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GIVE YOU BETTER
GROWTH





ABOUT US

Our Vision:

To provide better training by full filling the requirements of our trainee.

Our Mission:

We always ensure to give practical based training. And we make the candidates to get good hands-on experience on any platform.

Philosophy:

Our Root Level Training Will give you Better Growth.

We successfully survived around 5 years in the IT field. Started this is as small Training room. But now we are having 5 branches across India.

Certified Trainers taking the session on various domain with any level of doubts clarification.

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Cloud Computing Real Time Projects Training -COURSE CONTENT

- ❖ Introduction to Cloud Computing
- ❖ Introduction to Dev Ops

A Short history

- ❖ Client Server Computing Concepts
- ❖ Challenges with Distributed Computing
- ❖ Introduction to Cloud Computing
- ❖ Why Cloud Computing?
- ❖ Benefits of Cloud Computing

Cloud Computing Deployment Models

- ❖ Private Cloud
- ❖ Public Cloud
- ❖ Hybrid Cloud

Cloud Delivery/Service Models

- ❖ Software as a Service (SaaS)
- ❖ Platform as a Service(PaaS)
- ❖ Infrastructure as a Service (IaaS)

Linux Basics

- ❖ Linux basic Commands
- ❖ Linux basic Administration
- ❖ Linux Root & Sudo users
- ❖ Linux File System Hierarchy
- ❖ YUM package management
- ❖ Linux Services Management

AWS Services

- ❖ Identity and Access Management (IAM)
- ❖ Amazon Elastic Compute Cloud(EC2)
- ❖ Amazon Simple Storage Service (S3)
- ❖ Elastic Block Storage (EBS)
- ❖ Elastic Load Balancing (ELB)
- ❖ Amazon Relational Database Service (RDS)
- ❖ Auto Scaling
- ❖ Virtual Private Cloud (VPC)
- ❖ Cloud Formation
- ❖ Simple Email Services (SES)
- ❖ Simple Notification Services (SNS)
- ❖ Server less computing (Lambda)
- ❖ Cloud Trail
- ❖ Route-53
- ❖ Glacier
- ❖ Key Management Service (KMS)

Devops Tools

- ❖ Python
- ❖ Boto3 Coding
- ❖ Lambda
- ❖ Cloud Formation
- ❖ Jenkins
- ❖ Git Hub
- ❖ Terraform
- ❖ Docker
- ❖ Ansible

Introduction to AWS

- ❖ Subscription to AWS
- ❖ Introduction to the AWS Management Console
- ❖ Project overview

Identity and Access management (IAM)

- ❖ Creation of user accounts
- ❖ Setting up multi factor Authentication (MFA)
- ❖ Roles in IAM
- ❖ Groups in IAM
- ❖ Delegation of permissions for users
- ❖ Creation of custom policies for delegation
- ❖ Using Identity Providers
- ❖ Cross-Account Access
- ❖ Account settings
- ❖ Credential Report
- ❖ Encryption - Key Management Service (KMS)

Elastic Compute Cloud (EC2) Essentials

- ❖ Regions and Availability Zones – Choose the right Region
- ❖ Amazon Machine Images (AMI)
- ❖ Working with AMIs
- ❖ Choosing the right AMI
- ❖ Deciding what goes into an AMI
- ❖ Finding the right AMI
- ❖ Pricing model in EC2 instances
- ❖ On-demand, Reserved, Scheduled, Spot instances, Dedicated Hosts
- ❖ EC2 Reserved Instance Marketplace
- ❖ Importing and Exporting Instances

EC2 Instances

- ❖ Building an EC2 Windows instance & Linux Instance
- ❖ Boot strapping with user-data
- ❖ Setting up security
- ❖ Security with Key Pairs
- ❖ Working with the Security Group
- ❖ Different IPs assigned to an EC2 instance
- ❖ Assigning Elastic IPs
- ❖ Login/Access to the instance
- ❖ Creating your own custom AMI, Registering & Granting access to the AMI
- ❖ Placement groups
- ❖ EC2 instance protection
- ❖ Instance Roles
- ❖ Importing and Exporting Instances
- ❖ Elastic Network Interfaces(ENIs)
- ❖ Resources and Tags
- ❖ Accessing Meta-Data & use cases.

