

AWS Cloud Basic

1. Review [Getting Started with Amazon EC2](#). Log Into Your AWS Account, Launch, Configure, Connect and Terminate Your Instance. Do not use Amazon Lightsail. It is recommended to use the t2 or t3.micro instance and the CentOS operating system.

The screenshot shows the AWS Cloud Basic launch process. It starts with the 'Launch an instance' wizard, which asks for a name ('Name and tags') and selects 'CentOS-7-2111-20220330_2 (x86_64)' as the AMI. The instance type is set to 't2.micro'. A summary box on the right provides details like 'Number of instances: 1', 'Software Image (AMI): CentOS-7-2111-20220330_2 (x86_64)', and 'Virtual server type (instance type): t2.micro'. The 'Launch instance' button is highlighted in orange. Below this, a success message indicates the instance was successfully launched with ID i-0f482bae87bd58295, and it lists the successful steps in the launch log.

Launch an instance Info

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags Info

Name Add additional tags

Application and OS Images (Amazon Machine Image) Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below.

Search our full catalog including 1000s of application and OS images

Recents Quick Start

Currently in use

Browse more AMIs

EC2 > Instances > Launch an instance

Success
Successfully initiated launch of instance ([i-0f482bae87bd58295](#))

▼ Launch log

Initializing requests	Succeeded
Creating security groups	Succeeded
Creating security group rules	Succeeded
Launch initiation	Succeeded

Summary

Number of instances Info
1

Software Image (AMI)
CentOS-7-2111-20220330_2 (x86_64) ...read more
ami-0b14f0a2730f8cbd2

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 10 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million

Cancel Launch instance

Instances (1/2) Info

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
CentOS 7 prac...	i-0e6d223398754d531	Running	t2.micro	2/2 checks passed	No alarms	eu-central-1c
Eepam	i-0f482bae87bd58295	Running	t2.micro	-	No alarms	eu-central-1b

Instance: i-0f482bae87bd58295 (Eepam)

Details Security Networking Storage Status checks Monitoring Tags

Instance summary

Instance ID i-0f482bae87bd58295 (Eepam)	Public IPv4 address 18.156.1.105 open address	Private IPv4 addresses 172.31.38.242
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-18-156-1-105.eu-central-1.compute.amazonaws.com open address
Hostname type IP name: ip-172-31-38-242.eu-central-1.compute.internal	Private IP DNS name (IPv4 only) ip-172-31-38-242.eu-central-1.compute.internal	Elastic IP addresses -
Answer private resource DNS name IPv4 (A)	Instance type t2.micro	

```
[maxd@Air-M1-MaxD ~ % ssh -i /Users/maxd/Documents/EPAM/CentOS_7_keypair.pem centos@ec2-18-156-1-105.eu-central-1.compute.amazonaws.com
[[centos@ip-172-31-38-242 ~]$ pwd
/home/centos
[centos@ip-172-31-38-242 ~]$ ]]
```

Successfully terminated i-0f482bae87bd58295

Instances (1/2) Info

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
CentOS 7 prac...	i-0e6d223398754d531	Running	t2.micro	2/2 checks passed	No alarms	eu-central-1c
Eepam	i-0f482bae87bd58295	Terminated	t2.micro	-	No alarms	eu-central-1b

2. Create a snapshot of your instance to keep as a backup.

Create image

An image (also referred to as an AMI) defines the programs and settings that are applied when you launch an EC2 instance. You can create an image from the configuration of an existing instance.

