Hands-on Lab

Regain Access to a System

Linux Academy | Cloud Assessments

Contents

In this lab, we learn how to change the root password to a system we are locked out of. Note that this lab requires a VNC viewer to use. We suggest VNC Viewer (https://www.realvnc.com/en/connect/download/viewer/) if you do not have one already.

Resetting the Root Password

Copy the public IP provided on the Hands-on Lab page, and open your VNC viewer of choice. Connect to port 5901 on the server at the provided IP. The password for the VNC connection is vncpass. Note that this process may take several minutes. Should the VNC client report an encryption warning, simply continue. If the client connects and the screen remains black, wait until the graphical interface appears.

Open the Terminal application on the server; the easiest way to do this is by right-clicking on the desktop and selecting **Open Terminal**.

From the terminal, open the Virtual Machine Manager:

```
[root@ip] virt-manager
```

Select the provided CentOS virtual machine, click **Open**, then click the play button to start.

When the boot menu appears, select the first option – **CentOS Linux (3.10.0)** – and press **E** on your keyboard.

Scroll down the opened page until a line that begins with linux16 appears. Set the cursor to this line, then press **CTRL+E** to move to the end of the line. Remove the following from the end of the line:

```
rhgb console=tty0 console=ttyS0
```

In its place, add:

```
rd.break
```

Press **CTRL+X** to start booting the server.

Once finished booting, we are presented with the following command prompt:

```
switch_root:/#
```

Before we can make any changes, we need to mount the file system:

```
switch_root:/# mount -o remount,rw /sysroot
```

Change the root directory:

```
switch_root:/# chroot /systroot
```

We can now update the root password:

```
sh-4.2# passwd
```

Set the password to whatever you desire; we used linuxacademy.

Update SELinux:

```
sh-4.2# touch /.autorelabel
```

Exit back into the booting process:

```
sh-4.2# exit
switch_root:/# exit
```

Wait for the system to finish booting. When presented with the bootloader again, select the same version of CentOS. When prompted to log in, log in as root with the password we just set.

We have now gained access to our system!

Review

Knowing how to regain access to a server is an invaluable skill since getting locked out of a server is a very real problem many Linux administrators face. This lab has provided you hands-on practice with the process, and we encourage you to spend more time practicing before the lab time ends.

Complete this lab when finished.