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Solutions Templates,  
Arcade Expressions,  
and Web APIs



# Solutions Templates, Arcade Expressions, & Web APIs

- Esri Solution Templates
  - ArcGIS Online
  - ArcGIS Enterprise
- Arcade Expressions
- Web APIs












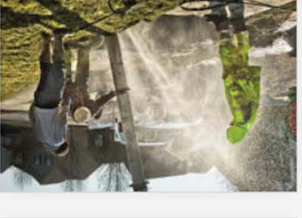
# Solutions Templates

# Solutions Templates

- What is a Solution Template?
  - ArcGIS Solutions is a collection of focused maps and apps. They leverage your authoritative data and are designed to improve operations, provide new insight, and enhance services.
- Why should I use it?
  - Why not!
- These easy to use fully configured applications for ArcGIS Online or your Enterprise environment are a great tool for quick deployment and ease of use.



# Solutions Templates

 <p>Capital Project Tracking can be used to manage an active project portfolio, communicate project status, and share project updates with internal and external stakeholders.</p> <p><b>Capital Project Tracking</b></p>	 <p>Water Distribution Utility Network Foundation can be used to accelerate water distribution utility network implementations.</p> <p><b>Water Distribution Utility Network Foundation</b></p>
 <p>Capital Project Planning can be used to define a project portfolio, organize the portfolio into an official capital improvement plan, and share the plan with internal and external stakeholders.</p> <p><b>Capital Project Planning</b></p>	 <p>Water Geometric Network Editing and Analysis can be used to map and manage asset information using ArcMap and a geometric network.</p> <p><b>Water Geometric Network Editing and Analysis</b></p>
 <p>Lead Service Line Inventory can be used to develop a lead service line inventory and monitor the replacement of service lines required to comply with the Environmental Protection Agency's (EPA) Lead and Copper Rule Revisions.</p> <p><b>Lead Service Line Inventory</b></p>	 <p>Data Reviewer for Water Utilities can be used to validate and improve the integrity of geometric network data sets.</p> <p><b>Data Reviewer for Water Utilities</b></p>
 <p>Participatory Budgeting can be used to solicit community feedback to identify, discuss, and prioritize public spending projects.</p> <p><b>Participatory Budgeting</b></p>	 <p>Water Outage can be used to quickly respond to main breaks, reduce water loss, and minimize impact to customers.</p> <p><b>Water Outage</b></p>



# Solutions Templates



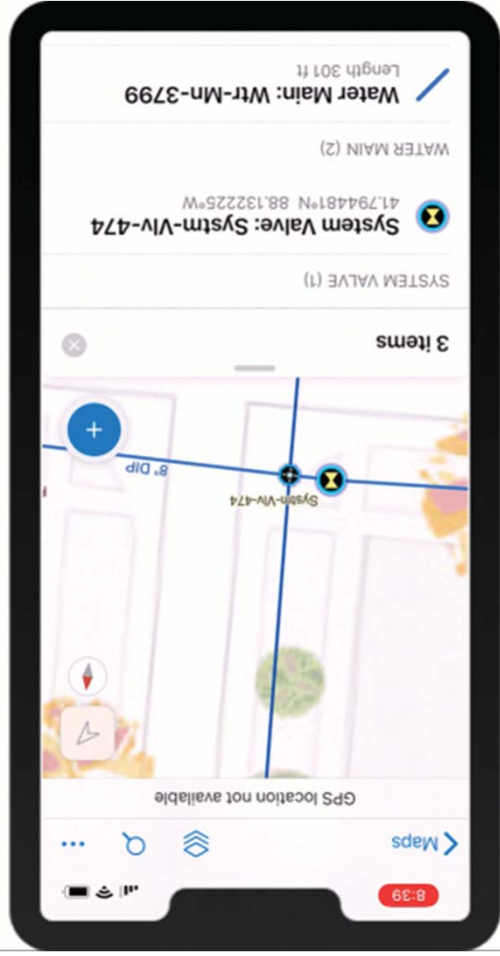
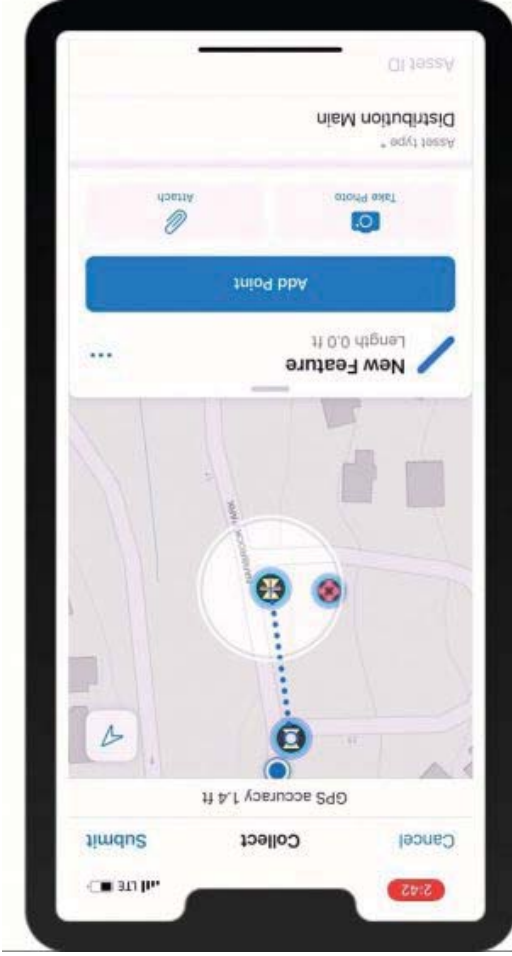
# Solutions Templates

## Water Distribution Data Management for ArcGIS Enterprise

Deployment Tasks

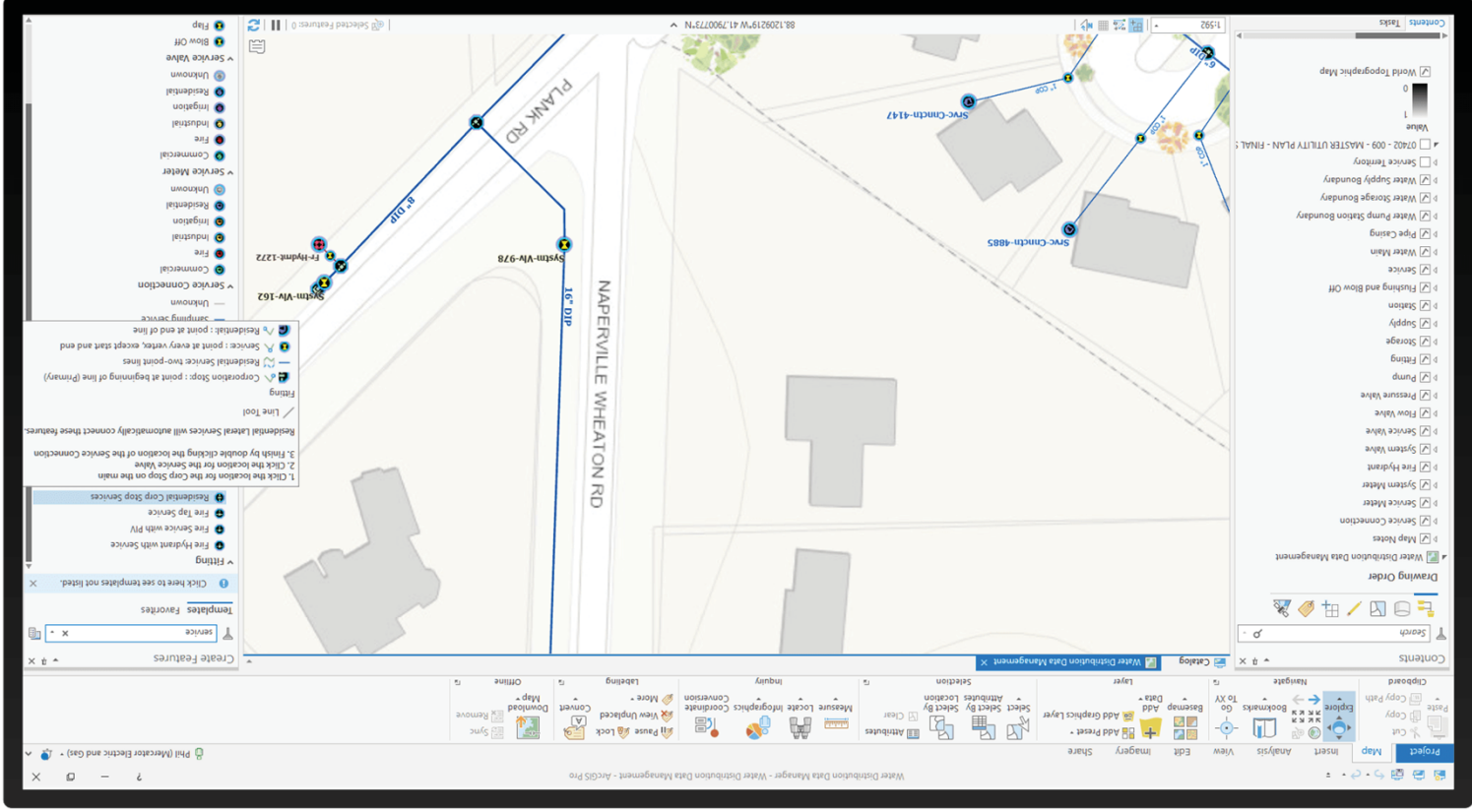


# Solutions Templates






# Solutions Templates



# Solutions Templates




# Solutions Templates



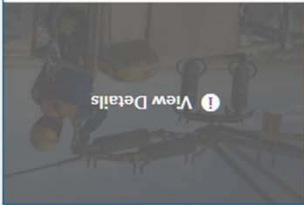
**Outage Damage Assessment**

Outage Damage Assessment can be used to perform damage assessments and respond to outages caused by severe weather conditions and emergency incidents.



**Electric Distribution Data Management**


Electric Distribution Data Management can be used to map electric distribution assets, edit data, view system maps in the field and office, view asset reports, and collaborate with map notes.



**Electric Utility Network Foundation**


Electric Utility Network Foundation can be used to accelerate electric utility network implementations.

View Details



**3D Basemaps**

3D Basemaps can be used to author and maintain a 3D basemap for your organization.



**Electric Underground Inspections**

Electric Underground Inspections can be used to organize underground asset inspection campaigns, assess the condition of assets in the field, monitor the progress of inspection campaigns, and understand the current condition of underground assets.



# Solutions Templates

## Overview

Electric Underground Inspections can be used to organize underground asset inspection campaigns, assess the condition of assets in the field, monitor the progress of inspection campaigns, and understand the current condition of underground assets.

Undergrounding is the process of building electric infrastructure, such as electric distribution lines and other electrical facilities, in trenches underground. Many communities are requiring electric utilities to be installed underground because they improve the aesthetic appearance of a community and increase reliability during storms. Underground electric utilities are not immune to weather damage and are vulnerable to equipment issues. When underground systems are damaged, repairs can be time-consuming, and estimates suggest it can take almost twice as long to repair. Electric Underground Inspections is typically implemented by electric utilities that want to reduce operations and maintenance costs, implement a routine underground inspection program, and identify defects and safety issues before an asset fails.

The Electric Underground Inspection solution delivers a set of capabilities that help you organize underground asset inspection campaigns, assess the condition of assets in the field, monitor the progress of inspection campaigns, and understand the current condition of underground assets.



