



PBMR for Windows

Runbook

Version 9.7.1 | June 2026

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PC-BaX, UBax, Cristie P4VM (Protect for VMs), Cristie Storage Manager (CSM), SDB, ABMR (Bare Machine Recovery for EMC Avamar), NBMR (Bare Machine Recovery for EMC NetWorker), TBMR (Bare Machine Recovery for Spectrum Protect/TSM), CBMR (Cristie Bare Machine Recovery), CoBMR (Bare Machine Recovery for Cohesity DataProtect), RBMR (Bare Machine Recovery for Rubrik), and CRISP (Cristie Recovery ISO Producer), PBMR (Bare Machine Recovery for Dell PowerProtect Data Manager).

About this Runbook

This Runbook contains the **procedures, pre-checks and troubleshooting** required to deploy, configure and perform bare-metal recoveries with Cristie **PBMR** for **Windows** systems protected by **Dell PowerProtect Manager**.

The Appliance fully supports the backup, recovery, and monitoring of:

- Windows
- Linux
- Solaris
- AIX

Before you start

Make sure the items below are in place **before** you **install PBMR** or attempt a **recovery**.

Protection job configuration

- Add the server to a **Dell PowerProtect** protection job.
- Include all **required system** and **data volumes**.
- **Execute** the **protection job** and confirm that at least one successful backup completes.

Registered Source

- **Install** the **PowerProtect agent** on the server.
- **Register** the host in **PowerProtect** as a **Physical Server**.
- **Confirm** that the **Registered Source** name matches exactly how it appears in the **PowerProtect UI**.

This name must be entered identically during recovery.

How to download

- Download the **PBMR installation media** and the **recovery ISO** from the [Cristie Portal](#)
- A trial account is required to log into the **Portal**. To request a trial account or a commercial license, contact: sales@cristie.com

Cristie PBMR

Note:

- For more information about Installing Cristie PBMR, see: [PBMR User Guide](#)
- Supported operating-system versions and features are listed in the [Cristie Backup/Recovery OS Support Matrix](#)
- If you need further help, contact our support team: support.cristie.com

Install the PBMR components

Before you install PBMR, add the PBMR configuration tool to your antivirus exclusions:

Pre-install checklist

- Add PBMRCFG.exe to the Windows Defender/Antivirus exclusion list, this exclusion significantly speeds up the installation/config creation process.

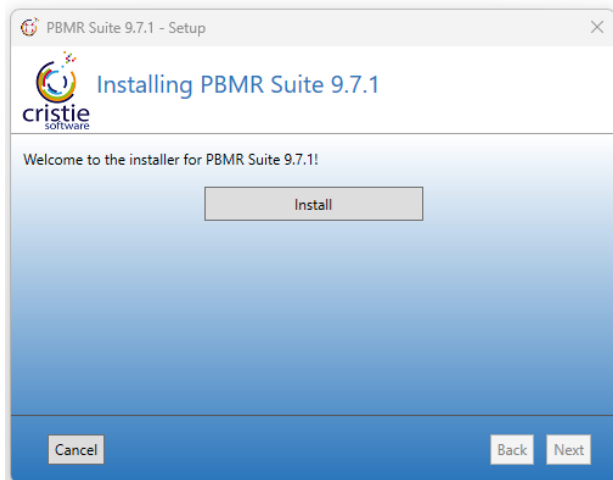
Default location:

C:\Program Files\Cristie\PBMR\PBMRCFG.exe.

