



Bare Metal Restore

Bare Metal Restore (BMR) is the process of rebuilding a computer after a drive failure, system crash or total site loss. Bare Metal Restore offers a very fast way to recover a crashed server to the same or dissimilar hardware. It simply paints the picture of the original drive back onto the new drive and restarts the system – reducing a process that can potentially take as much as 36 hours, to just minutes. CA ARCserve® D2D will restore a computer system from "bare metal", that is, without any previously installed software and it allows recovery to dissimilar hardware taking into account any hardware differences.

OVERVIEW

CA ARCserve D2D allows you to perform Full, Incremental, or Verify type backups at a Block Level and Backs up only the changed blocks within a file. It lets you restore individual files/folders, applications and the full Machine using a Bare Metal Recovery process.

CA ARCserve D2D allows you to backup to a local USB drive or a local or remote network share. You can store backups of multiple machines on a single network share destination.

Bare metal restore brings back all the data in a single pass including installed applications, registry, Active Directory, system information, configuration settings, necessary drivers, security and anything else that was residing on the original drive.

BENEFITS

- CA ARCserve D2D lets you backup and recover from a local drive or from any network share.
- The backed up machine can be restored to similar hardware or even a virtual machine.
- Reduces recovery times from days to minutes.
- Flexibility to restore individual files/folders, volumes, applications and Bare Metal Restore - all from a single pass backup.
- CA ARCserve D2D allows you to resize the disk partition during the recovery process which helps to expand and restore to bigger disks if necessary.

Preparing for BMR

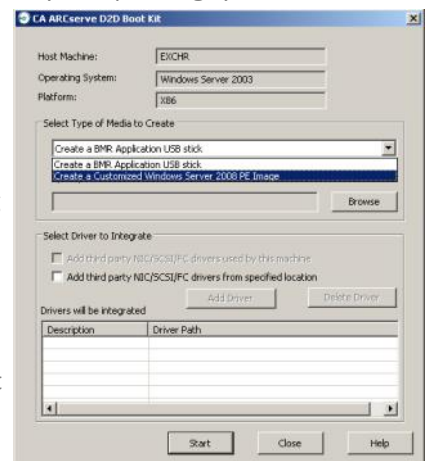
To perform Bare Metal Restore, it is necessary to create a Boot Kit which enables the machine to boot during the BMR process. The CA ARCserve D2D Boot Kit utility is used to create and save a boot image of your operating system.

CA ARCserve D2D supports two methods of Boot Kit creation:

1. creating Windows Server 2008 PE CD image using Microsoft WAIK 2.0 (Windows Automated Installation Kit) utility
2. creating custom USB stick boot kit (requires windows 2008 OS media during BMR restore)

The Boot Kit disk does not contain any machine specific data. A single boot kit can be used on any machine during BMR.

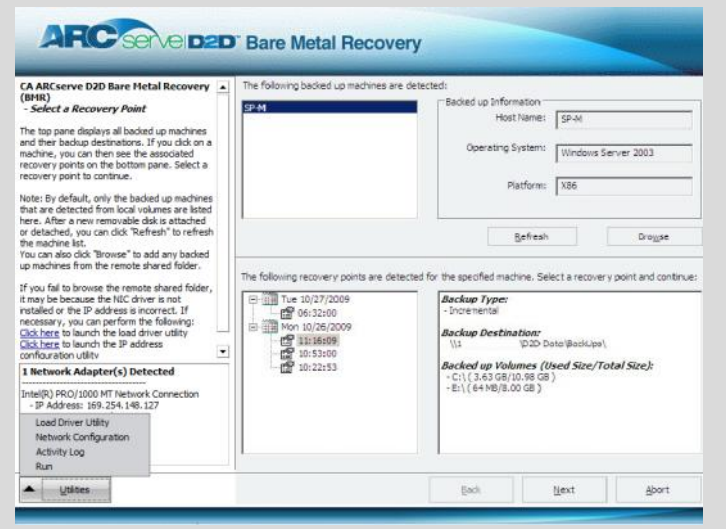
You ideally need to create 2 boot kit images for your environment one for 32-bit (X86) and other for 64-bit (X64) machines.



This Boot Kit creation process also allows CA ARCserve D2D to integrate any additional or any third party drivers (like NIC/SCSI/FC drivers) into a boot kit image. After the successful creation of the Boot Kit, you can find the CA ARCserve D2D Boot Kit files on your USB stick or windows 2008 PE image.

It is also necessary to have at least one full Backup copy available to restore the machine via the Bare Metal Recovery process.

CA ARCserve D2D backs up all relevant information that is necessary to perform a complete rebuild of the computer system. For BMR, the CA ARCserve D2D boot kit disk is used to initialize the new computer system and allow the bare metal recovery process to begin. You need to boot the machine with Windows PE CD image (which contains ARCserve D2D boot kit and OS files) or Windows 2008 OS DVD with USB stick containing Boot kit files. The CA ARCserve D2D BMR wizard guides you to perform smooth recovery of machine during whole BMR process.



Bare Metal Recovery process

BMR can be performed using any of the backup copies - Full, Verify or Incremental copy. During the BMR process, CA ARCserve D2D discovers all the backup recovery points for individual machines and also displays detailed information about each recovery point (like backup type, date, time, backup destination, and size). CA ARCserve D2D can restore the machine to a bigger disc size and also has an option to resize (extend) any partition. When restoring to another disk or volume, the capacity of new disk must be the same size or larger than original disk/volume. During the BMR restore process, the Utilities menu allows you to perform multiple operations such as Loading Driver Utility, configuring the network and viewing the activity logs for the machine to be recovered.

Frequently Asked Questions

- Q:** Can I restore X86 Machines to X64 and vice versa?
A: CA ARCserve D2D allows restoring to alternate hardware. A 32-bit machine can be restored to 64-bit machine, however, 64-bit (X64) machines cannot be restored to 32-bit (X86) machine due to architecture differences.
- Q:** Do we need to install applications (like SQL, My SQL etc) manually after the machine is restored?
A: CA ARCserve D2D BMR brings back the whole machine including the applications running on that machine. So you do not have to install the applications after BMR.
- Q:** Does CA ARCserve D2D support all the hardware architecture?
A: Yes CA ARCserve D2D supports all hardware architectures except Itanium processors.
- Q:** Can I restore my backed up machine with different disk/partition size?
A: Yes, during the BMR process users are allowed to configure disk/volume size as per their needs. However, volume resizing is for basic disks only, and not for dynamic disks.

Summary

CA ARCserve D2D BMR rebuilds and restores the whole machine quickly, efficiently and with minimal effort. It gives full machine protection and helps the user quickly recover from an outage. CA ARCserve D2D allows the backed up machine to be restored to similar or dissimilar hardware or a virtual machine in any location you need.

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.