Building a Living Atlas for Your Community

Bern Szukalski
@bernszukalski
bszukalski@esri.com

Deane Kensok
@dkenso
dkensok@esri.com
Living Atlas Overview
- What is it? What options exist for creating my own?
  - Example: Africa GeoPortal

Best Practices for Building a “Living Atlas”
- Organization, Groups, Apps, etc.

Participating in the Living Atlas of the World
- Leverage existing curation process and tools
ArcGIS includes a Living Atlas of the World
Maps and Layers from Esri and Thousands of Contributors

The Collection is growing and changing on a daily basis…
Content is Published by Esri, Partners, and Users
Built by the ArcGIS Community and Curated by Esri

- Nearmap 7cm Imagery
- MB – Research Boundaries
- NOAA Real-time Weather
- EEA Land Cover
- Canal & River Trust
Accessing the Living Atlas through ArcGIS

Multiple ways to Experience the Living Atlas through ArcGIS Apps

• ArcGIS Online & ArcGIS Enterprise (Portal)
  - Content: Living Atlas Content
  - Add Data: Browse Living Atlas Layers
  - Analysis: Choose Living Atlas Layers

• Living Atlas of the World Website
  - livingatlas.arcgis.com
  - Browse and preview maps, layers, and tools
  - Contribute maps, layers, and data

• ArcGIS Pro 1.2+
  - Open Maps, Add Layers, Perform Analysis
Options to Create Your Own “Living Atlas”

1. Configure the Living Atlas Website
   a) Select Language and Region and Save URL

2. Create Web App using ArcGIS Online Group
   a) Create a New Group and Add Items
   b) Create Categories and Assign to Items
   c) Reference Group in a Custom Web App

3. Create and Curate an ArcGIS Online Organization
   a) Create & Configure New Organizational Site
   b) Create Groups, Create & Curate Content
“Living Atlas” Options
Africa GeoPortal

• Portal to host GeoSpatial data from Esri, Partner and Community Members
• Includes Geospatial Tools, Learning Resources, and Africa Living Atlas

What is in the Africa GeoPortal?
The Africa GeoPortal will host geospatial data from Esri, partners and community members providing tools, visualization and training. Discover Africa through GIS.
Steps for Building the “Living Atlas” in Africa GeoPortal

1. Create a New Organization in ArcGIS Online (e.g. name, URL, etc.)
   a) Create a few curator and publisher accounts
2. Create New Groups in the Org (e.g. for Home page, Gallery, Apps)
   a) Curate Public Content from Living Atlas of the World into Groups
3. Create New Content in the Org (e.g. Layers, Maps, Apps, and Tools)
   a) Create a custom Locator and Configure in Map Viewer
   b) Create a “mask layer” to focus attention on Your Community
4. Customize Home Page of the Org
   a) Custom Banner, Featured Content, Org Description
5. Customer Gallery Page of the Org
   a) Configure and Curate Group of Featured Content
Africa GeoPortal
Establish the vision and governance

UNDERSTAND YOUR ROADMAP TO SUCCESS AND WHAT SUCCESS MEANS
Vision and Governance

Find the right people
- Who are the champions?
- Who are the stakeholders?
- Who is the audience?

Discover what they need
- What is the mission and vision?
- What workflows will it support?
- What are the deliverables?

Consider the following
- Establish a curator, or group of curators
- Form a governance committee
- Meet early and often
Suggestions

- Communicate early, often, and well
- Establish a rough time for deliverables
- Prototype and test before rolling out
- Implement successful patterns
- Establish essential procedures and guidelines
- Be flexible, adapt, and evolve
Create a great destination
Organization home

City of Victoria

Victoria has been blessed with a wealth of natural and man-made riches, including stunning heritage architecture framed by ocean views and mountain vistas. It is the rare juxtaposition of heritage charm, scenic backdrops, and modern cityscape that makes Victoria one of the most unusual special places in Canada. Millions visit our city every year and enjoy the natural beauty, temperate climate, and heritage charm Victoria offers its citizens every day.

Welcome to ODOT ArcGIS Online!