# Solutions Templates

Deploy Electric Underground Inspections

## Spatial Reference

Select the spatial reference of the feature layers deployed with the solution. [Learn more](#)

Search for spatial reference using name or WKID

- WGS 1984 Web Mercator Auxiliary Sphere (102100)

Close

Deploy



# Solutions Templates



A screenshot of an ArcGIS Solutions template. At the top, a dark grey header contains the text 'ArcGIS Solutions' in white. Below the header is a navigation bar with 'Home' and 'My Solutions' in white text on a black background. A search bar with a magnifying glass icon and the text 'Search My Solutions' is positioned below the navigation bar. The main content area features a map with a white circle highlighting a specific location, with the number '63' inside the circle. Below the map, the text 'Solutions: 1' is displayed. The title of the solution is 'Electric Underground Inspections'. The main body of text describes the solution: 'Electric Underground Inspections can be used to organize underground asset inspection campaigns, assess the condition of assets in the field, monitor the progress of inspection campaigns, and understand the current condition of underground assets.'



# Solutions Templates



















## Electric Underground Inspections

Electric Underground Inspections can be used to organize underground asset inspection campaigns, assess the condition of assets in the field, monitor the progress of inspection campaigns, and understand the current condition of underground assets.



# Solutions Templates

Title	Modified
<input type="checkbox"/>  Electric Underground Inspections	Mar 18, 2022
<input type="checkbox"/>  Electric Underground Inspections Office Users	Mar 18, 2022
<input type="checkbox"/>  Group	
<input type="checkbox"/>  Underground Inspection Center	Mar 18, 2022
<input type="checkbox"/>  Underground Inspections Manager	Mar 18, 2022
<input type="checkbox"/>  Underground Inspections Dashboard	Mar 18, 2022
<input type="checkbox"/>  Underground Inspections	Mar 18, 2022
<input type="checkbox"/>  ElectricDistributionSystem_Viewing	Mar 18, 2022
<input type="checkbox"/>  Archive Underground Inspections	Mar 18, 2022
<input type="checkbox"/>  Extend Underground Schema	Mar 18, 2022
<input type="checkbox"/>  ElectricDistributionSystem	Mar 18, 2022
<input type="checkbox"/>  Electric Underground Inspection Field Users	Mar 18, 2022
<input type="checkbox"/>  Group	
<input type="checkbox"/>  Delete Underground Inspections	Mar 18, 2022
<input type="checkbox"/>  Assigned - Underground Inspections	Mar 18, 2022
<input type="checkbox"/>  Needs Repair - Underground Inspections	Mar 18, 2022
<input type="checkbox"/>  Unassigned - Underground Inspections	Mar 18, 2022
<input type="checkbox"/>  Load Underground User Domain	Mar 18, 2022
<input type="checkbox"/>  Underground Inspections - Assigned	Mar 18, 2022
<input type="checkbox"/>  Underground Inspections-Unassigned	Mar 18, 2022
<input type="checkbox"/>  Underground Inspections - Needs Repair	Mar 18, 2022
<input type="checkbox"/>  UndergroundInspections	Mar 18, 2022
<input type="checkbox"/>  Notebook Log	Mar 18, 2022
<input type="checkbox"/>  Inspectedby	Mar 18, 2022





# Solutions Templates

	<p><b>Electric Underground Inspections - Office Users</b></p> <p>Owner: <a href="#">mtcopeland</a> Created: Mar 18, 2022   Last updated: Mar 18, 2022   Viewable by:  Group members</p> <p><a href="#">Delete group</a></p>
	<p><b>Electric Underground Inspections - Field Users</b></p> <p>Owner: <a href="#">mtcopeland</a> Created: Mar 18, 2022   Last updated: Mar 18, 2022   Viewable by:  Group members</p> <p><a href="#">Delete group</a></p>



# Solutions Templates

The screenshot displays the ArcGIS online interface for a group named "Electric Underground Inspections - Field Users". The top navigation bar includes "Home", "Gallery", "Map", "Scene", "Groups", "Content", "Organization", and a search icon. Below the navigation, the group name is shown with a "Content" tab selected. The main area features a grid of content items, each with a thumbnail, title, and metadata (Created, Updated, View Count). The items include:

- Assigned - Underground Ins...
- Needs Repair - Underground...
- Unassigned - Underground...
- Underground Inspections - N...
- Underground Inspections
- Inspectedby

On the right side, there are sections for "Recently added content", "Description" (with a link to "Add an in-depth description of the group."), and "Owner" (mccopeland). Below the description is a "Tags" section with a tag "source=ec9953da524288940901db4e971a8f". At the bottom, there are buttons for "Invite users", "Add items to group", and "Create Web App".



# Solutions Templates

- Project Package

[LeadServiceLineInventory](#)

[Project Package](#)

- Project Packages are downloaded and configured using ArcGIS Pro
- Uses an ArcGIS Workflow for step by step configuration and deployment
- Web Experience
  - Uses Experience Builder
  - Follow Configuration steps provided on the ArcGIS Solutions page



# Solutions Templates

## Configure Electric Underground Inspections

[ArcGIS Online](#) | [Other versions](#) ▼

Electric Underground Inspections can be used to conduct inspection campaigns and monitor the condition of electric underground assets.

In this topic, you'll learn how to configure the Electric Underground Inspections solution to meet specific needs in your organization.



# Solutions Templates



## This notebook will add or remove users from your organization for inspections.

Click **Cell > Run All** to load the Load User Domain form in this notebook. Please note this operation may take a moment for the form to appear. Do not refresh the page.

### Add / Remove Inspectors

1. Select the **Inspection Assigned To** field from the drop down.
2. Filter the list by selecting one of the three options.
- a. **All**: shows all the user in the organization.
- b. **Filter By Group**: Use the **Select a Group** dropdown to filter the user list.
- c. **Filter By Role**: Use the **Select a Role** dropdown to filter the list.
3. Click **Load Users and Domain** to view the users.
4. Select **Included** to add and **Not Included** to remove.
5. Click **Update Domain**.

*\*The **inspectedby.csv** is getting updated to be used with the Unassigned Inspection survey.*

### Add / Remove Repair Person

1. Select the **Repair Assigned To** field from the dropdown.
2. Filter the list by selecting one of the three options.
- a. **All**: shows all the user in the organization.
- b. **Filter By Group**: Use the **Select a Group** dropdown to filter the user list.
- c. **Filter By Role**: Use the **Select a Role** dropdown to filter the list.
3. Click **Load Users and Domain** to view the users.
4. Select **Included** to add and **Not Included** to remove.
5. Click **Update Domain**.

In [1]:

```
import copy
import csv
import os
import tempfile
import uuid
import logging
import sys
```



# Solutions Templates

Phase Sticker [Edit](#)

Transformer & Junction Box & Switch Gear [Edit](#)

Expression

Test    Globals    Functions    Constants    Existing

```
1 // Write a script to return a value to show in the pop-up.
```

Survey123 Connect for ArcGIS

My Survey Designs    Tutorials    Search

MPS GIS    maps@mpsutility.com

Survey123 Community Activity

All    Discussions    Questions    Blogs    Tweets

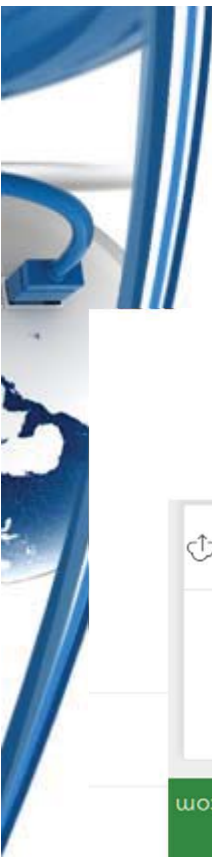
New Survey

Needs Repair - Undergroun...

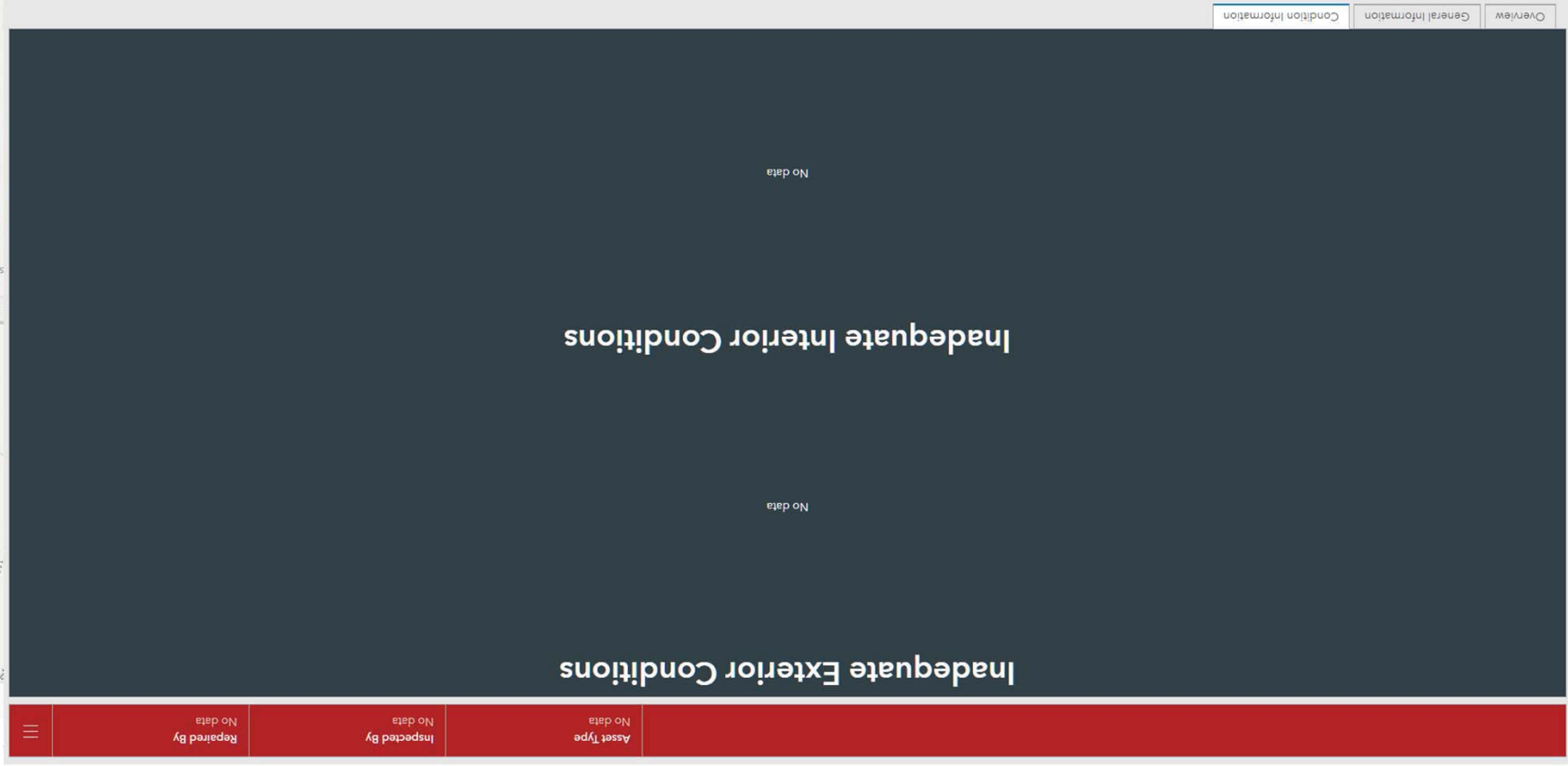
Unassigned - Undergroun...

