



**Certified Enterprise Applications
Integration Specialist
(With Microsoft BizTalk Server)
Sample Material**

V-Skills Certifications

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1. INTRODUCTION & INSTALLATION

1.1 Introduction

BizTalk is a business process management (BPM) server that enables organizations to automate and optimize business processes. This includes powerful, familiar tools to design, develop, deploy, and manage those processes. It's is a middleware technology designed to integrate disparate systems within and outside organization. BizTalk integration of applications supports Modularity and decoupling in its totality. The publish and subscribe mechanisms greatly decouple receiving data from how the data is used. F example, we can add more subscribers without changing how the data is received

1.2 Installation

The basic installation process for BizTalk Server is the same as most Windows-based applications. The BizTalk Server Setup program calls Windows Installer to install BizTalk Server and related components. If a required component is not present, Setup is able to install prerequisites from the Web or from a pre-downloaded CAB file. The CAB file contains the following redistributable prerequisites

- ✓ Microsoft Office 2003 Web Components
- ✓ Microsoft Data Access Components (MDAC) 2.8 Service Pack 1 (SP1)
- ✓ Microsoft XML Core Services (MSXML) 3.0 SP7
- ✓ Microsoft XML Core Services (MSXML) 6.0
- ✓ SQLXML 3.0 SP3
- ✓ Microsoft .NET Framework 2.0
- ✓ Microsoft .NET Framework 3.0
- ✓ ADOMD.NET 8.0

The following paragraph describes the available features and components that can be installed

- ✓ **Documentation:** Selecting the Documentation component installs the core documentation, tutorials, UI reference (F1 Help), programmer's reference, and usage instructions for the SDK samples and utilities
- ✓ **Server Runtime:** Selecting the Server Runtime component installs the runtime services for BizTalk Server 2006. These runtime services are an essential part of the BizTalk Server platform.
 - ✓ **BizTalk EDI/AS2 Runtime:** Selecting the BizTalk EDI/AS2 Runtime component installs the BizTalk EDI/AS2 runtime. These runtime services provide native support for Electronic Data Interchange (EDI) data exchange and AS2 (Applicability Statement 2) data transport messaging functionality.
 - ✓ **Administrative Tools:** Selecting the Administration Tools component installs the necessary software to administer BizTalk Server 2006 on both the local computer and a remote server

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- ✓ **Developer Tools and SDK:** Selecting the Developer Tools and SDK component installs samples and utilities that enable the rapid creation of BizTalk Server 2006 solutions. This includes: SDK samples and supporting documentation, BizTalk Explorer, schema and map designers, and Microsoft Visual Studio project templates. This component requires Visual Studio 2005.

Precautions while installing When Installing BizTalk Server 2006 on Windows XP

- ✓ Installing and configuring BizTalk Server in the workgroup environment on a single computer is supported. SQL Server and BizTalk Server features and components are installed and configured on the same computer.
- ✓ BizTalk Server supports only Active Directory domain groups and user accounts when you use multicomputer configurations, including SQL Server. Domain groups include Domain Local Groups, Global Groups, and Universal Groups, which are supported in single-server and in multicomputer environments. You must manually create all of the domain groups and accounts before you configure BizTalk Server.
- ✓ The user running the BizTalk Server configuration must belong to the following user groups or have the equivalent permissions
 - ✓ Administrators group on the local computer.
 - ✓ SQL Server System Administrators group on the SQL Server.
 - ✓ Member of the domain group used for the "BizTalk Server Administrators" group.
 - ✓ Member of the domain group used for the "SSO Administrators" group.

1.3 Hardware Requirements

The following shows the minimum recommended hardware requirements for a BizTalk Server 2006 R2 installation on Windows XP as per Microsoft Corporation.

