



Citrix XenServer ® 6.0.2 Guest Support

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Supported Guests and Allocating Resources

This document lists the supported guest operating systems in XenServer 6.0.2. It lists virtual memory and virtual disk size minimums, describes the Windows templates, and the installation methods for Linux VMs.

For detailed information on Virtual Machines (VMs), refer to the [XenServer Virtual Machine Installation Guide](#).

Supported Guests, Virtual Memory, and Disk Size Limits

When installing VMs, follow the memory and disk space guidelines of the operating system and any relevant applications, when allocating resources such as memory and disk space.

Note:

Individual versions of the operating systems may also impose their own maximum limits on the amount of memory supported (for example, for licensing reasons).

Warning:

When configuring guest memory, do not to exceed the maximum amount of physical memory addressable by your operating system. Setting a memory maximum that is greater than the operating system supported limit may lead to stability problems within your guest.

Operating System	Minimum RAM	Maximum RAM	Minimum Disk Space
Windows 7, Windows 7 SP1 (32-bit)	1GB	4GB	24GB, 40GB or more recommended
Windows 7, Windows 7 SP1 (64-bit)	2GB	128GB	24GB
Windows Server 2008 R2, Windows Server 2008 R2 SP1 (64-bit)	512MB	128GB	24GB
Windows Server 2008 SP2 (32-bit)	512MB	64GB	24GB, 40GB or more recommended
Windows Server 2008 SP2 (64-bit)	512MB	128GB	24GB, 40GB or more recommended
Windows Server 2003 SP2 (32-bit)	256MB	64GB	8GB
Windows Server 2003 SP2 (64-bit)	256MB	128GB	8GB
Windows Vista SP2 (32-bit)	1GB	4GB	24GB
Windows XP SP3 (32-bit)	256MB	4GB	8GB
CentOS 4.5, 4.6, 4.7, 4.8 (32-bit)	256MB	16GB	8GB
CentOS 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7 (32-/64-bit)	512MB	16GB	8GB
CentOS 6.0 (32-bit)	512MB	8GB	8GB
CentOS 6.0 (64-bit)	512MB	32GB	8GB



Operating System	Minimum RAM	Maximum RAM	Minimum Space	Disk
Red Hat Enterprise Linux 4.5, 4.6, 4.7, 4.8 (32-bit)	256MB	16GB	8GB	
Red Hat Enterprise Linux 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7 (32-/64-bit)	512MB	16GB	8GB	
Red Hat Enterprise Linux 6.0 (32-bit)	512MB	8GB	8GB	
Red Hat Enterprise Linux 6.0 (64-bit)	512MB	32GB	8GB	
SUSE Linux Enterprise Server 10 SP1, SLES 10 SP2, SLES 10 SP3, SLES 10 SP4 (32-bit)	512MB	16GB	8GB	
SUSE Linux Enterprise Server 10 SP1, SLES 10 SP2, SLES 10 SP3, SLES 10 SP4 (64-bit)	512MB	128GB	8GB	
SUSE Linux Enterprise Server 11, SLES 11 SP1 (32-bit)	512MB	16GB	8GB	
SUSE Linux Enterprise Server 11 SP1, SLES 11 SP1 (64-bit)	512MB	128GB	8GB	
Oracle Enterprise Linux 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7 (32-bit)	512MB	64GB	8GB	
Oracle Enterprise Linux 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7 (64-bit)	512MB	128GB	8GB	
Oracle Enterprise Linux 6.0 (32-bit)	512MB	8GB	8GB	
Oracle Enterprise Linux 6.0 (64-bit)	512MB	32GB	8GB	
Debian Lenny 5.0 (32-bit)	128MB	32GB	8GB	
Debian Squeeze 6.0 (32-/64-bit)	128MB	32GB	8GB	
Ubuntu 10.04 (32-bit)	128MB	512MB	8GB	
Ubuntu 10.04 (64-bit)	128MB	32GB	8GB	

Note:

Some 32-bit Windows operating systems can support more than 4 GB of RAM through the use of a special mode: physical address extension (PAE) mode. If you want to reconfigure a VM with greater than 4 GB of RAM, you must use the xe CLI, not XenCenter, as the CLI does not impose any upper bounds for `memory-static-max`.

For more information on how to set the memory static max, please refer to the Dynamic Memory Control chapter, in the [XenServer Administrator's Guide](#).



Deprecated Guests

The following table lists the deprecated guest operating systems in XenServer 6.0.2.

Operating System
SUSE Linux Enterprise Server 9 SP4 (32-bit)
Windows Server 2008 (32-bit)
Windows Server 2008 (base release) (64-bit)
Windows Server 2003 (base release), Windows Server 2003 SP1 (32-bit)
Windows Server 2003 (base release), Windows Server 2003 SP1 (64-bit)
Windows Vista (base release), Windows Vista SP1 (32-bit)

Note:

There will be no option to engage Citrix's product development resources, and technical workarounds may be limited or not possible for customers on unsupported guest operating systems. If the support incident requires escalation to development for further guidance, requires a hotfix, or requires a security update, customers will be asked to upgrade to a supported service pack.



