How to troubleshoot startup problems in Windows Server 2003

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SUMMARY

This article describes general procedures that you can use to troubleshoot startup problems in Windows Server 2003.

A successful Windows startup includes of the following four phases:

- Initial phase
- Boot loader phase
- Kernel phase
- Logon phase

If a problem occurs during one of these phases, Windows may not start correctly, and you may experience one of the following problems:

- The computer stops responding (hangs).
- You receive an error message.

If a startup problem occurs after you click **Microsoft Windows Server 2003** on either the boot loader menu or when you receive the "Please select the operating system to start" message, files that the operating system needs may be missing or damaged. Windows provides a variety of options that you can use to troubleshoot this issue, including Safe mode, the Recovery Console, and an Automated System Recovery.

How to Start the Computer by Using the Last Known Good Configuration

If the startup problem occurs immediately after you make a change to the computer (for example, after you install a new driver), try to start the computer by using the Last Known Good Configuration feature.

When you use the Last Known Good Configuration feature, you start your computer by using the most recent settings that worked. This feature restores registry information and driver settings that were in effect the last time the computer started successfully. Use this feature when you cannot start Windows after you make a change to the computer (for example, after you install or upgrade a device driver).

To start the computer by using Last Known Good Configuration, follow these steps:

1. Click **Start**, and then click **Shut Down**.
2. Click **Restart**, and then click **OK**.
3. When you see the message **Please select the operating system to start**, press the F8 key.
4. Use the arrow keys to select **Last Known Good Configuration**, and then press ENTER.

   Note NUM LOCK must be off before the arrow keys on the numeric keypad will function.
5. If you are running other operating systems on the computer, click **Microsoft Windows Server 2003** in the list, and then press ENTER.

Notes

- By selecting **Last Known Good Configuration**, you can recover from problems such as a newly added driver that may be incorrect for your hardware. This feature does not solve problems caused by corrupted or missing drivers or files.

- When you select **Last Known Good Configuration**, only the information in registry key HKLM\System\CurrentControlSet is restored. Any changes you have made in other registry keys remain.

If you can start your computer by using Last Known Good Configuration, the last change that you made to the computer (for example, the installation of a driver) may be the cause of the incorrect startup behavior. Microsoft recommends that you either remove or update the driver or program, and then test Windows for correct startup.

How to Start the Computer in Safe Mode

When you start the computer in Safe mode, Windows loads only the drivers and computer services that you need. You can use Safe mode when you have to identify and resolve problems that are caused by faulty drivers, programs, or services that start automatically.

If the computer starts successfully in Safe mode but it does not start in normal mode, the computer may have a conflict with the hardware settings or the resources. There may be incompatibilities with programs, services, or drivers, or there may be registry damage. In Safe mode, you can disable or remove a program, service, or device driver that may prevent the computer from starting.

To troubleshoot startup problems in Safe mode, follow these steps:

1. Click **Start**, and then click **Shut Down**.
2. Click **Restart**, and then click **OK**.
3. When you see the message **Please select the operating system to start**, press F8.
4. In **Windows Advanced Option Menu**, use the arrow keys to select **Safe Mode**, and then press ENTER.

Note NUM LOCK must be off before the arrow keys on the numeric keypad will function.

5. If you are running other operating systems on the computer, click **Microsoft Windows Server 2003** on the list that is displayed, and then press ENTER.

6. Do one of the following:
   - If the computer does not start in Safe mode, try starting the computer by using the Recovery Console. If you still cannot start the computer, look for possible hardware problems, such as defective devices, installation problems, cabling problems, or connector problems. Remove any newly added hardware, and then restart the computer to see if the problem is resolved.
   - If the computer starts in Safe mode, go to the next section to continue to troubleshoot the startup issue.

To Use Event Viewer to Identify the Cause of the Startup Problem

View the event logs in Event Viewer for additional information that may help you to identify and diagnose the cause of the startup problem. To view events that are recorded in the event logs, follow these steps:

1. Do one of the following:
   - Click **Start**, point to **Administrative Tools**, and then click **Event Viewer**.
   - Start the Event Viewer snap-in in Microsoft Management Console (MMC).

