

# Introduction to Open-Source Networking Technologies (LFS165x)

**Course Duration : 16 Hours**

**Course code : LFS165x**

## 1. Course Overview

The **Introduction to Open-Source Networking Technologies (LFS165x)** course introduces learners to modern networking concepts using open-source tools and technologies. This course helps participants understand how open-source networking is used to build flexible, scalable, and cost-effective network infrastructures.

## 2. What you'll learn?

- Fundamentals of networking
- Open-source networking concepts
- Software-defined networking (SDN) basics
- Network virtualization fundamentals
- Introduction to open-source networking tools

## 3. Target Audience

- Network engineers
- IT professionals
- System administrators
- DevOps engineers
- Networking beginners

## 4. Pre-Requisites

- Basic understanding of networking concepts
- Familiarity with Linux basics
- Interest in open-source technologies

## 5. Course Content (Modules)

### **Module 1: Networking Fundamentals**

- Basic networking concepts
- Network models and protocols

### **Module 2: Introduction to Open-Source Networking**

- Open-source networking overview
- Benefits and use cases

### **Module 3: Software-Defined Networking (SDN)**

- SDN architecture
- Controllers and data planes

### **Module 4: Network Virtualization**

- Virtual networks
- Overlay and underlay networks

### **Module 5: Open-Source Networking Tools**

- Overview of popular tools
- Real-world networking scenarios