



# Clone Unix file systems

## SnapCenter Software 5.0

NetApp  
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# Clone Unix file systems

## Clone Unix file system backup

You can use SnapCenter to clone Unix file system using the backup of the filesystem.

### Before you begin

- You can skip the fstab file update by setting the value of `SKIP_FSTAB_UPDATE` to **true** in the `agent.properties` file located at `/opt/NetApp/snapcenter/scc/etc`.
- You can have a static clone volume name and junction path by setting the value of `USE_CUSTOM_CLONE_VOLUME_NAME_FORMAT` to **true** in the `agent.properties` file located at `/opt/NetApp/snapcenter/scc/etc`. After updating the file, you should restart the SnapCenter for custom plug-in service by running the command: `/opt/NetApp/snapcenter/scc/bin/scc restart`.


Example: Without this property the clone volume name and junction path will be like `<Source_volume_name>_Clone_<Timestamp>` but now it will be `<Source_volume_name>_Clone_<Clone_Name>`

This keeps the name constant so that you can manually keep the fstab file updated if you do not prefer to update the fstab by SnapCenter.

### Steps

1. In the left navigation pane, click **Resources**, and then select the appropriate plug-in from the list.
2. In the Resources page, select either **Path** or **Resource Group** from the **View** list.
3. Select the file system from either the details view or the resource group details view.

The topology page is displayed.

4. From the Manage Copies view, select the backups either from Local copies (primary), Mirror copies (secondary), or Vault copies (secondary).
5. Select the backup from the table, and then click .
6. In the Location page, perform the following actions:

For this field...	Do this...
Clone server	By default, the source host is populated.
Clone mount point	Specify the path where the file system will be mounted.

7. In the Scripts page, perform the following steps:
  - a. Enter the commands for pre clone or post clone that should be run before or after the clone operation, respectively.



You should check if the commands exist in the command list available on the plug-in host from the `/opt/NetApp/snapcenter/scc/allowed_commands.config` path.

8. In the Notification page, from the **Email preference** drop-down list, select the scenarios in which you want to send the emails.

You must also specify the sender and receiver email addresses, and the subject of the email. If you want to attach the report of the clone operation performed, select **Attach Job Report**.



For email notification, you must have specified the SMTP server details using either the GUI or the PowerShell command `Set-SmSmtServer`.

9. Review the summary, and then click **Finish**.
10. Monitor the operation progress by clicking **Monitor > Jobs**.

## Split a clone

You can use SnapCenter to split a cloned resource from the parent resource. The clone that is split becomes independent of the parent resource.

### About this task

- You cannot perform the clone split operation on an intermediate clone.

For example, after you create clone1 from a database backup, you can create a backup of clone1, and then clone this backup (clone2). After you create clone2, clone1 is an intermediate clone, and you cannot perform the clone split operation on clone1. However, you can perform the clone split operation on clone2.

After splitting clone2, you can perform the clone split operation on clone1 because clone1 is no longer the intermediate clone.

- When you split a clone, the backup copies and clone jobs of the clone are deleted.
- For information about clone split operation limitations, see [ONTAP 9 Logical Storage Management Guide](#).
- Ensure that the volume or aggregate on the storage system is online.

### Steps

1. In the left navigation pane, click **Resources**, and then select the appropriate plug-in from the list.
2. In the **Resources** page, select the appropriate option from the View list:

Option	Description
For database applications	Select <b>Database</b> from the View list.
For file systems	Select <b>Path</b> from the View list.

3. Select the appropriate resource from the list.

The resource topology page is displayed.

4. From the **Manage Copies** view, select the cloned resource (for example, the database or LUN), and then click .
5. Review the estimated size of the clone that is to be split and the required space available on the aggregate, and then click **Start**.

6. Monitor the operation progress by clicking **Monitor > Jobs**.

The clone split operation stops responding if the SMCORE service restarts. You should run the Stop-SmJob cmdlet to stop the clone split operation, and then retry the clone split operation.

If you want a longer poll time or shorter poll time to check whether the clone is split or not, you can change the value of *CloneSplitStatusCheckPollTime* parameter in *SMCoreServiceHost.exe.config* file to set the time interval for SMCORE to poll for the status of the clone split operation. The value is in milliseconds and the default value is 5 minutes.

For example:

```
<add key="CloneSplitStatusCheckPollTime" value="300000" />
```

The clone split start operation fails if backup, restore, or another clone split is in progress. You should restart the clone split operation only after the running operations are complete.

### Related information







[SnapCenter clone or verification fails with aggregate does not exist](#)

## Monitor Unix file systems clone operations


You can monitor the progress of SnapCenter clone operations by using the Jobs page. You might want to check the progress of an operation to determine when it is complete or if there is an issue.

### About this task

The following icons appear on the Jobs page, and indicate the state of the operation:

-  In progress
-  Completed successfully
-  Failed
-  Completed with warnings or could not start due to warnings
-  Queued
-  Canceled

### Steps

1. In the left navigation pane, click **Monitor**.
2. In the **Monitor** page, click **Jobs**.
3. In the **Jobs** page, perform the following steps:
  - a. Click  to filter the list so that only clone operations are listed.
  - b. Specify the start and end dates.
  - c. From the **Type** drop-down list, select **Clone**.

- d. From the **Status** drop-down list, select the clone status.
  - e. Click **Apply** to view the operations that are completed successfully.
4. Select the clone job, and then click **Details** to view the job details.
  5. In the Job Details page, click **View logs**.

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