

Automation with Terraform and AWS Elastic Kubernetes Service

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Course Number: WA3108

Duration: 1 days

Overview

Course Description

In this one-day fundamentals class, learn the foundations of Terraform with Amazon's Kubernetes offering, the Elastic Kubernetes Service. In this course you will learn the basics of Terraform, managing state, planning with Terraform, connecting Terraform Providers such as AWS, and how to configure the Elastic Kubernetes Service and associated AWS services.

- You will also use Terraform to deploy both a stateless and a stateful workload onto EKS and will walk away with the beginnings of your first simple Terraform template library for future service.

Prerequisites

- Fundamental knowledge of AWS infrastructure services like VPCs, Security Groups, and IAM.
- Competency with an editor of your choice (vi/vim, nano, emacs, or IDE)

- Comfort navigating basic command line actions like listing files, executing binaries, and changing permissions.

Audience

Course Details

Outline

1. Terraform fundamentals
2. Terraform provider for AWS and setup for AWS usage
3. Lab - Setup AWS for usage on Terraform
4. Basic Networking and VPC setup using Infrastructure as code on AWS
5. Lab - Creating your own VPC and infrastructure for VMs or Containers using Terraform
6. Creating stateless Containers on the Elastic Kubernetes Service using Terraform
7. Lab - Creating a stateless container using Terraform and the AWS Elastic Kubernetes Service (EKS)
8. Creating Stateful Containers on EKS using Terraform
9. Lab - Creating a stateful container using Terraform, EKS, and EFS on Fargate
10. Bringing it all together
 - Terraform fundamentals
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