



Course Brochure

SQL Server 2008

Overview

•Microsoft Sql Server 2008 is basically designed to suit the requirements of Database design and development. Audience gets complete knowledge on SQL commands, constraints, views, sub queries, indexes etc... as well as how to program with T-SQL i.e.. developing stored procedures, triggers, functions, cursors etc... Complete discussion on XML integration, CLR integration, Log on triggers, Ranking functions, new isolation levels etc.. Discusses all the advanced features of SQL Server 2005 and new features of SQL Server 2008

Pre-requisites

•Basic knowledge of Microsoft Windows operating system.Knowledge of any one language like C is added advantage.Knowledge of databases is another added advantage.

Applications

COURSE CONTENTS

Basics

- ❖ Database
- ❖ DBMS
- ❖ RDBMS
- ❖ Oracle and SQL Server

SQL Server Environment

- ❖ SQL Server 2005 and 2008
- ❖ New Features in SQL Server 2005 and 2008
- ❖ SQL Server Management Studio Enhancements in SSMS - 2008
- ❖ SQL Server Business Intelligence Development Studio(BIDS)

SQL Language

- ❖ DQL
- ❖ DML(INSERT, UPDATE, DELETE, MERGE)
- ❖ TCL
- ❖ DDL
- ❖ DCL

Data Integrity

- ❖ Domain Integrity
- ❖ Entity Integrity
- ❖ Referential Integrity

Database Design

- ❖ Normalization
- ❖ De Normalization
- ❖ Database Diagrams (E-R)
- ❖

Joins and Sub Queries

- ❖ SQL Operators
- ❖ Simple Queries
- ❖ Built in Functions
- ❖ Joins

- ❖ SubQueries
- ❖ Advanced Queries

Views

- ❖ Create View
- ❖ Advantage of Views
- ❖ Updatable Views
- ❖ NonUpdatable Views
- ❖ Index Views
- ❖

Introduction to T-SQL

- ❖ Anonymous Block
- ❖ Stored Block

Anonymous block(including 2008 features)

Structed exception handling

Cursors

- ❖ Declaring Cursors
- ❖ Modifications Thorough Cursors
- ❖ Types of Cursors
- ❖ Advantages of Cursors

Stored block

Stored Procedures

- ❖ System Stored Procedure
- ❖ User Stored Procedures
- ❖ Passing In/Out Parameters
- ❖ Altering Procedure
- ❖ Advantages of Procedure
- ❖ Extended Stored Procedure

User Defined Functions

- ❖ Scalar UDF
- ❖ Inline UDF
- ❖ Multi Statement Table UDF
- ❖ Table Variables, Temporary Tables

COURSE CONTENTS

Triggers

- ❖ DML Triggers (After | Instead of)
- ❖ DDL Triggers
- ❖ Magic Tables
- ❖ Advantages of Triggers

Transactions and Locks

- ❖ Implicit Transactions
- ❖ Explicit Transactions
- ❖ TCL Commands
- ❖ Lock Types
- ❖ Isolation Levels
- ❖ Dead Locks
- ❖ MS-DTC

Indexes

- ❖ Clustered Index
- ❖ Non Clustered Index
- ❖ Creating Index
- ❖ Advantages of Indexes

XML Integration

- ❖ FOR XML
- ❖ OPEN XML
- ❖ XML Data Type

.NET 2.0 (CLR) Integration

- ❖ CLR Objects
- ❖ CLR Stored Procedures
- ❖ CLR User Defined Functions

Security

- ❖ Windows Authentication
- ❖ SQL Server Authentication
- ❖ Creating Login

- ❖ Database Permissions
- ❖ Introduction to Roles, Schema
- ❖ Dropping Login

Database Maintenance

- ❖ Backup Database
- ❖ Restore Database
- ❖ Deployment of Database
- ❖ Generating T-SQL Scripts and Batches
- ❖ System Databases and System Tables

SQL Server Agent

- ❖ Jobs
- ❖ Schedules
- ❖ Alerts
- ❖ Operators

Data Transformation Services

- ❖ BCP
- ❖ DTS Packages / SSIS Packages

Datawarehousing Support

- ❖ OLTP
- ❖ OLAP
- ❖ Analysis Services (SSAS)
- ❖ Reporting Services (SSRS)
- ❖ Sample Projects

Introduction to DBA Concepts

- ❖ Replication
- ❖ Performance Monitoring
- ❖ Service Broker

