# **Microsoft**®

2734B: Updating Your Database Development Skills to Microsoft® SQL Server™ 2005

# Informational Virtual Machine Build Guide

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Course Number: 2734B

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# **Setup Requirements**

## **Virtual Disks**

Virtual disk	Drive type	Parent (if applicable)
File name	Parent or differencing (or both, if applicable)	If drive is a differencing drive, list the file name for its parent drive
Base04A.vhd	Parent	
2733_4B-en-server.vhd	Differencing	Base04A.vhd
2733_4B-AllFiles.vhd	Dynamic	
2733_4B-en- SQL2005CD.vhd	Dynamic	

## **Virtual Machines**

Virtual machine	Settings	Description	
File name of the virtual machine.	List all of the relevant settings for the virtual machine.	Describe the role of the virtual machine in the course.	
	Be sure to include the following.		
	Memory:		
	Hard Disk 1:		
	Hard Disk 2:		
	Undo Disks:		
	Networking:		
2733_4B.vmc	Memory: 712 MB	Student computer	
	HD1: 2733_4B-en-server.vhd		
	HD2: 2733_4B- AllFiles.vhd		
	HD3: 2733_4B-en- SQL2005CD.vhd		
	Undo Disks: Enabled		
	Networking: Local only		

## **Classroom Configuration**

Virtual machine name	Computer name	IP address	DNS server	Default gateway
2733_4B	SQL2005PC	Any	N/A	N/A

## **Software**

The following table shows all of the software needed to set up the virtual machines for this course. The table includes the version tested for the course and whether it is a retail or evaluation version.

Software	Version tested and notes
SQL Server 2005 Pre-Beta 3	December CTP(Build 9.00.0981.04)
	NOTE: Available from MSDN or beta.microsoftcom
Visual Studio 2005 Beta	September CTP (Build 2.0.40903.27)
	NOTE: Available from MSDN or beta.microsoft.com

## **User Accounts**

The table below lists all user or group accounts used in the course. These accounts should be localized using MILS-approved names.

User or group name	Logon name (include location)	Password (N/A for group accounts)	Other account properties
Administrator	SQL2005PC\ Administrator	P@ssw0rd	Member of Administrators group.
			Password does not expire.
SQLServer	SQL2005PC\ SQLServer	P@ssw0rd	Member of Administrators group.
			User cannot change password.
			Password does not expire.
Peter	SQL2005PC\ Peter	P@ssw0rd	Password does not expire.

## **Setup Files**

The following table lists the installation files not already included in the software section that are required for the creation of the virtual machines. When application source files are required, they will also be listed below.

File or folder name
SQL Server 2005 December CTP Source Files
2733B AllFiles
2734B AllFiles

## **Parent Drives**

This section lists any parent drives created for this course. This does not include Microsoft Learning base images.

# Create the 2733\_4B-AllFiles.vhd parent drive

- 1. In Microsoft® Virtual PC Console, on the **File** menu, click **Virtual Disk Wizard**.
- 2. In the Virtual Disk Wizard, click Next.
- 3. On the **Disk Options** page, ensure that **Create a new virtual disk** is selected, and then click **Next**.
- 4. On the **Virtual Disk Type** page, ensure that **A virtual hard disk** is selected, and then click **Next**.
- 5. On the Virtual Hard Disk Location page, in the Name and location box, type C:\Program Files\Microsoft Learning\2733-4\Drives\2733\_4B-AllFiles.vhd, and then click Next.
- 6. If the **Virtual PC** dialog box appears asking you if you want to create a folder, click **Yes**.
- 7. On the Virtual Hard Disk Options page, click Dynamically Expanding, and then click Next.
- 8. On the **Virtual Hard Disk Size** page, type **600 MB** for the size of your virtual hard disk and then click **Next**.
- 9. In the Virtual Disk Wizard dialog box, click **Finish**.
- 10. In the Virtual Disk Wizard dialog box, click **Close**.

# Create the 2733\_4B-en-SQL2005CD.vhd parent drive

- 1. In Virtual PC Console, on the File menu, click Virtual Disk Wizard.
- 2. In the Virtual Disk Wizard, click Next.
- 3. On the **Disk Options** page, ensure that **Create a new virtual disk** is selected, and then click **Next**.
- 4. On the **Virtual Disk Type** page, ensure that **A virtual hard disk** is selected, and then click **Next**.
- 5. On the Virtual Hard Disk Location page, in the Name and location box, type C:\Program Files\Microsoft Learning\2733-4\Drives\2733\_4B-en-SQL2005CD.vhd, and then click Next.
- 6. If the **Virtual PC** dialog box appears asking you if you want to create a folder, click **Yes**.
- On the Virtual Hard Disk Options page, click Dynamically Expanding, and then click Next.
- 8. On the **Virtual Hard Disk Size** page, type **800 MB** for the size of your virtual hard disk, and then click **Next**.
- 9. In the Virtual Disk Wizard dialog box, click Finish.
- 10. In the Virtual Disk Wizard dialog box, click **Close**.

# **Differencing Drives**

This section lists the differencing drives specific to this course.

# Differencing Drive: 2733\_4B-en-server.vhd

# 1. Create the Differencing Drive

- 1. In Virtual PC Console, on the File menu, click Virtual Disk Wizard.
- 2. In the Virtual Disk Wizard, click Next.
- 3. On the **Disk Options** page, ensure that **Create a new virtual disk** is selected, and then click **Next**.
- 4. On the **Virtual Disk Type** page, ensure that **A virtual hard disk** is selected, and then click **Next**.
- 5. On the Virtual Hard Disk Location page, in the Name and location box, type C:\Program Files\Microsoft Learning\2733-4\Drives\2733\_4B-enserver.vhd, and then click Next.
- 6. If the **Virtual PC** dialog box appears asking you if you want to create a folder, click **Yes**.
- On the Virtual Hard Disk Options page, click Differencing, and then click Next
- 8. On the **Differencing Virtual Hard Disk** page, in the **Name and location** box, type **C:\Program Files\Microsoft Learning\Base\Base04A.vhd**, and then click **Next**.
- 9. In the Virtual Disk Wizard dialog box, click **Finish**.
- 10. In the Virtual Disk Wizard dialog box, click Close.

