

Homework Week 2 - EC2

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1. Log in to AWS



Sign in as IAM user

Account ID (12 digits) or account alias

ceu

IAM user name

kucukoglu_ersan@student.ceu.edu

Password

.....

☐ Remember this account

Sign in

[Sign in using root user email](#)

[Forgot password?](#)

2. Create a Security Group + Configure the Security group. Call the group “secgroup- <your student id>-homework”

The screenshot shows the AWS Management Console interface. On the left is a navigation menu with categories like EC2, Instances, Images, Elastic Block Store, and Network & Security. The main content area displays the details of a security group named 'sg-0c5846650984d3ce3 - secgroup-1904225-homework'. A green banner at the top indicates the security group was created successfully. Below this, the 'Details' tab is active, showing a table with fields: Security group name, Security group ID, Description, VPC ID, Owner, Inbound rules count, and Outbound rules count. Below the details, there are tabs for 'Inbound rules', 'Outbound rules', and 'Tags'. The 'Inbound rules' tab is selected, showing a table with 2 rules. The first rule is a Custom TCP rule on port 2345, and the second is an HTTP rule on port 80. Both rules have a source of 0.0.0.0/0.

Security group (sg-0c5846650984d3ce3 | secgroup-1904225-homework) was created successfully

EC2 > Security Groups > sg-0c5846650984d3ce3 - secgroup-1904225-homework

sg-0c5846650984d3ce3 - secgroup-1904225-homework

Details

Security group name	Security group ID	Description	VPC ID
sg-0c5846650984d3ce3	sg-0c5846650984d3ce3	secgroup-1904225-homework	vpc-cf69a3a9
Owner	Inbound rules count	Outbound rules count	
455745865449	2 Permission entries	1 Permission entry	

Inbound rules (2)

Name	Security group rule...	IP version	Type	Protocol	Port range	Source	Des
-	sg-024b35f6510205a3a	IPv4	Custom TCP	TCP	2345	0.0.0.0/0	-
-	sg-0e52a7db203a5ac90	IPv4	HTTP	TCP	80	0.0.0.0/0	-

3. Create a Keypair, call them call it "kp-<your student id>-homework". Download the keypair

Key pair

A key pair, consisting of a private key and a public key, is a set of security credentials that you use to prove your identity when connecting to an instance.

Name

The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type [Info](#)

☒ RSA

☐ ED25519

Private key file format

☒ .pem
For use with OpenSSH

☐ .ppk
For use with PuTTY

Tags (Optional)

No tags associated with the resource.

Add tag

You can add 50 more tags.

CancelCreate key pair

4. Start creating a t4g.nano instance using the Custom AMI we used in the class.

1. Choose AMI2. Choose Instance Type3. Configure Instance4. Add Storage5. Add Tags6. Configure Security Group7. Review

Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: [All instance families](#) [Current generation](#) [Show/Hide Columns](#)

Currently selected: t4g.nano (- ECUs, 2 vCPUs, 2.5 GHz, ~, 0.5 GiB memory, EBS only)

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GiB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input checked="" type="checkbox"/>	t4g	t4g.nano	2	0.5	EBS only	Yes	Up to 5 Gigabit	Yes
<input type="checkbox"/>	t4g	t4g.micro	2	1	EBS only	Yes	Up to 5 Gigabit	Yes
<input type="checkbox"/>	t4g	t4g.small	2	2	EBS only	Yes	Up to 5 Gigabit	Yes
<input type="checkbox"/>	t4g	t4g.medium	2	4	EBS only	Yes	Up to 5 Gigabit	Yes
<input type="checkbox"/>	t4g	t4g.large	2	8	EBS only	Yes	Up to 5 Gigabit	Yes
<input type="checkbox"/>	t4g	t4g.xlarge	4	16	EBS only	Yes	Up to 5 Gigabit	Yes
<input type="checkbox"/>	t4g	t4g.2xlarge	8	32	EBS only	Yes	Up to 5 Gigabit	Yes
<input type="checkbox"/>	c6g	c6g.medium	1	2	EBS only	Yes	Up to 10 Gigabit	Yes
<input type="checkbox"/>	c6g	c6g.large	2	4	EBS only	Yes	Up to 10 Gigabit	Yes

