Esri Remote Sensing APPathon a.k.a. Web AppBuilder with support for Image Services

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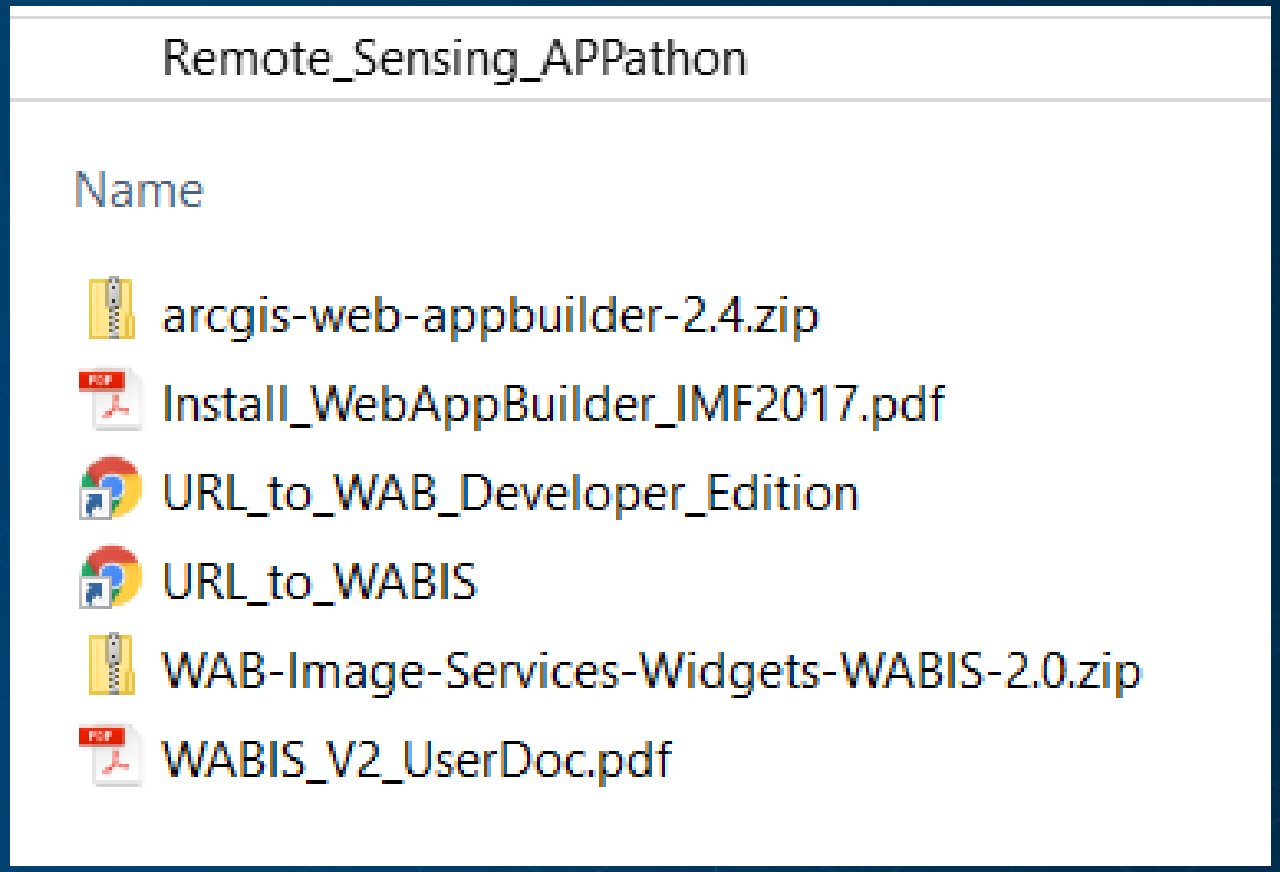
Esri Imaging and Mapping Forum

