



Disconnecting a Snapshot copy

Snapdrive for Unix

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Disconnecting a Snapshot copy

You can disconnect a Snapshot copy from a LUN, a file system on a LUN, disk groups, NFS directories, or shared disk groups, host volumes, and file systems on a LUN.



You can disconnect the split clone volumes from SnapDrive for UNIX 4.2 and later versions.

Using the Snapshot disconnect operation

Use the `snapdrive snap disconnect` command to disconnect a Snapshot copy that is across multiple storage systems or storage system volumes.

You use the `snapdrive snap disconnect` command to remove the mappings for LUNs, or for storage entities and the underlying LUNs, or for NFS directories in the Snapshot copy.

You can use this command to disconnect Snapshot copies that span multiple storage system volumes or multiple storage systems. The storage entities and volumes can reside on the same storage system or different storage systems.

Use this command to disconnect any of the following:

- LUNs
- A file system created directly on a LUN
- Disk groups, host volumes, and file systems created on LUNs
- NFS directory trees
- Shared disk groups, host volumes, and file systems created on LUNs

The disconnect operation does not modify the connected Snapshot copy. However, by default, the operation does delete any temporary LUNs or clones created by the corresponding connect operation.



For LUNs, file systems on LUNs, and LVM entities, this command is equivalent to `snapdrive storage delete`.

Guidelines for disconnecting Snapshot copies

The following are the guidelines to disconnect a Snapshot copy for LUNs, storage entities, or NFS directories.

- When you disconnect a file system, SnapDrive for UNIX always removes the mountpoint.
- To undo the effects of the Snapshot connect operation, use the Snapshot disconnect command.
- If you set the `enable-split-clone` configuration variable value to `on` or `sync` during the Snapshot connect operation and `off` during the Snapshot disconnect operation, SnapDrive for UNIX does not delete the original volume or LUN that is present in the Snapshot copy.

Guidelines for disconnecting Snapshot copies for NFS entities

The disconnect operation for a Snapshot copy can be executed from any node in a host cluster environment. Use command options to disconnect a storage entity from a specific node.

Follow these guidelines when disconnecting Snapshot copies that contain NFS entities:

- If you disconnect an NFS directory tree that you connected with read-only permission, SnapDrive for UNIX performs the following actions:
 - Unmounts the file system.
 - Removes the mount entry in the file system table file.
 - Removes the mountpoint.
 - Does not remove the export rules of the Snapshot copy directory, which was created while connecting NFS filespec from the secondary host (the host that does not have export permission on the parent volume).
- If you disconnect an NFS directory tree that you connected with read-write permission, SnapDrive for UNIX performs the following actions:
 - Unmounts the file system.
 - Removes the mount entry in the file system table file.
 - Deletes the NFS directory tree that corresponds to the file system in the FlexVol volume clone.
 - Destroys the underlying FlexVol volume clone (if it is empty).
 - Removes the mountpoint.

Information required for using the snapdrive snap disconnect command

To disconnect a Snapshot copy, specify the type of storage entity to be used, such as, LUN, disk groups, file systems, or host volume.

The following table gives the information you need to supply when you use the `snapdrive snap disconnect` command.

Requirement/Option	Argument
LUN (<code>-lun file_spec</code>)	<i>name of the LUN. Include the name of the filer, volume and LUN.</i>
Disk group (<code>-dg file_spec</code>) or volume group (<code>-vg file_spec</code>)	<i>name of the disk or volume group</i>
File system (<code>-fs file_spec</code>)	<i>filesystem_name</i>
Host volume (<code>-hostvol file_spec</code>) or logical volume (<code>-lvol file_spec</code>)	<i>name of the host or logical volume</i>

Requirement/Option	Argument
Specify the type of storage entity that you want to use to disconnect the Snapshot copy and supply that entity's name with the appropriate argument. This is the value for the <i>file_spec</i> argument.	
-full	~
Include the -full option on the command line if you want SnapDrive for UNIX to disconnect the objects from the Snapshot copy even if a host-side entity on the command line has other entities (such as a disk group that has one or more host volumes). If you do not include this option, you must specify only empty host-side entities.	
-fstype	<i>type</i>
-vmtype	<i>type</i>
Optional: Specify the type of file system and volume manager to be used.	
-split	~
Enables to split the cloned volumes or LUNs during Snapshot connect and Snapshot disconnect operations.	

