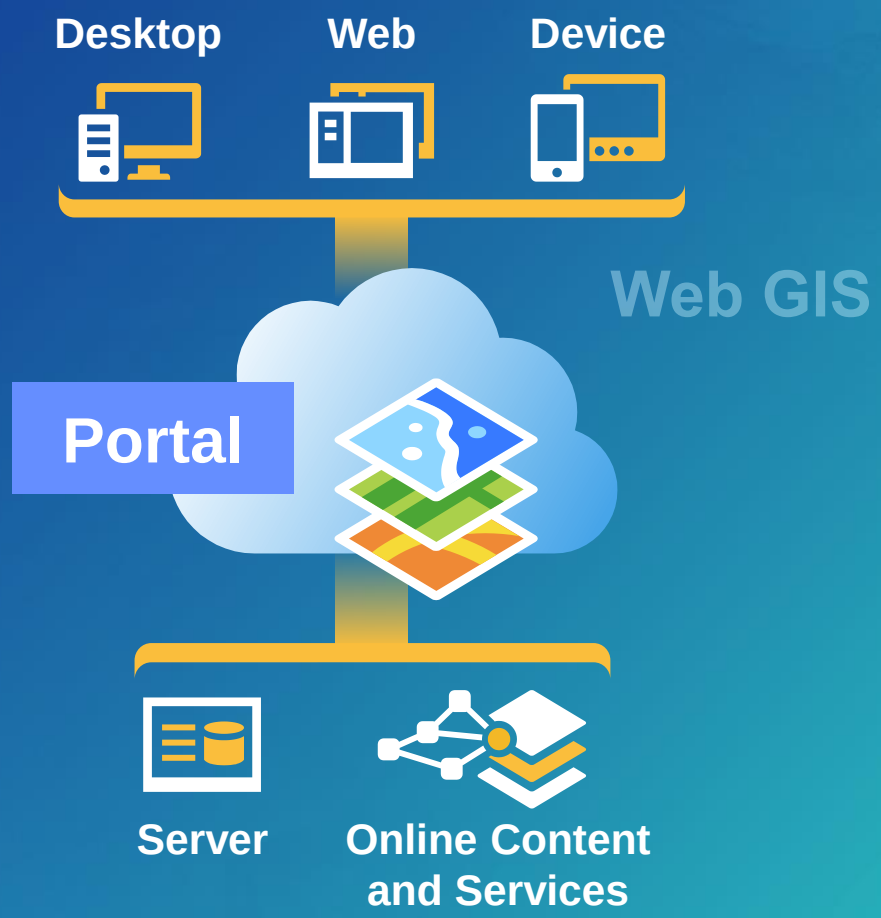
ArcGIS - Open, Interoperable and Standards Compliant

