

## GARP 0317: Cookbook 19 September 2012

### *You in Space! (Part 4)*

#### **Overview**

1. ArcGIS Online Map Viewer vs. ArcGIS Explorer Online
2. Project Organization
3. Project Organization Tools
4. Google Fusion Tables
5. You In Space!



<http://hypercities.com/>



## **1) ArcGIS.com Map Viewer vs. ArcGIS Explorer Online**

ArcGIS has two basic viewers you can use to view web maps in web browsers.

➔ ***ArcGIS Explorer Online is cooler, but potentially more problematic.***

### **ArcGIS.com map viewer**

Use the lightweight map viewer built into the website to author and view interactive web maps. You can set the area of interest, choose a base map, add data layers, configure pop-up windows, change the display, save your maps, and share them with others.

- A mobile version of the viewer automatically opens in your iOS, Android, and Blackberry device, providing an optimized view of web maps on your mobile device. The ArcGIS.com map viewer is free and only requires a web browser and an Internet connection.

### **ArcGIS Explorer Online**

ArcGIS Explorer Online uses the website as a repository to store any web maps that you create with ArcGIS Explorer Online. You can also search for and view other content from the website that's available to you, to any groups of which you are a member, and to the public. You can search for and integrate map services you find on the site into your own maps.

- While ArcGIS Explorer Online and the ArcGIS.com map viewer are complimentary tools for creating and viewing web maps, ArcGIS Explorer Online has some functionality that isn't available with the ArcGIS.com map viewer. For example, you can create map dashboards and create presentations that tell a geographic story as an annotated tour around different areas of interest or highlight specific issues.
- ArcGIS Explorer Online is a web application that requires the Silverlight plug-in from Microsoft.

### **More Information**

- [http://resources.arcgis.com/en/help/main/10.1/#/Web\\_map\\_client\\_capabilities/01w100000820000000/](http://resources.arcgis.com/en/help/main/10.1/#/Web_map_client_capabilities/01w10000082000000/)
- <http://help.arcgis.com/en/arcgisexplorer/help/>

### **ArcGIS Explorer Desktop**

ArcGIS Explorer is a free, downloadable GIS viewer that gives you an easy way to explore, visualize and share GIS information = it's basically the ESRI version of Google Earth, optimized to work with shapefiles and other ESRI specialties.

<http://www.esri.com/software/arcgis/explorer>




## 2) Project Organization


**GIS Project: Organize Project, Data, and Deliverables (= Map and Report)**

**Project Organization**

1. Budget and Resources.
2. Workflow (= flowchart)
3. Collaborators and Dependencies.
4. Timeline, mile stones, deadlines.
5. Deliverables: What? To whom?
6. Backup!




**Data Organization**



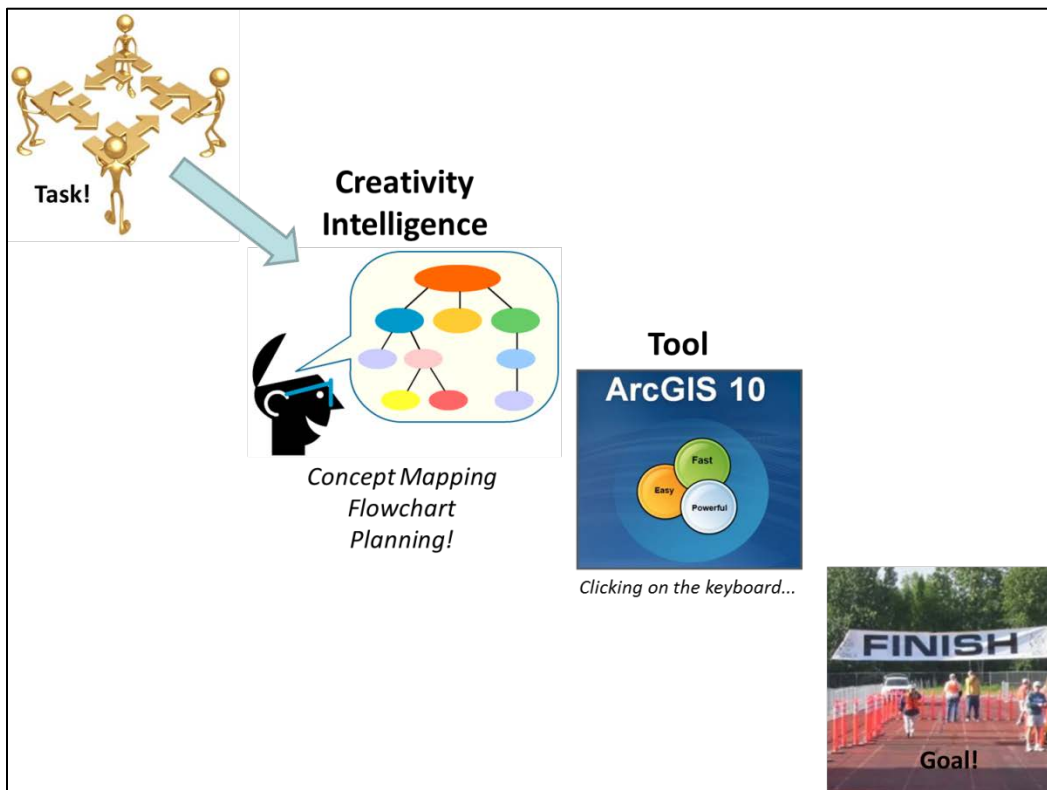
1. Data Sources (free?)
2. Data Creation?
3. Data Manipulation
4. Data Analysis
5. Data Organization and Backup.

