

Microsoft



Microsoft
Virtual PC for Mac
VERSION 7

Deployment Guide

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Introduction to Virtual PC for Mac

Who should read this guide?

This document provides deployment information for IT professionals working in corporate environments who have purchased the volume licensing version of Microsoft Virtual PC for Mac Version 7. To install and configure a volume licensing version of Virtual PC for Mac, you should be familiar with Windows and the settings that are required to connect a Windows-based computer on your network.

If you are installing any version of Virtual PC for Mac that is not a volume licensing version, refer to the documentation included with your software.

About Virtual PC for Mac

Virtual PC for Mac is designed for Macintosh users who sometimes need access to Windows-only programs. Virtual PC for Mac is a cost-effective alternative to purchasing a second computer for someone who requires access to both operating systems.

You can use Microsoft Virtual PC for Mac to create one or more virtual machines, each running its own operating system, on a single Macintosh computer. The virtual machine emulates a standard x86-based computer, including all of the basic hardware components. By using emulated hardware, each virtual machine works like a separate physical computer.

This virtual machine is much like a real computer. You install an operating system on it, such as Windows XP, as well as programs, such as Microsoft Access or Microsoft Visio. The virtual machine appears in its own window on the Mac, and users can switch easily between programs on a virtual machine and programs on the Mac.

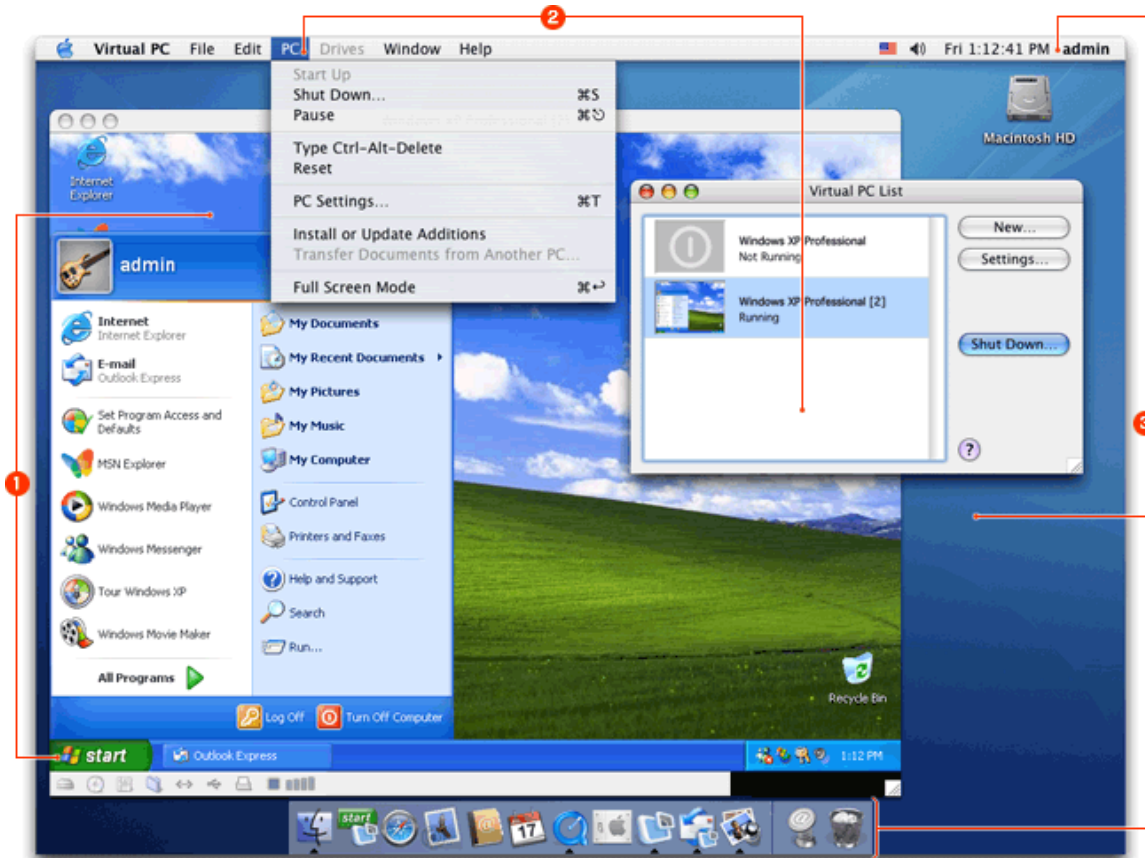
Virtual PC for Mac is as easy to use as any Macintosh program. For example, the user can do the following

- Switch from Mac OS to Windows and back with a mouse click.
- Drag files and folders from the Macintosh desktop to the Windows desktop and back again.
- Start Windows-based programs by using the Windows **Start** menu in a virtual machine window or by adding Windows program icons to the Dock.
- Print from the virtual machine by using the same printer drivers as the Mac OS uses – no additional configuration required (users of Mac OS 10.3 or later only).

Introduction to Virtual PC for Mac

To use Virtual PC for Mac and your virtual machine, you must interact with three separate user interfaces:

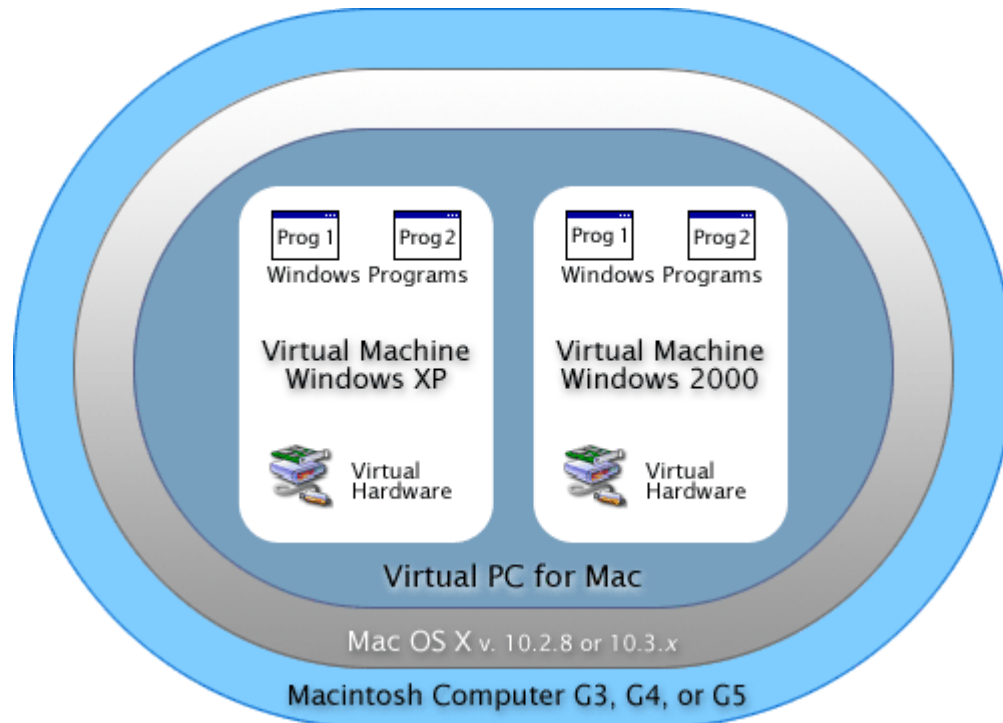
- Windows
- Virtual PC for Mac
- Mac OS X



- 1 Windows
- 2 Virtual PC for Mac program
- 3 Mac OS X

How Virtual PC for Mac works

Each virtual machine running on Virtual PC for Mac acts as a standalone computer. It has its own emulated sound, video, and network cards as well as its own emulated processor. And each virtual machine runs its own operating system. Microsoft fully supports the following operating systems running in a virtual machine on Virtual PC for Mac: Microsoft Windows 2000 Professional, Windows XP Professional, and Windows XP Home Edition.