Instance ID i-0ac84d29302f80ada (Eepam2)
Image name Eepam2 Backup
Image description - optional Create a snapshot of your instance to keep as a backup.
No reboot <input type="checkbox"/> Enable
Instance volumes
Volume type Device Snapshot Size Volume type IOPS Throughput Delete on termination Encrypted
EBS /dev... Create new snapshot fr... 10 EBS General Purpose S... 100 <input checked="" type="checkbox"/> Enable <input type="checkbox"/> Enable

Amazon Machine Images (AMIs) (1/1) [Info](#) [C](#) [Recycle Bin](#) [EC2 Image Builder](#) Actions Launch instance from AMI

Owned by me

Name	AMI ID	AMI name	Source	Owner
Epam2 Backup	ami-0b51e553bd84cfe3e	Epam2 Backup	212631846827/Eepam2 Backup	212631846827

AMI ID: ami-0b51e553bd84cfe3e (Epam2 Backup)

Details Permissions Storage Tags

AMI ID ami-0b51e553bd84cfe3e (Epam2 Backup)	Image type machine	Platform details Linux/UNIX	Root device type EBS
--	-----------------------	--------------------------------	-------------------------

3. Create and attach a Disk_D (EBS) to your instance to add more storage space. Create and save some file on Disk_D.

Volumes (1/3) [C](#) Actions [Create volume](#)

Search

Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created
-	vol-038c57ac1978f47bb	gp2	10 GiB	100	-	snap-028c771...	2022/11/07 21:26 GMT+2
Disk_D (EBS)	vol-02f293fad15c001c8	gp2	5 GiB	100	-	-	2022/11/07 22:32 GMT+2
-	vol-062d441a575b5b394	gp2	30 GiB	100	-	snap-028c771...	2022/08/01 16:35 GMT+3

Volume ID: vol-02f293fad15c001c8 (Disk_D (EBS))

Details Status checks Monitoring Tags

Details

Volume ID vol-02f293fad15c001c8 (Disk_D (EBS))	Size 5 GiB	Type gp2	Volume status Okay
---	---------------	-------------	--

Attach volume Info

Attach a volume to an instance to use it as you would a regular physical hard disk drive.

Basic details

Volume ID

 [vol-02f293fad15c001c8 \(Disk_D \(EBS\)\)](#)

Availability Zone

eu-central-1b

Instance Info

i-01e6b92c67e8fa5ec



Only instances in the same Availability Zone as the selected volume are displayed.

Device name Info

/dev/sdf

Recommended device names for Linux: /dev/sda1 for root volume. /dev/sd[f-p] for data volumes.

```

[[centos@ip-172-31-40-147 dev]$ lsblk
NAME   MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
xvda   202:0    0 10G  0 disk
└─xvda1 202:1    0 10G  0 part /
xvdf   202:80   0  5G  0 disk
[[centos@ip-172-31-40-147 dev]$ lsblk
NAME   MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
xvda   202:0    0 10G  0 disk
└─xvda1 202:1    0 10G  0 part /
xvdf   202:80   0  5G  0 disk
[[centos@ip-172-31-40-147 dev]$ sudo file -s /dev/xvdf
/dev/xvdf: data
[[centos@ip-172-31-40-147 dev]$ sudo lsblk -f
NAME   FSTYPE LABEL UUID                                     MOUNTPOINT
xvda
└─xvda1 xfs      44a6a613-4e21-478b-a909-ab653c9d39df /
xvdf
[[centos@ip-172-31-40-147 dev]$ sudo mkfs -t xfs /dev/xvdf
meta-data=/dev/xvdf              isize=512    agcount=4, agsize=327680 blks
                                =                      sectsz=512  attr=2, projid32bit=1
                                =                      crc=1     finobt=0, sparse=0
data     =                      bsize=4096   blocks=1310720, imaxpct=25
                                =                      sunit=0   swidth=0 blks
naming   =version 2            bsize=4096   ascii-ci=0 ftype=1
log      =internal log         bsize=4096   blocks=2560, version=2
                                =                      sectsz=512  sunit=0 blks, lazy-count=1
realtime =none                 extsz=4096   blocks=0, rtextents=0
[[centos@ip-172-31-40-147 dev]$ lsblk
NAME   MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
xvda   202:0    0 10G  0 disk
└─xvda1 202:1    0 10G  0 part /
xvdf   202:80   0  5G  0 disk
[[centos@ip-172-31-40-147 dev]$ cd ~
[[centos@ip-172-31-40-147 ~]$ sudo mkdir /Disk_D
[[centos@ip-172-31-40-147 ~]$ sudo mount /dev/xvdf /Disk_D
[[centos@ip-172-31-40-147 ~]$ sudo lsblk -f
NAME   FSTYPE LABEL UUID                                     MOUNTPOINT
xvda
└─xvda1 xfs      44a6a613-4e21-478b-a909-ab653c9d39df /
xvdf   xfs      da33f61a-95c4-4d56-95e3-bb50995d52ff /Disk_D
[[centos@ip-172-31-40-147 ~]$ ]]