CancelPreviousReview and LaunchNext: Configure Instance Detail

5. Check the price of this instance on ec2instances.info

Region: Europe (Ireland)Pricing Unit: InstanceCost: HourlyReserved: 1-year - No UpfrontColumnsCompare SelectedClear FiltersCSV

Filter: Min Memory (GiB): 0Min vCPUs: 0Min Memory/vCPU (GiB/vCPU): 0Min Storage (GiB): 0Search:

Name	API Name	Memory	vCPUs	Instance Storage	Network Performance	Linux On Demand cost	Linux Reserved cost	Linux Spot Minimum cost	Windows On Demand cost	Windows Reserved cost
t4	<input type="text" value="Search"/>	0.5	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>
T4G Nano	t4g.nano	0.5 GiB	2 vCPUs	EBS only	Up to 5 Gigabit	\$0.004600 hourly	\$0.002900 hourly	\$0.001400 hourly	unavailable	unavailable

6. Set your security group

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

Step 6: Configure Security Group

Security Group	Default	Copy to new
sg-0088eabf9329802d	Dani_sec_group	Copy to new
sg-f25b8f88	default	Copy to new
sg-055288b91fc09fb4a	launch-wizard-1	Copy to new
sg-0ef74d47a709b94ec	launch-wizard-2	Copy to new
sg-069649edd09674240	launch-wizard-3	Copy to new
sg-0c1680f6ba45b29b9	launch-wizard-4	Copy to new
sg-0602e4cc83c241bc4	launch-wizard-5	Copy to new
sg-0d79e4dce9b4e17f	oskar-security-group	Copy to new
sg-0c31eb2cd151a0948	peterkaisersecuritygroup	Copy to new
sg-04b129d91f2dd14cb	sabina-security-group	Copy to new
sg-05d3bbd77b38f558e	salgabri_security_group	Copy to new
sg-0c5846650984d3ce3	segroup-1904225-homework	Copy to new
sg-0322bbc1ed1e8d506	windows-demo-vm	Copy to new
sg-022974e4bfe0bde1	xibei	Copy to new
sg-054b85edc53c7b3b2	zoltan-test	Copy to new

Inbound rules for sg-0c5846650984d3ce3 (Selected security groups: sg-0c5846650984d3ce3)

Type	Protocol	Port Range	Source	Description
HTTP	TCP	80	0.0.0.0/0	
Custom TCP Rule	TCP	2345	0.0.0.0/0	

7. Set your keypairs and start the instance

Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance. Amazon EC2 supports ED25519 and RSA key pair types.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

Choose an existing key pair

Select a key pair

kp-1904225-homework | RSA

☒ I acknowledge that I have access to the corresponding private key file, and that without this file, I won't be able to log into my instance.

Cancel Launch Instances

8. Go to the instance page of your instance

EC2 > Instances > i-0f6008bbeb8f3f16a

Instance summary for i-0f6008bbeb8f3f16a

Updated less than a minute ago

Public IPv4 address copied 52.214.33.96 | open address

Instance state: Running

Instance type: t4g.nano

AWS Compute Optimizer finding: User: arn:aws:iam::455745865449:user/kucukoglu_ersan@student.cau.edu is not authorized to perform: compute-optimizer:GetEnrollmentStatus on resource: * because no identity-based policy allows the compute-optimizer:GetEnrollmentStatus action. Retry

Private IPv4 addresses: 172.31.10.203

Public IPv4 DNS: ec2-52-214-33-96.eu-west-1.compute.amazonaws.com | open address

Elastic IP addresses: -

IAM Role: -

Instance ID: i-0f6008bbeb8f3f16a

IPv6 address: -

Private IPv4 DNS: ip-172-31-10-203.eu-west-1.compute.internal

VPC ID: vpc-cf69a3a9 (DEFAULT VPC)

Subnet ID: subnet-2fec0749 (dd - laszlo.sallio)

