

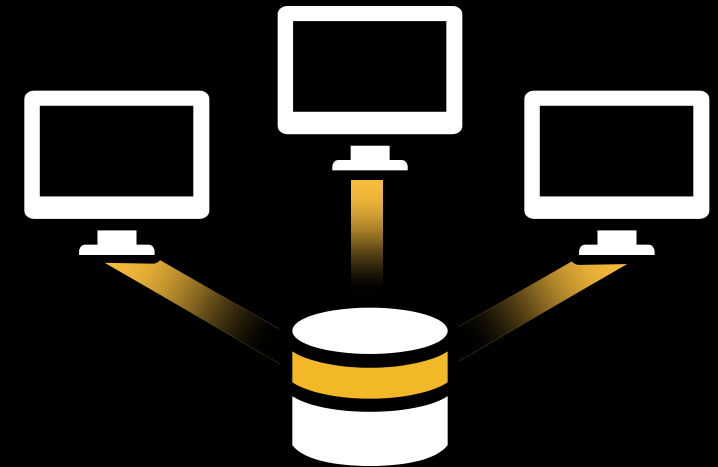


What is coming in ArcGIS 10.3 for Server and Portal for ArcGIS

Technical Workshop

Chapter I

THE BASICS



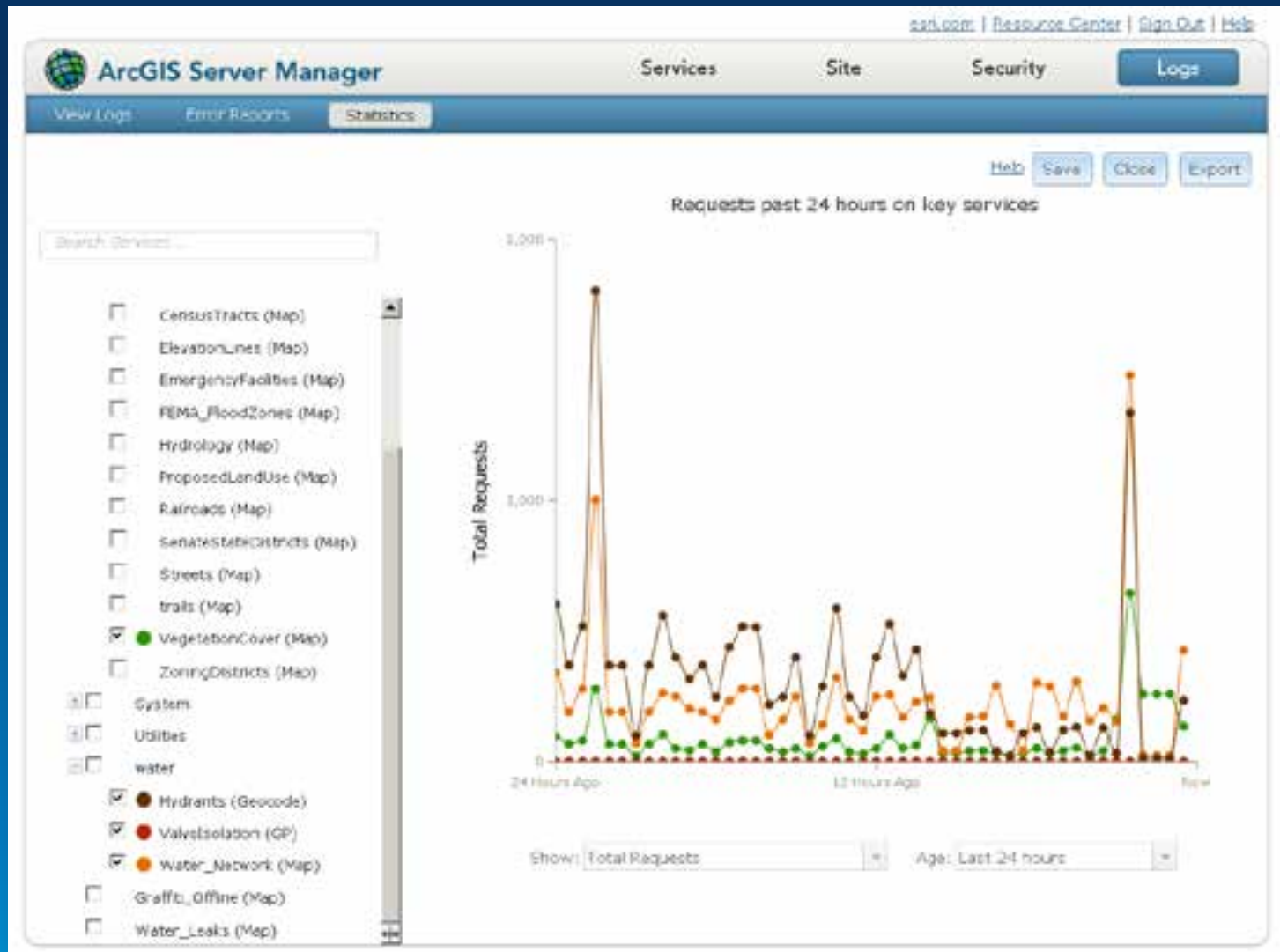
Database
(Geodata management)

Chapter II

The GIS Services Server



**Web Services
(Dissemination)**



Service Usage Statistics



Promote



Demote

1180
Points

User Assignable Layer Ids for REST Map Services

Under Consideration

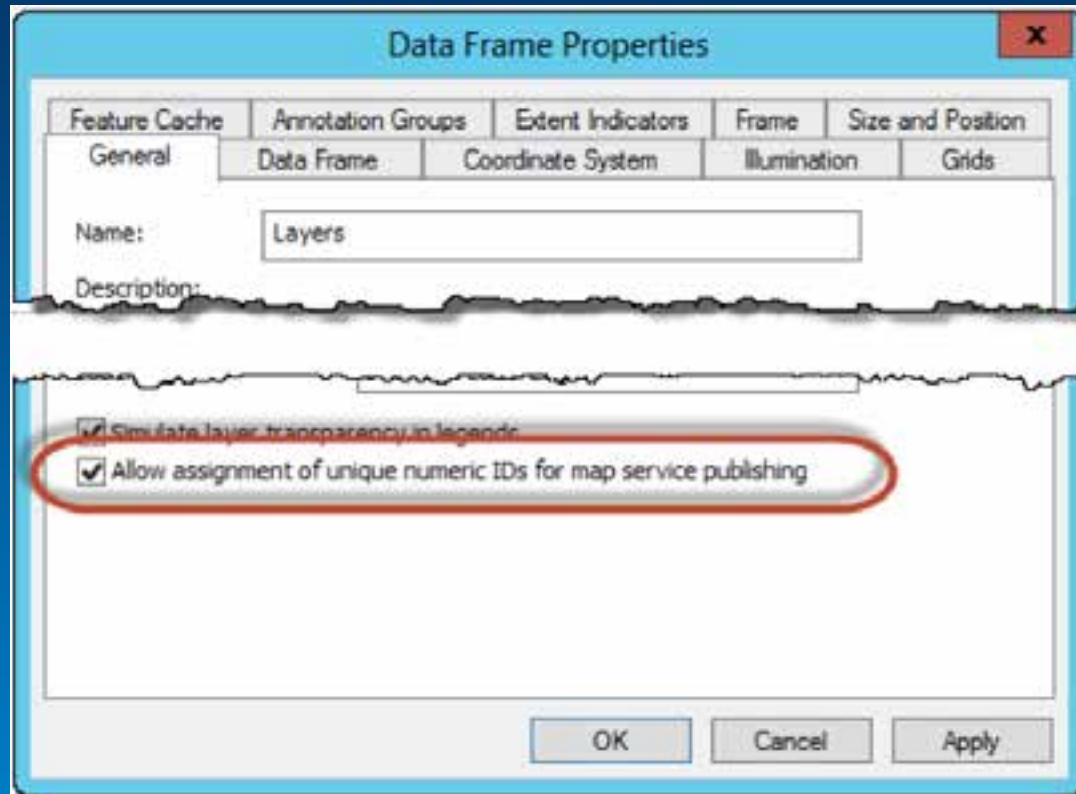
I am constantly adding and removing layers from map services. Each time I do, the layerid shifts. This is a pain. If I add a new layer, I have modify the source of my apps to reflect the updated layerid for querytasks, etc etc. This would be a huge plus.

