

Week 1

Objectives

At the end of week1, you should be

- Able to understand what is IaC
- Able to differentiate IaC from Configuration management
- Able to list some of the commonly used IaC tools
- Able to install terraform in your machine
- Able to understand the basics of terraform
- Able to use terraform to create a VM in Azure/AWS

Topics

- What is IaC and why IaC?
- Different IaC and CM tools
- What is Terraform and why use terraform?
- Benefits of using TF over other IaC tools
- TF installation
- Providers, resources and state files in terraform
- Using terraform provider documentation for referencing cloud resources
- Deploy a simple infrastructure using terraform
- Destroy the deployed infrastructure using terraform

Suggested Learning Materials

Go through the below materials/contents in the order they are listed

- Introduction to IaC - [School of DevOps LATAM_ Infrastructure as Code](#)
- Terraform installation
 - Udemy Course – Section 1 - Introduction
 - Udemy Course – Section 2 - Getting Started & Setting Up Labs (can skip the AWS setup part)
- Deploying with Terraform
 - Udemy Course – Section 3 - Deploying Infrastructure with Terraform
- Access O'Reilly Sandboxes for practice labs - [Manual](#)

Practice Lab Questions

Note: Please create a repo and check-in all your work so that they can be tracked by the facilitators

Azure Users

- Install terraform in your local machine -[reference](#)
- Deploy a simple virtual network in your RG - [reference](#)
 - Useful links
 - [Authentication using Azure CLI](#)
 - [Authentication using service account](#)
- Verify if the network was created as desired by logging in to the Azure portal
- Destroy the created virtual network using terraform

AWS Users

- Install terraform in your local machine -[reference](#)
- Deploy a simple VPC in your AWS account - [reference](#)
 - Useful links
 - [Manage access keys](#)
 - [Authenticating using access keys](#)
- Verify if the network was created as desired by logging in to the AWS console
- Destroy the created VPC network using terraform

Useful Links

- Udemy Course - [HashiCorp Certified: Terraform Associate 2023](#)
- O'Reilly Book - [Terraform: Up and Running, 3rd Edition](#)