Virtual PC for Mac uses the built-in Ethernet port on the Macintosh computer to connect to the Internet or network servers. By default, virtual machines connect to the Internet and networks by using Shared Networking. Shared Networking uses Network Address Translation (NAT) to share the TCP/IP connection for your Macintosh computer. A virtual machine can also connect to the Internet and networks by using Virtual Switch networking. Virtual Switch networking requires a separate IP address for the virtual machine to establish its own TCP/IP connection.

Programs that users install on their virtual machines work the same way that they do on a Windows-based computer, including business, education, Internet, and other programs. And most devices that users connect to their physical computers, such as printers, modems, CD-ROM drives, and so on, also work with their virtual machines.

Note A virtual machine running Windows is exposed to the same security risks faced by Windows-based computers. To lower the risk, users should always install the latest Windows security patches and service releases.

Benefits of Virtual PC for Mac

Virtual PC for Mac is a time-saving and cost-saving solution in any scenario in which users must run both Macintosh and Windows operating systems. In the corporate environment, it provides your Mac users access to necessary Windows programs. Rather than purchasing multiple computers, one for each operating system, Mac users can use Windows-based software, files, and networks right from their Macs. This saves their organizations not only hardware costs but also overhead costs, such as power and additional office resources.

Virtual PC for Mac helps extend your current investment in hardware and software. If you have developed custom line of business (LOB) programs exclusively for the Windows platform, such as expense reporting tools, finance tools, and customer databases, Virtual PC for Mac saves you the need of purchasing additional Windows-based machines for your Mac users or porting the Windows software.

Scenarios in which people typically use multiple operating systems include technical support, quality assurance, Web site design, training, and collaboration. In the case of technical support, Virtual PC for Mac helps support technicians provide quicker responses and reduce call times. Rather than maintaining multiple computers or restarting computers for different support calls, they can simply start a pre-built virtual machine that matches the caller's configuration — almost instantly. With Virtual PC for Mac, test engineers are able to test programs against a wider variety of operating systems in shorter amounts of time. In addition, Virtual PC for Mac provides quicker reconfiguration times for computers in training rooms and enables more diverse classes based on more computer configurations. In an academic setting, researchers can use Virtual PC for Mac to collaborate with colleagues who use Windows-based software for their design, data collection, and analysis.

Note Virtual PC for Mac might not be an optimal platform in some cases. For example, certain types of specialized graphics-intensive software, such as three-dimensional (3-D) automation tools and games, might not run on Virtual PC for Mac or might not perform as expected. Also, we recommend a dedicated Windows-based computer in cases where a user is required to run Windows programs a majority of the time.

What's new in Virtual PC for Mac Version 7

Virtual PC for Mac Version 7 includes many improvements in performance and ease of use.

- **Improved performance** Enjoy improved graphics and visual display, and an experience optimized for Mac OS X. Programs launch quickly, refresh easily, and are more responsive than in prior versions of Virtual PC for Mac.
- **G5 support** Run Windows-based programs on the fastest new hardware from Apple.
- **Easy installation** Get started quickly with streamlined installation of Virtual PC for Mac.
- **Easy printing** Use the same printer as your Macintosh computer uses if you are running Mac OS X version 10.3.x (Panther) or later.
- **Fast save** Shut down and save the state of your virtual machine in one easy step. When you use the Fast Save feature, all Windows-based programs that are running on your virtual machine when you shut down will be running when you restart your virtual machine.
- **Expanded preferences and settings** Customize your virtual machine by using new application preferences and virtual machine settings.

About virtual machine components

Each virtual machine that you create has the following components:

- **Virtual machine window** The virtual machine appears in this window on the Macintosh desktop. The name of the virtual machine appears in the title bar and the Virtual PC for Mac toolbar appears at the bottom.
- **A configuration document** Each virtual machine that you create is represented in Mac OS X by a configuration document. A configuration document contains all of the configuration information for a virtual machine, including the virtual machine settings and the virtual hard disk image. It has the same name as the virtual machine.
- **Virtual hard disk image** A virtual hard disk image functions like a physical hard disk. The virtual hard disk image dynamically expands as you install programs or store data in it.
- **An operating system installed in the virtual hard disk image** An operating system must be installed in the virtual hard disk image. If the operating system that you want to install is not included with Virtual PC for Mac, you must purchase and install an operating system.

The supported operating systems are Windows XP Professional, Windows XP Home, and Windows 2000. Refer to the Read Me for specific details about the supported operating systems. The Read Me is included on the Virtual PC for Mac installation CD, and in Virtual PC for Mac on the Help menu.

- **Emulated hardware** The virtual machine emulates a standard x86-based computer, including all of the basic hardware components.

Setup and configuration checklist

The following summarizes the process of installing and configuring Virtual PC for Mac Version 7.

Step 1	Before You Install Virtual PC for Mac Review the requirements for Virtual PC for Mac.
Step 2	Install Virtual PC for Mac Follow the on-screen instructions of the Virtual PC for Mac Assistant.
Step 3	Create an empty virtual machine Follow the on-screen instructions of the Create New PC Assistant. This creates an empty virtual machine on which you will install a Windows operating system.
Step 4	Install an operating system Install a Windows operating system on the empty virtual machine. You can install Windows XP Professional, Windows XP Home Edition, or Windows 2000.
Step 5	Install Virtual Machine Additions Install Virtual Machine Additions on a Windows operating system to provide system integration features (such as mouse integration and shared folders).
Optional	Configure a virtual machine Configure and set up preferences for Virtual PC for Mac and Windows to ensure that they work properly. See page 17 for information on setting up networking. See page 20 for information on setting up printers. See page 22 for information on setting up shared folders.
Optional	Install Windows-based programs Installing a Windows-based program is easy: Start a virtual machine, insert the installation CD, and follow the on-screen instructions. See page 28 .

Installing Virtual PC for Mac

This section provides instructions on installing the volume licensing version of Virtual PC for Mac.

Note If you are installing any version of Virtual PC for Mac that is not a volume licensing version, refer to the documentation included with your software.

About automated installations

Virtual PC for Mac does not support or include tools for automated installations across a network — you must install Virtual PC for Mac manually on each computer. After you create a virtual machine and install a volume licensing version of Windows on it, you can [copy the virtual machine over the network](#) to other Macintosh computers. See page **Error! Bookmark not defined.** for more information.

Step 1: Before You Install Virtual PC for Mac

Read the following information prior to installing Virtual PC for Mac.

