



Course Brochure

SQL Server DBA 2008

Overview

• Course is designed in such a manner that you can get good scenario based and hands on training towards administration. Audience gets complete knowledge on physical architecture of database, memory architecture, SQL Server architecture, database engine architecture. Complete discussion of Backup and Restoration, Replication, Security, Log Shipping, Database Mirroring. Complete knowledge on database mail, configuring linked servers, locks, deadlocks, resolving blocking etc. **Introduction to SSIS, SSRS.**

Pre-requisites

• Basic knowledge of Microsoft Windows operating system i.e. creating users, groups etc. Good knowledge of Transact-SQL and relational databases. Installing active directory and users is added advantage.

Applications

COURSE CONTENTS

Introduction to DBA

- ❖ Database Environment
- ❖ DBA Types
- ❖ DBA Responsibilities
- ❖ Versions and features of SQL Server

Creating Database System

- ❖ Installation Strategy
- ❖ Type of Installation
- ❖ Editions of SQL Server
- ❖ O/S Compatibility and Hardware requirements
- ❖ Pre-requisite Software
- ❖ Default and Named Instances Installation
- ❖ Troubleshooting Installation
- ❖ Configuration
- ❖ Troubleshooting Connectivity

SQL Server Environment

- ❖ System Databases
- ❖ User Databases
- ❖ Database Setup
- ❖ Database Architecture
- ❖ Database Configuration
- ❖ SQL Server Architecture
- ❖ SQL Server optimized Configuration
- ❖ **SQL Power Shell Scripts**

Protecting Database System

- ❖ Authentication and Authorization
- ❖ Windows Authentication
- ❖ SQL Server Authentication
- ❖ Logins
- ❖ Permissions Using Roles and DCL
- ❖ Database User, Schema

- ❖ Encryption and Decryption
- ❖ **TDE [Transparent Data Encryption]**
- ❖ **Policy Based Management**
- ❖ Service Accounts Configuration
- ❖ Linked Servers Setup

Maintaining Database System

- ❖ Recovery Models
- ❖ Backup Methods
- ❖ Restoring Methods
- ❖ SQL Server Agent Jobs, Schedules, Operators and Alerts
- ❖ Database Mail Configuration
- ❖ Database Maintenance Plan Preparation
- ❖ DBCC Commands
- ❖ Database Snapshots
- ❖ **Data Compression**

Creating Standby Servers for High Availability [HA]

- ❖ Database Monitoring
- ❖ Log Shipping
- ❖ Replication
- ❖ Clustering [Windows & SQL Server]

Monitoring The Database System

- ❖ Windows and SQL Server Event Logs
- ❖ User Activity Tracking
- ❖ Performance base Line
- ❖ CPU, RAM and I/O Utilization
- ❖ Performance Monitor
- ❖ SQL Server Profiler
- ❖ Database Level Tuning
- ❖ Query /SP Tuning
- ❖ **Resource Governor**

COURSE CONTENTS

DBA practical Usage Of:

- ❖ DMV and DMF
- ❖ System Stored Procedures
- ❖ System Tables and Catalog Views

Objects Level Maintenance

- ❖ Data Partitions
- ❖ Indexes fragmentation
- ❖ Statistics updation
- ❖ Consistency & Data integrity Check[DBCC]
- ❖ Copying Objects from One Server to Another Server
- ❖ Script based Backup of Objects

Upgrading To SQL Server 2005/2008

- ❖ Up gradation Plan
- ❖ Upgrade Advisor Tool
- ❖ In place Up gradation
- ❖ Side by Side Up gradation
- ❖ Post up gradation checks