```

```

[[centos@ip-172-31-40-147 /]$ touch /Disk_D/text
[[centos@ip-172-31-40-147 /]$ nano /Disk_D/text
[[centos@ip-172-31-40-147 /]$ nano /Disk_D/text
[[centos@ip-172-31-40-147 /]$ cd /Disk_D/text
-bash: cd: /Disk_D/text: Not a directory
[[centos@ip-172-31-40-147 /]$ cd /Disk_D
[[centos@ip-172-31-40-147 Disk_D]$ ls
text

```

4. Launch the second instance from backup.

Amazon Machine Images (AMIs) (1/1) Info				
Owned by me ▼		Find AMI by attribute or tag C Recycle Bin EC2 Image Builder Actions ▾ Launch instance from AMI		
		<input type="button" value="Clear filters"/>		
<input checked="" type="checkbox"/>	Name	AMI ID	AMI name	Source
<input checked="" type="checkbox"/>	Epam2 Backup	ami-0b51e553bd84cf3e	Epam2 Backup	212631846827/Eepam2 Backup
				

AMI ID: ami-0b51e553bd84cf3e (Epam2 Backup)

Details	Permissions	Storage	Tags
AMI ID  ami-0b51e553bd84cf3e (Epam2 Backup)	Image type machine	Platform details Linux/UNIX	Root device type EBS

Launch an instance [Info](#)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags [Info](#)

Name
 [Add additional tags](#)

Application and OS Images (Amazon Machine Image) [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

[AMI from catalog](#) [Recents](#) [My AMIs](#) [Quick Start](#)

Amazon Machine Image (AMI)
 [Epam2 Backup](#)
ami-0b51e553bd84cf3e

[Browse more AMIs](#)

▼ Summary

Number of instances [Info](#)

[▼](#)

Software Image (AMI)

Create a snapshot of your inst... [read more](#)
ami-0b51e553bd84cf3e

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 10 GiB

 **Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million

[Cancel](#)

[Launch instance](#)

Instances (1/4) [Info](#)

Instances (1/4) Info								
<input type="button" value="C"/> Connect Instance state ▾ Actions ▾ Launch instances ▼								
<input type="button" value="Find instance by attribute or tag (case-sensitive)"/>								
<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Publ
<input type="checkbox"/>	CentOS 7 prac...	i-0e6d223398754d531	 Running	 t2.micro	 2/2 checks passed	No alarms 	eu-central-1c	ec2-...
<input checked="" type="checkbox"/>	Eepam3 backed...	i-0c96965e0494c81e2	 Running	 t2.micro	-	No alarms 	eu-central-1b	ec2-...
<input type="checkbox"/>	Eepam2	i-0ac84d29302f80ada	 Running	 t2.micro	 2/2 checks passed	No alarms 	eu-central-1b	ec2-...
<input type="checkbox"/>	Eepam	i-01e6b92c67e8fa5ec	 Running	 t2.micro	 2/2 checks passed	No alarms 	eu-central-1b	ec2-...

