ORACLE VM

Oracle VM - Application-Driven Virtualization Frequently Asked Questions

Overview

Oracle VM server virtualization is designed to support both x86 and SPARC architectures and a variety of workloads such as Linux, Solaris and Windows. Oracle also offers virtualization built in to hardware and Oracle operating systems to deliver the most complete and optimized solution for your entire cloud environment. With tight integrated management support in Oracle Enterprise Manager, customers benefit from simplicity of management and automation in the IT process to further reduce cost and increase efficiency.

Application-Driven Virtualization for Faster time to Value

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.

Oracle VM server virtualization provides value beyond simple server consolidation. Using Oracle VM Templates, sophisticated enterprise applications such as Oracle Database, Oracle Real Application Clusters, Oracle JD Edwards EnterpriseOne can be deployed in matter of minutes compared to traditional server virtualization. With over 100 Templates pre-configured, pre-tested, pre-patched by Oracle, deploying a complete infrastructure with Oracle Linux, Oracle Middleware and business applications is reduced from months and weeks to days. In addition, Oracle VM Templates can be customized for non-Oracle applications. Oracle VM Templates ensures IT standardization of the compute stack deployment from operating systems to database to applications, helping to reduce risk and ensure faster delivery of services.

Fully Integrated with Oracle's Hardware and Software

Oracle VM is a critical component in the Oracle cloud strategy. Oracle VM is integrated into nearly all layers of the Oracle product offering. With Oracle Engineered Systems, Oracle VM is the foundation for Oracle Database Appliance, Virtual Compute Appliance, Oracle Exalytics In-Memory Machine, Oracle Exalogic and Oracle Storage as well as Oracle x86 and SPARC servers.

At the Application level, Oracle VM Templates provide a highly cost effective, standardized integrated support for rapid deployment of Oracle Database and Oracle applications.

For orchestration and app to disk view and management, Oracle VM is tightly integrated into Oracle Enterprise Manager. With this tight integration, administrators have a full 360 view of their datacenter operations from Oracle Database monitoring to patching Guest OS and monitoring server capacity. Oracle VM subscription includes the Oracle Enterprise Manager Basic monitoring package at no additional cost

Features Highlights

- Rapid Application Deployment - using pre-configured Oracle VM Templates of Oracle Database, Oracle Real Application Clusters (RAC), Oracle Linux, Middleware, Applications can be deployed 7-10x faster than traditional server virtualization products on the market
- Server consolidation, load balancing for increased utilization of hardware resources

ORACLE

- Live Migration—the capability of moving live virtual machines from one physical host to another without re-configuration;
- Highly scalable server virtualization supports up to 128vCPU allowing for room to grow and future proofing capacity for handling business-critical production environments in data centers;
- Oracle VM Manager – centrally managed resources, easy-to-use interface to configure parameters, with no special software required, just a web browser. Oracle VM Manager provides a unified console for management of both Oracle VM Server for x86 and Oracle VM Server for SPARC
- Integrated Management – Oracle VM is tightly integrated with Oracle Enterprise Manager to provide for application and services provisioning for cloud infrastructures and services such as monitoring, self-provisioning, chargeback, etc.
- Single vendor support provided by the world's largest software support organization for all layers of your cloud infrastructures.
- Certification of Oracle Database, Middleware, Applications, and Real Application Clusters, Oracle hardware running Oracle VM
- Higher 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 recurring operational savings with Oracle VM Templates and Enterprise Manager.

Question and Answer

Technical Questions

Q: What does Oracle VM include?

A: There are two components for Oracle VM. Oracle VM Server for x86, a Xen-based hypervisor, and Oracle VM Manager. Oracle VM also supports SPARC architectures. With Oracle VM Server for SPARC customers can deploy virtualization to their SPARC hardware.

Q: Is Oracle VM really best suited for Oracle Database?

A: Oracle VM is uniquely suited for Oracle Database. Oracle VM is the foundation virtualization technology built into Oracle Database Appliance, Virtual Compute Appliance, Oracle Exalogic. As such Oracle VM is thoroughly tested and is engineered to include optimizations for Oracle and Tier 1 enterprise applications. Furthermore, Oracle VM Templates for Oracle Database Single Instance or RAC provide an out-of-box experience for deployment unmatched by any traditional virtualization vendor in the market with best practices already built in. The customers simply download and deploy. Oracle has the unique benefit of having engineering expertise for both the Database and Oracle VM, making support a much more efficient experience for customers with a single vendor contact.