ArcGIS

Platform

Enabling GIS Everywhere

- Simple
- Integrated
- Open



Available in the Cloud . . .
. . . and On-Premises

ArcGIS

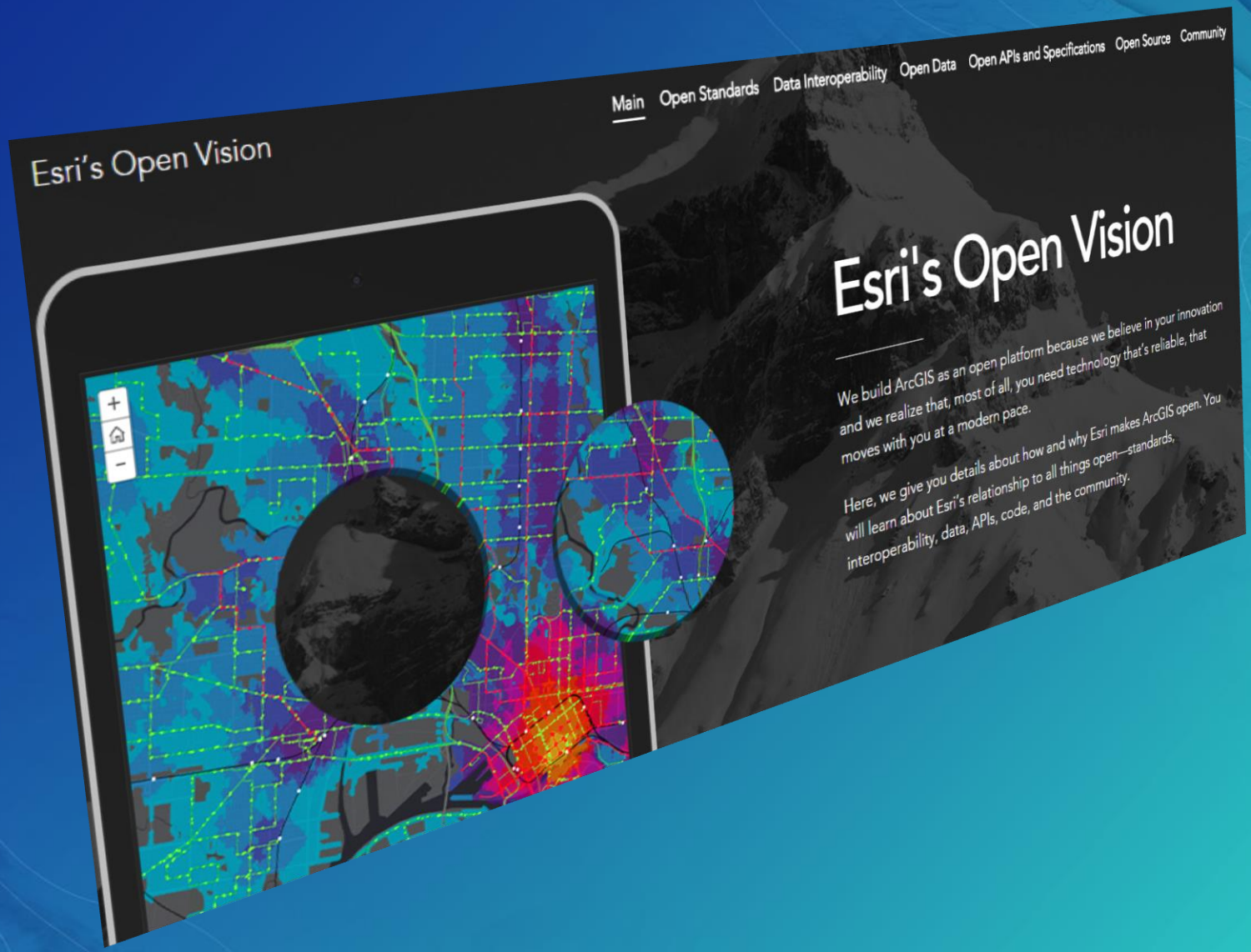
ArcGIS Online

- Hosted by Esri (SaaS)
  - Upgraded automatically (by Esri)
  - Esri controls SLA
- Esri-provided content and services
  - Basemaps
  - Living Atlas
  - GeoEnrichment, Routing, …

Core Web GIS functionality
(Apps, visualization, smart mapping, analysis…)

