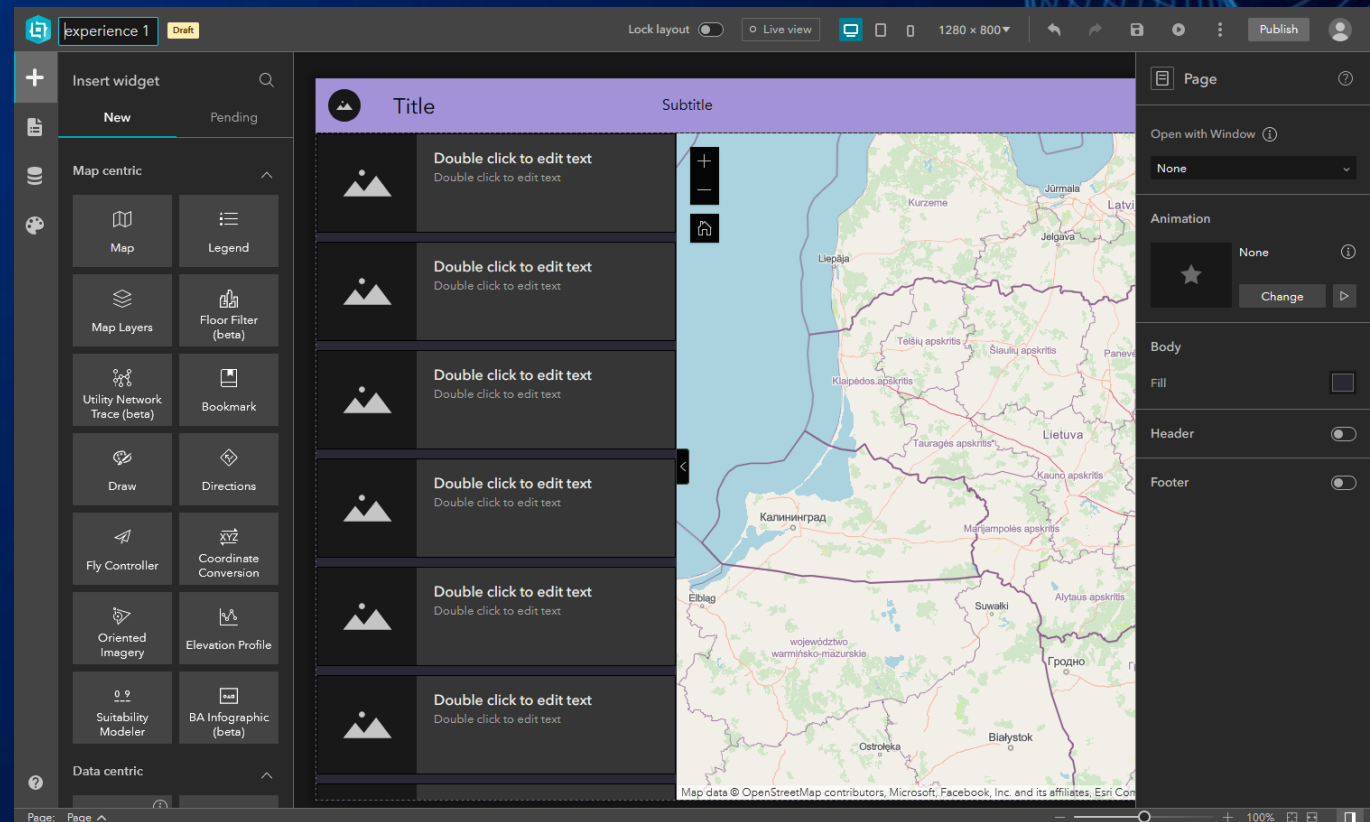
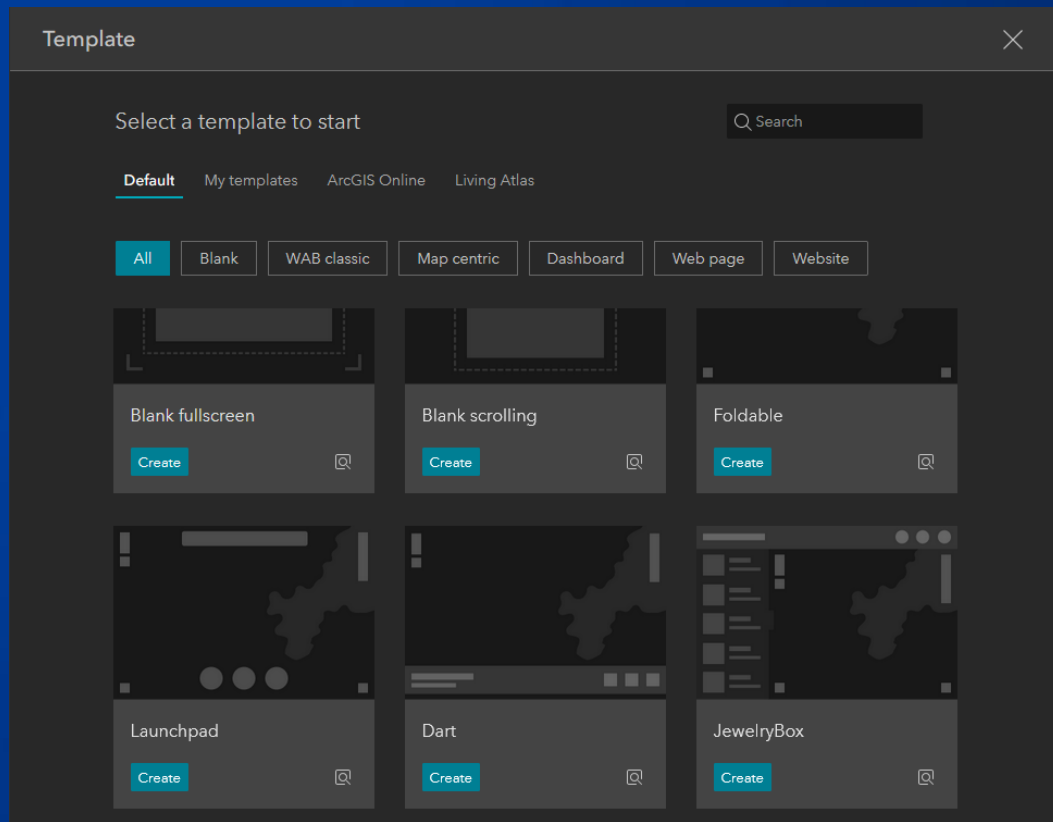


