Bare-Metal Restore of Archive Points

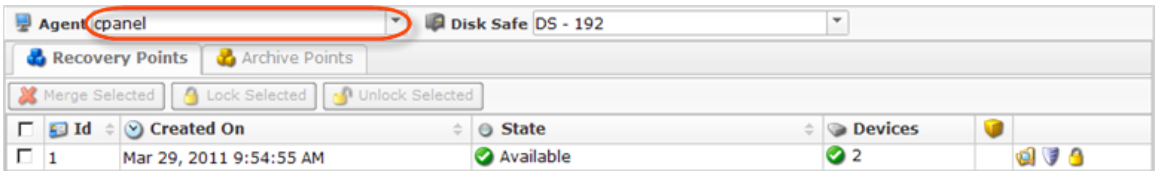
Follow the instructions below to run the Bare-Metal Restore of Archive Point.

> **Note**
> Bare-Metal Restore of Archive Points is the same as Bare-Metal Restore of a usual Recovery Point.

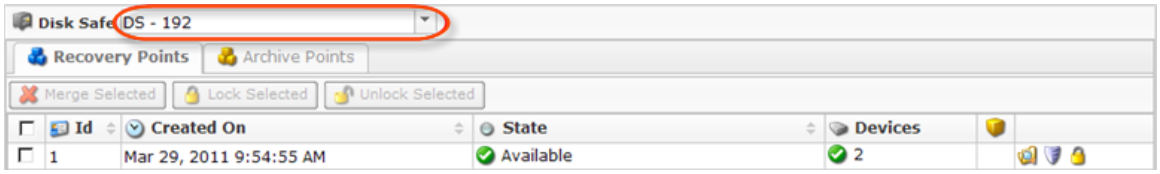
1. Click on "Recovery Points" in the Main Menu to open the "Recovery Points" screen.

Advanced Edition	Enterprise Edition
	

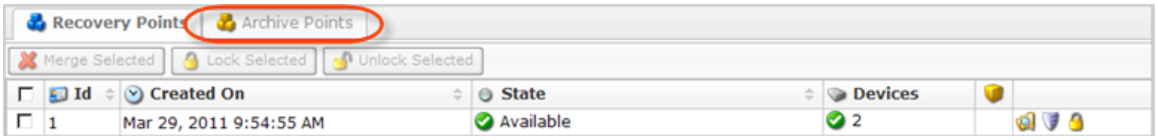
2. Enterprise Edition: Select an Agent from the drop-down menu located on the "Recovery Points" list toolbar.



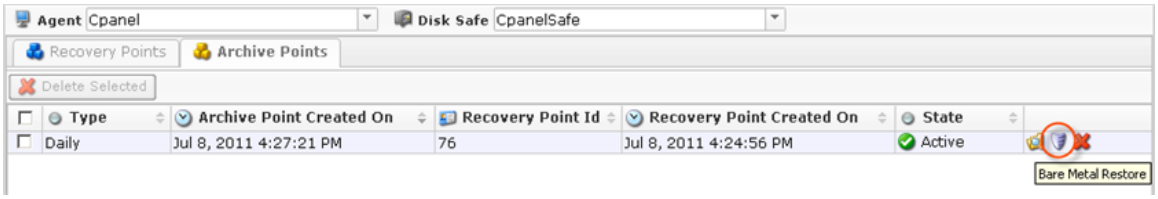
3. Select a Disk Safe from the drop-down menu located on the "Recovery Points" list toolbar.

Advanced Edition	
Enterprise Edition	

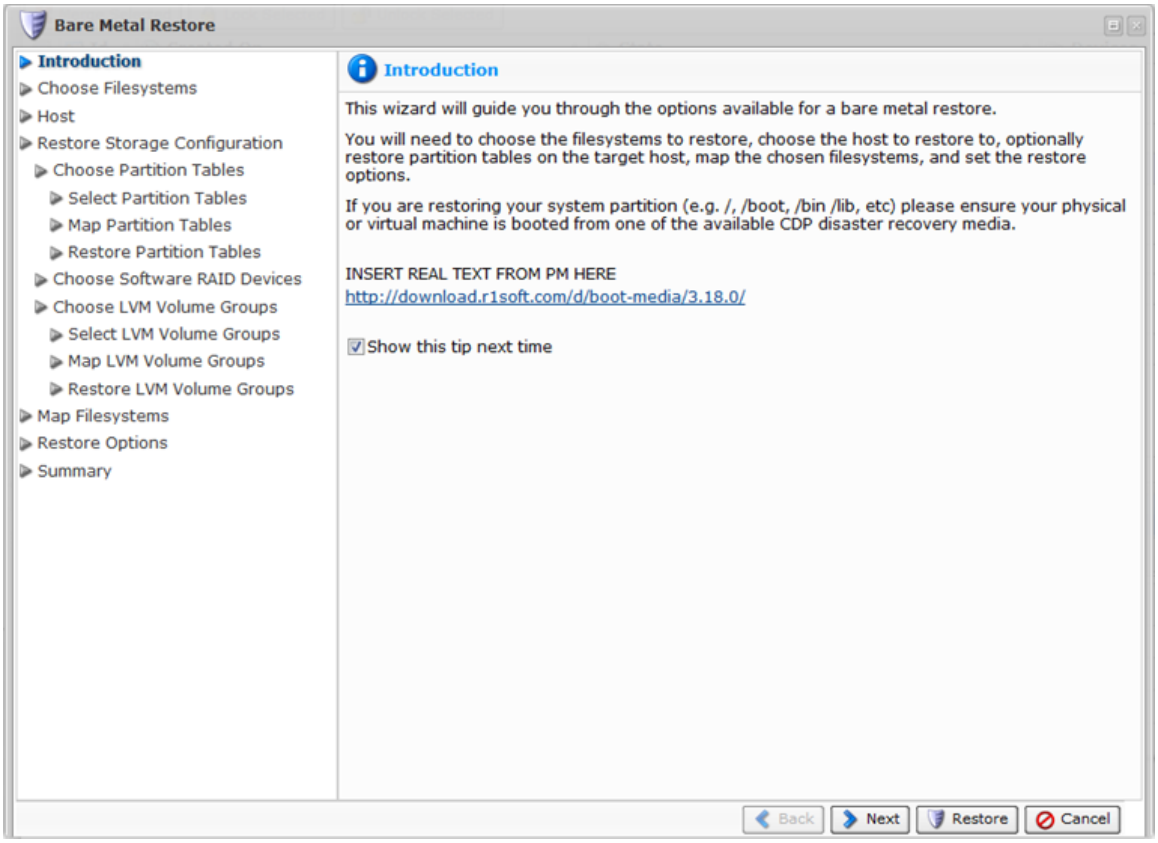
4. Select the "Archive Points" tab.



5. In the "Archive Points" list, click on the "Bare-Metal Restore" icon in the "Actions" column for the Archive Point from which you are going to restore.