2. In the console tree, expand **Event Viewer**, and then click the log that you want to view. For example, click **System log** or **Application log**.

3. In the details pane, double-click the event that you want to view.

   To copy the details of the event, click **Copy**, open a new document in the program in which you want to paste the event (for example, Microsoft Word), and then click **Paste** on the **Edit** menu.

4. To view the description of the previous event or the next event, press the UP ARROW key or the DOWN ARROW key.

To Use System Information to Identify the Cause of the Startup Problem

The System Information tool displays a comprehensive view of the computer's hardware, the system components, and the software environment. Use this tool to help identify possible problem devices and device conflicts. To do this, follow these steps:

1. Click **Start**, and then click **Run**.

2. In the **Open** box, type **msinfo32**, and then click **OK**.

3. Look for problem devices or device conflicts. To do so:
   a. In the console tree, expand **Components**, and then click **Problem Devices**.

      Note any devices that are listed in the right pane.
   b. In the console tree, expand **Hardware Resources**, and then click **Conflicts/Sharing**.

      Note any resource conflicts that are listed in the right pane.
   c. If you identify a problem device, perform the appropriate action (for example, remove, disable, or reconfigure the device, or update the driver), and then restart the computer in normal mode.

      You can use Device Manager to remove or disable devices and their drivers. For more information about Device Manager, see the Use Device Manager to Identify the Cause of the Startup Problem section of this article.

If the computer starts correctly, that particular device may be the cause of the startup problem.

If you disabled a device to resolve the problem, make sure that the device is listed on the Windows Server 2003 Hardware Compatibility List (HCL), and that it is installed correctly. Also, contact the manufacturer to report the behavior and to obtain information about possible updates that can resolve the startup problem.For information about how to contact computer hardware manufacturers, click the appropriate article number in the following list to view the article in the Microsoft Knowledge Base:

65416 (http://support.microsoft.com/kb/65416/) Hardware and software vendor contact information, A-K

60781 (http://support.microsoft.com/kb/60781/) Hardware and software vendor contact information, L-P

60782 (http://support.microsoft.com/kb/60782/) Hardware and software vendor contact information, Q-Z

Microsoft provides third-party contact information to help you find technical support. This contact information may change without notice. Microsoft does not guarantee the accuracy of this third-party contact information.

4. If no device conflicts or problem devices are reported by the System Information tool, look for programs that start automatically when Windows starts. To do so, follow these steps:
   a. In the console tree, expand **Software Environment**, and then click **Startup Programs**.

      Programs that start automatically when Windows starts are listed in the right pane.
   b. Disable the programs, and then restart the computer.

      For information about how to disable the program, see the program documentation or contact the manufacturer.
   c. If you disable the startup programs, and the startup problem is resolved, enable the programs again, one at a time.

      Shut down and restart the computer each time you enable a program, and note if the incorrect startup behavior occurs. If the behavior occurs, the last program that you enabled may be causing the incorrect startup behavior.

To View the Safe Mode Boot Log File

To troubleshoot startup issues, view the boot log file, Ntbtlog.txt, and then make a note of the drivers and services that did not load when you started your computer in Safe mode.

This log file is located in the %SystemRoot% folder (by default, this is the Windows folder). The log file lists devices and services that load (and do not load) when you start the computer in Safe mode. You can use a text editor such as Notepad to open and view the log file.

Use the list of drivers and services that did not load at startup to help identify the possible cause of the startup problem.

Note Some startup problems may occur early in the startup process. In this scenario, Windows may not save the boot log file to the hard disk.

To Use Device Manager to Identify the Cause of the Startup Problem

Device Manager displays a graphical view of the hardware that is installed on your computer. Use this tool to resolve any possible device conflicts or to identify incompatible devices that may be the cause of the startup problem.

To start Device Manager, follow these steps:

1. Click **Start**, right-click **My Computer**, and then click **Manage**.
2. Expand **System Tools**, and then click **Device Manager**.

