Creating and Publishing Your Own Configurable Apps for Your Organization

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Kelly Hutchins

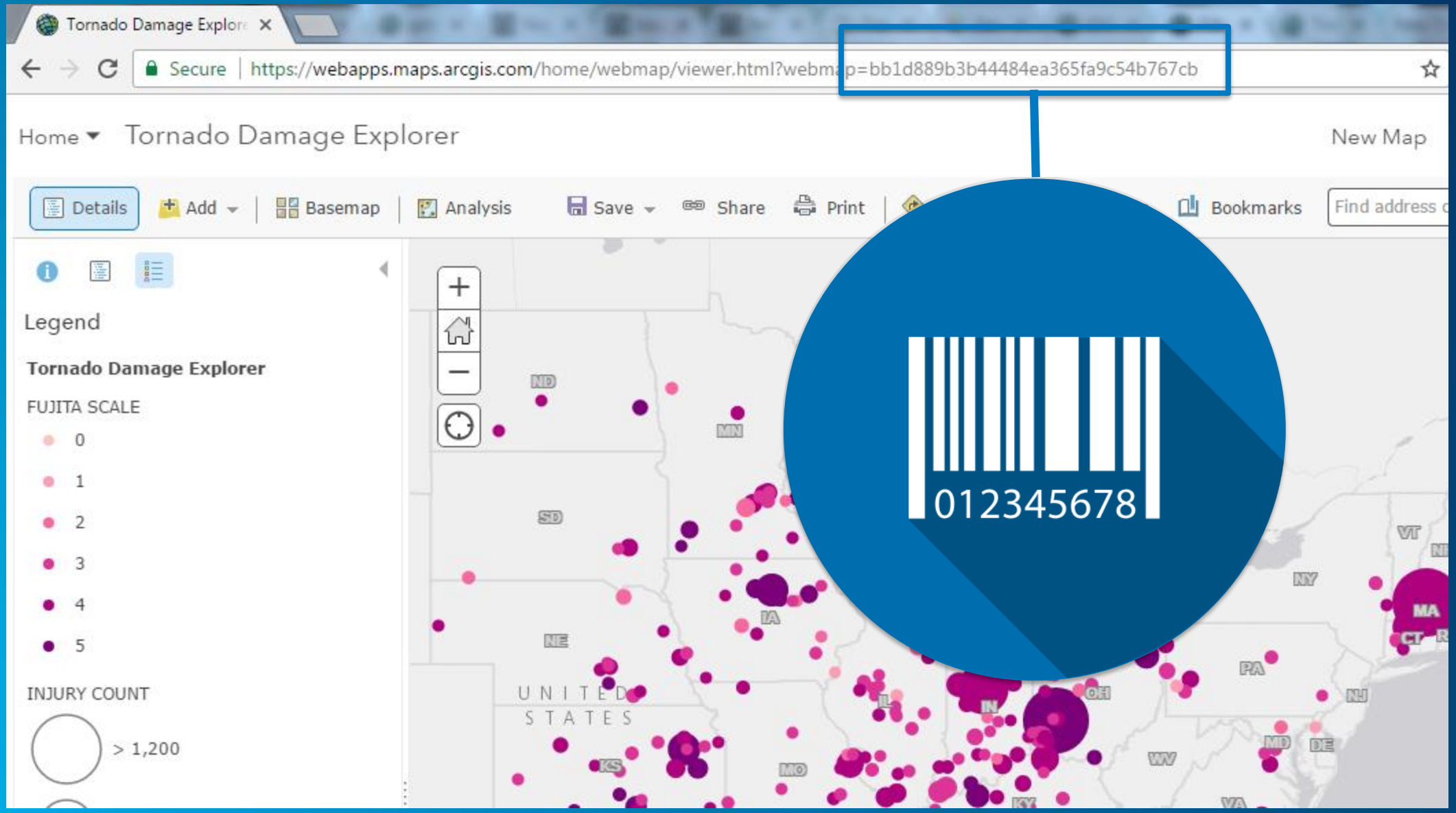
Content: Basic building block for Apps

Web Map

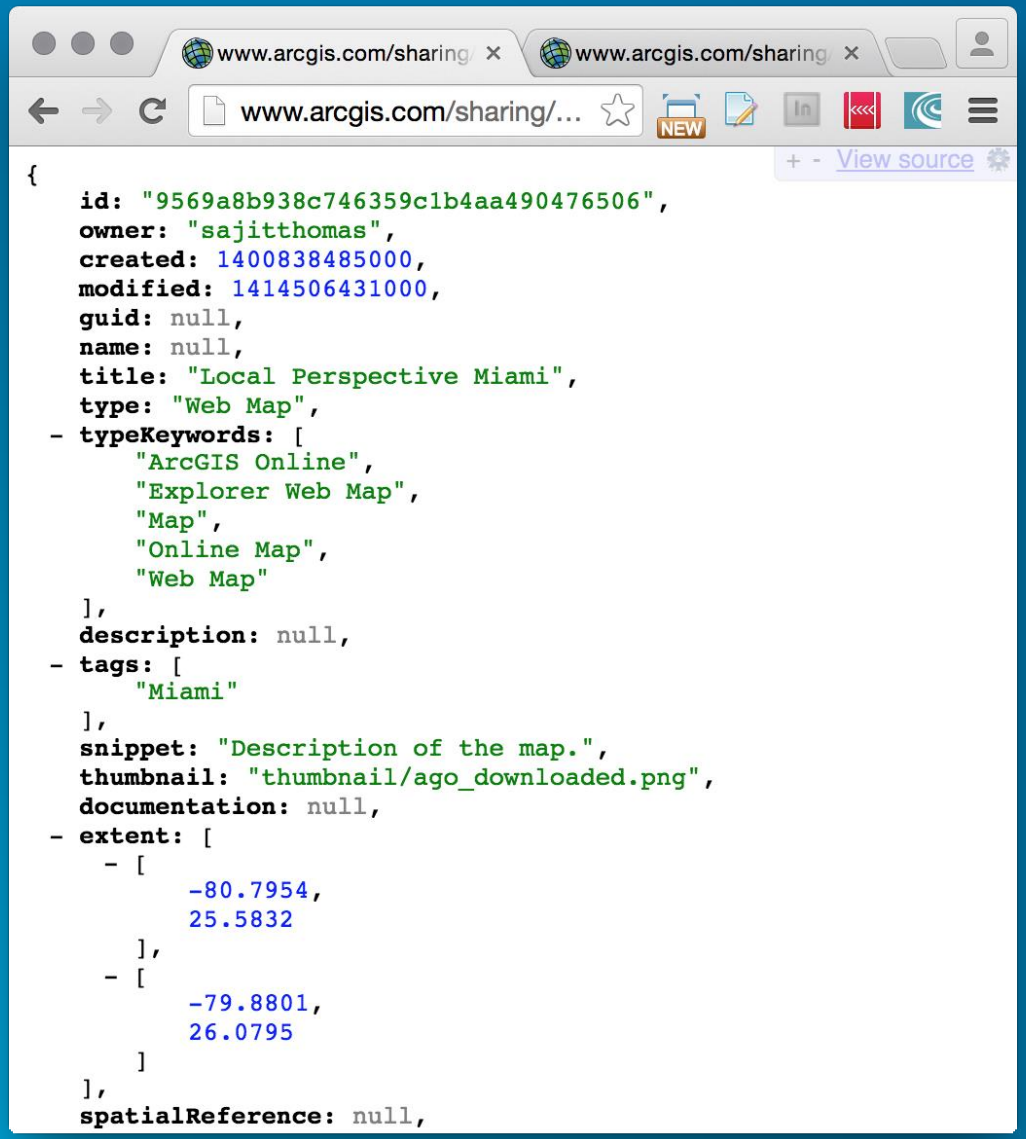
Web Scene

Group | Items

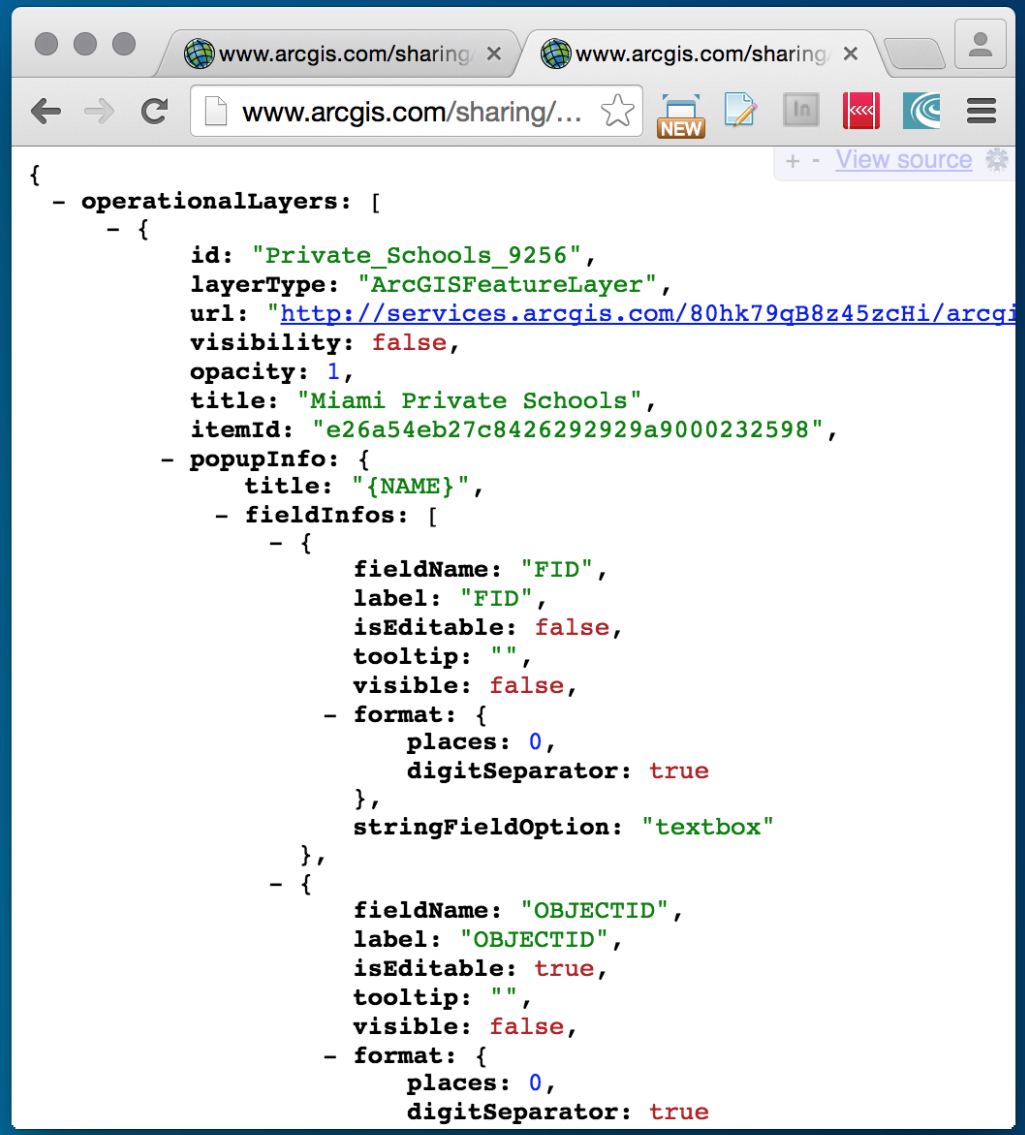
ID: Each item of content has a unique identifier



Web Maps/Web Scenes: JSON (Information + Data)

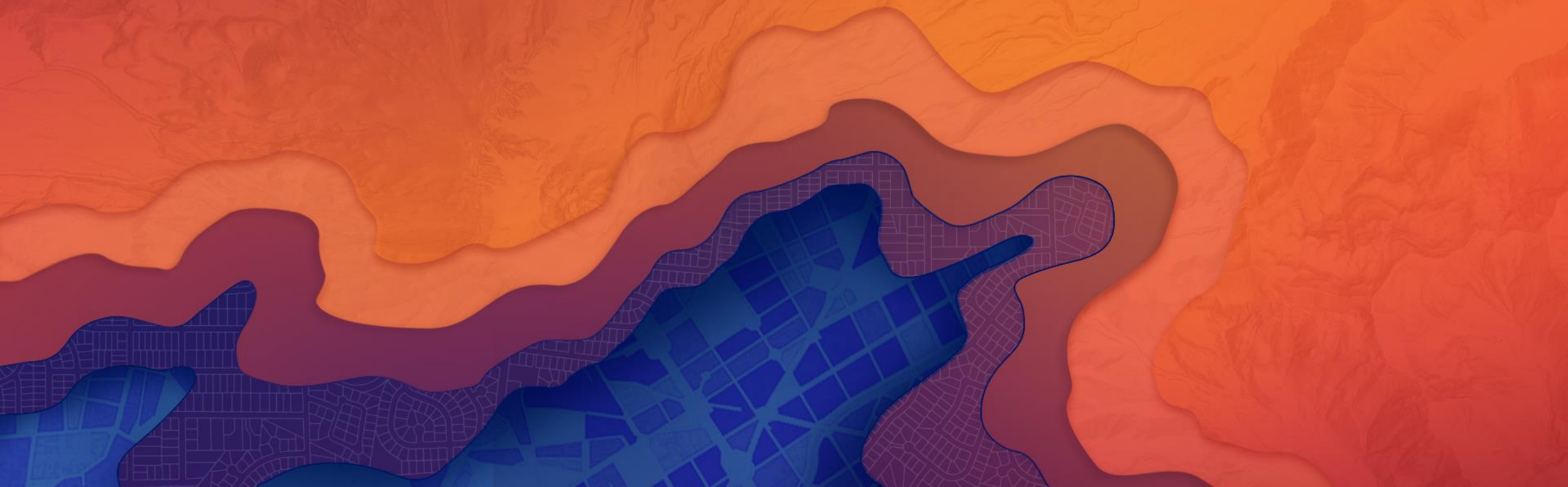



```
{
   id: "9569a8b938c746359c1b4aa490476506",
   owner: "sajitthomas",
   created: 1400838485000,
   modified: 1414506431000,
   guid: null,
   name: null,
   title: "Local Perspective Miami",
   type: "Web Map",
 - typeKeywords: [
       "ArcGIS Online",
       "Explorer Web Map",
       "Map",
       "Online Map",
       "Web Map"
   ],
   description: null,
 - tags: [
       "Miami"
   ],
   snippet: "Description of the map.",
   thumbnail: "thumbnail/ago_downloaded.png",
   documentation: null,
 - extent: [
     - [
           -80.7954,
           25.5832
       ],
     - [
           -79.8801,
           26.0795
       ]
   ],
   spatialReference: null,
```


```
{
 - operationalLayers: [
     - {
           id: "Private_Schools_9256",
