

# Building your first ArcGIS Enterprise

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# Overview

- **Web GIS options with Esri**
- **Building a Base ArcGIS Enterprise Deployment**
  - Overview of Base ArcGIS Enterprise Deployment & Key Concepts
  - ArcGIS Enterprise Builder
  - Administering and customizing your ArcGIS Enterprise

# Web GIS Options with Esri

## ArcGIS Online

## ArcGIS Enterprise

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Core Web GIS functionality  
(Apps, visualization, smart mapping, analysis...)

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- Hosted by Esri (SaaS)
  - Upgraded automatically (by Esri)
  - Esri controls SLA

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

# ArcGIS Enterprise | Components



**ArcGIS  
Enterprise**

=



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

# ArcGIS Enterprise | Components



ArcGIS Web  
Adaptor

+



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 Web  
Adaptor



Portal for  
ArcGIS



ArcGIS  
Server

Gives you the ability to  
**publish** services and  
**share** maps and layers  
from your own business  
databases.



ArcGIS Data  
Store

# ArcGIS Enterprise | Components



ArcGIS Web  
Adaptor

+



Portal for  
ArcGIS

+



ArcGIS  
Server

+



ArcGIS Data  
Store

The **ArcGIS managed data repository** that stores the content that is hosted on the portal. It is not a replacement for your enterprise geodatabases.



# ArcGIS Enterprise | Components



ArcGIS Web  
Adaptor

+



Portal for  
ArcGIS

+



ArcGIS  
Server

+



ArcGIS Data — **Three Types:**  
Store

Relational

Tile Cache

Spatiotemporal

# ArcGIS Enterprise | Components



ArcGIS Web  
Adaptor

+



Portal for  
ArcGIS

+



ArcGIS  
Server

+



ArcGIS Data  
Store

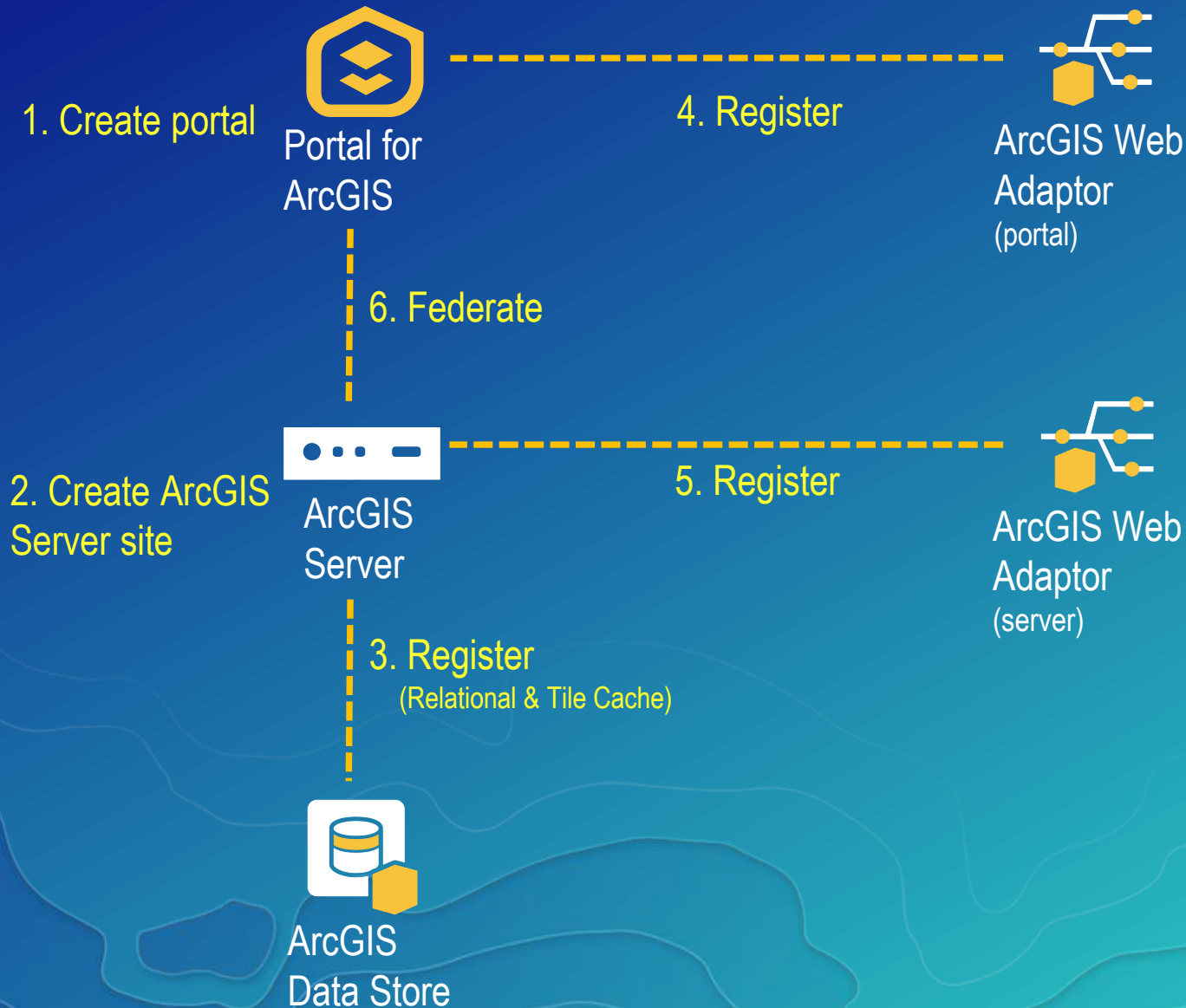
Three Types:

Relational

Tile Cache

Spatiotemporal

# ArcGIS Enterprise | Base Deployment Overview



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

## Add ArcGIS Server

Enter the URLs for accessing and administering your ArcGIS Server site. Also enter credentials for an administrator of the ArcGIS Server site.

Services URL:   
Example: <https://webadaptorhost.domain.com/webadaptorname>

Administration URL:   
Example: <https://gisserver.domain.com:6443/arcgis>

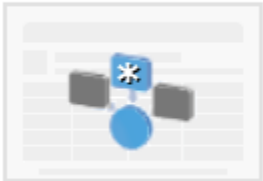
Username:

Password:

# 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 to a map

### Hosting Server



Optionally choose one of your servers to act as your portal's hosting server. Your portal members will be able to publish services to this server. ArcGIS Server's Managed Database must be configured on the site before it can be designated as the portal's hosting server.

WEBGIS.ESRI.COM/server ▼

No hosting server

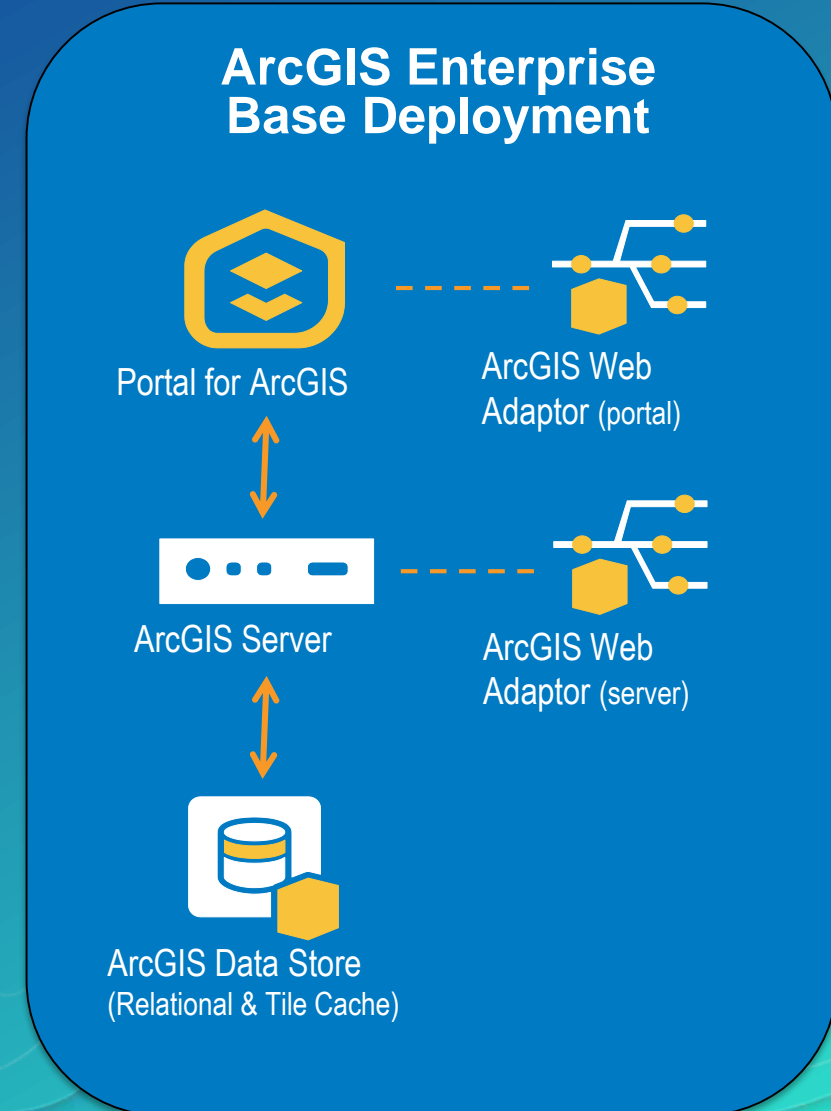
WEBGIS.ESRI.COM/server

Feature Analysis - Sta

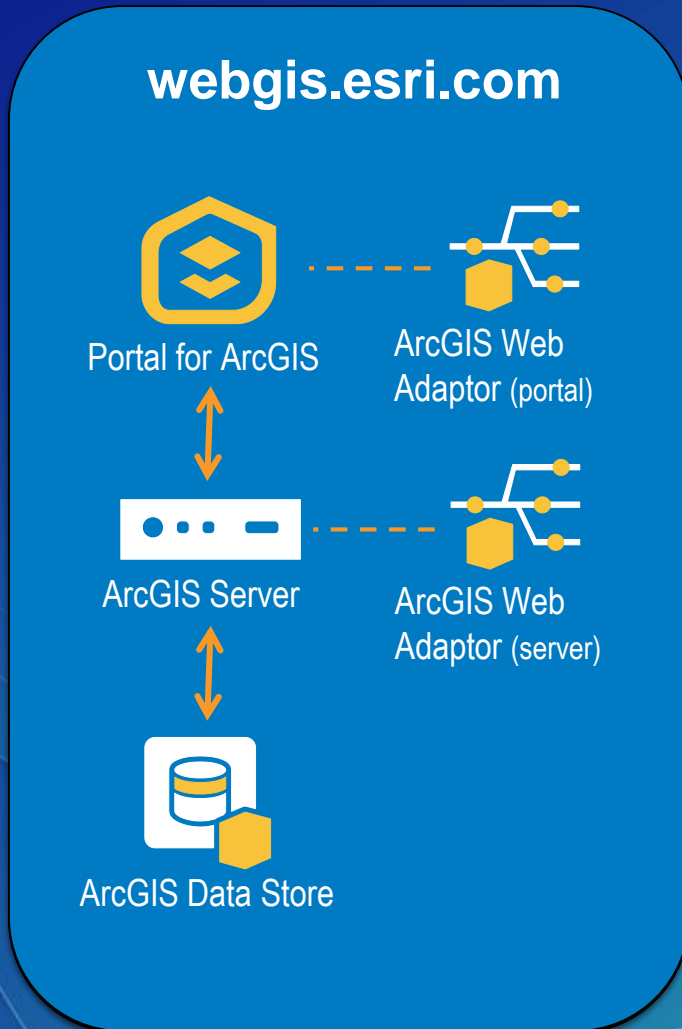


# ArcGIS Enterprise Builder

- 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>

UC



# Demo: ArcGIS Enterprise Builder

Configuring, Customizing, and Using

