

Configuration Limits

Citrix® XenServer 6.0

Citrix recommends using the following configuration limits as a guideline when selecting and configuring your virtual and physical environment for XenServer. The following information represents tested and recommended configuration limits that are fully supported by Citrix for XenServer.

- [Virtual Machine Limits](#)
- [XenServer Host Limits](#)
- [Resource Pool Limits](#)

Factors such as hardware and environment can affect the limitations listed below. More information about supported hardware can be found on Citrix [XenServer Hardware Compatibility List](#). Consult your hardware manufacturers' documented limits to ensure you do not exceed the supported configuration limits for your environment. Please visit Citrix [XenServer Technical Specifications](#) and [XenServer White Papers](#) for the latest technical specifications, platform requirements and white papers on capacity planning and performance testing completed for XenServer.

Virtual Machine Limits

Item	Limit
Compute	
Virtual CPUs per virtual machine	16
Memory	
RAM per virtual machine	128 GB ¹
Storage	
Virtual disks (including CD-ROM) per virtual machine	16
Virtual CD-ROM drives per virtual machine	1
Virtual disk size (NFS)	<2 TB
Virtual disk size (LVM)	2 TB
Networking	
Virtual NICs per virtual machine	7 ²
Pass-through	
SR-IOV virtual functions per NetScaler VPX	12
GPU Pass-through per virtual machine	1

1. The maximum amount of physical memory addressable by your operating system varies. Setting the memory to greater than the operating system supported limit may lead to performance issues within your guest. Some 32-bit Windows operating systems can support more than 4 GB of RAM through use of the physical address extension (PAE) mode. The limit for 32-bit PV virtual machines is 64GB. Please consult your guest operating system Administrators Guide and [XenServer Virtual Machine Installation Guide](#) for more details.
2. SLES 10 SP1 and RHEL 4.x support 3. Oracle, CentOS 5.0/5.1/5.2 and RHEL 5.0/5.1/5.2 support 3, but can support 7 once Citrix Tools for Virtual Machines (XenTools) are installed.

XenServer Host Limits

Item	Limit
Compute	
Logical physical processors per host	160 ¹
Concurrent VMs per host	75
Concurrent XenDesktop VMs per host (2940 MB dom0 RAM)	75 – 130 ²
Concurrent PVS VMs per host (2940 MB dom0 RAM)	75 – 130 ²
Concurrent XenDesktop VMs using IntelliCache per host (2940 MB dom0 RAM)	50 – 130 ²
Concurrent protected VMs per host with HA enabled	50 – 60 ²
Memory	
RAM per host	1 TB ³
Storage	
VDIs per host	512
Networking	
Physical NICs per host	16
Physical NICs per network bond	2
Virtual NICs per host	512
VLANs per host	128
Pass-through	
SR-IOV NICs per host	14 ⁴
SR-IOV virtual functions per CPU core	32 ⁴
SR-IOV virtual functions per host	320 ⁴

1. The maximum amount of logical physical processors supported differs by CPU. Please consult the [XenServer Hardware Compatibility List](#) for more details on the maximum amount of logical cores supported per vendor and CPU.
2. The lower limit indicates a number in which the system is fully supported. The range between the lower and upper limit indicates a number in which the system can function with conditional support depending on virtual machine workload, system load, and certain environmental factors. Citrix reserves the right to determine what specific environmental factors affect the maximum limit within the range in which a system can function.
3. If a host has one or more 32-bit paravirtualized guests (Linux virtual machines) running then a maximum of 128 GB RAM is supported on the host.
4. SR-IOV support is available only for the NetScaler virtual appliance.

Resource Pool Limits

Item	Limit
Compute	
Hosts per resource pool	16
Networking	
VLANs per resource pool	128
Active hosts per cross-server private network	16
Cross-server private networks per resource pool	16



Item	Limit
Virtual NICs per cross-server private network	16
Cross-server private network virtual NICs per resource pool	256
Hosts per vSwitch controller	64
Virtual NICs per vSwitch controller	1024
Virtual machines per vSwitch controller	1024
Disaster Recovery	
Concurrent exports via Virtual Machine Protection Recovery	2
Integrated Site Recovery storage repositories per resource pool	8
Storage	
Paths to a LUN	8
LUNs per HBA	256
LUNs per iSCSI target	256
XenCenter	
Concurrent operations per pool	25

If you have any comments about this documentation, submit your feedback to xenserverlimits@citrix.com.

About Citrix

Citrix Systems, Inc. (NASDAQ:CTXS) is a leading provider of virtual computing solutions that help companies deliver IT as an on-demand service. Founded in 1989, Citrix combines virtualization, networking, and cloud computing technologies into a full portfolio of products that enable virtual workstyles for users and virtual datacenters for IT. More than 230,000 organizations worldwide rely on Citrix to help them build simpler and more cost-effective IT environments. Citrix partners with over 10,000 companies in more than 100 countries. Annual revenue in 2010 was \$1.87 billion.

v1.18