Elastic Block Store (EBS)

- ❖ EBS Volume Types
- ❖ EBS Encryption
- ❖ EBS Performance
- ❖ Instance Store volumes
- ❖ Instance Stores Available on Instance Types
- ❖ Instance Store Usage Scenarios
- ❖ Adding Instance Store Volumes to an AMI
- ❖ Optimizing Disk Performance
- ❖ Creating and deleting volumes
- ❖ Attaching and detaching volumes
- ❖ Mounting and Unmounting the attached volume
- ❖ Increasing the volume size
- ❖ Creating snapshots
- ❖ Creating Volumes & AMIs from Snapshots.
- ❖ Cross-Region snapshot copy & use cases.

Elastic Load Balancer (ELB)

- ❖ What Is Elastic Load Balancing
- ❖ How Elastic Load Balancing Works
- ❖ Classic & App ELB types.
- ❖ Creating load balancer
- ❖ Internal & External Load balancers
- ❖ Load balancing protocols
- ❖ Listener Configurations
- ❖ Attach & Detach Subnets
- ❖ Security groups for the load balancer
- ❖ Configure health check for the load balancer
- ❖ Adding multiple instance to the load balancer
- ❖ Custom Domain Names
- ❖ Monitoring and Logging
- ❖ ELB traffic logging

Auto Scaling

- ❖ What is auto scaling
- ❖ Auto scaling components
- ❖ Benefits of auto scaling
- ❖ Creating launch configuration, and its prerequisites.
- ❖ Creating Auto Scaling Groups (ASG)
- ❖ Attach & Detach EC2 Instances in ASG
- ❖ Configuration of auto scaling policies based on the Load on EC2 instances.
- ❖ Using Auto scaling with Elastic Load balancer (ELB).
- ❖ Temporarily Removing Instances
- ❖ Suspend and Resume Process
- ❖ Shut Down Your Auto Scaling Process
- ❖ Monitoring Your Auto Scaling Instances
- ❖ Health Checks
- ❖ Getting Notifications When Your Auto Scaling Group Changes

Simple Storage Service (S3)

- ❖ Creating and deleting buckets
- ❖ Adding objects to buckets
- ❖ Getting objects
- ❖ Deleting objects
- ❖ Notifications
- ❖ Uses of S3 storage
- ❖ Working with Permissions of S3, Access Control, Bucket policy
- ❖ S3 Data encryption types
- ❖ Enable Versioning, Logging for S3 objects
- ❖ Lifecycle rules in s3
- ❖ Accessing S3 storage with Tools
- ❖ Hosting a Static Website
- ❖ Audit Logging with AWS CloudTrail

Glacier Storage

- ❖ Creating Vaults
- ❖ Working with Archives
- ❖ Accessing the Glacier vault using tools
- ❖ Using Glacier for backups

Virtual Private Cloud (VPC)

- ❖ Different types of networks that can be setup in AWS
- ❖ Creating a custom VPC
- ❖ NACLs & Security Groups
- ❖ Creation of Internet Gateway(IGW)
- ❖ Connecting to instances in the gateway
- ❖ Subnets, Route Tables & Association
- ❖ NAT Instances & NAT-Gateways
- ❖ VPC Peering
- ❖ VPN overview & components
- ❖ Transit gateway

Route 53

- ❖ Configuring Amazon Route 53 as Your DNS Service
- ❖ Registering a Domain Name and Configuring Amazon Route 53 as the DNS Service
- ❖ Migrating DNS Service for an Existing Domain to Amazon Route 53
- ❖ Creating a Subdomain That Uses Amazon Route 53 without Migrating the Parent Domain
- ❖ Working with Public Hosted Zones
- ❖ Working with Private Hosted Zones
- ❖ Working with Resource Record Sets

Cloud watch

- ❖ Monitoring the AWS Service Health Dashboard
- ❖ Monitoring with Cloud watch
- ❖ Getting statistics for a specific EC2 instance
- ❖ Getting aggregated statistics
- ❖ Metrics for other AWS Services and related namespaces
- ❖ Setting up notifications

Simple Notification Services (SNS)

- ❖ Creation of a topic
- ❖ Subscribing to topic via Email
- ❖ Setting notification for EC2 instance changes

Simple Email Services (SES)

- ❖ Setting up email domain
- ❖ Limits of SES
- ❖ Test Email setup

Python

- ❖ Introduction to Python
- ❖ Installation of Python
- ❖ Python Input and Output statements
- ❖ Python DataTypes
- ❖ List, Set, Tuple, Dictionary
- ❖ Looping and Conditional statements in python
- ❖ Functions in Python

