

REPORT

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Clouds Course

Assignment 1 Deliverable

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1 Create a free Azure account

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

Your answer: Having to deal with the personal account before hand was confusing but finally the Azure Account was credited using the EURECOM's email address.

2 Deploy a website on Virtual Machine

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

Your answer:

```
VM_SIZE=$(az vm show --name lab1-vm \
  --resource-group lab1-resources --query "hardwareProfile.vmSize" -o tsv)
az vm list-sizes --location east-us --query "[?name=='$VM_SIZE']" -o table
```

Returns

MaxDataDiskCount	MemoryInMB	Name	NumberOfCores	OsDiskSizeInMB	ResourceDiskSizeInMB
2	512	Standard_B1ls	1	1047552	4096

- Name: Standard_B1ls (The VM instance type).

- NumberOfCores: 1 (This instance has 1 core).
- MemoryInMB: 512 MB (The VM has 512 MB of RAM).

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

Your answer:

```
az vm show --name lab1-vm --resource-group lab1-resources \
--query "storageProfile.osDisk.{Size:diskSizeGb, Type:managedDisk.storageAccountType}" -o table
```

Returns

Size	Type
30	Standard_LRS

- Size: The virtual disk size is defined by the diskSizeGb field (e.g., 30 GB).
- Type: The storage type is defined by the storageAccountType field (e.g., Standard_LRS).

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

Your answer:

```
az vm list-ip-addresses --resource-group lab1-resources --output table
```

Returns

VirtualMachine	PublicIPAddresses	PrivateIPAddresses
lab1-vm	74.235.215.246	10.0.1.4

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?

Your answer:

```
tofu apply -var="vm_size=Standard_DS2_v2" -target=azurerm_linux_virtual_machine.lab1_vm
```

Returns

What type of disks did you add? What were their sizes?

According to Azure, what is their expected sequencing bandwidth and random IOPS?

Your answer:

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

Your answer:

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?

Your answer:

`http://acrclouds2025eurbr.eastus.azurecontainer.io`

What is the size of the container image used?

192MB

(You can find this by listing the size of all images in your container registry)

`docker image ls`

Returns:

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
acrclouds2025eurbr.azurecr.io/static-site	v1	e62dc83210d6	About an hour ago	192MB
static-site	latest	e62dc83210d6	About an hour ago	192MB
nginx	latest	9bea9f2796e2	7 weeks ago	192MB

Your answer:

5 Create Azure webapp static site

What is the public address of the webapps static site?

Your answer:

`https://webappclouds2025eurbr.azurewebsites.net`

6 Deploy static site on Azure Blob Store

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

Your answer:

<https://blobstoreclouds2025eurbr.z13.web.core.windows.net>

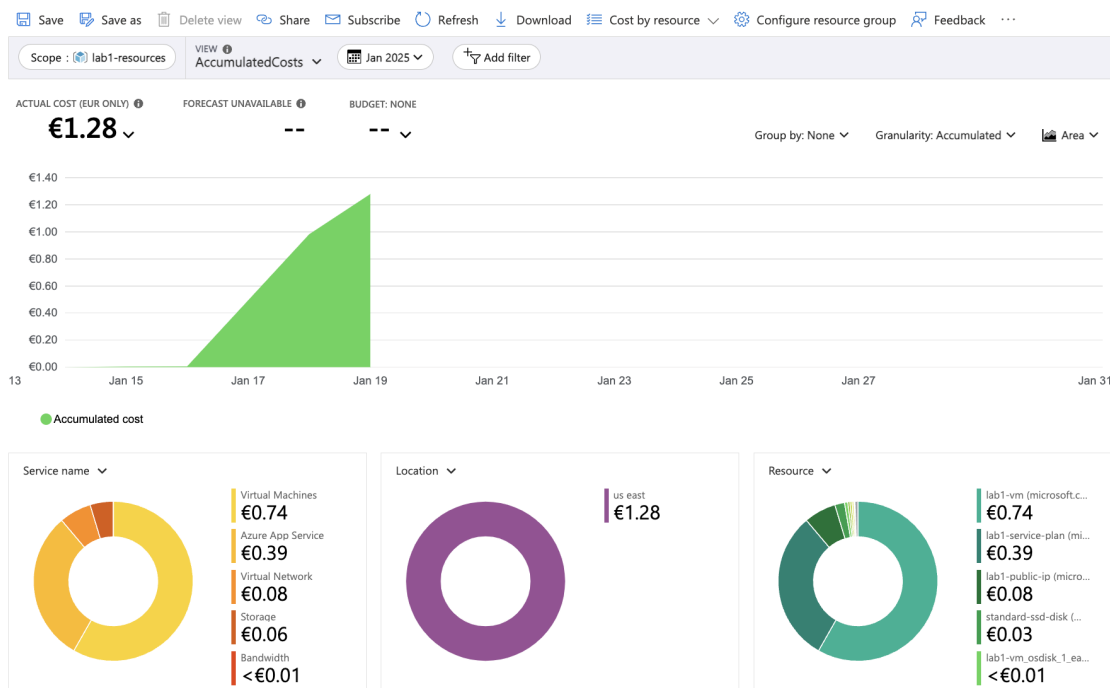
Summary Questions.

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.

Your answer:

For the entire lab (Assigment 1), one resource group was used **lab1-resources**

IaC (Infrastructure as Code), using **OpenTofu** helps saving cost by creating all the infrastructure at once and tearing it down all together when needed. Some extra commands need to applied manually but in general running the scripts takes about 1 minute to launch.



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