Exam AZ-120: Planning and Administering Microsoft Azure for SAP Workloads

Introduction

Microsoft Azure: Planning and Administering Microsoft Azure for SAP Workload (AZ-120) certification courses are designed for professionals who desire to gain the extensive knowledge and expertise required for this exam. The candidate gets trained in working around the landscape of SAP operation on Microsoft Azure. Moreover, the AZ-120 exam tests the capabilities of candidates such as analyzing and selecting appropriate resources, performance, scalability, and optimizations.

Course Outline

MODULE 1: Migrate SAP Workloads to Azure (25–30%)

- Identify requirements for target infrastructure
  - estimate target database size
  - determine supportability of operating systems and databases in Azure
  - estimate compute, storage, and network requirements for the target database
  - determine target SAPS by using EarlyWatch Alert (EWA) reports or Quick Sizer
  - assess constraints imposed by subscription models and quota limits
  - evaluate licensing and pricing across SAP tiers
  - evaluate components, such as Azure Data Factory, Azure Data Lake, Microsoft Power BI, and SAP Cloud
  - specify a Microsoft support option for SAP on Azure

- Design and implement identity and access for SAP workloads
  - design and implement access control and authorization for SAP workloads
  - design and implement authentication for SAP workloads
  - manage access permissions to SAP systems

- Design and implement an SAP migration strategy
  - choose a migration scenario
  - choose migration methods
  - configure the storage to support migration
  - implement an SAP migration

MODULE 2: Design and Implement an Infrastructure to Support SAP Workloads (25–30%)

- Design and implement a compute solution for SAP workloads
  - specify a compute platform (Azure Virtual Machines versus HANA Large Instances [HLI])
  - configure Enhanced Monitoring
  - configure Accelerated Networking
  - configure VMs for Availability Sets
  - configure VMs for Availability Zones
  - deploy an OS by using the Azure Marketplace
  - create and deploy a custom image
  - automate deployment by using ARM templates
  - connect to an Azure HLI
  - configure license registration for an Azure HLI
  - configure and apply operating system updates to an Azure HLI
  - configure a snapshot

- Design and implement a network topology for SAP on Azure Virtual Machines or Azure HLI
  - design and configure proximity placement groups
  - define SAP zones and subnets
  - design for latency considerations

- design for network security
- design and implement networking for Azure HLI
- plan for the use of Azure ExpressRoute (FastPath versus direct)
- optimize networking to minimize latency between/within SAP tiers
- configure routing for Azure HLI
- design and configure load balancing for a reverse proxy

- Design and implement a storage solution for SAP on Azure Virtual Machines or Azure HLI
  - specify an appropriate disk option (Managed, Premium, Ultra disk, SOFS with Storage Spaces Direct [SSD], Azure NetApp Files, Azure shared managed disks)
  - specify when to use disk striping
  - design for security considerations for storage
  - design for data protection considerations
  - design and implement caching for disks
  - configure Write Accelerator
  - configure encryption

MODULE 3: Design and Implement High Availability and Disaster Recovery (HA/DR) (20–25%)

- Design a high availability and disaster recovery solution for SAP on Azure Virtual Machines or Azure HLI
  - design an Azure Site Recovery strategy for SAP workloads
  - design HANA system replication/SQL Server AlwaysOn/Data Guard
  - design an Availability Set and Availability Zone strategy for SAP workloads
  - design load balancing for SAP HA or database HA
  - design for regional considerations
  - design for service-level agreement (SLA) considerations

- Implement high availability and disaster recovery
  - configure STONITH
  - configure database-level replication, including HANA System Replication, SQL Server

- AlwaysOn, and Oracle Data Guard
  - configure fencing/Stonith Block Device (SBD)
  - configure Azure Site Recovery
  - configure storage-level replication for SAP Central Services
  - configure load balancing for SAP HA or database HA
  - configure clustering
  - configure and validate backups
  - perform backup and restore
  - test disaster recovery

MODULE 4: Maintain SAP Workloads on Azure (15–20%)

- Optimize performance and costs
  - optimize performance and cost of SAP HANA virtual hardware and Azure HLI
  - optimize performance and cost of SAP HANA Hardware and Cloud Measurement Tools (HCMT)
  - measure/reduce network latency between SAP servers and clients
  - optimize network performance and bandwidth costs
  - optimize performance and cost of SAP application servers
  - optimize performance by using the SAPS benchmark tool
  - configure snoozing
  - resize VMs
  - optimize storage costs
  - optimize an SAP workload on Azure by using Azure Advisor

- Monitor SAP on Azure
  - monitor SAP workloads by using Azure Monitor for SAP Solutions
  - monitor SAP workloads by using Log Analytics
  - monitor networking

Prerequisites

- Understanding of SAP Applications, SAP HANA, S/4HANA, SAP NetWeaver, SAP BW, OS Servers for SAP Applications, and Databases.

- Azure Administrator (AZ-103) or Azure Solutions Architect (AZ-300) training

Target Audience

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 initial migration or integration and 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 adjusting 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 database administrators, 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, Azure Marketplace, Azure Resource Manager templates (ARM templates), virtualization, cloud infrastructure, storage structures, high availability design, disaster recovery design, data protection concepts, and networking.

For this exam, we strongly recommended that you have an Azure Administrator Associate orAzure Solutions Architect Expert certification, in addition to SAP certifications.

Duration

32 Hours