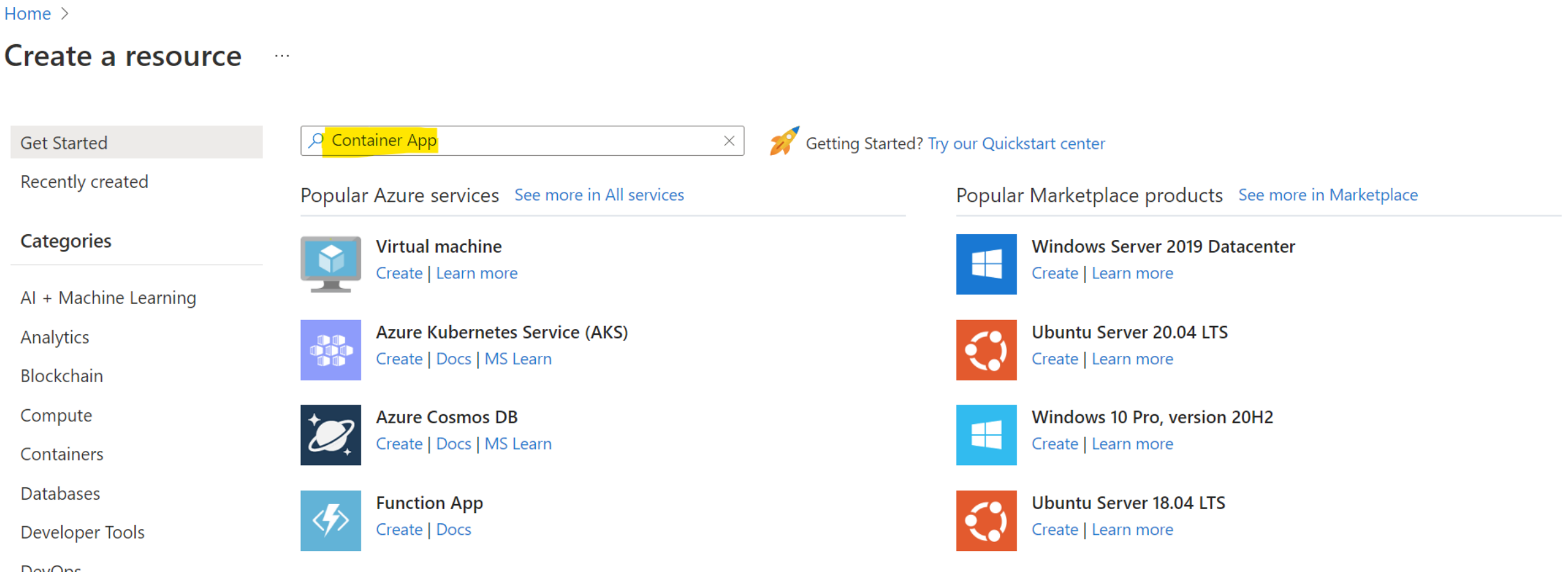
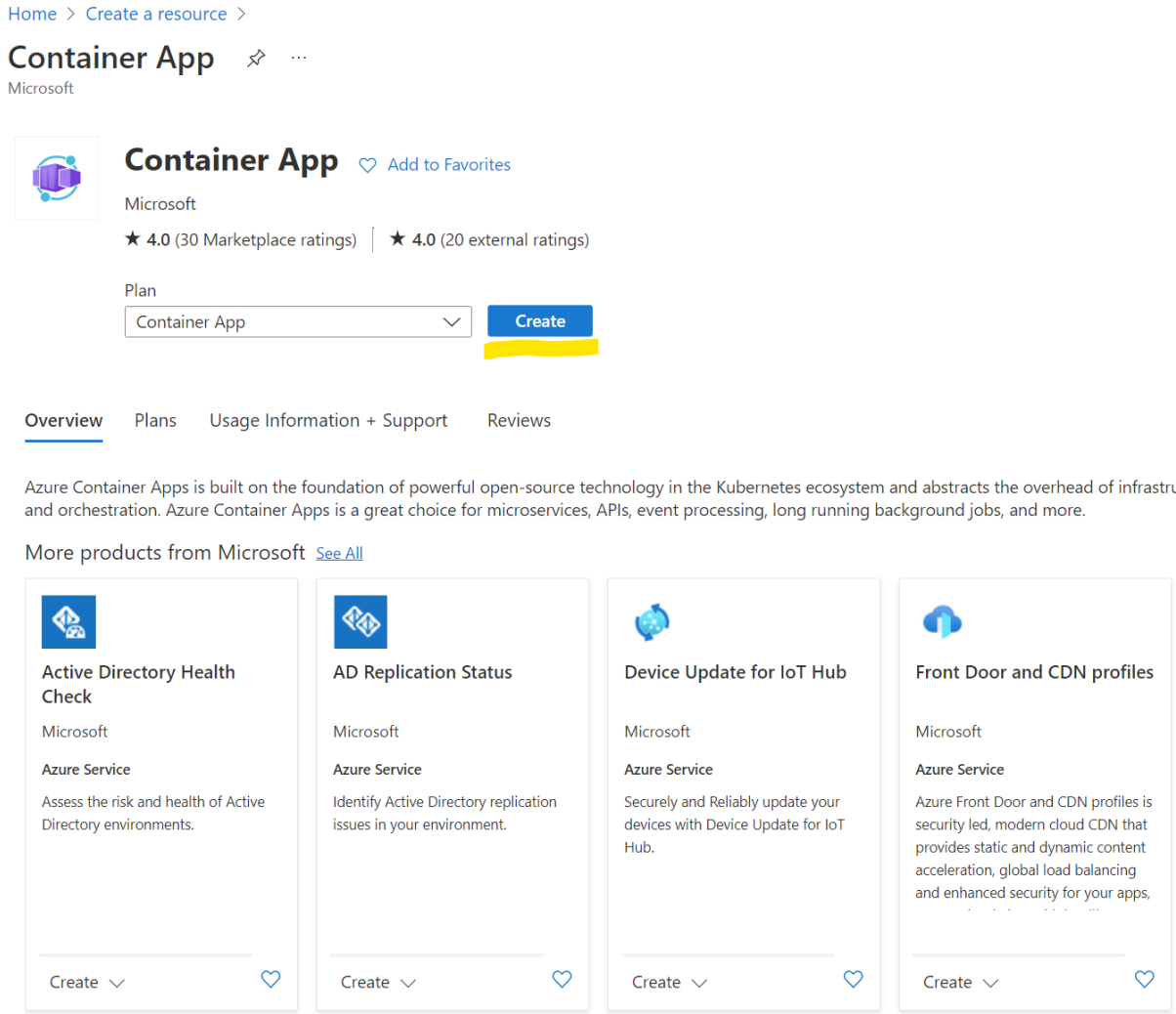
Note 1: Complete all instructions in the PDF and then return to the GitHub repo of the lab and the README.md again - for the next steps of the Lab 1.
The PDF is ***only*** for the *Create the sample app* - step 1 of Lab 1.