   The devices that are installed on your computer are listed in the right pane. If a symbol is displayed next to a device, there may be a problem with the device. For example, a black exclamation point (!) on a yellow field indicates that the device is in a problem state.

   Note To disable a device in Device Manager, right-click the device, and then click **Disable**.
3. Investigate possible device conflicts. To do so, double-click the device in the right pane, and then click the **Resources** tab.

   If a device conflict exists, it is listed under **Conflicting device list**.

   Note the **Use automatic settings** check box. If Windows successfully detects a device, this check box is selected, and the device functions correctly. However, if the resource settings are based on Basic Configuration n (where n is any number from 0 to 9), you may have to change the configuration. To do so, either click a different basic configuration from the list or manually change the resource settings. **WARNING** This procedure may require that you change the computer's complementary metal oxide semiconductor (CMOS) settings and the basic input/output system (BIOS) settings. Incorrect changes to the BIOS of the computer can result in serious problems. Change the computer's CMOS settings at your own risk.

   If Windows cannot resolve a resource conflict, verify that the computer is configured to permit Windows to enumerate the devices in the computer. To do so, enable the **Plug and Play OS** setting in the Setup tool of the computer's BIOS. To change the computer's BIOS settings, see the computer documentation or contact your computer manufacturer.
4. If you identify a problem device, disable it, and then restart the computer in normal mode.

   If the computer starts correctly, the device that you disabled may be the cause of the startup problem.

   Make sure that the device is listed on the Windows Server 2003 Hardware Compatibility List (HCL) and that it is installed correctly. Also, contact the manufacturer to report the behavior and to obtain information about possible updates that can resolve the startup problem.

For additional information about how to configure devices in Device Manager, click the following article number to view the article in the Microsoft Knowledge Base:

   323423 (http://support.microsoft.com/kb/323423/) How to use Device Manager to configure devices in Windows Server 2003

How to Use System Configuration Utility

System Configuration Utility (Msconfig.exe) automates the routine troubleshooting steps that Microsoft Product Support Services technicians use when they diagnose Windows configuration issues. You can use this tool to modify the system configuration and troubleshoot the problem by using a process-of-elimination method.

You must be logged on as Administrator or as a member of the administrative groups to use System Configuration Utility. If your computer is connected to a network, network policy settings may prevent you from using the utility. As a security "best practice," consider using the **Run as** command to perform these procedures.

Note Microsoft strongly recommends that you do not use System Configuration Utility to modify the Boot.ini file on your computer without the help of a Microsoft support professional. Doing so may render your computer unusable.

To Create a Clean Environment for Troubleshooting

1. Click **Start**, click **Run**, type **msconfig** in the **Open** box, and then click **OK**. (To use the **Run as** command, type **runas /user:administrator** **Path\msconfig.exe** in the **Open** box, and then click **OK**.)

2. Click the **General** tab, click **Diagnostic startup - load basic devices and services only**, click **OK**, and then click **Restart** to restart your computer.

3. After Windows starts, determine whether the problem still occurs.

To Isolate Problems by Using System Startup Options

1. Click **Start**, click **Run**, type **msconfig** in the **Open** box, and then click **OK**.

2. Click the **General** tab, and then click **Selective Startup**.

3. Click to clear the following check boxes:

   Process SYSTEM.INI File
   Process WIN.INI File
   Load System Services

   You will not be able to clear the **Use Original BOOT.INI** check box.

4. To test the software loading process, make sure the **Load Startup Items** check box is selected, and then click **OK**.

5. Restart the computer when you are prompted to do so.

To Isolate Problems by Using Selective Startup Options

1. Click **Start**, click **Run**, type **msconfig** in the **Open** box, and then click **OK**.

2. Click the **General** tab, and then click **Selective Startup**.

3. Click to clear all the check boxes under **Selective Startup**. You will not be able to clear the **Use Original BOOT.INI** check box.

4. Click to select the **Process SYSTEM.INI File** check box, click **OK**, and then restart the computer when you are prompted.

   Repeat this process and select each check box one at a time. Restart your computer each time. Repeat the process until the problem occurs.

