

## ORACLE VM 3.1: WHAT'S NEW

### ORACLE'S X86 SERVER VIRTUALIZATION SOLUTION

#### KEY FEATURES

- Enhanced ease-of-use with new GUI
- Integration of Oracle's Unbreakable Enterprise Kernel 2 (UEK2) to enable support up to 4TB of memory.
- Broader range of support for hardware and application workloads
- Enhanced availability and backup support
- Automated deployment of a template to multiple virtual machines

#### KEY BENEFITS

- Fully integrated enterprise management from disk to applications to cloud
- Rapid Enterprise Application Deployment with Oracle VM Templates
- All Oracle applications fully certified on Oracle VM
- Zero licensing cost, affordable enterprise quality support
- Free to download and distribute

*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 release significantly enhances ease of use for virtualization administrators through a new user interface designed to provide faster and more streamlined access to key new capabilities in the area of storage availability, back-up support, and network configuration.

This new version also delivers broader hardware and application workload support with Oracle VM 3 as a validated platform for Microsoft software as part of Microsoft's Server Virtualization Vendor Program (SVVP).

#### Enhanced ease-of-use for virtualization management

The new GUI design is engineered for faster execution of workflow and to maximize ease of use and reduce deployment time.

Highlighted enhancements:

- **New User Interface New Design.** Enables quicker access to tasks with improved wizards including the addition of a step-by-step instructions wizard, the *Getting Started Guide*. See Figure 1
- **New Drag and Drop.** While in the Oracle VM management web browser user interface, objects can be dragged and dropped in user operations to provide the same look and feel of native application. This is enabled through the use of Oracle's Application Development Framework (ADF).
- **New Virtual Machine Keyboard Mapping.** Enhanced localization support with keyboard mapping for different languages for each individual virtual machine console, as well as for the server pool, so administrators can tailor their console to their language of choice.
- **New Bulk Discovery of Oracle VM Servers Using Hostnames and IP.** Using multiple hostnames and IP addresses, multiple servers can be discovered for more efficient and streamlined management operations of large scale deployment of virtual machines.
- **New Hot Add vCPUs.** Allows for the addition of virtual CPUs on the fly to a running virtual machine. This is available on OS'es which can support adding and removing CPUs on the fly. By managing vCPUs on the fly, administrators can direct additional resources to a VM when needed without a reboot or any downtime enabling much more flexibility, control and efficient use of resources at the same time continue to deliver IT services to the business uninterrupted.

- **New Move or Clone Virtual Machines and Templates.** Moving a VM allows for deployment of the VM to a different repository while preserving all its configuration parameters. Cloning a VM creates a bootable copy of the VM with a different MAC address to allow the new VM to be immediately booted and run alongside the original VM. The ability to move and clone VMs enable administrators to easily balance storage resources and create additional computing sources to rapidly respond to business demands.
- **New Automatic Creation of Multiple Virtual Machines from a Template.** Supports the automatic creation of multiple VMs from a single Oracle VM template with the click of a button. This automation significantly simplifies large datacenter operations while saving time, allowing rapid VM deployment and helping administrators to focus more on the actual business needs. See Figure 2
- **New Virtual Machine Console Take Over.** A virtual machine console control in use by one user can be taken over by another user to allow for more flexibility in user control and administration of the VMs.

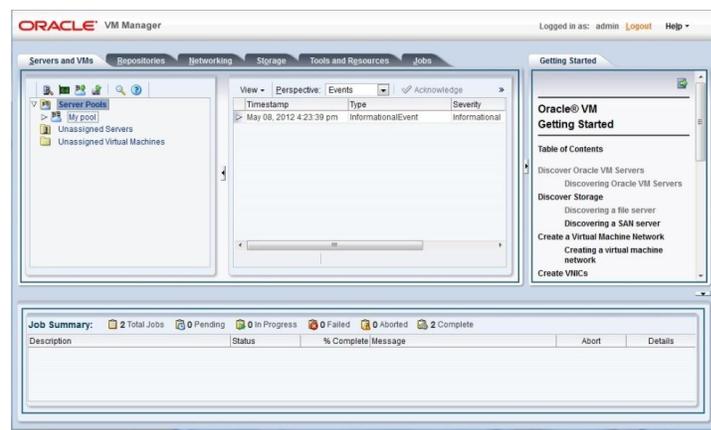


Figure 1. Oracle VM Manager Main Window with Getting Started Guide.