           layerType: "ArcGISFeatureLayer",
           url: "http://services.arcgis.com/80hk79qB8z45zcHi/arcgi
           visibility: false,
           opacity: 1,
           title: "Miami Private Schools",
           itemId: "e26a54eb27c8426292929a9000232598",
         - popupInfo: {
               title: "{NAME}",
             - fieldInfos: [
                 - {
                       fieldName: "FID",
                       label: "FID",
                       isEditable: false,
                       tooltip: "",
                       visible: false,
                     - format: {
                           places: 0,
                           digitSeparator: true
                       },
                       stringFieldOption: "textbox"
                   },
                 - {
                       fieldName: "OBJECTID",
                       label: "OBJECTID",
                       isEditable: true,
                       tooltip: "",
                       visible: false,
                     - format: {
                           places: 0,
                           digitSeparator: true
```

Built-in configurable apps

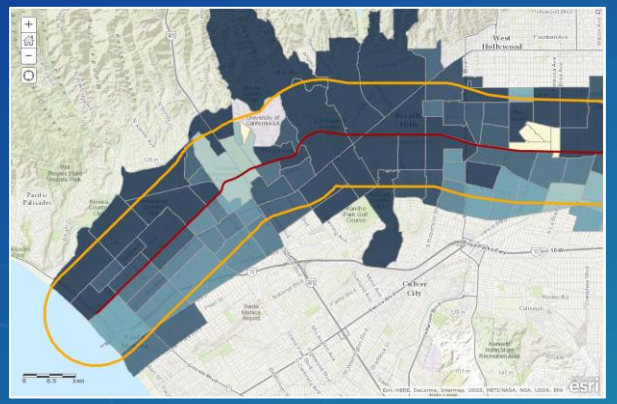


What are configurable apps?

