Name:

Red Hat Lab – Chapter 14

BC

Use **Red Hat Lab Environment** to complete the lab. Issue the following commands immediately before step 1:

```
history -c
history -w
```

These commands should be repeated for each user@machine prompt. See boxes below.

Paste a screenshot in the box below of the command output from the command below. Include the command itself in the **`lab grade software-review`**

```
[student@workstation ~]$ lab grade software-review

Grading lab.

 · Checking lab systems ..................... SUCCESS
 · Verifying that the repo exists on serverb . SUCCESS
 · Verifying that rht-system is installed .... SUCCESS
 · Verifying that cups.x86_64 is removed ..... SUCCESS
 · Verifying that exercise package is
   installed ................................ SUCCESS

Overall lab grade: PASS
```

Issue the command `history` after the last step for each user@machine prompt. Paste a screenshot of each history in the proper box below. Include the command itself and the full history of commands.

student@serverb

```
[student@serverb ~]$ history
    1  sudo -i
    2  rpm -q -p rhcsa-script-1.0.0-1.noarch.rpm -i
    3  sudo dnf install rhcsa-script-1.0.0-1.noarch.rpm
    4  rpm -q rhcsa-script
    5  history
```

root@serverb

```
[root@serverb ~]# history
    1  vim /etc/yum.repos.d/errata.repo
    2  dnf list rht-system
    3  dnf install rht-system
    4  dnf list cups
    5  dnf remove cups.x86_64
    6  history
```

Lab Manual

Use the VirtualBox RHELv9 virtual machine for this lab. Do not use the Red Hat Lab Environment. Issue the following commands in the Terminal window before starting the lab on the next page:

```
history -c
history -w
```

Repeat these commands for root@RHELv8 if necessary.

Paste the results of the history command in the box at the end of the lab.

Lab 21: RHEL Repositories

1. Go to the Red Hat Developer's Network at https://developers.redhat.com.
2. Create an account and login.
3. Locate the free developer's edition of RHELv9. It is not necessary to download it but be aware of its existence.
4. Register your system using a command line utility.
5. List available subscriptions.
6. Attach the subscription.
7. Confirm the subscription.
8. List available repositories.
9. List additional repositories.
10. Enable one of the repositories.
11. List available packages.
12. Add the EPEL repository to RHELv8.

```
student@localhost:~$ history
    1  sudo subscription-manager clean
    2  sudo subscription-manager register
    3  sudo subscription-manager list --available
    4  sudo subscription-manager attach --pool=2c94f2d78226546701823a0c6e4020f2
    5  sudo subscription-manager list
    6  sudo dnf repolist all
    7  ls /etc/yum.repos.d/
    8  cat /etc/yum.repos.d/redhat.repo
    9  sudo dnf config-manager --enable rhel-9-for-x86_64-appstream-eus-rpms
   10  sudo dnf list .
   11  dnf list "ping"
   12  sudo rpm --import http://dl.fedoraproject.org/pub/epel/RPM-GPG-KEY-EPEL-9
   13  sudo dnf install https://dl.fedoraproject.org/pub/epel/epel-release-latest-9.noarch.rpm
   14  history
```

Lab 22: RPM Package Management

1. Using the rpm command, display the first ten installed software packages.
2. Display details about the setup software package.
3. View the scripts included in the setup package.
4. View the documentation included in the setup package.
5. Display the status of the first ten package files.
6. Retrieve http://mirror.RHELv8.org/RHELv8/7/os/x86_64/Packages/wireshark-1.10.14-16.el7_0.x86_64.rpm (If this version of WireShark is not available, find another version to retrieve)
7. Determine what the WireShark package requires for it to work correctly.
8. Try to install the WireShark package using the rpm command. It should fail due to dependencies it requires.
9. Install the Wireshark package using the CLI with a command that will resolve the dependencies required automatically.
10. Verify Wireshark has been installed by running tshark at a command line.
11. Now remove Wireshark using the same command.
12. Display the RHELv9 release version.
13. Install the Extra Packages for Enterprise Linux (EPEL) repository.
14. Import the GPG key.
15. Verify the EPEL repository has been installed.

```
student@localhost:~$ history
    1  dnf list installed | head -n 10
    2  rpm -qi setup
    3  rpm -q --scripts setup
    4  rpm -qd setup
    5  rpm -ql setup | head -n 10
    6  wget http://mirror.RHELv8.org/RHELv8/7/os/x86_64/Packages/wireshark-1.10.14-16.el7_0.x86_64.rpm
    7  yum deplist wireshark
    8  sudo rpm --install --verbose --hash wireshark-3.4.10-1.el9.src.rpm
    9  sudo yum install wireshark-1:3.4.10-1.el9.x86_64
   10  sudo tshark
   11  sudo yum remove wireshark
   12  cat /etc/os-release
   13  sudo dnf config-manager --add-repo="https://dl.fedoraproject.org/pub/epel/9/Everything/x86_64/"
   14  sudo vim dl.fedoraproject.org_pub_epel_9_Everything_x86_64_.repo
   15  sudo rpm --import http://dl.fedoraproject.org/pub/epel/RPM-GPG-KEY-EPEL-9
   16  sudo dnf install https://dl.fedoraproject.org/pub/epel/epel-release-latest-9.noarch.rpm
   17  cat /etc/yum.repos.d/epel.repo
   18  sudo dnf repolist
   19  history
```

Lab 23: Debian Package Management

Use **Ubuntu** for this exercise.

1. View the /etc/apt/sources.list file to see some of the repositories.
2. Install the aptitude package using apt-get.
3. Install the xfsdump package.
4. Update the list of repositories available.
5. Install the updated versions of all available packages (this may take as long as an hour to complete).
6. Remove the wget package.
7. Reinstall the wget package.
8. Search for packages related to “apt” to install.
9. View the dependencies of the aptitude package.
10. View the details of the aptitude package.

11. Install nmap using the Ubuntu Software Center.

12. Remove the nmap package and all related configuration files using apt-get.
13. Install the nmap package using apt-get.
14. List all packages currently installed on the system that match apt*
15. Display the contents of the nmap package using dpkg.
16. Display the status of the nmap package.

```
student@Ubuntu-22:~$ history
    1  sudo cat /etc/apt/sources.list
    2  sudo apt update
    3  sudo apt-get install aptitude
    4  sudo apt-get install xfsdump
    5  sudo apt-get update
    6  sudo apt list --upgradable
    7  sudo apt-get upgrade
    8  sudo apt-get remove wget
    9  sudo apt-get purge wget
   10  sudo apt autoremove
   11  sudo apt-get install wget
   12  sudo apt list --installed | grep apt
   13  dpkg -l "*apt"
   14  apt list apt\*
   15  apt-cache depends aptitude
   16  dpkg -s aptitude
   17  sudo apt-get remove nmap ; sudo apt-get purge nmap
   18  sudo apt-get install nmap
   19  apt list apt*
   20  dpkg -l | grep "apt"
   21  dpkg -L nmap
   22  dpkg -s nmap
   23  history
```