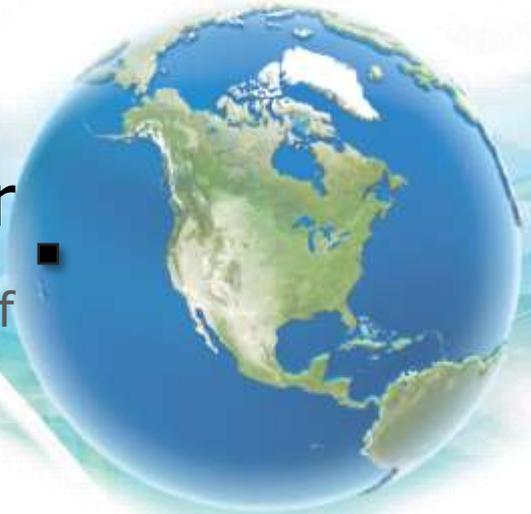


Advancing
Geographic Place-Based Understanding
for **Decision-Making**

FGDC Service Status Checker



Monitoring the Performance and Reliability of
Geospatial Web Services



Eldrich “Rich” Frazier
Technical Advisor
Federal Geographic Data Committee
July 12, 2016

Background

Geospatial Service Health

- Web Services ***discovery, availability*** and ***quality*** are critical in fostering adoption and re-use of geospatial information.
- Service Status Checker (SSC) established to ***provide service health analytics*** to assess geospatial service health

