#### Microsoft

## BizTalk Server 2006 R2



# **BizTalk Server 2006 R2 System Requirements**

### Introduction

This document describes the system requirements for running Microsoft® BizTalk® Server 2006 R2 with BizTalk RFID on Windows Server® 2003 operating systems. System requirements include elements of both software and hardware.

The system requirements for BizTalk Server 2006 R2 and BizTalk RFID are described in the following sections:

- BizTalk Server Requirements
- BizTalk RFID Requirements
- <u>Software Prerequisites</u>
- <u>Redistributable CAB Files</u>

### **BizTalk Server Requirements**

This section describes the software and hardware requirements for a stand-alone installation of BizTalk Server or BizTalk RFID on a single computer. Your actual requirements may vary depending on your system configuration, the BizTalk Server features you intend to deploy, deployment topology (single or multiple computer), and the volume of traffic processed by the system.

BizTalk Server and BizTalk RFID can be installed on the same computer. This is referred to as a "side-by-side" installation. If BizTalk RFID will be installed side-by-side with BizTalk Server 2006 R2, then the hardware requirements for BizTalk Server will apply, along with the software requirements for both BizTalk RFID and BizTalk Server.

#### **BizTalk Server Hardware Requirements**

The following requirements are for an installation of BizTalk Server 2006 R2 on a single computer:

Component	BizTalk Server 2006 R2 Minimum Requirement						
Computer and	A computer with an Intel Pentium-compatible CPU that is:						
processor	• 1 GHz or higher for single processors						
	• 900 MHz or higher for double processors						
	• 700 MHz or higher for quad processors						
	Hyper-Threading and Dual-Core processors are supported.						
	<ul> <li>The 64-bit versions of BizTalk Server require a 64-bit operating system running on an x64-based system. Computers based on CPUs that are compatible with the AMD64 (x86-64) and Extended Memory 64-bit Technology (EM64T) processor architecture are considered x64-based systems. BizTalk Server 2006 R2 Enterprise Edition and BizTalk Server 2006 R2 Developer Edition are the only editions that support native 64-bit execution.</li> <li>BizTalk Server is not supported on Itanium-based systems.</li> </ul>						
Memory	1 GB of RAM						
Hard disk	15 GB of available hard disk space for a complete installation including the operating system, all prerequisite software, and language packs. This does not include disk space for data storage.						
Drive	CD-ROM or DVD-ROM drive						
Display	Windows Server 2003-compatible super VGA (1024 x768) or higher- resolution monitor						
Other	Network adapter card, and a Microsoft mouse or compatible pointing device						

### **BizTalk Server 2006 R2 Software Requirements**

The minimum software requirements for a complete installation of BizTalk Server 2006 R2 on a single computer are described here. This list contains only the minimum requirements; you may need to install additional software depending on which BizTalk Server optional features you have installed.

Some of these requirements are provided for you in the redistributable CAB files for BizTalk Server. The <u>Feature Dependency Matrix</u> identifies which components are provided in the CAB files. During installation you will have the option to download CAB files from the Internet or use a pre-downloaded CAB file. If you plan to use a pre-downloaded CAB file you must ensure that you have the latest version for use with BizTalk Server 2006 R2. CAB files intended for previous versions of BizTalk Server, including BizTalk Server 2006 and pre-release versions of BizTalk Server 2006 R2, should not be used. See the <u>Software Prerequisites</u> section of this document for detailed descriptions of required and optional software.

- Windows Server 2003 with Service Pack 1 (SP1) or Service Pack 2 (SP2), or Windows Server 2003 R2. The 64-bit editions of Windows Server 2003 are supported. Windows Server 2003, Web Edition is not supported.
- Microsoft Internet Information Services (IIS) 6.0
- Microsoft Office Excel® 2003 and Microsoft Office InfoPath® 2003 with Service Pack 2. Microsoft Office Excel 2007 and Microsoft Office InfoPath 2007 are supported.
- Microsoft Visual Studio® 2005 with Visual C#® .NET. Required for BizTalk Server applications development and debugging; not required for production-only systems.
- SQL Server<sup>™</sup> 2005 with Service Pack 2 or SQL Server 2000 with Service Pack 4. SQL Server 2005 Express Edition is not recommended.
- SQL Server 2005 Analysis Services with Service Pack 2 or SQL Server 2000 Analysis Services with Service Pack 4.
- SQL Server 2005 Notification Services with Service Pack 2 or SQL Server 2000 Notification Services 2.0 with Service Pack 1.
- Business Activity Services (BAS) requires that Microsoft Windows® SharePoint® Services 2.0 with Service Pack 2 (SP2) is installed. BAS is only supported with Windows SharePoint Services 2.0 SP2.
- The Windows SharePoint Services adapter Web service requires that one of the following is installed:
  - Windows SharePoint Services 2.0 with Service Pack 2
  - Windows SharePoint Services 3.0
  - Microsoft Office SharePoint Server 2007 (MOSS)