System requirements

To install and run Virtual PC for Mac, you must have the following:

- A native G3, G4, or G5 Macintosh computer — Microsoft does not support processor upgrade and/or accelerator cards for use with Virtual PC for Mac
- Mac OS 10.2.8 or Mac OS 10.3.x
Note To run Virtual PC for Mac on a G5 Macintosh, you must be running Mac OS 10.3.x.
- At least 512 MB of RAM and 3 GB of free hard-disk space
- A 700 MHz processor, minimum

For optimal performance in Virtual PC for Mac, Microsoft recommends using video cards that support Quartz Extreme, such as nVidia GeForce or ATI Radeon.

Supported operating systems

You can install the following operating systems on a virtual machine in Virtual PC for Mac:

- Windows XP Professional
- Windows XP Home Edition
- Windows 2000

Note These operating systems are not included with the volume licensing version of Virtual PC for Mac.

Product keys

The product key for the volume licensing version of Microsoft Virtual PC for Mac is preset, and you are not required to enter this key during installation. If you are installing any version of Microsoft Virtual PC for Mac which is not a volume licensing version, refer to the documentation included with your software for the location of the product key.

To install your Windows operating system on a virtual machine, you need the product key for your operating system. The Windows product key is different than the key used by Virtual PC for Mac.

Step 2: Install Virtual PC for Mac

To install Virtual PC for Mac

1. Insert the Virtual PC for Mac installation CD into the CD drive on your Macintosh computer. The following installation screen appears.



If the installation screen does not automatically appear, double-click the **Virtual PC for Mac Version 7** CD icon that appears on the Macintosh desktop.

The installation screen has three options:

- **Install Virtual PC** This opens the Virtual PC for Mac installer.
- **Read Me** This document contains important information regarding Virtual PC for Mac.
- **Manuals & Tools** This folder contains an electronic copy of the *Getting Started* guide and a tool for removing Virtual PC for Mac.

2. Double-click **Install Virtual PC**.

The **Welcome to the Virtual PC Installer** screen appears.

3. Follow the on-screen instructions.

When you restart your Macintosh computer (when prompted), be sure you log on as an administrator. After you log on as an administrator, the Virtual PC for Mac Setup Assistant starts. If the Virtual PC for Mac Setup Assistant does not start immediately after you log on as an administrator, double-click the **Applications** folder, and then double-click **Virtual PC**.

4. Follow the on-screen instructions for the Virtual PC for Mac Setup Assistant. This Assistant helps you complete the Virtual PC for Mac installation.

Step 3: Create an empty virtual machine

After you install Virtual PC for Mac, use the following procedure to create an empty virtual machine.

To create an empty virtual machine

1. If the Create New PC Assistant does not start immediately after completing the Virtual PC for Mac installation, in Virtual PC for Mac, on the **File** menu, click **New**.

The Create New PC Assistant opens.

2. Click **Install your own operating system**, and then click **Begin**.

This allows you to create an empty virtual machine where you can install your operating system.

3. Click **Continue**.

4. In the **Operating System** list, click the operating system that you want to install on your virtual machine. If the operating system that you want to install is not listed, click **Unspecified**.

The Assistant displays possible formats for the virtual hard disk image based on the operating system you selected.

Note Only Windows XP Professional, Windows XP Home Edition, and Windows 2000 are supported in Virtual PC for Mac. You can install and run other Windows and non-Windows operating systems, but these operating systems are not supported in Virtual PC for Mac and may not perform as expected.

5. Select the format you want to use for the virtual hard disk image, and then click **Continue**.

The default format is the format recommended for your operating system. Some file formats are not compatible with certain operating systems. Incompatible formats for the selected operating system appear dimmed and cannot be selected.

6. In the **Name** box, type the name for your virtual machine.

You can either accept the name that is provided or create your own name. For best results, use the name of the operating system that you are installing (for example, Windows XP Professional).

7. To install the configuration document (which contains the configuration information and operating system files for your virtual machine), do one of the following:

- To accept the default installation location, click **Create**.

By default, the Assistant installs configuration information and operating system files for your virtual machine in the User/Documents/Virtual PC List folder on your Macintosh hard disk.

- To select a different installation location, click **Change Location**, select a location, and then click **Create**.

8. Close the Create New PC window.

You are now ready to install your operating system on the new virtual machine.

Step 4: Install an operating system

Note These steps describe installing Windows XP. If you are installing a different operating system, some steps may be different than described below. Depending on the speed of the host Macintosh, the time it takes to install the operating system ranges from approximately 30 minutes to over 2 hours.

To install an operating system on an empty virtual machine

1. In the Virtual PC List, double-click the empty virtual machine that you want to install an operating system on.

A black screen with the following message appears: "OS not found. Install an OS on this hard drive."

2. With Virtual PC for Mac in the foreground, insert the CD that contains the operating system into the CD drive of your Macintosh computer.

The CD is now captured for use by Virtual PC for Mac. When a CD is captured for use by Virtual PC for Mac, the CD image in the Virtual PC for Mac toolbar is no longer shaded. If the CD is not automatically captured, in Virtual PC for Mac, on the **Drives** menu, click **Capture Disc**.

Installing Virtual PC for Mac

If you have an operating system that requires installing from a floppy disk, you need either a floppy disk drive on your Macintosh computer or a floppy disk image that contains the installation information. If your Macintosh computer does not have a floppy disk drive, you can copy the contents of the physical floppy disk from another Macintosh computer to a network location that you can access. For more information about using floppy disk images, see “Create a floppy disk image” in the Virtual PC for Mac Help.

3. In Virtual PC for Mac, on the **PC** menu, click **Reset**.
4. To confirm that you want to restart the virtual machine, click **Reset** again.
5. When the message “Press any key to boot from CD” appears, immediately press any key on your keyboard.

Note You must press a key quickly, without pausing. Otherwise, the black screen with the message “OS not found. Install an OS on this hard drive.” appears again, and you will need to repeat steps 3 and 4.

Windows files are installed.

6. Follow the on-screen instructions for Windows XP Setup. The following list shows some of the choices to make during setup:
 - **Default file system** The file system that is selected by default is the partition option that you selected in the Create New PC Assistant. Use the default file system unless you are sure that you need to select a different file system.
 - **NTFS** Do not convert your file system to the NTFS file system unless you are certain that you want to use the NTFS file system. You cannot convert back to a FAT file system after you have used an NTFS file system. In addition, the Virtual Disk Assistant in Virtual PC for Mac cannot modify or examine NTFS file systems.
 - **Typical vs. custom network settings** To avoid compromising the performance of Virtual PC for Mac, select **Typical**. These network settings have been preconfigured to perform the majority of tasks in Windows. If you select **Custom**, always use DHCP unless you are using a domain or your network requires a setting other than DHCP.
 - **Domain or workgroup** If you are unsure if the virtual machine is a member of a domain, use the default **Workgroup** setting. You can join the virtual machine to a domain later, after installing Windows. If you join a domain, use the fully qualified name of the domain, headquarters.corp.adatum.com, for example.

Once you have finished installing an operating system, you are ready to install Virtual Machine Additions.

Step 5: Install Virtual Machine Additions

You can install Virtual Machine Additions on Windows 2000 and Windows XP operating systems to provide system integration features, including:

- **Mouse integration** Move the mouse freely between Macintosh and Windows operating systems.
- **Shared folders** Share information between your Macintosh computer and your virtual machine, or among multiple virtual machines.
- **Performance enhancements** Improve the performance of Windows when you add these optimized video drivers.
- **Drag-and-drop operations** Copy files easily by dragging the files between the Windows and Macintosh operating systems.
- **Time synchronization** Synchronize the clock in the Windows operating system with the clock in the Macintosh operating system.
- **Dock support** Start a virtual machine from the Macintosh Dock.
- **Easy printing** Use the same printer as your Macintosh computer uses if you are running Mac OS X version 10.3.x (Panther) or later. No special configuration is required.

