

CYB 300 Module Four Practice Lab Worksheet One

Complete this worksheet by replacing the bracketed phrases in the Response column with the relevant information. For all screenshots, include your name in the command line.

Lab: Certification Configuration and Management

Exercise 1: Enable Certificate-Based Authentication

Prompt	Response
Task 1: Take a screenshot of step 7 showing ssh active and running. Add your name in the command line.	<pre> 0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded. Need to get 5,084 B of archives. After this operation, 121 kB of additional disk space will be used. Get:1 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 ssh all 1:8.2p1-4ubuntu0.11 [amd64] Fetched 5,084 B in 0s (31.2 kB/s) Selecting previously unselected package ssh. (Reading database ... 108864 files and directories currently installed.) Preparing to unpack .../ssh_1%3a8.2p1-4ubuntu0.11_all.deb ... Unpacking ssh (1:8.2p1-4ubuntu0.11) ... Setting up ssh (1:8.2p1-4ubuntu0.11) ... administrator@plabsrv01:~\$ 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 Tue 2024-07-23 15:38:27 UTC; 2min 20s ago Docs: man:sshd(8) man:sshd_config(5) Main PID: 28230 (sshd) Tasks: 1 (limit: 2196) Memory: 2.9M CGroup: /system.slice/ssh.service └─28230 sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups Jul 23 15:38:26 plabsrv01 systemd[1]: Starting OpenBSD Secure Shell server... Jul 23 15:38:27 plabsrv01 sshd[28230]: Server listening on 0.0.0.0 port 22. Jul 23 15:38:27 plabsrv01 sshd[28230]: Server listening on :: port 22. Jul 23 15:38:27 plabsrv01 systemd[1]: Started OpenBSD Secure Shell server. administrator@plabsrv01:~\$ Joshua Merren </pre>

Exercise 2: Configure Server Keys SSH Certificates for Authentication

Prompt	Response
Task 2: Take a screenshot of Step 6 showing successful ssh update and new key installation. Add your name in the command line.	<pre> Enable ESM Apps to receive additional future security updates. See https://ubuntu.com/esm or run: sudo pro status New release '22.04.3 LTS' available. Run 'do-release-upgrade' to upgrade to it. *** System restart required *** Last login: Tue Jul 23 15:48:21 2024 from 192.168.0.3 administrator@plabsrv01:~\$ sudo rm /etc/ssh/ssh_host* [sudo] password for administrator: administrator@plabsrv01:~\$ sudo ssh-keygen -q -N "" -t rsa -b 4096 -f /etc/ssh/ssh_host_rsa_key administrator@plabsrv01:~\$ sudo ssh-keygen -q -N "" -t ed25519 -f /etc/ssh/ssh_host_ed25519_key administrator@plabsrv01:~\$ sudoedit /etc/ssh/sshd_config.d/hardened.conf sudoedit: /etc/ssh/sshd_config.d: not a regular file administrator@plabsrv01:~\$ sudo systemctl restart --now ssh.service administrator@plabsrv01:~\$ sudo systemctl enable --now ssh.service Synchronizing state of ssh.service with SysV service script with /lib/systemd/systemd-sysv-install. Executing: /lib/systemd/systemd-sysv-install enable ssh administrator@plabsrv01:~\$ Joshua Merren </pre>

