



CITY OF RAPID CITY

RAPID CITY, SOUTH DAKOTA 57701-2724

Growth Management Department

300 Sixth Street

Marcia Elkins, Director
Growth Management Department
city web: www.rcgov.org

Phone: 605-394-4120
Fax: 605-394-6636
e-mail: marcia.elkins@rcgov.org

MEMORANDUM

TO: Mayor Shaw
Rapid City Council

FROM: Marcia Elkins, Director
Growth Management Department

DATE: April 5, 2004

RE: Travel Request for Bimende Malik
ArcSDE Administration for SQL Server

The GIS Division, Growth Management Department is requesting approval of the Travel Request for Bimende Malik, GIS Analysis, to attend the ESRI Training on ArcSDE Administration for SQL Server in Broomfield, CO, June 7-11, 2004.

The training will provide instruction on configuring SQL Server to support ArcSDE, install and configure ArcSDE, load vector and raster data, monitor and optimize queries and manage a multiversioned geodatabase. The training is required to provide staff with the education necessary to support the transition of the GIS software to the SDE based system.

Travel and training expenses for staff to attend the ArcSDE Administration for SQL Server training is not to exceed \$2,957.26.



EQUAL HOUSING
OPPORTUNITY

EQUAL OPPORTUNITY EMPLOYER

**CITY OF RAPID CITY
TRAVEL REQUEST**

Growth Management

Person requesting travel Bimende Malik Department #105 - GIS

I hereby request permission to travel for the following purpose: (Give specific nature of business and interest of the City to justify cost involved.)

ArcSDE Administration for SQL Server

List all other City employees, if any, making the trip for the same purpose: na

Place of meeting or destination: ESRI-Denver, Broomfield CO

Date of meeting June 7-11, 2004

Date trip to begin June 6, 2004 Date trip will end June 12, 2004

Method of transportation requested personal vehicle


Estimated transportation cost 399.33x2x17¢ 4.99x2x5x17¢ \$ 144.26

Meals 208.00

Lodging 6 days \$80.00 480.00

Other costs - description Registration 2125.00

Total estimated cost of trip \$ 2957.26

Signed  Date March 15 Date 4/5/04
(person requesting travel) (Department Head)

When the cost of the trip will exceed \$500, per employee, this section must be signed.

In accordance with the provisions of Rapid City ordinances and travel regulations, consent is hereby given for travel as requested in the foregoing application. Maximum cost of trip authorized is \$ _____

Approved: _____ Date _____
Mayor

When the cost of the trip will exceed \$1,500, per event, Council approval is required.

Approved by Common Council on _____ (Date)

White copy - Mayor Yellow copy - Finance Gold copy - Department copy

ESRI Instructor-Led Training

ArcSDE Administration for SQL Server

Five days

Overview

This course teaches how to configure SQL Server to support ArcSDE, install and configure ArcSDE, load vector and raster data, monitor and optimize queries, and manage a multiversed geodatabase. Participants learn to monitor access to their ArcSDE database by using ArcSDE and DBMS tools. Guidelines for adjusting resource allocation as database usage changes are discussed. Management of ArcSDE for access from ArcGIS clients, including multiversed viewing and editing, is highlighted. The course focuses on understanding how ArcSDE software interacts with SQL Server and proposes solid strategies for maintaining and managing an enterprise GIS database.

Topics from *Introduction to ArcSDE* are included throughout the course; participants do not need to attend that course first.

Audience

This course is for experienced SQL Server database administrators who need to manage ArcSDE databases and clients.

Goals

- Configure SQL Server to support ArcSDE
- Install and configure ArcSDE
- Create vector feature classes and raster datasets
- Configure, create, and monitor application server, direct, and OLE DB connections
- Customize storage for ArcSDE vector and raster data
- Monitor and optimize query access
- Manage a multiversed geodatabase

Topics covered

ArcSDE installation: Evaluating the SQL Server configuration; Preparing SQL Server to use ArcSDE; Installing ArcSDE; Starting and stopping the ArcSDE server; Exploring ArcSDE system tables; Configuring ArcSDE and SQL Server on separate hosts

Data loading: Creating storage space; Creating users and assigning privileges; Calculating a spatial domain; Creating vector feature classes from coverages and shapefiles; Creating raster datasets from image files; Building raster catalogs and mosaics; Estimating storage needs; Examining feature class components; Customizing storage with the DBTUNE table

Monitoring data access: Creating application server, direct, and OLE DB connections; Monitoring connections with ArcSDE and SQL Server tools; Tracing client queries; Reporting system I/O

Optimizing data access: Analyzing spatial index performance; Creating a group layer; Creating a spatial view; Working with overview and magnify windows, raster wire frames, scale-dependent layers, and thumbnails

Managing a multiversed geodatabase: Registering feature classes as versioned; Choosing version privileges; Reconciling and posting changes between versions; Compressing the state tree; Monitoring changes to the adds, deletes, and system tables

Prerequisites and recommendations

Participants in this course should have experience with the following:

- SQL Server database administration or application development
- Administering a Windows operating system
- Managing database storage
- Creating SQL Server users and assigning their privileges
- Designing tables, indexes, constraints, and triggers
- Using spatial and tabular data from a GIS application
- SQL

Price: \$2,125 (per seat)

Classes can be taught onsite at a client's facility (up to 12 participants) for a fixed price of \$16,625.00. Clients of the United States federal government are entitled to special pricing for onsite training classes.

When clients attend classes at our ESRI facilities, special pricing is available to the United States federal government and to qualifying educational institutions, libraries, and museums. Contact the ESRI Learning Center for eligibility requirements. Prices are subject to change without notice.

[View Schedule of Classes and Register](#)

Outline of Topics

(click to expand) **[Show/Hide All](#)**

[Introduction](#)

[Configuring SQL Server for ArcSDE](#)

[Installing and troubleshooting ArcSDE](#)

[Managing storage](#)

[Loading data](#)

[ArcSDE administrator and user schemas](#)

[Tracing layer access](#)

[Customizing feature class storage](#)

[Optimizing query access](#)

[Working with versions](#)

[Maintaining geodatabase integrity](#)