

About Course

What is this course about?

Devops engineers are all-rounders, Devops bridge the gap between the development, test and production teams. This course will teach you how to become a full fledged devops engineer. In this course we will start with building with 3-tier infrastructure and deploy an application and scale it horizontally and vertically, provision using configuration management tools, Monitor the deployed application for zero-downtime.

This course is taught hands-on, you learn by doing.

What are the course objectives?

- Setup Dev/test environment with Vagrant.
- Build High availability 3-tier architecture on AWS VPC.
- Provisioning using Puppet/Chef/Ansible.
- Build Infrastructure using Cloudformation/Terraform.
- Implement Continuous Integration using Jenkins.
- Setup Server/Application Monitoring using CloudWatch and Nagios.
- Auto Scale with AWS Autoscaling.
- Automate repetitive Admin task with Shell.

Extra:

- Serverless architecture
- Containerization Docker - Getting started.

Who should do this course?

This course is suitable for System Administrators, Developers, IT Managers, IT Operations team members, who want to learn more about DevOps..

Course Syllabus

Introduction:

- What is DevOps?
- Devops is not Job title.
- As a Devops engineer, Do I need to code?

Cloud Computing:

- What is Cloud computing?
- What is IASS,PASS and SASS?

Linux:

- Install/ configure Cygin for Linux like environment for windows users.
- Get comfortable with Linux command line.
- Basic Linux Commands.
- Linux Admin Commands

Amazon Cloud

- EC2 Instance
- S3 - Simple Cloud Storage.

- ELB - Elastic load balancers
- EBS - Elastic Block Storage
- VPC - Virtual Private cloud
- CloudFront - Cache Engine
- RDS - Relational Database Service
- CloudWatch - Monitoring your Infrastructure.
- CodeCommit
- CodePipeline
- Codedeploy

Jenkins

- Installing/configuring Jenkins.
- Top Jenkins Plugins
- Setting up Continuous integration with jenkins.

Provisioning:

- Puppet/Chef/Ansible
- Setup provisioning with puppet/chef/Ansible.
- Puppet:
 - Getting started with Puppet.
 - How to create a manifest
- Chef:
 - Getting started with Chef
 - How to create your own cookbooks.
- Ansible:
 - Getting started with Ansible
 - How to create your own Playbooks.

Infrastructure As Code

- CloudFormation
- Terraform.
- Build scriptable Infrastructure with terraform.

Shell scripting:

- Shell basics.
- Shell loops - if,for,while..etc.
- How to write a script?

Extra:

- Serverless architecture
 - Lambda
- Containerization
 - Docker - Getting started.