6. The "Bare-Metal Restore" window opens.



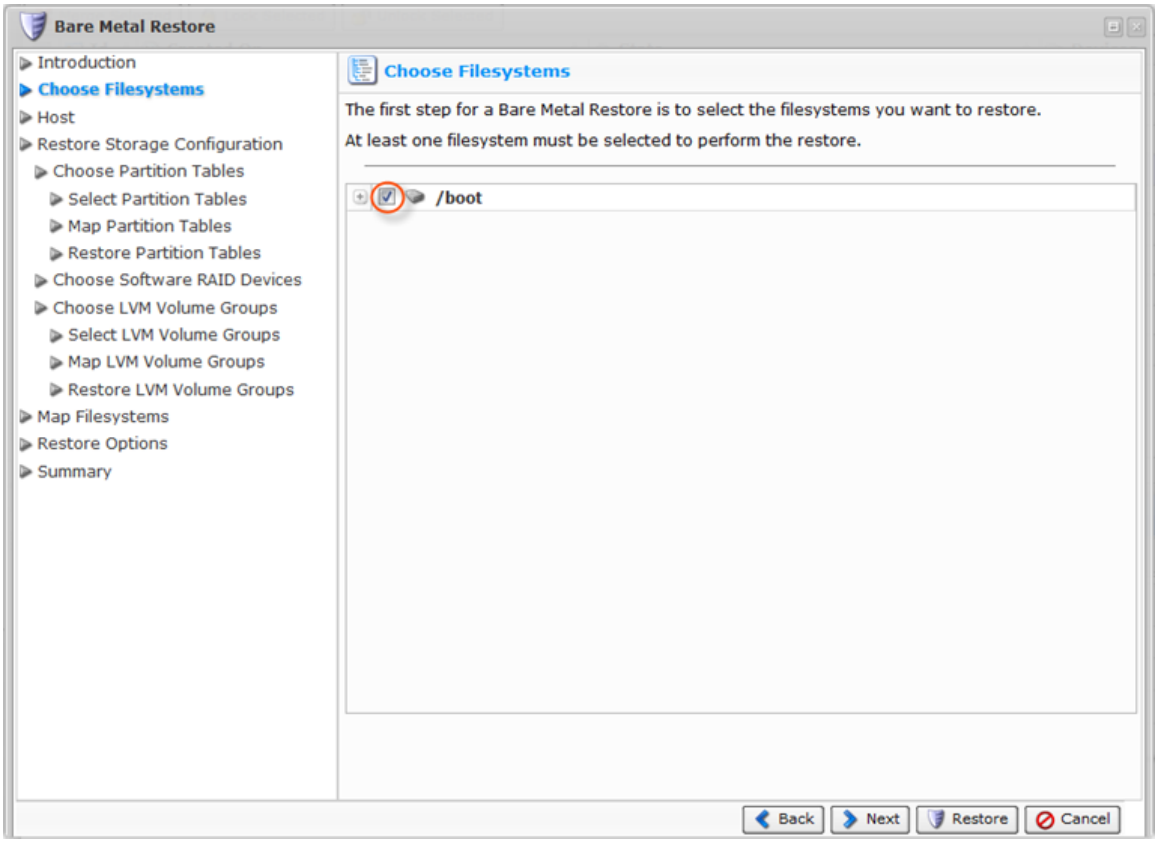
7. Look through the information on the Introduction screen and click "Next."

8. On the next page, select the file system you want to restore. All available file systems are listed. At least one must be selected by clicking on the appropriate checkbox.

Tip

To display file system properties, click on the "Plus" icon in front of the file system name. The following data is provided for each file system:

- Content Type - Either "MBR" (Master Boot Record) or a file system of special type. Most common file system types are NTFS (Windows) or EXT3 (Linux).
- Device Path - The path used by the operating system to identify the hard disk or partition. In Windows, it looks like `\\?\Volume2cb24442-fd22-11df-b57d-806e6f6e6963`. In Linux, it looks like `/dev/hda` or `/dev/sda`. The Device path saved in the Recovery Point refers to the Device for which this Recovery Point was created. If you are performing Bare-Metal Restore to alternate Agent, the Device Path will be different.
- Size - Size of the hard disk or partition in gigabytes.
- Block Size - Minimum amount of space that can be allocated on the hard disk. Depends on the partition size and file system used and is equal to multiples of 512 bytes.
- Total Blocks - The total number of blocks (see above) available for data on this partition.
- Allocated Blocks - The number of blocks allocated for data at the time the Recovery Point was created.



Click "Next" to proceed to the following step.

9. On the next screen, select one of the following options:

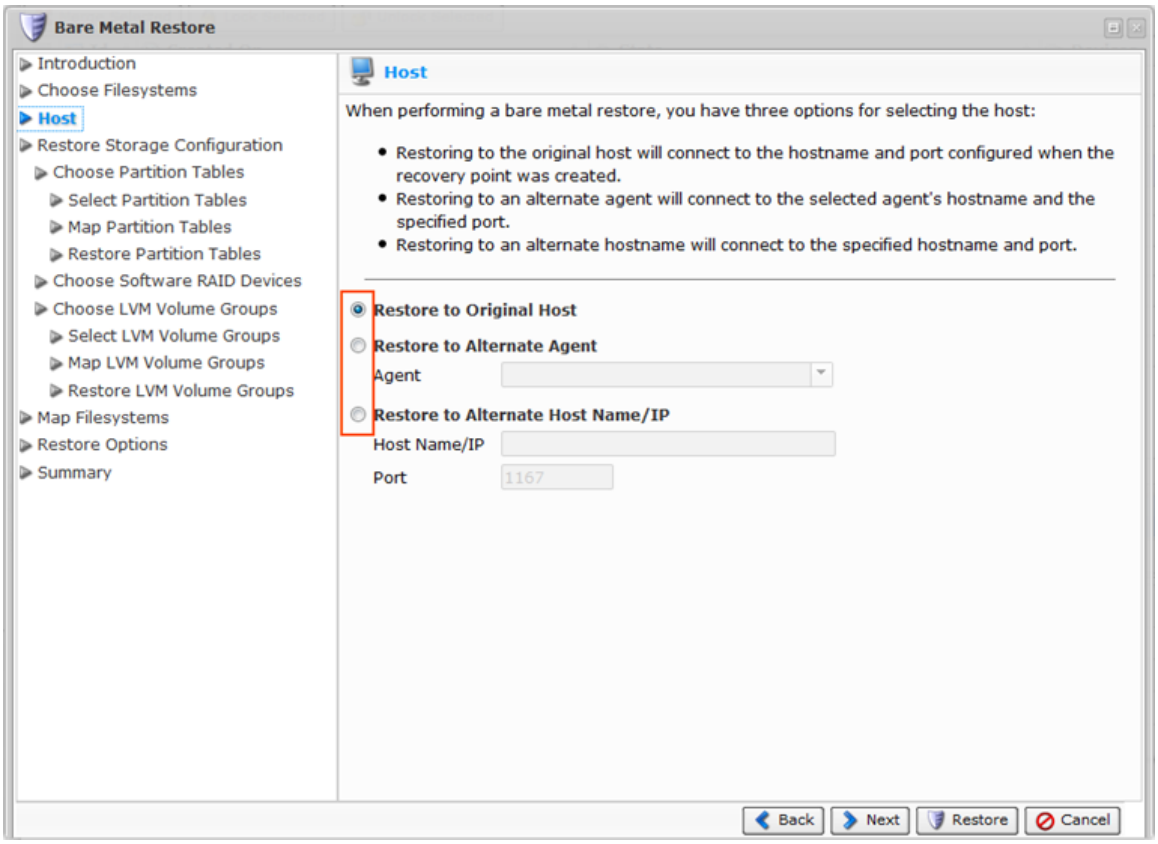
- Restore to Original Host - The same Agent Name/IP address and port as the original Agent. Connects to the Agent name and uses the port configured when the Recovery Point was created.
- Restore to Alternate Agent - Connects to the selected Agent's hostname and the specified port. The Agent must have been added already to the system.
- Restore to Alternate Host Name/IP - Connect to the specified hostname and port. This option allows you to Restore to a Host with a Host Name/IP address different than the original Host. For example, if the PXE host has a different IP, specify the IP address.

To restore to the Agent where the system was installed previously, choose the first option (" Restore to Original Host"). This is the only option that makes sense when you perform Bare-Metal Restore using Server Live CD or Server PXE Boot.

If you chose to restore to an alternate Agent added to the system, select the second option (" Restore to Alternate Agent"). Then select the Agent from the drop-down list. The Agent must be running the R1Soft Backup Disaster Recovery Boot Media and should be known to the CDP

Server. When a Host is booted into Disaster Recovery Media, no authentication will be required.