To install Virtual Machine Additions

1. Start a virtual machine.
2. Make sure you are logged on to Microsoft Windows as an administrator.
3. When the Windows desktop appears, hold down the COMMAND (⌘) key, and then move the mouse pointer outside the virtual machine window and onto the Macintosh desktop.
4. In Virtual PC for Mac, on the **PC** menu, click **Install or Update Additions**.
5. Follow the on-screen instructions.
6. Click **Finish**.
7. To restart your computer now so that configuration changes take effect immediately, click **Yes**.

You are now ready to configure your virtual machine.

Configuring a virtual machine

After you have a virtual machine with a version of Windows installed on it, you need to configure both the Virtual PC for Mac program and Windows to ensure that they work properly. Specifically, you need to configure and set up:

- Networking
- Printing
- Shared folders
- Virtual PC for Mac preferences
- Additional programs

Note The information in this section applies only if you installed a Windows operating system.

Set up networking

In Virtual PC for Mac, a virtual machine can connect to the Internet and network servers in one of the following two ways.

- **Shared Networking** By using Shared Networking, the virtual machine can share the Internet connection established for the Macintosh computer, whether the Macintosh computer is connected through a modem or a LAN. Shared Networking works well for standard networking tasks, such as browsing the Web and reading e-mail. It can also be used to access shared resources, such as FTP sites, printers, or files.

A virtual machine that uses Shared Networking cannot act as an Internet server. Shared networking uses TCP/IP. Other network protocols, such as Novell IPX/SPX and NetBEUI, are not supported. If you must use one of these other protocols, use Virtual Switch networking instead of Shared Networking.

Note If you are using an Airport connection to access your network, use shared networking to ensure reliable network connectivity.

- **Virtual Switch** By using Virtual Switch networking, a virtual machine that is running Microsoft Windows can have a unique network connection that is separate from that of the Macintosh computer. A virtual machine that uses Virtual Switch networking can run server programs and act as an Internet server. Virtual Switch networking is needed to run some networking software, such as chat programs. Use Virtual Switch networking only if you are knowledgeable about network configuration.

If you use Virtual Switch networking, you can either obtain a TCP/IP address from a DHCP server or use a TCP/IP address that differs from the TCP/IP address used by the Macintosh computer. To view the TCP/IP address used by the Macintosh computer, on the **Apple** menu, click **System Preferences**, and then click **Network**.

Set up Shared Networking

To set up Shared Networking, you must specify networking settings in Virtual PC for Mac and configure Microsoft Windows to automatically obtain a TCP/IP address from a DHCP server. Typically, these are the default settings for both Virtual PC for Mac and Windows.

By default, Shared Networking is selected as the network setting. Use the following two procedures to change the network setting to Shared Networking if the network setting is currently set is to Virtual Switch. You can use the first procedure to determine the current network setting.

Note With Shared Networking, Virtual PC for Mac acts as the DHCP server. No other DHCP server is necessary.

To set up Shared Networking in Virtual PC for Mac

1. Start Virtual PC for Mac, and then start the virtual machine that you want to configure.
2. On the **PC** menu, click **PC Settings**.
3. Click **Networking**.
4. Select **Enable networking**, and then click **Shared Networking**.
5. Click **OK**.

After you set up Shared Networking in Virtual PC for Mac, you can configure Windows to work with Shared Networking by using the following procedure.

To configure Windows to work with Shared Networking

1. In Windows, click **Start**, and then click **Control Panel**.
2. Double-click **Network Connections**.
If you do not see **Network Connections**, in the list on the left of the **Control Panel**, click **Switch to Classic View**.
3. Double-click your network connection.
4. On the **General** tab, click **Properties**.
5. Click **Internet Protocol (TCP/IP)**, and then click **Properties**.
6. Click **Obtain an IP address automatically**.
7. Click **OK**.

Set up Virtual Switch networking

To set up Virtual Switch networking, you must specify networking settings in Virtual PC for Mac and configure Microsoft Windows either to automatically obtain a TCP/IP address from a DHCP server or to use a static TCP/IP address.

To enable Virtual Switch networking, you must:

- Configure Virtual PC for Mac
- Configure your operating system

To configure Virtual Switch networking for a virtual machine

1. Start Virtual PC for Mac, and then start the virtual machine that you want to configure.
2. On the **PC** menu, click **PC Settings**.
3. Click **Networking**.
4. Select the **Enable networking** check box, and then click **Virtual Switch**.
5. Click **Restart**.

After you configure Virtual Switch networking for a virtual machine, you can configure Windows to work with Virtual Switch networking by using the following procedure.

To configure Windows to work with Virtual Switch networking

Note You can configure networking in Windows on your virtual machine the same way you would configure networking for any other Windows computer.

1. In Windows, click **Start**, and then click **Control Panel**.
2. Double-click **Network Connections**.
If you do not see **Network Connections**, in the list on the left of the **Control Panel**, click **Switch to Classic View**.
3. Double-click your network connection.
4. On the **General** tab, click **Properties**.
5. Click **Internet Protocol (TCP/IP)**, and then click **Properties**.

6. Do one of the following:
 - To obtain a TCP/IP address automatically, click **Obtain an IP address automatically**.
 - To use a static TCP/IP address, click **Use the following IP address**, and then fill in the information.

Note In addition to requiring an IP address, network and dial-up connections on a TCP/IP network might require a mechanism to map computer names to IP addresses. Four name resolution options are available: DNS (Domain Name System), WINS (Windows Internet Name Service), broadcast name resolution, and the Hosts and Lmhosts files.

7. Click **OK**.

Important If your network uses a proxy server, you need to configure your Internet settings to use the proxy server before you can access your network. To configure your Internet settings to use the proxy server, in Internet Explorer, on the **Tools** menu, click **Internet Options**, and then on the **Connections** tab, click **LAN Settings**.

Set up printers

In Virtual PC for Mac, there are several ways to establish a printer connection for your virtual machine. The method you choose depends on the operating system that is installed on your Macintosh computer and whether the printer you want to use is a printer directly connected to your Macintosh computer or a printer on a network.

Use the following table to determine the printer connection that is best for you.

I am running Mac OS X	My printer is	Recommended printer connection for your virtual machine
Version 10.3.x or later	Connected directly to my Macintosh computer	Use the Virtual Machine Additions Printer.
	On a network	Use the Virtual Machine Additions Printer.
Version 10.2.8	Connected directly to my Macintosh computer	Connect to the USB printer independently of the Macintosh computer.
	On a network	Configure your printers from within Windows the same way you would configure a printer for any other Windows computer.

Important In Virtual PC for Mac, the virtual machine does not automatically capture USB printers for use. To use a USB printer with a virtual machine, you must first capture the USB printer for use by the virtual machine. For more information about using USB devices with a virtual machine, see Virtual PC for Mac Help.

If you are running Mac OS X version 10.3.x on your Macintosh computer

If your Macintosh computer is already set up to print from either a printer connected directly to it or a printer on a network, use the Virtual Machine Additions Printer driver as the printer connection for your virtual machine. The Virtual Machine Additions Printer driver uses the printer connections that have already been established for your Macintosh computer and requires no additional configuration. The Virtual Machine Additions Printer driver can be used only with a virtual machine that is running a supported operating system.

