

# KN02:

## A) Umgang mit AWS Kurs (20%)

Einladung angenommen und Account erstellt.

## B) Instanz erstellen (40%)

The screenshot shows the AWS CloudFormation console. On the left, under 'Schlüsselpaare - Pflichtfeld', 'Elif1' is selected. On the right, the 'Übersicht' panel shows '1' instance. Below, the configuration details for the instance are shown, including a security group rule allowing SSH access from 0.0.0.0/0.

Als kurzer Text/Aufzählung geben Sie die folgenden Einstellungen zu Ihrer Instanz an:  
Diskgrösse, Betriebssystem, Grösse des RAM, Anzahl der CPUs:

1GiB Arbeitsspeicher, 1cVPU, Plattform: Linux/UNIX

## C) Zugriff mit SSH-Key (40%)

Screenshot mit dem ssh-Befehl und des Resultats unter Verwendung des **ersten** Schlüssels

```
PS C:\Users\elifb> ssh ubuntu@54.174.91.4 -i C:\Users\elifb\Downloads\Elif1.pem -o ServerAliveInterval=30
Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.14.0-1015-aws x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/pro

System information as of Tue Nov 18 13:12:46 UTC 2025

System load: 0.92      Processes:           111
Usage of /: 26.2% of 6.71GB  Users logged in: 1
Memory usage: 22%        IPv4 address for enX0: 172.31.24.248
Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Tue Nov 18 13:11:35 2025 from 194.209.11.12
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
```

```
ubuntu@ip-172-31-24-248:~$ ssh-keygen -f C:\Users\elifb\.ssh\Elif2.pem -t rsa -b 2048 -C max
Generating public/private rsa key pair.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in C:Userselifb.sshElif2.pem
Your public key has been saved in C:Userselifb.sshElif2.pem.pub
The key fingerprint is:
SHA256:R/PoIrKx3CIzfpUeMAB3svstYn9toez6ABXgK3moSiE max
The key's randomart image is:
+---[RSA 2048]---+
| ..+.o |
| o+. . |
| o.. o |
| o +o . o |
| E.+ = oS... |
| ...o o .+.o |
| .. o =+.+.o |
| o .++++=o.o |
| . . .*=o=. |
+---[SHA256]---+
```

```
ubuntu@ip-172-31-24-248:~$ ssh-keygen -f C:\Users\elifeb\.ssh\Elife1.pem -t rsa -b 2048 -C max
Generating public/private rsa key pair.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in C:\Users\elifeb\.ssh\Elife1.pem
Your public key has been saved in C:\Users\elifeb\.ssh\Elife1.pem.pub
The key fingerprint is:
SHA256:2W0tSwj+0weKngHnZRUWddFBn7jVuqmpUympBuIPZQg max
The key's randomart image is:
+---[RSA 2048]---+
|          .+=|
|          ...=|
| E       . o. oo|
| . . . + + oo. |
| . o S o.Boo |
| .o. oo*o+ o |
| ... o.*oo + |
| .. o+=.. + |
| .. o++ .oo |
+---[SHA256]---+
```

```
ubuntu@ip-172-31-24-248:~$ ssh-keygen -y -f C:\Users\elibf\.ssh\Elibf1.pem > C:\Users\elibf\.ssh\Elibf1.pub  
ubuntu@ip-172-31-24-248:~$ ssh-keygen -y -f C:\Users\elibf\.ssh\Elibf2.pem > C:\Users\elibf\.ssh\Elibf2.pub  
ubuntu@ip-172-31-24-248:~$ ssh-keygen -y -f C:\Users\elibf\.ssh\Elibf2.pem > C:\Users\elibf\.ssh\Elibf2.pub  
ubuntu@ip-172-31-24-248:~$ |
```

Screenshot mit dem ssh-Befehl und des Resultats unter Verwendung des **zweiten** Schlüssels:

```
ubuntu@ip-172-31-24-248:~$ ssh ubuntu@54.174.91.4 -i C:\Users\elifb\Downloads\Elif2.pem -o ServerAliveInterval=30
Warning: Identity file C:/Users/elifb/Downloads/Elif2.pem not accessible: No such file or directory.
The authenticity of host '54.174.91.4 (54.174.91.4)' can't be established.
ED25519 key fingerprint is SHA256:nafZQFJ3Qcm4GzNcdMejzpe7uB/qVtz9uP4cM8XZ278.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '54.174.91.4' (ED25519) to the list of known hosts.
ubuntu@54.174.91.4: Permission denied (publickey).
```

Screenshot der Instanz-Detail (oder Liste), so dass der verwendete Schlüssel sichtbar ist:

Instances (1/1) <small>Alle</small>	<small>Verbinden</small>	<small>Instances</small>															
Name	Instance-ID	Instance-Status	Instance-Typ	Statusüberprüfung	Alarmstatus	Availability Zone	Öffentlicher IPv4-DNS	Öffentliche IP	Static IP	IPv6-IPs	Überwachung	Name der Sicherheit	Schlüssel	Startzeit	Plattform	Verwaltet	Operator
KN25-EBI	1f5ecccdb474f049	LUft	g	0,2.millis	5/2 Prüfungen be Alle anzeigen	eu-central-1a	e2.54-174.91-4c.com	54.174.91.4	-	-	disabled	cloud-watch-1	EBI	2025/11/18 15:35 CEST+1	Linux/UNIX	Falsch	-