

Week #5 – Linux Networking

Overview of the week's objectives

This week's modules will introduce Linux networking related topics. The first one will focus on setting up networking on Linux systems while the other will supplement this information by leading you to explore how to set up secure encrypted shell sessions using OpenSSH.

TODO List

Please refer to all previous "Week's Overview PDFs" for details / advice relating to, or concerning, each of the tasks detailed in the remainder of this overview. While we focus on instructions specific to this week's material herein, previous instructions still apply.

Learning Activity			Time in hours		Points
			Expected	Spent	
Reading Assignments	O1L7 O2L7	Studying Guides & Videos	2		
Practice Assignments	O1L7-PQ O2L7-PQ	Taking Practice Quizzes	1		
	W5-PA	Working on PAs & Participating to PA forums	5		
Graded Assignments	W5-GQ	Taking Graded Quiz	1		2
	W5-DF1 W5-DF2	Participating to Discussion forums	3		1
			12		3

Task #1 – Study & Practice

Refer to “Week #2’s Overview PDF” and/or all previous “Week’s Overview PDFs” for detailed instructions on how to use [online module guides](#), [practice quizzes](#) and our [support forum](#) while working on this task.

Task #2 – Practice Assignments

Refer to “Week #2’s Overview PDF” and/or all previous “Week’s Overview PDFs” for detailed instructions applying to all Practice Assignments.

Question #1

On your Linux Virtual Box, make sure `sshd` is installed. Make a copy of the `sshd` configuration file and paste the whole file into a Microsoft Word or Open Office file. Work your way down the file and describe the purpose of each line.

Question #2

Generate a public and private key pair for your client machine. Transfer it to your server machine (virtual box or real) and then copy the keys to the `authorized_keys` file. Keep notes of how you worked through this task in your practice assignment.

Question #3

Setup two networked virtual machines to allow XWindow forwarding using SSH. Run a Window application on one machine but set it to display it on the other virtual machine’s display. Screenshot the result and document the problems you encountered / resources you used.

Task #3 – Discussion Forums

Refer to “Week #2’s Overview PDF” and/or all previous “Week’s Overview PDFs” for detailed instructions applying to all discussion forums assignments.

Topic #1 – W5DF1 – Encryption Algorithms

Using the Internet, research and compare the algorithm used by OpenSSH encryption to another encryption algorithm of your preference. Your post should explain the new algorithm, its characteristics – e.g. public / private key, its typical applications, tools which are implementing it...

Your post should address a different algorithm than other posters or, if not possible, it should supplement the information they provided.

Topic #2 – W5DF2 – Remote Desktops

Using the internet, research available remote desktop technologies for either Linux or Windows systems and compare one of them to X11 tunneling over a SSH link. Your post should address performance, licensing, features... Make sure to address a different remote desktop technology than other posters or, if not possible, it should supplement the information they provided.

Task #4 – Graded quizzes

Refer to “Week #2’s Overview PDF” and/or all previous “Week’s Overview PDFs” for detailed instructions applying to all graded quizzes.