Side-by-side installation of Windows SharePoint Services 2.0 and Windows SharePoint Services 3.0 is supported. For more information about the versions of Windows SharePoint Services that are supported for use with BizTalk Server 2006 R2 see the BizTalk Server online help topic **Windows SharePoint Services Support in BizTalk Server 2006 R2**.

If you intend to install BizTalk RFID side-by-side with BizTalk Server the following software components are required in addition to the requirements listed above:

- Microsoft .NET Framework 3.0
- Web Services Enhancements (WSE) 3.0 Required only if you install the BizTalk RFID SDK.
- Microsoft Message Queuing service (MSMQ)
- Microsoft Management Console (MMC) 3.0

## **BizTalk Server Feature Dependency Matrix**

The following table indicates the dependencies that you must install or update before installing BizTalk Server 2006 R2 based on the BizTalk Server features you plan to install.

	Platform Dependency																									
	L	SQL Server																								
					200	0	2	005											С	AB	Fik	e C	om	pon	hen	ts
	Internet Information Services (IIS)	Windows SharePoint Services 2.0 SP2	Visual Studio 2005	SQL Server 2000 SP4	SQL Server 2000 Client Tools	SQL Server 2000 Analysis Services SP4	SQL Server 2005	SQL Server 2005 Client Tools	ces	SQL Server Notification Services	Internet Explorer 6.0 SP1	Internet Explorer 7.0	Microsoft Management Console 3.0	Office Excel 2003 SP2	Office InfoPath 2003 SP2		IBM WebSphere MQ 5.3 CSD 10	.NET Framework 1.1	2.0	.NET Framework 3.0		ADO.NET 8.0		P3		Office Web Components
Feature Tree Selection	Interne	Vindow	/isual 5	SQL Se	SQL Se	SQL Se	sQL Se	SQL Se	sQL Se	SQL Sel	interne	nterne	dicroso	Office E	Office I	Office V	BM We	NET Fr	NET Fr	NET Fr	MSXML 6.0	ADO.NE	ADO.NE	MXJQS	1DAC 2	Office V
Documentation	-	1-	-	0,	0,	07	07	07	07		-	-	-	4	4	4	-	•		•	-	~	~		-	Ĕ
Server Runtime		+		⊢	⊢	⊢	$\vdash$	$\vdash$	$\vdash$	+		+	+	+	+	+	+	-	-							$\vdash$
BizTalk EDI/AS2 Runtime		+		⊢	⊢	⊢	$\vdash$	$\vdash$	Η	+		+	+	+	+	+	+	-	-		-	-	-	-	-	$\vdash$
WCF Adapter		-		⊢	⊢	-				+	-	+	+	-	+	+	-	-	-		H	-		H	$\vdash$	$\vdash$
Administrative Tools		⊢		⊢	⊢	⊢	$\vdash$	$\vdash$	$\square$	$\vdash$		+	+	+	+	+	-	-		-						
WCF Administration Tools		⊢		⊢	⊢	⊢	$\vdash$		$\square$	$\vdash$	-	+	+	+	+	+	-	-	-		-	-	-	—	-	-
Developer Tools and SDK		⊢		⊢	⊢	⊢	$\vdash$	$\vdash$	Η	$\vdash$		+	+	+	+	+	+	-	•	-		•		H		$\vdash$
Portal Components		⊢	-	⊢	⊢	$\vdash$	$\vdash$		$\square$	$\vdash$	-	+	+	+	+	+	-	-	-		-	-	-	H	-	$\vdash$
Business Activity Monitoring		⊢		⊢		$\vdash$				$\vdash$	-		-	-	+	+	-	-	•					H		
Business Activity Services	Ĭ				F	$\vdash$		-		$\vdash$			-	-		+	-	-	ž					H		
Human Workflow Web Service	ŏ	F		F	$\vdash$	$\vdash$	-			$\square$	-		-	-	-	+			ě		H			H		
Additional Software	F	$\vdash$		⊢	$\vdash$	$\vdash$				H			-	-	+	+			-		H			H		
Enterprise Single Sign-On Master Secret Server		$\vdash$		⊢	$\vdash$	$\vdash$				$\vdash$	-		+	-	+	+	-	-	•					H		
Enterprise Single Sign-On Administration		$\vdash$		⊢	$\vdash$	$\vdash$	$\vdash$			$\vdash$	-			-	+	+	-	-	ě		H			H		
Business Rules Components		+		⊢	$\vdash$	$\vdash$				$\square$			-	-	+	+		-	ě		H			H		
MQSeries Agent		-		$\vdash$	$\vdash$					H			-	-	+	1			-					H		
Windows SharePoint Services Adapter Web Service				⊢	$\vdash$	$\vdash$				H			-	-	+	+	-	-	•		H			H		
BAM Alert Provider for Notification Services	۲	Ľ			$\vdash$		$\vdash$	$\vdash$	$\square$				+	+	+	+			ē			•	•	Η	Η	$\vdash$
BAM Client		F		•		•				-		+	+		+	+			Ó			Ē		$\vdash$	Η	Η
BAM Eventing		F		ſ	ſ	ſ	Ē		-	$\square$		+		-	╡				é					$\vdash$	Η	Η
Other Software		F			$\vdash$					$\vdash$			+	+	+	+			-					$\vdash$	Η	$\vdash$
Business Rule Engine		F			$\vdash$				$\square$	$\vdash$		+	+	+	+	+			•		$\square$			H	Η	H
Health and Activity Tracking		F		$\vdash$	t	•			$\square$	$\vdash$	-	+	+	+	┥	+			-					H	Η	
ODBA		1			$\vdash$	-				$\square$		+	+	+			-	-						H	$\vdash$	F

