Introduction to Your First ArcGIS Enterprise Deployment

Thomas Edghill & Jonathan Quinn
Overview

- Web GIS options with Esri
- Building a Base ArcGIS Enterprise Deployment
  - Overview of Base ArcGIS Enterprise Deployment & Key Concepts
- ArcGIS Enterprise Builder
  - Installation and configuration
- New at 10.6
  - Upgrading
  - Command line tools
- Quick tips when using the Enterprise Builder
Web GIS Options with Esri

**ArcGIS Online**
- Hosted by Esri (SaaS)
  - Upgraded automatically (by Esri)
  - Esri controls SLA

**ArcGIS Enterprise**
- In your own infrastructure (Software)
  - Upgraded manually (by you)
  - You control your ArcGIS Enterprise SLA

**Core Web GIS functionality** (Apps, visualization, smart mapping, analysis...)
ArcGIS Enterprise | Components

- ArcGIS Web Adaptor
- Portal for ArcGIS
- ArcGIS Server
- ArcGIS Data Store
ArcGIS Enterprise | Components

- **ArcGIS Web Adaptor**: An Esri built application that integrates with your existing web server and appropriately directs network traffic for access to ArcGIS Enterprise.

- **Portal for ArcGIS**

- **ArcGIS Server**

- **ArcGIS Data Store**
The **web frontend** and **infrastructure backend** that supports a user’s interaction and overall experience with your ArcGIS Enterprise.
ArcGIS Enterprise | Components

ArcGIS Server

Provides the layers, services, and horsepower required to power your ArcGIS Enterprise.
The **Esri managed data repository** that stores the spatial content that has been copied to Portal.
ArcGIS Enterprise | Components

Three Types:
- Relational
- Tile Cache
- Spatiotemporal
ArcGIS Enterprise | Components

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ArcGIS Enterprise | Components

ArcGIS Web Adaptor

Portal for ArcGIS

ArcGIS Server

ArcGIS Data Store

NOTE: It is not a replacement to your Enterprise Geodatabases.
1. Create portal

2. Create ArcGIS Server site

3. Register (Relational & Tile Cache)

4. Register

5. Register

6. Federate

1. Create the portal

2. Create the ArcGIS Server site

3. Register the Data Store (Relational & Tile Cache)

4. Register the Web Adaptor for Portal for ArcGIS

5. Register the Web Adaptor for ArcGIS Server

6. **Federate** ArcGIS Server with Portal for ArcGIS & set as **Hosting Server**
Key ArcGIS Enterprise Concept: Federation

- Integrates security for Portal and Server
  - Portal user store controls access to the server
  - Services added as items in the portal
  - Sharing model controls access to services
    - Share with no one
    - Share with a group or the organization
    - Share with everyone
Key ArcGIS Enterprise Concept: Hosting server

- A server that hosts content published to the portal (copying data)
  - Requires a registered relational ArcGIS Data Store
- Needed for:
  - Standard analysis and GeoAnalytics
  - Publishing hosted layers
  - Batch geocoding
  - Adding shapefiles or csv to a map
ArcGIS Enterprise Builder

- New at 10.5.1
- Simplifies the setup and configuration of a single machine ArcGIS Enterprise deployment
- Asks the minimum number of questions required to get a deployment up and running
Demo: Our setup

Portal Home Page URL: https://webgis.esri.com/portal/home/
Portaladmin URL: https://webgis.esri.com/portal/portaladmin/
Services URL: https://webgis.esri.com/server/rest
Server Manager URL: https://webgis.esri.com:6443/arcgis/manager
Demo: ArcGIS Enterprise Builder
Installing, Configuring, and Customizing the Deployment
Recap: Customizing your portal

- Customizing the home page
  - Updating the banner and background

- Updating the behavior of the portal
  - Configuring utility services, (custom routing or geocoding, printing)
  - Configuring behavior within the web map viewer

Customizing the portal website
Recap: Administering your portal

- Adding members
  - Built-in and enterprise users

  - Security and SSL certificates
  - Portal logs
Using the ArcGIS Enterprise – connecting to the portal

- Portal home app URL: https://webgis.esri.com/portal/home
- Client apps URL: https://webgis.esri.com/portal
  - ArcGIS Pro
  - ArcMap
  - ArcGIS Maps for Office
  - Collector for ArcGIS
Demo: ArcGIS Enterprise Builder
Verifying and Using the ArcGIS Enterprise
New at 10.6
Upgrades and Command Line Tools
Upgrading an Enterprise Deployment

- Supports upgrades from 10.5.1
- One click experience that upgrades all components
Demo: ArcGIS Enterprise Builder

Upgrades
Command Line Utilities - Install

• Install a base deployment
  - Usage: <location of setup>/Builder.exe
  - Supported options:
    - GIS_INSTALLDIR= (Install directory)
    - GIS_USER_NAME= (Administrator username)
    - GIS_PASSWORD= (Administrator password)
    - PORTAL_AUTHORIZATION= (Path to Portal authorization file)
    - SERVER_AUTHORIZATION= (Path to Server authorization file)
Command Line Utilities - Configure

- Configure a base deployment
  - Usage: configurebasedeployment
  - Supported options:
    - -fn (First Name)
    - -ln (Last Name)
    - -u (Username)
    - -p (Password)
    - -e (Email)
    - -qi (Security Question index)
    - -qa (Security Question answer)
    - -ws (Server Web Adaptor URL for Java Web Servers)
    - -wp (Portal Web Adaptor URL for Java Web Servers)
    - -d (Content Directory)
    - -f (Properties file for the configurebasedeployment utility)
    - -h (Display help)
Command Line Utilities - Upgrade

- Upgrade a base deployment
  - Usage: `upgradebasedeployment`
  - Supported options:
    - `-s` (Performs silent upgrade)
    - `-h` (Displays help)
Quick Tips for the Enterprise Builder

- Don’t reinstall or uninstall components manually
- Only can upgrade ArcGIS Enterprise Builder deployments
- Run Patch Notification tool to check for available patches
- Run the security scans for Server and Portal
Resources

  - Topic - "Tutorial: Set up a base ArcGIS Enterprise deployment"
  - Other subjects – Pro licensing, SSL certificates, upgrading
- Technical Support – [https://support.esri.com](https://support.esri.com)
- Esri Showcase– ArcGIS Enterprise Area
Other sessions

- **Web GIS: A Crash Course**
  - Wednesday March 7, 10:30 AM – 11:30 AM
    - Catalina/Madera
  - And Friday March 9, 1:00 PM – 2:00 PM
    - Pasadena/Sierra/Ventura

- **ArcGIS Enterprise: Architecting your Deployment**
  - Wednesday, March 7, 1:00 PM – 2:00 PM & 5:30 PM – 6:30 PM
    - Catalina/Madera

- **Administration of ArcGIS Enterprise**
  - Wednesday, March 7, 4:00 PM – 4:30 PM
    - Demo Theater 3: Oasis 1-2

- **What’s New in ArcGIS Enterprise**
  - Thursday, March 8, 1:00 PM – 2:00 PM
    - Primrose B
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