Parallels Software International, Inc.

Parallels[®] Workstation Getting Started Guide



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Introduction

This guide is aimed at the novice computer users who want to install Parallels Workstation in their Linux primary operating system and create one or more virtual machines to run different versions of Windows as the guest operating systems. This guide provides all the necessary information for installing Parallels Workstation and creating a new virtual machine. It also gives detailed procedures of Windows XP and Windows Vista installation.

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System Requirements

Before installing the product, please make sure that the computer where you want to install and run Parallels Workstation meets the hardware and software requirements described in this chapter.

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Hardware Requirements

Parallels Workstation hardware requirements are listed in the following table:

Processor	700 MHz 32-bit or 64-bit processor with IA-32 compatibility (Intel Pentium or AMD Athlon).1.5 GHz or faster is recommended.
	Note. To run Parallels Workstation on 64-bit platform, you must have a 32-bit primary OS installed.
System Memory	768 MB of RAM minimum.
	2 GB recommended for Windows Vista guest OS.
	1 GB recommended for all other guest OSes.
Free Hard Disk Space	25 MB required for Parallels Workstation package.
	10 GB or more is recommended for each virtual machine.
Video Card	8-bit SVGA display adapter.
	16-bit color depth or higher is recommended.
Optical Drive	CD-ROM and/or DVD-ROM drive.
Network Device	Ethernet adapter.

Software Requirements

Parallels Workstation can be successfully installed on any of the following primary operating systems:

- Fedora Core Linux 4 stock 2.6.11-1.1369_FC4
- Red Hat Enterprise Linux WS4 stock 2.6.9-5
- Red Hat Enterprise Linux AS4 stock 2.6.9-5
- Red Hat Enterprise Linux ES4 stock 2.6.9-5
- Red Hat Linux 9 stock 2.4.20-8
- Debian Linux 3.1 stock 2.6.8-2-386
- SUSE Linux 10.0 stock 2.6.13-15
- SUSE Linux 9.3 2.6.11.4-20a
- SUSE Linux 9.2 stock 2.6.8-24.11
- SUSE Linux 9.1 stock 2.6.4-52
- SUSE Linux 9.0 stock 2.4.21-69
- Mandriva Linux 10 stock 2.6.3-7

The primary operating system must have the following software packages installed:

- Kernel source files
- glibc [glibc]
- gcc [gcc], ld [binutils]
- X Window System including
 - xf86vidmode extension (for full screen mode only)
 - XKB extension (for keyboard national layouts and leds support)

• Qt 3.0.5 library multithreaded [qt3]

Supported Guest Operating Systems

Parallels Workstation supports a set of Windows, Linux, and other operating systems. For the full list of supported guest operating systems, see *Parallels Workstation User Guide*.

Following is the list of the supported Windows guest OSes:

- Windows Vista Ultimate, Enterprise, Business
- Windows Server 2003 Standard Edition SP0, SP1
- Windows Server 2003 Enterprise Edition SP0, SP1
- Windows Server 2003 Web Edition SP0, SP1
- Windows XP Professional SP0, SP1,SP2
- Windows XP Home SP0, SP1, SP2
- Windows 2000 Professional Edition SP4
- Windows 2000 Server SP4
- Windows 2000 Advanced Server SP4
- Windows NT Workstation 4.0 SP6
- Windows NT Server 4.0 SP6
- Windows ME
- Windows 98
- Windows 95
- Windows 3.11
- Windows 3.1

CHAPTER 3

Installing Parallels Workstation

This chapter describes how to install Parallels Workstation in a Linux primary operating system.

Step-by-Step Installation

If you purchased the program from Parallels Online store (http://www.parallels.com/en/buyonline), or downloaded a trial version, make sure that you have a permanent or trial activation key. Depending on what file types your system supports, download the **RPM**, or **DEB**, or **TZG** package respectively.

Step-by-Step Installation

1 Launch the **Terminal** program.

Note. To enter (or issue) a command you must type a command and press the Enter key.

2 To gain root privileges enter the following command:

su

Enter the password for the root account when prompted.

- **3** If .rpm is supported in your system:
 - Locate the file Parallels-2.2.xxxx-lin.i386.rpm.
 - To start installing Parallels Workstation, issue the following command:

rpm -i Parallels-2.2.xxxx-lin.i386.rpm

Proceed to step 7.

