Microsoft Azure Administrator: Create and Configure Containers

CREATE AND CONFIGURE AZURE CONTAINERS

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Course Coverage of Certification Objectives

Create and Configure Azure Containers

- Configure sizing and scaling for Azure Container Instances
- Configure container groups for Azure Container Instances

Create and Configure Azure Kubernetes Service

- Configure storage for AKS
- Configure scaling for AKS
- Configure network connections for AKS
- Upgrade an AKS cluster

Full certification exam skills outline available at http://bit.ly/az104ms

Exercise Files

Slides

Code

Links to Resources

Azure Container Instances

What is a Container?

Virtual Machines

VM1/App1	VM2/App2
Bins/services	Bins/services
Guest OS 1	Guest OS 2

Hyper-Visor

Operating System

Physical Server

Containers

Container/App1	Container/App2
Bins/services	Bins/services

Container RunTime

Operating System

Physical Server
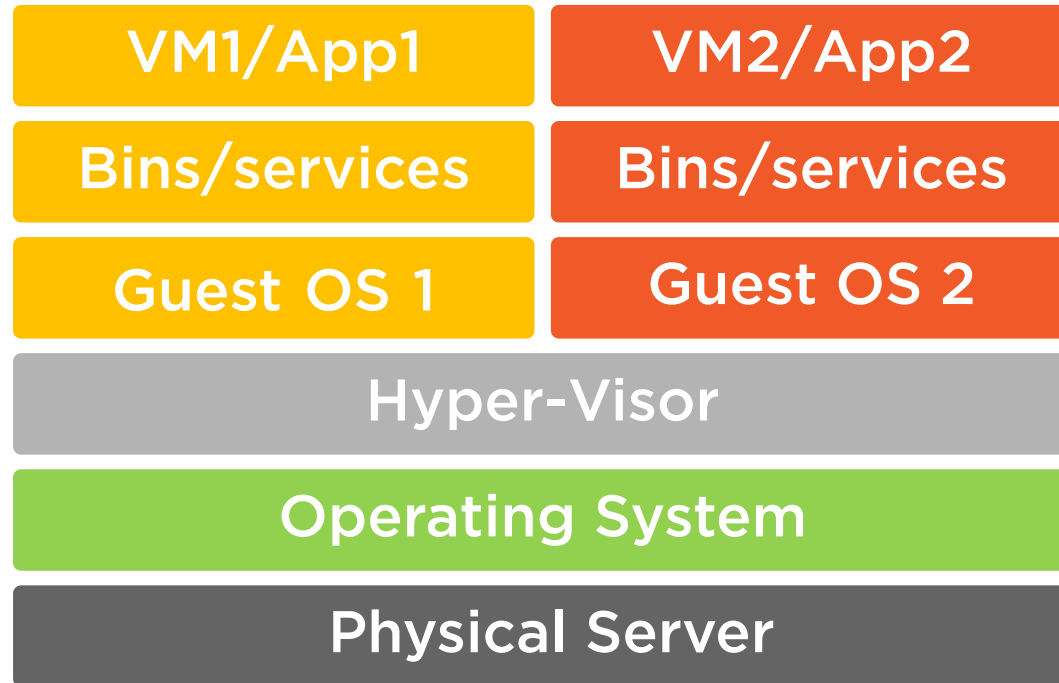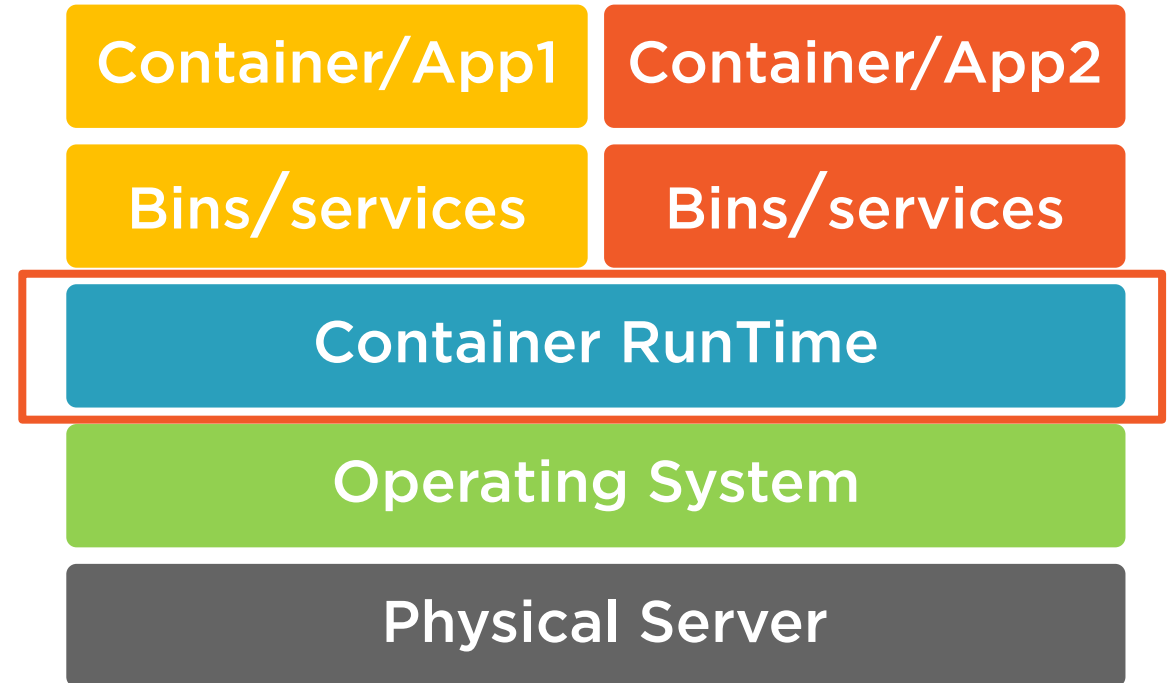
Benefits of Container Instances