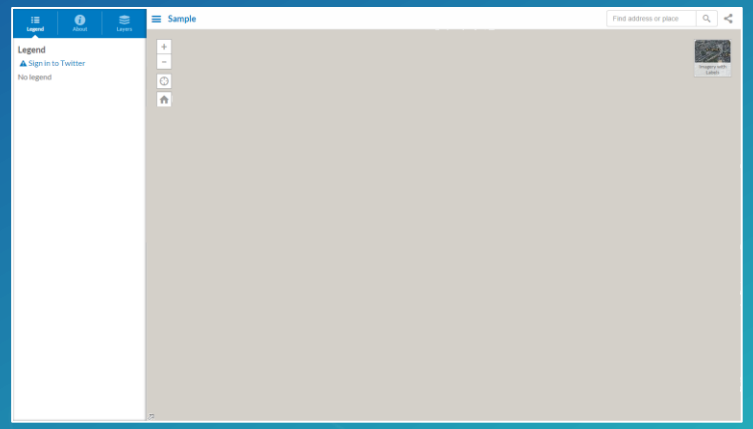
- Hosted apps maintained by Esri in the cloud
- Designed for you to *configure* – no programming needed
- Fastest and easiest way to go from a map to a shareable app
- Work with different types of content

Apps are the user experience

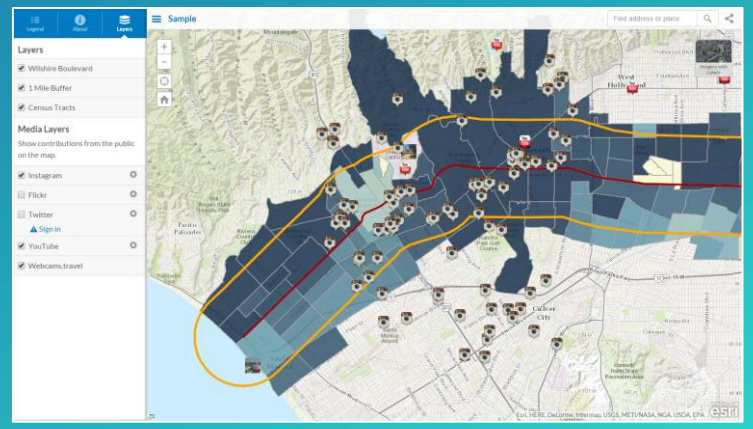
- Present map information and tools in meaningful ways
- Configure to reach target audience
- Support workflows and workforce tasks



Map



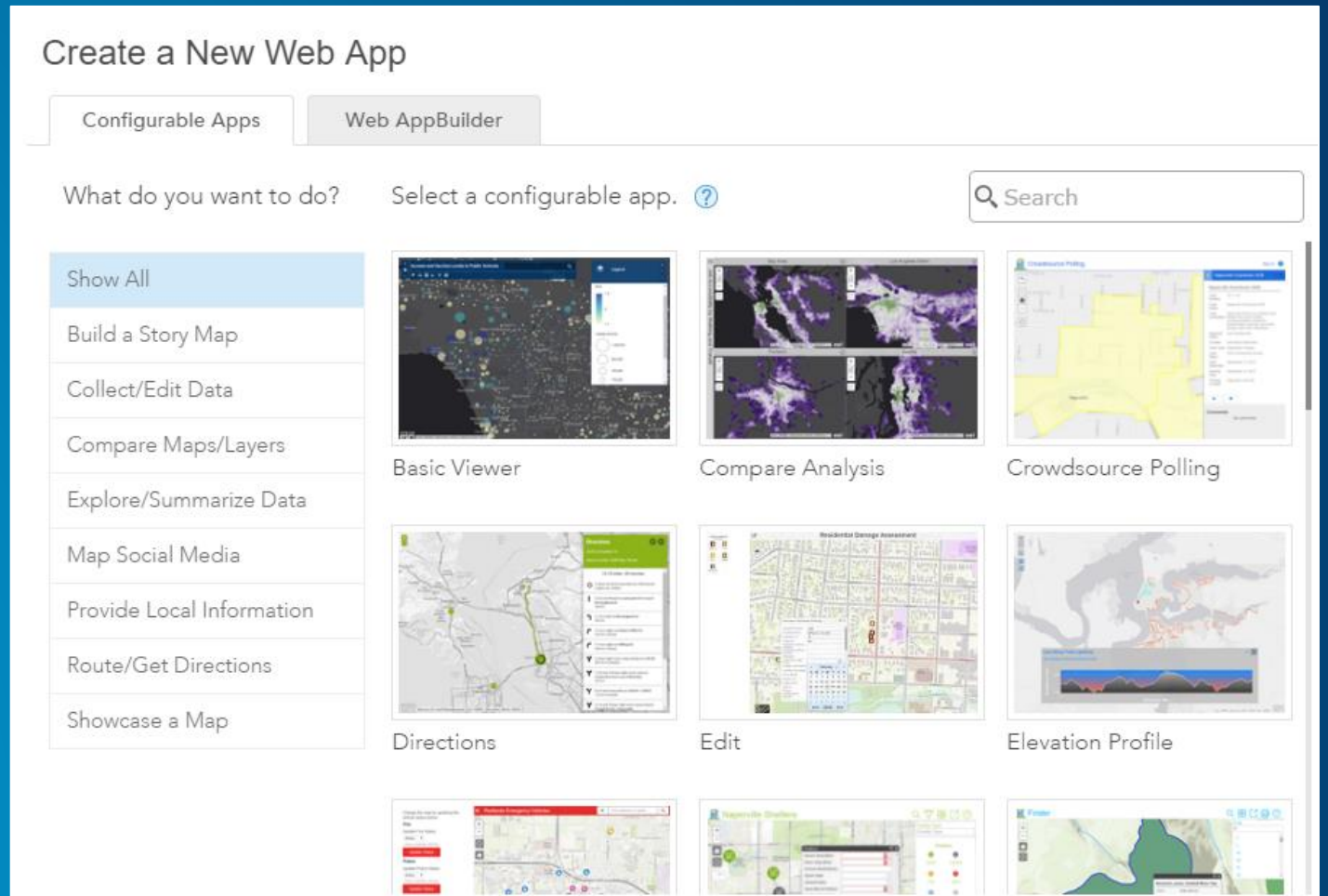
App template



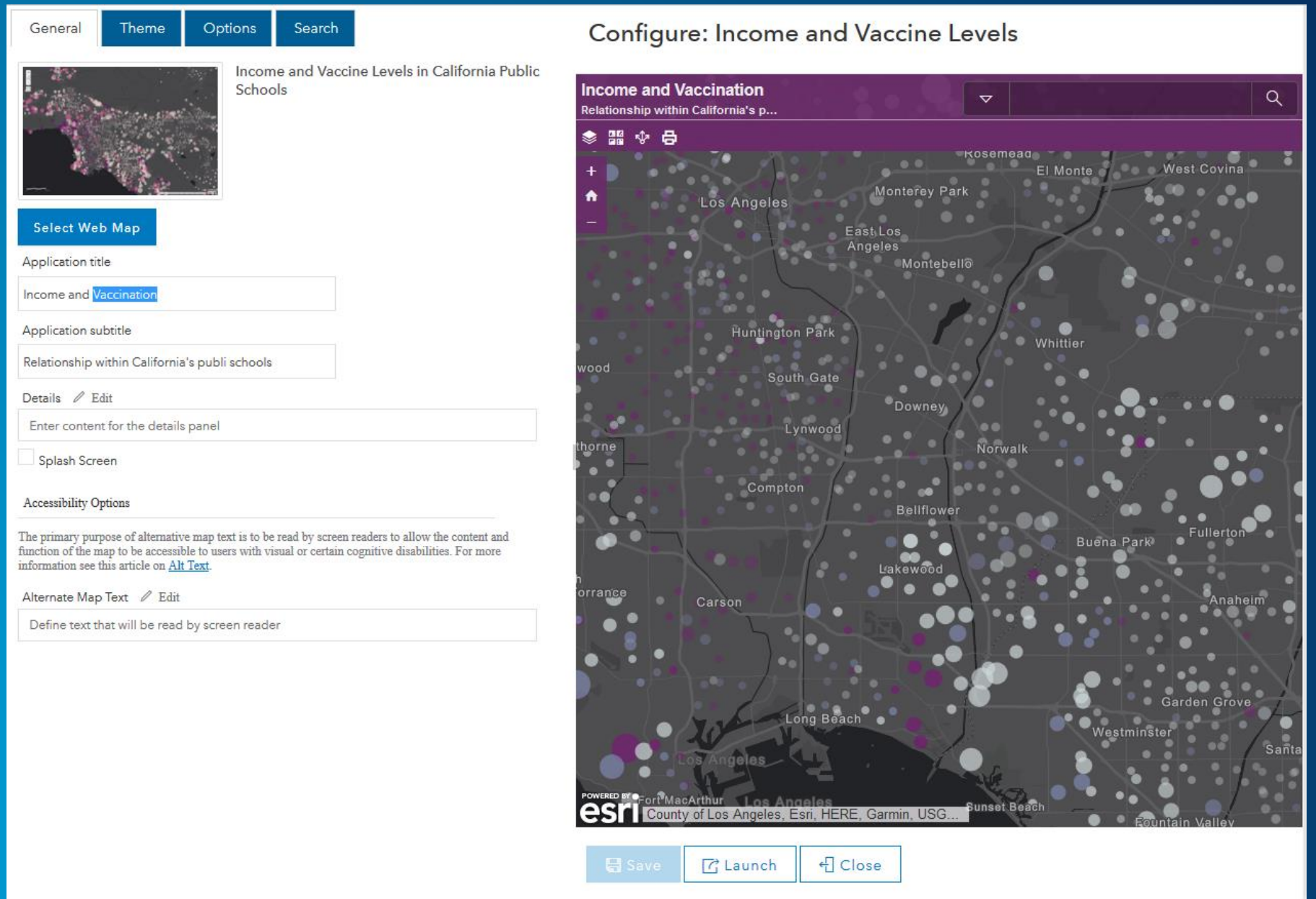
Configured application

What do you want to do?

