

# **Protecting SQL Server (PROTSQL)**

**Modality: Virtual Classroom**

**Duration: 2 Days**

**NATU: 24 Units**

## **About this Course:**

This course is very much essential and highly recommended if you want to learn about how to deploy or install the SnapCenter Plug-in for MS-SQL Server. This host-side component of NetApp SnapCenter is essential for data protection management which is why you need to have proper training before working with it. The course will teach you about the different components of this plug-in and also the basics about its installation and configuration method. You need SnapCenter data protection management software to secure, clone, and restore Microsoft SQL Server databases. This course teaches you just that by using the SnapCenter designed plug-in. The course will be delivered by an instructor in the form of multiple presentations. They will help you gain the essential knowledge on this topic. Furthermore, you will get to have practical demonstration exercises of the learned skills.

## **Course Objectives:**

- Describe the features of the Microsoft SQL Server Plug-in
- List the workflow for using SnapCenter software to protect Microsoft SQL Server databases
- Explain how SnapCenter software uses NetApp technology to protect SQL Server databases
- Illustrate the recommended NetApp storage layouts to support SQL Server data
- Describe data protection strategies for SQL Server databases by using SnapCenter software
- Demonstrate how to configure and perform SQL Server database backups by using SnapCenter software
- Demonstrate SQL Server database restores that use SnapCenter software
- Describe cloning strategies that use SnapCenter software and NetApp technology
- Build alerting and reporting operations for Plug-in for SQL Server

## **Audience:**

- NetApp and NetApp Partner Professional Services
- Systems Engineers
- NetApp Customers

## **Prerequisites:**

- ONTAP Cluster Administration
- Data Protection Administration
- SnapCenter Fundamentals
- SnapCenter Administration

## **Course Outline:**

## **Module 1: SnapCenter Plug-In for Microsoft SQL Server Overview**

- Features
- MS SQL server data protection workflow

## **Module 2: Getting Started with the SnapCenter Plug-In for MS SQL Server**

- Prerequisite tasks for using the Plug-In
- Installation steps for the Plug-in
- Plug-in configuration
- Storage layout recommendations and restrictions
- Storage design for a virtualized environment

## **Module 3: Data Migration**

- Resource wizard
- Importing from SnapManager software

## **Module 4: Creating and Backing up SQL Server Resources**

- Data protection strategy
- Backing up SQL server databases

## **Module 5: Restoring SQL Server Resources**

- Defining a restore strategy
- Restoring SQL server databases

## **Module 6: Cloning SQL Server Databases**

- Defining a cloning strategy
- Cloning a SQL server database backup
- Splitting a SQL server cloned database
- Clone lifecycle management

## **Module 7: Monitoring and Managing SQL Server Operations**

- Monitoring operations
- Canceling a database backup operation
- Monitoring and managing a thin-provisioned environment
- Setting thresholds, alerts and reports

## **Labs:**

- Configuring SnapCenter and install plug-ins for MS SQL Server
- Migrating databases
- Protecting a MS SQL server database
- Restoring a MS SQL server database

- Cloning a MS SQL server database
- Performing management and monitoring tasks by using SnapCenter software and NetApp ONTAP system manager

## **Appendix A - Challenge labs:**

- Migrating a database from existing volume to a new volume
- Configuring backup and replication for the newly migrated database
- Configuring a clone lifecycle for the development team
- Performing a point-in-time restore to remove database corruption