5. When the problem occurs, click the tab that corresponds to the selected file. For example, if the problem occurs after you select the Win.ini file, click the **WIN.INI** tab in System Configuration Utility.

To Isolate Problems by Using the Startup Tab

The **Startup** tab lists items that load at startup from the Startup group, Win.ini load= and run=, and the registry.

1. Click **Start**, click **Run**, type **msconfig** in the **Open** box, and then click **OK**.

2. Click the **Startup** tab.

3. Click to clear all check boxes.

4. To start troubleshooting, click to select the first check box, click **OK**, and then restart the computer when you are prompted.

   Repeat this process and select each check box one at a time. Restart your computer each time. Repeat the process until the problem occurs.

To Troubleshoot System Services

1. Click **Start**, click **Run**, type **msconfig** in the **Open** box, and then click **OK**.

2. Click the **Services** tab.

3. Make a note of any services that are not selected.

    IMPORTANT Do not skip this step. You will need this information later.

4. Click **Disable All**, click **OK**, and then restart your computer.

5. Click **Start**, click **Run**, type **msconfig** in the **Open** box, and then click **OK**.

6. Click the **Services** tab.

7. Click to select the check box of a service to turn it on, and then click **OK**.

8. Restart your computer, and see if the problem occurs.

9. Repeat steps 5 through 8 for each service until the problem occurs. When the problem occurs, you will know that the last service you turned on is causing the problem. Make a note of this service, and go to step 10.

10. Click **Enable All**, click to clear the check box next to the faulty service, click to clear the check boxes of any other services you made note of in step 3, click **OK**, and then restart your computer.

    As a workaround, you can leave the faulty service turned off (not selected). Contact the manufacturer of the faulty service for more assistance.

    Note You might be able to determine more quickly which service is causing the problem by testing the services in groups. Divide the services into two groups--select the check boxes of the first group, and clear the check boxes of the second group. Restart your computer, and then test for the problem. If the problem occurs, the faulty service is in the group with the selected check boxes. If the problem does not occur, the faulty service is in the group with the cleared check boxes. Repeat this process on the faulty group until you have isolated the faulty service.

To Troubleshoot the System.ini File

1. Click **Start**, click **Run**, type **msconfig** in the **Open** box, and then click **OK**.

2. Click the **SYSTEM.INI** tab.

3. Make a note of any items that are not selected. You might have to expand some items (such as **[drivers]**) to determine if any sub-items are not selected.

    IMPORTANT Do not skip this step. You will need this information later.

4. Click **Disable All**, click **OK**, and then restart your computer.

5. Click **Start**, click **Run**, type **msconfig** in the **Open** box, and then click **OK**.

6. Click the **SYSTEM.INI** tab.

7. Expand all items in the list, click the check box of an item to turn it on, and then click **OK**.

8. Restart your computer, and see if the problem occurs.

9. Repeat steps 5 through 8 for each item until the problem occurs.

    When the problem occurs, you will know that the last item you turned on is causing the problem. Make a note of this item, and then go to step 10.

10. Click **Enable All**, click to clear the check box next to the faulty item, click to clear the check boxes of any other items you made note of in step 3, click **OK**, and then restart your computer.

    As a workaround, you can leave the faulty item turned off (not selected). If possible, contact the manufacturer of the faulty item for more assistance.

    Note You might be able to determine more quickly which System.ini item is causing the problem by testing the items in groups. Divide the items into two groups--select the check boxes of the first group, and clear the check boxes of the second group. Restart your computer, and then test for the problem. If

the problem occurs, the faulty service is in the group with the selected check boxes. If the problem does not occur, the faulty service is in the group with the cleared check boxes. Repeat this process on the faulty group until you have isolated the faulty System.ini item.

To Troubleshoot the Win.ini File

1. Click **Start**, click **Run**, type **msconfig** in the **Open** box, and then click **OK**.
2. Click the **WIN.INI** tab.
3. Make a note of any items that are not selected. You might have to expand some items (such as **[OLFax Ports]**) to determine if any sub-items are not selected.

