Federal GIS Conference

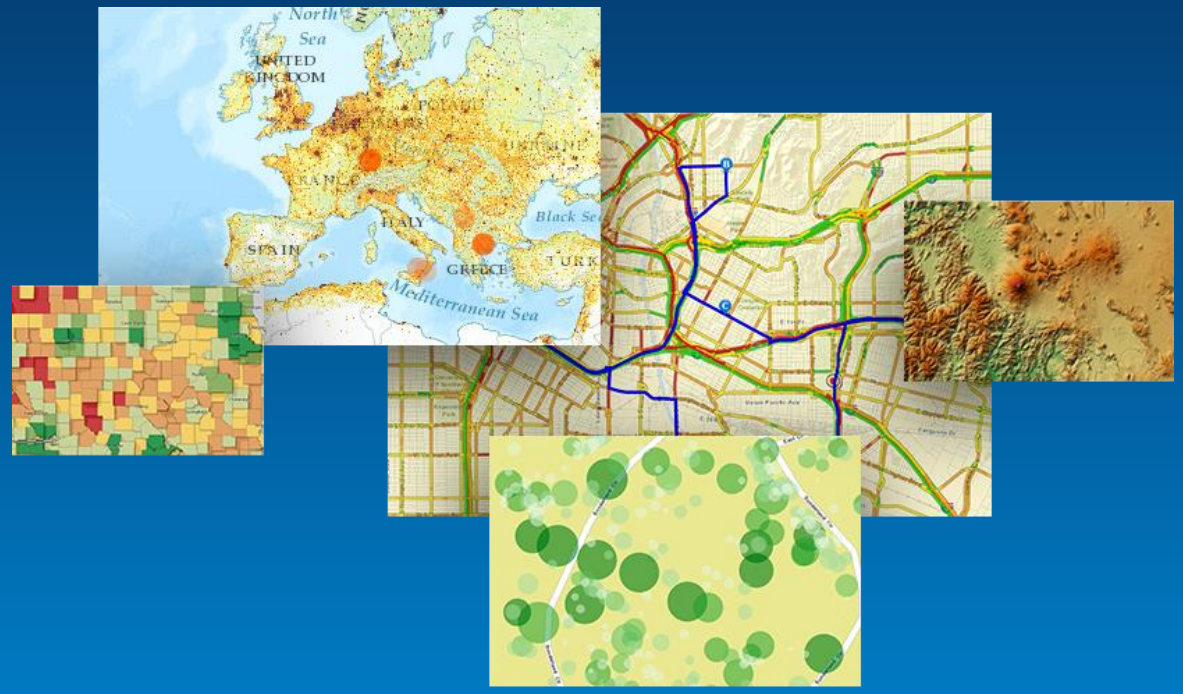
February 9–10, 2015 | Washington, DC

Introduction to Portal for ArcGIS

Brett Rose

Agenda

- Web GIS pattern
- Product overview
- Installation and deployment
- Security and groups
- Configuration options
- Portal for ArcGIS + ArcGIS for Server
- Implementation suggestions
- Summary