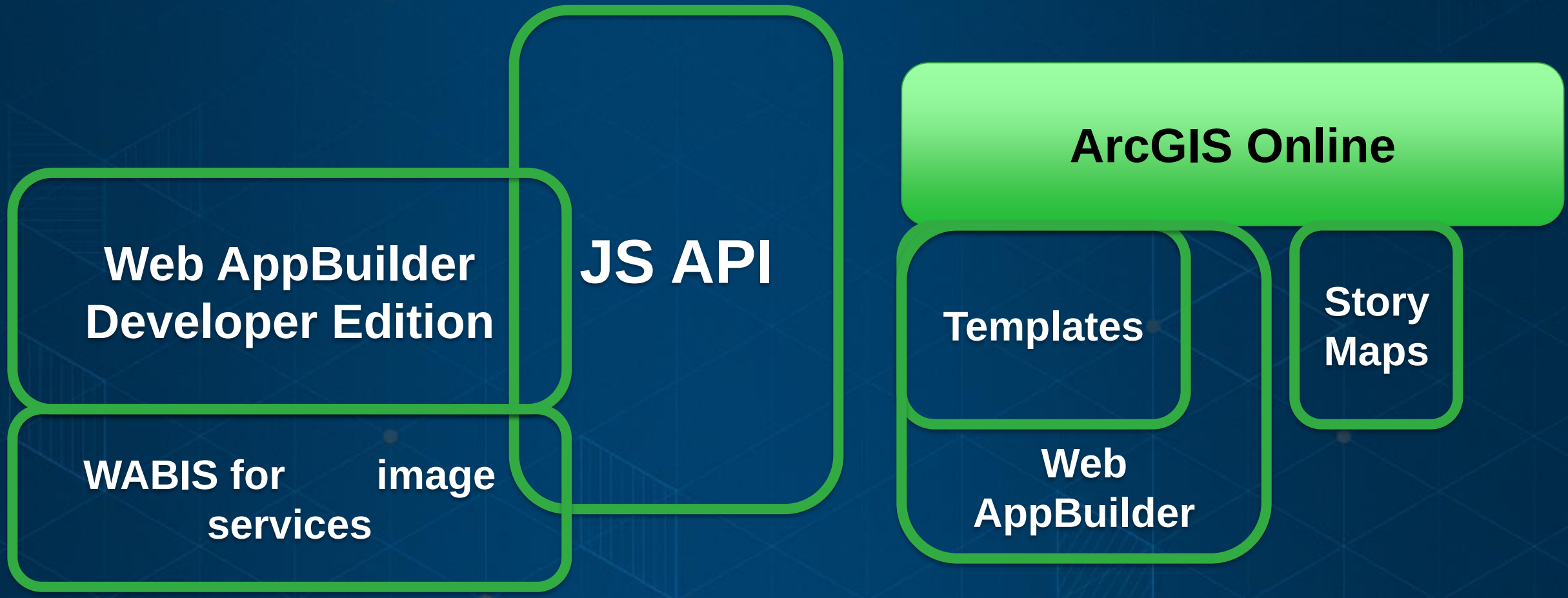
Installation directory & files for APPathon



https://developers.arcgis.com/web-appbuilder

http://esriurl.com/WABIS

The different working environments to create web apps



Introduction

Workshop sections

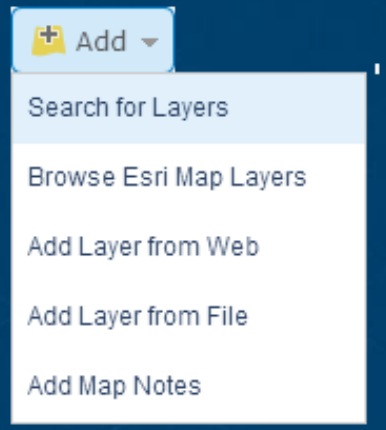
- ArcGIS Online
  - Web Maps
  - Sharing as Apps
  - Configurable App Templates
  - Web AppBuilder via AGOL
  - Customizing/Extending a Template
- Web AppBuilder Developer Edition
- Image Service widgets (WABIS) on GitHub

Web Apps through ArcGIS Online

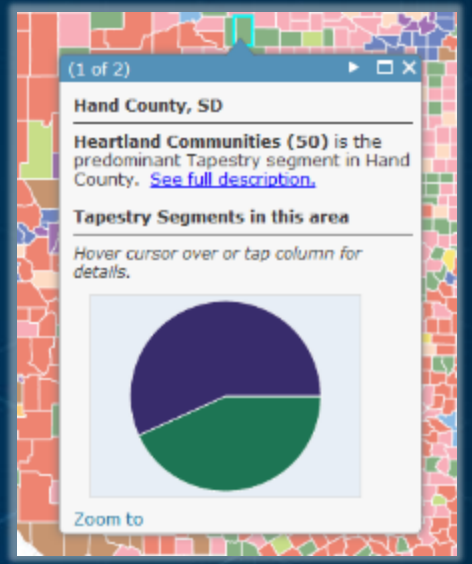
Make a Web Map – the fundamental input to a Web App