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.

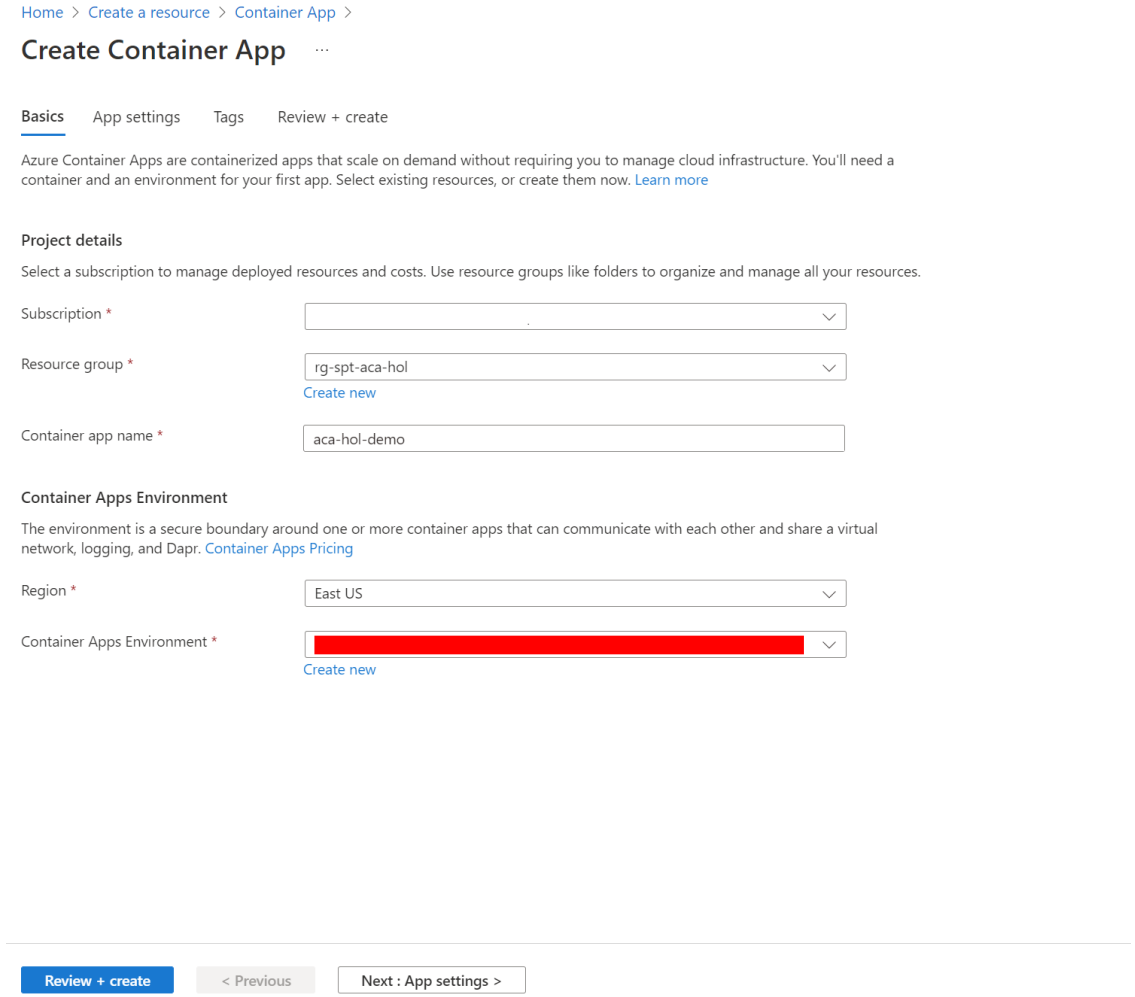
Instructions:
In the Azure Portal, click on **[+ Create a Resource]** and type in "Container App"





Instructions:

Click [Create]



Instructions:

Project Details