The driver for the Virtual Machine Additions Printer is automatically installed with Virtual Machine Additions.

To use the Virtual Machine Additions Printer driver, Virtual Machine Additions must be installed for a new virtual machine that contains a version of Windows XP purchased separately from Virtual PC for Mac. You can also use the Virtual Machine Additions Printer driver if you update Virtual Machine Additions after importing a virtual machine.

Note Before you can use the Virtual Machine Additions Printer driver, you must first set up a printer for your Macintosh computer and verify that it is working properly.

Tips

- If other printers are installed in the Windows operating system of the virtual machine, you must select the Virtual Machine Additions Printer as your default printer.
- The Virtual Machine Additions Printer is the recommended and easiest printer connection, but you can also connect your virtual machine to a USB printer independently of the Macintosh computer or use emulated printing.

If you are running Mac OS X version 10.2.8 on your Macintosh computer

If the printer you want to use is a USB printer that is connected directly to your Macintosh computer, you can establish a separate USB printer connection for your virtual machine that is independent of the USB printer connection for your Macintosh computer. This means that the USB printer and the necessary printer drivers must be installed in the Windows operating system on your virtual machine in addition to being installed on your Macintosh computer.

If the printer that you want to use is on a network, configure your printers from within Windows the same way you would configure a printer for any other Windows computer.

It is also possible to use emulated printing as the printer connection for your virtual machine. However, the emulated printing connection can result in poor quality and performance. You should use emulated printing only if no other printing option is available.

To learn how to select the Virtual Machine Additions Printer as the default printer in Virtual PC for Mac and in Windows XP and Windows 2000, see Virtual PC for Mac Help.

Set up shared folders

You can easily transfer files between Mac OS X and Microsoft Windows by creating shared network folders that are available in both operating systems, or by simply dragging a file from one operating system to the other.

Dragging and dropping files

If your virtual machine is using Windows XP or Windows 2000, and you install Virtual Machine Additions, you can share files between the different operating systems by dragging and dropping files. This copies the file from one operating system to the other. For example, if you are working on a file on your Macintosh computer and you want to copy that file to your virtual machine running Windows XP, you can simply drag the file from your Macintosh computer onto your Windows XP desktop.

Shared network folders

Shared network folders allow a file to be available in both operating systems. You can use that file in both operating systems as long as the program that is needed to open the file is installed in both operating systems. For example, if you create a file in Microsoft Word for Mac, to open the file in the Windows operating system you need Microsoft Word for Windows installed on the virtual machine.

Shared network folders are named differently in Mac OS X and Windows. In Mac OS X, these folders are identified by a name. In Windows, these folders are called network drives, and are assigned to a drive letter, such as drive “Z.”

A folder in Mac OS X can also be shared by multiple virtual machines that are running simultaneously. Because virtual machines cannot directly share files and folders, shared network folders provide an easy way to share and transfer files and folders between multiple virtual machines and the Macintosh computer.

To create a shared network folder

1. Start the virtual machine.
2. On the **PC** menu, click **PC Settings**.
3. Click **Shared Folders**.
4. Under **Shared Folders Settings**, click **Share Folder**.

Tip You can quickly open the Shared Folders setting by clicking the folder icon on the Virtual PC for Mac toolbar.

Configuring a virtual machine

5. Do one of the following:
 - To share an existing folder, browse through the list of folders to find the one you want to share.
 - To create a new folder, click the location where you want to create a new folder. Click **New Folder**, type the folder name, and then click **Create**.
6. Additionally, you can do either of the following:
 - To change the disk that this shared folder is assigned to in Microsoft Windows, click a letter in the **Drive Letter** box.
 - To make this folder is available every time you start the virtual machine, select the **Share every time** check box. If the virtual machine is currently running, you must restart it before this setting will work.
7. Click **Share**.
8. On the **Settings** page, click **OK**.

To access the shared folder in Mac OS X

- In the Mac OS X Finder, navigate to the folder that is shared with Windows.

To access the shared folder in Windows

1. Start the virtual machine that has the shared folder you want to access.
2. On the **Start** menu, click **My Computer**.
3. Double-click the network drive associated with the shared folder.

Configure Virtual PC for Mac preferences

After you create your virtual machine, you need to configure it. In Virtual PC for Mac, you can set both application preferences and virtual machine settings.

Application preferences

Application preferences apply to all of the virtual machines that you created in Virtual PC for Mac. They are set for the Virtual PC for Mac program rather than the individual virtual machine. Application preferences control behavior such as sound, CPU usage, visual display, and other behavior that applies to all virtual machines in Virtual PC for Mac.

Note For default behavior, you do not need to change these settings.

Configuring a virtual machine

The following table provides a description of each application preference.

Application preference	Description
Alert Behavior	Determines if alert messages will be displayed. In Virtual PC for Mac, many alert messages have a Don't show again option. If you select this option, the alert will not display again in Virtual PC for Mac. However, if you want alerts in Virtual PC for Mac to display, click Reset in the Alert Behavior preference.
PC Behavior	Determines whether to suspend activity (pause) in background virtual machines when you are running multiple virtual machines simultaneously. Determines if all virtual machines you were running when you last quit Virtual PC for Mac will be automatically restarted the next time you start Virtual PC for Mac. To set all virtual machines to restart, select Restore PCs at launch .
Full Screen Mode	Determines the behavior of the video settings on your Macintosh computer when you run a virtual machine in full-screen mode. Virtual PC for Mac menus and toolbars are not accessible when the virtual machine is running in full-screen mode unless you press the COMMAND (⌘) key. To return to the normal screen mode, press the COMMAND and RETURN keys simultaneously.
Virtual Switch	Determines which Ethernet adapter to use with a virtual machine that is set to run with the Virtual Switch network option.
Sound	Sets the behavior of system sounds on all virtual machines.
CPU Usage	Determines how to divide processing resources between Virtual PC for Mac and other programs that are running simultaneously when Virtual PC 7 is not the active program on the Macintosh computer.
Script Menu	Adds the AppleScript menu to the Apple menu bar when Virtual PC for Mac is running.
Toolbar	Selects the items that will appear on the Virtual PC for Mac toolbar.
Login	Sets Virtual PC for Mac to start automatically when you log on to your Macintosh computer.

To configure application preferences

1. In Virtual PC for Mac, on the **Virtual PC** menu, click **Preferences**.
2. Click the application preference that you want to configure.

Virtual machine settings

Virtual machine settings are unique to each virtual machine that you create in Virtual PC for Mac. These settings control behavior for each virtual machine rather than for the Virtual PC for Mac program. Virtual machine settings control behavior such as printing, connecting to a network, using USB devices, and other behavior that applies to individual virtual machines running in Virtual PC for Mac.

Note For default behavior, you do not need to change these settings.

The following table provides a description of each virtual machine setting.

