AZ-1001 Deploy and manage containers using Azure Kubernetes Service

Category: Cloud Platforms | **Vendor:** Microsoft Technical

Duration: 8.00 hours (1 days) **6.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format:	Instructor Led - Online
Certification:	Microsoft Applied Skills: Deploy and manage containers using Azure Kubernetes Service
Related Exam:	AZ-1001

Course Overview

In this learning path, you practice deploying containers, container orchestration, and managing clusters on Azure Kubernetes Service. The skills validated include deploying, configuring, and scaling an Azure Kubernetes Service cluster. Also, deploying an Azure Container Registry instance and deploying an application into an Azure Kubernetes Service cluster.

About This Course

In this learning path, you practice deploying containers, container orchestration, and managing clusters on Azure Kubernetes Service. The skills validated include deploying, configuring, and scaling an Azure Kubernetes Service cluster. Also, deploying an Azure Container Registry instance and deploying an application into an Azure Kubernetes Service cluster.

Prerequisites & Entry Requirements

General Prerequisites:

- Experience using the Azure portal to create resources.
- Basic knowledge of security concepts like identities, permissions, and encryption.
- Basic knowledge of networking concepts like virtual networks and subnetting.
- Basic knowledge of Azure Policy and Azure Kubernetes Service concepts.

Detailed Course Outline

1 - Plan an Azure Kubernetes Service deployment

- 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
- Module assessment

2 - Deploy and use Azure Container Registry

- 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
- Module assessment

3 - Deploy an Azure Kubernetes Service cluster

- Azure Kubernetes Service cluster architecture
- Network topology
- Plan the IP addresses
- Configure compute for nodes and node pools
- Integrate Microsoft Entra ID for the cluster
- Secure the network flow
- Node and pod scalability
- Try-This exercise - Create an Azure Kubernetes Service cluster
- Module assessment

4 - Configure an Azure Kubernetes Service cluster

- 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
- Module assessment

5 - Deploy applications to Azure Kubernetes Service

- 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
- Module assessment

6 - Configure scaling in Azure Kubernetes Service

- Scaling options in Azure Kubernetes Service
- Cluster autoscaler
- Burst to Azure Container Instances
- When to use the cluster autoscaler
- Try-this exercise - Scale the node count in an Azure Kubernetes Service cluster
- Automatically scale a cluster on Azure Kubernetes Service
- Module assessment

7 - Guided Project - Deploy applications to Azure Kubernetes Service

- Module assessment

□□ Certification Path

Microsoft Applied Skills: Deploy and manage containers using Azure Kubernetes Service

Exam: AZ-1001

Frequently Asked Questions

Q: What delivery options are available for AZ-1001 Deploy and manage containers using Azure Kubernetes Service?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: What certification does this course prepare me for?

The AZ-1001 Deploy and manage containers using Azure Kubernetes Service course helps prepare you for the Microsoft Applied Skills: Deploy and manage containers using Azure Kubernetes Service certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the AZ-1001 official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

Q: How many CPD hours does this course provide?

The 1-day AZ-1001 Deploy and manage containers using Azure Kubernetes Service course provides up to 6.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the AZ-1001 Deploy and manage containers using Azure Kubernetes Service training?

The training takes place over 1 day(s), with each day lasting approximately 8.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for AZ-1001 Deploy and manage containers using Azure Kubernetes Service?

Yes, we provide corporate training, dedicated training, and closed classes for AZ-1001 Deploy and manage containers using Azure Kubernetes Service. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: Why choose Nexus Human for AZ-1001 Deploy and manage containers using Azure Kubernetes Service?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your AZ-1001 Deploy and manage containers using Azure Kubernetes Service training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

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