Assigned - Undergroun...

```
17 if ($feature.assettype == 'Junction Box') {  
18     return null  
19 }
```

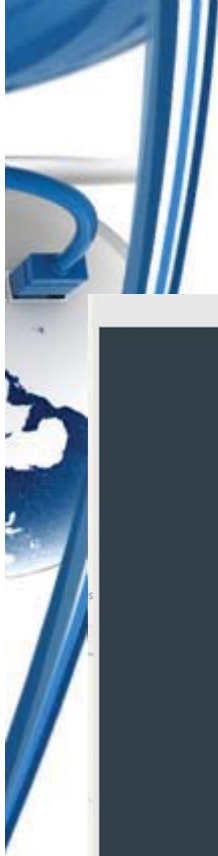


# Solutions Templates

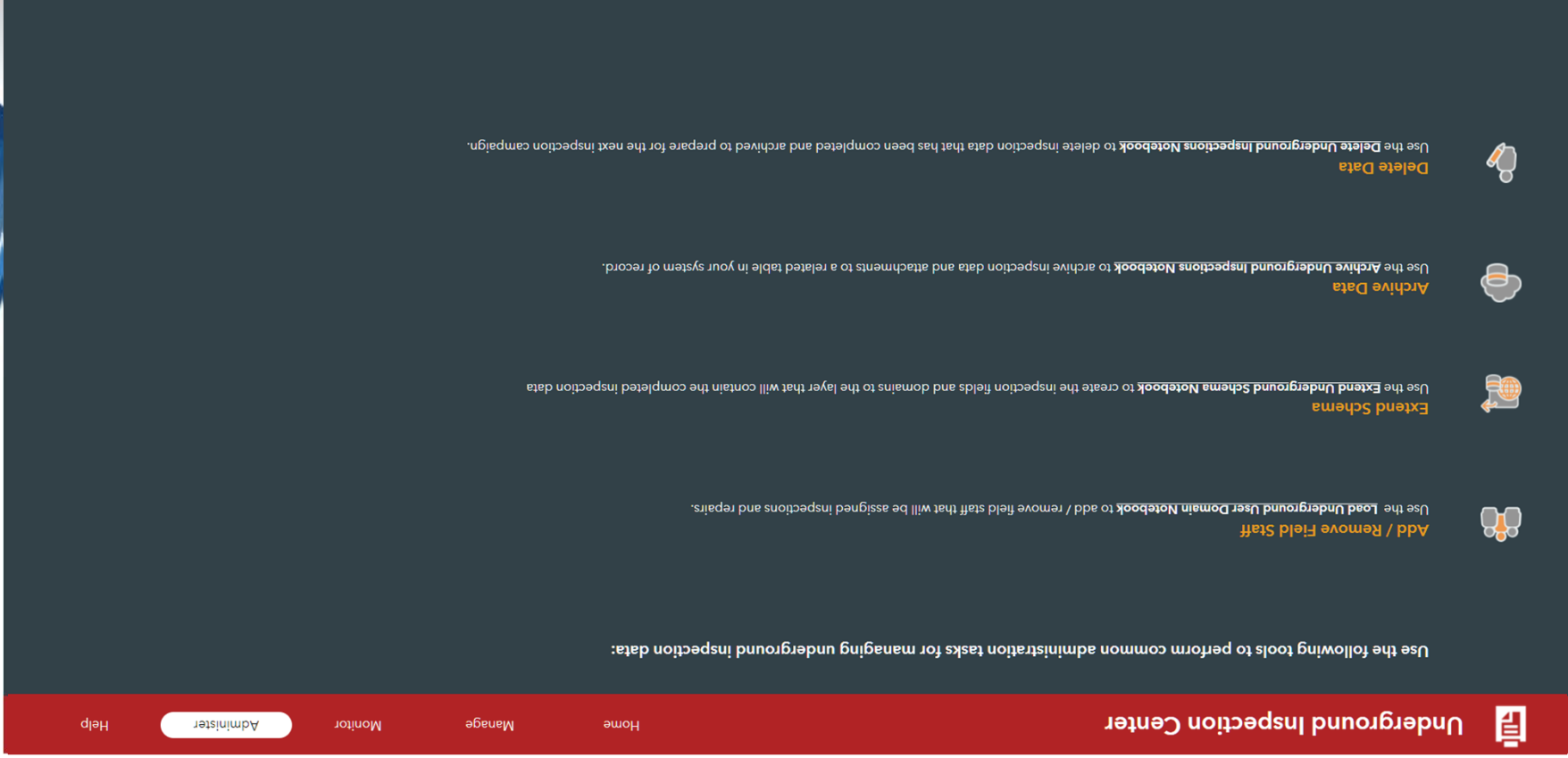


Inadequate Exterior Conditions	Inadequate Interior Conditions
No data	No data

Repaired By: No data  
Inspected By: No data  
Asset Type: No data







# Solutions Templates



**Underground Inspection Center**

Home   Manage   Monitor   **Administer**   Help

Use the following tools to perform common administration tasks for managing underground inspection data:

-  **Add / Remove Field Staff**  
Use the *Lead Underground User Domain Notebook* to add / remove field staff that will be assigned inspections and repairs.
-  **Extend Schema**  
Use the *Extend Underground Schema Notebook* to create the inspection fields and domains to the layer that will contain the completed inspection data
-  **Archive Data**  
Use the *Archive Underground Inspections Notebook* to archive inspection data and attachments to a related table in your system of record.
-  **Delete Data**  
Use the *Delete Underground Inspections Notebook* to delete inspection data that has been completed and archived to prepare for the next inspection campaign.





# Arcade Expressions



# Arcade Expressions

- What is Arcade, Is this a new video game?
  - Arcade is a portable, lightweight, and secure expression language written for use in the ArcGIS platform.
  - Perform mathematical calculations, manipulate text, and evaluate logical statements.
- Why Arcade?
  - Arcade was designed specifically for creating custom visualizations and labeling expressions in the ArcGIS Platform.
  - Use of Functions and Profiles
  - Includes the use of feature and geometry data types.
  - It is intended solely for use in the visualization, labeling, popup, and alias contexts of applications built with the ArcGIS platform, including ArcGIS Pro and Runtime SDKs, and the ArcGIS API for Javascript.



# Arcade Expressions

- Structure and Logic
  - Case Sensitivity
  - Comments
  - Multi-line statements
  - Variables
  - Global variables
  - Template literals
  - Feature sets
  - If statements
  - For loops
  - Operators
  - User-defined functions
  - Global and local scope



# Arcade Expressions

- Structure and Logic
  - Case Sensitivity – Arcade is case insensitive.
  - Comments

```
`Hello World`  
// returns "Hello World"  
  
`Hello`  
`World`  
// returns "Hello"  
// World"
```



# Arcade Expressions

- Structure and Logic
  - Case Sensitivity – Arcade is case insensitive.
  - Comments
  - Multi-line statements
  - Variables

```
var x = 10;  
return x; // returns 10  
  
x = "hello";  
return x; // returns "hello"
```



# Arcade Expressions

- Structure and Logic
  - Case Sensitivity – Arcade is case insensitive.

- Global variables
  - Comments
  - Multi-line statements
  - Variables
  - Global variables

- \$feature.fieldname
- . with square brackets
- \$feature["joinKey:fieldName"]

```
// returns % of population with a college degree
var percentCollege = Round($feature.COLLEGE / $feature.POPULATION * 100, 2);

// returns the population density per square kilometer
var popDensity = Round($feature.POPULATION / AreaGeodetic($feature), "square-kilometers");
```

# Arcade Expressions

- Structure and Logic
  - Case Sensitivity – Arcade is case insensitive.
  - Comments
  - Multi-line statements
  - Variables
  - Global variables
  - Template literals

```
`Hello World`  
// returns "Hello World"  
  
`Hello`  
`World`  
// returns "Hello  
World"  
  
`There are ${feature.STUDENTS} students at the University of California.`  
// returns "There are 15,000 students at the University of California."  
  
var scores = [70, 85, 92, 98, 100, 78, 89];  
`The average score was ${Round(Average(scores), 2)}%.`  
// returns "The average score was 87.43%."
```



# Arcade Expressions

- Structure and Logic

- Case Sensitivity – Arcade is case insensitive.

- Comments

- Multi-line statements

- Variables

- Global variables

- Template literals

- Feature sets

```
// returns the number of sensitive land features that intersect the feature displaying the popup  
var publicLandFeatures = FeatureSetByName($map, "public lands", ["class"], true);  
Count(Intersects(Filter(publicLandFeatures, "class = 'sensitive'"), $feature), "square-kilometers");
```



# Arcade Expressions

- Structure and Logic
  - Comments
  - Multi-line statements
  - Variables
  - Global variables
  - Template literals
  - Feature sets
  - If statements

```
function isOdd(value){  
  // Returns either 1 or 0.  
  // 1 = odd number  
  // 0 = even number  
  // Boolean() converts the raw value to a bool  
  var val = Boolean(value % 2);  
  if (val) {  
    return "Yes. This is odd."  
  }  
  else {  
    return "Nope. Not odd."  
  }  
}  
isOdd(213); // returns "Yes. This is odd."  
isOdd(2); // returns "Nope. Not odd."
```

– Case Sensitivity – Arcade is case insensitive.



# Arcade Expressions

- Structure and Logic

- Case Sensitivity – Arcade is case insensitive.

- Comments

- Multi-line statements

- Variables

- Global variables

- Template literals

- Feature sets

- If statements

- For loops

```
var sensitiveFeatures = Filter(publiclandfeatures, "class = 'sensitive'");  
var largeAreasPresent = false;  
for(var f in sensitiveFeatures){  
    largeAreasPresent = IIF(f.ACRES > 5000, true, largeAreasPresent);  
}
```



# Arcade Expressions

- Structure and Logic
  - Case Sensitivity – Arcade is case insensitive.
  - Comments
  - Multi-line statements
  - Variables
  - Global variables
  - Template literals
  - Feature sets
  - If statements
  - For loops
  - Operators

```
//Pre increment example
var x=10
++x // x is now 11 and the value 11 is returned

//Post increment example
var x=10
x++ // x is now 11 but the value of 10 is returned.
```



# Arcade Expressions

- Structure and Logic

- Case Sensitivity – Arcade is case insensitive.

- Comments

- Multi-line statements

- Variables

- Global variables

- Template literals

- Feature sets

- If statements

- For loops

- Operators

- User-defined functions

- Global and local scope

```
var myGlobal = 1;
function useGlobal() {
  var n = 10; // n is only available inside of this function. ie. It is local scope.
  return myGlobal * n; // will use the globally defined variable
}
function overrideGlobal() {
  var myGlobal = 1000;
  return myGlobal * 10; // will use the locally defined variable
}
var z = overrideGlobal(); // will be 10000
var k = useGlobal(); // will be 10
return z + k; // returns 10010
```



# Arcade Expressions

- Structure and Logic
  - Case Sensitivity – Arcade is case insensitive.
  - Comments
  - Multi-line statements
  - Variables
  - Global variables
  - Template literals
  - Feature sets
  - If statements
  - For loops
  - Operators
  - User-defined functions
  - Global and local scope

```
var myGlobal = 1;  
for(var k=1; k<100; k++) {  
  var n=10; // Defined in Block, but will be available outside of Block.  
  return k + n; // Will return 110  
}
```





# Web APIs

# Web APIs

- What is an API?
  - It is a set of functions and procedures that extend allowing the creation of applications that access the features or data of an operating system, application, or other service.
  - How does this apply to Esri technology?
- ArcGIS application programming interfaces (API) provide the ability to extend traditional capabilities for their products (solutions, applications, and extensions, software development kits (SDK))



# Web APIs

Documentation

## All documentation

Web APIs

[ArcGIS API for JavaScript](#) >

[Esri Leaflet](#) >

[Mapbox GL JS](#) >

[OpenLayers](#) >

Calcite design system

[Overview](#) >

[Components](#) >

[Icons](#) >

[Colors](#) >

Reference topics

[Developer glossary](#) >

[Web Map Specification](#) >

[Web Scene Specification](#) >

[Spatial references](#) >

[Cartographic Information Model Specification](#)

[Indexed 3D Scene Layers](#)

[Tile package specification](#)

