ArcGIS Enterprise is the new name for ArcGIS for Server
ArcGIS Enterprise is powerful server software for data management, mapping, and analysis that runs in your infrastructure. It is made up of a system of components that create a Web GIS that help you reach more people, through any device.
The base ArcGIS Enterprise deployment is the minimum configuration of ArcGIS Enterprise.
Prior to ArcGIS 10.5 there was only one named user level.
ArcGIS Enterprise Named User Levels

This pre-10.5 named user is now called a Level 2 named user.

Remember this is the user level required to complete the configuration of the base ArcGIS Enterprise deployment.
New at 10.5 is a Level 1 named user.

Members that are Level 1 named users are viewer only – they cannot own or create content.
ArcGIS Enterprise = ArcGIS Web Adaptor + Portal for ArcGIS + ArcGIS Server + ArcGIS Data Store
Server Capabilities

- Publish and Share GIS Content
- Share/run advanced geoprocessing tools (the same ones you have in ArcGIS Desktop)
- Share Imagery
- Perform raster analytics (even on massive raster collections)
- Do large volume analysis on vector and tabular datasets
- Analyze streaming data sources in real-time
- Perform advanced GeoEnrichment on your business intelligence data
Deploying ArcGIS Enterprise

ArcGIS Enterprise Builder, Chef, AWS, and Azure
Data Store Configuration Wizard

Easily configure your ArcGIS Data Store with the data store configuration wizard.

- Configure your data store as relational, tile cache, or spatiotemporal - or as a combination of types.
- Remember, at 10.5 you must use ArcGIS Data Store as your registered managed database with your hosting server.
How to deploy

It’s not all about deploying components by hand anymore!

For GIS professionals

ArcGIS Enterprise Builder
A wizard that installs and configures ArcGIS Enterprise on a single machine.

For those who want to deploy in the cloud

Machine Images and tools
Easily deploy and configure ArcGIS Enterprise in the two most popular public cloud environments.

For those with DevOps

CHEF
Automate installation and configuration in your infrastructure.
What’s New in the portal
ArcGIS Enterprise = ArcGIS Web Adaptor + Portal for ArcGIS + ArcGIS Server + ArcGIS Data Store
Living Atlas
Curated content that can be used in connected and disconnected ArcGIS Enterprise deployments

• The Living Atlas is the world’s foremost and largest collection of GIS data
• You can configure Living Atlas to use Online resources
• You can download international boundary data and host locally
ArcGIS API for Python
Control and use your Web GIS from a notebook

• New way to script and automate ArcGIS Enterprise
  - Administrative tasks
  - Analytical workflows
  - Mapping and visualization workflows
ArcGIS Pro

Publishing and sharing services with ArcGIS Enterprise and ArcGIS Pro
What’s new in ArcGIS Pro

• Remove the connection to ArcGIS.com manually or through installation parameters

• Set an initial portal list through installation parameters

• Vertical coordinate systems are used when sharing web scenes and web scene layers

• Expanded support for time zones, sync, and extract when sharing
Publishing to ArcGIS Enterprise

Melanie Summers
Distributed collaboration

ArcGIS Enterprise to ArcGIS Enterprise collaboration
ArcGIS Enterprise and ArcGIS Online collaboration
Distributed Collaboration with ArcGIS Enterprise @ 10.5

Emergency Management

Map + Live Layers

Fire

Public Works

Where liveness of the data is key!
Distributed Collaboration with ArcGIS Enterprise and ArcGIS Online @ 10.5.1

Mayor’s Office (ArcGIS Online)

Emergency Management (Enterprise)

Map + Copies of feature layers

Data snapshots are required between Enterprise and Online!
ArcGIS Enterprise and ArcGIS Online collaboration

Sam Williamson
Establishing trust

• Need network connectivity between portal
• Admin credentials are never exchanged
• Invitation and response files are used to exchange PKI-style public keys
• Keys are used to generate collaboration tokens
  - There are no accounts created specifically for collaboration
• For portals with web-tier authentication, web-tier credentials need to be provided during key exchange
  - IWA (NTLM) - service account
  - PKI - service account certificates
Linking a group to collaboration workspace - conceptual diagram

- **Desktop**
- **Web**
- **Device**
- **Server**
- **Online Content and Services**

**Transportation Dept. Host**

**Street Maintenance Group**

**Collaboration Workspace**

**Public Works Dept. Guest**

**Street Closures Group**

**Trusted Collaboration**
Collaboration workspaces

- At least one
- A conceptual space where collaborated content is collected and shared with participating Portals
- Associated with an event, project or theme
- Links portal group to collaboration
- Access mode is defined per workspace
1. Identify items that need to be replicated and serialize them into package file
2. Import items from package file into Host portal
3. Ask host to package items needed by Guest and then download the package
4. Import items from downloaded package into Guest portal
Synchronization

- Only items that have been modified or missing are exchanged
- Scheduled or immediately
- Item IDs of items are consistent across portals
Powerful new analytics
GeoAnalytics and Raster Analytics
ArcGIS has a new way of processing vector and tabular data with both spatial (location) and temporal (time) components that is designed for fast distributed analytics and storage.
GeoAnalytics adds to existing ArcGIS analysis capabilities

Geoprocessing + GeoAnalytics + Web GIS Layers

Powerful analytics + Distributed analytics and storage + Rich geoinformation model

more + new + extends
GeoAnalytics Server | Rich Collection of Analysis Tools

**Summarize Data**
- Aggregate Points
- Join Features
- Reconstruct Tracks
- Summarize Attributes
- Summarize Within

**Find Locations**
- Find Similar Locations

**Analyze Patterns**
- Calculate Density
- Create Space Time Cube
- Find Hot Spots

**Use Proximity**
- Create Buffers

**Manage Data**
- Copy to Data Store
GeoAnalytics Server | Familiar User Interfaces

ArcGIS Pro
Map Viewer
Geoprocessing Service

- REST API
- ArcGIS Python API

**System/GeoAnalyticsTools (GPServer)**

**Service Description:** The GeoAnalyticsTools service is provided for distributed analysis of large datasets.

**Tasks:**
- **AggregatePoints**
- **DescribeDataset**
- **JoinFeatures**
- **CreateBuffers**
- **CalculateDensity**
- **ReconstructTracks**
- **CreateSpaceTimeCube**
- **CopyToDataStore**
- **SummarizeAttributes**
- **SummarizeWithin**
- **FindSimilarLocations**
- **FindHotSpots**

**Execution Type:** esriExecutionTypeAsynchronous
ArcGIS has a new way to create and execute spatial analysis models and raster processing chains which leverages distributed storage and analytics.
Raster Analytics adds to existing ArcGIS concepts

- **Dynamic Raster Models**: on-the-fly processing
- **Geoprocessing Models / spatial analysis**: powerful analytics
- **Server-based distributed processing and storage**: scalable distributed analytics with persisted storage
- **Web GIS Layers**: rich geoinformation model

The diagram extends the existing ArcGIS concepts with new functionalities and more capabilities.
• Run models against data that is too big for single desktop
  - Global rasters (big geography)
  - Large Scale (high resolution)
  - Large Collections (many)

• Run models and meet time constraints
Please Take Our Survey on the Esri Events App!

Download the Esri Events app and find your event

Select the session you attended

Scroll down to find the survey

Complete Answers and Select “Submit”