

Module 0: Getting Started

Exercise 0: Checking the Exercise Equipment

Task 1: Ensure Connectivity to your ONTAP Cluster

Pg_8(step1-8): The screenshot will vary so refer the below image.

```
cluster1::> version
NetApp Release 9.8: Wed Dec 09 01:07:39 UTC 2020
```

Task 2: Synchronous System Time for Windows Domains

Note: The **Time Zone** of the **ONTAP Cluster** and the **Windows Domain** will be in **Asia/Singapore** so don't change the **time or time zone** in this task.

Module 2: SnapMirror Fundamentals

Exercise 2: Configuring Cluster Peering and SVM Peering

Task 1: Create Intercluster LIFs

Pg_19(step_1-6): The screenshot may vary for the **System Manager Dashboard**.

Pg_21(step_1-11): The screenshot will vary so kindly refer the below image

The screenshot shows the ONTAP System Manager dashboard. The left sidebar contains navigation links: DASHBOARD, STORAGE, NETWORK, Overview, Ethernet Ports, EVENTS & JOBS, PROTECTION, HOSTS, and CLUSTER. The main content area is titled 'Overview' and contains three sections: IPspaces, Broadcast Domains, and Network Interfaces.

IPspaces:

Cluster	Broadcast Domains
Default	Storage VMs svm1, svm2, svm3 Broadcast Domains Default

Broadcast Domains:

Cluster	9000 MTU	IPspace: Cluster
cluster1-01	e0a	e0b
cluster1-02	e0a	e0b

Network Interfaces:

Name	Status	Storage VM	IPspace	Address	Current Node	Current P...	Protocols	Type	Throughput
svm2_cifs_nfs_lif1	✓	svm2	Default	192.168.0.61	cluster1-02	e0d	SMB/CIFS,...	Data	0
cluster1-02_clus1	✓		Cluster	169.254.43.135	cluster1-02	e0a		Cluster	0
cluster1-02_mgmt1	✓		Default	192.168.0.112	cluster1-02	e0c		Cluster/No...	0
cluster1-02_clus2	✓		Cluster	169.254.43.145	cluster1-02	e0b		Cluster	0

Task 3: Configure Cluster Peering

Pg_30(step_3-13): To check the **current health status** of cluster peer relationship use the below command

```
cluster1: :> cluster peer health show -bypass-cache true
```

Module 3: SnapMirror Operation

Exercise 1: Using SnapMirror Asynchronous to Mirror FlexVol Volumes

Task 2: Verify Data Transfer

Pg_44(step2-4): In the **Export Settings** section, **Mount path** will be shown only after clicking the **Mount** checkbox. The screenshot will vary.

Pg_47(step2-15): In the **Map Network Drive** window, the **Reconnect at sign-in** checkbox will be in **unchecked** state so the screenshot will vary.

The following output in the respective steps varies because of **Reconnect at sign-in**:

- Page48_Step 2-17
- Page82_Step 2-3
- Page 88_Step2-21
- Page 106_Step3-13
- Page 129_Step4-15

Exercise 3: Configuring SnapMirror Unified Replication for Vaulting

Task 2: Verify Data Transfer

Pg_86(step2-14): In the **Export Settings** section, **Mount path** will be shown only after clicking the **Mount** checkbox. The screenshot will vary.

Exercise 5: Configuring a SnapMirror Synchronous Relationship

Task 1: Create an SM-S Policy

Pg_94(step_1-5): After selecting the **Policy Type** check that the **Policy Name** is applied properly.

Task 2: Create an SM-S Relationship

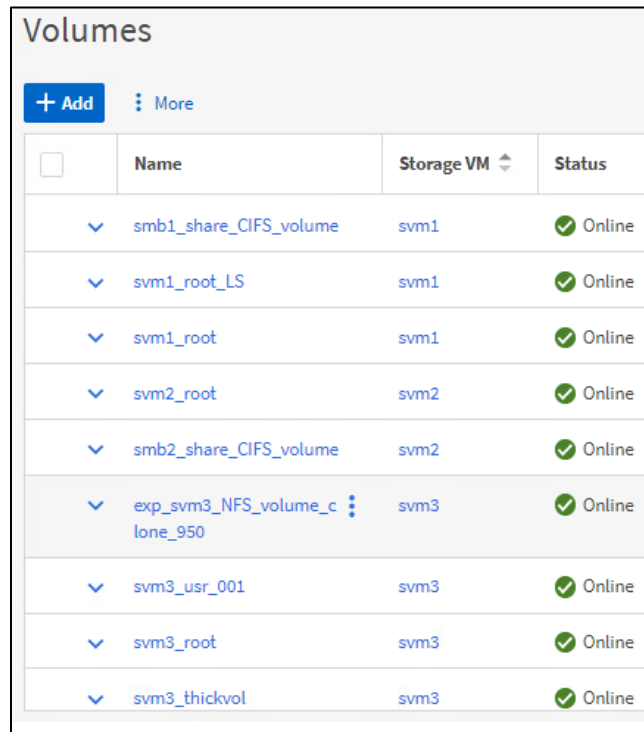
Pg_97(step2-9): It takes few minutes for the **smb2_share_CIFS_volume** changes to **In sync** in the **Status**.