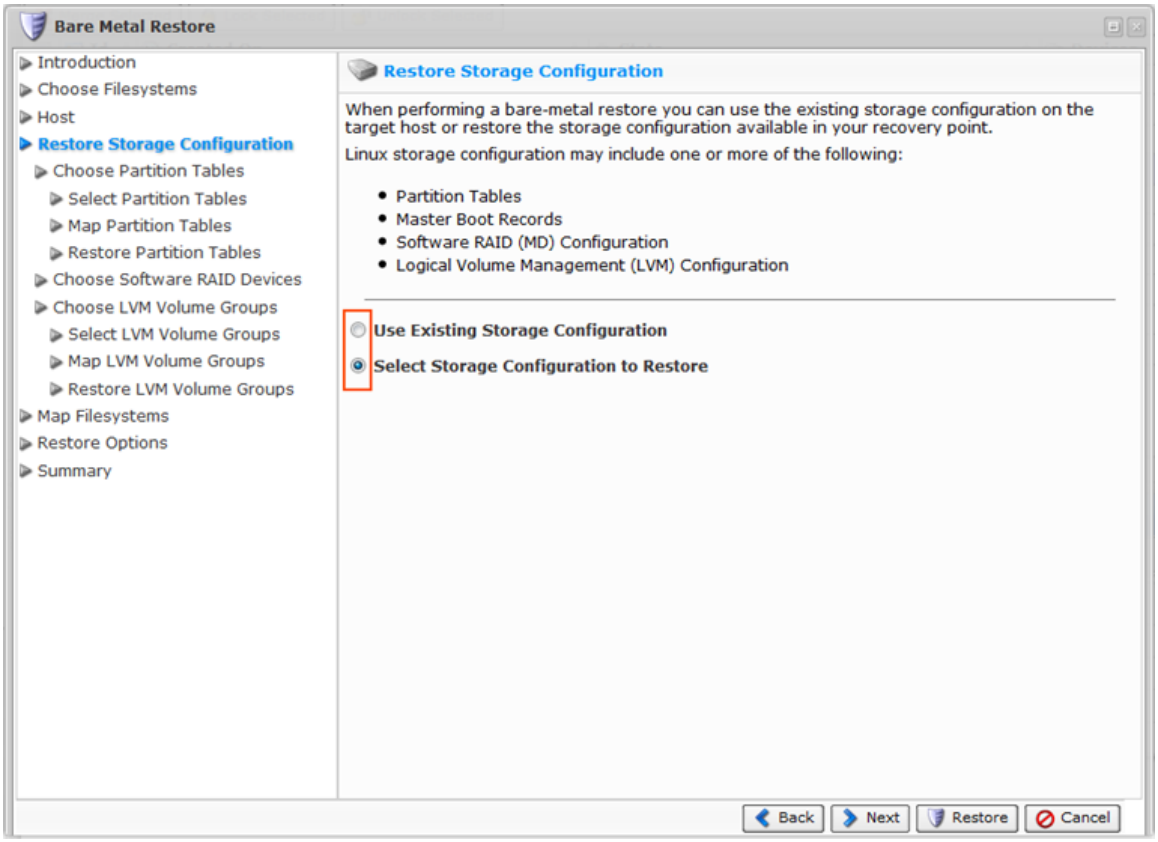
If you chose to restore to an alternate Agent not added to the system, select the last option (" Restore to Alternate Host Name/IP"). Then enter the Hostname or IP address of the alternate Agent. This option should be selected when you perform Bare-Metal Restore using Agent Live CD or Agent PXE Boot.



Click "Next" to proceed to the following step.

10. On the "Restore Storage Configuration" screen, select one of the following options:

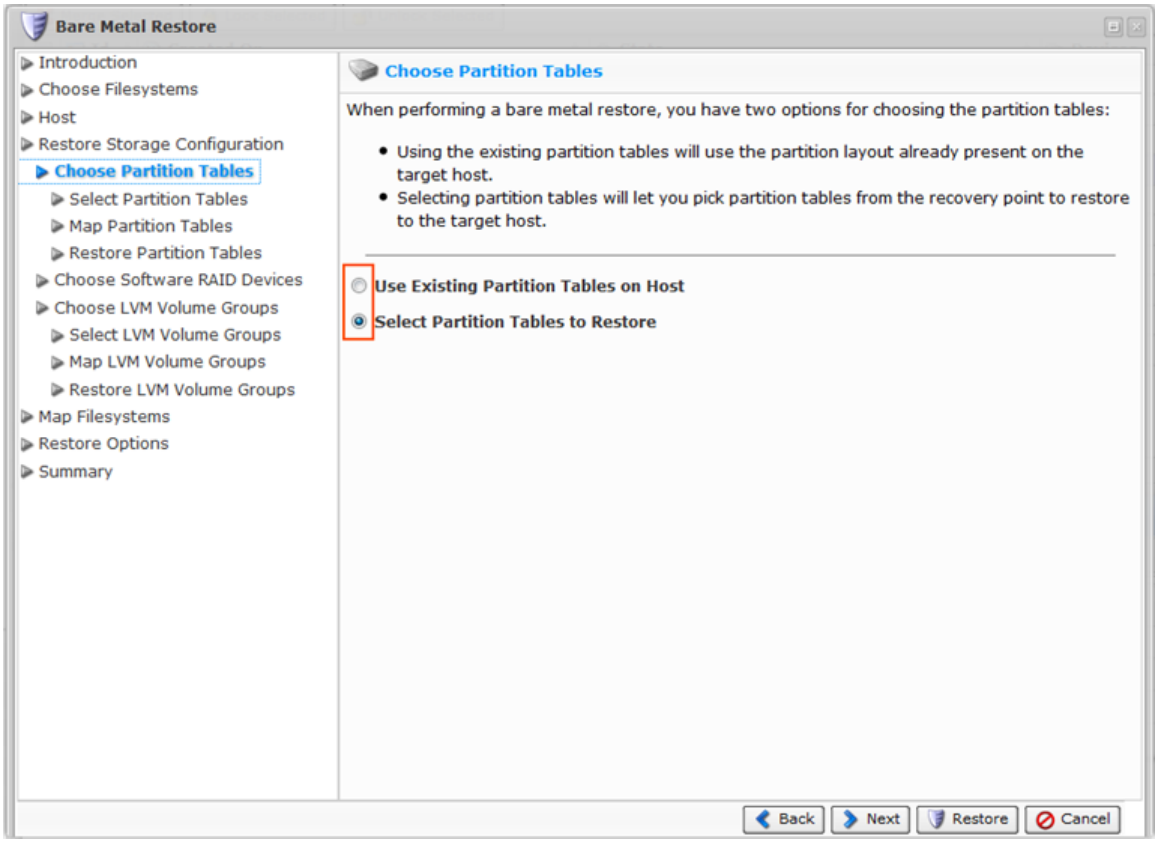
- Select Storage Configuration to Restore - Selecting this option lets you choose storage configuration.
- Use Existing Storage Configuration - Bare-Metal Restore will use the storage configuration already present on the target Agent. If you choose this step, proceed to the step 16.



Click "Next" to proceed to the following step.

11. On the next screen, select one of the following options:

- Use Existing Partition Tables on Host - Bare-Metal Restore will use the partition layout already present on the target Agent. This option should almost never be used when performing Bare-Metal Restore.
- Select Partition Tables to Restore - Selecting this option lets you pick partition tables from the Recovery Point to restore to the target Agent. In most cases, you should select this option.