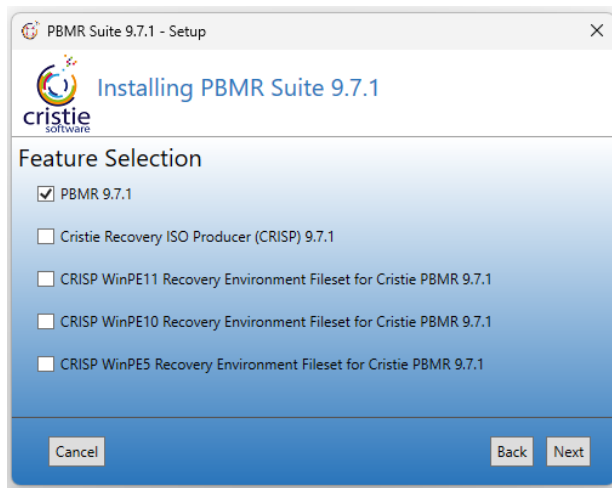
The below steps will show you how to install the PBMR components.

Procedure

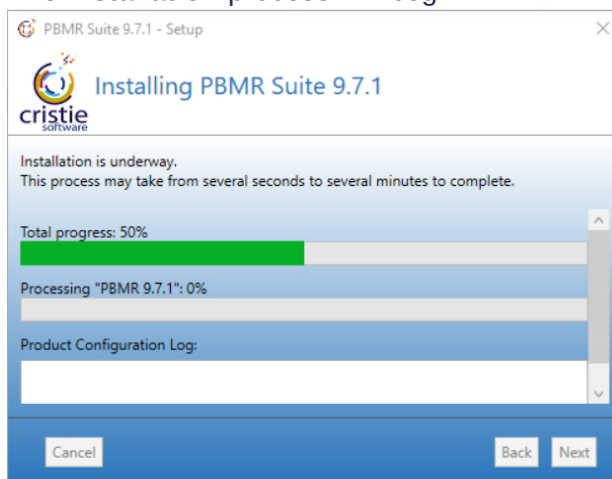
1. Run the **suite installer** SetupPBMRSuite.exe by double-clicking it in Explorer or launching it from a command prompt. The installer will guide you through component selection.



2. **Tick** the following **features**:
 - **PBMR 9.7.1**
 - **WinPE** recovery Environment (WinPE10)
 - **CRISP** (this is optional, if users already have the ISO, CRISP is not required)
- Click **Next**.



3. **Read** and **accept** the license agreement box, then click **Next**.
 4. Leave the ***Use recommended settings*** ticked, and click **Next**.
 5. **Optional:** Un-tick **Use recommended settings**, and you will see the following additional fields:
 - **Installation root for PBMR Suite 9.7.1:**
The installation path has to be on system drive (C:\), but this does not have to be the default Program Files directory
 - **VA Address:**
Add your appliance IP address or FQDN
 - **VA Tenant:**
Add your appliance tenant (leave blank for root)
- If both VA address and tenant are specified, the installer will setup the Cristie Appliance service to talk back to the appliance and show your system in estate management.
6. The **installation** process will begin.



7. Once **completed**, click **Exit**.

PBMR PowerProtect Pre-script

PBMRCfg.exe can be configured to run automatically before a **PowerProtect Data Manager backup**.

Generating a fresh configuration ensures the recovery information remains up to date and reflects any changes to:

- disk configuration
- operating system updates
- hardware configuration

Configuring the pre-script consists of two steps:

1. Create the **script** on the **protected system**.
2. Configure the **script** within the PowerProtect Data Manager.

Procedure

1. Create the script file (.bat)

- Open Notepad (Run as Administrator).
- Paste the single-line command below:

```
@cd "%ProgramFiles%\Cristie\PBMR" && pbmrcfg.exe
```

- Save the file as cristiePBMR.bat

2. Upload the script to PowerProtect Data Manager

- In the **PowerProtect Console** navigate to the **Protection job**, and select the required Job.
- Navigate to **Options**, then **Pre/Post Script**.
- **Add the scripts** as required for **Pre/Post**.