Windows VM Template Details

Warning:

Running a VM without installing the XenServer Tools is not a supported configuration. For more information, see [XenServer Administrator's Guide](#).

Available Windows Templates

Windows operating systems are installed onto VMs by cloning an appropriate template using either XenCenter or the xe CLI, and then installing the operating system. The templates for individual guests have predefined platform flags set which define the configuration of the virtual hardware. For example, all Windows VMs are installed with the ACPI Hardware Abstraction Layer (HAL) mode enabled. If you subsequently change one of these VMs to have multiple virtual CPUs, Windows automatically switches the HAL to multi-processor mode.

The available Windows templates are listed below:

Template Name	Description
Citrix XenApp on Windows Server 2003 (32-bit)	Used to install Windows Server 2003 SP2 (32-bit). The Server, Enterprise, Data Centre, and SBS editions are supported. This template is specially tuned to optimize XenApp performance.
Citrix XenApp on Windows Server 2003 (64-bit)	Used to install Windows Server 2003 SP2 (64-bit). The Server, Enterprise, Data Centre, and SBS editions are supported. This template is specially tuned to optimize XenApp performance.
Citrix XenApp on Windows Server 2008 (32-bit)	Used to install Windows Server 2008 SP2 (32-bit). All editions are supported. This template is specially tuned to optimize XenApp performance.
Citrix XenApp on Windows Server 2008 (64-bit)	Used to install Windows Server 2008 SP2 (64-bit). All editions are supported. This template is specially tuned to optimize XenApp performance.
Citrix XenApp on Windows Server 2008 R2 (64-bit)	Used to install Windows Server 2008 R2 and Windows Server 2008 R2 SP1 (64-bit). All editions are supported. This template is specially tuned to optimize XenApp performance.
Windows 7 (32-bit)	Used to install Windows 7 and Windows 7 SP1 (32-bit).
Windows 7 (64-bit)	Used to install Windows 7 and Windows 7 SP1 (64-bit).
Windows Server 2003 (32-bit)	Used to install Windows Server 2003 SP2 (32-bit). The Server, Enterprise, Data Centre, and SBS editions are supported.
Windows Server 2003 (64-bit)	Used to install Windows Server 2003 SP2 (64-bit). The Server, Enterprise, Data Centre, and SBS editions are supported.
Windows Server 2008 (32-bit)	Used to install Windows Server 2008 SP2 (32-bit). All editions are supported.
Windows Server 2008 (64-bit)	Used to install Windows Server 2008 SP2 (64-bit). All editions are supported.
Windows Server 2008 R2 (64-bit)	Used to install Windows Server 2008 R2 and Windows Server 2008 R2 SP1 (64-bit). All editions are supported.



Template Name	Description
Windows Vista (32-bit)	Used to install Windows Vista SP2 (32-bit). The Enterprise edition is supported.
Windows XP SP3 (32-bit)	Used to install Windows XP SP3 (32-bit). Earlier service packs are not supported.



Linux VM Installation Notes

Warning:

Running a VM without installing the XenServer Tools is not a supported configuration, so Citrix recommends that you install the tools immediately after Operating System installation. For more information, see [XenServer Administrator's Guide](#).

XenServer supports the installation of many Linux distributions as VMs. There are three installation mechanisms:

1. installing from an internet repository
2. installing from a physical CD
3. installing from an ISO library

The supported Linux distributions are:

Distribution	Vendor Install from CD	Vendor Install from network repository	Notes
Debian Lenny 5.0 (32-bit)	X	X	
Debian Squeeze 6.0 (32-/64-bit)	X	X	
Red Hat Enterprise Linux 4.5, 4.6, 4.7, 4.8 (32-bit)	X	X	Requires installing XenServer Tools after installing RHEL to apply the Citrix RHEL 4.8 kernel.
Red Hat Enterprise Linux 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7 (32-/64-bit)	X	X	Supported provided you use the 5.4 or later kernel.
Red Hat Enterprise Linux 6.0 (32-/64-bit)	X	X	
SUSE Linux Enterprise Server 10 SP1, SLES 10 SP2, SLES 10 SP4 (32-/64-bit)	X	X	
SUSE Linux Enterprise Server 10 SP3 (32-bit)			Supported only if upgrading from SLES 10 SP2
SUSE Linux Enterprise Server 10 SP3 (64-bit)	X	X	
SUSE Linux Enterprise Server 11, SLES 11 SP1 (32-/64-bit)	X	X	
CentOS 4.5, 4.6, 4.7, 4.8 (32-bit)	X	X	
CentOS 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7 (32-/64-bit)	X	X	
CentOS 6.0 (32-/64-bit)	X	X	
Oracle Enterprise Linux 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7 (32-/64-bit)	X	X	

Distribution	Vendor Install from CD	Vendor Install from network repository	Notes
Oracle Enterprise Linux 6.0 (32-/64-bit)	X	X	
Ubuntu 10.04 (32-/64-bit)		X	

Distributions not present in the above list are *not* supported. However, distributions that use the same installation mechanism as Red Hat Enterprise Linux 5 (for example Fedora Core 6) might be successfully installed using the same template.

