ArcGIS Experience Builder

Lauren Voelker, Sr. Solution Engineer

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Agenda

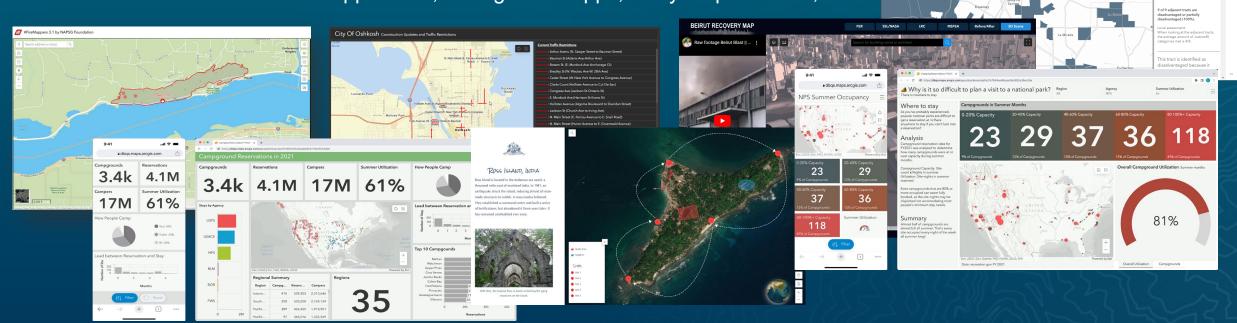
- User AppsOverview
- Building Blocks
- Deployment
- Roadmap



ArcGIS Online – Web Mapping Applications by the numbers

Almost 10 Million Web Mapping Apps Including:

- 1.4 Million Story Maps
- 790 K Dashboards
- 350K Instant Apps
- 200 K Web Experiences
- 6.5 Million Web AppBuilder, Configurable Apps, Story Maps Classic, etc.



38

997

Population), 25+ with

ew.goTo({ center: [-126, 49]

.catch(function(error) {
 if (error.name != "AbortError") {
 console.error(error);

App Builders

Apps are the user experience for your map and data

Present the content with information and tools in a meaningful way

- Leverage capabilities within the map and layers
- Provide meaningful interactivity to enhance user experience







Your Published application

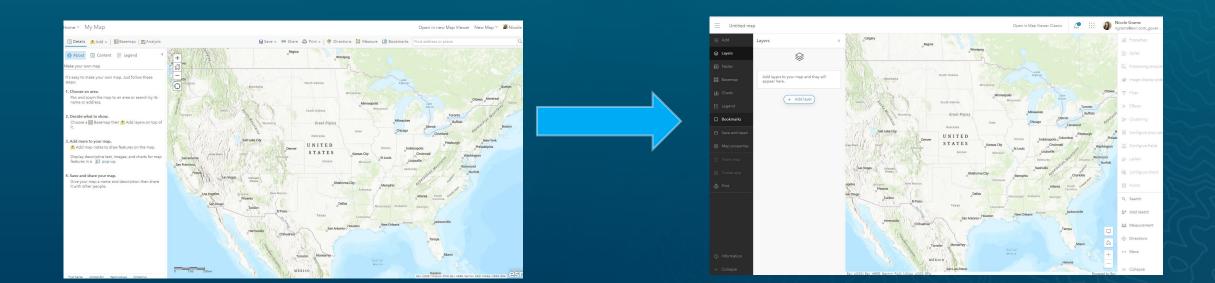
Map and Data

Configure App

A Tale of Two Map Viewers

• Moving from JavaScript 3.x to 4.x is a BIG undertaking

• Kind of like....



A Tale of Two Map Viewers

Moving from JavaScript 3.x to 4.x is a BIG undertaking

• Kind of like....





A Tale of Two Map Viewers

ArcGIS Online

Pueblo

The tale of two ArcGIS Online map viewers: functionality guidance

KANSAS

Mapping April 13, 2021 Kelly Gerrow-Wilcox Chris Whitmore Lynnae Terpstra

The new Map Viewer (formerly known as Map Viewer Beta) and Map Viewer Classic (formerly known as Map Viewer) are both available for production use by all customers. Because the map viewers are built using different versions of the ArcGIS API for JavaScript, and some workflows are not yet available in the new Map Viewer, please use this functionality guide to understand when you need to use a specific map viewer to complete your workflow.



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🔊 Note:

MISSOUR

If Map Viewer Classic is your organization's primary map viewer, it will be automatically updated to Map Viewer in June 2022. Map Viewer Classic will continue to be available and you will still be able to change your organization's primary map viewer as needed.

Map Viewer supports most of the mapping workflows available in Map Viewer Classic, including searching, styling, pop-up configuration, filtering, labeling, and clustering. Additionally, Map Viewer includes some new capabilities that are not supported in Map Viewer Classic. The following capabilities are only available in Map Viewer:

- Dot density styling
- Multielement pop-ups
- Above and Below styling themes
- Layer blending
- Effects (whole layer and feature-specific)
- Group layers
- Vector symbols
- Labels for clusters
- Feature display order
- Clustering for more than 50,000 point features

Amplify the power of your maps and data







Captivate and inform

Integrate your data and maps

Engage on any mobile device



Build with minimal effort

Exercise creative freedom

Captivate and Inform

Communicate status

App builders

Answer questions

Streamline workflows

Tell a story

Engage the public

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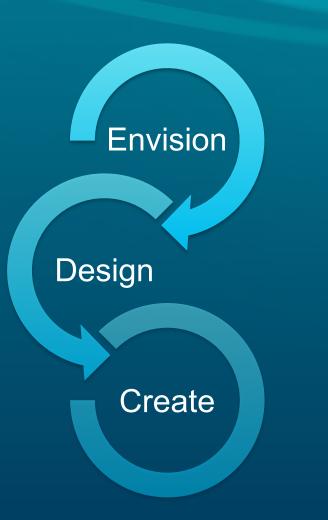
catch(function(error) {
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ArcGIS Experience Builder

What Is ArcGIS Experience Builder?

