The following was presented at DMT'12 (May 20-23, 2012).

The contents are provisional and will be superseded by a paper in the DMT'12 Proceedings.

See also earlier Proceedings (1997-2011)
http://ngmdb.usgs.gov/info/dmt/

What's New in ArcGIS 10.1

Authoring, Publishing, and Sharing Maps

Larry Batten ····· *Account Manager – USGS & BLM*

Willy Lynch ····· *Energy-Mining Industry Team*

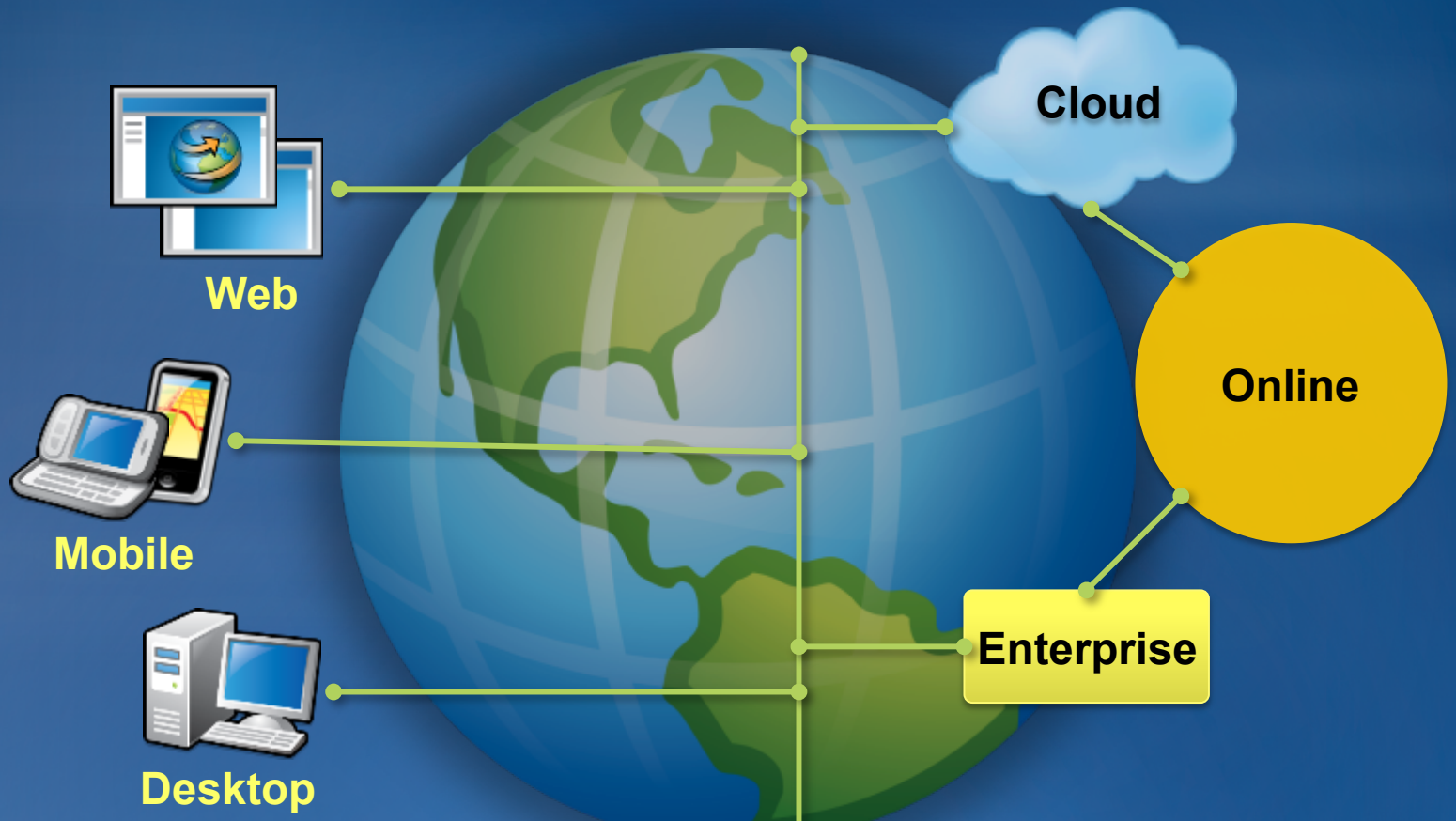
What are we going to cover today?

- New features in ArcGIS 10.1 important to the DMT community
  - Sharing – data, analyses, services, capabilities
  - Lidar support