Instance: i-0c96965e0494c81e2 (Eepam3 backed from Eepam2)

Details			Security	Networking	Storage	Status checks	Monitoring	Tags
▼ Instance summary Info								
Instance ID  i-0c96965e0494c81e2 (Eepam3 backed from Eepam2)	Public IPv4 address  18.195.152.170 open address	Private IPv4 addresses  172.31.36.251	IPv6 address -	Instance state  Running	Public IPv4 DNS  ec2-18-195-152-170.eu-central-1.compute.amazonaws.com open address			

5. Detach Disk_D from the 1st instance and attach disk_D to the new instance.

```
[[centos@ip-172-31-40-147 /]$ lsblk
NAME   MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
xvda    202:0    0 10G  0 disk
└─xvda1 202:1    0 10G  0 part /
xvdf    202:80   0  5G  0 disk /Disk_D
[[centos@ip-172-31-40-147 /]$ sudo umount -d /dev/xvdf
```

The screenshot shows a green success message: "Successfully detached volume." Below it, a note says: "You can now create Amazon Data Lifecycle Manager policies to automate snapshot management directly from this screen. Select the volumes to back up, and then choose Actions, Create snapshot lifecycle policy. For more information, see the Knowledge Center article." A table lists volumes, with "Disk_D (EBS)" selected. The "Attach volume" section shows "Basic details" for attaching to instance "i-0c96965e0494c81e2" at device "/dev/sdf". A note in the "Device name" field explains that newer Linux kernels may rename devices to /dev/xvdf through /dev/xvdp internally.

```
[[centos@ip-172-31-36-251 ~]$ lsblk
NAME   MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
xvda    202:0    0 10G  0 disk
└─xvda1 202:1    0 10G  0 part /
xvdf    202:80   0  5G  0 disk
[[centos@ip-172-31-36-251 ~]$ sudo file -s /dev/xvdf
/dev/xvdf: SGI XFS filesystem data (blksz 4096, inosz 512, v2 dirs)
[[centos@ip-172-31-36-251 ~]$ sudo mkdir /Disk_D
[[centos@ip-172-31-36-251 ~]$ sudo mount /dev/xvdf /Disk_D
[[centos@ip-172-31-36-251 ~]$ ls /Disk_D
text
[centos@ip-172-31-36-251 ~]$ ]
```

6. Review the 10-minute [example](#). Explore the possibilities of creating your own domain and domain name for your site. Note, that Route 53 not free service. Alternatively you can free register the domain name *.PP.UA and use it.

Домены

Зарегистрировать домен

Перенести домен

Быстрый поиск

Домен NS Срок действия Заказ АП

dovbeshko.pp.ua Собственные NS (4) 08 нояб. 2023 2218840 Продлить Изменить NS

Продлить Изменить NS

7. Launch and configure a WordPress instance with Amazon Lightsail [link](#)

Amazon Lightsail | Home

Docs Search Account AWS

Lightsail now offers container services!

You can now deploy, run, and scale containerized applications on Lightsail in just a few clicks. Get started for free!

[Check out our blog for more information](#)

Pick your instance image

Select a platform

Linux/Unix 28 blueprints Microsoft Windows 4 blueprints

Select a blueprint

Apps + OS OS Only

WordPress 6.0.2-1	WordPress Multisite 6.0.2-1	LAMP (PHP 7) 7.4.30-11	Node.js 16.17.0-1
Joomla 3.10.11-0	Magento 2.4.5-2	MEAN 4.4.15-0	Drupal 9.4.5-1
GitLab CE 15.3.3-ce.0-0	Redmine 5.0.2-4	Nginx 1.21.6-31	Ghost 4.48.4-0

©2008-2022, Amazon Web Services, Inc. or its affiliates. All rights reserved. [Privacy Policy](#) [Terms of Use](#)

Instances Containers Databases Networking Storage Snapshots

Sort by Date

Create instance

WordPress_website_practice	1 GB RAM, 1 vCPU, 40 GB SSD	3.75.179.8
Running	2a05:d014:69c:2100:3913:d2c7:c642:6786	Frankfurt, Zone A
Name ➔ WordPress_website_practice		

```
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent  
permitted by applicable law.
```

```
[--]_L_/_-_-V--_--_(_  
[-\|_|-|-V-|_|\_|||  
*** Welcome to the WordPress packaged by Bitnami 6.0.2-1 ***  
*** Documentation: https://docs.bitnami.com/aws/apps/wordpress/ ***  
*** https://docs.bitnami.com/aws/ ***  
*** Bitnami Forums: https://github.com/bitnami/vms/ ***  
bitnami@ip-172-26-13-129:~$ cat $HOME/bitnami_application_password  
hC07vLnRQHVa  
bitnami@ip-172-26-13-129:~$
```