Edit Policy

Type: **Pre/Post-Script (Optional)**
 Add a pre-script and post-script to run before and after the protection policy backup. Name: Windows PBMR Test.JC | Type: File System | Purpose: Centralized Protection | Assets: 2

Assets: ✓
 File Filters: ✓
 Objectives: ✓
 Options: **Pre/Post-Script**
 Summary

Pre-script:
 A maximum of two pre-scripts (one Windows-compatible script, and one non-Windows script) can be added.

Add Script

Name: win_pbmrcfg
 Compatibility: Windows

If script fails:
☒ Continue job
☐ Skip job

Note: If a timeout value for the script is not specified, hung jobs will continue to wait for a response from the script.

Timeout: 15 Minutes

Post-script:
 A maximum of two post-scripts (one Windows-compatible script, and one non-Windows script) can be added.

Add Script

Run As:
 Select credential for Windows

Run As:
 Select credential for Unix

☐ Run script on specific days

Step 6a of 7 Cancel Back Next

3. Configure the Script Timeout.

Increase the script timeout value within the **Protection Job** settings to ensure the script completes successfully before the backup begins.

Pre/Post-Script (Optional)

Pre-script:

A maximum of two pre-scripts (one Windows-compatible script, and one non-Windows script) can be added.

Name:	PowerProtectDataManager	×
Compatibility:	Windows	

[+Add Script](#)

If script fails ☐ Continue job
☒ Skip job

Note: If a timeout value for the script is not specified, hung jobs will continue to wait for a response from the script.

Timeout:* ⓘ

4. Save the Protection Policy.

Note:

After configuring the pre-script, a new backup must be completed before a restore can be performed. This allows the required **bmr.cfg** files to be captured in the backup.

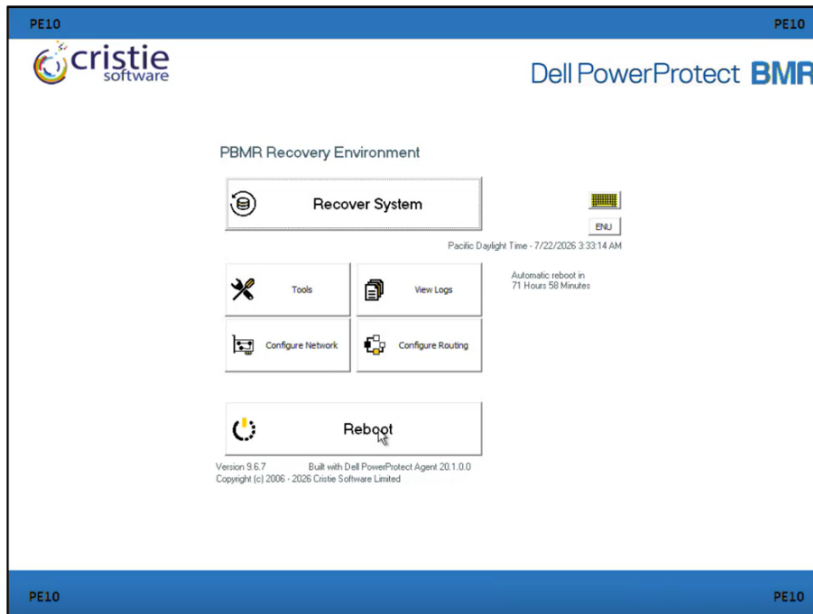
BMR Recovery

This chapter demonstrates how to perform a recovery using the **PBMR WinPE** recovery environment.

Boot recovery ISO

Procedure

1. Prepare the **recovery media** (CD/DVD, ISO, or USB) obtained from the **Cristie Portal** or created using **CRISP** and the appropriate **WinPE fileset** (WinPE 10)
2. Attach the **recovery media** to the **target machine** and boot from it. Use the host's boot menu or the remote management console (iLO, iDRAC, etc) to select the recovery device.
The PBMR recovery environment welcome screen then appears.