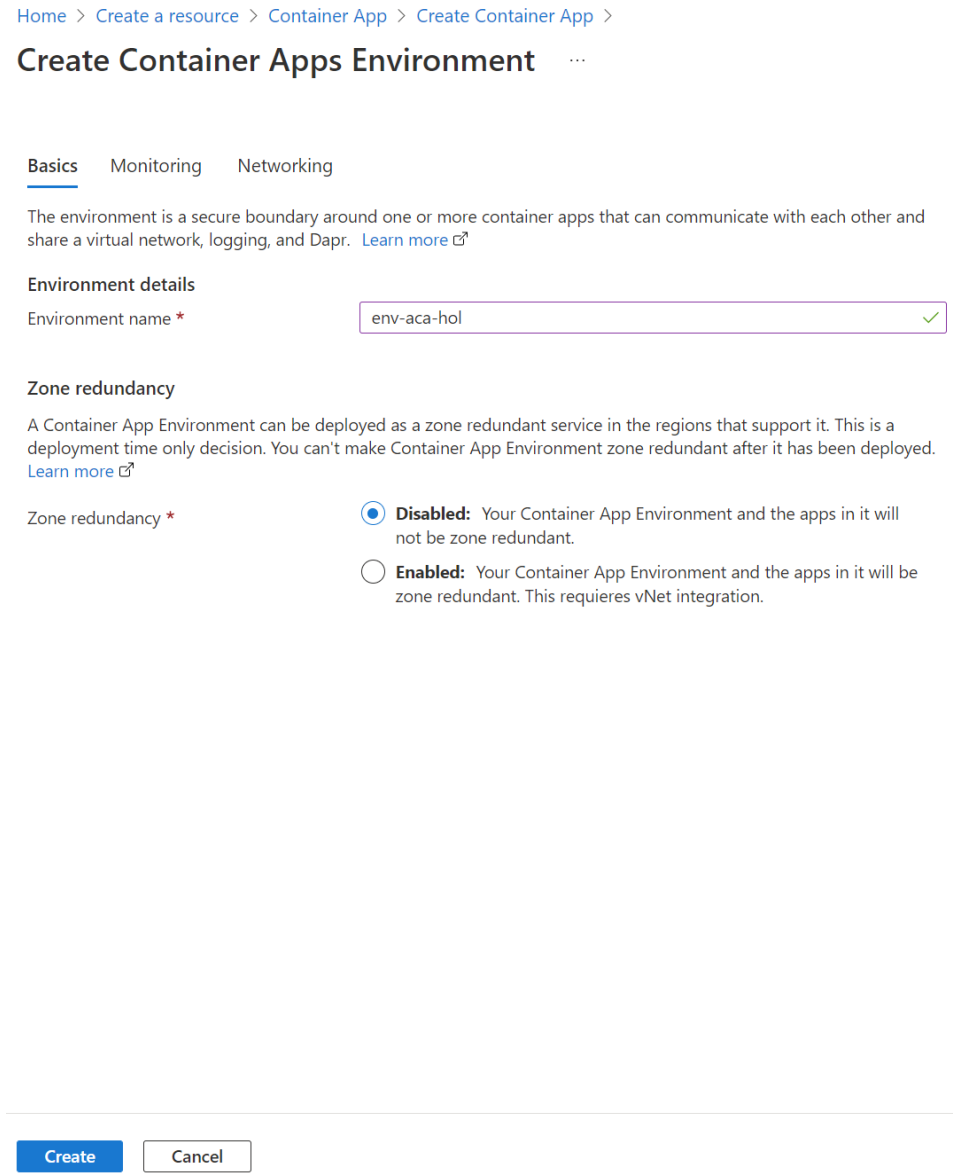
Choose the [Subscription] you would like to use. It is recommended that you create a new resource group so fill in a name and create a new resource group by clicking on the [Create New] hyperlink. Provide a [Container app name] of your choice *e.g. aca-hol-demo*

