

Microsoft Dataverse for Teams

Module 1: Installing, Upgrading, and Migrating to Windows 7

This module will introduce students to Microsoft Dataverse. Microsoft Dataverse has two offerings, a more comprehensive service that is available at a cost, known as Dataverse, and a free to use service that comes as part of your Microsoft Teams license called Microsoft Dataverse for Teams, which is consumed directly from within Microsoft Teams. We will learn about the differences between these services, what are the limitations of Microsoft Dataverse for Teams and when to use each service. We will then discover how Microsoft Dataverse for Teams can be leveraged by Microsoft Power Apps, Microsoft Power Virtual Agents, Power BI and Microsoft Power Automate. In this module we cover how to add the Power Apps for Teams app, directly to Microsoft Teams, which will become our hub for designing business solutions. We will also provide a brief overview of the Microsoft Teams interface to discuss key elements that are essential to Microsoft Dataverse for Teams creations.

Lessons

- Microsoft Dataverse
- What is the Power Platform?
- Licensing for Microsoft Dataverse
- Licensing for the Power Platform
- What is Microsoft Dataverse for Teams?
- Database terminology
- Chatbots, apps and flows
- Usage scenarios and limitations
- Power BI in Microsoft Teams
- An overview of Microsoft Teams
- Where can you use Microsoft Teams?
- The desktop app interface
- Pinning apps in Microsoft Teams
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Lab 1: Getting Ready

- Download required materials for the labs
- Login to Microsoft 365
- Create a Team
- Pin apps
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After completing this module, students will be able to:

- Understand what Microsoft Dataverse for Teams is.
- Describe the limitations of Microsoft Dataverse for Teams.
- Explain what an app, chatbot and a flow is in context to a Team.
- Be able to navigate Microsoft Teams and pin apps.
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Module 2: Setting up tables

This module will cover how to set up tables in your Microsoft Dataverse for Teams environment. Each Team utilising Microsoft Dataverse for Teams has its own environment where you can design your database. You can create tables, columns, rows, views, and relationships to model your data. The tables that you design can be used to support your apps, chatbots, reports and flows, acting as a centralised data source that you can tap into. Ensuring your data tables are correctly configured and secured is essential for success in other areas of Microsoft Dataverse for Teams.

Lessons

- Getting started with tables
- Creating an environment for a Team
- Creating a new table
- Table settings
- Adding columns
- Choice columns
- Adding rows of data
- Creating table relationships
- Designing new views
- Table security
- Deleting tables
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Lab 1: Create tables and relationships

- Create multiple tables
- Add columns
- Create relationships between tables
- Set table security
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After completing this module, students will be able to:

- Understand environments for Teams.
- Structure their data effectively using tables.
- Set up relationships between tables.
- Create views for filtering content.
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Module 3: Creating new apps

In this module we will design the interfaces that your Team's members are going to use to add new rows of data to your tables. We will introduce you to Power Apps in Microsoft Teams which is tailored to work with Microsoft Dataverse for Teams. The app itself can be based on an existing sample or you can choose to create your own app. This module will also cover adding components to your apps, writing formulas, introducing media, and using variables. We will then show you how to test, publish and use our apps within a Team.

Lessons

- An introduction to Power Apps
- Power Apps services
- The Power Apps interface
- Creating a new app from a sample
- Create a blank app
- Working with screens
- Connecting to data sources
- Adding and editing controls
- Introducing formulas
- Using variables
- Media
- Testing an app
- App settings

- Publish to Teams
- Broad distribution apps
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Lab 1: Create a new app

- Create a new app
- Adding screens
- Add controls and media
- Implement formulas and variables
- Test and publish the app
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After completing this module, students will be able to:

- Know where to start designing an app.
- Understand how to connect to data sources.
- Know when to use specific controls in an app.
- Understand formula syntax and when to use variables.
- Be able to test an app and publish it.
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Module 4: Designing chatbots

In this module we will cover using Power Virtual Agents within Microsoft Teams. Power Virtual Agents allows us to design chatbots. A chatbot is an interface where an individual can type in a question or request information or support. The chatbot will look at the entry and interpret a logical response. Power Virtual Agents allows us to design the pace of these conversations. The full tool allows chatbots to be designed for enterprise use and for external facing customers. Within Teams these chatbots are only applied to a Team but are free whereas the full tool is not. We will show you how to get started with designing a chatbot, implement logic, test, and publish a chatbot to a Team. As Microsoft Teams is a chat enriched platform, understanding how to build chatbots can help you field common conversations that emerge within your Team.

