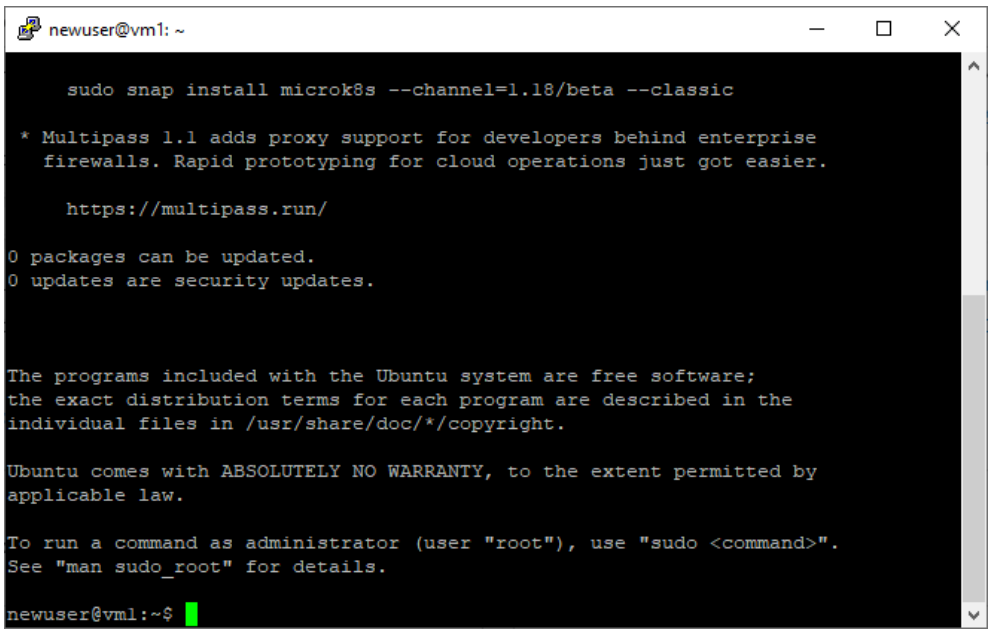
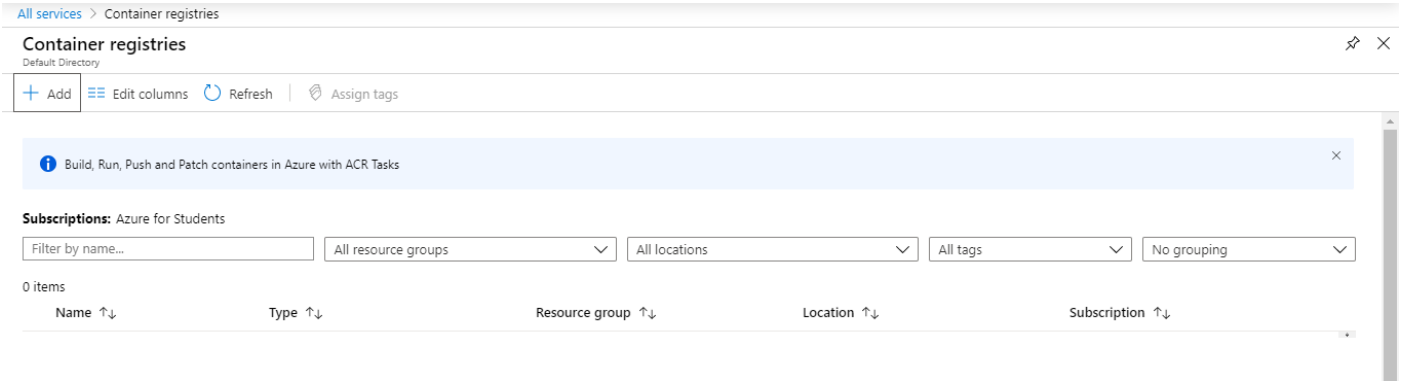
Azure 104 Module 5: Hands-on:2