- 4 If .deb is supported in you system:
 - Locate the file Parallels-2.2.xxxx-lin.deb.
 - To start installing Parallels Workstation, issue the following command:

dpkg -i Parallels-2.2.xxxx-Lin.deb

Proceed to step 7.

- 5 If both .rpm and .deb are not supported in your system:
 - Locate file Parallels-2.2.xxxx-lin.tgz and extract it into any existing directory:
- tar -xzpf Parallels-2.2.xxxx-lin.tgz -C <directory name>
 - Go to the directory where you unpacked the .tgz file and issue the next command:

cd parallels-2.2.xxxx-lin

• Run the following command

```
./install.sh
```

6 After the installation completes, run the post-installation script. Issue the following command:

9

parallels-config

- 7 When prompted, press Enter on the keyboard.
- 8 Read the license agreement scrolling it by pressing Spacebar on your keyboard. To accept the agreement, type "y" or "yes" (in either upper or lower case) and press Enter.
- **9** The Parallels Workstation setup program configures, compiles and installs the drivers. You will be informed about the successful completion.

10 To exit the **Terminal**, issue the command:

exit

You can now run Parallels Workstation.

Troubleshooting

If you receive a "Can not configure!" or "Can not compile!" message (note that you should have kernel sources installed), you can view log file and try to fix problem yourself. The log file is named: /usr/lib/parallels/comp.log.<log number>.error

If you can not fix the problem yourself, please send the log file and problem description to reports@parallels.com. Parallels Support Team will assist you as soon as possible.

CHAPTER 4

Starting Parallels Workstation

To start Parallels Workstation

• when logged in, launch the **Terminal** program and enter the command in the command line: **parallels**

To exit Parallels Workstation

- Choose **Exit** from the **File** menu
- Click the **Close** button on the title bar of the Parallels Workstation window.

CHAPTER 5

Creating a Virtual Machine

The process of creating a ready-to-use virtual machine includes the following steps:

- Creating a virtual machine configuration.
- Installing a guest operating system.
- Installing Parallels Tools.

Note. You must have a full (not OEM) version of the operating system you wish to install.

The procedure of creating virtual machines is generally the same in all the supported primary operating systems.

To create a configuration for Windows Vista or Windows XP virtual machine:

1

The easiest way to create a Windows Vista or Windows XP virtual machine configuration

1 Here we will describe how to create a virtual machine configuration for further installation of Windows Vista or Windows XP as a guest OS. In the Parallels Workstation window click

the New VM button.

2 The Welcome window of New Virtual Machine Wizard appears. The New Virtual Machine Wizard will help you to create a virtual machine and configure it.



Click Next.

3 In the next window you should specify the type of configuration. There are three types of configuration available: Typical, Custom and Blank. We recommend you to select the Create a typical VM option. This is the easiest way of creating a virtual machine. The wizard will use virtual hardware with specifications typical for the selected guest OS. (To view the specifications for a typical configuration of the selected guest OS, choose Contents from the Help menu, open Creating a virtual machine -> Typical configuration.) Click Next.

New Virtual Machine Wizard
Select virtual machine configuration How to configure your new virtual machine?
Please specify how would you like to configure your virtual machine:
Create a typical VM (recommended). This is the fastest way to create a new VM. The wizard will create a VM with the most common options for a selected guest OS. You will be able to configure VM later in the Configuration Editor.
Create a custom VM configuration. This mode allows you to create a new VM with specific configuration
Create a blank VM. Choose this option if you need a VM with the empty configuration.
< <u>B</u> ack <u>N</u> ext > Cancel

4 In the **Select guest OS** window specify the type and the version of the operating system you want to install in your virtual machine.

New Virtual Machine Wizard	
Select guest OS Which operating system will be installed on this virtual machine?	20
Please specify which guest operating system will be installed on this virtual machine:	
Guest OS Type:	
Windows	
Guest OS Version:	
Windows 2000	
< <u>B</u> ack <u>N</u> ext > Ca	ancel

5 In the next window, you're prompted to specify the name and location for the configuration file of the new virtual machine. By default, the wizard will name the VM after the guest OS you've specified and will save it in the Parallels folder. You can change these default values in Parallel Preferences window (select from the Parallels Workstation's menu: Edit -> Preferences -> Common). For more information, choose Help -> Contents.