Faster startup

Custom sizes

Per second billing

Persistent storage

Security through isolation

Linux and Windows

Core Concepts

Azure Container Instances allows you to run multiple containers without managing servers

Image source is the source from which the image is pulled. Can create and upload custom images to your registry

Registries are the location of images, can be Azure Container Registry, Docker Hub, or other container registry

Restart policies include *always*, *on failure* and *never*

Creating Azure Container Instances

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Create container instance

Basics Networking **Advanced** Tags Review + create

Configure additional container properties and variables.

Restart policy ⓘ   On failure   ▼

Environment variables

Key   **Value**

Command override ⓘ   [ ]

Example: ["/bin/bash", "-c", "echo hello; sleep 100000"]

Review + create   < Previous   Next : Tags >

```
# Create a resource group

az group create --name ps-course-rg --location centralus

# Create and deploy container

az container create --resource-group ps-course-rg --name mycontainer \
--image mcr.microsoft.com/azuredocs/aci-helloworld --dns-name-label az104-demo \
--ports 80 --restart-policy Always
```
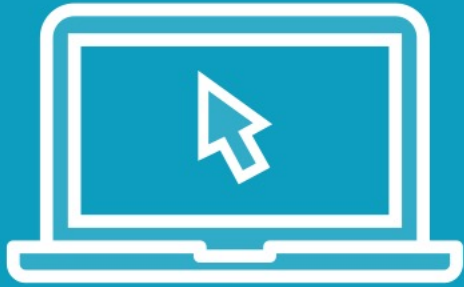
Creating an Azure Container Instance

Azure CLI

Demo

Create Azure Container Instance

Azure Container Groups

Azure Container Groups

Collection of containers on the same host

Currently supports only Linux container instances

Deployment options:
- Resource Manger template
- YAML file

Azure Container Groups

Update containers in a group by redeploying the group

Modified properties that requires container deletion:

- OS type
- CPU, memory or GPU
- Restart policy
- Network profile

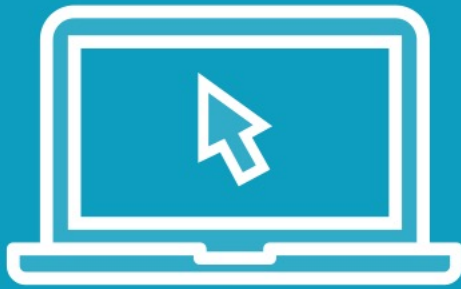# Deploying Container Group with ARM Template

```
# Create a resource group

az group create --name container-rg --location centralus


# Create and deploy Azure Container group from template

az deployment group create --resource-group container-rg --template-file azuredeploy.json
```

Demo

Deploy a container group

Up Next:
Create and Configure Azure Kubernetes Service