

Dynamics 365 University: Business Intelligence Wizard Detailed Agenda

Course Level: 200

Microsoft Dynamics CRM Online offers powerful reporting and analytics. This class will review all the unique CRM reporting capabilities of Advanced Find views and charts, reports using the built-in report wizard, custom CRM reports with FetchXML, and the Report Authoring Add-in. We will also do a deep dive into Power BI with the Power BI Desktop app. With this tool the report author can create stunning visualizations and analysis through interactive reports. These reports are published directly from the interface to the Power BI site for users to consume, create and share their own dashboards, and schedule refreshes. You will leave with all the necessary knowledge and resources to create powerful analytics from your CRM system. Note: some content in this class applies exclusively to CRM Online and On-premise. The instructor will indicate those differences in class.

Audience

This training is intended for Dynamics 365 users with intermediate to advanced technical skills who desire to continue their education in business analytics. This course assumes working knowledge of skills outlined in the Dynamics 365 Boot Camp course. Experience with relational database concepts and Microsoft SQL is helpful but not required.

This course is designed to provide

- a deeper understanding of the data analysis and visualization tools available in the Dynamics 365 user interface
- create Excel and Word Templates
- advanced customization of charts using XML
- an understanding of SSRS and Power BI as external analysis and design tools which allow surfacing of business intelligence in the Dynamics 365 user interface
- basic skills for authoring SSRS reports using Visual Studio SQL Server Data Tools (the course will focus on using Fetch XML as a data source, as this works for both Online and on-premises implementations, and will include information on a few SQL data source specific functions)
- basic skills for building Power BI reports using the Power BI web service and Power BI desktop

Prerequisites

This course requires that students meet the following prerequisites:

- Completion of Dynamics 365 University - Boot Camp or equivalent application experience
- Technical Understanding of Dynamics 365
- Computer with Microsoft Remote Desktop Connection installed and configured to allow connection to a remote computer -or-
- Computer with SQL Server Data Tools for Visual Studio 2012 and Power BI Desktop installed

Dynamics 365 Data Analysis and Visualization

- Reporting Infrastructure
- Reporting in the User Interface (UI)
- SQL Server Reporting Services (SSRS) Reports
 - Default Reports
 - Report Wizard Reports
 - Custom SSRS reports using SQL or Fetch XML data connections
- Power BI Reports and Dashboards
- Compare and contrast capabilities of UI, SSRS and Power BI reporting

Reporting in the User Interface

- Advanced Find
 - Data Filters
 - Sorting
 - 1:1 Relational Data
- Document Generation
 - Security Considerations
 - Word Templates
 - Understanding Relationships
 - XML Document Controls
 - Excel Templates
 - Designing Visualizations
 - Refreshing Data
- Charts
 - Leveraging Inline or via Dashboards
 - Built-in drill through to view data
 - Edit Chart XML
- Dashboards
 - Configuration options for Views and Charts
 - Using iFrames and Web Resources

Dynamics 365 Report Manager

- Report Permissions
- Load a Report
- Schedule* Reports (only for on-premises)
- Run a Report
- Set the Default Filter
- Edit report information
 - Display and categorize
 - Associate to an entity
 - Publish for external use
 - Report metadata
 - Set Parent
 - Set as Individual or Organization
 - Change Ownership

SSRS Report Building Toolset

- Report Wizard
 - Capabilities and Consideration Filters
 - Groupings
 - Charts and Tables
- Report Builder
 - Supports SQL data connections
- SQL Server Data Tools (SSDT) for Visual Studio
 - Natively supports SQL data connections
 - Dynamics 365 Authoring Extension supports Fetch XML data connections
 - Report Projects
 - Provides report aggregation for Parent-Child reports, specific Business Units or special projects
 - Managing report projects similar for any managed solution using source control such as TFS.

Build SSRS Report with SSDT

- Security overview and requirements
- Data source best practices
 - Fetch XML data connections
 - SQL data connections
- Set up SSDT Visual Studio 2012 Report Design Environment
- Connecting to Data Sources and Datasets
- SSDT Report Design

- Table, Matrix, Chart and Image tools
- Properties window and actions
 - Grouping
 - Headers and footers
 - Formatting and expressions
- CRM Pre-Filtering
- Parameters
 - Report Filter Parameters
 - Report Formatting Parameters
 - CRM Specific Parameters
- Parent Reports and Sub-reports
- Map Reports (only available with SQL connections)
- Sparkline, Data Bar, Gauge and Indicator tools
- Publishing Custom SSRS Reports in CRM
 - Managing Report Definition Language files
 - Loading and Downloading
 - Solutions Portability
 - Report Settings
 - Troubleshooting

PowerBI Introduction

- What is Power BI?
 - Power BI web service
 - Power BI desktop
 - Power BI gateway
 - Power BI free/pro
- Overview of Power BI web service and desktop
 - Navigation and terminology in app.powerbi.com
 - Navigation and terminology in Power BI desktop
 - Analyzing Dynamics 365 data with Power BI
 - Interacting with Power BI Reports and Visualizations
- Using Power BI in Dynamics 365 Online
 - Activate Power BI license and access app.powerbi.com
 - Load pre-built Dynamics 365 Microsoft Content Packs
 - Surface Power BI visualizations in Dynamics 365
- Building a report in Power BI desktop with Excel data
 - Connect to data
 - Transform data in query
 - Load data

- Design report
- Building a report in Power BI desktop with CRM online data
 - Connect to Dynamics 365 online
 - Working with Dynamics 365 option sets
 - Working with multiple datasets
- Interact with Power BI report on app.powerbi.com
 - Publish Power BI report to app.powerbi.com
 - Create a Power BI dashboard and add report tiles
 - Share the Power BI dashboard
- More Power BI features
 - Bring in external data
 - Ask the data
 - Custom visuals
- Power BI and Dynamics 365 on premises
 - Power BI report tiles on personal dashboards
 - Surface a Power BI personal dashboard
 - Add Power BI report URL as a link in the reports area
 - Power BI Premium on-premises report server

At course completion

- Understand how to fully leverage the reporting available in the Dynamics 365 user interface, including Advanced Find, Views, Document Generation, Charts and Dashboards
- Understand how to make basic formatting changes to Dynamics 365 charts by editing the XML
- Understand the features and functions of the Report Manager
- Understand the capabilities of the toolset for building SSRS reports including Report Wizard, Report Builder and SQL Server Data Tools
- Understand how to configure SQL Server Data Tools and the Visual Studio interface to build SSRS reports for Dynamics 365
- Understand the components of an SSRS report including data sources, data sets, visualization tools, formatting, parameters, pre-filtering and sub-reports
- Understand how to publish and manage custom SSRS reports in Dynamics 365
- Understand the Power BI web service and Power BI desktop
- Understand how to connect to Dynamics 365 data with Power BI
- Understand how to use Power BI desktop to build reports
- Understand how to publish Power BI dashboards to the Power BI web service
- Understand how to surface Power BI analysis and visualizations in Dynamics 365 Online and on-premises and how they differ