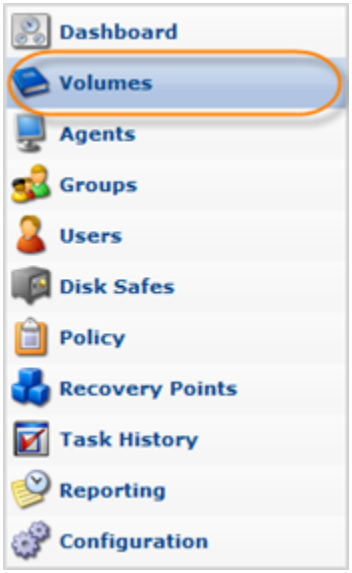
Creating Volumes

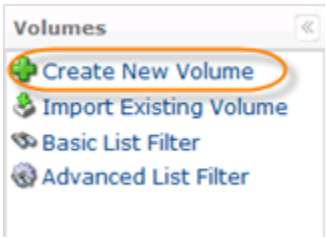
You can assign a Disk Safe to a Volume. In this case, the Volume must have been created before the Disk Safe.

Follow the instructions below to add a Volume to your CDP Enterprise Edition.

1. Click on "Volumes" in the Main Menu to access the Volumes page.



2. Then click "Create New Volume" in the Volumes menu located in the top left area.



3. The "Create New Volume" window will open. It contains the following tabs:

- Identification
- Users
- Groups
- Limits

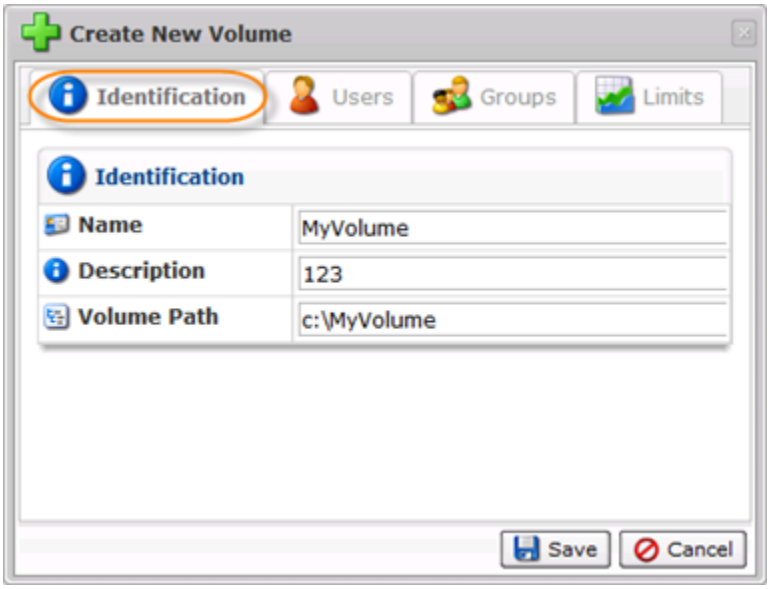
4. Define the following settings specific to the new Volume:

Identification Tab | Users Tab | Groups Tab | Limits Tab

Identification Tab

Define the following Identification options:

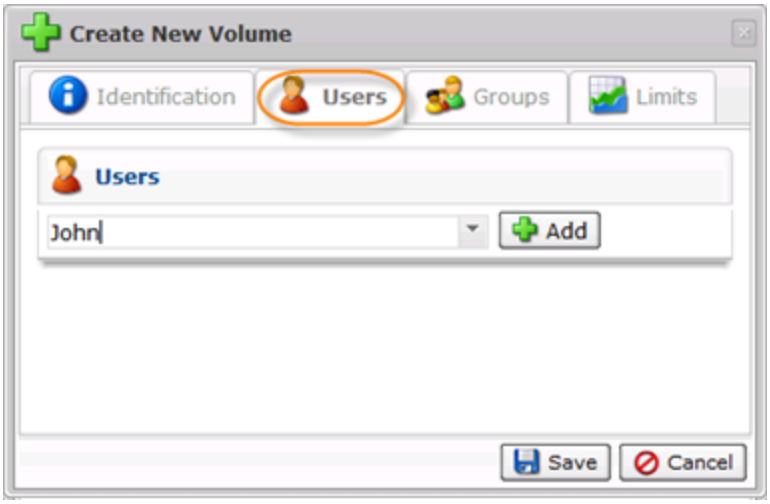
- Name - Volume name is used to identify the Volume in the system. For example, to assign a Volume to the Disk Safe, you need to select a Volume name from the drop-down menu.
- Description - Additional information describing the Volume. The Description is displayed in the Volumes list.
- Volume Path - New or existing folder. The assigned Disk Safes will be placed in this folder.



Users Tab

This tab allows you to assign users to the Volume.

> **Note**
> After upgrading, existing Sub-User assignments will not be removed.

