



Knowledge Base Article: 000444492

How to Perform a Windows BMR recovery by using the wizard (000444492)

Primary Product :
Product : NetWorker, NetWorker Family, NetWorker 8.0.1, NetWorker 8.0.2, NetWorker 8.0.3, NetWorker 8.1.1, NetWorker Client for Windows 8.0.1, NetWorker Client for Windows 8.0.2, NetWorker Client for Windows 8.0.3, NetWorker Client for Windows 8.1.1, NetWorker Client

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Summary: How to Perform a Windows BMR recovery by using the wizard

Issue: How to Perform a Windows Bare Metal Recovery (BMR) by using the BMR wizard
Disaster recovery of a Windows host

Resolution: Follow below steps to perform a Windows Bare Metal Recovery (BMR) using the wizard:

1. Boot the host to be recovered from the location of the NetWorker Windows BMR image, either a bootable CD or network boot location.
2. Click Next when the Welcome screen of the Windows Bare Metal Recovery wizard appears.
3. Perform the following steps only if a DNS server is not available on the network. If DNS is not available, you can manually add and edit a hosts file to add information about the NetWorker server.
 - a. Open a command line window.
 - b. Edit the hosts file, for example, X:\Windows\System32\Drivers\etc\hosts, and add the IP address and hostname for the NetWorker server, NetWorker storage node, and Avamar deduplication node (if one is being used).
 - c. From the command line, start the Windows Bare Metal Recovery wizard. For example:
X:\Program Files\Legato\nsr\wizard> Start javaw -jar WinPeWizard.jar
 - d. When the wizard appears, click Next to continue.
 - e. In the Select Network Interface screen, select the NIC driver so that the host can communicate with the NetWorker server during the recovery process.
If the required NIC driver is not in the list, click Load Driver to browse to a location, such as a CD or USB drive, and locate the required driver.
The selected driver cannot require a reboot operation because the WinPE environment is loaded in memory only and changes are not persistent across a reboot operation. Although some drivers prompt for a reboot operation, most modern NIC drivers are generally plug-and-play, and ignoring the reboot prompt might actually work.
4. Click Next.
5. Complete the fields on the Configure Hostname and Network screen:
 - a. Type the hostname of the machine that you are recovering in the Hostname field.
 - b. Type the name of the domain in which the host resides in the DNS domain field. If the host resides in a workgroup instead of a domain, you can leave this field blank.
 - c. In the TCP/IP Address fields, select Obtain an IP address automatically (DHCP) if host IP addresses are assigned automatically. If the IP address of the host to be recovered is static, type the IP address in the IP address field. If applicable, type the subnet mask and the default gateway used by the host to be recovered in the Subnet mask and Default gateway fields.
 - d. In the DNS Server fields, select Obtain DNS server address automatically if the DNS server name is automatically assigned.
If the DNS server IP address is static, type the IP address of the DNS server in the Preferred DNS server field. If applicable, type an alternate DNS server address in the Alternate DNS server field.
You can ignore the DNS Server fields if you added the NetWorker server hostname and IP address to the X:\Windows\System32\Drivers\etc\hosts file in step 3.
 - e. Click Next. All local disks that have been detected are displayed in the Available Disks screen.
6. If the wizard has failed to detect a disk, click Load Driver to browse to a location, such as a CD or USB drive, and locate the correct driver for the disk. After loading the required disk driver, click Refresh to update the list of disks that have been detected.
7. Click Next.
8. Complete the fields on the Select NetWorker Server screen:
 - a. In the Server field, specify the NetWorker server to which the host was backed up by double-clicking the appropriate NetWorker server from the list or typing the fully-qualified domain name (FQDN). You have to click Search to update the list of NetWorker servers. The Search function locates only those NetWorker servers on the local subnet.
 - b. In the Client field, ensure that the client name matches the client resource name on the NetWorker server. For example, if the client resource on the NetWorker server uses a FQDN, then use the client's FQDN in the Client field.
This field is automatically populated with the values that were typed in to the Hostname and DNS Domain fields on the Configure Hostname and Network screen of the wizard.
You can modify the Client field if you want to recover a backup that was created by a different machine. However, the hardware configuration of the target machine must be similar to the original machine. You must also satisfy the following requirements for performing a directed recovery:
The NetWorker server must have a client resource for both the source machine and the target machine.
The Remote Access attribute of the client resource for the source machine must allow access to the user / host machine that is performing the directed recovery operation. Do this by adding "SYSTEM@target_client" to the source client resource's Remote Access attribute.
Add "user=system,host=target_client" to the Users attribute of the NetWorker server's preconfigured Administrators user group.
 - c. Click Next.