Boto3

- ❖ Installation of Boto3
- ❖ Boto3 Authentication
- ❖ Boto3 on Windows & Linux
- ❖ Boto3 Request & response Syntax
- ❖ Working on output
- ❖ Basic List programs
- ❖ Boto3 Intergration with Lambda
- ❖ Boto3 Intergration with Jenkins
- ❖ Boto3 Report Generation
- ❖ Boto3 Email Notification

Lambda

- ❖ Introduction to Lambda
- ❖ Working with Functions
- ❖ Lambda Usecases
- ❖ Lambda Roles
- ❖ Lambda Time-out
- ❖ Lambda Boto
- ❖ Lambda Usecases for DR
- ❖ Lambda Disaster recovery Configuration
- ❖ Lambda Stop/Start Instance

Cloud Formation

- ❖ Building AWS infrastructure as a code
- ❖ Utilization of Sample templates
- ❖ Introduction to JSON & YAML
- ❖ Cloud Formation Vs Terraform
- ❖ CFT Stack
- ❖ CFT Structure
- ❖ CFT code for EC2 instance with Sec group & EIP
- ❖ CFT code for VPC Whole setup
- ❖

Ansible

- ❖ What is Ansible? Why Ansible?
- ❖ COnfiguration management Tools
- ❖ what is Pull and Push based tool
- ❖ Ansible Installation
- ❖ Ansible Command Modules
- ❖ Working with different modules in Ansible
- ❖ Ansible Host Entries
- ❖ Ansible Playbook
- ❖ How to create and work Playbook
- ❖ Ansible with AWS
- ❖ AWS automation using ansible

Docker

- ❖ Hypervisor Vs Docker Container
- ❖ Container Architecture
- ❖ Docker Basics
- ❖ Docker Architechture
- ❖ Docker Installation

- ❖ Docker Commands
- ❖ Docker Image Build
- ❖ Docker-hub registry
- ❖ Docker Volumes
- ❖ Docker Networking
- ❖ Docker Compose
- ❖ Deploying web application in container
- ❖

Jenkins

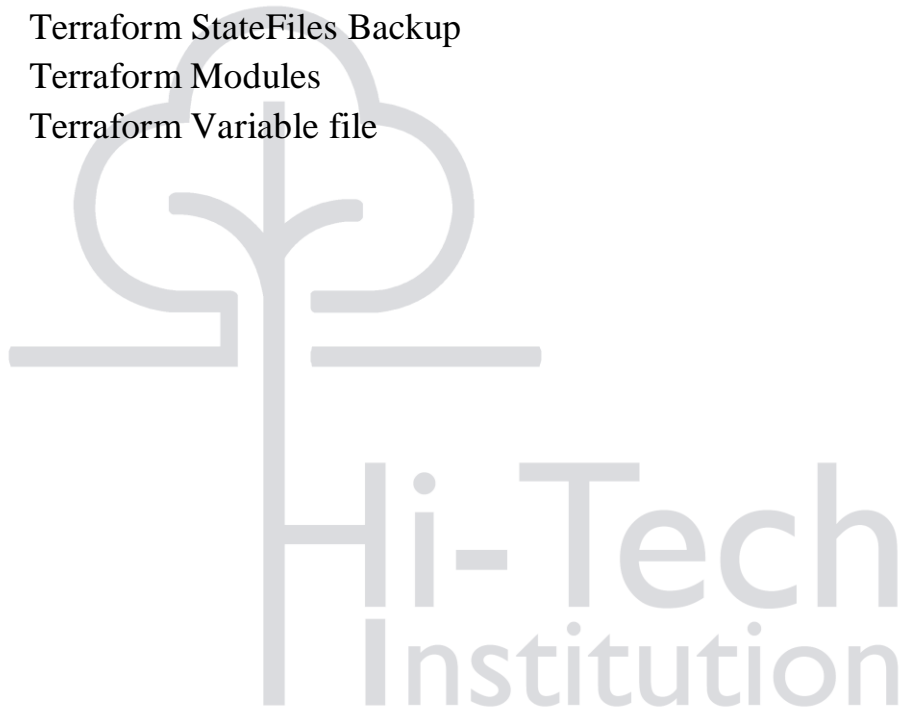
- ❖ Jenkins Basics
- ❖ Jenkins Installation Linux + Windows
- ❖ Jenkins Global Tool Configurations
- ❖ Jenkins Jobs creation
- ❖ Jenkins with GitHub
- ❖ Jenkins Folders for job
- ❖ Jenkins Pipeline
- ❖ Jenkins job and pipeline for AWS
- ❖ Jenkins Groovy Scripting
- ❖ Pipeline with different stage
- ❖ Plugin management
- ❖ Master and slave configuration
- ❖ Jenkins integration with Git repo
- ❖ Jenkins Credential Management

