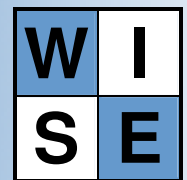


- COURSE CODE:** SQSNFD
- COURSE TITLE:** SQL Server 2005 New Features for Developers
- AUDIENCE:** Developers and DBAs.
- PREREQUISITES:** At least six (6) months SQL Server application developer experience.
- DURATION:** 1 day
- SUMMARY:** Designed mainly for the IT developer, this presentation discusses, among others, the following SQL Server 2005 new features and enhancements:
- .NET framework
  - Object oriented language enhancements
  - Transact-SQL (T-SQL)
  - XML
  - Business Intelligence
  - Data Warehousing
  - Data Integration
  - Data and index partitioning
- OBJECTIVES:** Upon completion of this presentation, the delegate should be conversant with SQL Server 2005's new features and enhancements per the 'Core Topics' that follow.
- FORMAT:** Lecture



### 1. .NET FRAMEWORK

- Definition
- Overview
- Common Language Runtime (CLR)
- .NET integration
- Development languages
- Assemblies and modules
- CLR type system
- Members of types
- Memory management
- Stored procedures and functions

### 2. TOOLS INTEGRATION

- SQL Server Management Studio
- Visual Studio 2005

### 3. .NET LANGUAGE SUPPORT

- Procedures
- Functions
- Common Language Runtime (CLR)
- System.Data.SqlTypes
- Scalar-valued functions
- Table-valued functions
- Triggers

### 4. OBJECT ORIENTED FACILITIES

- User-defined types
- User-defined aggregates

### 5. TRANSACT-SQL (T-SQL) ENHANCEMENTS

- T-SQL vs. SQLCLR
- TOP operator
- TABLESAMPLE clause
- Common Table Expressions (CTEs)
- Large object data types
- Exception handling
- DDL triggers
- Event notification
- Snapshot isolation
- Ranking functions
- PIVOT, UNPIVOT and APPLY
- OUTPUT clause
- BULK rowset provider
- Metadata views
- Alter index

### 5. TRANSACT-SQL (T-SQL) ENHANCEMENTS, cont'd.

- Statement-level recompilation
- Synonyms
- EXCEPT/INTERSECT
- SET SHOWPLAN
- SET STATISTICS

### 6. EXTENSIBLE MARKUP LANGUAGE

- XML data type
- XML data stored in tables
- XML bulk load
- XML query language
- Updating XML columns

### 7. ADO & ADO.NET ENHANCEMENTS

- User-defined types
- XML data types
- Stored procedures

### 8. SQL SERVER 2005 INTEGRATION SERVICES (SSIS)

- New features
- Architecture
- Toolkit
- Package design
- Wizards
- ETL – Extract, Transform and Load
- Data warehousing

### 9. SQL SERVER 2005 SERVICE BROKER

- Messaging
- Task

### 10. DATA & INDEX PARTITIONING

- SQL Server 2000 vs. SQL Server 2005
- Range-partitioning concepts
- Advantages/disadvantages
- Filegroups
- Lexicon (e.g., function, scheme)
- Partitioning keys
- Index partitioning
- Business Intelligence implications