



Bare Metal Recovery

The bare metal recovery method can be used to recover entire Microsoft Windows systems in the event the system has completely failed and no other recovery options are available. With a bare metal recovery, all data, settings, applications, and operating system are installed to a bare metal system (no operating system installed).

In order to perform a bare metal restore, all system volumes and the system state must be backed up on the data source. Bare metal restore requires that the target system is exact or similar hardware to the originally backed up system (source). Bare metal restore supports the following Microsoft Windows operating systems:

- Windows Server 2016
- Windows Server 2012 R2
- Windows Server 2012
- Windows Server 2008 R2
- Windows Server 2008
- Windows 10
- Windows 8.1
- Windows 8
- Windows 7

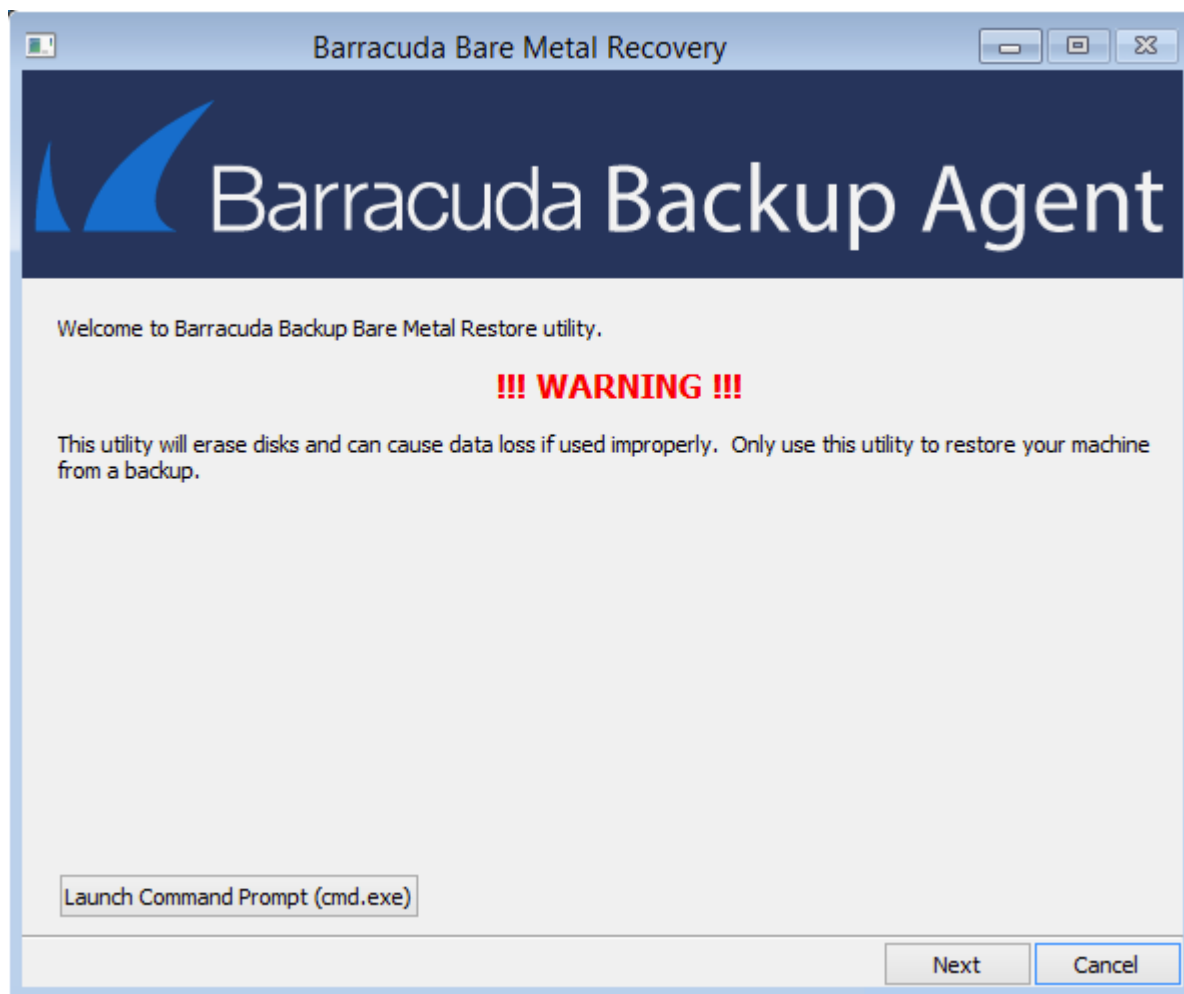
Bare Metal Live ISO

Bare metal restore uses Barracuda's Bare Metal Live ISO, which the target system boots off of to create an environment that Barracuda Backup can restore to. Download the Bare Metal Live ISO from the **System > Software Downloads** page. Select the appropriate version, 32-bit or 64-bit, depending on the system you are restoring. Once downloaded, the Bare Metal Live ISO file can be used on a bootable disk or flash drive.

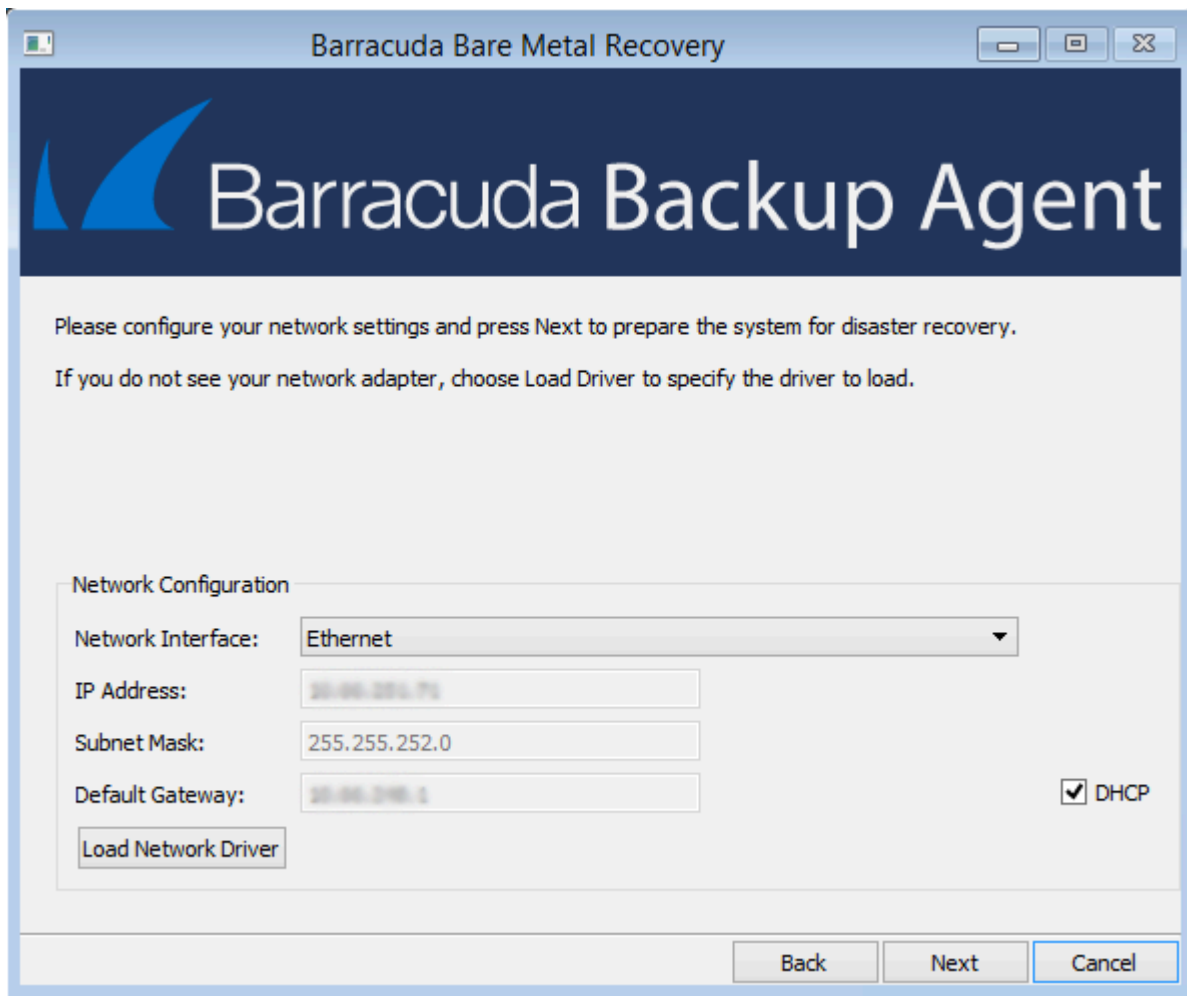
The Bare Metal Live environment is based on the Windows 8.1 pre-environment (PE). Currently, Windows Server 2016 ReFS partitions using a 4K cluster size are not supported by bare metal restore because Windows 8.1 only supports a 64K cluster size.