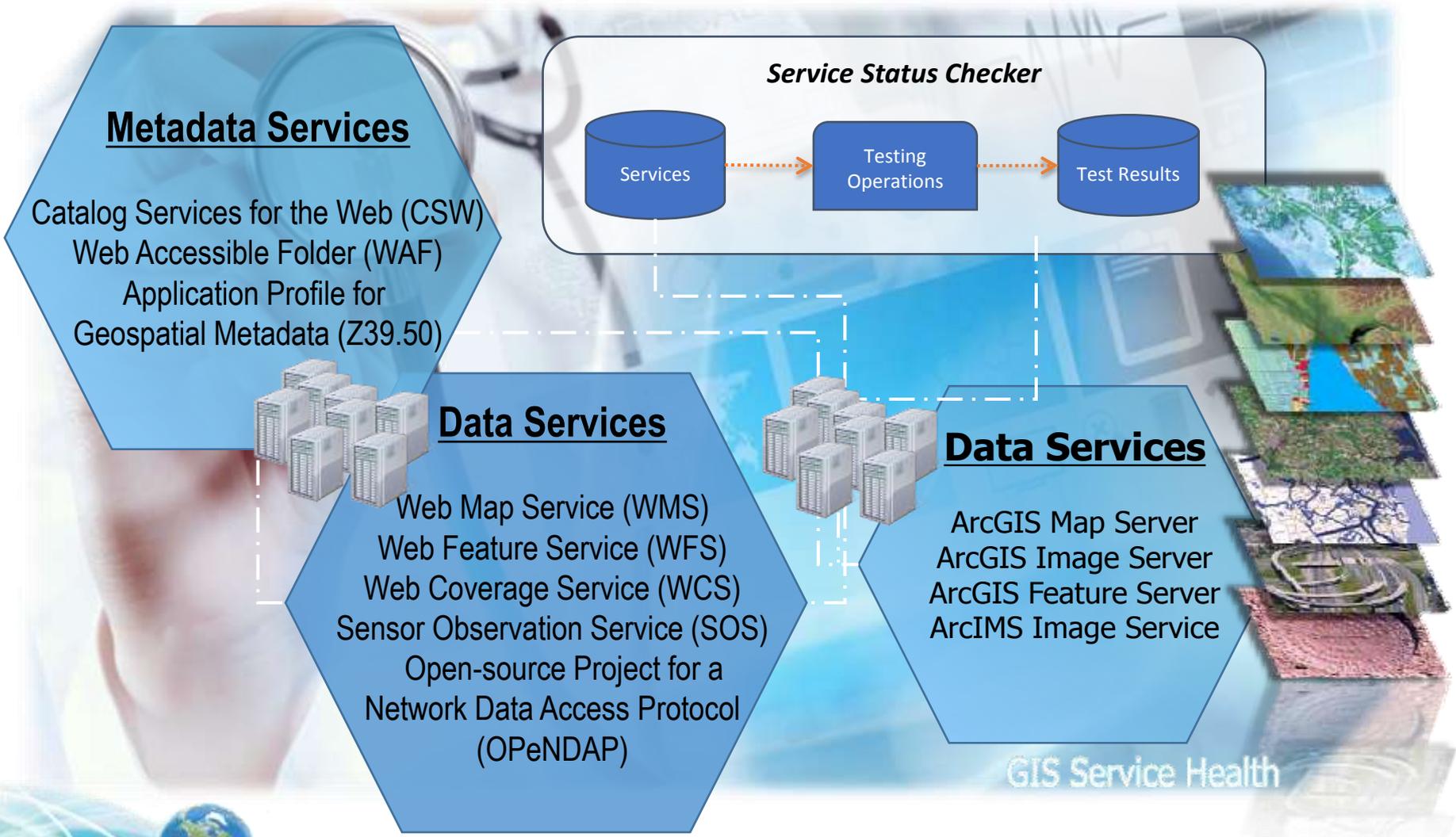


SSC Objectives

Monitor ◆ *Diagnose* ◆ *Alert*

- Monitor and score spatial web services
- Identify performance issues
- Provide diagnostic service information
- Notify owners of service issues
- Consume results through web services

SSC Monitored Services



SSC Features for Service Providers and Developers

GIS Service Health

82 
125 

89%
17/19
100%



Ensure Your Geospatial Services Are Operational

Geospatial services are designed to be interoperable so it is critical that they remain operational. Our service automatically tests and monitors a majority of Open Geospatial Consortium (OGC) service types. The only thing you need to do to get started is create an account and setup a list of your services to be tested.

