

MS 2549 - Advanced Distributed Application Development with Microsoft Visual Studio 2005

Description: This two-day instructor-led workshop provides students with the knowledge and skills to develop advanced distributed applications using Microsoft Visual Studio 2005. The workshop focuses on advanced features of Web Services Enhancements (WSE) 3.0 and message queuing.

Days: 2

Prerequisites: Before attending this course, students:

- Must have attended or studied Workshop 2548A, Core Distributed Applications or possess equivalent knowledge and skills.
- Must be able to create Web services.
- Must be able to write applications that use Web services.
- Be able to send and receive messages by using Message Queuing

Audience: This workshop is intended for corporate or independent software vendor (ISV) application developers who have a desire to learn more about specific technology areas in Microsoft Windows application development.

Unit 1: Implementing WSE 3.0 Security and Policy

This unit introduces Web Services Enhancements (WSE) 3.0. It explains the Web service WS-* standards implemented by WSE and the WSE 3.0 architecture. The unit also shows how to protect Web services with WSE using policies, encryption, digital signing, and security credentials.

Lessons

- What is WSE 3.0 Security?
- Implementing WSE 3.0 Policies

Lab 1: Implementing WSE 3.0 Security and Policy

Unit 2: Implementing WSE 3.0 Custom Policy Assertions

This unit introduces the WSE 3.0 custom policy assertion mechanism. It shows the architecture of the custom policy assertions in WSE 3.0 and how to use custom policy assertions in a Web service.

Lesson

- What is a WSE 3.0 Custom Policy Assertion?
- Applying Custom Policy Assertions

Lab 2: Implementing WSE 3.0 Custom Policy Assertions

Unit 3: Handling Large Data Transfer by Using WSE 3.0

This unit describes how to send and receive large files by using WSE 3.0. It discusses the Message Transmission Optimization Mechanism (MTOM) protocol, how to send and receive files, and how to handle bulky data in binary format in SOAP messages.

Lesson

- What is the Message Transmission Optimization Mechanism (MTOM)?
- How to Use MTOM with WSE 3.0

Lab 3: Handling Large Data Transfers with WSE 3.0

Unit 4: Implementing WSE 3.0 SOAP Messaging

This unit describes how to implement SOAP messaging. It describes how to send and receive SOAP messages in Web services by using different sets of protocols.

Lessons

- What is SOAP Messaging?
- Sending and Receiving SOAP Messages
- TCP and HTTP Messaging

Lab 4: Implementing WSE 3.0 SOAP Messaging

Unit 5: Implementing SOAP Headers and Extensions

This unit describes SOAP headers and extensions. It explains what a SOAP header is, and how a Web service processes a SOAP extension.

Lessons

- What is a SOAP Header?
- What is a SOAP Extension?

Lab 5: Implementing SOAP Headers and Extensions

Unit 6: Implementing WSE 3.0 Routing

This unit discusses the routing mechanisms supported in WSE 3.0. It explains how to route Web method calls and how to implement content-based routing.

Lessons

- What is Routing?
- Using WSE 3.0 Routing

Lab 6: Implementing WSE 3.0 Routing

Unit 7: Optimizing and Protecting Message Queuing

This unit discusses techniques for improving the security and optimizing the performance of applications that use the queuing mechanisms. It also describes how to verify whether messages posted to a queue are delivered successfully and how to correlate a message reply posted to a queue with the original message.

Lessons

- How to Reduce Message Queue Bottlenecks
- How to Verify Message Delivery
- How to Correlate Message Replies
- How to Use Encryption and Authentication in Message Queues

Lab 7: Optimizing and Protecting Message Queuing

Upcoming Classes

Jun 18, 2012 - Jun 19, 2012

Jul 10, 2012 - Jul 11, 2012

Aug 29, 2012 - Aug 30, 2012

Sep 17, 2012 - Sep 18, 2012

Oct 11, 2012 - Oct 12, 2012

Nov 19, 2012 - Nov 20, 2012

Dec 12, 2012 - Dec 13, 2012