    IMPORTANT Do not skip this step. You will need this information later.
4. Click **Disable All**, click **OK**, and then restart your computer.
5. Click **Start**, click **Run**, type **msconfig** in the **Open** box, and then click **OK**.
6. Click the **WIN.INI** tab.
7. Expand all items in the list, click the check box of an item to turn it on, and then click **OK**.
8. Restart your computer, and see if the problem occurs.
9. Repeat steps 5 through 8 for each item until the problem occurs.

    When the problem occurs, you will know that the last item you turned on is causing the problem. Make a note of this item, and then go to step 10.
10. Click **Enable All**, click to clear the check box of the faulty item, click to clear the check boxes of any other items you made note of in step 3, click **OK**, and then restart your computer.

    As a workaround, you can leave the faulty item turned off (not selected). If possible, contact the manufacturer of the faulty item for more assistance.

    Note You might be able to determine more quickly which Win.ini item is causing the problem by testing the items in groups. Divide the items into two groups--select the check boxes of the first group, and clear the check boxes of the second group. Restart your computer, and then test for the problem. If the problem occurs, the faulty service is in the group with the selected check boxes. If the problem does not occur, the faulty service is in the group with the cleared check boxes. Repeat this process on the faulty group until you have isolated the faulty Win.ini item.

To Troubleshoot the Boot.ini File

Only system administrators and advanced users should try to change the Boot.ini file. Steps for troubleshooting Boot.ini are beyond the scope of this article.

For additional information, search the Microsoft Knowledge Base. To do this, visit the following Microsoft Web site:

Microsoft Product Support Services
http://support.microsoft.com (http://support.microsoft.com/)

To Reset System Configuration Utility to Normal Startup

To reset System Configuration Utility to normal startup, follow these steps:

1. Click **Start**, click **Run**, type **msconfig** in the **Open** box, and then click **OK**.
2. On the **General** tab, click **Normal Startup - load all device drivers and services**, and then click **OK**.
3. Restart your computer.

How to Use the Microsoft Windows Recovery Console

The Recovery Console is a command-line tool that you can use to repair Windows if the computer does not start properly. You can start the Recovery Console from the Windows Server 2003 CD or at startup if the Recovery Console was previously installed to your computer.

Use the Recovery Console if you used the Last Known Good Configuration startup option and it was not successful and you cannot start the computer in Safe mode. Microsoft recommends that you use the Recovery Console method only if you are an advanced user who can use basic commands to identify and locate problem drivers and files.

To use Recovery Console, follow these steps:

1. Insert the Windows Server 2003 installation CD in your CD-ROM or DVD-ROM drive, and then restart the computer.
2. When you are prompted during text-mode setup, press R to start the Recovery Console.

You can use the Recovery Console to:

- Access the drives on your computer.
- Enable or disable device drivers or services.
- Copy files from the Windows Server 2003 installation CD or copy files from other removable media. For example, you can copy a file that you need that was deleted.
- Create a new boot sector and a new master boot record (MBR). You might have to do this if there are problems starting from the existing boot sector.

To Confirm That Your Hard Disk or File System Is Not Damaged

To confirm that your hard disk or file system is not damaged, start your computer from the Windows Server 2003 CD, start the Recovery Console, and then use the **Chkdsk** command-line utility. This may solve your problem.

IMPORTANT Microsoft recommends that only advanced users or administrators use the Recovery Console. You have to know the password for the Administrator account to use the Recovery Console.

For additional information about how to test and repair a damaged hard disk by using **Chkdsk**, see the "Using the Recovery Console and Using the Recovery Console Command Prompt" sections in the following article:

> 307654 (http://support.microsoft.com/kb/307654/) How to install and use the Recovery Console in Windows XP

Note If **Chkdsk** reports that it cannot access your hard disk, you may have a hardware failure. Examine all cable connections and any jumper settings on your drive. Contact a computer repair professional, or the manufacturer of your computer for more assistance.

If **Chkdsk** reports that it cannot fix all hard disk problems, your file system or MBR may be damaged or no longer accessible. Try using the appropriate Recovery Console commands, such as **Fixmbr** and **Fixboot**, contact a data recovery service, or repartition and then reformat your hard disk.