### BizTalk RFID Requirements

This section describes the minimum hardware and software requirements to install BizTalk RFID on a single computer. Your actual requirements may vary depending on system configuration, BizTalk RFID features installed, and the volume of data the system must process.

### **BizTalk RFID Hardware Requirements**

The following requirements are for a BizTalk RFID-only installation on a single computer.

Component	BizTalk RFID System Requirement
Computer and processor	A computer with a 133 MHz or higher Intel Pentium-compatible CPU. A computer with a 733 MHz or higher Intel Pentium-compatible CPU is recommended.
Memory	512 MB of RAM, 1 GB recommended
Hard disk	6 GB of available hard disk space; 40 GB or more recommended
Drive	CD-ROM or DVD-ROM drive
Display	Windows Server 2003-compatible super VGA (800 x 600) or higher- resolution monitor; 1024 x 768 or higher is recommended
Other	Network adapter card, and a Microsoft mouse or compatible pointing device.

### **BizTalk RFID Software Requirements**

This section describes the software requirements for an installation of BizTalk RFID only.

- Windows XP SP2, Windows Server 2003 SP1 or higher, or Windows Vista®
- Microsoft Internet Information Services (IIS) 6.0 on Windows Server 2003 computers
- World Wide Web Publishing Service on Windows Server 2003 computers
- Web Services Enhancements (WSE) 3.0. WSE is required by the BizTalk RFID SDK. You can download WSE 3.0 from http://go.microsoft.com/fwlink/?LinkID=93064.
- Microsoft Message Queuing service (MSMQ), if you choose to install RFID Server
- Microsoft Management Console (MMC) 3.0

Any one of the following database software if you choose to install BizTalk RFID Server and want to install the database component of BizTalk RFID on the same computer:

- SQL Server 2005 with Service Pack 2
- SQL Server 2000 with Service Pack 4
- SQL Server 2000 Desktop Engine (MSDE 2000) release A version 8.00.760 or higher

**Note** The SQL Server or MSDE database must be available during BizTalk RFID installation and configured to support Windows authentication.