(1) Choose basemap

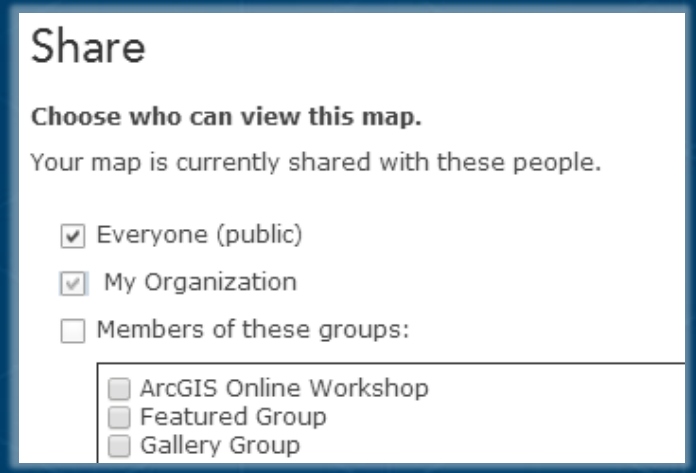
(2) Add layers...



(3) Configure / style



(4) Save and Share

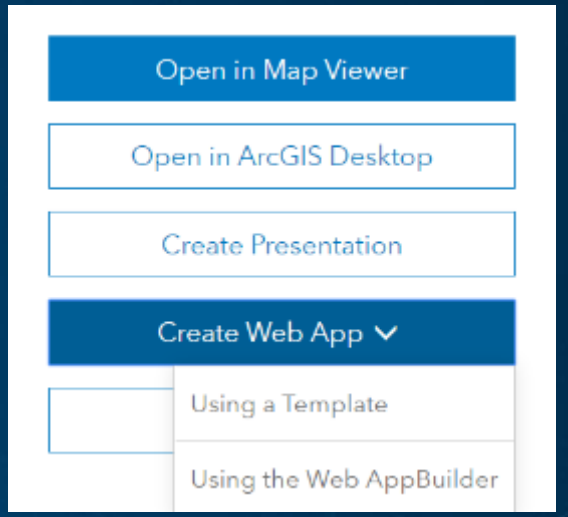


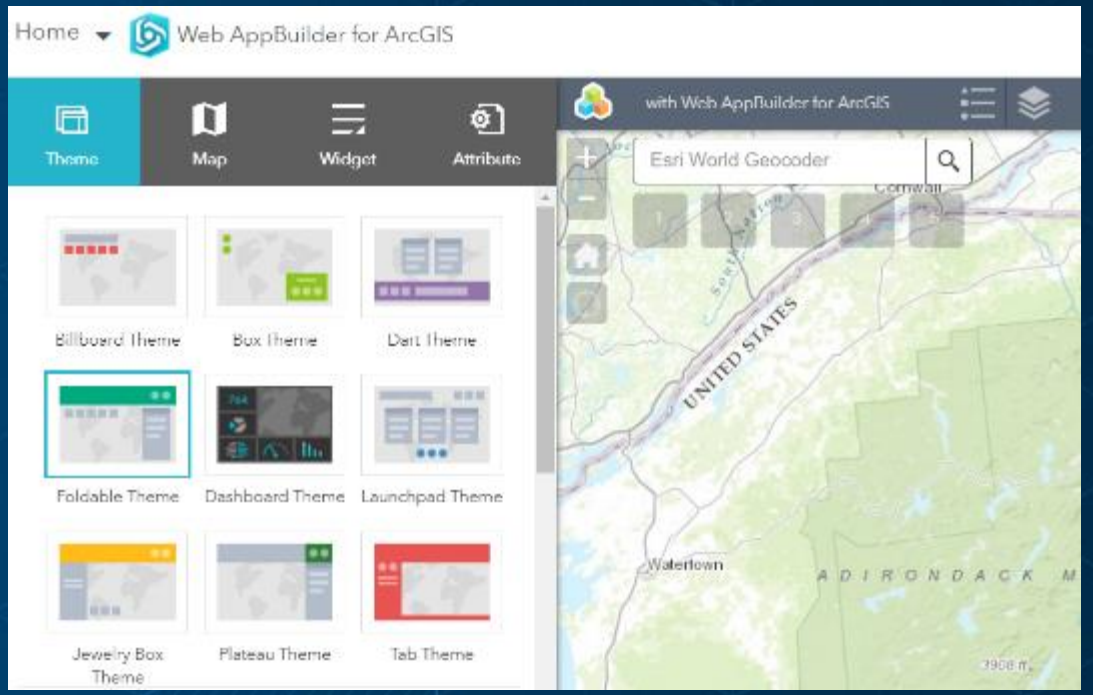
(5) Create App (Optional)

