Note 1: Complete all instructions in the PDF and then return to the GitHub repo of the lab and the README.md again - for the next steps of the Lab 1. The PDF is *only* for the *Create the sample app* - step 1 of Lab 1.

Note 2: Please note that the container image for this sample app is pulled from a public Docker repository.

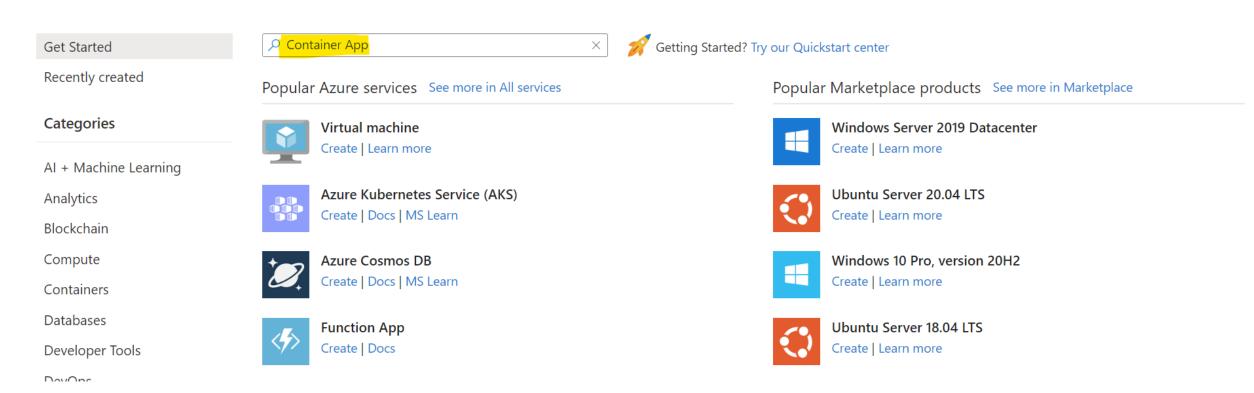
If you choose to utilize your own container image repository, utilize the [Lab1\src] folder and the associated Dockerfile to build and push the image to your container registry of choice / repository and substitute the values in the Container App creation step for the [Registry login server] and [Image and tag] values.

Instructions:

In the Azure Portal, click on [+ Create a Resource] and type in "Container App"

Home >

Create a resource



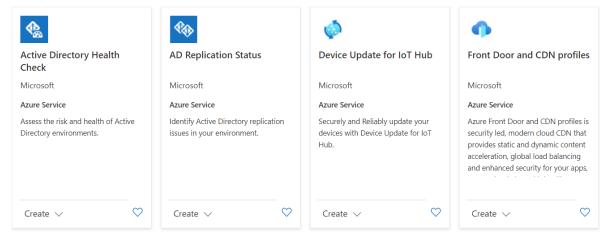


Microsoft



Azure Container Apps is built on the foundation of powerful open-source technology in the Kubernetes ecosystem and abstracts the overhead of infrastructure management and orchestration. Azure Container Apps is a great choice for microservices, APIs, event processing, long running background jobs, and more.

More products from Microsoft See All



Instructions: Click [Create]

Review + create

< Previous

Next : App settings >

sics App settings Ta	gs Review + create	
	nerized apps that scale on demand without requiring you to m r your first app. Select existing resources, or create them now.	
ct details		
a subscription to manage	deployed resources and costs. Use resource groups like folder:	s to organize and manage all you
cription *		V
lesource group *	rg-spt-aca-hol	
	Create new	
ainer app name *	aca-hol-demo	
ainer Apps Environment		
	ndary around one or more container apps that can communica tainer Apps Pricing	ate with each other and share a vi
n *	East US	~
iner Apps Environment *		

Instructions:

Project Details

Choose the [Subscription] you would like to use. It is recommended that you create a new resource group so fill in a name and create a new resource group by clicking on the [Create New] hyperlink. Provide a [Container app name] of your choice *e.g. aca-hol-demo*

Container Apps Environment

Choose the [Region] you want to deploy to from the drop-down of available regions.