- Use case demonstration
  - Clancy Energy

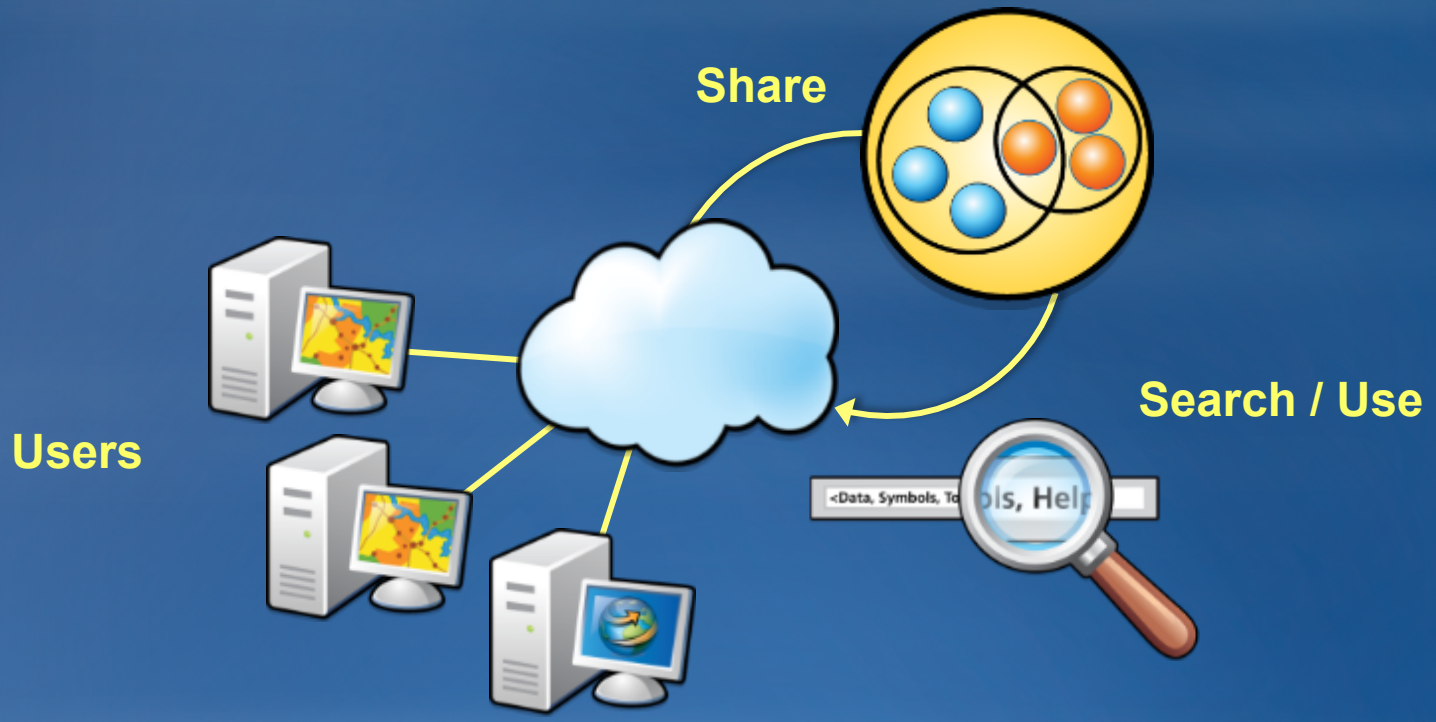
ArcGIS

A Complete System for Geographic Information



Sharing

- Information sharing is critical and has been the primary focus for the desktop team
- Transparency and easy information access are now expected

