# Preparations:

# Prepare 3 machines (VM1 for server and VM2 and VM3 for clients)

# rewrite the vagrant file to name them homework-vmX, where x is number from 1 to 3.

# also change the network from 99 to 2, because of a problem with existing network adapters

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# So let’s begin:

# TASK1

(samba group share)

**# VM1**

sudo zypper install samba samba-client

**# after that (as in practice file) enable and start smb,nmb services,**

**# also add firewall exception and reload the configuration**

sudo systemctl enable smb nmb

sudo systemctl start smb nmb

sudo firewall-cmd --add-service samba --permanent

sudo firewall-cmd --reload

**# add group that will be used for samba shares**

sudo groupadd homework-task1

**# add folder to share**

sudo mkdir homework-task1

**# add the corresponding permissions**

sudo chgrp homework-task1 homework-task1

sudo chmod 770 homework-task1

**# add two users to the group**

sudo useradd vm2

sudo useradd vm3

sudo usermod -a -G homework-task1 vm2

sudo usermod -a -G homework-task1 vm3

**# create passwords and enable the users**

sudo smbpasswd -a vm2

sudo smbpasswd -a vm3

sudo smbpasswd -e vm2

sudo smbpasswd -e vm3

**# create backup of the original /etc/samba/smb.conf**

sudo mv /etc/samba/smb.conf /etc/samba/smb.conf.bak

sudo vi /etc/samba/smb.conf

# restart and test config

sudo systemctl restart smb

testparm

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The force group option must have “k” in the group name to work, so I’ve edited it

## # test from users that are homework-task1 members:

**# VM2 and VM3**

sudo zypper install samba-client

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## # test with user that is not part of homework-task1 group:

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# add the user to the group:

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# TASK 2

(nfs share with ro and rw for two stations)

**# VM1 (again as in practice)**

sudo zypper install nfs-kernel-server

sudo systemctl enable --now nfsserver

**# check for exports**

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**# create folder to share**

sudo mkdir homework\_task2

**# ip addresses of vm2 and vm3 must be 2.132 and 2.133**

**sudo vi /etc/exports**

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vagrant@homework-vm1:~/homework\_task2> sudo exportfs -rav

exporting 192.168.2.132:/home/vagrant/homework\_task2

exporting 192.168.2.133:/home/vagrant/homework\_task2**# allow service communication**

sudo firewall-cmd --add-service nfs --permanent

**# reload the firewall rules**

sudo firewall-cmd –reload

# VM2 and VM3

**# the nfs client is already installed, so we proceed with the next step -> mount the share**

sudo mkdir -p /mnt/homework\_task2

sudo mount -t nfs4 homework-vm1:/home/vagrant/homework\_task2 /mnt/homework\_task2

# TEST FROM READ ONLY IP (192.168.2.133) VM3:

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# TEST FROM R/W IP (192.168.2.132) VM2:

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# The share can be mounted for autostart on both machines as in the practice file with adding this row in /etc/fstab:

homework-vm1:/home/vagrant/homework\_task2 /mnt/homework\_task2 nfs4 defaults 0 0