Once the Bare Metal Live ISO is applied to bootable media and the target system is booted from that, perform bare metal recovery of a Microsoft Windows system using the following steps:

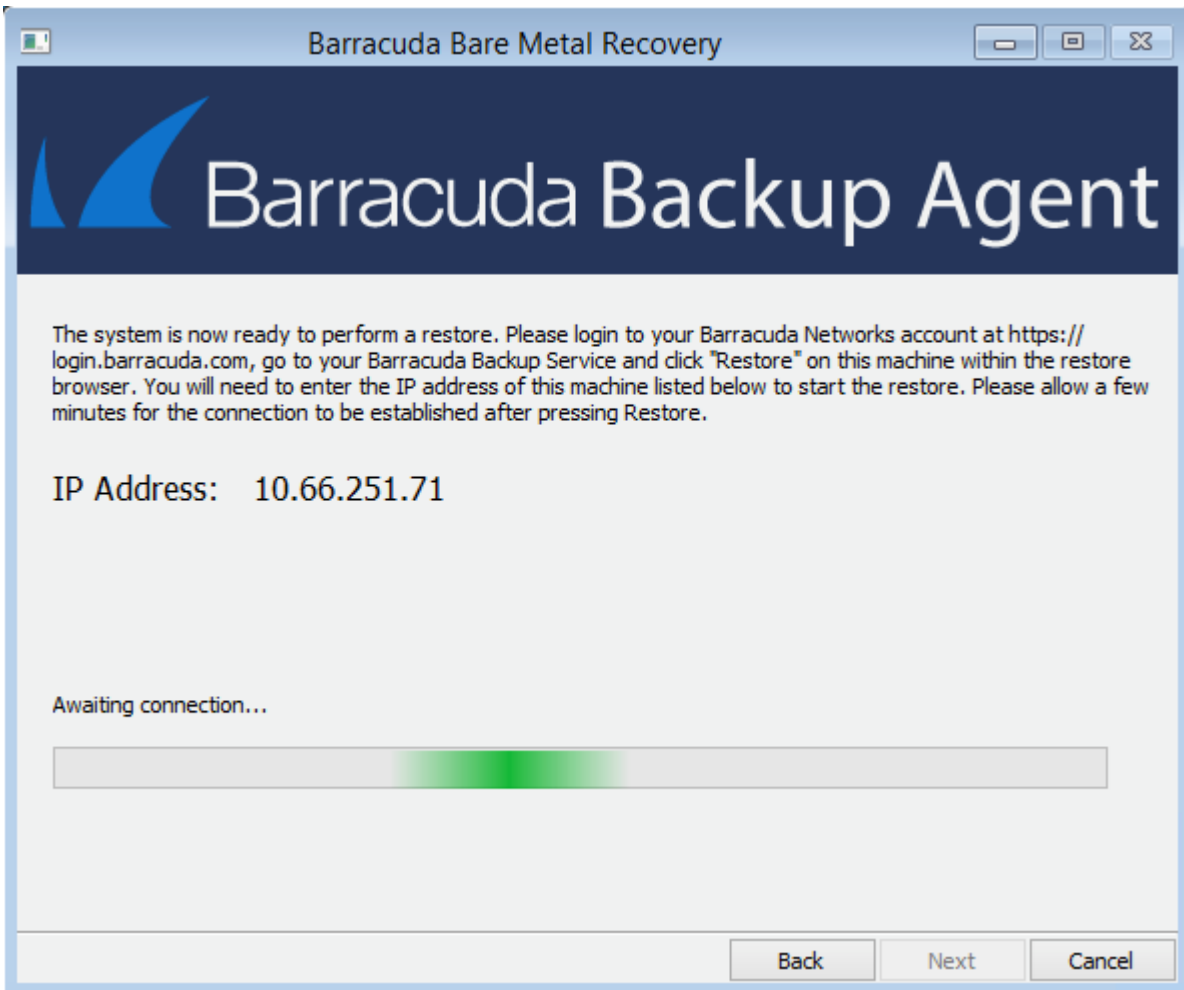
1. The Bare Metal Restore Utility welcome/warning screen displays. Ensure that no data is present on the target system, and click **Next**:



