



Virtuozzo Containers for Windows 6.0

Upgrade Guide

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Contents

Introduction	4
About This Guide	4
Organization of This Guide	4
Getting Help.....	5
Upgrade Scenarios.....	6
Upgrading from Virtuozzo Containers for Windows 4.6.....	7
Upgrading Standalone Nodes.....	7
Upgrading Cluster Nodes	9
Rolling Back to the Previous Version	10
Getting Technical Support	11
Index	12

CHAPTER 1

Introduction

This chapter provides general information about this guide.

In This Chapter

About This Guide	4
Getting Help	5

About This Guide

This document describes how to upgrade Virtuozzo Containers for Windows 4.6 to Virtuozzo Containers for Windows 6.0.

Note: Upgrading Virtuozzo versions earlier than 4.6 to Virtuozzo Containers for Windows 6.0 is not supported. So, if you are running an earlier version of Virtuozzo (e.g., Virtuozzo 4.5), first upgrade your software to Virtuozzo Containers for Windows 4.6, and then proceed with upgrading to Virtuozzo Containers for Windows 6.0.

Organization of This Guide

The guide is organized as follows:

- **Chapter 1, Introduction**, provides information about this guide and lists other documentation on Virtuozzo Containers for Windows you may find helpful.
- **Chapter 2, Upgrade Scenarios**, lists Virtuozzo Containers for Windows upgrade scenarios.
- **Chapter 3, Upgrading from Virtuozzo Containers for Windows 4.6**, describes to how upgrade Virtuozzo Containers for Windows 4.6 to Virtuozzo Containers for Windows 6.0 on standalone Nodes and Nodes participating in a failover cluster.
- **Chapter 4, Rolling Back to the Previous Version**, describes how you can roll back an unsuccessful upgrade from Virtuozzo Containers for Windows 4.6.
- **Chapter 5, Getting Technical Support**, describes how you can submit support issues to Virtuozzo technical support.

Getting Help

In addition to this guide, there are a number of other guides that can help you use the product more effectively:

- *Virtuozzo Containers for Windows 6.0 Installation Guide*. This guide provides exhaustive information on the process of installing, configuring, and deploying your Virtuozzo Containers for Windows system. Unlike this guide, it contains a more detailed description of all the operations needed to install and set Virtuozzo Containers for Windows 6.0 to work including planning the structure of your Virtuozzo Containers for Windows network, performing the Virtuozzo Containers for Windows unattended installation, etc. Besides, it does not include the description of any Container-related operations.
- *Virtuozzo Containers for Windows 6.0 User's Guide*. This guide provides comprehensive information on Virtuozzo Containers for Windows 6.0 covering the necessary theoretical conceptions as well as all practical aspects of working with Virtuozzo Containers for Windows. However, it does not deal with the process of installing and configuring your Virtuozzo Containers for Windows system.
- *Virtuozzo Containers for Windows 6.0 Templates Management Guide*. This guide is meant to provide complete information on Virtuozzo Containers for Windows templates, an exclusive Virtuozzo technology allowing you to efficiently deploy standard Windows applications inside your Containers and to greatly save the Hardware Node resources (physical memory, disk space, etc.).
- *Virtuozzo Containers for Windows 6.0 Reference Guide*. This guide is a complete reference on all Virtuozzo Containers for Windows configuration files and Hardware Node command-line utilities.
- *Deploying Microsoft Clusters in Virtuozzo-Based Systems*. This document provides information on creating Microsoft failover and Network Load Balancing clusters in Virtuozzo Containers for Windows-based systems.
- *Virtuozzo Automator Administrator's Guide*. This help system shows you how to work with Virtuozzo Automator, a tool providing you with the ability to manage Hardware Nodes and their Containers with the help of a standard Web browser on any platform.
- *Virtuozzo Power Panel User's Guide*. This help system deals with Virtuozzo Power Panel, a means for administering individual Containers through a common Web browser on any platform.

Upgrade Scenarios

Before beginning the upgrade process, it is important to choose the proper upgrade scenario. Doing so will help you avoid difficulties you may otherwise encounter and will also ensure you can successfully solve any problems that may still occur. You can use one of the following scenarios to upgrade your system:

First Scenario

Typically, you perform an in-place upgrade of an existing system. This upgrade scenario is supported for servers running Virtuozzo Containers for Windows 4.6 and is described in **Upgrading from Virtuozzo Containers for Windows 4.6**.

