

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
НАЦІОНАЛЬНИЙ ТЕХНІЧНИЙ УНІВЕРСИТЕТ
«ДНІПРОВСЬКА ПОЛІТЕХНІКА»



ФАКУЛЬТЕТ ІНФОРМАЦІЙНИХ ТЕХНОЛОГІЙ
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Практична робота №5
з дисципліни
«Аналіз програмного забезпечення»

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Практична робота №5

AWS EC2

Мета роботи: набування навичок створення та розміщення віртуального сервера за допомогою AWS EC2.

Administrator

x8u-d5%d.KOKZFWOp15as9LJX\$RzxnC

The screenshot displays the AWS Management Console interface for launching an EC2 instance. The browser tabs at the top include 'Cloud Computing Services', 'AWS Console - Sign in', 'Billing and Cost Manager', 'Launch an instance', 'Instance details | EC2', and 'Launch an instance'. The address bar shows the URL: `eu-north-1.console.aws.amazon.com/ec2/home?region=eu-north-1#LaunchInstances`. The console header shows the AWS logo, a search bar, and the account ID: 5210-3724-6940, with the user name 'AndreyFokin'.

The main content area is titled 'Launch an instance' and features a 'Quick Start' tab. Under 'Recents', there are buttons for various operating systems: Amazon Linux, macOS, Ubuntu, Windows, Red Hat, SUSE Linux, and Debian. The 'Amazon Linux 2023 kernel-6.1 AMI' is selected, showing its ID: `ami-0f50f13aefb6c0a5d` and its architecture: `x86_64`. The 'Description' section states: 'Amazon Linux 2023 (kernel-6.1) is a modern, general purpose Linux-based OS that comes with 5 years of long term support. It is optimized for AWS and designed to provide a secure, stable and high-performance execution environment to develop and run your cloud applications.' The 'Instance type' section is partially visible at the bottom.

The 'Summary' panel on the right provides a overview of the instance configuration:

- Number of instances:** 1
- Software Image (AMI):** Amazon Linux 2023 AMI 2023.9.2...[read more](#)
- Virtual server type (instance type):** t3.micro
- Firewall (security group):** New security group
- Storage (volumes):** 1 volume(s) - 8 GiB

At the bottom of the summary panel, there are buttons for 'Cancel', 'Launch instance', and 'Preview code'.

eu-north-1.console.aws.amazon.com/ec2/home?region=eu-north-1#LaunchInstances:

EC2 > Instances > Launch an instance

Create key pair

Key pairs allow you to connect to your instance securely.

Key pair name

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

Key pair type
☒ RSA
RSA encrypted private and public key pair
☐ ED25519
ED25519 encrypted private and public key pair

Private key file format
☒ .pem
For use with OpenSSH
☐ .ppk
For use with PuTTY

⚠ When prompted, store the private key in a secure and accessible location on your computer. You will need it later to connect to your instance. [Learn more](#)

Cancel Create key pair

Summary
Number of instances
Software image (AMI)
Actual server type (instance type)
Security group
Storage (volumes)
Launch instance
Preview code

eu-north-1.console.aws.amazon.com/ec2/home?region=eu-north-1#Instances:instanceState=running

EC2 > Instances

Instances (1/1)

Find instance by attribute or tag (case-sensitive)
Instance state = running
Clear filters

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4
APZ-Fokin	i-08c849e5b524592dc	Running	m7i-flex.large	3/3 checks passed	View alarms	eu-north-1b	ec2-13-60-252-81

i-08c849e5b524592dc (APZ-Fokin)

Details Status and alarms Monitoring Security Networking Storage Tags

Instance summary

Instance ID i-08c849e5b524592dc	Public IPv4 address 13.60.252.81 open address	Private IPv4 addresses 172.31.34.177
IPv6 address -	Instance state Running	Public DNS ec2-13-60-252-81.eu-north-1.compute.amazonaws.com open address