The name doesn't really matter unless you plan to create several VMs running the same operating system; in that case, you can give them distinct names ("Windows XP for Games" and "Windows XP for Work", for example).

New Virtual Machine Wizard		
Select virtual machine configuration file Where do you want to store the configuration file?		
Please specify a virtual machine name and location of the virtual machine configuration file:		
Virtual machine name:		
Microsoft Windows 2000		
Configuration file:		
C:\Documents and Settings\LisAn\My Documents\Parallels Virtual Machines\		
< <u>B</u> ack Finish Cancel		

Click **Finish** to begin creating the virtual machine. When the new configuration is generated, it will be open in the Parallels Workstation window.

The auto-update feature asks if you want Parallels Workstation to perform regular automatic checks for updates.

Parallels	Workstation
?	Parallels Workstation is configured to automatically check for updates every week. To do this your host computer should be connected to the internet. You may choose another checking period or disable this feature in the Preferences/Common screen.
	Click Yes if you want Parallels Workstation to perform automatic checking for updates in background. You will be notified when an update is available. Click No if you do not want to perform automatic checking for updates.
	Yes No

We recommend that you turn this feature on to be automatically informed when Parallels Workstation updates are released. For more information about the auto-update feature see **Auto-Updating Parallels Workstation in Windows** or **Auto-Updating Parallels Workstation in Linux** in the *Parallels Workstation User Guide*. You can access the guide by selecting the Help -> Contents in the Parallels Workstation menu.

Next, you have to activate your copy of Parallels Workstation if you skipped it during the installation.

Activating Parallels Workstation in Linux Primary OS

To activate Parallels Workstation in Linux do the following:

- 1 Choose Activate from the **Help** menu.
- 2 In the Activate Product window, fill in the following fields:
 - In the **Activation key** field type the activation key. When the field is not blank, the **Activate** button becomes enabled.
 - Specify your name and name of the company in the User Name and Company Name fields. These fields are optional.

Y	Activate Product
	Activation Key:
	User Name:
(Company Name:
	This copy of Parallels Workstation 2.1 is currently not active. Please purchase a permanent activation key or obtain a free trial activation key.
	<u>A</u> ctivate <u>C</u> ancel

3 Click the Activate button. If you have entered a valid activation key, the following message will be displayed: "Parallels Workstation has been activated successfully. Thank you!"

CHAPTER 6

Installing Windows XP

To install the Windows XP guest operating system in your virtual machine, follow these steps:

- **1** Insert the Windows XP installation CD or DVD disc into the CD/DVD-ROM drive of your computer.
- 2 Click the **Power On** button to start the virtual machine. The Property Page transforms to the Console window.
- 3 The Installation starts, and the Welcome to Setup screen appears.



Both your physical computer and the virtual machine emulated in it use the same mouse and keyboard devices. To use your keyboard and mouse inside the virtual machine, click anywhere inside the virtual machine's Console window.

Note. To release the keyboard and mouse input back for using them in the primary OS press Ctrl+Alt at any time.

After this press Enter on your keyboard.

4 The license agreement is displayed on the screen. To scroll it down press the Page Down key. To agree press F8.



5 In the lower part of the following screen, the Setup displays the list of hard disks and partitions available in the virtual machine. For a new virtual machine this list contains only one item: the unpartitioned space. Press Enter to create a partition on the unpartitioned space.

Windows XP Professional Setup
The following list shows the existing partitions and unpartitioned space on this computer.
Use the UP and DOWN ARROW keys to select an item in the list.
 To set up Windows XP on the selected item, press ENTER.
• To create a partition in the unpartitioned space, press C.
• To delete the selected partition, press D.
31997 MB Disk Ø at Id Ø on bus Ø on atapi [MBR]
Unpartitioned space 31997 MB

ENTER=Install C=Create Partition F3=Quit

6 On the next screen choose the file system for that new partition that will be the system volume in your virtual machine. Select the type of file system and mode of formatting and press Enter. Formatting to NTFS is recommended.



- 7 The virtual machine will restart automatically. The text stage of the installation has completed. During the next (GUI) stage, dialog boxes will be used.
- 8 Specify your Regional and Language Options and click Next.
- **9** Enter the license key and click **Next**.

