

# VMware Server

Free Virtualization for Windows and Linux Servers

## What Is VMware Server?

VMware<sup>®</sup> Server is a free virtualization product for Windows and Linux servers with enterprise-class support. It enables companies to partition a physical server into multiple virtual machines and to start experiencing the benefits of virtualization. VMware Server is a robust yet easy to use product for users new to server virtualization technology and is based on VMware's proven technology, which has been used by thousands of customers for more than six years.

## What Is a Virtual Machine?

A virtual machine is like a server, but instead of electronics, it is software. A virtual machine runs operating systems and applications just like a physical server. However, virtual machines offer users many advantages over physical servers. Virtual machines:

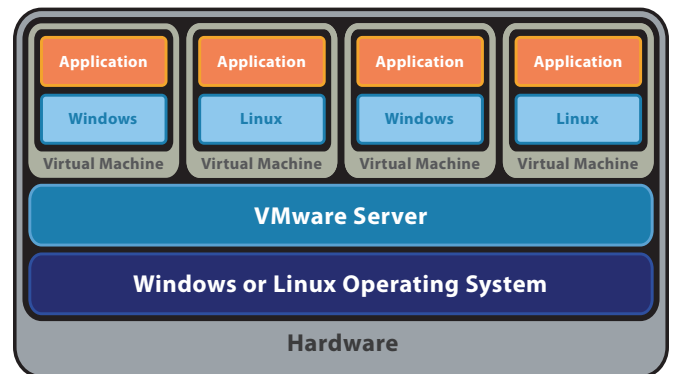
- Are hardware independent and run on any x86 physical server.
- Can access all physical host hardware resources such as CPU, memory, disk, networking and peripherals.
- Are saved as files and can be provisioned and moved quickly.
- Are completely isolated and secure.
- Can run simultaneously and safely on the same physical server.
- Are portable, so full systems including virtual hardware, operating systems and fully configured applications can be easily moved from one physical server to another, even while in operation.
- Can be built and distributed as plug-and-play virtual appliances that contain the entire stack of virtual hardware, operating system and fully configured software applications.

## How Does VMware Server Work?

VMware server installs and runs as an application on top of a host Windows or Linux operating system. A thin virtualization layer partitions the physical server so that multiple virtual machines can be run simultaneously on a single server.

Computing resources of the physical server are treated as a uniform pool of resources that can be allocated to virtual machines in a controlled manner.

VMware Server isolates each virtual machine from its host and other virtual machines, leaving it unaffected if another virtual machine crashes. Data does not leak across virtual machines and



VMware Server partitions a physical server into multiple virtual machines.

applications can only communicate over configured network connections. VMware Server encapsulates a virtual machine environment as a set of files, which are easy to back-up, move and copy.

## What Are the Benefits of VMware Server?

By creating and running virtual machines with VMware Server, users can:

- Provision additional servers in minutes without investing in new hardware.
- Run Windows, Linux, Solaris and Netware operating systems and applications on the same physical server.
- Increase the CPU utilization of a physical server.
- Move virtual machines from one physical server to another without re-configuration.
- Capture the entire state of a virtual machine and roll back to that configuration with the click of a button
- Gain centralized management to efficiently provision, monitor and manage IT infrastructure when combined with VMware VirtualCenter
- Choose to access enterprise-class product support
- Easily migrate virtual machines to VMware Infrastructure

*"Offering VMware Server for free will bring VMware's proven virtualization technology to a wider audience, allowing companies to achieve the benefits of virtualization, such as cost reductions and flexible server provisioning."*

Craig Liess  
Server Administrator, Central Transport

## How Can I Use VMware Server?

With VMware Server you can:

- Streamline software development and testing by allowing developers to create multiple environments with different operating systems on the same server.
- Simplify IT testing of patches, new applications and operating systems by allowing systems administrators to test in a secure virtual machine environment and be able to roll back to a clean state by using the snapshot feature.
- Simplify server provisioning by building a virtual machine once and deploying it multiple times.
- Evaluate software in ready-to-run virtual machines without installation and configuration.
- Re-host legacy operating systems such as Windows NT Server 4.0 and Windows 2000 Server in a virtual machine running on new hardware and operating system.
- Leverage pre-built, ready-to-run virtual appliances that include virtual hardware, operating system and application environments.

