

BIND DNS Administration

Course Duration: 24 Hours

Course code: BIND-DNS

1. Course Overview

This course provides an in-depth understanding of BIND (Berkeley Internet Name Domain), the most widely used DNS server on the Internet. Participants will learn how to install, configure, secure, and manage BIND DNS servers for both internal and external name resolution. The course also covers DNS concepts, zone management, DNSSEC, troubleshooting, and performance optimization, ensuring learners are fully equipped to administer production-grade DNS services.

2. What you'll learn?

By the end of this course, participants will be able to:

- Understand DNS concepts, architecture, and records.
- Install and configure BIND on Linux/Unix systems.
- Set up authoritative, recursive, and caching DNS servers.
- Create and manage forward and reverse lookup zones.
- Configure zone transfers, delegation, and views.
- Secure DNS using DNSSEC and access controls.
- Monitor, troubleshoot, and optimize BIND performance.
- Integrate BIND with modern networking environments.

3. Target Audience

- Linux/Unix system administrators
- Network administrators
- IT professionals managing DNS infrastructure
- Security engineers working with DNS and DNSSEC

4. Pre-Requisites

Familiarity with:

- Linux/Unix system administration
- TCP/IP networking basics
- DNS fundamentals (basic record types)

5. Course content

Basic DNS concepts

- Resource Records
- dig, host and nslookup
- Domain name registration
- Root zones
- DNS zones
- BIND 9 installation
- Common named configurations
- Configuring caching-only name server
- DNS (Domain Name System) administration
- Setting up Master DNS server
- Setting up Slave DNS server
- in-addr.arpa zones (and reverse lookups)
- Using RNDG
- Delegating zones to other DNS servers
- Understanding named logging
- DNS troubleshooting techniques

Common BIND error messages