



VMware vCenter Server High Availability

To meet rapidly changing business environment, organizations are looking for ways to improve operational efficiency, reduce costs, increase revenues and maintain their competitive edge. Virtualization helps you reduce your investments in IT expenditure by consolidating servers, reducing physical space and power consumption in data centers. However, the use of Virtualization technology presents its own challenges, including manageability, data protection, and business continuity.

CA ARCserve® High Availability (formally known as CA XOssoft™ High Availability) ensures your systems, applications, and data are always available. CA ARCserve High Availability provides VMware vCenter Server high availability to help ensure your VMware vCenter Server environment is protected and available; it provides central management services for configuring, provisioning and managing distributed virtual IT environments. CA ARCserve High Availability solution for VMware vCenter Server brings together multiple VMware ESX/vSphere hosts and combines their physical resources for more effective utilization.

OVERVIEW

CA ARCserve High Availability provides High Availability support to VMware vCenter Server which manages your whole VMware Virtual environment. The CA ARCserve High Availability VMware vCenter Scenario auto-configures the Replica server with identical settings as that of the Master vCenter Server.

CA ARCserve High Availability supports local and distributed deployment of VMware vCenter server. It protects the different components of VMware vCenter such as vCenter Server, vCenter Database and Virtual Infrastructure Web access.

CA ARCserve High Availability generates reports on the replication and synchronization processes; lets you store, view from the Report Center, send email or trigger script

BENEFITS

- Provides integrated application-aware Replication and High Availability for the VMware vCenter Server management application.
- Automatically detects the different VMware vCenter Server components on the Master server; making discovery and protection easy for customers.
- Supports all major releases of VMware vCenter application including latest vSphere vCenter 4.0 and 4.1.
- Enables you to recover lost data from a certain event or point in time; uses checkpoints and user-defined bookmarks to roll corrupt data on the Master back to a time before corruption occurred.
- Auto-configures the replica server with identical settings as that of the Master vCenter Server.

Install/Configure

Installation of CA ARCserve High Availability is straightforward and wizard-driven; you need to install the CA ARCserve High Availability Engine on every vCenter Server. CA ARCserve High Availability requires you to install the vCenter Server components on the Replica server to be identical to that of the Master server; ensure the Replica has the same database type and folder structure as the Master server.

CA ARCserve High Availability will not discover database files if database server used by vCenter is on a remote machine. User need to protect remote database using another CA ARCserve High Availability Scenario (SQL or Oracle HA Scenario based on which database vCenter server is using).

In switchover settings, use “Move IP” as network redirection mode and set “Managed IP” of vCenter same as Move IP. This ensures that Managed IP is moved to Replica vCenter Server after Switchover so that Replica vCenter Server manages ESX servers after switchover without manually reconnecting to them.

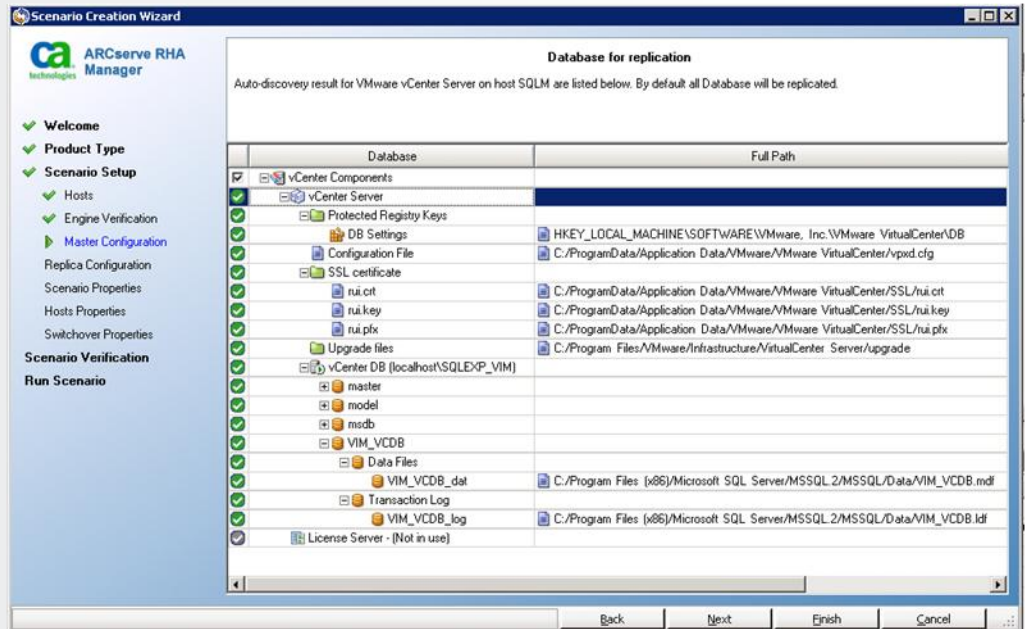
Create High Availability Scenario for VMware vCenter