- ✓ **Computer and processor:** 450 MHz or higher Intel Pentium-compatible CPU. Hyper-Threading and Dual-Core processors are supported.
- ✓ **Memory:** 512 MB of RAM
- ✓ **Hard Disk:** 10GB of available HDD space

1.4 Software Requirements

The following table lists the prerequisite software you must install on the computer that will run BizTalk Server as per Microsoft Corporation

Product	Description
Windows XP Professional Edition with Service Pack 2	Provides operating system security and Web site administration through Internet Information Services (IIS).
Internet Information Services 5.1	IIS is a powerful Web server that provides a highly reliable, manageable, and scalable Web application infrastructure. BizTalk Server requires IIS for certain features.

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Product	Description
Microsoft SQL Server 2005 with Service Pack 2 or Microsoft SQL Server 2000 with Service Pack 4	Microsoft SQL Server is an enterprise-class relational database server capable of efficiently processing high volumes of critical data. Note - Using SQL Server Express Edition in a production environment is not recommended.
Microsoft SQL Server 2000 Analysis Services with Service Pack 4	SQL Server 2000 Analysis Services is the next generation of the OLAP Services component that was included in SQL Server 7.0.
SQLXML 3.0 with Service Pack 3	SQLXML enables XML support for your SQL Server Database. It allows developers to bridge the gap between XML and relational data. You can create an XML View of your existing relational data and work with it as if it were an XML file.
SQL Server Notification Services 2.0 with Service Pack 1	Microsoft SQL Server 2000 Notification Services provides organizations with a high-performance platform to build scalable notification applications that generate messages customized to meet their users' specific information requirements. This is required if you plan to configure BAM alerts.
Microsoft Excel 2003 with Service Pack 2	Business Activity Monitoring (BAM) uses a Microsoft Excel workbook to provide business users with a way to see a real-time holistic view of business processes.
Microsoft .NET Framework 3.0	The .NET Framework version 3.0 improves scalability and performance with improved caching, application deployment and updating with ClickOnce, support for the broadest array of browsers and devices with ASP.NET 2.0 controls and services. This is required for the BizTalk Server 2006 runtime.
Microsoft Visual Studio 2005	Microsoft Visual Studio 2005 provides a powerful, enterprise team development environment for rapidly building mission-critical applications that target any device and integrate with any platform. This is required for the BizTalk Server Developer Tools and

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Product	Description
	<p>SDK component.</p> <p>Note The Developer Tools and SDK component cannot be installed on Visual Studio 2005 Express Editions.</p>
Microsoft Data Access Components (MDAC) 2.8 Service Pack 1 (SP1)	Microsoft Data Access Components (MDAC) 2.8 SP1 contains core Data Access components such as the Microsoft SQL Server OLE DB provider and ODBC driver.
Microsoft XML Core Services (MSXML) 3.0 Service Pack 7 (SP7)	XML Core Services (formerly known as MSXML, for Microsoft Extensible Markup Language or XML) is an application for processing Extensible Stylesheet Language Transformation (XSLT) in an XML file. XML Core Services is a required piece of software for your BizTalk Server installation.
Microsoft XML Core Services (MSXML) 6.0	MSXML 6.0 has improved reliability, security, conformance with the XML 1.0 and XML Schema 1.0 W3C Recommendations, and compatibility with System.Xml 2.0.
Office Web Components 11 (OWC11) Version 4	Microsoft Office Web Components are a collection of Component Object Model (COM) controls for publishing spreadsheets, charts, and databases to the Web, and for viewing the published components on the Web. OWC11 Version 4 is optional for a BizTalk Server 2006 R2 installation. It is required only if you want to use Health and Activity Tracking (HAT).
ADOMD.NET 8.0	ADOMD.NET 8.0 is a .NET object model, used for building client applications that access an XML for Analysis 1.1-compliant data provider, such as that provided by the XML for Analysis 1.1 SDK. ADOMD.NET is the .NET successor to the ADOMD (COM) object model.
ADOMD.NET 9.0	ADOMD.NET 9.0 is the successor to ADOMD.NET 8.0.

