

**Course Description:** This solution-based course focuses on the optimization of Microsoft SQL Server 2005 in a NetApp storage environment. This course takes students through the entire systems integration process of architecture planning, data migration, backup and restore, disaster recovery, and troubleshooting.

**Who Should Attend:** Network Professionals who need to have a working understanding of Microsoft SQL Server 2005 on a NetApp Storage System will benefit from this course.

**Prerequisites:** Students should have taken Data ONTAP Fundamentals, Data Protection and Retention, and Data ONTAP SAN Administration. They must have at least one of the following: Microsoft Course 2072, Microsoft exam 70-228, or one year Microsoft SQL Server 2005 experience.

**Benefits of Attendance:** Upon completion of this course, students will be able to:

- Describe the benefits of running SQL Server 2005 on a NetApp Storage System
- Perform SQL Server 2005 storage planning, implementation, and administration
- Architect a high performance, highly available, consolidated SQL Server solution on a NetApp Storage System
- Deploy SQL Server 2005 on a NetApp Storage System
- Describe the SQL Server 2005 backup and restore process using SnapManager
- Determine the correct NetApp Storage Controller model, volume size, and LUN size to support the solution
- Back up and verify a SQL Server 2005 database using SnapManager.
- Restore data using SnapManager

### Course Outline:

Roles and functionality of the various components in a SQL Server 2005 solution

Various dependencies of each component in a SQL Server 2005 Solution

Storage solutions

Installing multiple instances of Microsoft SQL Server

Configuring an IP SAN

Configuring the Storage Controller and Windows host for Microsoft SQL Server

Installing SnapDrive

Installing SnapManager for SQL Server

Creating and managing qtrees and LUNs

Performing and testing a database migration

Performing full database backups

Performing a concurrent backup of multiple databases

Transaction log backups

Local and remote database verification

Backup management groups in backup and verification

Deleting backup Snapshot copies

SnapManager

Restoring a database to an alternate location

Creating, configuring, and testing a backup schedule

Common faults in SnapDrive and SnapManager for SQL Server and Microsoft SQL Server

Implementing NetApp supported and recommended Disaster Recovery methods

Integration of secondary storage as a D/R technique

Backup archiving

Roles of NetApp CFO and Microsoft MSCS in a High Availability configuration