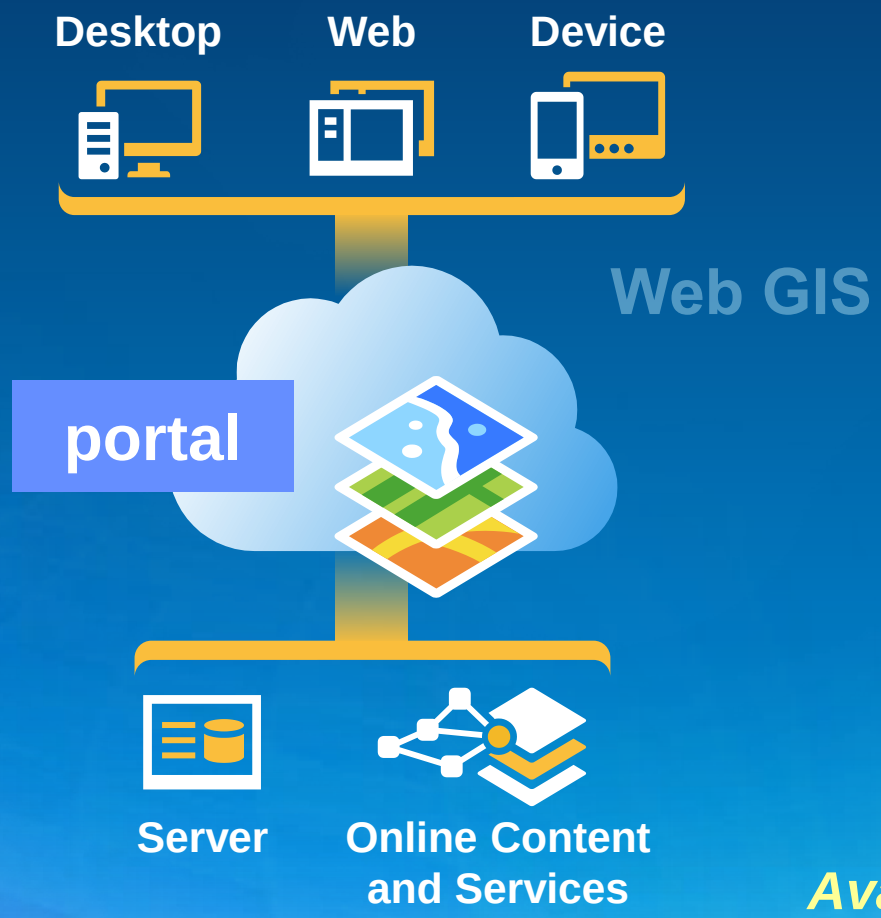
ArcGIS Is a Platform

Enabling GIS Everywhere

Simple

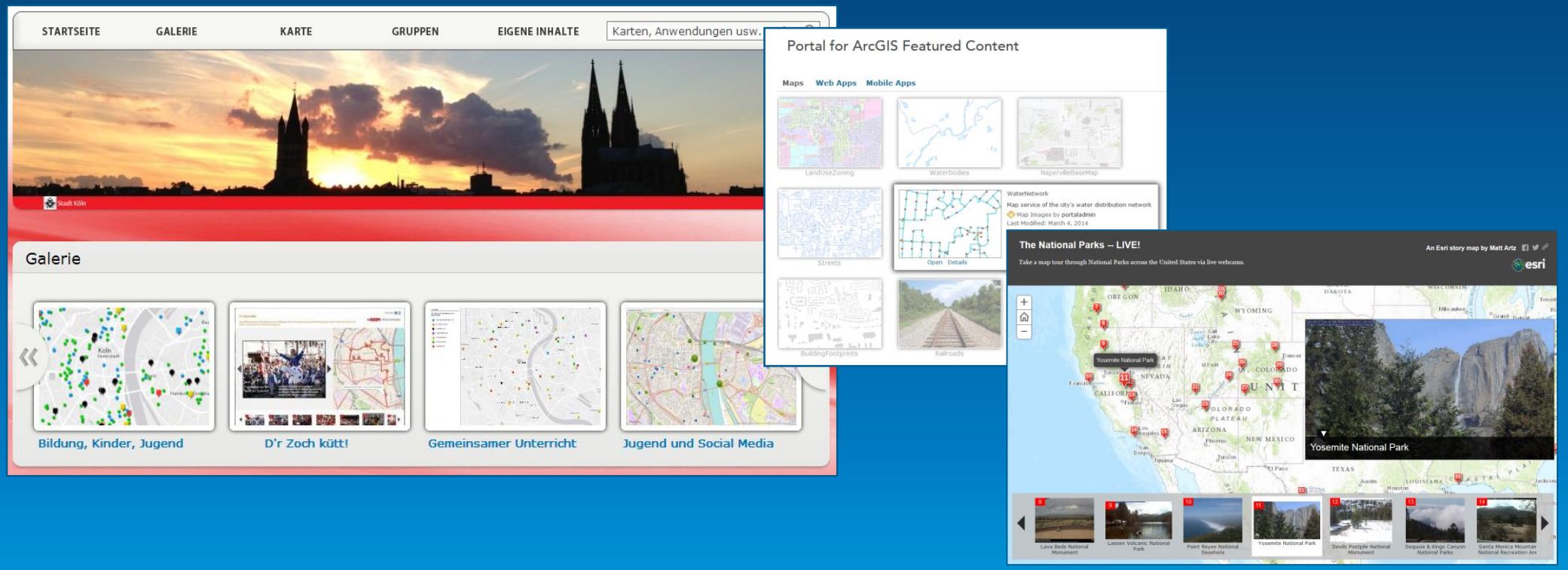
Integrated

Open



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

Organize your maps and apps



enable discovery

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More apps

Collector for ArcGIS

Operations Dashboard for ArcGIS

Esri Maps for Office
Esri Maps for SharePoint

Web Application Templates

Maps everywhere

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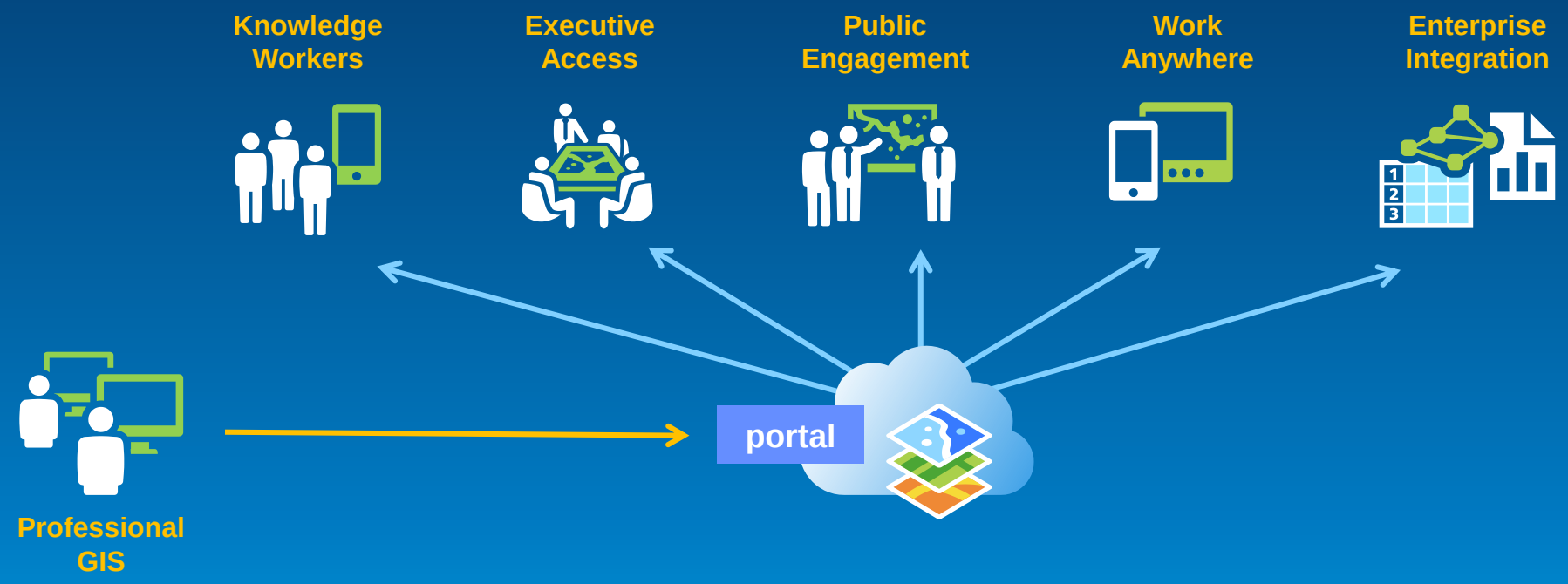
Empower people

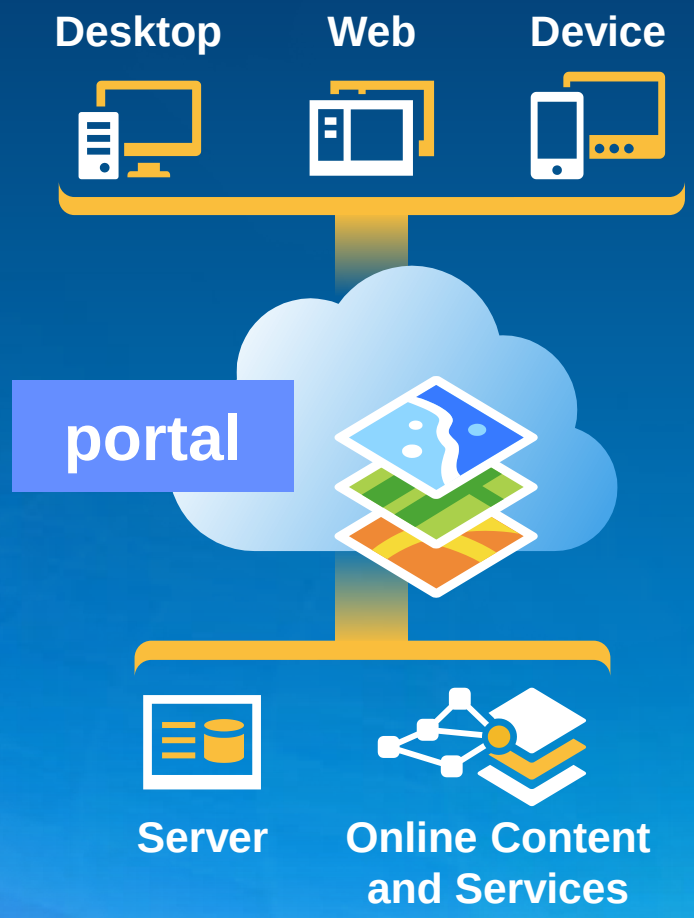


to use and create maps

The ArcGIS Platform enables Web GIS

Enabling GIS Everywhere

- Simple
- Integrated
- Open



Available in the Cloud . . .
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Key ArcGIS components for Web GIS

Apps

- Information Products
- Access Control

portal

- Web Services
- Data

GIS Servers
Authoring tools

Ready to use
Content

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Web GIS Deployment Patterns

Apps

portal

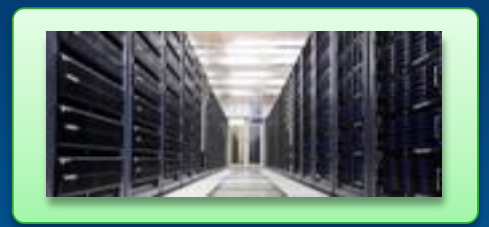
GIS Servers

Ready to use Content

SaaS	ArcGIS Online (portal)	ArcGIS Online (Hosted Servers)	ArcGIS Online Services
Software	Portal for ArcGIS	ArcGIS Server	ArcGIS Data Appliance

