

WHAT'S NEW: ORACLE VM **VIRTUALBOX 3.2**

ORACLE VM VIRTUALBOX

ORACLE'S CROSS-PLATFORM VIRTUALIZATION SOLUTION

- Installs on Windows, Linux, Solaris and Mac OS X
- Supports a huge range of guest operating systems
- Easy to use GUI or scriptable command line Interface
- Up to 32 vCPUs per guest
- No hardware virtualization required
- Guest Additions for optimum guest performance
- Built-in iSCSI support
- Built-in Remote Desktop Server
- Teleportation of running guests across hosts
- Import and export of OVF appliances
- Multi-generational snapshots

Oracle VM VirtualBox is cross-platform x86 virtualization software that extends the power of your existing computers to run multiple operating systems, on the same hardware, at the same time, and alongside your existing applications. For example, run Windows on your Mac, run Linux on your Windows PC or run Oracle Solaris on your Linux servers.

Oracle VM VirtualBox 3.2 is the latest release of the popular open source virtualization software for Windows, Linux, Oracle Solaris and the Mac.

The 3 P's - Increased Performance, Power and Platform coverage.

Designed for use on systems ranging from notebook computers to high-end server-class hardware, Oracle VM VirtualBox is lightweight and easy to install and use. Yet under the deceptively simple exterior lies an extremely fast and powerful virtualization engine. Building on its formidable reputation for speed and agility, Oracle VM VirtualBox 3.2 is a major new release which contains innovative features to deliver tangible business benefits: significant **performance** improvements; a more **powerful** virtualization system; and a wider range of supported guest operating system **platforms**. In detail:

Performance

- **New Latest Intel hardware support** – Harnessing the latest in chip-level support for virtualization, Oracle VM VirtualBox 3.2 supports new Intel Core i5 and i7 processor and Intel Xeon processor 5600 Series support for Unrestricted Guest Execution bringing faster boot times for everything from Windows to Solaris guests.
- **New Large Page support** – Reducing the size and overhead of key system resources, Large Page support delivers increased performance by enabling faster lookups and shorter table creation times.
- **New In-hypervisor Networking** – Significant optimization of the networking subsystem has reduced context switching between guests and host, increasing network throughput by up to 25%.
- **New New Storage I/O subsystem** – Oracle VM VirtualBox 3.2 offers a completely re-worked virtual disk subsystem which utilizes asynchronous I/O to achieve high-performance whilst maintaining high data integrity.
- **New Remote Video Acceleration** – The unique built-in Oracle VM VirtualBox

Remote Display Protocol (VRDP), which is primarily used in virtual desktop infrastructure (VDI) deployments, has been enhanced to deliver video acceleration. This delivers a rich user experience coupled with reduced computational expense, which is vital when servers are running hundreds of virtual machines.

Power

- **New Page Fusion** – Traditional page sharing techniques have suffered from long and expensive cache construction as pages are scrutinized as candidates for de-duplication. Taking a smarter approach, Oracle VM VirtualBox page fusion uses intelligence in the guest virtual machine to determine much more rapidly and accurately those pages which can be eliminated, thereby increasing the capacity or virtual machine density of the system.
- **New Memory Ballooning**– Ballooning provides another method to increase virtual machine density by allowing the memory of one guest to be recouped and made available to others.
- **New Multiple Virtual Monitors** – Oracle VM VirtualBox 3.2 now supports multi-headed virtual machines with up to 8 virtual monitors attached to a guest. Each virtual monitor can be a host window, or be mapped to the hosts physical monitors.
- **New Hot-plug CPU's** – Modern operating systems such Windows Server 2008 x64 Data Center Edition or the latest Linux server platforms allow CPUs to be dynamically inserted into a system to provide incremental computing power while the system is running. Oracle VM VirtualBox 3.2 introduces support for hot-plug vCPUs, allowing virtual machines to be given more power, with zero-downtime of the guest.
- **New Virtual SAS Controller** – Oracle VM VirtualBox 3.2 now offers a virtual SAS controller, enabling it to run the most demanding of high-end guests.
- **New Online Snapshot Merging** – Snapshots are powerful but can eat up disk space and need to be pruned from time to time. Historically, machines have needed to be turned off to delete or merge snapshots. but with Oracle VM VirtualBox 3.2, this operation can be done whilst the machines are running. This allows sophisticated system management with minimal interruption of operations.
- **New OVF Enhancements** – Oracle VM VirtualBox has supported the OVF standard for virtual machine portability for some time. Now with version 3.2, Oracle VM VirtualBox specific configuration data is also stored in the standard allowing richer virtual machine definitions without compromising portability.
- **New Guest Automation** – The Guest Automation APIs allow host-based logic to drive operations in the guest.

Platforms

- **New USB Keyboard and Mouse** – Support more guests that require USB input

devices.

- **New Oracle Enterprise Linux 5.5** – Support for the latest version of Oracle's flagship Linux platform.
- **New Ubuntu 10.04 (“Lucid Lynx”)** – Support for both the desktop and server version of the popular Ubuntu Linux distribution.
- **New Mac OS X Server (experimental)** – On Apple hardware only, support for creating virtual machines running Mac OS X Server.

Please refer to the [User Manual](#) for complete information the use of these and other new features in Oracle VM VirtualBox 3.2.

System Requirements

- Any x86 compatible processor from Intel or AMD, with or without VT-x or AMD-V support, and with at least 1 GB RAM.
- Host Support:

Windows	Mac OS X	Linux hosts (32-bit and 64-bit)	Solaris hosts (32-bit and 64-bit)
<ul style="list-style-type: none"> • Windows XP, all service packs (32-bit) • Windows Server 2003 (32-bit) • Windows Vista (32-bit and 64-bit) • Windows Server 2008 (32-bit and 64-bit) • Windows 7 (32-bit and 64-bit) 	<ul style="list-style-type: none"> • 10.5 (Leopard, 32-bit) • 10.6 (Snow Leopard, 32-bit and 64-bit) 	<ul style="list-style-type: none"> • Debian GNU/Linux 3.1 (“sarge”), 4.0 (“etch”) and 5.0 (“lenny”) • Fedora Core 4 to 12 • Gentoo Linux • Redhat Enterprise Linux 4 and 5 • SUSE Linux 9 and 10, openSUSE 10.3, 11.0, 11.1, 11.2 • Ubuntu 6.06 (“Dapper Drake”), 6.10 (“Edgy Eff”), 7.04 (“Feisty Fawn”), 7.10 (“Gutsy Gibbon”), 8.04 (“Hardy Heron”), 8.10 (“Intrepid Ibex”), 9.04 (“Jaunty Jackalope”), 9.10 (“Karmic Koala”), 10.04 (“Lucid Lynx”). • Mandriva 2007.1, 2008.0, 2009.1, 2010.0 • Oracle Enterprise Linux 4 and 5 	<ul style="list-style-type: none"> • Solaris 10 (u5 and higher)

Huge Community Backing

One of the benefits of choosing the Oracle VM VirtualBox is that you are always just a click away from our vibrant, knowledgeable and supportive community at forums.virtualbox.org.

Oracle VM VirtualBox - Licensing

Oracle VM VirtualBox is free for personal use. Enterprise licenses are available for wider deployments, and if you want to embed Oracle VM VirtualBox technology in your solution contact our [OEM sales team](#).

Oracle VM VirtualBox is available from our [download center](#).

More Information

For more information, visit virtualbox.org or oracle.com/virtualization



Copyright © 2010, 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. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners. 0609