



MB-500T00: MICROSOFT DYNAMICS **365: FINANCE AND OPERATIONS APPS DEVELOPER TRAINING**

Duration: 5 Days



Course Description

MB 500T00: Microsoft Dynamics 365: Finance and Operations Apps Developer Training is focused on professionals willing to learn the customization and capabilities of Dynamics 365 Finance and Operations. This technical course guides on the utilization of extensible features, and standardizes application coding patterns and external integrations to provide completely realized solutions.

Our enterprise training program allows a team up-gradation with a skill set that leads to the firm's overall development. It also helps in developing a better understanding of developer tools and solution designs.

With the help of this course, individuals will learn about code testing and development, framework, integration, and reporting.

This training program is ideal for Microsoft Dynamics 365 Finance and Operations Apps Developers who want to enhance their skills and boost their credibility in the market. It is also suitable for individuals preparing for exam MB-500.

This training is designed based on the objectives of the course variant MB-500T00-A.

Who should attend this course?

- This training is aimed at professionals who are Microsoft Dynamics 365 Finance and Operations Apps Developers.
- Given below are professionals who can use Microsoft Dynamics 365: finance and Operations Apps Developer Training to upskill their current positions:
 - o Software Engineers
 - o System Developers
 - Technical Consultants
 - o Dynamics 365 Developers
 - o DevOps Engineer
 - Business Analyst
 - Reporting Specialist
 - Technical Project
 - Professional Developers

What you will learn

- Overview & Architecture
- Developer Tools
- Solution Design
- AOT Elements
- Code Development & Testing
- Data Migration
- Frameworks
- Integration
- Reporting
- Security & Performance
- Building Finance Apps
- Building Operation Apps
- Connect to Finance and Operations Apps



Prerequisites

Recommended

- MB 920T00: Microsoft Dynamics 365 Fundamentals (ERP)
- Professionals willing to pursue this course should have basic computer knowledge.

What Exam Do I Need To Get Certified?

Exam MB-500

Curriculum

Module 1: Get introduced to the finance and operations apps

- Discover the suite of finance and operation apps that you can use for enterprise resource planning
- Review use cases for finance and operations app
- Labs: Navigate the finance and operations apps

Module 2: Explore the ecosystem and main components of finance and operations apps

- Explore the Dynamics 365 ecosystem
- Learn about the main components of finance and operations apps
- Learn about on-premises and cloud deployment options
- Explore the development and deployment process for finance and operations apps

Module 3: Key differences between Dynamics AX 2012 and finance and operations apps

- How Microsoft helps customers upgrade
- The Microsoft Cloud
- Architectural and operational differences between AX 2012 and finance and operations apps

Module 4: Explore the technical architecture of finance and operations apps

- Differentiate between on-premises and cloud architecture of finance and operations
- Learn about the purposes and relationships between packages, models, and elements
- Learn about the application components and architecture
- Detail metadata management and source control processes
- Use and understand the purpose of Lifecycle Services

Module 5: Implement application lifecycle management in finance and operations apps

- Define ALM
- Learn about the different ALM methodologies
- Build models
- Create a project plan for building and testing solutions
- Create processes for release management, change management, and risk management

Module 6: Manage finance and operations apps implementations by using Lifecycle Services

- Performing support tasks
- Provisioning and managing environments
- Managing asset libraries
- Managing the code upgrade process between versions of finance and operations apps



Module 7: Start developing finance and operations apps by using Visual Studio

- Create and build projects and deployable packages in Visual Studio
- Use the Application Explorer to manage elements
- Synchronize data dictionary changes with the application database
- Work in the Element Designer to create elements
- Labs: Create a project and add an element

Module 8: Manage source code by using version control in finance and operations apps

- Connect your developer environment to an Azure DevOps project
- Use best practices for version control
- Manage and perform code reviews

Module 9: Build extended data types and enumerations for finance and operations apps

