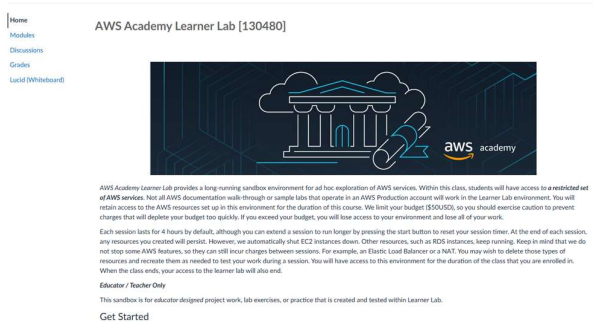


Cloud Computing task 1 Report Max Nummila

This is a report about task 1 in the cloud computing course. The report has screenshots to either show the work done or to support what is written in the report.

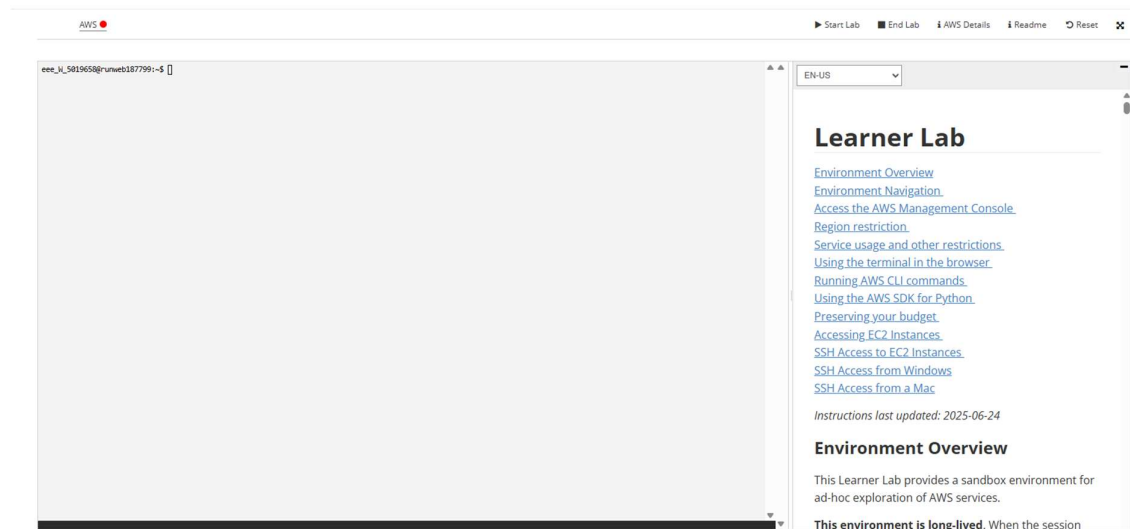


Step 1: Login on the AWS console

Went to modules since the front page told me to get started there.

