

ORACLE VM SERVER FOR X86 VIRTUALIZATION AND MANAGEMENT

ORACLE'S CERTIFIED X86 VIRTUALIZATION SOLUTION

KEY FEATURES

- Complete server virtualization and management with no license costs
- Speeds application deployment with Oracle VM Templates and software assemblies
- Modern, low overhead architecture for leading price/performance
- Included secure live migration, VM high-availability, dynamic resource management, P2V and V2V conversion, and other advanced features

Oracle VM Server for x86 is a free server virtualization and management solution that makes enterprise applications easier to deploy, manage, and support. Backed worldwide by affordable enterprise-quality support for both Oracle and non-Oracle environments, Oracle VM facilitates the deployment and operation of your enterprise applications on a fully certified platform to reduce operations and support costs while simultaneously increasing IT efficiency and agility.

The Virtualization Platform for Enterprise Workloads

You are facing the challenges of a rapidly expanding data center—increased operating costs, inefficient resource utilization, and an eye toward cloud computing. Your virtualization solution has to increase datacenter flexibility, meet your price/performance needs, and make applications easier to deploy, manage, and support.

Oracle VM delivers:

- **High performance, high scalability.** Low-overhead architecture with the Xen® hypervisor provides scalable performance under increasing workloads to meet the most aggressive performance requirements; supports up to 160 physical CPUs and 2TB memory; each guest VM supports up to 128 vCPU and 1TB memory to accommodate enterprise and cloud workloads.
- **Advanced management for zero extra cost.** Includes Oracle VM Manager for centralized, browser-based management of your resource pools; includes policy-based, dynamic resource scheduling; dynamic capacity and power management. A rich, dynamic html UI provides ease of use. Also includes comprehensive event tracking. Support for tight integration with Oracle Enterprise Manager provides for the ability to manage virtual and physical environments across the full stack.
- **Latest hardware support.** Leverage the new hardware features from Intel® Xeon® and AMD® Opteron® processors for higher performance and more efficient power management.
- **Storage configuration and management.** Includes centralized storage configuration to manage storage in an automated, uniform way. Storage Connect plug-ins for GUI access to advanced storage functionality available from Oracle and 3rd party partners. Thin provisioning and cloning for storage efficiency.
- **Network configuration and management.** All Oracle VM Server logical network configuration and management is now performed using Oracle VM Manager, for example, NIC port bonding, and configuring VLAN Networks.
- **Faster software deployment with Oracle VM Templates.** Download and import pre-configured virtual machines containing pre-installed Oracle enterprise applications or other software to get up and running in hours not weeks.

- **OVF support.** Oracle VM Manager supports Open Virtualization Format (OVF) based software assemblies produced by Oracle to accelerate application deployment.
- **Rapid VM provisioning and cloning.** Sparse file support in OCFS2 enables significantly faster virtual machine provisioning and cloning; allows users more control over data allocation, improving performance and storage efficiency. OCFS2 also provides “instant” cloning capabilities to create copy-on-write clones and that can be immediately started modified on any machine in a server pool independent of the clone “source” VM.
- **Secure live VM migration.** Completely eliminate service outages associated with planned maintenance or scale up your resources quickly by migrating running VMs to other servers over secure SSL links, without interruption. Create dedicated Live Migration networks to eliminate impacts on other network traffic.
- **High availability.** Reliably and automatically restart failed VMs on other servers in the server pool after unexpected server or individual VM outage.
- **Physical-to-virtual / virtual-to-virtual machine conversion.** Quickly convert existing physical servers or non-Oracle VM virtual machines (i.e. VMDK, VHD, etc.) to Oracle VM virtual machines to reduce license expenses.
- **Virtual CPU scheduling priorities and caps per VM.** Control access to CPU between multiple VMs to align with IT/business priorities.
- **Solaris, Linux, and Windows support.** Run Solaris, Linux and Windows guest operating systems on Oracle VM to support your entire data center.
- **Official certification based on real-world testing.** Certified for use with the most sophisticated enterprise workloads under real-world conditions.
- **Affordable, full-stack enterprise-class support.** Worldwide support from Oracle for the entire virtualization environment and workloads together.

Integrated Server Virtualization and Management

Consisting of Oracle VM Server, open source server software, and an integrated web browser-based management console, Oracle VM Manager, Oracle VM provides an easy-to-use, feature-rich graphical interface for creating and managing virtual server pools, running on x86 based systems across the enterprise.