Note:

Creating 32-bit Linux VMs on a host that has more than 128GB of memory is not supported.

Additional Installation Notes for Linux Distributions

This section describes additional, vendor-specific configuration information that you should be aware of before creating Linux VMs. It covers each Linux distribution supported in this release of XenServer.

Important:

For detailed release notes on all distributions, see [XenServer Virtual Machine Installation Guide](#).

Linux Distribution	Installation Notes
CentOS 4.5, 4.6, 4.7, 4.8 (32-bit)	For a CentOS 4.x VM, you must ensure that the operating system is using the RHEL 5.4 kernel (2.6.18-164.el5) or later, which is available from the distribution vendor. Enterprise Linux kernel versions prior to 5.4 contain issues that prevent XenServer VMs from running properly. Upgrade the kernel using the vendor's normal kernel upgrade procedure.
CentOS 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7 (32-/64-bit)	For a CentOS 5.x VM, you must ensure that the operating system is using the RHEL 5.4 kernel (2.6.18-164.el5) or later, which is available from the distribution vendor. Enterprise Linux kernel versions prior to 5.4 contain issues that prevent XenServer VMs from running properly. Upgrade the kernel using the vendor's normal kernel upgrade procedure.
CentOS 6.0 (32-/64-bit)	None.
Red Hat Enterprise Linux 4.5, 4.6, 4.7, 4.8 (32-bit)	For a RHEL 4.x VM, you must install the XenServer Tools, which includes the RHEL 4.8 kernel and fixes issues in the RHEL kernel that prevent XenServer from running correctly.
Red Hat Enterprise Linux 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7 (32-/64-bit)	For a RHEL 5.x VM, you must ensure that the operating system is using the RHEL 5.4 kernel (2.6.18-164.el5) or later, which is available from the distribution vendor. Enterprise Linux kernel versions prior to 5.4 contain issues that prevent XenServer VMs from running properly. Upgrade the kernel using the vendor's normal kernel upgrade procedure.
Red Hat Enterprise Linux 6.0 (32-/64-bit)	None.

Linux Distribution	Installation Notes
SUSE Linux Enterprise Server 10 SP1, SLES 10 SP2, SLES 10 SP 3 (32-/64-bit)	None.
SUSE Linux Enterprise Server 11, SLES 11 SP1 (32-/64-bit)	None.
Oracle Enterprise Linux 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7 (32-/64-bit)	<ul style="list-style-type: none"> • For an OEL 5.x VM, you must ensure that the operating system is using the RHEL 5.4 kernel (2.6.18-164.el5) or later, which is available from the distribution vendor. Enterprise Linux kernel versions prior to 5.4 contain issues that prevent XenServer VMs from running properly. Upgrade the kernel using the vendor's normal kernel upgrade procedure. • With OEL 5.6 64-bit, the Unbreakable Enterprise Kernel does not support the Xen platform. If you use the Unbreakable Enterprise Kernel with this operating system, the kernel fails to boot properly.
Debian Lenny 5.0 (32-bit)	<ul style="list-style-type: none"> • The standard Debian Lenny 5.0 DVD images are not compatible with XenServer. For details on how to obtain a suitable DVD image, Debian Lenny article on the Citrix Developer Network (http://community.citrix.com/display/xs/Debian+Lenny). • When a private mirror is specified in XenCenter this is only used to retrieve the installer kernel. Once the installer is running you will again need to enter the address of the mirror to be used for package retrieval. • To properly mount the XenServer Tools CD on a Debian guest, you must pass <code>-o exec</code> along with the other options on the VM. Otherwise, the installation scripts do not run off the XenServer Tools CD.
Debian Squeeze 6.0 (32-/64-bit)	<ul style="list-style-type: none"> • To install Debian Squeeze 6.0, you need to use the multiarch.iso from the official Debian mirror which can be found at http://www.debian.org/devel/debian-installer/. • When a private mirror is specified in XenCenter this is only used to retrieve the installer kernel. Once the installer is running you will again need to enter the address of the mirror to be used for package retrieval. • To properly mount the XenServer Tools CD on a Debian guest, you must pass <code>-o exec</code> along with the other options on the VM. Otherwise, the installation scripts do not run off the XenServer Tools CD.



Linux Distribution	Installation Notes
Ubuntu 10.04 (32-/64-bit)	To create Ubuntu 10.04 VMs with multiple vCPUs, Citrix strongly recommends that you update the guest kernel to "2.6.32-32 #64". For details on this issue, see the Knowledge Base article CTX129472 Ubuntu 10.04 Kernel Bug Affects SMP Operation .