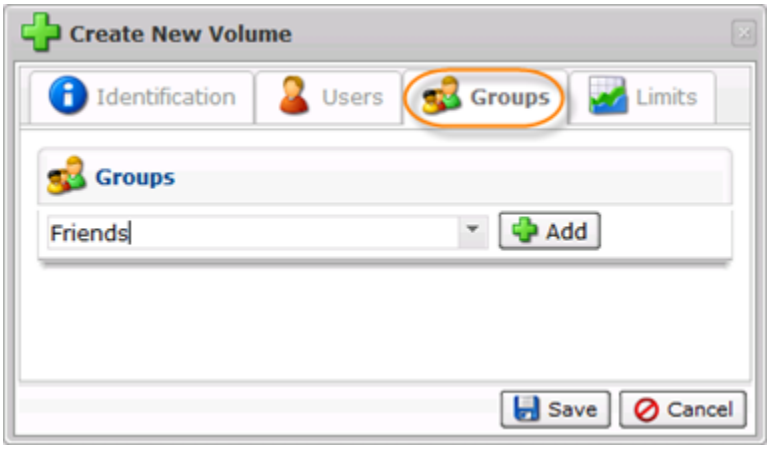


Select a user name from the drop-down menu and click on the green plus icon. The user will appear in the Users area.

> **Tip**
> If you need to remove an assigned user from the Volume properties window, click on the Delete (red X) icon in front of the user.

Groups Tab

This tab allows you to assign groups to the Volume.



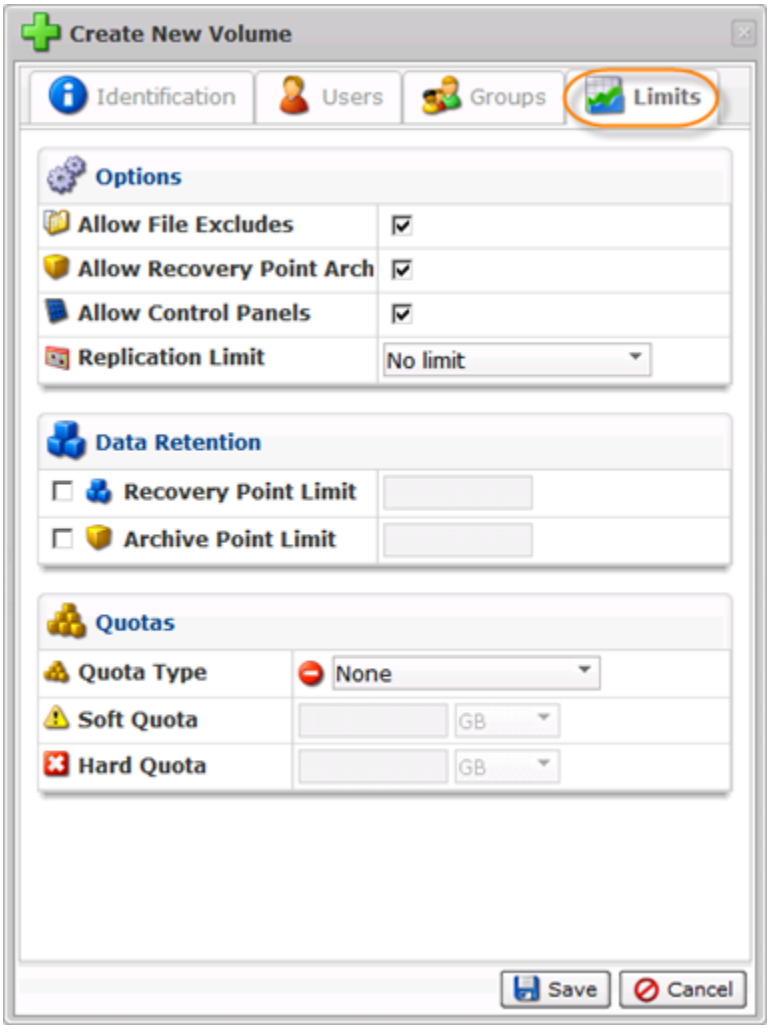
Select a group name from the drop-down menu and click on the Add button. The group will appear in the Groups area.

> **Tip**
> If you need to remove an assigned group from the Volume properties window, click on the Delete (red X) icon in front of the group.

Limits Tab

This tab allows File Excludes, Recovery Point Archiving, and Control Panels to be enabled/disabled. Limits can be defined for Replication, Recovery Points, and Archive Points.

> **Note**
> When you set a limit for a Volume, it will be enforced to all Disk Safes (and Policies) assigned to that Volume. For example, if a Volume limits Replication frequency to daily, Disk Safe Replication cannot be hourly. The same rule applies to retention policy, quotas, allowing file excludes, etc.



