ArcGIS Online, Portal & Interoperability

Satish Sankaran
Chris Whitmore
Open Systems and Interoperability

- **interoperability** is the ability of different information technology systems and software applications to communicate, exchange data, and use the information that has been exchanged.

- **Open** systems are computer systems that provide some combination of interoperability, portability, and open software standards.
What is Open? The many meanings of Open

[Diagram: A man says "Four" while pointing to sticks, and another man says "No Three." A group of doctors examines an elephant and have different opinions on what it is: a fan, a wall, a spear, a snake, a tree, and a rope.]
ArcGIS: Open Platform for Innovation

Open Specifications
Open APIs
Open Standards
Open Data
Open Community
Open Source

Flexible
Configurable
Interoperable
Deployable
Customizable
Scalable

Open ArcGIS Platform

http://www.esri.com/software/open
The ArcGIS Platform

- An Open & Interoperable Platform
  - Supporting a thriving ecosystem of focused apps and applications.

- A Standards Compliant Platform
  - Supporting many relevant standards including those from ISO TC 211 and OGC.
ArcGIS

**ArcGIS Online**

- Hosted by Esri (SaaS)
  - Upgraded automatically (by Esri)
  - Esri controls SLA

- Esri-provided content and services
  - Basemaps
  - Living Atlas
  - GeoEnrichment, Routing, ...

**ArcGIS Enterprise**

- In your own infrastructure (Software)
  - Upgraded manually (by organization)
  - Organization controls SLA

- Advanced GIS functionality
  - GIS Server
  - Image Server (optional)
  - GeoEvent Server (optional)
  - GeoAnalytics Server (optional)

Core Web GIS functionality
(Apps, visualization, smart mapping, analysis...)
ArcGIS Enterprise | Software Components

ArcGIS Enterprise = ArcGIS Web Adaptor + Portal for ArcGIS + ArcGIS Server + ArcGIS Data Store

All of these components existed in the software pre-10.5
ArcGIS Online / Portal – Supported formats

- **Data formats**

- **Metadata formats**

- **Web Service protocols**
Open Platform Discussion

“I suppose I’ll be the one to mention the elephant in the room.”
Standards (defacto & deJure)

- **Data Standards**
  - CAD, Shape file, CSV, GML, GeoJSON, GeoRSS, KML, JPEG, Geopackage, …

- **Metadata Standards**
  - ISO, FGDC, INSPIRE, DCAT, …

- **Web Service Standards**
  - GeoServices REST, WMS, WFS, WMTS, WCS, WPS, …