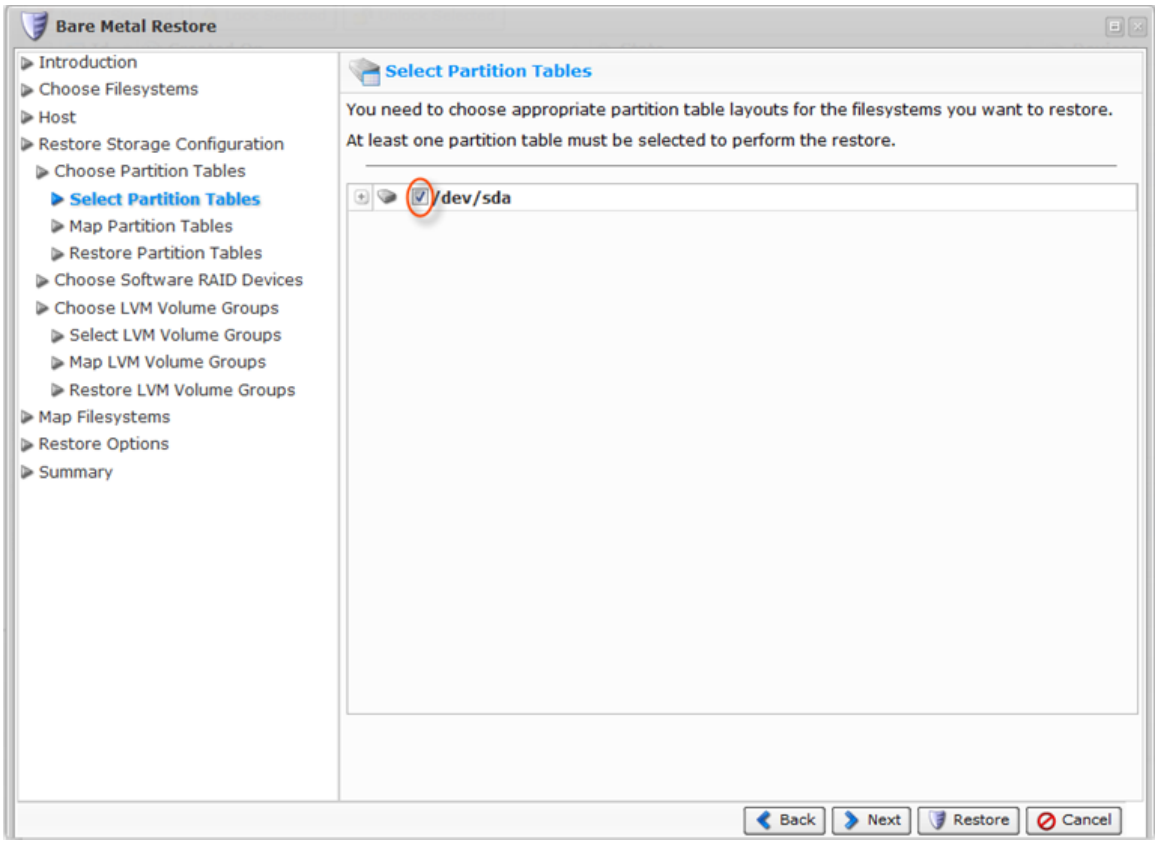
Click "Next" to proceed to the following step.

12. If you select the "Select Partition Tables to Restore" option, then three additional steps arise:

- Select Partition Tables
- Map Partition Tables
- Restore Partition Tables

12.1 Selecting Partition Tables

Select the partition table layout(s) for the filesystems you want to restore.



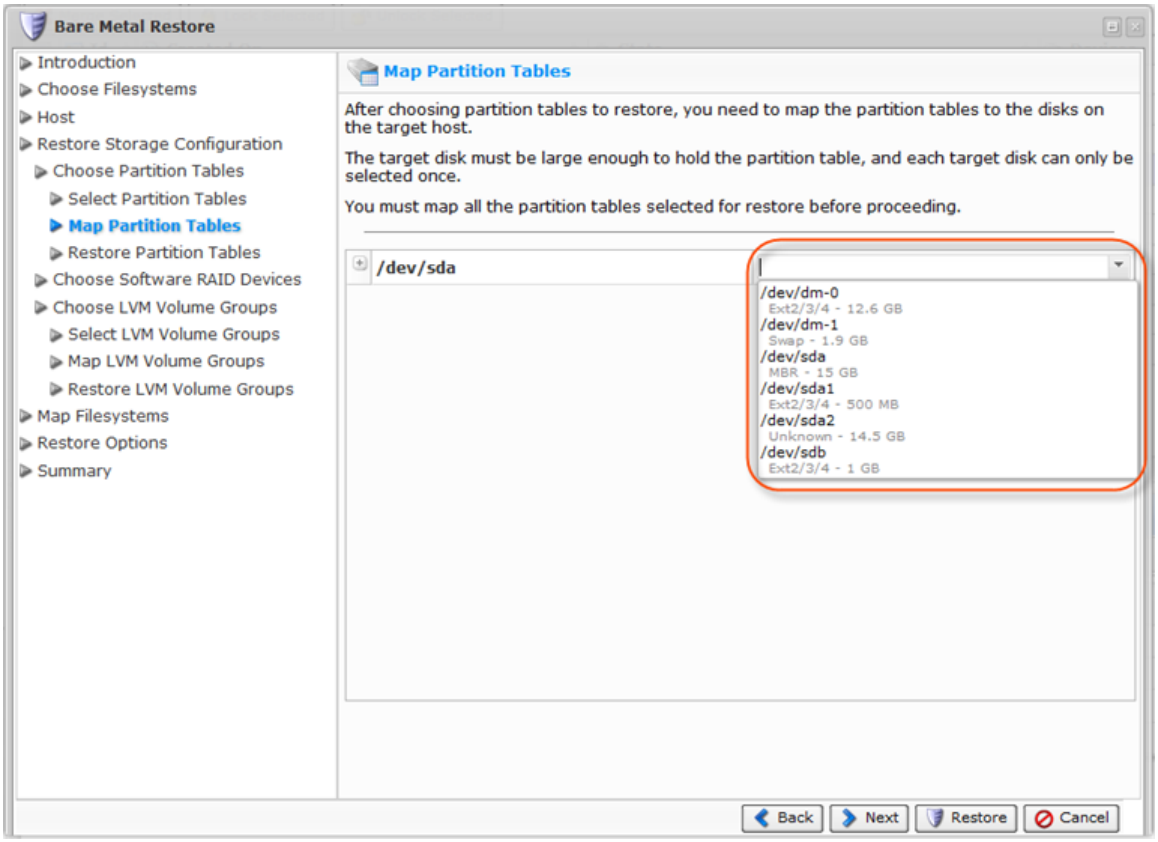
> **Tip**
> To display the partition table properties, click on the "Plus" icon in front of the partition table's name.
>
> - Content Type - Either MBR (Master Boot Record) or other special type of the partition.
> - Size - Size of the partition table in gigabytes.
> - Number Of Sectors - Shows the total number of partition table sectors.
> - Sector Size - The value in bytes of the sector.
> - Serial Number - Full serial number of the partition table.
> - Partitions - The list of partitions allocated with the partition table.

Click "Next" to proceed to the following step.

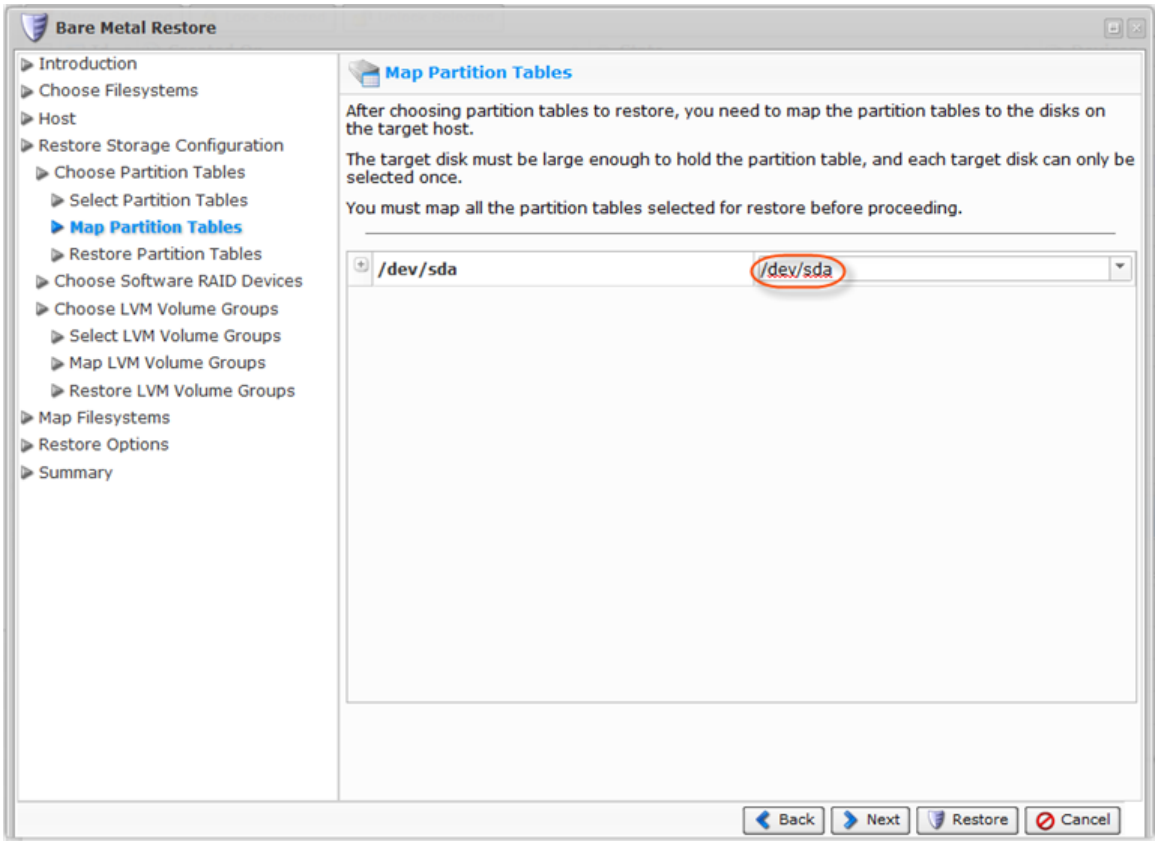
12.2 Mapping Partition Tables

After choosing partition tables to restore, map the selected Partition Table(s) Recovery Points to physical Disks in the Target Agent. From the drop-down menu named "Click to Edit," select the

physical Disks to which you are going to restore.