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.*



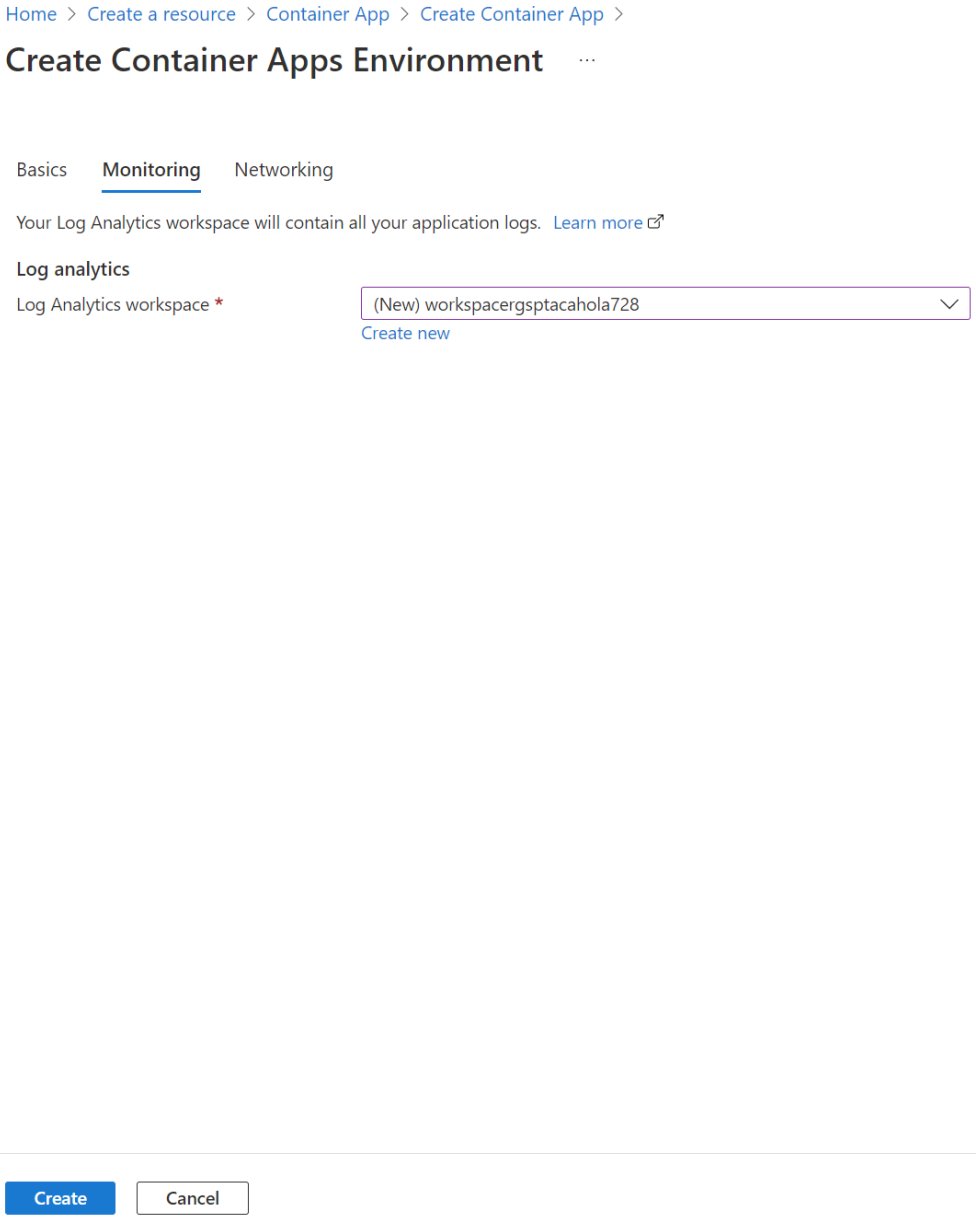
Instructions:

[Create Container Apps Environment - Basics] tab

Environment details

Provide an [Environment name]

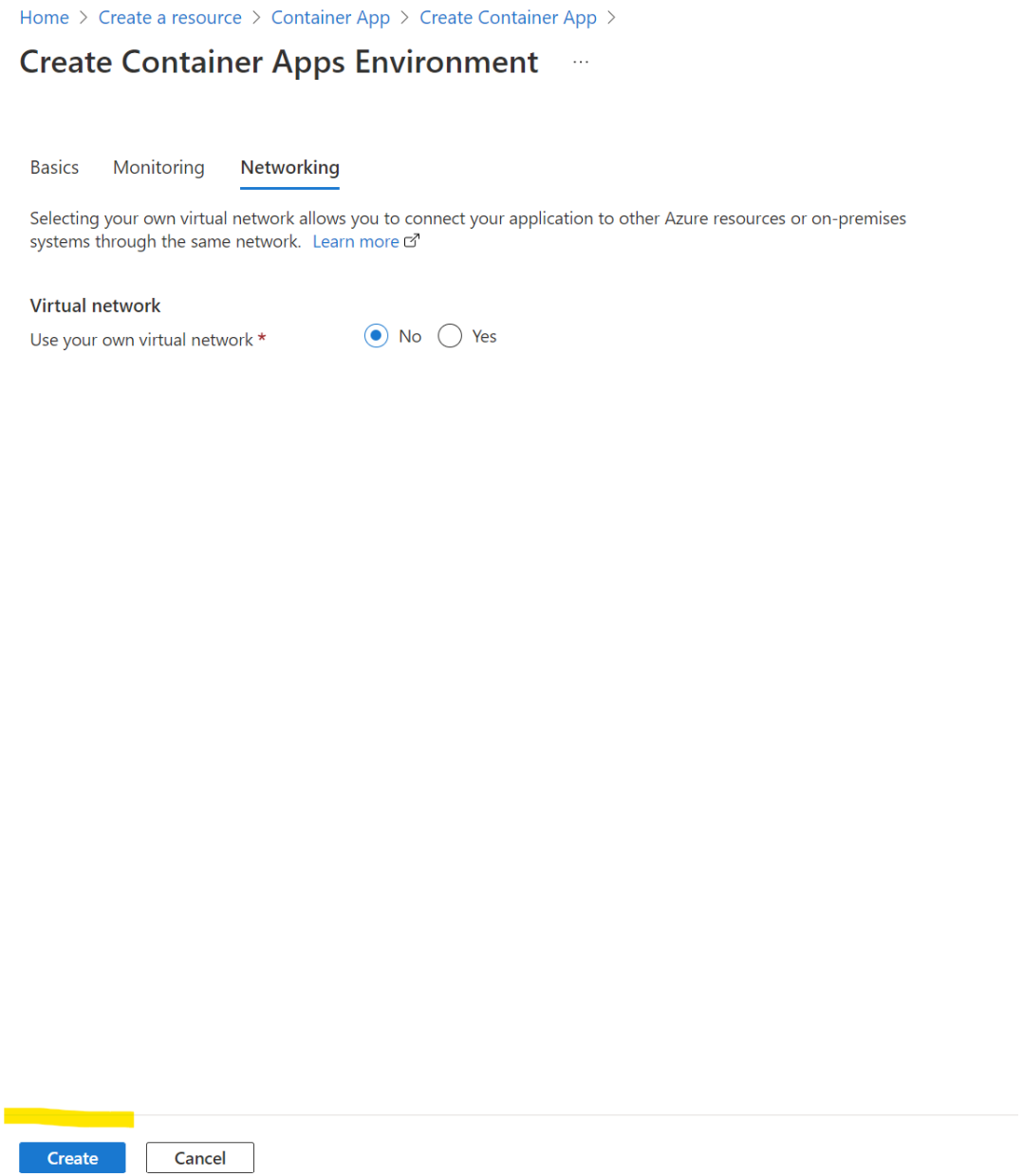
Zone Redundancy (ZR) - The decision to make this Container App Environment - zone redundant is to be made at deployment time. The Container App Environment cannot be made zone redundant If NOT deployed as zone redundant at the time of creation. For Lab 1 - let us leave [Zone redundancy] as [Disabled]