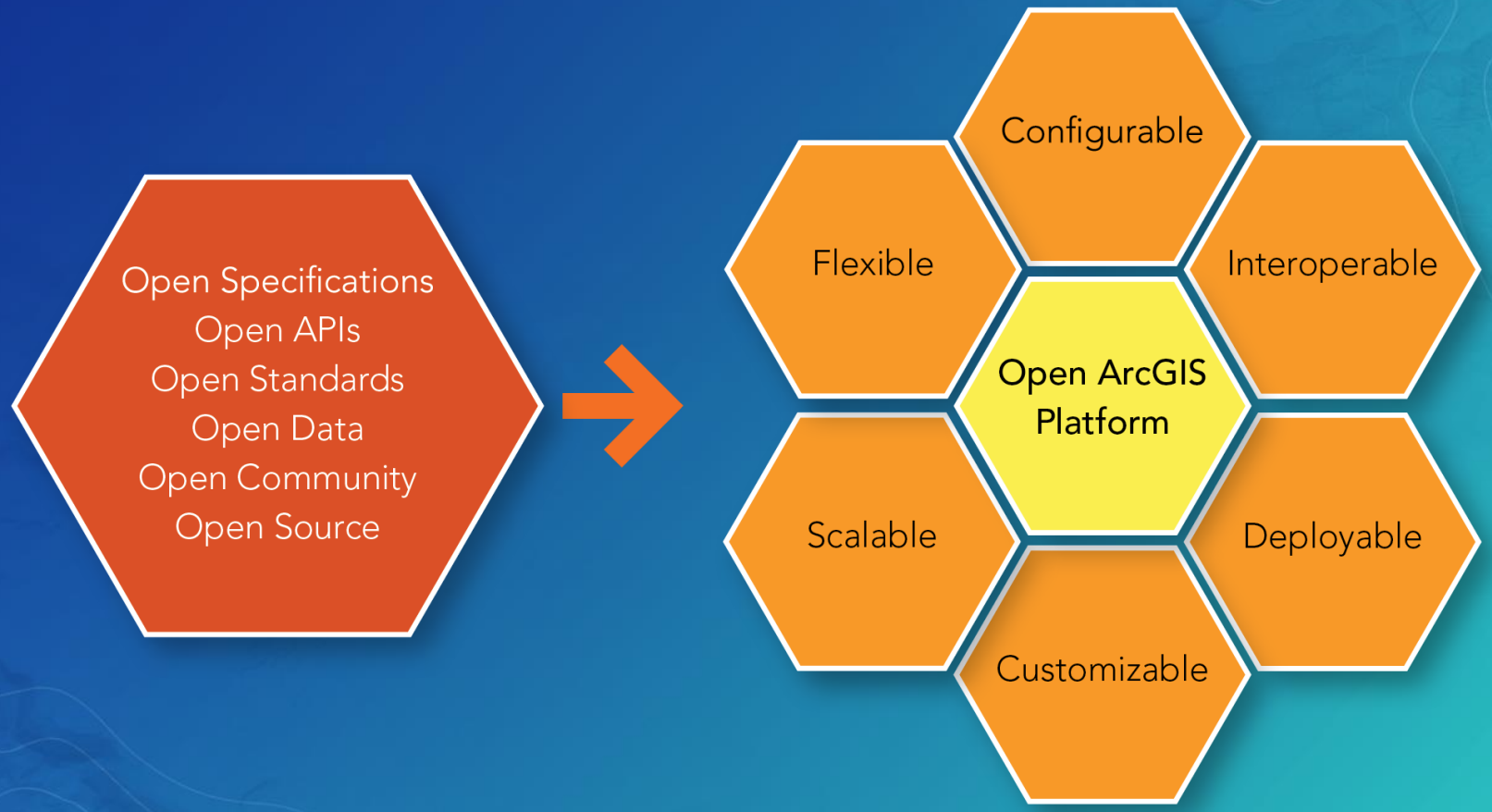
ArcGIS Enterprise

- 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)



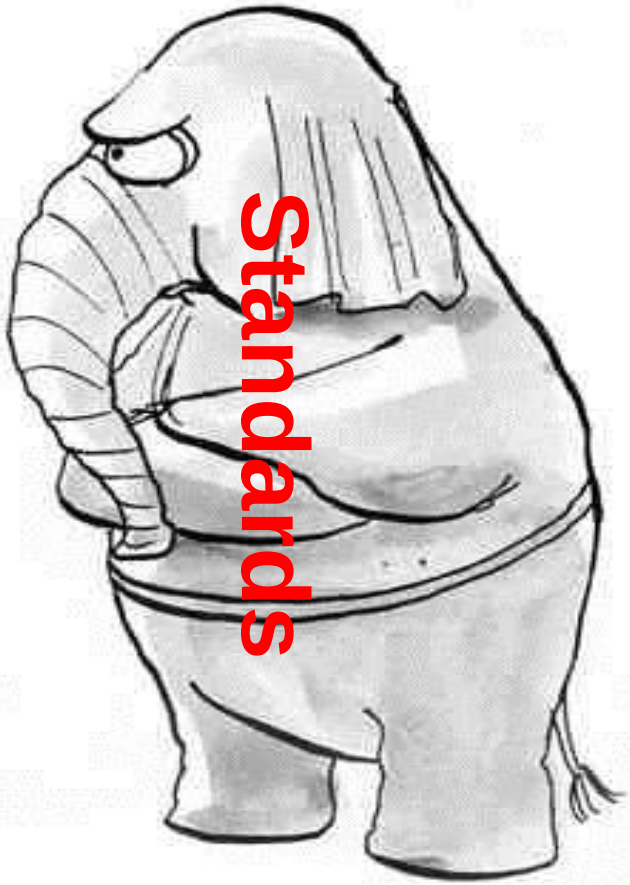
http://www.esri.com/software/open

ArcGIS: Open Platform for Innovation



http://www.esri.com/library/brochures/pdfs/arcgis-an-open-platform-for-innovation.pdf

Open Platform Discussion



"I suppose I'll be the one
to mention the elephant in the room."

ArcGIS Platform Components

Portals
(AGOL, Portal)

Providing &
Consuming

Server

Providing

Developer Solutions
(runtime, Javascript
Api)
Consuming

Desktop
(ArcMap & PRO)
Consuming

Apps
Consuming

Core Standards

Metadata
(ISO, FGDC, …)

Data
(Geopackage,
geoJSON, gml-
JPEG 2000…)

Portrayal
Standards

Services
(wms,wfs,wcs,
wps,sos,cs-w, …)

Compliancy

Open Geospatial Consortium
Compliance Certificate

This Compliance Certificate is awarded to

Esri

In recognition that

ArcGIS Enterprise 10.5

Meets all Compliance Items and therefore complies with

OGC Web Feature Service Implementation Standard, Version 2.0

Awarded the 17th day of November 2016

This certificate is valid only in conjunction with following OGC live logo:
http://www.opengeospatial.org/resource/products/details/?pid=1395

Jeffrey S. Burnett, Vice President

Open Geospatial Consortium Inc. CORPORATE SEAL 1994 DELAWARE

For our most recent platform release, we have obtained over 30 OGC certificates of compliance.

http://www.opengeospatial.org/resource/products/compliant#ESRI

Open API’s and Specifications

- Geoservices REST Api
- i3S
- LERC
- FGDB Api
- Geodatabase XML
- Shapefile

OGC Community Standards

The OGC Community Standard Process

Tweet Like 0 G+1 0 Share

Post date: 15 February 2017
Contributed by: Carl Reed
Tags:
Community standards, OGC standards

For many years, the OGC membership discussed and struggled with defining a process and set of related policies for accommodating submission of widely used, mature specifications developed outside the OGC standards development and approval process. Examples of these specifications are GeoTIFF, GeoJSON*, and GeoRSS. Such specifications are often termed as "de facto" standards. A *de facto standard* is something that is used so widely that it is considered a *standard* for a given application although it has no official status. The focus of the OGC discussions was to define a more lightweight process by which outside (non-OGC) groups as well as OGC member organizations *could feel comfortable* submitting specifications developed outside the OGC into the formal OGC standards process. The four driving use cases for the Community Standards process are:

1. Submitters could rest assured that the OGC would not alter the content of the specification (unless errors were discovered), would not usurp the development and maintenance of the specification, and that the intellectual property could remain with the organization or group that developed the de-facto standard.
2. A desire by government organizations to have de facto standards vetted and branded by a formal Standards Development Organization, such as the OGC, so that these de facto standards could be specified in procurement language.
3. The need for OGC standards to be able to reference externally developed de-facto standards as normative.

