

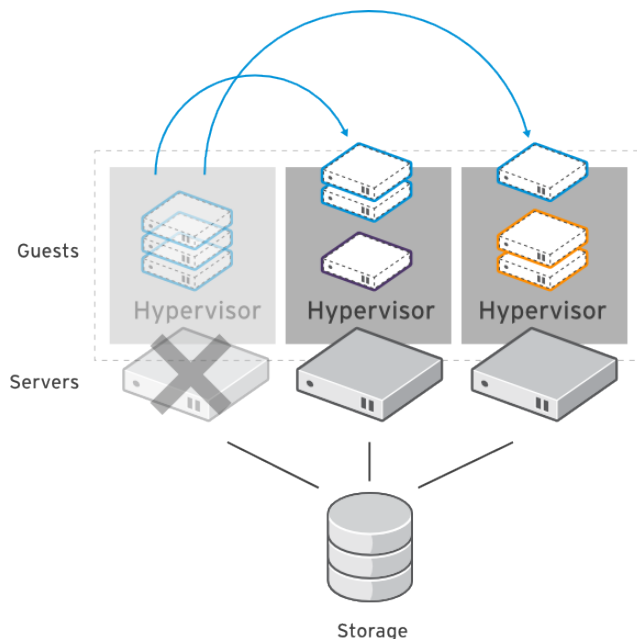


RED HAT ENTERPRISE VIRTUALIZATION: HIGH AVAILABILITY

WHAT IS HIGH AVAILABILITY?

Red Hat Enterprise Virtualization includes *High Availability*, which provides the foundation for building a highly available virtual infrastructure.

Red Hat Enterprise Virtualization High Availability continually monitors the physical host systems. In the event of a hardware failure, any virtual machine configured to be "Highly Available" will be restarted on another host in the cluster.



As well as monitoring physical hosts, each virtual machine is monitored. If a virtual machine failure is detected, it will be automatically restarted on the same host system.

REDUCE DOWN TIME

Red Hat Enterprise Virtualization *High Availability* will automatically restart virtual machines with no user intervention required. Within a matter of seconds, the virtual

machine is restarted and the administrator receives an alert. When the original host system is recovered, *Live Migration* can be used to "fail back" the virtual machine to its original host without any interruption to service.

High Availability is integrated with Red Hat Enterprise Virtualization *System Scheduler* to ensure that the virtual machine is restarted on a host selected based on its current resource utilization and in compliance with any workload balancing or power saving policies.

HIGH AVAILABILITY FOR ALL APPLICATIONS

Due to the high cost and complexity of application failover and clustering solutions usually only the most mission critical applications within an organization are protected. With *High Availability* included with Red Hat Enterprise Virtualization any application deployed within a virtual machine can be protected from hardware and software failures.

STANDARDIZE : REDUCE COMPLEXITY

Many organizations deploy a mixture of high availability solutions using different technologies for each application and often for each operating system. Using Red Hat Enterprise Virtualization, organizations can deploy a single high availability solutions for any application running inside a virtual machine regardless of the operating system : Red Hat Enterprise Linux or Windows Server.

REDUCE COST

Drive costs out of your infrastructure by using Red Hat Enterprise Virtualization High Availability, saving thousands of dollars per server in licensing costs compared to software based high availability solutions.

Red Hat Enterprise Virtualization High Availability uses spare capacity in your cluster for fail-over saving on the cost of dedicated standby hardware.



“SINGLE CLICK” HIGH AVAILABILITY

With Red Hat Enterprise Virtualization High Availability, configuring a virtual machine to be highly available is as simple as clicking a checkbox.

With a single click Red Hat Enterprise Virtualization begins monitoring the virtual machine for failures. Alerts can be configured to notify operations staff and administrations in the case of failures.

Edit Virtual Machine

Template:	Blank
Name:	RHEL5-WWW
Description:	RHEL 5.3 x86_64 web build
Host Cluster:	Default
Default Host:	Auto Assign
Storage Domain:	iscsi-1
Memory Size:	32768 MB
Number of CPU cores:	16
Operating System:	Red Hat Enterprise Linux 5.x
	<input checked="" type="checkbox"/> Highly available

OK Cancel

MORE THAN JUST FAILOVER

Building a highly available infrastructure is more than just monitoring for failure and restarting applications.

Red Hat Enterprise Virtualization is built on top of Red Hat Enterprise Linux, with a proven track record of providing a robust, secure and stable platform.

Red Hat Enterprise Virtualization protects against network failures by using NIC bonding for both improved throughput and failover.

Multipath I/O is used to improve storage throughput and to provide redundancy.

HARDWARE REQUIREMENTS

Red Hat Enterprise Virtualization High Availability requires an out-of-band management interface such as IPMI, Dell DRAC, HP iLO, IBM RSA or BladeCenter for host power management. In the case of a failure these interfaces are used to check the hardware status and physically power down the host to prevent data corruption.

SOFTWARE REQUIREMENTS

Red Hat Enterprise Virtualization High Availability works with Red Hat Enterprise Linux versions 3, 4 and 5 and with Windows Server 2003 and Windows 2008.

High Availability is included within all editions of Red Hat Enterprise Virtualization.