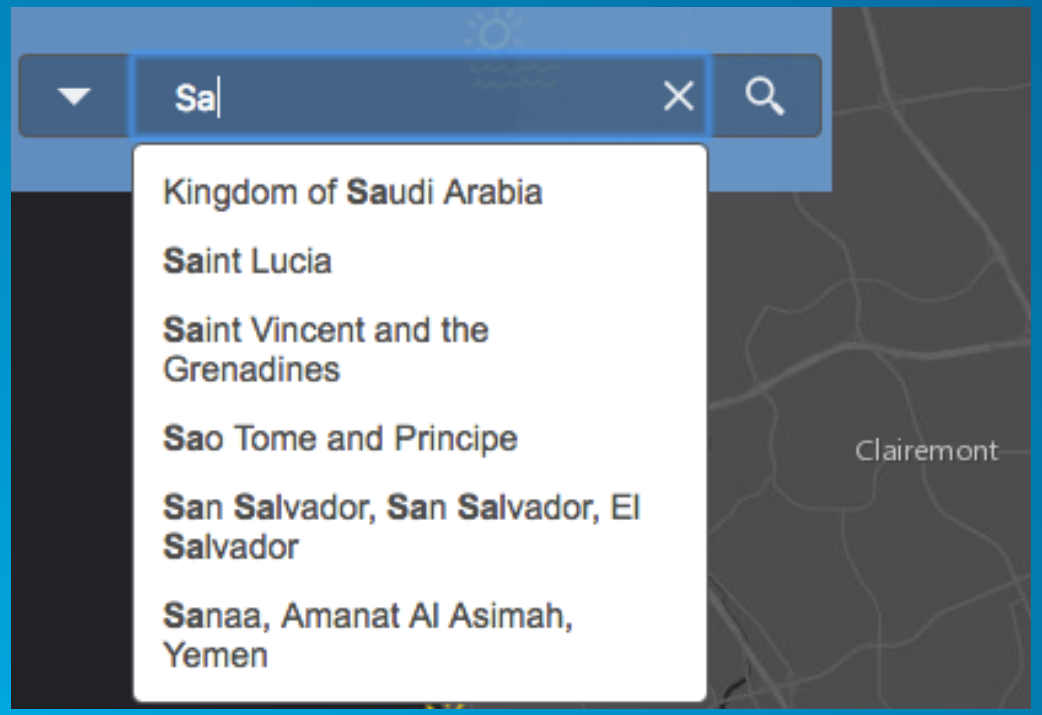
- Build a story map
- Collect/edit data
- Compare maps/layers
- Display a Scene
- Explore/summarize data
- Make a Gallery
- Map social media
- Provide local information
- Route/get directions
- Showcase a map

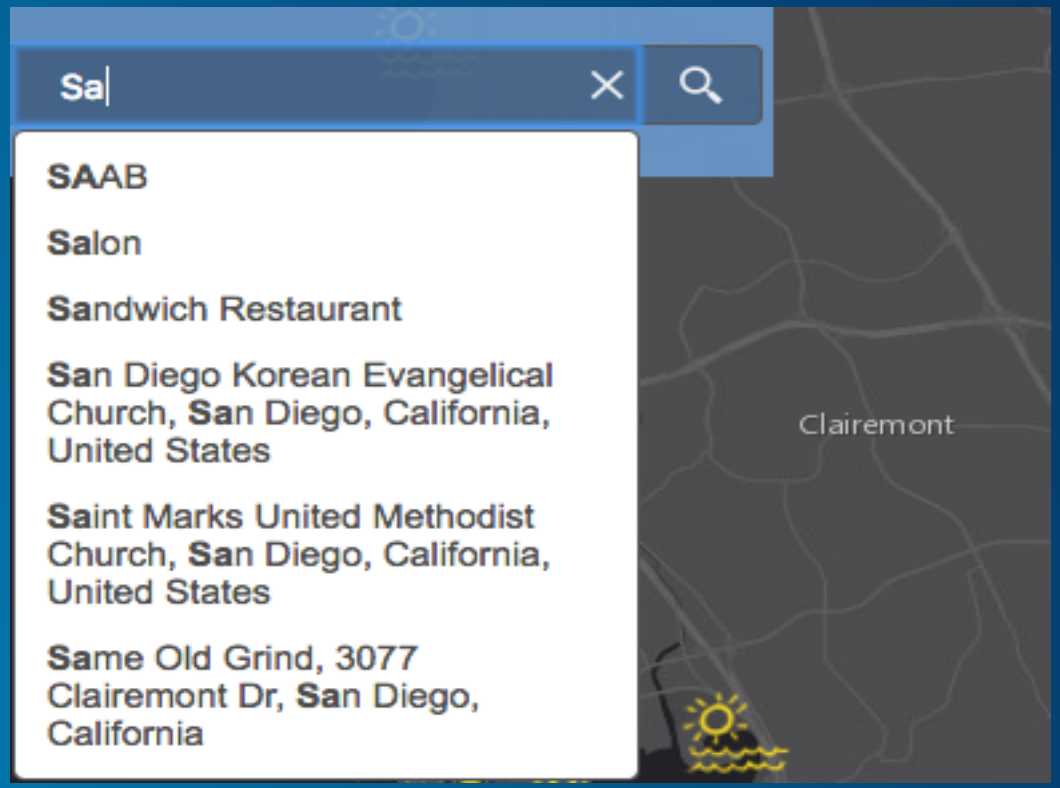


Configure app



Constrain search within map





App Design Considerations

- **Shared theme:**
  - **Color Contrast Analyzer http://webaim.org/resources/contrastchecker/**
  - **Logo – transparent background**
- **Usability:**
  - **Focus on the purpose of your app.**
    - **Who is it for and what do they need to learn from your app?**
- **Unified Search**

Shared Theme settings

Shared Theme

Use the shared theme to apply your organization's brand colors and logo to information products created from configurable app templates, Story Maps, Web AppBuilder, and to your Open Data sites. Define the shared theme of your organization using the color pickers and logo options below.

Header: Sample Text

Text Color:

Background:

Body: Sample Text Sample Link

Text Color:

Background:

Link Color:

Button: Sample Text

Text Color:

Background:

Logo:

Specify a logo image by entering a URL reference or by uploading an image file that will be stored as a public item in your content. Optionally, you can make the logo clickable by entering the target website URL in the Logo Link box.

Logo Image: https://nw-brews.mapsdevext.arcgis.com/sharing/rest/content/items/f27b1facce704698b82fa3abb39730b5/dat

