

**Parallels<sup>®</sup> H-Sphere**

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**Parallels H-Sphere 3.2 Patch 2  
Windows Server Installation**

# Legal and Copyright Notice

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# Preface

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## Typographical Conventions

Before you start using this guide, it is important to understand the documentation conventions used in it.

The following kinds of formatting in the text identify special information.

<u>Formatting convention</u>	<u>Type of Information</u>	<u>Example</u>
<b>Special Bold</b>	Items you must select, such as menu options, command buttons, or items in a list.	Go to the <b>System</b> tab.
	Titles of chapters, sections, and subsections.	Read the <b>Basic Administration</b> chapter.
<i>Italics</i>	Used to emphasize the importance of a point, to introduce a term or to designate a command line placeholder, which is to be replaced with a real name or value.	The system supports the so called <i>wildcard character</i> search.
Monospace	The names of commands, files, directories, and domain names.	The license file is located in the <code>http://docs/common/licenses</code> directory.

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Preformatted	On-screen computer output in your command-line sessions; source code in XML, C++, or other programming languages.	<pre># ls -al /files total 14470</pre>
Preformatted Bold	What you type, contrasted with on-screen computer output.	<pre># cd /root/rpms/php</pre>
CAPITALS	Names of keys on the keyboard.	SHIFT, CTRL, ALT
KEY+KEY	Key combinations for which the user must press and hold down one key and then press another.	CTRL+P, ALT+F4

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## Feedback

If you have found a mistake in this guide, or if you have suggestions or ideas on how to improve this guide, please send your feedback using the online form at <http://www.parallels.com/en/support/usersdoc/>. Please include in your report the guide's title, chapter and section titles, and the fragment of text in which you have found an error.

# Preparing Windows Server

This chapter gives you information on how to prepare Windows 2000 and Windows 2003 servers for installation of Parallels H-Sphere components and notes you should consider before proceeding to the installation.

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**Notes:**

- We don't install Parallels H-Sphere on live servers.
  - On Windows, the users group by default has the read/write permissions on all disks. Upon Parallels H-Sphere installation, the users group is stripped of the read/write permissions on the system directory and other directories that may affect hosting. No other permissions are modified. If needed, change them by yourself.
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## Hardware and Partitioning Requirements

For better functioning we recommend having not less than 256 MB RAM. And as for partitions it's better to break it into two:

- C:\ for system files and program files - at least 5 GB.
- D:\ for users' content - the rest of the HDD.

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**Important:** partition containing users' content must be NTFS formatted to support disk space quota.

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## Software Requirements

Before installing Parallels H-Sphere to Windows platform, make sure your system complies with the following software requirements:

- 1 **32-bit only** version of Windows
- 2 Windows 2000 Server, Windows 2000 Advanced Server, Windows 2003 Servers, Windows 2003 Web Edition (more on Microsoft Server 2003 limitations:  
<http://www.microsoft.com/windowsserver2003/evaluation/overview/default.mspx>)
  - a) must not be PDC (Primary Domain Controller), i.e Parallels H-Sphere cannot be installed on Windows 2003 SBS because it works only as PDC
  - b) must not be in Active Directory mode
- 3 Terminal Service or pcAnywhere for remote access to the computer
- 4 Both, the system disk and the one with user homes, must have NTFS file system
- 5 External IP

- 6 IIS (Internet Information Server) service set up for WWW service and FTP service
- 7 FrontPage extensions version 4 or higher;
- 8 ASP.NET 1.1

The following ports must be open:

- 20, 21 (FTP)
- 80 (HTTP)
- 443 (HTTPS)
- 873 (Rsync)
- 10125 (SOAP).

Parallels H-Sphere includes support for Parallels H-Sphere Windows Services. When creating a new account on winbox, Windows service method is run with SOAP (Simple Object Access Protocol). It's a new protocol of data communication between CP and Windows server. To enable support for Win services in Parallels H-Sphere, go to `hsphere.properties` file and set:

```
SOAP_SUPPORT = true
```

Also, make port 10125 available on Windows server. This port is used to connect to Windows services by default. It can be set in the `hsphere.properties` file:

```
SOAP_PORT = 10125
```

- 9 These are the default ports for \*SQL servers to be open if your customers connect to them via ODBC:
  - MySQL - 3306
  - PostgreSQL - 5432
  - MS SQL-1433

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**Note:** If \*SQL server is put on any port other than the default, don't forget to open it.

To access Windows boxes via pcAnywhere or Terminal Service, the ports 5631 and 3389 correspondingly must be open.

