



Offline Synchronization

CA ARCserve® Replication and CA ARCserve® High Availability, formerly known as CA XOSoft™ Replication and CA XOSoft™ High Availability provides continuous data protection and high availability for systems, applications, and data.

CA ARCserve® Replication and CA ARCserve® High Availability significantly expands product platform coverage, application support and core capabilities, delivering better control and greater protection, helping you better address your growing and changing data recovery needs.

Offline synchronization is designed for users who need to protect large Windows-based data sets or databases, but are restricted to a low bandwidth connection to transfer data during the initial deployment; or after repair or replacement of a primary file or application server.

OVERVIEW

The Offline Synchronization process is simple and fast

- Leverages VSS snapshot to removable media
- Copy applied to replica server
- Verification of data once it is in place
- Changes applied to copy to bring it up to date
- Replication then resumes once data is in sync

BENEFITS

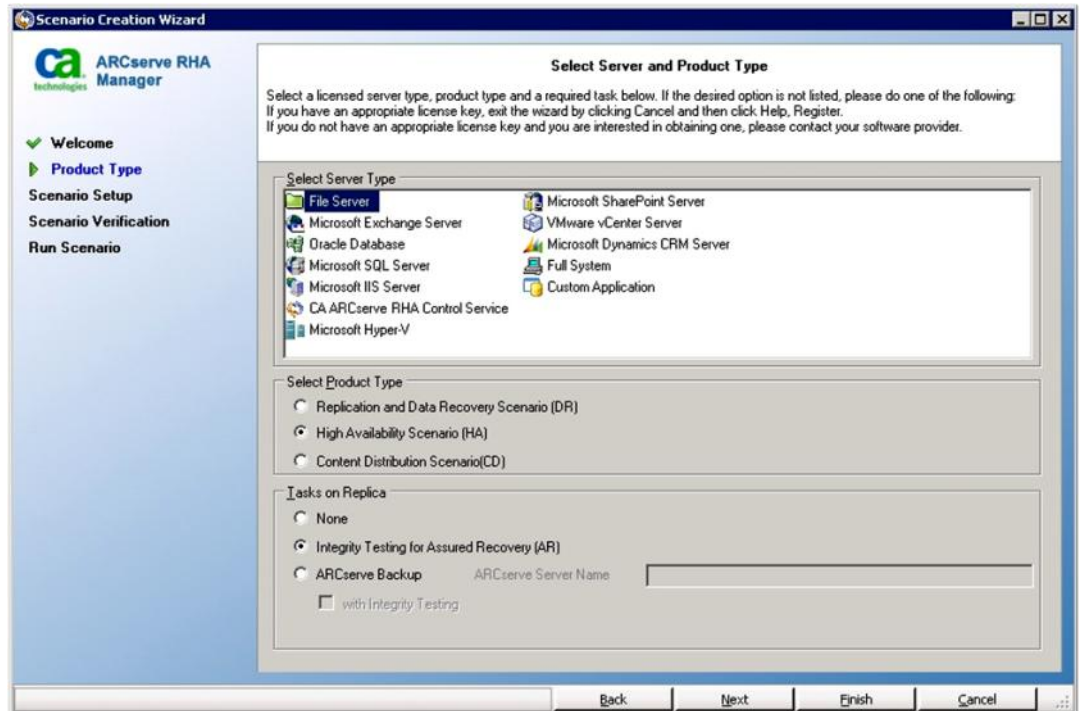
Addresses the synchronization of large data sets and databases over limited bandwidth connections.