Web GIS Deployment Patterns

portal



GIS Servers

Ready to use Content

SaaS

Software

ArcGIS Online (portal)	ArcGIS Online (Hosted Servers)	ArcGIS Online Services
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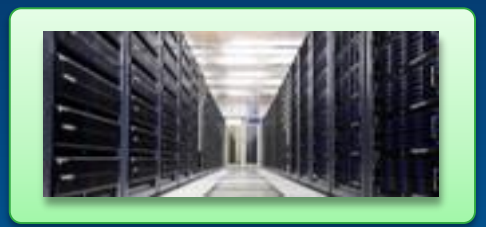
Web GIS Deployment Patterns

portal



GIS Servers

Ready to use Content

SaaS

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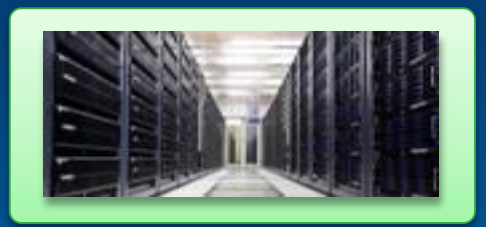
Web GIS Deployment Patterns

portal



GIS Servers

Ready to use Content

SaaS

Software

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Portal for ArcGIS

On-premises option for Web GIS

- Map-centric content management system for your GIS assets
- Solution when
  - Additional security requirements
  - No public cloud option
- Allows for
  - Enterprise integration (e.g., security)
- COTS product since 10.2
- Extension to ArcGIS for Server Advanced

Portal for ArcGIS

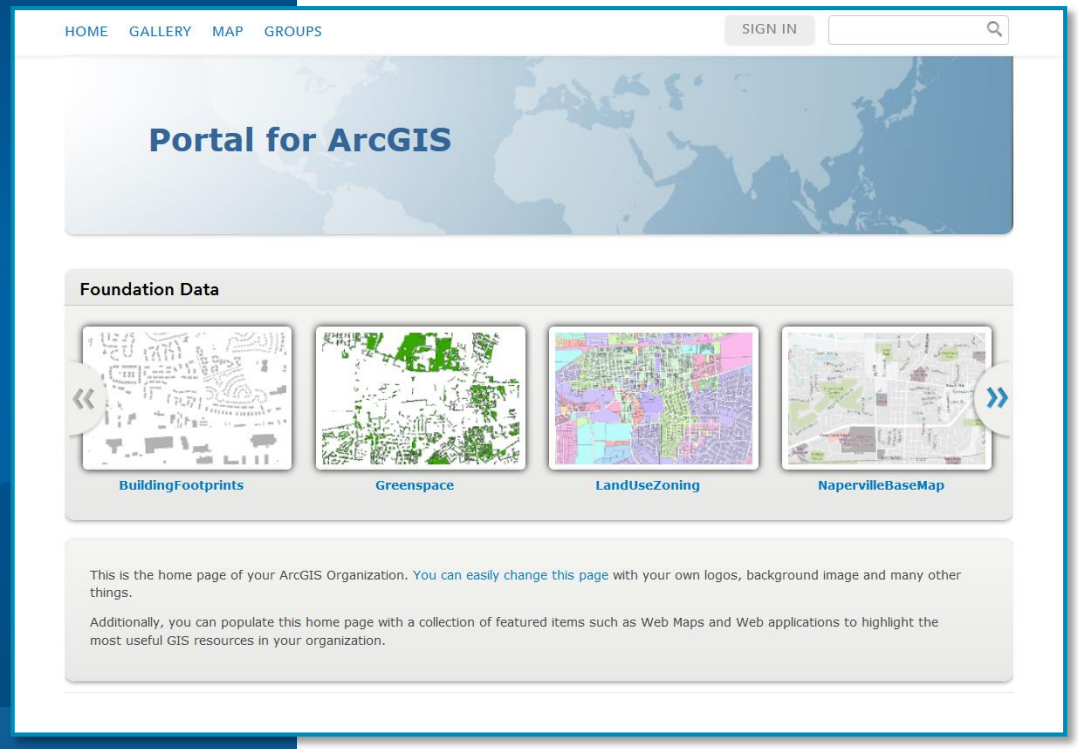
Is it right for me?

- Typical reasons for choosing **Portal for ArcGIS**
  - Have no Internet/www connection
  - Have strict SLAs and governance
  - Not ready for the cloud yet

- Typical reasons for choosing **ArcGIS Online**
  - Lower overall cost (faster start, less admin costs)
  - Continuous updates and improvements
  - Elasticity

Web GIS

portal


HOME
GALLERY
MAP
GROUPS
SIGN IN
Portal for ArcGIS
Foundation Data
BuildingFootprints
Greenspace
LandUseZoning
NapervilleBaseMap
This is the home page of your ArcGIS Organization. You can easily change this page with your own logos, background image and many other things.
Additionally, you can populate this home page with a collection of featured items such as Web Maps and Web applications to highlight the most useful GIS resources in your organization.

Portal for ArcGIS – System Requirements

Same Supported Operating Systems as ArcGIS for Server

Windows

Supported operating systems

The Portal for ArcGIS setup will only proceed if the operating system is 64-bit; 32-bit operating systems are not supported. The operati

- Windows Server 2012 R2 Standard and Datacenter
- Windows Server 2012 Standard and Datacenter
- Windows Server 2008 R2 Standard, Enterprise, and Datacenter (maximum version supported is SP1)
- Windows Server 2008 Standard, Enterprise, and Datacenter (maximum version supported is SP2)
- Windows 8.1 Professional and Enterprise
- Windows 8 Professional and Enterprise
- Windows 7 Ultimate, Enterprise, Professional, Home Premium
- Windows Vista Service Pack 2 Ultimate, Enterprise, Business, and Home

