ROLE BASED

INHOUSE TRAINING

WITH 100% PLACEMENT

Peopleclick

AWS Certified Devops Architect – Associate

Main Topics

1. Basic of Networking
2. Basic of Linux Admin
3. AWS – Solution Architect – Course Content

- EC2 Cloud Compute services
- VPC (Virtual Private Cloud)
- VPN (Virtual Private Network)
- Storage & Content Delivery
- Route 53
- Management Tools
- Security Identify & Compliances
- Auto Scaling & ELB
- Databases

4 AWS Sysops

- EBS Snapshots and Replication
- S3 – Website Hosting
- Cloudwatch
- CloudTrail
- Migration tools

5.AWS Devops

- Understanding Application Lifecycle Management
- Codedeploy
- Elastic Beanstack
- Elastic Container Service
- CodePipepline

- CloudFormation
- Creating Stacks and Managing Configuration with OpsWorks

6. Devops

- Version Control with Git
- Continous Integration using Jenkins
- Configuration Management with Ansible
- Containerization with Docker
- Containerization with Docker: Ecosystem and Networking
- Containerization using Kubernetes
- Continuous Monitoring with Nagios

Course Flow

1.Basic of Networking

- What is Networking
- IP address Basic
- Classess of IP
- Subnetting
- Public / Private IP
- Natting/ Patting
- IP V6 Implementation

2 Basic of linux Admin

- Introduction to UNIX & LINUX
- Installation of Linux
- Access the command line
- Manage files from the command line
- Advanced File Permissions

- Disk Partitioning and Mounting File System

3. AWS – Solution Architect – Course Content

Introduction to Cloud Computing

- AWS Architecture
- AWS Management Console
- Setting up of the AWS Account
- What is cloud computing?
- History of cloud
- Different vendors for Cloud
- Cloud main objectives
- IaaS overview
- PaaS overview
- SaaS overview
- Why AWS Cloud
- Features of AWS cloud

2.EC2 Cloud Compute services

- Launching the Instance AMI
- Configuring Security Groups
- Understanding Security Key pair
- Configuring N/W Interfaces
- Understanding and Configuring dedicated Host

3.VPC (Virtual Private Cloud)

- Understanding & Configuring VPC

- Configuring Subnet & extracting N/W's out of VPC
- Configuring Route Table
- Understanding & Configuring Internet Gateway for VPC
- Egress only Internet Gateway
- DHCP option set
- Elastic IP
- Network access list
- Vpc Peering
- Endpoint
- Egress Only Internet Gateways

4 VPN Connections

- Customer Gateway
- VPG Gateways & VPN Connections

5 Storage & Content Delivery

- S3 Bucket Configuration & Implementation
- Static Web Hosting via S3 Bucket
- S3 bucket policy
- EBS
- Cloud front Configuration
- Understanding & Implementing Glacier Versioning S3
- Understanding Functionality Snow ball Migrations

6 Route 53

- Traffic Management
- DNS Management
- Traffic Policy & Endpoint
- Domain Name Registration

7 Management Tools

- Understanding Integrated Features of Cloud watch
- Configuring Alarms & Cloud watch based actions

8 Security Identify & Compliances

- Identify & Access Management

9 Auto Scaling & ELB

- Configuring Auto Scaling & Creating Cloud watch for Optimization
- Creating Load Balancing with application & Classic Load Balancers

1. Easy to Container Services

- Creating EC2 Container Services for Auto Scaling

2. Databases

- RDS
- Dynamo DB

1. **AWS Sysops**

1.1 EBS Snapshots and Replication
1.2 S3 – Website Hosting
1.3 Cloudwatch
1.4 CloudTrail
1.5 Migration tools

2. **AWS Devops**

2.1Codedeploy
2.2Elastic Beanstack
2.3Elastic Container Service

2.4CodePipepline

2.5CloudFormation

- CloudFormation: Terminology
- CloudFormation: Structure of the template
- CloudFormation: Working with Stacks
- CloudFormation: Ref functions
- CloudFormation: Parameters
- CloudFormation:Init and User Data
- CloudFormation: Creating Base templates
- CloudFormation: Troubleshooting templates

2.6 Creating Stacks and Managing Configuration with OpsWorks

- Introduction
- OpsWorks Key Concepts
- Working with Stacks and Layers
- Understanding Lifecycle Events
- Working with Cookbooks and Recipes
- Replacing Failed Instances with Auto Healing

3. Devops

3.1 Version Control with Git

Learning Objectives: Upon completing this module, you should be able to install GIT and work with remote repositories and perform management of files for small as well as large projects, execute branching and merging operation and will learn about various GIT commands in Git cheat sheet.

Topics:

- What is version control?
- What is Git?
- Why Git for your organization?

- Installing Git
- Working with Remote Repositories
- Branching and Merging in Git
- Git workflows
- Git cheat sheet

Hands On/Demo:

- GIT Installation, Version Control, branching and merging of code.
  Pulling and Pushing repositories from remote server

3.2 Continuous Integration using Jenkins

Learning Objectives: Upon completing this module, you should be able to understand the importance of Continuous Integration, learn about Jenkins and Maven by building and deploying codes using Jenkins and Maven, also perform automation tests and build Delivery Pipelines.