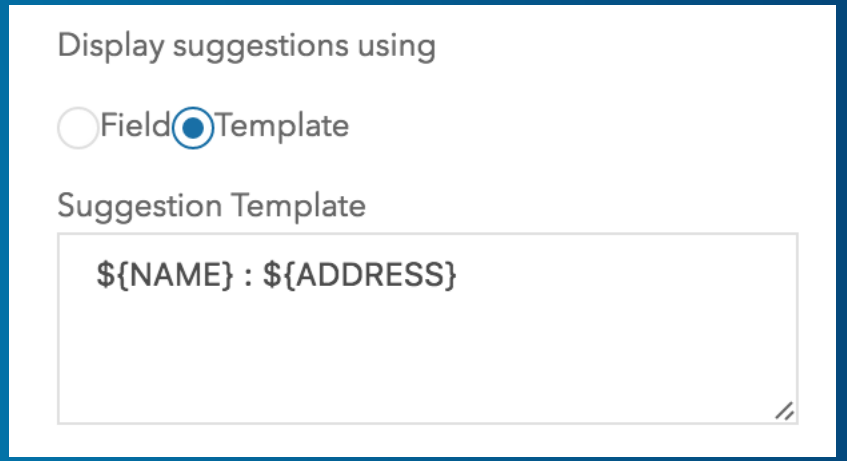
UPLOAD LOGO

Logo Link: Set a click-through link for your logo: https://example.com/

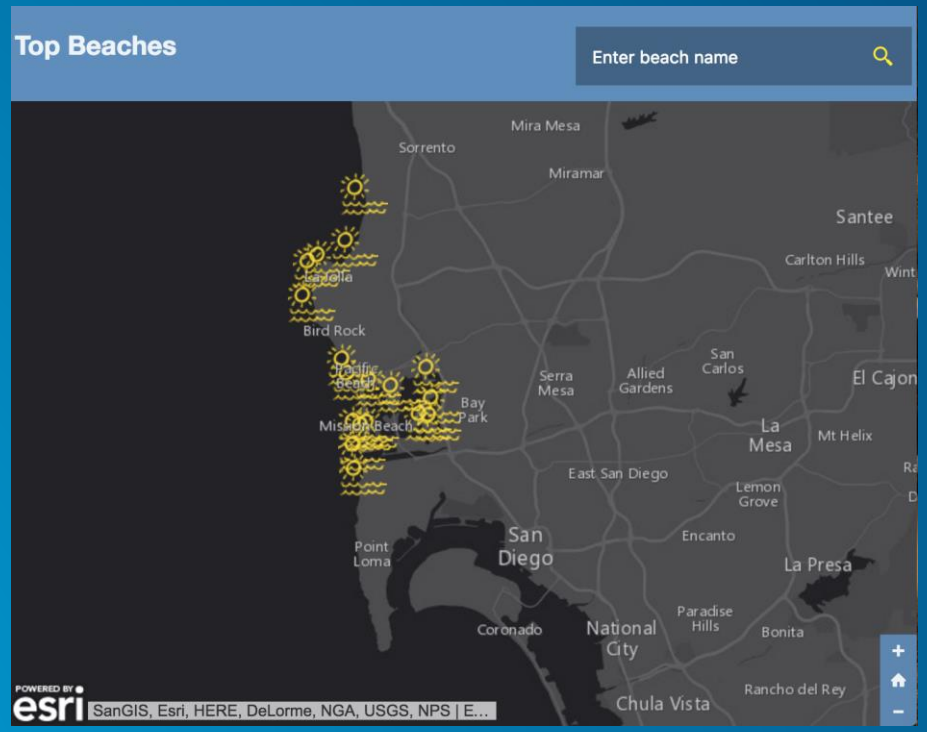
Search

Configuration Options
- Multiple searches
- Place holder text
- Name
- Search within extent
- Country code

Suggestions
- 10.3 geocoding service with suggest capability
- 10.3 feature layer supports pagination.



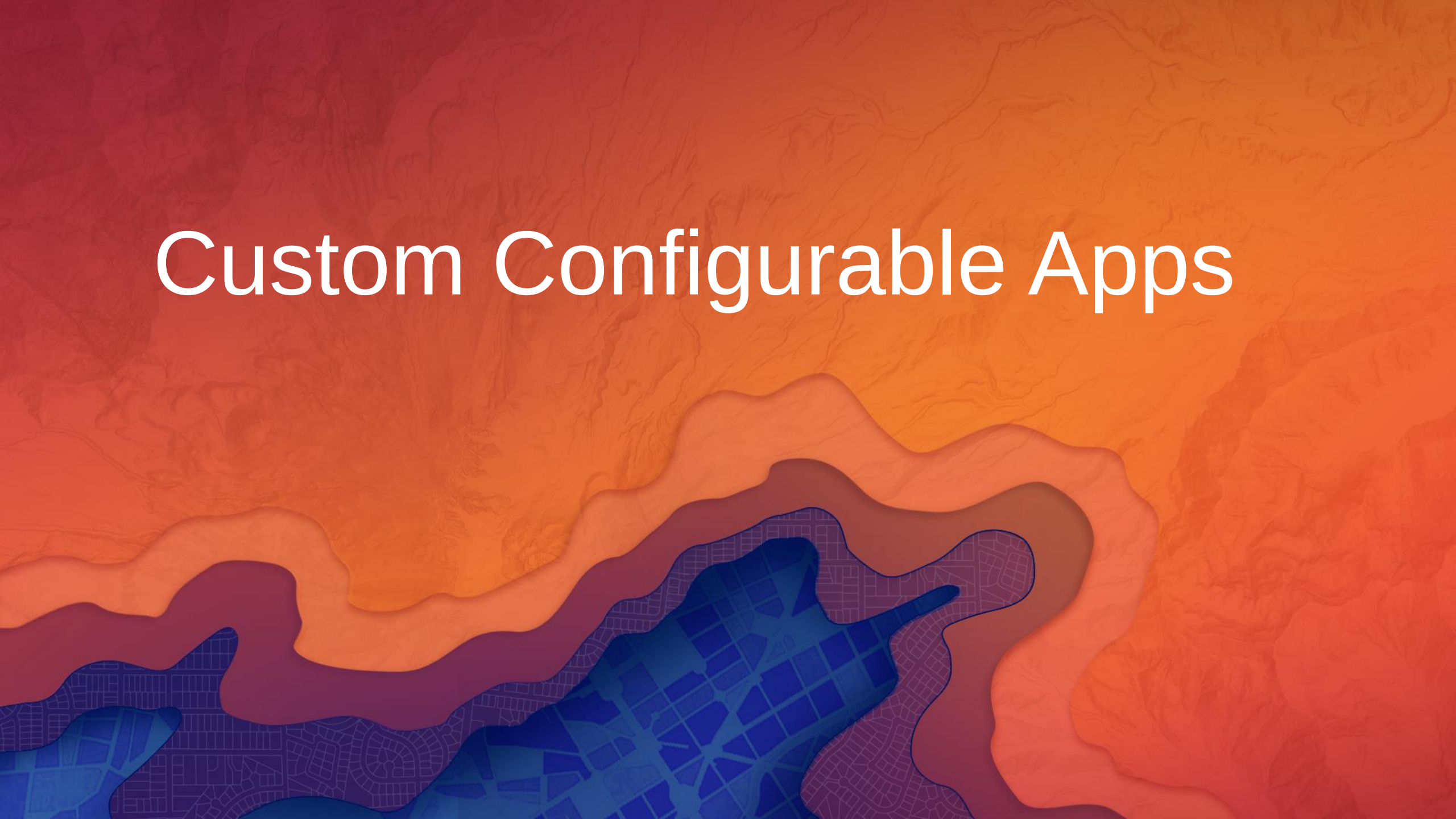
Custom CSS


Top Beaches
Enter beach name
Mira Mesa
Sorrento
Miramar
Santee
Carlton Hills
Bird Rock
Serra Mesa
Allied Gardens
San Carlos
El Cajon
Bay Park
La Mesa
Mt Helix
East San Diego
Lemon Grove
Point Loma
San Diego
Encanto
La Presa
Paradise Hills
Coronado
National City
Bonita
Chula Vista
Rancho del Rey
esri
SanGIS, Esri, HERE, DeLorme, NGA, USGS, NPS | E...

