TECHNICAL GUIDE: CA ARCserve® Backup

Synthetic Full Backup

CA ARCserve Backup is a comprehensive, distributed storage management solution for distributed and multiplatform environments. The application can back up and restore data from all the machines on your network, (including machines running Windows, UNIX, and Linux) using optional client agents. CA ARCserve Backup offers control from one management console. It can support small-scale and large-scale enterprise environments comprising of one machine or many, across different platforms and organizations.

CA ARCserve backup Synthetic Full backup provides the ability to perform file level incremental backup (only backing up what has changed) forever for Windows file system, using the CA ARcserve backup Client Agent for Windows. CA ARCserve Backup Synthetic Full Backup will synthesize all incremental sessions and their parent (synthetic) full session to a new synthetic full backup (SFB) session, providing the same protection level as if they had performed a full backup every day.

CA ARCserve Backup Synthetic Full Backup Option also provides you with scheduling options and rotation schemes to help you establish an automatic backup strategy. You can specify a D2D2T synthetic full backup job using a rotation scheme that suits your environment.

OVERVIEW

CA ARCserve Backup enables you to perform file level incremental forever backup. CA ARCserve will synthesize the recent incremental/differential backup sessions and the last (synthetic) full backup session to a new SFB (synthetic full backup) session.

CA ARCserve Backup Synthetic Full Backup option lets you submit scheduled backups of source groups and computers, also submit Normal backups with staging and deduplication backups that consist of your first (parent) full backup and all subsequent incremental backups combined into one session

CA ARCserve Backup supports synthetic backup for Disk staging jobs (D2D2T). For Disk Staging, final destination can be Tape, Cloud and Disk devices.

BENEFITS

- Lets you avoid network congestion and excessive media consumption, faster than full backups.
- Lets you migrate synthetic full backup sessions to tape, cloud, and disk devices using D2D2T.
- Supports Point-in-Time recovery, and disaster recovery to recover data.
- Lets you specify the synthetic schedule for synthetic full backups.
- Synthesizes incremental sessions to a new Synthetic Full Backup session.
- Generate a real full backup based on synthetic policy for data assurance

Install/Configure

Installation of CA ARCserve Backup is simple, the installation wizard is an interactive application that lets you install CA ARCserve Backup on local and remote systems with ease. The CA ARCserve Backup Synthetic Full Backup option is installed with the Base product. To perform synthetic full backup jobs, you must install and license CA ARCserve Backup Agent for Open Files on the computers that you want to back up. If you do not install and license the agent, CA ARCserve Backup converts synthetic full backups to regular backups, and creates a warning message in the Activity Log.

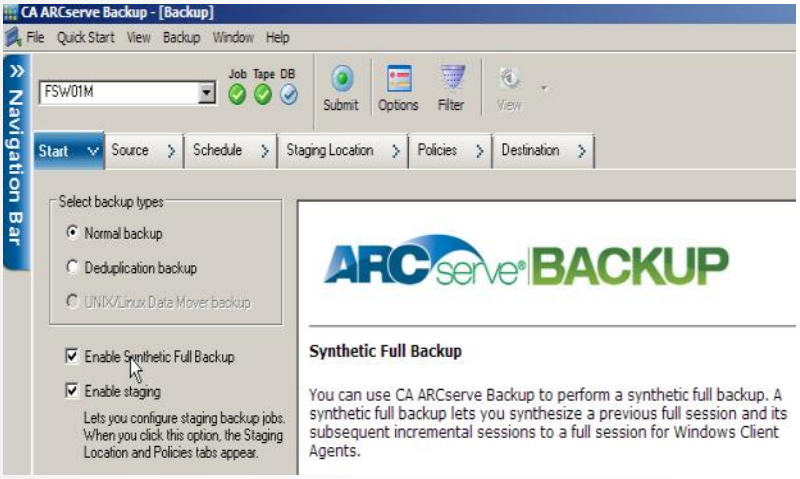
You can access Synthetic Full Backup from the CA ARCserve Backup Manager UI, select the Backup Manager from either the Home page or form the Quick Start drop down menu. Then select “enable Synthetic Full Backup” from the Start tab