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.



Instructions:

[Create Container Apps Environment - Networking] tab

Virtual Network

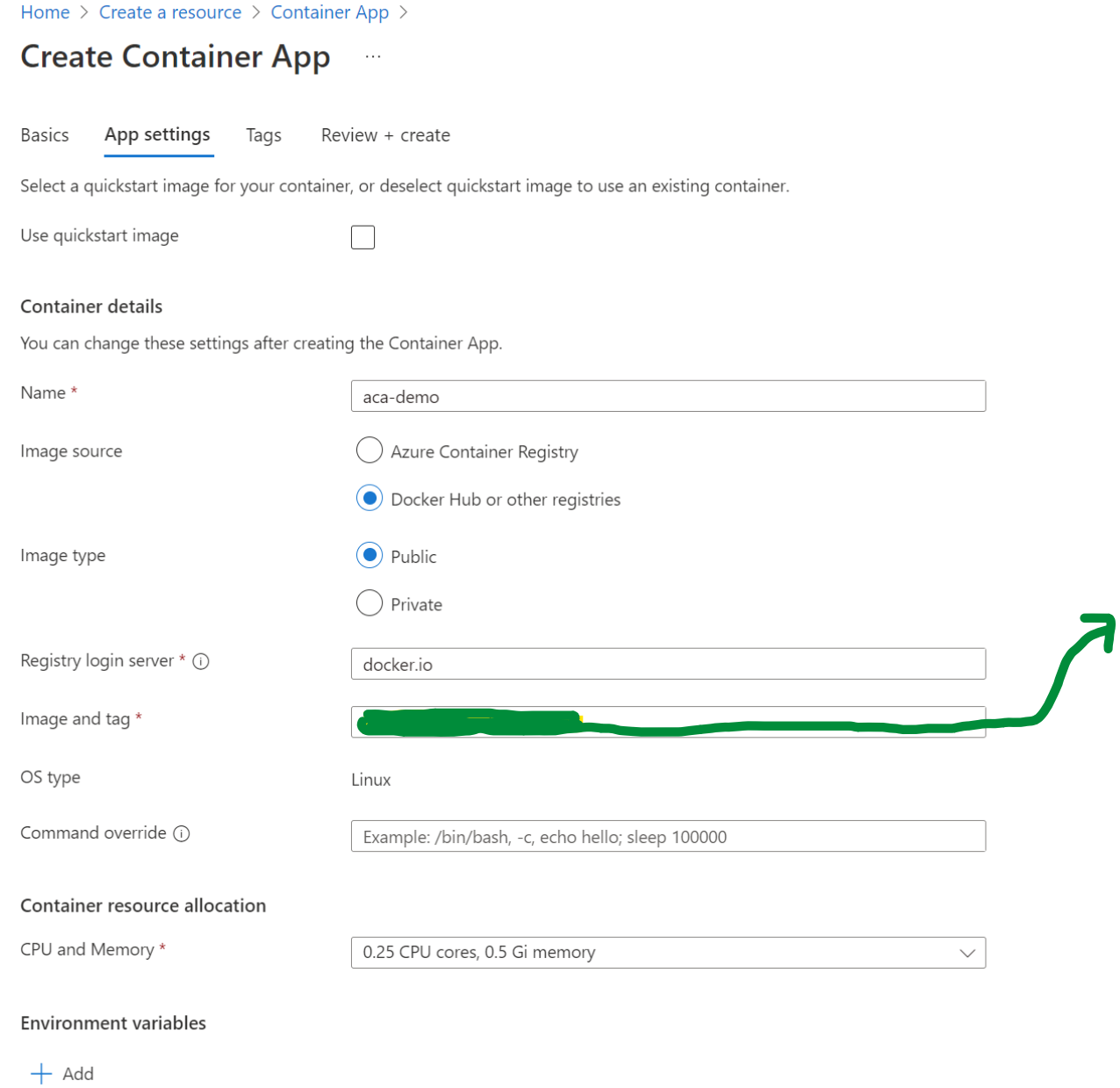
For Lab 1 - we are not going to choose own virtual network (VNet).

