


Web Map Applications: The Geo-Web Revisited

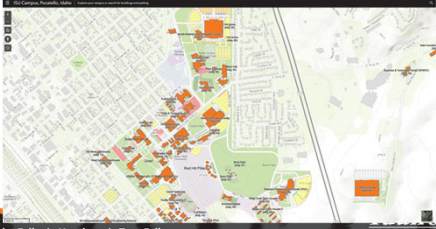
IT4GIS
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Web Map Apps

- In the first part of our exercise, you visited some web map applications



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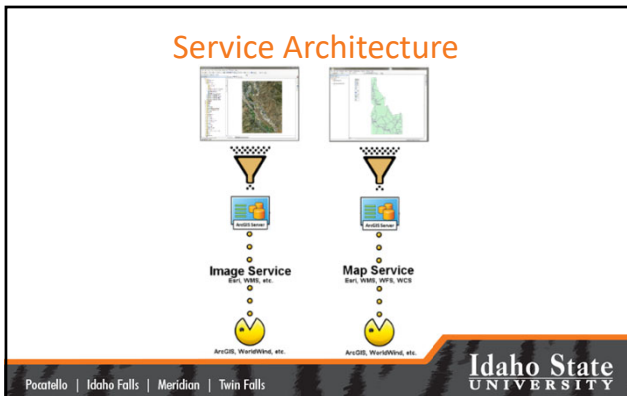
What's a Web Map App?

- Web Map Apps rely on a **browser** and "*wrapper software*" to deliver GIS content to the client
- It is the **browser** that "*consumes*" the web map service
- Web Map Apps are frequently "*mash-ups*" of various web map and web image services

Wrapper software is a generic term referring here to software like ArcGIS Portal that uses Java Scripts to draw maps and provide map content

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Putting Smart Maps on the Web

- Browsers (FireFox, Edge, Chrome, etc.) cannot consume map services **directly**
- They need something (wrapper software) to prepare these data for consumption

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Which Wrapper...

- Which Environment will we use?
 - Adobe Flex
 - MS Silverlight
 - JavaScript
 - HTML 5
 - Portal (aka, ArcGIS Online (AGOL))

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AGOL Architecture

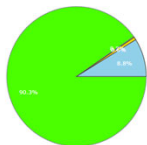
- AGOL is a cloud resource
 - ISU’s AGOL presence is called **gISU**
 - Each of you already has a user account on gISU
 - gISU is allowed 50,000 user accounts
 - gISU is allowed 5,000,000 credits under our site license

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Credits: Things you Need to Know!

gISU used 464 credits



Click on the slice for more detail

	Units	Credits
Manage		
File	0 GB	0
Features	0.92 GB	429
Tile	549.02 MB	1
Analytics - Usage		
Routing	0 locations	0
Proximity	0 requests	0
Geographic Events	0 events	0
Network Analysis	53 routes	41
Spatial Analysis	0 requests	0
Traversal Analysis	0 requests	0
Previous Content - Usage		
Geographics	0 requests	0
Published Content - Usage		
File	0 GB(transfer)	0
Features	0.09 GB(transfer)	0
Tile Generation	3,270 Tiles	3
Total		464

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Credits: Things you Need to Know!

- Storing geospatial data in the AGOL cloud costs credits
- Creating and storing TILES in the AGOL cloud costs **LOTS** of credits
- Raster layers are not allowed in AGOL (based on ISU’s license agreement)
- What do we do???

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Leverage All Our Resources

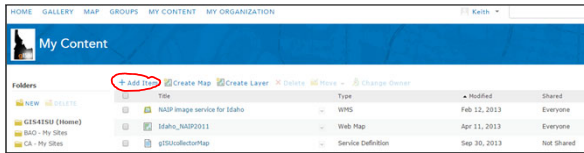
- Create and store OUR big geospatial data on OUR server
 - The GIS TReC's Portal
- Create web services for these Big Data (map/image services) on OUR server
- Share the service end-points (URL) with AGOL (gISU)

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How?

- AGOL– My Content– Add Item

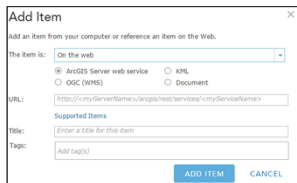


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How to...

- The ITEM URL expects a REST or SOAP end-point



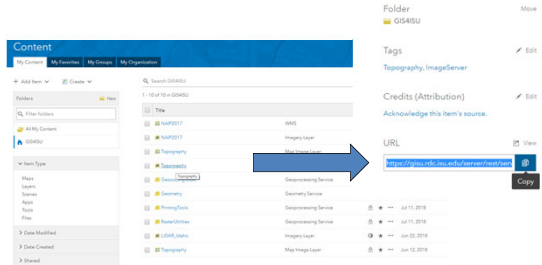
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How Do I Find My End-point?

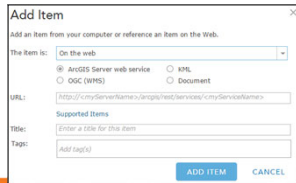
- Access Portal from a web browser
 - Log-in
 - View your Content
 - Select the web layer of interest
 - Copy its REST end-point

How Do I Find My End-point?



Copy and Paste

- Copy the REST end-point
- Add an item and paste the REST end-point into AGOL
- This Adds the Item to your AGOL account



Time to Share

- From AGOL, share your item!
 - Once you add an ITEM to AGOL you can easily share it **with others** (by named group) or with EVERYONE (public).
 - Your source service in portal must also be shared in the same way
 - Recall our discussion of permissions from the “Systems Administration” section of this class

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Why not use *our* Portal Directly for Everything

- Permissions and firewalls
- Visibility and discoverability



PORTAL
BELOW THE RADAR

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Tips for Making a Great Web Map

- DON'T
 - Dump data on the consumer (less is more)
 - Include OBJECTID in the pop-up
 - Use imagery basemaps
- DO
 - Use meaningful layer names
 - Use meaningful field names
 - Carefully craft symbology
 - Apply spatial/scale thresholds
 - Set a good initial map extent

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Now its Time for Cartography

- Make your map using AGOL tools
 - Explore
 - Use Esri’s new Map Viewer
 - Have fun!
 - Detailed instructions can be found in this week’s exercise document
- Since the data are not uploaded to AGOL (it is stored on Portal and shared with AGOL), you will not use any credits!

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Professional Hints and Tips

- Work Smarter not Harder with a List of Files
 - Build a batch file
 - Build a Python script
 - Build a Macro (Idrisi TerrSet, LAS Tools, etc.)

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Questions?



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