



# RED HAT ENTERPRISE VIRTUALIZATION FOR SERVERS: OVERVIEW

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## OVERVIEW

Red Hat Enterprise Virtualization for Servers consists of the following two components:

- **Red Hat Enterprise Virtualization Manager for Servers:** A feature-rich server virtualization management system that provides advanced capabilities for hosts and guests.
- **Red Hat Enterprise Virtualization Hypervisor:** A modern hypervisor based on KVM which can be deployed either as a standalone bare metal hypervisor (included with Red Hat Enterprise Virtualization for Servers), or as **Red Hat Enterprise Linux 5.4** and later (purchased separately) installed as a hypervisor host.

Red Hat Enterprise Virtualization for Servers offers:

- Comprehensive management functionality, including Live Migration, High Availability, Power Manager, System Scheduler, and more.
- Unmatched consolidation ratios and performance
- Lowest cost of ownership among enterprise virtualization platforms.
- Windows and Linux guest support.
- Full compatibility with Red Hat Enterprise Linux and the complete ecosystem of Red Hat partners for virtualization of mission critical applications.

## **RED HAT ENTERPRISE VIRTUALIZATION BRINGS OVER 10 YEARS OF ENTERPRISE LINUX MANAGEABILITY, PERFORMANCE, AND SECURITY TO X86 SERVER VIRTUALIZATION**

Red Hat Enterprise Virtualization features a unique and revolutionary virtualization technology called KVM (Kernel-based Virtual Machine) that converts the Red Hat Enterprise Linux kernel into a virtualization platform. By leveraging the

Red Hat Enterprise Linux kernel, trusted by Fortune 500 and Global 2000 organizations such as NYSE Euronext, The Chicago Mercantile Exchange, DreamWorks, and Swisscom for their mission critical workloads, Red Hat Enterprise Virtualization leapfrogs other virtualization platforms by inheriting all the enterprise grade characteristics of Red Hat Enterprise Linux, including industry leading performance, scalability, security, and the widest ecosystem of supported hardware and enterprise applications.

With up to 95% performance relative to bare metal for real-world enterprise workloads like SAP, Oracle and Exchange, more than 1 million messages per second from a single host with sub 200 micro-second latency, and the highest consolidation ratios of more than 600 virtual machines with enterprise workloads running on a single server, Red Hat Enterprise Virtualization allows even the most demanding application workloads to be virtualized. Red Hat Enterprise Virtualization brings the highest level of guest-to-host and guest-to-guest security isolation by using SELinux security technology developed in conjunction with the US Government, and offers enterprises the ideal platform on which to base large scale virtualization initiatives and internal/private cloud deployments.

Red Hat Enterprise Virtualization Manager for Servers allows enterprises to centrally manage their entire virtual environment – virtual data centers, clusters, hosts, guest virtual servers, networking and storage. Via advanced functionality like High Availability, Live Migration and System Scheduler, Red Hat Enterprise Virtualization helps enterprises significantly reduce their IT operational and capital expenses.

## **RED HAT DELIVERS ENTERPRISE-GRADE VIRTUALIZATION AT A BARRIER-BREAKING PRICE POINT**

Available via a simple subscription model, Red Hat Enterprise Virtualization for Servers provides a 40–80% reduction in cost relative to comparable solutions from VMware and



Microsoft with the same or better feature set. In addition, the subscription model automatically entitles customers to receive newer versions of the software with infrastructural and performance advancements at no additional cost.

### **RED HAT ENTERPRISE VIRTUALIZATION ENABLES INTERNAL AND EXTERNAL CLOUDS, AND POSITIONS YOUR COMPANY FOR THE CLOUD-BASED FUTURE**

With most enterprise grade public cloud infrastructures like Amazon, IBM and Rackspace (subject to review on 10/15/2009 to determine public status of these cloud providers, or additional ones) depending on Red Hat Enterprise Linux and Red Hat Enterprise Virtualization for their cloud substrates, enterprises are protected with their investment in Red Hat Enterprise Virtualization. Red Hat's Certified Cloud Provider program is designed to assure customers of

interoperability and portability of Red Hat Enterprise Virtualization virtual machines across internal clouds built with Red Hat Enterprise Virtualization and the leading public cloud providers.

Industry leading technology, enterprise grade performance, scalability and security at the lowest price point, and the widest ecosystem of hardware vendors, ISVs and cloud providers make Red Hat Enterprise Virtualization the clear platform choice for companies looking to protect and extend their current investments in virtualization technology into the cloud-based future.

### **WHAT NEXT?**

For more information, please go to <http://www.redhat.com/virtualization> or contact your local Red Hat Enterprise Virtualization reseller.