Portal for ArcGIS: An Introduction

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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
More apps

Operations Dashboard for ArcGIS

Explorer for ArcGIS

Collector for ArcGIS

Web Application Templates

10.3: Web AppBuilder for ArcGIS

Maps everywhere

Esri Maps for … Apps

Explorer for ArcGIS

Portal for ArcGIS: An Introduction
Empower people to use and create maps

Knowledge Workers

Executive Access

Public Engagement

Work Anywhere

Enterprise Integration

Professional GIS

portal

A
The ArcGIS Platform enables Web GIS
Enabling GIS Everywhere

Available in the Cloud . . .
. . . and On-Premises
Key ArcGIS components for Web GIS

- Web Services
- Data
- Information Products
- Access Control

Apps

portal

GIS Servers
Authoring tools

Ready to use
Content
Web GIS Deployment Patterns

Apps

portal

GIS Servers

Ready to use Content

SaaS

Software

ArcGIS Online (portal)

ArcGIS Online (Hosted Servers)

ArcGIS Online Services

Portal for ArcGIS

ArcGIS Server

ArcGIS Data Appliance
Web GIS Deployment Patterns

SaaS

Software

ArcGIS Online (portal)
ArcGIS Online (Hosted Servers)
ArcGIS Online Services
Portal for ArcGIS
ArcGIS Server
ArcGIS Data Appliance
Web GIS Deployment Patterns

**SaaS**

**Software**

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

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Portal for ArcGIS
Web GIS in your infrastructure option

- **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**
  - 10.3: Standard and Advanced
Portal for ArcGIS
Is it right for me?

• Typical reasons for choosing **Portal for ArcGIS**
  - Have no Internet/\(\text{www}\) 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
Some Portal for ArcGIS Customer sites
Web GIS
On-premises

Portal for ArcGIS: An Introduction
Portal for ArcGIS Capabilities

- Browse, search, and discover your GIS assets
- Self-service mapping
- Content creation and management
- Sharing and collaboration
- Data hosting and mapping
- Visualization, Collection, and Analysis
- Ready to use maps and layers
Apps included with Portal for ArcGIS

- Web application templates
- Collector for ArcGIS
- Operations Dashboard for ArcGIS
- Explorer for ArcGIS
- Esri Maps for … Apps (7 different apps)
- 10.3: Web App Builder for ArcGIS

Collector for ArcGIS
Web Application Templates
Operations Dashboard for ArcGIS
Explorer for ArcGIS
Esri Maps for … Apps
10.3: Web App Builder for ArcGIS
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 operating systems supported are:

- 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 systems supported are:

- 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

Private Network

Web Server

Portal for ArcGIS
Website
Applications
Portal Services API
Repository

ArcGIS for Server
GIS Services

ArcGIS Web Adaptor

Client Applications & Browsers
Deployment

One Machine

Web Server

ArcGIS Web Adaptor

Portal for ArcGIS

Website
Applications
Portal Services API
Repository

ArcGIS for Server

GIS Services

Private Network

Client Applications & Browsers

Portal for ArcGIS: An Introduction
Portal for ArcGIS: An Introduction
Security
Integrates with Your Enterprise Security Infrastructure

• Authentication
  - Supports web tier authentication, including Windows Authentication & PKI
  - Supports SSO to your ArcGIS Servers (federated servers)
  - 10.3: Web SSO with SAML

• Users, Roles, and Groups

**Users**
- Built-in
- Enterprise
  - Active Directory
  - LDAP

**Roles**
- Anonymous
- User
- Publisher
- Administrator

**Groups**
- Built-in
  - 10.3 will support Enterprise groups
## Portal for ArcGIS: Users and Roles

<table>
<thead>
<tr>
<th>Action</th>
<th>With an ArcGIS organizational account</th>
<th>Without account</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search and use public items</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Search and use private items</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Create and share items</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Publish new content as tiled or feature services</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Administer the ArcGIS organization</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Manage users and their privileges</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Manage items created by others</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Use Esri Maps for … Apps, Collector, Operations Dashboard, and Explorer</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>
Portal security tech session

- **Securing your Portal for ArcGIS**
  - Wed 8:30 am Room 14B
  - Thurs 1:30 pm Room 4
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

• 10.3 will support Enterprise Groups
Groups in Portal
Configuring Portal for ArcGIS

- Must have Administrator privileges

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.
Basemaps & Utility Services

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

Portal for ArcGIS

Item A
Registered web service
ArcGIS Server site 1

Item B
Federated Server
ArcGIS Server site 2

Item C
Hosted Server
ArcGIS Server site 3

Identity Store
Managed GDB data store

Portal for ArcGIS + ArcGIS for Server
A
Scripting Portal for ArcGIS administration

- Portal administration functionality is exposed via REST API
- Execute admin commands with scripts
  - Automate and schedule tasks
- *PortalPy module* available on GitHub
- Scripting languages
  - Python, Java, JavaScript, PowerShell, C#, Ruby, Scala, Perl, etc
Portal scripting tech session

- **ArcGIS Online: Administering your ArcGIS Organization Through Scripting**
  - Tues 1:30 pm Room 33A
  - Thurs 10:15 am Room 33A
Activity Dashboard for ArcGIS
For Portal for ArcGIS

• Web app for admins to activity-based metrics and real-time reports
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 organization’s structure & workflows
- Consider the Web GIS Launch Kits
• Extending Access to GIS Maps and Apps with Portal for ArcGIS
  60 min training seminar - Free
• Portal for ArcGIS 101 ArcUser Technical article
Portal for ArcGIS - Summary

- **Map-centric content management system for your GIS assets**
- Implements “Web GIS” in your infrastructure
- Solution when
  - Additional security demands
  - No public cloud option
- Extension of ArcGIS for Server
  - Standard and Advanced
Thank you...

• Please fill out the session survey:

  First Offering ID: 523
  Second Offering ID: 1143

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Paper – pick up and put in drop box