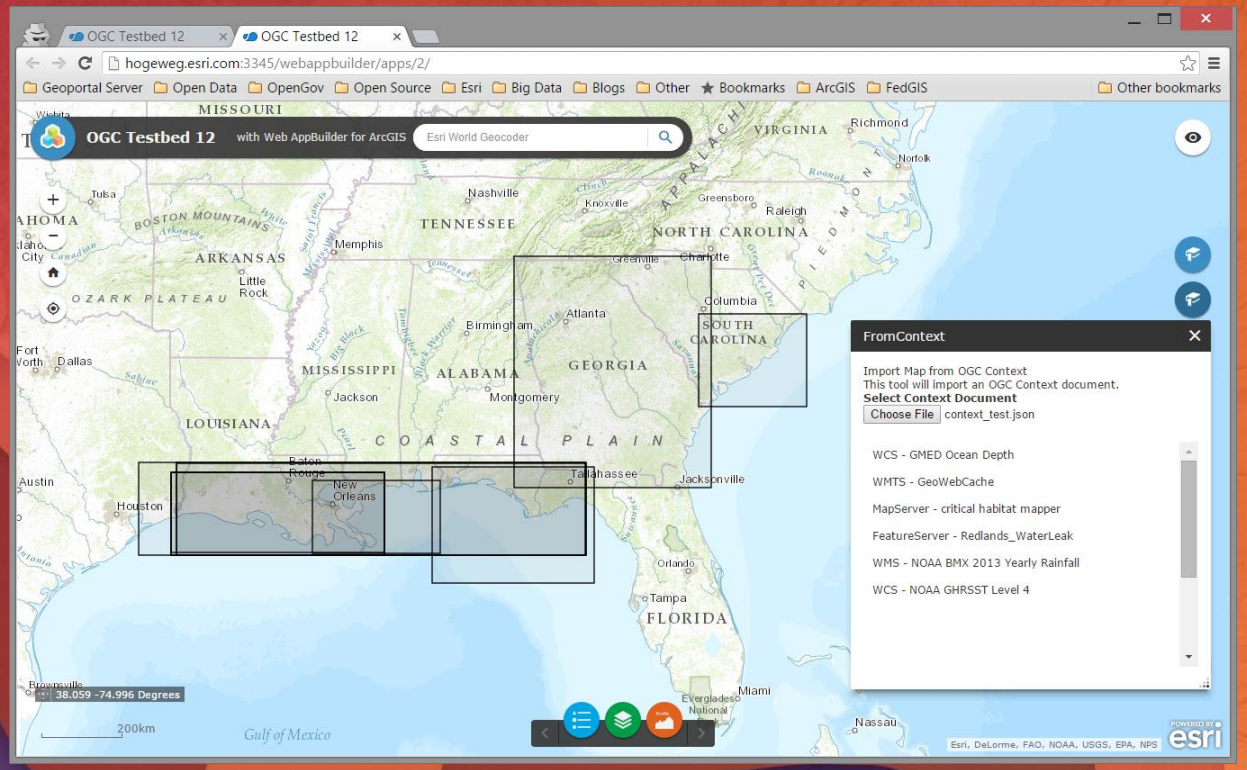
http://www.opengeospatial.org/blog/2543

Indexed 3D Scene (i3S)

An open specification for storage and transmission of large, heterogeneous 3D geospatial data sets.

