

## Web Map Applications: The Geo-Web Revisited

IT4GIS  
Keith T. Weber, GISP  
GIS Director  
ISU-GIS Training and Research Center

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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

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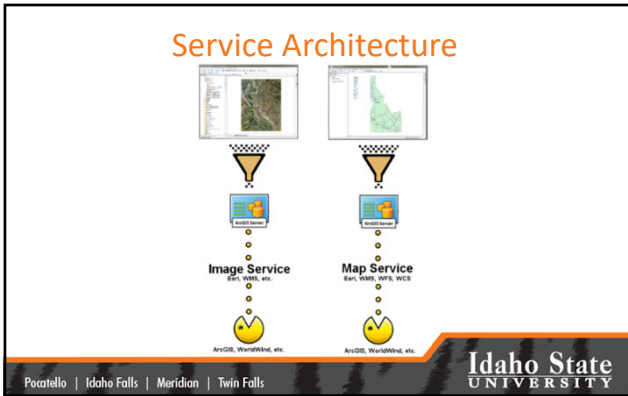
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### Putting Smart Maps on the Web

- 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 (or should have) 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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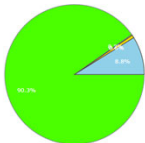
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## Credits: Things you Need to Know!

gISU used 484 credits



Click on the slice for more detail

	Units	Credits
<b>Manage</b>		
Files	0 GB	0
Features	0.92 GB	429
Tiles	549.02 MB	1
<b>Analytics - Usage</b>		
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
<b>Previous Content - Usage</b>		
Geographics	0 requests	0
<b>Published Content - Usage</b>		
Files	0 GB(transfer)	0
Features	0.09 GB(transfer)	0
Tile Generation	3,270 Tiles	3
<b>Total</b>		<b>484</b>

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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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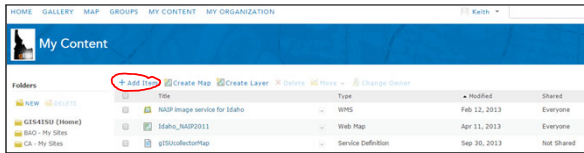
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## How?

- AGOL– My Content– Add Item



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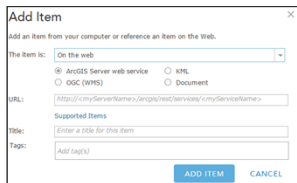
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## How to...

- 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

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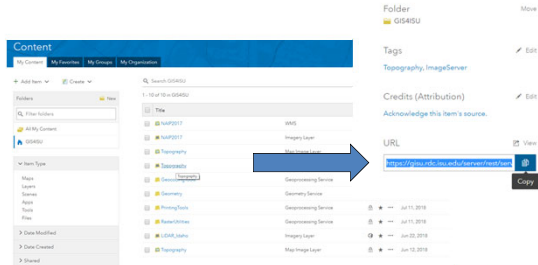
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## How Do I Find My End-point?



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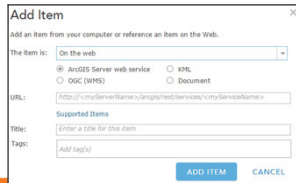
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## Copy and Paste

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



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## 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

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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 is 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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