- Identify the different types of EDTs
- Learn about the use of base enumerations (base enums)
- Identify how EDTs and base enums are viewed in the finance and operations apps user interface
- Create a base enumeration
- Labs: Create a base enumeration, add elements, and update properties

Module 10: Build tables in finance and operations apps

- Define the use of tables in finance and operations apps
- Create a new table in Visual Studio
- Manage table properties
- Add fields and field groups to a table
- Create an index and a table relation
- Learn about table methods
- Labs: Create a table, add fields, and create field groups

Module 11: Extend elements in finance and operations apps

- Create extensions to customize finance and operations apps
- Extend a table
- Create a form extension
- Labs: Extend a form and add controls

Module 12: Build forms and optimize form performance in finance and operations apps

- Create a new form
- Apply a form pattern
- Add a data source to a form
- Add grids, fields, and groups to a form
- Understand form methods
- Discover the types of menu items
- Create a menu item and add it to a form
- Run a form and test its functionality
- Learn about browser-based and Performance Timer tools that are used to optimize form performance
- Create a form

Module 13: Create classes in finance and operations apps

- Learn about the use of classes in developing finance and operations apps
- Create a new class that is added to a project
- Add methods to a class



- Review the types of methods that can be used in a class
- Labs: Insert records by using a runnable class

Module 14: Explore extensions and the extension framework in finance and operations apps

- Learn about the reasons for creating extensions
- Determine when to use the extensibility request form
- · Learn about the risk of intrusive customizations
- Develop code that will extend the functionality of finance and operations apps
- Implement the SysOperationSandbox framework
- Labs: Extend an EDT

Module 15: Configure your user interface in Finance and Operations apps

- Add a menu item to the favorites
- Explain how different roles see different dashboards
- Add a KPI to a dashboard workspace
- Modify the fields in a form
- Modify the fields in a report
- Labs: Create favorites
- Labs: View role-based dashboards
- Labs: Change form fields and queries
- Labs: Change report output

Module 16: Build workspaces in finance and operations apps

- Design and build key performance indicators (KPIs)
- Create workspace elements
- Use Report Definition Language (RDL) to create custom reports
- Implement reporting components into workspaces
- Labs: Create a workspace and add a tile, list, link, and Power BI element

Module 17: Get started with development using X++ in finance and operations apps

- Identify components of classes
- Create an instance of a class
- Create objects in a constructor
- Manipulate data by using X++
- Identify the different types of conditional statements
- Write conditional statements
- Write loop statements
- Use iterative statements
- Identify exception-handling statements
- Write exception-handling statements
- Learn about the use and function of const values

Module 18: Develop object-oriented code in finance and operations apps

- Discover the importance of object-oriented programming for finance and operations apps
- Learn the importance of abstract classes and inheritance in object-oriented programming
- Learn about interfaces
- Use the Chain of Command (CoC)
- Learn how scoping is implemented in X++ code
- Determine when to use references and values
- Labs: Create an extension by using Chain of Command



Module 19: Build reports for finance and operations apps

- Enable Business document management
- Design, create, and modify SSRS reports
- Create and modify a Power BI report by using finance and operations apps data
- Create and modify an Excel report by using finance and operations apps data
- Learn how to build SQL statement by using query objects
- Labs: Create and deploy a report

Module 20: Implement the Data management package API for finance and operations apps

- Import and export APIs between finance and operations apps cloud deployments and onpremises deployments
- Import and export APIs between on-premises deployments
- Use GetExecutionSummaryStatus to get the status and availability of APIs
- Create wrapper classes with C# and X++

Module 21: Explore the test framework and tools in finance and operations apps

- Capabilities and benefits of the unit test framework
- Capabilities and benefits of Task Recorder
- Benefits of the Best Practices tool

Module 22: Perform user acceptance testing in finance and operations apps

- Test cases and business requirements
- Best practices for recording test cases
- Task recorder
- How to create a BPM library
- How to synchronize and configure your test plan in Azure DevOps
- How to run test cases manually and automatically
- The Regression suite automation tool (RSAT)
- Labs: Build test scripts to test business functionality

