

Introduction to ArcGIS Server

Two days

Overview

ArcGIS Server provides a complete server-based GIS system that supports the use of centrally managed spatial data for mapping and analysis. This course introduces ArcGIS Server and teaches a workflow for creating and sharing GIS maps, globes, and tools. You learn how to publish maps, globes, and geoprocessing models that are optimized for performance and how to create out-of-the-box Web applications using ArcGIS Server Manager. The course covers using GIS services in both Web applications and ArcGIS Explorer. Installation and some configuration techniques for ArcGIS Server are also covered, but administration is not the focus of this course.

Audience

This course is designed for those new to ArcGIS Server who want to learn about its architecture, capabilities, and client applications.

Prerequisites and recommendations

Students should have completed ArcGIS Desktop II: Tools and Functionality or Learning ArcGIS Desktop or have equivalent knowledge.

Goals

- Understand the client and server components of the ArcGIS Server architecture.
- Describe the types of services available and the options related to each.
- Publish GIS services.
- Publish and use geoprocessing tasks.
- Publish a geodata service for data replication and extraction.
- Access services using a variety of clients (ArcMap, ArcGIS Explorer, and Web applications).
- Build Web mapping applications that use GIS services.
- Administer and optimize GIS services.

Topics covered

ArcGIS Server overview: ArcGIS Server components; Authoring content for GIS services; Publishing GIS services; Creating Web mapping applications to use map services; Using Web mapping applications in various clients; Administering ArcGIS Server using ArcCatalog and ArcGIS Server Manager; Ensuring data access for ArcGIS Server.

Map and image services: Map service capabilities; Authoring considerations to optimize performance; Enabling capabilities for interoperability; Using ArcGIS Online services.

Caching map services: Improving performance with caches; Developing a caching strategy; Generating and maintaining map service caches.

Globe and 3D services: Publishing KML-enabled map services; Authoring content for globe services using ArcGlobe; Caching globe services; Using globe services in ArcGIS Explorer.

Geoprocessing services: Considerations when authoring models for geoprocessing services; Using geoprocessing tasks in Web mapping applications, ArcGIS Explorer, and ArcMap.

Geodata services: Providing Web access to data; Data extraction and replication; Geodata service workflows.

Editing in Web mapping applications: Authoring content for editable map services; Publishing map services for editing; Configuring the Editing task for Web mapping applications; Using the Editing task.

Customizing ArcGIS Server applications: Making simple customizations to Web mapping applications; Configuring an ArcGIS Explorer home server; Creating mobile applications; Resources for developers; Using ArcGIS JavaScript APIs.

Administration and optimization: Installing ArcGIS Server; Post installation; Local access to the server; Data access for the server; Options for scaling your ArcGIS Server system; Troubleshooting.