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]



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]

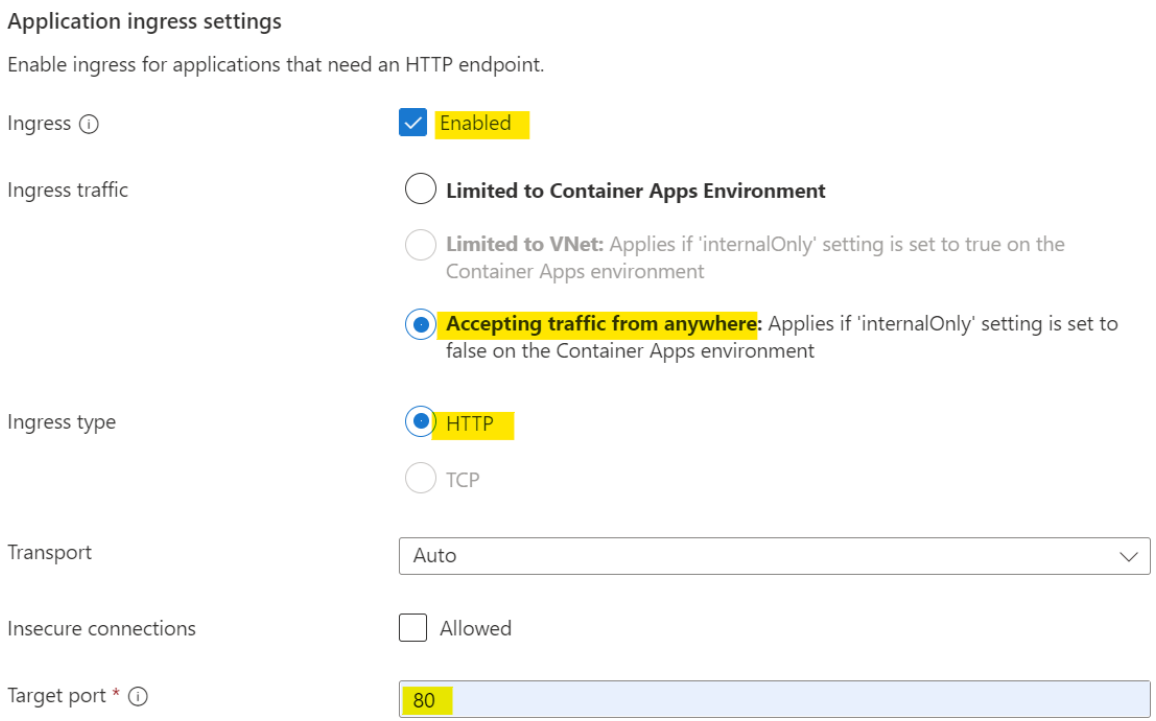
[Name] Provide a name for the container **[Image Source]** Select [Docker Hub or other registries] **[Image type]** Select [Public]

[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 …



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 ...

