

Microsoft SQL Server 2000: System Administration

Objectives: This course teaches you how to install, configure, administer, and troubleshoot Microsoft SQL

Server 2000 in a Windows 2000 Server environment. This course also assists you in preparing for the Microsoft Certified Systems Engineer and Microsoft Certified Database Administrator Exam #70-228, Installing, Configuring, and Administrating Microsoft SQL

Server 2000 Enterprise Edition.

Prerequisites: To ensure your success, we recommend you first take either the

Windows 2000: Installation and Administration or the

Windows 2000 for Windows NT Administrators: courses, or have equivalent knowledge.

Duration: 3 days

Additional Information: Consultancy or Tailored courses are available upon request

Course Contents

Introduction to Microsoft SQL Server

Exploring the Components of SQL Server Understanding the SQL Server Architecture

Exploring the Features of Microsoft SQL Server Administering SQL Server

Discussing the Components of SQL Server Determining SQL Server Administration Tasks

Identifying the Default Databases and System
Identifying Administrative Utilities

Tables

Installing SQL Server

Identifying the Requirements for InstallingSQL

Exploring the SQL Server Installation

Server

Choosing the Hardware and Software for SQL Starting SQL Server Enterprise Manager

Server 2000

Selecting Your Server's Hardware Viewing the System Databases Within SQL

Server EnterpriseManager

Identifying Where to Install SQL Server Creating and Working with a Database Diagram

Choosing Installation Options for SQL Server Using SQL Server Enterprise Manager to

Configure Your Server

Installing SQL Server Troubleshooting the SQL Server Installation

Creating and Configuring a Service Account for Testing the SQL Server Installation

SQL Server

Performing Unattended Installations Viewing the SQL Server Log

Using the SQL Server Service Manager to Manage the SQL Services

Designing and Implementing Databases

Developing a Strategy for Implementing Changing the Default Filegroup

Databases

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Course Contents

Using SQL Server Enterprise Manager to Discussing SQL Server Terminology

Configure a Database

Identifying the Space Requirements for

Databases

Using Stored Procedures to View Database

Information

Viewing Space Statistics Managing Databases

Optimizing Database Performance Configuring SQL Server to Automatically Expand

a Database

Creating Databases Manually Expanding a Database and its

Transaction Log

Using Transact-SQL to Create a New Database Configuring SQL Server to Automatically Shrink

a DatabaseFile

Using SQL Server Enterprise Manager to Create Deleting a Database

a New Database

Creating and Managing Tables

Creating Tables Using Transact-SQL to Work with Tables

Designing Tables Using the INSERT Statement to Add Rows to a

Table

Choosing Data Types for a Table Using the UPDATE Statement Identifying the Role of Constraints in a Table Using the DELETE Statement Using SQL Server Enterprise Manager to Create Formatting Columns in a Query

a Table

Modifying the Structure of a Table

Designing and Configuring SQL Server Security

Identifying the Security Features of SQL Server Implementing Statement and Object Permissions

Identifying the SQL Server Security Components Comparing Permission Types

Configuring Your Server's Authentication Mode **Granting Statement Permissions** Configuring Encryption **Granting Object Permissions** Creating Login Accounts **Denying Statement Permissions** Creating a Login Account for a Windows Account Denying Object Permissions

Denying Login Privileges Revoking Statement and Object Permissions

Creating and Testing a SQL Server Login

Account

Creating and Using an Application Role

Assigning Login Accounts to Server Roles Creating and Using a View Assigning Login Accounts as Database Users **Defining Linked Servers** Assigning a Login Account as a Database User

in SQL ServerEnterprise Manager

Defining a Linked Server

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Adding a Database User to a Database Role	Configuring Linked Server Security
Creating a User-defined Database Role	
Importing and Exporting Data	
Introduction to Data Transfer	Using bcp to Generate a Transfer File
Comparing the Data Transfer Utilities	Using bcp to Import a Transfer File
Creating a DTS Package by Using the DTS Import/Export Wizard	Configuring XML Support
Using DTS Designer to Modify a Package	Creating a Virtual Directory for SQL Server
Bulk Data Transfers	Running a URL Query
Backing Up SQL Server Databases	
Planning Backups	Performing a Backup of the Master Database to a PermanentBackup Device
Planning to Back Up Your Server	Performing a Parallel Backup of the Class_mgr Database
Reviewing the Backup Process	Performing a Filegroup Backup
Backing Up Databases	Scheduling an Automatic Backup of the Msdb Database
Performing a Backup	Designing Your Backup Strategy
Creating a Permanent Backup Device	
Restoring SQL Server Databases	
Restoring User-defined Databases	Restoring the Class_mgr Database
Observing an Automatic Recovery	Recovering System Databases
Reviewing User-initiated Database Recovery	Simulating a Master Database Failure
Creating Tables and Backing Up	Instructor Demo: Removing the Read-only Attribute From the SQL Server Installation Files
Simulating a Failed Database	Restoring the Master Database
Automating SQL Server Administration	
Configuring SQL Server to Send Mail	Managing Jobs
Verifying the Configuration of the SQL Server Agent Service	Creating a Job
Instructor Demo: Configuring a Mailbox for the SQL ServerService Account	Viewing Job History Information
Creating a Mail Profile	Manually Running a Job
Configuring SQL Agent Mail	Running the Database Maintenance Plan Wizard
Configuring the SQL Server Service to Send and Receive Mail	Managing Alerts
Using SQL Mail to Send Query Results	Creating an Alert
Defining SQL Operators	Configuring Event Forwarding

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Course Contents

Using SQL Server Enterprise Manager to Define Troubleshooting Alerts

Operators

Specifying a Fail-Safe Operator

Designing, Configuring, and Managing Replication

Introduction to Replication Configuring a Pull Subscription

Identifying Publishable Information Creating an Initial Snapshot for a Publication

Choosing a Replication Model Monitoring and Maintaining Replication

Choosing a Replication Strategy

Using the Replication Monitor

Configuring Replication Maintaining the Distribution Database

Configuring a Publisher/Distributor Creating Replication Scripts in SQL Server

Enterprise Manager

Configuring Distributor and Publisher Properties Troubleshooting Replication

Creating a Publication Examining Replication Information in the Error

Logs

Modifying a Publication

Implementing Fault Tolerance

Configuring Fault Tolerance in SQL Server 2000 Exploring Clustering

Monitoring SQL Server

Enterprise Manager to Monitor Your Server

Discussing Server Optimization and Monitoring Using

Techniques

Using SQL Server Profiler

Identifying the Factors That Affect the

Performance of SQLServer

Using SQL Query Analyzer to Monitor a Query

Using Monitoring Tools Choosing a Monitoring Tool

Observing Your Server's Current Activity