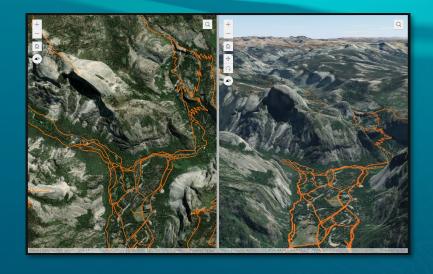
Create web apps you envision

- Design and build web apps
 - Explore design decisions with templates
 - Access ready-to-use widgets
 - Build custom tools
- Data driven
- Modern interface



Key Features

- Flexible design
- Mobile optimization
- Interconnection between widgets
- 2D and 3D in one app
- Integration with other ArcGIS apps
- Extensibility







Silverwood Park Natural History Tour

Take a virtual Natural History tour through Silverwood Park in St. Anthony, MN. This narrated tour explores the park's wildlife, topography, and history.



Find a Collaborative

Discovery tool for the Collaborative Conservation Mapping Project to inventory and map collaborative groups working on conservation and resource management in the Southwest and Rocky Mountain regions.



Indicators of Planet Earth

This user friendly portal/gateway is bundled with multi Earth observations in which the visualizations are categorized in form of Earth Indicators, Natural Hazards, Environmental Threats, Ecosystem Health and Monitoring Climate.



Southeast AK Herring Surveys 2021

Alaska Department of Fish and Game (ADF&G) assesses the abundance of herring stocks annually using a variety of methods including aerial surveys.



Tucson's Climate Action Survey Results

This application displays the results of the Tucson's Climate Action survey in both spatial and graphical forms, pushing the limits of Experience Builder's capabilities.



CDC Places

This application provides an interactive map for model-based chronic disease related estimates at county, place, census tract, and ZIP Code Tabulation Area (ZCTA) levels.



City of Boston Property Audit

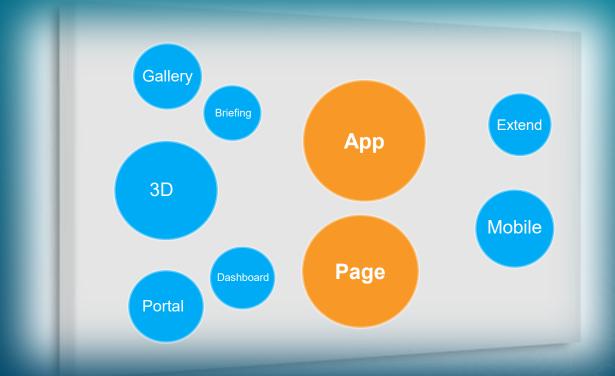
This application is to visualize the inventory of all City-owned property in Boston, as well as identify all vacant or underutilized property.



Is My River Fit to Play in?

The Rivers Trust has released this interactive map which aims to help shed the light on the reality of sewage pollution and allow river users to weigh up the risks before taking to the water.





