



Replication & High Availability

Linux & UNIX

CA ARCserve® Replication and CA ARCserve® High Availability provide data protection and high availability for Linux and UNIX environments. CA ARCserve Replication provides continuous and periodic LAN/WAN replication for onsite and offsite data protection and disaster recovery and includes data rewind for CDP. CA ARCserve High Availability provides all the features of CA ARCserve Replication and adds server monitoring, automated and push-button failover and push-button failback for organizations that need to meet more demanding service level agreements (SLAs). Both products offer a unified, web-based management console so you may deploy, manage and maintain all your Windows, Linux and UNIX servers from a single pane of glass.

OVERVIEW

First the Master server and Replica server are synchronized. After synchronization, only real time byte-level changes are sent across the LAN or WAN. When an event causes loss of data on the primary server, the data can be restored from the Replica. The recovery process is in fact a synchronization process in the reverse direction - from a Replica to the Master. They enable you to either recover all lost data from the Replica to the Master, or to recover data only from a certain action or point in time. The other option, called Data Rewind, is similar to an undo action. It is useful in cases in which corrupted data on the Master was replicated to the Replica, and you want to restore the data to its previous state before the corruption occurred. The rewind process is done using time-stamped check-points and user-defined bookmarks.

BENEFITS

- Replication – Continuous and periodic replication to a secondary server ensures that the very latest data is available in the event of a failure.
- Automated & Push-button Failover – Fully automated failover of Server and Application to a Replica server avoids the complex and error-prone process of manual failover to ensure truly minimal time to recovery (RTO), even after the loss of an entire site.
- UNIX/Linux High Availability
 - Network resource management on UNIX/Linux
 - Service management on UNIX/Linux
 - Oracle Service management

Install/Configure:

CA ARCserve Replication and High Availability installation bundle consists of packages for all the supported platforms of Unix/Linux and a common installation scripts. CA ARCserve Replication and High Availability engine installation and upgrade process is very simple and does not require any Server reboot.

High Availability New Features

UNIX High Availability fileserver

- Supports all platforms that Replication Scenario supports in R16
- Supports Network File Sharing (NFS) as root directory.

Oracle High Availability on UNIX/Linux

- Supports all versions that Oracle DR supports (10g/11g)
- No integrated DB console service (customize “Action upon success” script to support it)

Network resource management

- Supported Network redirections
 - Switch Computer Name
 - Move IP
 - Redirect DNS

UNIX & Linux Hard Link Support

- Concept – Hard Link
 - Have the same inode number within a file system.
 - Are regular files: share the same disk data.
 - Have a different path.
 - Operation on one hard link file has the same result to other hard linked files.
 - All links of the same file must be protected in one scenario. If not:
 - Links in different scenarios – After sync, hard links become normal files.
 - Link not in scenario – Data change cannot be captured
 - After scenario starts, Master fails to create the hard link between cross root directories.
 - Different root directories are different File Systems

Benefits/Enhancements

- Provides UNIX/Linux replication and high-availability extending the Windows support for heterogeneous environments.
- Brings the complementary real-time replication and traditional backup technologies together in a single scenario.
- Integration with CA ARCserve Backup makes management easier and simpler
- The main Unix/ Linux HA GUI and process, including Wizard creation, pre-run verification, switchover, etc., are almost the same as that on Windows. This feature parity between platforms will benefit users who are familiar with scenarios on Windows and will keep the product functions consistent.
- UNIX and Linux file systems may contain “hard links” to files, representing multiple entry points for the same pieces of data. By supporting hard links during synchronization and replication we can better ensure that the file type and data content will be preserved as-is on the Replica servers. This ensures that after synchronization the hard link files on master will also be represented as hard linked on replica. When “Data Rewind” is enabled, ARCserve Replication and High Availability captures the hard link events during replication so that when a hard link file is created a corresponding “undo journal event” is also created.

Frequently Asked Questions

Q: Is cross-platform Oracle HA (High Availability) supported between Windows and UNIX/Linux?

A: No.

Q. Does UNIX HA (High Availability) support BIND DNS servers on UNIX, Linux, and Windows platforms?

A. Yes. but only BIND 9 and higher versions are supported.

Q. Does ARCserve Replication and High Availability support UNIX & Linux Hard Links?

A. Yes

Q. When is a hard link removed?

A. When the link count is zero.

Summary - UNIX/Linux Platforms Supported

- **Red Hat Enterprise Linux Server (RHEL)** 4, 5 (x86, x86_64), 5.5 & 6.0.
- **SuSE Enterprise Linux Server** 9, 10 & 11 (x86, x86_64)
- **IBM AIX** 5.2 (32bit, 64bit), 5.3 (min TL04 is required) (32bit, 64bit), 6.1 (64bit) & 7.1
- **Sun Solaris** 9 (32bit, 64bit), 10 (SPARC) (64bit), 10 (x86_64) & 11

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.