Agenda

- Installing
- High level concept
- Extending Experience builder with Widgets



ArcGIS Experience Builder










<https://developers.arcgis.com/experience-builder/>



ArcGIS Experience Builder Developer Edition

Version 1.8 · April 2022

 <h3>Get started</h3> <p>Instructions to install ArcGIS Experience Builder.</p>			 <p>Download the SDK</p>	 <p>Install the SDK</p>
<h3>Guide</h3> <p>Learn how to create widgets, themes, data sources, and message actions.</p>	<h3>Sample Code</h3> <p>Get code samples to extend Experience Builder.</p>	<h3>API Reference</h3> <p>Documentation for Experience Builder classes, methods, and properties.</p>	 <p>License</p>	 <p>Key Features</p>
			 <p>Developer Overview</p>	 <p>What's New</p>

<https://developers.arcgis.com/experience-builder/>






Download

ArcGIS Experience Builder

Latest release

v1.8 - April 13, 2022

Type	Size	SHA256 checksum	
Download	22.4 MB	d92fef91c40905e34f2d53d2aafc65c0d9d5015a8eabbeccc716d82f9d22530d	 arcgis-experience-builder-1.8.zip
Node cache	186 MB	df7fad3db389c6030bfd703667d449bd268b321fd099fa7da8cde37626f65029	 exb-1.8-node_modules-cache.zip
Documentation	19.9 MB	3abcf7a6c026eb0e4b2ef220d177daa1f303a178a717ca5af91638bf5e3c65ed	 experience-builder-docs-1.8.zip



Install

```
cmd npm ci
C:\ArcGISExperienceBuilder\server>npm ci
npm WARN old lockfile
npm WARN old lockfile The package-lock.json file was created with an old version of npm,
npm WARN old lockfile so supplemental metadata must be fetched from the registry.
npm WARN old lockfile This is a one-time fix-up, please be patient...
```

```
cmd npm ci
C:\ArcGISExperienceBuilder\client>npm ci
npm WARN old lockfile
npm WARN old lockfile The package-lock.json file was created with an old version of npm,
npm WARN old lockfile so supplemental metadata must be fetched from the registry.
npm WARN old lockfile This is a one-time fix-up, please be patient...
npm WARN deprecated @types/bson@1.0.0: This is a stub definition for bson@4.0.0.
npm WARN deprecated @types/mongodb@3.6.20: This is a stub definition for mongodb@4.0.0.
[redacted] - reify:@types/mongodb@3.6.20: sill inflate node_modules/jest-serializer
```




Run

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.22000.613]
(c) Microsoft Corporation. All rights reserved.