Virtual appliances for Web, file, print, DNS, email, proxy and other infrastructure services are available for download on VMware Technology Network at [www.vmware.com/vmtn/vm](http://www.vmware.com/vmtn/vm).

## Get VMware Server Now.

VMware Server is available for immediate download at [www.vmware.com/download/server](http://www.vmware.com/download/server).

## Ready for More?

Explore VMware Infrastructure 3, the only production-ready virtualization software suite used by 20,000 customers of all sizes to optimize and manage industry standard IT environments from the desktop to the data center. Delivering built-in management, resource optimization, application availability and operational automation capabilities, VMware Infrastructure 3 dramatically reduces costs and increases efficiency, flexibility and IT service levels. Users of VMware Server can protect their investment if they choose to migrate to VMware Infrastructure as VMware virtual machines are fully compatible across the product line.

## KEY FEATURES

- Runs on any standard x86 hardware
- Supports 64-bit guest operating systems, including Windows, Linux, and Solaris
- Support for VMware VirtualCenter to efficiently manage infrastructure from a central management console
- Experimental support for two-processor Virtual SMP™
- Experimental support for Intel® Virtualization Technology
- Runs on a wider variety of Windows and Linux host and guest operating systems than any server virtualization product on the market
- Support for any Windows or Linux application, including pre-built virtual appliances
- Installs like an application, with quick and easy, wizard-driven installation
- Quick and easy, wizard-driven virtual machine creation
- Support for any VMware or Microsoft virtual machine format and Symantec LiveState Recovery images
- Investment protection with easy upgrade path to VMware Infrastructure and other production-proven VMware products
- Virtual machine monitoring and management with an intuitive, user friendly remote console

## SYSTEM REQUIREMENTS

### Host Operating Systems

#### 64-bit Operating Systems:

- Microsoft Windows Server 2003 Enterprise, Standard, and Web Editions, R2
- Microsoft Windows Server 2003 Enterprise, Standard, and Web Editions, Service Pack 1
- Red Hat Enterprise Linux 4.0 AS, ES, and WS, including U3 and 3.0 AS, ES, and WS
- SUSE Linux 10 and 10.1 (experimental support), 9.3, 9.2 and 9.1
- SUSE Linux Enterprise Server 10 Beta (experimental support) and 9, including SP1, SP2, and SP3
- Mandriva Linux 2006
- Ubuntu Linux 6.06, 5.10 and 5.04

#### 32-bit Operating Systems:

- Microsoft Windows Server 2003 Enterprise, Standard, and Web Editions, R2
- Microsoft Windows Server 2003 Enterprise, Standard, Web, and Small Business Editions, including Service Pack 1
- Microsoft Windows 2000 Advanced Server, Service Pack 3 and Service Pack 4
- Microsoft Windows 2000 Server, Service Pack 3 and Service Pack 4
- Mandriva Linux 2006
- Mandrake Linux 10.1 and 9.0

- Red Hat Enterprise Linux 4.0, including updates 1, 2, and 3, 3.0, including updates 1, 2, 3, 4, 5, 6, and 7, and 2.1
- Red Hat Linux 9.0, 8.0, 7.3 and 7.2.
- SUSE Linux Enterprise Server 10 Beta (experimental support), 9, including SP1, SP2, and SP3 and 8
- SUSE LINUX 10, 10.1 (experimental support), 9.3, 9.2, 9.1, 9.0, 8.2 and 7.3
- Ubuntu Linux 6.06, 5.10 and 5.04

Go to: [www.vmware.com/support/pubs/server\\_pubs.html](http://www.vmware.com/support/pubs/server_pubs.html) for a full list of supported devices