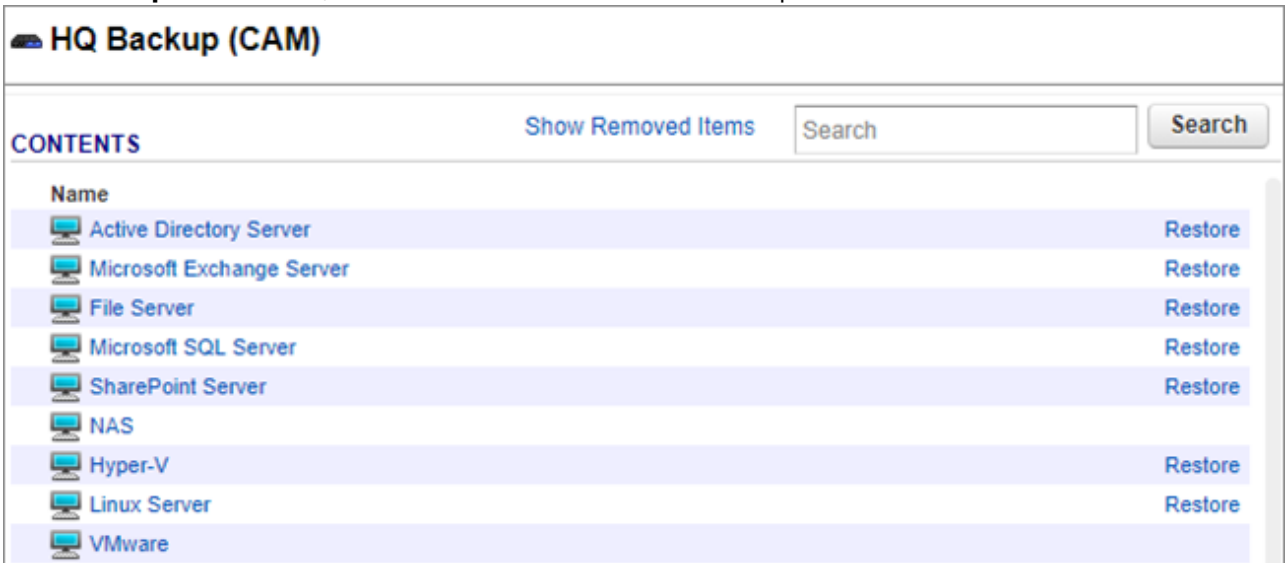
2. On the **Network Configuration** screen, choose a network interface, configure an **IP Address**, **Subnet Mask**, and **Default Gateway**:



3. Click **Next**. The **Awaiting connection** screen displays:



- 4. Log in to the Barracuda Backup local or cloud interface, and go to the **Restore > Restore Browser** page.
- 5. Click **Restore** to the right of the Microsoft Windows system you want to restore. If you want to restore to a different backup revision of the system other than the latest, click on the system, and click **View all revisions up to: <date>**, and click **Restore** next to the backup revision:



- 6. In the **Restore** dialog box, select **Other Hostname or IP Address**, and type the IP Address configured for the target system in the Bare Metal restore Utility:



7. Click **Start Restore**.
8. After several minutes the target system should receive the restore job from Barracuda Backup and display a list of recoverable volumes:

Label	Type	Size	Is Critical
<input checked="" type="checkbox"/> Recovery \\?\Volume{48838644-b447-41...	Simple,NTFS	450 MB	No
<input checked="" type="checkbox"/> No Label Defined \\?\GLOBALROOT\Device\Har...	Simple,FAT32	99 MB	Yes (Boot)
<input checked="" type="checkbox"/> No Label Defined \\?\Volume{b477f903-298c-489... C:	Simple,NTFS	126.4 GB	Yes (System)

