

WEEK 5**Networking - Ethernet and LAYER-II Internals**

Prerequisite Modules: Computer Systems Refresher and Bash Kick-start, Bash Hands-on and Linux Internals Kick-start, Linux Hands-on - Virtualization and IP Networking Basics, Linux Hands-on - Virtualization and IP Networking Labs on Routing & Switching

Sr. No.	Topic	Difficulty Level (L, M, H)	Lab Outline	Comments	Completed (Y/N)
1	Bridging/L2 Internals (PART-II)	M	Repeat Labs #2 and #3 in WEEK4, replace separate switch instances with a single L2 switch and segregate sub-networks Using VLAN tags	L2 Security, VLANs, IEEE 802.1Q standard	Y
2	Virtualization (part-IV)	M	Modify VM XML definitions accordingly #1 above		Y
3	Ethernet Standard - IEEE 802.3	M	Wireshark Lab to decode L2 MAC frames	Ethernet Transceivers, CSMA/CD, Physical Layer communication	Y
4	L2 Framing - code	M → H	Write code to define L2 Frame in C, use RAW Sockets on Linux	Continued for WEEK7 (WEEK6 is Ahmer Holiday)	N
		L = 0 L → M = 0 M = 3 M → H = 1 H = 0			