### Software Prerequisites

The following table contains descriptions of the prerequisite software that you must install on the server that will run BizTalk Server 2006 R2 or BizTalk RFID, as listed in the software requirements sections above. This information is more detailed than the previous listings. The exact mix of software installed will depend on the BizTalk Server or BizTalk RFID features selected. Refer to the <u>Feature Dependency Matrix</u> for more information about specific BizTalk Server features and platform dependencies.

Product	Description					
Windows Server 2003, Datacenter Edition, Enterprise Edition, or Standard Edition, including 64-bit editions, with Service Pack 1 or Service Pack 2 Windows Server 2003 R2 Datacenter Edition, Enterprise Edition, or Standard Edition, including 64-bit editions Microsoft Small Business Server 2003 with Service Pack 1, or Microsoft Small Business Server 2003 R2	<ul> <li>Operating system.</li> <li>Note Windows Server 2003 Web Edition is not supported.</li> <li>Note Itanium (IA64) editions of Windows Server 2003 are not supported by the BizTalk Server runtime; however, BizTalk databases can be hosted on SQL Server running on Itanium-based hardware.</li> <li>Note BizTalk Server 2006 R2 Enterprise and BizTalk Server 2006 R2 Developer are the only BizTalk Server editions that support native 64-bit execution.</li> </ul>					
Microsoft Internet Information Services (IIS) 6.0	Internet Information Services provides a reliable, manageable, and scalable Web application infrastructure.					
SQL Server 2005 with Service Pack 2, or SQL Server 2000 with Service Pack 4	SQL Server is a relational database server capable of efficiently processing high volumes of data. For optimal performance, we recommend that you use Enterprise Edition of SQL Server 2005.					
	<b>Note</b> Using SQL Server Express Edition in a production environment is not recommended. The Express edition does not include certain features needed by BizTalk Server, such as the SQL Server Agent service.					
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 released 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	SQL Server 2000 Notification Services provides a platform to build scalable notification applications capable of generating customized messages. This is required if you plan to configure BAM Alerts.
Windows SharePoint Services 2.0 with Service Pack 2	Windows SharePoint Services is a collection of services for Windows Server 2003 that you can use to share information, collaborate with other users on documents, and create lists and Web part pages. Windows SharePoint Services 2.0 is required for Business Activity Services (BAS). BAS is supported for use with Windows SharePoint Services 2.0 only.
Windows SharePoint Services 3.0 or Office SharePoint Server 2007	Installation of Microsoft Office SharePoint Server 2007 (MOSS) is supported. For more information see the topic <b>Windows</b> <b>SharePoint Services Support in</b> <b>BizTalk Server 2006 R2</b> in the BizTalk Server 2006 R2 online help. <b>Note</b> Business Activity Services (BAS) is not supported for use with
Web Services Enhancements (WSE) 3.0	Windows SharePoint Services 3.0 or Office SharePoint Server 2007. WSE 3.0 is an add-on to Microsoft Visual Studio
for Microsoft .NET	2005 and the Microsoft .NET Framework 2.0 that enables developers to build secure Web services based on the latest Web services protocol specifications.
	<b>Note</b> WSE 3.0 is required by the BizTalk RFID SDK only.
Microsoft Management Console (MMC) 3.0	MMC hosts administrative tools that you can use to administer networks, computers, services, and other system components. MMC 3.0 is required for BizTalk RFID.
Microsoft Message Queuing Service (MSMQ)	MSMQ is a component of the Windows operating system that allows cooperating applications to send and receive messages to each other, even if the intended recipient application is not running or the computer on which the sender or recipient application is running is disconnected from the network. MSMQ is required by BizTalk RFID.
Microsoft Office Excel 2003 with Office 2003 Service Pack 2, or Microsoft Office Excel 2007	Business Activity Monitoring (BAM) uses an Excel workbook to provide business users with a way to see a real-time view of business processes.
Microsoft Office InfoPath 2003 with Office 2003 Service Pack 2, or Microsoft	Microsoft Office InfoPath can help teams and organizations efficiently gather the

