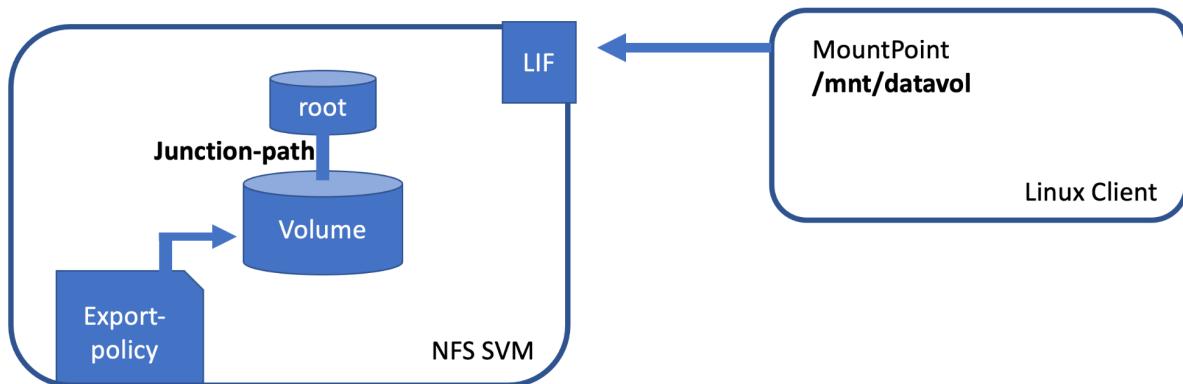


# **ONTAP\_NFS\_SVM**

In this lab you will setup and configure a basic NFS Storage VM.  
You will connect to the share using linux.

1. Create a new SVM
2. Create a LIF in the SVM
3. Create an export policy that allows access for reading and writing
4. Create a volume in the SVM and connect the export policy
5. Mount the volume
6. Enable NFS in the SVM
7. On linux, use the showmount command
8. On linux, create a mountpoint
9. Mount the volume and create a file

(see next page for commands)



**NFS SVM and NFS client**

## Commands

```
# 1. Create an SVM called nfssvm with the default settings
cluster1::>
vserver create -vserver nfssvm -subtype default -rootvolume nfssvm_root

# 2. Create a LIF in the nfssvm with lifname nfslif1, use an available ip address.
cluster1::>
net int create -vserver nfssvm -lif nfslif1 -service-policy default-data-files -address 192.168.4.220 -netmask 255.255.255.0 -home-node cluster1-01 -home-port e0d

# 3. Create a new export-policy in the svm “nfssvm_pol”, and add a rule that allows access to all ips, and with read and write permissions, also for the superuser of a linux machine.
cluster1:::
export-policy create -vserver nfssvm -policyname nfssvm_pol

export-policy rule create -vserver nfssvm -policyname nfssvm_pol -clientmatch 0.0.0.0/0 -rорule any -rwrule any -superuser any

# 4. Create a volume “nfsvol1” in an available aggregate. Volume size 100M, policy nfssvm_pol
cluster1:::
vol create -vserver nfssvm -volume nfsvol1 -aggregate n1_data -size 100M -state online -policy nfssvm_pol

# 5. Mount the volume.
cluster1::>
vol mount -vserver nfssvm -volume nfsvol1 -junction-path /nfsvol1

# 6. Enable nfs for the SVM.
cluster1::>
nfs on nfssvm

# 7. Open up a collection to the linux machine. Run ‘showmount -e <nfssvm ip>’.
Linux:
showmount -e 192.168.4.220
(the output should look like this:
/ (everyone)
/nfsvol1 (everyone)

# 8. Create a mountpoint in /mnt
Linux:
mkdir /mnt/nfsvol1

# 9. Try to mount the volume.
```

Linux:

**mount 192.168.4.220:/nfsvol1 /mnt/nfsvol1**

This should fail. Why is that?

# 10. Connect the nfssvm\_pol to the rootvolume of the SVM.

cluster1::>

**vol modify -vserver nfssvm -volume nfssvm\_root -policy nfssvm\_pol**

# 11. Repeat step 9.

**mount 192.168.4.220:/nfsvol1 /mnt/nfsvol1**

This should work.

# 12. Create a file in the volume from the linux client.

Linux:

**touch /mnt/nfsvol1/file1**