

(55045A) –Microsoft End to End Business Intelligence Boot Camp

OBJECTIVE

This three-day instructor-led course is a complete high-level tour of the Microsoft Business Intelligence stack. It introduces students to the SQL 2012 Business Intelligence and SharePoint 2013 Business Intelligence services including PerformancePoint Service, Excel Services, Business Connectivity Services, Visio Services and the Business Intelligence Center focusing on their interdependency.

Each of the modules is stand-alone allowing for customization of the course for those audiences that may not have an interest in a certain service.

Each concept is demonstrated with a video before the exercise on that concept, so first you will have the short lecture then see the concept demonstrated then do it yourself. Remember if you can't do it you didn't learn it. Each of the videos, and there are approximately 13 hours of them, is intended as a take-away from the class for each student.

COURSE TOPICS

Module 1: Course Overview

- Introduction
- Course Materials
- Facilities
- Prerequisites
- What We'll Be Discussing

Module 2: The Business Intelligence Stack

- Business Intelligence in Three Ways
- SQL 2012 Business Intelligence
- New 2013 SharePoint Business Intelligence Features
- New 2013 PowerPivot in Excel Features

Module 3: SQL Server Integration Services (SSIS) 2012

- What's New?
- Overview of Extract, Transform, and Load (ETL)
- SSIS Tools
- Change Data Capture
- SQL Server Integration Services Scripting
- Variables, Parameters, and Expressions
- Package Deployment

Module 4: SQL 2012 Business Intelligence Semantic Model (Multidimensional Mode)

- The Data Warehouse/Data Mart
- The Tools
- Key Concepts
- Data Sources
- Data Views
- Cubes
- Data Profiler
- Proactive Cache
- Wizards

Module 5: Microsoft Multidimensional Expressions

- Concepts in Multidimensional Space
- Basic MDX Statements
- SQL Server Management Studio MDX Query Editor
- Navigating Hierarchies
- Working with Time
- Microsoft Multidimensional Expressions

Module 6: SQL 2012 Business Intelligence Semantic Model (Tabular Mode)

- The Tabular Model
- Data Analytic Expressions (DAX)
- The Editor
- Data Connections
- Creating a Tabular Project
- Relationships
- Measures and Calculated Columns
- Hierarchies
- Perspectives
- KPIs
- Partitions
- Processing
- Deployment

Module 7: SQL Server 2012 Reporting Services

- Report Lifecycles
- Installation Modes
- Report Creation Tools
- Data Sources
- Datasets
- Basic Reports
- Graphics
- Maps
- Report Parts

Module 8: Master Data Services

- What is Master Data Management?
- System Roles
- Master Data vs. Transactional Data
- Master Data Services ETL
- Master Data Services Key Concepts

Module 9: Data Mining/Predictive Analytics

- Definitions for Our Purpose
- Problems Addressed
- Business Analytics
- CRISP-DM
- Key Concepts
- Microsoft Data Mining Process
- Data Mining Tasks
- Microsoft Algorithms
- Matching the Tasks to the Algorithm
- Data Mining Add-in for Excel

Module 10: SharePoint 2013 Business Intelligence Center

- New 2013 SharePoint Central Administration
- New 2013 Business Intelligence Center
- Permissions and Roles
- Included Document Library and List Apps

Module 11: SharePoint 2013 Excel Services

- New 2013 Excel Services Features
- Core Components
- Excel Web Access (EWA)
- What Excel Web Access is Not
- Differences in the Browser vs. Desktop
- SharePoint Libraries to Store Workbooks
- Power View Add-in for Excel
- The Save and Share Process
- Excel Web App
- Best Practices

Module 12: SharePoint 2013 PerformancePoint 2013

- New 2013 Overview of PerformancePoint Services
- Dashboard Designer
- Data Sources
- Indicators
- KPIs
- Visual Reports
- Filters
- Scorecards
- Dashboards

Module 13: SharePoint 2013 Visio Services

- New 2013 Visio Services Features
- Visio Graphics Service
- Visio Drawings in the Browser
- Visio Web Access Web Part
- SharePoint 2013 Visio Services

Module 14: PowerPivot

- New 2013 PowerPivot Features
- PowerPivot and Excel
- PowerPivot and SharePoint
- Enterprise Business Intelligence and PowerPivot
- Importing Data

- Enriching Data
- SharePoint Sharing

Module 15: SharePoint 2013 Business Connectivity Services

- New 2013 Business Connectivity Service Features
- What is Business Connectivity Services?
- BCS Terminology
- BCS Security
- Using SharePoint Designer 2013 with BCS
- Surfacing the BCS Data

Module 16: Dashboards

- Dashboard Migration
- Three Types of Dashboards
- Successful Dashboards
- Tables or Graphs
- Types of Graphs
- Choosing a Chart Type
- Key Performance Indicators
- Pitfalls In Dashboard Design
- Microsoft Report Builder 3.0
- Plan Your Reports
- Datasets
- New 2013 SharePoint Designer Features
- SharePoint Web Apps

After completing this course, students will be able to:

- Browse the data within the cube using SQL Server Management Studio.
- Browse data using Visual Studio 2013.
- Connect to a tabular source, import tables, and explore the data.
- Successfully Navigate SQL Server Data Tools.
- Successfully Navigate SQL Server Management Studio.
- Run the Import Export Wizard.
- Create a Project.
- Add and Configure Connections to the Control Flow.
- Add and Configure Execute SQL Tasks.