Tags : LayerID REST

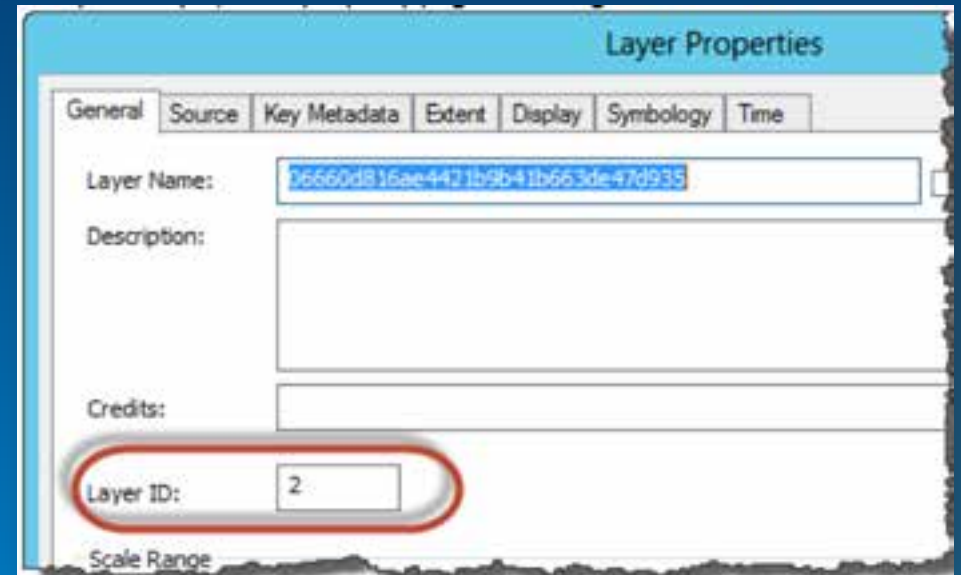
 **15 Comments** | Posted by :  **Buddhatown** to ArcGIS Server, Web Apps and APIs Aug 19, 2011

Immutable Layer IDs

In ArcMap (10.3), set the Data Frame Properties as follows...



.... this will ensure that Layer IDs are unique (as usual) and will preserve the IDs originally assigned



In the Layer Properties you can also assign your own ID if you like. ArcGIS will make sure is unique...

Immutable Layer IDs

You can now add, remove, shift layers and publish your map again...

Layers:

- [TaxLots](#) (1)
- [BuildingPermits](#) (0)

Tables:

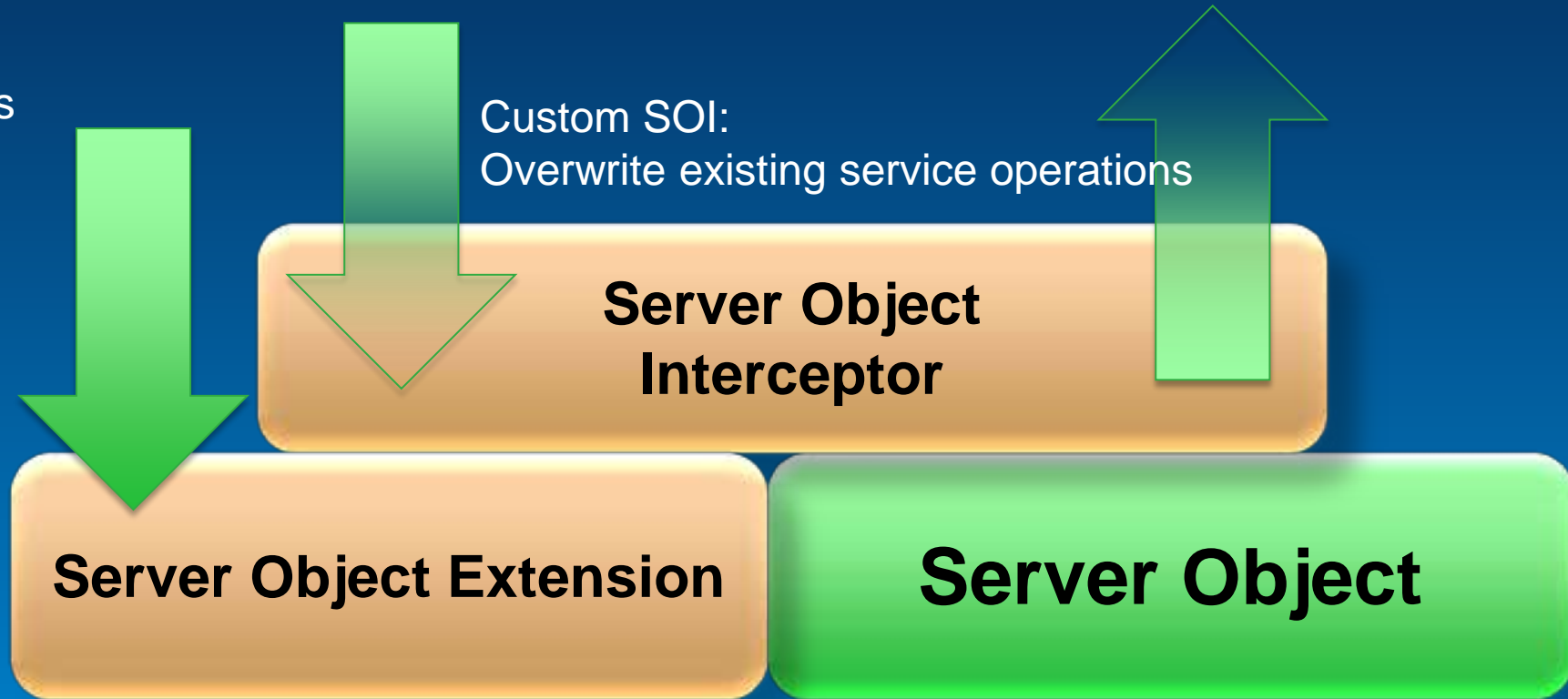
- [PlanningPermits.txt](#) (200)
- [PlanningPermitsDBF](#) (3)
- [SubdivisonDrawings](#) (5)
- [map.PlanningPermitsSQLSrv](#) (6)
- [vtest.MAP.PlanningPermitsSDE](#) (7)

Your Layer IDs will remain... and your apps wont break.

Immutable Layer IDs

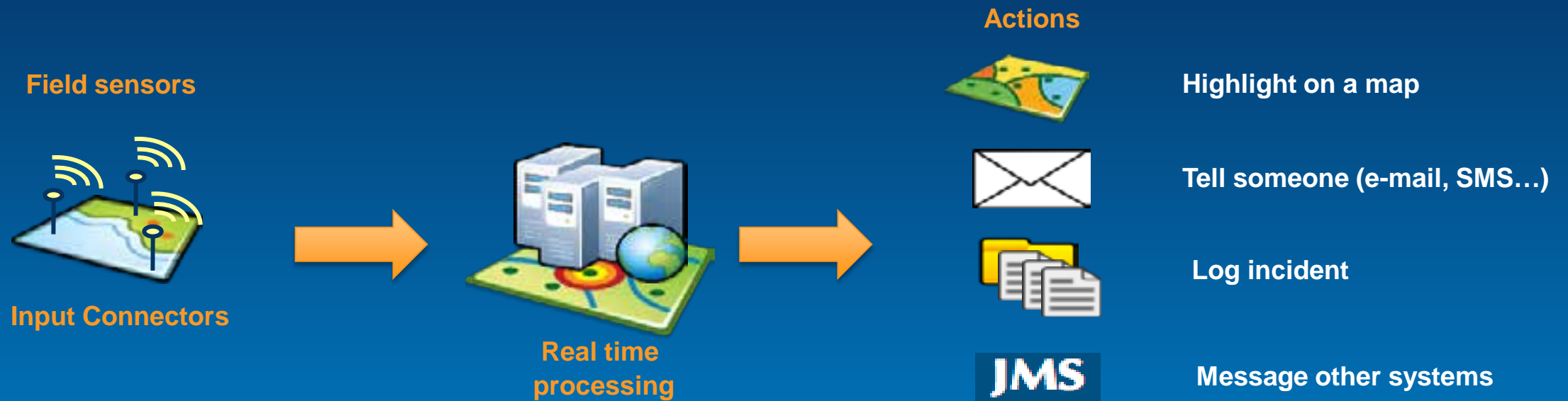
Custom SOE:
Add new operations

Custom SOI:
Overwrite existing service operations



Server Object Interceptors

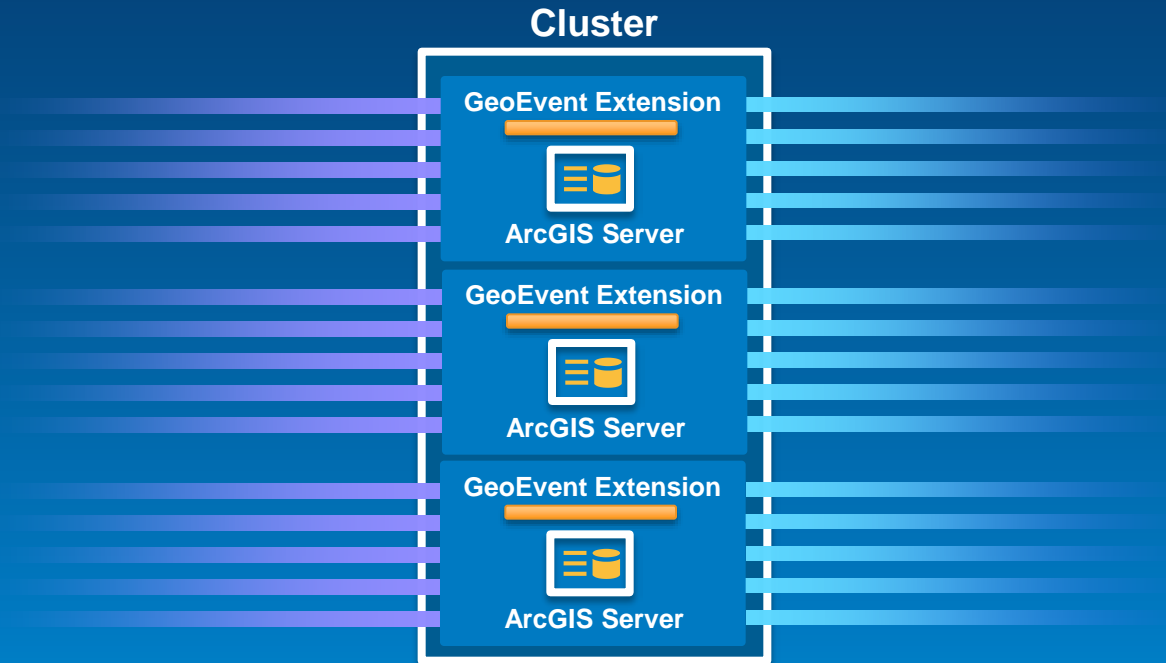
Intercept / filter incoming requests and outgoing responses