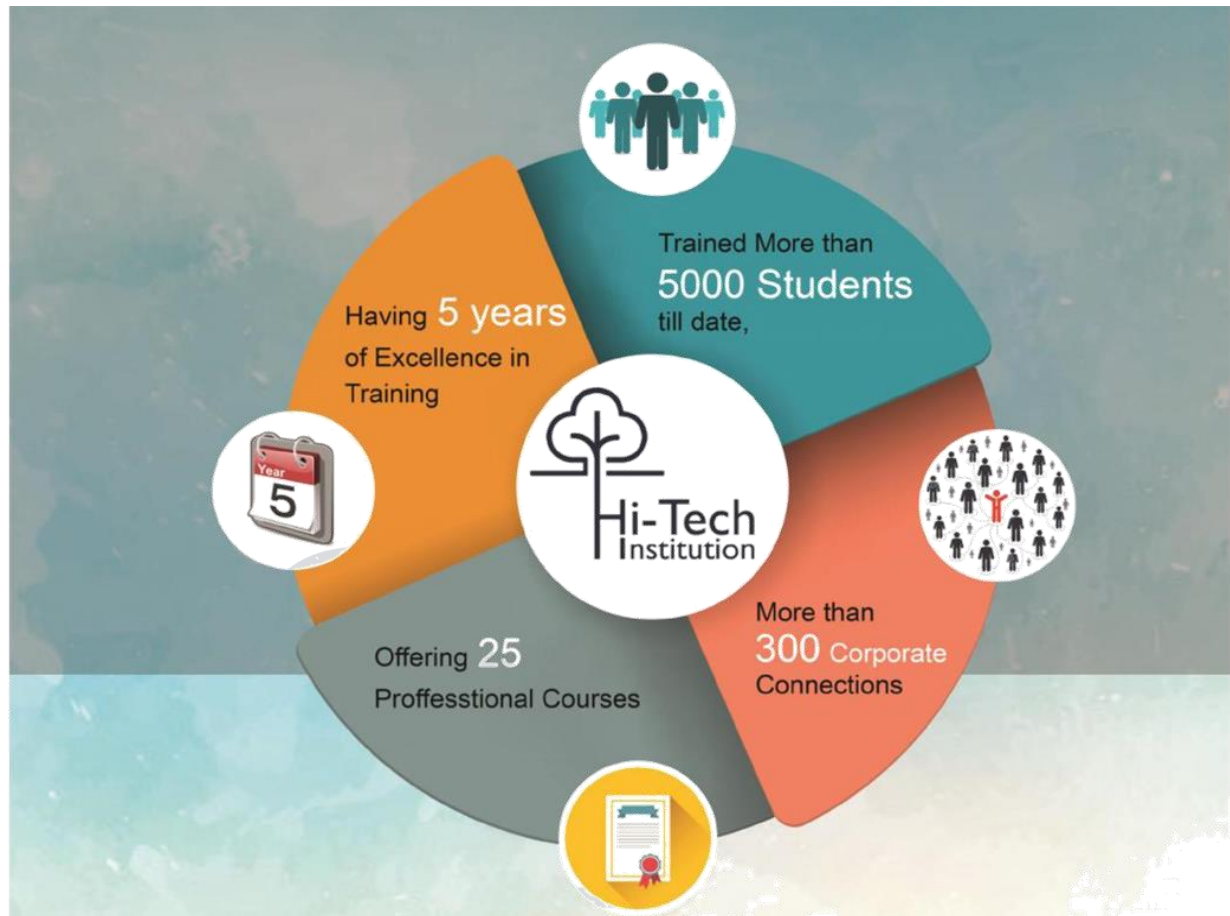
Git-hub

- ❖ Creating Login/Access
- ❖ Working with Public & Private Repo
- ❖ working with repo settings
- ❖ Web hooks in Git hub
- ❖ Jenkins integration with Git repo

Terrafrom

- ❖ Terraform introduction
- ❖ Terraform implementation
- ❖ Terraform Vs Cloud Formation
- ❖ Terraform working with providers
- ❖ Terraform Code Writing
- ❖ Terraform Plugins
- ❖ Terraform Cloud Modules
- ❖ Terraform StateFiles
- ❖ Terraform as Infrastructure as a code
- ❖ Terraform StateFiles Backup
- ❖ Terraform Modules
- ❖ Terraform Variable file





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