You are provided a table that allows you to map the chosen Partition Tables to physical Disks on the Target Agent. You can see as many lines in the table as the Partition Tables selected to restore. Each Partition Table must be mapped to a physical Disk on the Target Agent before proceeding.

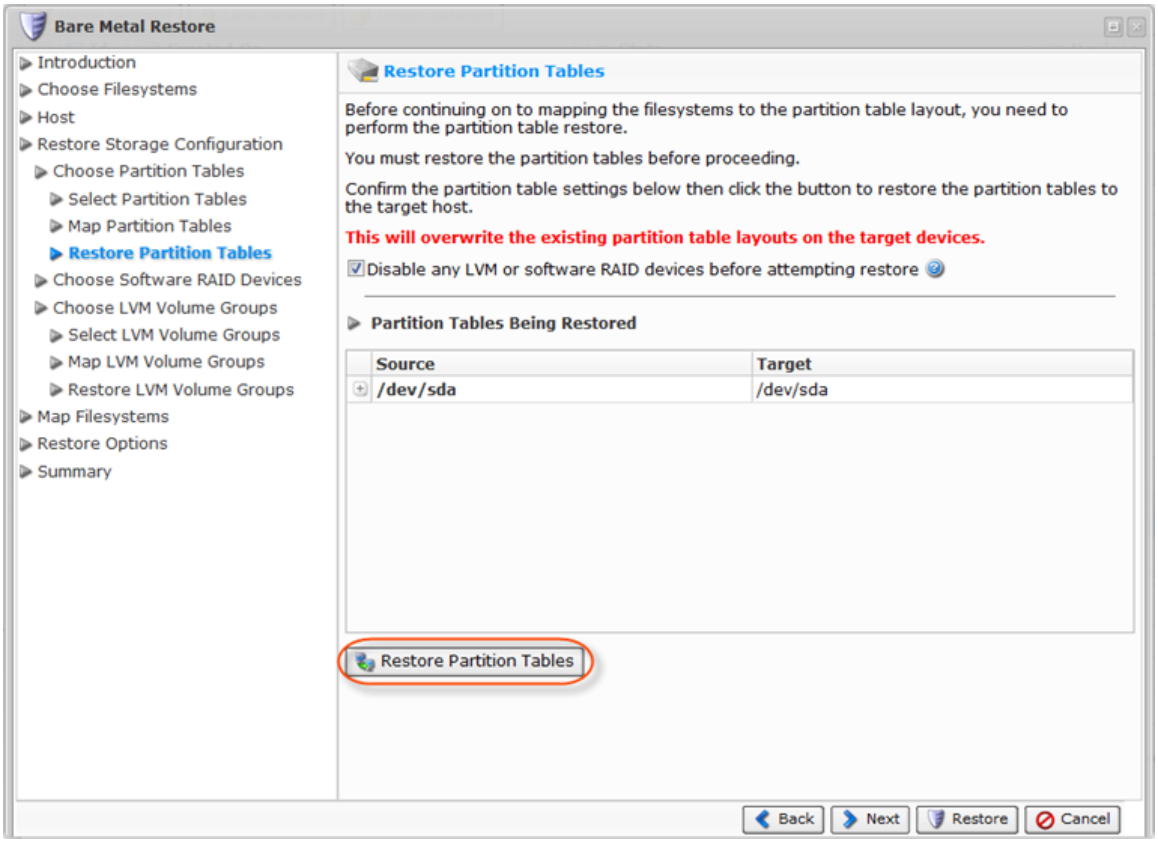


After selecting the Disks, click on "Next" to proceed to the next page.

12.3 Restoring Partition Tables

Perform the partition table restore by clicking on the "Restore Partition Tables" button. Once confirmed, the Partition Table Restore will be initiated. A busy indicator will be displayed while the restore is in progress. Restoring the partition table should not take a lot of time because the partition table fits into one sector - 512 bytes.

> **Notice**
> Restored partition tables will overwrite the existing partition table layout on the target devices.

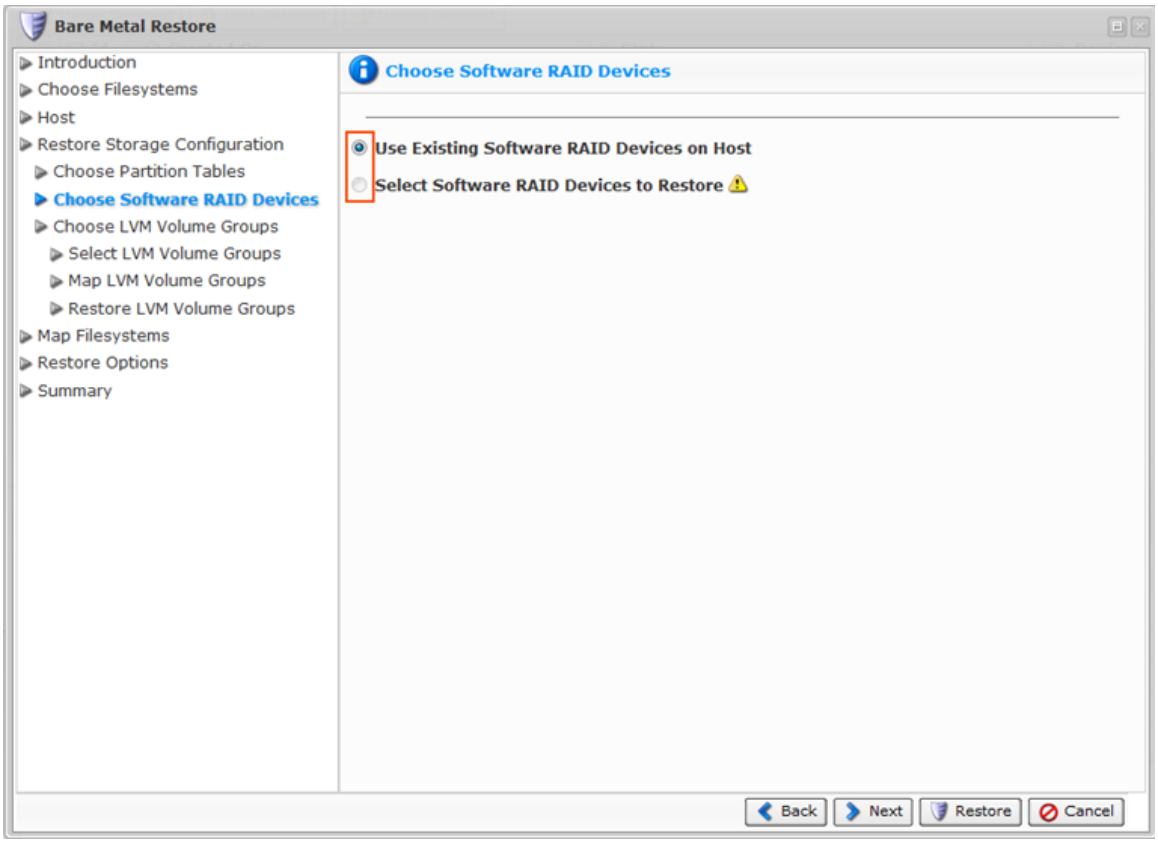


When the process is over, click "OK" in the notification pop-up.