2 ways to create apps *built into* AGOL

- **Templates**
  - A good place to start…

- **Web AppBuilder**
  - From ArcGIS Online

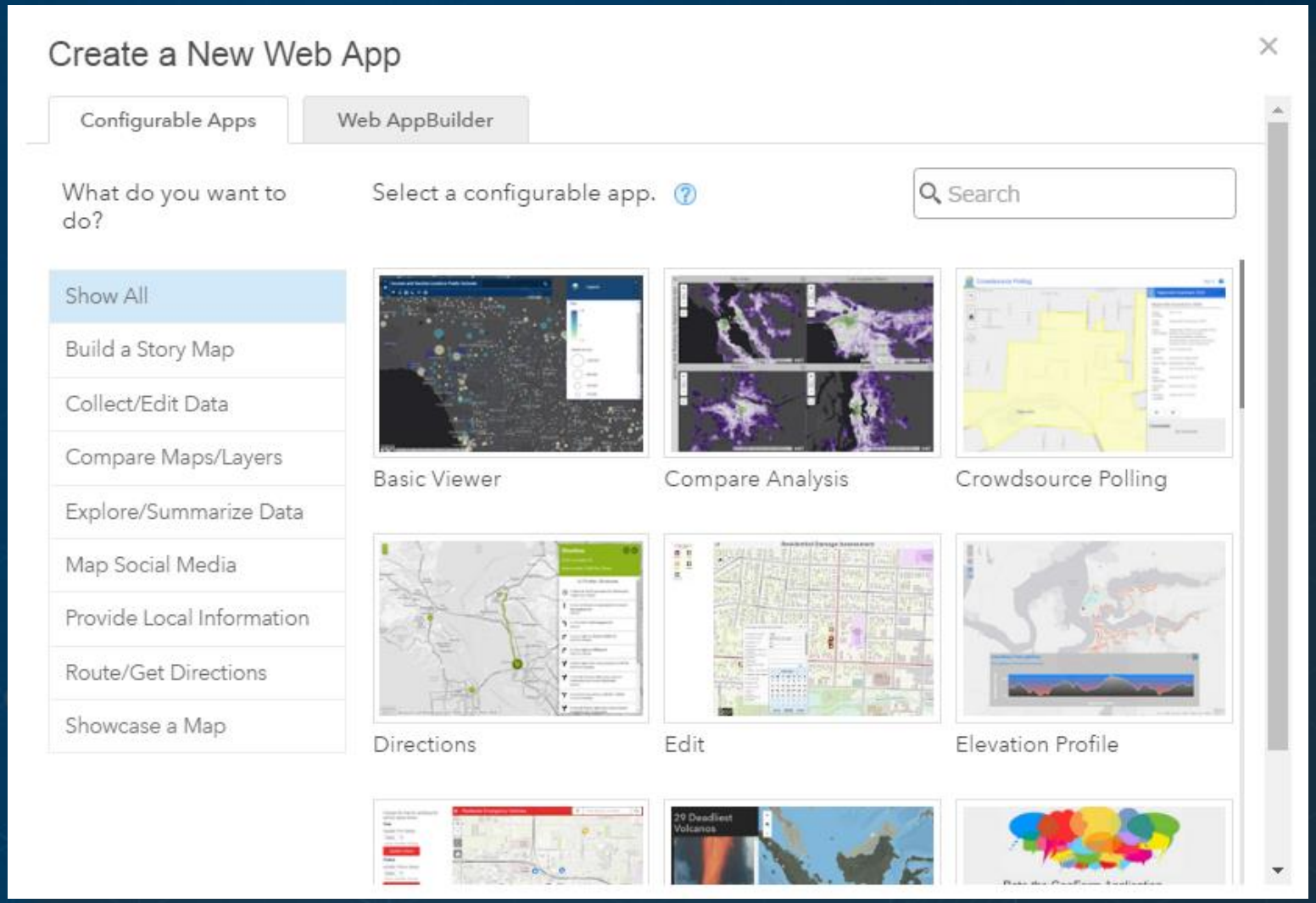




Web App Templates

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

Types of Web App Templates



Templates for imagery coming in the future

What if I need functions from 2 or more of these templates?!?

You need Web AppBuilder

- Similar workflow
- 20 + widgets
- WYSIWYG configuration
- Same hosting options

What if I want to change one of these templates?!?

- **Download from GitHub**
- **Modify using Web AppBuilder**