Setting	Description
PC Name	Sets the name for the virtual machine, which appears in Virtual PC List .
PC Memory	Sets how much RAM and VRAM are allocated when this virtual machine is running.
Drive 1, 2, and 3	Assigns additional virtual hard disk images to a virtual machine. Drive 1 is the default primary drive.
Undo Drives	Saves all changes made to a virtual machine in a separate Undo file so that the virtual hard disk image of the virtual machine remains in its original state.
Shared Folders	Creates a shared folder to easily transfer files between your Macintosh computer and a virtual machine.
Mouse	Customizes the key combination on your keyboard to enable a single-button mouse to “right click.”
Keyboard	Assigns special computer keys, such as the Windows key, to your Macintosh keyboard.
Com Ports 1 and 2	Assigns a physical serial device or file to a virtual machine’s emulated serial ports.
Networking	Sets either the Shared Networking or Virtual Switch networking option.
USB	Allows a physical USB device to be used with a virtual machine.
Dock	Determines whether Windows-based programs that are running display in the Macintosh Dock. If you have multiple virtual machines, the programs running on each virtual machine appear in the Dock. To determine which virtual machine is running the program, use your mouse device to point to the program you want. The name of the virtual machine will appear above the program icon. Determines whether to display the Windows Start menu in the Macintosh Dock. This version of the Windows Start menu is not a fully functional

Setting	Description
	<p>menu, but rather, a quick way of starting a virtual machine and Windows-based programs by using the Dock. If you have multiple virtual machines, only the programs that are installed on the virtual machine (for which this setting is selected) will appear in the Start menu. This setting can be selected by only one virtual machine at a time.</p> <p>To integrate Virtual PC for Mac with the Dock, you must install Virtual Machine Additions.</p>
Printing	<p>Defines which Macintosh printer is used when you print to the Virtual Machine Additions Printer in Windows. This is available only if you are running Mac OS X version 10.3.x on your Macintosh computer.</p>

To configure virtual machine settings

1. Do one of the following in Virtual PC for Mac:
 - If you have one virtual machine, on the **PC** menu, click **PC Settings**.
 - If you have multiple **virtual** machines, on the **Window** menu, click **Virtual PC List**. Click the virtual machine that you want to configure, and then click **Settings**.
2. Click the virtual machine setting that you want to configure.

Copy a virtual machine over the network

If you have installed a volume licensing version of Windows on a virtual machine, you can copy the virtual machine to another Macintosh computer.

Before you copy a virtual machine to another Macintosh computer

1. Install Virtual PC for Mac on the source and destination Macintosh computers.
2. On the destination Macintosh computer, turn Personal File Sharing on.
To turn Personal File Sharing on, open **System Preferences**, click **Sharing**, and select the **Personal File Sharing** check box.
3. On the source Macintosh computer, create a virtual machine and install a Windows operating system and Virtual Machine Additions.
4. Configure the virtual machine and Windows as needed.

Configuring a virtual machine

5. Use the **Start** menu in Windows to shut down the virtual machine completely. Click **Start**, and then click **Shut Down** (or **Turn Off**). This method does not automatically save the current state of Windows. All data that is not saved prior to shutting down is lost.

In Windows XP Professional, the **Start** menu displays **Shut Down** if you are connected to a domain and **Turn Off** if you are not connected to a domain.

6. When the status of the virtual machine is “Not Running” in the Virtual PC List, quit Virtual PC. Do not copy a virtual machine that is running.
7. Connect to the destination Macintosh computer and mount the volume where you want to copy the virtual machine.

You can use the Finder Network Browser or the Connect To Server dialog to connect to a shared Macintosh computer. See Apple Help for more information about locating and connecting to shared computers.

To copy a virtual machine to another Macintosh computer

1. On the source Macintosh computer, open the Documents folder, and then open the Virtual PC List folder. Make sure that you open the Documents folder in the Home folder of the user who installed and runs Virtual PC for Mac.

For each virtual machine on the Macintosh computer, there is a Virtual PC Document with the same name in the Virtual PC List folder.

2. From the source Macintosh computer, double-click the mounted volume of the destination Macintosh computer, open the Documents folder, and then open the Virtual PC List folder: Make sure that you open the Documents folder in the Home folder of the user who installed and runs Virtual PC for Mac on the destination Macintosh computer.
3. Drag the Virtual PC Document from the Virtual PC List on the source Macintosh to the Virtual PC List folder on the destination Macintosh computer.
4. Start Virtual PC for Mac on the destination Macintosh computer. The copied virtual machine appears in the Virtual PC List if you copied it to the correct folder.
5. Start up the copied virtual machine from the Virtual PC List and configure it as needed.

Note If the virtual machine you copied is set to use Virtual Switch networking, a conflict can occur if two computers on a network have the same name and the same static IP address. To resolve this conflict, start the copied virtual machine and change the computer name in Windows. To change the computer name in Windows, click **Start**, click **Control Panel**, and then double-click **System**. On the **Computer Name** tab, click **Change**. In **Computer name**, type your computer name.

Install additional programs

Now that your virtual machine is set up with your operating system and connected to your network, you can install additional programs on your virtual machine. Use the first procedure to install a Windows-based program. If the CD is not captured for use by the virtual machine or the installation program does not start automatically, use the second procedure to install the program by using the **Install Program From Floppy Disk or CD-ROM** wizard.

To install Windows-based programs

1. Start the virtual machine on which you want to install the program.
Important Start your virtual machine before you insert the installation CD for the program into the CD drive of your Macintosh computer; otherwise, the CD might be captured for use by the Macintosh computer rather than by the virtual machine.
2. Insert the installation CD for the program into the CD drive of your Macintosh computer. The active CD icon on the toolbar in Virtual PC for Mac indicates that the virtual machine has captured the CD.
Note If the virtual machine does not capture the CD, on the **Drives** menu, click **Capture Disc**. If your Macintosh computer does not have a floppy disk drive and you must install a program from a floppy disk, use a virtual floppy disk image. For more information on creating a virtual floppy disk image, see “Create a floppy disk image” in the Virtual PC for Mac Help.
3. If the Windows-based program has an automated installation tool included, the installation program starts. Follow the on-screen instructions.

To install Windows-based programs by using Add or Remove Programs

1. In Microsoft Windows, click **Start**, and then click **Control Panel**.
2. Double-click **Add or Remove Programs**.
3. Click **Add New Programs**, and then click **CD or Floppy**.
4. Follow the instructions in the **Install Program From Floppy Disk or CD-ROM** wizard.
For more information about installing Windows-based programs, in Windows, click **Start**, and then click **Help and Support**.

Add a Windows program icon to the Dock

After installing a Windows program on your virtual machine, you can add its icon to the Dock. The icon for the Windows program will appear in the Dock, even when Virtual PC is not running. To start the program and Virtual PC, click the icon.

To add an icon to the Dock

1. Start the Windows-based program you want to add to the Dock.
2. When the program icon appears on the Dock, hold down CONTROL, click the icon, and then click **Keep in Dock**.

Note If the **Keep in Dock** option does not appear, you need to configure the Dock virtual machine setting. Click a virtual machine, and then click **Settings**. Click **Dock**, and then select the **Show Windows applications in Dock** check box.

Pause or resume a virtual machine

Avoid shutting down a virtual machine if you intend to use it again before long. Pausing and resuming a virtual machine is much faster than shutting down a virtual machine and then starting it again. Also, when a virtual machine is paused, it frees up memory that can be used by other virtual machines that are currently running. When paused, the virtual machine's contents appear dimmed. Each virtual machine must be resumed individually.