Click "Next" to proceed to the following step.

13. On the appeared screen, select one of the following options:

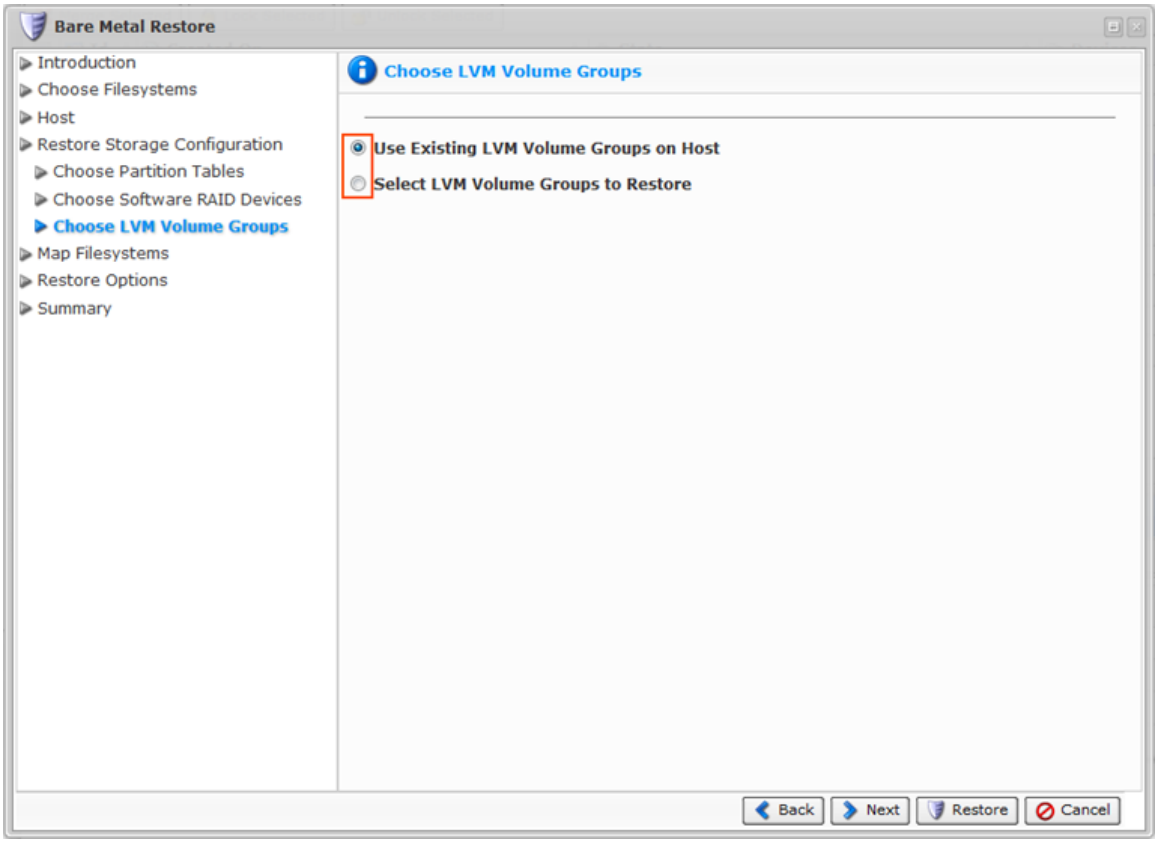
- Use Existing Software RAID Devices on Host - Bare-Metal restore will use Software RAID Devices that already exist on host.
- Select Software RAID Devices to restore - Allows you to choose Software RAID Devices to restore. If you choose this option, go through all of the Software RAID steps. For more information see Performing Bare-Metal Restore with RAID (MD).



Click on "Next" to proceed to the next page.

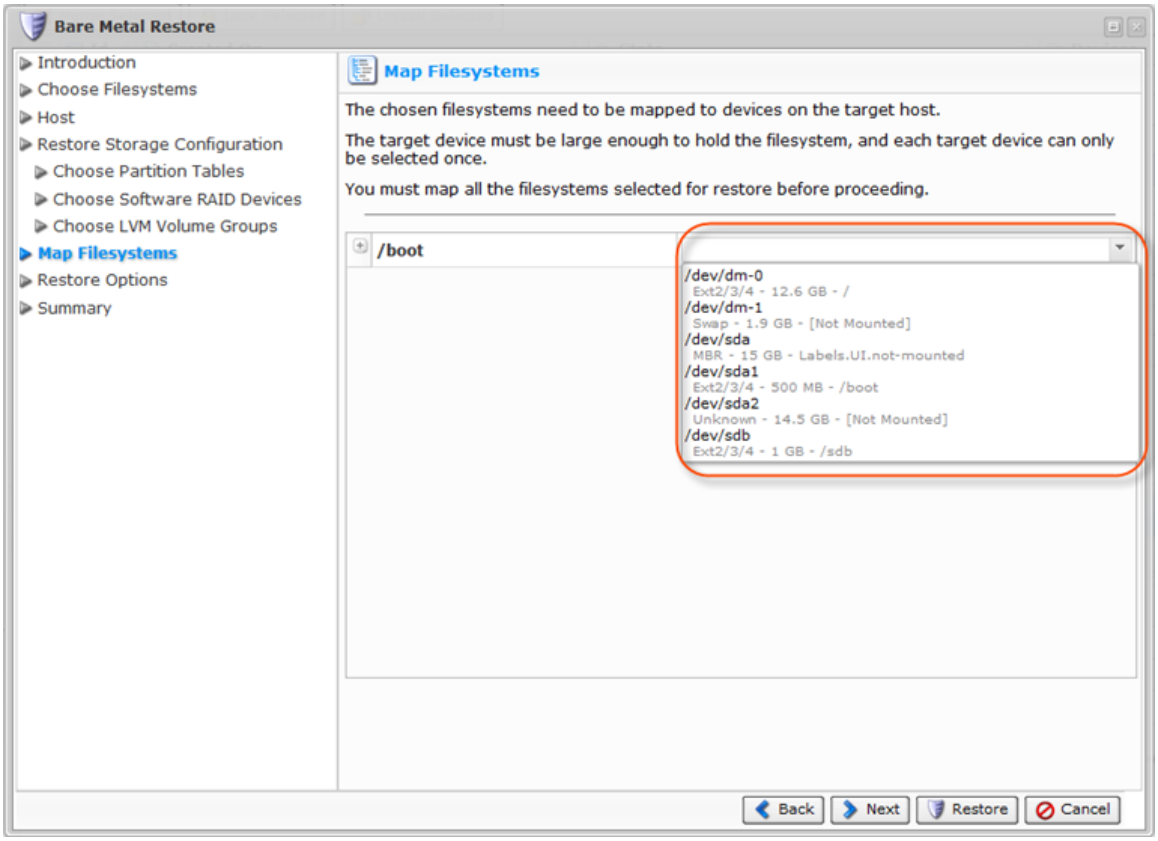
14. On the appeared screen, select one of the following options:

- Use Existing LVM Volume Groups on Host - Bare-Metal restore will use LVM Volume Groups on host.
- Select LVM Volume Groups to Restore - Allows you to choose LVM Volume Groups to restore. If you choose this option, go through all of the LVM Volume Groups steps. For more information see Perfoming Bare-Metal Restore with LVM.