9. Select the system backup that you wish to recover to the host in the Select System Recovery screen. System backups are listed in descending order from most recent to oldest.

10. Click Next. The Save Sets to Restore screen lists the volumes to be recovered to the host.

Save Set	Label	Type	Size
C:	None	Critical	12 GB
\\.?\\VOLUME{...}	System Reserved	Critical	216 MB

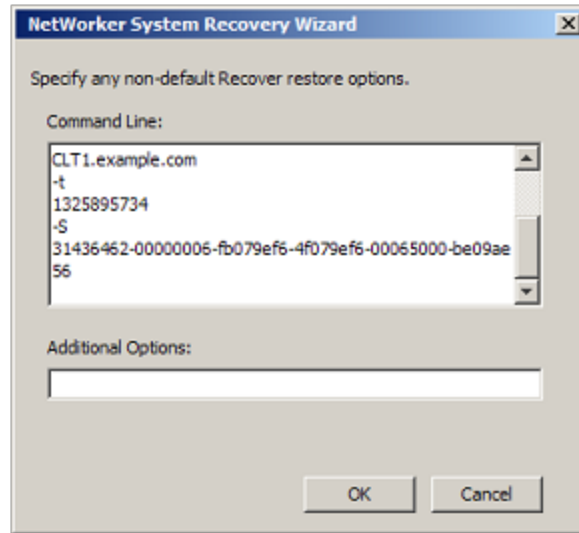
☒ Perform a quick format of disks.

During the recovery process, critical volumes will be reformatted. Non-critical volumes will be formatted only if the disk signature is different, for instance if the disk was replaced.

11. To perform a quick format instead of a full format operation, select Perform a quick format of disks. This is the default selection. Although quick formatting is much faster than full formatting, a quick format, unlike a full format, does not verify each sector on the volume. The recovery process will not recover non-critical volume data even if the non-critical volume is reformatted. Non-critical volumes can be recovered, if necessary, by using the NetWorker User program after the wizard has completed and the host has been rebooted.

12. Click Next. The System Recovery Summary screen lists the selected recovery options.

13. If you need to specify any non-default recovery options, click Options to display the Non-Default Recover Options screen as shown.



NetWorker System Recovery Wizard

Specify any non-default Recover restore options.

Command Line:

```
CLT1.example.com
-t
1325895734
-S
31436462-00000006-fb079ef6-4f079ef6-00065000-be09ae
56
```

Additional Options:

OK Cancel

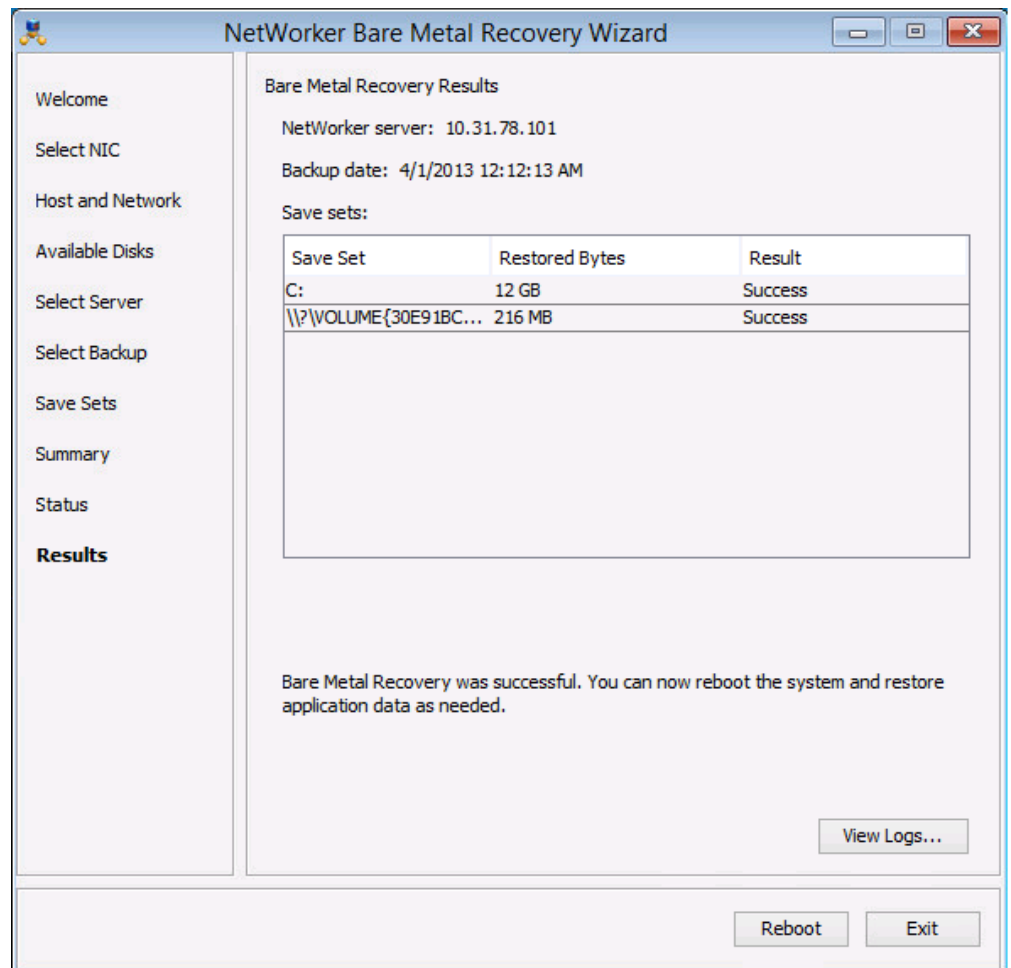
On the Non-Default Recover Options screen:

- Type any required non-default options with their corresponding values in the Additional Options field. Non-default options are primarily used for troubleshooting purposes. See the Additional Recoveries section for more information.
- Click OK to save and close the Non-Default Recover Options screen and return to the System Recovery Summary screen.

14. Click Restore to begin the recovery process.

15. In the confirmation screen that appears, confirm your choice to begin the recovery process and then click OK.

At the end of the recovery process, log files are backed up to the NetWorker server. These files can be used to troubleshoot a failed recovery. Ensure that the NetWorker server has a mounted writable backup volume available for these log files. Otherwise, the recovery will not complete because it waits for a writable volume. If this occurs, you can cancel the log file backup without affecting the recovery operation. By default, recovery log files are written to the default backup pool. If desired, you can set up a special backup pool for log files. To do so, ensure that the backup pool accepts manual save sets that are named Offline Restore Logs. The System Recovery Results screen is displayed when the recovery process has completed.



NetWorker Bare Metal Recovery Wizard

Results

NetWorker server: 10.31.78.101

Backup date: 4/1/2013 12:12:13 AM

Save sets:

Save Set	Restored Bytes	Result
C:	12 GB	Success
\\?\VOLUME{30E91BC...	216 MB	Success

Bare Metal Recovery was successful. You can now reboot the system and restore application data as needed.

View Logs...

Reboot Exit

16. Click Reboot or Exit as appropriate:

Click Reboot to reboot the system and restore the application data. If you are recovering an Active Directory domain controller, it is recovered in non-authoritative mode by default.

If you need to recover the domain controller in authoritative mode, click Exit to return to the WinPE command prompt and boot into Directory Services Restore Mode (DSRM).

Notes:

Refer to NetWorker Administrators Guide and NetWorker Disaster Recovery Guide for more information

Product:

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