Configure network

Ensure that the Network connectivity and firewall rules are set up to permit:

1. Recovery environment: **Dell PowerProtect: TCP 8443** (HTTPS)
2. Recovery environment: **PowerProtect Agent Service: TCP 7000 - 7020** (except 7010 and 7011)

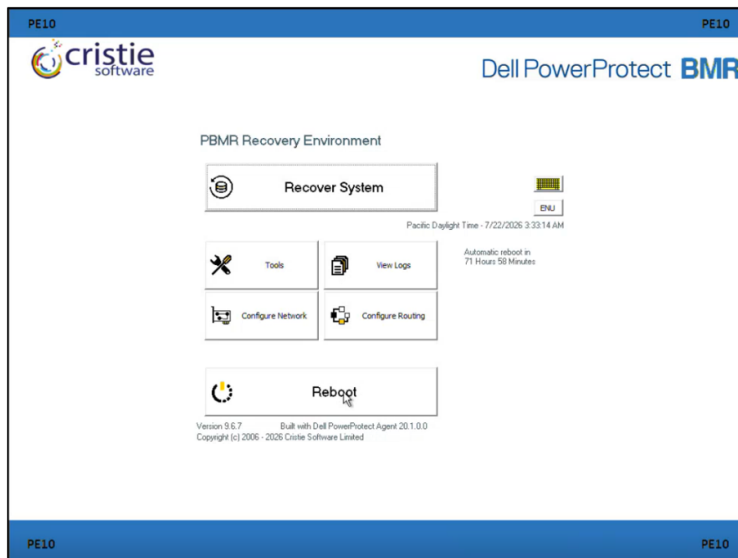
Note:

- For the PowerProtect Agent Service, Port 7000 is the default, but the other ports are available if they need to be changed.
- For more information regarding ports, see: [Ports table](#)

Configure logfile location

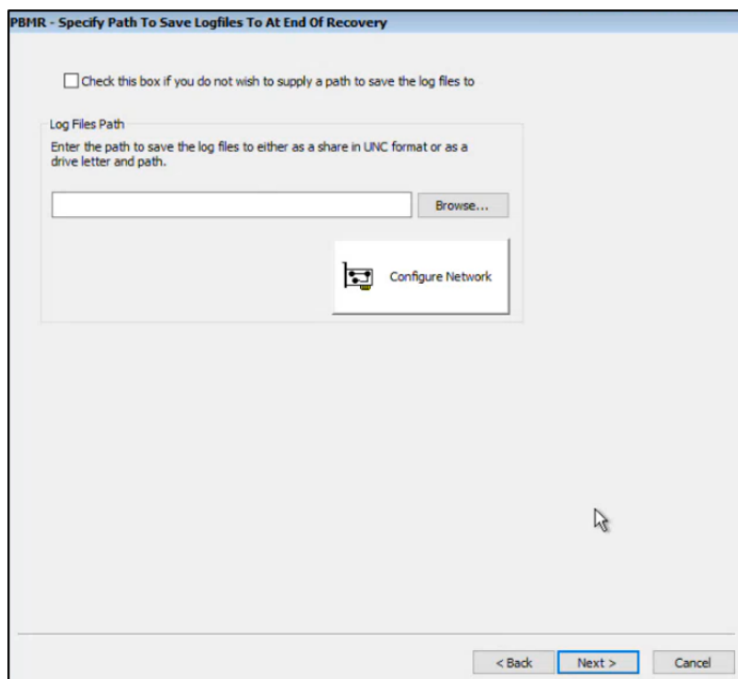
Procedure

1. Click **Recover System** to launch the wizard.



2. From here choose a file path to **save** your **log files**, if you do not want to do this, select the following tick box.

Although optional, it is recommended to save the recovery log files for troubleshooting and support. The log files are also copied to the recovered system.

