

# **MICROSOFT AZURE CODE2UTF('8211',0) TECHNOLOGIES POUR LES ARCHITECTES**

## **CODE STAGE : AZ303**

### **OBJECTIFS**

Comprendre comment gérer les souscriptions et les ressources Azure Savoir implémenter et gérer le stockage dans Azure

Être capable de déployer et gérer des machines virtuelles

Comprendre comment configurer et gérer des réseaux virtuels

Savoir mettre en oeuvre la gestion des identités et en assurer la sécurité Connaître les différentes techniques et services propres à Azure (Service Fabric, Azure Kubernetes, ...)

### **DURÉE**

5 jours

### **PUBLIC**

Personnes expérimentées dans la création de l'infrastructure et des applications sur la plate-forme Microsoft Azure

### **PRÉ-REQUIS**

Il est conseillé d'avoir de bonnes notions d'administration des solutions Azure (Virtualisation, Stockage, Réseau, Automatisation) ou d'avoir suivi le cours AZ104

### **PROGRAMME**

1: Implement VMs for Windows and Linux

In this module, you will learn about Azure virtual machines including planning, creating, availability and extensions. This module includes:

2: Automate Deployment and Configuration of Resources

In this module, you will learn about the tools an Azure Administrator uses to manage their infrastructure. This includes the Azure Portal, Cloud Shell, Azure PowerShell, CLI, and Resource Manager Templates. This module includes:

### 3: Implement Virtual Networking

In this module, you will learn about basic virtual networking concepts like virtual networks and subnetting, IP addressing, network security groups, Azure Firewall, and Azure DNS.

### 4: Implement Load Balancing and Network Security

In this module, you will learn about network traffic strategies including network routing and service endpoints, Azure Load Balancer, Azure Application Gateway, and Traffic Manager.

Create an Azure Front Door

Understand Traffic Manager routing methods

Configure Network Security Groups (NSGs)

### 5: Implement Storage Accounts

In this module, you will learn about basic storage features including storage accounts, blob storage, Azure files and File Sync, storage security, and storage tools.

### 6: Implement Azure Active Directory

In this module, you will learn how to secure identities with Azure Active Directory, and implement users and groups.

### 7: Implement and Manage Azure Governance

In this module, you will learn about managing your subscriptions and accounts, implementing Azure policies, and using Role-Based Access Control.

### 8: Implement and Manage Hybrid Identities

In this module, you will learn how to install and configure Azure AD Connect and implement Azure AD Connect Health.

### 9: Manage Workloads in Azure

In this module, you will learn how to migrate workloads using Azure Migrate, perform VMware agent-based and agent-less migrations, and perform Azure Backup and Azure Site Recovery.

### 10: Implement Cloud Infrastructure Monitoring

In this module, you will learn about Azure Monitor, Azure Workbooks, Azure Alerts, Network Watcher, Azure Service Health, Azure Application Insights.

### 11: Manage Security for Applications

In this module, you will learn about Azure Key Vault and implementing authentication using Azure Managed Identities.

## 12: Implement an Application Infrastructure

In this module, you will learn how to create an App Service web App for Containers, create and configure an App Service Plan, and create and manage Deployment

## 13: Implement Container-Based Applications

In this module, you will learn how to run Azure Container instances and how to deploy Kubernetes with AKS.

## 14: Implement NoSQL Databases

In this module, you will learn about Azure Table Storage and recommend options for CosmosDB APIs.

## 15: Implement Azure SQL Databases

In this module, you will create an Azure SQL Database single database, create an Azure SQL Database Managed Instance, and review high-availability and Azure SQL database.