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*Third party commercial products* are purchased separately and must be installed prior to Parallels H-Sphere:

- MS SQL server
- Real Server
- ColdFusion
- Miva

The following *noncommercial* third party products should also be set up prior to the Parallels H-Sphere installation:

- Webalizer: please download Webalizer 2.01.09.RB07 supported by Parallels H-Sphere from <http://download.hsphere.parallels.com/shiv/WinBox/wb09RB07.exe>
- ASP.NET 1.1, ASP.NET 2.0 (see also ASP.NET Support)
- ActivePerl
- PHP 4.3.1 and higher .

**Note:** To make sure you have all required libraries necessary for proper work of PHP, *install PHP from the zip archive*, not self-extracting executable. The mentioned libs are also needed for correct work of Webshell.

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- MDAC 2.8 and higher.

## NTFS Permissions For ActivePerl and PHP

Upon the completion of ActivePerl and PHP installation, please set the following permissions on the PERL and PHP directories and their content. They are required so respective libraries can be run when Perl or PHP scripts are requested via http.

These permissions are set during Parallels H-Sphere installation and aren't checked by Parallels H-Sphere updates, so please don't modify them afterwards.

Group	Permissions
Administrators System	Full
Users	Read, Execute

## Peculiarities of Parallels H-Sphere work under Windows 2003

Please consider the following when you intend to install Parallels H-Sphere on Windows 2003 servers:

- 1 Parallels H-Sphere works with IIS 6 compatible mode.
- 2 In Parallels H-Sphere shared SSL scheme works with IIS 6.0.
- 3 CDONTS object library doesn't work on Windows 2003. We recommend using CDO instead of CDONTS on all Windows servers, since it is a newer and more flexible.

## Other Requirements

- 1 SOAP property must be turned on in the hsphere.properties configuration file on the CP server. SOAP port 10125 must be opened in your firewall.
- 2 If you use Windows 2003 R2 system, install the File Server Resource Manager component before Parallels H-Sphere installation.

# Installing Parallels H-Sphere Winbox

To install Parallels H-Sphere Winbox, please perform the steps provided below in this chapter.

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## Step 1. Adding Physical Server

➤ *To add a Windows physical server:*

- 1 Go to **E. Manager > Servers > Add P.Server** and fill in the form:
  - a Enter the name of the physical server, its IP and associated net mask.
  - b Specify the name of administrative account (usually, *hsadmin*) and its password, so that CP is able to connect to the Windows box.
  - c Submit the form
- 2 Add physical server groups according to the hosting type: Windows Web hosting, MS SQL hosting, or both. To add a group:
  - a Go to **E.Manager -> Servers -> Server Groups**.
  - b At the bottom of the page that appears, enter the name of the server group and select its type.
  - c Click **Add** .
- 3 Go to **E.Manager-> Servers -> P.Servers**.
- 4 Click the name of the physical server.
  - a In the **Add Group** field, select a server group and click **Add**..
- 5 Assign physical server profile: your Windows server will be installed and updated according to the rules specified in this profile:
  - a Go to **E.Manager > Update > Physical server profiles**
  - b Choose the box and click the **Add** button
  - c Name and configure your profile in the form that appears
  - d Click **Save** to apply. Profile will appear in the list of existing profiles.
  - e Click the **Assign Profiles to Physical Servers** link and apply.

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**Note:** you can find more info on Physical Server Groups and Profiles in Parallels H-Sphere Sysadmin Guide

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## Step 2. Adding Logical Server

➤ *To add a logical server:*

- 1 In your administrator control panel go to **E.Manager > Servers > Add L.Server**.
- 2 On the page that appears, enter the properties of the logical server.
- 3 Click Submit to create a logical server. You will proceed to the page where you can configure other parameters for this logical server:
  - a Enable user signup on this server
  - b Automatically generate custom DNS records by clicking Generate in front of Generate custom DNS records for Windows logical server.
  - c Add IP range available for hosting on this server
  - d Configure additional options specific to Windows logical server type
- 4 Add DNS records for this logical server in **E.Manager > DNS Manager** menu. Make sure you created a custom A record for this logical server.

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## Step 3. Adding New Windows Server to NAT Configured Cluster

If you are adding new Windows server to a NAT configured Parallels H-Sphere cluster, you must add this server's IPs to the `~cpanel/shiva/psoft_config/ips-map.xml` file.

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## Step 4. Installing Parallels H-Sphere MSI Package

There are two ways of installing Parallels H-Sphere MSI package: automatic and with the help of bundles.

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You can find more info on Parallels H-Sphere Winbox MSI packages and their download locations in Appendix A (on page 15) of this guide.

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## Automatic Installation

- 1 Download Parallels H-Sphere Windows HsCore MSI package:  
[http://download.hsphere.parallels.com/shiv/HS/WINDOWS/HsCore\\_3.2.272.3254.msi](http://download.hsphere.parallels.com/shiv/HS/WINDOWS/HsCore_3.2.272.3254.msi)

Here:

- 3.2 is the Parallels H-Sphere Winbox version
  - 272 is the package build
  - 3254 is the package build timestamp (days from 1 Jan 2000)
- 2 Run the HsCore installer and follow its instructions.

