



## HashiCorp Terraform training & certification program

## **About DevOpsSchool**

DevOpsSchool is a unit of "Cotocus PVT Itd" and a leading platform which helps IT organizations and professionals to learn all the emerging technologies and trend which helps them to learn and embrace all the skills, intelligence, innovation and transformation which requires to achieve the end result, quickly and efficiently. We provide over 40 specialized programs on DevOps, Cloud, Containers, Security, Al, ML and on Big data that are focused on industry requirement and each curriculum is developed and delivered by leading experts in each domain and aligned with the industry standards.

#### **About Course**

**HashiCorp Certified Terraform associate** is a foundational level of certification that validates your understanding of basic concepts and skills about Terraform. This Terraform certification training program is for Cloud Engineers specializing in operations, IT, or development who are familiar with basic concepts and skills associated with Terraform. This Terraform Certification course is good to validate upon Terraform skills.

Terraform by HashiCorp, is an open source, CLI-based infrastructure as code tool. It is an infrastructure as code tool which is used to build, change infrastructure safely and efficiently. It consist of low-level components such as storage, and networking, compute instances as well as high-level components which includes DNS entries, SaaS features, etc. Terraform can easily manage existing service providers and as well as custom in-house solutions.

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Duration	15 Hours	
Mode	Online (Instructor-led, live & Interactive)	
Projects (Real time scenario based)	1	



FEATURES	DEVOPSSCHOOL	OTHERS
Faculty Profile Check	✓	×
Lifetime Technical Support	✓	×
Lifetime LMS access	<b>✓</b>	×
Top 25 Tools	~	×
Interviews Kit	~	×
Training Notes	<b>✓</b>	×
Step by Step Web Based Tutorials	~	×
Training Slides	~	×
Training + Additional Videos	~	×



### **Training**

DevOps As part of this course, you would be strong in DevOps technology. You would learn Linux, Python, DevOps, Docker, Jira, Git, SonarQube, Maven, Ansible, Jenkins, Kubernetes, Datadog, Splunk, NewRelic, Terraform and various other stacks related to this methodology.

## **Projects**

As part of this project, we would help our participant to have first-hand experience of real time software project development planning, coding, deployment, setup and monitoring in production from scratch to end. We would also help participants to visualize a real development environment, testing environment and production environments. Project technology would be based on Java, Python and DOTNET and based on Microservices concept.

#### Interview

As part of this, you would be given complete interview preparation support until you clear a interview and get on boarded with organization including demo interview and guidance. More than 50 sets of Interview KIT would be given including various project scenario of the projects.



#### AGENDA OF THE GITOPS ESSENTIAL TRAINING

What is DevOps Vs DevSecOps Vs SRE? Tool sets in DevOps Vs DevSecOps Vs SRE? Overview of infrastructure during SDLC? Problems with many infrastructure tools? Introducing Infrastructure as Code Declarative vs. Imperative **Introduction of Terraform** Advantage & Disadvantage of Terraform How Terraform works for Infrastructure as Code? Alternative of Terraform **Terraform Use cases** How to install Terraform? • - Introductions of Terraform Components?

- - Terraform Providers
- - Terraform Registry
- - Terraform Resources
- Terraform Resources Argument Reference.

#### **Deploying Your First Terraform Configuration**

#### **Terraform Basics Workflow using Terraform CLI**

- terraform validate
- - terraform init
- - terraform plan
- terraform apply
- terraform show
- terraform detroy



Updating Your Configuration with More Resources ——
Configuring a Resource After Creation
Adding a New Provider to Your Configuration ——
Understanding Terraform state file. ——
Use cases - Track the development lifecycle with GitLab Cycle Analytics.
Terraform Resource Behavior & Lifecycle
Undertanding Terraform HCL syntax & Style
<ul> <li>Terraform Resources Meta-Argument</li> <li>depends on</li> <li>count</li> <li>for each</li> <li>provider</li> <li>lifecycle.</li> </ul>
Using Terraform for Create Cloud Provider Compute Resources ——
Introduction of Terraform Variables & Values
<ul><li>Input Variables</li><li>Output Values</li><li>Local Values.</li></ul>
Where to declare a Terraform Input Variables?



	Deep o	dive ii	nto T	ypes of	Terraform	Input \	√ariables
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- - string
- number
- bool
- list
- set
- map
- object
- - tuple.

How to access Terraform Input Variables value?
Terraform Input Variables precedence & Scope.
Working with Terraform Output Values.
Working with Terraform Local Values.

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**Introduction of Terraform Data sources?** 

Accessing Terraform Data sources?

Working with Terraform HCL Operators

**Overview of Terraform Functions** 

**Working with Terraform Functions** 

- - Numeric Functions
- - String Functions
- - Collection Functions
- - Encoding Functions
- - Filesystem Functions
- - Date and Time Functions
- - Hash and Crypto Functions
- - IP Network Functions
- - Type Conversion Functions



Introducing Terraform Provisioners				
Working with Terraform Provisioners				
<ul><li>- file</li><li>- local-exec</li></ul>				
• - remote-exec				
Using Terraform for Create Cloud Provider Storage & Networking Resources				
Working with Terraform Templates				
Working with Workspaces for multiple environments				
Working with Remote Backend for managing State file for team				
<ul><li>- artifactory</li><li>- s3</li></ul>				
<ul><li>- azurerm</li></ul>				
• - gcs				
Understanding Terraform State locking				
Terraform Troubleshooting using logs & common errors.				
Introducing Terraform Module ——				
Using with Terraform Module from Registry.				
Developing Custom Terraform Module.				
Publishing Modules on the Terraform Registry.				
Introducing Terraform Console.				



Introducing Terraform Tags. ——	
Introducing Terraform Cloud.	
Using Terraform for use Multiple providers fo	or CI/CD.



# Thank you!

Connect with us for more info Call/WhatsApp: - +91 968 682 9970

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