Web App Builder Developer Edition
and
the Image Service Widgets (WABIS)

Web App Builder Developer Edition

- **Download from https://developers.arcgis.com/web-appbuilder/**
  - (or copy from USB drives in APPathon room)

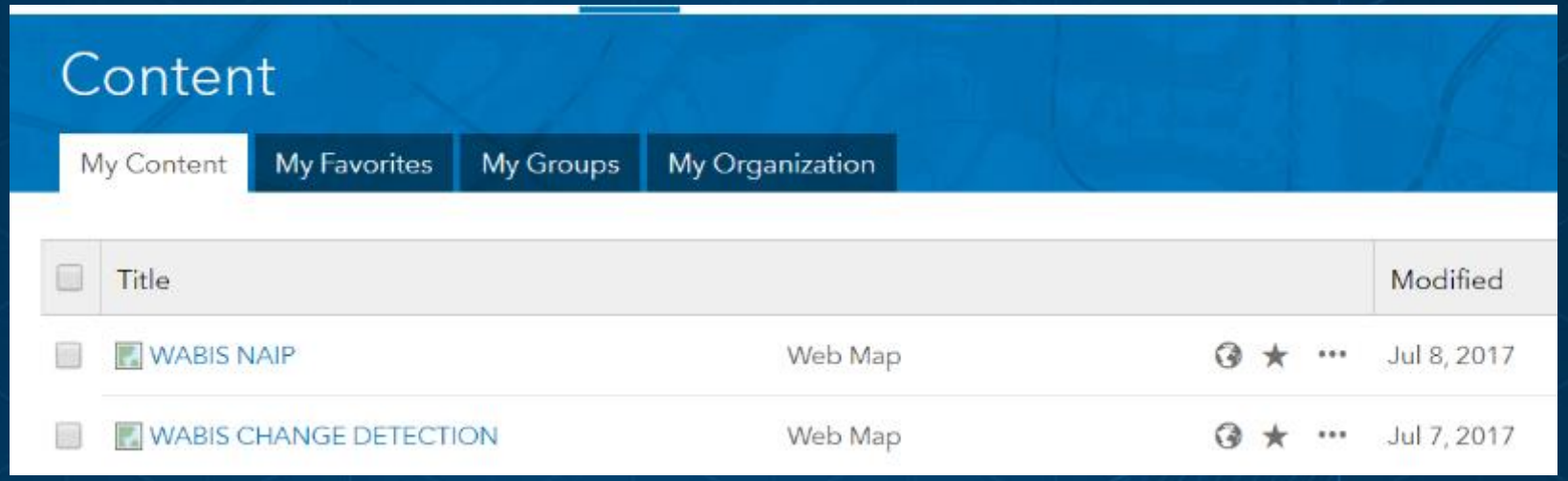
- **Installation & Configuration**
  - See workshop handout **"Install_WebAppBuilder_IMF2017.pdf"**

- **Few widgets focused on imagery**

  …thus the need for *WABIS* (Web AppBuilder for Image Services)

ArcGIS Online organization for APPathon training

Username	Password
Customer_1	ASPRS_2017_1
Customer_2	ASPRS_2017_2
Customer_3	ASPRS_2017_3
Customer_4	ASPRS_2017_4