Canvas

Accessing ArcGIS Experience Builder



ArcGIS Experience Builder Licensing

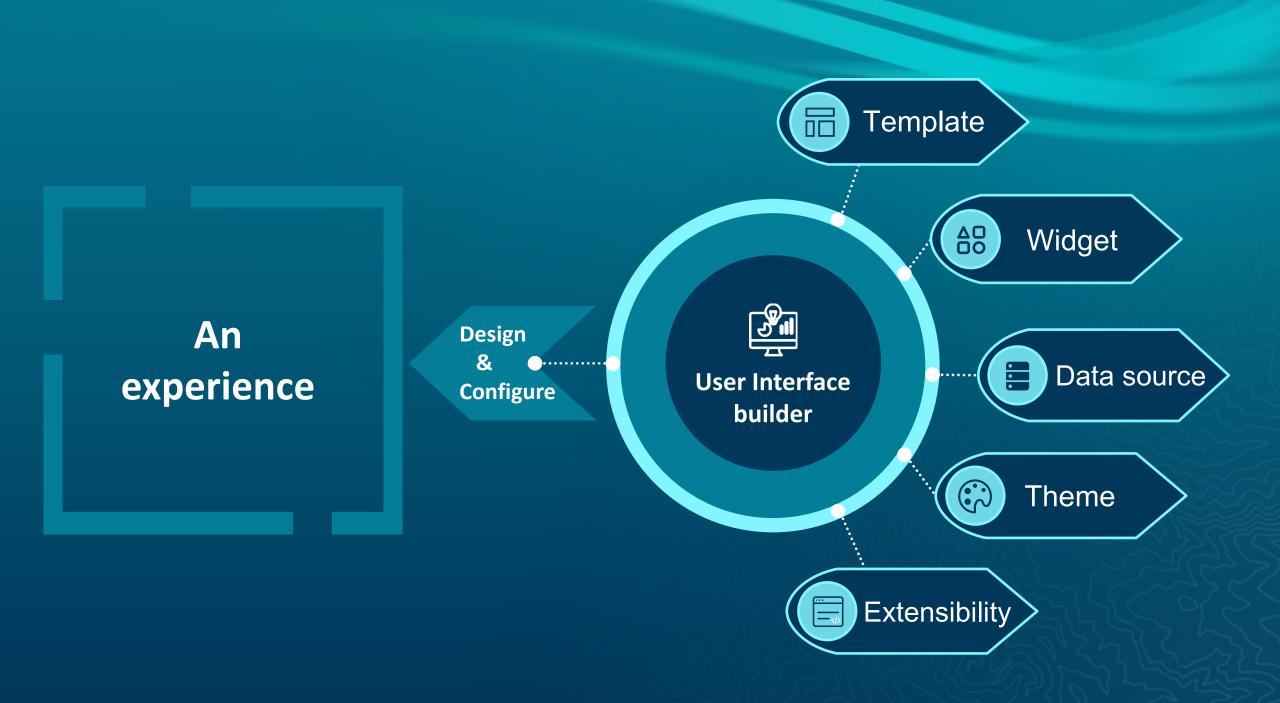
Essential Apps Bundle

- Must have a Creator or GIS Professional user type to create experiences

ArcGIS Developer subscription

- For developers who are not part of an ArcGIS organization to use Developer Edition





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catch(function(error) {
 if (error.name != "AbortError") {
 console.error(error);
 }
}

Templates

Building block

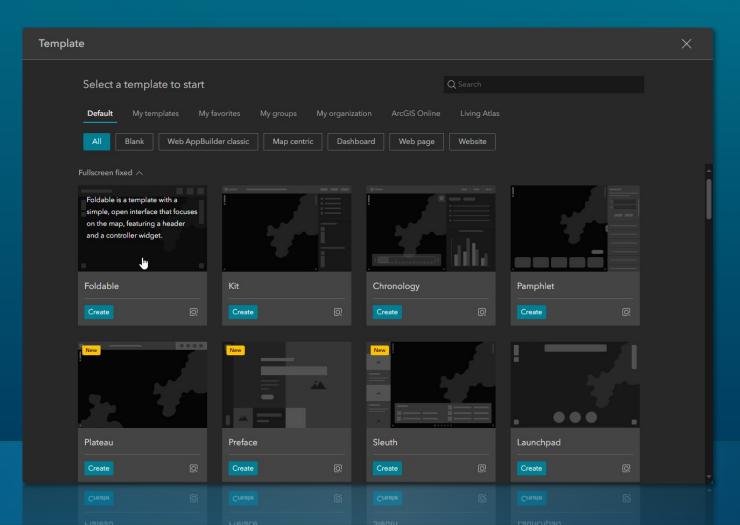
courryParameters =
ieryParameters().apply {
ieryParameters() = "price > 200"

Default Templates

• Fullscreen

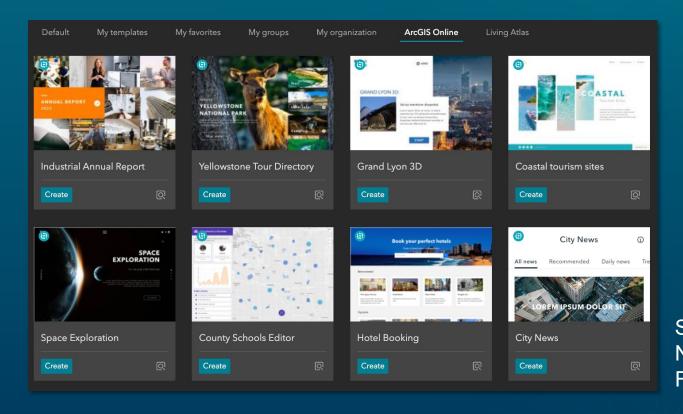
Scrolling

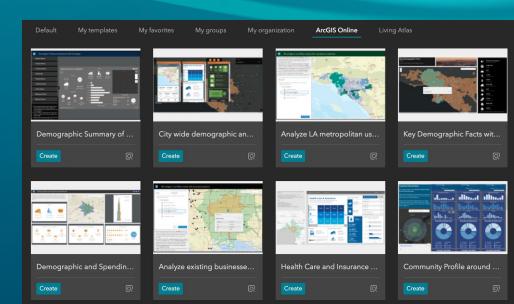
• Grid



Public Templates

Available in ArcGIS Online





Business Analyst Templates

Showcase New Features

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catch(function(error) {
 if (error.name != "AbortError") {
 console.error(error);

