Portal for ArcGIS

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ArcGIS – A Complete GIS

End to End Integration

Data Management
- Collect, Organize, & Exchange Data

Planning & Analysis
- Transform Data into Actionable Information

Field Mobility
- Get Information Into and Out of the Field

Operational Awareness
- Disseminate Information Where and When it is Needed

Constituent Engagement
- Get Feedback and Make Informed Decisions

Transform Data into Actionable Information
Collect, Organize, & Exchange Data
Get Information Into and Out of the Field
Disseminate Information Where and When it is Needed
Get Feedback and Make Informed Decisions
ArcGIS – Service Oriented Architecture

Network

ArcGIS for Mobile

Rich Internet Clients

ArcGIS for Desktop

ArcGIS Explorer

ArcGIS for Server

Data Tier
ArcGIS – A Pervasive GIS

- Engage & Leverage Social Media
- Empower Citizens
- Unlock Mapping Capabilities
- Simple access to GI for decision makers

…. Moving beyond traditional GIS workflows
Portal for ArcGIS

Your private GIS Content Management System

Collaborate and share GIS and map content within the security of your organization's infrastructure.

- Role of Portal and the Value Proposition
- ArcGIS Online Versus Portal for ArcGIS
- Portal for ArcGIS – The Product
- Implementation Considerations
Portal for ArcGIS – Value Proposition

Discovery

Self Service Mapping

Applications
Discovery

The potential to meet the world’s demand for safe, reliable energy is as infinite as human ingenuity. We believe that finding newer, smarter, cleaner ways to power the world begins with the spirit of discovery and innovation. At Clancy Energy we effectively manage resources in ways that reduce energy costs, benefit the environment, and ensure clean, reliable power for our communities and our nation.
Self Service Mapping

Using Web Maps – The ONE representation for Browsers, Devices, Tablets and Desktop

Web Maps

- Map Galleries
- Embedded Maps
- SharePoint
- Mobile Devices
- Microsoft Office
- ArcGIS for Server
  Your Business Data

One map, many devices
Applications

- Application Templates
- Esri Maps for Office
- ArcGIS for Desktop
- Collector for ArcGIS
- Operations Dashboard
- ArcGIS Viewer for Flex
- ArcGIS Viewer for Silverlight
- ArcGIS Explorer Online
- ArcGIS Explorer Desktop
- ArcGIS for SharePoint
- ArcGIS for iOS, Android and Windows Phone (native apps)
- ArcGIS for Windows Mobile
Apps – Application Templates

Make a Web Application

Click a template’s thumbnail to preview it or click its links to download it to your computer or publish it to the web.

Basic Viewer
- Make a web application
Apps - Esri Maps for Microsoft Office

Portal for ArcGIS

…… spatially enables your Office products
Apps - Operations Dashboard for ArcGIS

...... Provides Common Operating Picture for monitoring events
Apps - Collector for ArcGIS

- Available on iPhone and Android phones
- Targets field data collection
- Free to download and use
- Integrated into the ArcGIS platform
- Configurable using ArcGIS Online and Portal for ArcGIS
Apps - ArcGIS App

Discover and share content

Collect, edit, and update features and attributes

Use tools to search, identify, measure, and query
ArcGIS Online Versus Portal for ArcGIS
ArcGIS Online

A SaaS offering for sharing and Collaboration of geospatial information

ArcGIS for Mobile

ArcGIS for Desktop

ArcGIS Explorer

Rich Internet Clients

ArcGIS Online

Server

Data Tier
ArcGIS Online

A SaaS offering for sharing and Collaboration of geospatial information
Organization

Executives, Managers

Knowledge Workers

Field Personnel

ArcGIS Online
Portal for ArcGIS – COTS product at 10.2

• **The on-premises option**

• **Solution when**
  - Additional security demands
  - No public cloud option

• **Allows for**
  - Enterprise integration *(e.g. security)*
  - More extensive customization

• **Requires**
  - Installation
  - Infrastructure
  - Operations and management
Portal for ArcGIS

A COTS Software for sharing and Collaboration of geospatial information within your Organization

ArcGIS for Mobile
ArcGIS for Desktop
ArcGIS Explorer
Rich Internet Clients
ArcGIS for Server
Data Tier
Portal for ArcGIS 10.2

• Product Details – What do you get?

