



FEARLESS FORTY

**Full Stack Training Program from
Linux Administration to DevOps Expert**

FOR

01

Linux Evolution and Popular Operating Systems

Open Source Philosophy. Distributions - Debian, Ubuntu (LTS), RedHat, CentOS

02

Information & Communication Technology (ICT) Skills &

Working in Linux - Desktop Skills, Getting to the Command Line
Industry uses of Linux, Cloud Computing and Virtualization

03

Finding way on a Linux System - mv, cp, rm, touch, mkdir, rmdir

04

Archiving Files on the Command Line - tar, gzip, bzip, zip

05

Searching Extracting Data from Files - grep, less, cat, head, tail, sort, cut

06

Where Data is Stored - ps, top, free, syslog, dmesg, /etc/, /var/log/, /boot/, /proc/, /dev/, /sys/, fdisk, mkfs, /etc/fstab, mount, lsblk, blkid, lvm

07

Your Computer on the Network - route, ip route show, ifconfig, ip addr show, netstat, ip route show, /etc/resolv.conf, /etc/hosts, IPv4, IPv6, ping, ping6, host

08

Security & File Permissions - /etc/shadow, /etc/group, id, who, w, sudo, su, visudo

09

Creating Users & Groups - /etc/passwd, /etc/shadow, /etc/group, /etc/skel/, last, useradd, groupadd, passwd, chage

10

Managing File Permissions - chmod, chown, special permissions, acl

LINUX

01

Introduction to AWS

AWS Fundamentals. AWS Cloud Computing Platform

02

Amazon Simple Storage Service (Amazon S3) and Amazon

Glacier Storage - Introduction | Object Storage versus Traditional Block and File Storage | Amazon Simple Storage Service (Amazon S3) Basics | Buckets | Amazon S3 Advanced Features | Amazon Glacier

03

Amazon Elastic Compute Cloud (Amazon EC2) and Amazon

Elastic Block Store (Amazon EBS) - Amazon Elastic Compute Cloud (Amazon EC2) | Amazon Elastic Block Store (Amazon EBS)

04

Amazon Virtual Private Cloud (Amazon VPC) - Amazon Virtual

Private Cloud (Amazon VPC) | Subnets | Route Tables | Internet Gateways | Dynamic Host Configuration Protocol (DHCP) Option Sets | Elastic IP Addresses (EIPs) | Elastic Network Interfaces (ENIs) | Peering | Security Groups | Network Access Control Lists (ACLs) | NAT Gateways

05

Elastic Load Balancing, Amazon CloudWatch & Auto Scaling -

Elastic Load Balancing | Amazon CloudWatch | Auto Scaling

06

AWS Identity and Access Management (IAM) - Principals |

Authentication | Authorization | Roles | MFA Authentication

07

Databases and AWS - Amazon Relational Database Service

(Amazon RDS) | Amazon Redshift | Amazon DynamoDB

08

SQS, SWF, and SNS - Amazon Simple Queue Service (Amazon

SQS) | Amazon Simple Workflow Service (Amazon SWF) | Amazon Simple Notification Service (Amazon SNS)

09

Domain Name System (DNS) and Amazon Route 53 -

Domain Name System (DNS) | Amazon Route 53 Policies

10

Security on AWS - Introduction | Shared Responsibility Model |

AWS Compliance Program | Global Infrastructure Security | AWS Account Security Features | AWS Cloud Service-Specific Security

11

AWS DevOps & BigData Support - OpsWorks | Big Data support on AWS

TERRAFORM

01

Introduction to Infrastructure as Code - What is IaC | Infrastructure As Code in Cloud | ClickOps vs DevOps

02

Introduction to Terraform - Introduction to AWS & Installing AWS CLI | Installing Terraform | Configuring AWS Provider | Creating EC2 Instance with Terraform | Understanding States | Destroying Everything

03

Dependencies & Modules - Creating AWS VPC | Dependency Graph | Controlling Dependencies with: depends_on, ignore_changes | Understanding Modules | Removing Duplication with Modules | Configuring Modules | Module Data

04

Storing & Supplying Configuration - Variables | Map & List Variables | Supplying Variable "in-line" Environment Variables | Using Variable files | Data Sources: configuring template_file, configuring external data | Quick Look at Consul

05

Connecting with Other Tools - Return Data with Outputs | Testing Servers with Inspec | Provisioners: local-exec & Ansible, remote-exec & Puppet, Uploading files with file provisioners

06

Scaling & Updating Infrastructure - Counting Servers | Configuring HA | Load Balancing & Simulating Conditions | Immutable Infrastructure | Making Images with Packer | AMI Upgrades | Performing Blue-Green Deployment Refreshing Infrastructure | Importing Resources

07

Collaborative Infrastructure - Version Control with GIT | Moving Templates with GIT | Protecting Secrets in GIT Repository | Storing State Files Remotely | Connecting Remote State Together | Storing Modules Remotely | Locking State Files with Terragrunt | Future of Terraform

01

Configuration Management with Ansible - Understanding configuration management tools | Ansible Architecture | Installing Ansible Controller | Ansible ad-hoc commands | Adding remote servers | Ansible Repository | Key-based Authentication | Ansible Playbooks | Using Variables | Using Conditions | Using Loops | Advance Ansible Playbooks | Ansible Roles | Jinja Templates | Ansible Performance Tuning | Integration with GIT | Ansible Security

02

Configuration Management with Puppet - Introduction to Puppet | Agent-based Configuration Management Tools | Installing Puppet Server & Agent | Understanding site.pp | Taking help in Puppet | Puppet Resources | Writing Puppet Manifests | Puppet Classes | Writing Puppet Modules | Applying Nodes Specific Configuration | Puppet Dependencies | Tasks & Templates | Conditions in Puppet | Integration with GIT | Reporting & Troubleshooting | Puppet Bolt

03

Docker Containers - Introduction to Containers | Virtual Machines vs Containers | Installing Docker CE | Docker Images | Docker Containers | Docker File | Docker Logs | Running Apache Container | Exposing Ports | Docker Hub | Docker Networking | Creating Own Docker Network | Docker Volumes | Docker Swarm

04

Jenkins Administration - Understanding CI / CD | Installing Jenkins | Exploring Jenkins Dashboard | Running Jobs | Configuring Jenkins | Scheduling Jenkins Jobs | Plugin Management | User Management | Attaching Jenkins Job with GIT | Vulnerabilities Testing | Jenkins Themes | Jenkins Security

05

GIT Hub - Understanding Git Hub | Creating Account on Git Hub | Understanding Repositories | Cloning Git Repositories | Creating Organization on Git Hub | Creating Team | Git Pull & Push | Access Control

DEVELOPERS