Second Scenario

You want to upgrade the Host operating system (Host OS) installed on your server together with the Virtuozzo Containers for Windows software running on it. In this case, follow these steps:

- 1 Back up all important Virtuozzo and Container configuration files.
- 2 Reinstall the Host operating system on the server.
- 3 Install Virtuozzo Containers for Windows 6.0 on the server.
- 4 Restore the backed up Virtuozzo and Container configuration files.

Third Scenario

You have a spare server to perform a new Virtuozzo Containers for Windows 6.0 installation. In this case, follow these steps:

- 1 Install Virtuozzo Containers for Windows 6.0 on the spare server.
- 2 Migrate all Containers from the Hardware Node you want to upgrade to the spare server.
- 3 Check that all the Containers on the spare server can be started and stopped. To do this, use Virtuozzo Automator and Virtuozzo command-line utilities.
- 4 Reinstall the operating system on the Hardware Node.
- 5 Install Virtuozzo Containers for Windows 6.0 on the Hardware Node.
- 6 Migrate the Containers back from the spare server to the Hardware Node, if necessary.

Consult the *Virtuozzo Containers for Windows 6.0 User's Guide* and *Virtuozzo Containers for Windows 6.0 Installation Guide* for detailed information on how to migrate Containers between Hardware Nodes and to perform a clean installation of Virtuozzo Containers for Windows 6.0, respectively.

Upgrading from Virtuozzo Containers for Windows 4.6

This chapter provides information on upgrading Virtuozzo Containers for Windows 4.6 to Virtuozzo Containers for Windows 6.0 on both standalone Nodes and on Nodes participating in a failover cluster.

In This Chapter

Upgrading Standalone Nodes.....	7
Upgrading Cluster Nodes	9

Upgrading Standalone Nodes

Virtuozzo Containers for Windows 6.0 was designed to allow for an easy upgrade from Virtuozzo Containers for Windows 4.6. All you have to do to start upgrading your Virtuozzo Containers for Windows installation is execute the `containers6.0_x64_w2k8r2.exe` installation file.

Notes:

1. Make sure you back up your system before starting the upgrade.
2. If you have a permanent license, make sure you update it prior to the upgrade with the help of your Virtuozzo sales representative. Not doing so may result in unnecessary downtime after the upgrade.

During the upgrade, you will have to complete the following steps:

- 1 On the **Welcome** screen, click **Next** to proceed with the installation.

Note: The **Welcome** screen is skipped if you run the `vzautoinstall60.exe` utility in the 'Download and install' mode.

- 2 On the next screen, accept the Virtuozzo end user license agreement by selecting the **I accept the terms in the license agreement** radio button and clicking **Next**.
- 3 On the **User Information** screen, enter the necessary information in the fields provided and click **Next**.
- 4 On the **Locations of Virtuozzo Containers for Windows Data and Program Files** screen, you can view the locations of Virtuozzo Containers for Windows program files, Container-related

data (private areas, installed templates, logs, and so on), and Container backups. Notice that you are not allowed to modify these locations when performing the upgrade.

During the upgrade, all folders are updated in accordance with the Virtuozzo Containers for Windows 6.0 state. However, no changes will be made to any of your Containers and their backups; so, you will find them in the same state as they were at the upgrade beginning.

- 5 On the **Ready to Install the Program** screen, click the **Install** button to start upgrading your software. During this procedure:

Note: If you use the `vzautoinstall160.exe` utility in the 'Download and install' mode, the **Ready to Install the Program** screen is skipped and the upgrade procedure is initiated after you click the **Install** button in the **Locations of Virtuozzo Containers for Windows Data and Program Files** window.

- All Container on the Hardware Node are stopped for the time needed to upgrade your Virtuozzo Containers for Windows installation. Upon the upgrade completion, these Containers will be started again.
- The old version of the Virtuozzo Containers for Windows software is removed from the Hardware Node.
- You are asked to restart your system. Just click **OK** in the Virtuozzo Containers for Windows upgrade window. After the system reboot, the installation wizard automatically continues upgrading the software. It installs Virtuozzo Containers for Windows 6.0 and upgrade the Windows Server OS templates and the Virtuozzo Containers for Windows tools (Virtuozzo Automator and Virtuozzo Power Panel) to their latest versions.
- You may also be prompted to add additional Windows Server components to your Host OS. These components represent standard Windows applications and are necessary to provide Containers you will create on the Hardware Node with the corresponding functionality. When adding the components, you will need you to provide a path to the Windows Server distribution files (either by inserting a CD with the Windows Server distribution kit or by clicking the **OK** button in the displayed window and specifying the path to the distribution files).

