Web GIS - Making Your Data Available as Maps, Apps, & Layers

Bruce Godfrey GIS Librarian Sept 26, 2017

Goal

Provide information about the features and capabilities of ArcGIS Online so that you can determine if it is useful for your work.

What is ArcGIS Online (AGOL)?

- A web-based collaborative GIS hosted by Esri that allows you to use, create, manage, store, document, and share maps, apps, and data.
 - http://arcgis.com
 - Released: late 2012 | ArcGIS 10.1
 - Quarterly update cycle
 - Continuing evolution from desktop to web GIS
 - Afforded organizational access through our Statewide Esri GIS Software Site License

AGOL Features

- Apps
- Ready-To-Use-Maps
- Make your own maps & add your items
- Management
 - Organize & document items; create groups; share items
- Spatial analysis
- Security
- Developer tools
 - APIs, SDKs



Map Viewer

Create beautiful maps you can embed in websites or add to apps. Use data-driven workflows, intelligent defaults, coordinated styling, and automated scale ranges.



Scene Viewer

View, create, and share 3D scenes in a browser. Add your own data and layers to basemaps and 3D maps. Display more data in popup windows and infographics.



Configurable Apps

Choose from a comprehensive set of templates to quickly configure focused apps, for example for parcel editing or displaying social content.



Web AppBuilder for ArcGIS

Create HTML/JavaScript apps with ready-to-use widgets that run on any device. Customize the look with configurable themes.

No coding required.



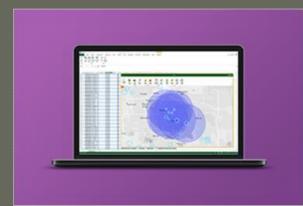
Collector for ArcGIS

Efficient, accurate data collection on smartphones or tablets replaces paper forms. Respond, record, work on- or offline, and sync automatically.



Survey123 for ArcGIS

Use a form-based survey interface in a lightweight, intuitive app. In just a few clicks you can collect, manage, and analyze survey results.



ArcGIS Maps for Office

Microsoft Excel and PowerPoint users can use the power of maps to ask location-related questions of their data. Get new insights to make smarter decisions.



Esri Story Maps

Tell stories that inform, engage, and inspire your audience.

Combine web maps with narrative text, photos, and other media.





ArcGIS Business Analyst

Get location-based insight for market planning, site selection, and customer segmentation plus 15,000+ variables of market data for maps, analytics, and reports.



ArcGIS Community Analyst

See the impact of policy decisions to prioritize community projects or place new facilities.
Use global data to create what-if scenarios and comparison reports.



ArcMap

Part of ArcGIS Desktop, ArcMap is an advanced cartographic authoring, data editing, spatial and imagery analysis, and workflow automation application.





ArcGIS Pro

The latest addition to ArcGIS

Desktop. Create 2D and 3D maps.

Edit and analyze data faster than

ever using a new, highperformance 64-bit architecture.



1

Esri CityEngine

The advanced 3D city design application for creating, editing, and sharing 3D building models and massive urban environments.

- More information
 - https://arcgis.com/features/apps/index.html

Ready-To-Use-Maps

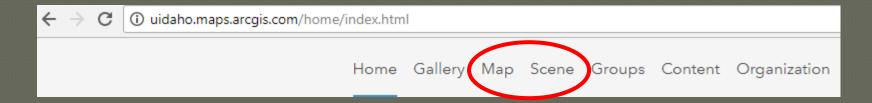
- Living Atlas of the World
 - Collection of geographic information from Esri and its partners
 - Imagery
 - Demographics
 - Boundaries & Places
 - Transportation
 - Oceans
 - Landscape
 - and more

Ready-To-Use-Maps

- More information
 - https://livingatlas.arcgis.com/en/

Make Maps & Add Items

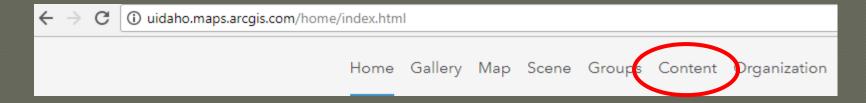
- Make Maps
 - Map Viewer | Scene Viewer



- Items you can add to AGOL
 - Content > My Content > Add Item
 - http://doc.arcgis.com/en/arcgisonline/reference/supported-items.htm
 - 1GB limit unless using ArcGIS Desktop/Pro

Managing Items

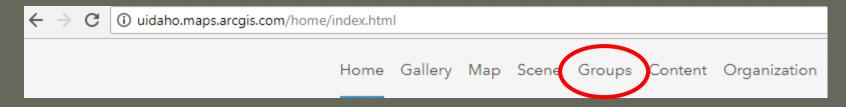
• Under "Content" tab



- Create folders
- © Create/add/delete/share items
- Link to item details (documentation, usage statistics, settings

Groups

• Under "Groups" tab



 A collection of items usually related to a specific area of interest

Groups

- Create a Group
 - Title, summary, description, thumbnail

Who can view this group?

- Only group members
- People in the organization (University of Idaho)
- Everyone (public)

Who can join this group?