CA ARCserve High Availability Manager provides a pre-defined server type scenario for VMware vCenter Server in the scenario

creation wizard. You can create Replication or a High Availability Scenario for your vCenter Server.

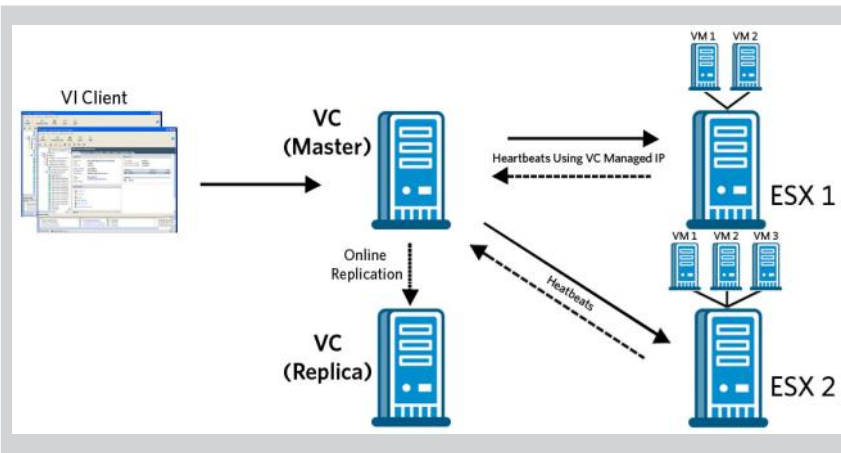
During scenario creation, CA ARCserve High Availability auto-discovers the vCenter database, configuration files and important registry settings on vCenter Master server.

- Database files (most of environment state)
 - Filter non-vCenter DB (For SQL Server)
- DB settings (DB password)
 - Based on “registry-sync” mechanism
- vCenter Configuration file (timeout, managed IP)
- SSL certificate (used to encrypt password)
- Upgrade files (interaction with ESX)
- License files



How High Availability for VMware vCenter server works

CA ARCserve High Availability continuously monitors the Master server on a regular basis, by default every 30 seconds, to see if it is alive. If all checks fail throughout a configured timeout period (by default, 5 minutes), the VM on the Master server is considered to be down. Then, depending on the HA scenario configuration, CA ARCserve High Availability sends you an alert or automatically initiates a switchover.



SWITCHOVER

In the event of a failure of the vCenter Master server, CA ARCserve High Availability performs a switchover. You can define how you want the switchover to be initiated, either manual or automatic. The database and associated services come up on the replica server, all the clients and the ESX/vSphere server will be redirected to the active replica vCenter server.

SWITCHBACK

After a Switchover is performed, you may need to initiate a Switchback operation to reverse the server roles. Run the Backward scenario to replicate the data that has changed during the time the original Master server is inoperative. During switchback, vCenter scenario will move the managed IP back to Master vCenter server so that ESX/vSphere servers will communicate to active Master vCenter server.

Frequently Asked Questions

Q: What is VC managed IP and why we need to set it on vCenter Server?

A: Each ESX server can be managed by only one vCenter Server, if an ESX server is connected by another vCenter Server, it will automatically disconnect from original vCenter Server. ESX server uses this Managed IP to periodically send Heartbeats to vCenter Server. If vCenter Server cannot receive heartbeat from ESX server, vCenter Server cannot manage the ESX server without “re-connect”. CA ARCserve High Availability moves this managed IP to replica vCenter server during switchover.

Summary

CA ARCserve High Availability is a powerful, easy-to-use product that provides integrated application-aware Replication and High Availability for all VMware virtual Machines as well as the VMware vCenter Server management application. CA ARCserve High Availability supports both Stand-Alone and Distributed deployments of vCenter Server; auto-configures the replica server with identical settings as that of the Master vCenter Server to make protection and discovery of your VMware vCenter Server environment easy.

For more information about the CA ARCserve Family of products, please visit arcserve.com/products or test drive our products at arcserve.com/software-trials.