The screenshot shows the WordPress dashboard for a user named 'user's blog'. The top bar includes a 'Howdy, user' greeting, 'Screen Options', and 'Help'. The dashboard features a large 'Welcome to WordPress!' message with a 'Learn more about the 6.0.3 version.' link. To the right is a large '6.0' logo. On the left, a sidebar lists navigation items: Home, Updates (11), Jetpack, Posts, Media, Pages, Comments, Appearance, Plugins (7), Users, Tools, Settings, and a 'Collapse menu' option. A notification bar at the top says 'WordPress 6.1 is available! Please update now.'



Identify your static IP
Your Lightsail resources must have unique names.

Static IP addresses are free only while attached to an instance.
You can manage five at no additional cost.

Create

Public static IP address

This static IP is available for public connection worldwide.

3.75.161.157

Attach to an instance

Attaching a static IP replaces that instance's dynamic IP address.



dovbeshko.pp.ua

DNS zone

Global, all zones

[Details](#)

[Tags](#)

[Delete](#)

DNS records

Lightsail currently supports A, CNAME, MX, NS, SRV, and TXT record types.

[Learn about DNS record types](#)

[Add record](#)

You have no records for this zone.

Name servers

To use Lightsail to manage DNS records for your domain, you will have to configure your domain provider to use the following name servers:

ns-1258.awsdns-29.org
ns-435.awsdns-54.com
ns-1740.awsdns-25.co.uk
ns-602.awsdns-11.net

Домены

[Зарегистрировать домен](#)

[Перенести домен](#)

Быстрый поиск

<input type="checkbox"/> Домен	NS	Срок действия	Заказ	АП
<input checked="" type="checkbox"/> dovbeshko.pp.ua	Собственные NS (4)	08 нояб. 2023	2218840	<input type="checkbox"/> Продлить

[Продлить](#)

[Изменить NS](#)

[Details](#) [Tags](#) [Delete](#)

DNS records

Lightsail currently supports A, CNAME, MX, NS, SRV, and TXT record types.
[Learn about DNS record types](#)

[+ Add record](#)

A record

Associate your domain or a subdomain with an IPv4 address.



Subdomain

Resolves to

@.dovbeshko.pp.ua

Staticip_Wordpress_website_practice

Name servers

To use Lightsail to manage DNS records for your domain, you will have to configure your domain provider to use the following name servers:

ns-1258.awsdns-29.org
ns-435.awsdns-54.com
ns-1740.awsdns-25.co.uk
ns-602.awsdns-11.net



Hello world!

Welcome to WordPress. This is your first post. Edit or delete it, then start writing!

November 8, 2022

8. Review the 10-minute [Store and Retrieve a File](#). Repeat, creating your own repository.

Amazon S3 > Buckets > Create bucket

Create bucket Info

Buckets are containers for data stored in S3. [Learn more](#)

General configuration

Bucket name	<input type="text" value="study_bucket"/>
Bucket name must be globally unique and must not contain spaces or uppercase letters. See rules for bucket naming	
AWS Region	<input type="text" value="EU (Frankfurt) eu-central-1"/>
Copy settings from existing bucket - optional Only the bucket settings in the following configuration are copied.	
Choose bucket	

[Files and folders](#) | Configuration

Files and folders (1 Total, 3.4 MB)

Name	Folder	Type	Size	Status	Error
Lecture AWS. Core services.pdf	AWS/	application/pdf	3.4 MB	Succeeded	-

Delete objects Info

⚠ • If a folder is selected for deletion, all objects in the folder will be deleted, and any new objects added while the delete action is in progress might also be deleted. If an object is selected for deletion, any new objects with the same name that are uploaded before the delete action is completed will also be deleted.
 • Deleting the specified objects can't be undone.

