

Oracle VM Server for x86 FAQ

General Overview

What is Oracle VM Server for x86?

Oracle VM Server for x86 is server virtualization software which fully supports both Oracle and non-Oracle applications. Oracle VM Server for x86 offers scalable, low-cost server virtualization that is three times more efficient than existing server virtualization products from other vendors. Oracle has also announced certification of key Oracle products including Oracle Database, Oracle Fusion Middleware, Oracle Applications, and Oracle Real Application Clusters with Oracle VM Server for x86.

Backed by Oracle's world-class support organization, customers now have a single point of support for their entire virtualization environments including the Linux and Solaris operating systems, Oracle Database, Oracle Fusion Middleware and Oracle Application software. Oracle VM is free, and is available for free download from edelivery.oracle.com/oraclevm. Oracle Solaris, Linux and Windows guests are supported.

Oracle VM Server for x86 is a product that offers scalable, low-cost server virtualization that supports both Oracle and non-Oracle applications. Consisting of open source server software and an integrated Web browser-based management console, Oracle VM provides an easy-to-use graphical interface for creating and managing virtual server pools, running on x86 and x86-64-based systems, across an enterprise.

Users can create and manage Virtual Machines (VMs) that exist on the same physical server but behave like independent physical servers. Each virtual machine created with Oracle VM has its own virtual CPUs, network interfaces, storage and operating system. With Oracle VM, users have an easy-to-use browser-based tool for creating, cloning, sharing, configuring, booting and migrating VMs.

Only Oracle offers the industry's most complete and integrated virtualization solutions portfolio that can virtualize and manage the full hardware and software stack. With a focus on integrated management, testing, and support from applications to disk, Oracle's unique approach to virtualization not only helps consolidate IT resources – it enables IT to deliver on-demand services rapidly and efficiently. For complete Oracle virtualization offerings, visit <http://oracle.com/virtualization>.

Why is Oracle offering Oracle VM Server for x86?

Oracle has a long-standing history of enabling our customers to exploit low-cost hardware through Grid Computing. Oracle has developed several essential Grid Computing technologies, including

- Oracle Database and Oracle Fusion Middleware Clustering
- Oracle Automatic Storage Management
- Oracle Enterprise Manager Grid Control

Oracle VM Server for x86 is another key grid technology. Oracle VM enables customers to easily and economically deploy applications in a grid without physical server configuration or per server software installation. Oracle VM enables customers to increase server utilization through virtual machine consolidation with very little overhead, saving power, floor space, and hardware cost. And Oracle VM allows customers to grow or shrink the physical server resources dedicated to an application without downtime through Oracle VM live migration.

With Oracle VM Server for x86, Oracle now provides customers integrated clustering, virtualization, storage, and management for Grid Computing, as well as unified, full stack support for virtualization, Linux, Solaris, database, middleware, and application products. Recognizing enterprise customers' demand for fully supported server virtualization, Oracle now offers Oracle VM backed by a world-class support organization, as well as a full suite of Oracle product certifications. Oracle is the only software vendor that combines the benefits of server clustering and server virtualization technologies to deliver a complete Grid Computing infrastructure.

Which industry vendors support Oracle VM Server for x86?

A significant number of infrastructure vendors including AMD, Dell, Emulex, HP, Intel, Liquid Computing, NetApp, Pillar Data Systems, and Qlogic support their products running with Oracle VM today. Also, Oracle is working closely with numerous other strategic vendors and will continue to highlight these partnerships. [Read more Oracle VM Partner Endorsements.](#)

What does Oracle deliver with Oracle VM Server for x86 Support?

Oracle delivers:

- Free installable binaries for Oracle VM Server for x86 and Oracle VM Manager;
- Access to patches, fixes, and updates, delivered via a subscriber network, the Unbreakable Linux Network (ULN);
- 24x7 global support from the world's largest enterprise software support organization.

Who can use Oracle VM Server for x86?

Any user can get Oracle VM Server for x86 and associated support from Oracle whether they use Oracle products or third party applications.

Pricing and Licensing

How much do customers pay for Oracle VM support from Oracle?

Oracle VM software is available for free download. Pricing for Oracle VM support is simple, and is calculated on a per system basis as follows:

	Annual price per system with up to 2 physical CPUs (sockets)	Annual price per system with unlimited physical CPUs (sockets)	Details
Installable Binaries (both server and manager) and Source (for server)	Free	Free.	Free installable binaries and source available online at edelivery.oracle.com/oraclevm
Oracle VM Premier Support (1 Year)	\$599	\$1,199	Access to software and updates through the Unbreakable Linux Network and 24x7 support with global coverage
Oracle VM Premier Support (3 Years)	\$1,797	\$3,597.	Network access plus 24x7 support with global coverage.

