

AZ-1001: Deploy and manage containers using Azure Kubernetes Service

Plan an Azure Kubernetes Service deployment

Introduction

Azure Kubernetes Service

Azure Kubernetes cluster architecture

Azure Kubernetes Service pods

Nodes and node pools for Azure Kubernetes Service

Namespaces for Azure Kubernetes Service

Access to Azure Kubernetes Service

Monitoring and logging for Azure Kubernetes Service

Knowledge check

Summary

Deploy and use Azure Container Registry

Introduction

Try-This exercise - Create a container registry

Try-This exercise - Sign in to the container registry

Try-This exercise - Push an image to the registry

Try-This exercise - View container images

Try-This exercise - Run an image from the registry

Try-This exercise - Create a virtual network

Knowledge check

Summary

Deploy an Azure Kubernetes Service cluster

Introduction

Azure Kubernetes Service cluster architecture

Network topology

Plan the IP addresses

Configure compute for the base cluster

Integrate Microsoft Entra ID for the cluster

Secure the network flow

Node and pod scalability

Try-This exercise - Create an Azure Kubernetes Service cluster

Knowledge check

Summary

Configure an Azure Kubernetes Service cluster

Introduction3 min

Understand Azure Policy for Kubernetes clusters

Try-This exercise - Enable Azure Policy add on for Azure Kubernetes Service

Try-This exercise - Assign a policy definition to an Azure Kubernetes cluster

Host-based encryption on Azure Kubernetes Service

Create a custom namespace for Azure Kubernetes clusters

Knowledge check

Summary

Deploy applications to Azure Kubernetes Service

Introduction3 min

Configure Azure Kubernetes pods using Azure Policy

Try-This exercise - Apply Azure Kubernetes Service pod settings using Azure Policy

Configure storage for applications running on Azure Kubernetes Service

Deploy an application to an Azure Kubernetes Service cluster

Try-This exercise - Configure storage for applications that run on Azure Kubernetes Service

Try-This exercise - Deploy an application to Azure Kubernetes Service cluster

Knowledge check

Summary

Configure scaling in Azure Kubernetes Service

Introduction

Scaling options in Azure Kubernetes Services

Cluster autoscaler

Burst to Azure Container Instances

When to use cluster autoscaler

Try-This exercise - Scale the node count in an Azure Kubernetes Service cluster

Automatically scale a cluster on Azure Kubernetes Service

Knowledge check

Summary