Details Security Networking Storage Status checks Monitoring Tags

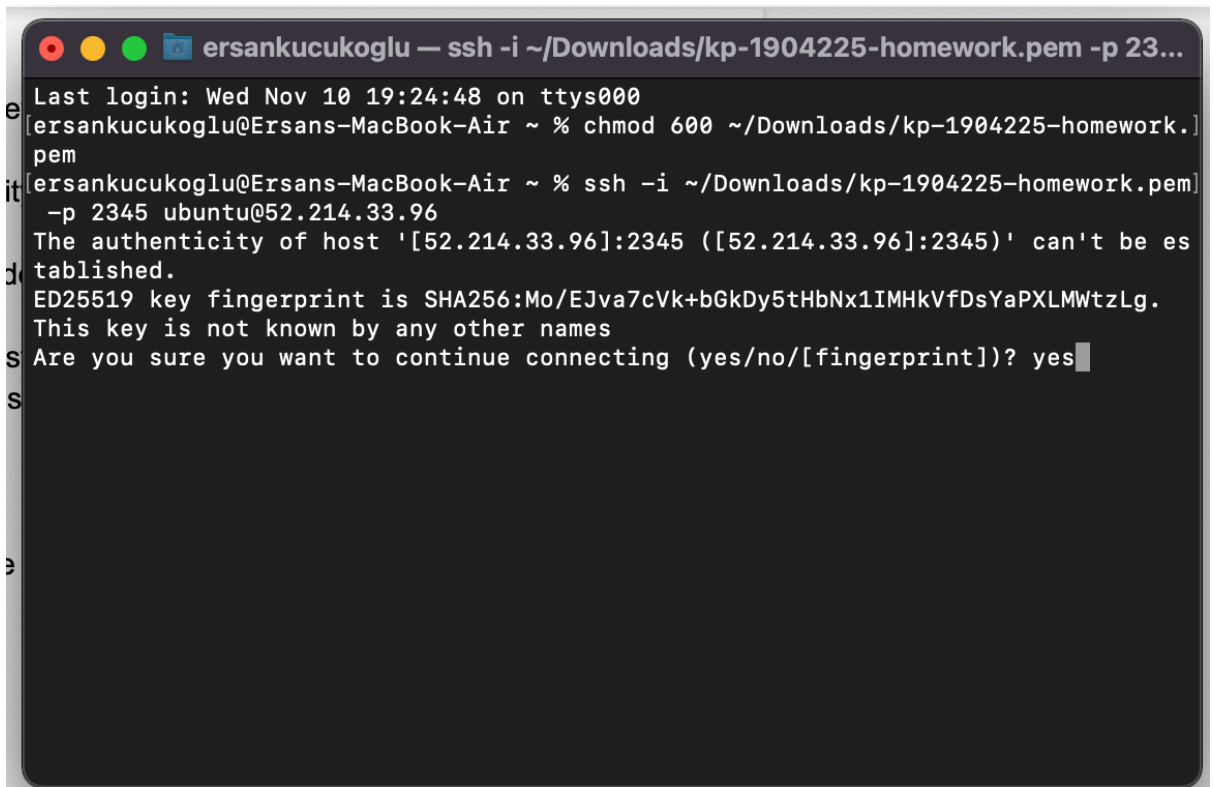
Instance details info

Platform: Linux/UNIX (Inferred)

