

# BizTalk Server 2020 Developer Immersion

# **Course Summary**

#### Description

Integration takes many forms, from simply moving files between an FTP site and a local file share, to complex trading partner connections using Electronic Data Interchange (EDI), and everything in between. BizTalk Server is Microsoft's flagship integration technology and is used by companies all over the world to solve integration problems big and small.

This course is designed to educate .NET developers on how to create enterprise-class integration solutions using Microsoft BizTalk Server. This intensive, yet entertaining and engaging, guided tour of BizTalk Server teaches developers the core skills needed to build integration applications. Join QuickLearn Training's expert trainers and learn what it truly means to be a BizTalk Server developer.

Whether you choose to receive the instruction face-to-face with one of our trainers, or attend the course remotely, rest assured that you will receive the very best training available to launch you into your BizTalk developer experience.

In this course, attendees will receive live instruction from one of our expert trainers, in-classroom demonstrations, challenging hands-on labs, and an electronic copy of the presentation materials and lab guide with hands-on activities.

#### **Objectives**

At the end of this course, students will be able to:

- Automate deployment using MSIs and scripts
- Create and configure XML and flat file schemas
- Transform messages using maps
- Manipulate data using Functoids
- Enable message routing and processing using receive and send ports
- Troubleshoot exceptions
- Enable tracking of BizTalk Server activity
- Create and configure pipelines to process XML, flat file, and EDI data
- Create orchestrations to automate critical business processes
- Implement orchestration patterns such as correlation and direct-bound ports
- Integrate with ASMX, WCF, PHP, JAVA, and REST services
- Implement a variety of adapters
- Integrate with trading partners and applications using EDI After Hours
- Develop Business Rules Engine (BRE) policies After Hours
- Enable Business Activity Monitoring (BAM) After Hours

#### **Topics**

- BizTalk Server Overview
- Creating BizTalk Schemas
- Creating BizTalk Maps
- Deploying BizTalk Applications
- Enabling Message Routing Using Ports
- Troubleshooting BizTalk Runtime Exceptions
- The BizTalk Server Runtime Hosting Model
- Tracking BizTalk Server Activity

- Creating Pipelines
- Basic Orchestration Design
- Advanced Orchestration Design
- Introduction to WCF Adapters and Two-Way Communication
- RESTful API Integration

Integrating with Databases Using the WCF-SQL Adapter

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# ProTech Professional Technical Services, Inc.



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#### Audience

Experienced .NET Developers who are new, or relatively new, to BizTalk Server development and want to take their place as a valuable member of any BizTalk development team.

#### **Prerequisites**

Students should be experienced with .NET development (C# or VB .NET), working with Visual Studio, and the concepts of SQL Server databases. Prior experience with web services and XML is also desirable.

#### **Duration**

Five days



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# **Course Outline**

### I. BizTalk Server Overview

- A. What Is BizTalk Server
- B. BizTalk Components and Capabilities
- C. What's New in BizTalk Server
- D. BizTalk Server Tools and Tasks

### II. Creating BizTalk Schemas

- A. Introduction to BizTalk Schemas
- B. Creating Schemas
- C. Creating Custom Data Types
- D. Schemas for Non-XML Messages

### III. Creating BizTalk Maps

- A. Creating a BizTalk Map
- B. Manipulating Data Using Functoids
- C. BizTalk Mapper Usability Features

### IV. Deploying BizTalk Applications

- A. Deploying Fundamentals
- B. Deploying Assemblies
- C. Working with Binding Files
- D. Deploying Using MSI Packages

### V. Enabling Message Routing Using Ports

- A. Introduction to Message Routing
- B. Configuring Message Routing
- C. Monitoring BizTalk Processes
- D. Enabling Tracking and Viewing Tracked Data

#### VI. Troubleshooting BizTalk Runtime Exceptions

A. Troubleshooting Issues Using the Group Hub

### VII. The BizTalk Server Runtime Hosting Model

- A. Concepts of Hosts and Host Instances
- B. Managing BizTalk Hosts and Host Instances

### VIII. Tracking BizTalk Server Activity

- A. Enabling Tracking and Viewing Tracked Data
- B. How Does Tracking Really Work?

# IX. Creating Pipelines

- A. Introduction to Pipelines
- B. Building Custom Pipelines

### X. Basic Orchestration Design

- A. Introduction to BizTalk Orchestration
- B. Building an Orchestration

### XI. Advanced Orchestration Design

- A. Orchestration Shapes
- B. Logical Port Binding Options
- C. Implementing Correlation
- D. Invoking Orchestrations

#### XII. Introduction to WCF Adapters and Two-Way Communication

- A. Communication with Two-Way Services
- B. Adapter Hosting Models
- C. Concepts of BizTalk Server's WCF Adapters

# XIII.: RESTful API Integration

- A. RESTful APIs 101
- B. Address Templating
- C. HTTP Verbs, Headers, and Response Codes
- D. Working with JSON Encoded Messages
- E. Preprocessing Messages with IIS Modules

#### XIV. Integrating with Databases Using the WCF-SQL Adapter

- A. Generating BizTalk Artifacts from Database
- B. Registering the WCF-SQL Adapter

### XV. Integrating with Azure Service Bus

- A. What Is Service Bus?
- B. Connecting to Service Bus