## VirtualBox Community Bulletin

# New Oracle VM VirtualBox 3.2

**May 18, 2010** – The VirtualBox team today released a significant new version of Oracle VM VirtualBox(TM), its high performance, cross-platform virtualization software. VirtualBox 3.2, the first Oracle branded release since the acquisition of Sun Microsystems, Inc by Oracle Corp. earlier this year, contains many innovative new features which deliver further significant improvements in performance, power and supported guest operating system platforms.



## Performance

- New Latest Intel hardware support Harnessing the latest in chip-level support for virtualization, 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** 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 VirtualBox Remote Display Protocol (VRDP), which is primarily used in virtual desktop infrastructure 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, VirtualBox Page

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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 vm density of the system;

- *New* Memory Ballooning– Ballooning provides another method to increase vm density by allowing the memory of one guest to be recouped and made available to others;
- *New* Multiple Virtual Monitors 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. Version 3.2 introduces support for Hot-plug vCPUs, allowing VirtualBox virtual machines to be given more power, with zero-downtime of the guest;
- *New* Virtual SAS Controller VirtualBox 3.2 now offers a virtual Serial Attached SCSI (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 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 VirtualBox has supported the OVF standard for virtual machine portability for some time. Now with 3.2, 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 On Apple hardware only, support for creating virtual machines running Mac OS X.

A key component of Oracle's industry-leading desktop-to-datacenter virtualization portfolio, VirtualBox is open source software and hugely popular: surpassing 26 million downloads worldwide since October 2007, with in excess of 40,000 downloads a day. A relatively small download, VirtualBox software is incredibly compact and efficient and installs in just a few minutes.

## Pricing and Availability

To download the freely available Oracle VM VirtualBox software, visit the <u>VirtualBox Downloads</u> page. VirtualBox software is free of charge for personal use. For wider deployments within an organization, enterprise licenses are also available, starting at \$50 (USD) per user. For partners wishing to redistribute the VirtualBox technology as part of their own solution, Oracle offers a comprehensive OEM licensing program.