Disconnecting Snapshot copy with LUNs and no storage entities

You can use the `snapdrive snap disconnect` command to disconnect a Snapshot copy that contains LUNs having no storage entities.

Steps

1. Enter the following command syntax:

```
snapdrive snap disconnect -lun long_lun_name [lun_name...]
```

SnapDrive for UNIX removes the mappings for the storage entities specified in the command line.

The following command removes the mappings to luna and lunb on the storage system toaster:

```
# snapdrive snap disconnect -lun toaster:/vol/vol1/luna lunb
```

Disconnecting Snapshot copy with storage entities

You can use the `snapdrive snap disconnect` command to disconnect a Snapshot copy that contains storage entities.

Steps

1. Enter the following command:

```
snapdrive snap disconnect {-dg | -fs | -hostvol} file_spec [file_spec...]{-dg |  
-fs | -hostvol} file_spec [file_spec...] [-full] [-fstype type] [-vmtype type]  
[-split]
```

This command must always start with the storage entity, for example, `-lun`, `-dg`, `-hostvol`, or `-fs`.

- If you specify a LUN (`-lun`), you must enter the long LUN name. You cannot specify a LUN with the `-lun` option on the same command line as other storage entities (`-vg`, `-dg`, `-fs`, `-lvol`, or `-hostvol` options).
- If you specify an NFS mountpoint, you cannot specify non-NFS entities (`-vg`, `-dg`, `-fs`, `-lvol`, or `-hostvol`) on the same command line. You must use a separate command to specify the NFS mountpoint.



An error message occurs if the host entity is using LUNs that are not part of the Snapshot copy. An error also occurs if you specify a subset of the host volumes and/or file systems contained in each target disk group.

SnapDrive for UNIX removes the mappings for the storage entities specified in the command line.

This command line removes the mappings to all the LUNs underlying the host volume `dg5/myvolume`. It removes any temporary LUNs that creates with a Snapshot connect operation:

```
# snapdrive snap disconnect -hostvol dg5/myvolume
```

This command line removes the mappings to all the LUNs underlying the host volume `dg5/myvolume`. It removes any temporary LUNs that creates with a Snapshot connect operation:

```
# snapdrive snap disconnect -hostvol dg5/myvolume
```

This command disconnects the mapping to disk group 1 (`dg1`) and to the underlying LUN. It also removes any temporary LUNs that creates with the Snapshot connect operation:

```
# snapdrive snap disconnect -lun toaster:/vol/vol1/luna -dg dg1
```

This command line removes the mapping to the file system `fs1`, and to the LUN that underlies it. It also removes any temporary LUNs that creates with the Snapshot connect operation:

```
# snapdrive snap disconnect -fs mnt/fs1
```

This command line removes the mappings for disk groups `dg1`, `dg2`, and `dg3`. It removes any temporary LUNs that creates with the Snapshot connect operation:

```
# snapdrive snap disconnect -dg dg1 dg2 dg3
```

This example disconnects a Snapshot copy with file system, disk group on Veritas stack:

```
# snapdrive snap disconnect -fs /mnt/fs1_clone -fstype vxfs
delete file system /mnt/fs1_clone
- fs /mnt/fs1_clone ... deleted
- hostvol vxvm1_0/fs1_SdHv_0 ... deleted
- dg vxvm1_0 ... deleted
- LUN snoopy:/vol/vol1/lunVxvm1_0 ... deleted
```

This example disconnects a Snapshot copy with file system, disk group on LVM stack:

```
# snapdrive snap disconnect -fs /mnt/fs1_clone -fstype jfs2

delete file system /mnt/fs1_clone
- fs /mnt/fs1_clone ... deleted
- hostvol lvm1_0/fs1_SdHv_0 ... deleted
- dg lvm1_0 ... deleted
- LUN snoopy:/vol/vol1/lunLvm1_0 ... deleted
```

Disconnecting Snapshot copies with shared storage entities

You can use the `snapdrive snap disconnect` command to disconnect a Snapshot copy that contains shared storage entities.

Steps

1. Enter the following command syntax:

```
snapdrive snap disconnect {-dg | -fs} file_spec [file_spec...] {-dg | -fs}
file_spec [file_spec...]... long_snap_name [-full] [-fstype type] [-vmtype type]
[-split]
```

This example disconnects shared file system:

```
# snapdrive snap disconnect -fs /mnt/oracle
```

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