Linux

Supported Linux operating systems

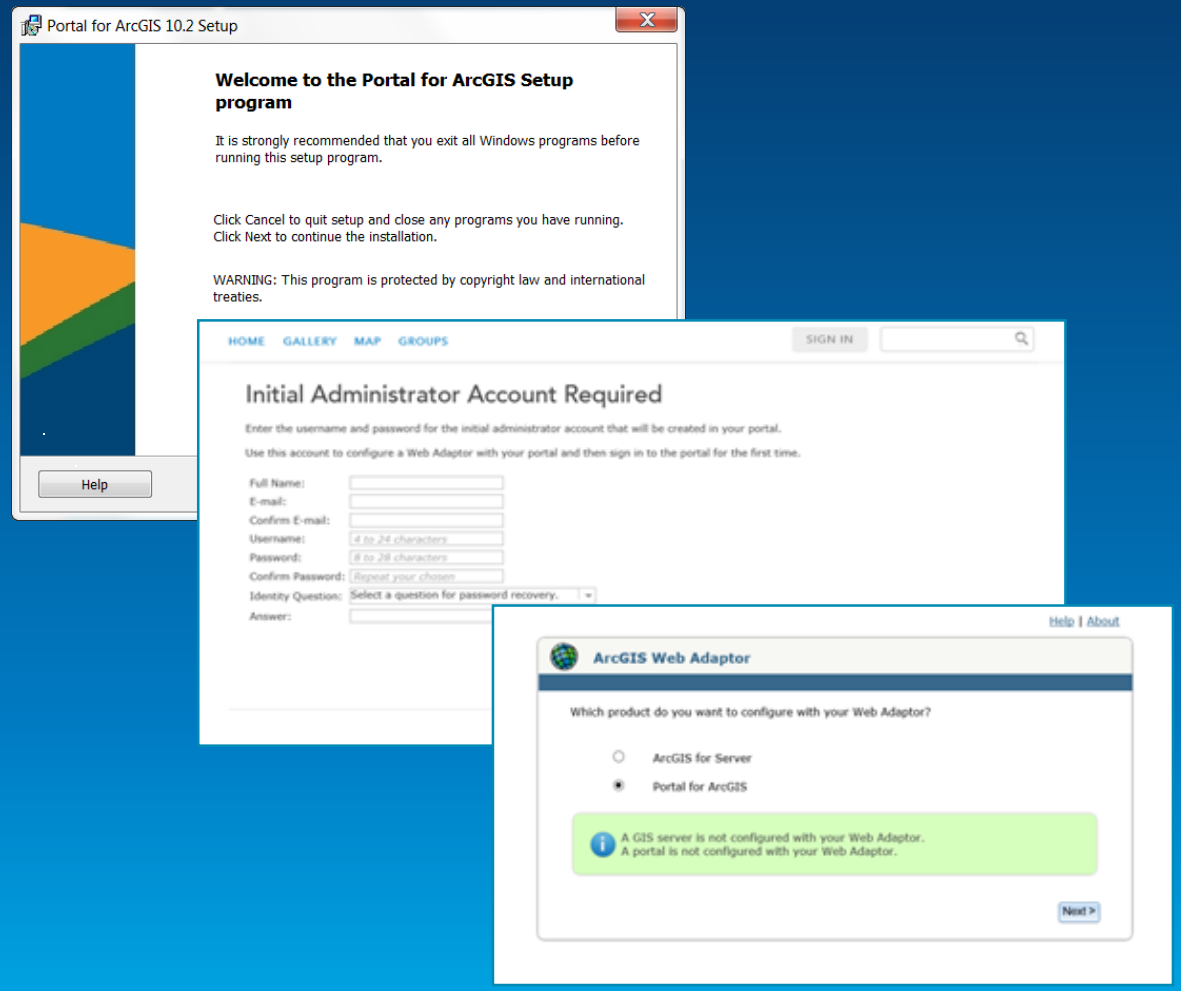
The Portal for ArcGIS setup will only proceed if the operating system is 64-bit; 32-bit operating systems are not supported. The operating sy

- Red Hat Enterprise Linux Server 6
- Red Hat Enterprise Linux Server 5 Update 7 with libX11 patch
- SUSE Linux Enterprise Server 11 Service Pack 1