C:\Users\rkraujutis>cd C:\ArcGISExperienceBuilder\server

C:\ArcGISExperienceBuilder\server>npm start

> exb-server@0.1.0 start
> cross-env NODE_ENV=production node src/server

Apps folder: C:\ArcGISExperienceBuilder\server\public\apps
Http server running on port 3000
Https server running on port 3001
```

```
C:\ArcGISExperienceBuilder\client>npm start

> exb-client@1.8.0 start
> cross-env NODE_ENV=development webpack --mode development --watch

(node:16344) [DEP0147] DeprecationWarning: In future versions of Node.js, fs.rmdir(path, { recursive: true }) will be removed. Use fs.rm(path, { recursive: true }) instead
(Use `node --trace-deprecation ...` to show where the warning was created)
Entrypoint widgets/simple/dist/runtime/widget 8.18 KiB = widgets/simple/dist/runtime/widget.js
webpack 5.69.1 compiled successfully in 992 ms
```




First run

Experience Builder System

https://localhost:3001/page/set-portalurl

Specify the URL to your ArcGIS Online organization or ArcGIS Enterprise

https://[redacted].gis.it/portal

Provide the Client ID for Experience Builder registered in the ArcGIS Enterprise you specify above

S[redacted]

Sign in

Experience Builder System

https://localhost:3001

ArcGIS Experience Builder (Developer Edition)

Experiences Templates

Recent experiences

Import Create new

Search

Owned by me Last modified

Create your first experience

Click + Create new to start a new experience



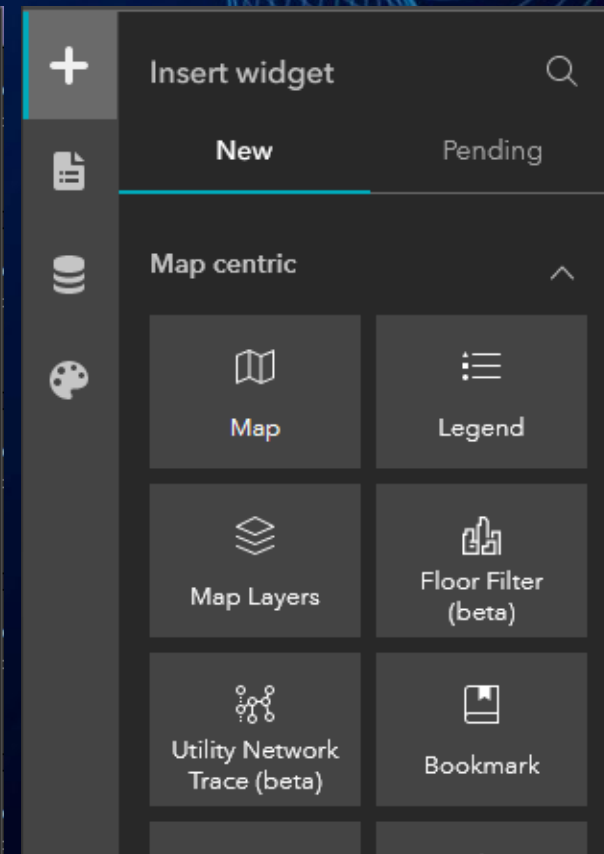
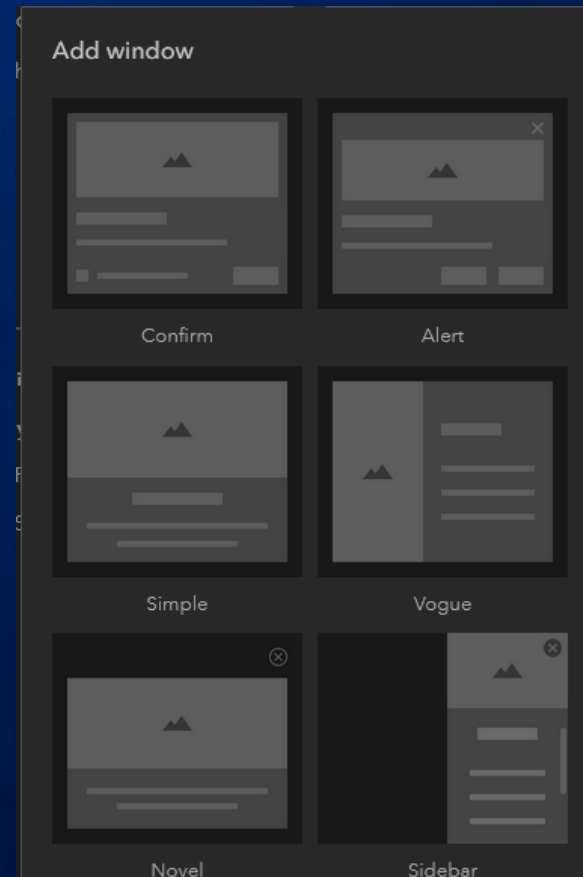
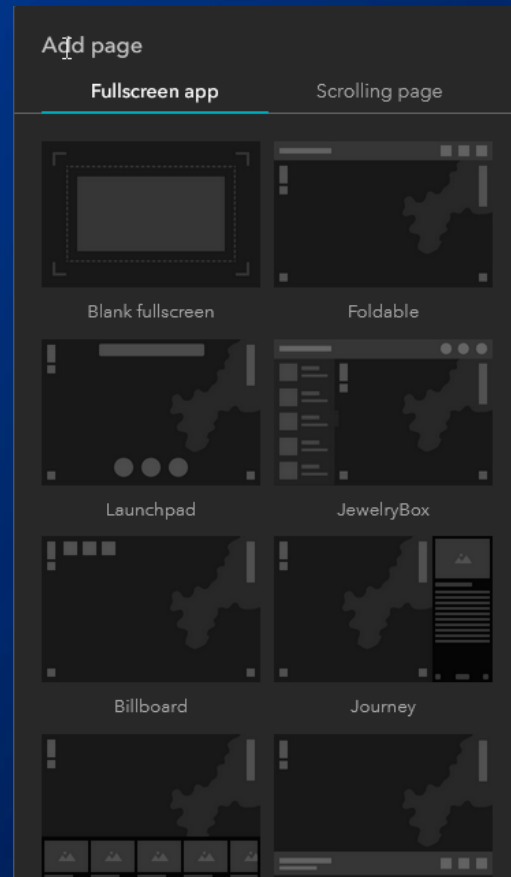
Core concepts

- Experience Builder's extensibility framework called jimmu, which is built on the following components:
 - ArcGIS API for JavaScript 4.x
 - React + Redux framework
