Introduction to the Multiuser Geodatabase

Two days

Overview

The multiuser geodatabase uses ArcSDE technology and a relational database management system (RDBMS) to store large amounts of GIS data that many users may concurrently access. This course, designed for the end user of a multiuser geodatabase, shows how to leverage the powerful capabilities offered by the multiuser geodatabase. You learn how to perform GIS tasks in a multiuser environment and how the multiuser environment differs from the file geodatabase or personal geodatabase for Microsoft® AccessTM environment. The course also discusses geodatabase functionality in the context of an editing environment, fundamental editing workflow procedures, and clientside performance considerations. This course does not focus on a specific supported RDBMS and is suitable for those working with desktop, workgroup, and enterprise ArcSDE geodatabases.

Audience

This course is designed for experienced ArcGIS users who are familiar with the geodatabase data model and are migrating to a multiuser geodatabase environment. GIS managers will also find the course a useful introduction to the capabilities and uses of a multiuser geodatabase. Those who want to learn how to create the structure of a geodatabase and add "smart" features such as subtypes, domains, and relationship classes, may wish to enroll in Building Geodatabases, which pairs well with this course.

Prerequisites and recommendations

Students should have completed ArcGIS Desktop II: Tools and Functionality or Learning ArcGIS Desktop and ArcGIS Desktop III: GIS Workflows and Analysis or have equivalent knowledge. Database administration experience is not required

Goals

- Describe advantages of working with a multiuser geodatabase.
- Understand the differences between desktop, workgroup, and enterprise geodatabases.
- Understand properties of geodatabase connections.
- Examine vector and raster data in a multiuser geodatabase.
- Optimize the performance of client applications.
- Edit data stored in a multiuser geodatabase.
- Understand fundamental concepts of versioning workflow procedures.
- Perform checkout/check-in geodatabase replication for editing.

Topics covered

Geodatabase basics: Overview of geodatabase types; Advantages of ArcSDE geodatabases; *ArcSDE geodatabases:* desktop, workgroup, and enterprise.

Exploring and connecting to the geodatabase: Application server, direct, and OLE DB connections.

Exploring geodatabase components: Moving data between geodatabases; Vector and raster data properties; Granting privileges on data.

Optimizing clientside performance: Performance tips for working with multiuser geodatabases in ArcCatalog and ArcMap.

Non-versioned editing: Understanding and performing non-versioned editing; Concurrency issues.

Versioned editing: Working with versions; Version properties and permissions; Multiuser editing in one version and conflicts; Merging versions: reconcile, post, and conflicts.

Geodatabase replication: Overview of replica types: checkout/check-in, one-way, and two-way; Understanding and performing checkout/check-in replication.