Widgets Building block

Types of Widgets

• Map centric

Data centric

Page elements

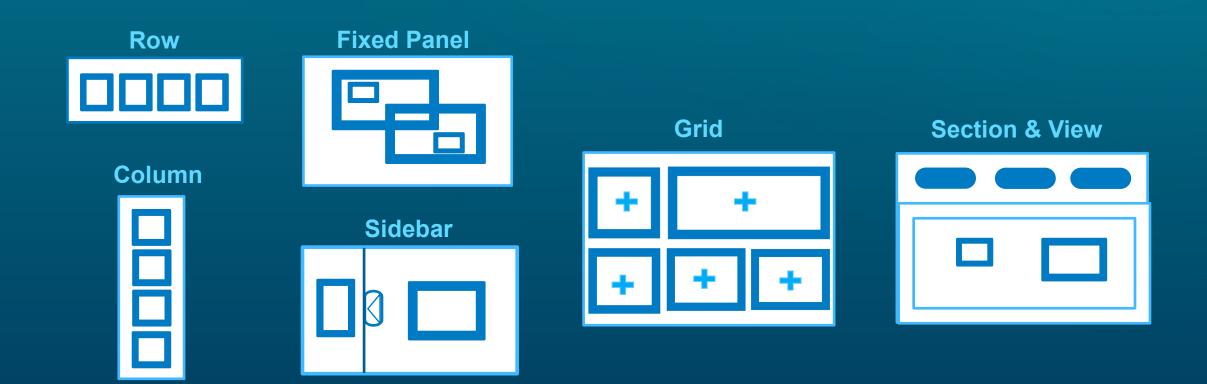
• Menu and toolbars

Layout

Section

	Map centric	^	Data centric	^	
Basic widgets	Ш Мар	Basemap Gallery	0= (j) 0= List	H Table	
	Page elements	^	Menu and toolbars 🔨 🔨		
	T Text	[∑] Image) Menu	ED Widget Controller	
Layout widgets	Layout	^	Section	~	
	Fixed Panel	Sidebar	G	다. Views Navigation	





Widget Properties

Content

Source

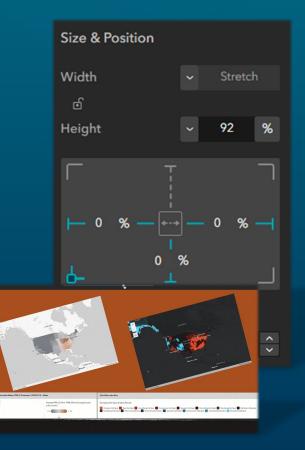
A web map or web scene, or any combination of the two.

Select map

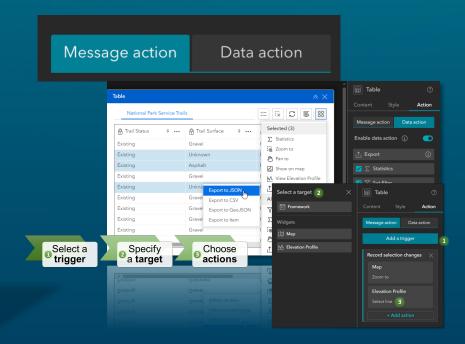
 \bigcirc

Options	
Zoom to	
Show or hide labels	
Transparency	

Style



Action



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catch(function(error) {
 if (error.name != "AbortError") {
 console.error(error);

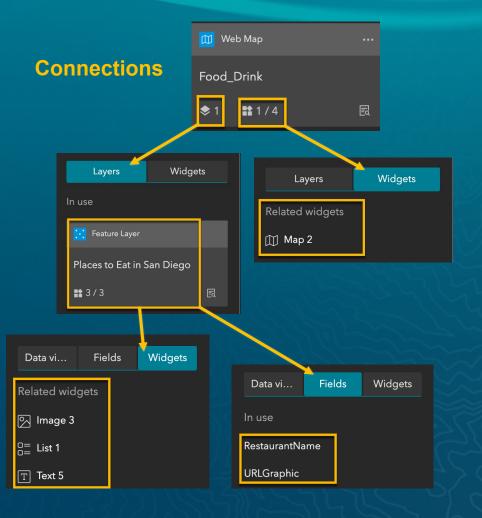
Data Source

Building block

Data Source

• Manage and share data at the app (framework) level

- Hosted feature layers
- Feature & map services
- Feature collections
- Scene layers
- Show connections between Map, Layer, Field, Widget
- Web map & Web scene are one of data sources



Dynamic Content

• Dynamically display attribute values, statistics or expressions

- In Image, Text, Button, List, Card, and Embed
- Must connect to data

	Dynamic content	×	Dynamic conten	t X
	Attribute Statistics Exp	pression	Attribute Sta	tistics Expression
	Data Interior Landmarks layer item	~	Expression 1	Insert
□ □ □ □ □ □ [LM_NAME] □ □ □ □ □	Auto-populated tent Q Search		"Expression dem + SUM({LOT})	no" + {LM_NAME}
	ABC LM_NAME		Fields	Functions

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.catch(function(error) {
 if (error.name != "AbortError") {
 console.error(error);

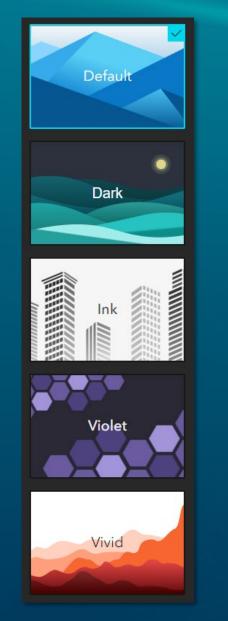
Theme Building block

Theme

Defines color and font

Customized options

- Color
- Font style
- Font size



Theme colors	
Primary	
Advanced color setting (>
Theme font	
Avenir Next	
A A	
75% 87.5% 100% 125%	1
	>
	1

heme font			
Av	enir Next		
~	Avenir Next		
	Calibri		
	PmingLiu		
	Impact		
	Georgia		
	Arial		
	Times New Roman		
	SimHei		
	Microsoft YaHei		