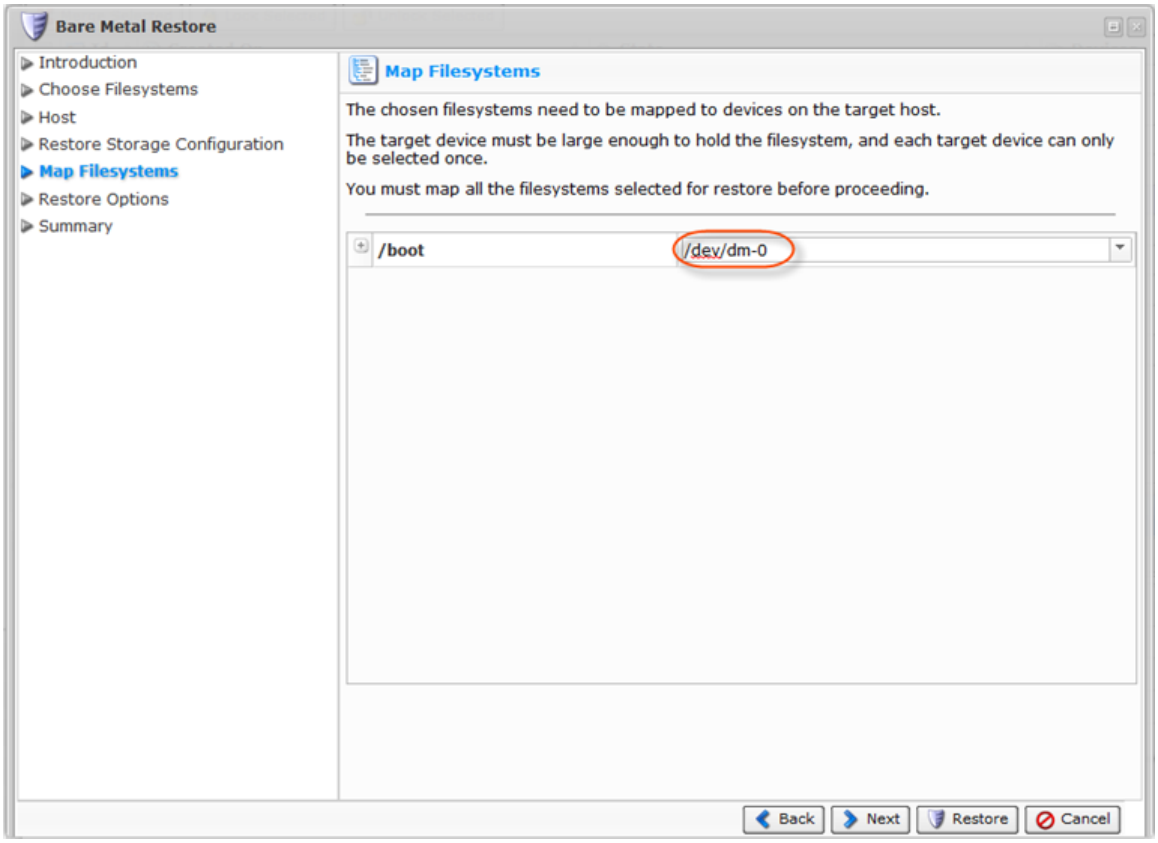


Click on "Next" to proceed to the next page.

15. The following step requires you to map the chosen file systems to the devices on the target machine.



From the drop-down menu called "Click to Edit," select destination devices for each source file system.



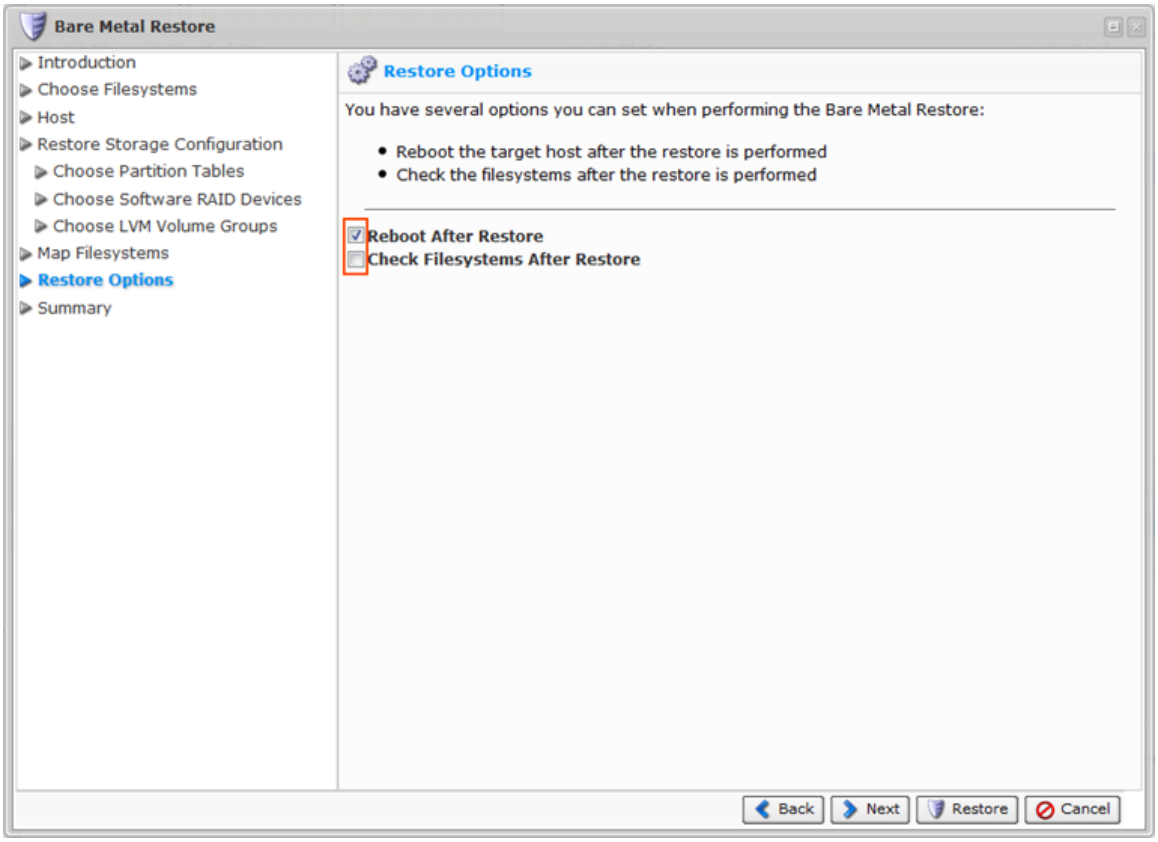
> **Notice**
> The target device must be large enough to hold the file system.

> **Notice**
> Each target device can be selected once only.

Click "Next" to proceed to the following step.

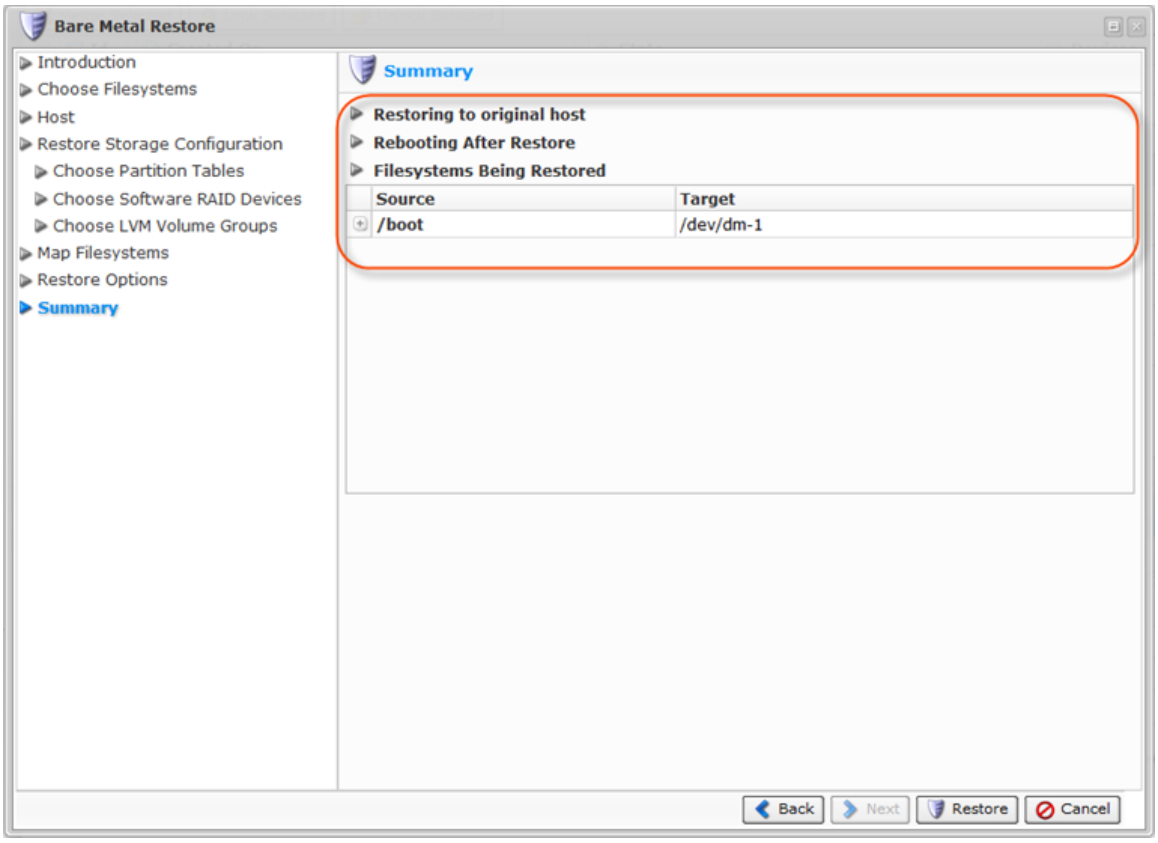
16. Then you need to define the following options:

- Reboot After Restore - Reboots the target host after the restore is performed. Select this checkbox to reboot your Agent after the Bare-Metal Restore is complete. This option is very useful since you have to reboot the target host after restore anyway.
- Check Filesystems After Restore - Checks the file systems after the restore is performed.

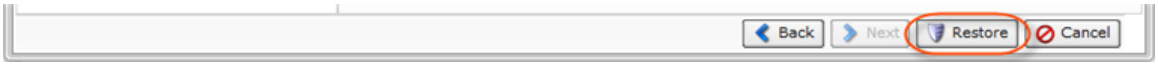


Click "Next" to proceed to the following step.

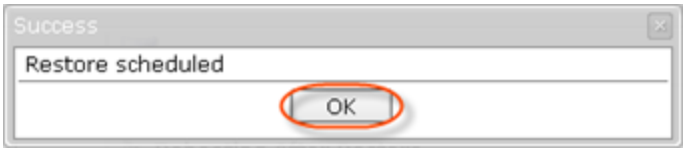
17. On the "Summary" page, you will need to confirm the selected Bare-Metal Restore options. Each selected file system is listed along with the name of the target device to which the file system is being mapped.



Click "Restore" to start the Bare-Metal Restore task.



The Bare-Metal Restore task is scheduled. Click "OK".

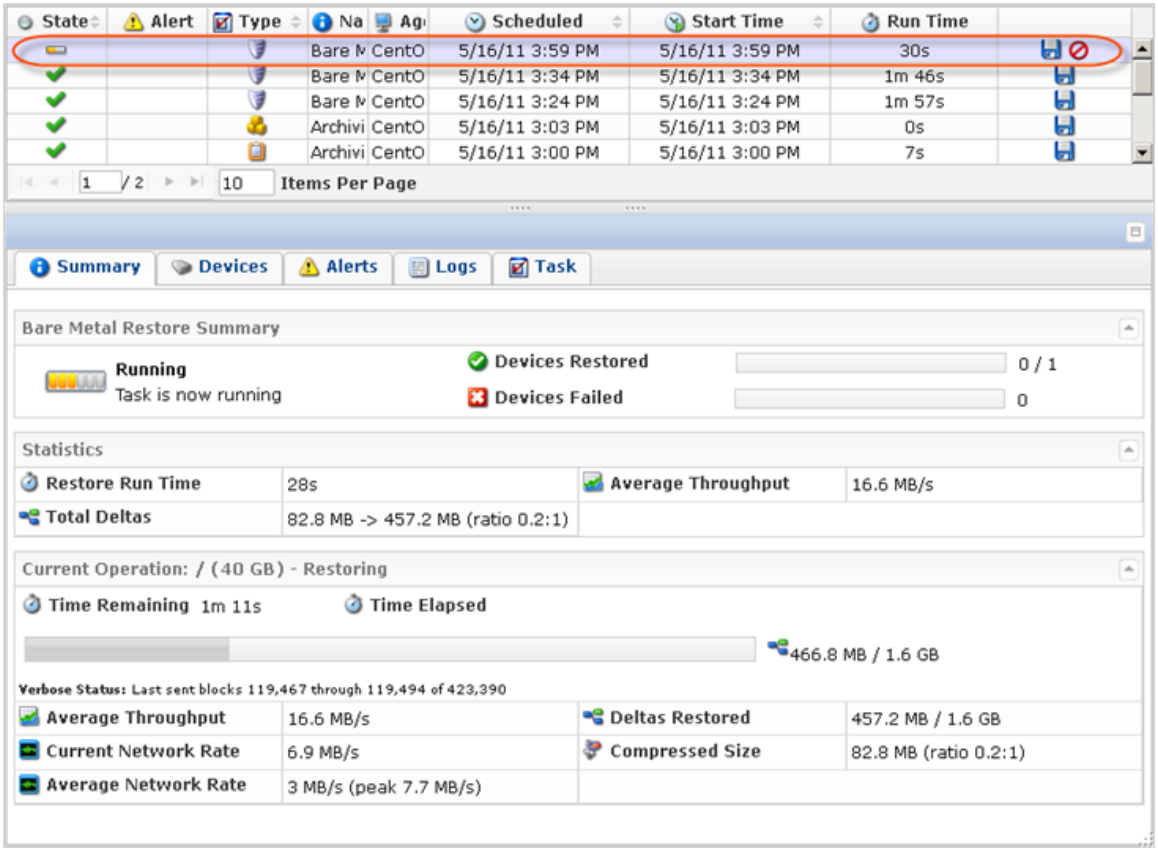


> **Tip**
> The Task results can be sent via email as a Report. See Reporting.

18. The Restore process starts and can take awhile. You can go to the "Task History" screen to

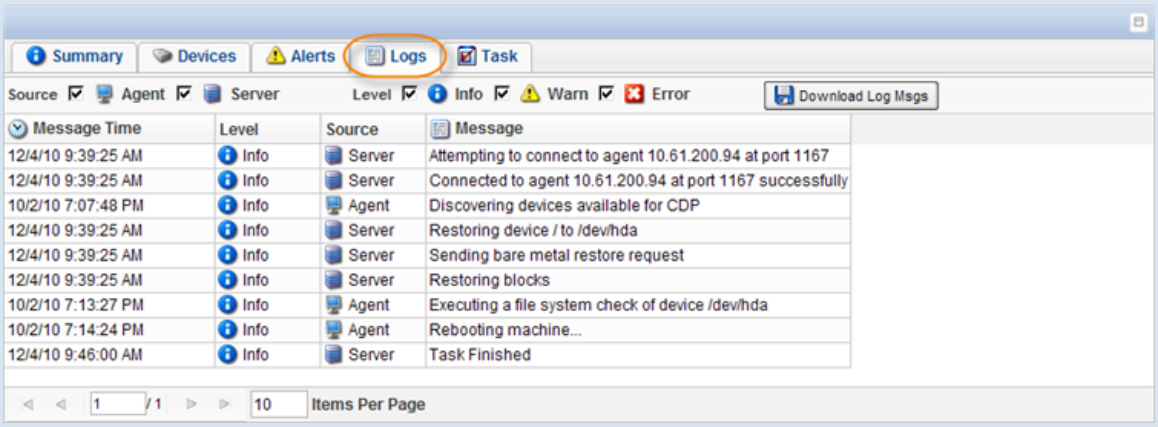
observe the task progress. See Accessing Task History.

The Task History page displays the State, Alert, Type, Progress percentage, and the Started time stamp of the Bare-Metal Restore process.



Note

You can find more information about the Restore process by reading the Log Messages. The Log Messages for the selected Task are displayed at the bottom of the page.



19. When the process is complete, you can reboot the server you just restored by pressing Ctrl-Alt-Del or by executing the reboot command in the root shell.

> **Notice**
> Make sure you eject the Disk from the CD-ROM drive so the server will boot from the hard Disk.

> **Note**
> If the Disk you used for your Bare-Metal Restore is larger than the Disk you backed up previously, the free space on the new Disk will remain free. You can create a new Partition in this space.