

ORACLE VM 3: WHAT'S NEW

ORACLE'S CERTIFIED X86 VIRTUALIZATION SOLUTION

KEY FEATURES

- Free to download, use, and distribute
- Dynamic, policy-based management included free of charge
- Improved network and storage configuration
- Rapid application deployment with Oracle VM Templates
- Modern, low-overhead architecture for leading price and performance
- Most scalable server virtualization solution
- Application-driven virtualization

Oracle VM Server for x86 is a free server virtualization solution that makes enterprise applications easier to deploy, manage, and support. Oracle VM provides benefits beyond simple server consolidation, directly addressing IT's compelling need to reduce operational expense in the datacenter. It is part of Oracle's most complete and integrated virtualization portfolio.

New Version Overview

The new Oracle VM release is specifically designed for deploying and managing advanced system infrastructures including enterprise clouds. Oracle VM can create the most scalable, reliable, computing environments, all readily managed with Oracle VM Manager.

This new version of Oracle VM includes many enhancements to simplify and automate network and storage configuration, new policy-based management to deliver application resource flexibility, an all-new graphical user interface for ease-of-use.

Oracle VM supports both Oracle and non-Oracle applications and offers customers the most cost effective server virtualization backed by Oracle's world-class support. Suitable for deployments across your entire data center, Oracle VM is also the only x86 server virtualization solution certified for use with all Oracle software.

Policy-Based Resource Management

New Oracle VM automated policy management features improve application quality of service and reduce power consumption for maximum operational efficiency by dynamically relocating running VMs across a server pool based on load.

Highlighted enhancements:

- **New Distributed Resource Scheduling (DRS) for capacity management.** DRS provides real-time monitoring of Oracle VM Server utilization to rebalance a server pool and provide consistent resources to the running virtual machines. DRS migrates VMs away from heavily loaded Oracle VM Servers to those servers with more resources available.
- **New Distributed Power Management (DPM) to optimize server pool for minimum power consumption.** DPM complements DRS to reduce the number of powered-on servers in the pool when there are periods of low resource utilization. It can automatically power-on capacity as needed when resource utilization ramps up.

Fully Centralized Network and Storage Configuration and Management

Network and storage are key parts of any application deployment. By centralizing network and storage configuration tasks in the Oracle VM Manager, Oracle VM simplifies the creation and configuration of networking and storage, reducing administrative time.

Highlighted enhancements:

- **New Centralized 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.
- **New Storage connect storage configuration and management.** The Oracle VM Storage Connect framework enables Oracle VM Manager to directly leverage the resources and functionality of existing storage systems in the Oracle VM environment, supporting native storage services such as SAN or NFS storage creation, deletion, and expansion. This allows the Oracle VM Manager to automatically discover available storage using Oracle VM Manager.

Improved Performance, Scalability, and Security

Oracle VM 3 delivers significant enhancements to make it faster and easier to rollout operating systems, enterprise applications and middleware, while reducing costs and making your datacenter or cloud environment more highly available and secure.

Highlighted enhancements:

- **New Updated Xen 4.0 hypervisor.** More efficient power management capabilities, broader hardware support, better performance, and greater scalability and security for both hardware-virtualized and paravirtualized guest operating systems.
- **New Updated Dom0 command and control kernel with the latest drivers.** Enhanced hardware support for higher performance, leveraging the latest Oracle Unbreakable Enterprise Kernel.
- **New Improved scalability.** Capable of supporting physical servers up to 160 CPUs and 2TB memory. Oracle VM can now support 128 virtual CPUs per virtual machine-4X more than VMware.
- **New Updated OCFS2 1.8 cluster file system.** Instant clone support that provides significantly faster virtual machine provisioning and cloning.
- **New Support for OVF.** Customers can now use Oracle VM Manager to import a broad range of Open Virtualization Format (OVF) based software assemblies, all of which are produced by Oracle to accelerate application deployment.

Improved Ease-of-Use

Management ease of use directly impacts administrative efficiency. Oracle VM Manager has been substantially enhanced to centralize and simplify administrative operations.

Highlighted enhancements:

- **New Dynamic user interface.** Based on the latest Oracle ADF dynamic html capabilities, the Oracle VM Manager now includes a fully interactive tree view and automatic refresh to show the real-time state of the physical and virtual environment. To facilitate accessibility from “anywhere”, the Oracle VM GUI is also pure browser-based: no client software required.
- **New Server and storage discovery.** Discover Oracle VM servers and storage in your environment to quickly get large numbers of servers up and running.

Extensive Task and Event Management

Automated Tasks, known as “Jobs” in Oracle VM, provide a way to orchestrate and monitor changes to the environment that ensure auditability and rollback.

Highlighted enhancements:

- **New Job management framework.** Every Oracle VM Manager operation is performed as a “job”. A job consists of all the steps involved in the successful completion of the operation. For each job, Oracle VM Manager provides status, such as percent complete, each step completed, and the steps remaining. Through the GUI, an administrator can view and abort a job at any time, or if the job is aborted by the system because of a terminal failure, the state is rolled back to its original state.
- **New Extensive event logging.** Oracle VM Manager maintains an extensive event or “job” history that is accessible through the Manager GUI, providing a simple way to see who made changes within the environment and to trace failures.

Physical and Virtual Status and Resource Information

Understanding the resource utilization of physical and virtual resources supports important administrative tasks such as capacity planning and application quality of service monitoring.

Highlighted enhancements:

- **New Resource information.** Performance statistics are available for CPU, memory, disk and network for each physical server and virtual machine. Events are displayed for each physical and virtual object, such as port up/down status. IP address and other configuration information are displayed directly in the user interface.

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. Please visit the site for the latest information on exact product versions certified.

Contact Us

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



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