- Connect and Configure Precedence Constraints.
- Add and Configure Data Flow Tasks.
- Use the Destination Assistant.
- Copy a Package and Reuse Project Connection Managers.
- Add and Configure a Data Conversion Transformation.
- Add and Configure a Conditional Split Transformation.
- Add and Configure a Multicast Transformation.
- Add and Configure an Aggregate Transformation.
- Add and Configure a Derived Column Transformation.
- Add and Configure a Sort Transformation.
- Add and Configure a Lookup Transformation.
- Successfully Deploy a Project.
- Create a Sample or Test Database.
- Successfully Navigate and Use Key Objects.
- Create a Server Side Time Dimension.
- Create a Data Source.
- Create a Data View.
- Successfully Navigate a Cube.
- Successfully Navigate and Configure Partitions.
- Use the Aggregation Design Wizard.
- Create and Configure a Data Profiling Task.
- Configure Proactive Cache.
- Deploy and Process a Project.
- Build a Cube.
- Understand the Functionality of MDX.
- Write MDX.
- Understand How to Use MDX to Navigate Hierarchies.
- Write MDX Navigating Hierarchies.
- Understand Working with Time in MDX.
- Write MDX Working with Time.
- Creating a Tabular Project.
- Import Data Using the Table Import Wizard.
- Manually Add a Relationship.
- Create Measures.

- Create Calculated Columns.
- Create Hierarchies.
- Create Perspectives.
- Create KPIs.
- Process Data.
- Deploy a Solution.
- Connect to a Tabular Model Using Excel.
- Locate, Access and Use Report Manager.
- Use Report Designer.
- Create and Configure Data Sources.
- Create and Configure Datasets.
- Create and Configure a Basic Report.
- Create and Configure Graphics.
- Create and Configure Maps
- Create and Configure Report Parts.
- Create and Configure a Model.
- Create and Configure Entities.
- Create and Configure Members.
- Create and Configure Attributes.
- Create a Business Rule.
- Deploy a Model.
- Load Data.
- Create a Subscribing View.
- Use the Data Mining Add-in for Excel.
- Explore the options and settings available within the new SharePoint 2013 Central Administration.
- Create a new web application and business intelligence site while exploring the features of both.
- Create a SharePoint library to hold Excel workbooks and explore trusted file locations.
- Utilize the Power View add-in for Excel
- Create an Excel workbook with a parameter and save it to a SharePoint document library.
- Add Web Apps to a webpage.
- Explore the Dashboard Designer interface and know how to create and configure a data source.
- Create and configure a standard KPI and a scorecard.
- Create and configure a leaf KPI and a scorecard.
- Create two blank KPI's and then roll them into an objective KPI.

- Create and configure an analytic chart and an analytic grid, add them to a dashboard, deploy them to SharePoint, and explore the options available.
- Create and configure a filter, and tie the filter into both the analytic chart and analytic grid created earlier.
- Create and configure a cascading filter and then tie it into a new analytic chart and grid.
- Create a Time Intelligence data connection, a Time Intelligence filter, and create a report using both.
- Create four copies of the Objective Scorecard, configure settings in each of the four copies, and deploy them to SharePoint in a dashboard.
- Create a new leaf KPI and use that KPI in two new scorecards, one with a filter configured, and one without.
- Create a new dashboard with two pages and review editing options.
- Create a drawing, upload the document to the Student BI Site documents library, and view the drawing in a browser.
- Create a data-connected drawing and upload the document to the Student BI Site documents library.
- Create an objective scorecard and matching strategy map, place them in a dashboard, and then upload the dashboard to the Student BI Site.
- Use PowerPivot within Excel to import a table from SQL Server.
- View the relationships existing within the imported tables from SQL Server and then import an additional table and configure a relationship between it and the existing.
- Hide columns they don't want reflected in the resulting PivotTable.
- Create a PivotTable within an existing worksheet.
- Assign administrators and permissions on the BDC Metadata Store.
- Explore the different content types available in SharePoint 2013 and learn how to locate them and their corresponding settings.
- Create a document library, configure it to accept specific content types, and then learn how to delete the document library.
- Create and configure a new external content type.
- Create an external list associated with the new external content type created prior.
- Create a new external content type and a new host URL, and then create an external list and profile page.
- Add a custom action to an external list.
- Navigate the Report Builder 3.0 interface.
- Create an embedded data source connecting into a database.
- Create an embedded data source connecting into an OLAP database.
- Create a shared data source using the Report Manager.
- Create a shared dataset using the shared connection they created in the previous exercise.
- Create a new dashboard and explore three different ways to connect the Web Apps.

PREREQUISITES

Before attending this course, students must have:

- An understanding of the benefits of business intelligence.

TRAINING APPROACH

This course includes lectures, course notes, exercises and hands-on practice.

COURSE DURATION

24 Hours (in 3 days)

CERTIFICATION COMPLETION

A certificate of completion is provided for all trainees attending the course