Passed

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]

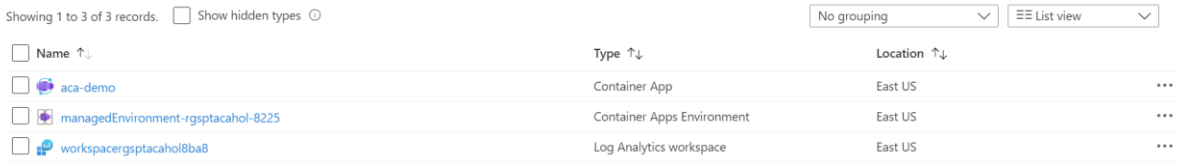
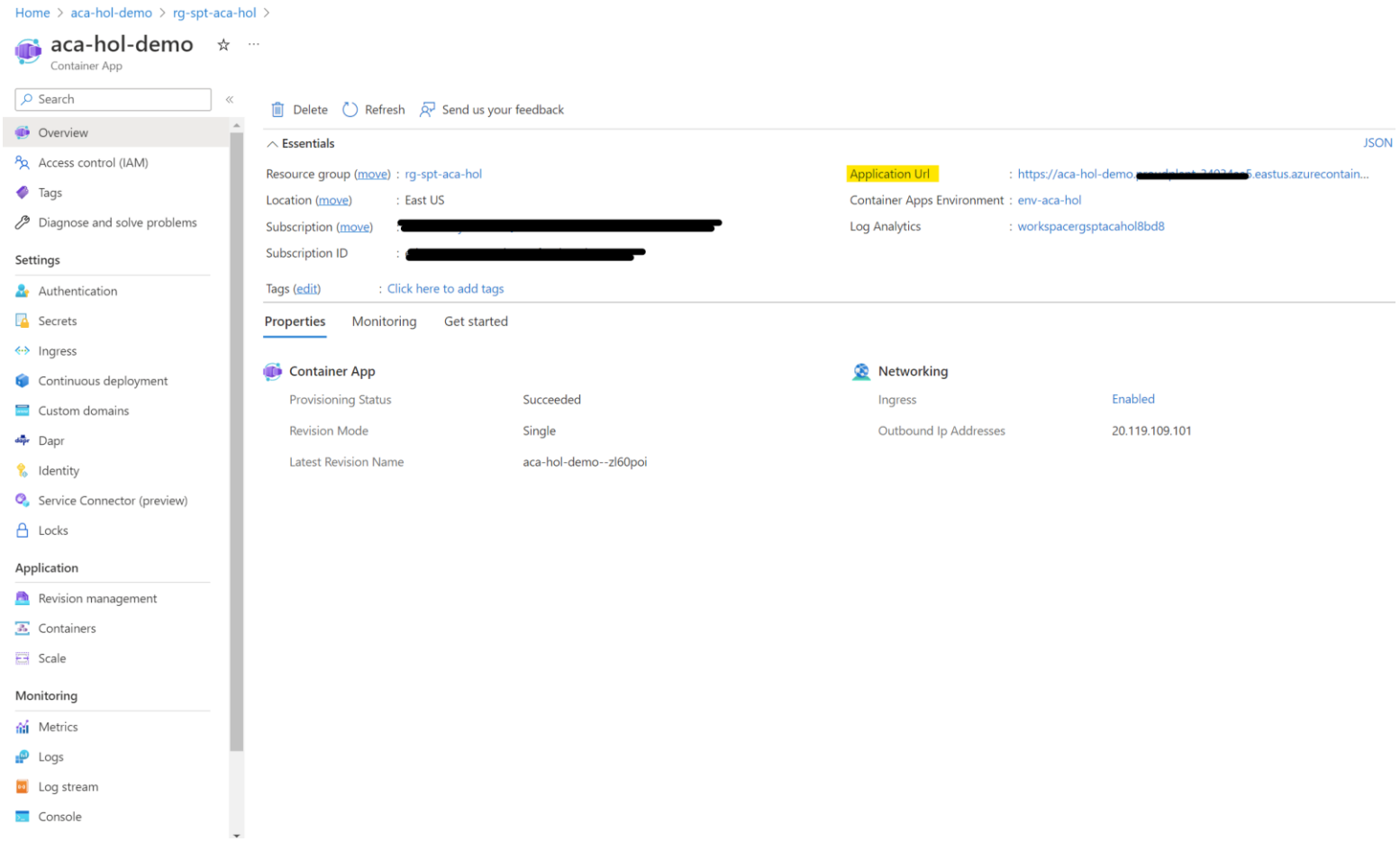


Fig. 1



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.