

## **AZ-120T00: Planning and Deploying SAP on Azure**

### **Course Outline**

#### **1) Explore Azure for SAP workloads**

- Explore Azure for SAP workloads
  - Discover the SAP and Microsoft partnership
  - Explore your options with SAP on Azure
- Discover common terms and meanings for SAP on Azure
  - Discover common terms and meanings for SAP, Azure, and SAP deployments on Azure
- Identify SAP-certified configurations
  - Explore general prerequisites for SAP support in public cloud environments
  - Discover SAP certifications and configurations running on Microsoft Azure
- Examine SAP NetWeaver with AnyDB on Azure virtual machines
  - Explore SAP NetWeaver with AnyDB on Azure virtual machines and learn to recognize the architecture's components
  - Examine a sample functional workflow
- Examine SAP S/4HANA on Azure virtual machines
  - Explore SAP S/4HANA on Azure virtual machines and learn to recognize the architecture's components
  - Examine a sample functional workflow

#### **2) Explore the foundations of IaaS for SAP on Azure**

- Explore Azure for SAP compute
  - Plan for implementing SAP solutions
  - Explore Azure virtual machines
  - Examine Azure virtual machine compute considerations
  - Implement and verify high availability SAP HANA on Azure virtual machines
- Explore Azure for SAP networking
  - Explore Azure virtual networks
  - Examine Azure virtual machine networking considerations
  - Examine load balancing considerations
  - Explore virtual network connectivity
  - Explore cross-premises connectivity
- Explore Azure for SAP storage
  - Explore Azure Storage types
  - Examine general database sizing
  - Examine SAP HANA Azure virtual machine storage configurations
  - Explore solutions with Premium Storage and Azure Write Accelerator for Azure M-Series virtual machines
  - Examine sizing for HANA databases on Azure NetApp Files
- Explore Azure for SAP databases
  - Explore database support of Azure for SAP workloads
  - Explore storing database files directly on Azure Blob Storage
  - Explore Azure virtual machine and blob storage security

- Examine SQL Server and Oracle recommendations
- Explore Azure networking for SAP RISE
  - Differentiate the responsibilities of the SAP RISE team, Azure support, and the customer
  - Connect to SAP RISE with Azure virtual private network (VPN) peering
  - Connect to SAP RISE with VNet-to-VNet
  - Connect SAP RISE with an on-premises network
  - Connect SAP RISE with the internet

### **3) Explore the foundations of identity and governance for SAP on Azure**

- Explore identity services for SAP on Azure
  - Define Active Directory Domain Services
  - Define Microsoft Entra ID
  - Discuss Microsoft Entra Domain Services
- Define Active Directory Domain Services
- Define Microsoft Entra ID
- Explore remote management for SAP on Azure
  - Consider remote management of Azure virtual machines
  - Set up the Azure connector for SAP Landscape Management
  - Explore access management
- Explore governance and manageability for SAP on Azure
  - Explore Azure Resource Manager and Azure Resource Manager templates
  - Examine role-based access control and Azure Policy
  - Explore security and compliance services

### **4) Deploy SAP on Azure**

- Deploy single-instance implementations of SAP on Azure (2-tier and 3-tier)
  - Explore deployment methodologies
  - Deploy via Azure Resource Manager templates
  - Prepare Azure virtual machines for a manual installation of SAP HANA
  - Implement SAP HANA scale-out
- Implement high availability in SAP NetWeaver with AnyDB on Azure virtual machines
  - Examine single SID 3-tier SAP NetWeaver high availability AnyDB deployment
  - Examine multi-SID 3-tier SAP NetWeaver high availability AnyDB deployment
  - Set up a Windows Server failover cluster for an SAP ASCS-SCS instance
  - Examine Installation of SIOS DataKeeper Cluster Edition for the SAP ASCS-SCS cluster shared disk
- Explore Azure Center for SAP solutions
  - Explain Azure Center for SAP Solutions (ACSS) and its services
  - Deploy SAP workloads on Azure or register existing SAP workloads with ACSS
  - Use ACSS to manage new and existing SAP workloads on Azure
  - Monitor and troubleshoot SAP workloads on Azure

## **5) Ensure business continuity and implement disaster recovery for SAP solutions on Azure**

- Implement high availability for SAP workloads in Azure
  - Explore high availability and disaster recovery support of Azure for SAP workloads
  - Examine principal architectures
  - Determine latency between Azure virtual machines across Availability Zones
- Implement disaster recovery for SAP workloads in Azure
  - Explore disaster recovery of SAP workloads
  - Combine availability within one region and across regions
  - Explore site recovery
  - Implement disaster recovery for SAP deployments across Azure regions with Azure Site Recovery
- Perform backups and restores for SAP workloads on Azure
  - Explore backup and restore of Azure virtual machines
  - Explore application backup
  - Explore SAP HANA backup
  - Explore Oracle backup
  - Explore SQL Server backups

## **6) Migrate SAP workloads to Azure**

- Use the planning and deployment checklist for SAP workloads on Azure
  - Examine the SAP workload planning and deployment checklist
  - Explore the phases from project preparation and planning, and through the Go Live and post production phases
- Explore migration options for SAP on Azure
  - Analyze strategies for migrating SAP systems to Microsoft Azure
  - Compare classical migration options
  - Explore downtime-optimized migration
- Migrate very large databases (VLDB) to Azure for SAP
  - Explore very large database migration
  - Learn best practices for optimizing the source system, network upload, and the target system
  - Examine very large database migration best practices

## **7) Monitor and troubleshoot Azure for SAP workloads**

- Explore monitoring requirements of Azure for SAP workloads
  - Examine monitoring, logging, and alerting services
  - Explore Azure Monitor and Log Analytics
  - Explore operating system and workload updates for Azure virtual machines
- Configure the Azure Enhanced Monitoring Extension for SAP
  - Explore the Azure Enhanced Monitoring Extension for SAP
  - Configure the Azure Enhanced Monitoring Extension for SAP
- Explore licensing, pricing, and support for SAP on Azure virtual machines
  - Learn how to price Azure virtual machine-based solutions
  - Explore licensing, pricing, and support of Azure for SAP workloads

## 8) LAB Outline

- Implement Linux clustering on Azure VMs
- Implement Windows clustering on Azure VMs
- Implement SAP architecture on Azure VMs running Linux
- Implement SAP architecture on Azure VMs running Windows
- Automate deployment by using Azure Center for SAP solutions
- Overview of prerequisites for deployment of Azure Center for SAP solutions (ACSS)
- Overview of deployment and maintenance of Azure Center for SAP solutions (ACSS)
- Overview of deployment Azure Center for SAP solutions