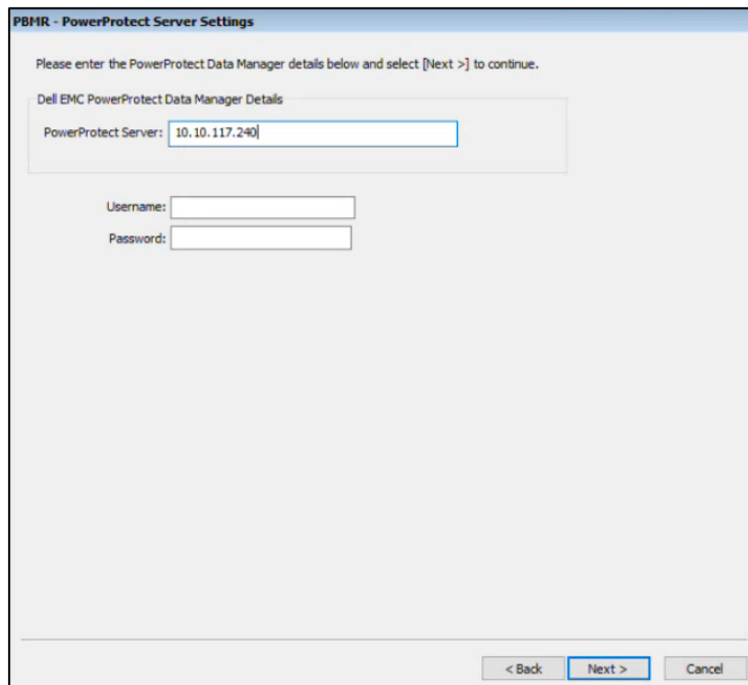


3. Click **Next**.

Connect to PowerProtect Data Manager

Procedure

1. You will now need to enter your **PowerProtect details**, this will be the backup cluster that you will be connecting to.



PBMR - PowerProtect Server Settings

Please enter the PowerProtect Data Manager details below and select [Next >] to continue.

Dell EMC PowerProtect Data Manager Details

PowerProtect Server:

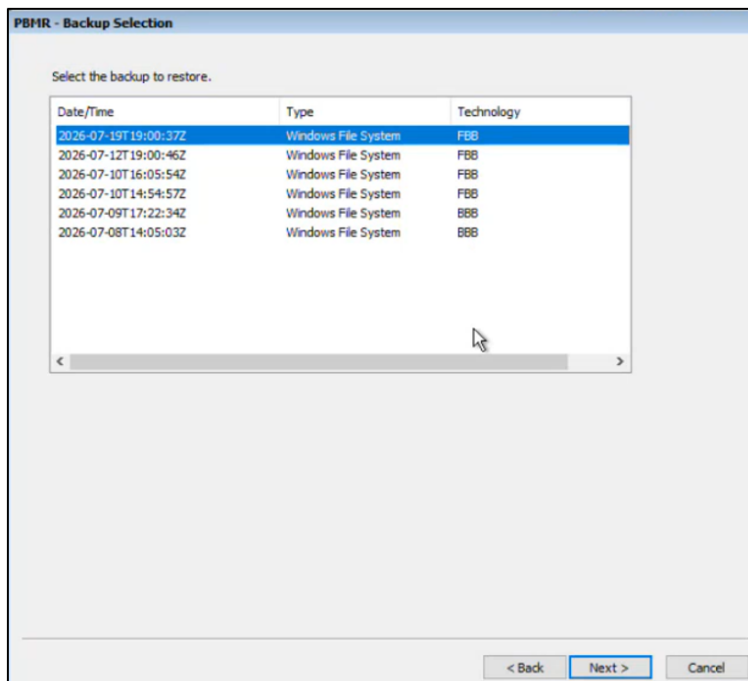
Username:

Password:

< Back Next > Cancel

2. For the **Backup-Type**, you must select **FBB** (File Based Backup)

Note:
Block-based backup is not supported



PBMR - Backup Selection

Select the backup to restore.