GeoEvent Extension

Bring real time GIS into decision making support tools

Out of the box support for clustering



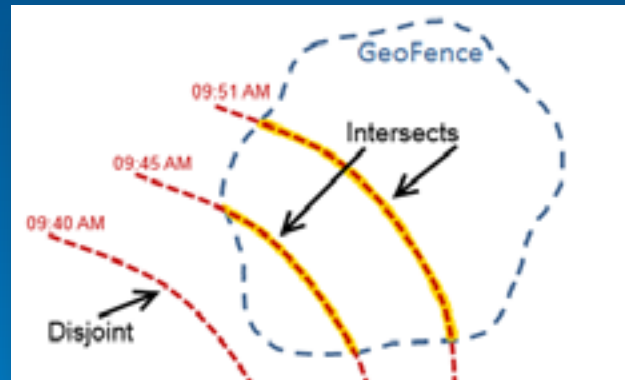
GeoEvent Extension

Expanded Processing Capacity and High Availability

New Spatial Operators and Geometry Processors



*Buffer, Union, Difference, Symmetric
Difference, Convex Hull, Simplifier,
Projector*



*intersect, disjoint, touches,
contains, crosses, equals,
overlaps, within*

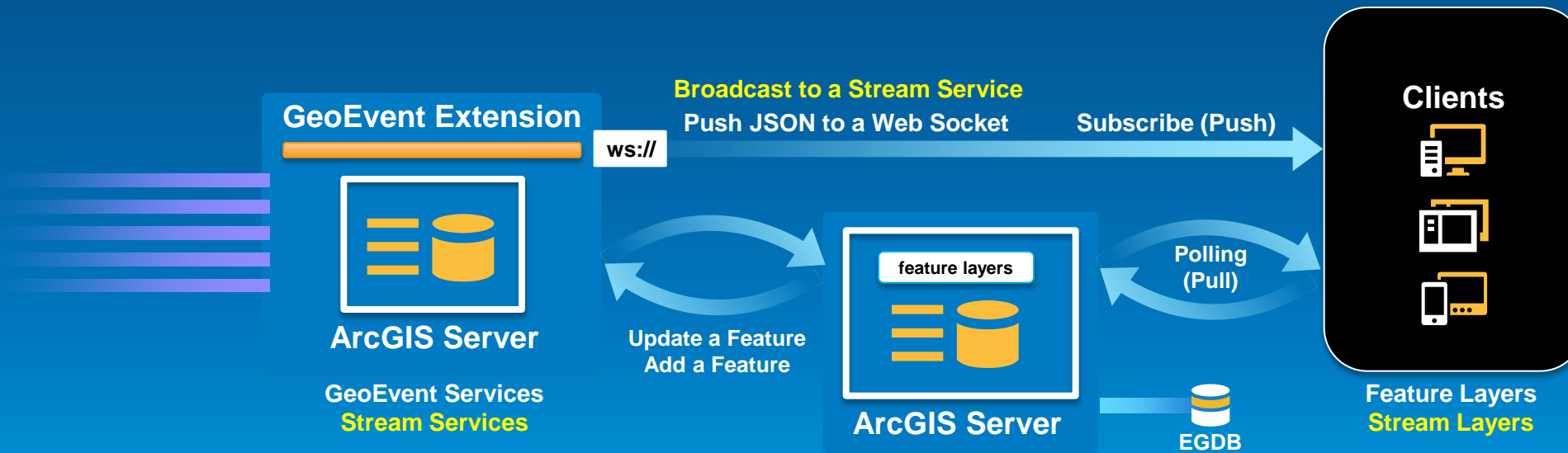


GeoEvent Extension

Enhanced Real Time Analysis

Stream Services and Stream Layers

- Adding 'Stream Service' to ArcGIS Server
- Adding 'Stream Layer' to the ArcGIS API for JavaScript (*Runtimes coming after 10.3...*)

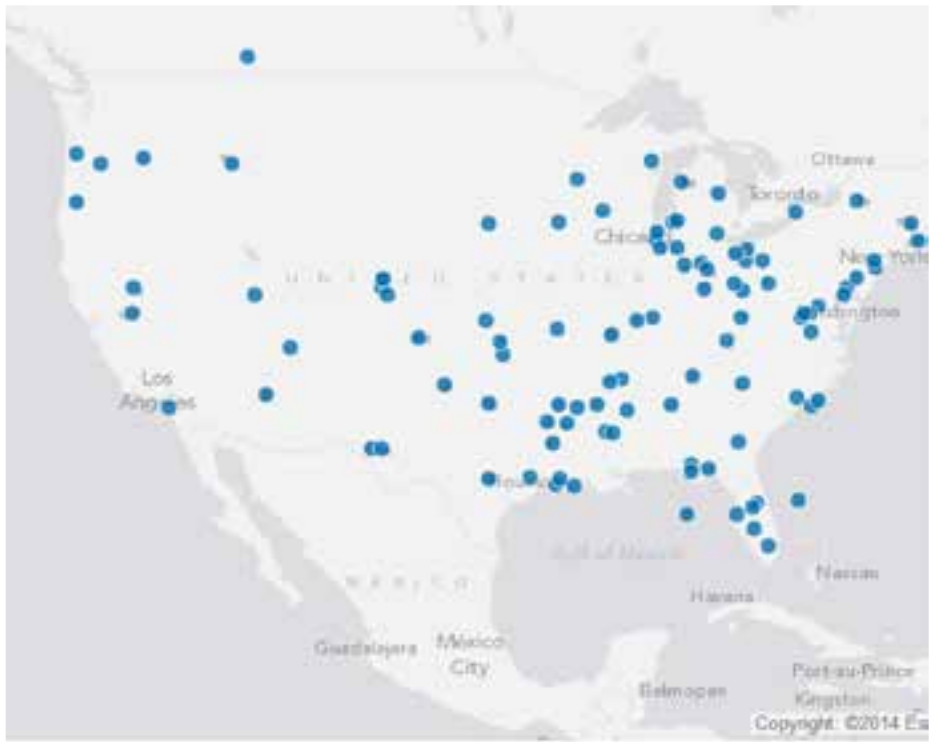


GeoEvent Extension

Boosting GeoEvent outputs

Real-Time GIS Clients

Stream Services and Stream Layers



http://localhost:6080/arcgis/rest/services/Asdi/Uai/StreamServer/0

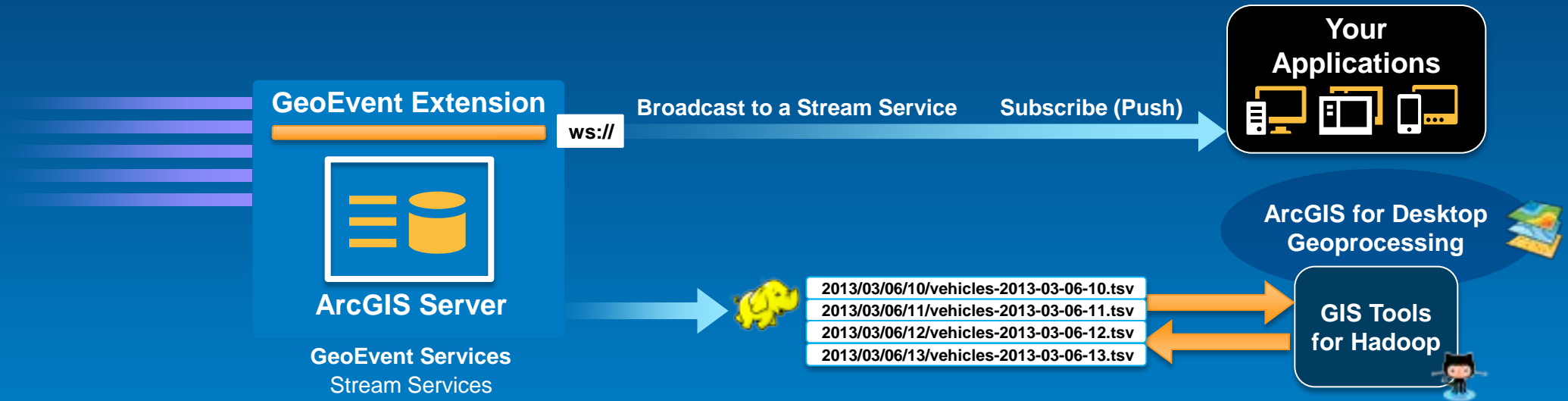
Layer Disconnect Stream Layer Clear Graphics