## 2. Create the Virtual Machine

- 1. In Virtual PC Console, on the **File** menu, click **New Virtual Machine Wizard**.
- 2. In the New Virtual Machine Wizard dialog box, click Next.
- 3. On the **Options** page, ensure that **Create a virtual machine** is selected, and then click **Next**.
- 4. On the Virtual Machine Name and Location page, in the Name and location box, type C:\Program Files\Microsoft Learning\2733-4\Drives\2733 4B.vmc, and then click Next.
- 5. On the Operating System page, in Operating system, select Microsoft Windows Server 2003, and then click Next.
- 6. On the Memory page, select Adjusting the RAM, and in the Set the RAM for this virtual machine box, type 712.
- 7. On the Memory page, click Next.
- 8. On the Virtual Hard Disk Options page, ensure that An existing virtual hard disk is selected, and then click Next.

- On the Virtual Hard Disk Location page, in the Virtual hard disk location box, type C:\Program Files\Microsoft Learning\2733-4\Drives\2733\_4B-en-server.vhd, and then click Next.
- 10. In the New Virtual Machine Wizard dialog box, click **Finish**.
- 11. In Virtual PC Console, click the virtual machine you want to configure.
- 12. On the **Action** menu, click **Settings**.
- 13. Configure the virtual machine by using the settings in the Virtual Machines table that appears earlier in this document.

# 3. Configure the Virtual Machine

#### **►** Configure Microsoft Windows®

- 1. Start the 2733 4B virtual machine and log on as Administrator.
- 2. Rename the computer to SQL2005PC and restart it.
- 3. Use Disk Administrator to configure the disks as shown in the following table:

Disk	Configuration
1	No additional configuration required
2	<ul> <li>Mount at C:\Program Files\Microsoft Learning</li> </ul>
	<ul> <li>Format as NTFS</li> </ul>
	<ul> <li>Create folders called 2733 and 2734</li> </ul>
	<ul> <li>Copy the AllFiles tree for 2733B into the 2733 folder, and copy the AllFiles tree for 2734B into the 2734 folder</li> </ul>
3	• Assign drive letter D:
	<ul> <li>Format as NTFS</li> </ul>
	<ul> <li>Copy SQL Server 2005 source files.</li> </ul>

- 4. Create the SQLServer and Peter user accounts as described in the previous table.
- 5. Install or remove the following Windows components:
  - Install Microsoft ASP.NET
  - Install IIS (including Microsoft Office FrontPage® 2002 extensions and SMTP)
  - Install E-mail Services
  - Remove Microsoft Internet Explorer Enhanced Security Configuration
- 6. Use the POP3 Service administrative tool to create a domain named adventure-works.com and mailboxes for Administrator and SQLServer.
- Configure Microsoft Outlook® Express for the Administrator user to use localhost as the Post Office Protocol (POP) and Simple Mail Transfer Protocol (SMTP) server.

## ► Install Microsoft SQL Server<sup>™</sup> 2005

- 1. Install a default instance of SQL Server 2005 from the second virtual hard disk. Perform a complete install (click the **Advanced** button and then select all components) with all services logging on as **SQLServer**. Configure the ReportServer and ReportManager services to start manually, but configure all others to start automatically.
- 2. Install a second instance of the SQL Server database engine. Name the instance SQLINSTANCE2 and configure it to log on as SQLServer but to start manually.
- 3. Install a third instance of the SQL Server database engine. Name the instance SQLINSTANCE3 and configure it to log on as SQLServer but to start manually.

#### ► Install Microsoft Visual Studio® 2005

- 1. Install a complete installation of Visual Studio 2005
- 2. Start Visual Studio and select C# settings.

## ► Configure IIS for ASP.NET 2.0

- 1. From the **Administrative Tools** program group on the **Start** menu, start **Internet Information Services (IIS) Manager**.
- 2. Expand the local server and the **Web Sites** folder.
- 3. Right-click **Default Web Site** and click **Properties**.
- 4. On the ASP.NET tab, select 2.0.40903.0 as the ASP.NET Version and then click OK.
- 5. Close IIS Management.

#### ► Create the user documents environment variable

- 1. Click Start, right-click My Computer, and then click Properties.
- 2. On the Advanced tab, click Environment Variables.
- 3. Under **User variables for Administrator**, click **New**, and add the following variable:

Variable name	Value
user_documents	%USERPROFILE%\My Documents

- 4. Click **OK** to close the Properties window.
- 5. Use Windows Explorer to view C:\Program Files\Microsoft Learning\2733\Democode\Mod01\CLRDemo\AWXmlMessaging.
- 6. Double-click **AWXmlMessaging.sln** to open it with Visual Studio. You might see a message about the settings not being found.
- 7. Wait for the project to load, and then close Visual Studio.
- 8. Double-click **AWXmlMessaging.sln** again. This time the message should not appear.
- 9. Close Visual Studio.

## **▶** Configure file settings

- 1. Configure Windows Explorer to show file extensions and hidden files.
- 2. Create the following batch file and save it as **RestartServices.bat** on the desktop:

NET STOP MSSQLSERVER /y NET START MSSQLSERVER NET START SQLSERVERAGENT