Publishing and Automating Image Deployment to Azure Container Registry

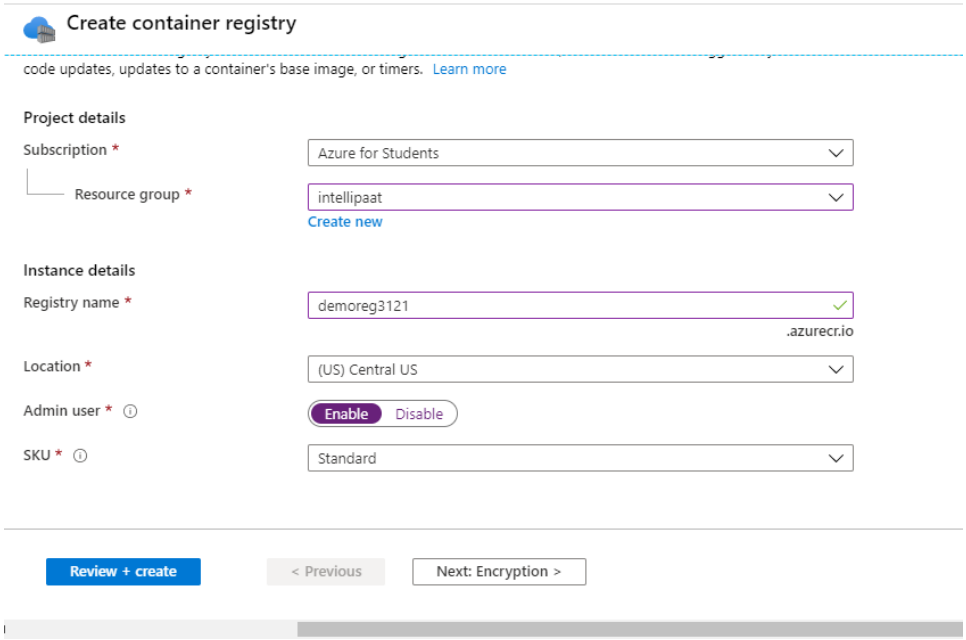
Step 1: Deploy an Ubuntu virtual machine and install the Azure CLI and Docker.



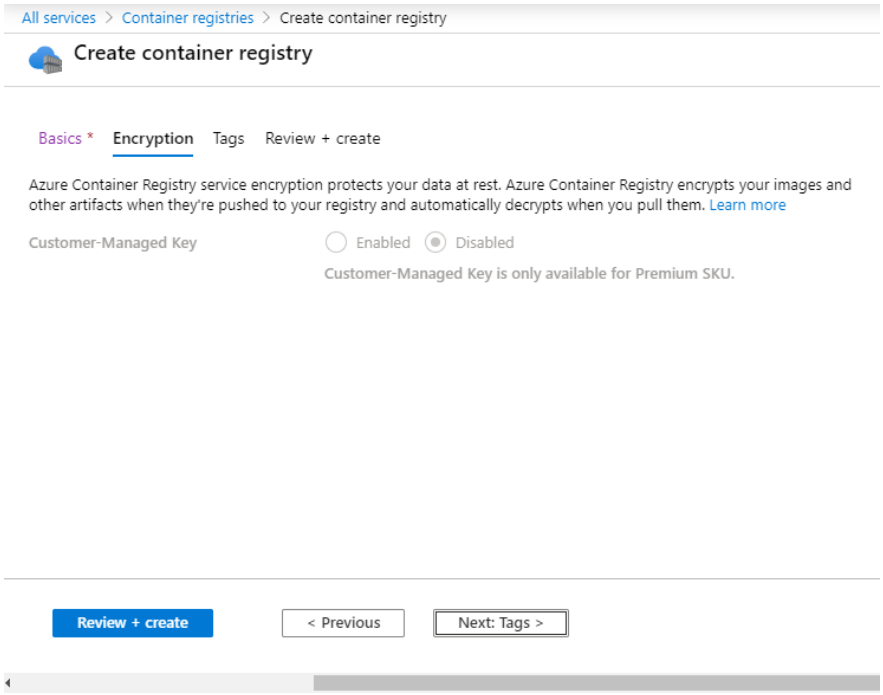
Step 2: Search for **Container registries** and click on it; and then, click on **Add**



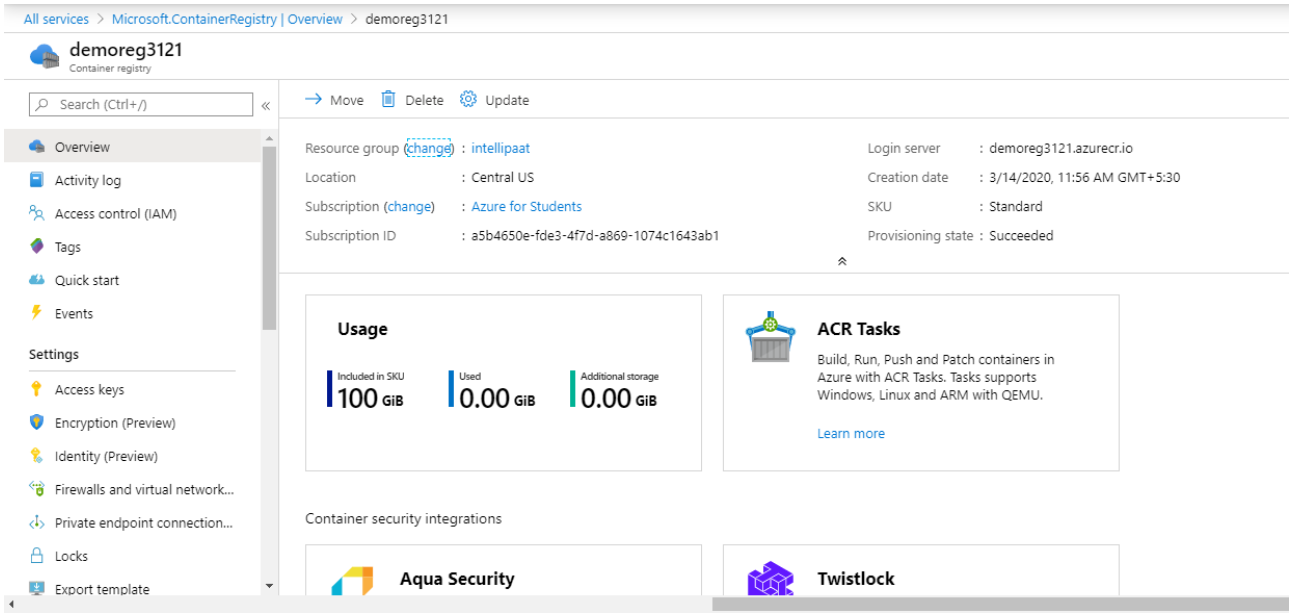
Step 3: Enter details such as the resource group and the name of the registry and switch the Admin user to **Enable**. Then, click on **Next: Encryption**