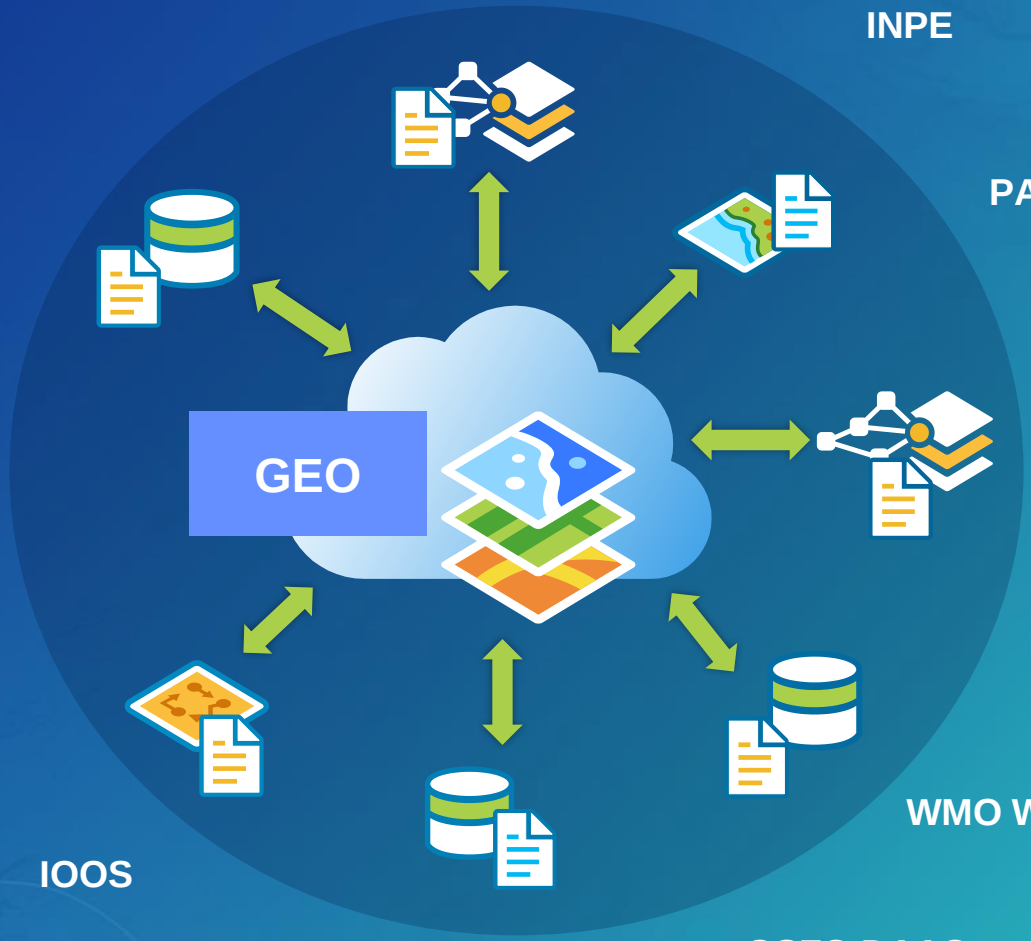
https://github.com/Esri/i3s-spec

- **Indexed 3D Scene Layer project started in 2013**
- **Initial release as with the ArcGIS platform in 2014**
- **Published as an open specification in April 2015**
- **Supported by Vricon, Bentley, Cyclomedia in 2016**
- **Currently being voted upon at the OGC.**