[Arcade](#) >

[Common data types](#) >

Mobile APIs

[ArcGIS Runtime API for iOS](#) >

[ArcGIS Runtime API for Android](#) >

[ArcGIS Runtime API for .NET](#) >

[ArcGIS Runtime API for Qt](#) >

App builders and templates

[ArcGIS Experience Builder](#) >

[ArcGIS Web AppBuilder](#) >

[ArcGIS AppStudio](#) >

[ArcGIS Survey123](#) >

Native/Desktop APIs

[ArcGIS Runtime API for Java](#) >

[ArcGIS Runtime API for .NET](#) >

[ArcGIS Runtime API for Qt](#) >

ArcGIS Pro

[ArcGIS Pro SDK for Microsoft .NET](#)

[ArcPy](#)

Other documentation

[Vector Tile Style Editor](#) >

[ArcGIS Earth Automation API](#) >

[ArcGIS Urban API \(Beta\)](#) >

[ArcGIS GeoAnalytics On-Demand Engine \(Beta\)](#) >

[ArcGIS Velocity gRPC Feeds \(Beta\)](#) >

[ArcGIS API for JavaScript \(legacy 3.x\)](#) >

[ArcGIS Developer release notes](#) >

[Frequently asked questions \(FAQ\)](#) >

REST APIs

[Overview](#) >

[API Clients](#)

[ArcGIS REST JS](#) >

[ArcGIS API for Python](#) >

ArcGIS Enterprise

[ArcGIS Enterprise SDK](#) >

[ArcGIS Workflow Manager](#) >

[GeoEvent Server SDK](#)

[Chef for ArcGIS Enterprise](#)





# Web APIs

- What is an API?
  - It is a set of functions and procedures that extend allowing the creation of applications that access the features or data of an operating system, application, or other service.
  - How does this pertain to Esri?
    - ArcGIS application programming interfaces (API) provide the ability to extend traditional capabilities for their products (solutions, applications, and extensions, software development kits (SDK))
    - Why use an API?
      - To extend the capabilities already provided.



# WebApp Builder API

- What is ArcGIS Web AppBuilder
  - It is an intuitive what-you-see-is-what-you-get (WYSIWYG) application that allows you to easily build web apps. The developer edition provides an extensible framework for developers to create custom widgets and themes.
- Why use it?

- Create HTML/JavaScript apps that work on desktop browsers, tablets, and smartphones.
- Integrated with the ArcGIS Online and ArcGIS Enterprise platforms.
- Build the apps you need using ready-to-use widgets, such as Query, Geoprocessing, and Print.
- Create custom app templates.
- Extensible framework for developers to create widgets and themes.
- Web AppBuilder allows you to create apps by accessing workflow tabs including [Theme](#), [Map](#), [Widget](#), and [Attribute](#).



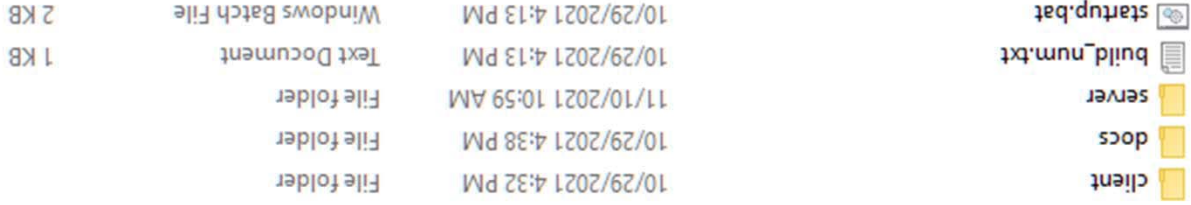
# WebApp Builder API

- Requirements
  - You must have an ArcGIS Developer account (or an ArcGIS organizational account with appropriate permissions)
  - Must you a supported browser (see 2D & 3D requirements)
  - Must use a supported version of Node.js (v4.2 or later)
  - Must use supported version of ArcGIS Online and ArcGIS Enterprise
    - 2D v10.3 or later
    - 3D v10.3.1 or later
  - Supported versions of JavaScript 3.3 (2D) or 4.22 (3D)



# WebApp Builder API

- Lets get started!
  - Download and install the ArcGIS App Builder SDK
  - Web App Builder API requires the use of Node.js
  - This will download and install



client	File folder	10/29/2021 4:32 PM	
docs	File folder	10/29/2021 4:38 PM	
server	File folder	11/10/2021 10:59 AM	
build_num.txt	Text Document	10/29/2021 4:13 PM	1 KB
startup.bat	Windows Batch File	10/29/2021 4:13 PM	2 KB



# WebApp Builder API

- Lets get started!
  - Download and install the ArcGIS App Builder SDK
  - Web App Builder API requires the use of Node.js
    - This will download and install
  - The Web App Builder API uses a preconfigured .bat file and runs in the command prompt locally on your machine and Web AppBuilder in your default browser.
  - Double-click the .bat file to launch the application
  - [https://\[yourmachinename\]:3344/webappbuilder](https://[yourmachinename]:3344/webappbuilder)
  - **DO NOT CLOSE THE COMMAND PROMPT WINDOW!**

```
C:\> Web AppBuilder for ArcGIS
Server listening tcp connection on port 3344 in development mode
[2022-03-21T09:48:02.257] [INFO] repo - Read repository items: F:\GIS\Arc
ts-web-appbuilder-2.22\ArcGISWebAppBuilder\client\stemapp\widgets
Server listening http connection on port 3345 in development mode
Server listening https connection on port 3346 in development mode
```



# WebApp Builder API

- Specify your Portal
  - ArcGIS Enterprise
  - ArcGIS Online

Specify the URL to your ArcGIS Online organization or ArcGIS Enterprise

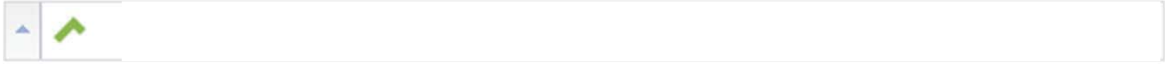


# WebApp Builder API

- Specify your Portal

– ArcGIS Enterprise

– ArcGIS Online

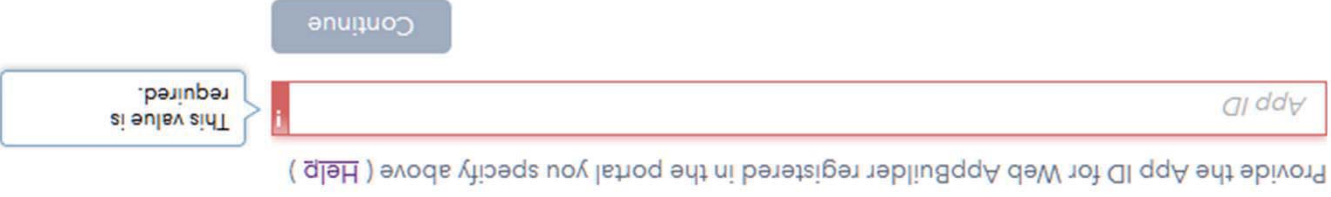
A screenshot of a form field with a green checkmark icon on the left side, indicating a successful validation or completion of the step.

Specify the URL to your ArcGIS Online organization or ArcGIS Enterprise

A blue button with the text "Continue" written on it.

- Provide an appID for Web App Builder

– Requires a Web App API application to work

A screenshot of a form field with a red border, indicating an error. Below the field is a text label: "Provide the App ID for Web AppBuilder registered in the portal you specify above ( [Help](#) )". To the left of the field is a callout box with the text "This value is required." and a "Continue" button.

# WebApp Builder API

 Edit Thumbnail



 Add to Favorites

 Web Mapping Application by maps@mpsutility.com

Created: Oct 19, 2020 Updated: Oct 19, 2020 View Count: 5

Add a brief summary about the item.

 Edit


**Description**

Add an in-depth description of the item.

 Edit

**Terms of Use**

Add any special restrictions, disclaimers, terms and conditions, or limitations on using the item's content.

 Edit

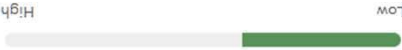
Comments (0)


Leave a comment. 

Leave a comment.

 Comment

**Item Information**

Top Improvement:  Add a summary

 Learn more

**Details**


Size: 0 KB


Shared with: **The item is not shared.**


API: JavaScript

Purpose: Ready To Use


\*\*\*\*\*


**Owner**  maps@mpsutility.com


 Change Owner

**Folder**  Move

Development Testing

 View Application

 Share

 Metadata





# WebApp Builder API

Web Mapping Application

Data Source

URL

Code Attachment

Purpose

API

App Registration

Registered Info

Ready To Use

JavaScript

Update

Unregister App

Attach Code

Save

Cancel



# WebApp Builder API



Update   Unregister App

App Registration

App ID:

GUCb117TnTIZsvpq

App Secret:

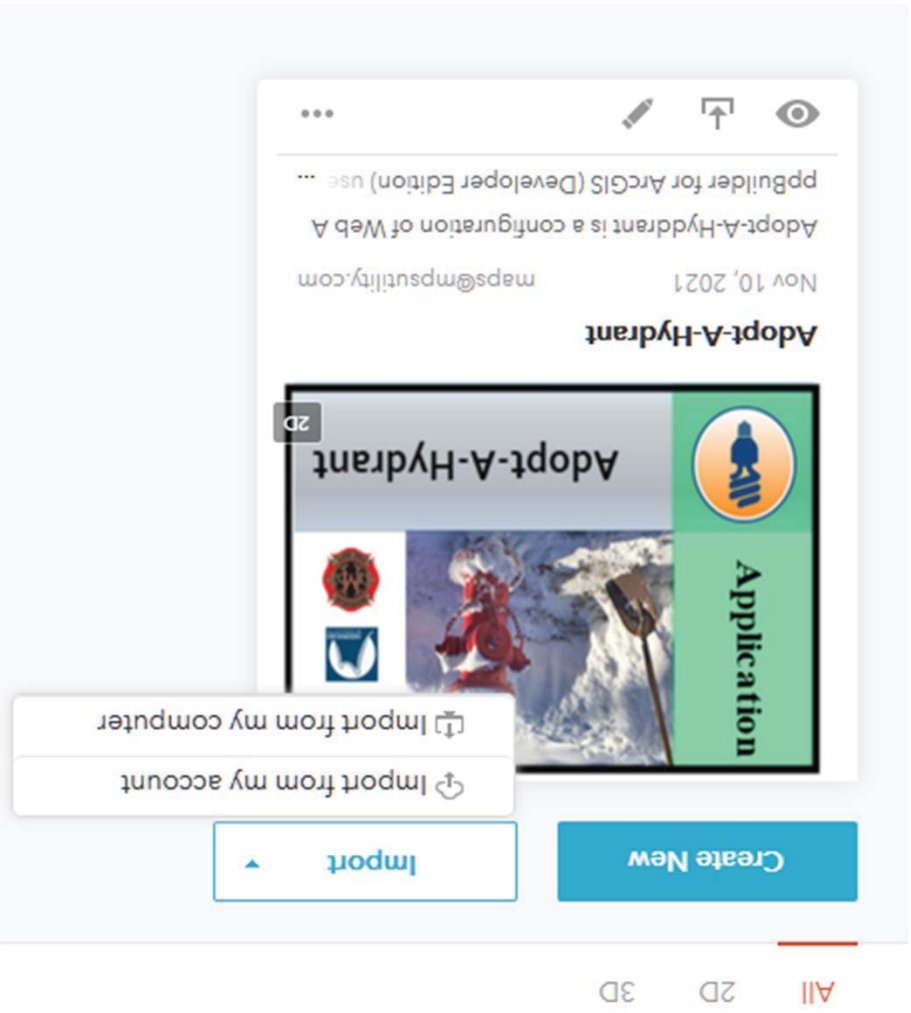
Show Secret

App Type:

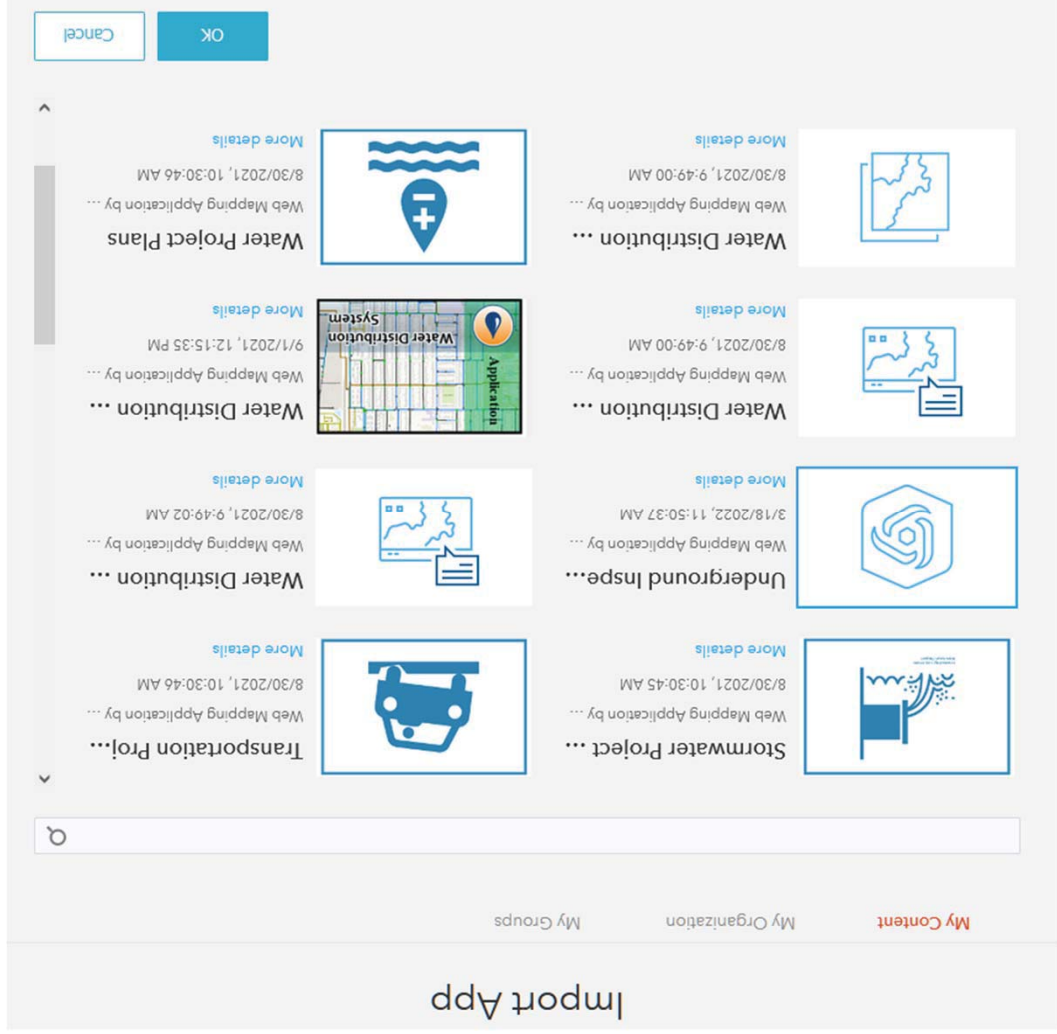
Browser

Redirect URI's:

# WebApp Builder API



# WebApp Builder API

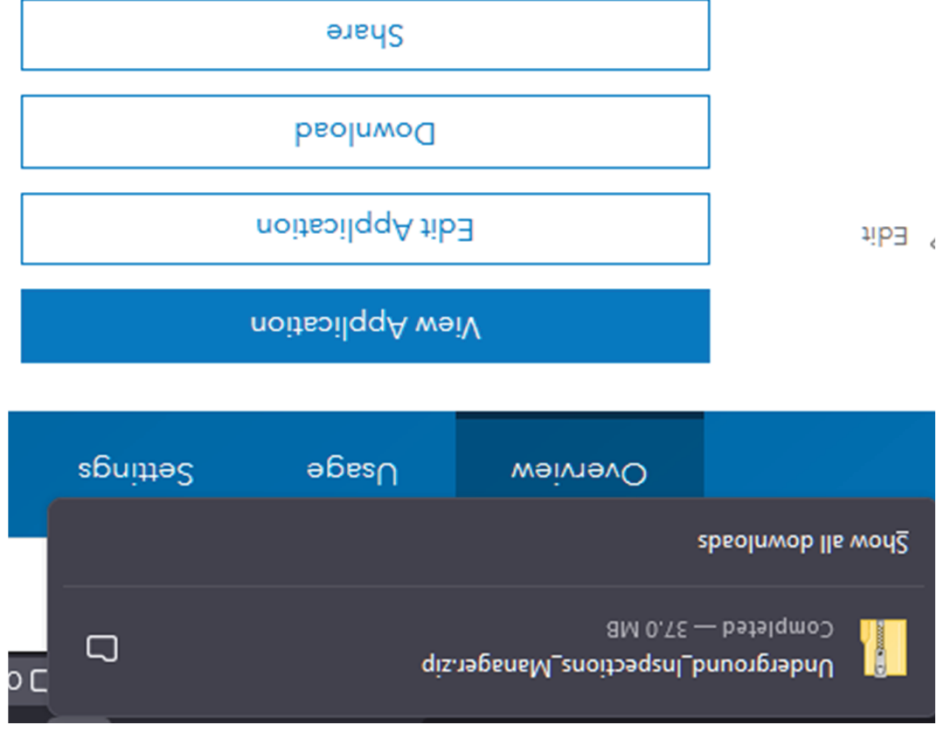


# WebApp Builder API

- Some preconfigured apps will need to be downloaded PRIOR to being modified with the Web AppBuilder API
- Open the application detail page
- Select DOWNLOAD
- Navigate to the downloads folder
- Copy the .ZIP file to your working folder directory
- IMPORT from your computer
- Select the .ZIP and OPEN
- The Web AppBuilder API will then upload the application



# WebApp Builder API



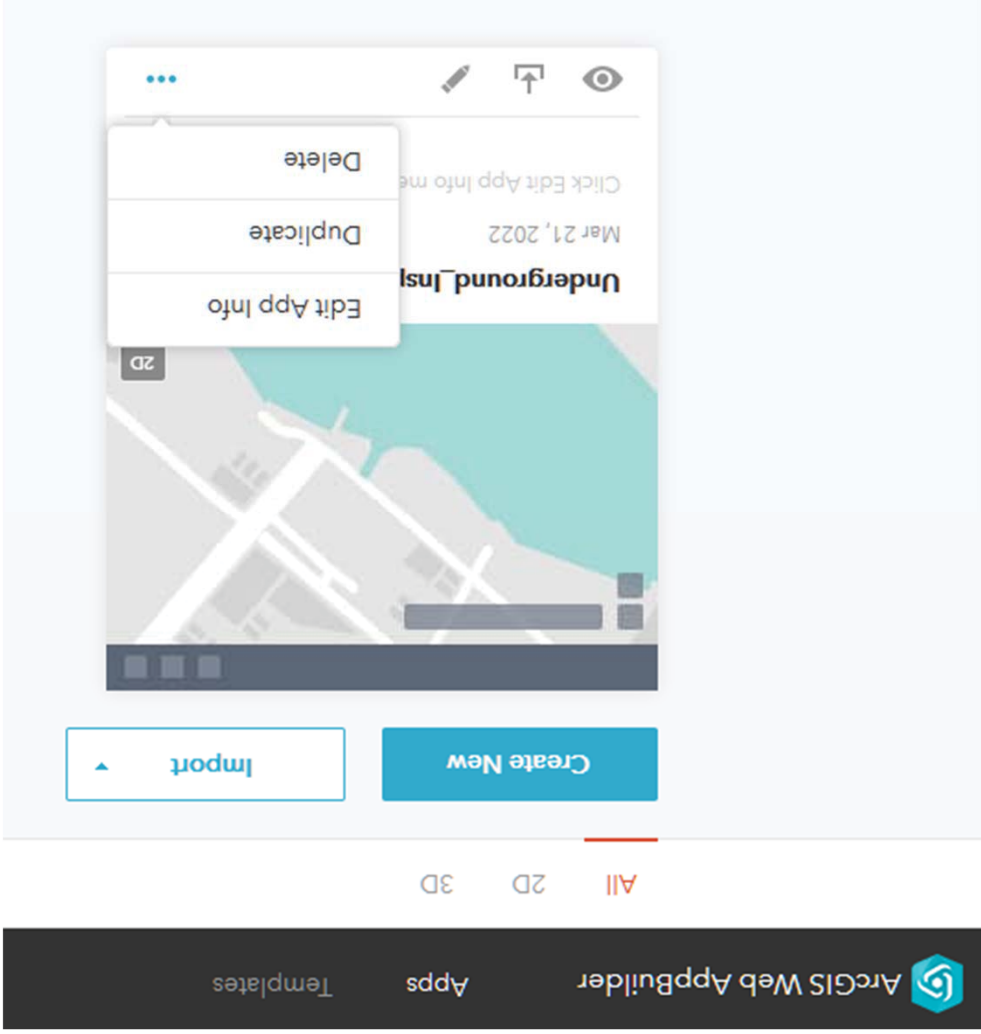
# WebApp Builder API

Fail to import. Some widgets used in  
the app are newer version. App  
name:[Underground\_Inspections\_Man  
ager], widget: HomeButton,2.23  
MyLocation,2.23  
ZoomSlider,2.23  
ExtentNavigate,2.23  
FullScreen,2.23  
Legend,2.23  
LayerList,2.23  
BatchAttributeEditor,2.23

