

## DevOps:

DevOps may be a set of practices that mixes software development (Dev) and knowledge Technology Operations (Ops). It provides continuous delivery with high software quality. DevOps includes security, Collaborative ways of working, data analytics and lots of other things. It's collision of two major related trends i.e., agile infrastructure and agile operations. DevOps influences the appliance lifecycle throughout its plan, develop, deliver and operate phases. Each phase relies on the others, and therefore the phases aren't role specific.

## Phases of DevOps:

- Plan
- Develop
- Deliver
- Operate

While adopting DevOps practices automates and optimized processes through technology. Cloud adoption has fundamentally transformed the way teams are building, deploying, and operating applications. Alongside the adoption of DevOps, teams now have greater opportunity to enhance their practices and better serve their customers better.

## Benefits of DevOps:

- Significantly shorter time to market
- Improved customer satisfaction

- Better product quality
- Improved Productivity and efficiency

## Course Content:

### Module 1 – DevOps Introduction

Objectives – At the end of this Module, you should be able to:

- What is DevOps
- What is SDLC
- Why DevOps
- DevOps principles
- Waterfall vs Agile vs DevOps
- DevOps tools

### Module 2 - Cloud Computing Concepts

Objectives – At the end of this Module, you should be able to:

- Cloud History
- Cloud Computing Concepts
- Cloud Deployment Models

- Cloud Delivery Models
- Cloud Computing Benefits

### Module 3 – AWS/ Azure Overview

Objectives – At the end of this Module, you should be able to:

- AWS/Azure History
- Brief Overview of AWS/Azure
- AWS /Azure as a Market Leader
- AWS /Azure Globally Distributed Infrastructure
- Discuss AWS/ Azure Products and Services

### Module 4 - Virtualization

Objectives – At the end of this Module, you should be able to:

- What is Virtualization?
- History of Virtualization
- What is Hypervisor?
- Types of Server Virtualization
- Benefits of Virtualization

- Important Virtualization products

## Module 5 - VAGRANT

Objectives – At the end of this Module, you should be able to:

### Introduction

1. Why and what is Vagrant
2. Uses of Vagrant in an environment
3. Alternatives of Vagrant
4. Vagrant versions

### Installation and Configuration:

1. Installing Virtual box
2. How to install Vagrant on Windows
3. Configuring Vagrant

### Provisioning with Vagrant:

1. Creating first VM with Vagrant
2. Operations on the VM

3. Connecting to the VM
4. Add required Images to Vagrant
5. Using Vagrant.

## Module 6 - GIT: Version Control System

Objectives – At the end of this Module, you should be able to:

### Introduction:

1. Version control systems
2. Local, Centralized and distributed

### Installing Git:

1. Installing on Linux
2. Installing on Windows
3. Initial setup

### Git Essentials:

1. Creating repository
2. Cloning, check-in and committing
3. Fetch pull and remote

#### 4. Branching

### Module 7 - Configuration Management: Chef

Objectives – At the end of this Module, you should be able to:

#### Overview of Chef:

1. Common Chef Terminology (Server, Workstation, Client, Repository etc.)
2. Servers and Nodes
3. Chef Configuration Concepts

#### Workstation Setup:

1. How to configure knife
2. Execute some commands to test the connection between knife and

workstation

#### Organization Setup:

1. Create Organization
2. Add yourself and node to the organization

## Test Node Setup:

1. Create a server and add to organization
2. Check node details using knife

## Node Objects and Search:

1. How to Add Run list to Node
2. Check node Details

## Environments:

1. How to create Environments
2. Add servers to environments

## Roles:

1. Create roles
2. Add Roles to organization

## Module 8 - Configuration Management: Puppet

Objectives – At the end of this Module, you should be able to:

## What is Puppet?

1. How puppet works
2. Puppet Architecture
3. Master and Agents
4. Configuration Language
5. Resource Abstraction Layer
6. Transactional Layer

## Installation and Configuration:

1. Installing Puppet
2. Configuring Puppet Master and Agent
3. Connecting Agents

## Puppet Master:

1. Puppet configuration tree
2. Puppet configuration files

## Puppet Language Basics:

1. The declarative language



2. Resources
3. Resource Collectors
4. Virtual Resources
5. Exported Resources
6. Manifests
7. Relationships and Ordering
8. Modules and Classes
9. Class Parameters
10. Defined Types

Puppet Language Advanced & nbs

### Our learning methods include:

- Comprehensive course selection of Instructor-Led Training
- Logistical convenience and interactive classroom experience of Online Training
- Flexible pacing and instructor-guided support of Mentored Learning
- Self-paced convenience of Online ANYTIME

### In addition:

- Interview preparation with mock interview drills
- Effective resume building



+17207384411  
[info@procareer.io](mailto:info@procareer.io)

- Process of applying jobs at the right places

### Reach us:

Call : +1 720 738 4411

Email ID: [info@procareer.io](mailto:info@procareer.io)

Website: <https://www.procareer.io/>