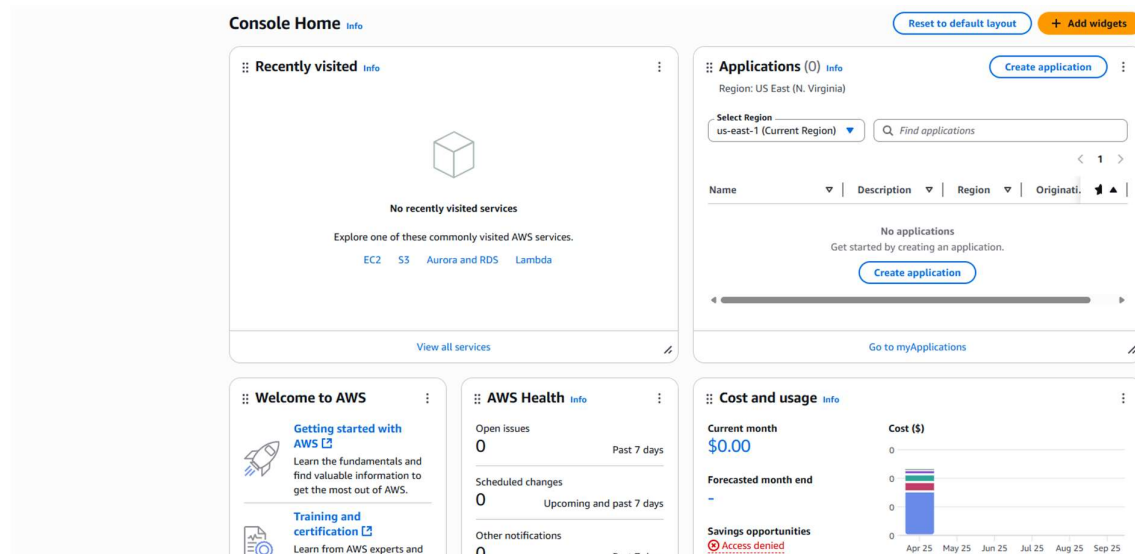


This popped up as a probable next step since it launches the lab.



After agreeing to some terms I got to where I need to be, then I started it with the button

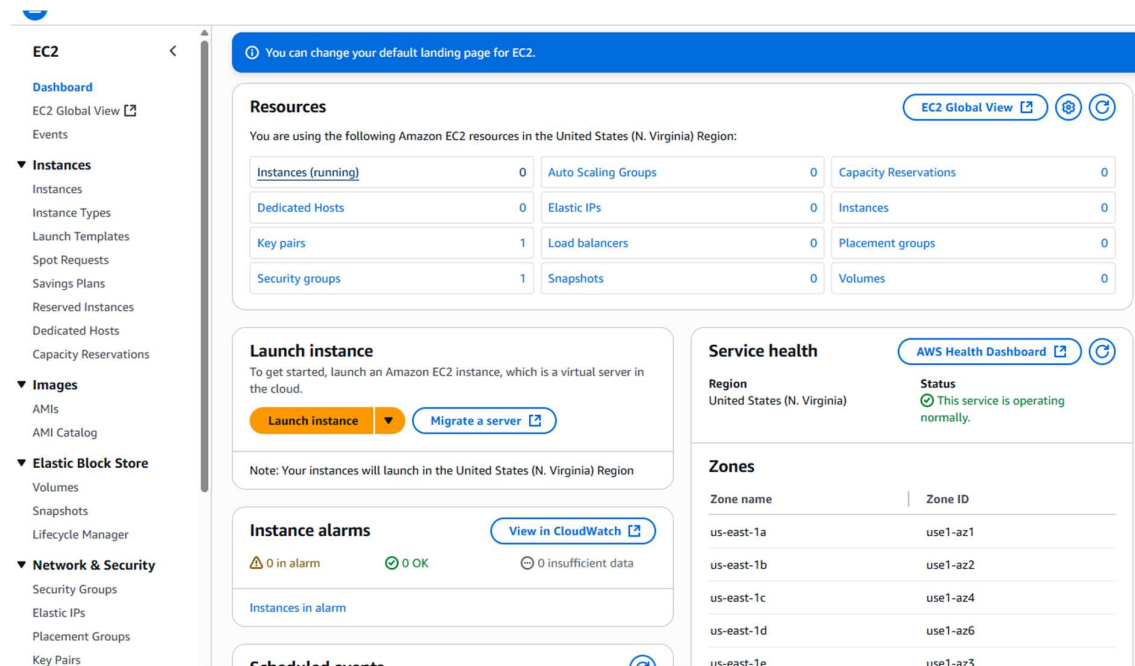
labeled as such. The lab started after a short wait and next was finding the console. The readme told me to press the AWS with the green button and so I did.



Okay, it says console home so step 1 done.