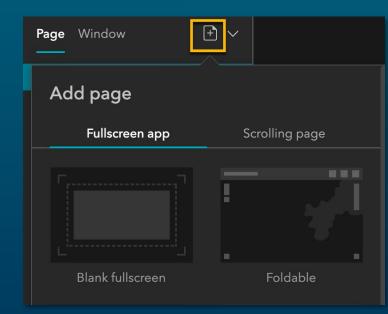
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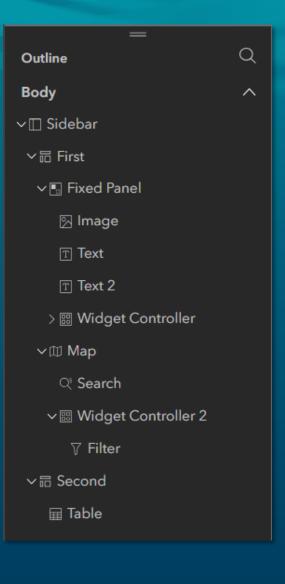
catch(function(error) {
 if (error.name != "AbortError") {
 console.error(error);

Page & Window Building block

Page

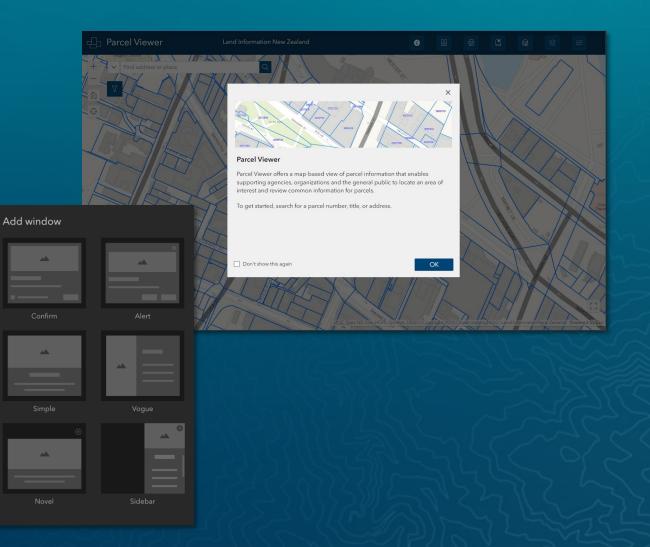
Header, Footer, Open with window
Outline helps navigate widgets on the page
Page templates





Window

- Display Splash screens or information
- Fixed mode
 - shown in a fixed position like a splash screen
 - Non-modal windows unblocking pages
- Anchored mode
 - shown around the widget that triggers it
- Window templates



Mobile Optimization

One app 3 configurations





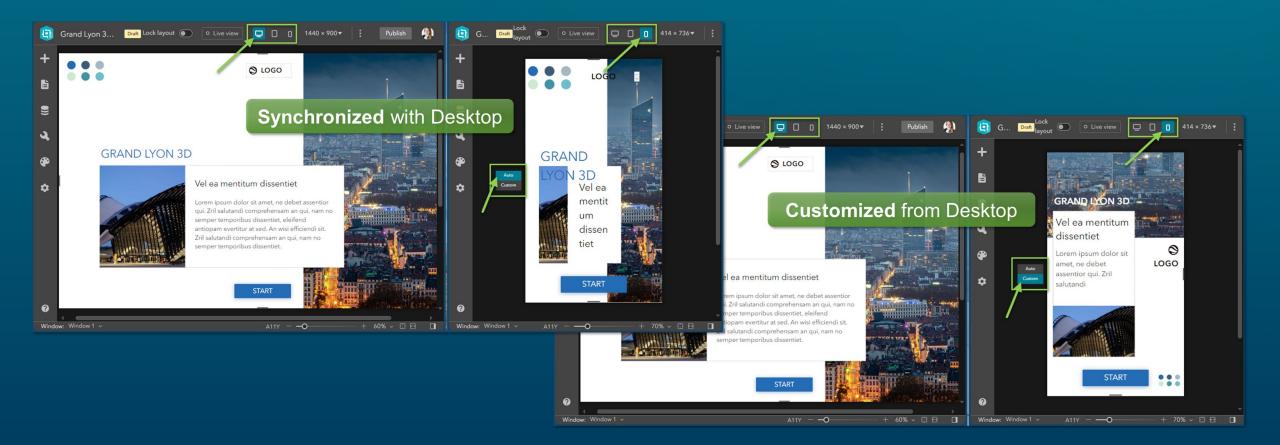


Small



Key to Mobile Optimization

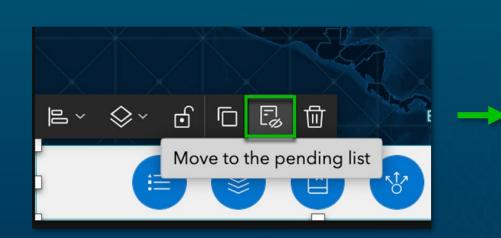
Auto vs Custom mode

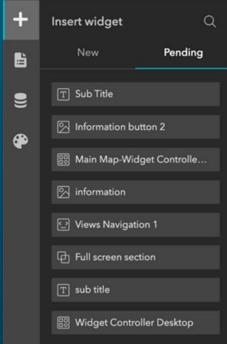


Key to Mobile Optimization Pending list

Changing position, size, and style of widgets won't affect other screen sizes
Changing content of widgets or removing widgets affects other screen sizes

