

DEVOPS (DOCKER & KUBERNETES) TRAINING

Duration: 2 Weeks

Starting date: 4th November 2024

About the Course

The DevOps training course will help you become fully proficient and deploy the DevOps principles and tools in a software enterprise. You will be learning the techniques of successfully integrating the IT development and IT operation departments. This DevOps instructor-led training will help you understand how to communicate, collaborate and automate key processes and systems in order to create synergies for creating faster and better software solutions.

Why take this Course?

For very long times the development and the operations teams of any software enterprise have stayed at arm's length. But this organizational cultural shift thanks to DevOps a lot of changes are happening in forward-thinking enterprises. Learning DevOps will help you master all the skills needed in order to successfully build, operate, monitor, measure and improve the various processes in IT enterprises by better integrating development and operations. You will grab the best jobs after finishing the DevOps training course.

Course Content

Module /Topic	Hands on exercises
Introduction & Set Up <ul style="list-style-type: none">• Introduction• Installation of Basic Software	<ul style="list-style-type: none">• Basic Installations
The Basics (Linux, Networking, Applications) <ul style="list-style-type: none">• Linux CLI• Linux Commands• Networking Basics• Basic Routing and Switching• DNS• Java Project (Spring Boot Application)• Java – Build & Packaging	<ul style="list-style-type: none">• Implement Basic Linux Commands• Writing a Basic Application in either Java or Node (Any preferred programming Language)

<ul style="list-style-type: none"> Node JS - NPM 	
GIT <ul style="list-style-type: none"> Introduction to GIT Initializing GIT Repository GIT Branches (checkout, push, merging) GIT Remote Repositories 	<ul style="list-style-type: none"> Installation of GIT GIT CLI Local and Remote Repositories exercise
Jenkins <ul style="list-style-type: none"> Introduction to Jenkins Searching through Plugins Install Jenkins on a VM Jenkins CLI Installing Plugins Administering Jenkins Backup and Restore Jenkins 	<ul style="list-style-type: none"> Installing Jenkins Working with Jenkins CLI Installing Jenkins Plugins System Administration with Jenkins
Pipelines <ul style="list-style-type: none"> Build a CI pipeline Build a CD pipeline Full pipeline deployment 	<ul style="list-style-type: none"> Write a Jenkins file for a Pipeline
Docker <ul style="list-style-type: none"> Docker Overview Basic Docker Commands Docker Run Docker Images Docker Engine & Networking Docker Registry 	<ul style="list-style-type: none"> Installation of Docker Working with images and containers Docker CLI
Kubernetes <ul style="list-style-type: none"> Kubernetes Overview Containers Overview Container Orchestration Kubernetes Architecture Minikube Setup Kubernetes Concepts – PODS Basics of Networking in Kubernetes 	<ul style="list-style-type: none"> Minikube setup PODS with YAML Replica Sets

YAML introduction <ul style="list-style-type: none">• Introduction to YAML	<ul style="list-style-type: none">• Writing YAML configuration Files
Microservices Architecture <ul style="list-style-type: none">• Microservices Architecture• Deploying sample app on Kubernetes	
Ansible <ul style="list-style-type: none">• Ansible Introduction• Ansible Inventory• Ansible Playbooks• Ansible Modules• Ansible Variables• Ansible Conditionals• Ansible Loops and Roles	<ul style="list-style-type: none">• Installing Ansible• Ansible Concepts• Ansible Conditionals, Loops and Roles
Terraform <ul style="list-style-type: none">• Introduction to Terraform• Hashicorp Configuration Language (HCL)• Terraform Providers• Multiple Providers• Using Input Variables• Terraform State• Terraform Commands• LifeCycle Rules	<ul style="list-style-type: none">• Installing Terraform• HCL Basics• Configuration Directory• Understanding Variable Block• Terraform Commands
Lab Project <ul style="list-style-type: none">• Introduce a Lab Project that will cover all the features of the course content covered	

A. AWARD

A certificate of attendance with will be awarded to all participants.

B. TRAINING DATES AND VENUE

4TH NOV 2024, SOFTNET TRAINING & EXAM CENTRE, MIKOCHENI A/MIGOMBANI STREET IN DAR ES SALAAM

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