Lessons

- An introduction to Power Virtual Agents
- Chatbot topics
- How do chatbots work in Teams?
- The Power Virtual Agents interface
- The authoring canvas
- Entities
- Creating a new chatbot
- Working with topics
- Setting up triggers
- Adding nodes
- Call a flow
- Testing your chatbot
- Publish a chatbot
- Using a chatbot in Microsoft Teams
- Maintaining a chatbot
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Lab 1: Create a chatbot

- Create a new chatbot
- Design a topic
- Add an entity
- Working with nodes
- Test your chatbot
- Publish your chatbot
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After completing this module, students will be able to:

- Create a new chatbot within Teams.
- Use the authoring canvas to create a conversation.
- Be able to test a chatbot.
- Understand how to publish a chatbot to a Team.

Module 5: Adding automated processes

With the ability to create chatbots and apps as well all the capabilities Teams has to offer, it can prove to be a challenge to form a narrative between these services. Enter Power Automate in Teams. Power Automate offers Teams users the option to create business processes that bring together services from across Microsoft 365 and Microsoft Dataverse for Teams. Power Automate in Teams prioritises workflows that interact with features in Teams, such as chat and channel posts. It can also interact with elements of Microsoft Dataverse for Teams. This module provides instructions on how to get new business processes up and running quickly, and how to customise workflows further to enhance their logic and reach.

Lessons

- An introduction to Power Automate
- How does Power Automate help Microsoft Team users?
- Configuring Microsoft Teams flows
- Testing a flow
- Designing new flows or customising flows
- The Power Automate interface
- Working with actions
- Branching logic
- Connect a flow to Dataverse for Teams
- Expressions and variables
- Publish a flow
- Flow history and error resolution
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Lab 1: Create a new flow

- Create a new Microsoft Team flow
- Test the flow
- Modify the flow in Power Automate
- Publish and test your changes
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After completing this module, students will be able to:

- Understand when and how to add Microsoft Teams flows.
- Recognise when a flow needs to be customised and how to make changes.
- Implement branching logic within the flow.

- Connect a flow to your tables in your environment.
- Thoroughly test a flow and review workflow history.
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Module 6: Designing reports

Data within our tables in Microsoft Dataverse for Teams can tell a story. But often displaying the data as a table does not offer an invested party much insight into this information. Microsoft Dataverse for Teams can connect to Power BI Desktop to allow you to design reports against the live data in your custom tables. Although there is a lot of value in this, it is worth noting that Power BI does require additional licensing for the service to work. In this module we will show you how to connect to your data tables in Microsoft Dataverse for Teams and use Power BI Desktop to design and publish an engaging report. Once published we will show you how to schedule the report to update on its own so that it is displaying up to date information.

Lessons

- An introduction to Power BI
- The Power BI suite
- User based licensing
- Premium capacity workspaces
- Connecting to tables
- Queries and data modelling
- Designing reports
- Hide and rename columns
- Adding basic content
- Visualisations
- Publishing reports
- Scheduling a data refresh
- Share in Teams
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Lab 1: Connect a chatbot to a table using flow

- Design a new flow to access a table
- Update a topic and add your flow
- Complete the remaining topic notes
- Test your enhanced bot and publish
- Exploring Power BI Desktop
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After completing this module, students will be able to:

- Understand what Power BI is as a service and what tools you can use to leverage it.
- Explain the licensing that is required for Power BI to be used within an organisation.
- Demonstrate how to connect to tables in Microsoft Dataverse for Teams using Power BI Desktop
- Design reports using tables and columns from Microsoft Dataverse for Teams.
- Adhere to best practices.
- Feel confident publishing and scheduling reports.
- Share a report with colleagues or add a report directly to Microsoft Teams