Time for a Demo

Group on Earth Observations



SAEOS

INPE

GCMD

PANGAEA

ArcGIS Online

SeaDataNet

EEA-SDI

EuroGEOSS

WMO WIS

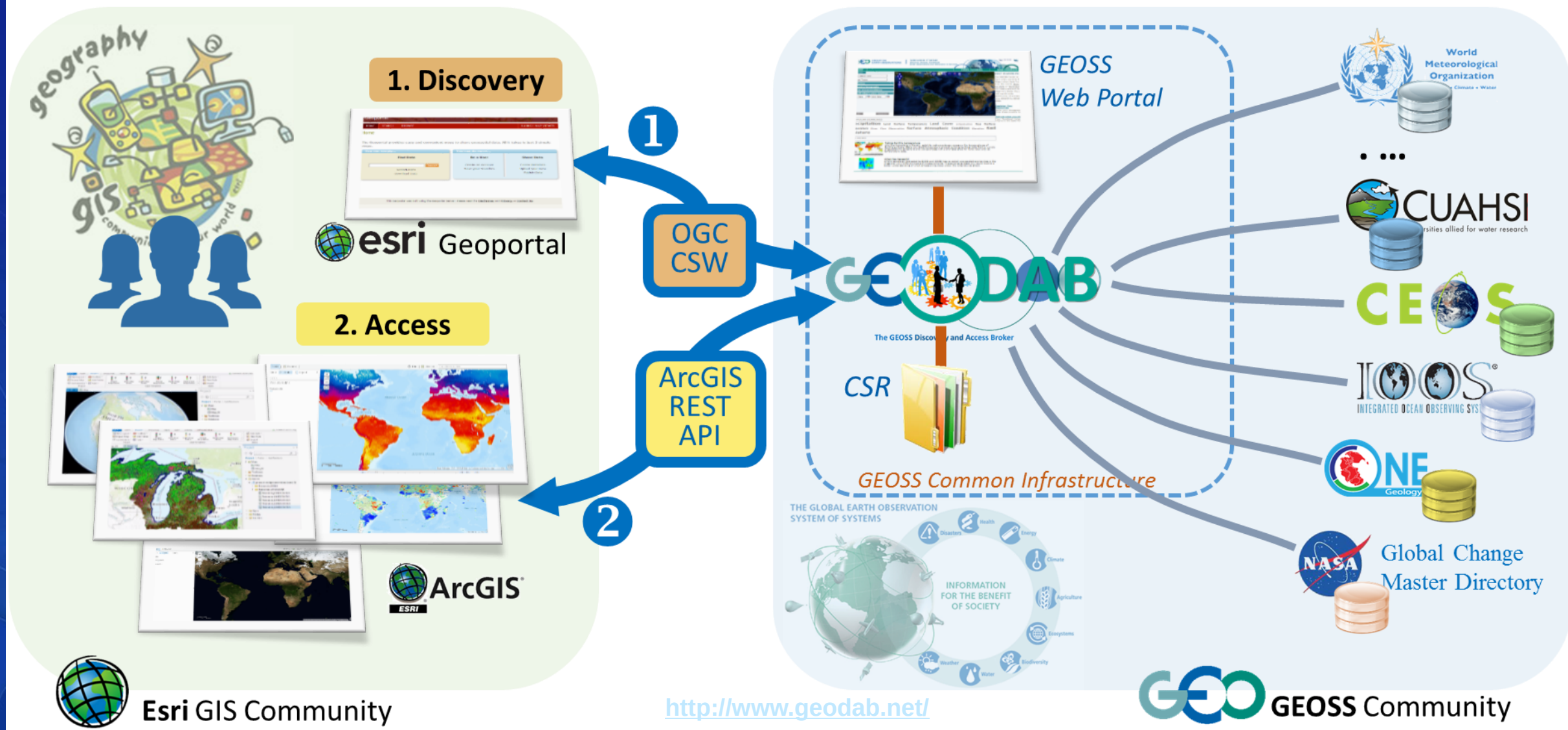
IOOS

GSFC-DAAC

EnviroGRIDS

GBIF

Connecting GIS and Earth Observations

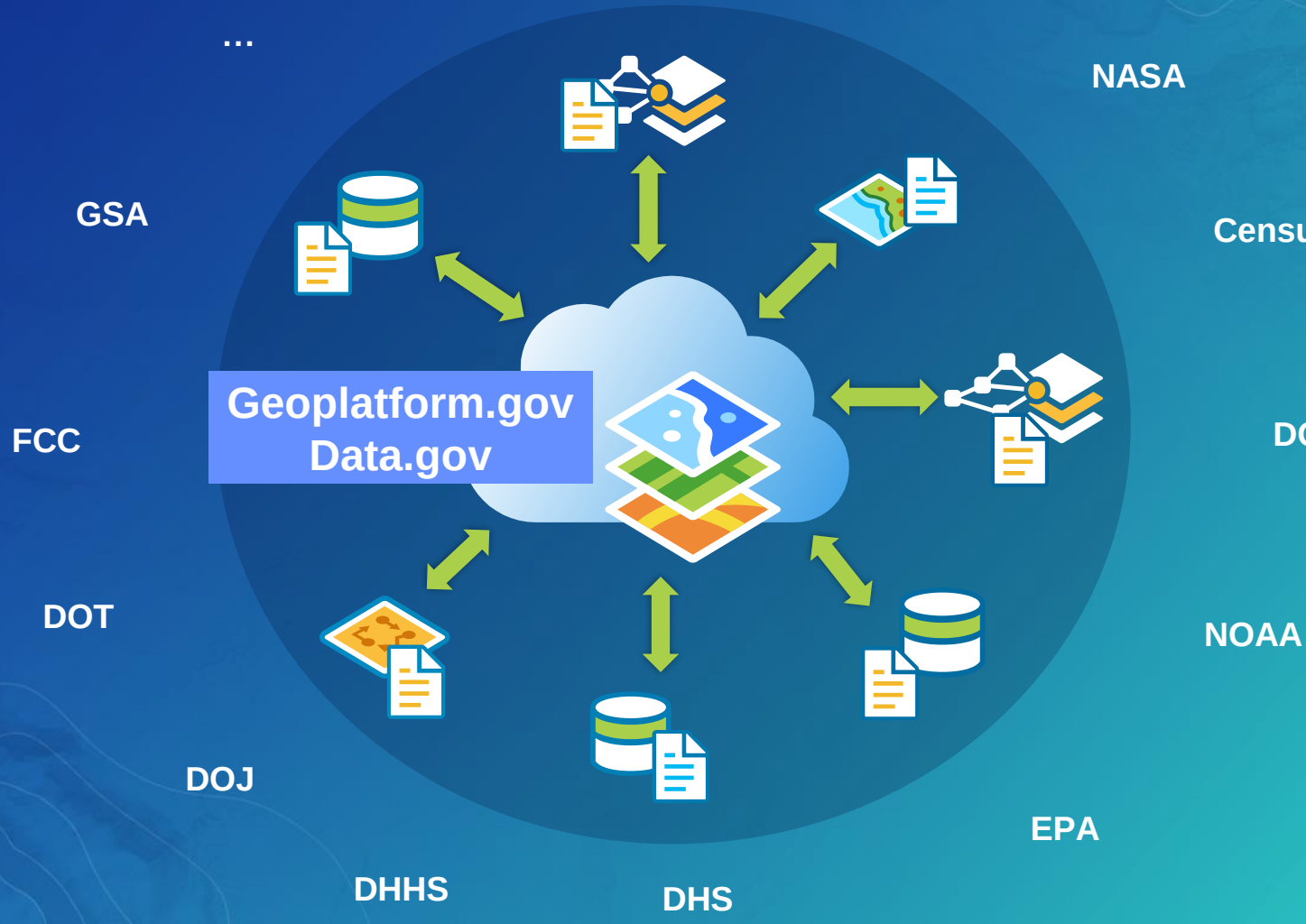