As it is the first time, **let us click on the [Create new**] hyperlink to create a new [Container Apps Environment] and explore the options there instead of using the auto-populated value.

Note: An environment in Azure Container Apps creates a secure boundary around a group of container apps. Container Apps deployed to the same environment are deployed in the same virtual network and write logs to the same Log Analytics workspace.

Create Container Apps Environment

Basics Monitoring Network	king
The environment is a secure bounda share a virtual network, logging, and	ry around one or more container apps that can communicate with each other and I Dapr. Learn more ਟਾੋ
Environment details	
Environment name *	env-aca-hol 🗸
Zone redundancy	
	e deployed as a zone redundant service in the regions that support it. This is a can't make Container App Environment zone redundant after it has been deployed.
Zone redundancy *	 Disabled: Your Container App Environment and the apps in it will not be zone redundant.
	Enabled: Your Container App Environment and the apps in it will be zone redundant. This requieres vNet integration.

Instructions:

[Create Container Apps Environment - Basics] tab

Environment details

Provide an [Environment name]

Zone Redundancy (ZR) - The decision to make this Container App Environment - zone redundant is to be made at deployment time. The Container App Environment cannot be made zone redundant If NOT deployed as zone redundant at the time of creation. For Lab 1 - let us leave [Zone redundancy] as [Disabled]

Cancel

Create

Create Container Apps Environment ...

Basics Monitoring N	letworking	
Your Log Analytics workspace	e will contain all your application logs. Learn more ♂	
Log analytics		
Log Analytics workspace *	(New) workspacergsptacahola728	~
	Create new	

Instructions:

[Create Container Apps Environment - Monitoring] tab

A [Log Analytics workspace] name is pre-populated for you. You can choose to [Create new] using the link if you want.

Create Container Apps Environment

Basics Monitoring Networking

Selecting your own virtual network allows you to connect your application to other Azure resources or on-premises systems through the same network. Learn more
Virtual network

Use your own virtual network *

No Yes

Create Cancel

Instructions:

[Create Container Apps Environment - Networking] tab

Virtual Network

For Lab 1 - we are not going to choose own virtual network (VNet).

But for looking at and learning a bit more - choose [Yes] just to make a note of this part for when you create a container app environment beyond this lab - that you get to choose an existing VNet or [Create new].

And then observe the menu to provide the [Infrastructure subnet] range.

The choice to have the Virtual IP as [Internal] only with the endpoint being an internal load balancer [OR] to expose the apps on an internet accessible IP address is also made here.

Now, revert to choosing [No] and click [Create]

Home > Create a resource > Container App >

Create Container App

Basics App settings Tags Rev	riew + create			
Select a quickstart image for your container, or deselect quickstart image to use an existing container.				
Use quickstart image				
Container details				
You can change these settings after creating the Container App.				
Name *	aca-demo			
Image source	Azure Container Registry			
	Docker Hub or other registries			
Image type	Public			
	Private			
Registry login server * (i)	docker.io			
Image and tag *				
OS type	Linux			
Command override (i)	Example: /bin/bash, -c, echo hello; sleep 100000			
Container resource allocation				
CPU and Memory *	0.25 CPU cores, 0.5 Gi memory			
Environment variables				
+ Add				

Instructions:

[Create Container Apps Environment - App Settings] tab

Uncheck the [Use quickstart image] check-box as we want to deploy our own sample app; the container image of our app is in the public Docker Hub.

[Container details]

[Name] Provide a name for the container [Image Source] Select [Docker Hub or other registries] [Image type] Select [Public]

[Registry login server] can be retained as [docker.io]

[Image and tag] Enter the value [dockerr10n/aca-lab1-image:green]

[Container resource allocation] - For this lab retain the default first value but observe that there is a set of choices that can be made based on your container's CPU and memory requirements.