# Recap: Customizing your portal

- Customizing the home page
  - Updating the banner and background
- Updating the portal behavior
  - Configuring utility services
  - Configuring a custom basemap gallery

## Customizing the portal website





# Recap: Administering your portal

- Adding members
  - Built-in and enterprise users
- ArcGIS Portal Directory Admin API - <https://webgis.esri.com/portal/portaladmin>
  - 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

# Resources

- Review help documentation – <https://server.arcgis.com/en/documentation>
  - Topic - "Tutorial: Set up a base ArcGIS Enterprise deployment"
  - Other subjects – Pro licensing, SSL certificates, upgrading
- Technical Support – <https://support.esri.com>
- **Esri Showcase– ArcGIS Enterprise Area**

# Other sessions

- **ArcGIS Enterprise: Architecting your Deployment**

- Wednesday July 12, 10:15 AM – 11:30 AM
  - Hilton Bayfront – Sapphire Ballroom
- And Wednesday July 12, 1:30 PM – 2:45 PM
  - SDCC Room 09

- **ArcGIS Enterprise Security: An Introduction**

- Tuesday, July 11, 10:15 AM – 11:30 AM
  - SDCC Room 16 B
- And Thursday, July 13, 8:30 AM – 9:45 AM
  - SDCC Room 14 A

