

55321AC SQL Server Integration Services

Duration: 5 Days

Prerequisites:

- Working knowledge of T-SQL and SQL Server Agent jobs is helpful, but not required.
- Basic knowledge of the Microsoft Windows operating system and its core functionality.
- Working knowledge of relational databases.
- Some experience with database

Course Description:

In this course, you will learn how to use the most common FortiGate features. In interactive labs, you will explore firewall policies, user authentication, high availability, SSL VPN, site-to-site IPsec VPN, Fortinet Security Fabric, and how to protect your network using security profiles, such as IPS, antivirus, web filtering, application control, and more. These administration fundamentals will provide you with a solid understanding of how to implement the most common FortiGate features.

Course Objectives:

- Create sophisticated SSIS packages for extracting, transforming, and loading data
- Use containers to efficiently control repetitive tasks and transactions
- Configure packages to dynamically adapt to environment changes
- Use Data Quality Services to cleanse
- Successfully troubleshoot packages
- Create and Manage the SSIS Catalog
- Deploy, configure, and schedule packages
- Secure the SSIS Catalog

Intended Audience:

The primary audience for this course is database professionals who need to fulfil a Business Intelligence Developer role. They will need to focus on hands-on work creating BI solutions including Data Warehouse implementation, ETL, and data cleansing.

Course Outline:

Module 1: SSIS Overview

- Import/Export Wizard
- Exporting Data with the Wizard
- Common Import Concerns
- Quality Checking Imported/Exported

Module 2: Working with Solutions and Projects

- Working with SQL Server Data Tools
- Understanding Solutions and Projects
- Working with the Visual Studio Interface

Module 3: Basic Control Flow

- Working with Tasks
- **Understanding Precedence Constraints**
- Annotating Packages
- Grouping Tasks
- Package and Task Properties
- Connection Managers
- Favorite Tasks

Module 4: Common Tasks

- Analysis Services Processing
- Data Profiling Task
- Execute Package Task
- Execute Process Task
- Expression Task
- File System Task FTP Task
- Hadoop Task
- Script Task Introduction
- Send Mail Task
- Web Service Task
- XML Task

Module 5: Data Flow Sources and Destinations

- The Data Flow Task
- The Data Flow SSIS Toolbox
- Working with Data Sources
- SSIS Data Sources
- Working with Data Destinations
- SSIS Data Destinations

Module 6: Data Flow Transformations

- Transformations
- Configuring Transformations

Module 7: Making Packages Dynamic

- Features for Making Packages Dynamic
- Package Parameters
- Project Parameters
- Variables
- **SQL Parameters**
- Expressions in Tasks
- Expressions in Connection Managers After Deployment
- How It All Fits Together

Module 8: Containers

- Sequence Containers
- For Loop Containers
- Foreach Loop Containers

Module 9: Troubleshooting and Package Reliability

- Understanding MaximumErrorCount
- Breakpoints
- Redirecting Error Rows
- Logging
- Event Handlers
- Using Checkpoints
- Transactions

Module 10: Deploying to the SSIS Catalog

- The SSIS Catalog
- **Deploying Projects**
- Working with Environments
- Executing Packages in SSMS
- Executing Packages from the Command Line
- Deployment Model Differences

Module 11: Installing and Administering SSIS

- Installing SSIS
- Upgrading SSIS
- Managing the SSIS Catalog
- Viewing Built-in SSIS Reports
- Managing SSIS Logging and Operation Histories
- Automating Package Execution

Module 12: Securing the SSIS Catalog

- **Principals**
- Securables
- Grantable Permissions
- **Granting Permissions**
- Configuring Proxy Accounts