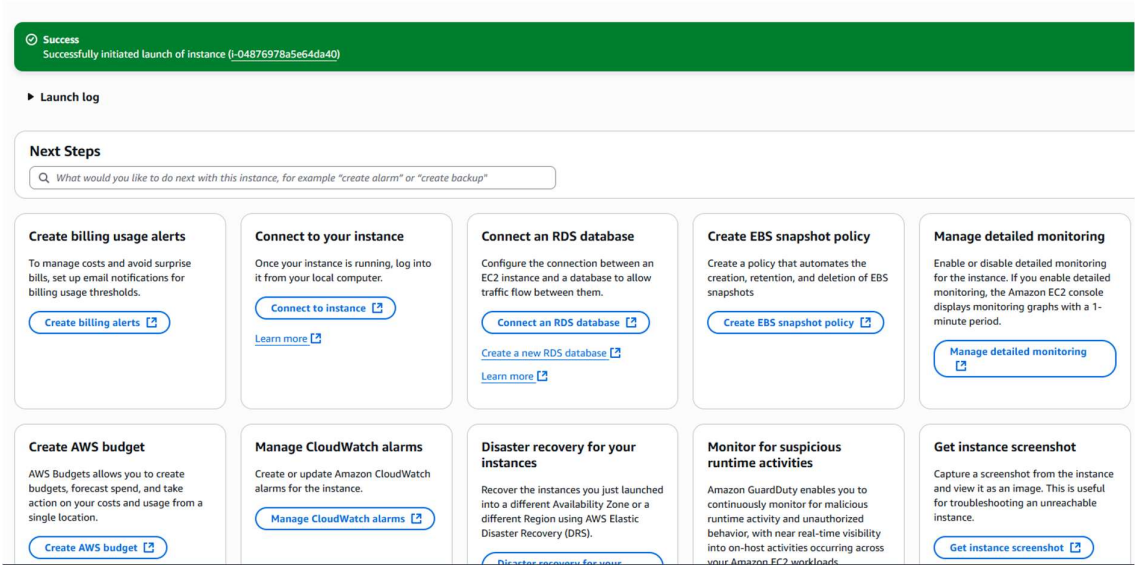
Step 2: Launch an instance via the console

First thought is to press the EC2 since we talked about it on the lecture.



And there it is "Launch instance".

I named it TestLab1 and picked Amazon linux as it is the default, picked t2.micro as it was recommended in the instructions. I created a keypair and made a backup in case of emergency, since incase I would not have the key, I wouldn't be able to SSH to the VM. I left all the network and storage settings except for the HTTP one, which I allowed.



Success, step 2 done.

Step 3: Check the public IP address and public DNS of your newly created VM. Then, using SSH and your key file, connect to your remote VM from your local machine.

So, to find my instance I went back to my instances, and I can already see the public DNS and ipv4. The server is probably somewhere in North Virginia, as that is my region on AWS but I am not sure.

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...
<input type="checkbox"/>	TestLab1	i-04876978a5e64da40	Running	t2.micro	Initializing	View alarms +	us-east-1b	ec2-54-161-255-172.co...	54.161.255.172

Then I use gitbash to find my pem file for the key, which I then chmod 400 to make sure it works in gitbash and is not too open. Then I ssh to it with my key and the ip.

[illegible]

It took a couple of minutes but now it is live.

Step 4: Check if your Linux distribution contains packages to be updated

```
[ec2-user@ip-172-31-83-218 ~]$ sudo yum update
Amazon Linux 2023 Kernel Livepatch repository                200 kB/s | 21 kB    00:00
=====
WARNING:
  A newer release of "Amazon Linux" is available.

Available Versions:

Version 2023.8.20250908:
  Run the following command to upgrade to 2023.8.20250908:

    dnf upgrade --releasever=2023.8.20250908

Release notes:
  https://docs.aws.amazon.com/linux/al2023/release-notes/relnotes-2023.8.20250908.html
=====
Dependencies resolved.
Nothing to do.
Complete!
[ec2-user@ip-172-31-83-218 ~]$
```

Nothing to do, great!