Date/Time	Type	Technology
2026-07-19T19:00:37Z	Windows File System	FBB
2026-07-12T19:00:46Z	Windows File System	FBB
2026-07-10T16:05:54Z	Windows File System	FBB
2026-07-10T14:54:57Z	Windows File System	FBB
2026-07-09T17:22:34Z	Windows File System	BBB
2026-07-08T14:05:03Z	Windows File System	BBB

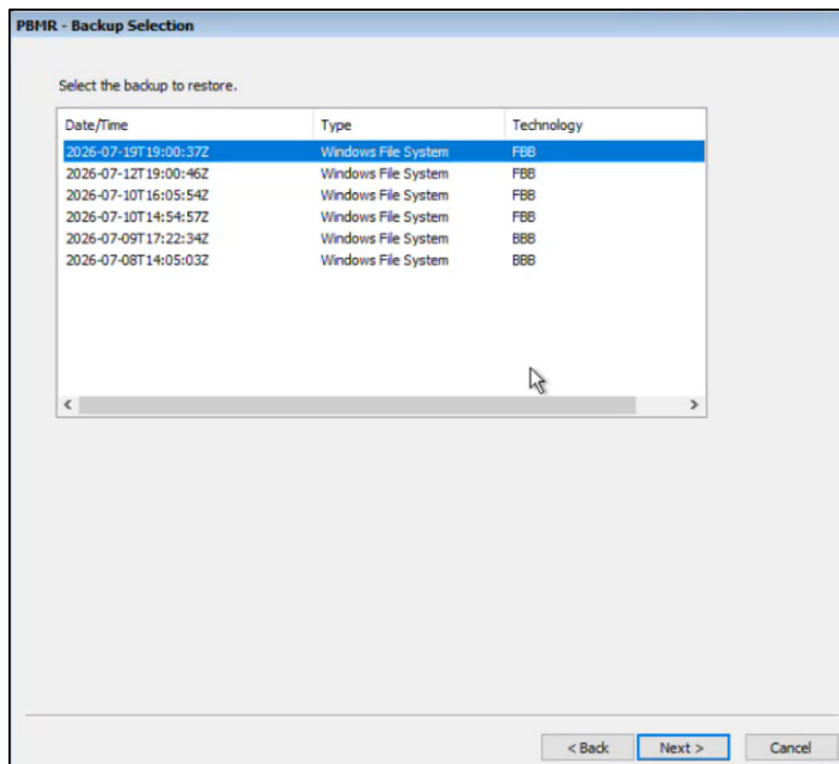
< Next > Cancel

3. Click **Next**.

Retrieve system configuration

Procedure

1. After **successfully** logging in, you will see a list of your backup snapshots.
Select the backup you want to run and click **Next**.



2. The system will now access the backup and read the configuration file.
3. The config file has now been **successfully retrieved**, and you can now see the **Volume layout**.

