

# Network Fundamentals

Learn the core concepts of how computers communicate with each other and types of network weaknesses.

Every security professional needs to understand the network fundamentals. This module will introduce the core concepts of computer networking, covering everything from the Internet Protocol (IP), network topologies, TCP and UDP protocols of the OSI Transport Layer. Don't worry if that sounds complicated, as this module's labs use fun beginner friendly exercises and real-world examples to help guide your learning.



Free

## What is Networking?

Begin learning the fundamentals of computer networking in this bite-sized and interactive module.



Free

## Intro to LAN

Learn about some of the technologies and designs that power private networks



VIP

## OSI Model

Learn about the fundamental networking framework that determines the various stages in which data is handled across a network



VIP

## Packets & Frames

Understand how data is divided into smaller pieces and transmitted across a network to another device



VIP

## Extending Your Network

Learn about some of the technologies used to extend networks out onto the Internet and the motivations for this.

## Need to know



### How The Web Works

To become a better hacker it's vital to understand the underlying functions of the world wide web and what makes it work.

## Next Steps



### Linux Fundamentals

Many servers and security tools use Linux. Learn how to use the Linux operating system, a critical skill in cyber security.

## What are modules?

A learning pathway is made up of modules, and a module is made of bite-sized rooms (*think of a room like a mini security lab*).

► Learning Structure Diagram