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**Note:** On this step you can choose the Parallels H-Sphere folder. By default, it is `C:\Program Files\HSphere`. After the installation you won't be able to change the Parallels H-Sphere location.

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- 3 In administrator control panel, go to **E.Manager -> Update -> Update Boxes**. Check your Winbox server and click Start Update to run Parallels H-Sphere Update Wizard to complete the installation. This will automatically update your Winbox.

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### Important:

Parallels H-Sphere Winbox resources are installed by means of respective MSI packages.

Some third party Parallels H-Sphere services (like Miva or ColdFusion) won't be installed to the Windows server if the original software is absent on the box. First, install the third-party software, and then run the Update Wizard on this box again to install respective Parallels H-Sphere MSI packages (HSMiva, HSColdFusion, etc).

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## Bundles Installation

Download and run the Windows server installation bundles in accordance with the hosting type:

- Windows Web hosting: HS\_WinHosting\_Bundle\_320P1.exe  
([http://download.hsphere.parallels.com/shiv/HS/releases/U32.0/U32.0P1/HS\\_WinHosting\\_Bundle\\_320P1.exe](http://download.hsphere.parallels.com/shiv/HS/releases/U32.0/U32.0P1/HS_WinHosting_Bundle_320P1.exe))
- MS SQL hosting: HS\_MSSQL\_Bundle\_320P1.exe  
([http://download.hsphere.parallels.com/shiv/HS/releases/U32.0/U32.0P1/HS\\_MSSQL\\_Bundle\\_320P1.exe](http://download.hsphere.parallels.com/shiv/HS/releases/U32.0/U32.0P1/HS_MSSQL_Bundle_320P1.exe))
- Windows Web + MS SQL hosting: HS\_WinHosting\_MSSQL\_Bundle\_320P1.exe  
([http://download.hsphere.parallels.com/shiv/HS/releases/U32.0/U32.0P1/HS\\_WinHosting\\_MSSQL\\_Bundle\\_320P1.exe](http://download.hsphere.parallels.com/shiv/HS/releases/U32.0/U32.0P1/HS_WinHosting_MSSQL_Bundle_320P1.exe))

# Uninstalling Parallels H-Sphere Winbox

Parallels H-Sphere Windows software can be uninstalled from a Windows server only manually.

➤ **To uninstall Parallels H-Sphere for Windows:**

1 Go to the directory `[disk]:\Hsphere\bin\`

- Unregister the HSSVC and HsQuotas services by running the commands:

```
hssvc /unregserver
HsQuotas /unregserver
```

- Remove the `HKEY_LOCAL_MACHINE\SOFTWARE\Psoft` key from the registry.

2 Remove the `hsphere` service by running in the command line:

```
[WinDir]\Microsoft.NET\Framework\[version]\InstallUtil.exe /u
[\hsphere.net]\bin\hsphere.exe
```

Where:

- **[WinDir]** is a path to the directory where Windows is installed (usually `C:\Windows`)
- **[version]** is a version of ASP.NET (v1.0.3705 or later)

**[hsphere.net]** is a path to the directory where HSphere.NET is located For example:

```
C:\Windows\Microsoft.NET\Framework\v1.1.4322\InstallUtil.exe
/u C:\hsphere.net\bin\hsphere.exe
```

3 Go to the IIS interface (**Programs -> Administrative Tools -> Computer management -> Internet Information Services**) and perform one of the following two actions:

- If Parallels H-Sphere was set up on the default website, remove the CFG, Urchin, Webshell and MS SQL virtual directories;
- If Parallels H-Sphere was set up on a separate website, remove the website.

4 Check in the component services on the Parallels H-Sphere website for COM+ applications `cfg` and `cfg/net`. To do this:

Go to **Programs > Administrative Tools > Component Services > My Computer > COM+ Applications**

- Remove `IIS{Default Website Root}/cfg/NET` and `IIS{Default Website Root}/cfg`. In order to remove them, right-click on it and choose **Properties**, go to **Advanced** tab and uncheck **Disable Deletion** option.

5 In the IIS interface re-map default FTP root to the IIS directory (usually `c:\inetpub\ftproot`):

- Go to **FTP Sites**, right-click the **Default FTP Site > Properties**.

On the page that appears click **Properties**, then browse for folder and choose **ftproot**.