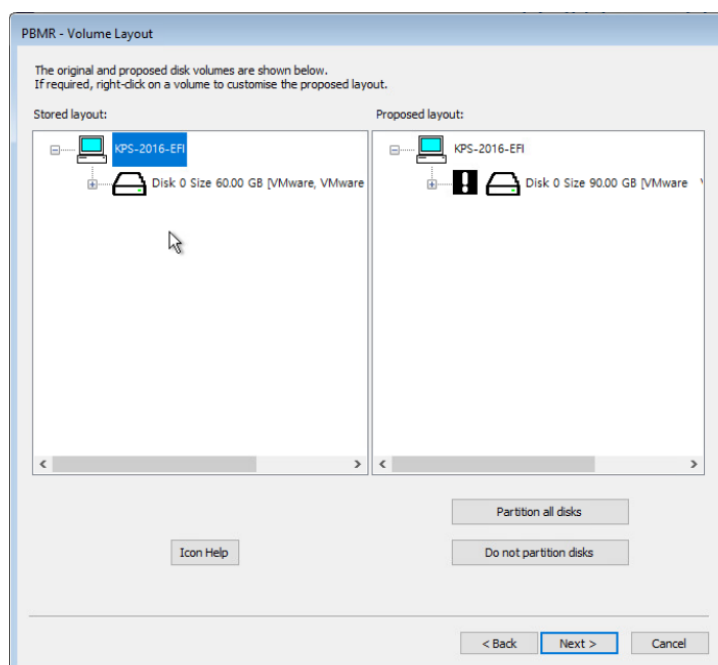
Adjust configuration

Procedure

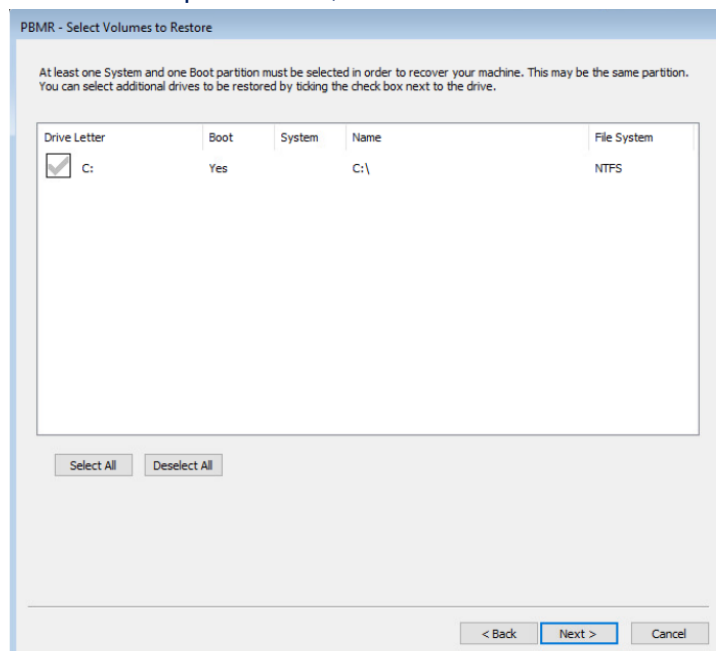
1. Configure the **Volume Layout** to how you want the disks partitioned.
Else, click **Next**.
 - **Stored layout:** What the original machine had on it.
 - **Proposed layout:** Disks that have been prepared and are on that machine.

Note:

The **Exclamation Marks** displayed in the right pane indicate the disk will be partitioned prior to recovery.



2. Select the required Drive, then click **Next**.



3. Enter the **network configuration** details.

The **default** behaviour restores the machine with the exact same host name and IP configuration that the original machine had at the time of the backup.

But the name and IP address can be changed if required.

Click **Next** then **Finish**.

PBMR - Clone Settings

Do not change any settings on this page unless you wish to change the identity of the recovered machine. For example when performing a cloning operation.

Change the computer's NetBIOS name on reboot.
 ---->

Change the computer's host name on reboot.
 ---->

Change the IP address of this adapter on reboot.

Physical Address:

☒ Use DHCP ☒ Use DHCP

IP Address: ---->

Netmask: ---->

Gateway: ---->

Preferred DNS: ---->

Alternate DNS: ---->

Friendly Name: ---->

< Back **Next >** Cancel

Execute restore

Procedure

1. After confirming your selections and initiated the recovery process, the system will now start the working through the various steps to successfully implement the backup.
2. Once completed, you will see the **Restore Status window**, the time of completion will vary depending on the size

