

- ET SOAK KURSUS

70-767 Implementing a Data Warehouse using SQL

Dato	: 3 kursusdage – ring/ skriv for dato
Lokation	: Foldegade 33, 7100 Vejle
Pris pr. deltager	: Kr. 9.995,- ex. moms Prisen er inkl. kursusmaterialer samt forplejning
Instruktør	: Microsoft Certified Trainer Søren Agerbo
PC	: Medbring evt. egen PC – aftales ved tilmelding

Om Kurset

Dette 3-dags kursus giver deltagerne de nødvendige færdigheder til at provisionere en Microsoft SQL Server – både on-premise og i Azure og både ny-installation samt migrering fra en eksisterende installation. Kurset er et tilpasset certificeringsrettet kursus rettet mod certificering: *70-767: Implementing a Data Warehouse using SQL*. Udgangspunktet er Microsoft certificering, men indholdet er modificeret og tilrettet således der også tages udgangspunkt i "real life experiences".

Deltager-profil - eksempel

Database administratorer som har brug for at kunne indtage rollen som Business Intelligence Developer. Der vil være brug for fokus på hands-on og at opnå kompetencer til at skabe BI-løsninger inklusiv Data Warehouse implementering, ETL og Datavask. Inden tilmelding tilbyder vi en samtale med instruktøren for at forventningsafstemme ift. indhold, niveau etc.

Efter endt kursus:

Efter endt kursus har deltagerne kompetencerne til at:

- Describe the key elements of a data warehousing solution
- Describe the main hardware considerations for building a data warehouse
- Implement a logical design for a data warehouse
- Implement a physical design for a data warehouse
- Create columnstore indexes
- Implementing an Azure SQL Data Warehouse
- Describe the key features of SSIS
- Implement a data flow by using SSIS
- Implement control flow by using tasks and precedence constraints
- Create dynamic packages that include variables and parameters
- Debug SSIS packages
- Describe the considerations for implement an ETL solution
- Implement Data Quality Services
- Implement a Master Data Services model
- Describe how you can use custom components to extend SSIS
- Deploy SSIS projects
- Describe BI and common BI scenarios

Forudsætninger:

For at få maksimalt udbytte af kurset anbefaler vi at deltagere besidder en grundlæggende kompetence og har en genelre og professionel erfaring inde for området. Desuden skal deltagere på kurset også besidde følgende tekniske viden:

- Basis viden om Microsoft Windows operating systemet and grundliggende funktionaliteter heri.
- Arbejdsrelateret erfaring med relationelle databaser
- Lettere erfaring med database design.

Moduler:

Module 1: Introduction to Data Warehousing.

This module describes data warehouse concepts and architecture consideration.

- Overview of Data Warehousing
- Considerations for a Data Warehouse Solution

Module 2: Planning Data Warehouse Infrastructure.

This module describes the main hardware considerations for building a data warehouse.

- Considerations for data warehouse infrastructure.
- Planning data warehouse hardware.

Module 3: Designing and Implementing a Data Warehouse

This module describes how you go about designing and implementing a schema for a data warehouse.

- Data warehouse design overview
- Designing dimension tables
- Designing fact tables
- Physical Design for a Data Warehouse

Module 4: Columnstore Indexes

This module introduces Columnstore Indexes.

- Introduction to Columnstore Indexes
- Creating Columnstore Indexes
- Working with Columnstore Indexes

Module 5: Implementing an Azure SQL Data Warehouse

This module describes Azure SQL Data Warehouses and how to implement them.

- Advantages of Azure SQL Data Warehouse
- Implementing an Azure SQL Data Warehouse
- Developing an Azure SQL Data Warehouse
- Migrating to an Azure SQ Data Warehouse
- Copying data with the Azure data factory

Module 6: Creating an ETL Solution.

At the end of this module you will be able to implement data flow in a SSIS package.

- Introduction to ETL with SSIS
- Exploring Source Data
- Implementing Data Flow

Module 7: Implementing Control Flow in an SSIS Package

This module describes implementing control flow in an SSIS package.

- Introduction to Control Flow
- Creating Dynamic Packages
- Using Containers
- Managing consistency.

Module 8: Debugging and Troubleshooting SSIS Packages

This module describes how to debug and troubleshoot SSIS packages.

- Debugging an SSIS Package
- Logging SSIS Package Events
- Handling Errors in an SSIS Package

Module 9: Implementing a Data Extraction Solution

This module describes how to implement an SSIS solution that supports incremental DW loads and changing data.

- Introduction to Incremental ETL
- Extracting Modified Data
- Loading modified data
- Temporal Tables

Module 10: Enforcing Data Quality

This module describes how to implement data cleansing by using Microsoft Data Quality services.

- Introduction to Data Quality
- Using Data Quality Services to Cleanse Data
- Using Data Quality Services to Match Data

Module 11: Using Master Data Services

This module describes how to implement master data services to enforce data integrity at source.

- Introduction to Master Data Services
- Implementing a Master Data Services Model
- Hierarchies and collections
- Creating a Master Data Hub

Module 12: Extending SQL Server Integration Services (SSIS)

This module describes how to extend SSIS with custom scripts and components.

- Using scripting in SSIS
- Using custom components in SSIS

Module 13: Deploying and Configuring SSIS Packages

This module describes how to deploy and configure SSIS packages.

- Overview of SSIS Deployment
- Deploying SSIS Projects
- Planning SSIS Package Execution

Module 14: Consuming Data in a Data Warehouse

This module describes how to debug and troubleshoot SSIS packages

- Introduction to Business Intelligence
- An Introduction to Data Analysis
- Introduction to reporting
- Analyzing Data with Azure SQL Data Warehouse