



Appendix A

Prepare a System for the Sample Exams

Randy Russell, the Director of Certification at Red Hat, revealed in a blog post that Red Hat exams no longer mandate a “bare-metal installation.” Put simply, you will be provided with a pre-installed system when you sit for a Red Hat exam today. This appendix guides you through the setup of a pre-installed system suitable for the two sample exams accessible on McGraw Hill’s companion website. Details regarding each exam are provided on the first few pages of Appendices B and C, respectively, followed by their solutions.

Sample Exam System Requirements

As highlighted in Chapter 1, a genuine RHEL 9 subscription is ideal for this purpose. Exercise 1-1 described how to enroll in the Red Hat Developer Program and obtain a Red Hat Developer Subscription for Individuals at no cost. Rebuild distributions, such as AlmaLinux, should function just as effectively since they are grounded on the openly available RHEL 9 source code. However, we strongly advise against using Fedora Linux for studying for Red Hat exams. Despite RHEL 9 being rooted in Fedora Linux, RHEL 9

presents a distinctive look and feel and, in certain instances, differs in functionality from the most similar Fedora release, Fedora 34.

Keeping these considerations in mind, we recommend using the `server1.example.com` and `tester1.example.com` virtual systems that you initially set up in Chapter 1. However, you will need to reinstall RHEL 9 on both systems and configure them according to the following specifications before commencing the sample RHCSA exams:

- **Network settings** For `server1.example.com`, assign a random IPv4 address and netmask during installation to render the system network unreachable. On `tester1.example.com`, leave the IPv4 default settings to use DHCP and set the hostname to `tester1.example.com`. These settings can be found on the Networks and Hostname configuration screen, as shown in Figures 1-6 and 1-7.
- **Root password** On `server1.example.com`, set a random password and forget about it (you will execute password recovery during the sample exams). On `tester1.example.com`, set the root password to `changeme`.
- **Disk space** On `server1.example.com`, select custom partitioning and manually configure the `/boot` and `/` partitions. Do not format the entire disk, and leave 1GB unallocated. On `tester1.example.com`, select automatic partitioning. For additional guidance on this topic, please consult the "Partition Creation Exercise" section in Chapter 1.
- **Software selection** In the Software Selection screen, keep the default option Server with GUI selected, as shown in Figure 1-13.
- **System subscription** After the installation is completed, on `tester1.example.com`, set up the system to obtain packages from the Red Hat Network using the following commands:

```
# subscription-manager register
# subscription-manager attach --auto
```

- **Web service** On `tester1.example.com`, install an Apache web server by executing the following command:

```
# dnf install httpd
```

In the `/etc/httpd/conf/httpd.conf` file, change the following line:

```
DocumentRoot "/var/www/html"
```

to the following:

```
DocumentRoot "/html"
```

Also change this line:

```
Listen 80
```

to the following:

```
Listen 8234
```

Then, add the following lines at the bottom of the file:

```
<Directory "/html">
  Require all granted
</Directory>
```

Finally, run the following commands:

```
# mkdir /html
# echo "Success!" > /html/index.html
# systemctl enable httpd
```

INSIDE THE EXAM

While the setup of an Apache web server is not an RHCSA exam requirement, you should be able to “configure firewall settings using

firewall-cmd/firewalld” and “manage SELinux port labels” and “file contexts” to make a service operational.

- **NFS service** On tester1.example.com, set up the NFS. First, add the following lines to /etc/exports:

```
/exports/sam *(rw, sync, no_root_squash)
/exports/nfsshare *(rw, sync, no_root_squash)
```

Then, run the following commands:

```
# dnf install nfs-utils
# firewall-cmd --permanent --add-service=nfs
# firewall-cmd --reload
# systemctl enable nfs-server --now
# mkdir -p /exports/{sam,nfsshare}
# chwon 1234 /exports/sam
# chmod 700 /exports/sam
```

INSIDE THE EXAM

Again, setting up an NFS server isn't an RHCSA exam requirement, but you should

be able to “mount and unmount network file systems using NFS.”

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