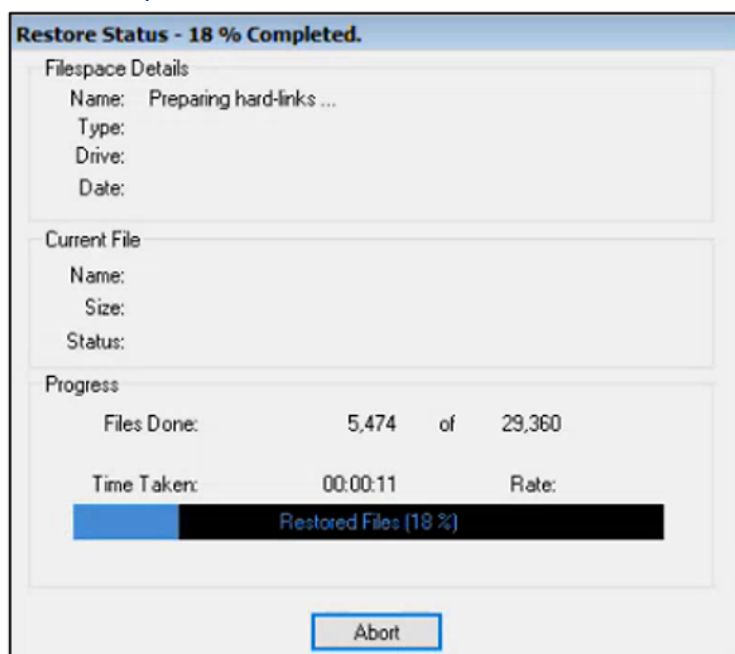
PBMR Recovery Status

```

=====
PBMR Environment Version 9.7 build 54704
Automatic recovery started on 2026-07-22T11:52:01+01:00
=====
CBMR_DP.DLL 9.7.1 (build 54704) Cristie Disk Partitioner (CDP) created on Jul 17 2026 at 12:29:10
Restoring Microsoft Windows Server 2016 (1607) Sep 2016, 64-bit (build 14393)
Preparing basic disks
Target disk# 0, Size=92160 MiB, Cyls=11748, T/C=255, S/T=63, B/S=512
Creating basic partitions
Creating any partitions on target disk 0
Created GPT partition (450 MiB) with drive letter n/a, labelled 'Recovery'
Created EFI partition (99 MiB)
Created MSR partition (16 MiB)
Created GPT partition (91593 MiB) with drive letter C:, labelled '<undefined>'
Successfully created all basic disk partitions
Formatting basic partitions
Formatted unmounted basic partition labelled 'Recovery'
Formatted partition with drive letter B:, labelled '<undefined>'
Formatted partition with drive letter C:, labelled '<undefined>'
=====
  
```

Abort

3. The below image shows the end of the recovery, including the **dissimilar hardware stage**. When this is completed click **Finish**.



Log File Collection

Before rebooting the system, ensure you have done the following:

1. **Confirm** that recovery **log files** have been written to the **specified location**.
2. **Copy** the log files if required for **troubleshooting** or **support**.

Post-Recovery Actions

After the restore process completes, ensure you have done the following:

1. Removed the recovery ISO or virtual media.
2. Reboot the system.

Verify that:

- The operating system boots successfully
- Network connectivity is operational
- Required services start correctly

Appendix A: Network ports & connectivity

This appendix lists the network ports that must be open between the **Cristie PBMR** recovery environment and the **Dell PowerProtect Manager**, so recoveries work reliably.

Use the table below when validating firewall rules, NAT, or routing for recovery operations.

Ports table

Source (origin)	Destination	Purpose	Port / Protocol
PBMR recovery environment	PowerProtect VSE	Recovery environment → PowerProtect VSE (control & UI). Allows the PBMR utilities to contact Dell PowerProtect via HTTPS.	TCP 443 (HTTPS)
PBMR recovery environment ↔ PowerProtect VSE	PowerProtect agent / VSE	Agent communications used by PBMR recovery environment to reach the PowerProtect agent and VSE for restore operations.	TCP 7000 - 7020 (except 7010 and 7011)

Cristie Technical Support

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Cristie Support links

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*Severity 1 issues are defined as: a production server failure, cannot perform recovery or actual loss of data occurring.

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