

Parallels[®] Server Installation Guide

for Windows

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Contents

Introduction	4
<hr/>	
Parallels Server Components	5
<hr/>	
System Requirements	6
Parallels Server System Requirements	6
Parallels Management Console System Requirements	8
Network Requirements	8
<hr/>	
Installing Parallels Server Components on Windows	9
Installing Parallels Server on Windows	9
Installing Parallels Management Console on Windows	10
Installing Parallels Server SDK on Windows	11
<hr/>	
Removing Parallels Server Components	12
Removing Parallels Server	12
Removing Parallels Management Console	13
Removing Parallels Server SDK	13
<hr/>	
What's Next	14

CHAPTER 1

Introduction

Parallels Server is a cross-platform software that enables you to create virtual machines on computers with Intel® VT-x and AMD-V™ hardware virtualization support that have a Mac OS® X, Windows® , Linux® , or no primary operating system installed.

With Parallels Server, you can make these virtual machines accessible to other computers on the network, even to those that have different primary operating systems.

Parallels Server Components

Parallels Server comprises three major components that are fully cross-platform and can be installed on any computer that has Mac OS, Windows, or Linux operating system.

- **Parallels Server.** Server application that enables you to create and run Parallels virtual machines.
- **Parallels Management Console.** Client application that is used to manage Parallels Server and its virtual machines.
- **Parallels Server SDK.** Software Development Kit that enables you to manage Parallels Server and its virtual machines without using any client applications.

Parallels Server also includes several utilities that can help you work with your virtual machines:

- **Parallels Command Line Tool.** Utility that enables you to manage Parallels Server and its virtual machines right from the command line of your computer.
- **Parallels Transporter.** Application that enables you to migrate physical computers and disks into Parallels Server virtual machines.
- **Parallels Server Image Tool.** Utility that enables you to change the format and properties of hard disks used by Parallels virtual machines.

Note: In this version, the Image Tool utility is available only for computers with Mac OS X. It is installed together with Parallels Server.

- **Parallels Server Explorer.** Utility that enables you to view and manage the contents of Parallels virtual machines and their hard disks without even starting them.

Note: In this version, the Explorer utility is available only for computers with Mac OS X. It is installed together with Parallels Server.

- **Parallels Server Mounter.** Utility that enables you to mount Parallels virtual hard disks in Mac OS Finder.

Note: In this version, the Mounter utility is available only for computers with Mac OS X. It is installed together with Parallels Server.

- **Parallels Compressor.** Utility that enables you to reduce the size of virtual hard disks used by Parallels virtual machines.

Note: The Compressor utility is available for virtual machines with Windows guest operating systems only.

CHAPTER 3

System Requirements

Before installing the product, make sure that your computer meets the hardware and software requirements listed in this section.

In This Chapter

Parallels Server System Requirements.....	6
Parallels Management Console System Requirements	8
Network Requirements	8

Parallels Server System Requirements

Parallels Server can be installed on any Windows computer (Windows 2000 and later versions) that supports Intel VT-x or AMD-V hardware virtualization and complies with the requirements listed here. The number of virtual machines you can run on a single physical computer depends on the resources they require and the number of processors this physical computer has. The more processors your physical computer has, the higher will be the performance of each of the running virtual machines.

Hardware Requirements

Windows host computers should meet the following hardware requirements:

- Minimum 1.5 GHz x86 (32-bit) or x64 (64-bit) CPU with Intel VT-x or AMD-V hardware virtualization technology support. A 64-bit version of Windows OS is required to host virtual machines with 64-bit operating systems installed.

Note: The number of physical CPUs must be equal to or greater than the number of virtual CPUs used by any of the virtual machines.

- 2 GB RAM minimum. 4 GB RAM or more is recommended.
- 200 MB of hard disk space is required for Parallels Server installation.
- About 30 GB of hard disk space for each virtual machine.
- CD-ROM or DVD-ROM drive (optional).
- Ethernet network adapter.

Note: If you want to connect PCI devices directly to the virtual machine, you need a host computer with Intel VT-d chipset, plus to the requirements listed above.

Software Requirements

Parallels Server supports host computers with the following Windows operating systems installed:

Note: You can run virtual machines with 64-bit operating systems only on host computers with 64-bit versions of Windows OS installed.

- Windows Server® 2003 Standard Edition SP2, R2 (x32, x64)
- Windows Server 2003 Enterprise Edition SP2, R2 (x32, x64)
- Windows Vista® Ultimate (x32, x64)
- Windows XP Professional Edition SP2 (x32, x64)

Important: If you have Parallels Workstation installed, you should remove it before installing Parallels Server. Parallels Server cannot be used on computers that have Parallels Workstation installed. This limitation doesn't apply to Parallels Management Console and Parallels SDK, though. These components can be installed and used side-by-side with Parallels Workstation.