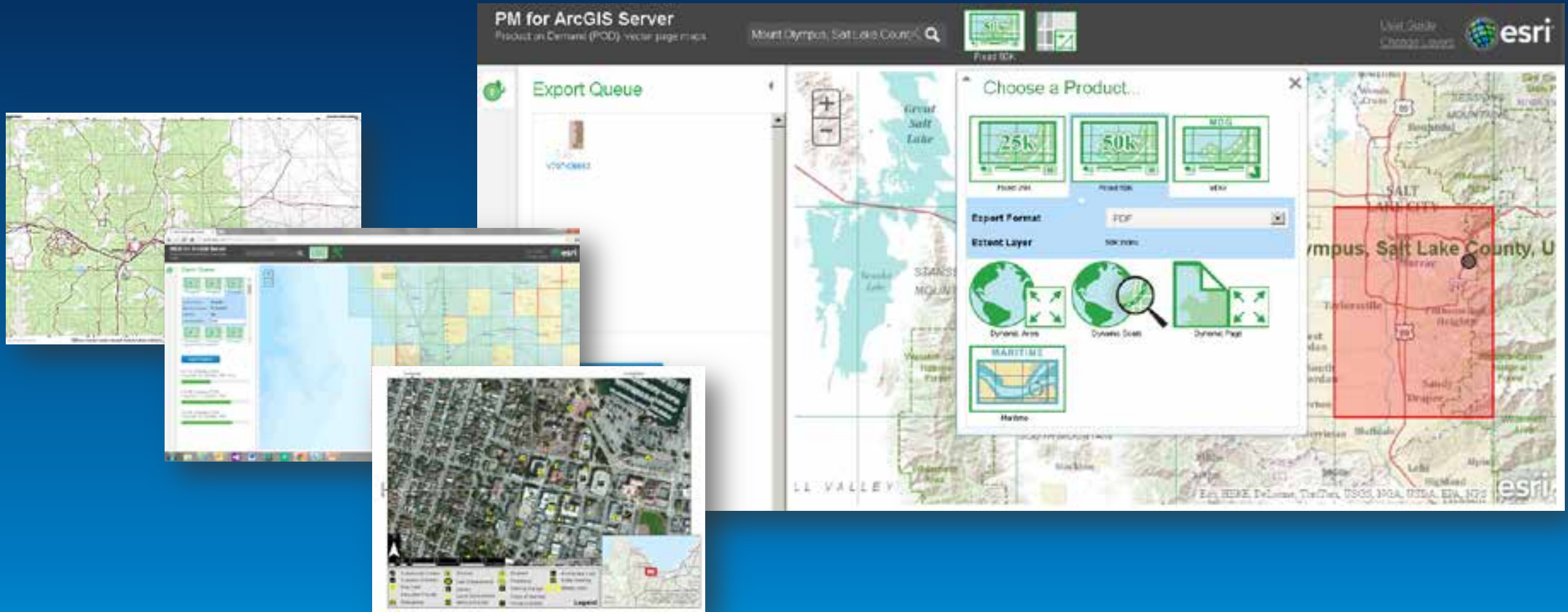
Where Clause
AltitudeFeet < 30000 Set Where

Outfields (Comma delimited list):
Fld,AltitudeFeet Set Outfields

Big Data outputs and integration

- Archiving of streaming data
 - Improvements to BigData store output connectors
 - Improved integration with 'GIS Tools for Hadoop'





Esri Production Mapping for ArcGIS

New ArcGIS for Server extension.
Create and download authoritative High Quality
Cartographic Products **on Demand**



Microsoft
Azure

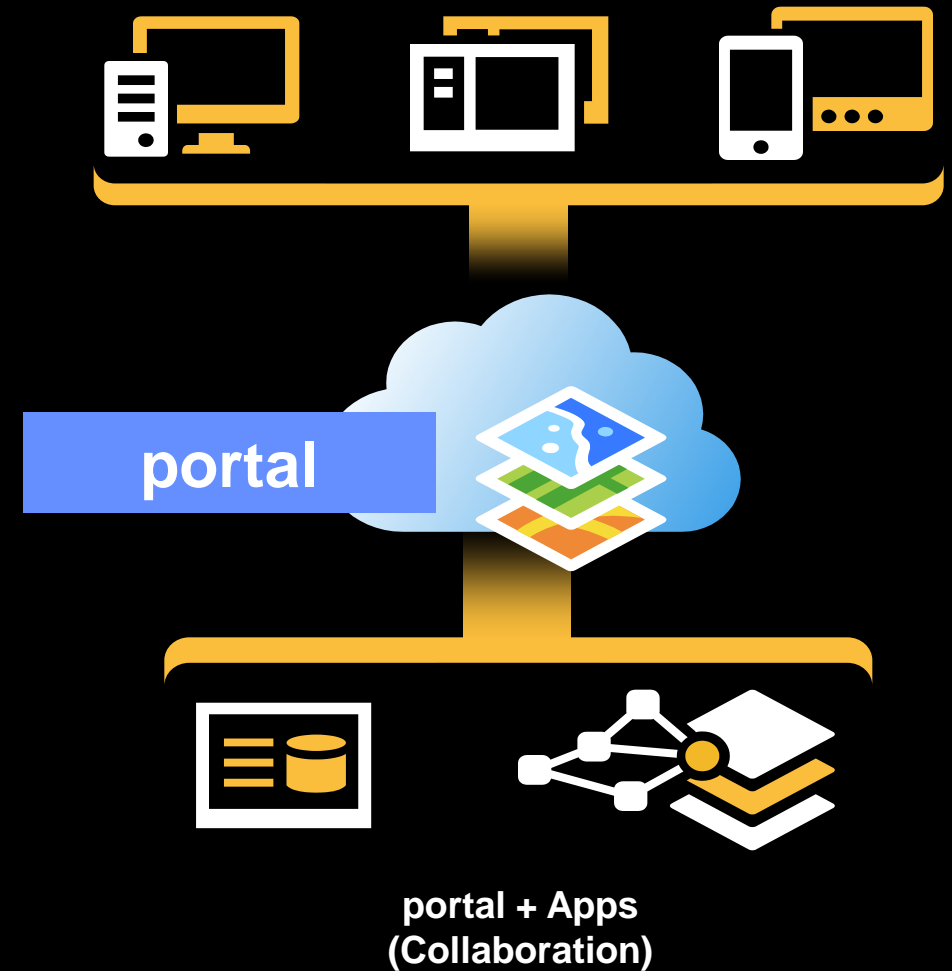
ArcGIS for Server in the Cloud

- Read-Only support for SAP Hana and Altibase databases
- WFS 2.0
- ...
- New 3D Services
- Enhanced Feature Service Scalability
- “HTML Viewer”

Other Enhancements |

Chapter III

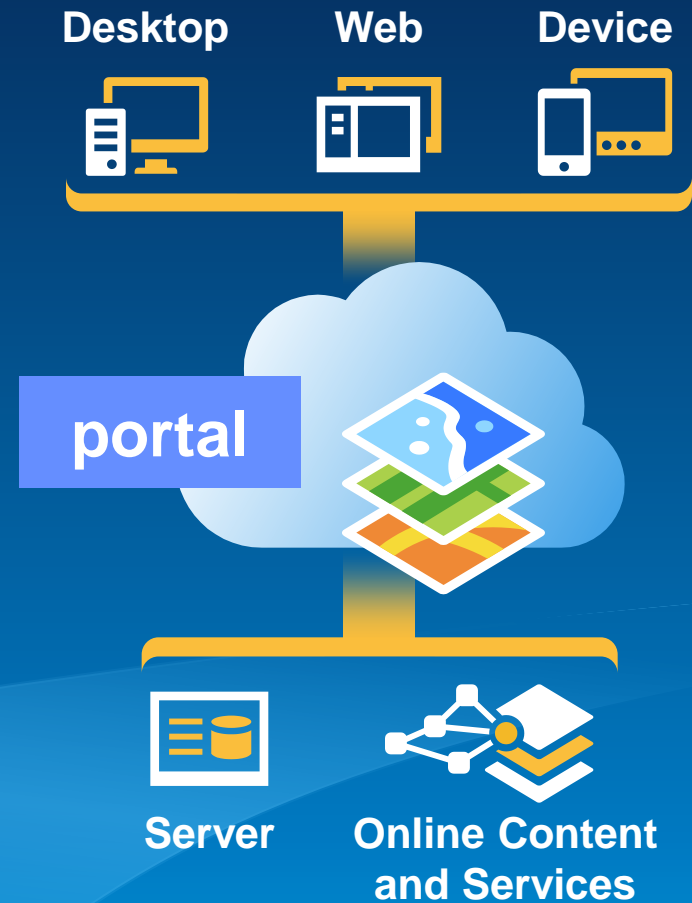
Web GIS



10.3

ArcGIS Server includes:

- Apps
- A Portal
- GIS Server
- Data Management

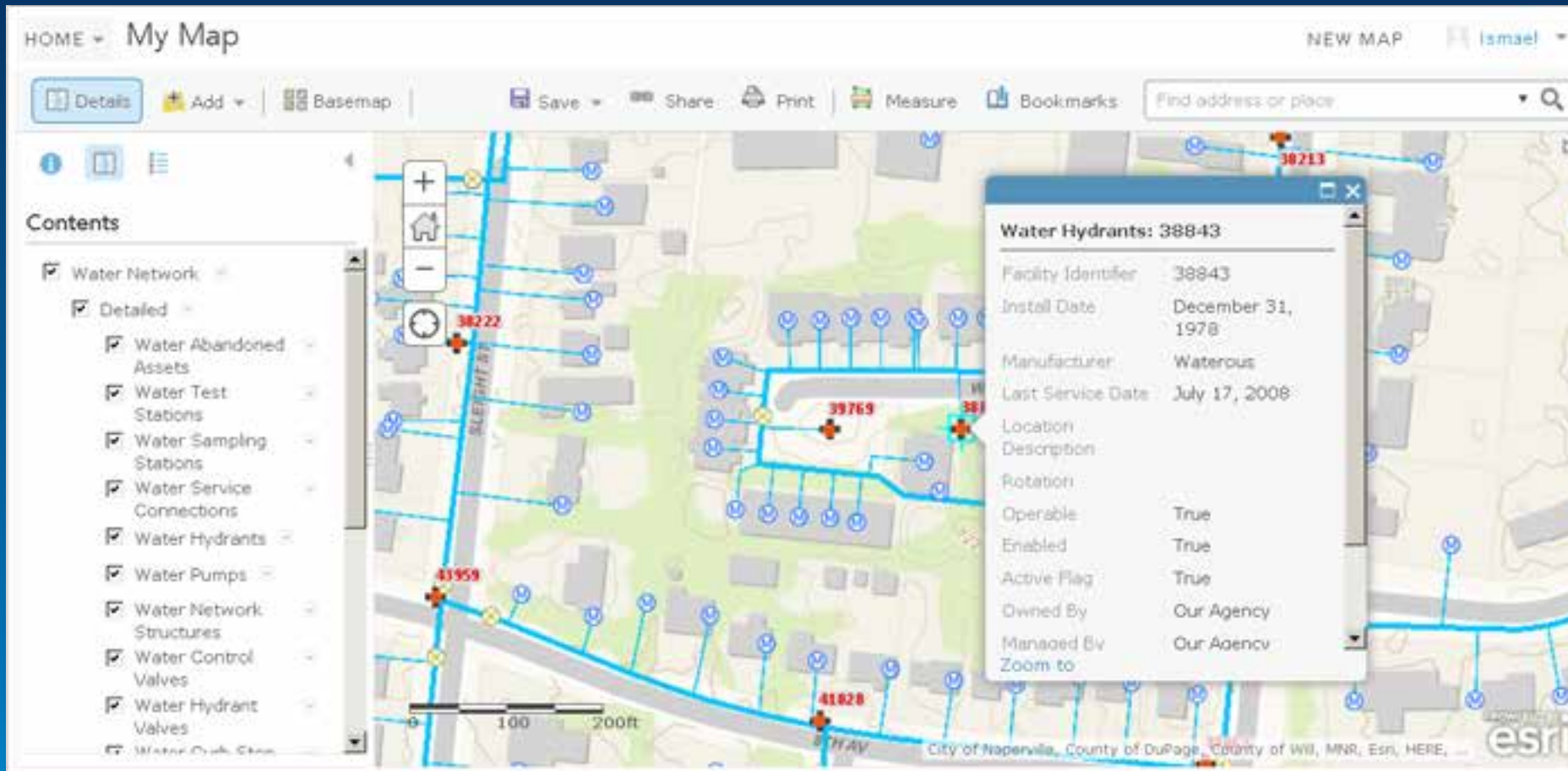


**Portal for ArcGIS included with ArcGIS for Server
Standard Edition**



More Web Apps than ever before

Useful, Beautiful and ready to go



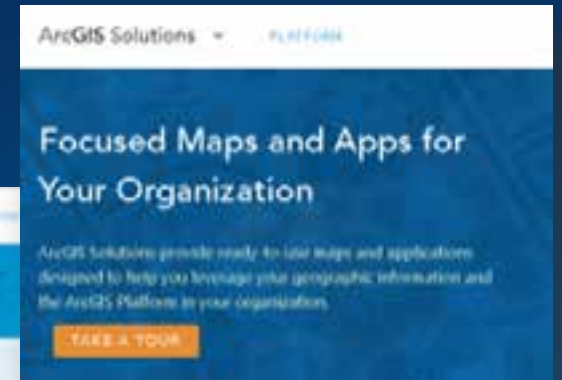
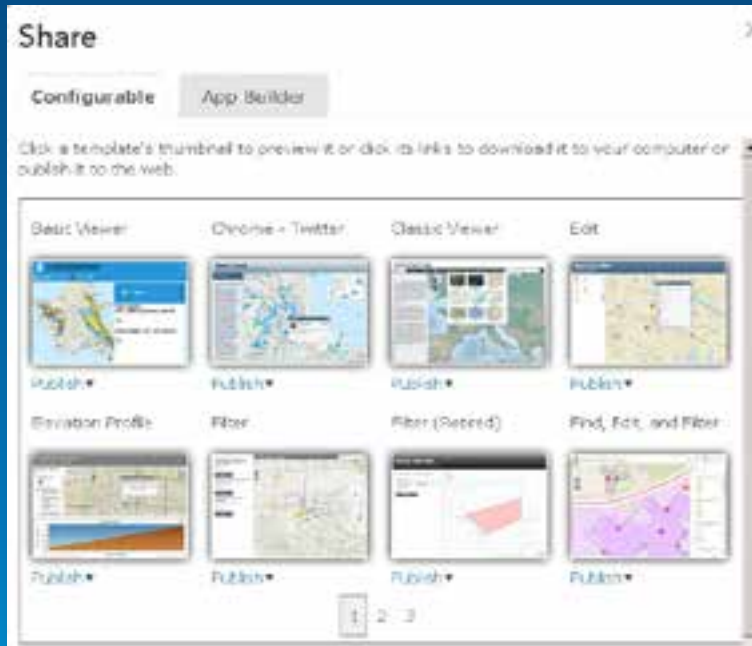
ArcGIS Viewer

An authoring tool for your Web Maps

Mashup your ArcGIS Server services quickly and effectively

Web App Templates

1) Bundled with ArcGIS Server



Highlight locations on a map and thumbnail list

The Playlist app enables you to feature a collection of locations as clickable map items and as a list of thumbnails that appear within a sidebar. Users can click on items on the thumbnail list to click a map view to view that location. Playlist also a large web map that includes an array of locations newly derived from a CSV spreadsheet.

