Replication Stages

The CDP Replication has four (4) stages:

1. Snapshot of the Disk or Volume.
A point-in-time online snapshot of the server's file system is created.

2. Exclude files/folders.
At this stage, you can choose which files/folder will be excluded from the replication.
If you exclude files by pattern (e.g. ".log"), this process will take longer as each file name must be examined against the pattern (e.g. ".log"). You can save time by excluding entire folders rather than single files. CDP will give you a progress indicator showing you how much time has elapsed excluding files/folders.

3. Copy Deltas or Perform Initial Replication.
At this stage, the deltas are saved to the Disk Safe a new Recovery Point is created.

4. Merging Recovery Points.
When a new Recovery Point is created and if the total amount of them exceeds the Recovery Points limit, the old Recovery Points will be automatically merged. This process sometimes requires a considerable amount of time, especially if the Recovery Points to be merged are large.

Although this stage is not displayed in the Task History, the Replication is finished only after the old Recovery Points have been merged.

To view the Id of the merged Recovery Point, go to Task History, select the current policy, and click on the "Merged Recovery Points" tab.

Replication Types

The CDP Replication has three (3) types:

1. Initial Replica
This replica is created once for each new device you save to a Disk Safe. During the Initial Replica, all information from the disk (except for the files/folders you have excluded) is copied to the Disk Safe and forms the first Recovery Point. This usually requires some time. To learn more about this process, see: Virtual Full Backups.

2. CDP Replication
During a CDP Replication, the CDP Agent installed on the Host tracks what block-level deltas have changed on the target replication device since your last Recovery Point and copies them to the Disk Safe. This process doesn't take long. To learn more see: Computing Deltas.

3. Full Block Scan

Sometimes the CDP Agent must perform a full block scan type replication of the device. This procedure is required to get the asynchronous CDP replications back in sync. During the scan, every allocated block in the file system must be read from disk and its MD5 check sum computed and compared to the checksum in the last completed Recovery Point. This process takes much longer than a CDP Replication.