[Learn more](#)

Specified objects

Name	Type	Last modified	Size
Lecture AWS. Core services.pdf	pdf	November 12, 2022, 17:19:52 (UTC+02:00)	3.4 MB

Permanently delete objects?

To confirm deletion, type *permanently delete* in the text input field.

[Cancel](#) [Delete objects](#)

Amazon S3 > Buckets > study-bucket-epam > Delete bucket

Delete bucket Info

⚠ • Deleting a bucket cannot be undone.
 • Bucket names are unique. If you delete a bucket, another AWS user can use the name.

[Learn more](#)

Delete bucket "study-bucket-epam"?

To confirm deletion, enter the name of the bucket in the text input field.

[Cancel](#) [Delete bucket](#)

9. Review the 10-minute [example](#) Batch upload files to the cloud to Amazon S3 using the AWS CLI. Create a user AWS IAM, configure CLI AWS and upload any files to S3.

```
[maxd@Air-M1-MaxD ~ % aws s3 mb s3://s3-study-epam
make_bucket: s3-study-epam
[maxd@Air-M1-MaxD ~ % aws s3 cp "/Users/maxd/Documents/EPAM/DevOps/L1/AWS/Lecture AWS. Core services.pdf" s3://s3-study-epam
upload: Documents/EPAM/DevOps/L1/AWS/Lecture AWS. Core services.pdf to s3://s3-study-epam/Lecture AWS. Core services.pdf
[maxd@Air-M1-MaxD ~ % aws s3 cp "s3://s3-study-epam/Lecture AWS. Core services.pdf" ./
download: s3://s3-study-epam/Lecture AWS. Core services.pdf to ./Lecture AWS. Core services.pdf
[maxd@Air-M1-MaxD ~ % aws s3 rm "s3://s3-study-epam/Lecture AWS. Core services.pdf"
delete: s3://s3-study-epam/Lecture AWS. Core services.pdf
maxd@Air-M1-MaxD ~ % ]
```

10. Review the 10-minute [example](#) Deploy Docker Containers on Amazon Elastic Container Service (Amazon ECS). Repeat, create a cluster, and run the online demo application or better other application with custom settings.

Getting Started with Amazon Elastic Container Service (Amazon ECS) using Fargate

Launch Status

We are creating resources for your service. This may take up to 10 minutes. When we're complete, you can view your service.

[Back](#) [View service](#)

Additional features that you can add to your service after creation

Scale based on metrics

You can configure scaling rules based on CloudWatch metrics

Preparing service : 10 of 10 complete

ECS resource creation

Cluster sample-cluster	complete ✓
Task definition first-run-task-definition1	complete ✓
Service sample-app-service	complete ✓