Nindows xp	
Collecting information	Windows XP Professional Setup Your Product Key Your Product Key uniquely identifies your copy of Windows XP.
 Dynamic Update Preparing installation 	Please see your License Agreement Administrator or System Administrator to obtain your 25-character Volume License product key. For more information see your product
Installing Windows Finalizing installation	packaging. Type the Volume License Product Key below:
Setup will complete approximately: 33 minutes	Product Key:
	< Back

- **10** On the next several screens you will be prompted to enter the computer name and administrator password, select your date and time zone. When prompted to specify your network settings, select **Typical**.
- **11** Next, you should specify whether your computer will be a member of a domain. If you are creating a virtual machine for running it in corporate environment, ask the system administrator whether you should specify the domain. Otherwise, choose the first option to make your virtual machine a member of the workgroup.

👫 Windows*p	
 Collecting information Dynamic Update 	Windows XP Professional Setup Image: Computer Domain A workgroup or Computer Domain A workgroup is a collection of computers that have the same workgroup name. A domain is a collection of computers defined by a network administrator.
 Preparing installation Installing windows Finalizing installation Setup will complete approximately: 30 minutes 	Do you want this computer to be a member of a domain? (You may need to obtain this information from your network administrator.) No, this computer is not on a network, or is on a network without a domain. Make this computer a member of the following workgroup: WORKGROUP Yes, make this computer a member of the following domain:
	< Back Next >

12 After that, Setup adjusts the Display Settings for better image quality.

13 In the **Help protect my PC** screen indicate whether you want to turn on the Automatic Updating feature. It is recommended to enable the Automatic Updates feature.



14 On the next screen, choose the way your computer will be connected to the Internet. Select Yes.

🖊 Windows ^{xp}	
Will this computer connect to the Inter directly, or through a network?	net
You can set up this computer to connect to the Internet directly, or through a network of connected compu either case, Windows Firewall helps protect your computer from unauthorized access over the Internet. Will this computer connect to the Internet through a network?	ıters, if you have one. In
 Yes, this computer will connect through a local area network or home network No, this computer will connect directly to the Internet 	
If you're not sure whether your computer is on a network, select No above. You can always change this o setting up Windows. Just click Control Panel on the Start menu, and then click Network and Internet Co	ption after you finish onnections.
If you don't want this computer to connect to the Internet now, click Skip.	
	For help, click here or press F1.
Eack	Skip 🚺 Next ݤ

15 If you want to register with Microsoft select **Yes** on the following screen.



16 When prompted, create user accounts for each person who will use this virtual machine.

眷 Windows ^{xp}		
Who will use	Who will use this computer?	
Type the name of each person who can personalize the way you want W customize the desktop.	will use this computer. Windows will create a separate user account for each person so you Indows to organize and display information, protect your files and computer settings, and	
Your name:		
2nd User.		
<u>3</u> rd User:		
<u>4</u> th User:		
5th User:		
These names will appear on the W click your name on the Welcome so each user, or add more user accou Start menu, and then click User Ac	elcome screen in alphabetical order. When you start Windows, simply creen to begin. If you want to set passwords and limit permissions for ints after you finish setting up Windows, just click Control Panel on the counts.	
	For help, click here or press F1.	
Back	Next 🔁	

The installation of Windows XP is complete. But there is one more operation the you should perform before you can use the virtual machine - install Parallels Tools.

C H A P T E R 7

Installing Windows Vista

Only the following editions of Windows Vista are supported as guest OSes in Parallels virtual machines: Ultimate, Enterprise, or Business.

Insert the installation CD/DVD disc into the appropriate drive of your computer.

The Windows Vista installation starts as soon as you click the **Power On** button. The installation wizard guides you through the following steps:

1 Once Windows loads the necessary files, you will be prompted to set the language and other national preferences. Click **Next** to proceed.





On the next screen click **Install now**.

Enter your product key. Click **Next**.