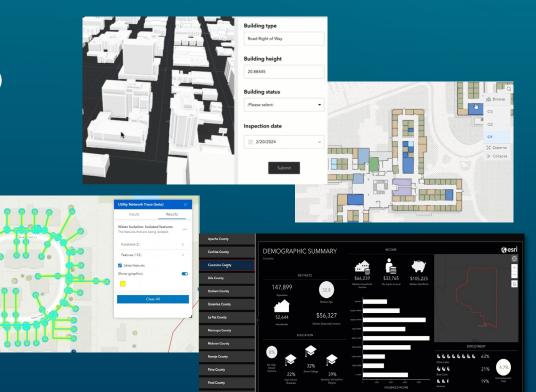
Move to the pending list





Integration with ArcGIS Apps

- Survey widget (ArcGIS Survey123)
- Business Analyst widget (ArcGIS Business Analyst)
- Floor Filter widget (ArcGIS Indoors)
- Suitability Modeler widget (ArcGIS GeoPlanner)
- Utility Network Trace widget (Utility Network)



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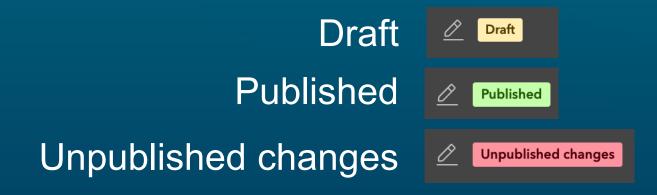
catch(function(error) {
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 console.error(error);

Publish Apps

viewModelScope.launch {

Publish Apps

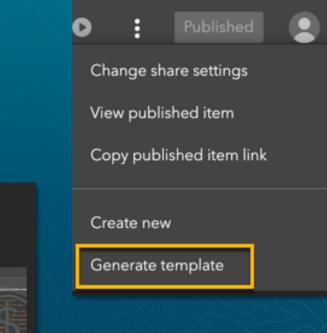




Generate Templates

Create your own starters for reuse and branding
Share with others

Select a template to start					
Default My templates 1	Ay favorites My groups	My organization	ArcGIS Online	iving Atlas	
		Risgradia Porticia I Example		Biosecur biosetting lacts a (2) set target auster a (2) set target auster (2) se	
Plant Protectors	Wildfire Incidents in No	orth United St	tates Infographic C	Interesting Facts	about Sho
Create Q	Create	Q Create	Q	Create	Q



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catch(function(error) {
 if (error.name != "AbortError") {
 console.error(error);

Developer Edition

Low code

viewModelScope.launch {

Key Features

Open-Source Widgets



- Ready-to-use widgets provide high quality and stress-tested code samples
- Learn from and easily modify them to meet your needs.

Jimu Library



- A collection of Legos used in ready-to-use widgets
- Quickly assemble them to build your own castle

Design System



- Storybook as a playground for UI components
- Preview and play UI components with various styles

Coded Once Used Anywhere



- Custom widgets and themes are portable
- Coded once and used anywhere

A Tale of Two App Builders

Moving from JavaScript 3.x to 4.x is a BIG undertaking

• Kind of like....





center: [-126, 49]

catch(function(error) {
 if (error.name != "AbortError") console.error(error);

Web AppBuilder Retirement Timeline

viewModelScope.launch {

Web AppBuilder Retirement Timeline

Developer Edition: July 2024

ArcGIS Web AppBuilder in ArcGIS Enterprise
 Deprecated now, not tied to a specific release
 Last release in first half of 2025 (Long-Term Support release)

ArcGIS Web AppBuilder in ArcGIS Online: end of 2025

What Does Retirement Mean?

- No further bug fixes or enhancements
- Updates to browsers could introduce functional or security issues which will not be addressed by Esri
- No technical support from Esri
- Your apps will continue to work

What Does Retirement Mean?

Developer Edition

Downloads are still available. The developer edition pages have been updated to reflect its status as retired technology.

ArcGIS Enterprise

Web AppBuilder continues to be fully supported in accordance with the <u>ArcGIS Enterprise product</u> <u>lifecycle</u>. It will only receive critical bug fixes, such as security updates, with no functional enhancements.

ArcGIS Online

Existing apps continue to work and new apps cannot be created or edited.

center: [-126, 49]

catch(function(error) {
 if (error.name != "AbortError") {
 console.error(error);

Migration Resources

viewModelScope.launch {

WAB		WAB		WAB		WAB		WAB		WAB		WAB	
About	•	Coordinate Conversion	•	Full Screen	•	Layer List	•	Query	•	Splash	•	Daylight (3D)	•
Add Data	•	Cost Analysis	0	GeoLookup	0	Legend	•	Related Table Charts	0	Stream	0	Navigate (3D)	•
Analysis	•	Data Aggregation	0	Geoprocessing	•	Measurement	•	Report Feature	٩	Suitability Modeler	•	Slider (3D)	•
Attribute Table	•	Directions	•	Grid Overlay	0	My Location	•	Reviewer Dashboard	0	Summary	•	Measurement (3D)	•
Batch Attribute Editor	•	District Lookup	0	Gridded Reference Graphic	0	Near Me	•	Scalebar	•	Swipe	•		
Basemap Gallery	•	Distance and Direction	0	Group Filter	•	Network Trace	•	Screening	•	Threat Analysis	0		
Bookmark	•	Draw	•	Home Button	•	Oblique Viewer	•	Search	•	Time Slider	•		
Business Analyst	•	Edit	•	Image Measurement	•	Overview Map	•	Select	•	Visibility	0		
Chart	•	Emergency Response Guider	0	Incident Analysis	•	Parcel Drafter	0	Share	•	Zoom Slider	•		
Controller	•	Extent Navigate	•	Infographic	•	Print	•	Situation Awareness	•	3DFx	0		
Coordinates	•	Filter	•	Info Summary	•	Public Notification	0	Smart Editor	•	Compass (3D)	•		