To pause or resume a virtual machine

1. Click the virtual machine window of the virtual machine you want to pause or resume.
2. In Virtual PC, do one of the following:
 - To pause the operation of a virtual machine, on the **PC** menu, click **Pause**.
 - To resume the operation of a virtual machine, on the **PC** menu, click **Resume**.

Note At times, a virtual machine will pause automatically. This occurs if the virtual machine is experiencing a severe memory allocation problem and Virtual PC forcibly pauses the virtual machine. If this happens, use the command to resume the virtual machine.

Shut down a virtual machine

When you shut down a virtual machine, you can save its state, shut it down without saving its state, or turn it off. Saving the state of a virtual machine puts it in a sleep state. When you next start up the virtual machine, its previous state is restored and you can quickly resume your work. Shut down a virtual machine without saving its state when you want to make changes to the virtual machine. Turn off a virtual machine when it is not responding and the Shut Down option does not work.

Notes

- If multiple virtual machine windows are open, click the window of the virtual machine you want to shut down. The other virtual machines will be paused in the background and display a status of “Running (Paused)” in Virtual PC List.
- If Undo Drives is selected for the virtual machine you are shutting down, you have three options: **Discard hard disk changes**, **Save hard disk changes**, or **Carry forward undoable changes**. Learn about these options in the next section, [Safely revert by enabling Undo drives](#).

To shut down and save the state of a virtual machine

This option saves the current state of the operating system. Any program or file that is open when you shut down using this option will be open when you restart the virtual machine.

1. On the **PC** menu, click **Shut Down**.
2. Click **Save PC's state**, and then click **Save State**.

Tip You can also use the Fast Save method, which shuts down a virtual machine and saves its state in one step. Click the **Close** button on a virtual machine window to shut down and save the state of the virtual machine. To shut down all running virtual machines in one step and save their states, on the **Virtual PC** menu, click **Quit Virtual PC**. Virtual PC shuts down all open virtual machines, and saves the current state of their Windows-based.

To shut down a virtual machine without saving its state

Caution All data that is not saved prior to shutting down is lost. This option does not save the current state of the Windows operating system.

1. On the **PC** menu, click **Shut Down**.
2. Click **Shut down Windows XP**, and then click **Shut Down**.

Use this option when making changes to your virtual machine, such as turning the Undo Drives setting on or off, or when mounting a virtual hard disk image. You must also use this option before importing a virtual machine, transferring documents from a virtual machine to Virtual PC for Mac, or making a duplicate of a virtual machine. A Windows operating system and Virtual Machine Additions must be installed on the virtual machine for this option to be available.

To shut down a virtual machine if Virtual Machine Additions is not installed

If you do not have Virtual Machine Additions installed, you can shut down a virtual machine by using the **Start** menu in Windows.

Caution All data that is not saved prior to shutting down is lost. This method does not save the current state of the Windows operating system.

- In Windows, click **Start**, and then click **Shut Down** or **Turn Off**.

In Microsoft Windows XP Professional, the **Start** menu displays **Shut Down** if you are connected to a domain and **Turn Off** if you are not connected to a domain.

To shut down a virtual machine that is not responding

Caution Do not use this option unless the virtual machine is not responding and the **Shut Down** option does not work. **Turn off PC** is equivalent to unplugging a physical computer. If your virtual machine is not running Windows, use this option instead of the **Shut Down** option to shut down your virtual machine.

1. On the **PC** menu, click **Shut Down**.
2. Click **Turn off PC**.

To shut down a virtual machine that is not running Windows

1. On the **PC** menu, click **Shut Down**.
2. Click **Turn off PC**.

Safely revert by enabling Undo drives

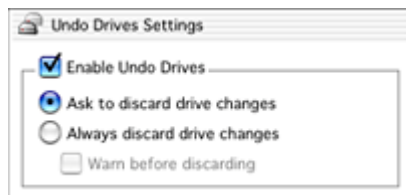
As you make changes to the virtual machines on your system, you might want the ability to discard those changes. For example, suppose you've installed unnecessary or potentially incompatible software. By selecting the **Enable Undo Drives** setting in Virtual PC for Mac, you give yourself the option of discarding such changes. By enabling Undo Drives before you start making changes to a virtual machine, you can make incremental additions and improvements on the virtual machine and test the results. If you choose to make the changes permanent, you can save the changes to the virtual hard disk image when you shut down the virtual machine. If not, you can discard the changes by using Undo Drives.

When you enable **Undo Drives**, Virtual PC creates a temporary hard drive file called an Undo Drive and makes subsequent changes to that file. When you elect to discard changes, Virtual PC discards the Undo Drive and the virtual machine reverts to the state it was in when the Undo Drive was created. This means that all changes that have been made since the time the Undo Drive was created are discarded, including data files, programs you've installed, changes to settings, and Internet or document history.

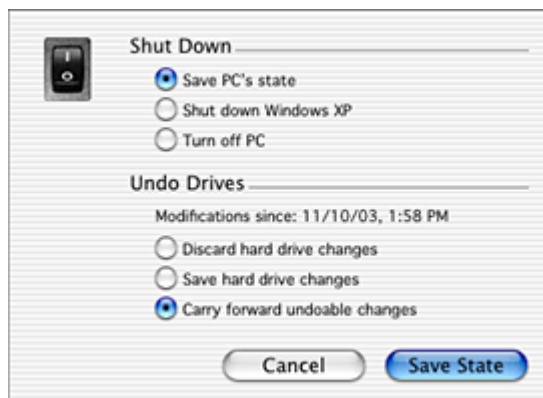
Caution Make sure that any files you want to keep are backed up to a different drive before you discard changes.

Enable Undo Drives

1. If the virtual machine is running, on the **PC** menu, click **Shut Down** , select the **Shut down Windows XP** check box, and then click the **Shut Down** button.
Note The virtual machine must be completely shut down to enable the **Undo Drives** setting. Do not choose the **Save State** option.
2. On the **Window** menu, click **Virtual PC List**.
3. Click the virtual machine you want, and then click **Settings**.
4. On the left, click **Undo Drives Settings**.
5. Select the **Enable Undo Drives** check box, and then click the option you want.



If you select the **Ask to discard drive changes** check box, a new set of options appears when you shut down your virtual machine or save its state.



Before you shut down or save the state, select one of the following options:

Discard hard drive changes The changes saved in the Undo Drive — a temporary hard drive file — are discarded and the virtual machine reverts to the state it was in the last time you saved changes.

Save hard drive changes The changes saved in the Undo Drive become permanent. You can no longer revert to a previously saved version of the virtual machine.

Carry forward undoable changes The changes are preserved in the Undo Drive but not incorporated in the virtual machine. You can still revert to a previously saved version of the virtual machine.

Maintaining virtual machines

The information in this section will help you maintain virtual machines on a Macintosh computer. This section includes topics on performance, security, Windows updates, backing up data, deleting a virtual machine, and removing Virtual PC for Mac.

About optimizing performance

You can improve performance by making changes in any of the following areas.

Processor speed

The speed of the Macintosh processor is the most important element for overall Virtual PC for Mac performance. The processor speed must be a part of the physical computer and cannot be added, by using a CPU accelerator, for example. To improve processor speed, you must use a Macintosh computer with a faster processor.

Multiple virtual machines

When multiple virtual machines are running simultaneously, processing time is divided among the different machines. More processing time is given to the active virtual machine. Therefore, the active virtual machine is processing at a faster rate than the background virtual machines. To improve the performance of the active virtual machine, you can pause all background virtual machines.