Notall Windows
Type your product key for activation
You can find your product key on your computer or on the installation disc holder inside the Windows package. Although you are not required to enter your product key now to install, failure to enter it may result in the loss of data, information, and programs. You may be required to purchase another edition of Windows Vista. We strongly advise that you enter your product identification key now.
The product key sticker looks like this:
Product key (dashes will be added automatically):
✓ Automatically activate Windows when I'm online
What is activation?
Read our privacy statement

4 Read the license terms and select **I accept the license terms** if you agree. Click **Next**.

O	💱 Install Windows	
	Please read the license terms	
	MICROSOFT SOFTWARE LICENSE TERMS	
	WINDOWS VISTA HOME BASIC	
	WINDOWS VISTA HOME PREMIUM	
	WINDOWS VISTA ULTIMATE	
	These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. T terms also apply to any Microsoft	he
	· updates,	
	· supplements,	-
	✓ Laccept the license terms	
		Next

5 Click the **Custom installation** option.

🗿 💐 Install Windows	
Which type of	installation do you want?
Upgr Keep Be su	rade your files, settings, and programs and upgrade Windows. re to back up your files before upgrading.
Custo Instal to dis This o	om (advanced) I a clean copy of Windows, select where you want to install it, or make changes sks and partitions. option does not keep your files, settings, and programs.
<u>H</u> elp me decide	
Upgrade has been disabled	
- To upgrade, start the installation from Windows.	

6 On the next screen select the unpartitioned hard disk and click **Next**; all the space will be allocated for one partition. If you want to create several partitions, click **Driver options** (advanced) and partition the virtual hard disk specifying the size for each partition. When the disk is partitioned, click **Next**.



7 Once all the necessary files are copied, you will be prompted to enter a user name. In case you want to protect your Windows by a password you will have to enter it twice and provide a hint that can help you in case you forget the password. Click **Next**.



8 On the next screen choose the way of enhancing your Windows security. Click the desired option.



9 On the next screen set the time and date. If everything is correct, click **Next**.

0	Set Up Windows Review your time and date set Time zone: (GMT-08:00) Pacific Time (US & Cana ② Automatically adjust clock for Dayl	ettings ada) light Saving Time	•
	Date: Su Mo Tu We Th Fr Sa 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 3 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10	<u>T</u> ime: 2: 54: 57 PM ♥	
			Next

10 On the next screen click **Start**. Enter the password, if prompted.

When the installation is complete, you can eject your installation CD or DVD, or disconnect the disc image.

CHAPTER 8

Installing Parallels Tools

When the installation of Windows XP is complete, you can start working with your virtual machine.

But consider installing Parallels Tools first. After installation of Parallels Tools you don't have to press the special key combination (Alt+Enter) to release your mouse and keyboard input to the primary operating system each time you want to switch to it or its applications - just click anywhere outside the Guest OS window to switch. Parallels Tools will also let you use shred folders to transfer the data between the guest and the primary OSes. The Tools will also enhance the performance of your virtual machine in many other aspects.

To install Parallels Tools

- 1 Choose Install Parallels Tools from the Parallels Workstation VM menu.
- 2 When you see this message, click **OK**.



3 In the Welcome window of the Parallels Tools Setup wizard click Next.



- **4** In the **Choose Destination Location** window click **Next** to install Parallels Tools in the default folder.
- 5 In the Setup Type window make sure that the *complete* type of setup is selected. Click Next.

Parallels Tools Setup	
Setup Type Select the setup type that best suits your needs.	No.
Click the type of setup you prefer.	
Complete	Description
Custom	The complete setup type includes all Parallels Tools components.
InstallShield	
< Ba	ck Next> Cancel

- 6 In the Select Program Folder window click Next. The default folder will be used.
- 7 The Check Setup Information window displays the options selected. Click Next to begin the installation.
- 8 Click **OK** in the unsigned drivers warning dialog box.

Parallels Tools Setup	
Parallels Tools installation contains a number of unsigned drivers. These drivers are required for proper functioning of Parallels Tools. Currently your system is configured to warn you every time an unsigned driver is installed. Do you want to receive these warnings during Parallels Tools installation?	
Click OK to temporarily disable the warnings; they will be re-enabled after the installation is complete. If you click Cancel, the warnings will be displayed. Click Continue when an unsigned warning appears.	
OK Cancel	





After the restart the virtual machine will be ready for work.

Capturing and Releasing the Keyboard and the Mouse in a Virtual Machine

When you power on a virtual machine, you will have two computers running at once: your physical computer, and the simulated PC that is running inside it. But you've got only one mouse and keyboard. How, then, is Parallels Workstation supposed to know when a certain mouse or keyboard activity is intended for the primary OS, and when for the guest OS?