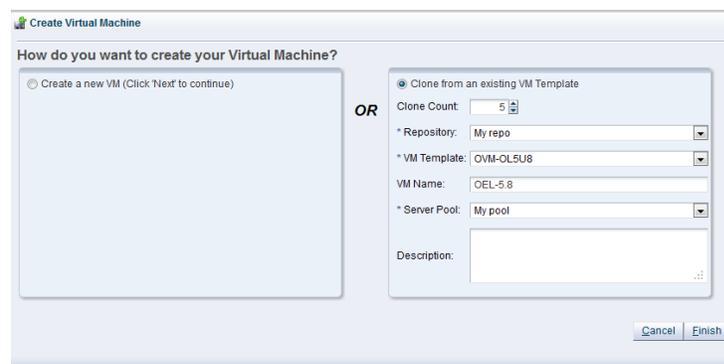


Figure 2. Oracle VM Manager Create and Clone VM.

### Enhanced Availability and Backup Support

Enhanced storage configuration capabilities for better availability, backup and administration support.

Highlighted enhancements:

- **New Move VM Storage Repositories Between Server Pools.** Oracle Cluster File System version 2 (OCFS2) virtual machine storage repositories that are tightly connected to their respective clusters can now be easily removed and rejoin any cluster with ease. The process of moving a storage repository from one server pool to another is streamlined to facilitate faster and easier disaster recovery and more storage agility.
- **New Backup/Restore Access to VM Storage Repositories.** OCFS2 virtual machine storage repositories that are strongly coupled with their respective cluster can now be served as an NFS share to allow easy access to the OCFS2 repository and enable external tools to easily connect and interact with the repository for backup and restore of VMs, Assemblies, Templates and ISOs.
- **New LUN Resizing.** Resizing a LUN will automatically resize the OCFS2 file system in that environment without any manual intervention with the LUN or the file system and additional batch operations further streamlining storage resource management with Oracle VM.
- **New Multipath Boot from SAN.** Oracle VM Server can be installed to perform boot from multipath SAN without requiring any type of local storage enabling administrators to use their enterprise class storage to install the servers and use diskless servers for easier maintenance and better availability.
- **New Support for Jumbo Frames.** Enables administrators to define different maximum transmission unit (MTU) sizes for each one of the bonds and ports on the server. The use of larger frames helps to reduce network overhead and increase throughput in the VM.
- **New Oracle VM Templates.** Availability of new Oracle VM Templates such as Oracle E-Business Suite 12.1.3 applications; Oracle PeopleSoft FSCM 9.1; Oracle Enterprise Manager Cloud Control 12c; Oracle Linux 5.8; Oracle Linux 6.1; Oracle Solaris 11 11/11 add to the existing 100+ templates ready for download. Oracle VM templates are fully pre-configured as an entire stack including OS and application fully tested, production ready and certified from a single vendor.

### Broader range of support for hardware and application workloads

Support for a broader range of hardware and application workloads with Microsoft Server Virtualization Vendor Program (SVVP) Validation of Oracle VM 3 and through the integration of the latest Xen hypervisor.

Highlighted enhancements:

- **New Microsoft Server Virtualization Vendor Program Validation (SVVP).** Oracle VM Windows Paravirtual (PV) drivers 3.0.1 and virtualization implementation have been validated as part of the Microsoft Server Virtualization Vendor Program (SVVP). The program enables Microsoft customers to receive technical support for Windows Server deployed in Oracle VM environments.
- **New Unbreakable Enterprise Kernel update for Oracle VM Server Management domain.** Integration of the latest release of Oracle's Unbreakable Enterprise Kernel release 2 into the Oracle VM Server management domain enables support for larger server hardware with up to 4TB of memory.
- **New Updated Xen Hypervisor.** Oracle VM is updated with Xen hypervisor 4.1.2 and incorporates enhancements for PV drivers to enable support of a broader range of the latest server and storage hardware, giving administrators more flexibility and options in their deployments.

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