OK

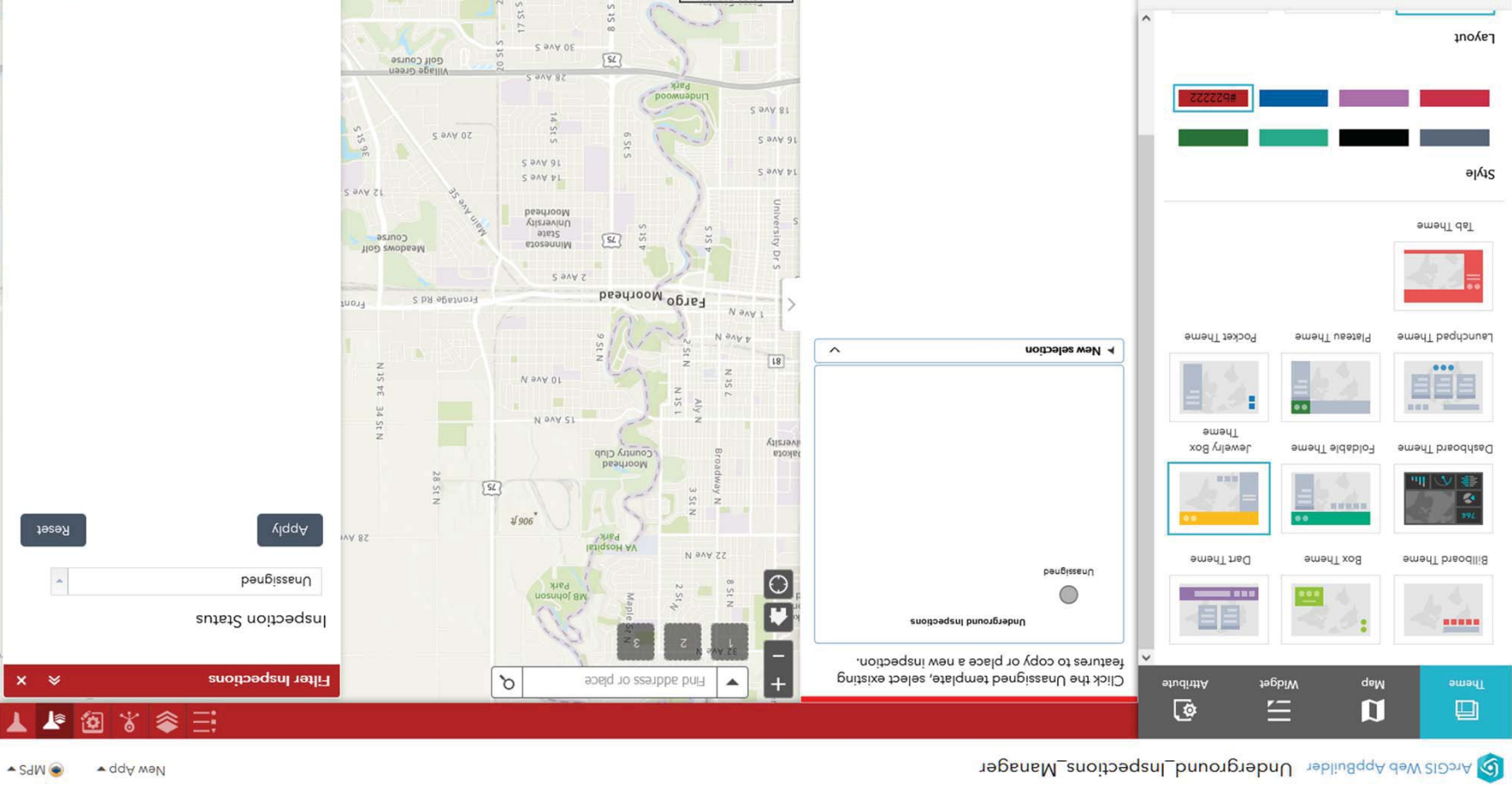


# WebApp Builder API





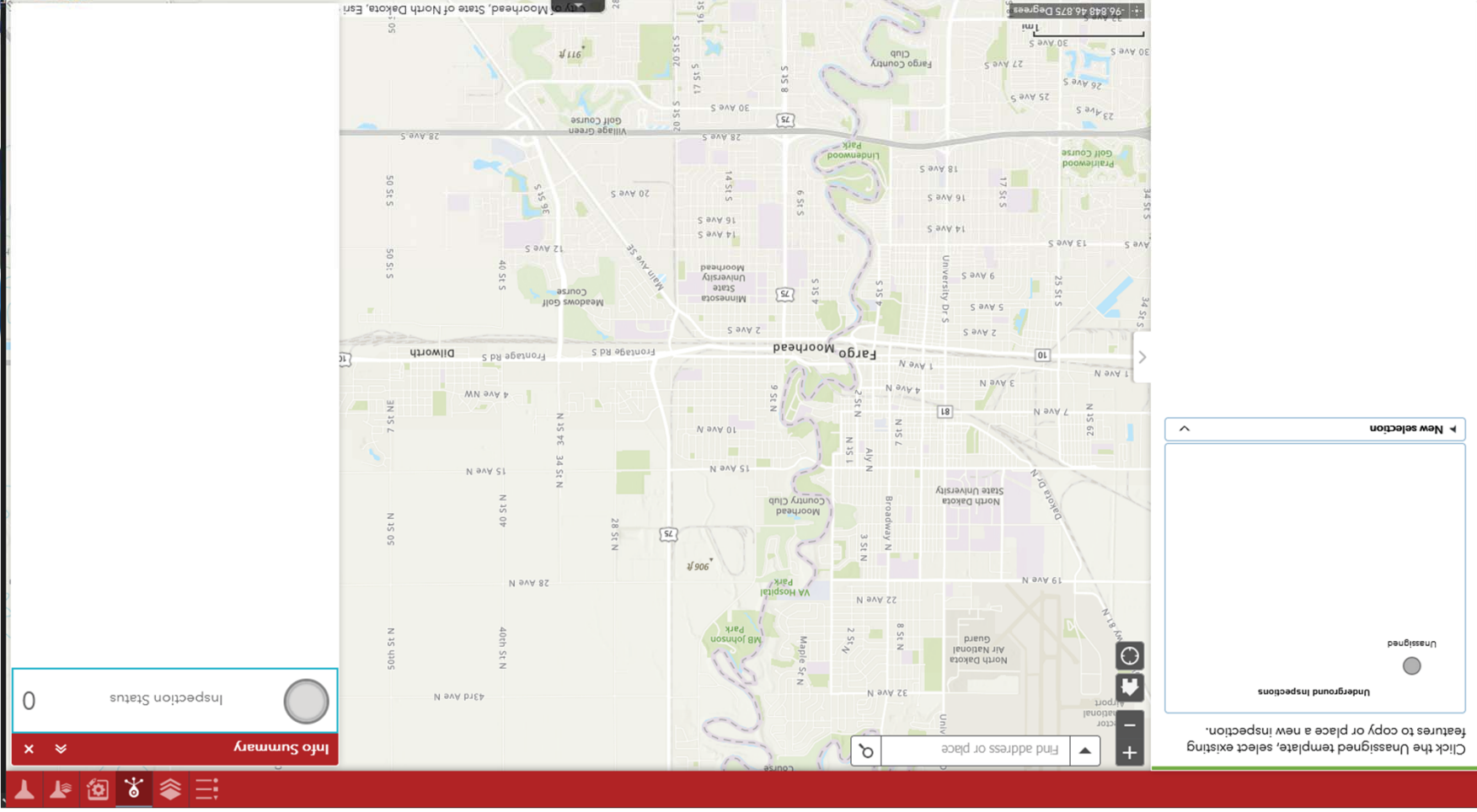
# WebApp Builder API



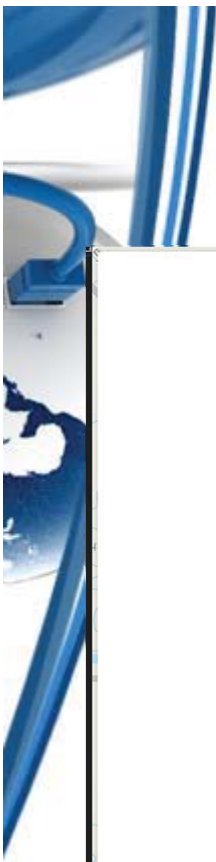
The screenshot displays the ArcGIS Web AppBuilder interface. At the top, the ArcGIS logo and the text 'ArcGIS Web AppBuilder' and 'Underground\_Inspections\_Manager' are visible. The main area is a map of Fargo Moorhead, MN, with a search bar and navigation controls. A configuration panel on the right is open, showing a 'New selection' window with a grey circle labeled 'Unassigned' and the text 'Underground Inspections'. Below this, a message reads: 'Click the Unassigned template, select existing features to copy or place a new inspection.' The configuration panel includes sections for 'Style' (with color swatches), 'Tab Theme' (with a 'Jewelry Box' theme selected), and 'Layout'. A bottom toolbar contains icons for 'Theme', 'Map', 'Widget', and 'Attribute'. The top navigation bar shows 'New App' and 'MPS'.



# WebApp Builder API



The screenshot displays the WebApp Builder API interface. The main area is a map of Fargo Moorhead, MN, showing streets, parks, and landmarks like Moorhead State University and North Dakota Air National Guard. A sidebar on the right contains a section titled "Underground Inspections" with a sub-section "New selection". Below this, there is a list of "Unassigned" items, each represented by a grey circle. A text box at the bottom of the sidebar reads: "Click the Unassigned template, select existing features to copy or place a new inspection." At the top of the sidebar, there is a search bar labeled "Find address or place" and a search icon. Below the search bar is a red "Info Summary" bar with a close button (X) and a refresh button. In the bottom right corner, there is a red bar with a search icon and a text input field containing the number "0".