Note: You must use the same Windows Server distribution kit as the one installed on your Hardware Node. You are supposed to choose the set of Windows Server system services to be launched inside newly created Containers on their startup. Please turn to **Installing Virtuozzo Containers Software** for detailed information on Windows system services sets.

- You are asked to update the Virtuozzo license currently installed on the Hardware Node. If you have a new license, enter it into the corresponding field. Otherwise you will need to update your current lease or permanent license. To update your current lease license, run the `vzlicload -u -n` command in the Command Prompt (you will need an Internet connection). To update your permanent license, contact your Virtuozzo sales representative.

Upgrading Cluster Nodes

The process of upgrading Hardware Nodes running Virtuozzo Containers for Windows 4.6 and participating in a failover cluster is similar to that used to upgrade standalone Nodes. However, pay attention to the following when upgrading your failover cluster:

- Before starting the upgrade procedure, make sure that each cluster node hosts only one group with Virtuozzo Containers for Windows resources. If any of your nodes hosts more than one resource group (as it may be the case in an active/active failover cluster), move them to standby nodes in the cluster.
- First upgrade all active nodes in the cluster, and then proceed with upgrading standby nodes.
- When upgrading an active cluster node, select a group with Virtuozzo Containers for Windows resources to upgrade in the **Resource Group Selection** window.

This window lists all groups that are included in your failover cluster and are not yet upgraded to support Virtuozzo Containers for Windows 6.0. When upgrading nodes, make sure that no groups with Virtuozzo Containers for Windows resources are left un-upgraded after you finish upgrading your last active node in the cluster.

Note: The **Resource Group Selection** window is not displayed if you are upgrading a standby node.

Rolling Back to the Previous Version

This chapter describes how to roll back an unsuccessful upgrade from Virtuozzo Containers for Windows 4.6.

If the upgrade operation was unsuccessful, you can use one of the following ways to return the system to its original state:

- If you created a backup of the entire server (e.g., using the Acronis® True Image Echo™ Enterprise Server software) before the upgrade, perform a full system restore by following the instructions given in the corresponding product documentation.
- If you backed up all Containers that existed on the Hardware Node before the upgrade, but did not create a full backup of the server, do the following:
 - Reinstall the Windows Server operating system on the Node.
 - Install the original version of the software on the Node (Virtuozzo Containers for Windows 4.6).
 - Restore the Containers from their backups on the Node.

Before you start the rollback operation, use the **Submit Support Issue** wizard to contact the Virtuozzo support team and inform it of the problem you have encountered (to invoke the wizard, click **Programs > Virtuozzo > Virtuozzo Containers > Submit Support Issue** on the Windows **Start** menu, or type `vzreport.exe` in the command line). This wizard automatically collects the necessary Virtuozzo Containers for Windows logs, network, system, and troubleshooting information into a single file and downloads it to the Virtuozzo technical support server. It does not send your private information to Virtuozzo.

If it is impossible to make use of the **Submit Support Issue** wizard, please back up the log files generated during the upgrade procedure and send them to the Virtuozzo support team. Please provide the support team with the following log files:

- All files stored in the `<system_drive>:\vzlog` folder.
- The files located in the `<system_drive>:\Windows` folder, having the `.log` extension, and created or modified during the upgrade (you can sort out these files by clicking the **Date Modified** column in the `<system_drive>:\Windows` folder).

Getting Technical Support

If you experience any problems related to upgrading your software to Virtuozzo Containers for Windows 6.0, do the following:

- If you have a Customer Relationship manager or a dedicated support engineer assigned to your company, please feel free to contact them for any questions related to the Virtuozzo Containers for Windows 6.0 upgrade.
- In all other cases, use one of the following ways to get technical support from Virtuozzo (available 24/7 via email and phone):
 - Open a support ticket by filling out a support form at the official website or submitting a support request by means of the **Submit Support Issue** wizard (to invoke the wizard, click **Start > Programs > Virtuozzo > Virtuozzo Containers > Submit Support Issue**). You can then use the Virtuozzo Support RT self-service interface available at <https://cscontact.virtuozzo.com/form/9/?Product=Virtuozzo%20Containers> to open and track your ticket.
 - If your support plan includes phone assistance, call 866.248.8906 (toll-free for US and Canada customers) or +1.703.286.2196 (internationally).

Index

A

About This Guide - 4

G

Getting Help - 5

Getting Technical Support - 11

I

Introduction - 4

O

Organization of This Guide - 4

R

Rolling Back to the Previous Version - 10

U

Upgrade Scenarios - 6

Upgrading Cluster Nodes - 9

Upgrading from Virtuozzo Containers for
Windows 4.6 - 7

Upgrading Standalone Nodes - 7