

The Course

DEVOPS PROFESSIONAL

DevOps Training assists organizations system to save their valuable time and money. We train Devops engineers to collaborate between IT operations and development team to accelerate the automation of workflow and infrastructure. We provide good sources to learn devops tutorial for beginners. This Course is Provided by the Real-Time professionals to make you understand the Real-Time IT Scenario's and Problems. DevOps Training makes you master in the various aspects of the principles of continuous development and deployment, software development operations, continuous integration, automation of configuration management and learn the various tools like Git, Docker, Jenkins, Nagios, Puppet, Ansible and Kubernetes.

The Eligibility

Passionate Technology Enthusiasts with a minimal knowledge on IT and Operating Systems.

Good to have basic knowledge on Windows, OS & IT Infrastructure.



The Rulepaper Promise

Our training methodologies promises to give the students hands on art enterprise skills to delve deeper into the technologies from a practical and enterprise point of view. Extreme Hands-on-Lab with a self doable on the fly practical based training approaches makes transformation of the student from a no vice to a capable experienced cloud computing engineer.

The Instructor

Enterprise Architect with huge experience on Private and Public Cloud Technologies. The trainers are advisors and members of larger Cloud Computing Forums and seasoned integrators of IT Cloud Computing technologies with more than 12+ years in global large enterprise giants.

DevOps

INTRODUCTION TO DEVOPS

- What is DevOps?
- History of DevOps
- Dev and Ops
- DevOps definitions
- DevOps and Software Development Life Cycle
- DevOps main objectives
- Infrastructure As A Code
 - IaaS Overview
 - PaaS Overview
- DevOps on the Cloud
- Prerequisites for DevOps
- Introduction to Linux
 - Basics of UNIX and Linux Operating Systems
 - Linux System administration introduction
- Tools (Jenkins, Chef, Docker, Vagrant and so on.)
- Continuous Testing and Integration
- Continuous Release and Deployment
- Continuous Application Monitoring

CLOUD COMPUTING and VIRTUALIZATION

- History and evolution of cloud
- Cloud computing concepts
- Grid Computing vs. Cloud Computing
- Characteristics and Benefits of Cloud
- Cloud service models (NIST)
- IaaS, PaaS and SaaS
- Cloud service model implementations
- Cloud Deployment Models (NIST)
- Virtualization
- Virtual Machines
- Virtual bootable OS Images
- Cloud Storage
- SOA and Cloud
- Virtual Private Cloud (VPC)
- Risk in Cloud and DevOps security concerns
- Introduction to AWS and AZURE

DEVOPS ADOPTION

- CRITERIA
 - Things to Look For and Avoid
 - IT Assets Ownership
 - Viewing Applications As Products, not Projects
 - DevOps in the Enterprise
 - IT Governance
 - Governance and Risk Mitigation
 - DevOps Adoption Steps
 - Select DevOps Techniques and Practices
 - Service Quality Metrics
- TOOLS
 - The Choice of Cloud Platform
 - IaaS for DevOps
 - PaaS for DevOps
 - Containerization Tools
 - System Configuration Automation and Management
 - Continuous Integration (CI) Systems
 - Build and Dependency Management Systems
 - Select DevOps Tools
 - Collaborative Lifecycle Management Solutions from IBM
 - Rational Team Concert (RTC)
 - Rational Quality Manager (RQM)
 - Rational DOORS Next Generation (DNG)

DEVOPS TOOLS: CHEF

- Overview of Chef
 - Common Chef Terminology (Server, Workstation, Client, Repository etc.)
 - Servers and Nodes
 - Chef Configuration Concepts
- Workstation Setup
 - How to configure knife
 - Execute some commands to test connection between knife and workstation
- Organization Setup
 - Create organization
 - Add yourself and node to organization
- Test Node Setup
 - Create a server and add to organization
 - Check node details using knife

RULEPAPER ACADEMY

- Databags
 - How to create Databags
 - Add Databags to organization
- Node Objects and Search
 - How to Add Run list to Node
 - Check node Details
- Environments
 - How to create Environments
 - Add servers to environments
- Roles
 - Create roles
 - Add Roles to organization
- Advanced Chef
 - What is foodcritic and TestKitchen
 - Improve and expand on the existing recipes
 - One-click system launching

DEVOPS TOOLS: PUPPET

- Introduction to Puppet
- Installation and Configuration of Master server and agents
- Managing Manifests
- Creating and Managing modules
- Version control with Puppet

DEVOPS TOOLS: VAGRANT

- Introduction
 - What is Vagrant
 - Uses of Vagrant in an environment
- Installation and Configuration
 - How to install Vagrant in Windows and Linux
 - Configure Vagrant
- Provisioning with Vagrant
 - How to use Vagrant to create small virtual
 - Add required Images to Vagrant
- Using Vagrant
 - Using Vagrant in Chef for Testing

DEVOPS: SOURCE CODE MANAGEMENT

- GIT REPOSITORY
 - What is a version control system?
 - What is a distributed version control system?
 - Installation
 - Different levels of Git configuration
 - The process of staging and committing
 - The details of the commit objects
- NEXUS
 - Nexus prerequisites
 - Installing and Running Nexus
 - Using the Nexus User Interface

CONTINUOUS INTEGRATION

- INTRODUCTION TO JENKINS-CI
 - Continuous Integration with Jenkins Overview
 - Installation
 - Configure Jenkins as stand-alone application
 - Configure Jenkins on an Application Server
 - Jenkins management
 - Support for the Git version control systems
 - Different types of Jenkins Jobs
 - Setting up a Jenkins job
 - Scheduling build Jobs
 - Maven Build Scripts
 - Securing Jenkins
 - Authentication
 - Authorization
 - Confidentiality
 - Creating users
 - Jenkins Plugin
 - Installing Jenkins Plugins
 - SCM plugin
 - Build and test
 - Analyzers
 - Distributed builds with Jenkins
 - Best Practices for Jenkins

DEVOPS: MONITORING

- NAGIOS
 - How to monitor the Servers in Nagios
 - Trigger Alerts in Nagios

RULEPAPER ACADEMY

- How to apply blackouts and remove blackouts
- ZENOSS
 - How to monitor the Servers in Zenoss
 - Trigger Alerts in Zenoss
 - How to apply blackouts and remove blackouts
 - How to check events; CPU, Memory and RAM Graphs for servers

DEVOPS: APPLICATION ARCHITECTURE

- Web Forms
- User Controls
- Shared UI Code
- Business Logic

CONFIGURATION MANAGEMENT

- Configuration Management Activity
- Configuration Control
- Incident Management
- Change Management
- Problem Management

GENERAL ENVIRONMENT SETUP STEPS IN AWS and NTTA

- Creating Servers and Networks in Cloud
- Setting up rules and Application
- Difficult Scenarios in environments.
- Scaling
 - Environment testing
 - Monitoring logs

MISCELLANEOUS

- Other Tools used in DevOps.
- Docker