

# Oracle VM Server for x86

## Virtualization and Management

Oracle VM Server for x86 is a zero license cost 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 reduces operations and support costs while increasing IT efficiency and agility.

### ENGINEERED FOR OPEN CLOUD INFRASTRUCTURE

You are facing increased operating costs and inefficient resource utilization, and have 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 and scalability:** Low-overhead architecture with the Xen hypervisor provides scalable performance under increasing workloads. Supports up to 384 physical CPUs and 6TB memory with each guest VM supporting up to 256 virtual CPUs and 2,000,000MB memory to accommodate the most demanding enterprise and cloud applications.
- **Broad guest operating system support:** Oracle Linux, Oracle Solaris, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Microsoft Windows.
- **Modern Dom0 kernel:** Oracle Unbreakable Enterprise Kernel (UEK) Release 4 offers high performance and streamlined partner certifications.

### RELIABILITY AND HIGH AVAILABILITY

IT operations teams are under increased pressure to deliver more services with fewer resources. Virtualization solutions need to offer multiple management interfaces, automation options and features that make it easier to deploy applications to end users.

Oracle VM delivers:

- **Secure live VM migration:** Completely eliminate service outages associated with planned maintenance or scale up your resources quickly by migrating running Virtual Machines (VMs) to other servers over secure SSL links, without interruption.
- **Storage live VM migration:** Perform live migrations of running virtual machines that have virtual disks on local storage.
- **High Availability:** Reliably and automatically restart failed VMs on other servers in the server pool after unexpected outages.

### Key Business Benefits

- Complete server virtualization and management solution with zero license cost
- Speeds application deployment with Oracle VM Templates and Virtual Appliances
- Integration with Ksplice to patch kernel, Xen hypervisor, and key user space libraries with no service interruption
- Full Stack Management with Oracle Enterprise Manager

- **Rapid VM provisioning and cloning:** Sparse file support enables significantly faster virtual machine provisioning and cloning; and allows users more control over data allocation to improve storage efficiency. Oracle VM also provides "instant" cloning capabilities to create copy-on-write clones and that can be immediately started or modified.
- **Embedded OSWatcher Utility:** The OSWatcher utility collects and archives operating system and network metrics to diagnose performance issues.

## MANAGEMENT OPTIONS AND EASE OF USE FEATURES

IT operations teams are under increased pressure to deliver more services with fewer resources. Virtualization solutions need to offer multiple management interfaces, automation options and features that make it easier to deploy applications to end users.

Oracle VM delivers:

- **Advanced management for zero extra cost:** Includes Oracle VM Manager for centralized, browser-based management of your resource pools, VMs, storage, and networking. A rich, dynamic HTML based Web user interface provides ease of use and includes comprehensive event tracking and virtualized system health status.
- **Oracle VM Manager Web Services API (WS-API):** Oracle VM Manager exposes a Web Services API, enabling a higher level of automation, interoperability and integration.
- **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.
- **Virtual Appliance support:** Oracle VM Manager supports importing and exporting Open Virtualization Format (OVF) and Open Virtualization Archive (OVA) based software appliances to accelerate application deployment
- **Object topology viewer:** A graphical representation of virtual machine object nodes and all of their attributes helps to quickly locate resources and view the virtualization environment.
- **Full Stack Management:** Integration with Oracle Enterprise Manager offers comprehensive provisioning, monitoring, administration, and configuration management capabilities.

## ORACLE VM SERVER FOR X86 WITH KSPLICE

Beginning with release 3.4.5, Oracle VM Server for x86 supports Ksplice patching for the Dom0 kernel, Xen hypervisor and user-space packages. In a virtualized environment any forced reboot of the VM server nodes is an ordeal, requiring careful planning to migrate affected workloads or accept multiple outages. This is a major hassle and can severely impact productivity. With Ksplice support, Oracle VM administrators now have an enhanced set of tools to maximize security and application availability while virtualized.

### Key Features

- Modern, low overhead architecture based on the Xen hypervisor for leading price/performance
- Full Oracle VM Manager command-line interface (CLI) and Web Services API (WS-API) allow greater automation and interoperability
- Support for Secure live migration and Storage live migration
- VM high-availability (HA)
- Distributed Resource Scheduler (DRS) and Distributed Power Management (DPM)
- Physical-to-Virtual (P2V) and Virtual-to-Virtual (V2V) conversion

## SYSTEM REQUIREMENTS

Please refer to the [Oracle VM Documentation Library](#) for specific software and hardware requirements, and other pertinent information.

Oracle VM Server is supported on Oracle and non-Oracle x86 systems. Please refer to this list of [Oracle Linux and Oracle VM certified hardware](#) to see which systems are certified.

## THE CERTIFIED AND SUPPORTED VIRTUALIZATION ENVIRONMENT

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 application versions certified.

The [ISV catalog](#) provides users with information about third-party software that our ecosystem ISVs have certified to run on Oracle Linux and Oracle VM.

## 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 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.

For Oracle x86 systems, Oracle VM support is included with [Oracle Premier Support for Systems](#).

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