

Administering a Microsoft SQL Server 2000 Database

Introduction

This course provides students with the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of Microsoft® SQL Server™2000.

Pre-Requisites

Before attending this course, students must have:

- Experience using the Microsoft Windows® 2000 operating system
- An understanding of basic relational database concepts
- Course 2151, Microsoft Windows 2000 Network and Operating System Essentials
- Course 2152, Implementing Microsoft Windows 2000 Professional and Server

Outcomes

After completing this course, students will be able to:

- Describe SQL Server architecture.
- Plan for a SQL Server installation, and then install an instance of SQL Server.
- Manage files and databases, including determining resource requirements.
- Choose a login security method, configure login security, plan and implement database permissions, and describe how to help protect SQL Server in an enterprise network.
- Perform and automate administrative tasks and create custom administrative tools.
- Back up databases and implement a backup strategy.
- Restore databases.
- Monitor and optimize SQL Server performance.
- Transfer and migrate data into databases.
- Maintain the high availability of SQL Server.
- Describe how to replicate data from one SQL Server to another.



Learning Solutions

(1300 86 87246
1300 TO TRAIN

Course Details

Course code: MS 2072

Duration: 5 days

Starting time: 9.00 am

Finishing time: 4.30 pm

Lunch and refreshments are provided.

Booking guidelines

Contact our Learning Consultants on 1300 86 87246 and we will assist you with your booking.

Course Outline

Ø Module 1—SQL Server Overview

The following topics are covered in this module:

- What Is SQL Server
- SQL Server Integration
- SQL Server Databases
- SQL Server Security
- Working with SQL Server

Lab

- SQL Server Overview

Ø Module 2— Planning to Install SQL Server

- Hardware Installation Considerations
- SQL Server 2000 Editions
- Software Installation Considerations
- Methods of Installing SQL Server
- Verifying the Installation
- Configuring SQL Server Enterprise Manager
- Troubleshooting

Lab

- Installing SQL Server

Ø Module 3— Managing Database Files

- Introduction to Data Structures
- Creating Databases
- Managing Databases
- Placing Database Files and Logs
- Optimizing the Database Using Hardware-based RAID
- Optimizing the Database Using File groups
- Optimizing the Database Using File groups with Hardware-based RAID
- Capacity Planning

Lab

- Managing Database Files

Ø Module 4— Managing Security

- Implementing an Authentication Mode
- Assigning Logins to Users and Roles
- Assigning Permissions to Users and Roles
- Managing Security Within SQL Server
- Managing Application Security
- Managing SQL Server Security in the Enterprise

Lab

- Managing Security
- Managing Permissions
- Managing Application Security

Ø Module 5— Performing Administrative Tasks

- Configuration Tasks
- Routine SQL Server Administrative Tasks
- Automating Routine Maintenance Tasks
- Creating Alerts
- Troubleshooting SQL Server Automation
- Automating Multiserver Jobs

Labs

- Configuring SQL Server
- Creating Jobs and Operators
- Creating Alerts

Ø Module 6— Backing Up Databases

- Preventing Data Loss
- Setting and Changing a Database Recovery Model
- SQL Server Backup
- When to Back Up Databases
- Performing Backups
- Types of Backup Methods
- Planning a Backup Strategy
- Performance Considerations

Lab

- Backing Up Databases

Ø Module 7— Restoring Databases

- SQL Server Recovery Process
- Preparing to Restore a Database
- Restoring Backups
- Restoring Databases from Different Backup Types
- Restoring Damaged System Databases

Lab

- Restoring Databases

Ø Module 8— Monitoring SQL Server for Performance

- Why to Monitor SQL Server
- Performance Monitoring and Tuning
- Tools for Monitoring SQL Server
- Common Monitoring and Tuning Tasks

Lab

- Monitoring SQL Server

Course Outline

Ø Module 9— Transferring Data

- Introduction to Transferring Data
- Tools for Importing and Exporting Data in SQL Server
- Introduction to DTS
- Transforming Data with DTS

Lab

- Transferring Data

Ø Module 10— Maintaining High Availability

- Introduction to Availability
- Increasing Availability Using Fail over Clustering
- Standby Servers and Log Shipping

Lab

- Automating the Maintenance of a Standby Server

Ø Module 11— Introducing Replication

- Introduction to Distributed Data
- Introduction to SQL Server Replication
- SQL Server Replication Agents
- SQL Server Replication Types
- Physical Replication Models

Lab

- Implementing Replication