

# VMware vCenter Server Heartbeat

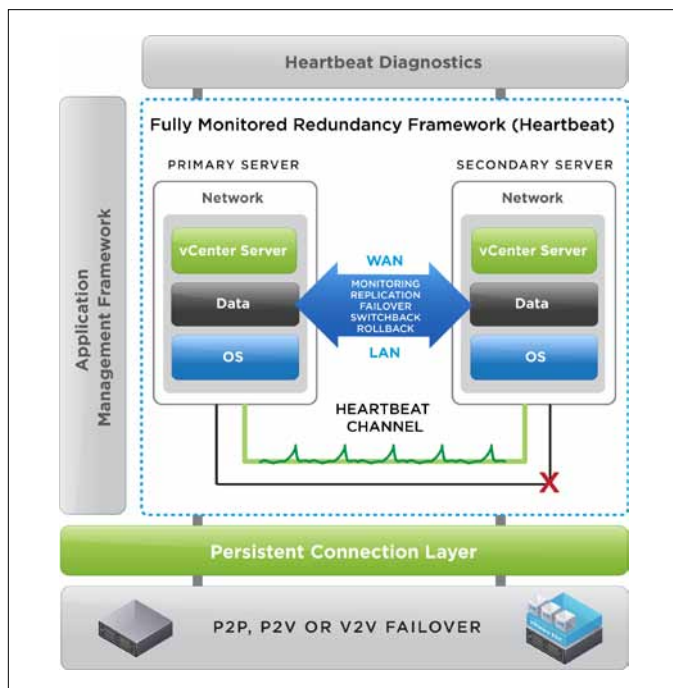
Ensure Availability for the VMware vCenter Server Management Platform

## AT A GLANCE

VMware vCenter™ Server Heartbeat delivers high availability for VMware vCenter Server, protecting virtual datacenters and cloud infrastructures from downtime caused by a broad range of problems.

## KEY BENEFITS

- Protect vCenter Server against all types of planned and unplanned downtime—hardware, operating system, application or network-related issues—on virtual and physical platforms.
- Get ahead of possible outages or problems that may impact vCenter Server by proactively monitoring all of its components.
- Ensure rapid and seamless failover and failback of vCenter Server, including the database and license server.
- Preserve the mission-critical functionality of virtual and cloud infrastructure.



VMware vCenter Server Heartbeat provides continuous availability for VMware vCenter Server and its database against any kind of failure.

## What is vCenter Server Heartbeat?

vCenter Server Heartbeat provides unified protection for vCenter Server and its components against the broadest range of potential outages—from application, operating system, hardware and network failures to external events—regardless of whether vCenter Server is deployed on a physical or virtual machine. It is a solution for virtual infrastructure managers who need to protect vCenter Server against all types of potential planned or unplanned downtime. vCenter Server Heartbeat is an easy-to-use solution that eliminates the complexity of clustering. Unlike most replication solutions, vCenter Server Heartbeat expands and extends availability for vCenter Server, VMware View™ and other critical components of the virtual infrastructure across the LAN or WAN.

## How Does vCenter Server Heartbeat Work?

### Replication

vCenter Server Heartbeat continuously replicates information from vCenter Server to a passive standby server for rapid recovery. Data locations, registry entries, license data and databases are all cloned automatically. vCenter Server Heartbeat uses a hidden network channel to maintain connectivity and replicate changes to a passive secondary server, making sure only the primary server is visible to users.

### Monitoring

vCenter Server Heartbeat uses predictive technology to continually monitor the health of vCenter Server, its database, and other components or plug-ins, including VMware View Composer. The software monitors components such as the license server, the vpxd service, VMware vSphere® Update Manager and other critical parts of the management platform. Monitoring can also easily be extended to plug-ins for vCenter Server.

### Automated Recovery

When there is an availability threat, or simply a planned maintenance window, administrators can switch over 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 is also easy to automate according to predefined criteria.

## How is vCenter Server Heartbeat Used?

With more and more enterprises deploying mission-critical workloads on VMware vSphere, enterprises need a comprehensive, easy-to-implement and easy-to-use mechanism for monitoring, replicating and protecting vCenter Server. Maintaining high availability for vCenter Server gives customers continuous access to important functions and critical information about their virtual and cloud infrastructure. vCenter Server Heartbeat extends the protection available in VMware vSphere High Availability (HA), adding protection against network, software and entire site failures. vCenter Server Heartbeat also supports failover for instances of vCenter Server installed on physical servers.

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

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

## Key Features

- **Proactive monitoring and protection for vCenter Server**
  - vCenter Server Heartbeat monitors availability of all components of vCenter Server at the application and service layer, and it can restart or restore individual services. It uses a passive server instance to provide rapid failover and failback of vCenter Server and its components, such as Update Manager or the License Server, to a standby instance either onsite or in a remote datacenter.
- **Protection for the vCenter Server database**
  - The software monitors and protects the Microsoft SQL Server database associated with vCenter Server, even if it's installed on a separate server.
- **Improved integration with vCenter Server – NEW**
  - Plug-in provides monitoring and management of vCenter Server Heartbeat from the vSphere Client. vCenter Server Heartbeat tasks and alarms are registered in vCenter and displayed in the vSphere Client.
- **Enhanced architecture – NEW**
  - Active and standby nodes can be reached over the network at the same time, so both can be patched and managed.
- **Real-time replication of all relevant application data**
  - vCenter Server Heartbeat provides lossless recovery from outages by using data replication to keep the passive server up to date with any changes in real time.
- **LAN or WAN failover capability**
  - The software can protect vCenter Server against both local and site outages. Smart bandwidth compression and split-brain avoidance technology facilitate WAN failovers.
- **Monitoring and protection for View Composer – NEW**
  - vCenter Server Heartbeat can monitor and protect View Composer, enabling IT administrators to maintain user productivity by ensuring the availability of virtual desktops.
- **Easy-to-use interface**
  - A new, intuitive Web interface in vCenter Server Heartbeat makes it easier to manage multiple instances of the software.

## Find Out More

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