AMI ID: ami-Oeaba29c599955307

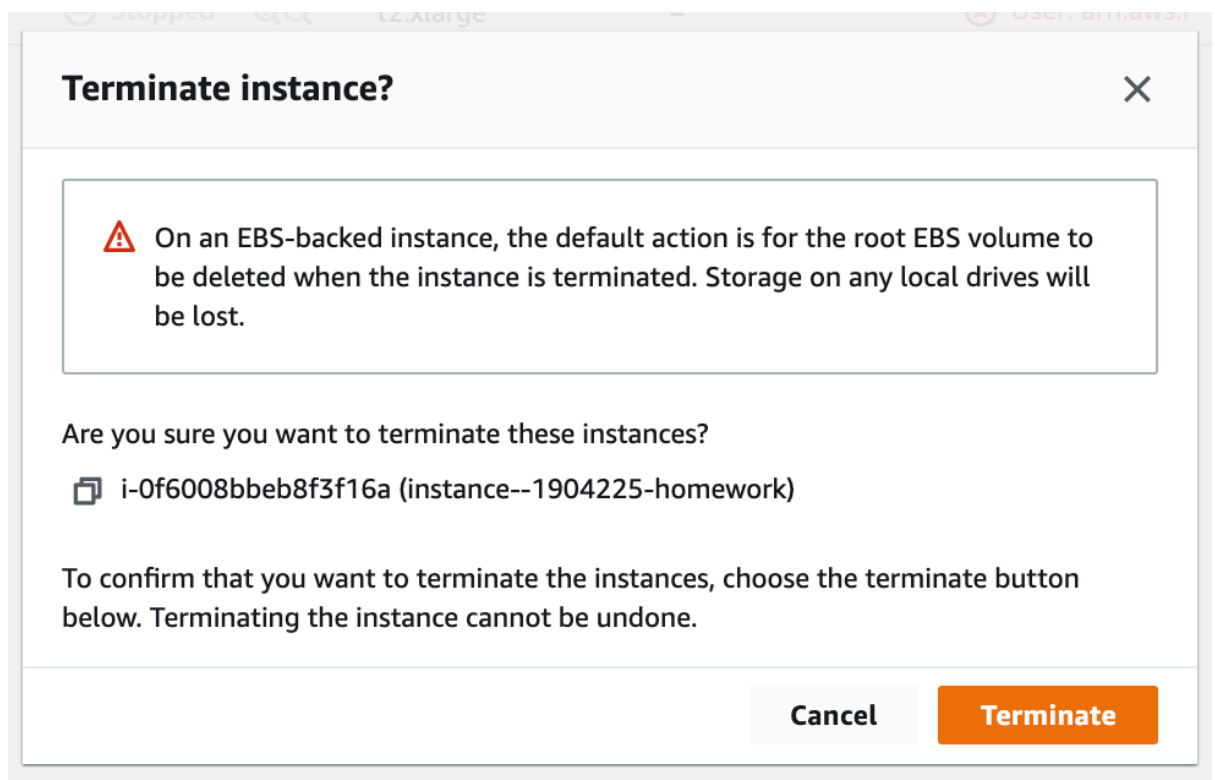
Monitoring: disabled

9. Use Putty or a terminal to SSH into the instance

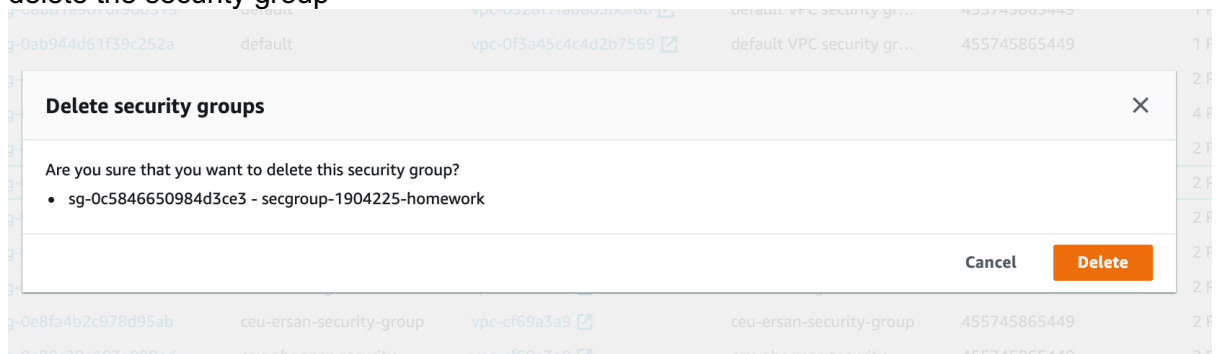


```
ersankucukoglu — ssh -i ~/Downloads/kp-1904225-homework.pem -p 23...
Last login: Wed Nov 10 19:24:48 on ttys000
[ersankucukoglu@Ersans-MacBook-Air ~ % chmod 600 ~/Downloads/kp-1904225-homework.]
pem
[ersankucukoglu@Ersans-MacBook-Air ~ % ssh -i ~/Downloads/kp-1904225-homework.pem]
-p 2345 ubuntu@52.214.33.96
The authenticity of host '[52.214.33.96]:2345 ([52.214.33.96]:2345)' can't be es
tablished.
ED25519 key fingerprint is SHA256:Mo/EJva7cVk+bGkDy5tHbNx1IMHkVfDsYaPXLmwTzLg.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
```

10. Terminate the instance



11. delete the security group



12. delete the keypair