The Oregon Department of Transportation’s (ODOT) interactive portal through which ODOT staff, business partners, and others can access web maps, applications, and tools to display and consume geospatial data pertaining to transportation in Oregon.

Disclaimer:
The products on this site are for informational purposes and may not have been prepared for legal, engineering or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information. Questions? Contact the ODOT GIS support team.
State of Oregon
Geospatial Data, Maps & Applications

Organization home
The Crowther Lab is a research group based at ETH Zurich. We are a collection of researchers, scientists and technical staff with a range of expertise from microbiology to digital marketing, all working with one thing in mind – the climate.

We study the ecological processes that influence the climate to help us predict and combat anthropogenic climate change. We are not focused on one academic field. We are Earth Scientists, Remote Sensing Experts, Community Ecologists, Ecosystem Ecologists, Earth System Modelers, Programmers, Physiologists, Mathematicians, Molecular Biologists, Physicists and Biochemists. Most labs in the world focus on one or all these, but our interdisciplinary background allows us to identify the most important questions, and to come at questions from different angles.

We aim to understand how natural ecosystems regulate the carbon cycle, necessary for us to...
The first impression

- Appealing design
- Featured gallery, with branding
- Featured links and resources
- Links to city website and Open Data
- Gallery and Group tabs

✔️ Consider all page elements

💡 Add home page as item
Organization settings – Esri vector basemaps

Create a custom basemap gallery that includes both...
Groups are building blocks

- For your organization
  - Basemaps, configurable apps
  - Galleries, featured content
  - Public galleries

- For members and their work
  - Mirror organization structure
  - Support organization projects, workflows, and initiatives

More details on groups later...
Example: Boston Maps
Establish a brand
Organization branding
Organization profile

KYTC GIS
This user has not provided any personal information.

or

Montana State Library
The Montana State Library, Geographic Information, develops and maintains an extensive collection of Montana's geographically referenced information about the cultural and natural resources for the state. Visit: http://geoinfo.msl.mt.gov | Phone: 406-444-5354

Profile | Items | Groups
Putting it together

**Open Data GIS Layer**
Michigan Department of Natural Resources

**Ownership**

**WEB MAP**
State of Utah School and Institutional Trust Lands Administration

**Michigan DNR**
Welcome to the official Michigan Department of Natural Resources ArcGIS Online page! The Michigan Department of Natural Resources is committed to the conservation, protection, management, use and enjoyment of the state’s natural and cultural resources for current and future generations. For more information, go to www.michigan.gov/dnr. Follow us on Facebook for the latest DNR news, photos and answers to all of your questions or by following us on Twitter at www.twitter.com/michiganDNR or www.twitter.com/michiganDNR_UX

**State of Utah Trust Lands Administration - GIS**
This is the official GIS Portal for online maps, information products and GIS data published by the State of Utah School and Institutional Trust Lands Administration (SITLA). You may contact us directly by EMAIL: tla-gis@utah.gov, PHONE: 801-538-5100 or WEB: http://trustlands.utah.gov/

Profile Items Groups
Organization shared theme

- Apply brand colors and logo to apps
  - Configurable apps, Story Maps, Web AppBuilder, Open Data sites
Turn content into information building blocks
Information building block taxonomy

- Apps
- Maps
- Layers
- Files and Services
Add existing content

- ArcGIS services
- Shapefiles, spreadsheets, map templates, and more…
- Publish new hosted layers as needed
Optimize services for use
Consider service type

- Hosted map service
- Hosted feature service
- Enterprise map service
- Enterprise feature service
- Image service
- Vector tile
- Raster tile
- Scene service
- Elevation service
- WMS / WFS
Views

- Common feature layer with multiple user views onto the layer
- A view is a live-linked feature layer defined by an expression
- Different privileges and access can be set

<table>
<thead>
<tr>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Add new sightings to the map</td>
</tr>
<tr>
<td>• Only view sightings that have been reviewed by city staff</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>City Staff (field)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Add new sightings to the map</td>
</tr>
<tr>
<td>• View sightings regardless of their review status</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>City Staff (reviewers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Update and delete sightings when reviewing (duplicates, fake reports)</td>
</tr>
<tr>
<td>• View only sightings that are pending review</td>
</tr>
</tbody>
</table>
Refining your layers

