

DevOps





# **DevOps**

#### Introduction:

DevOps is a software development approach that emphasizes collaboration, communication, and automation between development and operations teams. This 5-day training course will provide participants with a comprehensive understanding of DevOps and its benefits, along with practical examples of how to implement DevOps practices and tools.

## Course Objectives:

By the end of this course, participants will be able to:

- Understand the basics of DevOps and its principles
- Implement DevOps practices and tools for collaboration and communication
- Use automation tools for software development, testing, and deployment
- · Apply DevOps practices for continuous integration and delivery
- Use tools for monitoring, troubleshooting, and performance optimization

## **Targeted Audience:**

This course is designed for IT professionals, software developers, and operations teams who want to learn about DevOps and its implementation.

### Course Outlines:

#### Unit 1: Introduction to DevOps

- Overview of DevOps
- · Benefits and challenges of DevOps
- DevOps principles and practices
- DevOps Culture and Collaboration
- DevOps Tools and Technologies

#### Unit 2: Collaboration and Communication in DevOps

- Agile and Lean Software Development
- Continuous Integration and Delivery
- Infrastructure as Code
- Collaboration Tools for DevOps
- DevOps Metrics and Monitoring

## Unit 3: Automation Tools for DevOps

- Source Code Management
- Build Automation
- Configuration Management
- Continuous Testing



Release Automation

## Unit 4: Continuous Integration and Delivery in DevOps

- Continuous Integration and Deployment Pipeline
- Build and Release Automation
- Automated Testing
- Continuous Delivery Best Practices
- Monitoring and Metrics for Continuous Delivery

## Unit 5: Monitoring and Troubleshooting in DevOps

- Monitoring and Logging in DevOps
- Troubleshooting DevOps Applications
- Performance Optimization in DevOps
- Security and Compliance in DevOps
- Best Practices for DevOps Implementation