

S V Cloud Consulting & Training Services

Trainer: SreeKiran

Cloud Introduction

- What is Cloud
- Public vs Private vs Hybrid Cloud
- Industry leading Public & Private Cloud Providers

Introduction to Azure Cloud

- Overview of Azure
- Managing Azure with the Azure portal
- Overview of Azure Resource Manager (ARM)
- Azure Service Manager vs Azure Resource Manager
- Different types of Services available in Azure
- IaaS vs PaaS vs SaaS vs CaaS

Provisioning & Configuring Services through Azure Portal

- Storage Accounts
- Key Vault
- Virtual Network
- Subnets
- Network Security Groups (NSGs) & Application Security Groups (ASGs)
- Network Interface Card
- Virtual Machines
- Virtual Machine Scale sets
- Availability Sets vs Availability Zones
- Azure Load Balancers
- Azure Virtual Network Peering (Regional & Global)
- Understanding concepts on premise connectivity
 - VPN (Site to Site & Point to Site)
 - o Express Route
- Azure SQL Server
- Azure Cosmos DB
- Azure Web Apps
- Understanding of Azure Application Gateways, Web Application Firewall, Front door & Traffic Manager
- Azure Function Apps
- Azure Logic Apps
- Azure Automation Account
- Azure Backup Services

• Azure PowerShell

- Installing Azure PowerShell
- Windows PowerShell vs Azure PowerShell
- Introduction to Operators, Conditions and Loops
- Provisioning below service using Azure PowerShell

- Storage Account
- Virtual Machines
- o Azure SQL Databases
- o Azure Web Apps
- Introduction to PowerShell Functions
- Introduction to PowerShell Modules

• Azure Security

- Securing Network
- Private Endpoints
- Service Endpoints
- Encryption

• Azure Monitor

- Enabling Diagnostic Settings
- Log Analytics
- App Insights
- Action Groups
- Alert management

Terraform

- Installing Terraform
- What is terraform Provider
- Instruction to Azure & Other Providers
- Terraform State (Remote vs Local)
- Introduction to Operators, Conditions and Loops
- Terraform CLI Commands (Init, Plan, Apply, Destroy etc.)
- Provisioning below service using Terraform
 - Storage Account
 - Virtual Machines
 - o Azure SQL Databases
 - Azure Web Apps
- Introduction to Terraform Modules

• Azure Devops

- Instruction to Azure Devops
- Continuous Integration VS Continuous Deployment VS Continuous Delivery
- Introduction to Service Connection
- Introduction to Devops Agents
- Parameters vs Variables
- Classic Pipelines vs YML Pipelines
- Introduction to Azure Tasks, Variable Groups & Reusable Controls
- Prepare CI and CD Pipelines for
 - o ARM Template Deployment

- o Terraform Template Deployment
- o Azure PowerShell Deployment
- o Sample .Net Application
- Azure Active Directory
 - What is Azure Active Directory
 - What is Service Principle Account (App Registrations)
 - Azure Build-In and Custom Roles
 - Access Control (RBACs)
- Docker & Azure Kubernate Services (AKS) fundamentals
 - Introduction to Docker
 - Virtual Machine VS Docker
 - Installing & Managing Docker Engine
 - Deploy & Manage Containers
 - Introduction to AKS
 - Deployment and Manage AKS in Azure Portal & Terraform
- Additional Topics
 - What is Azure SLA for various Services
 - Azure Infrastructure DR Strategies
 - What are Azure Migration Services Available in Azure
 - Azure Cost Calculator, Invoices & Billing Optimization
 - Azure Policies & Implementation
 - Agile Methodology and Process
 - Important Interview Questions and Answers

Notes:

- ♣ Duration 45 days
- Only on Weekdays (No Saturdays & Sundays).
- **♣** Daily 1.30 hours
- ♣ Special focus on real time examples

Demo Classes on 19th & 20th Aug 2023