Topics:

- Topics:
- What is CI
- Why CI is Required
- Introduction to Jenkins (With Architecture)
- Introduction to Maven

- Jenkins Management
- Build Setup
- Test Automation (with Maven)
- Securing Jenkins
- Notification System
- Building Delivery Pipeline

Hands On/Demo:

- Build and automation of Test using Jenkins and Maven
- Build the complete pipeline by invoking top level Maven project

3.3 Configuration Management with Ansible

Learning Objectives: Upon completing this module, you should be able to install Ansible on your machine, write Ansible Playbooks, execute ad-hoc commands using Ansible and differentiate Ansible and Puppet.

Topics:

- Introduction to Ansible
- Ansible Installation
- Configuring Ansible Roles
- Write Playbooks
- Executing adhoc command
- Implementing Ansible

Hands On/Demo:

- Installing Ansible
- Configuring Ansible Role
- Write Playbooks
- Execute Ad-Hoc commands

3.4 Containerization with Docker

Topics:

- Shipping Transportation Challenges
- Introducing Docker
- Understanding images and containers
- Running Hello World in Docker
- Introduction to Container
- Container Life Cycle
- Sharing and Copying
- Base Image
- Docker File
- Working with containers
- Publishing Image on Docker Hub

Hands on:

- Create and Implement docker images and containers
- Publish image on the docker hub
    - **Containerization with Docker: Ecosystem and Networking**

Introduction to Docker Ecosystem

Docker Compose

Docker Swarm

Managing Containers

Running Containers

Introduction to Docker Networking

Network Types

Docker Container Networking

Hands on:

- Use Docker Compose to create a WordPress site
- Start Containers on a Cluster with Docker Swarm
- Manage Containers locally using Kitematic UI, Managing Container through Docker UI

- **Containerization using Kubernetes**

Topics:

Introduction to Kubernetes and Minikube(Tool)

Installing Kubernetes

Container Orchestration / Container Management using Kubernetes

Managing Workloads in Kubernetes (ReplicaSets and Deployments)

Overview of Services

Volume Management

Auto-scaling

Load-Balancing using Ingress

Deploying and scaling an application using Minikube locally

Hands-On:

Scaling and deployment of Docker Application using Kubernetes

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- **Continuous Monitoring with Nagios**

Topics:

Introduction to Continuous Monitoring

Introduction to Nagios

Installing Nagios

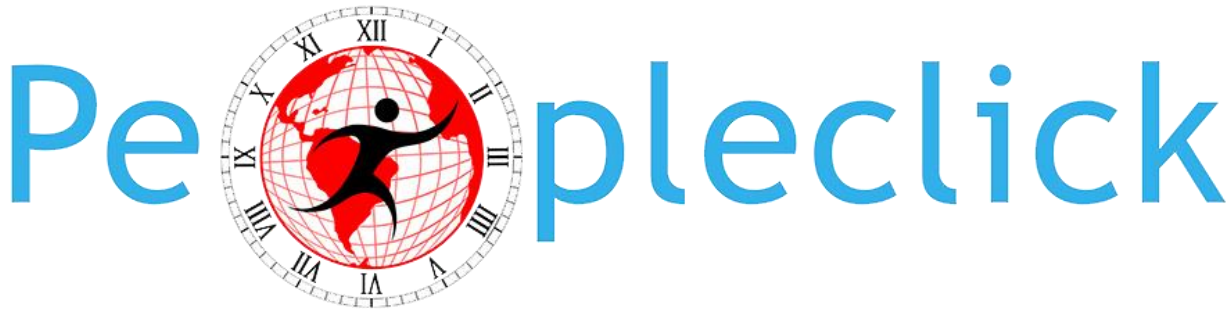
Nagios Plugins(NRPE) and Objects

Nagios Commands and Notification

Hands-On:

Installing Nagios

Monitoring of different servers using Nagios



Peopleclick

What We do in Consulting Services

Having successfully completed a large number of permanent placements we now feel comfortable with any situation that a client may present to us. In fact we enjoy any new challenge. At Peopleclick we share a exceptional, enthusiastic and empathetic spirit within the team and so you can expect that extra support from our placement consultants.

Our consultants are pre-screened and interviewed to ensure core competency. The consultant(s) that we place with you will be the best possible match for the position in terms of technical and communication skills. Recruitment at Peopleclick, is a resource-intensive. Our permanent consultants search for, select and interview suitable candidates, after which the most relevant individuals are presented to the client. We offer flexible solutions based on client's specific situation. Qualified candidates are proactively recruited through a variety of methods that have been tested and proven to attract the right candidates. Some of our most successful recruitment programs follow

- ✓ *Referral programs*
- ✓ *Extensive Localized Database*
- ✓ *Personal networks*
- ✓ *Internet Recruiting Programs*
- ✓ *Advertisements*
- ✓ *Focused recruitment drives*

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