Built-in demo

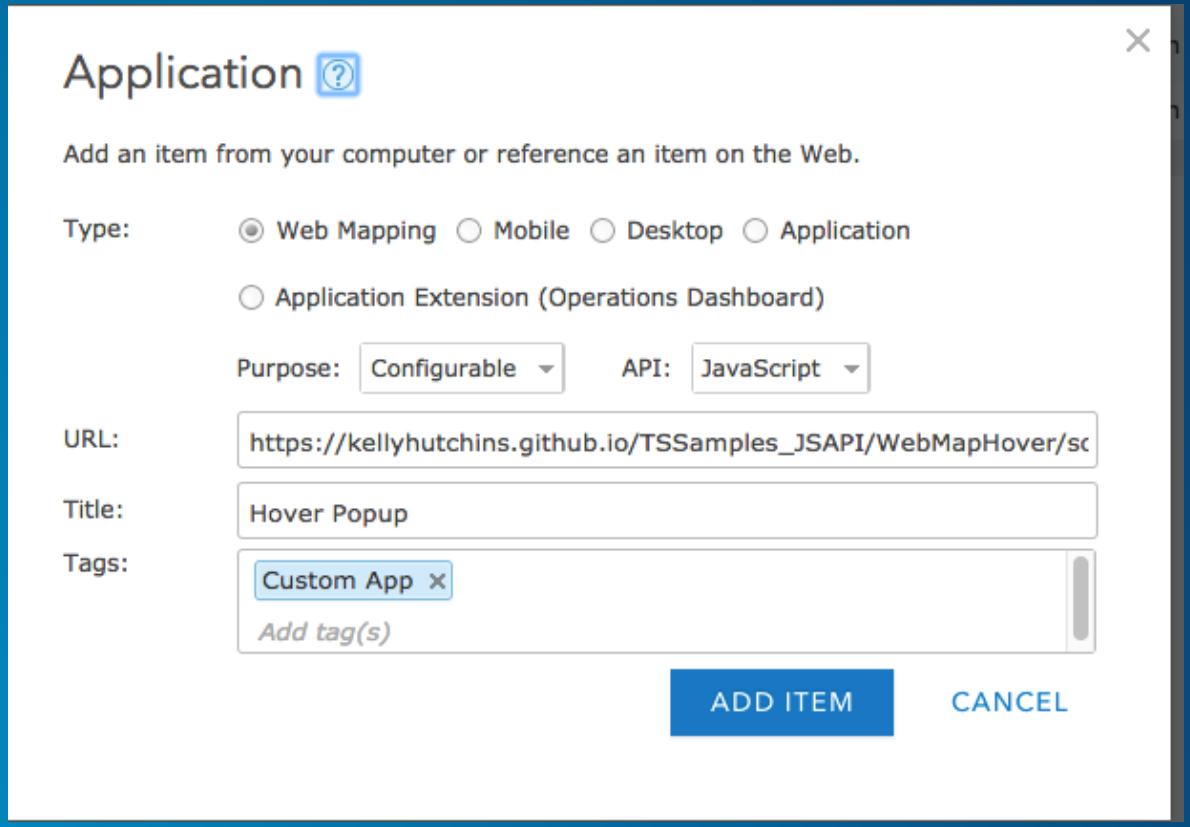
Customize configurable app

Custom Configurable Apps



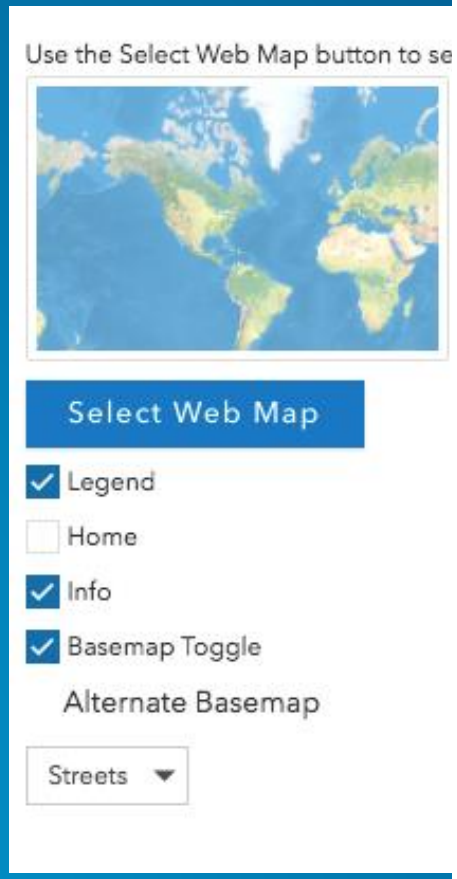
Create a custom app

- New App Item
  - Purpose: Configurable
  - URL
  - Title



Make your app configurable

- **Configuration options**

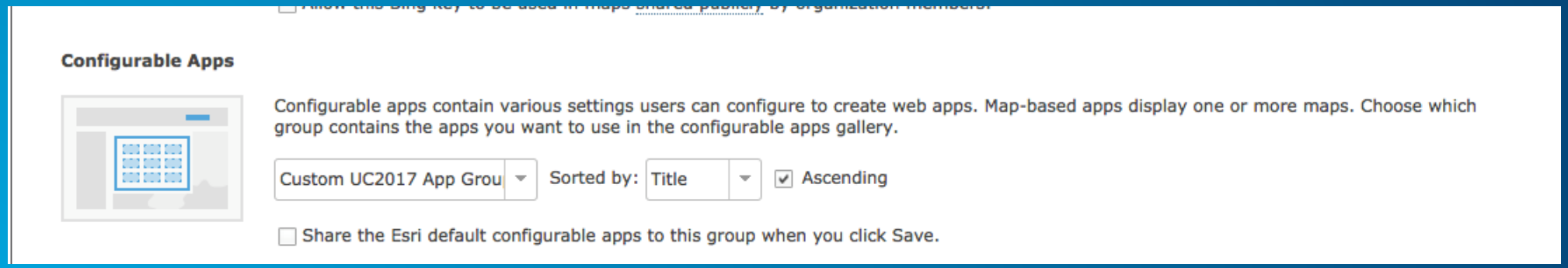



```
{
- configurationSettings: [
  - {
        category: "General",
      - fields: [
          - {
                type: "webmap"
            },
          - {
                type: "appproxies"
            },
          - {
                type: "boolean",
                fieldName: "legend",
                label: "Legend"
            },
          - {
                type: "boolean",
                fieldName: "home",
                label: "Home"
            },
          - {
                type: "boolean",
                fieldName: "info",
                label: "Info"
            },
          - {
                type: "conditional",
                condition: false,
                fieldName: "basemapToggle",
                label: "Basemap Toggle",
              - items: [
                  - {
                        type: "basemaps",
                        fieldName: "altBasemap",
                        tooltip: "Select the alternate basemap",
                        label: "Alternate Basemap"
                    }
                ]
            }
        ]
    }
],
- values: {
      legend: true,
      basemapToggle: true,
      home: false,
      info: true
  }
}
```