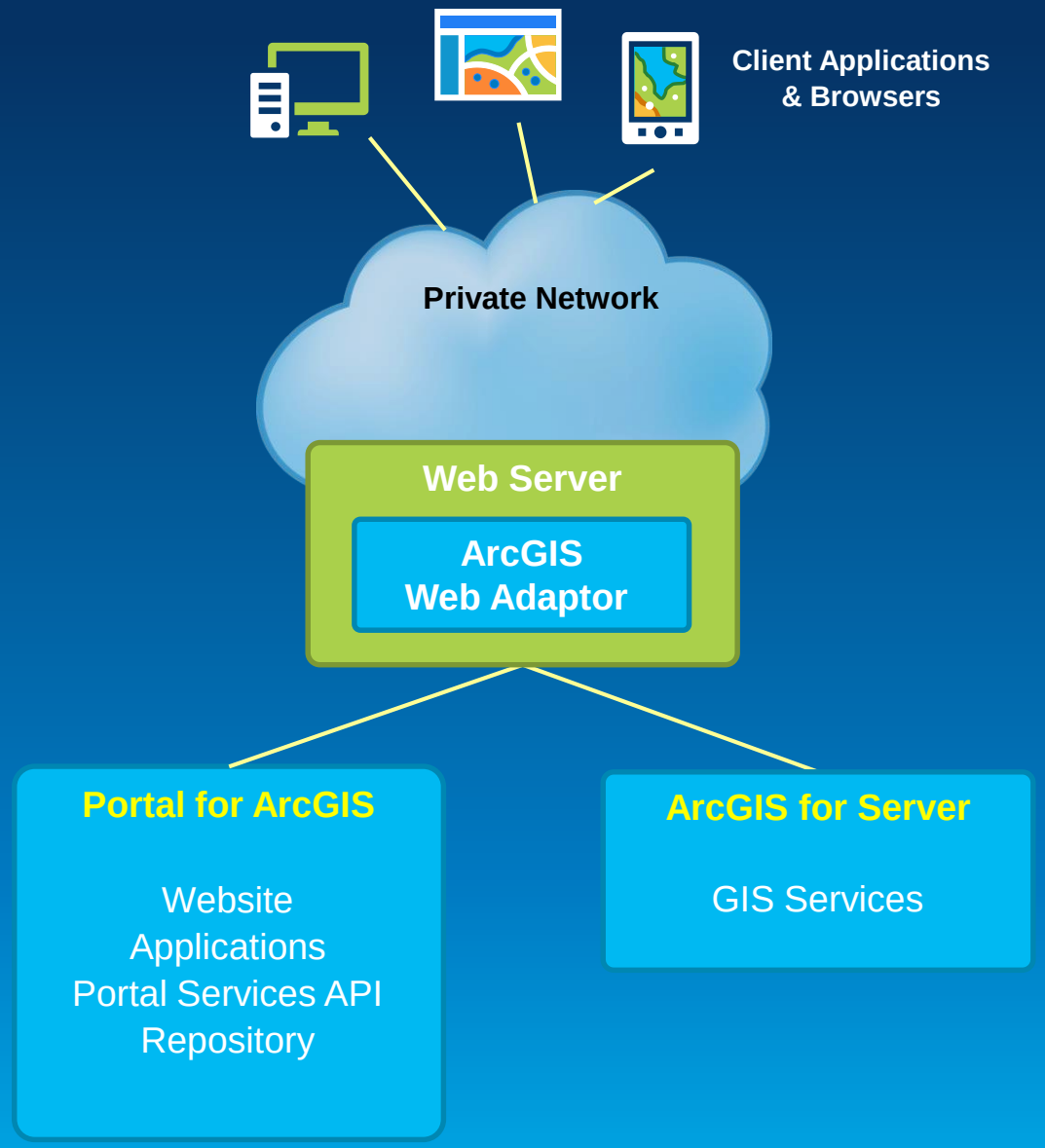
Installing Portal for ArcGIS

Can be Scripted for Silent Installs

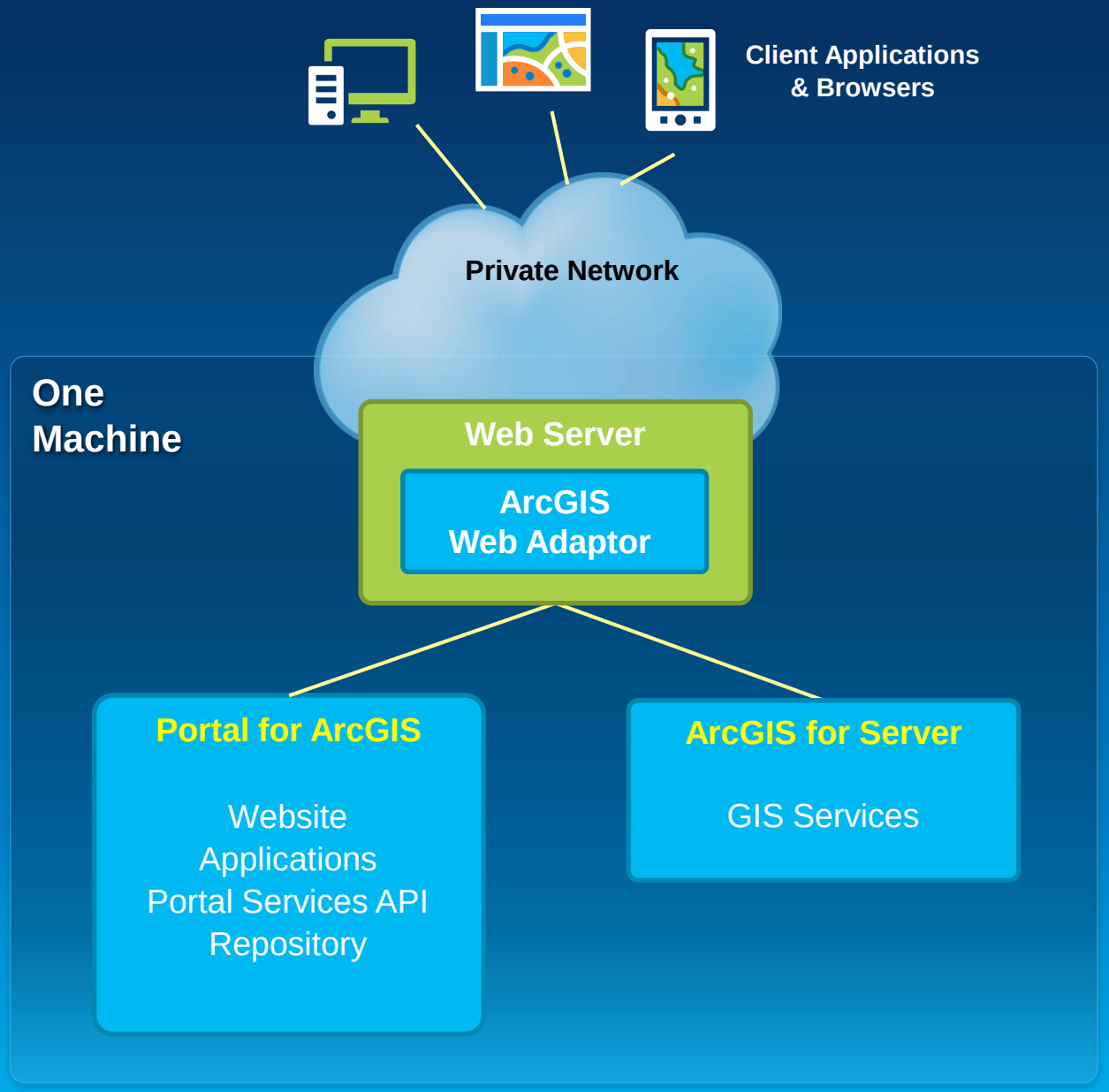
- **Simple 4 step workflow**
  1. **Run installer**
  2. **Authorize software**
  3. **Create initial admin account**
  4. **Configure Web Adapter**



Deployment


Client Applications
& Browsers
Private Network
Web Server
ArcGIS
Web Adaptor
Portal for ArcGIS
Website
Applications
Portal Services API
Repository
ArcGIS for Server
GIS Services

Deployment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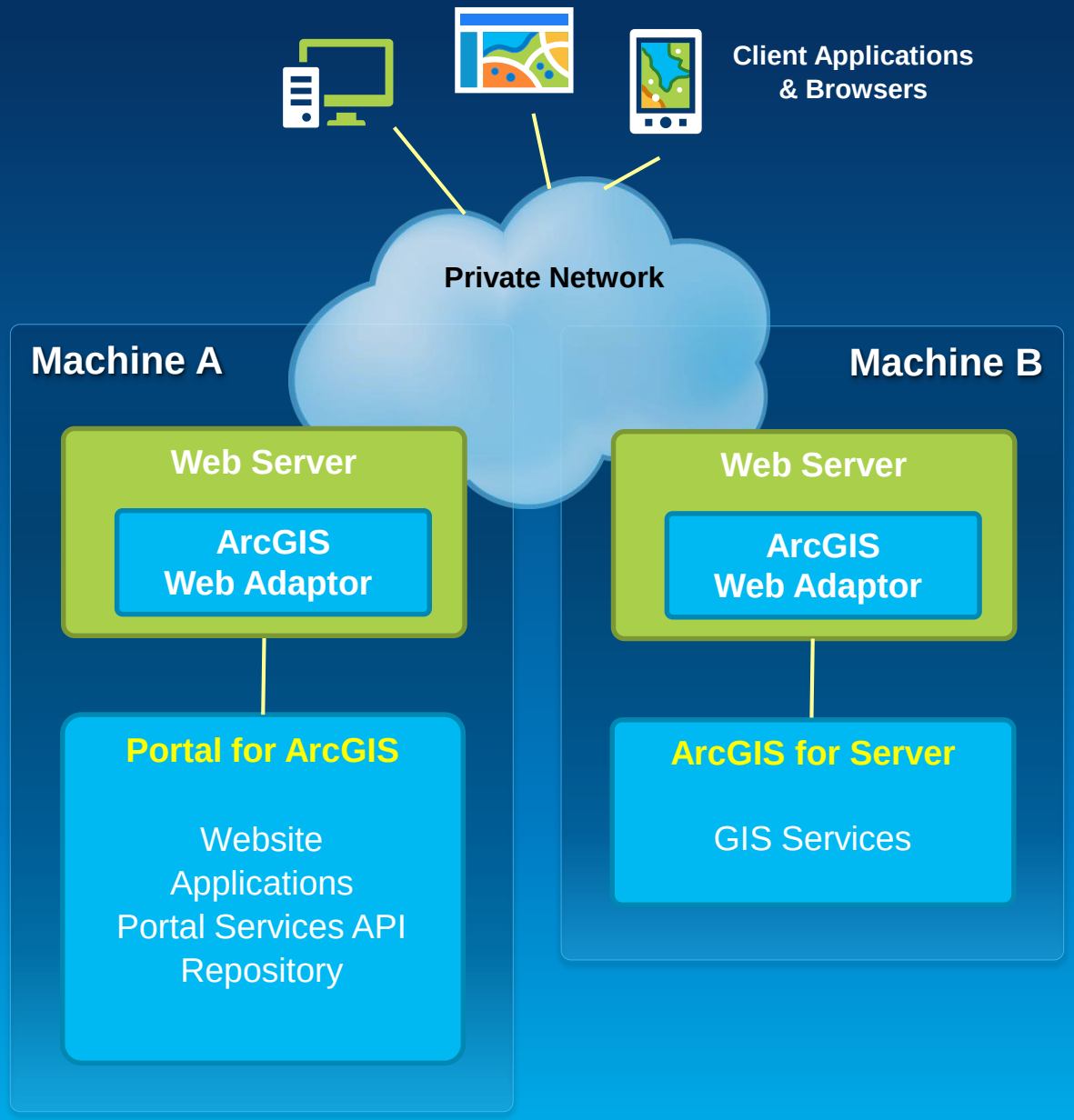
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Security

Integrates with Your Enterprise Security Infrastructure

- **Authentication**
  - **Supports web tier authentication, including Windows Authentication & PKI**
  - **Supports SSO to your ArcGIS Servers** *(federated servers)*
- **Users, Roles, and Groups**

