BizTalk Server 2016 Administrator Deep Dive

Course Summary

Description

Attendees of this course learn how to create and implement plans for performance tuning, scaling out, and automated monitoring. If you want to understand how to keep your BizTalk Server environments healthy, happy, and issue-free, this is the course for you.

In this five-day course, you will learn how to design and run a variety of tests in a BizTalk Server environment, including: performance testing, load testing, and integration testing. You will learn how to measure your tests and analyze your testing data so you can apply the lessons learned from your tests to configure your hardware, network, SQL Server, and BizTalk Server for ideal performance and sustained health.

Furthermore, you will learn about the inner workings of BizTalk Server host instances and the databases that support BizTalk Server. At the end of this course you will be able to apply all the lessons learned to configure BizTalk Server throttling to ensure sustainable throughput.

This is an advanced-level course. Attendees are expected to have a working understanding of BizTalk Server administration concepts, including: application deployment, application management, and basic troubleshooting.

Objectives

After taking this course, students will be able to:
- Implement change control management plans for BizTalk Server applications
- Monitor BizTalk Server and SQL Server performance using Performance Monitor
- Analyze performance data
- Identify and remedy performance bottlenecks
- Provide highly available deployments
- Troubleshoot and resolve runtime exceptions
- Implement automated monitoring using System Center Operations Manager
- Create automated test plans
- Tune the hardware, the operating system, the network, and SQL Server for ideal performance
- Tune the BizTalk Server runtime and applications for ideal performance
- Design and execute daily, weekly, monthly, and quarterly health checks

Topics

- Review of BizTalk Server Administration Fundamentals
- Managing BizTalk Server Applications
- Understanding Hosts and Host Instances
- Tracking BizTalk Server Activity
- Handling Runtime Exceptions
- Testing Practices and Methodologies
- Monitoring BizTalk Server
- Automated Monitoring of BizTalk Server

- Optimizing BizTalk Server Performance
- Performance Tuning the BizTalk Server Platform
- Performance Tuning SQL Server
- Optimizing Resource Usage through Throttling
- Maintaining a Healthy BizTalk Server Environment

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Course Summary (cont'd)

Audience

This course is designed for experienced BizTalk Server Administrators who have at least six months of hands-on experience managing BizTalk Server deployments, and experienced BizTalk Server Developers who support operations personnel with running health checks and performance tuning.

Prerequisites

Before taking this course, students should have experience with core BizTalk Server administration concepts and skills. They should already know how to deploy applications, create deployment scripts, create/configure send and receive ports, and troubleshoot runtime exceptions.

Duration

Five days

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Course Outline

I. **Review of BizTalk Server Administration Fundamentals**
   A. Frequently Asked Questions

II. **Managing BizTalk Server Applications**
   A. Deploying BizTalk Applications
   B. Updating BizTalk Applications
   C. Change Control Options

III. **Understanding Hosts and Host Instances**
   A. BizTalk Hosts and Host Instances
   B. Creating Hosts and Host Instances
   C. Clustering in BizTalk Environments
   D. Configuring BizTalk Adapter Handlers
   E. MessageBox Deep Dive
   F. Implementation Patterns for Hosts

IV. **Tracking BizTalk Server Activity**
   A. Enabling Tracking
   B. Viewing Tracked Information

V. **Handling Runtime Exceptions**
   A. Troubleshooting Runtime Exceptions

VI. **Testing Practices and Methodologies**
   A. Types of Testing
   B. Testing Myths Busted
   C. Performance Testing Methodology

VII. **Monitoring BizTalk Server**
   A. Types of Monitoring
   B. What is PAL?
   C. Other Tools for Monitoring BizTalk Server

VIII. **Automated Monitoring of BizTalk Server**
   A. Monitoring Obstacles
   B. Monitoring BizTalk Using OpsMgr
   C. Monitoring BizTalk Using BizTalk 360
   D. Monitoring BizTalk Using AIMS for BizTalk

IX. **Optimizing BizTalk Server Performance**
   A. General Optimizations
   B. Optimizing for Low Latency
   C. Using Relog.exe

X. **Performance Tuning the BizTalk Server Platform**
   A. Tuning Operating System Performance
   B. Tuning Network Performance
   C. Tuning IIS Performance

XI. **Performance Tuning SQL Server**
   A. SQL Server Theories
   B. Optimizing Before BizTalk Server
   C. Optimizing After BizTalk Server
   D. SQL Settings to Leave Alone

XII. **Optimizing Resource Usage Through Throttling**
   A. What Is Throttling?
   B. How Throttling Works
   C. Throttling Recommendations

XIII. **Maintaining a Healthy BizTalk Server Environment**
   A. Daily Tasks
   B. Weekly Tasks
   C. Monthly & Quarterly Tasks