# VMware vCenter Server Heartbeat

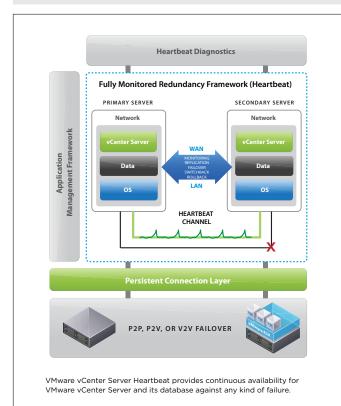
Ensure Availability for the VMware vCenter Server Management Platform

#### AT A GLANCE

VMware vCenter<sup>™</sup> Server Heartbeat delivers high availability for the VMware vCenter Server management platform, ensuring consistent operation of VMware vSphere<sup>™</sup> 4 when VMware vCenter Server is threatened by unplanned or planned downtime.

#### BENEFITS

- Protection for VMware vCenter Server against hardware, operating system, application and network downtime on virtual and physical platforms.
- Deep awareness and proactive monitoring of VMware vCenter Server and all of its components.
- Seamless failover and failback of VMware vCenter Server, including the database and license server.
- Protects VMware vCenter Server in local and remote disaster recovery scenarios.



How is VMware vCenter Server Heartbeat Used in the Enterprise?

With more and more enterprises deploying mission-critical workloads on VMware vSphere, protecting its underlying management platform is quickly becoming a critical requirement. Maintaining high availability for VMware vCenter Server gives customers continuous access to important functions and critical information about their environment. Increasingly, enterprises need a comprehensive, easy-toimplement and easy-to-use mechanism for monitoring, replicating and protecting VMware vCenter Server. While VMware® High Availability (HA) can protect against hardware and OS failures, VMware HA does not protect VMware vCenter Server against network or software failures, nor does it support failover from instances of VMware vCenter Server installed on physical servers.

VMware vCenter Server Heartbeat delivers high availability and disaster recovery for VMware vCenter Server and all of its components – including the database and licensing server—with failover across the LAN or WAN. The software supports physicalto-virtual (P2V), physical-to-physical (P2P) and virtual-to-virtual (V2V) failover, ensuring consistent operation of VMware vSphere when VMware vCenter Server is threatened by unplanned or planned downtime. The software monitors VMware vCenter Server and provides the broadest range of protection against application or operator errors, operating system or hardware failure, or external events.

VMware vCenter Server Heartbeat is easy to install and configure. The software has no hardware configuration dependencies and automatically detects standard VMware vCenter Server components upon installation for instant monitoring and protection.

VMware vCenter Server Heartbeat allows administrators to deliver a highly available, resilient virtual datacenter infrastructure. With VMware vCenter Server Heartbeat, administrators can:

- Protect and monitor VMware vCenter Server availability, minimizing the risk of downtime for vCenter Server and assuring access to critical components such as VMware vMotion™ and VMware Distributed Resource Scheduler (DRS), as well as monitoring and reporting functions that rely on VMware vCenter Server.
- Extend service monitoring and high availability to VMware vCenter Server components or plug-ins, including VMware License Server, VMware vCenter Update Manager and even third-party tools that plug in to VMware vCenter Server.

- Automate failover and failback of VMware vCenter Server and all its components across a LAN or WAN, eliminating costly and complex outages with both seamless failover and failback.
- Protect and recover the VMware vCenter Server database instance, even if it is installed on a separate server from VMware vCenter Server itself.

#### How Does VMware vCenter Server Heartbeat Work?

VMware vCenter Server Heartbeat works to protect VMware vCenter Server in three key ways:

- Replication: VMware vCenter Server Heartbeat continuously replicates information from VMware vCenter Server to a passive standby server for rapid recovery. Data locations, registry entries, license data and databases are all cloned automatically. VMware vCenter Server Heartbeat uses a hidden network channel to maintain connectivity and replicate to a passive secondary server, making sure only the primary server is visible to users.
- Monitoring: VMware vCenter Server Heartbeat uses predictive technology to continually monitor the health of VMware vCenter Server, its database and other components or plug-ins. The software monitors components such as VMware License Server, the vpxd service, VMware vCenter Update Manager, and other critical parts of the management platform. Monitoring can also easily be extended to any plug-ins for VMware vCenter Server.
- 3. Automated recovery: When there is an availability threat, or simply a planned maintenance window, administrators can switchover the VMware vCenter Server and all of its components from the primary server to a secondary server at the click of a button. The entire failover and failback process can also be easily automated based on pre-defined criteria.

### Key Features of VMware vCenter Server Heartbeat

VMware vCenter Server Heartbeat works to protect VMware vCenter Server in three key ways:

 Protects and monitors VMware vCenter Server availability. All components of VMware vCenter Server, including VMware License Server and other plug-ins, are monitored. This minimizes downtime of critical functions such as VMware VMotion and VMware DRS, and protects VMware vCenter Server performance, alerts and events information, keeping it up-to-date even if VMware vCenter Server experiences an outage.

- Automated failover and failback of VMware vCenter Server.
  Failure detection and the failover process is embedded so manual recovery and failover process definitions are a thing of the past. Administrators can also schedule maintenance windows and maintain availability by initiating a manual switchover to the standby server.
- Protects and recovers the VMware vCenter Server database. VMware vCenter Server Heartbeat protects critical configuration, inventory and other information stored in the VMware vCenter Server database, even if the database is installed on a separate server.

## **Find Out More**

For information or to purchase VMware products, call 1-877-4VMWARE (outside of North America dial +1-650-427-5000), visit http://www.vmware.com/products, or search online for an authorized reseller. For detailed product specifications and systems requirements, please refer to the VMware vCenter Server Heartbeat install and configure guide.

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VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.mware.com

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