

## CYB 300 Module Four Lab Worksheet One

Andree Salvo

Southern New Hampshire University

4-2 Lab Worksheet One: Certification Configuration and Management

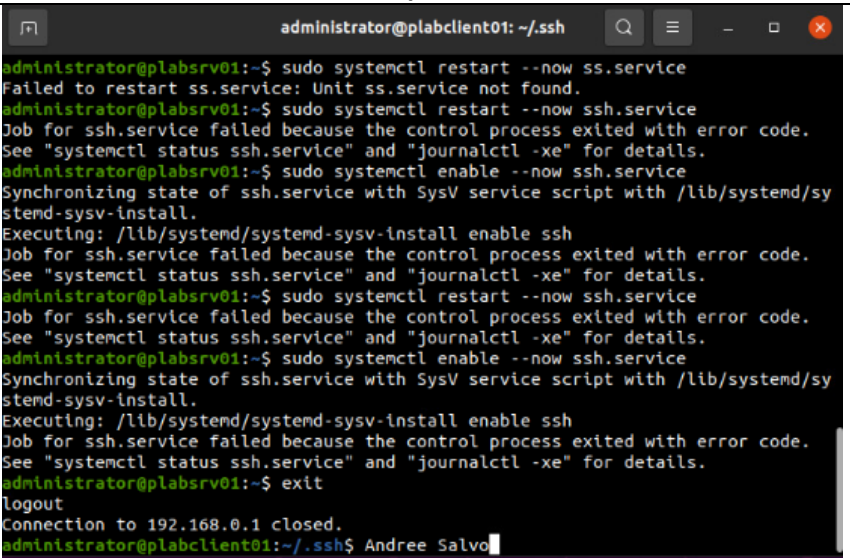
Instructor: Jason Keltner

Lab: Certification Configuration and Management

Exercise 1: Enable Certificate-Based Authentication

Prompt	Response
Task 1: Take a screenshot of <b>step 7</b> showing ssh active and running. Add your name in the command line.	<pre> administrator@plabrv01: ~ keychain libpam-ssh monkeysphere ssh-askpass molly-guard The following NEW packages will be installed: ssh The following packages will be upgraded:   openssh-client openssh-server openssh-sftp-server 3 upgraded, 1 newly installed, 0 to remove and 262 not upgraded. Need to get 1,105 kB of archives. After this operation, 138 kB of additional disk space will be used. Do you want to continue? [Y/n] y Get:1 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 openssh-sftp-server amd64 1:8.2p1-4ubuntu0.13 [51.6 kB] Get:2 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 openssh-server amd64 1:8.2p1-4ubuntu0.13 [378 kB] Get:3 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 openssh-client amd64 1:8.2p1-4ubuntu0.13 [670 kB] Get:4 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 ssh all 1:8.2p1-4ubuntu0.13 [5,060 B] Fetched 1,105 kB in 1s (1,466 kB/s) Preconfiguring packages ... (Reading database ... 71702 files and directories currently installed.) Preparing to unpack .../openssh-sftp-server_1:8.2p1-4ubuntu0.13_amd64.deb ... Unpacking openssh-sftp-server (1:8.2p1-4ubuntu0.13) over (1:8.2p1-4ubuntu0.4) ... Preparing to unpack .../openssh-server_1:8.2p1-4ubuntu0.13_amd64.deb ... Unpacking openssh-server (1:8.2p1-4ubuntu0.13) over (1:8.2p1-4ubuntu0.4) ... Preparing to unpack .../openssh-client_1:8.2p1-4ubuntu0.13_amd64.deb ... Unpacking openssh-client (1:8.2p1-4ubuntu0.13) over (1:8.2p1-4ubuntu0.4) ... Selecting previously unselected package ssh. Preparing to unpack .../ssh_1:8.2p1-4ubuntu0.13_all.deb ... Unpacking ssh (1:8.2p1-4ubuntu0.13) ... Setting up openssh-client (1:8.2p1-4ubuntu0.13) ... Setting up openssh-sftp-server (1:8.2p1-4ubuntu0.13) ... Setting up openssh-server (1:8.2p1-4ubuntu0.13) ... rescue-ssh.target is a disabled or a static unit, not starting it. Setting up ssh (1:8.2p1-4ubuntu0.13) ... Processing triggers for systemd (245.4-4ubuntu3.15) ... Processing triggers for man-db (2.9.1-1) ... Processing triggers for ufw (0.36-6ubuntu1) ... administrator@plabrv01: ~\$ sudo systemctl status ssh ● ssh.service - OpenBSD Secure Shell server    Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enabled)    Active: active (running) since Sat 2025-07-26 06:07:01 UTC; 20s ago      Docs: man:sshd(8)            man:sshd_config(5)    Main PID: 3895 (sshd)      Tasks: 1 (limit: 2290)     Memory: 1.2M     CGroup: /system.slice/ssh.service             └─3895 sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups  Jul 26 06:07:01 plabrv01 systemd[1]: Starting OpenBSD Secure Shell server... Jul 26 06:07:01 plabrv01 sshd[3895]: Server listening on 0.0.0.0 port 22. Jul 26 06:07:01 plabrv01 sshd[3895]: Server listening on :: port 22. Jul 26 06:07:01 plabrv01 systemd[1]: Started OpenBSD Secure Shell server. administrator@plabrv01: ~\$ Andree Salvo_ </pre>

Exercise 2: Configure Server Keys SSH Certificates for Authentication

Prompt	Response
<p>Task 2: Take a screenshot of <b>Step 6</b> showing successful ssh update and new key installation. Add your name in the command line.</p>	 <pre> administrator@plabclient01: ~/.ssh administrator@plabsrv01:~\$ sudo systemctl restart --now ss.service Failed to restart ss.service: Unit ss.service not found. administrator@plabsrv01:~\$ sudo systemctl restart --now ssh.service Job for ssh.service failed because the control process exited with error code. See "systemctl status ssh.service" and "journalctl -xe" for details. administrator@plabsrv01:~\$ sudo systemctl enable --now ssh.service Synchronizing state of ssh.service with SysV service script with /lib/systemd/sy stemd-sysv-install. Executing: /lib/systemd/systemd-sysv-install enable ssh Job for ssh.service failed because the control process exited with error code. See "systemctl status ssh.service" and "journalctl -xe" for details. administrator@plabsrv01:~\$ sudo systemctl restart --now ssh.service Job for ssh.service failed because the control process exited with error code. See "systemctl status ssh.service" and "journalctl -xe" for details. administrator@plabsrv01:~\$ sudo systemctl enable --now ssh.service Synchronizing state of ssh.service with SysV service script with /lib/systemd/sy stemd-sysv-install. Executing: /lib/systemd/systemd-sysv-install enable ssh Job for ssh.service failed because the control process exited with error code. See "systemctl status ssh.service" and "journalctl -xe" for details. administrator@plabsrv01:~\$ exit logout Connection to 192.168.0.1 closed. administrator@plabclient01:~/.ssh\$ Andree Salvo </pre>