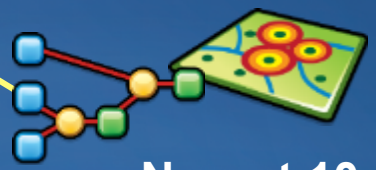


Sharing as a Package

Professional
to
Professional

ArcGIS
for Desktop

Map and Layer
Packages



New at 10.1
Tile, Geoprocessing &
Locator Packages

Sharing Tradecraft

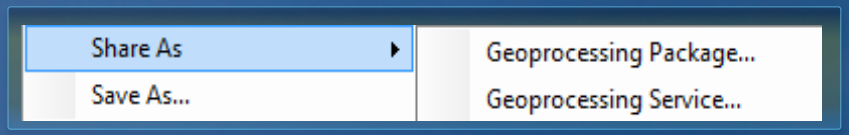
Sharing as Services

Professional
to
Everyone

Sharing Analysis

Analysis

Share as…



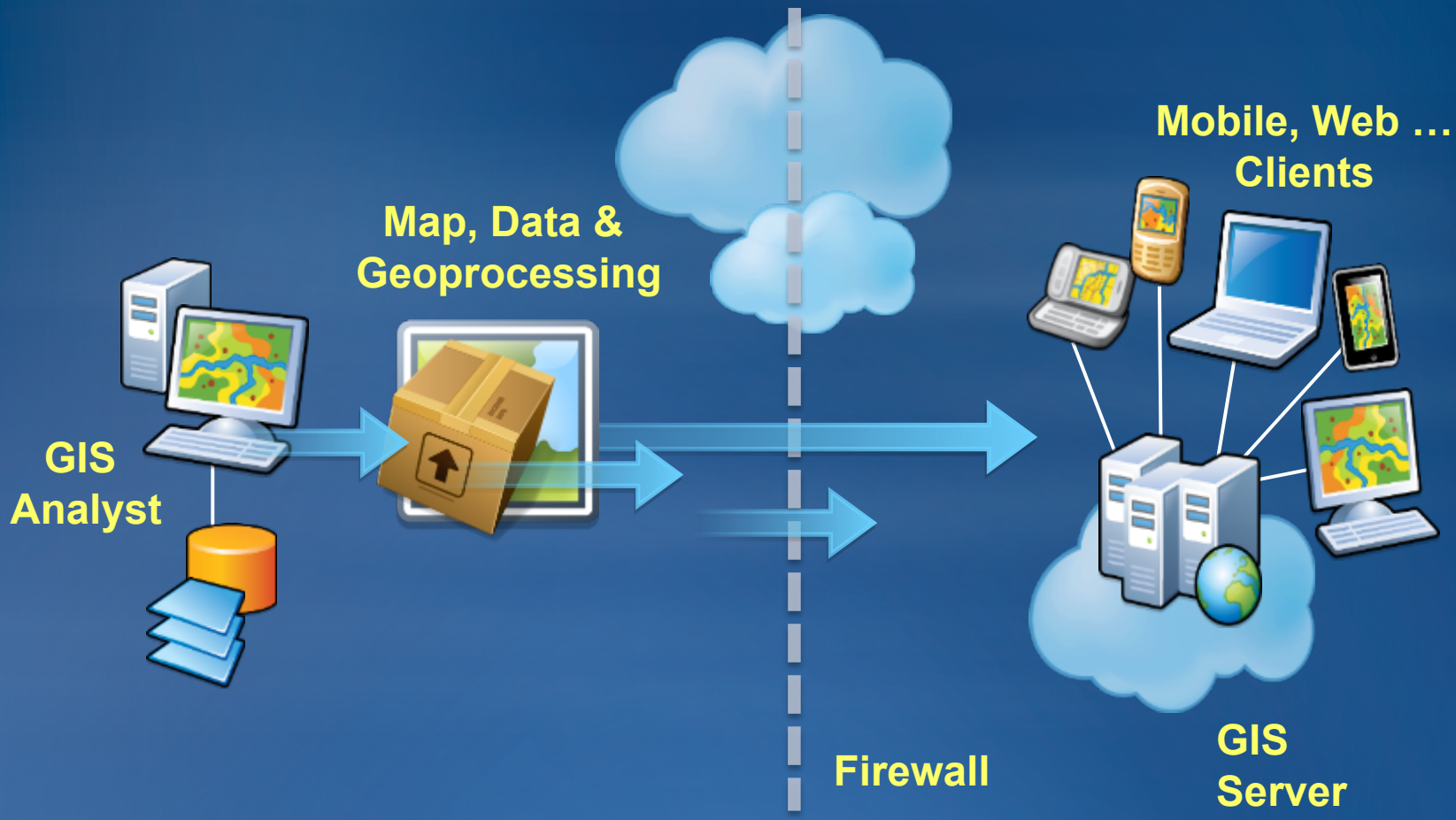
Package

Service

GIS Professionals

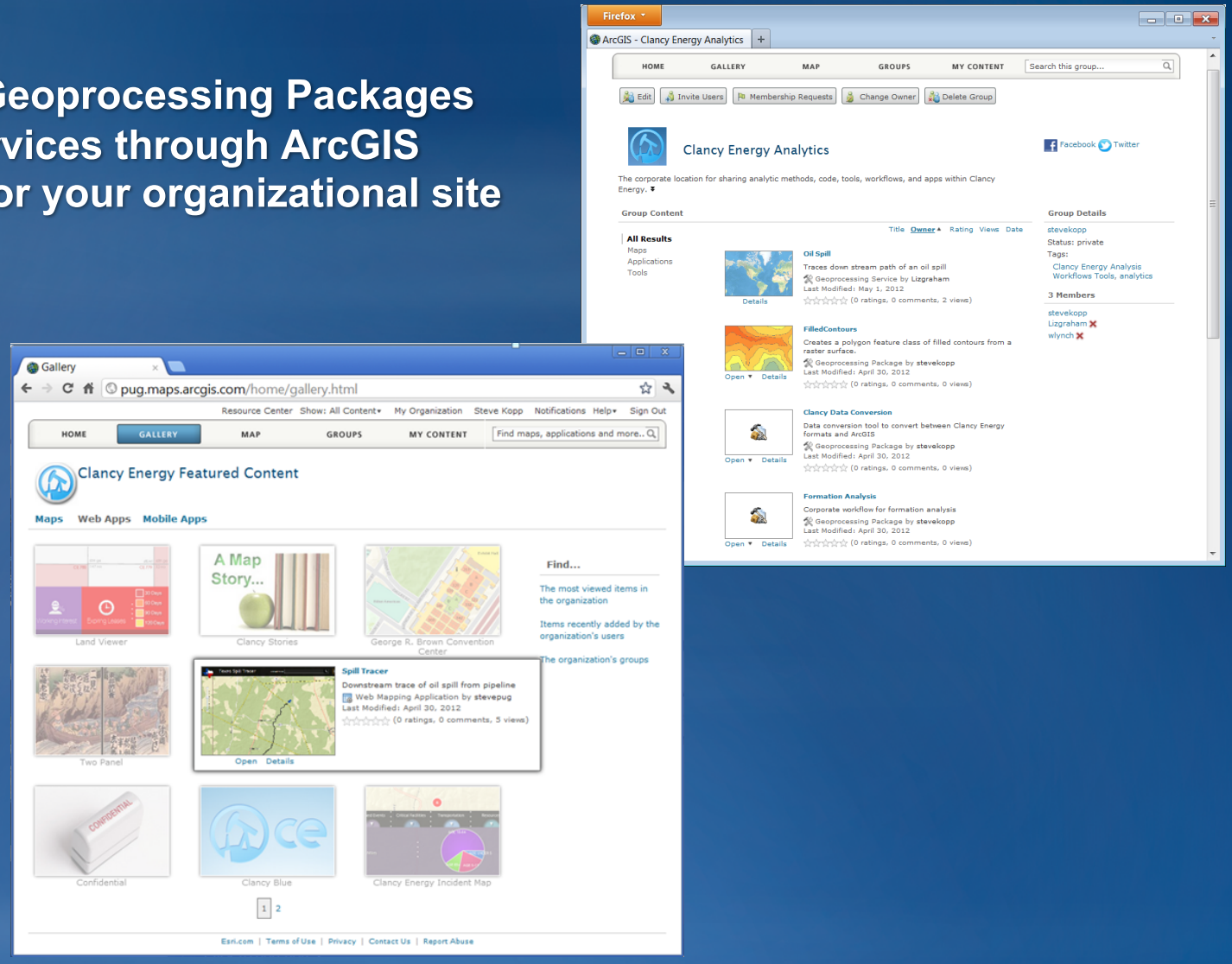
Everyone

