**PROCEDURE TO CLEAN UP STALE SNAPMIRROR RELATIONS:**

Check the snapmirror status on source and destination to see if the relation is shown on both source and destination filers.

If the relation is in broken state with huge lag, then the relation is in a good candidate for cleanup.

* ssh <<pfiler>> vfiler run <<vfiler>> snapmirror status <<vol\_name>>

Depending on which system the relationship is showing (Source/Destination), proceed with the snapmirror cleanup on that particular filer as detailed in the following section.

Consider the following guidelines when performing cleanup:

1. Please ensure that snapshots on both source and destination volumes are released/cleaned-up for all Broken-off Relations.
2. For Relations which are IDLE/Snapmirrored ensure that the Lag is under 150Hrs. In case the LAG is more, review the reason for huge LAG and do one of the following.
   1. Run a manual SnapMirror Update (if the relationship is still valid).
   2. Break the relation and clean up the SnapMirror snapshots (if the relation is no longer valid).
3. Review the Migration Tracker to identify any ongoing migrations related to Tech Refresh, Thin Mitigation, DCR's and take necessary action. (link to migration tracker - Fai)
4. If snapmirror is not in tracker then…?
   1. Review Email threads
   2. Escalate to Storage support

Scholar 1 snapmirror -

After completing destination and source.

Would possibly need to check snapmirror status on source to see if any left over

Sue has found instances where broken snapmirror on source (from original migration to this source – possibly from a previous migration) – this then needs to be handed over to storage support

**On Destination:**

1. Run the snapmirror status command on the destination filer.

* ssh <<pfiler>> vfiler run <<vfiler>> snapmirror status <<vol\_name>>

*ssh eg-nasmgmt-e02 vfiler run prod-mgmt-e0042 snapmirror status infra\_hpnacps768p\_n01ora1\_nosnap*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Source** | **Destination** | **State** | **Lag** | **Status** |
| prod-ecom-e0503:infra\_hpnacps768p\_n01ora1\_nosnap | prod-mgmt-e0042:infra\_hpnacps768p\_n01ora1\_nosnap | Broken-off | 364:55:36 | Idle |

Note that when run on destination filer, the snapmirror status command output shows the state as Broken-off

1. Run the snap list command to check the list of snapshots.

* Ssh <<pfiler>> vfiler run <<vfiler>> snap <<vol\_name>>

*ssh eg-nasmgmt-e02 vfiler run prod-mgmt-e0042 snap list infra\_hpnacps768p\_n01ora1\_nosnap*

*===== prod-mgmt-e0042*

*Volume infra\_hpnacps768p\_n01ora1\_nosnap*

*working...*

*%/used %/total date name*

*---------- ---------- ------------ --------*

*0% ( 0%) 0% ( 0%) Mar 22 09:39 prod-mgmt-e0042(1928476979)\_infra\_hpnacps768p\_n01ora1\_nosnap.601*

*0% ( 0%) 0% ( 0%) Mar 22 01:59 prod-mgmt-e0042(1928476979)\_infra\_hpnacps768p\_n01ora1\_nosnap.600*

NOTE: SnapMirror snapshots can be identified by the name represented with sl.no in braces.

1. Run the snap delete command to delete both the snapmirror snapshots to release the snapmirror relation.

* ssh <<pfiler>> vfiler run <<vfiler>> snap delete <<vol\_name>> ‘<<snap\_name>>’

*ssh ssh eg-nasmgmt-e02 vfiler run prod-mgmt-e0042 snap delete infra\_hpnacps768p\_n01ora1\_nosnap ‘prod-mgmt-e0042(1928476979)\_infra\_hpnacps768p\_n01ora1\_nosnap.600’*

*ssh ssh eg-nasmgmt-e02 vfiler run prod-mgmt-e0042 snap delete infra\_hpnacps768p\_n01ora1\_nosnap ‘prod-mgmt-e0042(1928476979)\_infra\_hpnacps768p\_n01ora1\_nosnap.601’*

Note: Always delete the oldest snapshot first (check the Date column of the snap list output).