Module 23: Explore reporting tools in finance and operations apps

- Learn about the capabilities of various reporting tools in finance and operations apps
- Determine which types of reports should be used
- Create and modify a report data source
- Learn about reporting and security requirements
- Deploy reports with PowerShell
- Deploy reports with Visual Studio
- Labs: Set authorization requirements on database tables

Module 24: Compare reporting and analytics in finance and operations apps with Dynamics AX 2012

- Reporting and Power BI analysis used with AX 2012
- The reporting options available in finance and operations apps
- Data export services in finance and operations apps
- How to modernize your data warehouse
- How to modernize your analytics and reporting

Module 25: Identify data integration patterns and scenarios in finance and operations apps

- Identify integration web application programming interfaces
- Explore available data integration scenarios
- Identify the key differences between synchronous and asynchronous integrations



Module 26: Implement data integration concepts and solutions for finance and operations apps

- · Create a data entity
- Enable data management capabilities
- Expose Open Data Protocol (OData) endpoints with data entities
- · Identify custom service endpoints
- Discover external web services that are available for use
- Consume external web services
- Connect to your data with the Microsoft Excel add-in
- Connect to your data with Microsoft Power Apps

Module 27: Data integrations with finance and operations apps

- Set up a data project
- Set up a recurring data job
- Define authorization for integrations by using OAuth
- Monitor the status and availability of entities
- Develop data transformations
- Use Microsoft Dataverse to synchronize entities between Dynamics 365 applications
- Use composite data entities
- Integrate composite data entities
- Export composite data entities
- Learn about Azure Data Lake and Entity Store and how to change data in Azure Data Lake
- Learn about Microsoft Power Platform convergence
- · Labs: Create a data project and recurring data job

Module 28: Connect to Microsoft Power Platform services with finance and operations apps

- Connect your finance and operations apps data with Power Automate
- Connect to your finance and operations apps data with Power Apps
- Learn about the Common Data Model to bring data from multiple systems and applications together

Module 29: Dual-write implementation for Dynamics 365 solutions

- Learn about the Dual-write implementation workshop
- Prepare for the Dual-write implementation workshop
- Learn how to conduct the Dual-write implementation workshop
- Follow up after the Dual-write implementation workshop

Module 30: Work with data management in finance and operations apps

- Identify the correct pattern for a given scenario to use the Data management platform for integration by using data entities
- Work with the Data management workspace
- Export data from a legal entity
- Import data into a legal entity
- Work with data import and export jobs
- Clean up the staging tables
- Work with database movement operations
- Work with the data-sharing framework
- Labs: Explore the Data management workspace
- Labs: Export data using the Data management workspace

Module 31: Work with performance and monitoring tools in finance and operations apps

• Diagnose performance issues by using the Trace parser



- Explore load testing by using the Performance SDK
- Monitor performance by using the SQL Insights dashboard
- Monitor server Health metrics in Microsoft Dynamics Lifecycle Services
- Labs: Use the Environment monitoring tool in Lifecycle Services

Module 32: Implement role-based security in finance and operations apps

- Create and modify roles, duties, privileges, and permissions
- Review the role-based security hierarchy
- Use and enforce permissions policies
- Define the extensible data security framework (XDS)
- Apply for security permissions
- Stay compliant with user licensing requirements
- Labs: Create a new security role and add duties

Module 33: Plan and implement security in finance and operations apps

- Understand the security architecture of finance and operations apps
- Learn about encryption in finance and operations apps
- Manage users
- Manage security
- Apply segregation of duties
- Run security reports
- Stay compliant with user licensing requirements
- Labs: Import a user and assign a security role
- Labs: Work with security

Module 34: Apply basic performance optimization in finance and operations apps

- Discover what temporary tables are and when to use them
- Learn about what set-based statements and row-based operations are and when to use each
- Understand and demonstrate different methods for optimizing custom queries
- Learn about the different caching methods that are possible and when each should be used
- Labs: Create runnable classes in Visual Studio to test code

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