

Deploying and Maintaining a Multiuser Geodatabase

STUDENT EDITION

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Course introduction

- Introduction
- Course goals
- Additional resources
- Installing the course data
- Icons used in this workbook

1 What is a multiuser geodatabase?

- Lesson introduction
- Multitier architecture
- Identifying the appropriate software tier
- Multiuser geodatabase components
- Hierarchy of users
- Comparing tools for making a multiuser geodatabase
- Create an enterprise geodatabase
- Explore the repository
- Exercise flow
- Orientation to the course exercise environment
- Exercise 1A: Create a multiuser geodatabase in SQL Server
 - Confirm services on the RDBMS server
 - Install RDBMS client software
 - Create a multiuser geodatabase
- Exercise 1B: Create a multiuser geodatabase in PostgreSQL
 - Confirm services on the RDBMS server
 - Configure PostgreSQL server
 - Create a multiuser geodatabase
- Lesson review

2 Connecting to the geodatabase

- Lesson introduction
- RDBMS client software
- Create a connection
- Software version compatibility
- Authentication methods
- Connection files
- Exercise 2: Configure connections to a multiuser geodatabase
 - Create a connection using the Catalog pane
 - Manage active connections
 - Connect to a specific version
 - Create a folder connection
 - Create a connection using a geoprocessing tool
 - Manage connection files
- Lesson review

3 Loading data into the geodatabase

Lesson introduction

Data owner account

Create the data owner account

RDBMS considerations

Geoprocessing environment settings

Updating datasets

Automation

Exercise 3: Load data into the geodatabase

- Create the data owner account and connection

- Load multiple datasets into a geodatabase

- Append data into a single feature class

- Load data by importing an XML workspace document

- Update datasets

Lesson review

4 Configuring privileges

Lesson introduction

Data users

Creating data users

Roles

Manage users

Defining roles

Designing roles

Securing credentials

Exercise 4: Configure privileges for data use

- Create roles

- Create users

- Apply privileges

- Test privileges

Lesson review

5 Managing storage

Lesson introduction

Configuration parameters

Configuration keywords

Supported spatial types

DBTUNE table

Create and update keywords

Exercise 5: Customize storage using configuration keywords

- Investigate Help documentation

- Export DBTUNE

- Modify the DEFAULTS keyword

- Create a custom keyword
- Import DBTUNE
- Load data using modified and new keywords
- Lesson review

6 Maintaining the geodatabase

- Lesson introduction
- Attribute indexes
- Statistics
- Manage attribute indexes and statistics
- Spatial indexes
- Maintaining geodatabase performance for versioned data
- Scheduling tasks
- Manage performance tasks with Python
- Schema locks
- View and clear locks
- Exercise 6: Maintain performance in your geodatabase
 - Import census data
 - Create indexes
 - Update statistics
 - Compress the geodatabase
 - Rebuild indexes
 - Automate performance tasks
- Lesson review

7 Associating data

- Lesson introduction
- Query layers
- Create query layers
- Database views
- Create database views
- Choosing between query layers and database views
- Determining whether to create query layers or database views
- Exercise 7: Associate data with database views and query layers
 - Create a query layer
 - Explore election data
 - Create database views
 - Use database views
- Lesson review

8 Applying the geodatabase workflow

- Lesson introduction
- Geodatabase workflow
- Geodatabase responsibilities

Geodatabase tasks

Exercise 8: Configure and manage a multiuser geodatabase

(PostgreSQL only) Configure PostgreSQL server

Create the Manhattan geodatabase

Load data into the geodatabase

Apply privileges

Maintain performance

Lesson review

Appendixes

Appendix A: Esri data license agreement

Appendix B: Answers to lesson review questions

Lesson 1: What is a multiuser geodatabase?

Lesson 2: Connecting to the geodatabase

Lesson 3: Loading data into the geodatabase

Lesson 4: Configuring privileges

Lesson 5: Managing storage

Lesson 6: Maintaining the geodatabase

Lesson 7: Associating data

Lesson 8: Applying the geodatabase workflow

