



5 Sessions –
15 Hours of Interactive Training

The SQL Server 2005 Maintaining a Database course from LearnKey is the most in-depth instruction for database management available. This course is for IT professionals who want to expand their SQL knowledge and prepare for certification. Expert Wayne Snyder explains and demonstrates the tools and technologies for maintaining a database and shows complete implementation procedures including creating data types, using tables, constraints, triggers, and XML schemas. Students should have a basic knowledge of Transact-SQL along with familiarity of database design. This course, combined with LearnKey's SQL Server 2005 Writing Queries and SQL Server 2005 Implementing a Database will prepare you for the Microsoft MCTS exam 70-431.

Benefits

- Learn from the most detailed instruction available in database management.
- Prepare for certification and increase your IT professional credibility.
- Receive step-by-step instruction on how to perform some of the most complex procedures using SQL Server 2005.

About The Author

Wayne Snyder is recognized worldwide as a SQL Server expert and Microsoft Most Valued Professional (MVP), with over 25 years of experience in project management, database administration, software design, performance measurement and capacity planning. He is a sought out consultant, trainer, writer and speaker, and produces a series of web-based seminars on SQL Server 2005. Wayne has edited many SQL Server books, contributes monthly to SQL Server Magazine and is a Managing Consultant for Mariner, a Business Intelligence Company.

Session 1

Section A: Installation
 · 2005 Versions
 · System Requirements
 · Licensing
 · SQL Services
 · SQL Server Collations
 · Collation Effects
 · Warnings
 · Unattended Setup

Section B: SQL Install
 · Developer Edition
 Installation
 · System Configuration
 Check
 · Server Components
 · Set Up Service
 Account
 · Collation Settings

Section C: Post Install
 Configuration
 · Dedicated
 Administrator Account
 · SQL Config Manager
 · Configuration Tool
 · Management Studio
 · Startup Options

Section D: Creating
 Databases
 · Database Basics
 · Installed Databases
 · Sample Databases
 · Database Objects
 · Data and Log Files
 · Pages and Extents
 · Database Creation
 Process
 · Transaction Log
 · Create Database
 Syntax
 · Space Estimation
 · Log Size and Recovery
 · Database Examples

Section E: Placing
 Database Files
 · Storage Management
 · Single vs. Multiple
 Data Files
 · Hardware-Based RAID
 · RAID 0
 · RAID 1
 · RAID 10
 · RAID 5

Section F: Using
 Filegroups
 · Files and Filegroups
 · Default and Read-Only
 Filegroups
 · Filegroup Maintenance
 · Configuration Example
 · Why Use Filegroups?

Section G: Finding
 Database Information
 · Where to Look
 · Using Object Explorer
 · Database Properties
 · Summary Filtering
 · Reports
 · Using Transact-SQL

Section H: Schemas
 · Schema Namespaces
 · Object Name
 Resolution

Session 2

Section A: Managing
 Databases
 · Growing a Database
 File
 · Setting Database
 Options
 · Shrinking a Database
 · Shrink Database
 Example

Section B: Disaster
 Recovery Planning
 · Why Backup?
 · Full Backup Strategy
 · DB & Log Backup
 Strategy
 · Differential Backup
 Strategy
 · Quick Restore
 · File/Filegroup Backup
 Strategy
 · Recovery
 Considerations
 · Backing Up
 · Backup - How Often?
 · SQL 2005 Backup
 Methods
 · SQL 2005 Backup
 Models

Section C: Full Backup
 · Full Backup Details
 · Full Backup When?
 · Full Backup to Dump
 Service
 · Backup Options
 · Tape Options
 · Differential Backups
 · Transaction Log
 Backup
 · Normal Log Backup
 · When the Log Gets
 Full
 · Backup..No_truncate
 · Log Away from Data
 · Standard Scenario

Section D:
 File/Filegroup Backup
 · Filegroup Backup
 · Filegroup Backup for
 VLDB
 · Partial Backup
 · Mirror To
 · Checksum/Restore
 Verifyonly
 · Full Backup
 · Striped Backup
 · Backup Setup
 · Backing Up
 · Creating a Snapshot

Section E: Restoring
 · Restore vs. Recovery
 · Automatic Recovery
 · When to Restore a
 Database
 · Restore Types
 · Restore Process
 · What is on the Media?
 · Restore Steps
 · Restore
 Command/Options
 · Restoring the Log
 · Restoring Syntax and
 Master

Section F: Restoring
 Databases
 · Running Recovery
 · Restore from
 Differential
 · Piecemeal Recovery

Session 3

Section A: Database
 Snapshots
 · Snapshot Defined
 · Using Snapshots
 · Snapshot Recovery

Section B: SQL 2005
 Security
 · Principles and
 Securables
 · Permissions and
 Modes
 · Password Policies
 · Fixed Server Roles
 · Credentials

Section C: Securing the
 Database
 · Three Security Steps
 · Adding Users
 · Database Roles
 · Application Role
 · Using Application
 Roles
 · Create a Role

Section D: Managing
 Keys and Certificates
 · Keys and Certificates
 · Certificate Levels
 · Decrypt by Key
 Function

Section E: Monitoring
 SQL Server
 · Admin To-do List
 · Monitoring Memory
 · Monitoring Processor
 · Monitoring Hard Disk
 I/O
 · Baseline Monitoring
 SQL Server
 · Profiles

SQL Server 2005 Maintaining a Database *continued*

Session 4

Section A: DDL Triggers and Event Notifications

- DDL Triggers
- Event Data Function
- Event Notification

Section B: Transferring Data

- Relocating and Transforming Data
- Data Flow
- Lookup
- Introduction to SSIS
- DTS Package
- Package Configurations

Section C: Jobs, Operators, and Security

- SQL Server Agent
- Schedules and Notifications
- Credentials
- Security/MSDB

Section D: Alerts

- Enterprise Automation
- Event Forwarding

Session 5

Section A: High Availability

- Failover Clustering
- SQL Editions

Section B: Database Mirroring

- Mode Benefits and Setup
- Mirroring Steps
- Log Shipping
- Switching Roles

Section C: Replication

- Overview
- Publications and Articles

Section D: Replication Types

- Snapshot, Transactional, Merge
- Replication and Distribution
- Transactional Replication