• Transparency
• Scale dependencies
• Labels
Pop-ups
Consider the entire information experience

Charts

Images and Links

Formatted text and Charts
Use Save Layer

- Enabled for layer item owner
- Preserves style, pop-ups, scale, transparency, etc.
- Makes layers ready-to-use
- Can be overridden in maps

☑️ Don’t share unconfigured layers

💡 Think of layers as building blocks, and craft accordingly
Maps

Reflect the complete experience from the basemap on through layers

Check that layers work well together in your map
Prevent accidental deletion
2015 Clothing/Accessory Store Market Opportunity in the United States

Description

This map shows the market opportunity for clothing and accessory stores in the U.S. in 2015 in a multiscale map (by state, county, ZIP Code, tract and block group). The map uses the Leontief Surplus Factor, an indexed value that represents opportunity (leakage), saturation (surplus), or balance within a market. This map focuses on the opportunity for clothing/accessories stores (NAICS 448).

The pop-up is configured to include the following information for each geography level:

- Count of clothing/accessory stores - NAICS 448
- Total annual NAICS 448 sales (supply)
Graphic hints

Location hints

Content hints

Hybrid
Editing thumbnails

Free tools available on GitHub
Third-party tools are available
Description

A group containing a collection of resources supporting research in community and physiological ecology.

Forest trees cover over 1/3 of the land surface, and they are prominent determinants of carbon cycling and the climate. Given their importance for the wellbeing of humans and their services, it is critical that we understand the patterns in forest structure at a global scale, and how these underpin the functioning of terrestrial ecosystems. We use global datasets of forest inventory data to understand the functional biogeography of forests, and its relationships with climate and other factors functioning at broad spatial scales. This research will also help us to understand how to maintain, manage, and restore forests in the fight against biodiversity loss, poverty and climate change.

The Crowther Lab is a research group based at ETH Zürich. We are a collection of researchers, scientists and technical staff with a range of expertise from microbiology to digital marketing, all working with one thing in mind - the climate. We study the ecological processes that influence the climate to help us predict and combat anthropogenic climate change.

Terms of Use

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Can be automated using Python
Third-party tools are available
A measure of item completeness
Organize your organization
Groups are a framework for your organization
Supporting departments, projects, workflows, collaboration

- Access to resources
- Collaboration within the organization
- Collaboration between organizations
What groups do you need?

- Departments in your organization
- Org chart
- Current projects
- Solution templates
Group best practices

- Use consistent visual cues
- Intuitive naming conventions
- Add useful descriptions
- Pre-populate with content
- Auto-assign members

Create a destination
Content Status

- Items can be designated authoritative or deprecated
- Members can search by Status
- Only searchable within your organization*

*More on publicly discoverable authoritative content later...
Group settings

- Groups can be:
  - Private (only owner and members can find)
  - Organization only
  - Public

- Membership:
  - Users can request membership
  - Admission by invite only
  - Anyone

- Contributors:
  - Only group owner
  - All members of the group
Group Settings

Delete Protection
- Prevent this group from being accidentally deleted.

Delete Group
Add items to groups

Boston Income and Growth

This layer shows a comparison of personal income growth and unemployment in Boston.

by lisa_berry
Last Modified: November 17, 2015

Share in a group you own
Hierarchical way to organize content
Start with a template
- ArcGIS (Living Atlas categories)
- ISO
- INSPIRE
Or use Custom categories
Also supported in groups
Searchable

Custom recommended!
Create interesting and useful apps
Apps complete the user experience
Apps complete the user experience
Easy to configure
Web AppBuilder

- Build apps using widgets
- Easiest way to create custom configurable apps for your organization
- Developer edition
Story Maps

- Combine narrative text, maps, and media to tell stories

Storymaps.arcgis.com
ArcGIS Solution templates for organizations

- Tailored to specific domains
- Follow best practices & trends
- Include:
  - Platform (ArcGIS organization) configurations
  - Configurable apps and map resources
  - Community
Example: ArcGIS for Local Government

Maintain Property Information
A collection of maps and apps used by land recorders, tax collectors, and property deed technicians to maintain a survey feature including survey plan book and plats, tax map books, inventory tax parcel descriptions, and cadastral records.

