**Space recovery on backup aggr :**

There are many steps we can perform before deciding on a space migration for backup filers. Before starting anything .

**PLEASE BE CAREFULL BEFORE DELETING ANYTHING**

1. **Check unused/nightly/expired big snaps**

Upon receiving an alert collect the backup filer and the aggr

**For example :** eg-nasbkp-f01-mgmt aggr\_f118\_32\_FULL\_techref

1. Find the biggest snap reserves :

for vol in `rsh eg-nasbkp-f01-mgmt aggr show\_space aggr\_f118\_32\_FULL\_techref | grep none|cut -d" " -f1`; do rsh eg-nasbkp-f01-mgmt df -h| grep $vol | grep .snapshot; done |sort -r -n -k 4

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| /vol/sv\_45\_at\_middletierprodapps\_snap0/.snapshot | 5658GB | 0GB | ---% | /vol/sv\_45\_at\_middletierprodapps\_snap0/.snapshot |
| /vol/sv\_14\_tandt\_aruba4p\_s01ora1\_snap/.snapshot | 1605GB | 0GB | ---% | /vol/sv\_14\_tandt\_aruba4p\_s01ora1\_snap/.snapshot |
| /vol/sv\_07\_newsedge\_newsroom\_webservicese\_snap/.snapshot | 0MB | 45MB | 0MB | ---% /vol/sv\_07\_newsedge\_newsroom\_webservicese\_snap/.snapshot |

1. Now lets find any snaps that consuming space and that we can delete

Find if any nightly snap that consumes heavy data

Rsh <filername> snap reclaimable <vol name> <snap name>

Use below script to delete the nightly

/filers/admin/bin/nightly.sh <filername> <volume sname>

1. Find invalid snaps

Sometime backup volume have snap which are non standard , ( snap schedule changed but snap not delete ) . delete those snap

**For example** : sv\_at\_adabas\_dbcf1p\_s01ora1\_snap\_s01oradata1.2

sv\_at\_adabas\_dbcf1p\_s01ora1\_snap (invalid , mind the date of creating should be expired)

1. Find the expired snaps , normally snapvault should delete those but it misses . for example , last snap name of a 45 days snapvault should get a snap name like .45 not more than that ( except scholar one)
2. Find the snaps used for snapmirror etc but not used now , for example :

ecomh2(0118073821)\_sv\_14\_at\_cbs5p\_s01oraadm1\_snap (remember this snap should not be blocked by any process like (busy,snapvault) or (busy,snapmirror)

1. **Find volumes with guaranty volume or file**

You can easily find out by :

rsh eg-nasbkp-f01-mgmt aggr show\_space aggr\_f118\_32\_FULL\_techref | egrep 'file|volume' |egrep -v 'vol0|space|root'

make it none if you find any

1. **Find any volume having huge lag ( lag more than retention )**

**On nerstrand :**

for vol in `rsh eg-nasbkp-f01-mgmt aggr show\_space aggr\_f118\_32\_FULL\_techref |grep none | cut -d" " -f1`; do grep $vol /srv/www/htdocs/netapp/snapvault/lag.txt; done

find id any volume has huge lag , destroy it after double check

1. As I already mentioned we should not create any backup on 95% full aggr, But find if somebody initialize .

rsh eg-nasbkp-f01-mgmt vfiler run corpf1 snapvault status | grep Un

rsh eg-nasbkp-f01-mgmt vfiler run ecomf1 snapvault status | grep Un

if you find any volume from the aggr , go ahead destroy it and create another one an diff aggr