NGINX Core

Duration: 2 days (8hrs/day)

Prerequisites: Basic knowledge of Linux.

Course Objective: The course will give you a detailed overview on how to administer, configure, and manage NGINX. During the training taken through the implementation of the web server, proxy server, and load balancer.

Nginx Version: Latest

Lab Requirement: Koenig DC (CentOS 9)

Module 1 - Introduction to NGINX and Installation

What is NGINX

What is HTTP and How Does it work?

NGINX vs Apache

Lab: Installing NGINX on Centos 9

Lab: Install NGINX from binary

Module 2 - NGINX as a Web Server

Understanding the NGINX Architecture

Understanding the Default NGINX Configuration

Overview of NGINX Modules

Lab: Serve static content

Lab: Handling Error Pages

Lab: Access Control with HTTP Basic Auth

Lab: Generating Self Signed Certificates

Lab: Redirecting All Traffic to HTTPS

Module 3 - Reverse Proxy

Introduction to Reverse Proxy

Lab: Proxy connections to upstream servers

Lab: Use Variables in Rewrites and Routing

Module 4 - Load Balancing

Introduction to Load Balancing

Lab: Configure Load Balancing for HTTP using the weighted Round Robin

Lab: Least Time, Least Connections, Hash, and IP Hash methods

Lab: Route Connections

Module 5 - Implement & Manage Caching

Introduction to HTTP Caching

Understanding the HTTP Cache Control Headers

Lab: Cache Control Headers no-store

Lab: If-Modified-Since Header

Module 6 - Logging and Monitoring

Understanding of NGINX Logging

Lab: Configuring Custom Logging

Lab: Enable Live Activity Monitoring of servers and upstream

Module 7 - Compression

HTTP Compression

Accept Content Encoding

Lab: GZIP Compression for NGINX