1. Ones the snapshots are deleted run the snapmirror status command to validate the relationship.

* ssh <<pfiler>> vfiler run <<vfiler>> snapmirror status <<vol\_name>>

*ssh eg-nasmgmt-e02 vfiler run prod-mgmt-e0042 snapmirror status infra\_hpnacps768p\_n01ora1\_nosnap*

*===== prod-mgmt-e0042*

*Snapmirror is on.*

**Clean-up of Snapmirror.conf file on destination:**

1. Ones the relationship is cleaned up check if there are any entries in the snapmirror.conf file of the vfiler root volume. If there are any entries in the snapmirror file hash them out to avoid messages logging to the console.
2. Mount the root volume (/etc) of the vfiler on to a temporary mount point and check if snapmirror.conf file has entries specific to the volume.

* Sudo mount <<vfiler>>:/etc tmp\_mount
* cd tmp\_mount
* cat snapmirror.conf

*prod-ecom-e0503:infra\_hpnacps768p\_n01ora1\_nosnap prod-mgmt-e0042:infra\_hpnacps768p\_n01ora1\_nosnap - \* 20,2 \* \**

1. If the file exists and if there entry for the corresponding volume, open the file in VI editor and comment out the entry.

* vi snapmirror.conf

*#prod-ecom-e0503:infra\_hpnacps768p\_n01ora1\_nosnap prod-mgmt-e0042:infra\_hpnacps768p\_n01ora1\_nosnap - \* 20,2 \* \**

* save and exit vi editor (wq!)

1. unmounts the root volume

* sudo umount ./tmp\_mount

This completes the snapmirror cleanup on the destination filer.

**On Source:**

1. Run the snapmirror status command on the Source filer.

* ssh <<pfiler>> vfiler run <<vfiler>> snapmirror status <<vol\_name>>

*ssh eg-nasecom-e12 vfiler run prod-ecom-e0503 snapmirror status infra\_hpnacps768p\_n01ora1\_nosnap*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Source** | **Destination** | **State** | **Lag** | **Status** |
| prod-ecom-e0503:infra\_hpnacps768p\_n01ora1\_nosnap | prod-mgmt-e0042:infra\_hpnacps768p\_n01ora1\_nosnap | **Source** | 364:55:36 | Idle |

Note that when run on the Source filer, the snapmirror status command output shows the state as **Source**

1. Run the snap list command to check the list of snapmirror snapshots.

* ssh <<pfiler>> vfiler run <<vfiler>> snap <<vol\_name>>

*ssh eg-nasecom-e12 vfiler run prod-ecom-e0503 snap list infra\_hpnacps768p\_n01ora1\_nosnap*

*===== prod-ecom-e0503*

*Volume infra\_hpnacps768p\_n01ora1\_nosnap*

*working...*

*%/used %/total date name*

*---------- ---------- ------------ --------*

*0% ( 0%) 0% ( 0%) Mar 22 09:39 prod-mgmt-e0042(1928476979)\_infra\_hpnacps768p\_n01ora1\_nosnap.601 (snapmirror)*

1. To clean up the snapmirror relation on the source filer run the following command:

* ssh <<pfiler>> vfiler run <<vfiler>> snapmirror release <<vol\_name>> <<dest:vol\_name>>

*ssh eg-nasecom-e12 vfiler run prod-ecom-e0503 snapmirror release infra\_hpnacps768p\_n01ora1\_nosnap prod-mgmt-e0042:infra\_hpnacps768p\_n01ora1\_nosnap*

1. Run the snapmirror status command to see if the relation is cleaned up.

* ssh <<pfiler>> vfiler run <<vfiler>> snapmirror status <<vol\_name>>

*ssh eg-nasecom-e12 vfiler run prod-ecom-e0503 snapmirror status infra\_hpnacps768p\_n01ora1\_nosnap*

*===== prod-ecom-e0503*

*Snapmirror is on.*

1. You may notice that the snapmirror snapshot is deleted as well.

* ssh <<pfiler>> vfiler run <<vfiler>> snap list <<vol\_name>>

*ssh eg-nasecom-e12 vfiler run prod-ecom-e0503 snap list infra\_hpnacps768p\_n01ora1\_nosnap*

*===== prod-ecom-e0503*

*Volume infra\_hpnacps768p\_n01ora1\_nosnap*

*working...*

*No snapshots exist.*