



Intelligent Block Level Incremental Backup

CA ARCserve® D2D tracks data changes on a machine at the block level and then backs up only those changed blocks in an incremental fashion. As a result, CA ARCserve D2D lets you perform frequent backups (as frequently as every 15 minutes), thereby reducing the size of each incremental backup and providing a more up-to-date backup. CA ARCserve D2D also provides the capability to restore files/folders and applications, and perform bare metal recovery from a single backup.

OVERVIEW

CA ARCserve D2D lets you perform frequent and periodic block level backups of local volumes. These backups can be stored on either an internal drive, an external drive, or on a NAS network drive. To avoid a continuous and never-ending backup cycle, the volume being backed up cannot also be specified as the backup destination. CA ARCserve D2D provides the capability to perform full, incremental, or resynchronization type backups.

The basic process for how CA ARCserve D2D works is simple. When you initiate a backup (either as scheduled or manually launched), CA ARCserve D2D captures a block-level VSS snapshot image of your machine. During this block-level backup process, CA ARCserve D2D not only captures the data, but also creates a catalog containing all information related to the operating system, installed applications, configuration settings, necessary drivers, and so on. When required, you can then restore this backed-up image to recover your data or your entire machine. .

BENEFITS

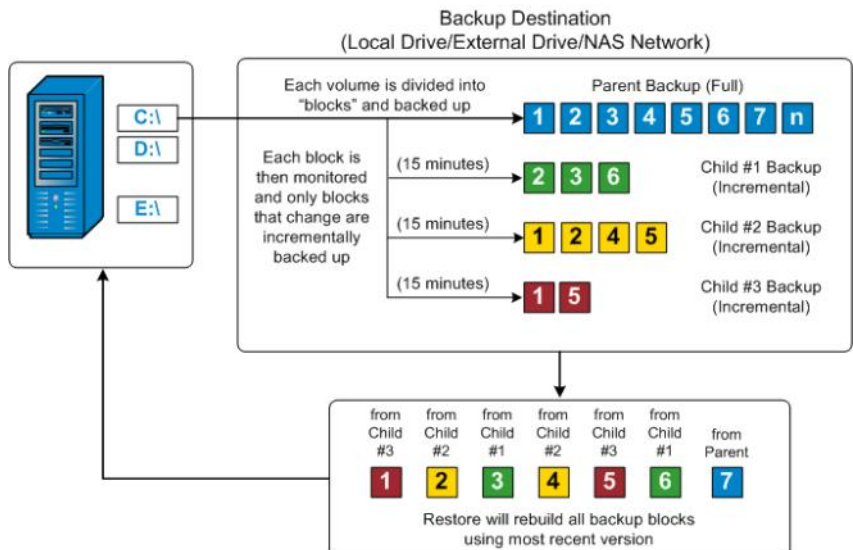
CA ARCserve D2D provides the following features:

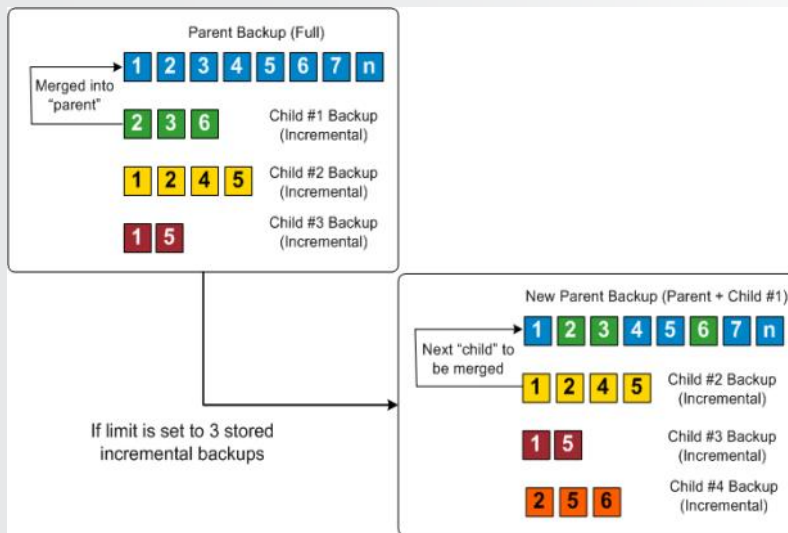
- Backup Data
 - CA ARCserve D2D lets you perform full, incremental, or verify type backups.
- Block Level Incremental Backups
- Incremental Backups Forever
- Application Consistent Backups
- Ad Hoc Backups
- Backup Status Monitoring
- Restore Data
 - File-Level Restore
 - Bare Metal Recovery
- Disk Resizing