Scroll down further ...

Application ingress settings

Enable ingress for applications that need an HTTP endpoint.

Ingress ①	✓ Enabled
Ingress traffic	Limited to Container Apps Environment
	Limited to VNet: Applies if 'internalOnly' setting is set to true on the Container Apps environment
	Accepting traffic from anywhere: Applies if 'internalOnly' setting is set to false on the Container Apps environment
Ingress type	HTTP
	СТСР
Transport	Auto
Insecure connections	Allowed
Target port * (i)	80

Instructions:

Application ingress settings

[Ingress] - Check/ enable the checkbox

[Ingress traffic] - Select the [Accepting traffic from anywhere] button.

[Ingress type] – leave the default HTTP option as selected

[Transport] – leave it as "Auto"

[Insecure connections] – leave it unselected; this will ensure HTTP requests to port 80 are *automatically* redirected to port 443 using HTTPS

[Target port] - Enter 80

Create Container App



Basics App settings Tags Review + create

Project details

Subscription MCAPS-Hybrid-REQ-45325-2022-ShankarRamachandran

Resource group rg-spt-aca-hol
Name aca-hol-demo

Container Apps Environment (New)

Region eastus

Container Apps Environment env-aca-hol

Log Analytics workspace (New) workspacergsptacahol8bd8

Virtual network Default

Zone redundancy Disabled

App settings

Name aca-demo
Image source Public
Registry login server docker.io

Image and tag dockerr10n/aca-lab1-image:green

OS type Linux

Command

Number of CPU cores 0.25

Memory size (Gi) 0.5

Ingress settings Accepting traffic from anywhere

Ingress type HTTP
Transport Auto

Create

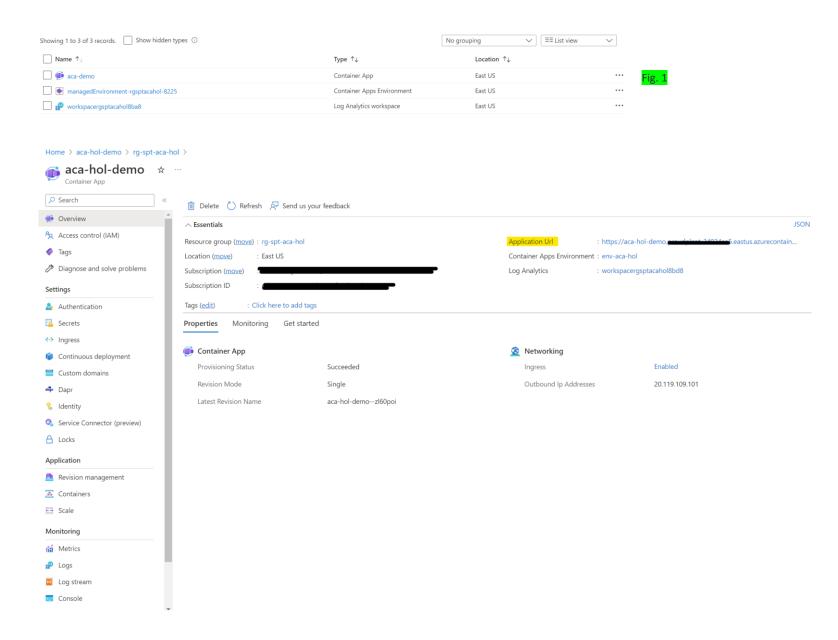
< Previous

Next

Download a template for automation

Instructions:

Click through [Next: Tags] and then go to [Next: Review + create >] and after the validation has Passed - click on [Create]



Instructions:

- 1. In your resource group observe that the 3 resource types depicted in the [Fig. 1] are created.
- **2.** Click on the [Container App] resource and observe the Application URI and click on it.



Instructions:

After you click the Application URI - you should see the above displayed in your browser.

This concludes Step 1 of Lab1. You can return to the Github repo of the Lab now.