Amount of RAM on your Macintosh computer

The Macintosh computer uses two types of memory: physical (RAM) memory and virtual memory. Physical memory is provided by the RAM chips installed on your Macintosh computer. Virtual memory is provided when the Macintosh computer uses the hard disk as a temporary storage location.

The speed at which the Macintosh computer is able to access memory depends on what type of memory it is accessing. Access to physical memory is almost instantaneous. Access to virtual memory can vary depending on both the speed of the hard disk and how often the Macintosh operating system must swap information to and from the hard disk. If virtual memory requires extensive use of the hard disk, access to virtual memory is slow. The more virtual machines you have running simultaneously, the greater the memory demands made on the Macintosh computer, which results in slower performance.

Installing more RAM on your Macintosh computer is a cost-effective way to reduce memory problems and increase the performance of Virtual PC for Mac. While Virtual PC for Mac requires only 512 MB of RAM, for best results, use a Macintosh computer with at least 1 GB of RAM and allocate 256 MB of RAM for each virtual machine. The virtual machine uses this RAM only when it is open and running.

Processor cache

The amount of processor cache affects the performance of Virtual PC for Mac. A cache is similar to RAM but runs faster because it stores the commands you use frequently in Mac OS X. For example, a Macintosh computer with a 1 MB processor cache is faster than a Macintosh computer with a 256 KB processor cache.

Processor cache is organized into different speeds for different cache levels. Level-1 (L1) cache is the fastest cache memory and is available only on the processor chip itself. Level-2 (L2) cache is often on the same chip as the processor. Level-3 (L3) cache is available for some later models of the G4 processor and is also on the same chip as the processor. To improve processor cache size, use a newer model Macintosh computer with the largest amount of L2 and L3 cache available.

About security

Virtual PC for Mac uses the security features of both Mac OS X and Microsoft Windows. To learn more about the security features of Mac OS X, see Mac OS X Help.

Important It is unlikely that a virus will affect the Mac OS or Mac files, but in certain circumstances your virtual machine running Windows exposes you to the same security risks that users running Windows on a Windows-based computer face. To lower your risk, make sure you always have installed the latest Windows security patches and service releases and that you have installed anti-virus software.

Check for Windows updates on the Internet

To protect the Microsoft Windows operating system that is running on your virtual machine, check for updates on the Windows Update Web site. The Windows Update Web site uses a tool that scans your virtual machine and gives you a selection of updates that apply to the specific software on your virtual machine. New content is added to the Windows Update Web site regularly, so you can always get the most recent updates and solutions. You might also want to remind anyone using Windows to check for updates on a regular basis.

To check for Windows updates on the Internet

1. In Windows, on the **Start** menu, click **Help and Support**.
2. Under **Pick a Task**, click **Keep your computer up-to-date with Windows Update**.

The first time you go to the Windows Update Web site, click **Yes** when prompted to install any required software or controls.

3. Follow the on-screen instructions.

Back up data

There are two ways to back up data. You can either back up the data on a virtual machine, or you can make a duplicate of the entire virtual machine.

To back up data on a virtual machine

1. Verify that the virtual machine that contains the data you want to back up is shut down completely. In Virtual PC List, the status of the virtual machine must be “Not Running.”
If the virtual machine is not shut down completely, start the virtual machine. In Virtual PC for Mac, on the **PC** menu, click **Shut Down**. Click the **Shut down** option, and then click the **Shut Down** button.
2. In the **Virtual PC List**, click the virtual machine that contains the data that you want to back up, and then click **Settings**.
3. Click the virtual hard disk image (**Drive 1**, **Drive 2**, or **Drive 3**) that contains the data you want to back up.
4. Click **Mount Drive Now**.
The virtual hard disk image is mounted as a volume on the Macintosh desktop.
5. Click the virtual hard disk image on the Macintosh desktop and back up the desired files. For more information on backing up files, see Mac OS X Help.

Notes

- When the virtual hard disk image is mounted as a volume on the Macintosh desktop, third-party software can be used to access the contents of the virtual hard disk image and perform an incremental backup.
- While the virtual hard disk image is mounted, do not move or delete files required by your Virtual PC for Mac operating system. Removal or modification of these files can result in system failure. To recover from this state, you will need to reinstall Virtual PC for Mac.

To back up data by duplicating a virtual machine

1. Make sure that the virtual machine that you are duplicating is completely shut down. In Virtual PC for Mac, on the **PC** menu, click **Shut Down**. Click the **Shut down** option, and then click the **Shut Down** button. The status of the virtual machine in Virtual PC List should be “Not Running.”
2. In the Finder, open the Documents/Virtual PC List folder.
The Virtual PC List folder is the default location for virtual machine configuration documents.
3. Select the virtual machine that you want to duplicate.
4. In the Mac OS X Finder, on the **File** menu, click **Duplicate**.
5. Move the duplicate virtual machine to another location; otherwise, it will appear in Virtual PC List the next time you start Virtual PC for Mac.

Delete a virtual machine

When you delete a virtual machine, the configuration document for that virtual machine is moved to the Trash, and all data is permanently lost when the Trash is emptied. The configuration document contains the virtual hard disk image and the virtual machine settings for a virtual machine. It can also contain the changes that have been saved in the Undo file for the Undo Drives setting. All information stored on the virtual hard disk image is lost when a configuration document containing that information is deleted.

Before deleting a virtual machine, make sure that you have first backed up any data on the virtual machine that you want to save.

To delete a virtual machine

1. Shut down the virtual machine that you want to delete. To shut down the virtual machine, click the virtual machine you want to delete, and then click **Shut Down**.

Tip Alternatively, you can click the **Close** button on the virtual machine window.

2. In Virtual PC for Mac, on the **Windows** menu, click **Virtual PC List**.

Verify that the status of the virtual machine in Virtual PC List is either “Saved” or “Not Running.”

3. Click the virtual machine you want to delete.
4. On the **File** menu, click **Move to Trash**.
5. At the prompt, click **Move to Trash**.
6. At the confirmation prompt, click **Move to Trash**.

When you delete a virtual machine, only the information contained in the configuration document is deleted. Files outside the configuration document are not deleted.

Remove Virtual PC for Mac

Use the following procedure to remove Virtual PC for Mac.

To remove Virtual PC for Mac

1. In Virtual PC for Mac, on the **PC** menu, click **Virtual PC List**.
2. For each virtual machine that is running, click the virtual machine, click **Shut Down**, click the **Shut down** option, and then click the **Shut Down** button.
3. Insert the Virtual PC for Mac installation CD into the CD drive on your Macintosh computer.
4. On the installation screen, double-click **Manuals & Tools**.
5. If the installation screen does not appear automatically, double-click the **Virtual PC for Mac version 7** CD icon that appears on the Macintosh desktop.
6. Double-click **Uninstall Virtual PC**.

Technical support options

For details on your technical support options, see your licensing agreement. Also visit the Help and Support page for Virtual PC for Mac Version 7 on the [Microsoft Web Site](http://www.microsoft.com/mac/) at <http://www.microsoft.com/mac/>. Here you will find links to highlights, top support issues, help and support contact information, and a link to the Newsgroup for Virtual PC for Mac Version 7. Here you can also search the Support Knowledge Base (KB) for articles that apply to Virtual PC for Mac Version 7.

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