• Architecture

• Deployment
Portal for ArcGIS - An Enterprise Class Product

- Integrates with your Organizations Security Framework
- Works in Virtualized Environments
- Works in the Cloud
Portal for ArcGIS – Components and Security

- Website
- Web App Templates
- Sharing API
- Repository

Client Applications & Browsers

Private Network

Web Server

Web Adaptor for ArcGIS

Portal for ArcGIS

- Website
- Web App Templates
- Sharing API
- Repository

Enforce HTTP authentication at Web Server

Supports -
- Identity Stores
- Active Directory
- LDAP
- Public Key Infrastructure
- Integrated Windows Authentication
Supported Content Formats

• **Maps & Data**
  - WMS, KML, CSV, TXT, GPX, & SHP
  - Web maps
  - Open Street Map & Bing
  - Map, image & feature services
  - Map / Layer packages & templates (.mpk .lpk .mxd .lyr)

• **Apps**
  - Web, mobile and desktop *(Can include code samples)*

• **Tools**
  - Geocoding, GP, Geodata, & Network Analyst services
Portal for ArcGIS – A GIS Content Management System.

- More than just a **Catalog** where you can register items, search items, share items and use items.

- Portal provides an **Authoring** Environment – Create Webmaps, Create Web Applications.

- Portal provides a Services **Publishing** Environment – Upload static content to Portal and have the portal publish it as a Service.
Portal and Server Federation

Federated Server – A Server whose security is managed by the Portal
Portal – Working with Services

- Portal
- Identity Store
- Client Applications & Browsers
- Registered Services
- Additional login may be required
- Federated Services
- Hosted Services
- SSO from Portal to Server
- Server
- Your Enterprise
- Foundational Content and Utility Services
Portal for ArcGIS 10.2

- Demonstration

- Examine the Role of Portal Administrator

- Use Portal to add/create items

- Using ArcGIS for Desktop with Portal for ArcGIS
The ArcGIS Platform
Implementation Considerations
ArcGIS Platform Deployment Patterns

SaaS

Portal
- SDKs
- Online
- Maps
- Apps

GIS Services Infrastructure
- Data Tier
- GIS Servers

Content
- Geoenrichment
- Geocoding
- Basemaps
- Network

Software

ArcGIS Online for Organizations

Portal for ArcGIS

ArcGIS for Server

Data Appliance for ArcGIS
Implementing Portal for ArcGIS

- Typical activities
  - Assessment & planning
  - Installation & configuration
  - Security integration
  - Content preparation & registration
  - Web Map authoring & sharing
  - Custom app development and/or integration
  - Deployment (*staging, production*)
  - End user engagement, socialization
  - IT training & support planning
  - Operations, maintenance, and support
Typical Roles & Responsibilities

• Key participants
  
  • Content Owner / Data Steward
  • Web Map Author / Domain Expert
  • Portal Administrator
  • System Administrator
  • Program Manager
Portal for ArcGIS Deployment Patterns

- Shared Machine for Portal & Server
- Separate Machines for Portal & Server
- Multiple Machine Portal Configurations
- High-Availability Portal Configurations
Best Practices
Best Practices

• **Focus on Information Products** (basemaps, operational layers, project maps and data)

• **Make Portal the Authoritative Source for Geographic Content in the GIS Enterprise**

• **Use Built-in or Secured Groups for Managing Authoritative Content** (basemaps, operational layers)

• **Create a Stewardship Structure for Managing Authoritative Geographic Content in Portal**
Best Practices - Security

• For Single Sign-on (SSO) Security Use the Federated Servers Security Model (10.2 only)

• Align Portal Groups with AGS GIS Services Groups (when not federated security)

• Share Secured Content with Portal Public Galleries (integrated Portal experience)
Best Practices – Web Apps

- Use Portal Web Application Templates for Rich Map Viewing and Analysis (e.g. Swipe, Compare, Tabbed)

- Publish Existing Web Apps to Portal (sharable, searchable)

- Add Existing Web Apps to Portal Web App Template Library (web map enable)
Best Practices

• Use Web Maps to Integrate GIS Across Enterprise (business systems, applications, etc.)

• Share and Reuse Information with Web Maps (not copying datasets)

• For Portal Availability, Start with Simple Backup/Restore Approach (i.e. copy PORTALHOME)
Portal for ArcGIS - Operating System Requirements

- **Windows**
  - Windows Server 2008 Standard 64-bit (EM64T) SP2
  - Windows Server 2008 R2 64-bit (EM64T) SP1
  - Windows Server 2012 64-bit (EM64T)

- **Linux**
  - Red Hat Enterprise Linux Server 5 Update 7
  - Red Hat Enterprise Linux Server 6
  - SUSE Linux Enterprise Server 11 Service Pack 1
Portal for ArcGIS - Hardware Requirements

- Processor: 2 or more cores
- Memory/RAM: 2 GB of more
- Disk space: minimum 50 GB disk space
  - For data and items

- Firewall settings
  - Open ports 7080, 7443, 7005, 7099, 7199, and 7654

- Supported web browsers
  - Firefox 3.5 or higher
  - Google Chrome 10 or higher
  - IE 7, 8, 9, and 10