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Installation and Configuration Tasks

The following process details installing and configuring an installation of BizTalk Server on Windows XP with Service Pack 2. In this task, it's required that following components are installed on computer before installing BizTalk

- ✓ Internet Information Services 5.1
- ✓ Office Excel 2003 with Service Pack 2
- ✓ Visual Studio 2005
- ✓ SQL Server 2000 with Service Pack 4 or SQL Server 2005
- ✓ SQL Server 2000 Analysis Services with Service Pack 4
- ✓ SQL Server Notification Services 2.0 with Service Pack 1

1.5 Installing Visual Studio 2005

Microsoft Visual Studio 2005 provides an enterprise team development environment for rapidly building mission-critical applications that target any device and integrate with any platform.

Visual Studio 2005 is important for the development process in BizTalk Server. To install the BizTalk Server development tools, Visual Studio 2005 must be installed first with minimum Visual C#.Net portion installed.

- ✓ Insert the Visual Studio 2005 installation disk into the DVD-ROM drive.
- ✓ Click Install Visual Studio 2005.
- ✓ After the installation loads, click **Next**.
- ✓ On the **Start Page**, accept the agreement, type your Product Key, and then click **Next**.
- ✓ On the **Options Page**, ensure that **Custom** is selected, and then click **Next**.
- ✓ Under Select features to install, clear all features except Visual C# and .NET Framework SDK, and then click Install.
- ✓ On the **Finish Page**, click **Finish** and restart system.

1.6 Install BizTalk Server 2006

- ✓ Before installing BizTalk Server, consider the following prerequisites
- ✓ Ensure that all software prerequisites are installed
- ✓ If computer name is longer than 15 characters, BizTalk Server configuration will not work.
- ✓ The account you are logged on as must be part of the local administrators group and have DBA rights on SQL Server. After configuration is complete, you can lower the privileges to DBO.
- ✓ Close all other programs before installing BizTalk Server.
- ✓ BizTalk Server Setup, Windows Installer, and several required prerequisite components generate log files during the installation process. By default, Setup creates log files in the %Temp% folder. The log files consist of one .htm summary file that is generated each time Setup is executed, one detailed .log file generated by MSI, and one .log file for configuration. Additional log files may be generated depending on additional prerequisite components installed.

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- ✓ On the Microsoft BizTalk Server 2006 Installation Wizard page, click Install Microsoft BizTalk Server 2006 on this computer.
- ✓ On the **Customer Information** page, type user name and organization, and then click **Next**.
- ✓ On the **License Agreement** page, click **Yes**, and then click **Next**.
- ✓ On the **Component Installation** page, review the available components and select the ones you want to install. For more information about the components, see "BizTalk Server 2006 Features and Components" in BizTalk Server 2006 Help. Accept the default installation location or click **Browse** to move to the location where you want to install BizTalk Server, and then click **Next**.
- ✓ On the **Redistributable Prerequisites** page, if your computer is missing a prerequisite component such as ADOMD .NET 8.0, ADOMD .NET 9.0, or SQLXML 3.0 SP3, Setup can install the redistributable prerequisites. Select **Automatically install the redistributable prerequisites from the web**, or if you have downloaded the CAB file, select **Automatically install the redistributable prerequisites from a CAB file** and browse to the location of the CAB file and select it Click **Next**.
- ✓ On the **Summary** page, verify that the components that you select to install are correct.
- ✓ Click **Install** to start the installation process.
- ✓ On the Installation Completed page, verify that the Launch BizTalk Server Configuration checkbox is selected, and then click **Finish**. This starts the Configuration Wizard.

1.7 Configuring BizTalk Server

- ✓ On the Microsoft BizTalk Server 2006 Configuration start page, ensure that Basic configuration is selected.
- ✓ Under **Database**, ensure that you enter the name of the computer where SQL Server is installed. SQL Server must be installed on the local computer for basic configuration.
- ✓ Under **Service Credential**, in the **User name** text box, type the user name for the account that the BizTalk services will run under.
 - ✓ In a Basic configuration, all BizTalk services will run under this account. The configuration process grants this account the necessary security permissions on the server and objects in SQL Server.
- ✓ Under **Service Credential**, in the **Password** text box, type the password for the account you specified, and then click **Configure**.
- ✓ On the **Summary** page, review the configuration about to be performed and make sure all features are validated, and then click **Configure**.
- ✓ On the **Completion** page, click **Finish**