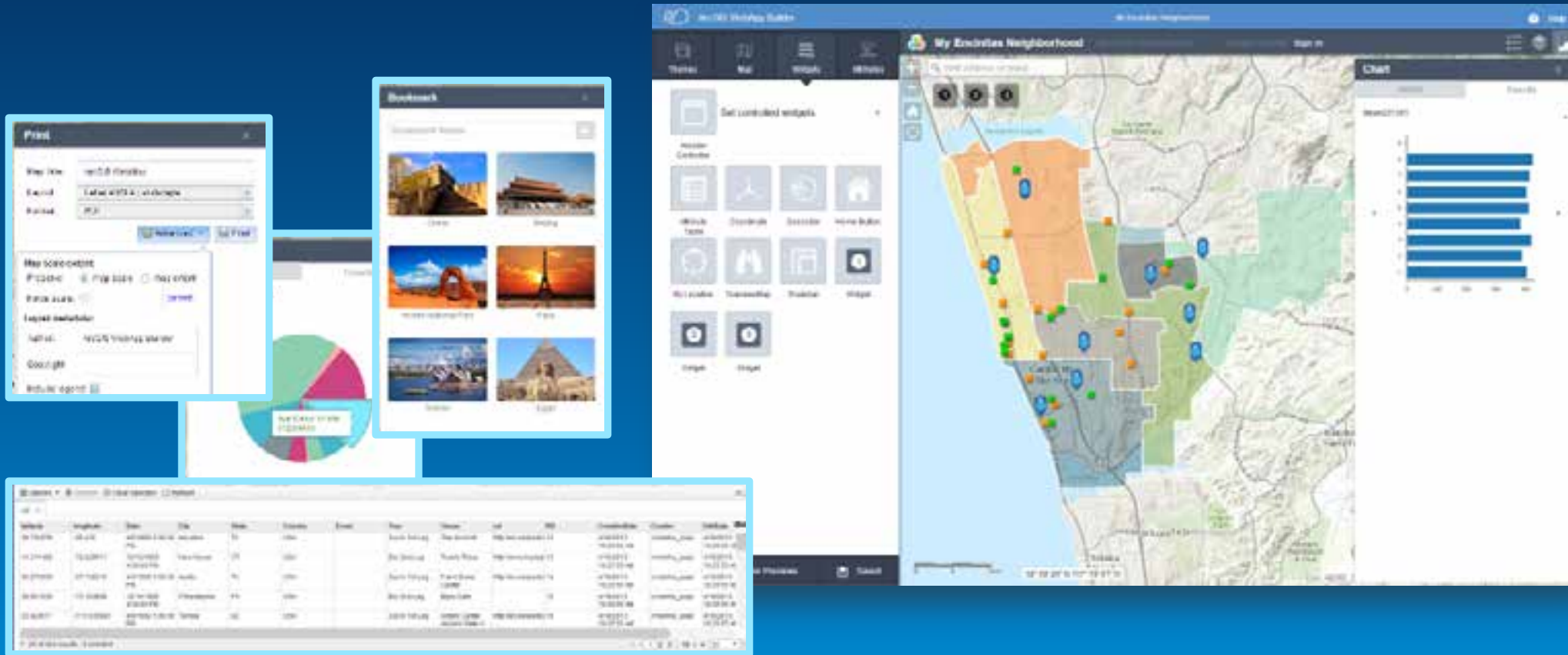
1) Downloadable from ArcGIS and Github



Configurable apps for typical tasks

Find the right fit, and configure right away

Web AppBuilder for ArcGIS



Ad-hoc apps made your way

We give you the building blocks, take it from there



Well Production Summary



Clancy Energy | A Badlands Conservation Story



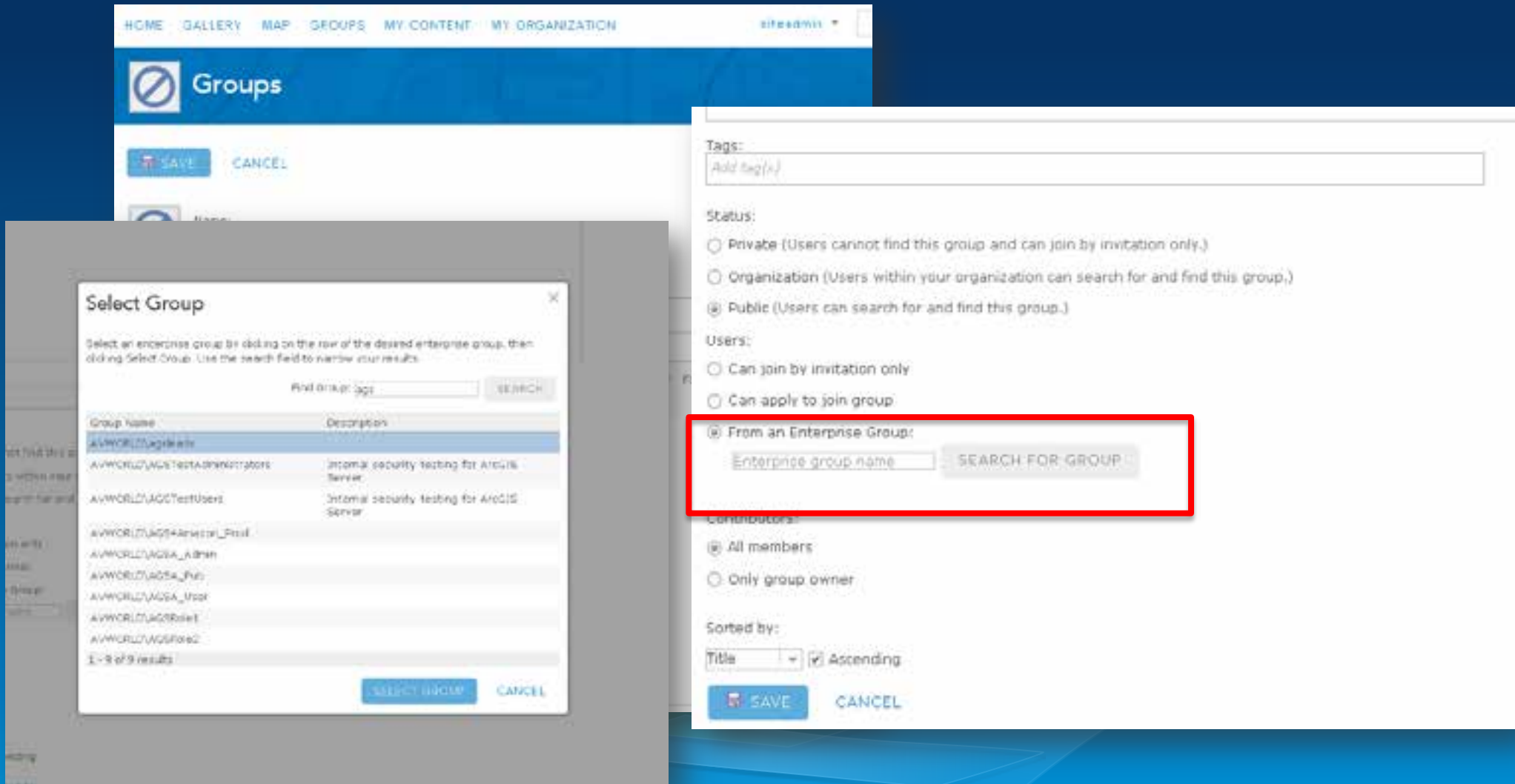
Bakken Incident Management



Cat Canyon Operations

Create a destination for everything geo

Enable discovery, manage your geographic knowledge



Better integration with Enterprise Groups

SAVE CANCEL

Roles

Create, edit, and manage roles in your portal. You may create a role based on an existing role or role template, allowing or denying privileges associated with the role as you deem necessary.

Note that when creating or editing a role, changes aren't saved until you click Save Role.

Visit the documentation to learn more about custom roles.

CREATE ROLE

Privilege	User	Publisher	Administrator	Custom
Use maps and apps	✓	✓	✓	✓
Create items	✓	✓	✓	Optional
Share maps and apps	✓	✓	✓	Optional
Join and create groups	✓	✓	✓	Optional
Edit features	✓	✓	✓	Optional
Publish hosted features and tiles		✓	✓	Optional

Apply fine grained privileges using Custom Roles


SAVE **CANCEL**

General
Home Page
Gallery
Map
Item Details
Groups
Utility Services
Servers
Roles
Security

Security

Configure the security settings for your portal.

Policies

 Allow access to the portal through SSL only.

Allow anonymous access to your portal.

Enterprise Logins

 You can set up your portal so that your users will be able to sign in to Portal for ArcGIS using the same username and password that they use with your existing on-premises systems.

The key to this is through a technology known as identity federation that this section will help you set up through two actions.

SET IDENTITY PROVIDER **GET SERVICE PROVIDER**

Single Web Sign On through SAML 2.0



Citizens

City of XYZ Web Site



Public Access to maps.



Citizens

City of XYZ Web Site



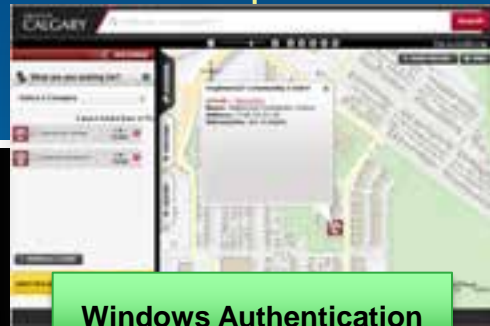
**City of XYZ
Employee**

How to secure access to sensitive data for City Employees?



Citizens

City of XYZ Web Site



Windows Authentication

Windows Active Directory Users



City of XYZ Employee

Traditionally organizations have leveraged their enterprise users and authentication. For example Windows Users and Authentication.

This works well for users within an intranet...

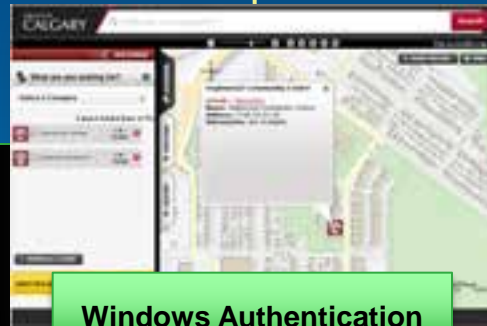


Citizens

City of XYZ Web Site



Contractor



Windows Authentication

City of XYZ Intranet



City of XYZ Employee

Windows Active Directory Users

What if an external user wants access to some sensitive data?