Esri GIS Community

http://www.geodab.net/

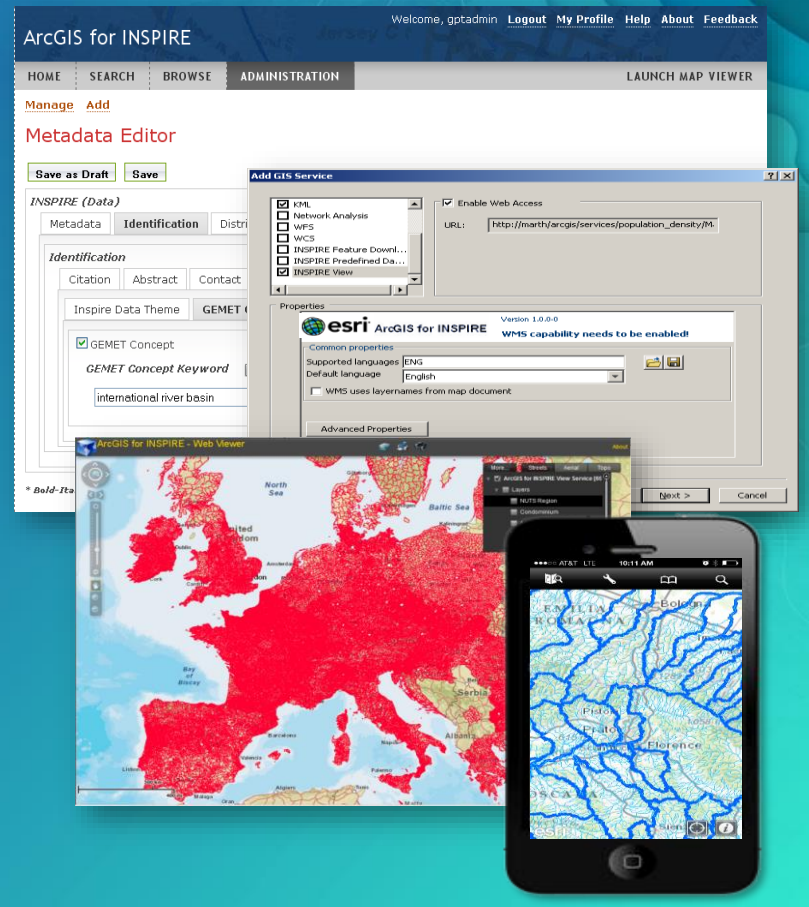
GEOSS Community

Geospatial Platform and Data.gov



ArcGIS for INSPIRE

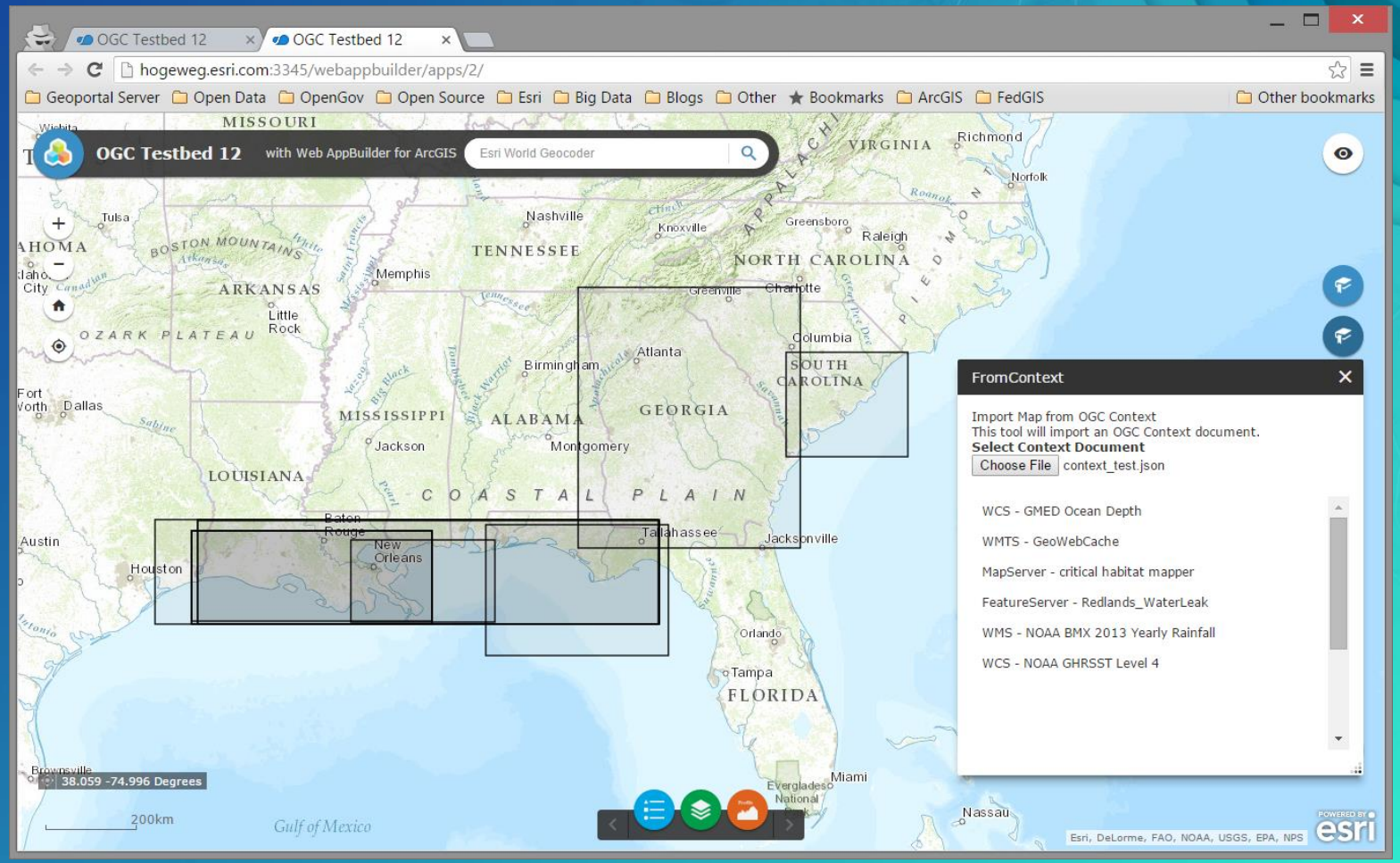
Enabling customers to achieve immediate and long term INSPIRE goals