Photo Inventory Properties
The Photo Survey application can be used by local governments to publish street-level photo collections and conduct focused property surveys that may identify blight, damaged structures, or construction activity.

Note information model requirements
Don’t forget Group Gallery Apps

Create a New Web App

Select a template to create a new app. You can also preview to get an idea of its capabilities or download it to your computer and customize it further.

- Crowdsourcing Manager
- Crowdsourcing Reporter
- Map Carousel
- Minimal Gallery

Can also embed as ribbon
Invite members and make them feel welcome

PROVIDE A GREAT EXPERIENCE FOR MEMBERS
Invite users

How would you like to invite or add members to your organization?

- Add members automatically without sending an email.
- Send invitations to preestablished user names.
- Send invitations for existing users.

NEXT

(Pre-establish recommended)

Use enterprise logins
(Best)

Invite and establish Role

Preestablish new ArcGIS logins one at a time or in batch from a file. Select any role without administrative privileges for the member to be a part of.
As an admin…

• Assign roles
• Assign users to groups
  - Make sure groups have good content to get them started
• Assign credit limits (if desired)
• Ensure users complete a profile
• Monitor and manage
Organization roles

• Built-in roles
  - Administrator
  - Publisher
  - User

• Custom roles
  - Based on templates
  - Created by an administrator

• User Levels
Assign member to meaningful groups

Pre-populate groups with useful content
User profiles

This user has not provided any personal information.

Who can see your profile?
- Everyone (public)
- Organization
- Private

Profile  Items  Groups
What a good profile looks like

Sandy Ebersole
Organization: Geological Survey of Alabama, Geologic Investigations Program; sebersole@gsa.alabama.gov; Specialties: Geology

Lindsay Withers
GIS Cartography Manager at the Trust for Public Land. The Trust for Public Land works to protect the places people value most and create close-to-home parks—particularly in and near the places where 80 percent of Americans live. Our goal is to ensure every child has easy access to a safe place to play in nature. We conserve working farms, ranches, and forests; lands of historic and cultural importance; rivers, streams, coasts, and waterways; and other special places where people can experience nature at hand. The Trust for Public Land’s Vision and GIS service provide cutting-edge research and innovative mapping technology to parks, protect open space, and deliver community-driven conservation plans. To learn more about The Trust for Public Land and its GIS services, visit https://www.tpl.org/how-we-work план.

Stephanie Smith
The mission of the Grand Canyon Trust is to protect and restore the Colorado Plateau – its spectacular landscapes, flowing rivers, clean air, diversity of plants and animals, and areas of beauty and solitude. The Trust was established in 1985 by Arizona Governor Bruce Babbitt and other leading conservationists as a national trust for projects in the Grand Canyon. Soon after, Trustee Stewart Udall made an impassioned plea that issues do not stop at the boundaries of the Park, and the Trust should be an advocate for both the Grand Canyon and the surrounding Colorado Plateau. The suggestion was adopted and Grand Canyon Trust emerged as a leading regional conservation organization, with offices across the Plateau and extensive connections among policymakers, land managers, scientists, and community leaders.
Open access to your data, maps, and apps beyond your organization

THE MORE USERS THE MORE VALUE

EXTEND YOUR REACH
Make your content discoverable

Flood and Hurricane Inundation Risk Map of Gloucester, MA

This map displays the combined risks from flooding and hurricane inundation, focusing on low-income and low-income elderly communities. In addition to risk and hazards, a number of adaptation strategies and challenges are marked. Many impacted areas are not candidates for infrastructure aimed at mitigating flooding. Gloucester does, however, have plans in place to install a second tide gate on Mill Pond, which could alleviate some flooding in that area. Other areas are marked that have no current adaptation strategies but that are significantly vulnerable, due to their demographics. Schools and community centers are also marked as potential relief centers following extreme weather events. To meet the challenges of adapting to climate change induced coastal flooding, Gloucester should consider putting policies into place that address the needs of environmental justice areas. These might include establishing a relief fund for low-income households, integrating communities in coastal flood zones of their risk, establishing community centers for post-disaster relief (taking into account where roads may become impassable). Additionally, recurring wetland habitat and not allowing rebuilding in flooded areas could enhance community resilience in the future.

