**∞**joindevops.com

# DevOps With AWS(るのか)

STARTS ON

Aug-11-2024





TRAINER:
SIVA KUMAR REDDY METTUKURU

# **∞** joindevops.com

## **Know Your Trainer**

Sivakumar Reddy, founder of JoinDevOps, is a seasoned DevOps expert with over 12 years of experience. He has trained over 6,500 students through real-world, project-based learning that meets corporate standards. Known for his hands-on approach, Sivakumar specializes in Jenkins, Docker, Kubernetes, Ansible, and Terraform. His practical training programs bridge the gap between academic learning and industry requirements, ensuring students are job-ready from day one.

Outlook

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Sivaknam Reddy in

SENIOR DEVOPS ARCHITECT | CLOUD CONSULTANT

12+ YEARS OF EXPEREINCE



# Course Details

DevOps with AWS (Telugu 81S)

Demo: Aug 11 | 10:30 am (IST)

Classes : Aug 12 | 7:45 pm - 9:15 pm ( IST) Evenings

Course Duration: 4 Months

Hours of Training: 120+ Hours

Register Now

If you haven't registered yet!



# Course Highlights

120+

Hours of Training



Real Time Project Experience



Lifetime Access to Recordings



Mock Interviews



Access to
DevOps Job Portal



Multi Environments



Daily **Q&A Support** 



Resume Preparation



Job Refferals

**COURSE FEE** 

₹24,490/-

₹29,990/

**EMI Options are Available** 

Attend One Week Sessions For Free, Then Decide.





# Syllabus



































### **Demo Day:**

- Trainer Introduction
- Course overview
- · Syllabus walkthrough
- Training features
- Placement assistance
- Q&A

### Week 1: Introduction to DevOps and AWS

- Introduction to DevOps, AWS Overview, EC2 Basics
- Process Management, Network Management
- RDBMS Overview,
- MySQL Introduction
- Backend Setup, Real-time Project Configuration

### Week 2: Advanced Networking and Database Management

- Public vs Private IP, Forward vs Reverse Proxy
- How DNS Works, Symlink vs Hardlink, Linux Folder Structure
- Shell Script Basics, GitHub Setup
- Variables, Read Command, Conditions, Exit Status, Special Variables

### Week 3: Shell Scripting and Automation

- Functions, Colors, Logs, Redirections, Loops
- Idempotency, Expense Project Completion
- Crontab, Disk Usage, Sending Gmail from Linux Server, Shell Disadvantages
- Introduction to Ansible, Push vs Pull, Install Ansible, Adhoc Commands



### Week 4: Ansible and Configuration Management

XML vs JSON vs YAML, Playbooks, Ansible Variables, Data Types Ansible Loops, Filters, DB Server Configuration Shell vs Command Module, Backend and Frontend Server Configuration Ansible Roles, Handlers, Tasks, Templates, Vars, Vault Ansible Tags, Dynamic Inventory, Forks, EC2 Integration

### Week 5: Infrastructure as Code with Terraform

IaaC Advantages, Terraform Setup, EC2 and SG Creation Variables, Data Types, Conditions, Count Based Loop, Outputs EC2 and R53 Creation, Locals, Data Sources State and Remote State, S3 and DynamoDB Configuration, Loops

### Week 6: Advanced Terraform

Multiple Environments, Workspaces, Separate Repos, Provisioners Module Development, VPC Concepts, Subnets, IGW, Route Tables VPC Peering, SG Module, SSM Parameter Store Bastion Host, SG Rules, Using Open Source Modules

### Week 7: Load Balancers and Auto Scaling

- LB Theory, Listener, Rules, Target Groups, Health Checks
- Load Balancer Setup, Launch Template, ASG, ASG Policy
- Expense Project with Terraform, ACM, HTTPS Listener
- Cloudfront, HTTP Methods



### Week 8: Git and CI/CD with Jenkins

- Introduction to Git, Branching, Merge, Rebase, Merge Conflicts
- Git Flow, CR Process, Reset, Revert
- Jenkins Installation, Freestyle Job, Pipeline Job, Pipeline Structure

### Week 9: Jenkins Advanced

- Input, When Condition, CI Pipeline, Reading JSON, Installing Dependencies
- Nexus Integration, CI/CD Job, Expense Project Completion
- SonarQube Installation, Configuration, QualityGate, Scans

### Week 10: Docker and Containerization

- Docker Introduction, Installation, Docker Commands
- Dockerfile Instructions, Build, Push, Expense Project with Docker
- Docker Compose, Docker Volumes, Best Practices

### Week 11: Kubernetes

- Docker Disadvantages, EKS Installation, K8s Resources, Namespace, Pods
- Services, ReplicaSet, Deployment, MySQL Backend, Frontend
- K8s Volumes, Static and Dynamic Provisioning, StatefulSet MySQL

### Week 12: Advanced Kubernetes

- StatefulSet, Helm, RBAC, Horizontal vs Vertical Scaling, HPA
- Taints and Tolerations, Node Affinity, Pod Affinity/Anti-Affinity
- Ingress Controller, Ingress, Init Containers, Ephemeral Volumes
- EKS Cluster Creation, Upgrade, Target Group Binding, Push Image to ECR



### **Week 13: Jenkins Shared Libraries and Pipelines**

- Jenkins Shared Library, NodeJS EKS Shared Pipeline
- Unit vs Functional vs Integration Tests, Multi-Branch Pipeline
- Pipelines, Development Pipeline, Non-Prod Pipeline, Prod Pipeline

### Week 14: Monitoring and Logging

- Monitoring, Prometheus, Node Exporter, Prometheus Rules, Alert Manager, Grafana Dashboard
- Prometheus Metrics, ELK Stack, Elasticsearch, Kibana, Filebeat, Logstash
- 4 Golden Signals, Latency, Errors, Traffic, Kubernetes Logging

### Week 15: Python for DevOps

- Introduction to Python, Environment Setup, Variables, Data Types
- Control Structures, Functions, Modules, Packages
- File Handling, Exception Handling, Python Standard Library
- Python for Automation, Scripting, Integrating Python with DevOps Tools



# Contact Us

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