The Automatic Switching

Automatic switching is available only after Parallels Tools were installed. Parallels Tools are available for most of the Windows OSes. See the Parallels Tools Overview to learn if this package is available for the specific guest operating system.

After Parallels Tools installation, you can easily switch the control over mouse and keyboard input:

- **to capture** click anywhere in the Guest OS window,
- **to release** click anywhere outside the Guest OS window.

And indeed, that's exactly how things work if you installed Parallels Tools as described in the previous chapter.

The Manual Switching

But Parallels Tools are not available for all guest operating systems. You can use any of three methods to make the virtual machine "capture" the input of the keyboard and mouse:

- Click anywhere inside the virtual machine window.
- Select **Capture Input** in the **VM** menu.
- Press Ctrl+I on your keyboard.

Once the guest OS captures your cursor, you can't move it outside of the Parallels Workstation window until you release it.

To release the keyboard and mouse to the primary OS:

 Press the hot key combination designated for releasing your keyboard/mouse (the default combination is Ctrl+Alt). The keyboard and the mouse will be released immediately.

You can change this key combo on the **Edit -> Preferences -> Hot Keys** tab.

The hot key combination for releasing keyboard /mouse can be changed on the Hot Key Combinations tab of the **Preferences** window.

CHAPTER 10

Starting, Stopping and Resetting a Virtual Machine

Starting a Virtual Machine

When you start Parallels Workstation, the last used virtual machine will be opened by default.

To start up the virtual machine just click the **Power On** button on the Parallels Workstation toolbar (or choose VM -> Power On).

The virtual machine switches on, and you can see the booting of the guest OS in the Parallels Workstation window.

Stopping a Virtual Machine

The same rules are applied to turning off /resetting a virtual machine as to turning off /resetting a physical computer.

First, shut down a guest operating system by using the guest OS "shut down" command (such as **Start -> Shut Down** or **Start ->Turn off Computer** in Windows). It is STRONGLY RECOMMENDED that you shut down the virtual machine in this way to ensure safety of your data. Then close the Parallels Workstation window.

Only if you are unable to shut down the guest OS this way, you may use the Parallels Workstation controls to stop it. To stop a virtual machine anyway, do one of the following:

- Click the Power Off button on the Parallels Workstation toolbar.
- Select **Power Off** from the **VM** menu.

The virtual machine will be stopped immediately.

Resetting a Virtual Machine

First, restart a guest operating system by using the guest OS "restart" command (such as **Start -> Shut Down -> Restart** or **Start -> Turn off Computer -> Restart** in Windows). It is STRONGLY RECOMMENDED that you restart the machine in this way to ensure safety of your data.

Only if you are unable to restart the guest OS this way, you may use the Parallels Workstation controls to stop or to reset it.

To reset a virtual machine, do one of the following :

- Click the **Reset** ^C button on the Parallels Workstation toolbar.
- Select **Reset** from the **VM** menu.

Press Ctrl+Alt+Insert while the keyboard input is captured inside a virtual machine window.

CHAPTER 11

Using Keyboard Shortcuts

If when working in the virtual machine, you press a special key combination intended for the guest OS (for example, Ctrl+Alt+Del for any of the Windows guest operating systems) the primary operating system may intercept such a command. That is why the standard hot key combinations for using in a virtual machine are replaced by the ones below.

When the Primary OS is Windows

If your computer is running any of Windows primary OSes, the primary OS will intercept the Ctrl+Alt+Del key combination pressed in the guest OS. To send Ctrl+Alt+Del to the guest OS:

- press Ctrl+Alt+Ins while the keyboard input is captured inside the virtual machine window,
- or select **Send Ctrl+Alt+Del** from the Parallels Workstation **VM** menu.

When the Primary and Guest OSes are Linuxes

When both primary and guest operating systems are Linuxes, to send standard hot key combinations to the guest Linux OS:

 press the Shift key instead of the Alt key in standard key combinations. For example, to send Ctrl+Alt+Backspace to the guest Linux OS, press Ctrl+Shift+Backspace. The primary Linux OS will not intercept this combination while the guest Linux OS will interpret it as Ctrl+Alt+Backspace.

