

Shelf install on Netapp Filer:

Confirm all lights are green on storage shelves.

SSH to both filers

Run the following command:

```
storage show disk -p
```

you should see output like this (depends on number of disks) If you see anything missing on "port" there is a pathing issue:

PRIMARY	PORT	SECONDARY	PORT	SHELF	BAY
0d.16	B	0c.16	A	1	0
0d.17	B	0c.17	A	1	1
0c.18	A	0d.18	B	1	2
0c.19	A	0d.19	B	1	3
0d.20	B	0c.20	A	1	4
0c.21	A	0d.21	B	1	5
0c.22	A	0d.22	B	1	6
0c.23	A	0d.23	B	1	7
0d.24	B	0c.24	A	1	8
0d.25	B	0c.25	A	1	9
0d.26	B	0c.26	A	1	10
0c.27	A	0d.27	B	1	11
0d.28	B	0c.28	A	1	12
0c.29	A	0d.29	B	1	13
0d.32	B	0c.32	A	2	0
0c.33	A	0d.33	B	2	1
0d.34	B	0c.34	A	2	2
0c.35	A	0d.35	B	2	3
0d.36	B	0c.36	A	2	4
0c.37	A	0d.37	B	2	5
0d.38	B	0c.38	A	2	6
0c.39	A	0d.39	B	2	7
0c.40	A	0d.40	B	2	8
0c.41	A	0d.41	B	2	9

Then run options disk and confirm auto assign is turned off

```
options disk
```


```
disk.asup_on_mp_loss      on          (value might be overwritten in takeover)
disk.auto_assign        off       (value might be overwritten in takeover)
disk.defect_data_read_all on          (value might be overwritten in takeover)
disk.log_sense_read_all   on          (value might be overwritten in takeover)
```


```


disk.maint_center.allowed_entries 1          (value might be overwritten in
takeover)
disk.maint_center.enable on                (value might be overwritten in
takeover)
disk.maint_center.max_disks 84             (value might be overwritten in
takeover)
disk.maint_center.rec_allowed_entries 5    (value might be overwritten
in takeover)
disk.maint_center.spares_check on          (value might be overwritten in
takeover)
disk.powercycle.enable on                 (value might be overwritten in
takeover)
disk.recovery_needed.count 5              (value might be overwritten in
takeover)

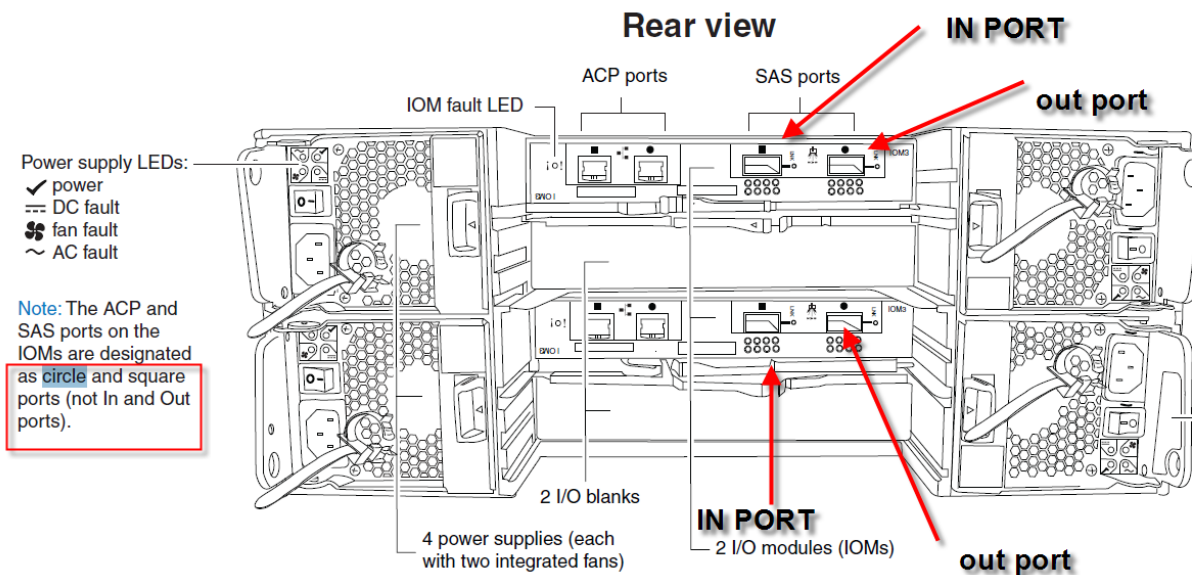
```

IF the option is on, turn it off

Remove both of out or circle  SAS cables. These are the ports configuration:

SQUARE  is the IN PORT,

CIRCLE  IS THE OUT PORT.



Connect circle to square of new shelf.

Run the following:

**Disk show -n**

Confirm new disks show up

Run the following command once all spares show up

**disk assign all on the system YOU WANT THE DISK OWNERSHIP TO BE ASSIGNED TO!!!**

This will assign all disks

Connect SAS cables

You should see something in the log that says transitioning to HA and information for SAS connector 4: normal status

Run the following command and confirm ports have a A and B

**storage show disk -p**

PRIMARY	PORT	SECONDARY	PORT	SHELF	BAY
0d.16	B	0c.16	A	1	0
0c.17	A	0d.17	B	1	1
0d.18	B	0c.18	A	1	2
0d.19	B	0c.19	A	1	3
0c.20	A	0d.20	B	1	4
0c.21	A	0d.21	B	1	5
0c.22	A	0d.22	B	1	6
0d.23	B	0c.23	A	1	7

Kick off autosupport once completed

**Options autosupport.doit DONE SHELF UPGRADE**

Last step is to confirm HA for shelves

Type the following command and confirm you see Multi-path HA

**sysconfig**

```
NetApp Release 8.0.2P3 7-Mode: Thu Oct 13 15:56:25 PDT 2011
System ID: 43984194-8148 (FILER_dontStealme); partner ID:
fkdfjkajfa;kfa (me_either)
System Serial Number: 79595959595959959595959595959595 (dontStealme)
System Rev: F3
System Storage Configuration: Multi-Path HA
System ACP Connectivity: NA
slot 0: System Board
    Processors: 4
    Processor type: Intel(R) Xeon(R) CPU E5240 @
3.00GHz
    Memory Size: 20480 MB
    Memory Attributes: Bank Interleaving
    Hoisting
    Rank Interleaving
    Chipkill ECC
Service Processor Status: Online
IOXM Status: present
```