 - Bootstrap 4 for user interface
 - HTML5



Application parts

- Page
- Window
- Section and view
- Screen group
- Layout
- Theme
- Widget
- Jimu
- Data source
- Data action
- Message and action
- Map/Scene view





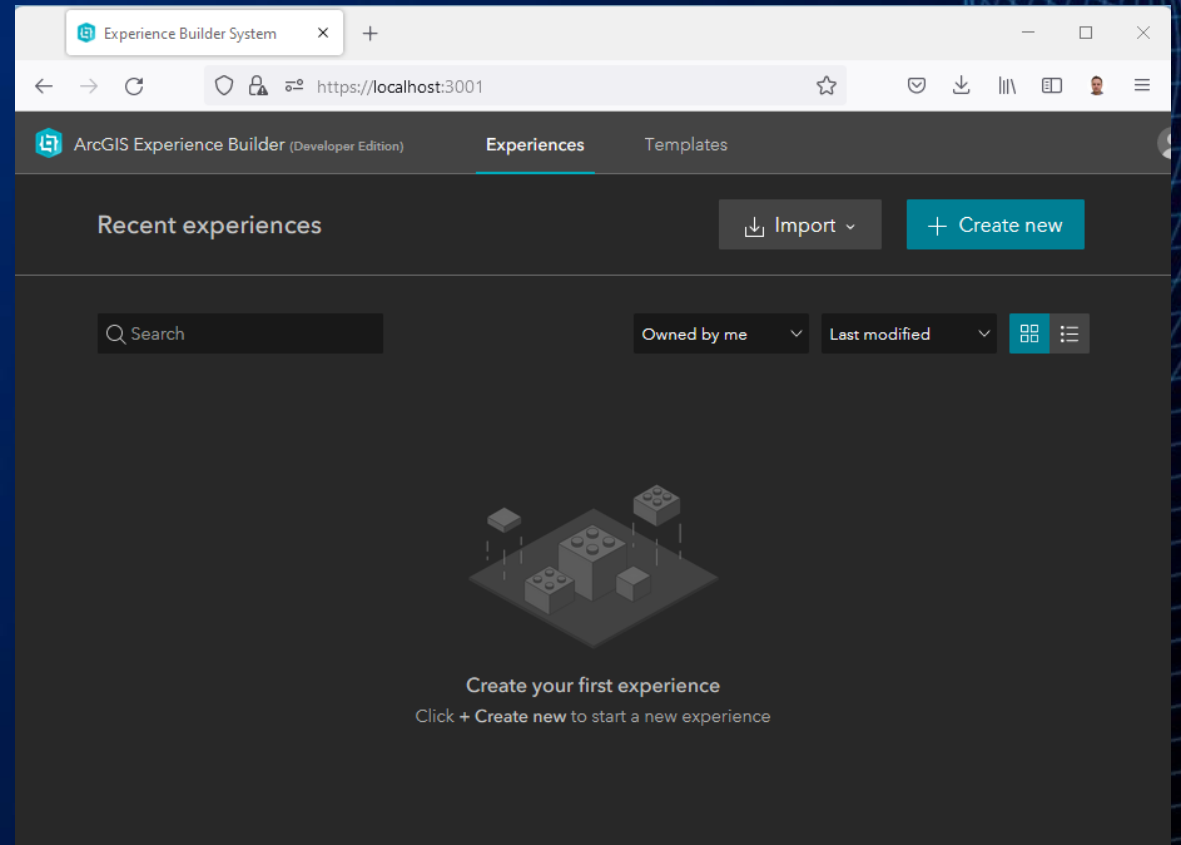
Widget structure

- manifest.json
- icon.svg
- config.json
- src
 - config.ts
 - runtime
 - widget.tsx
 - assets
 - translations
 - default.ts
 - setting – (optional)
 - setting.tsx
 - assets
 - translations
 - default.ts
- dist



Create first Widget

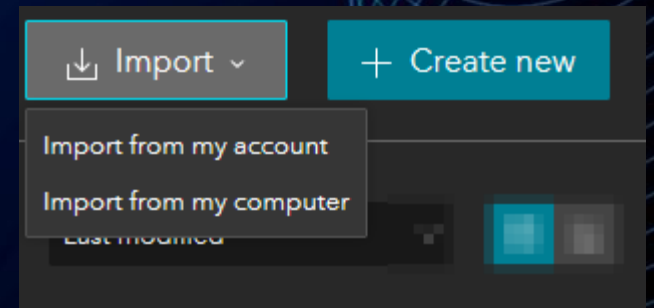
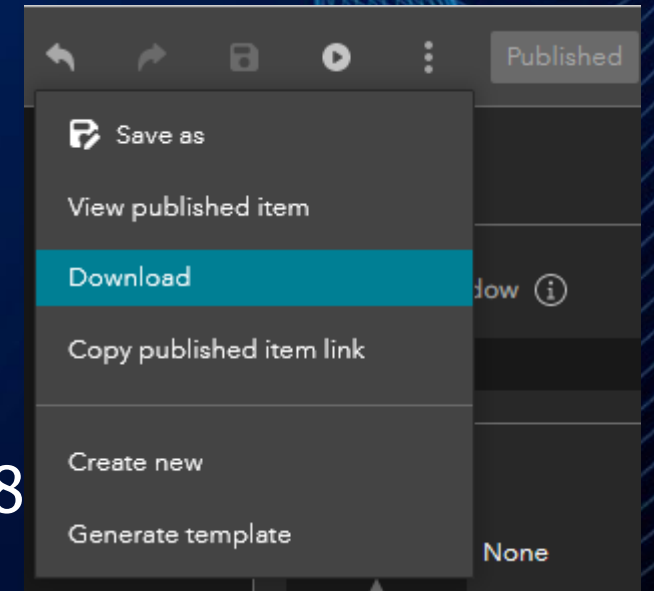
- DEMO





Export application

- Export application
- Import application
 - Usefull when upgrading (e.g. from 1.7 to 1.8)





Resources

- <https://developers.arcgis.com/experience-builder/>
- <https://github.com/Esri/arcgis-experience-builder-sdk-resources/>



Thank you

- Questions?