## SPECIFICATIONS

Each virtual machine provides a platform that includes:

### Processor

- Intel® Pentium® II or later, or AMD Athlon or later, depending on host processor; Intel EMT64T VT (experimental support)
- Single and multiprocessors per virtual machine with Virtual SMP capabilities

### Memory

- Up to 3.6GB per virtual machine

### IDE Drives

- Up to four devices (including disks, CD-ROM, or DVD-ROM)
- Physical disk devices or file system-based virtual disks up to 950GB
- CD-ROM can be a physical device or an ISO image file

### SCSI Drives

- Up to 21 devices (including disks, CD-ROM or DVD-ROM) on 3 virtual SCSI controllers
- SCSI virtual disks up to 950GB
- LSI Logic Ultra160 or Mylex® (BusLogic) BT-958 compatible host bus adapter
- Generic SCSI device support

### Graphics

- VGA and SVGA support

### Floppy Drives

- Up to two 1.44MB floppy devices
- Floppy drives can be physical drives or floppy images

### Serial (COM) Ports

- Up to four serial (COM) ports
- Output to serial ports, named pipes, or files

### Parallel (LPT) Ports

- Up to three bidirectional parallel ports
- Output to parallel ports or host operating system files

### USB Ports

- Two-port USB 1.1 UHCI controller
- Supports devices including USB printers, scanners, PDAs, hard disk drives, memory card readers and still digital cameras

### Keyboard

- 104-key Windows 95/98 enhanced keyboard

### Mouse and Drawing Tablets

- PS/2 mouse
- Serial tablet supported

### BIOS

- PhoenixBIOS™ 4.0 Release 6-based BIOS
- DMI/SMBIOS compliant for system management agent support

### Ethernet Card

- Up to four virtual Ethernet cards
- AMD® PCnet™ -PCI II compatible
- PXE ROM version 2.0
- Wireless networking supported with bridged and NAT networking

### Virtual Networking and File Sharing

- Nine virtual Ethernet switches (three reserved for bridged, host-only and NAT networking)
- Virtual Ethernet support includes TCP/IP, NetBEUI, Microsoft Networking, Samba, Novell® NetWare® and Network File System
- Built-in NAT supports client software using TCP/IP, FTP, DNS, HTTP and Telnet

### Guest Operating Systems

- Microsoft Windows Vista Beta (Experimental support)
- Windows Server 2003 Web, Small Business, Standard, and Enterprise Editions
- Windows 2000 Professional, Windows 2000 Server and Windows 2000 Advanced Server
- Windows NT Workstation 4.0 and Windows NT Server 4.0
- Windows XP Professional and Windows XP Home Edition
- Windows Me
- Windows 98 and Windows 98 SE
- Windows 95 (all OSR releases)
- Windows 3.1, MS-DOS 6
- Novell NetWare 4.2, 5.1, 6.0 and 6.5
- Red Hat Enterprise Linux 2.1, 3 and 4 (AS, ES and WS)
- Red Hat Linux 7.8, and 9
- SUSE Linux Enterprise Server 7, 8, 9 and 10 (Experimental support)
- SUSE Linux 7.3, 8, 9, and 10
- Turbolinux
- Mandriva Linux
- FreeBSD 4.0-4.6.2, 4.8, 5.0-5.4, 6.0 (Experimental support)
- Ubuntu 5.04, 5.10, 6.06 (Experimental support)
- Sun Solaris x86 9, 10
- 64-bit Operating Systems: Windows Server 2003 x64 Edition; Windows XP Professional x64 Edition; Windows Vista x64 Edition (experimental); Red Hat Enterprise Linux 3, 4; SUSE Linux Enterprise Server 9; SUSE Linux 10; SUSE Linux Pro; Ubuntu 5.10, 5.04, 6.06 (experimental); Solaris 10 (experimental); FreeBSD 5.3-5.4, 6.0 (experimental); Mandriva Linux 2006