http://doc.arcgis.com/en/arcgis-online/create-maps/configurable-templates.htm

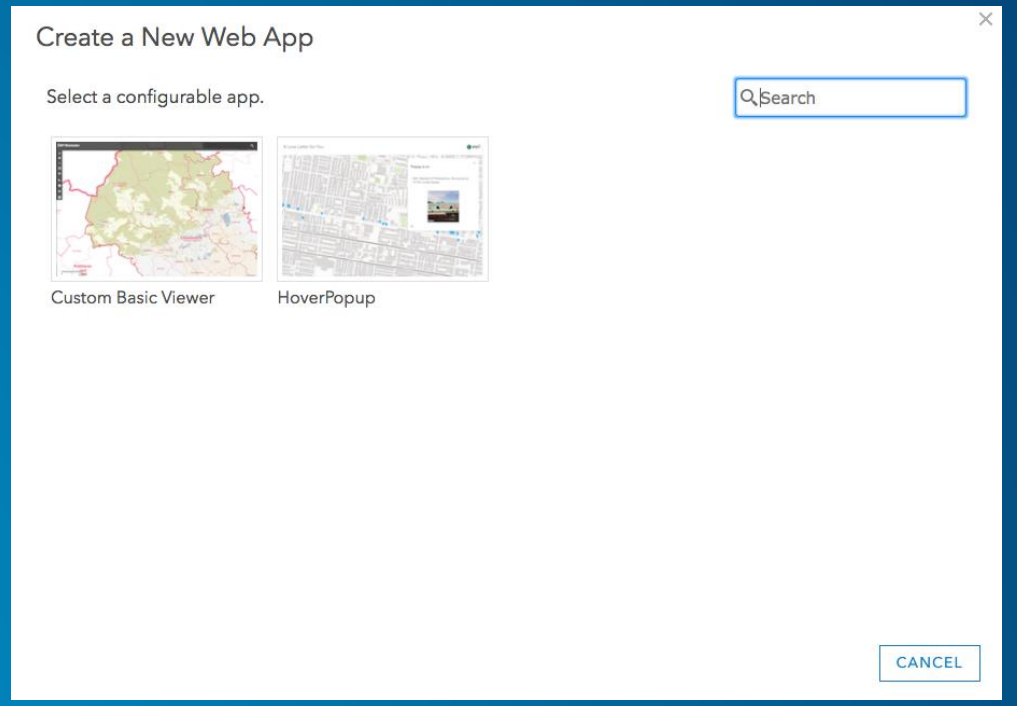
Add to gallery

- Create Custom Group
- Share app to group
- Org Admin set as Gallery Group



Create app based on custom configurable app

- **Select configurable app**
- **Specify config options**
- **Save**



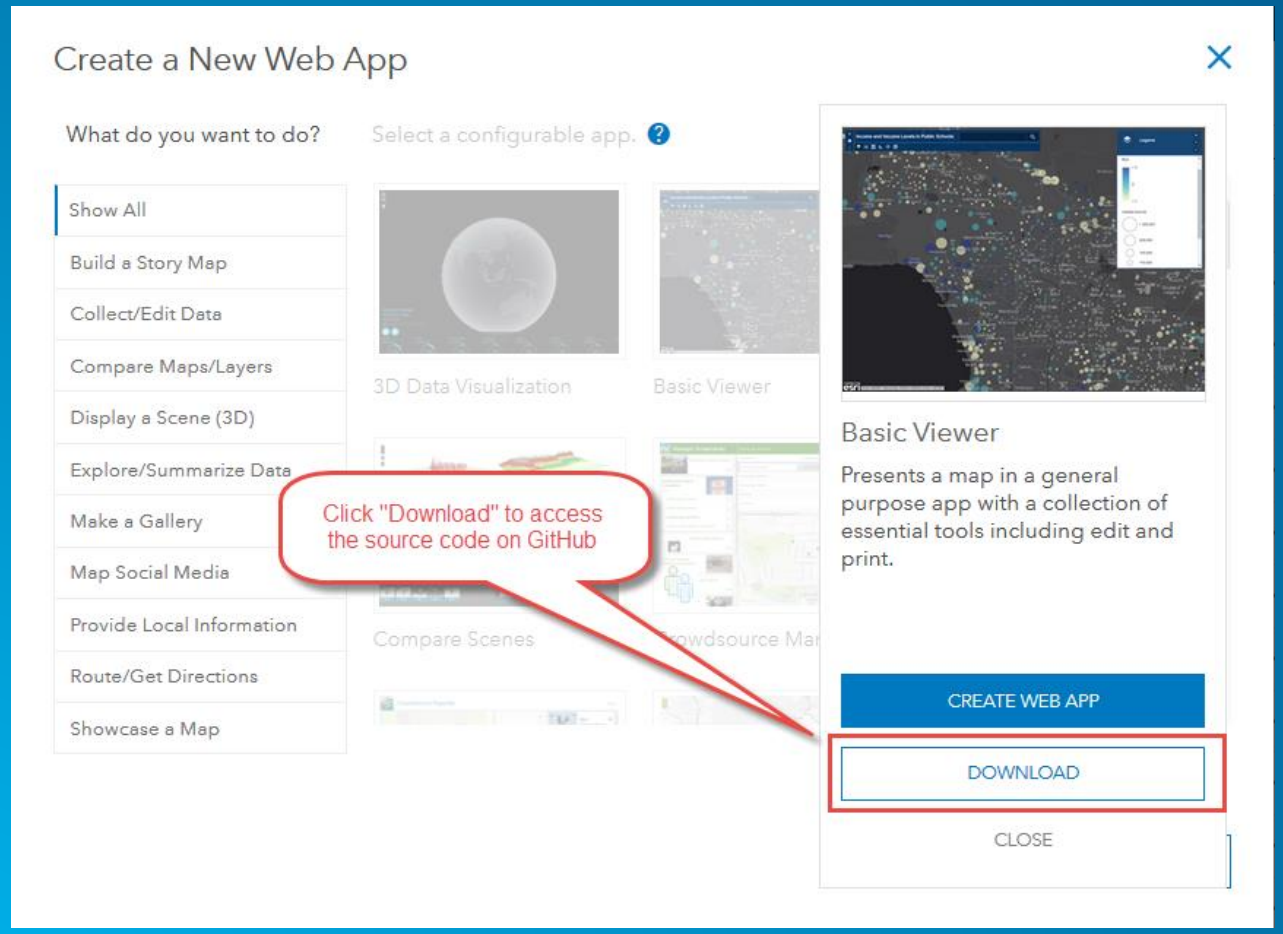
What is saved?

```
{
    source: "c7b9fa239f354274a99dd244d41cb648",
    folderId: "2d4ca0b4bd454e29884e65e94efcdaed",
  - values: {
        legend: true,
        basemapToggle: true,
        home: false,
        info: false,
        webmap: "9babea4a8f864e9db73cc01572dd7304"
    }
}
```

Create a custom configurable app

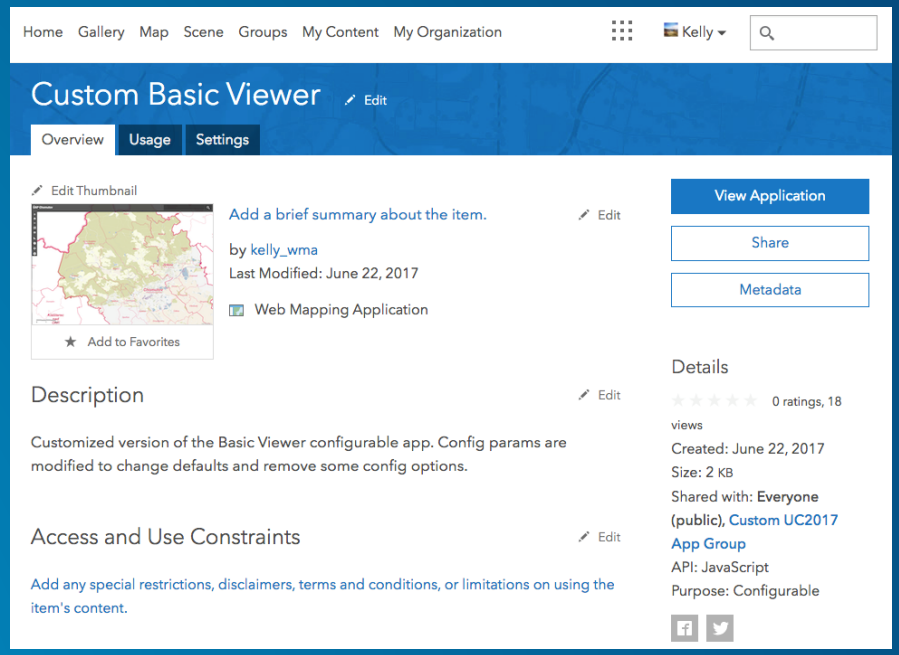
- Modify configuration for existing app
- Download, customize and host
- Build your own app

Get Out-of-the-box app source code



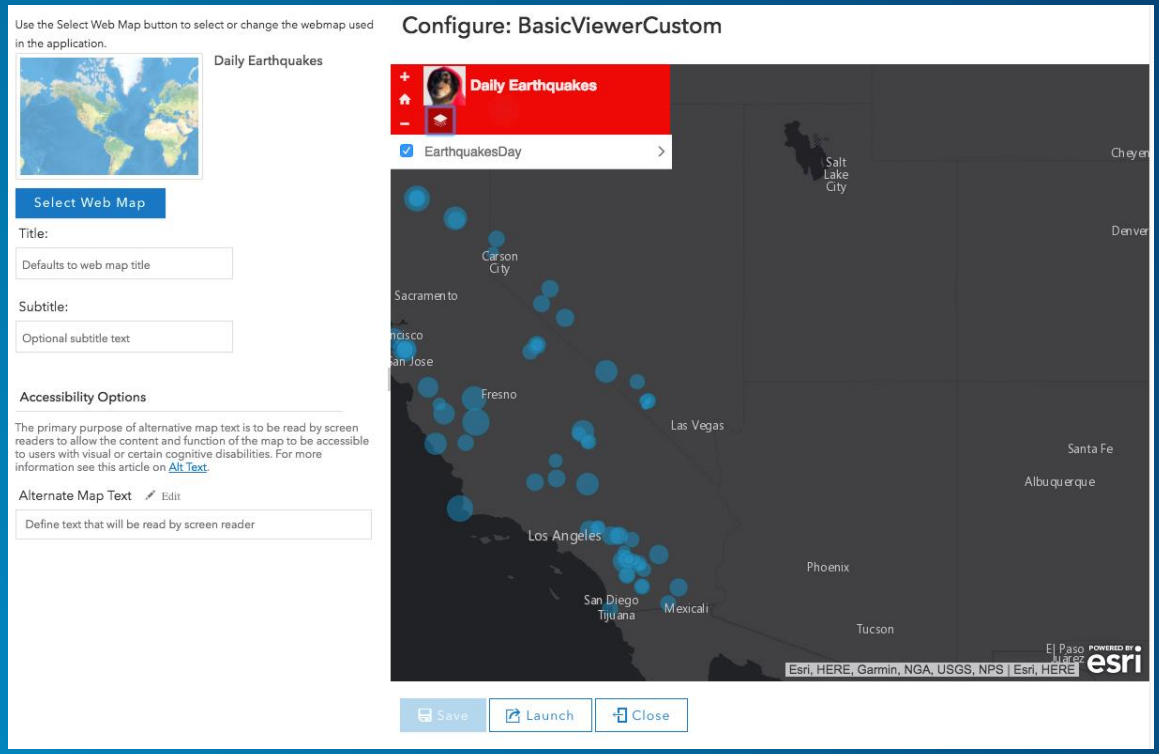
Modify appearance or defaults of existing app

- **Simple Customizations**
  - **CSS**
  - **Defaults**
- **Provide url to existing app**
- **Modify default config options**