Parallels Management Console

System Requirements

Parallels Management Console can be installed on any Windows computer that complies with the following system requirements:

Hardware Requirements

- 700+ MHz Intel-compatible x86 (32-bit) or x64 (64-bit) processor.
- 1 GB RAM is recommended.
- 100 MB of hard disk space is required for Parallels Management Console installation.
- CD-ROM or DVD-ROM drive (optional).
- Ethernet or WiFi network adapter.

Software Requirements

- Windows Server® 2003 Standard Edition SP2, R2 (x32, x64)
- Windows Server 2003 Enterprise Edition SP2, R2 (x32, x64)
- Windows 2003 Home Server (x32, x64)
- Windows XP Professional Edition SP2 (x32, x64)
- Windows Vista Ultimate (x32, x64)

Network Requirements

To connect Parallels Management Console to Parallels Server and its virtual machines, you will need to establish a network connection between the host and the remote computers. The connection can be wireless or wired.

Firewall Settings

Before using Parallels Server installed on Windows and Linux computers, make sure that the following ports are not blocked by the firewall:

- TCP/UDP port 64000

This port should be open to ensure correct performance of Parallels Server.

Note: You may need to configure the firewall settings on your physical computer where Parallels Server was installed.

CHAPTER 4

Installing Parallels Server Components on Windows

This chapter includes instructions on installing Parallels Server, Parallels Management Console and Parallels Server SDK on a Windows computer.

In This Chapter

Installing Parallels Server on Windows	9
Installing Parallels Management Console.....	10
Installing Parallels Server SDK on Windows	11

Installing Parallels Server on Windows

Parallels Server together with Parallels Management Console can be installed on a host computer with Windows primary OS. The computer must comply with the system requirements listed in the Parallels Server System Requirements (see page 6) topic.

Important: If you have Parallels Workstation installed, you should remove it before installing Parallels Server. Parallels Server cannot be used on computers that have Parallels Workstation installed. This limitation doesn't apply to Parallels Management Console and Parallels SDK, though. These components can be installed and used side-by-side with Parallels Workstation.

To install Parallels Server on a computer with Windows primary OS

- 1 Locate the Parallels Server package and double-click the Parallels Server executable file to launch the Install Parallels Server wizard.
- 2 In the Welcome window, click Next.
- 3 In the License Agreement window, carefully read the Software End User License Agreement for Parallels Server. If you agree with the terms of the license agreement, select **I accept the terms of the license agreement** and click Next. If you want to print the text of the license agreement for your records, click Print.

Note: You should accept the Software License Agreement to proceed with the installation.

- 4 In the **Choose Destination Location** window, specify the folder where you want to install Parallels Server and click **Next**. By default, Parallels Server is installed to: C:\Program Files\Parallels\Parallels Server\.
- 5 In the **Select Program Folder** window, specify the name of the program folder that will appear in the **Start** menu and click **Next**.
- 6 In the **Select Shortcuts** window, specify which shortcuts to Parallels Server components you want to create.

Note: Shortcuts are available for Parallels Management Console only.

- 7 In the **Ready to Install the Program**, click **Install** to start installing Parallels Server.
- 8 You can view the installation progress in the **Setup Status** window.
- 9 In the **Installation Complete** window, leave the **I want to view the Readme file** option enabled to view the Parallels Server ReadMe file. To exit the wizard, click **Finish**.

When you have Parallels Server installed, you don't need to launch it: it starts automatically and runs in the background. To manage your Parallels Server, use Parallels Management Console installed on the same or on a remote computer.

Note: During the Parallels Server installation, kernel modules are being installed. The set of these modules is necessary for the virtualization and depends on the Windows OS system kernel. If you upgraded the Windows kernel, you should reinstall Parallels Server to ensure proper functioning of the product.

Installing Parallels Management Console on Windows

Parallels Management Console can be installed on a client computer with Windows primary operating systems that has no Parallels Server installed.

The computer must comply with the system requirements listed in the Parallels Management Console System Requirements (see page 8) topic.

To install Parallels Management Console on a computer with Windows primary OS

- 1 Locate the Parallels Server package and double-click the **Parallels Management Console** executable file to launch the **Install Parallels Management Console** wizard.
- 2 In the **Welcome** window, click **Next**.
- 3 In the **License Agreement** window, carefully read the Software End User License Agreement for Parallels products. If you agree with the terms of the license agreement, select **I accept the terms in the license agreement** and click **Next**. If you want to print the text of the license agreement for your records, click **Print**.

Note: You should accept the Software License Agreement to proceed with the installation.