Users can create and manage virtual machines (VMs) that exist on the same physical server but that can behave independently, with each VM having its own virtual CPUs, network interfaces, storage, and operating system.

Oracle VM supports the following guest operating systems:

- Oracle Linux 4, 5, and 6
- Oracle Solaris 10 and Oracle Solaris 11 Express
- Red Hat Enterprise Linux 4, and 5
- Microsoft Windows ([learn more about Windows PV Drivers](#))

Please refer to the [product documentation](#) for complete information on supported guest operating system configurations.

Oracle VM Server installs on physical, “bare-metal” servers from a single CD or from a network in about one minute to provide the environment for hosting guest virtual machines. Virtual machines can be created, configured, and managed on hundreds of servers to be managed centrally from a browser using the included Oracle VM Manager software.

Advanced VM Management

Creating and configuring guest VMs is only the beginning. With Oracle VM's included management solution (Oracle VM Manager), administrators can enable advanced functionality to load-balance across resource pools and automatically reduce or eliminate outages associated with server downtime.

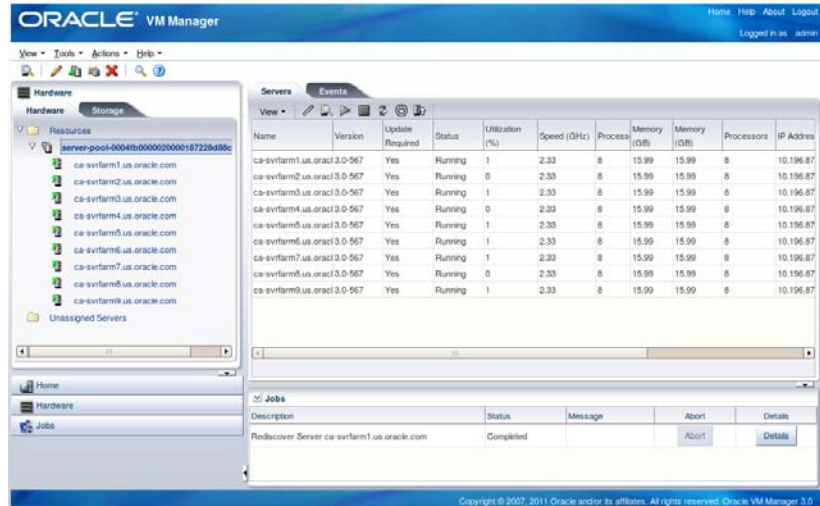


Figure 1. Oracle VM Manager Interface

System Requirements

Two systems with static IP addresses are needed to install Oracle VM: one to install Oracle VM Server and the other to install Oracle VM Manager.

- Oracle VM Server installs directly on server hardware with x86 or x86_64 processors that support Physical Address Extension (PAE) and does not require a host operating system; Oracle VM Server 3 requires 64-bit hardware
- Oracle VM Manager is a Java application based management server running on Linux; Oracle VM Manager uses an Oracle database as its management repository, which can be installed either on the management server or a separate server. Oracle Database Express Edition (XE) is bundled for evaluation purposes; All necessary licenses are included for the Oracle Database Standard Edition (SE) or Enterprise Edition (EE) instance that is required for production support as the management repository.
- Please refer to the [product documentation](#) for complete information on the system requirements.

The Certified and Supported Virtualization Environment for Oracle

Oracle performs real-world testing on its broad portfolio of products with Oracle VM to ensure bulletproof reliability and streamlined support. All new Oracle product releases are certified by default, but consult Support Note 464754.1 on the [My Oracle Support](#) website for information on exact product versions certified.

Oracle VM Support: The Complete Stack, One Call Worldwide

Oracle's world-class support organization offers Oracle VM Premier Support including:

- Access to patches, fixes, and updates delivered via a subscriber network, the Unbreakable Linux Network
- 24x7 global support

Oracle VM software is available for [free download](#). Support for Oracle VM can be purchased via [Oracle VM Store](#).

Pricing for Oracle VM support is calculated on a per system basis: Consult Oracle's [pricing guide](#) for further details.

Contact Us

For more information about Oracle VM Server, visit oracle.com/virtualization or call +1.800.ORACLE1 to speak to an Oracle representative.



Oracle is committed to developing practices and products that help protect the environment

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Hardware and Software, Engineered to Work Together