Sharing GIS Capabilities to Cloud Servers

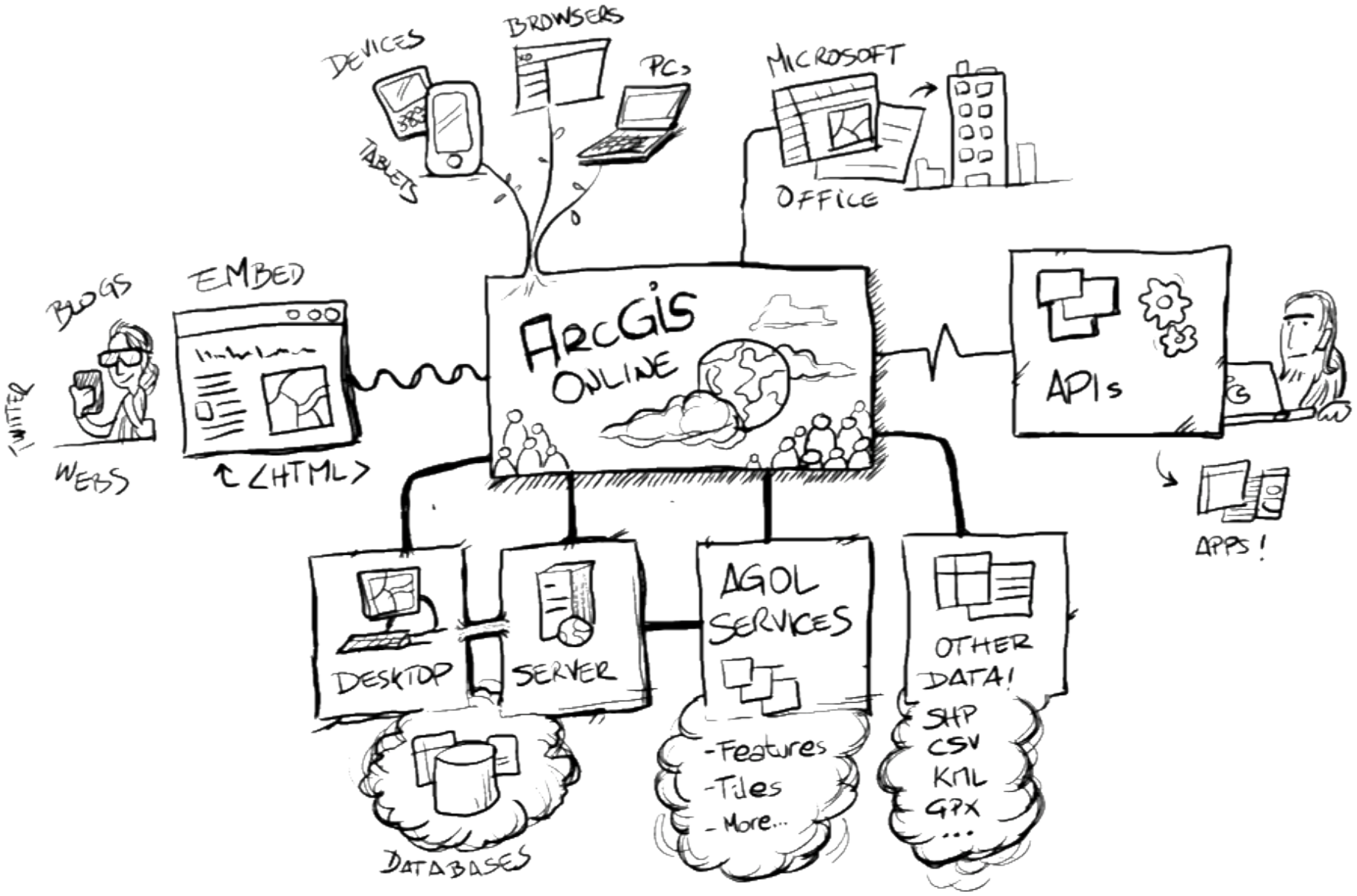


Sharing Online

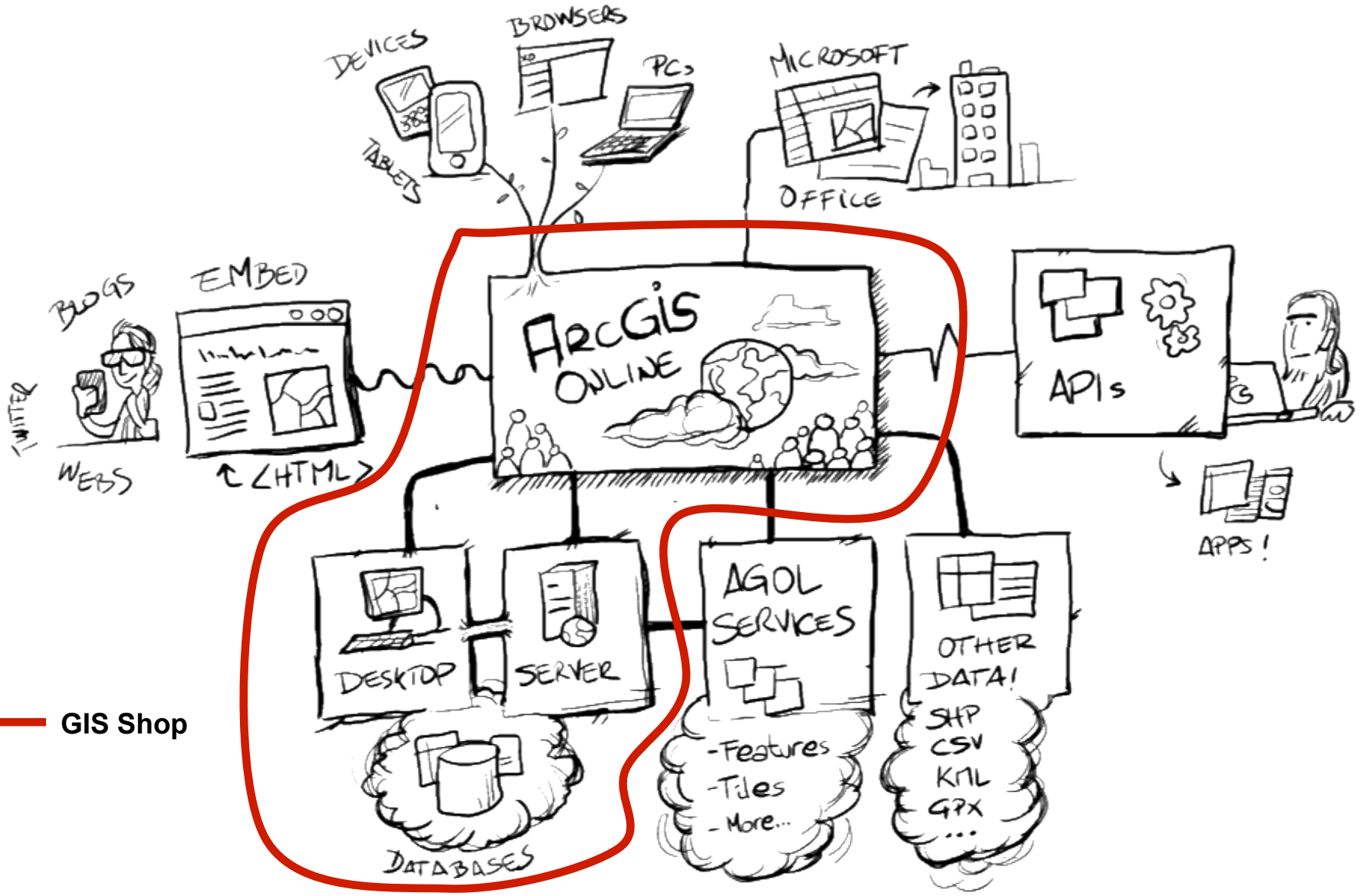
- Share Geoprocessing Packages and Services through ArcGIS Online or your organizational site



