

# INFOSOFT IT SOLUTIONS

**Training | Projects | Placements**

Revathi Apartments, Ameerpet, 1<sup>st</sup> Floor, Opposite Annapurna Block, Info

soft it solutions Software Training& Development 905968394,918254087

## **APACHE MESOS**

### **Introduction to Apache Mesos**

- Overview of Apache Mesos and its role in cluster management
- Comparison with other cluster orchestration frameworks (e.g., Kubernetes, Docker Swarm)
- Use cases and benefits of using Apache Mesos

### **Mesos Architecture**

- Understanding Mesos architecture components (Master, Agent, Framework)
- Resource allocation and scheduling principles
- High availability and fault tolerance mechanisms

### **Mesos Installation and Configuration**

- Pre-requisites and system requirements
- Installing Mesos (binary installation, package installation)
- Configuring Mesos clusters (Master and Agent configuration)
- Setting up Mesos with different operating systems

## **Mesos Frameworks**

- Overview of Mesos frameworks (Marathon, Chronos, Aurora, etc.)
- Writing applications with Mesos frameworks
- Using Mesos for batch processing and long-running services

## **Mesos Networking and Storage**

- Networking concepts in Mesos clusters
- Integrating Mesos with container networking (Docker, CNI)
- Persistent storage options and considerations

## **Mesos Security**

- Securing Mesos clusters (authentication, authorization)
- Using SSL for secure communication
- Best practices for securing Mesos environments

## **Mesos Operations and Monitoring**

- Managing Mesos clusters (scaling, upgrading, maintenance)
- Monitoring and logging Mesos clusters (Mesos UI, metrics)
- Troubleshooting common issues and performance tuning

## **Mesos Container Orchestration**

- Containerization concepts (Docker, Mesos containerizer, Universal Container Runtime)
- Deploying and managing containers with Mesos
- Integrating Mesos with container orchestration tools (Mesosphere DC/OS)

## **Mesos High Availability and Disaster Recovery**

- Setting up highly available Mesos clusters
- Implementing fault tolerance mechanisms
- Backup and recovery strategies for Mesos data

## **Advanced Mesos Topics**

- Dynamic resource allocation and scaling
- Using Mesos for big data processing (Apache Spark, Apache Hadoop)
- Integrating Mesos with other ecosystem tools (e.g., Kafka, Elasticsearch)