Monitoring

Notifications

Developer API



Catalog & Portal Managers



Service Owners

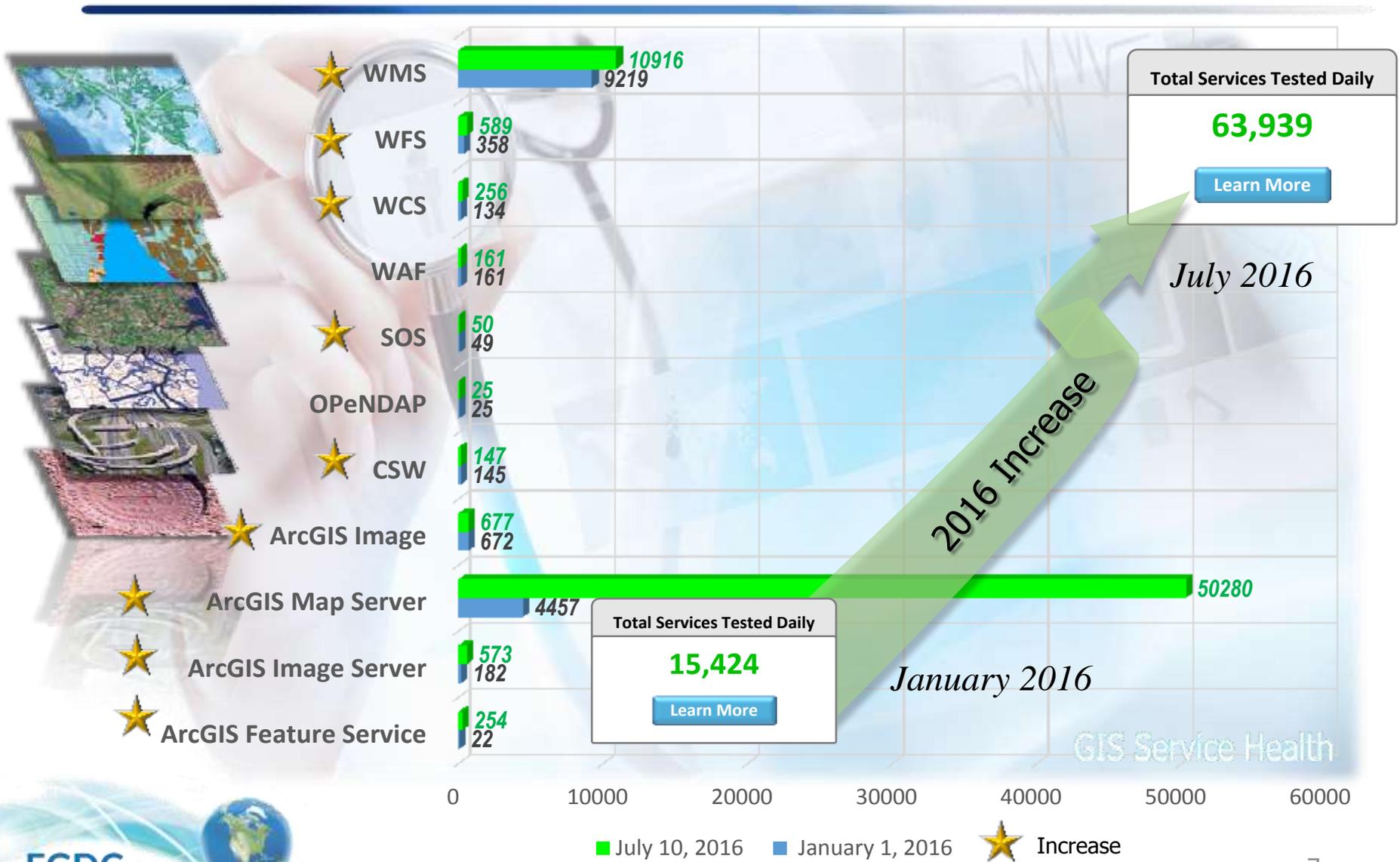


Application Developers

HEART RATE
LOW NORMAL HIGH



Accomplishments – *Increases in Monitoring*



Accomplishments – Design, Performance, Economy

- New Website Design
- Performance Improvements
- New Platform
- New Architecture

GIS Service Health

FGDC.GOV
FEDERAL GEOGRAPHIC DATA COMMITTEE

HOME WHO WE ARE WHAT WE DO INITIATIVES ORGANIZATION RESOURCES

STATUS CHECKER FEATURES GETTING STARTED TEST RESULTS DOCUMENTATION CONTACT LOGIN

GET STARTED NOW

ENJOY THE BENEFITS OF REAL-TIME TEST RESULTS

REGISTER NOW

WHAT'S NEW?

STATUS CHECKER

MONITOR, ALERT AND ANALYZE YOUR GEOSPATIAL SERVICES

The Federal Geographic Data Committee (FGDC) provides a Service Status Checker (SSC) web service to validate, test and score geospatial web services. It returns a set of summary and test diagnostic information about the tests performed on each service.

The web service performs health tests on geospatial services that provide access to metadata and data.

TOTAL SERVICES TESTED DAILY

63,939

LEARN MORE

MY ACCOUNT

Take full advantage of the Service Status Checker today!

LOGIN REGISTER

GETTING STARTED

Create your list of services to be monitored and register it.

LEARN MORE

TYPES OF SERVICES CURRENTLY TESTED

JS chart by amCharts

Service Type	Number of Services
ArcGIS Features Server	294
ArcGIS Image Server	573
ArcGIS Map Server	10,916
CMS	147
ArcGIS Image	677
CHECKOUT	28
SOS	50
WMS	161
WCS	258
WFS	589
SSC	10,916

Implementation Highlight Federal - GeoPlatform

GIS Service Health

GEOPLATFORM.gov

FGDC.GOV
FEDERAL GEOGRAPHIC DATA COMMITTEE



GeoPlatform Map Viewer

Browse Layers

Search Layers
Search for layers by name
Search layers

Sort Layers
Name: [v] Ascending: [v]

Layer sources

EPA Facilities US, 2012, US EPA, SEGS	2
ESI	1837
Maritime Limits and Boundaries of the United States (Version 4.1)	3
NAT Species Amphibians	33
NAT Species Birds	171