- 6 Re-map default web root to the IIS directory (usually `c:\inetpub\wwwroot`):
  - Go to **Web Sites**, right-click the **Default Web Site > Properties**.
  - On the page that appears click **Properties**, then browse for folder and choose **wwwroot** as shows above on Step 5.
- 7 Remove the user that was created during the Parallels H-Sphere installation to administer Parallels H-Sphere (by default, it's user *HSadmin*).
- 8 Stop IIS service by running in the command line:  
`iisreset/stop`
- 9 Remove the Parallels H-Sphere directories from their location: usually `C:\Hsphere` and `C:\Hsphere.Net`.
- 10 Restart IIS service by running in the command line:  
`iisreset`

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**Important:** Do not delete the `<hsphere.net>` directory if it contains any of the packages installed. If you want to uninstall Parallels H-Sphere, uninstall all Parallels H-Sphere packages first.

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# Appendix A. Parallels H-Sphere Winbox MSI Packages

Parallels H-Sphere Winbox installation and update is performed from MSI packages each responsible for a particular functionality.

## Package List

- `HsCore` - core of Parallels H-Sphere Winbox service
- `HsInstaller` - Parallels H-Sphere Winbox installer
- `HsGeneralHosting` - provides FTP hosting services
- `HsMSSQL` - Parallels H-Sphere MSSQL hosting server (requires MSSQL server installed on the box)
- `HsRSync` - RSync utility
- `HsWeb` - provides Parallels H-Sphere Web resources for Windows hosting
- `HsAspNetSqlEMan` - supports ASP.NET Enterprise manager
- `HsSharePoint` - SharePoint hosting (requires SharePoint installed)
- `HsColdFusion` - ColdFusion hosting (requires ColdFusion installed)
- `HsWebalizer` - Webalizer
- `HsUrchin` - integrates the Google Analytics tool (requires Urchin installed)
- `HsMiva` - integrates Miva tool (requires Miva installed)
- `HsPerl` - Perl
- `HsAWStats` - AWStats
- `HsStats` - Winbox statistics resource
- `HsPHP` - PHP hosting, includes both PHP 4 and 5 version
- `HsWebShell` - WebShell Web File Manager
- `HsOsCommerce` - OsCommerce
- `HsPhpBB` - PhpBB
- `HsEasyAppSvc` - provides EasyApp service to enable installation of EasyApp collection

## Package Name

Each package filename has the following notation:

<PACKAGE\_TITLE>\_<HS\_VERSION>.<BUILD>.<TIMESTAMP>.msi

where:

- `<PACKAGE_TITLE>` is the name of the package (see the list above)
- `<HS_VERSION>` is Parallels H-Sphere version
- `<BUILD>` is the package build
- `<TIMESTAMP>` is the package build timestamp (days from 1 Jan 2000)

Example: `HsGeneralHosting_3.2.152.3195.msi`.

## Package Download and Installation

Parallels H-Sphere MSI packages are downloaded from the Download location: <http://download.hsphere.parallels.com/shiv/HS/WINDOWS/> location.

There can be several cases of installing these packages:

- *Automatic* (on page 12)  
The first step is downloading and running the HsCore package. Installation/update of the rest of the packages is managed from the admin CP by means of the Update Wizard. The wizard runs them from the `<HS_HOME>\data\services\installer` folder, where `<HS_HOME>` is Parallels H-Sphere home location (`C:\Program Files\HSphere` by default)
- *Installation of the Bundles* (on page 12)  
Download and run the Windows server installation bundles in accordance with the hosting type:  
**Windows Web hosting:** `HS_WinHosting_Bundle<HS_VERSION>.exe`  
**MS SQL hosting:** `HS_MSSQL_Bundle_<HS_VERSION>.exe`  
**Windows Web + MS SQL hosting:**  
`HS_WinHosting_MSSQL_Bundle_<HS_VERSION>.exe`
- *Manual*  
*Not recommended!* You can also manually install/update Parallels H-Sphere Winbox by downloading these packages and running them one by one, according to their dependencies.

## Packages Requiring Third-Party Software

HsMSSQL, HsSharePoint, HsColdFusion, HsUrchin and HsMiva integrate third-party products into Parallels H-Sphere environment and require respective software installed. Please refer to separate documents for specific guidelines on their configuring in Parallels H-Sphere System Administrator's Guide.

## Package Dependencies Tree

Parallels H-Sphere Update Wizard installs the packages in the following sequence:

```
HsCore
|-- HsInstaller
|-- HsMSSQL
|-- HsGeneralHosting
    |-- HsRsync
    |-- HsWeb
        |-- HsAspNetSqlEMan
        |-- HsSharePoint
        |-- HsColdFusion
        |-- HsIpMigrator
        |-- HsWebalizer
        |-- HsUrchin
        |-- HsMiva
    |-- HsPerl-HsAWStats-HsStats
|
|--HsPHP
|-- HsWebShell
|-- HsOsCommerce
|-- HsPhpBB
|-- HsEasyAppSvc
```