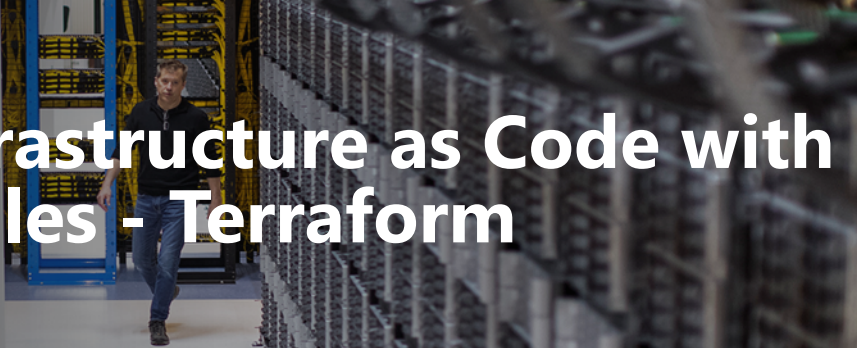


WorkshopPLUS - Infrastructure as Code with Azure Verified Modules - Terraform



WorkshopPLUS

Duration: 1 Day or 3 Days [Remote | Onsite]

Difficulty Level: 300 - Advanced

Description

This workshop delves into the efficient use of Terraform for provisioning infrastructure components on Azure and explores the transformative potential of Infrastructure as Code (IaC) using Azure Verified Modules (AVM), which sets the standard for high-quality IaC modules based on Terraform. This session is ideal for Cloud Infrastructure Professionals (DevOps users) looking to streamline their infrastructure management and deployment processes.

- **If the 3-day delivery is chosen, the complete curriculum will be covered, allowing a complete upskilling on both Terraform in general and applied to AVM in particular.**

- **If the 1-day delivery is chosen, targeting an audience already familiar with Terraform, the focus will only be about AVM.**

Objectives

- Understand Infrastructure-as-Code Principles
- Learn Core concepts around Terraform
- Use Terraform to manage Azure Resources
- Deploy resources using Terraform Templates
- Build complex deployments using Terraform
- Learn how to use Azure Verified Modules in your Terraform workflow

Outcome

- Learn how to use Infrastructure as Code with Azure
- Learn Terraform fundamentals
- Improve your default resiliency and security posture when deploying Azure resources with AVM

Methodology

- **Ramp up:** Learn the key concepts and principles of Infrastructure as Code with Terraform and Azure Verified Modules through presentations, demonstrations, and group discussions.
- **Hands-on Labs:** Experience and learn with hands-on labs in a controlled environment

Agenda

Delivery scenario options

- 3 Days: Azure Infrastructure as Code with Azure Verified Modules for Terraform. Full 3-day workshop covering all

aspects of Infrastructure as Code with Terraform and Azure Verified Modules.

- 1 Day: Azure Verified Modules for Terraform. 1-day workshop covering the aspects of Azure Verified Modules for Terraform.

3 Days: Azure Infrastructure as Code with Azure Verified Modules for Terraform

Day 1: Infrastructure as Code Fundamentals

- Introduction to IaC and Terraform
- Core Workflow and Config Options with labs
- Dependency Management with labs

Day 2: Infrastructure as Code Advanced

- Local and Remote Modules with labs
- State Management with labs
- Niche Topics with labs

Day 3: Azure Verified Modules

- Overview of Azure Verified Modules (AVM)
- Lab: Basic Azure workload deployments scenario with AVM
- Lab: Advanced Azure workload deployments scenario with AVM (AKS)
- Lab: Advanced Azure workload deployments scenario with AVM (AI)
- Optional: Demo of Continuous Delivery with AVM with GitHub or Azure DevOps

We designed this WorkshopPLUS experience to be delivered on consecutive days. Splitting day 1 and day 2 across several weeks is not recommended, as it will impair the delivery experience. We can deliver the third day (AVM module) in the next week.

1 Day: Azure Infrastructure as Code: Azure Verified Modules for Terraform

- Overview of Azure Verified Modules (AVM)
- Lab: Basic Azure workload deployments scenario with AVM
- Lab: Advanced Azure workload deployments scenario with AVM (AKS)
- Lab: Advanced Azure workload deployments scenario with AVM (AI)
- Optional: Demo of Continuous Delivery with AVM with GitHub or Azure DevOps

Delivery outline

Requirements

Participants

Having the right participants in this workshop is essential for a successful engagement. We recommend the following roles be available and able to participate in the workshop(s):

- DevOps Engineers/Platform Engineers
- Cloud Operations Team
- SecOps - Security engineers/architects
- Cloud Solutions Architect
- Application Developer/Architect
- IT Operations Manager

Time Commitment

One, or three full-day commitments for relevant roles. Attending the entire session is highly recommended.

Delivery Requirements

- A Microsoft Account.
- Internet access with at least 1-Mbps bandwidth per participant.

Skill Requirements

For 3 Day delivery

- Basic Azure knowledge
- Basic understanding of IaC concepts
- Ability to use version control systems
- Openness to learning new technologies

For 1 Day delivery

- Understanding of IaC concepts
- **Experience in using Terraform**
- Basic Azure knowledge
- Ability to use version control systems
- Openness to learning new technologies

It is mandatory for attendees to have a solid understanding of Terraform.

Ensure that your knowledge aligns with the Learning Path provided here: : <https://learn.microsoft.com/en-us/training/paths/terraform-fundamentals/>

Without this knowledge, the delivery experience may be compromised.

Detailed Agenda

| Detailed Agenda | |
|---|--|
| Terraform Fundamentals - Day 1 | <ul style="list-style-type: none">• Introduction to IaC and Terraform• Core Workflow and Config Options with labs• Dependency Management with labs |
| Terraform Advanced - Day 2 | <ul style="list-style-type: none">• Local and Remote Modules with labs• State Management with labs• Niche Topics with labs |
| Terraform Azure Verified Modules - Day 3 | <ul style="list-style-type: none">• Introduction to Azure Verified Modules• Labs: Foundational and advanced consumption scenarios |

If you are interested in this engagement for your organization, contact your Microsoft Account Representative.