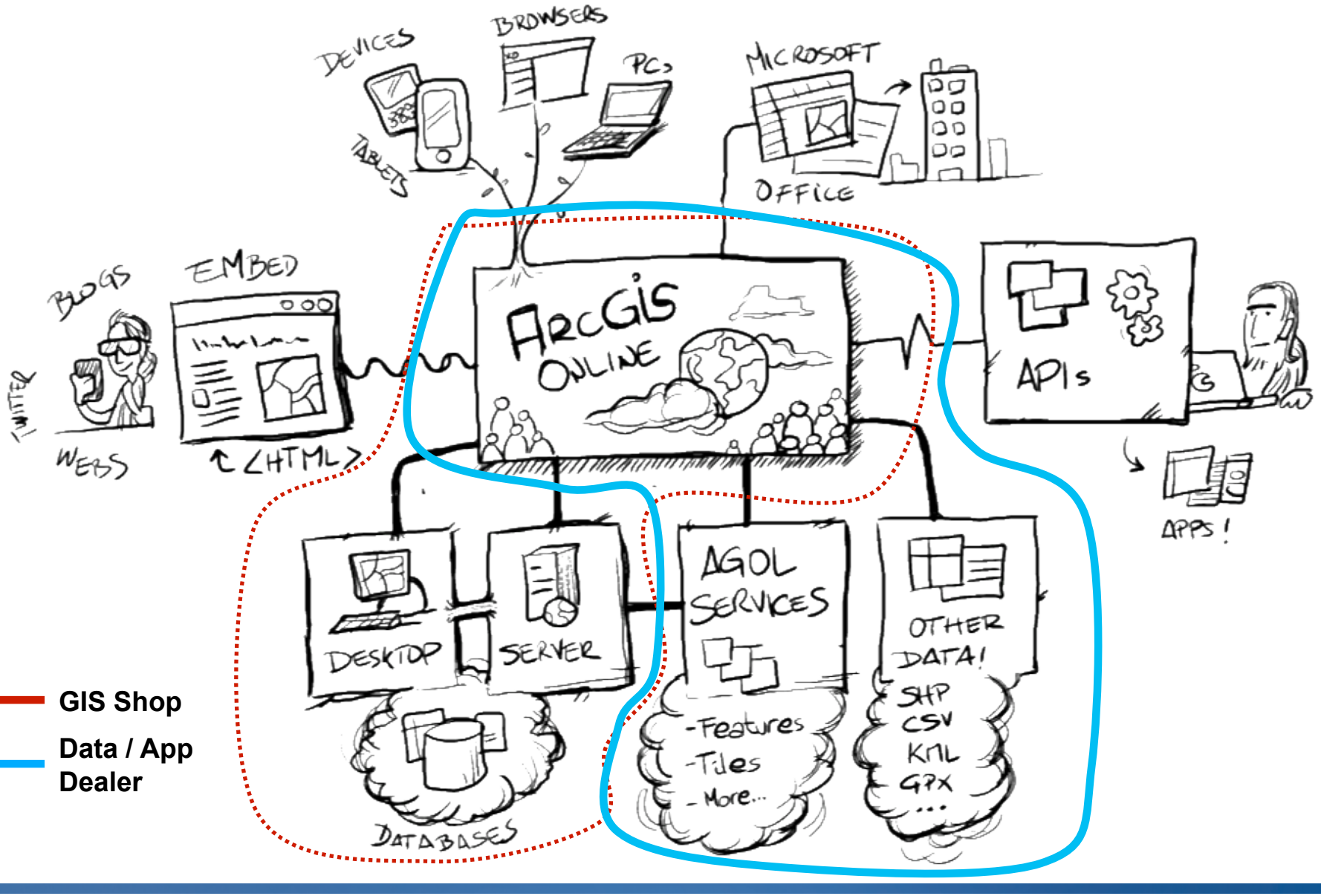
ArcGIS Online for Everyone



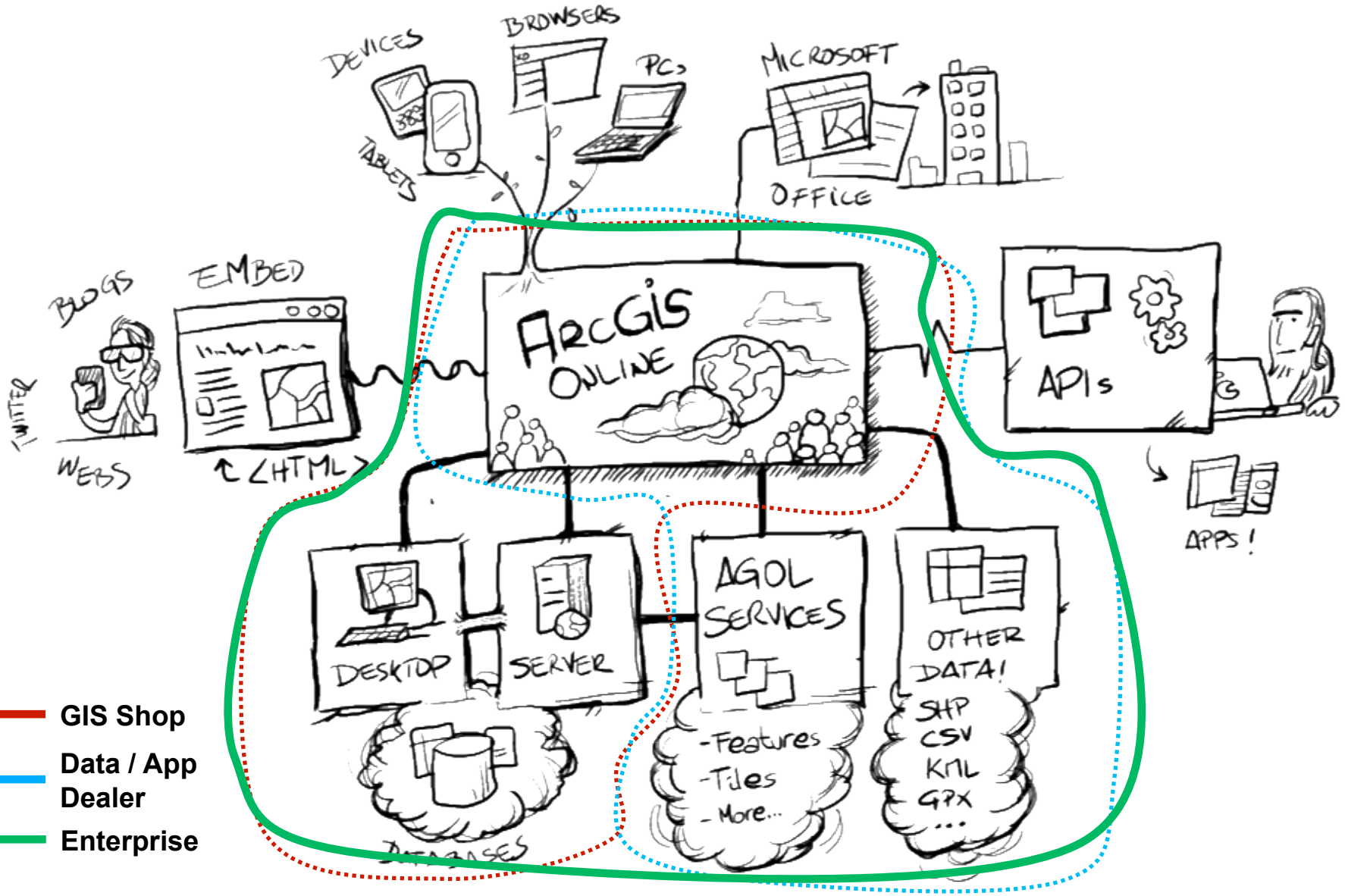
ArcGIS Online for Everyone



ArcGIS Online for Everyone



ArcGIS Online for Everyone

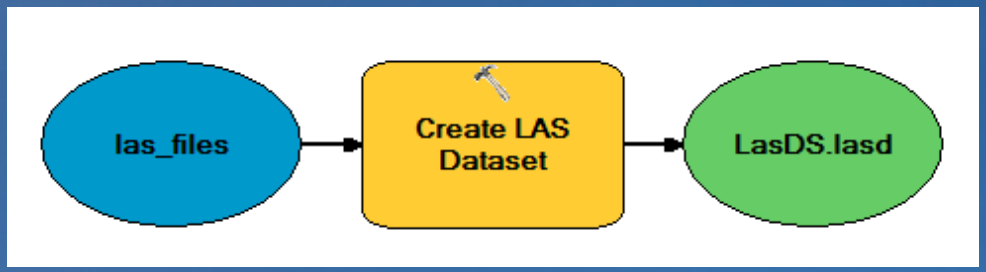


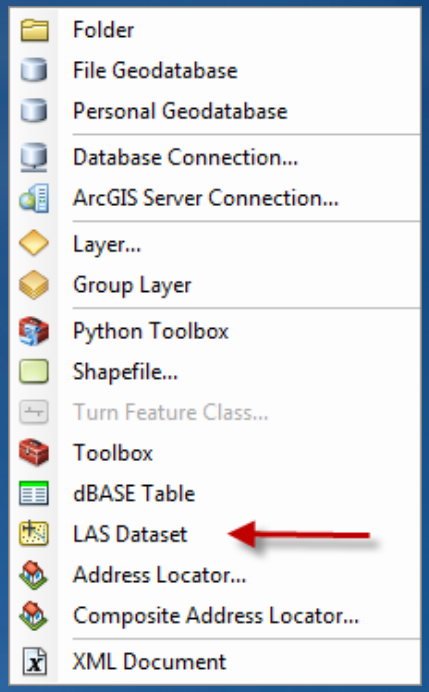
LAS Dataset

- New data type
- File based
- Stores references to LAS files on disk
- Optionally reference breakline data
- Treats a collection of LAS files as one logical dataset
- Create interactively via Catalog