Step 5: Check and report the following information

CPU Model name: Intel Xeon CPU E5-2686 v4

Cache size: L1d 32 KiB, L1i 32 KiB, L2 256 KiB, L3 45 MiB

CPU Clock Speed: 2.30 GHz

CPU Vendor: GenuineIntel

Name of Hypervisor vendor: Xen

```

CPU op-mode(s):      32-bit, 64-bit
Address sizes:       46 bits physical, 48 bits virtual
Byte Order:          Little Endian
CPU(s):              1
On-line CPU(s) list: 0
Vendor ID:            GenuineIntel
Model name:           Intel(R) Xeon(R) CPU E5-2686 v4 @ 2.30GHz
CPU family:           6
Model:                79
Thread(s) per core:   1
Core(s) per socket:   1
Socket(s):            1
Stepping:             1
BogoMIPS:             4600.00
Flags:                fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mc
                    flush mmx fxsr sse sse2 ht syscall nx rdtscp lm constant
                    xtopology cpuid tsc_known_freq pni pclmulqdq ssse3 fma
                    se4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave
                   ervisor lahf_lm abm cpuid_fault invpcid_single pti fsgs
                    bmi2 erms invpcid xsaveopt

Virtualization features:
Hypervisor vendor:    Xen
Virtualization type:   full
Caches (sum of all):
L1d:                   32 KiB (1 instance)
L1i:                   32 KiB (1 instance)
L2:                    256 KiB (1 instance)
L3:                    45 MiB (1 instance)
NUMA:
NUMA node(s):          1
NUMA node0 CPU(s):     0

```

Step 6: Still from your VM, execute the following command line

After missing a space I completed this

```

[ec2-user@ip-172-31-83-218 ~]$ curl "vm4460.kaj.pouta.csc.fi/logs.php?name=Max_Nummila">log.dat
-bash: curlvm4460.kaj.pouta.csc.fi/logs.php?name=Max_Nummila: No such file or directory
[ec2-user@ip-172-31-83-218 ~]$ curl "vm4460.kaj.pouta.csc.fi/logs.php?name=Max_Nummila">log.dat
 % Total    % Received % Xferd  Average Speed   Time    Time     Current
                                 Dload  Upload   Total   Spent    Left     Speed
100  127  100  127    0    0   314      0 --:--:-- --:--:-- --:--:--   314
[ec2-user@ip-172-31-83-218 ~]$

```

Step 7: download the created log.dat file on your computer

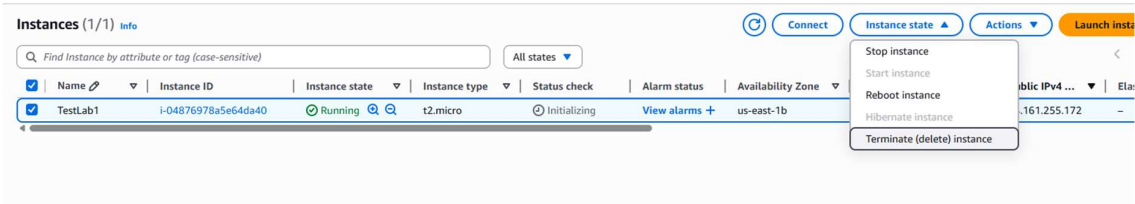
```

maxnu@VitPC MINGW64 /
$ scp -i ~/Downloads/max-awsacademy.pem ec2-user@54.161.255.172:~/log.dat ~/Down
loads/
log.dat                                100% 127    0.5KB/s   00:00

```

Easy enough with the scp command

Step 8: You are done with the VM! Remember to kill your VM!



That should do it.

Step 9: log.dat file

Name: Max_Nummila -- 54.161.255.172 -- ec2-54-161-255-172.compute-1.amazonaws.com -- 192.168.1.14 -- 1757518539 -- curl/8.11.1

Reflection

Have you learned anything completely new?

Yes, I have studied cloud computing a bit during my own time but I hadn't actually used any AWS services before.

Did anything surprise you?

The layout of the Amazon services were more user and beginner friendly than I expected, which was a pleasant surprise.

Did you find anything challenging? Why?

-

Did you find anything satisfying? Why?

Completing the tasks, felt nice actually doing hands on learning again after so much theory last year, and during my own free time learning about the topic.