

Assignment 1

CLOUDS COURSE

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1 Create a free Azure account

Did you run into any problems with creating an Azure account?

No, everything went as expected.

2 Deploy a website on Virtual Machine

What is the VM instance type you used? How many cores and memory does it have?

Standard B1s. 2 virtual core, 1GiB RAM.

What is the size of the virtual disk used by the VM? What type is it?

Resource Disk Size: 4GiB. Standard SSD.

What is the public ip address of the VM where we can access your site?

<http://20.23.240.47>

3 Provision disks in VM and measure IOPS

What VM type did you resize to? What is the difference in spec between this type and the one you used before?

Resized to DS2_v2. 2 virtual cores, 7GiB RAM. Supports 6 more data disks in comparison to B1s. Max IOPS is higher - 6400 vs 320. More temporary storage - 14GiB vs 4GiB.

What type of disks did you add? What were their sizes? According to Azure, what is their expected sequencing bandwidth and random IOPS?

One Premium SSD LRS (P1) and one Standard SSD LRS (E1) of 4GB each.

Type	Bandwidth	Max. IOPS
Standard	60MB/s	600
Premium	170MB/s	3,500

Table 1: From Azure's comparison chart for

What is the sequencing bandwidth and random IOPS you measured with FIO?

```
sudo fio \
  --name=randrw \
  --ioengine=libaio \
  --iodepth=1 \
  --rw=randrw \
  --bs=64k \
  --direct=1 \
  --size=128m --numjobs=8 --runtime=300 \
  --group_reporting \
  --runtime=60 \
  --time_based \
```

Type	Bandwidth (R, W)	Avg. IOPS (R, W)
Standard	19.0MiB/s, 19.3MiB/s	304.24, 309.13
Premium	82.8MiB/s, 82.7MiB/s	1325.48, 1324.69

Table 2: Fio benchmark test results

4 Deploy dockerized static site via Azure ACR

What is the public ip address of the ACI deployed container instance where we can access your site?

<http://20.86.208.250>

What is the size of the container image used? (You can find this by listing the size of all images in your container registry)

~56MB

5 Create Azure webapp static site

What is the public address of the webapps static site?

<https://clouds-cwa.azurewebsites.net/>

6 Deploy static site on Azure Blob Store

What is the public address of the Blob store static site?

<https://cloudsblob.z6.web.core.windows.net/>

7 Summary Questions.

You should have created a RG for each assignment separately. Report the cost distribution across various RGs that you can find in Azure Cost Analysis under Cost Management.

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