Support for Oracle VM can be [purchased online via the Oracle VM Store.](#)

NOTE: A monolithic integrated circuit with multiple cores or hyperthreading is counted as a single physical CPU when determining the total number of physical CPUs in a system. See the [Oracle VM Pricing Guide for further details.](#)

How are Oracle products priced and licensed for use with Oracle VM Server for x86?

There is no change in pricing and licensing of Oracle's products for use with Oracle VM Server for x86. Oracle counts and licenses physical processors on which the licensed programs are installed and/or running.

How does partitioning relate to software licensing?

For more information, [read this document](#), which discusses the attributes of server partitioning and how customers can leverage partitioning to optimize software licenses.

Does Oracle indemnify users against intellectual property infringement claims?

Yes. With Oracle's offer of comprehensive indemnification against infringement, users can deploy Oracle VM with confidence.

Features and Benefits

What are some of the features and benefits of Oracle VM Server for x86?

Oracle VM Server for x86 can provision a working environment or application within a short time, enabling faster time to market. Oracle VM can easily manage the complete lifecycle of VMs including creation, customization, sharing, management, and deployment, in a hosted infrastructure. Oracle VM also offers numerous features and benefits:

- Greater efficiencies—three times more efficient than other server virtualization products. Read the [Tolly Group's Oracle VM Benchmark Report](#) for more information;
- Simplified installation—Server install is a single CD; installs and configures in a minute;
- Server consolidation, load balancing, increased utilization of hardware resources;
- Live Migration—the capability of moving live virtual machines from one physical host to another without re-configuration;
- High performance server virtualization, built with a server-centric focus, capable of handling mission-critical production environments in data centers;
- Centrally managed resources, easy-to-use interface to configure parameters, with no special software required, just a web browser;
- Faster deployment through pre-configured [Oracle VM Templates](#) of Oracle Database, Middleware, Applications, Oracle Linux and Oracle Solaris; easy template creation—anyone can create VMs easily from templates or from scratch;
- Full and integrated support provided by the world's largest software support organization;
- Certification of Oracle Database, Middleware, Applications, and Real Application Clusters;
- Combined benefits of Grid Computing and server virtualization;
- Improved Return On Investment (ROI) and lower Total Cost of Ownership (TCO) through lower price, consolidated support and savings in terms of space, cooling, power and more.

How is Oracle VM three times more efficient than existing x86 server virtualization products?

Oracle ran many performance benchmarks comparing Oracle products running with Oracle VM against the existing leading server virtualization product and also with Oracle products on non-virtualized operating systems on x86 and x86-64. Oracle consistently saw much better resource utilization with an average of three times less overhead using Oracle VM, and also saw significant scalability with virtual SMP. In many cases, the comparison with real hardware was approximately equal in performance. Read the [Tolly Group's Oracle VM Benchmark Report](#) for more information.

What are Oracle VM Templates?

Oracle VM Templates provide an innovative approach to deploying a fully configured software stack by offering pre-installed and pre-configured software images. Use of Oracle VM Templates eliminates the installation and configuration costs, and reduces the ongoing maintenance costs helping organizations achieve faster time to market and lower cost of operations. Oracle VM Templates of many key Oracle products are available for download, including Oracle Database, Enterprise Linux, Fusion Middleware, and many more. [Learn more about Oracle VM Templates.](#)

How is Oracle On Demand benefiting from Oracle VM?

Oracle On Demand provides a portfolio of industry-leading applications—available on a subscription or managed basis—that deliver a superior ownership experience and help customers achieve better business results. With Oracle VM, Oracle is now introducing server virtualization within the Oracle On Demand Managed Services Grid. The introduction of virtualization in On Demand will afford Oracle the opportunity to optimize each customer's configuration, more fully harness the capabilities of these servers, maintain the operational enhancements deployed over the last several years, and introduce new benefits. In addition, Oracle On Demand expects to benefit from significant savings in terms of space, power and cooling. For more details, read the [Oracle On Demand white paper](#).

Technical Details

Which Oracle products are currently certified with Oracle VM Server for x86?