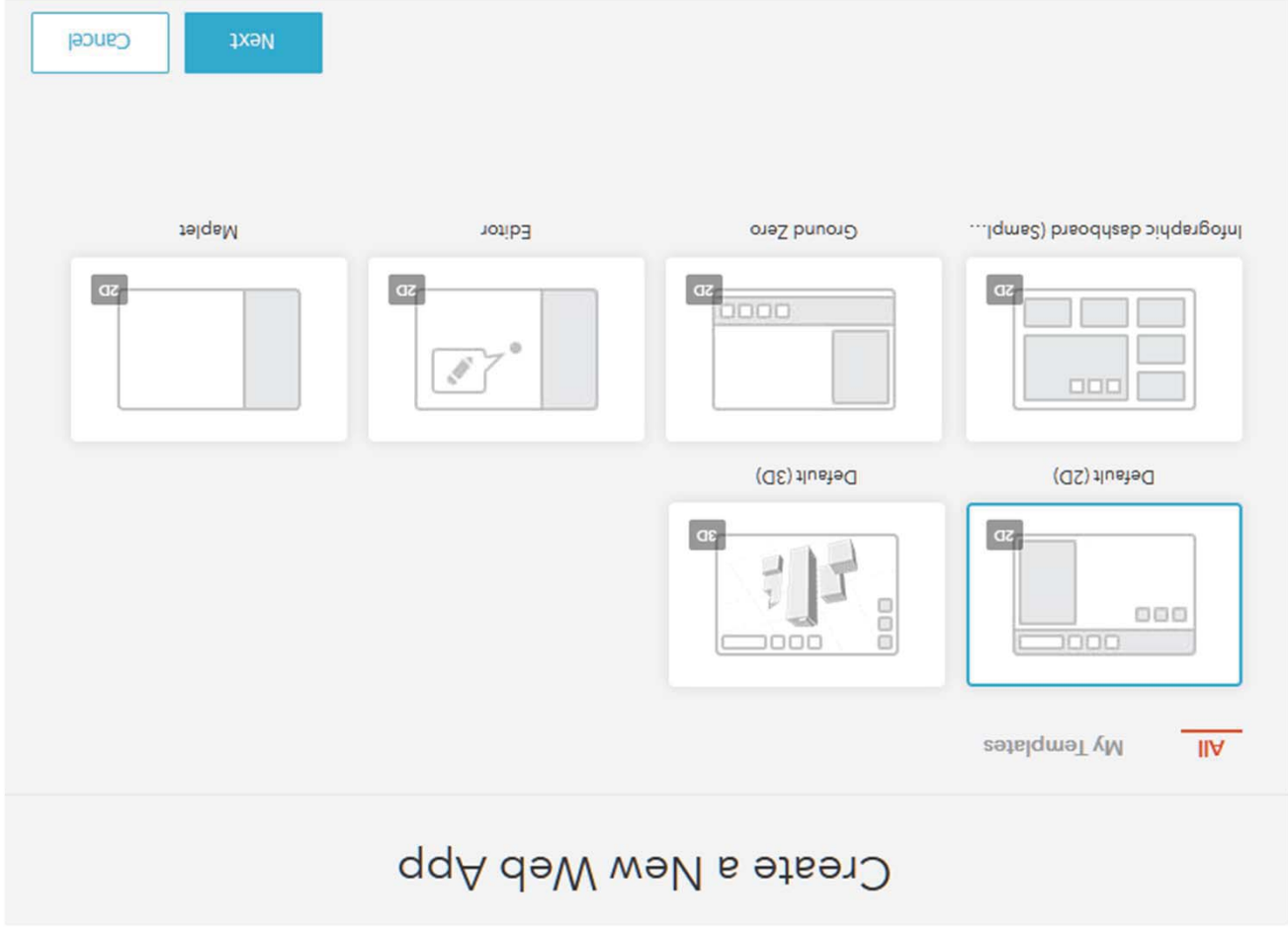
# WebApp Builder API

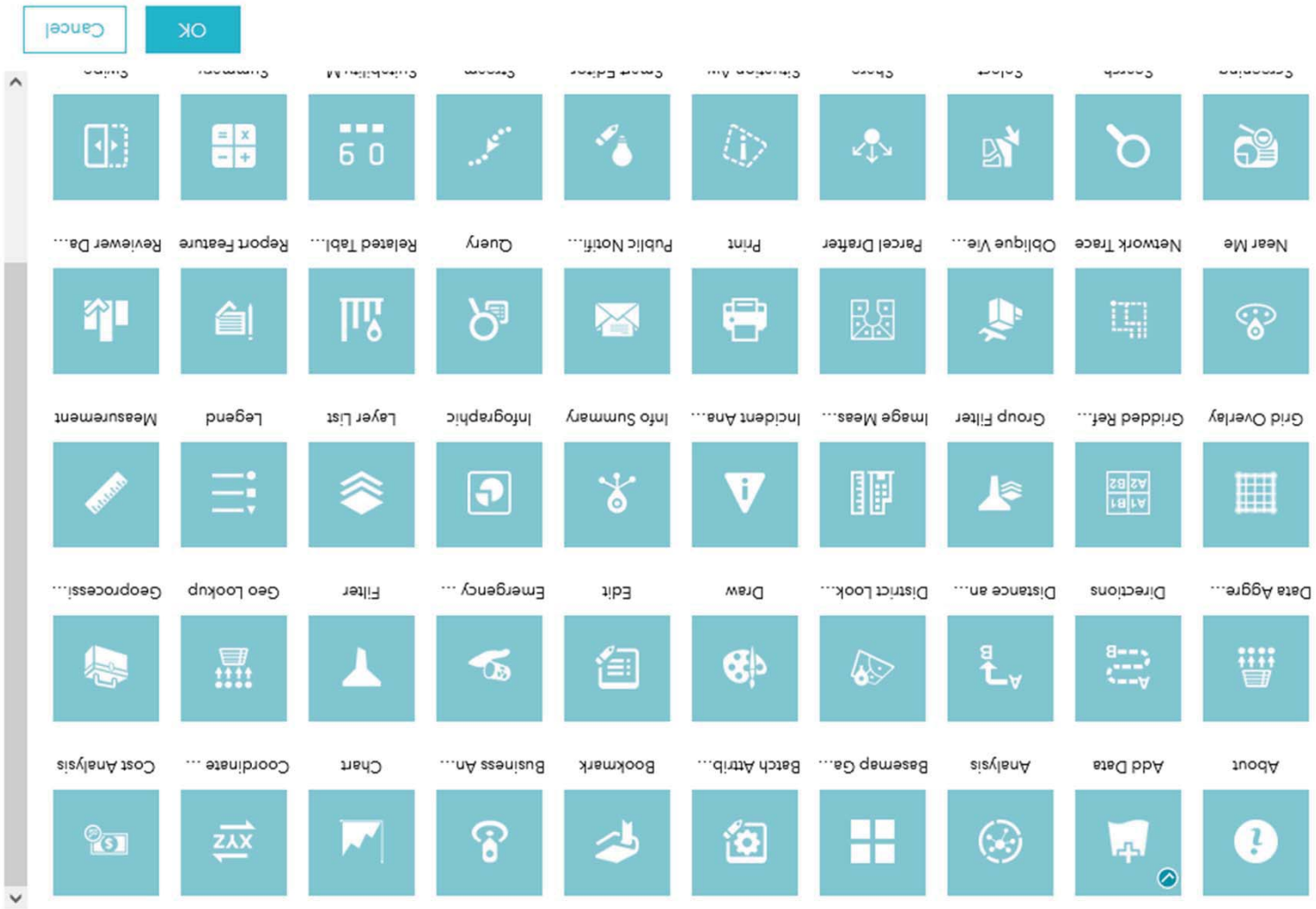
All   2D   3D

The screenshot displays the ArcGIS Web AppBuilder search results for 'Adopt-A-Hydrant'. At the top, there are navigation icons for a menu, edit, share, and view. Below these, the search results for 'Adopt-A-Hydrant' are shown, including the date 'Nov 10, 2021' and the email 'maps@mpsutility.com'. The main result is a card for 'Adopt-A-Hydrant' with a '2D' label, a person icon, and the word 'Application'. The card features a collage of images: a fire department logo, a water utility logo, a red fire hydrant, and a shovel in the snow. At the bottom of the search results, there are two buttons: 'Import' and 'Create New'.



# WebApp Builder API





# WebApp Builder API



# WebApp Builder API

Configure Add Data

X



Add Data

Change widget icon

[Learn more about this widget](#)

Number of items per page



Allow My Content



Allow My Organization



Allow ArcGIS Online



Allow Curated

Curated filter



Allow URL



Allow File



30

Optional label

Optional label

Optional label

Optional label

Living atlas example:

group:c755678be14e4a0984af36a15f5b643e



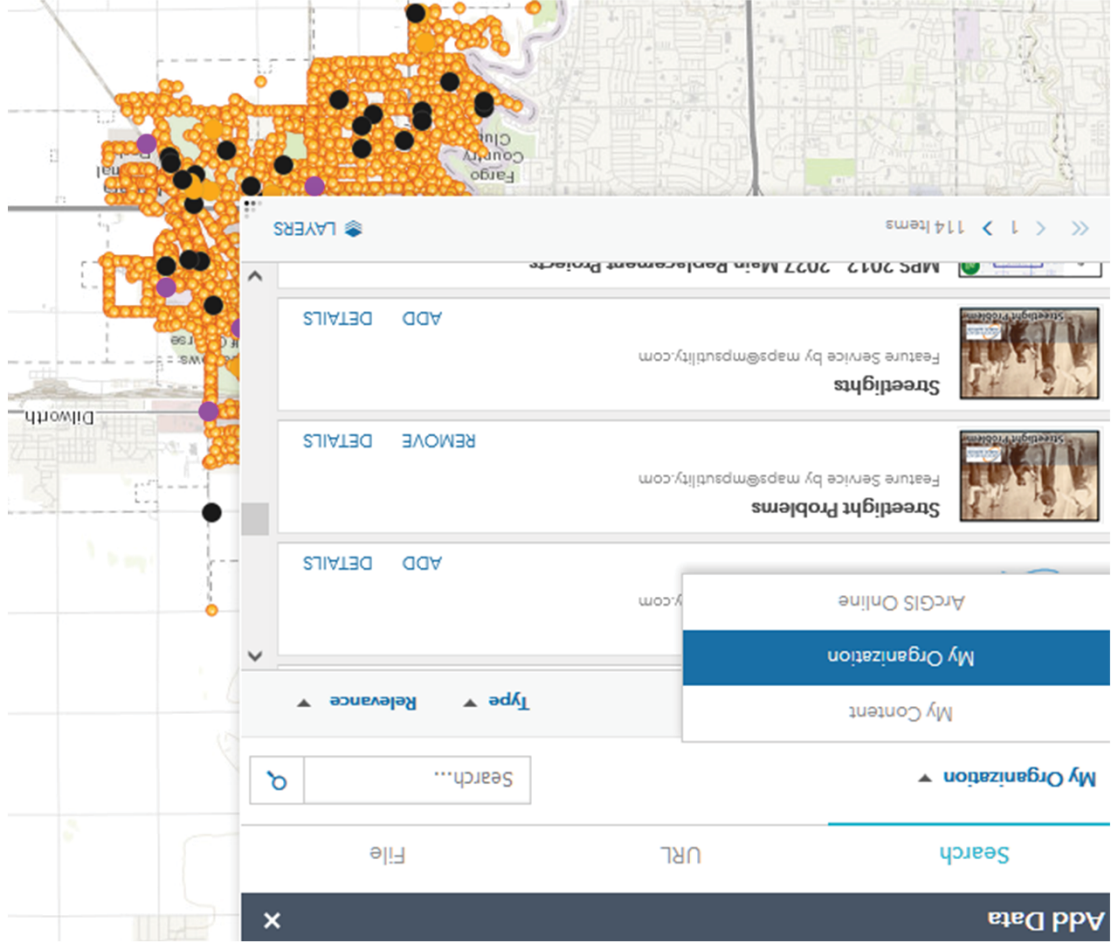
# WebApp Builder API

**Caution:** When you deploy the app locally, keep in mind that unlike hosted apps, there is no scope control over the deployed app. As a result, you should use the map scope to control the search scope of the Add Data widget. If you want to search the data in **My Organization** or **My Content**, ensure the map is not shared publicly. In this way, when the deployed app opens, the sign-on dialog box appears, passing the credentials to the Add Data widget. By default, the widget only displays the public content if the credentials are not present.

**Caution:** If the app is shared publicly, do not enable **Allow My Organization** or **Allow My Content** because the search will only execute against the public items.