Step 4: Here, enter the Encryption details, if any, and then click on **Review + create**



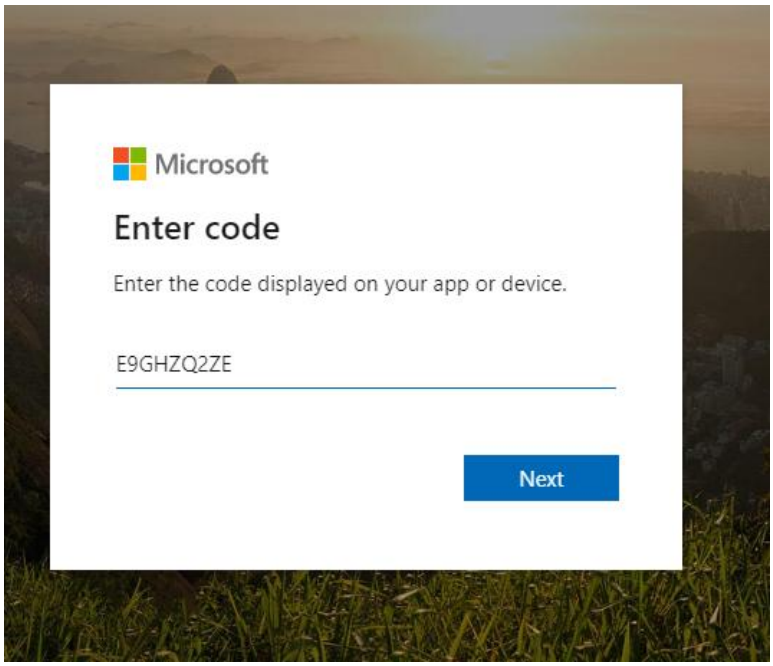
Step 5: Once the resource has been deployed, copy the name of the container registry



Step 6: Go to the Ubuntu machine and type the command **az login** to log into Azure Portal. It will provide you with a code to authenticate

```
root@vm1:/home/newuser# az login
To sign in, use a web browser to open the page https://microsoft.com/devicelogin
 and enter the code E9GHZQ2ZE to authenticate.
^Croot@vm1:/home/newuser#
```

Step 7: Enter the code to authenticate



Step 8: Connect to the Azure container registry with the command:

```
az acr login –name <name of the container registry>
```

```
root@vm1:/home/newuser# az acr login --name demoreg3121
Login Succeeded
root@vm1:/home/newuser#
```

Step 9: Pull an image 'hello-world' using the command **docker pull hello-world** and tag it using the docker tag command:

```
docker tag <image name><destination address of the image>
```

Now, follow these commands to push the image into the container registry and run it

```
> docker push demoreg3121.azurecr.io/hello-world:v1

>docker run demoreg3121.azurecr.io/hello-world:v1
```

```
root@vm1: /home/newuser
root@vm1:/home/newuser# docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
1b930d010525: Pull complete
Digest: sha256:f9dfddf63636d84ef479d645ab5885156ae030f611a56f3a7ac7f2fdd86d7e4e
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest
root@vm1:/home/newuser# docker tag hello-world demoreg3121.azurecr.io/hello-world:v1
root@vm1:/home/newuser# docker push demoreg3121.azurecr.io/hello-world:v1
The push refers to repository [demoreg3121.azurecr.io/hello-world]
af0b15c8625b: Pushed
v1: digest: sha256:92c7f9c92844bbbb5d0a101b22f7c2a7949e40f8ea90c8b3bc396879d95e899a size: 524
root@vm1:/home/newuser# docker run demoreg3121.azurecr.io/hello-world:v1

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
```

Step 10: Go to the Azure container registry in Azure Portal and click on **Repositories**. Refresh it to be able to see the repositories that have been pushed by you