Users	Roles	Groups

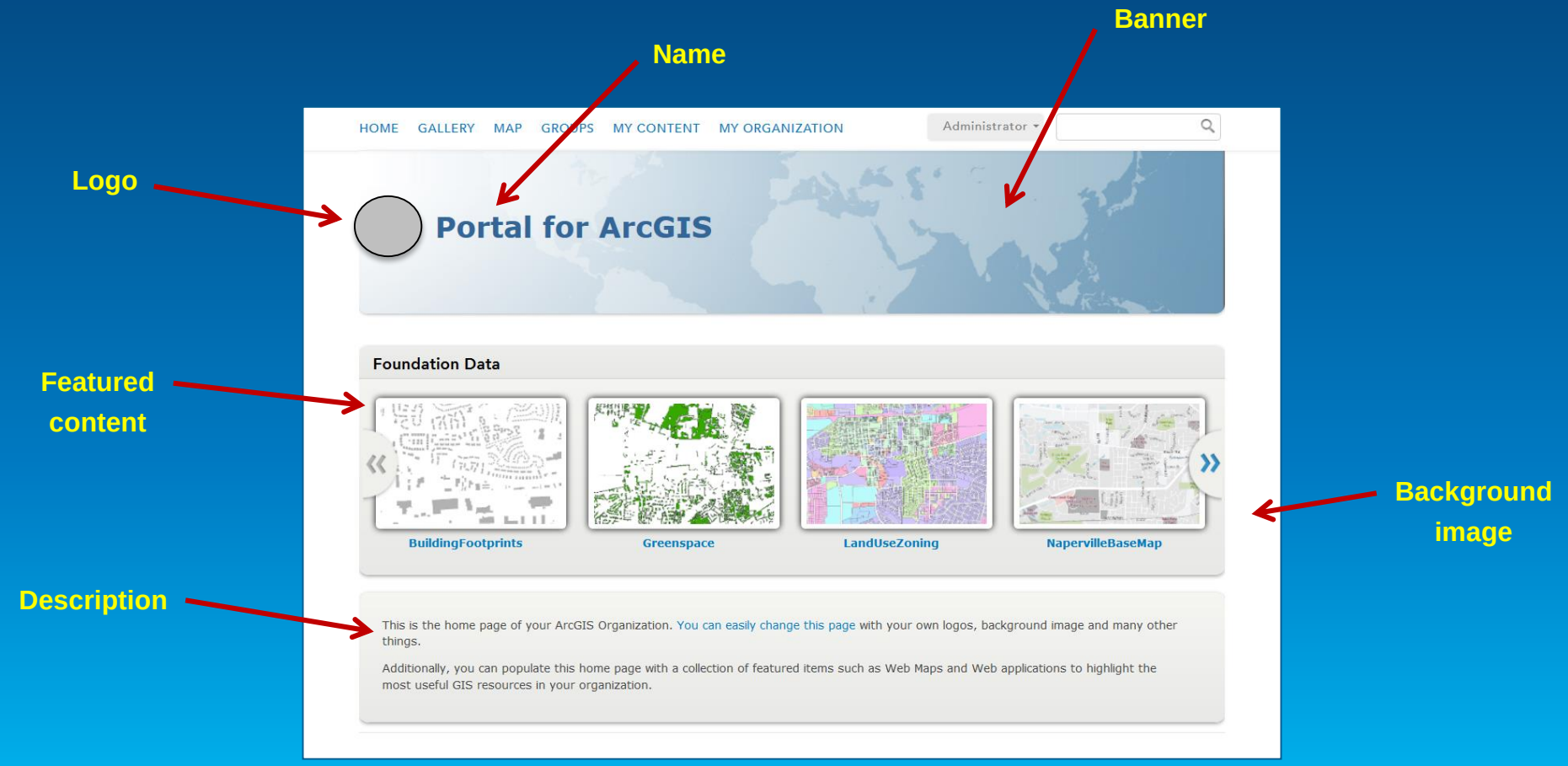
• Built-in
• Enterprise
  • *Active Directory*
  • *LDAP*
	• *Anonymous*
	• User
	• Publisher
	• Administrator
		• Built-in

Leverage Groups in Portal

- Groups have membership
- Organize by:
- **Theme or initiative**
  - Common and supportive content
- **Functional department/structure**
  - Based on organization's business units
- **Projects**
  - Specific projects or tasks
- **Ad-hoc**
  - Prototyping, non-permanent/temp projects, staging

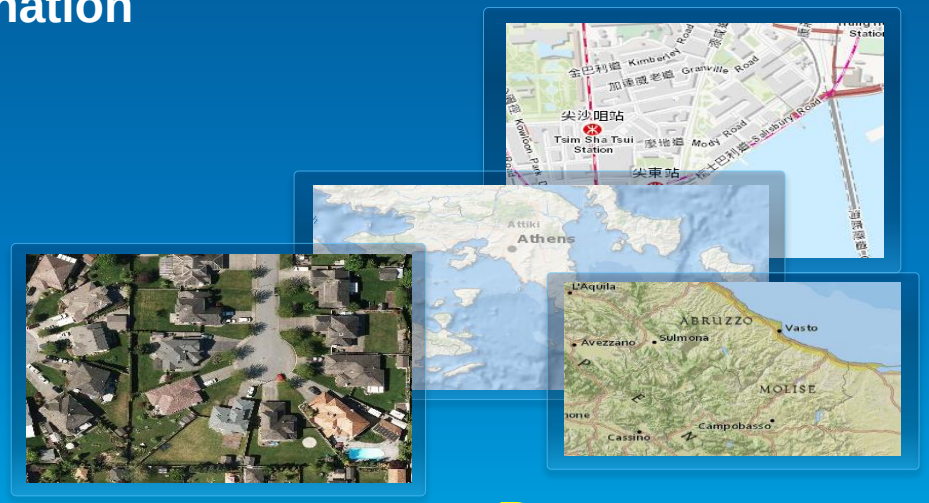
Configuring Portal for ArcGIS

- Must have Administrator privileges

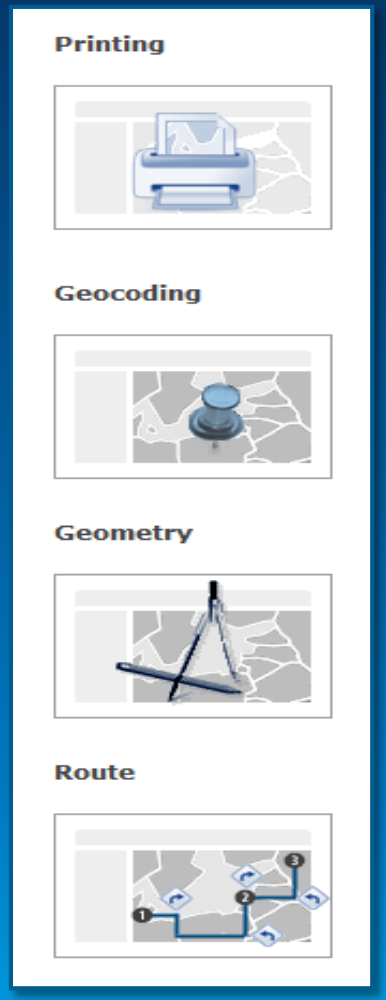


Basemaps & Utility Services

- Important part of Portal's resources
- Can be hosted:
  - Online *(by Esri)*
  - On-premises *(by you)*
  - Combination