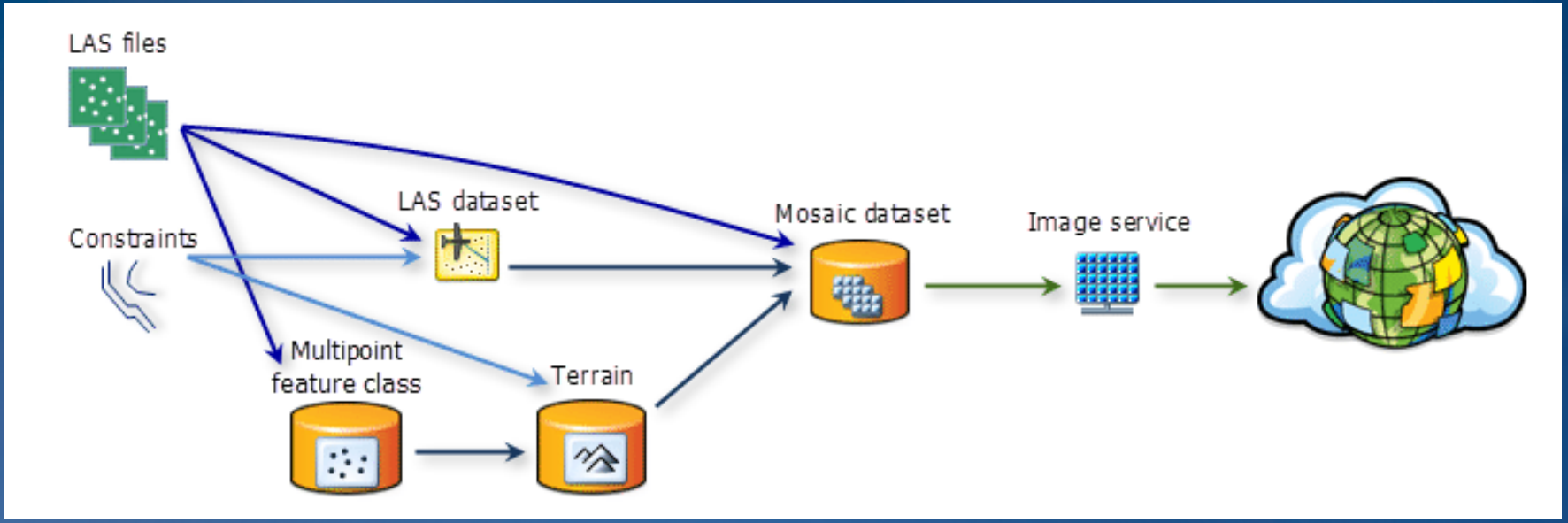
  Or

  Inside scripts and models with GP tools

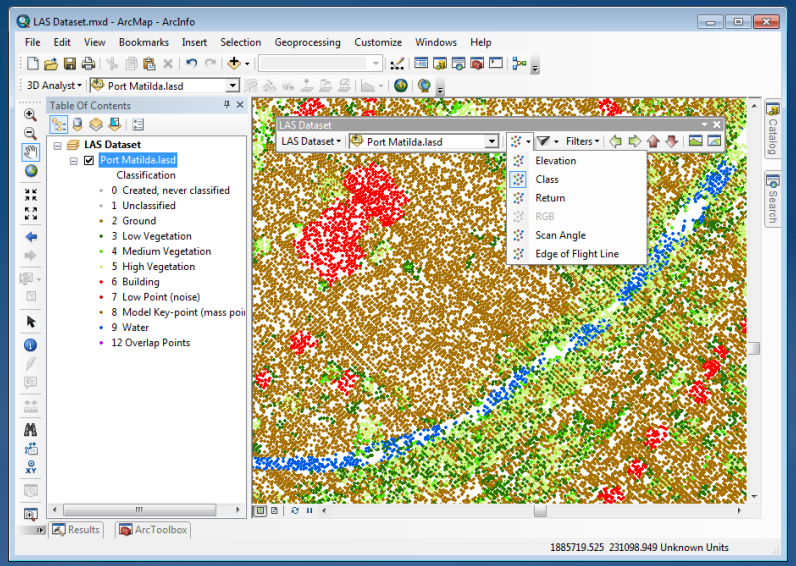


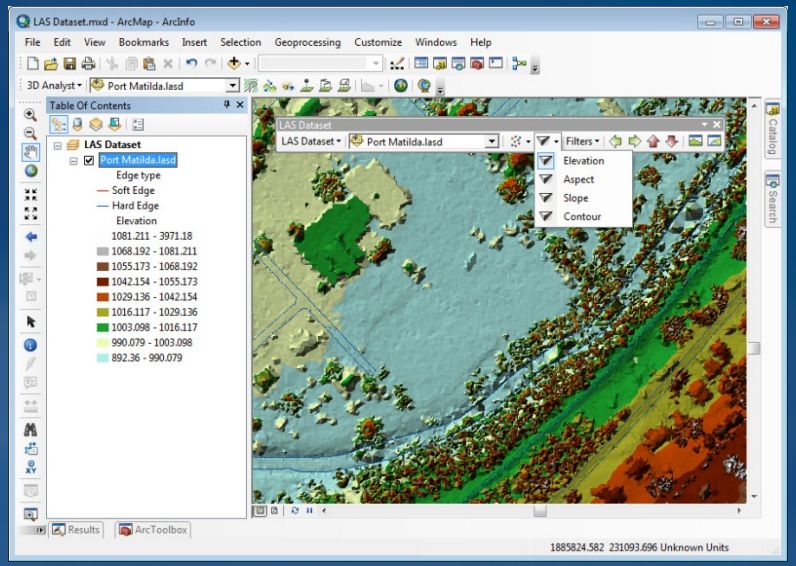


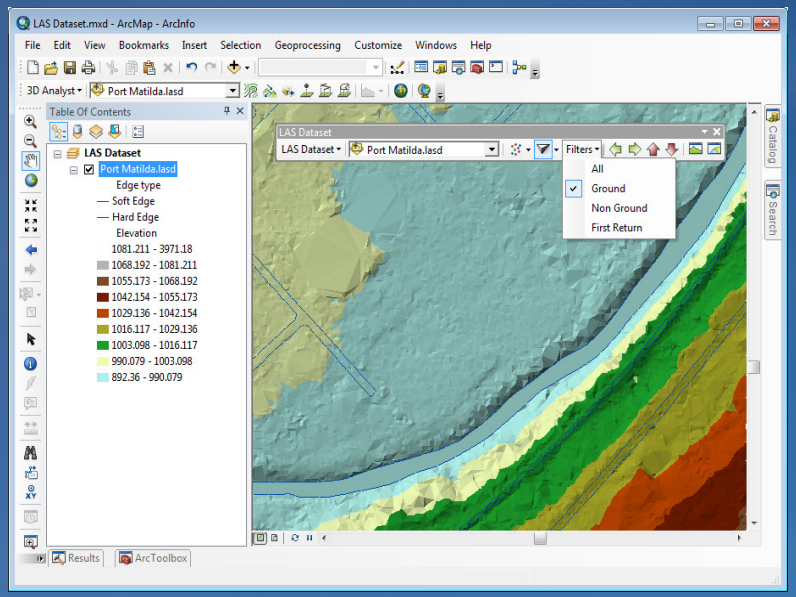
LiDAR as Image Services

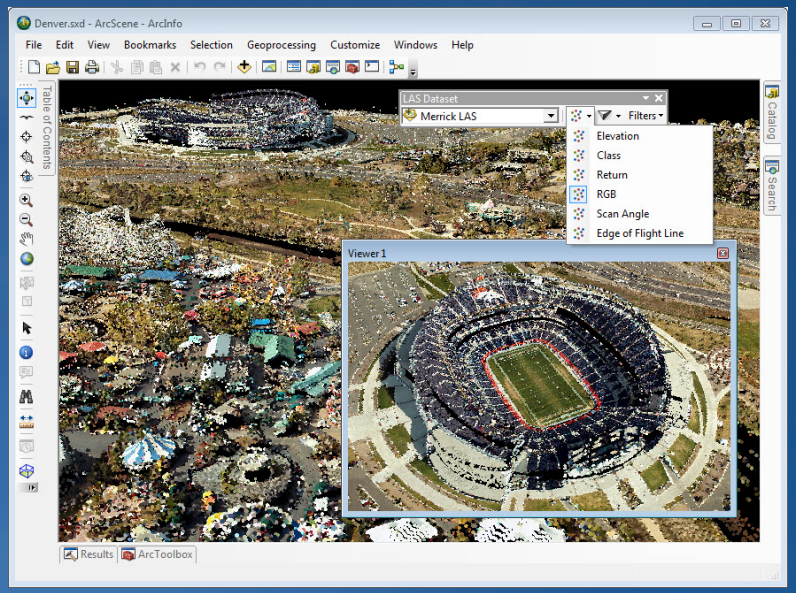


Symbolizing LAS Datasets



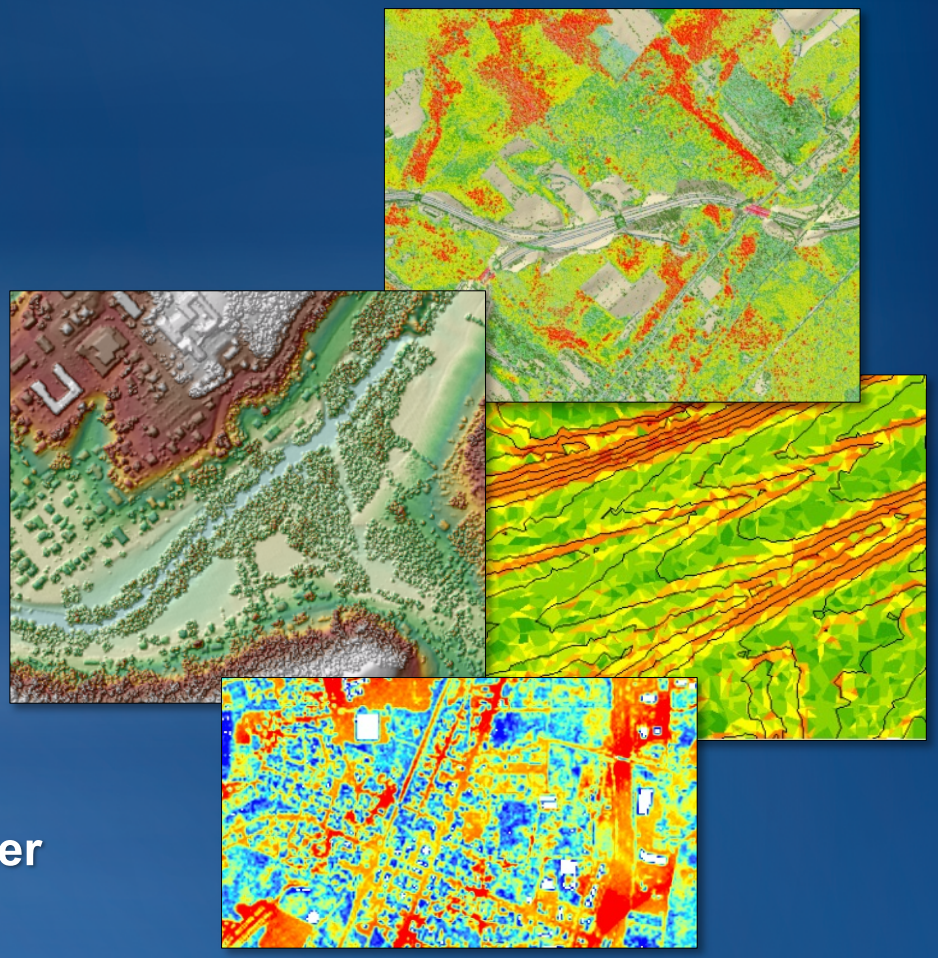






LAS Dataset - Analysis

- Derive surfaces
  - LAS Dataset As Raster
  - LAS Dataset As TIN
- Direct analysis
  - Interpolate Shape
  - Add Surface Information
  - Line Of Sight
  - Skyline
  - Locate Outliers
- Rasterize on point metrics
  - LAS Point Statistics As Raster



Live Seminar: Working with Lidar Data in ArcGIS 10.1

Working with Lidar Data in ArcGIS 10.1

Presented by: Lindsay Weitz & Melanie Harlow

Date: Thursday, May 24, 2012

Times: 9 AM, 11 AM, & 3 PM - Pacific Time (US & Canada)
12 PM, 2 PM, & 6 PM - Eastern Time (US & Canada)

Overview: Learn about new and improved tools to conduct analysis and manage, visualize, and disseminate lidar data.

For more information:
http://training.esri.com/gateway/index.cfm

LiDAR Tools support “Geologic Point Clouds”

Larry:

“I'm at the Digital Mapping Techniques conference. They are discussing methods of 3D modeling of geologic layers. Could they use 3D points to create surfaces using the Lidar tools? The point clusters could have a geologic unit designation similar to a Lidar classification. They would store the points and generate geo-surfaces. “

Peter Becker:

“Yes, there are possibilities for using LAS in such ways. It was something I was suggesting to the Bathymetry group. For example, from the source create a derived dataset as a LAS file purely for visualization and analysis purposes. Some tools would need to be developed.”

If you are interested,
please let Larry Batten know…

Demonstration

Clancy Energy