

# 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 by affordable, worldwide 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 infrastructure

When faced with increased operating costs and inefficient resource utilization, your virtualization solution needs to increase data center 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, and Microsoft Windows.
- **Unbreakable Enterprise Kernel as Dom0 kernel:** Oracle VM Server for x86 dom0 uses the Unbreakable Enterprise Kernel (UEK) for Oracle Linux. Customers benefit from performance optimization offered by UEK.

## 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.

## 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

- **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.
- **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 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

Creating and configuring guest VMs is only the beginning. With the integrated management solution, administrators can enable advanced functionality to load-balance across resource pools and automatically reduce or eliminate outages associated with server downtime.

Oracle VM delivers:

- **Advanced management for zero extra cost:** Includes Oracle VM Manager for centralized, browser-based management of resource pools, VMs, storage, and networking. A rich, dynamic HTML-based web user interface provides ease of use, 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 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.

## Zero-downtime patch update with Oracle Ksplice

Beginning with release 3.4.5, Oracle VM Server for x86 supports Ksplice patching for the Dom0 kernel, Xen hypervisor, and select user-space packages. In a virtualized environment, any forced reboot of the VM server nodes is challenging, requiring careful planning to migrate affected

## Key features

- Low overhead architecture based on the Xen hypervisor for leading price/performance
- 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

## Related services

- [Oracle VM Premier Support](#)
- [Oracle VM Premier Limited Support](#)
- [Oracle Linux Support](#)
- [Oracle Premier Support for Systems](#)

workloads or accept multiple outages. This is a major hassle and can severely impact productivity. With Ksplice support, Oracle VM administrators have an enhanced set of tools to maximize security and application availability while virtualized.

## 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 help increase reliability and streamlined support. For the list of certified Oracle software, consult My Oracle Support Document ID [464754.1](#).

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 Store](#). Visit [Oracle Linux Support and Oracle VM Support Global Price List](#) for pricing details.

For Oracle x86 systems and Oracle Engineered Systems, Oracle VM Premier support is included with [Oracle Premier Support for Systems](#). Visit [Oracle Technical Support Policies](#) for the support timelines and details of the respective Oracle Engineered Systems.

Oracle also offers Oracle VM 3 Extended Support. Extended Support became effective at the end of the Premier Support period in March 2021 and ends on June 30, 2024. Oracle VM 3 Extended Support includes:

- 24x7 global support
- Unlimited service requests
- Oracle VM software patches and fixes for critical security errata and select high-impact critical bug fixes

Oracle VM Extended Support does not include:

- New hardware certification
- Backport of fixes

## Oracle VM Extended Support Pricing on third-party hardware:

Oracle VM Extended Support is available at the following rates:

- Year 1 after Premier Support ends: Premier subscription fee plus 10%
- Year 2 and year 3 (and later, as applicable) after Premier Support ends: Premier subscription fee plus 20%

## Oracle VM Extended Support Pricing on Oracle hardware:

Oracle VM Extended Support fee is an uplift over the customer's base support offering for the hardware, either Premier Support for Systems or Premier Support for Operating Systems. Certain Oracle Engineered Systems may include Oracle VM Extended Support. Visit [Oracle Hardware and Systems Support Policies](#) for details.

Visit [Lifetime Support Policy: Coverage for Oracle Linux and Oracle VM](#) document for the support period of respective Oracle VM releases. For more information, read [Oracle Linux and Oracle VM Support Policies](#).

---

## Connect with us

Call **+1.800.ORACLE1** or visit **oracle.com**. Outside North America, find your local office at: **oracle.com/contact**.

 [blogs.oracle.com](https://blogs.oracle.com)

 [facebook.com/oracle](https://facebook.com/oracle)

 [twitter.com/oracle](https://twitter.com/oracle)

---

Copyright © 2021, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group. 0120

Disclaimer: This document is for informational purposes. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, timing, and pricing of any features or functionality described in this document may change and remains at the sole discretion of Oracle Corporation.