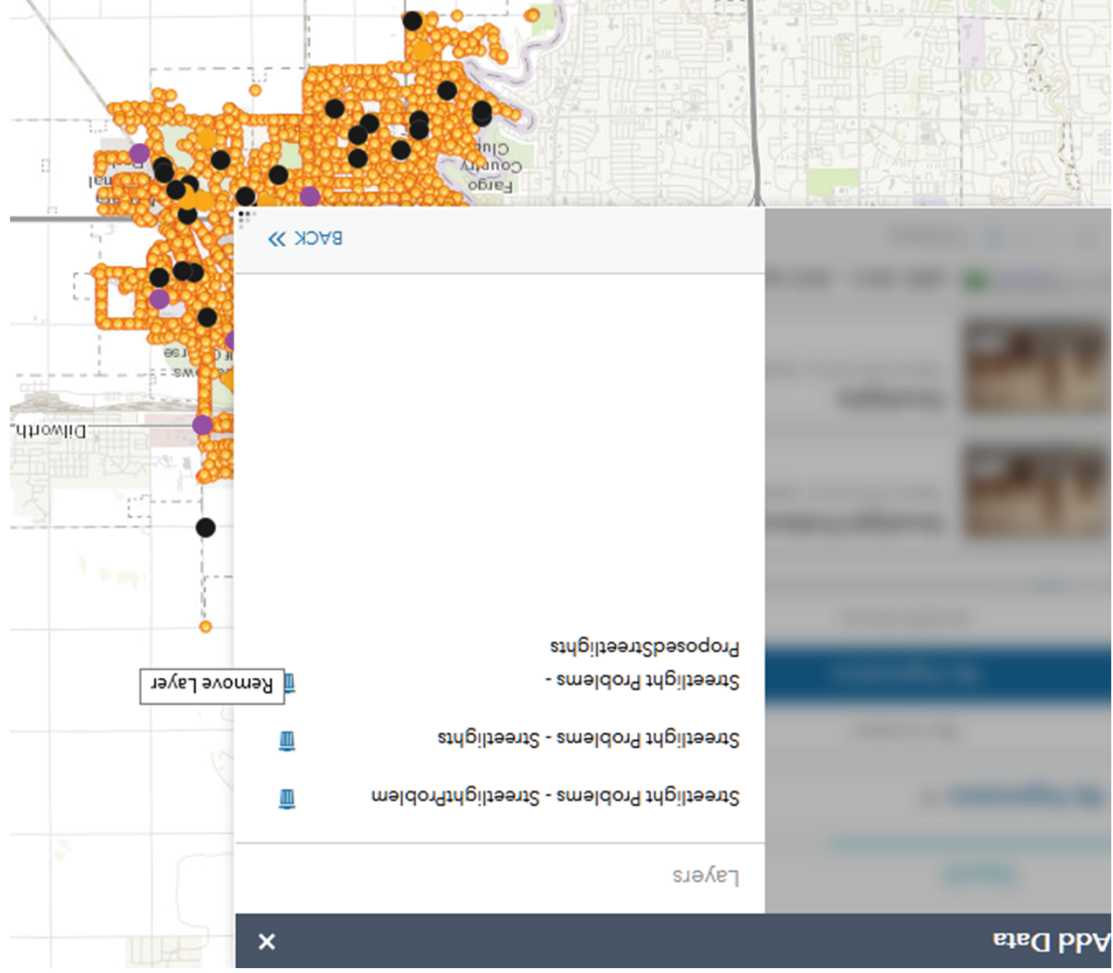


# WebApp Builder API

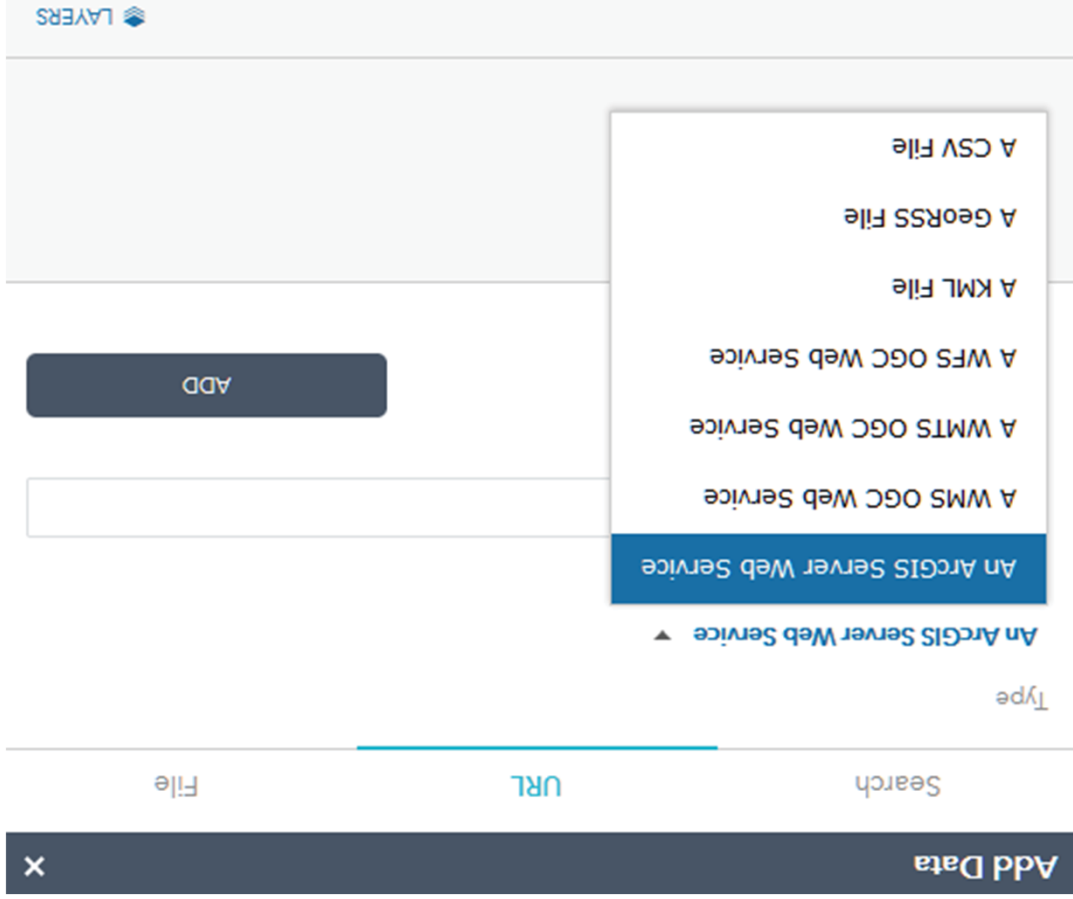




# WebApp Builder API



# WebApp Builder API



# WebApp Builder API




# WebApp Builder API



Configure Network Trace

X



Network Trace

[Change widget icon](#)

[Learn more about this widget](#)

Task URL

[Set](#)

---

**Project Settings**

Project polygon layer

Output parameter name

Project point layer

**Input**      **Output**


*Note: Project Settings are optional, once configured user can store project in the desired webmap layers with network outage area and input parameters. User can store other output parameters from the 'Output' tab.*



# WebApp Builder API

Configure Network Trace

X



Network Trace


[Change widget icon](#)

[Learn more about this widget](#)


Task URL

[Set](#)

Project Settings    **Input**    Output

Name	Type	Tooltip	Symbol
Isolation Flag	Flag	A flag to identify the feature requiring isolation.	

Provide text to display for the input tab



# WebApp Builder API

Configure Network Trace

Network Trace

Change widget icon

[Learn more about this widget](#)

Task URL

Project Settings    Input    Output

Visible	Output Parameters	Save to Layer (Optional)	Skippable	CSV	Symbol	Settings
<input checked="" type="checkbox"/>	Affected Hydrants	Select	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Affected Customers	Select	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Isolation Valves	Select	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>

Provide summary text to display on the output tab  
*Hint: Build your expression below using the add summary items button.*

**B I U | A +**

Auto zoom after trace



# WebApp Builder API

ArcGIS Web AppBuilder Web API 2D Test

Theme  Map  Widget  Attribute 

→ Loading screen

Background color

#508dca

Use background image

Show loading icon

Pick a predefined GIF



Upload an image



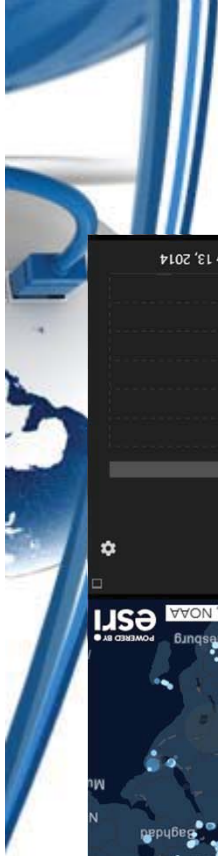
# WebApp Builder API

ArcGIS Web AppBuilder Testing Web Appbuilder API

The screenshot displays a dashboard with several data visualization widgets:

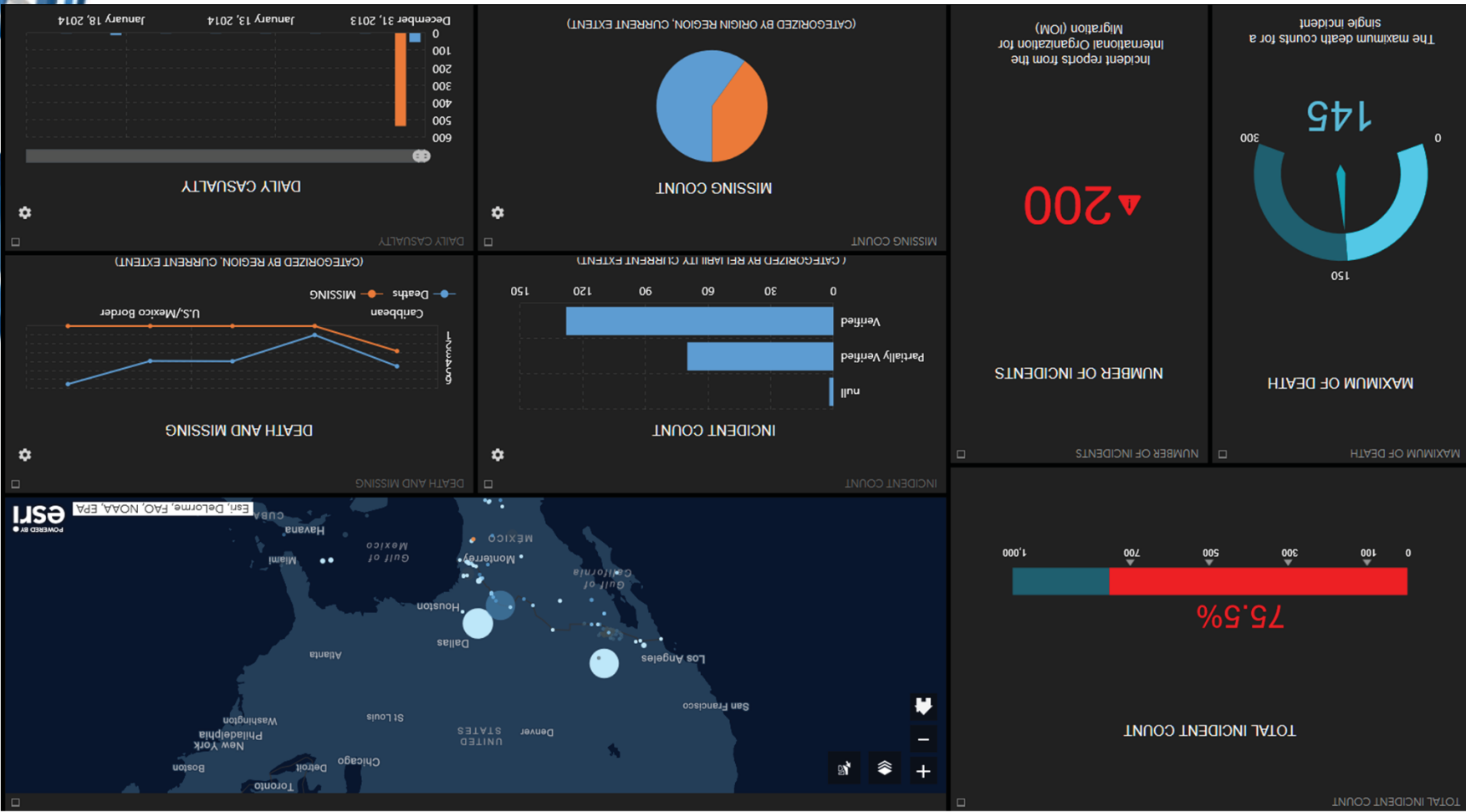
- DAILY CASUALTY:** A bar chart showing data for January 13, 2014, and December 31, 2013. The y-axis ranges from 0 to 600.
- MISSING COUNT:** A pie chart titled "(CATEGORIZED BY ORIGIN REGION, CURRENT EXTENT)".
- INCIDENT COUNT:** A horizontal bar chart comparing Unverified, Verified, and Partially Verified incidents, with a y-axis from 0 to 400.
- DEATH AND MISSING:** A line chart showing trends for Deaths, MISSING, Caribbean, and Middle East.
- Map:** A map of the Americas with various city labels (London, Paris, Moscow, Baghdad, Chicago, Los Angeles, Mexico City, Sao Paulo, Buenos Aires, Johannesburg) and a "Modify layout" button.
- TOTAL INCIDENT COUNT:** A horizontal bar chart showing a total of 75.5%.
- NUMBER OF INCIDENTS:** A gauge chart showing 728 incidents.
- MAXIMUM OF DEATH:** A gauge chart showing a maximum of 251 deaths.
- MAXIMUM OF INCIDENTS:** A gauge chart showing a maximum of 150 incidents.

At the bottom of the dashboard, there is a navigation bar with "New App" and "MPS" options. On the right side, there is a control panel with "Launch", "Reviews", and "Save" buttons, and a "Choose Web Map" button.





# WebApp Builder API



# Solutions Templates, Arcade Expressions, & Web APIs

- [Esri Industries | GIS Industry Solutions](#)
  - [GIS for Electric Utilities & Utility Mapping | More Than Making Maps \(esri.com\)](#)
  - [ArcGIS Solutions | Government, Utility & Defense Solutions \(esri.com\)](#)
  - [ArcGIS Utility Solutions](#)
    - [New ArcGIS Solutions for Water Distribution System Data Management \(esri.com\)](#)
    - [Introduction to Electric Underground Inspections—ArcGIS Solutions | Documentation](#)
- [Esri Documentation | Up-to-date documentation for ArcGIS and more | ArcGIS](#)
  - [Getting Started | ArcGIS Arcade | ArcGIS Developer](#)
  - [GIS APIs | ArcGIS APIs & SDKs for Developers \(esri.com\)](#)
    - [Documentation | ArcGIS Developer](#)
    - [ArcGIS Web AppBuilder | ArcGIS Developer](#)





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