Oracle customers can get the latest details from Support Note 464754.1 on [My Oracle Support](#).

How do customers manage their Oracle VM Server for x86 environment?

A browser-based management utility [Oracle VM Manager](#) is included with Oracle VM at no additional charge. Additionally, [Oracle Enterprise Manager](#) introduces the [Oracle VM Management Pack](#), which provides a comprehensive management solution for managing both the virtual machines and the operating systems and software running inside the virtual machines from a single product.

The Oracle VM Management Pack provides integrated in-depth health and performance monitoring, configuration management, and lifecycle automation for both virtual- and physical infrastructure for maximum operational efficiency.

Is Oracle VM Server for x86 available for download?

Yes. Oracle VM software is free, and is available for free download from [Oracle E-Delivery](#).

What is the difference between Oracle VM Server for x86 and the virtualization that comes bundled with Oracle Linux?

As part of the Unbreakable Linux Support program, Oracle supports virtualization that is included with Oracle Linux. Please note that Oracle products are not certified to run in that environment. Any customer who wants to deploy Oracle products in a virtual environment should use Oracle VM, and subscribe to Oracle VM support. Oracle customers should refer to Support Note 466538.1 on [My Oracle Support](#).

Does Oracle VM Server for x86 require a host operating system?

No. Oracle VM Server for x86 installs directly on server hardware and does not require a host operating system.

What guest operating systems are supported with Oracle VM Server for x86?

Oracle VM Server for x86 supports the following guest operating systems:

- Oracle Solaris 10 and Oracle Solaris 11 Express
- Oracle Linux 4, 5 and 6
- Red Hat Enterprise Linux 3, 4, and 5
- Windows Server 2008 R2, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP, and Windows 2000 are supported on hardware virtualization (Intel VT or AMD-V) capable hardware;
- Oracle VM offers [paravirtualized drivers](#) for Windows Server 2008 R2, Windows Server 2008, Windows Server 2003, Windows 7, Windows Vista, and Windows XP.

Please refer to [Oracle VM Documentation](#) for complete information on supported Guest OS configurations.

Which hardware is supported for Oracle VM Server for x86?

Oracle VM Server for x86 requires a 32 or 64 bit host, with at least an i686-class processor. This includes all Intel Pentium Pro or newer models, and all AMD Athlon/Duron processors or newer models; Pentium 4 or Athlon CPU is recommended at a minimum.

For unmodified guest operating systems, a CPU with hardware virtualization support is required. This includes some Intel Pentium D, Core, Core2 and Xeon models, and some AMD Athlon and Opteron models. Please refer to your processor documentation and [Oracle VM documentation](#) or further information.

Does Oracle support Solaris on Sun x86/x86_64 platforms?

Yes. The Oracle Solaris support on Oracle VM 2.2 begins with Oracle Solaris 10 10/09. The Oracle Solaris runs as a hardware virtual machine (HVM) which requires HVM support (Intel VT or AMD-V) on the underlying hardware platform. By default, Oracle Solaris already has the required paravirtualized (PV) drivers installed as part of the OS.

Does Oracle offer Windows paravirtualized (PV) drivers to improve the performance of Windows guests on Oracle VM?

Yes, Oracle VM offers paravirtualized (PV) Windows drivers that substantially improve the performance of Windows on Oracle VM. [Learn more.](#)

Support Details

Will Oracle support customers who are using Oracle products on other x86 server virtualization environments?

Oracle VM is the only x86-based server virtualization environment on which Oracle products are supported. Oracle customers should refer to Support Note 249212.1 on [My Oracle Support](#).

How do I get access to patches and updates?

Patches and updates for Oracle VM are available through [Unbreakable Linux Network](#) (ULN). ULN is a comprehensive resource for Oracle Unbreakable Linux support subscribers and Oracle VM support subscribers. ULN offers access to software patches, updates and fixes. To access ULN, a valid Customer Support Identifier (CSI) is required which can be obtained by purchasing Oracle VM Support. Support for Oracle VM can be purchased online via [Oracle VM Store](#).

What is Microsoft's support policy regarding Windows and Oracle VM?

Oracle VM server for x86 with Windows PV Drivers passed [Microsoft SVVP requirements for Windows servers](#). Please refer to the Microsoft Help and Support document titled, "[Support Policy for Microsoft Software Running in Non-Microsoft Hardware Virtualization Software](#)."

More Information

For more information about Oracle's Virtualization Solutions, visit oracle.com/virtualization.