# **TechyEdz Solutions**

# **A Blended Learning Approach**



Azure - Designing and Deploying SAP on Azure (AZ-120)









### Azure - Designing and Deploying SAP on Azure (AZ-120)

#### Course Overview:

The foremost thing that candidates should know about the AZ-120 exam is that it is a specialty certification exam. After qualifying the exam, you will get a "Microsoft Certified: Azure for SAP Workloads" specialty certification. The candidates for the AZ-120 exam are generally engineers and architects who have to make recommendations for services to manage SAP workloads on Azure. The job role of an SAP on Azure professional also involves optimization of resources for ensuring optimal resiliency, scalability, size, provisioning, monitoring, and performance. In addition, candidates will have to ensure compliance with industry standards specifically suitable for long-term operations of an SAP solution.

#### **4** Course Outline:

## Migrate SAP Workloads to Azure

#### 1. Create an inventory of existing SAP landscapes

- > network inventory
- > security inventory
- computing inventory
- > operations system inventory
- resiliency and availability inventory
- > SAP Database Inventory
- > SAP Landscape architecture
- > SAP workload performance SLA and metrics
- > migration considerations

#### 2. Design a migration strategy

- certified and support SAP Hana hardware directory
- design criteria for Tailored Datacenter Integration (TDI) phase 4 and phase 5 solutions
- databox with import and export
- ➤ HANA System Replication (HSR)
- > Azure Migrate SAP
- backup and restore methods and solutions

> infrastructure optimization for migration

## **Design an Azure Solution to Support SAP Workloads**

#### 1. Design a core infrastructure solution in Azure to support SAP workloads

- > network topology requirements
- > security requirements
- > virtual or bare metal
- > compute
- operating system requirements
- supported SAP products/versions
- > storage requirements
- proximity placement group
- > infrastructure requirements

#### 2. Design Azure infrastructure services to support SAP workloads

- backup and restoration requirements
- ➤ SLA/High Availability
- data protection (LRS/GRS, Availability Zones)
- > compliance
- > monitoring
- ➤ licensing
- application interfaces
- > dependencies

#### 3. Design a resilient Azure solution to support SAP workloads

- ➤ HA/DR models supported in HANA (N+N, N+M)
- > application servers
- > SAP Central services
- > availability sets
- > availability zones
- > Disaster Recovery (DR) with paired regions
- ➤ Database HA

## **Build and Deploy Azure for SAP Workloads**

#### 1. Automate deployment of Virtual Machines (VMs)

➤ Azure Resource Manager (ARM) Templates

- > automated configuration of VM
- scripting with automation tools, including script development, script modification, and deployment dependencies

#### 2. Implement and manage virtual networking

- > IDS/IPS for Azure
- > routing fundamentals
- subnetting strategy
- isolation and segmentation for SAP landscape

#### 3. Manage access and authentication on Azure

- custom domains
- ➤ Azure AD Identity Protection
- > Azure AD join
- > enterprise state roaming
- > conditional access policies
- Role-based access control (RBAC)
- > service principal
- > just in time access

#### 4. Implement and manage identities

- > Azure AD Connect
- > AD Federation and single sign-on
- ➤ LDAP/Kerberos/SSH
- Linux VMs Active Directory domain membership mechanism

## 5. Monitor SAP workloads on Azure

- Azure Enhanced Monitoring Extension for SAP workloads
- > Azure Monitors
- > workspaces & metrics

#### 6. Build & Deploy HA/DR infrastructure for SAP products

- ➤ ASCS/SCS deployments on Linux & Windows (SOFS with S2D, Azure NetApp Files, 3rd Party products that emulate shared storage
- ➤ HA/DR scenarios for SAP HANA
- ➤ HA/DR scenarios for AnyDB
- > HA for non-NetWeaver Products like SAP Business One, SAP Business Object BI
- ➤ Where to use load balances & troubleshooting connectivity

#### Validate Azure Infrastructure for SAP Workloads

#### 1. Perform infrastructure validation check

- Apache JMeter, Spirent Avalanche, Microfocus LoadRunner
- > Test implementation for SAP workloads
- Verify network performance and throughput
- ➤ Verify storage
- > SAP HANA Hardware and Cloud Measurement Tools (HCMT) (HANA)
- > Flexible I/O tester (FIO) DD

#### 2. Perform operational readiness check

- ➤ backup and restore
- ➤ high availability checks
- > failover test
- > DR test
- > print test

## **Operationalize Azure SAP Architecture**

#### 1. Optimize performance

- > SAP workloads on Azure using ABAPmeter
- > storage structure
- > SAP workloads on Azure support pre-requisites
- > scheduled maintenance for planned outages
- recovery plan for unplanned outages
- > SAP application and infrastructure housekeeping (i.e. snapshots on OS volumes)
- > bandwidth adjustment for ExpressRoute
- ➤ IPtables ExpressRoute Fast Path and ExpressRoute GlobalReach for HANA Large Instances (HLI)

#### 2. Migrate SAP workloads to Azure

- migration strategy
- ➤ Azure Migrate
- private and public IP addresses, network routes, network interface, subnets, and virtual network
- > storage configuration
- > source and target environments preparation
- backup and restore of data

#### Prerequisites:

Candidates should have either an Azure Architect or Azure Administrator certification along with Linux and SAP HANA certifications. The official documentation related to SAP-certified offerings for Azure and Planning Azure for SAP workloads could be your best alternatives.

#### Who Should Attend:

- Candidates for this exam should be architects or engineers with extensive experience and knowledge of the SAP system landscape and industry standards that are specific to the long-term operation of an SAP solution on Microsoft Azure.
- Responsibilities for an architect or an engineer for Azure for SAP Workloads include making recommendations on services and adjust resources as appropriate for optimal resiliency, performance, scale, provision, size, and monitoring.
- Architects or engineers for Azure for SAP Workloads partner with cloud administrators, cloud DBAs, and clients to implement solutions.
- A candidate for this exam should have extensive experience and knowledge of SAP applications: SAP HANA, S/4HANA, SAP NetWeaver, SAP BW/4HANA, OS servers for SAP applications and databases, Azure portal, ARM templates, operating systems, virtualization, cloud infrastructure, storage structures, high availability design, disaster recovery design, data protection concepts, and networking.
- For this exam, it is strongly recommended to have an Azure Administrator Associate or Azure Solutions Architect Expert certification, in addition to SAP HANA and Linux certifications.

Number of Hours: 40hrs

Certification: AZ-120

#### Key Features:

- One to One Training
- Online Training

- > Fastrack & Normal Track
- > Resume Modification
- Mock Interviews
- Video Tutorials
- Materials
- Real Time Projects
- ➤ Virtual Live Experience
- Preparing for Certification