Functionality Matrix between Web AppBuilder (WAB) and Experience Builder (ExB)

Available in Experience Builder in ArcGIS Online

Planned

O Not Planned

WAB		WAB		WAB		WAB		WAB		WAB		WAB	
About	•	Coordinate Conversion	•	Full Screen	•	Layer List	•	Query	•	Splash		Daylight (3D)	•
Add Data	•	Cost Analysis	0	GeoLookup	0	Legend	•	Related Table Charts	0	Stream	0	Navigate (3D)	•
Analysis	•	Data Aggregation	0	Geoprocessing	•	Measurement	•	Report Feature	•	Suitability Modeler	•	Slider (3D)	•
Attribute Table	•	Directions	•	Grid Overlay	0	My Location	•	Reviewer Dashboard	0	Summary	•	Measurement (3D)	•
Batch Attribute Editor	-	District Lookup	0	Gridded Reference Graphic	0	Near Me	•	Scalebar	•	Swipe	-		
Basemap Gallery	•	Distance and Direction	0	Group Filter	4	Network Trace	•	Screening	•	Threat Analysis	0		
Bookmark		Draw	•	Home Button	•	Oblique Viewer	•	Search	•	Time Slider	•		
Business Analyst	•	Edit	•	Image Measurement	•	Overview Map	•	Select	•	Visibility	0		
Chart	•	Emergency Response Guider	0	Incident Analysis	-	Parcel Drafter	0	Share	•	Zoom Slider	•		
Controller		Extent Navigate	-	Infographic	•	Print	•	Situation Awareness	-	3DFx	0		
Coordinates	•	Filter	•	Info Summary	-	Public Notification	0	Smart Editor	-	Compass (3D)	•		
Functionality Matrix between Available in ArcGIS 10.8.1 10.9 11.0 Web AppBuilder (WAB) and Experience Builder (ExB) Enterprise 10.9.1 11.1													

Migration Path for Widgets Not in the Plan

Other Products	ArcGIS Capabilities (Hosted feature Layer, Arcade, Web Map)	Other Widgets or Deprecated	Custom	
Parcel Drafter	Cost Analysis	Visibility	Grid Overlay	
3DFx	Data Aggregation	Geo Lookup	Emergence Response Guide	
Public Notification	Related Table Charts	Reviewer Dashboard	Threat Analysis	
District Lookup			Distance and Direction	
			Gridded Reference Graphic	
			Stream	

Home Create Apps Manage Apps

> Configure apps

> Configure 2D widgets

> Configure 3D widgets

✓ Migrate to ArcGIS Experience Builder

ArcGIS Web AppBuilder retirement

Experience Builder for Web AppBuilder users

Which Web AppBuilder widgets are available in Experience Builder?

Migration FAQ

Experience Builder for Web AppBuilder users

ArcGIS Online | Other versions - | Help archive

You cannot directly convert custom widgets, themes, and apps from Web AppBuilder to Experience Builder. However, nearly all of the functionality you used in Web AppBuilder is available in Experience Builder, along with additional functionality. If you are familiar with Web AppBuilder and want to get started with Experience Builder, the following sections outline what you need to do.

Identify Web AppBuilder features that are available in Experience Builder

To help you plan your migration, review the functionality matrix for Web AppBuilder and Experience Builder. Experience Builder functionality equivalents are listed for all Web AppBuilder widgets. You can also identify when each widget first became available or will be come available in ArcGIS Enterprise and the developer edition.

Discover Experience Builder and how it's different from Web AppBuilder

In this topic

Identify Web AppBuilder features that are availal Experience Builder

STATUS

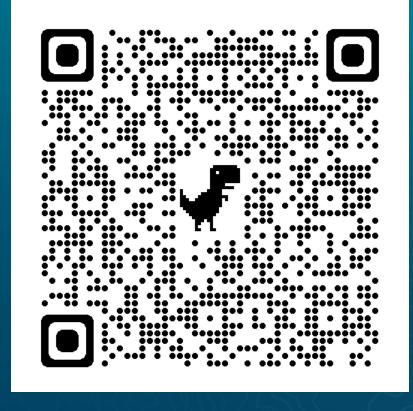
Contact Sales

Discover Experience Builder and how it's different from Web AppBuilder Get hands-on experience with Experience Builder Connect with users and developers Increase your knowledge of Experience Builder

A Glance at widget migration status



WAB migration documentation



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catch(function(error) {
 if (error.name != "AbortError") {
 console.error(error);

How to Migrate Your Apps

viewModelScope.launch {

The Goals

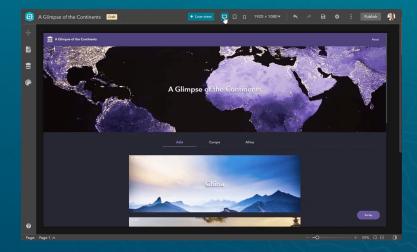
Minimize the impact
Perform better
Modern look
Great on Mobile



Know The Basics

Summary

- Start with a Web AppBuilder classic templates
- Use Window for the splash screen
- Drag & drop widgets or add them to Widget Controller
- Connect widgets with actions