Q: What are Oracle VM Templates?

A: 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, reduce errors by standardizing deployment images. Furthermore, Oracle VM helps to reduce the ongoing maintenance costs helping organizations achieve faster time to market. Oracle VM Templates of many key Oracle products are available for download, including Oracle Database, Oracle Linux, Oracle JD Edwards EnterpriseOne, Oracle Real Application Clusters (RAC), Oracle E-Business Suites, Oracle Middleware, and many more. Learn more about Oracle VM Templates.

Q: Does Oracle use Oracle VM?

A: Oracle VM is used by Oracle Managed Cloud Services. This hosted cloud operation provides a portfolio of industry-leading applications—available on a subscription or managed basis—that delivers a superior ownership experience and help customers achieve better business results. There are nearly 20,000 Oracle VM virtual machines deployed in this operation. In addition, Oracle's own Product Development IT deploys over 116,000 Oracle VM virtual machines to the engineers inside Oracle for use in their daily product development.

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

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

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

A: Oracle Linux 4, 5, 6. Red Hat Enterprise Linux 3, 4, 5, 6

Oracle Solaris 10, 11 and 12

Microsoft Windows Server 2012 R2, Microsoft Windows Server 2012, Microsoft Windows Server 2008 R2, Microsoft Windows 7, Microsoft Windows 8. For a complete listing of Microsoft Windows guest operating systems supported in Oracle VM and Oracle VM Server for x86

validation by the Microsoft Windows Server Virtualization Validation Program (SVVP), read the details here.

Q: Which hardware is supported by Oracle VM Server for x86?

A: 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. The Hardware Certification List (HCL) for Oracle VM also has the most updated information on servers certified for Oracle VM.

Q: Is there a list of Oracle VM validated configuration with systems or storage solutions?

A: Yes. The Oracle Validated Configurations Program continuously add pre-tested Validated Configurations, Validated Architectures and documented best practices for Oracle VM deployment of real world workload testing with Server, Storage, Network Components, Oracle Linux and Oracle Database.

Q: Is Oracle VM Server for x86 validated on any other third party converged infrastructure platforms?

A: Oracle VM Server for x86 is also validated with FlexPod. The Cisco Validated Document for FlexPod with Oracle Linux and Oracle VM with Oracle RAC is a reference architecture on 3rd party hardware and storage.

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

A: Oracle customers can get the latest details from Support Note 464754.1 on My Oracle Support.

Q: How do customers manage their Oracle VM Server for x 86 environments?

A: 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.

Q: Does Oracle support Oracle Solaris on Sun x86/x86_64 platforms?

A: 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.

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

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

Support Details

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

A: 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.

Q: How do I get access to patches and updates?

A: 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.

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

A: 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.

Q: Which industry vendors support Oracle VM Server for x86?

A: A significant number of infrastructure vendors including AMD, Cisco, Dell, Emulex, HP, Intel, Liquid Computing, NetApp, Nimble Storage, FusionIO, 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.

Licensing & Support Questions

Q: How does partitioning relate to software licensing?

A: For more information, read this document, which discusses the attributes of server partitioning and how customers can leverage partitioning to optimize software licenses.

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

A: 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.

Q: What does Oracle deliver with Oracle VM Server for x86 Support subscription?

A: 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.

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

A: Oracle VM software is available for free download. There is no license required. Pricing for Oracle VM support is simple, and is calculated on a per system basis. Support for Oracle VM can be purchased online via the Oracle VM Store.

	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)T	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.

Q: Does Oracle indemnify users against intellectual property infringement claims?

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

Oracle Corporation, World Headquarters
500 Oracle Parkway
Redwood Shores, CA 94065, USA

Worldwide Inquiries
Phone: +1.650.506.7000
Fax: +1.650.506.7200

CONNECT WITH US

blogs.oracle.com/virtualization
facebook.com/OracleVirtualization
twitter.com/ORCL_Virtualize
oracle.com/virtualization

Hardware and Software, Engineered to Work Together