EC2 > Instances > i-08c849e5b524592dc

EC2

- Dashboard
- AWS Global View
- Events
- Instances**
 - Instances
 - Instance Types
 - Launch Templates
 - Spot Requests
 - Savings Plans
 - Reserved Instances
 - Dedicated Hosts
 - Capacity Reservations
 - Capacity Manager
- Images
 - AMIs
 - AMI Catalog
- Elastic Block Store**
 - Volumes

Instance summary for i-08c849e5b524592dc (APZ-Fokin)

Updated less than a minute ago

Instance ID
i-08c849e5b524592dc

IPV6 address
-

Hostname type
IP name: ip-172-31-34-177.eu-north-1.compute.internal

Answer private resource DNS name
IPv4 (A)

Auto-assigned IP address
13.60.252.81 [Public IP]

IAM Role
-

IMDSv2
Required

Public IPv4 address
13.60.252.81 | [open address](#)

Instance state
Running

Private IP DNS name (IPv4 only)
ip-172-31-34-177.eu-north-1.compute.internal

Instance type
m7i-flex.large

VPC ID
vpc-0d57dbfb9982d3a9d

Subnet ID
subnet-09d4e93e12499fdb0

Instance ARN
arn:aws:ec2:eu-north-1:521037246940:instance/i-08c849e5b524592dc

Private IPv4 addresses
172.31.34.177

Public DNS
ec2-13-60-252-81.eu-north-1.compute.amazonaws.com | [open address](#)

Elastic IP addresses
-

AWS Compute Optimizer finding
[Opt-in to AWS Compute Optimizer for recommendation](#)
[Learn more](#)

Auto Scaling Group name
-

Managed
false

[Connect](#) [Instance state](#) [Actions](#)

EC2 > Instances > i-08c849e5b524592dc > Get Windows password

Use your private key to retrieve and decrypt the initial Windows administrator password for this instance.

Instance ID
i-08c849e5b524592dc (APZ-Fokin)

Key pair associated with this instance
apz-my-key

Private key
Either upload your private key file or copy and paste its contents into the field below.

[Upload private key file](#)

apz-my-key.pem
1.67 KB

Private key contents

```
-----BEGIN RSA PRIVATE KEY-----
MIIEogIBAAKCAQEAkQw9RG3VPGem7AcrkJgzuRITXpbOs26Ma2CeUr8UWUeIwJeZ
sbVryjefuFYhtKyC4l0Y/FWZR+0DCATPFQTS5KZL+IRalv5+PtNzXNE/zb2N9z7G
wb0XaE1hnCspIB5yJ5myVy+vhwSxYw2M2XXFVD/11DcvQLnyZ9qhUzQfgT4tlTJE
TJlJdukj1+07aBNaZmjp/IgvYepOJHFq7wDTqS9BkWyNl7NL6579TEUDPpRQDQb+
Nv/K9KqWCbcACSo/qP2OXAeurutnPFHhGsUGfBL/leqfJjd/gE8CN183Iaso12m
JztzVQFgK563+hk2+f2p+n5Nwu+qqLx57Jw/NwIDAQABAolBAANitP2oUOIESD2Z
AWU2m2eHd1Ns1tSPD0zoi2ZGuVRIUcnhdsk8U7mVsY8V5ZatIoNMwMhHkNED4
-----
```

[Cancel](#) [Decrypt password](#)

Get Windows password



Connect to your Windows instance using Remote Desktop with this information.


Instance ID

 i-08c849e5b524592dc (APZ-Fokin)

Private IP address

 172.31.34.177

Username

 Administrator

Password


 x8u-d5%d.KOKZFWOp15as9LJX\$RzxznC

Password change recommended

We recommend that you change your default password. Note: If a default password is changed, it cannot be retrieved using this tool. It is important that you change your password to one that you will remember.

Cancel

OK

 Windows Security

Enter your credentials

These credentials will be used to connect to 13.60.252.81.

Administrator

Password

DESKTOP-2CV156V\Administrator

☐ Remember me

[More choices](#)

OK

Cancel