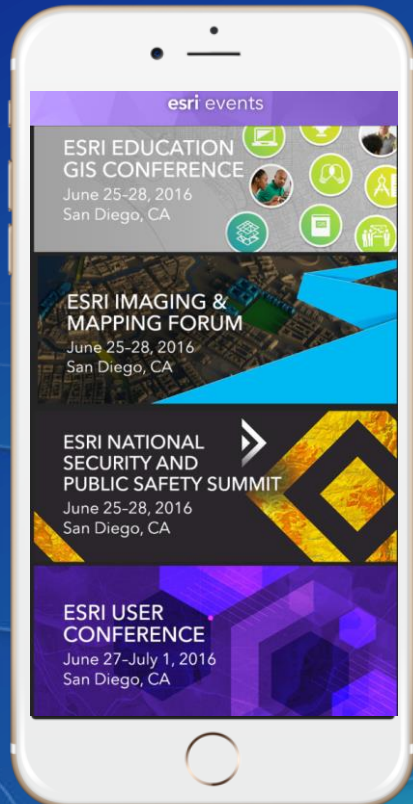
- **Web GIS: Architectural Patterns and Practices**

- Tuesday, July 11, 10:15 AM – 11:30 AM
  - SDCC Room 04
- And Thursday, July 13, 10:15 AM – 11:30 AM
  - Hilton Bayfront – Sapphire Ballroom A

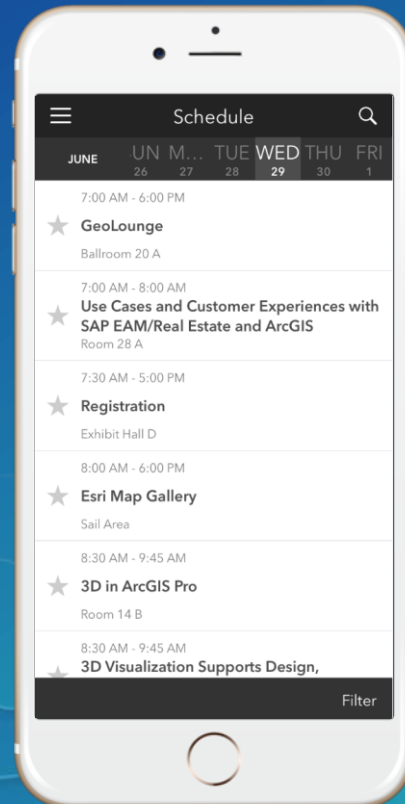
# Please take our Survey

Your feedback allows us to help maintain high standards and to help presenters

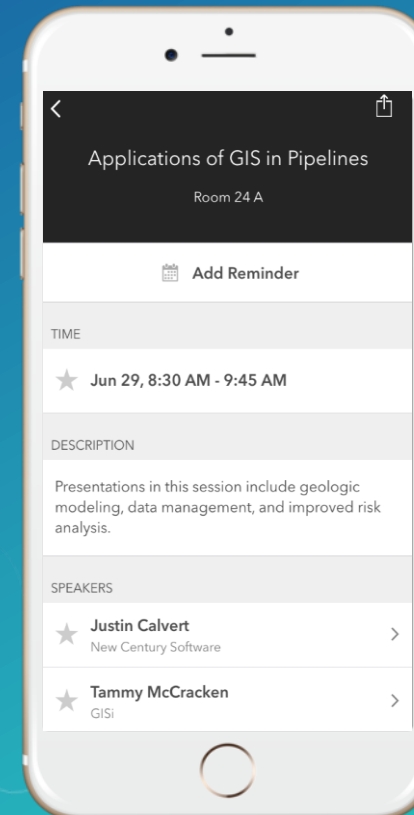
Find your event in the  
Esri Events App



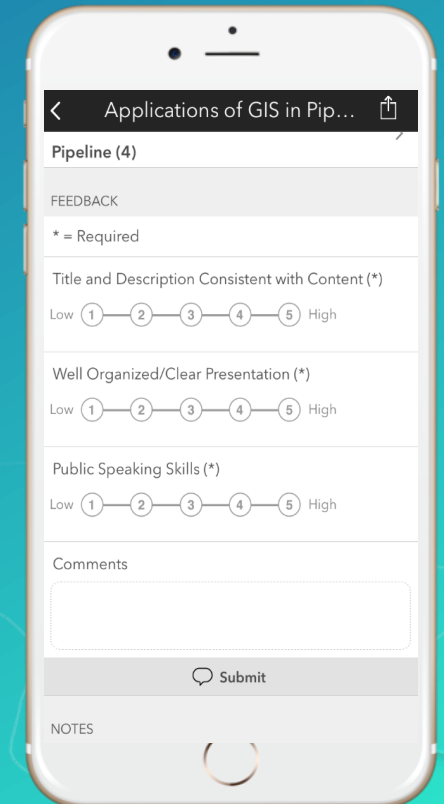
Find the session  
you want to review



Scroll down to the  
bottom of the session



Answer survey  
questions and submit







esri

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SCIENCE  
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