



## Managing SQL Business Intelligence Operations

**OD10988B; On-Demand, Video-based**

### Course Description

This course is aimed at database professionals who manage Business Intelligence (BI) operations. This course looks at various options that provide the ability of business users to analyze data and share their findings, starting with managed BI data sources and expanding to personal and external/public data sources.

### Course Objectives

After completing this course, students will be able to:

- Describe key features of a self-service BI solution
- Describe the key capabilities of SQL Server BI in a SharePoint environment
- Describe common Analysis Services operational tasks
- Describe PowerPivot for SharePoint server
- Describe Power Query
- Describe Windows Azure HDInsight

### Audience

The primary audience for this course are business intelligence professionals.

The secondary audiences for this course are technically proficient business users.

### Prerequisites

In addition to their professional experience, students who attend this training should already have the following technical knowledge:

- Some basic knowledge of data warehouse schema topology (including star and snowflake schemas)
- Some exposure to basic programming constructs (such as looping and branching)
- An awareness of key business priorities such as revenue, profitability, and financial accounting is desirable

- Familiarity with SharePoint Server and Microsoft Office applications – particularly Excel

## **Course Outline**

### **Module 1: Introduction to Microsoft SQL Server BI Solution**

This module is designed to set the scene for the rest of this course.

#### **Lessons**

- Rationale for BI Operations
- Roles in BI Operations
- Technologies Used in BI Operations
- Environment and Operational Standards

#### **Lab: Exploring an enterprise BI solution**

After completing this module, you will be able to:

- Describe the rationale for BI operations
- Describe roles in BI operations
- Describe the technologies used in BI operations
- Describe environments and operational standards

### **Module 2: SQL Server BI Features with Microsoft SharePoint**

This module focuses on optimizing the data platforms on which the BI solutions reside, adhering to best practice to meet the requirements of the business

#### **Lessons**

- The Importance of Standardized Builds
- Configuration Considerations for BI Technologies
- BI Architectures
- SharePoint BI Environments

#### **Lab: Configure BI Components**

After completing this module, you will be able to:

- Describe the importance of standardized builds
- Describe the configuration considerations for BI technologies
- Describe BI architectures
- Describe SharePoint BI environments

## **Module 3: Managing Business Intelligence Security**

This module discusses how managing the security of data within an organization should be the first priority for any operational team.

### **Lessons**

- Security Approach to BI Solutions
- Security Components
- Security Approach for BI Components
- The Security Approach in Different BI Environments

### **Lab: Managing Business Intelligence Security**

After completing this module, you will be able to:

- Describe the security approach to a BI solution
- Understand the security components available
- Apply the security components to BI technologies
- Manage security in different environments

## **Module 4: Supporting Analysis Services**

This module helps you to understand the tools that are available and benefits they offer will help you to pick the right tool for the job and aid deployment.

### **Lessons**

- Application Life Cycle Management for BI Solution
- Stand-Alone Deployments
- Team-based Deployments

### **Lab: Supporting Analysis Services**

After completing this module, you will be able to:

- Understand application life-cycle management for BI solutions
- Understand stand-alone deployments
- Understand team-based deployments

## **Module 5: Logging and Monitoring in BI Operations**

This module introduces techniques to ensure the continued service of key applications that are used within the business.

## Lessons

- The need for Logging and Monitoring
- Logging Options
- Monitoring Options
- Setting Up Alerts

## Lab: Monitoring BI Solutions

After completing this module, you will be able to:

- Describe need for logging and monitoring
- Use various logging options
- Use monitoring tools
- Set up notifications

## Module 6: Troubleshooting BI Solutions

This module introduces techniques to troubleshoot failed BI operations

## Lessons

- Troubleshoot Failed BI Solutions
- Troubleshooting the Data Warehouse
- Troubleshooting SQL Server Analysis Services
- Troubleshooting SQL Server Reporting Services

## Lab: Troubleshooting BI Solutions

After completing this module, you will be able to:

- Troubleshooting failed BI solutions
- Troubleshooting data warehouses
- Troubleshooting Analysis Services
- Troubleshooting Reporting Services

## Module 7: Performance Tuning BI Queries

This module introduces tuning the query aspects of the BI solution to improve performance.

## Lessons

- The need for Performance Tuning
- BI Queries to Performance Tune
- Tools for Performance Tuning

- Remediating Performance Issues

### **Lab: Performance Turning a BI Solution**

After completing this module, you will be able to:

- Understand the need for performance tuning
- Describe the BI queries required to carry out performance turning
- Use the tools for performance tuning
- Remediate performance problems