- 4 In the **Destination Folder** window, specify the folder where you want to install Parallels Management Console and click **Next**. By default, Parallels Management Console is installed to: `C:\Program Files\Parallels\Parallels Management Console\`.
- 5 In the **Ready to Install the Program**, click **Install** to start installing Parallels Management Console.
- 6 You can view the installation progress in the **Setup Status** window.
- 7 In the **Setup Completed** window, to exit the wizard, click **Finish**.

Now you can manage Parallels Server installed on a remote computer using Parallels Management Console.

Installing Parallels Server SDK on Windows

Parallels Server Software Development kit can be installed on a remote computer with Windows primary OS. This application enables you to manage Parallels Server and its virtual machines without using any applications.

To install Parallels Server SDK

- 1 Locate the Parallels Server package and double-click the **Parallels Server SDK** executable file to launch the **Install Parallels Server SDK** wizard.
- 2 In the **Welcome** window, click **Next**.
- 3 In the **License Agreement** window, carefully read the Software End User License Agreement for Parallels products. If you agree with the terms of the license agreement, select **I accept the terms in the license agreement** and click **Next**. If you want to print the text of the license agreement for your records, click **Print**.

Note: You should accept the Software License Agreement to proceed with the installation.

- 4 In the **Destination Folder** window, specify the folder where you want to install Parallels Management Console and click **Next**. By default, Parallels Server SDK is installed to: `C:\Program Files\Parallels\Parallels Server SDK\`.
- 5 In the **Ready to Install the Program**, click **Install** to start installing Parallels Server SDK.
- 6 You can view the installation progress in the **Setup Status** window.
- 7 In the **Setup Completed** window, to exit the wizard, click **Finish**.

CHAPTER 5

Removing Parallels Server Components

This chapter includes instructions on how to remove Parallels Server, Parallels Management Console and Parallels Server SDK from a Windows computer.

In This Chapter

Removing Parallels Server	12
Removing Parallels Management Console	13
Removing Parallels Server SDK	13

Removing Parallels Server

Parallels Server can be removed from the host operating system like any other Windows application.

Note: Removing Parallels Server doesn't remove virtual machines and their files from the host computer until you select **Settings** to remove the removed component.

To remove Parallels Server from a Windows primary OS computer

- 1 Start Parallels Server Uninstaller using one of these ways:
 - From the **Start** menu, choose **All Programs > Parallels > Parallels Server > Uninstall Parallels Server**. Follow the wizard's instructions.
 - From the **Start** menu, choose **Control Panel**. Open **Add or Remove Programs**. Select **Parallels Server** and click **Remove**.
- 2 The Installer asks you if you want to completely remove Parallels Server from the system. To remove Parallels Server, click **Yes**.

Note: The operation of Parallels Server uninstallation doesn't remove the virtual machines and their files from the host computer.

- 3 If you want to store configuration files and the license information on your computer, click **Yes**.
- 4 In the **Setup Status** window, you can view the operation progress.
- 5 When the operation is complete, click **Finish** in the **Uninstall Complete** window to exit the wizard.

Removing Parallels Management Console

Parallels Management Console can be removed from the host operating system like any other Windows application.

To remove Parallels Management Console from a Windows primary OS computer

- 1 From the Start menu, choose Control Panel and open Add or Remove Programs.
- 2 Select Parallels Management Console and click Remove.
- 3 Wait while Parallels Management Console is being removed.

Removing Parallels Server SDK

Parallels Server SDK can be removed from the operating system like any other Windows application.

To remove Parallels Server SDK from a Windows primary OS computer

- 1 From the Start menu, choose Control Panel and open Add or Remove Programs.
- 2 Select Parallels Server SDK and click Remove.
- 3 Wait while Parallels Server SDK is being removed.

CHAPTER 6

What's Next

After you have installed all the necessary components, you can administer your Parallels Server application and work with your Parallels virtual machines with the help of Parallels Management Console.

Using Parallels Management Console, you can create, clone, delete and otherwise manage your virtual machines. To learn all the necessary information about how to work with Parallels virtual machine, refer to *Parallels Virtual Machine Guide*.

To learn all the necessary information about how to work with Parallels Server, refer to *Parallels Server Administration Guide*.

You can find these documents after the installation of Parallels Management Console in the following location:

- On 32-bit Windows: C:\Program Files\Parallels\Parallels Server\Documentation\.
- On 64-bit Windows: C:\Program Files (x86)\Parallels\Parallels Server\Documentation\.

You can enhance your experience with Parallels Server by using the following utility that is available after the Parallels Server installation:

- **Parallels Compressor.** By default, Parallels Compressor is installed to the following folder on the host computer C:\Program Files\Parallels\Parallels Server\.