Layer types

NGDA	2779
------	------

Layer Availability

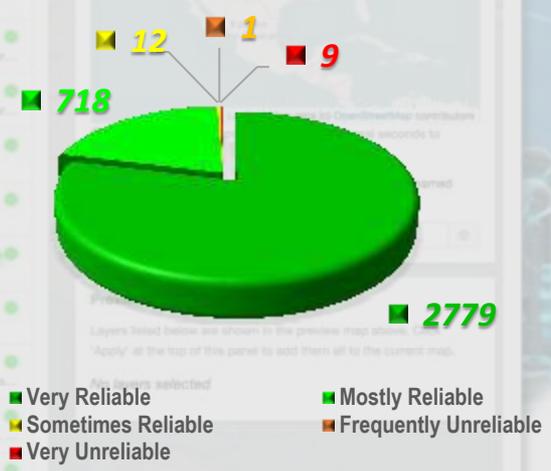
- Very reliable
- Mostly available
- Sometimes unavailable
- Frequently unavailable
- Very unreliable
- Unknown reliability

2779



Date: 7/10/2016

NGDA HEALTH STATUS REPORT



Implementation Highlight International - GeoSur

- South America & Caribbean Implementation
- Joomla with ESRI Geoportal open source
- SSC Integration
 - Joomla component
 - API v2

GIS Service Health

The screenshot shows the GeoSur website interface. The top navigation bar includes links for HOME, SEARCH FOR DATA, REGIONAL MAP VIEWER, NEWS, REGISTER, and CONTACT US. The main content area is divided into sections for PARTNER RESOURCES, LATEST NEWS, and a detailed OGC Services availability table.

OGC Services available in Portal

Service Name	GetCapabilities	GetMap
Argentina: Instituto Geografico Nacional, Mapas Base	Green	Green
Argentina: INDEC	Green	Green
Bolivia: Instituto Geografico Militar, Capas Administrativas	Red	Green
Bolivia: Instituto Geografico Militar, Capas de Medio Ambiente	Red	Green
Brazil: CRIA, Mapa de Zonas	Red	Green
Brazil: Ministerio de Medio Ambiente - ESIOS	Green	Green
Brazil: Ministerio de Medio Ambiente - webarr	Green	Green
Brazil: Ministerio del Ambiente, Bureaugones	Red	Green
Brazil: Ministerio del Ambiente, Capas Base Raster	Red	Green
Brazil: Ministerio del Ambiente, Florestas Publicas	Red	Green
Brazil: Ministerio del Ambiente, SGB	Red	Green
Centro Internacional de Agricultura Tropical	Red	Green
Chile: Instituto Geografico Militar	Red	Green
Chile: Ministerio de Obras Publicas	Red	Green
Colombia: IDEAM, Mapa de Ecosistemas	Green	Green

Displaying 15 of 124 Services.

Argentina: INDEC

Test	Status	Interactive Test	Score
IntServer	Green	Test Now	99.13
getCapabilities	Green	Test Now	
getMap	Green	Test Now	

Implementation Highlight – North Carolina



GIS Service Health

The screenshot shows the NC GeoSpatial Portal homepage. At the top, there is a navigation bar with links for HOME, SEARCH, BROWSE, DOWNLOAD IMAGERY, and LAUNCH MAP VIEWER. The main content area features a green banner announcing '2015 Imagery is Now Available Online for Viewing and Download'. Below this, there are sections for 'Find Resource...' with a search box, 'Tutorial Videos' with a video player showing a 'Raster Manager' interface, and 'Most Recently Added/Updated Resources...' with a list of links to various datasets and services. A green heart icon with a pulse line is overlaid on the 'NC Orthoimagery Latest Imagery Service (Cached ArcGIS Server)' link. At the bottom, there is a footer with the text 'Please read the Disclaimer and Privacy or Contact Us.'



What's Next?

GIS Service Health

- **2016 - In progress Prototypes**
 - GEO Data Access Broker
 - AmeriGEOSS
- **2016 - Planned Outreach**
 - GeoNode Open Source
 - GeoNetwork
 - Oskari Open Source
- **2017 - Implement new service types:**
 - REST, WPS
 - KML
 - RSS/Atom feeds
- **2017 - Collect & report service attributes**
 - Supported projections
 - Published file types



Summary

- SSC Supports discovery and accessibility of GIS
- Monitors a variety of services
- Supports service providers, developers, users
- Improvements in usability, performance and expandability
- Many Success Stories
- Future development and prototypes to add additional platforms and service monitoring types

[Http://statuschecker.fgdc.gov](http://statuschecker.fgdc.gov)

Questions?

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