9. Select the volumes you want to recover.

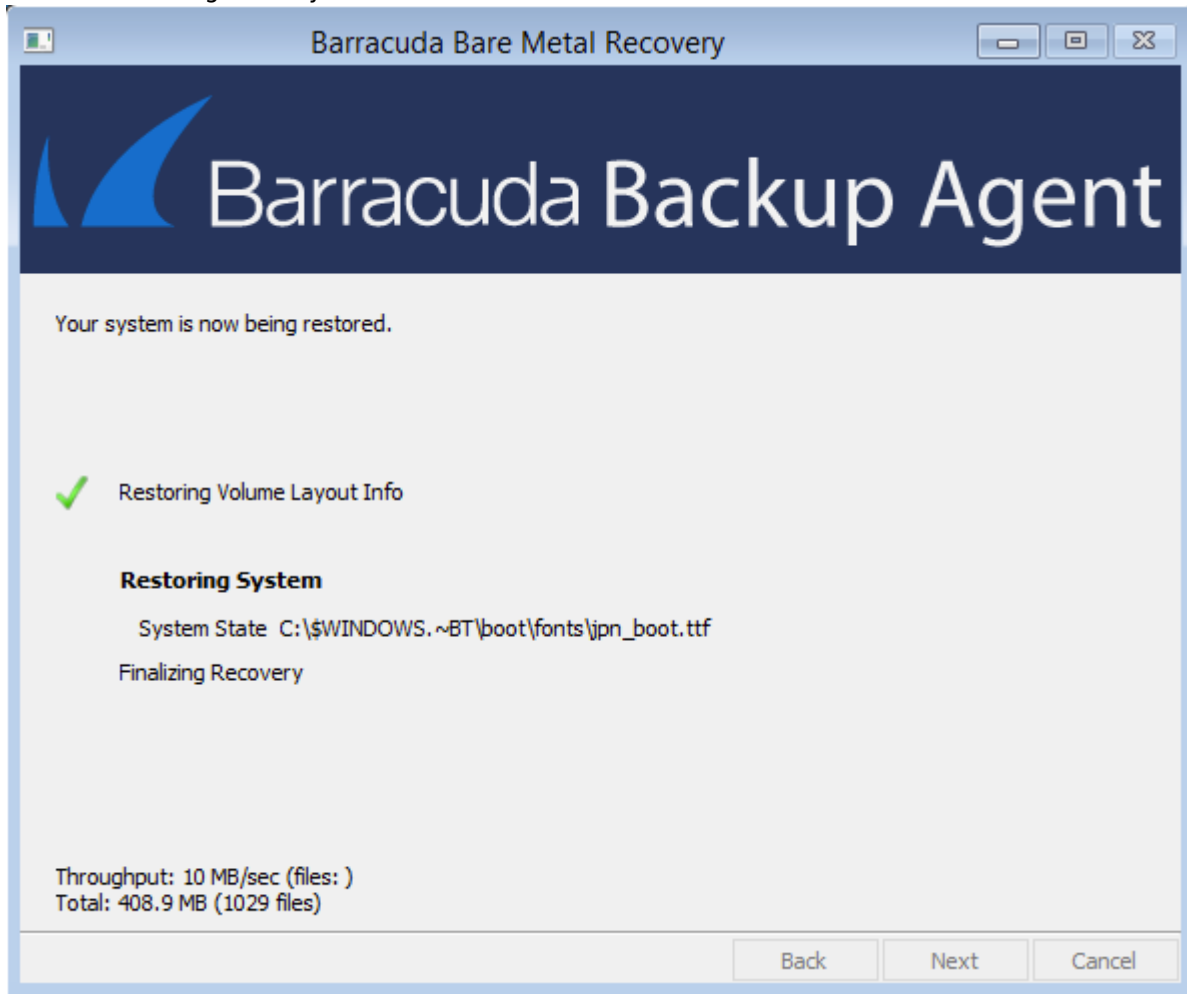
You cannot deselect boot and system volumes as these are required for the Bare Metal restore.

If you choose to restore to a server that does not have identical volumes as the original machine the data



was backed up from, the Barracuda Backup appliance will still attempt to restore all drives even though you may have only selected one of these on the Bare Metal Restore screen. The restore will throw errors for these missing drives, but will restore the drives that exist on the target machine.

10. Click **Next** to begin the system restore:



11. When the restore is complete, click **OK** in the **Confirmation** dialog box.

12. Remove the bare Metal Live CD, and reboot the system.

If the server being restored was an Exchange, SQL, or Hyper-V server, the application is installed after the bare metal restore; however, the databases or guest virtual machines (VMs) must be restored separately.