http://www.esri.com/software/arcgis/arcgis-for-inspire

OGC Testbed 12

- Viewer
  - ArcGIS, WMS, WCS, KML
  - WMTS, Koop FeatureServer
- Discovery
  - OpenSearch
  - OGC CSW 2.0.2, 3.0.0
- OGC Context Document
  - GeoJSON encoding



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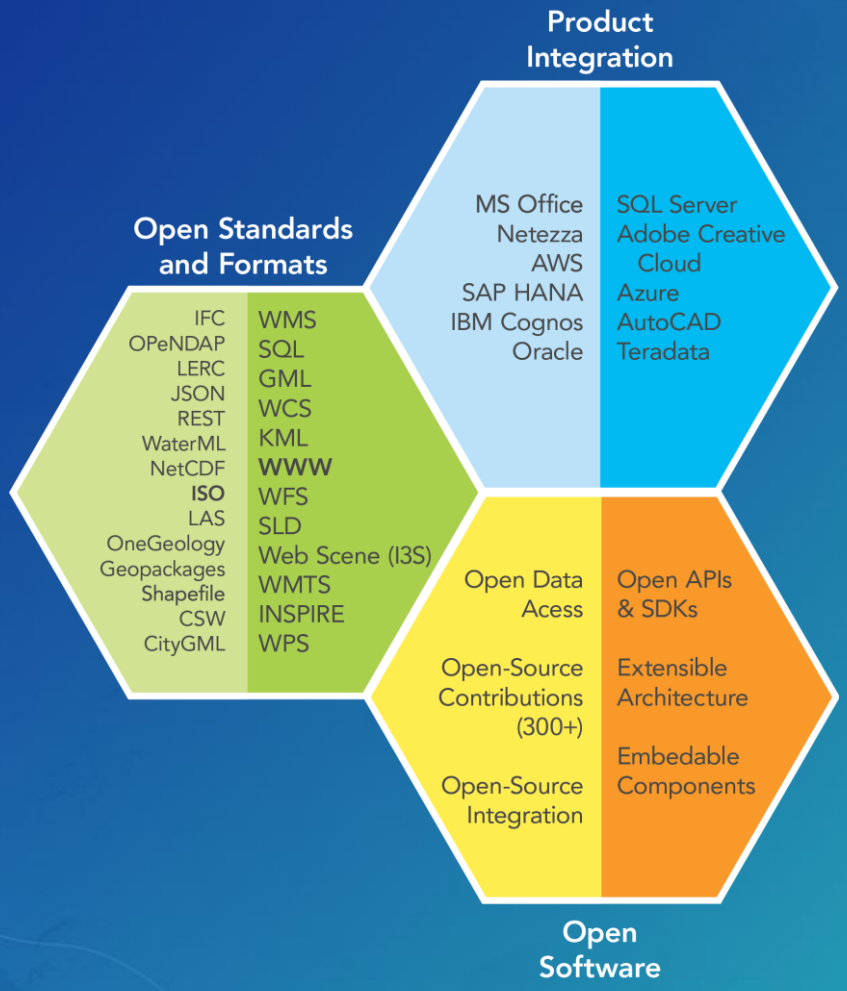

esri
THE
SCIENCE
OF
WHERE