

Managing Editing Workflows in a Multiuser Geodatabase

Three days

Overview

When deploying a multiuser geodatabase, the editing workflow that is administered can mean the difference between success and failure. This course provides an insider's look at how to manage editing workflows in a multiuser geodatabase. You learn how to use the different editing environments and integrate these environments into their business workflow. Additionally, you learn how ArcSDE technology implements versioned and non-versioned editing through the use of geodatabase system metadata tables and user delta tables. Solid strategies for maintaining multiuser geodatabase performance are explored.

Audience

This course is designed for ArcSDE users and experienced ArcGIS users who want to learn how to manage their editing environment in a multiuser geodatabase. This course is suitable for those working with personal, workgroup, and enterprise geodatabases.

Prerequisites and recommendations

Students should have completed ArcGIS Desktop II: Tools and Functionality or Learning ArcGIS Desktop or have equivalent knowledge. Familiarity with ArcSDE architecture and working on a Windows platform is also required.

Goals

- Understand the importance of designing an editing workflow.
- Edit data in a non-versioned and versioned environment.
- Discuss and implement various editing workflows.
- Understand ArcSDE system tables and user delta tables.
- Understand how to manage multiple versions.
- Use geodatabase archiving.
- Describe geodatabase replication.
- Create and use multiversioned views.
- Monitor versioned geodatabase performance.
- Understand and implement techniques for maintaining performance.

Topics covered

Overview of editing workflow options: Introducing the concept of short and long transactions; Overview of non-versioned editing; Overview of versioned editing.

Workflow strategies: Editing options; Understanding workflow considerations; Overview of different

workflow strategies. Non-versioned editing: Understanding non-versioned editing; Exploring concurrency issues; Examining DBMS locking; Exploring DBMS blocking issues; Workflow considerations; DBMS integrity constraints.

Versioned editing architecture: Tracking and merging changes; Where and how changes are stored; Registering feature classes as versioned; Geodatabase user and system tables participating in the version model.

State tree: States and the state tree; Editing examples and growth of the tables; Single-user editing example and the state tree; Multiuser editing example and the state tree; Auto-reconcile options. Merging versions: Implicit and explicit reconcile; Describing the reconcile action; Reconcile and the state tree; Conflict detection options; Conflict resolution; Reviewing conflicts; Describing the post action; Post and the state tree.

Version workflow: Version scenarios and considerations; Workflow examples; Developing version hierarchy; QA/QC, security, design, and editing stages; Potential reconcile and post issues.

Move to base editing: Architecture of move to base; How to register with move to base; Understanding the user tables; Move to base and the state tree; Move to base and conflict detection.

Geodatabase archiving: Preserving change to the data; Common historical queries; History pre 9.2; Archiving overview; Architecture of geodatabase archiving; Archive time; Answering common historical questions; Workflow benefits and considerations.

Geodatabase replication: Workflow requirements; Overview of geodatabase replication; Understanding check out/check in; One-way and two-way replication; Exploring synchronization.

Implementing views: Overview of multi-versioned views; Creating a multi-versioned view; How to use a multi-versioned view; Workflow considerations.

Bulk editing and loading: Understanding bulk change; Describing bulk change and the state tree; Workflow recommendations.

Management and performance: Contributing factors to decreased performance; Compressing the database; Statistics and indexes.