Web Map Applications:
The Geo-Web Revisited

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Web Map Apps

• In the first part of our exercise, you visited some web map applications (https://www.isu.edu/maps/)

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 map service
• Web Map Apps are frequently "mash-ups" of various map and image services

Wrapper software is a generic term referring to software like ArcGIS Portal
Service Architecture

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.

Which Wrapper...

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

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???
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)

How?

• AGOL– My Content– Add Item

  ![Image of AGOL My Content Add Item]

How to...

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

  ![Image of ITEM URL interface]
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
- Paste it 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).
  – Recall our discussion of permissions from the “Systems Administration” section of this class

Why not use our Portal Directly for Everything

• Permissions and firewalls
• Visibility and discoverability

Now its Time for Cartography

• Make your map using AGOL tools
  – Explore
  – Try using Esri’s new Map Viewer
  – Have fun!
  – Detailed instructions can be found 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!