

# Running Containers on Azure Container Instances

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**Azure Container  
Instances (ACI)**

Azure Web App  
for Containers

Azure Service Fabric

Azure Kubernetes  
Service (AKS)



# Azure Container Instances (ACI)

**The quickest and easiest way to run a container in Azure**

**“Serverless” – you don’t need to provision infrastructure**

**Great for quick experiments**

**Pay only while your container is running**

- Per-second billing model



# ACI Use Cases



## **Permanently running containers**

e.g. web servers, databases



## **Continuous integration build agents**

Scale out to support multiple concurrent builds



## **Short-lived experiments**

e.g. try out MongoDB, or perform a load test



## **Batch jobs**

Run for a few hours overnight

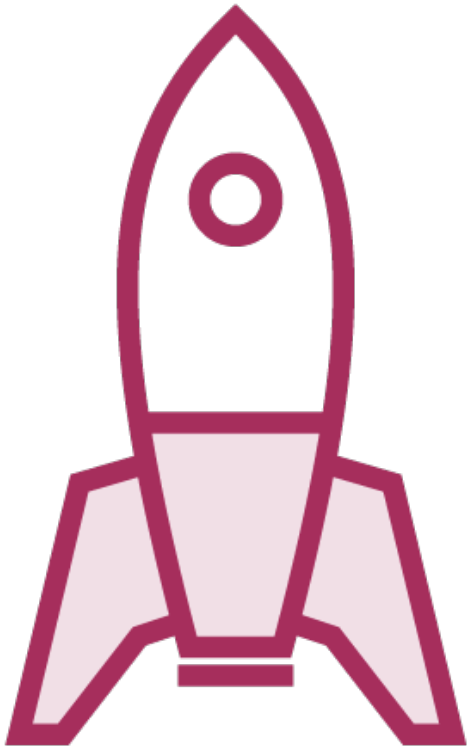


## **Elastic scale for Kubernetes clusters**

“Virtual Kubelet”



# ACI Features



## Easy to create and manage

- Azure CLI, PowerShell, C# SDK, ARM

## Networking

- Public IP address
- Domain name prefix
- Expose ports

## Windows or Linux containers

## Restart policy

# More ACI Features

## Mount volumes

- Azure file share
- Secrets, Git repositories

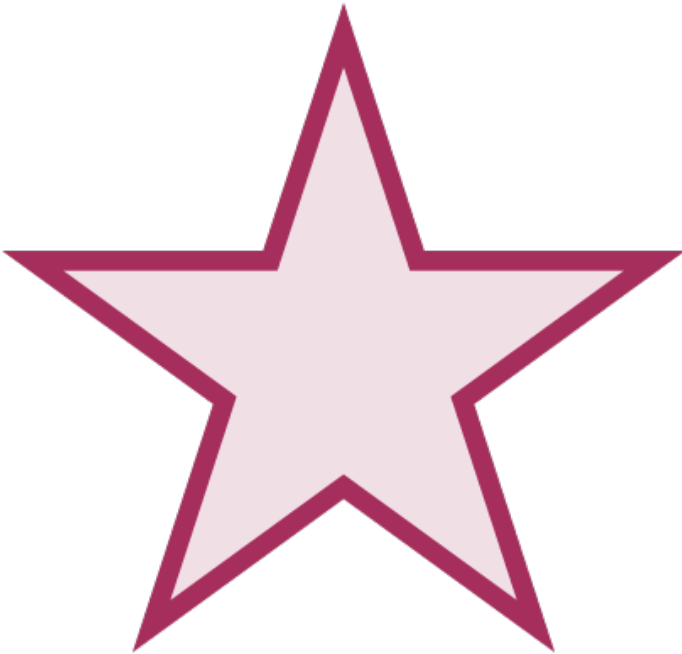
## Specify the command to run

## Configure environment variables

## Access container logs

## “Container groups”

- One or more containers
- Run on the same server and share resources

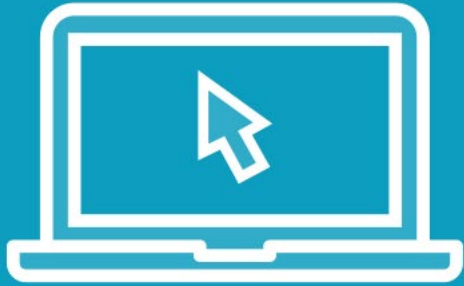


# Creating Container Groups with the Azure CLI

```
az container create
-n mycontainergroup -g myresourcegroup
--image someimage:sometag
--ip-address public
--dns-name-label mysite # mysite.eastus.azurecontainer.io
--ports 80
--os-type Windows # default is Linux
--cpu 1 --memory 1.5
-e name=value
--restart-policy never # always, onfailure
--azure-file-volume... # credentials, mount path, share-name
```



# Demo



## Create an ACI container group

- Ghost blog
- az group create
- az container create
- az container logs
- az group delete





# Demo



## Create a container group

- Docker image from ACR
- Mount an Azure file share
- az container exec



# Summary



## Azure Container Instances

- Serverless
- Per-second pricing model

## Azure CLI

- az container create
- az container logs
- az container exec

## Mount file shares as volumes

## Environment variables

## Access images in ACR

Up next:  
Running Containers on  
Azure Web App for  
Containers