Groups and group galleries

Organization gallery
Other ways to deliver access to your content

- Embed maps and apps
- Group gallery apps & ribbons
- Open Data for ArcGIS
Authoritative public content

- Verify your organization via Esri customer service
- Public content marked authoritative will get badge
- Publicly searchable via Status

Note that link goes back to org home
Open Data

- Built-in to your organizations
- Uses your organization content
- Group-based
- Multiple sites
- Serves data for
  - Developers
  - Contractors
  - Businesses
  - Citizens
  - Others…
Open Data

Open Data Is All Over the World

Explore 48,632 Open Datasets from 3,155 Organizations Worldwide.

Latest Data

**ROUTE83 V EVTL ORI MAINTENANT**
- Evenement: routes maintenance, routes departamentales du VTT / representation conductuelle et lineaire
- June 26, 2016
- #evenement

**ROUTE83 V EVTL ORP MAINTENANT**
- Evenement: routes maintenance, routes departamentales du VTT / representation conductuelle et lineaire
- June 26, 2016
- #evenement

**GRSM BACKCOUNTRY SHELTERS**
- BEYOND DOUBT the most generally useful building in any park is a shelter, usually open but sometimes enclosed or enclosable, and then
- June 26, 2016
- #nationalparkservice
Example: My City Houston

Welcome to the official City of Houston’s My City Houston.

The City of Houston’s Enterprise GIS team focuses on the development and continual enhancement of a system that serves the needs of all City of Houston departments, staff, and citizens. Through coordinate management and state of the art mapping services, City of Houston Enterprise GIS seeks to improve access to underlying data from which Information is derived. Visit http://mycity.houstontx.gov.
Curate, monitor, manage, and grow…

KEEP YOUR ORGANIZATION HEALTHY & VIBRANT
Member and item curation

- Usage by app
- Usage by member
- Members by role and credit usage
- Utilization summary
- Pro usage
- More…
Organization Status and Management
ArcGIS Marketplace – marketplace.arcgis.com
ArcGIS Online Assistant

A swiss army knife for your ArcGIS Online and Portal for ArcGIS accounts.

Log in to ArcGIS Online

Log in to Portal for ArcGIS

Inspect
View the underlying JSON for any item in ArcGIS Online or your Portal.

Update
Modify the URLs for services in web maps and registered applications.

Copy
Search for and copy content to your account and other accounts.
ArcGIS Monitor
How to Participate
Share Your Work with the Living Atlas!
How to Participate in the Living Atlas Community

• Living Atlas Community includes:
  - Contributors: people who publish content that is included in the Living Atlas
  - Curators: Esri staff who review, approve, and organize content that is included in the Living Atlas

• Living Atlas Contributors can participate by:
  a) Publishing content directly through ArcGIS Online
  b) Publishing content indirectly through Community Maps

• Why Participate?
  1. Improve the visibility and accessibility of your ArcGIS Online content for use by others.
  2. Have your authoritative content hosted by Esri so it is available to you and your end users.

Go to livingatlas.arcgis.com to Get Started!
Select Your Map Type

1. **Create Item in ArcGIS.com using your ArcGIS Online Account / Organization**
   - Layers can reference ArcGIS Online hosted services, ArcGIS Server services, WMS, etc.
     - Create new items for ArcGIS Server services and layers if you host them
   - Web maps can reference these layers or other feature collections that you publish

2. **Follow Best Practices for Sharing**
   - Share items with "Everyone (public)"

3. **Nominate your Items using the new Living Atlas Contributor app**
   - livingatlas.arcgis.com/contribute
questions & answers
Thanks!

Bern Szukalski  
@bernszukalski  
bszukalski@esri.com

Deane Kensok  
@dkensok  
dkensok@esri.com
Please Take Our Survey on the App

Download the Esri Events app and find your event

Select the session you attended

Select the Feedback tab

Complete answers and select “Submit”