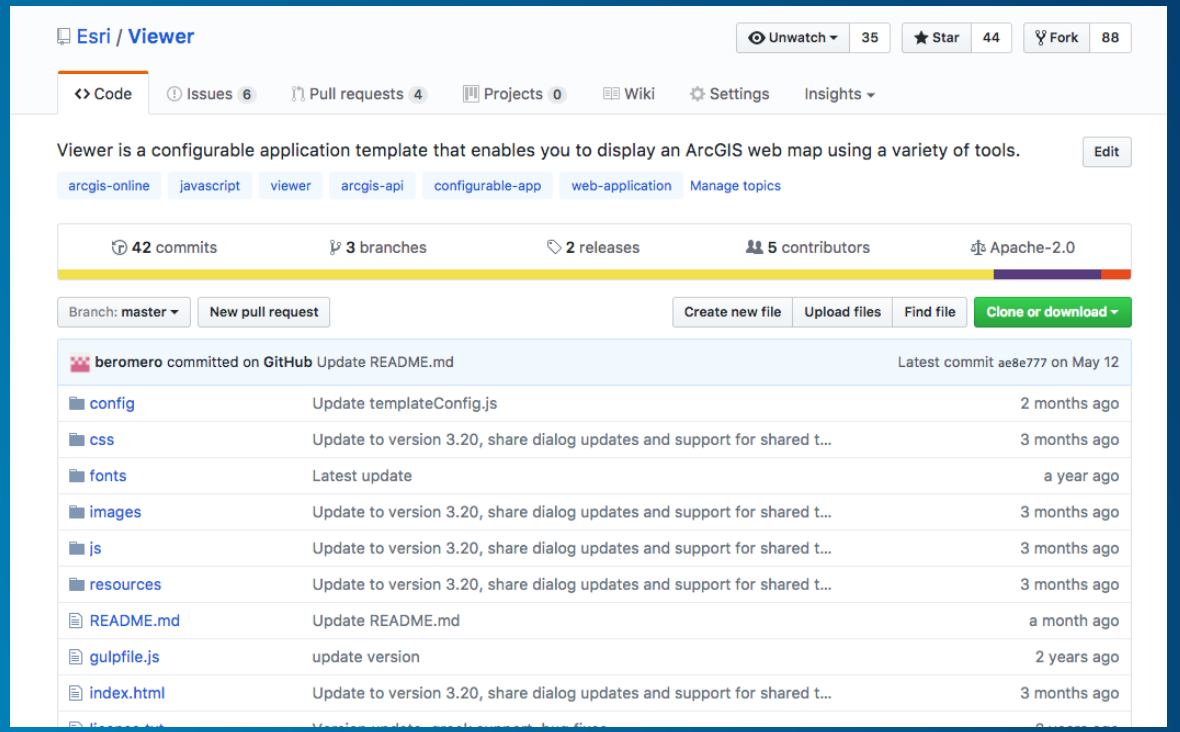
Configuration changes

- **Modified default values**
  - **Color**
  - **Logo**
  - **Disabled tools**
  - **Removed config options**



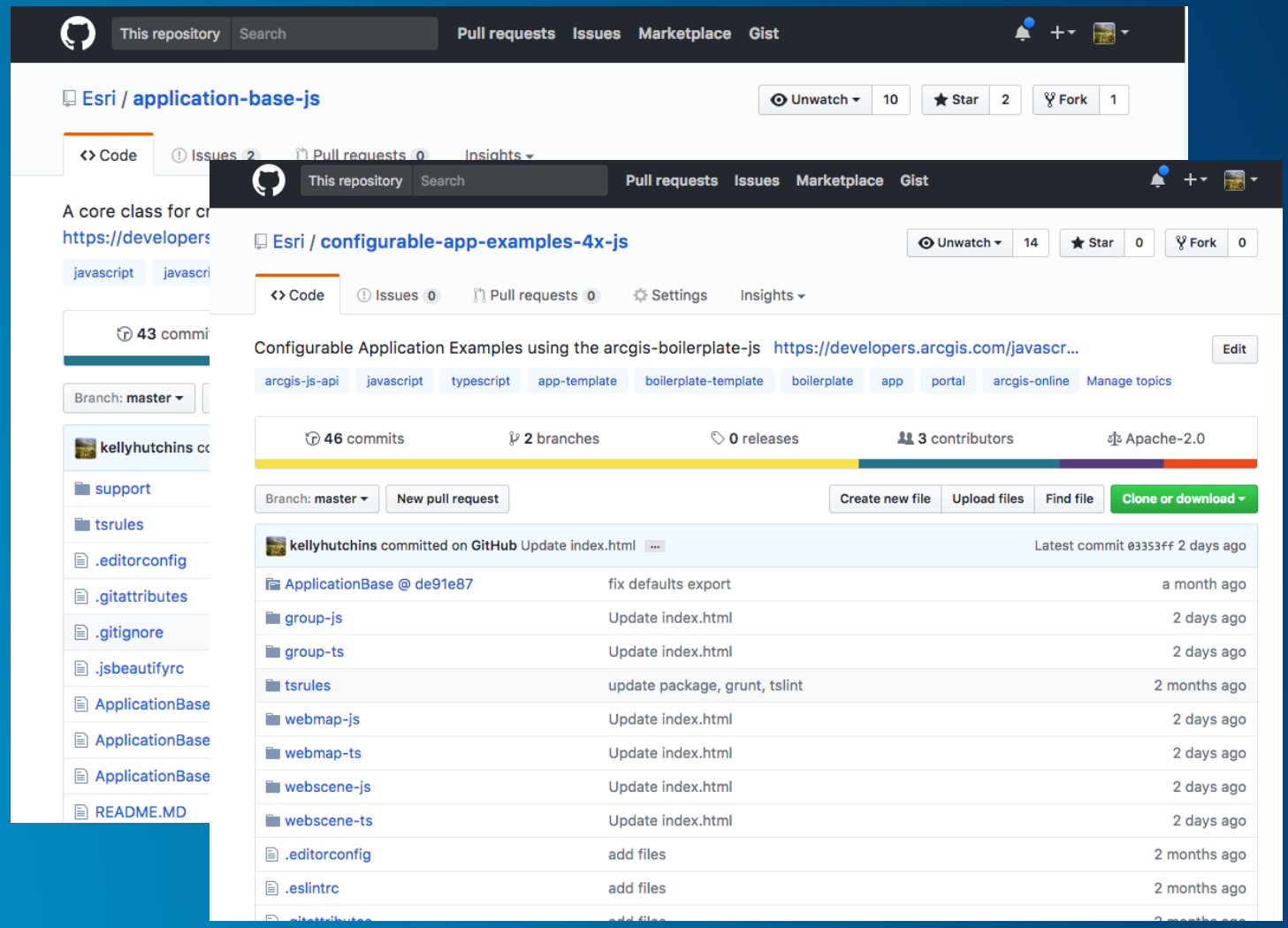
Download and Customize

- More advanced customizations
  - Add new tool
  - Modify app logic
- Requires that you host app

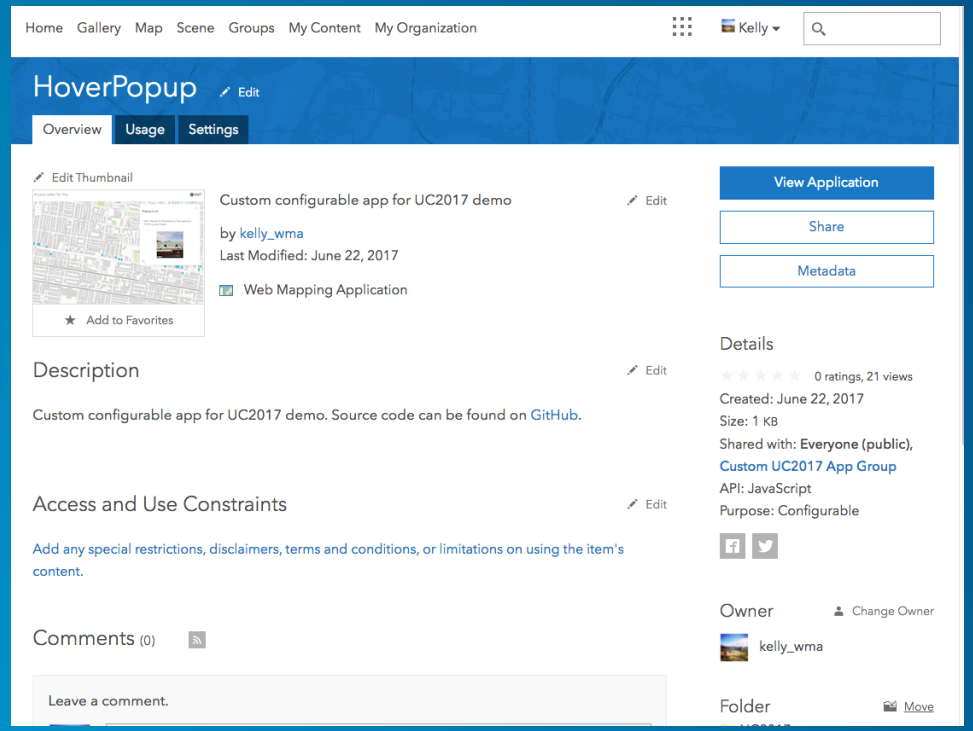


Write your own Configurable App

- Helper class
- Examples



Custom App Example



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