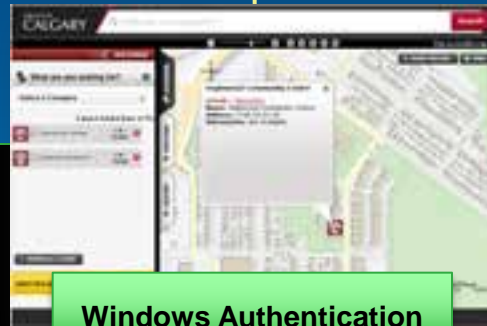
Citizens

City of XYZ Web Site



Contractor

LDAP Identity Store



Windows Authentication

City of XYZ Intranet



City of XYZ Employee

Windows Active Directory Users

Ideally we want the contractor to manage its own enterprise users

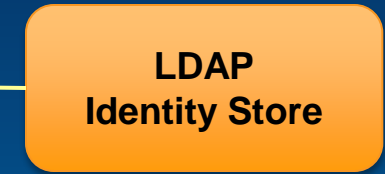


Citizens

City of XYZ Web Site



Contractor



LDAP
Identity Store

City of XYZ Intranet



City of XYZ
Employee

Windows
Active Directory
Users

SAML

ArcGIS Server supports SAML authentication.
It is compatible with your Enterprise Users
Windows users for example



Citizens

City of XYZ Web Site



Contractor

LDAP Identity Store

City of XYZ Intranet



City of XYZ Employee

Windows Active Directory Users

SAML

And can leverage enterprise users from third parties as well

Flood Zones



Add items to your 'Favorites'
Access 'Favorites' in the Gallery

Gallery

My Favorites My Organization's Featured Content

Search for Layers

Find: (e.g., parcels, fire...)

In: Portal for ArcGIS

The Web

3 Results

Flood by Ismael

Water by Ismael

Water by Ismael

Water by Ismael

Water by Ismael

Water by Ismael



Valve Isolation App



Water Leaks App



Flood Zones

Search your 'Favorites'

Other Enhancements to the Portal Web Site

HOME GALLERY MAP GROUPS MY CONTENT MY ORGANIZATION 2 Ismael

City of Naperville, IL - Spatial Por

Members

Viewing: Current Members

Name	Last Login	Settings
admin	Not yet	
Derek Law		
Ismael	Jul 11, 2014	⚙️
Julie Powell	Jul 11, 2014	⚙️
System Publisher	Not yet	⚙️

EDIT SETTINGS ADD MEMBERS

Members

Current Members

Add accounts in bulk

Featured Groups

Featured Maps and Apps

View when a user logged in for the last time

Other Enhancements to the Portal Web Site

HOME GALLERY MAP GROUPS MY CONTENT MY ORGANIZATION admin

City of Naperville, IL - Spatial Portal

SAVE CANCEL

- General
- Home Page
- Gallery
- Map
- Item Details
- Groups
- Utility Services**
- Servers
- Roles
- Security

Utility Services

Configure the utility services for your portal.

Printing

Configure your print server. Example: <https://gisportal.esri.com/arcgis/rest/services/World/MapServer/0>

Geocoding

Establish the geocoders and set other properties. To add a geocoder, click the **ADD GEOCODER** button.

Name		
Full World Geocoder		X
Hydrants Naperville		X

Units

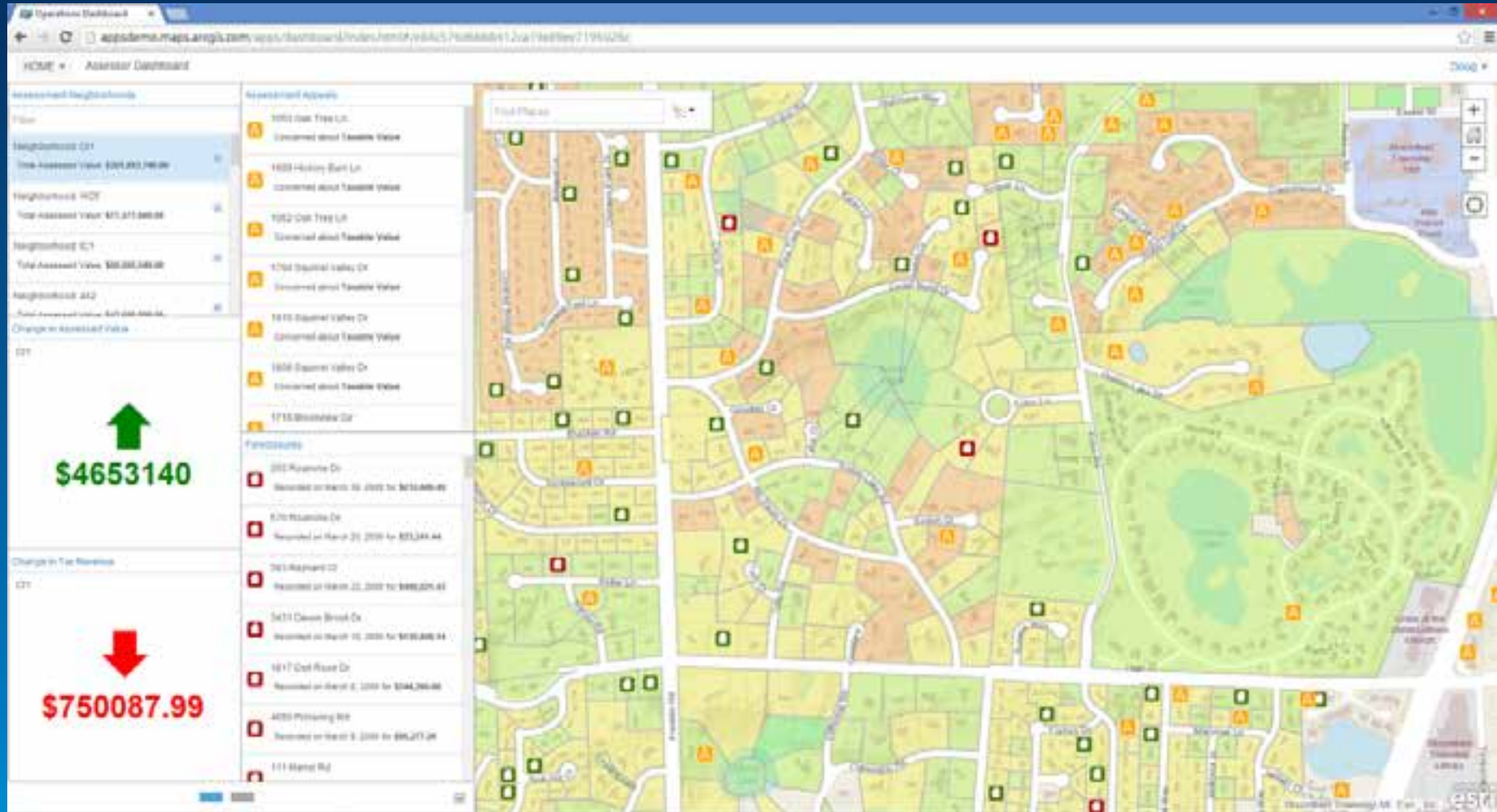
Choose the default units for the scalebar, measure tool, directions, and analysis: US Standard sets the units to miles, feet, and inches; Metric sets the units to kilometers, meters, and centimeters. Members can set the units they see through their profile page.

Metric

Define default unit system

Configure multiple locators

Other Enhancements to the Portal Web Site



Other Enhancements to the Portal Web Site

- Enable search of features of your WebMap
- Edit the URLs of services in items
- Decide if you would like people to copy your web maps
- Enable “delete protection’ on items
- Save layers as new items
- Add Text Notes and Label features
- Autocomplete when using World Geocoding Service
-and so much more

Including High Availability Configuration step by step guide...

Other Enhancements to the Portal Web Site

- Set up a data store
 - An overview of data store configuration
 - Create an ArcGIS Server site for your p...
 - Install ArcGIS Data Store
 - Create a data store
 - Tasks to perform after you create a ds...
- Manage the data store
 - Add a standby machine
 - Manage data store backups
 - Recover a data store
 - Access and manage ArcGIS Data Store
 - Move a data store
 - Alter data store account passwords
- Reference
 - ArcGIS Data Store system requirement
 - Troubleshoot ArcGIS Data Store
 - Uninstall ArcGIS Data Store
 - The ArcGIS Data Store account
 - ArcGIS Data Store command utility refs
 - ArcGIS Data Store REST commands
- Federating a server
- Designating a hosting server
- Common administrative tasks
- Scripting Portal for ArcGIS administration
- About the ArcGIS Portal Directory
- About Web Appbuilder for ArcGIS
- Configuring a highly available portal
- Portal compatibility with earlier versions of ArcGIS
- Running Portal for ArcGIS on Amazon Web Service
- Components of ArcGIS URLs
- Common problems and solutions

Configuring a highly available portal

In an organization where downtime cannot be incurred under any circumstances, Portal for ArcGIS needs to be achieved by installing the software on two machines and configuring them in an active-passive pattern using Portal for ArcGIS, you'll be required to configure your organization's load balancer to forward requests to the pr server to contain the portal's content directory. It's recommended you coordinate with your organization's inform requirements for configuring a highly available portal.

In this architecture, a network load balancer or reverse proxy server is configured with both portal machines an...

High Availability in Portal for ArcGIS

IDENTITY

It's all about identity

| Targeted user experiences,
access control and much more...



Collector for ArcGIS



Operations Dashboard for ArcGIS



Explorer for ArcGIS



Esri Maps for...