The table below shows how to transform a hotkey combination to use it in the Linux guest OS.

Desired Hotkey	Combination to Press
Ctrl+Alt+Backspace	Ctrl+Shift+Backspace
combinations starting Ctrl+Alt+F1 through Ctrl+Alt+F12	Ctrl+Shift+F1 through Ctrl+Shift+F12
Ctrl+Alt+<+> or Ctrl+Alt+<->	Ctrl+Shift+<+> or Ctrl+Shift+<->

To send Ctrl+Alt+Del to the guest OS:

- either press Ctrl+Alt+Ins while the keyboard is captured inside the guest OS window,
- or choose **Send Ctrl+Alt+Del** from the Parallels Workstation **VM** menu.

You can run a guest operating system in full screen mode with the guest OS window occupying the whole screen of your computer. In full screen mode the primary OS and its applications as well as the Parallels Workstation menu, toolbar, and status bar are not visible.

To switch to full screen while running a guest OS, do one of the following:

- Click Fullscreen Mode toolbar button.
- Select **View -> Fullscreen** in the menu.
- Press the hot key combination (Alt+Enter by default, unless you defined another one).

To return to window mode:

press any of the hot key combinations defined (Ctrl+Alt or Alt+Enter by default).

Hot key combinations are defined on the **Hot Key Combinations** tab of the **Preferences** available from the **Edit** menu.

You may adjust resolution of the monitor for full screen mode. See Help -> Contents -> Managing Virtual Machines -> Setting Parallels Workstation Preferences for more information.

Note: You can configure your virtual machine to start in full screen mode right away. Select the **Switch to fullscreen mode automatically** option on the **VM Flags** tab in Configuration Editor.

C hapter 1 2

Accessing the Internet

If you want to access the Internet in a virtual machine, start by making sure your computer itself can get online.

Then proceed like this:

- **1** If your virtual machine is currently running, turn the guest OS off and shut down the virtual machine.
- 2 On the Property Page in the Parallels Workstation window, click **Network Adapter** in the **Resources** list to open **Configuration Editor** on the **Network Adapter Options** tab.

Configuration Editor	
Resource Description Options Windows XP Shared Folders 4 folders (3 enabled) Video 0 items (0 enabled) Memory 512 MB Hard Disk 1 32000 MB; C:\Documents CD/DVD-ROM 1 D: Network Adapter Bridged Ethernet	Network Adapter Options Advanced Device Status Enabled Connect cable at startup Emulation Bridged Ethernet Network Adapters: Default Adapter Host-only networking
	<u> </u>

- 3 On the Network Adapter Options tab make sure that the Enabled and Connect cable at startup options are selected. In the Emulation group, select the Bridged Ethernet option and then choose a name of your network adapter in the list:
 - **default** adapter to use the adapter which connects your real computer to the Internet,
 - or a specific adapter if you have several adapters.
- 4 Click **OK** in the **Configuration Editor** window, then click the the Parallels Workstation window (or choose **File -> Save**).



button in

5 Now, start the virtual machine by clicking **Power On** bon the toolbar.

- 6 Capture the input devices in the guest OS screen (Capturing and Releasing Keyboard and Mouse in a Virtual Machine (page 33) chapter), if necessary.
- 7 Configure network options in your guest operating system, just as you would on a new PC.

Once your virtual machine is connected to the Internet, you can check your email account, surf the web, chat, and more!

What to Do Next

If your primary operating system is connected to the Internet, your new virtual machine can share this connection by using the Shared Networking (NAT) that is selected as a default option for a new virtual machine.

Then you can install your favorite Windows applications. For software installation you may use various types of media:

- CD/DVD-ROMs;
- ISO images of CD/DVD-ROMs made with Parallels Image Tools or third-party imaging products (use the Devices menu to connect or disconnect ISO images from CD/DVD-ROM drive at runtime);
- local network resources or the Internet if your computer is connected to it.

Tips

- To change the configuration of the virtual machine shut down the guest OS. On the Property Page of the virtual machine click the **Configuration** link to open Configuration Editor or choose **Edit Configuration** from the **File** menu. Add or remove devices and edit their options.
- To set the virtual machine's startup options choose **Preferences** from the **Edit** menu.
- To switch to full screen mode and back press Alt+Enter.

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