
Building COM+ Applications Using Microsoft .NET Enterprise Services

Duration: 5 Course Code: M2557

Overview:

This five-day instructor-led course provides delegates with the knowledge and skills to effectively build scalable, distributed applications that use Microsoft® .NET Enterprise Services and the Microsoft .NET Framework.

Target Audience:

This course is intended for departmental developers who currently build client/server applications and large-scale solutions for departments inside a business; consultants who work with developers to build client/server applications and large-scale solutions for businesses; Web developers who build Web-based applications requiring significant infrastructure support such as transactions, security, and pooling of resources; and Line-of-Business (LOB) application developers.

Objectives:

- Describe the history of server-based applications and describe the COM+ runtime architecture.
 - Use attributes to configure an assembly as a COM+ application and create components that use Just-in-Time (JIT) activation and are synchronized.
 - Create data access components that use Microsoft ADO.NET to retrieve or update data in a database.
 - Create transactional components.
 - Secure an enterprise application by using COM+ services role-based security.
 - Manage state in JIT activated components.
 - Create Compensating Resource Managers (CRMs) to enable transactional support for resources lacking a resource manager
 - Use loosely coupled events (LCEs) to send notifications to other applications.
 - Create queued components.
 - Debug COM+ applications and describe common application-failure scenarios and how to solve these failures.
 - Create scripts for managing deployment and administration.
 - Use the enhancements provided by COM+ version 1.5 to improve the scalability, availability, and manageability of COM+ applications and use COM+ features such as Services Without Components (SWC), Bring Your Own Transaction (BYOT), and Phase Zero notification in applications.
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Prerequisites:

Delegates are required to meet the following prerequisites:

- Experience building assemblies by using Microsoft Visual Basic® .NET or Microsoft Visual C#.
- Experience handling database transactions in program code.
- In addition, it is recommended (but not required) that delegates have completed M2349 - Programming with the Microsoft .NET Framework (Microsoft Visual C# .NET).

Testing and Certification

Recommended as preparation for exam(s):

- 70-310- Developing XML Web Services and Server Components with Microsoft Visual Basic .NET and the Microsoft .NET Framework
 - 70-320 - Developing XML Web Services and Server Components with Microsoft Visual C# and Microsoft and the Microsoft .NET Framework
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Content:

Introduction to COM+ Services

- History of Server-Based Applications
- The COM+ Runtime Architecture

Configuring Just-in-Time Activation and Synchronisation

- The .NET Enterprise Services Programming Model
- JIT Activation
- Synchronization

Using ADO.NET to Work With Data

- The ADO.NET Architecture
- Accessing a SQL Server Database

Transaction Services

- Introduction to Transaction Processing
- .NET Enterprise Services Transactions

Securing Enterprise Applications

- Introduction to Application Security
- Implementing COM+ Role-Based Security
- Authentication and Impersonation

State Management

- Introduction to State Management
- Using the Shared Property Manager
- Using ASP.NET to Store State

Compensating Resource Managers

- Introduction to Compensating Resource Managers
- Implementing Compensating Resource Managers

Loosely Coupled Events

- Introduction to Loosely Coupled Events
- COM+ Events
- Using Loosely Coupled Events

Queued Components

- Introduction to Queuing
- Developing Queued Components
- Queued Components and Transactions

Debugging COM+ Applications

- Debugging Tools
- Common Debugging Scenarios

Deploying and Administering COM+ Applications

- Deploying a COM+ Application Built Using .NET Enterprise Services
- Using COMAdmin Objects in WSH Scripts

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 01924 377489

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