	Workgroup*	Enterprise
Basic	NA	NA
Standard	5	5
Advanced	10	50

Identity in ArcGIS unlocks more apps

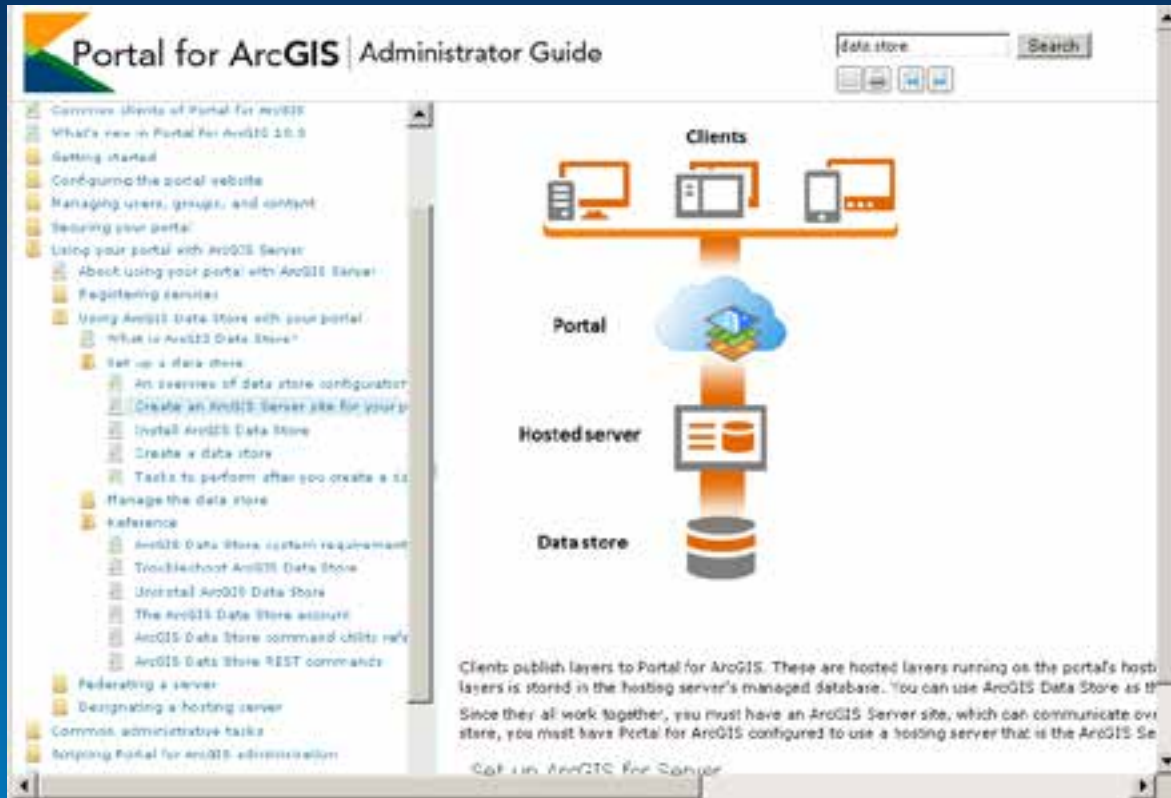
ArcGIS Server 10.3 includes a pack of Named User Licenses

Empower people



Identity in ArcGIS enables self-service mapping

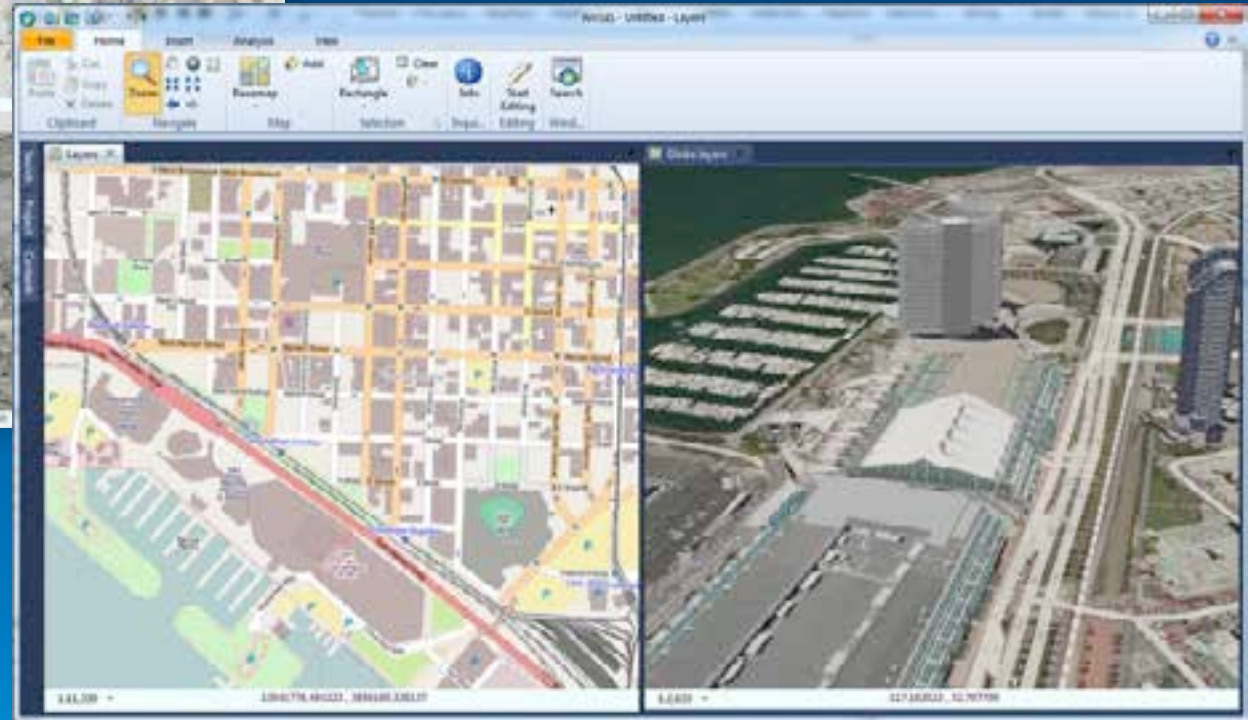
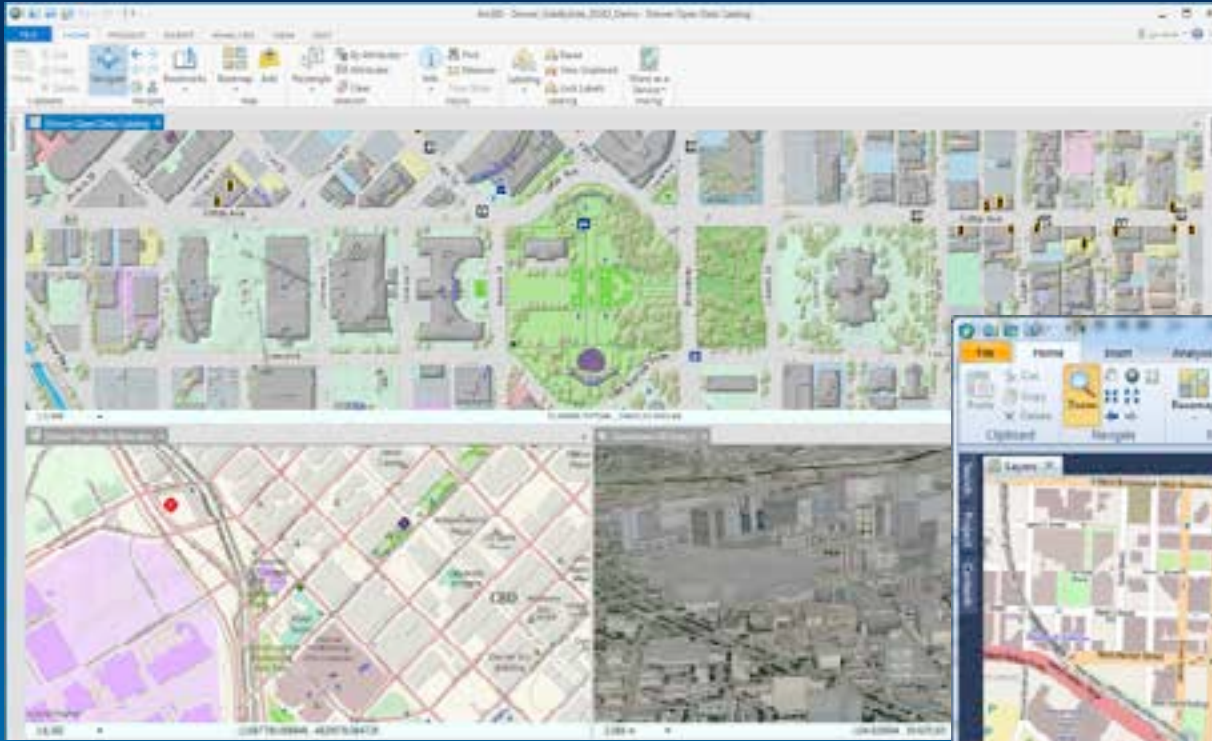
ArcGIS Server 10.3 includes a pack of Named User Licenses



- Optimized Storage for features published to your Portal
- ‘Lightweight Feature services’
- Easy setup
- Built-in backup & restore capabilities
- High Availability configuration

ArcGIS Data Store

ArcGIS Server 10.3 includes a pack of Named User Licenses



3D Web Scenes, ArcGIS Server & ArcGIS Pro

Chapter IV

Release Dates



Understanding our world.