Office InfoPath 2007	information they need through dynamic forms. The information collected can easily be reused throughout organizations and across business processes because InfoPath supports industry-standard Extensible Markup Language (XML) using any customer-defined schema. InfoPath is optional for a BizTalk Server 2006 R2 installation. It is required if you plan to configure Business Activity Services (BAS).
Microsoft .NET Framework 1.1	The .NET Framework version 1.1 is required for the Business Activity Monitoring (BAM) Tools. This is required when you plan to configure BAM alerts with SQL Server 2000 with Service Pack 4 and SQL Server Notification Services 2.0 with Service Pack 1.
Microsoft .NET Framework 2.0	The .NET Framework version 2.0 improves scalability and performance with improved caching, application deployment and updating with ClickOnce, and 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 R2 runtime.
Microsoft .NET Framework 3.0	The Microsoft .NET Framework 3.0 (formerly WinFX), is the new managed code programming model for Windows. It combines the power of the .NET Framework 2.0 with four new technologies: Windows Presentation Foundation (WPF), Windows Communication Foundation (WCF), Windows Workflow Foundation (WF), and Windows CardSpace (WCS, formerly "InfoCard"). This is required for the WCF adapter, WCF interceptor, and WCF Administration Tools.
Microsoft Visual Studio 2005	Microsoft Visual Studio 2005 provides a development environment for rapidly building applications that target any device and integrate with any platform. This is required for the BizTalk Server Developer Tools and SDK component. <b>Note</b> The Developer Tools and SDK component cannot be installed on Visual Studio 2005 Express Editions.
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 SQL Server OLE DB provider and ODBC driver.

	<b>Note</b> By default, MDAC 2.8 is installed on Windows Server 2003.
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.
Microsoft Office 2003 Web Components	Office Web Components is 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. Office Web components is optional for a BizTalk Server 2006 R2 installation. It is required only if you want to use Health and Activity Tracking (HAT), Administration Tools, or BAM portal components.
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. ADOMD.NET 9.0 is able to support all of the capabilities found in SQL Server 2005 Analysis Services. For more information, see <u>http://go.microsoft.com/fwlink/?LinkID=9</u> <u>3877</u> , "ADOMD.NET Release Differences" in SQL Server 2005 Books Online.

### Redistributable CAB Files

If your computer is missing a prerequisite component, Setup is able to install redistributable prerequisites automatically from the Web or from a pre-downloaded CAB file. Automatically installing from the Web or downloading the required CAB file requires Internet access. CAB file download locations for supported operating systems and languages are provided in the online documentation, in the Setup Wizard help, and in the Installation Guide in the root directory of the BizTalk Server installation disc. **Note** CAB files intended for previous versions of BizTalk Server, including BizTalk Server 2006 and pre-release versions of BizTalk Server 2006 R2, are not suitable for use with BizTalk Server 2006 R2. Verify that you have downloaded the latest CAB file before starting BizTalk Server setup.

The CAB file for Windows Server 2003 and Windows XP contains the following software:

- Office 2003 Web Components
- Microsoft Data Access Components (MDAC) 2.8 SP1
- Microsoft XML Core Services (MSXML) 3.0 SP7
- MSXML 6.0
- SQLXML 3.0 SP3
- Microsoft .NET Framework 2.0
- Microsoft .NET Framework 3.0
- SQL Server ADOMD.NET 8.0
- ADOMD.Net-KB893091-v8.00.0991-x86.EXE
- ADOMD.NET 9.0

The CAB file for Windows Vista contains the following software:

- Office 2003 Web Components
- Microsoft Data Access Components (MDAC) 2.8 SP1
- Microsoft XML Core Services (MSXML) 3.0 SP7
- MSXML 6.0
- SQLXML 3.0 SP3
- SQL Server ADOMD.NET 8.0
- ADOMD.Net-KB893091-v8.00.0991-x86.EXE
- ADOMD.NET 9.0

## Copyright

Information in this document, including URL and other Internet Web site references, is subject to change without notice. Unless otherwise noted, the companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted in examples herein are fictitious. No association with any real company, organization, product, domain name, e-mail address, logo, person, place, or event is intended or should be inferred. Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Microsoft Corporation.

Microsoft may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from Microsoft, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

© 2007 Microsoft Corporation. All rights reserved.

Microsoft, BizTalk, Excel, InfoPath, SharePoint, Visual C#, Visual Studio, Windows, Windows Server, and Windows Vista are trademarks of the Microsoft group of companies.

All other trademarks are property of their respective owners.