Block Level Incremental Backups

When invoked (either as scheduled or manually initiated), CA ARCserve D2D divides the specified volume into a number of subordinate data blocks that are then backed up. The initial backup is considered the "parent backup" and will be a full backup of the volume to establish the baseline blocks to be monitored. After the initial full backup is performed, a VSS snapshot is created and an internal flash driver then monitors each block to detect any changes. As scheduled, CA ARCserve D2D incrementally backs-up only those blocks that have changed since the previous backup. CA ARCserve D2D allows you to schedule the subsequent block-level incremental backups ("child backups") as frequently as every 15 minutes to provide up-to-date backup images.

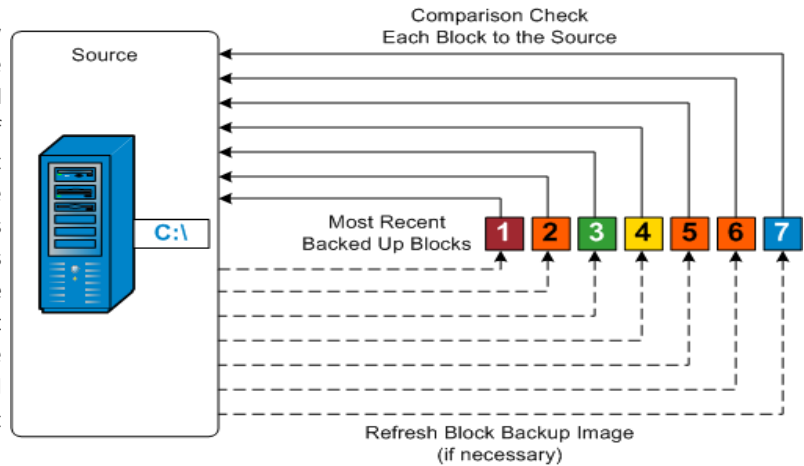
If you need to restore the volume information, CA ARCserve D2D will then locate the most recent backed up version of each block and rebuild the entire volume using these most current blocks.





If left alone, the incremental backups would continue, as often as 96 times each day. These periodic backups will accumulate a large chain of backup blocks to be monitored each time a new backup is performed, and also require added space to store these ever-growing backup images. To minimize this potential problem, CA ARCserve D2D allows you to set a limit for the number of incremental child backups to be stored. When the specified limit is exceeded, CA ARCserve D2D will merge the earliest (oldest) incremental child backup into the parent backup to create a new baseline image consisting of the "parent plus oldest child" blocks. This cycle of merging the oldest child backup into the parent backup will repeat for each subsequent backup, allowing you to perform incremental backups forever, while maintaining the same number of stored (and monitored) backup images.

Every so often (as scheduled or when manually initiated), CA ARCserve D2D can perform a verify type backup to provide a confidence check of the stored backup image and resynchronize that image if necessary. A verify type backup will look at the most recent backup of each individual block and compare the content and information to the source. This comparison verifies that the latest backed up blocks represent the corresponding information at the source. If the backup image for any block does not match the source (possibly because of changes in the system since the last backup), CA ARCserve D2D will refresh (resynchronize) the backup of the block that does not match.



Frequently Asked Questions

- Q: What is the highest frequency of backup?
 A: CA ARCserve D2D can perform a backup as often as 96 times each day.
- Q: Is there a possibility to limit the number of incremental backups stored on disk?
 A: Yes, when the specified limit is exceeded, CA ARCserve D2D will merge the earliest (oldest) incremental child backup into the parent backup to create a new baseline image consisting of the "parent plus oldest child" blocks.

Summary

CA ARCserve D2D provides the following backup features:

- Lets you perform different types of backup jobs, such as full, incremental, or verify.
- Protects all volumes of your machine (except if the volume contains the backup destination).
- Lets you set/change backup schedules (or immediately initiate a customized backup).
- Lets you remotely manage several machines (one at a time).
- Lets you perform backups from both CA ARCserve D2D and CA ARCserve Backup simultaneously.
- Provides a system tray monitor to display status/notification information and perform quick action.

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.