WARNING: If you repartition and reformat your hard disk, you lose all information on the disk.

IMPORTANT For more assistance, contact your computer manufacturer or a Microsoft Product Support Services professional. Only qualified personnel should try to repair your computer. If the computer repair is performed by non-qualified personnel, this may nullify your computer's warranty. For additional information about how to Use Recovery Console, click the following article numbers to view the articles in the Microsoft Knowledge Base:

> 326215 (http://support.microsoft.com/kb/326215/) How to use the Recovery Console

on a Windows Server 2003-based computer that does not start

How to Use Automated System Recovery

To recover from a system failure by using Automated System Recovery (ASR), follow these steps:

1. Make sure you have the following on hand before you start the recovery procedure:
   - Your previously created ASR floppy disk.
   - Your previously created backup media.
   - The original operating system installation CD.
   - If you have a mass storage controller and you are aware that the manufacturer has supplied a separate driver file for it (different from the driver files that are available on the Setup CD), obtain the file (on a floppy disk) before you start this procedure.

2. Insert the original operating system installation CD into your CD-ROM or DVD-ROM drive.

3. Restart your computer. If you are prompted to press a key to start the computer from CD, press the appropriate key.

4. If you have a separate driver file as described in step 1, press the F6 key to use the driver as part of Setup when you are prompted.

5. Press the F2 key when you are prompted at the start of the text-only mode section of Setup.

   You are prompted to insert the ASR floppy disk that you previously created.

6. Follow the on-screen instructions.

7. If you have a separate driver file as described in step 1, press F6 (a second time) when you are prompted after the system restarts.

8. Follow the on-screen instructions.

Notes

- ASR does not restore your data files. See Windows Help for more information about backing up and restoring your data files.

- If you are restoring a server cluster in which all nodes failed and the quorum disk cannot be restored from backup, use ASR on each node in the original cluster to restore the disk signatures and the partition layout of the cluster disks (quorum and nonquorum). For more information about backing up and restoring server clusters, see Windows Help.

To Create an ASR Disk Set by Using Backup

To use ASR, you must have an ASR disk set. To create an ASR disk set, follow these steps:

1. Click **Start**, point to **All Programs**, point to **Accessories**, point to **System Tools**, and then click **Backup**.

   By default, the Backup or Restore Wizard starts, unless it is disabled. You can use the Backup or Restore Wizard to create an ASR disk set by answering **All information on this computer** in the **What do you want to backup?** section. Otherwise, you can go to the next step to create an ASR disk set in **Advanced Mode**.

2. Click the **Advanced Mode** link in the Backup or Restore Wizard.

3. On the **Tools** menu, click **ASR Wizard**.

4. Follow the instructions that appear on your screen.

Notes

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You need a blank 1.44 megabyte (MB) floppy disk to save your system settings and media to contain the backup files. If your computer does not have a floppy disk drive, perform an ASR backup on the computer without the floppy disk drive. Copy the Asr.sif and Asrpnp.sif files that are located in the % SystemRoot%\Repair folder to another computer with a floppy disk drive, and then copy those files to a floppy disk.

- To perform this procedure, you must be a member of the Administrators or Backup Operators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security "best practice," consider using the **Run as** command to perform this procedure.

- This procedure backs up only those system files that you must have to start your system. You must back up your data files separately.

- After you create the ASR set, label this floppy disk and the backup media carefully and keep them together. To use the backup media, you must have the floppy disk that you created with that set of media. You cannot use a floppy disk that you created at a different time or with a different set of media. You must also have your Setup CD available at the time you perform ASR.

- Keep the ASR set in a secure location. The ASR set contains information about your systems configuration that might be used to cause damage to your system.

- If you are backing up a server cluster, run the Automated System Recovery Wizard on all nodes of the cluster, and make sure that the Cluster service is running when you start each ASR backup. Make sure that one of the nodes on which you run the Automated System Recovery Preparation Wizard is listed as the owner of the quorum resource while the wizard is running.