- Those who request membership and are approved by a group manager
- Only those invited by a group manager
- Anyone

Who can contribute content to the group?

- Group members
- Only group owner and managers

Groups

Item Updates

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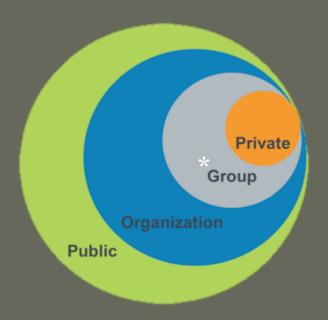
changes to the item's description, tags, metadata, as well as content. This option can't be disabled once the group has been created.

Updates to an item can include

What items in the group can its members update? 🔮

- Only their own items
- All items (group membership is limited to the organization)

Sharing Items



* Groups can include members of other AGOL organizations (federal, state, local, other academic institutions, etc.)

Spatial Analysis

✓ Summarize data

Aggregate Points

Join Features

Summarize Nearby

Summarize Within

 ✓ Use proximity

Create Buffers

Create Drive-Time Areas

Find Nearest

Plan Routes

Connect Origins to

Destinations

→ Find locations

Find Existing Locations

Derive New Locations

Find Similar Locations

Choose Best Facilities

Create Viewshed

Create Watersheds

Trace Downstream

→ Data enrichment

Enrich Layer

Analyze patterns

Calculate Density

Find Hot Spots

Find Outliers

Interpolate Points

Manage data

Extract Data

Dissolve Boundaries

Merge Layers

Overlay Layers

Spatial Analysis

- More information:
- http://doc.arcgis.com/en/arcgisonline/analyze/perform-analysis.htm

Security/Privacy/Compliance

http://trust.arcgis.com



Subscriptions

- Public account
 - Non-commercial individual use only
 - Limited capabilities
 - More information
- Developer subscription
 - Commercial use for development & testing
 - More information

Subscriptions

Organizational

- Sites within our subscription
 - Research and Teaching
 - · 1100-named users | 12,500-credits/year
 - Administration
 - 5-named user | 2,500-credits
 - · Research Projects can purchase
 - \$250 annually: 50-user/12,500 credits [Level 2]
 - \$500 annually: 100-users/12,500 credits [Level 3]
 - \$1000 annually: 250-user/25,000 credits [Level 4]

Service Credits

- Service credits: currency for AGOL
- How you use AGOL determines the number of service credits you consume
- See <u>service credits overview</u> for more information

Administration of AGOL for UI

- Primary Administrator responsible for all organizational administration, delegates responsibility as needed, and coordinates activities of other administrative staff (below)
- User Manager sends new invitations and/or manages enterprise logins with IT department, disables/retires user accounts as people leave and migrates items and groups as needed
- Quality Manager ensures quality of item/group descriptions/thumbnails, sets standards/best practices for item/group descriptions/thumbnails
- Group Manager creates new organizational groups, sets standards/best practices for group usage and ownership
- Reporting Manager runs reports on system usage and credit consumption
- Tool Developer creates software tools and/or scripts to help manage the Organization (knows Python and/or JavaScript and/or other programming languages)
- Content Curator discovers best new items via periodic searches; accepts submissions/suggestions; identifies needs for new layers, maps, and apps
- Technical Support Specialist primary point of contact for anyone that has questions on how to use the system
- Training Manager collects, produces, and makes available training materials to educate new
 members on basic operation of the system and power users about best practices and tips and
 tricks. Also communicates the benefits/impacts of new features and system updates at/before
 each new software release.
- · Authorized Purchaser approves the purchase of additional credits/users
- Open Data Site Administrator creates and manages open data sites
- Open Data Curator creates and manages open data groups, manages membership and content of open data groups

AGOL Learning Resources

- <u> Esri Help</u>
 - Exercises, Blog, & GeoNet Community*
- Esri Training*
 - E-Learning: Web Courses, Videos, Tutorials
- Library GIS Services
 - Bruce Godfrey <u>bgodfrey@uidaho.edu</u> 208-292-1407
 - * Contact Bruce to enable Esri access for your Organizational Account

Becoming a Member of the UI Teaching & Research Site

http://uidaho.maps.arcgis.com



Members are added automatically

- Placed in the 'Publisher' role
- Allocated 10 service credits

Signing In

Esri Maps for Office wants to access your ArcGIS Online account information

Sign In		esri
Username		
Password		
☐ Keep me	signed in	
SIGN IN	CANCEL	
Forgot passy	vord? Forgot username	?
	OR —	
Sign in with	ENTERPRISE ACCOUN	T
Sign in with	f G	

Esri Maps for Office developed by:



Esri

Esri publishes a set of ready-touse maps and apps that are available as part of ArcGIS. ArcGIS is a mapping platform that enables you to create interactive maps and apps to share within your organization or publicly.

Announcements

Don't Forget GIS Day
 Wed. Nov. 15
 Idaho Commons
 More information:

<u> http://insideidaho.org/gis-day.html</u>

Contact Information

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