Options

- Allow File Excludes - Check this option to activate the File Excludes feature for all the Disk Safes assigned to that Volume. If you check this option, then the system will allow you to specify files/folders which will not to be backed up during the replication Policy. By default, all file/folders from the selected Devices are replicated. Read more in About File and Folder Excludesand Excluding Files and Folders.
- Allow Recovery Point Archiving - Check this option to activate the Archiving feature for all the Disk Safes assigned to that Volume. If you check this option, the system will allow you to create archives of your data on a specified hour, day, week, or month. If the option is enabled, then you can specify the "Archive Point Limit" under "Data Retention." Read more in Archiving.
- Allow Control Panels - Check this option to activate the Control Panels feature for the Volume. If you check this option, the system will allow you to back up and restore Hosting Control Panel user accounts. Read more in CDP for Hosting Control Panels.

> Tip
> There is a system-wide option to enable the Hosting Control Panels feature (Configuration › Product features "Enable Hosting Control Panels" option under "Hosting Control Panels"). Read more in [CDP3:Enabling Hosting Control Panels].

- Replication Limit - This option defines the lowest replication frequency for all the Disk Safes assigned to that Volume. For example, if you set the Volume's replication limit to "Weekly," then the minimal replication frequency for the Disk Safes in that Volume will be weekly (hourly and daily replications will be restricted).

Data Retention

Here you can set the limits for Recovery and Archive Points stored in all of the Disk Safes assigned to the Volume. When the combined number of Recovery/Archive Points in all of the Disk Safes exceeds the defined limits, the old Recovery/Archive Points will be merged. See Merging Recovery Points.

- Recovery Point Limit - Specify the maximum number of Recovery Points that can be stored in the Disk Safes assigned to the Volume.
- Archive Point Limit - Specify the maximum number of Archive Points that can be stored in the Disk Safes assigned to the Volume. The option is available if the "Allow Recovery Point Archiving" option is enabled under "Option."

Quotas
Quotas are set to limit the disk usage of the Volume. The limit is set for all Disk Safes in the Volume on the basis of space occupied by Disk Safes, size of deltas, or number of deltas.

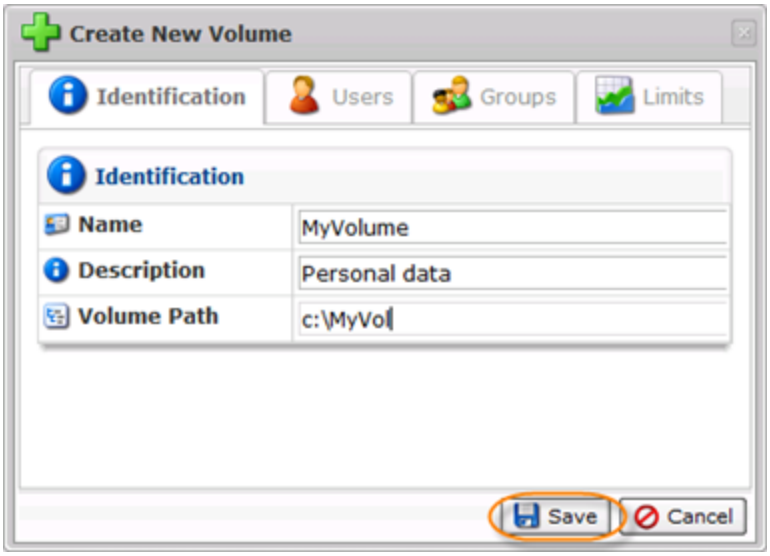
> **Tip**
> You can define Disk Quotas in Configuration. See Configuring Server Options.

- Quota Type - From the drop-down menu, select a quota type:
  - On Disk Size - Quota is based on the raw Disk file size of all the Disk Safes and their files in the Volume's folder.
  - Size of Deltas in Disk Safe - The quotas will calculate the sum of the sizes (after compression) of the actual block level deltas in the Disk Safe file. Disk Safe's overhead and unused space in the Disk Safe file are not counted against the quota. You can find a description of deltas in Disk Safes.

    > **Note**
    > Similar to a database, the Disk Safe format adds overhead to the raw data. This can happen if you delete more deltas from the Disk Safe than you add. For example, you delete a large number of data from the data set you are protecting. That data are no longer retained in any of your Recovery Points. As old Recovery Points are merged out and block-level deltas are no longer needed, they are "freed" from the Disk Safe file. Until there is a vacuum of the Disk, the size of the Disk Safe.db file(s) will not get smaller. You can run Vacuuming but it is time consuming, causes internal fragmentation of the .db Disk Safe files, and can affect the files' performance.

- Soft Quota - The value in bytes or in deltas. Soft Quota is a warning level where users are informed they are close to reaching their effective limit.
- Hard Quota - The value in bytes or in deltas. Hard Quota allows resources to be occupied by data. If the Hard Quota is reached, then the system forbids generating new Recovery Points. The replication is interrupted and failed.

5. Once the Volume settings are specified, click "Save" to add the new Volume to the system.



6. The Volume will appear in the "Volumes" list.