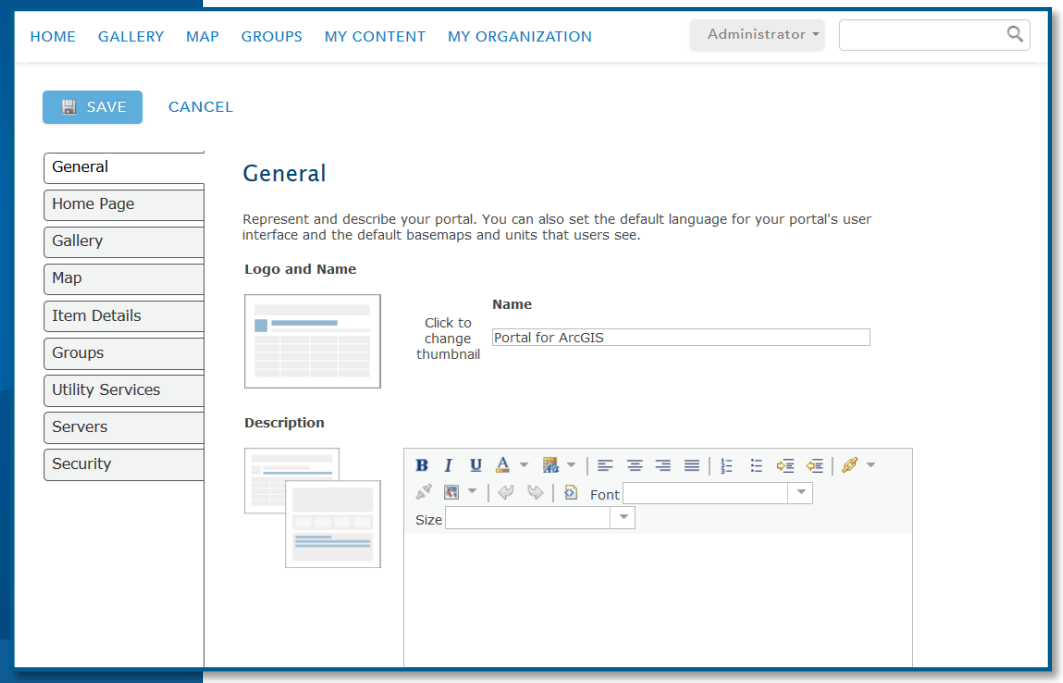
Basemaps



Utility services

Demo

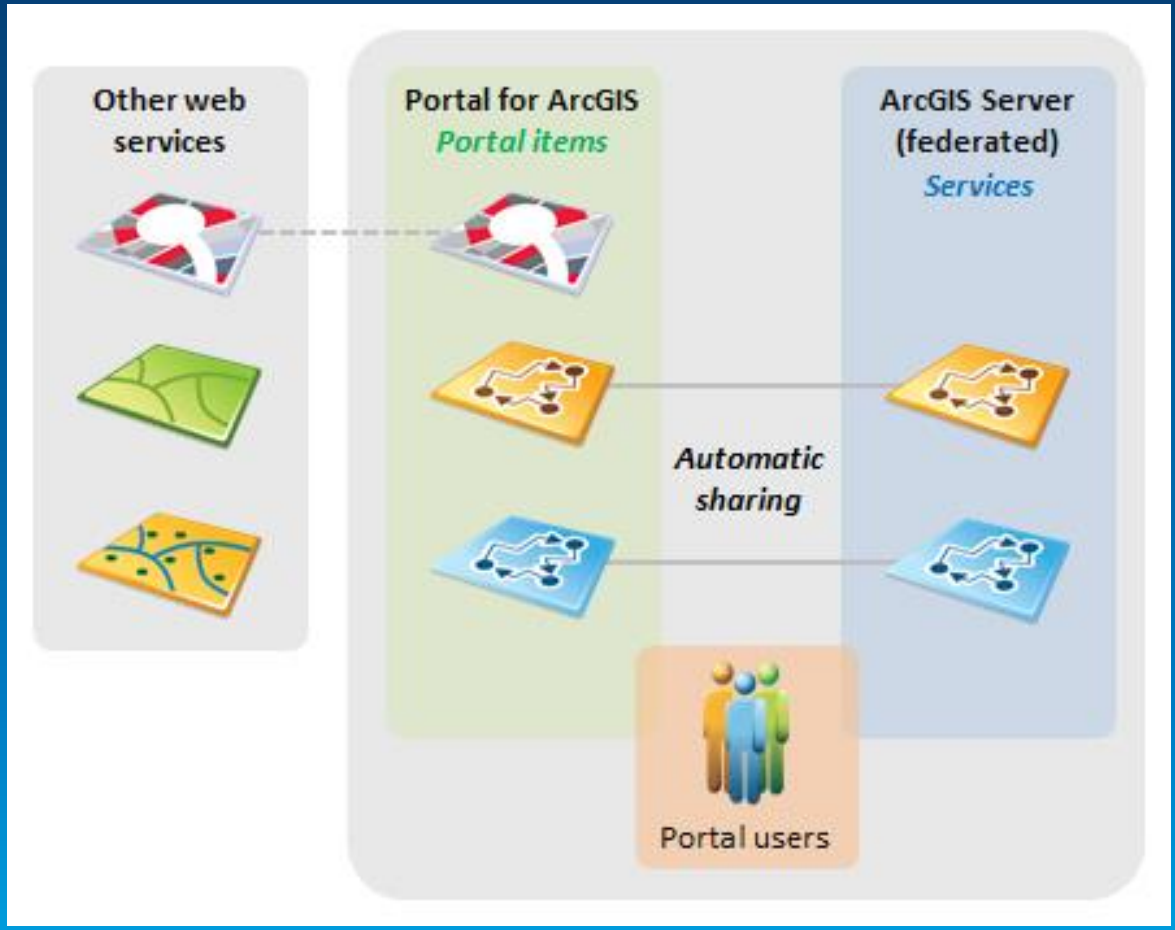
Configuring Portal for ArcGIS



Using Portal with ArcGIS Server

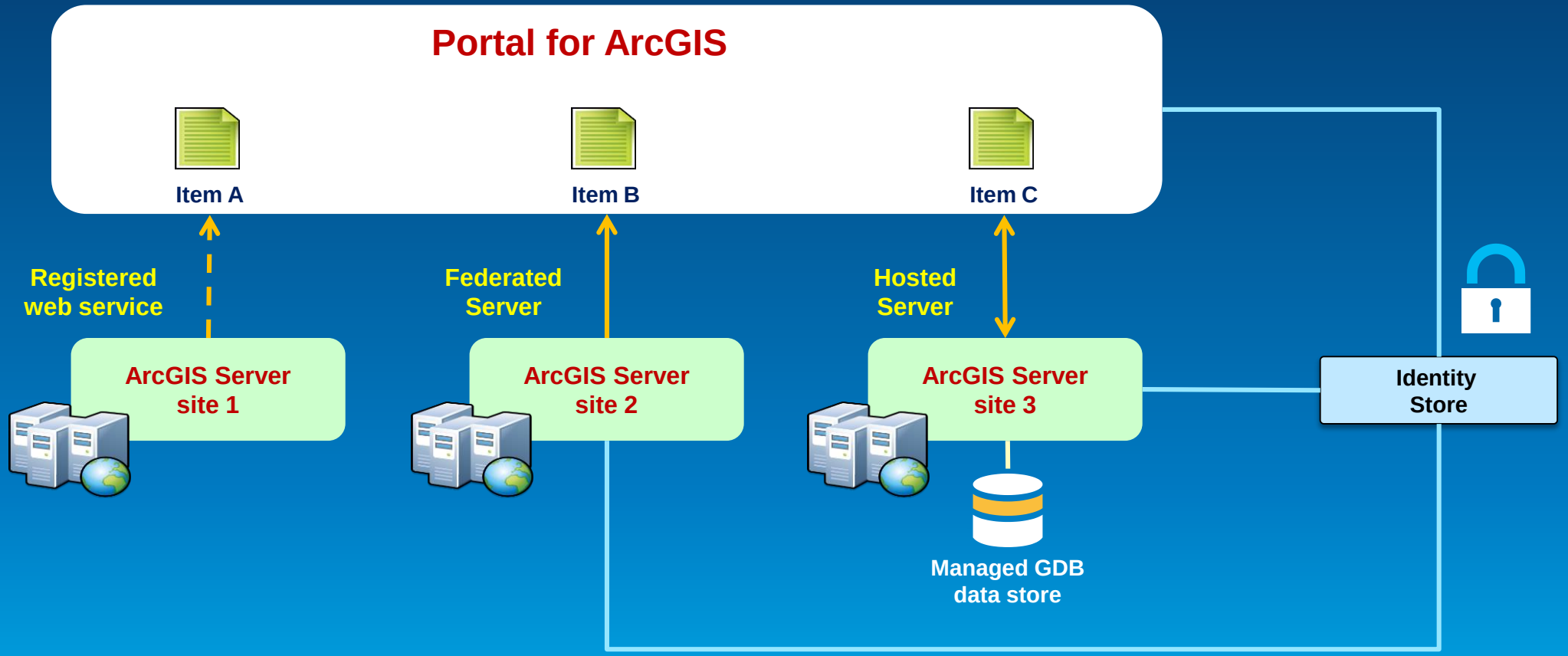
Three Integration Approaches

1. **Registering services**
2. **Federating a Server**
3. **Designating a hosting Server**



Implementation Patterns

Portal for ArcGIS + ArcGIS for Server



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Deploying the Data Store

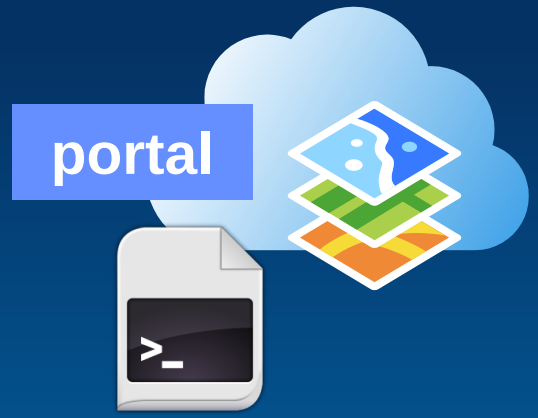
1. Configure ArcGIS for Server and Portal for ArcGIS.

2. Install ArcGIS Data Store.

3. Create a data store.

4. Specify a shared network location for feature layer database backups.

Scripting Portal for ArcGIS Administration



- Portal administration functionality is exposed via REST API
- Execute admin commands
- Scripting languages
  - Python, Java, JavaScript, PowerShell, C#, Ruby, Scala, Perl, etc
- Examples
  - *Members to the portal*
  - *Copy content from one portal to another*
  - *Grant members of the portal access to specific groups*