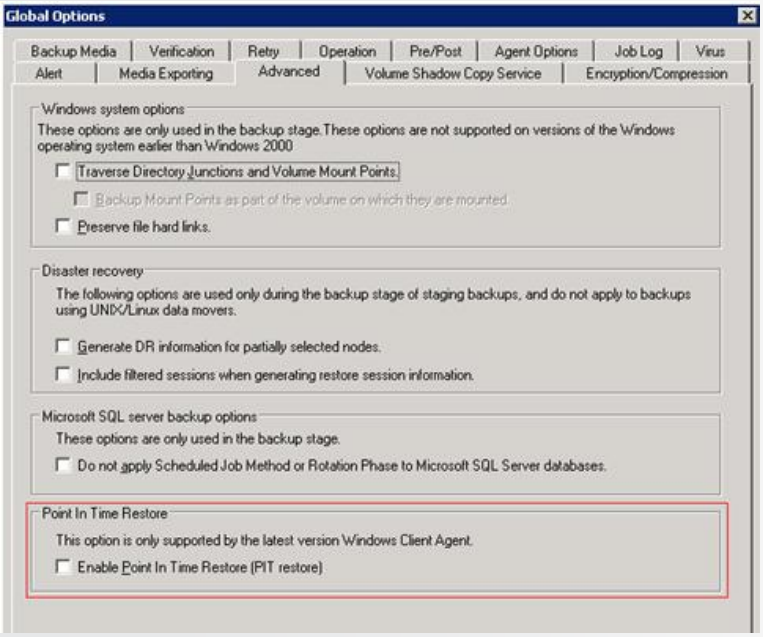
How Synthetic Full Backup Works

CA ARCserve Backup Synthetic Full Backup option lets you synthesize a previous full session and its subsequent incremental sessions to a full session for Windows Client Agents, you can submit Normal backups with staging and deduplication backups that consist of your first full backup and all subsequent incremental backups combined into one session.

CA ARCserve Backup lets you specify a schedule or submit on-demand synthetic full backups; you can define when to execute synthetic full backup jobs and specify the schedule for real full backup jobs, or submit an on-demand synthetic full backup job even though it is not a scheduled synthetic full backup day.

On the synthetic full backup day, if some incremental sessions finished but other incremental sessions failed, a normal makeup job for the failed client agent is submitted. A data synthetic job for synthesizing all finished sessions is also submitted. If the makeup job for the failed client agent is finished, it creates the incremental sessions for the failed client agent, and then submits another data synthetic job for synthesizing the failed client agent.





CA ARCserve Backup Synthetic Full Backup option also lets you:

- Allow scans of synthetic full backup sessions for data assurance.
- Migrate synthetic full backup sessions to tape, cloud, and disk devices using D2D2T.
- Perform point-in-time restores.
- Use the disaster recovery processes and point-in-time restores to recover data. CA ARCserve Backup lets you perform a disaster recovery using a synthetic full backup session without referring to the previous full or incremental sessions.

Frequently Asked Questions

Q: Do I need license for the CA ARCserve Backup Synthetic Full Backup feature?
A: No, Synthetic Full Backup is included with the base product.

Q: Is Synthetic Full Backup supported for the UNIX/Linux and MAC OS Client Agents?
A: No, Synthetic Full Backup only supports Windows Client Agent.

Q: Can I use my de-duplication device with Synthetic Full backup?
A: Yes, Synthetic Full Backup supports de-duplication devices and tape libraries/drives.

Q: Can I backup and use Synthetic Full Backup directly my cloud device?
A: No. Synthetic Full Backup does not backup directly to the cloud. Instead, Synthetic Full Backup will migrate the Synthetic full backup sessions to disk/ tape/cloud devices.

Summary

CA ARCserve backup Synthetic Full backup provides the ability to perform file level incremental backup forever for Windows file system, using the CA ARCserve backup Client Agent for Windows. CA ARCserve Backup Synthetic Full Backup will synthesize all incremental sessions and their parent (synthetic) full session to a new synthetic full backup (SFB) session, thereby drastically reducing the backup times as well as storage footprint while at the same time achieving the same data security and recoverability as with a normal full backup.

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.