Module 4: SVM DR

Exercise 1: Configure SVM

Task 1: Check Space Requirements

Pg_113(step_1-1): The screenshot will vary for the **Volume page**, so refer the below image.



The screenshot shows the 'Volumes' page in a management interface. It features a table with columns for Name, Storage VM, and Status. There are 10 volumes listed, all with a status of 'Online'. The volume 'exp_svm3_NFS_volume_c lone_950' is highlighted with a blue background. Above the table, there are buttons for '+ Add' and ': More'.

	Name	Storage VM	Status
▼	smb1_share_CIFS_volume	svm1	✓ Online
▼	svm1_root_LS	svm1	✓ Online
▼	svm1_root	svm1	✓ Online
▼	svm2_root	svm2	✓ Online
▼	smb2_share_CIFS_volume	svm2	✓ Online
▼	exp_svm3_NFS_volume_c lone_950	svm3	✓ Online
▼	svm3_usr_001	svm3	✓ Online
▼	svm3_root	svm3	✓ Online
▼	svm3_thickvol	svm3	✓ Online

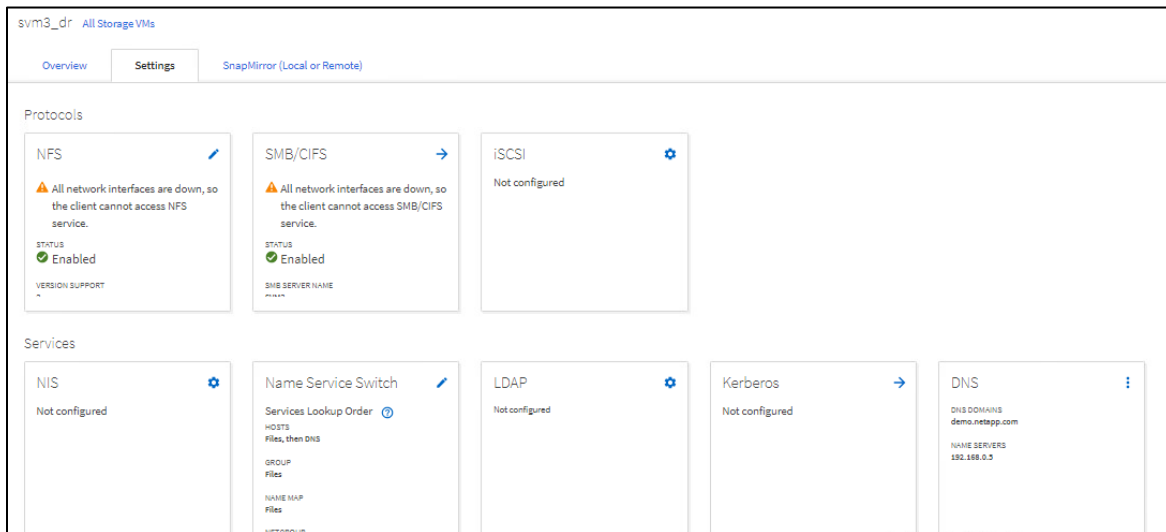
Pg_114(step_1-4): In the **Capacity Column**, position your cursor over the blue color in the capacity bar to view the **used capacity**.

Pg_115(step_1-8): Navigate to **Tier > HDD** pane, the screenshot will vary for the **Tier > HDD** pane, so refer the below image.

Task 3: Create SVM DR Relationship

Pg_121(Step_3-7): In the Relationship page, the State of the relationship will reflect Mirrored once the transfer status turns to idle.

Pg_123(Step_3-11): In the Settings page of svm3_dr, the screenshot will vary so kindly refer the below image.



Task 4: Fail Over to the Disaster-Recovery SVM

Pg_129(step4-15): In the **Map Network Drive** window, the drive letter for mapping the CIFS share differs so the screenshot will vary.