#### Exam 2

 $Node\ 1$  node1.example.com

## 1. Using basic tools

- In file /etc/passwd find lines with word "bash" and copy the whole line with matching word to a new file in /root/matches

## 2. Select a tuning profile

- Set recommended tuning profile

## 3. Create an archived file

- Create 10 files starting from file1 to file10 in a directory /exam2
- Archive all files from directory /exam2 to an archive named myarch.tar and put it in /exam2 directory

## 4. Configuring service

- Create directory /www and create in this directory file index.html
- In file index.html write the text "I like RHCSA"
- Edit httpd config to use by default /www directory for search documents
- Httpd service should start automatically at boot

#### 5. Set environment

- Set environment "EXAM=RHCSA" for user Anna
- The environment should be persistent

## 6. User management

- Create a user named Bob with UID 2000
- Set the Bob account to expire 10 days from the current day
- Edit configuration that every newly created user have a password which should change every 30 days
- Set sudo privileges for user Bob without the requirement of using a password

# 7. Managing files

- Write bash script which after executing displays sentence "Hello World" script should be named hello.sh and should be placed in /root directory
- For script hello.sh set permissions read, write and execute only for user root
- Create a soft link to script hello.sh and place it in /tmp/soft\_link

## 8. Ssh connection

- Set ssh key-based authentication for user Bob from node1 to node2
- User Bob should connect from node1 to node2 without providing a password
- Send file /etc/fstab from node1 to node2 with destination /tmp/fstab backup

## 9. Set hostname

- Set hostname to node1

# 10. Set persistent logs

- Edit config for System Journal that logs preserve reboots
- $Create\ config\ in\ /etc/rsyslog. d/\ with\ a\ record\ that\ all\ messages\ with\ authpriv\ facility\ and\ any\ priority\ will\ be\ send\ to\ the\ file\ /var/log/rhcsa\_secure.log$

## 11. Mount network share

- Create directory /mnt/my share
- Mount to /mnt/my share Filesystem which is exported from host main.example.com:/export files
- NFS share should be mounted after reboot

## 12. Managing containers

- Log in to the Red Hat repository registry.access.redhat.com
- Use the httpd image registry.access.redhat.com/rhscl/httpd-24-rhel7
- As a user student Create a container called mysite
- Port 8080 should be redirected to the container port 8080
- Mount the /home/student/www directory to /var/www/html/ directory in container
- Create the systemd unit named mysite to manage container with systemctl
- Mysite service should work after reboot and be managed via systemctl commands

## 13. Installing module

- Install the postgresql:12 module

## 14. Managing Stratis

- Create Stratis filesystem named fs1 in Stratis pool1 based on /dev/sdb
- Mount Stratis filesystem fs1 to directory /my stratis
- Stratis filesystem should be XFS and be mounted after reboot

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 $Node\ 2$  node2.example.com

# 1. Set Selinux

- Set SELinux to permissive mode

## 2. Create partition

- On disk /dev/sdb create new GPT partition with size 512MiB
- Make vfat filesystem for newly created partition
- Mount newly created partition to /vfat rhcsa directory
- Partition should be mounted after reboot

## 3. Managing LVM

- On a disk /dev/sdb create a new partition with size 1GiB
- Create a physical volume using newly created 1GiB partition
- Create volume group named vgex with default physical extents 10MiB from a new physical volume
- Create logical volume belongs to vgex volume group with size 30PE and named  $lv\_rhcsa$

## 4. Managing SWAP

- On a disk /dev/sdb create a new swap partition 512MiB
- Create swap from newly created partition and set that newly created swap will have the highest priority
- New swap should be additional swap space and should preserve reboot

## 5. Resolving names

- Set resolution for name rhcsa.example.com as an address 192.168.0.10

# 6. Basic tools

- Find all files in directory /etc with a size larger than 3MB and copy them to /findings directory

# Linux RHCSA preparation course