

Course 3 resources and citations

Week 1: Network architecture

Resources

[Helpful resources to get started](#)

- [Coursera Code of Conduct](#)
-
- [Coursera Honor Code](#)
-
- [Coursera: Edit my profile](#)
-
- [Coursera: Learner Help Center](#)
-
- [Coursera's Global Online Community](#)
-
- [Google: Common problems with labs](#)
-
- [Google Docs help](#)
-
- [Google Sheets help](#)
-
- [How to use Google Slides](#)
-
- [Microsoft Excel help and learning](#)
-
- [PowerPoint help and learning](#)

-
- [Word help and learning](#)
-

Citations

[Network components, devices, and diagrams](#)

- Meyers, Mike, and Scott Jernigan. (2019) CompTIA A+ Certification All-in-One Exam Guide, (Exams 220-1101 & 220-1102).
- Oluwatosin, H.S. (2014). Client-server model. *IOSR Journal of Computer Engineering*, 16 (1), 67-71.
- Sulyman, Shakirat. (2014). Client-Server Model. *IOSR Journal of Computer Engineering*. 16. 57-71. 10.9790/0661-16195771.
- GeeksforGeeks. (2022, March 21). [Devices used in each layer of TCP/IP model](#)

•

-

[Cloud computing and software-defined networks](#)

- Rackspace Technology Colo Data Centers. (n.d.). [What is colocation?](#)
-
- Fortinet. (n.d.). [What is hybrid cloud?](#)
-

[Learn more about the TCP/IP model](#)

- Clarke, Glen E. (2018). CompTIA Network+ Certification Study Guide: Exam N10-007.
- International Business Machines. (2022, Nov 15). [User datagram protocol](#)
- .
- International Business Machines. (2022, Nov 15). [Transmission control protocol](#)
- .

- Oracle. (n.d.). [TCP/IP protocol architecture model](#)
- . System administration guide, volume 3.
- Study CCNA. (n.d.). [OSI & TCP/IP models](#)
- .

[The OSI model](#)

- Cloudflare. (n.d.). [What is the OSI model?](#)
-
- FreeCodeCamp. (2020, December 21). [The OSI Model – The 7 Layers of Networking Explained in Plain English](#)
- .
- Imperva. (n.d.). [OSI Model](#)
- . Application security.

[Components of network layer communication](#)

- Agnė Srėbaliūtė. (2022, Aug 2). [IPv4 packet header: Format and structure](#)
- . IPXO.
- Rajinder Kaur (2009) [IPv4 Header](#)
- . Advanced Internet Technologies.
- Gsephrioth. (2017). [The IP diagram](#)
- .
- Wright, Robert. (October 1998). *IP Routing Primer*. O'Reilly.

Week 2: Network operations

Citations

[Network protocols](#)

- National Institute of Standards and Technology. (n.d.). [Glossary](#)
- . Accessed December 2022.

Common network protocols

- Cloudflare. (n.d.). [What is a protocol? | Network protocol definition](#)
- .
- CompTIA. (n.d.). [What is a network protocol and how does it work?](#)
-
- Oracle. (n.d.). [TCP/IP protocol architecture model](#)
- . System administration guide, volume 3.

Additional network protocols

- IBM. (2022, Oct 17). [TCP/IP address and parameter assignment - Dynamic host configuration protocol](#)
- . IBM AIX documentation.
- Microsoft. (n.d.O). [What are IMAP and POP?](#)
- Microsoft Support.
- Microsoft. (2013, October 21). [SMTP](#)
- .

The evolution of wireless security protocols

- Asus. (2022, January 14). [\[Wireless\] What is WPA3? What are the advantages of using WPA3?](#)
- FAQ.
- Britannica, T. Editors of Encyclopaedia (2022, February 3). [Wi-Fi](#)
- . *Encyclopedia Britannica*.
- Cisco Press. (2010, April 9). [Moving to WPA/WPA2-Enterprise wi-fi encryption](#)
- .

Firewalls and network security measures

- Cisco. (n.d.). [What is a firewall?](#)

-

Subnetting and CIDR

- Cloudflare. (n.d.). [What is a subnet?](#)
-
- Techopedia. (2017, July 18). [Subnetting](#)
- . Dictionary.
- IP Address Guide. (n.d.). [CIDR to IPv4 Conversion](#)
- . IPV4 Tools.

Proxy servers

- National Institute of Standards and Technology. (n.d.). [Glossary](#)
- . Accessed December 2022.

Week 3: Secure against network intrusions

Resources

Analyze network attacks

- [CompTIA](#)

-

Citations

The case for securing networks

- Vinton, Kate. (2014, September 18). [*With 56 million cards compromised, Home Depot's breach is bigger than Target's*](#)
- . Forbes.

Analyze network layer communication

- Lager, Nathan. (2020, April 3). [*Network Troubleshooting with Packet Captures*](#)
- . Enable Sysadmin.
- Oracle. (n.d.) [*How the TCP/IP Protocols Handle Data Communications \(System Administration Guide: IP Services\)*](#)
-).

Real-life DDoS attack

- Olenick, D. (2020, December 10) [*Guilty plea in 2016 Dyn DDos attack*](#)
- . Bank info security.
- Young, K (2022, January 10) [*Cyber case study: The Mirai DDoS attack on Dyn*](#)
- . Coverlink.

Overview of interception attacks

- Engebretson, P. (2013). *The basics of hacking and penetration testing: ethical hacking and penetration testing made easy*. Elsevier.

Week 4: Security hardening

Resources

[Course 3 glossary](#)

[Apply OS hardening techniques](#)

- [Opensource.com](#)
-
- [lana.org](#)
-
- [Geekflare](#)
-
- [Packet Pushers](#)
-

Citations

[OS hardening practices](#)

- National Institute of Security Technology. (2018, October). [Guide to securing macOS 10.12 systems for IT professionals](#)
- . Special publication 800-179, revision 1. Accessed December 2022.

[Apply OS hardening techniques](#)

- Doropoulos, N. (n.d.). [DNS Query Flood Attack.](#)

- [Linkedin.](#)

Use the NIST Cybersecurity Framework to respond to a security

- Bhardwaj, P. (2023, January 2). [How to detect an ICMP flood attack and protect your network.](#)
-

Firch, J. (2023, February 28). [How to prevent a ICMP flood attack.](#)

Google, Android, Chronicle, Google Drive, Google Sites, and YARA are trademarks owned by Google LLC. All other trademarks belong to their respective owners and are not affiliated with Google LLC.

Revision #1

Created 29 June 2023 05:41:49 by naruzkurai

Updated 3 July 2023 10:29:21 by naruzkurai