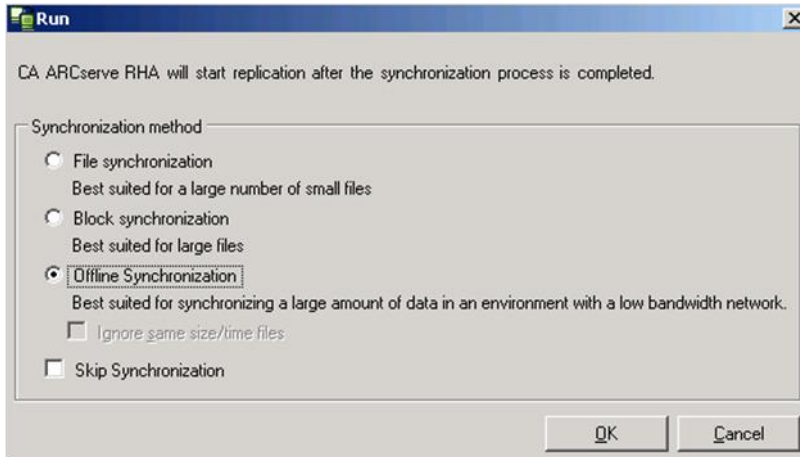
- Minimizes the time to transfer data
- Minimizes failures & transfer space issues
- Avoids network resource constraints
- Dramatically shortens time-to-protection

Install/Configure

CA ARCserve Replication and CA ARCserve High Availability Offline Synchronization is installed as a part of the base product.

From the CA ARCserve RHA Manager console, create a scenario for the type data to be replicated.





- Select the scenario to Run.
- From the Run dialog box, select “Offline Synchronization”
- This will skip the File or Block synchronization, building a VSS snapshot on the scenario master node.
- The client will use that VSS snapshot to transfer to the replica node(s).
- During the Offline Synchronization process, all the changes will be sent to the replica node(s), but will only be applied once the Offline Synchronization completion has been triggered by the client.

How Offline Synchronization Works

With Offline Synchronization, the administrator copies a VSS Snapshot from the Master server to a removable media and then synchronizes it with Replica server without actually replicating any data over the LAN or WAN. It enables pre-loading of the replica data using a copy on tape or portable disk or any other methodology.

The Master server tracks all changes while the offline synchronization process is run. Changes are replicated to the Replica server and held until the Offline Synchronization process is complete. No further synchronization is required and replication is already up to date. This process avoids having to run a block-level compare of the Master and Replica servers.

Administrators can validate the offline synchronization copy with a difference report. This process will compare the snapshot on the Master to the copy on the Replica and confirm that it is ready to begin replication.

Frequently Asked Questions

- Q: Do all the CA ARCserve Replication and High Availability Scenario types support Offline Synchronization?**
- A: Yes almost all the file and application scenarios supports Offline Synchronization except Full System scenarios, scenarios with scheduled replication and scenarios in which the Master Server is a UNIX/Linux host.
- Q: The Replica node was rebooted while the Offline Synchronization scenario was running. The scenario stopped and I had to manually restart the scenario. Is that normal?**
- A: Yes. Should the Master or Replica node be rebooted before the Offline Synchronization process has finished, the scenario will automatically stop. This ensures that the VSS snapshot is consistent.
- Q: I have a large amount of SQL Server data to be replicated over the WAN. A Block Level synchronization scenario takes many days to complete, then the changes are replicated, resulting in days of activity where there is no consistency of the data set. Will Offline Synchronization mode be any better?**
- A: Yes. Re-run the scenario, but select the ‘Offline Synchronization’ mode. This creates a VSS snapshot that is then used to be copied to the replica node. The copy process can be by whatever media transfer is available – USB or solid state drives; DVD; backup tape media; transported RAID disk array. Once the VSS snapshot has finished copying to the replica node, then select Offline completed for this scenario. All changes made to the data set while copying are then completed on the replica and the data set is now up to date.
- Q: How can I tell if there the data created on the master for the VSS snapshot copy, is the same as what I have copied to the Replica node?**
- A: Use the Difference Report feature available for Offline Synchronization. This will validate if the data on the replica is identical to the master or not.

Summary

CA ARCserve Replication and CA ARCserve High Availability provide Offline Synchronization as an efficient and effective alternative to synchronizing the complete data set over the local area network (LAN) or wide area network (WAN), not found in other solutions.

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.