



Take your skills to the next level with this advanced class for experienced BizTalk Server developers



Are you a BizTalk Developer that knows *what* to do but you are unsure *why* you do it? If so, you need to BizTalk Server Developer Deep Dive. This class focuses on best-practices & pattern-based design while pulling back the curtain on some of BizTalk Server's eccentricities. This class guarantees to challenge the way you think about BizTalk Server application design.

#### Flexible Learning Options

#### **Attend in Person**

- Industry expert trainers
- Relevant training skills
- High-tech teaching tools

## **Connect Remotely**

- Classroom-in-the-cloud
- Connect from anywhere
- 24-hour access to labs

#### **Bring Us Onsite**

- Customized curriculum
- Connect staff from multiple locations
- Access hands-on labs over the Internet

"After the first few days of training, I looked over some of my existing BizTalk deployments & immediately saw ways to improve & streamline." -Eric B.

"This is one of the best learning sessions I've ever had." —Rahul J..

#### Course Highlights

At course completion, students will be able to:

- Create custom functoids
- Design maps that execute custom XSLT
- Create EDI-based solutions to receive, send, & batch messages
- Create messaging solutions that de-batch flat-file & XML interchanges
- Build processes that subscribe to failed messages
- Create custom pipeline components
- Integrate with SQL Server databases using the WCF-SQL adapter
- Create loosely-coupled orchestrations using direct-bound ports
- Properly utilize the Call Orchestration & Start Orchestration shapes
- Develop applications that use dynamic send ports
- Implement complex orchestration patterns including: external code invocation, convoys, transactions & compensation, & exception handling
- Aggregate message instances using an orchestration & send pipeline
- Create a role & party-based integration solution
- Create business-rule vocabularies & polices
- Create custom tracking solutions using Business Activity Monitoring
- Extend visibility to custom .NET application using the BAM API

#### Audience

This course is intended for:

 Experienced Developers – who have previously attended the BizTalk Server Developer Immersion course and have at least 12 months hands-on experience implementing BizTalk Server solutions.









# Course Outline

### Module 1: Review of BizTalk Server Fundamentals

- BizTalk Server Architecture
- Lab: Creating a BizTalk Solution

## Module 2: Inner Workings of the Messaging Engine

- Lesson 1: Messaging Engine Deep Dive
- Lesson 2: Two-way Messaging Without Orchestrations

# Module 3: Designing and Testing Schemas

- Lesson 1: Schema Design
- Lesson 2: Enabling Unit Testing for BizTalk Projects
- Lab: Creating Reusable Types in a Schema

#### Module 4: Data Translation and Transformation

- Lesson 1: Custom Data Transformation
- Lab: Creating Custom Functoids
- Lab: Transforming Messages using Custom XSLT
- Lesson 2: Creating Custom Pipeline Components
- Lab: Creating Custom Pipeline Components

## Module 5: Working with Message Interchanges

- Lesson 1: De-Batching Message Interchanges
- Lab: Processing Flat-File Interchanges
- Lab: Processing XML Interchanges

## Module 6: Advanced Concepts of WCF Adapters

- Lesson 1: Connecting to External Systems
- Lesson 2: Using WCF LOB Adapters in BizTalk Server
- Lab: Executing Composite Operations Using the WCF-SQL Adapter







# Module 7: Publishing and Consuming WCF and RESTful Services

- Lesson 1: Overview of Service Integration Using WCF
- Lesson 2: Implementing WCF Services
- Lab: Building a Service Aggregator Orchestration
- Lab: Exposing BizTalk Processes as Services

## Module 8: Advanced Orchestration Communication Patterns

- Lesson 1: Orchestration Engine Deep Dive
- Lesson 2: Splitting and Aggregating Messages using Orchestrations
- Lesson 3: Orchestration Communication
- Lab: Orchestration Communication Patterns

# Module 9: Bridging the Synchronous/Asynchronous Gap Across Multiple Channels

- Lesson 1: Correlating Messages in Orchestration Instances
- Lesson 2: Building Convoy Orchestrations
- Lab: Creating Convoys

# Module 10: Handling Orchestration Faults and Exceptions

- Lesson 1: Exception Handling in Orchestrations
- Lab: Configuring Exception Handling

# Module 11: Implementing Transactions and Compensation

- Lesson 1: Creating Transactional Processes
- Lab: Implementing Transactions and Compensation

# Module 12: Designing Custom Tracking Models for BizTalk Applications

- Lesson 1: Introduction to Business Activity Monitoring
- Lesson 2: Enabling Business Activity Monitoring
- Lesson 3: Extending BAM Beyond BizTalk
- Lab: Creating a Simple BAM Solution
- Lab: Gathering Data Using the BAM API







# Module 13: Building Declarative Logic Using the Business Rules Engine

- Lesson 1: Concepts of Declarative Logic
- Lesson 2: Fundamentals of BizTalk BRE
- Lesson 3: Integrating Policies with BizTalk
- Lab: Building and Using Declarative Logic in a BizTalk Application

# Module 14: Advanced Concepts of the Business Rules Engine

- Lesson 1: Advanced Business Rule Concepts
- Lesson 2: Working with Advanced Facts

# Module 15: Integrating Across Business Boundaries Using Parties, Roles, and EDI

- Lesson 1: Port Binding Option Review
- Lesson 2: Role-Based Integration
- Lesson 3: What is EDI?
- Lesson 4: Enabling EDI-Based Messaging
- Lab: Create a Role and Party-Based Integration Solution