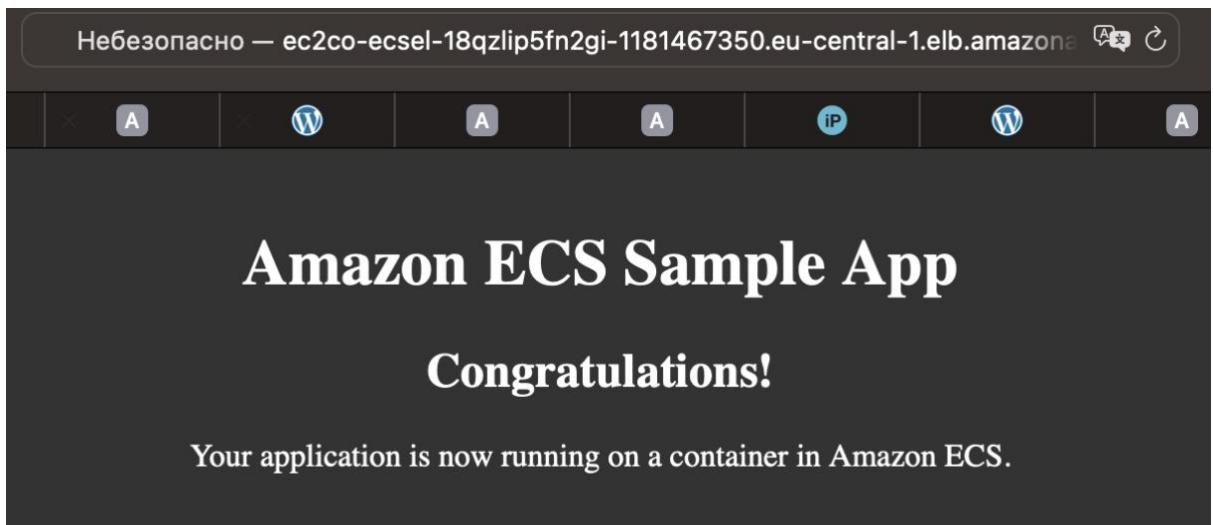
Additional AWS service integrations

Log group /ecs/first-run-task-definition	complete ✓
CloudFormation stack EC2ContainerService-sample-cluster	complete ✓
VPC vpc-0717574929611d322	complete ✓
Subnet 1 subnet-0fdaad802ef8fb8c3	complete ✓
Subnet 2 subnet-0a017828ccbb8c1	complete ✓
Security group sg-0b3267687e2e1462	complete ✓
Load balancer arn:aws:elasticloadbalancing:eu-central-1:212631846827:loadbalancer/app/EC2Co-EcsEl-18QZLIP5FN2G/767ce9f6f15f317c	complete ✓

The screenshot shows the AWS EC2 Dashboard with the 'Create Load Balancer' button highlighted. Below it, a table lists the newly created load balancer with the following details:

Name	DNS name	State	VPC ID	Availability Zones	Type
EC2Co-EcsEl-18QZLIP5FN...	EC2Co-EcsEl-18QZLIP5FN...	Active	vpc-0717574929611d322	eu-central-1b, eu-centr...	application

On the left sidebar, under 'Instances', the 'Instances' section is expanded, showing various instance-related options like 'Instances', 'Instance Types', 'Launch Templates', etc.



A screenshot of the AWS CloudWatch Metrics console. On the left, there's a sidebar with links like "New ECS Experience", "Clusters", "Task Definitions", "Account Settings", "Amazon EKS", "Clusters", and "Amazon ECR". The main area shows a green notification box with a checkmark and the text "Deleted cluster sample-cluster successfully". Below it, there's a section titled "Clusters" with a brief description and two buttons: "Create Cluster" and "Get Started".

11. Run a Serverless "Hello, World!" with AWS Lambda.

A screenshot of the AWS Lambda "Create function" wizard. It shows three options: "Author from scratch", "Use a blueprint", and "Container image". The "Use a blueprint" option is selected. Below it, there's a "Blueprints" section showing a single result for "Name = hello-world-python". The "Hello world function" is highlighted with a blue border. At the bottom right, there are buttons for "Last fetched 25 seconds ago", "C", "Export", and navigation arrows.

A screenshot of the AWS Lambda function details page for "hello-world-python". The top bar shows the function name and navigation links. The "Function overview" section includes a thumbnail for "hello-world-python", a "Layers" section (0 layers), and buttons for "+ Add trigger" and "+ Add destination". To the right, there's a "Description" section stating it's a "Starter AWS Lambda function." It also shows the "Last modified" time as "44 seconds ago" and the "Function ARN" as "arn:aws:lambda:eu-central-1:212631846827:function:hello-world-python".

The test event HelloWorldEvent was successfully saved.