**Deliverables Organization**



1. Map setup
2. Visualization: graphs, tables, etc.
3. Written Report
4. Website, meetings, etc.
5. Due Dates!

**GIS Project Documentation: Formal and Informal!**



**Task!**

**Creativity Intelligence**

**Tool ArcGIS 10**

Easy Fast Powerful

*Clicking on the keyboard...*

**Goal!**

**Creativity Intelligence**

**Today!**

- Don't even start ArcGIS Online!
- Read and understand the project description!
- Create a draft flow chart for the project!
- Create a time line for the project!
- Create the needed folders!
- Start a Google Docs for your project documentation!
- Think what Space means to you!

**Stop Clicking!**  
**Start Thinking!**  
**Start Planning!**

**Concept Mapping Flowchart Planning!**

### Step 1: Project Organization

You need to organize the project in your head! What do I need to do? How do I get the data? What is the outcome? Create a flowchart and timeline for the entire project!

### Step 2: Data Acquisition

What data do I need? Do I have the data? Do I have to digitize and create the data myself?

### Step 3: Data Exploration

Test-drive your data to make sure that you really have the data you need for your project.

### Step 4: Proof-of-Concept

Experiment with ArcGIS Online to see if/how things work! Don't commit unless you know what you want can be done!

### Step 5: Create your Web GIS

### Step 6: Share your Web GIS!

- People tend to forget about Step 1! Big mistake!
- People start with Step 2 and then immediately jump to Step 5...usually not a good idea.
- People are too focused with the end product...the final map or Web GIS, but Steps 5/6 are impossible without Steps 1 to 4.
- People forget to adequately document their project.
- People tend to focus too much on technology = the how...focus instead on the why!

➔ **Less clicking! More Thinking!**

### 3) Project Organization Tools

#### Spicy Nodes

<http://www.spicynodes.org/index.html>

Web-based mind and concept mapping

#### FreeMind

[http://freemind.sourceforge.net/wiki/index.php/Main\\_Page](http://freemind.sourceforge.net/wiki/index.php/Main_Page)

Open-source mind mapping

#### Simple Mapper

<http://simplemapper.org/>

Web-based maps, network diagrams, and workflows

#### Cmap Tools

<http://cmap.ihmc.us/>

Concept maps and flowcharts

#### Google Docs

[www.google.com](http://www.google.com)

Web-based documents, spreadsheets, etc.

#### Smartphone Apps

Tons!

#### Flowcharts in MS Office

<http://www.youtube.com/watch?v=RkN0dekcmw>



### 4) Google Fusion Tables



#### Google Fusion Tables

URL: <http://www.google.com/fusiontables/Home/>

Google Fusion Tables allows you to upload your own geographic data as spreadsheet tables and to visualize your data online as graphs or maps. You can share these graphs or maps on a website, blog, via Email, or via social media. Furthermore, Google Fusion Tables allows you and other people to collaborate on the data collection and data editing in real-time.

#### Help Resources

<http://support.google.com/fusiontables/?hl=en>

#### Great Tutorials

- <http://support.google.com/fusiontables/bin/answer.py?hl=en&answer=184641>
- [http://earth.google.com/outreach/tutorial\\_fusion\\_publish.html](http://earth.google.com/outreach/tutorial_fusion_publish.html)
- [http://earth.google.com/outreach/tutorial\\_fusion\\_sample.html](http://earth.google.com/outreach/tutorial_fusion_sample.html)
- <http://blog.apps.chicagotribune.com/2010/03/04/quickly-visualize-and-map-a-data-set-using-google-fusion-tables/>

### **YouTube Resources**

<http://www.youtube.com/watch?v=p0xnk9zFQpY>

<http://www.youtube.com/watch?v=aC67HbtRne8&feature=related>

YouTube search: Google Fusion Tables Tutorial



## **5) You In Space!**

*= your personal Web GIS and workshop!*

### ***5.1) You In Space! (Due Date 10/12/12)***

We are all spatial people and here you get to map yourself, your past, your future, and your interests. Think in terms of writing a personal statement – except here you create a Web GIS. You will probably have several maps, each with several layers.

- Use as many of the advanced ArcGIS Online tools and features as possible, including: pop-ups with embedded web links and photographs, Choropleth maps, time-awareness, dashboards, good layer names and legends, etc.
- Create, upload, and map a shapefile!
- Your maps have to be professional – as always consider your Web GIS as something you show-off during a job interview. In addition, this is your digital legacy! Include appropriate data credits.
- Blog about it on your blog!
- Share your maps using all three options. If needed, create a quick Google Blogger to test the embed code. The web applications are the most important here.

### ***5.2) GIS Day 2012 (Due Date 10/12/12)***

GIS Day 2012 is coming-up and you have volunteered to teach a 90-minute public workshop about ArcGIS Online. Now you need to prepare the hand-out / tutorials you will use! The goal of your workshop is to learn how to create and share a professional ArcGIS Online map that includes original content and interactivity.

- Assume that your students are normal people with normal levels of computer knowledge.
- Create a step-by-step tutorial, using screen captures, for your students to follow along as you demonstrate and help.
- Include links and websites for additional help and resources.
- Create this tutorial in whatever you want (I suggest MS Word or Google Docs) and save it as a PDF file.

**➔ *Contact me for help, support, or review as needed!***

**➔ *Contact me for clarification of this project and my expectations as needed!***