  - *Transfer the ownership of a member's items to another member*
  - *Update the URL of a service that is referenced in a web map*

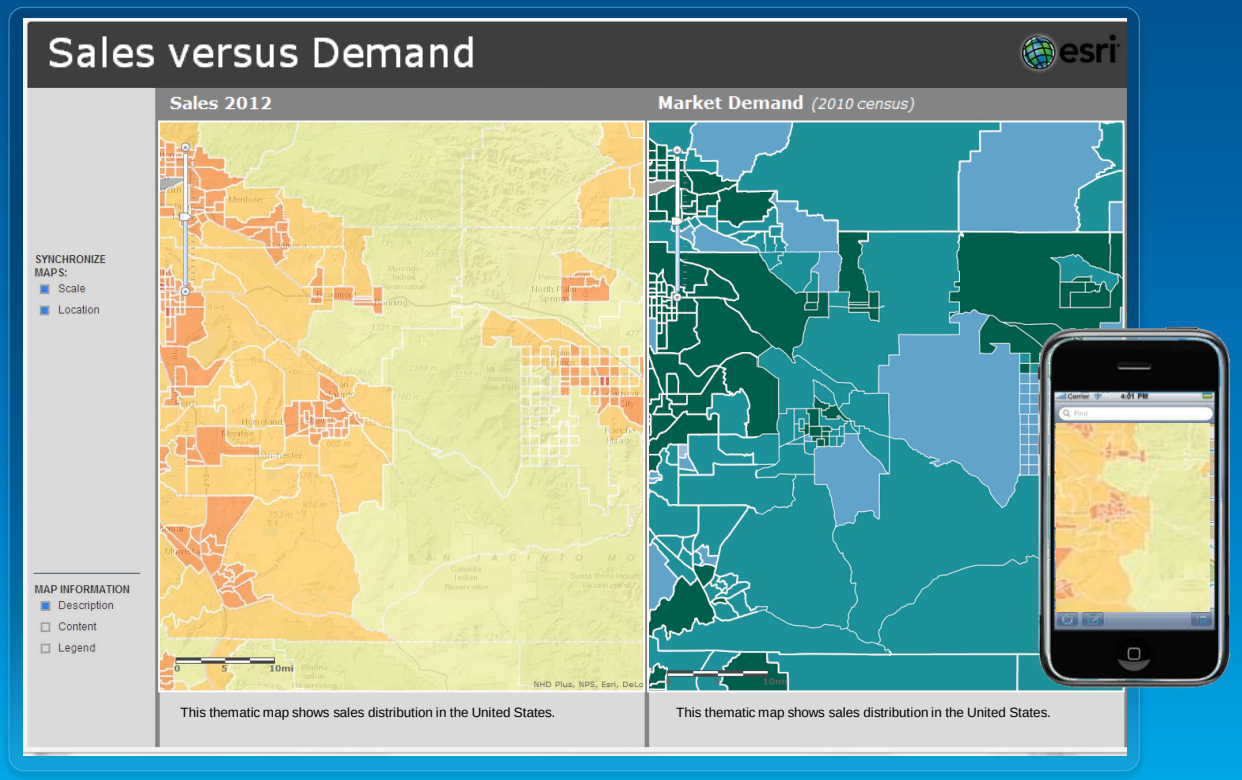
Implementing Web GIS

Typical activities

- **Assessment & planning**
- **Installation & configuration**
- **Security integration**
- **Deployment** *(staging, production)*
- **End user engagement, socialization**
- **IT training & support planning**
- **Operations, maintenance, and support**
- **Designing & building information products**

Keys to Success

- **Stay focused on the information products**



Keys to Success

- Stay focused on the information products
- Embrace the idea of maps everywhere
- Model Portal for ArcGIS after your structure & workflows
- Consider the Web GIS Launch Kits

Portal for ArcGIS - Summary

- Map-centric content management system for your GIS assets
- Implements “Web GIS” on-premises
- Solution when
  - Additional security demands
  - No public cloud option
- Extension of ArcGIS for Server Advanced
- http://server.arcgis.com/en/portal/

Understanding our world.