How to Repair Your Installation of Windows

You may be able to repair a damaged Windows Server 2003 installation by running Windows Setup from the Windows CD.

To repair your installation of Windows, follow these steps:

1. Insert the Windows Server 2003 CD in the CD-ROM or DVD-ROM drive.

2. If the Windows CD displays the **What would you like to do?** menu, click **Exit**.

3. Turn off your computer, wait ten seconds, and then turn your computer back on.

4. If you are prompted to start your computer from the CD, do so.

   Note You must be able to start your computer from the Windows Server 2003 CD-ROM to run Windows Setup. Your CD-ROM or DVD-ROM drive must be configured to do so. For information about how to configure your computer to start from the CD-ROM or DVD-ROM drive, see the documentation that is included with your computer, or contact your computer manufacturer.

5. After Setup starts, press ENTER to continue the setup process.

6. Press ENTER to select the option **To set up Windows now, press ENTER**. Do not select the **Recovery Console** option.

7. Press F8 to accept the licensing agreement.

   Setup searches for previous installations of Windows.
   - If Setup does not find a previous installation of Windows Server 2003, you might have a hardware failure.

     Hardware failures are beyond the scope of this article. See a computer hardware specialist for more help or try the Hardware troubleshooter. For more information about the Hardware Troubleshooter, see the Windows Server 2003 Help topic "Using Troubleshooters."

- If Setup does find a previous installation of Windows Server 2003, you may receive the following message:

    If one of the following Windows Server 2003 installations is damaged, setup can try to repair it. Use the up and down arrows to select an installation. To repair the selected installation, press R. To continue without repairing, press ESC.

    Select the appropriate Windows Server 2003 operating system installation, and then press R to try to repair it.

- Follow the on-screen instructions to repair the installation.

    Notes
    - You might have to change the boot drive sequence in your BIOS settings to successfully start your computer from the Windows Server 2003 CD. Contact the manufacturer of your computer, or see your manufacturer's documentation, for more information.

    - If you cannot start your computer from the Windows Server 2003 CD, you might have a CD-ROM or DVD-ROM drive failure or other hardware failure.

        Hardware failures are beyond the scope of this article. See a computer hardware specialist for more help or try the Hardware troubleshooter. For more information about the Hardware Troubleshooter, see the Windows Server 2003 Help topic "Using Troubleshooters."

    - After you repair your Windows Server 2003, you may be required to reactivate your copy of Windows Server 2003.

How to Use the Microsoft Product Support Services Web Site to Find a Solution

If you cannot resolve the problem by following the steps in this article, you can use the Microsoft Product Support Services Web site to find a solution to your problem. The following list describes some of the services that the Microsoft Product Support Services Web site provides:

- Searchable Knowledge Base (http://support.microsoft.com/default.aspx?pr=kbinfo&) - Search technical support information and self-help tools for Microsoft products.

- Frequently Asked Questions (http://support.microsoft.com/default.aspx?scid=fh;rid;faqs) - View product-specific frequently asked questions and support h ighlights.

- Microsoft Product Support Newsgroups (http://www.microsoft.com/communities/newsgroups/default.mspx) - Consult with your c ounterparts, peers, and Microsoft Most Valuable Professionals (MVPs).

- Software and Updates (http://www.microsoft.com/downloads/search.asp) - Find software and updates on the Download Center.

- Other Support Options (http://support.microsoft.com/) - Ask a support question by using the Web or call Microsoft Product Support Services.

APPLIES TO

- Microsoft Windows Server 2003, Datacenter Edition (32-bit x86)
- Microsoft Windows Server 2003, Enterprise Edition (32-bit x86)
- Microsoft Windows Server 2003, Standard Edition (32-bit x86)
- Microsoft Windows Server 2003, Web Edition
- Microsoft Windows Server 2003, 64-Bit Datacenter Edition
- Microsoft Windows Server 2003, Enterprise x64 Edition

- Microsoft Windows Small Business Server 2003 Standard Edition
- Microsoft Windows Small Business Server 2003 Premium Edition

Keywords: kbmgmtservices kbenv kbhowtomaster KB325375