AZ-301T04-A : Designing an Infrastructure Strategy

Learn how to Describe DNS and IP strategies for VNETs in Azure, compare connectivity options for ad-hoc and hybrid connectivity, distribute network traffic across multiple loads using load balancers, and design a hybrid connectivity scenario between cloud and on-premise.

Détails

- Code : AZ-301T04
- Durée : 1 jour (7 heures)

Public
- Administrateurs
- Administrateurs de bases de données
- Administrateurs de Cloud
- Administrateurs de data warehouse
- Administrateurs Linux
- Administrateurs systèmes
- Administrateurs systèmes et réseaux
- Administrators

Pré-requis

Objectifs

- Describe various patterns pulled from the Cloud Design Patterns, Distribute network traffic across multiple loads using load balancers
- Design a hybrid connectivity scenario between cloud and on-premise
- Design an availability set for one or more virtual machines
- Describe the differences between fault and update domains.
- Author a VM Scale Set ARM template

Programme

Module 1: Application Architecture Patterns in Azure
- Description
  - This module introduces, and reviews common Azure patterns and architectures as prescribed by the Microsoft Patterns & Practices team
  - Each pattern is grouped into performance, resiliency, and scalability categories and described in the context of similar patterns within the category
- After completing this module, students will be able to:
  - Locate and reference the Cloud Design Patterns documentation
  - Locate and reference the Azure Architecture Center
  - Describe various patterns pulled from the Cloud Design Patterns

Module 2: Building Azure IaaS-Based Server Applications (ADSK)
- Description
  - This module identifies workloads that are ideally deployed using Infrastructure-as-a-Service services in Azure
  - The module focuses on the VM Scale Sets and Virtual Machine services in Azure and how to best deploy workloads to these services using best practices and features such as Availability Sets

- Lab
  - Building Azure IaaS-Based Server Applications
- After completing this module, students will be able to:
  - Design an availability set for one or more virtual machines
  - Describe the differences between fault and update domains
  - Author a VM Scale Set ARM template
  - Join a virtualized machine to a domain either in Azure or on a hybrid network

Module 3: Networking Azure Application Components
- Description
  - This module describes the various networking and connectivity options available for solutions deployed on Azure
  - The module explores connectivity options ranging from ad-hoc connections to long-term hybrid connectivity scenarios
  - The module also discusses some of the performance and security concerns related to balancing workloads across multiple compute instances, connecting on-premise infrastructure to the cloud and creating gateways for on-premise data
- Lab

- - Deploying Network Infrastructure for Use in Azure Solutions
- After completing this module, students will be able to:
  - Describe DNS and IP strategies for VNETs in Azure
  - Compare connectivity options for ad-hoc and hybrid connectivity
  - Distribute network traffic across multiple loads using load balancers
  - Design a hybrid connectivity scenario between cloud and on-premise

Module 4: Integrating Azure Solution Components Using Messaging Services

- Description
  - This module describes and compares the integration and messaging services available for solutions hosted on the Azure platform
  - Messaging services described include Azure Storage Queues, Service Bus Queues, Service Bus Relay, IoT Hubs, Event Hubs, and Notification Hubs
  - Integration services include Azure Functions and Logic Apps
- Lab
  - Integrating Azure Solution Components using Messaging Services
- After completing this module, students will be able to:
  - Compare Storage Queues to Service Bus Queues
  - Identify when to use Azure Functions or Logic Apps for integration components in a solution
  - Describe the differences between IoT Hubs, Event Hubs and Time Series Insights

Modalités

- Type d'action :Acquisition des connaissances
- Moyens de la formation :Formation présentielle – 1 poste par stagiaire – 1 vidéo projecteur – Support de cours fourni à chaque stagiaire
- Modalités pédagogiques :Exposés – Cas pratiques – Synthèse
- Validation :Exercices de validation – Attestation de stages