

ArcGIS Enterprise: Administration Workflows

Essential concepts for enterprise administrators. Master techniques to configure and maintain an ArcGIS Enterprise solution that meets your organization's business needs.

Level: Advanced

Course Duration: 3 days

What is the course about?

You will learn about ArcGIS Enterprise architecture, server licensing roles and extensions, and the capabilities that support common GIS patterns of use. Best practices to manage servers, data, and services while ensuring high availability and system performance over time are covered.

Who is the target audience?

Enterprise Administrators

Are there any prerequisites?

Completion of ArcGIS Enterprise: Configuring a Base Deployment or equivalent knowledge.

What skills will I learn?

After completing this course, participants will be able to:

- Apply best practices to configure GIS resources and services
- Maintain system performance using workload separation and other best practices
- Configure distributed collaboration between multiple ArcGIS Enterprise portals
- Use ArcGIS Notebooks and ArcGIS APO for Python to automate common administrative functions

Topics

1. Business Needs and ArcGIS Enterprise solutions

- Mapping business needs to a system deployment
- Architecting the ArcGIS System: Best Practices
- Explore infrastructure capabilities
- Expanding capabilities
- Using the ArcGIS Enterprise Functionality Matrix

- Business needs and ArcGIS Server licensing role

2. Adding capabilities through federation

- Base ArcGIS Enterprise deployment
- Federating additional server sites
- Explore considerations for federating additional server sites
- Exercise environment

3. Web service fundamentals

- Web service fundamentals
- Explore user-managed data and ArcGIS-managed data
- Referencing registered data from ArcGIS Pro
- How layers enable efficient exposure of services
- Understand the relationship between services and layers
- Setting service properties
- Service properties and end-user functionality

4. Distributed Computing

- Distributed computing and business needs
- Explore ArcGIS Enterprise high availability
- Making ArcGIS Enterprise components highly available
- Explore workload separation
- Comparing high availability and workload separation Workload separation by server capability

5. ArcGIS Enterprise data management

- Types of ArcGIS-managed data
- Distributed data enables distributed analysis
- Explore distributed raster analytics results
- Types of user-managed data
- Branch versioning
- Getting ready for branch versioning

6. Administering ArcGIS Data Store

- ArcGIS Data Store
- Managing ArcGIS Data Store using command utilities
- ArcGIS Data Store backups

7. Web service internals and troubleshooting

- Service instance types
- Consider when to use shared instances
- Exploring service instances

8. The spatiotemporal big data store

- Understanding the spatiotemporal big data store
- ArcGIS Enterprise and the spatiotemporal big data store
- How the spatiotemporal big data store relates to other ArcGIS Enterprise components

9. Configuring a real-time analysis solution

- Real-time data
- Working with real-time data
- What is a geoevent?
- Explore configuring real-time analytics
- Building a GeoEvent Service in GeoEvent Manager

10. Distributed collaboration

- Distributed collaboration
- Sharing content between portals
- Planning for a collaboration
- Explore sharing content in a collaboration
- Establishing trust between portals

11. Automating ArcGIS Enterprise

- Automating administrative tasks
- ArcGIS Notebook Server
- Working with ArcGIS Notebooks
- Architecture considerations for ArcGIS Notebook Server