Web AppBuilder Image Service Widgets - *WABIS*

- **Download from http://esriurl.com/WABIS**
  - (or copy from USB drives in APPathon room)
  - Open "WABIS_V2_UserDoc.pdf"

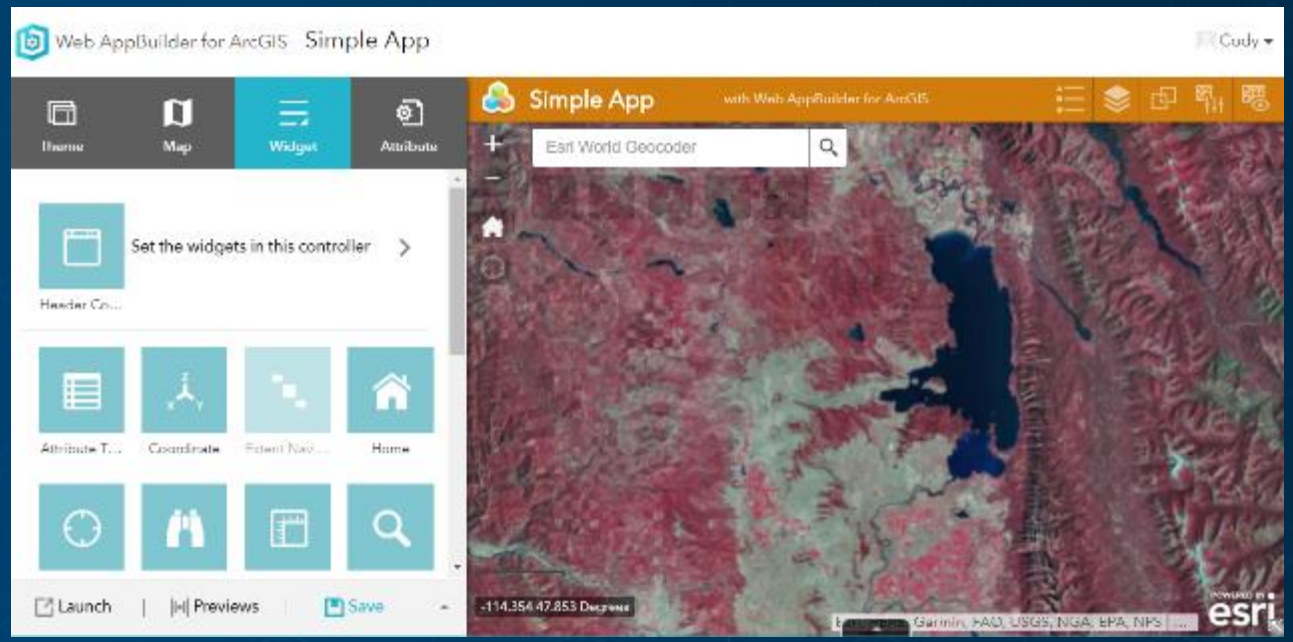
- **Add widgets to support common imagery requirements**
  - IS Layers
  - IS Image Selector
  - IS Change Detection
  - IS Compare
  - IS Display Order
  - IS Display Parameters
    - (formerly IS Parameters)
  - IS Export
  - IS Image Date
  - IS Profile
    - (formerly IS Spectral Profile)
  - IS Renderer
  - IS Scatterplot
    - (formerly Scatterplot)

3 sample apps - to build during APPathon

- **Simple image access & display**
- **Image Analysis app**
- **Change detection app**
- **Input to Web App = Web Map**
  - **Two ready-made web maps provided in ArcGIS Online Organization**
  - **Optional: Create your own**

Image Service: simple access, display, manipulation

- Use web map *WABIS NAIP*



- Add Widgets:
  - IS Renderer
  - IS Display order (Mosaic method)
  - IS Display Parameters (interp & compression)
  - IS Layers

Image Analysis app

- Use web map *WABIS NAIP*

- Add Widgets:
  - IS ImageDate
  - IS Profile widget, 3 modes
    - Spectral
    - Temporal
    - Index
  - IS Scatterplot

Change detection app

- Use web map *WABIS CHANGE DETECTION*

- Add Widgets:
  - IS Image selector
  - IS Compare
  - IS Change detection
  - IS Export

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Image Management Workflows
http://esriurl.com/ImageManagement

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SCIENCE
OF
WHERE