

# Experience Builder: Developer Edition

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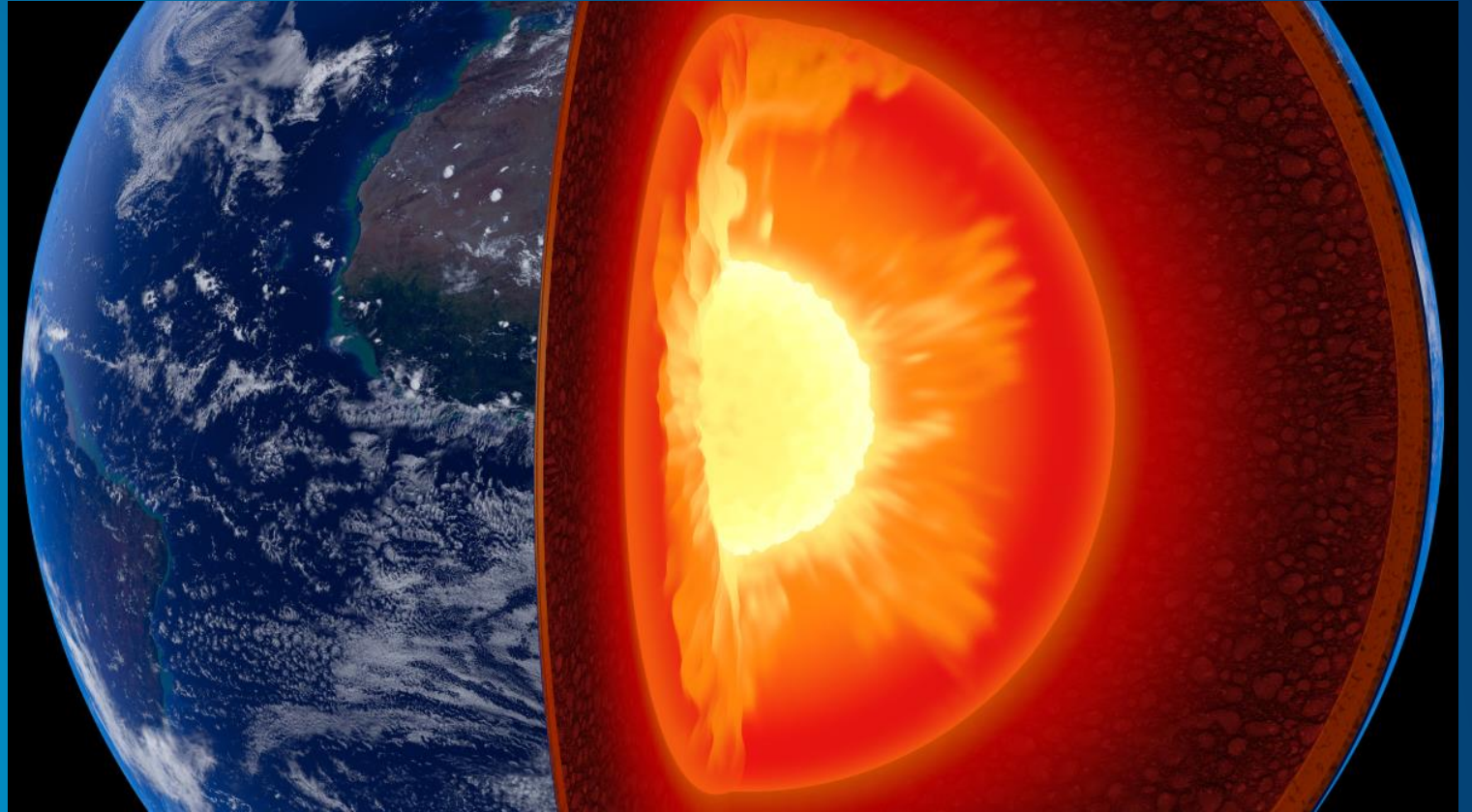
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# Agenda

- Core concepts
- Setup
- Widget development
  - Sample widget
  - `arcgis widget sample-exb-widget -t exb`
- Theme development
- Credentials
- Additional resources

# Core Concepts

- jimu
  - jimu-core
  - jimu-layouts
  - jimu-ui
  - jimu-arcgis
  - jimu-for-builder
- TypeScript
- Data source
- Map/Scene View
- Theme
- Widget
  - Message and Action



# Setup

- Install prerequisites (NodeJS)
- Download Experience Builder [Developer Edition](#)
- Setup New Application
- Unzip the files
- cd in **/server**
  - > npm ci
  - > npm start
- { setup first sample widget }
- cd in /client:
  - > npm ci
  - > npm start



# Widget Development

- Code demo 1)
  - Copy simple widget manually
- ALTERNATIVE!
  - arcgis-cli from root directory in client/
    - `> arcgis widget esri-ca-demo-widget -t exb`



## Widget Development continued

- Add widget to an experience
- Save/Publish
- Copy config:
  - server/src/public/apps/{#}/config.json
  - 
  - client/dist/experience/configs
- Load viewer:
  - <https://localhost:3001/experience?config=configs/config.json>

# Experience Builder and Web AppBuilder



gavinr commented on Mar 20 • edited ▾

Member



What about Experience Builder?

This Yeoman Generator for [Web AppBuilder](#) does two things:

1. It creates a Grunt-based build process for your widgets that watches your source code and every time you change it builds your TypeScript or ES6 code (using the TypeScript compiler or babel, respectively)) and copies it to the Web AppBuilder folder structure.
2. It generates all the files for a widget for you given a command ( `yo esri-appbuilder-js:widget` ).

For [Experience Builder](#), those are now accomplished <https://github.com/Esri/generator-esri-appbuilder-js/issues/158>

1. The build process for Experience Builder widgets now comes out-of-the-box in Developer Edition of Experience Builder. You simply run `npm start` within the `client` folder, and that will run a webpack task that will watch your code, build it (using webpack, TypeScript, and React), and make it available for use. [More info](#)
2. You can now generate all the files for an Experience Builder widget using the [arcgis-js-cli](#) project. See that link for detailed instructions, but the general instructions are:
  - i. `npm install -g @arcgis/cli`
  - ii. `cd C:\path\to\experience-builder\root\folder`
  - iii. `arcgis widget my-widget -t exb`

# Theme Development

Open `variables.json` and add your custom overrides such as:

```
{
  "colors": {
    "primary": "red"
  },
  "typography": {
    "fontFamilyBase": "Impact, Arial",
    "fontSizeBase": "1rem"
  }
}
```



```
import { css } from 'jimu-core';

// custom styles applied to the Button component from Jimu UI:
const customButtonStyles = (props) => {
  const theme = props.theme;
  const buttonType = props.type;
  return css`
    /* make the primary button's text to be bold and has a shadow */
    ${buttonType === 'primary' && `
      font-weight: ${theme.typography.weights.bold};
      box-shadow: ${theme.boxShadows.default};
    `}
  `;
}
```

```
// at the end of the style.ts file:
export { customButtonStyles as Button};
```

# References

- Experience Builder [guide](#)
- Arcgis-cli widget development [instructions](#)
- Enabling ExperienceBuilder DE to work with signed certs [blog](#)
- Additional [tutorials](#)
- Developer Primer: [React](#)
- Developer Primer: [TypeScript](#)
- [Community](#)
- Sample [code](#)
- Gavin Rehkemper [github](#)



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