

Exploring Microsoft® SQL Server® 2005

Instructor: Don Kiely is a nationally recognized author, instructor and consultant who travels the country sharing his expertise in SQL Server and security. He is a featured speaker at SQL Server conferences and specializes in security as it relates to databases and application development.

Total Learning Time: 9 hours

Media run time is 9+ hours. This course can also be used as quick reference material, with the ability to access just the information you need in a matter of minutes.

Course Description: Want to get up to speed on Microsoft's new SQL Server 2005? SQL Server 2005 is a major upgrade from its very successful predecessor, SQL Server 2000. This course introduces you to the new technological advances in SQL Server 2005 that provide businesses decreased downtime, increased scalability and performance, and set a new standard on data security. You will also learn about many new features that greatly reduce application development time allowing developers to be highly productive.

Course Outline:

Introduction to SQL Server 2005

- Database Engine
- Security
- Analysis Services
- Integration Services
- Reporting Services
- Notification Services

SQL Management Tools

- Management Studio
- Reports
- Template Explorer
- SQL Server Profiler
- Database Tuning Advisor
- Configuration Manager
- Surface Area Configuration
- SQLCMD

Authorization

- Strong Password Policies
- Password Policies
- Changing a Login
- SQL 2005 Principals
- Securable Objects
- Metadata Visibility

Security in Practice

- Execution Contexts
- Ownership Chains
- When to Use Each Option
- Users and Schemas
- Synonyms

Encryption

- Algorithms
- Encryption Hierarchy
- Service Master Key
- Database Master Key
- Use a Certificate
- Asymmetric Keys
- Symmetric Keys

SQLCLR

- Introduction to SQLCLR
- Why Use SQLCLR Code?
- Creating Raw SQLCLR Code
- Create with Visual Studio
- Deploy the UDF
- Deployment Notes
- Data Access in SQLCLR
- User-Defined Functions
- Stored Procedures

More SQLCLR

- Write a SQLCLR Stored Procedure
- User-Defined Aggregates
- Triggers
- User-Defined Types
- Troubleshooting Code
- Security in SQLCLR
- Permission Sets
- Secure Coding Practices
- T-SQL vs SQLCLR

SQL Management Objects

- Management Frameworks
- SMO Object Model
- SMO Class Types
- Code Behind the SMO Demo
- Code to Connect to the Server
- Create a Database
- Delete a Database
- Create a Table

SQL Express & Visual Studio Integration

- Introducing SQL Express
- Client and Management Tools
- Design Time Features
- Create a Database Application
- Deploy the Database Application
- Server Explorer Features
- SQL Reporting Services

ADO.NET Enhancements

- New Data Types
- Multiple Active Result Sets
- Asynchronous Queries
- Asynchronous Methods
- Error Handling
- Query Notifications
- Working with Service Broker
- Setup Database for Service Broker

Client Access Enhancements

- Batch Updates
- Bulk Copy
- Changes to the DataTable
- Stream Data into DT/DS
- DataTable from a DataView
- New Rowstate Features

XML

- XML Data Type
- Typed XML Data
- Indexing XML Data
- Using the XML Schema
- Querying XML
- XML Data Type Methods
- XQuery Limits in SQL Server

T-SQL XML Enhancements

- Retrieving XML
- Path for Returning XML Data
- Include Multiple Paths
- Output Column Data as a TN
- Include an Inline XML Schema
- Nested FOR XML Queries
- OpenXML Enhancements
- XML Bulk Load

Web Services

- Exposing Web Services
- Create a Stored Procedure
- Create a Web Service
- View the WSDL

T-SQL Enhancements - Part 1

- New Data Types
- Using TOP
- Using DML Output
- Pivot/Unpivot Operators

T-SQL Enhancements - Part 2

- Ranking Functions
- Using Other Ranking Functions
- Common Table Expressions
- Using DDL Triggers

Number of Modules	Media Run Time	Total Learning Time	Printable PDF Courseware	Hands-on Labs	Sample Code	Pre/Post Exams	Supports Microsoft Exam Number
6 Modules	9+ hours	9+ hours	N/A	N/A	Yes	N/A	N/A