Beyond The Basics

Modify the layout and style
2D & 3D in one app
Optimize mobile experiences

Change position, size, and style
Change content using the pending list

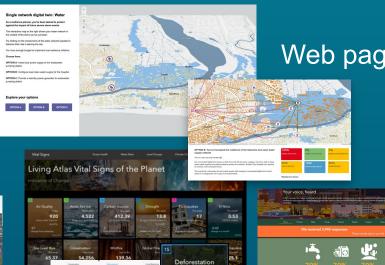
More



3D







1 234,546

3468937 sq.km change in a year

Web pages

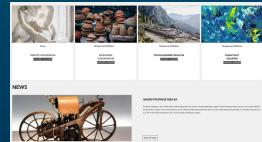


Mobile



Gallery





Apps









Portal

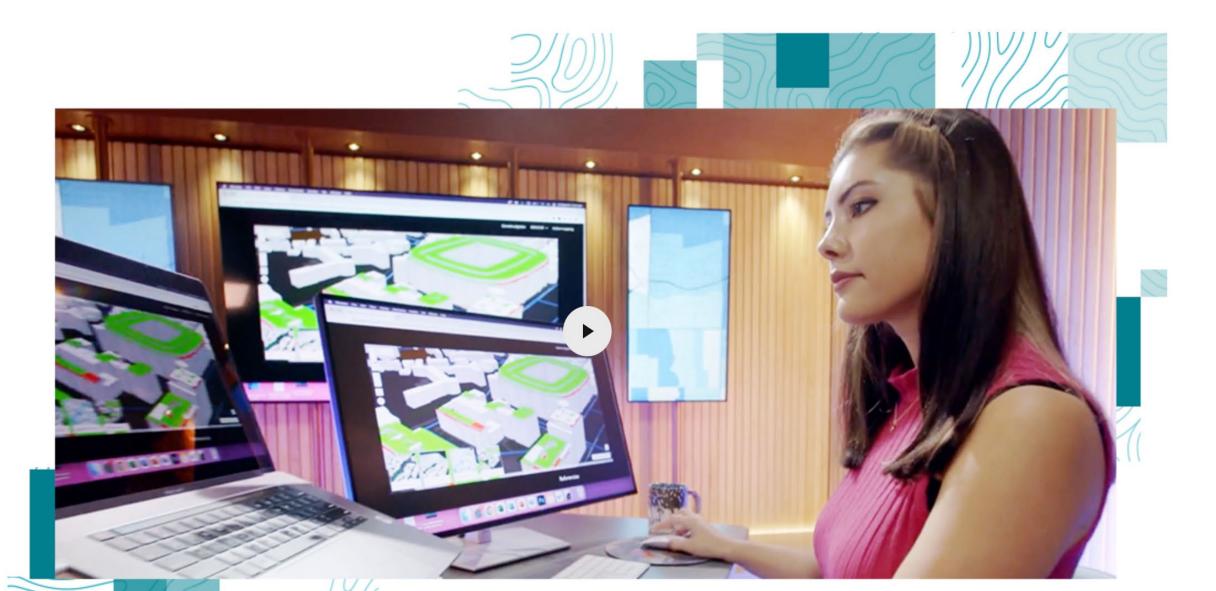




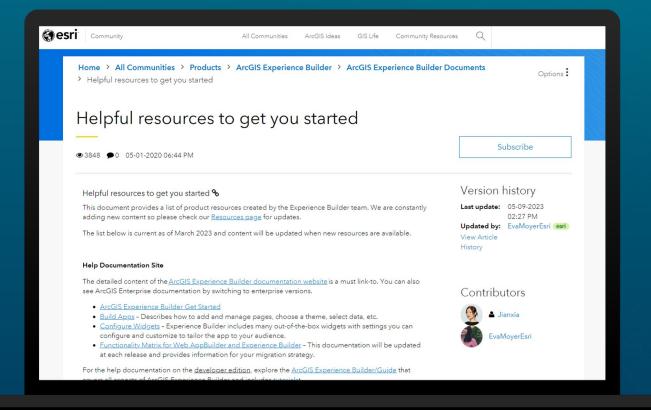


If you can envision it, you can build it

Amplify your data, maps, and apps by putting them all in one place.



Helpful Resources





2024 Roadmap

ArcGIS Online Q1 2024 ArcGIS Enterprise 11.3

- Select widget
- Group filter
 (Available in Filter widget)
- App URL parameters
- Non-modal window
- Report (ArcGIS Enterprise only)

ArcGIS Online Q2 2024 ArcGIS Enterprise 11.4

- Measure widget
- Building Explorer widget
- Google Analytics
- Raster data source
- Building scene layer

ArcGIS Online Q4 2024 ArcGIS Enterprise 11.4/11.5

- (A simple builder like WAB)
- View related records
- Overview Map widget
- My Location widget
- Batch attributes editing
- Image Measurement widget

Helpful Resources

- <u>ArcGIS Experience Builder Developer</u> <u>Edition SDK</u>
- <u>ArcGIS Experience Builder in ArcGIS</u>
 <u>Online Documentation</u>
- <u>ArcGIS Experience Builder in ArcGIS</u>
 <u>Enterprise</u>
- Product page

- <u>App Gallery</u>
- Esri Community
- <u>A full list of helpful resources</u>

E

- Videos
- Blogs
- Learn lessons
- Tutorials
- FAQ

// show the compass and pa mapRotation state data Compass(// reset the Compose rotation to point north u mapViewModel mapViewModel.setViewpo



const layerList = r });

<arcgis-map

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