Code source [Info](#)

Execution results

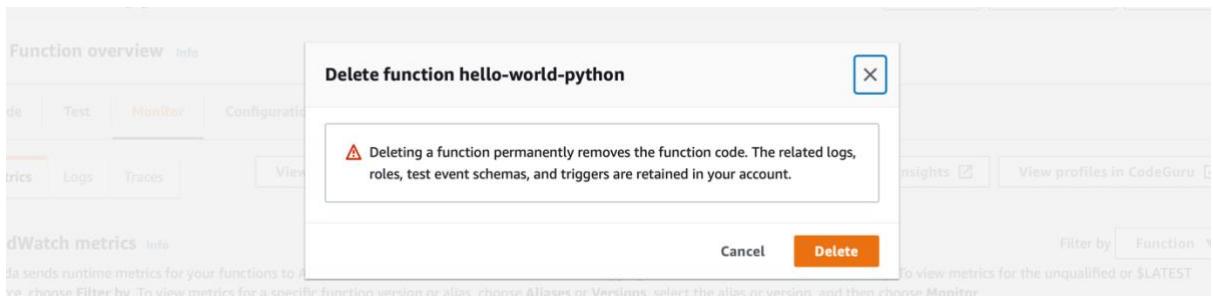
Test Event Name: HelloWorldEvent

Response: "hello, world!"

Function Logs

```

Loading function
START RequestId: 2a1ffd43-8ee4-4794-9ed0-1d7aed545b95 Version: $LATEST
value1 = hello, world!
value2 = value2
value3 = value3
END RequestId: 2a1ffd43-8ee4-4794-9ed0-1d7aed545b95
REPORT RequestId: 2a1ffd43-8ee4-4794-9ed0-1d7aed545b95 Duration: 1.57 ms Billed Duration: 2 ms Memory Size: 128 MB Max Memory Used: 36 MB
Request ID: 2a1ffd43-8ee4-4794-9ed0-1d7aed545b95
  
```



12. Create a static website on Amazon S3, publicly available ([link1](#) or [link2](#) - using a custom domain registered with Route 53). Post on the page your own photo, the name of the educational program (**EPAM Cloud&DevOps Fundamentals Autumn 2022**), the list of AWS services with which the student worked within the educational program or earlier and the full list with links of completed labs (based on [tutorials](#) or [quiklabs](#)). Provide the link to the website in your report and CV.

Buckets (2) [Info](#)

Buckets are containers for data stored in S3. [Learn more](#)

<input type="checkbox"/>	Name	AWS Region	Access	Creation date
<input type="radio"/>	my-static-s3-website	US East (N. Virginia) us-east-1	Objects can be public	January 26, 2023, 11:34:56 (UTC+02:00)
<input type="radio"/>	s3-study-epam	US East (N. Virginia) us-east-1	Objects can be public	November 12, 2022, 18:10:37 (UTC+02:00)

Static website hosting

Use this bucket to host a website or redirect requests. [Learn more](#)

Static website hosting
Disabled

[Edit](#)

Edit static website hosting Info

Static website hosting

Use this bucket to host a website or redirect requests. [Learn more](#)

Static website hosting

- Disable
- Enable

Hosting type

- Host a static website

Use the bucket endpoint as the web address. [Learn more](#)

- Redirect requests for an object

Redirect requests to another bucket or domain. [Learn more](#)

Static website hosting

Use this bucket to host a website or redirect requests. [Learn more](#)

[Edit](#)

Static website hosting

Use this bucket to host a website or redirect requests. [Learn more](#)

Enabled

Hosting type

Bucket hosting

Bucket website endpoint

When you configure your bucket as a static website, the website is available at the AWS Region-specific website endpoint of the bucket. [Learn more](#)

<http://my-static-s3-website.s3-website-us-east-1.amazonaws.com>

Block public access (bucket settings)

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to all your S3 buckets and objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to your buckets or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

Block all public access

Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.

Block public access to buckets and objects granted through new access control lists (ACLs)

S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.

Block public access to buckets and objects granted through any access control lists (ACLs)

S3 will ignore all ACLs that grant public access to buckets and objects.

Block public access to buckets and objects granted through new public bucket or access point policies

S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.

Block public and cross-account access to buckets and objects through any public bucket or access point policies

S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

Bucket policy

The bucket policy, written in JSON, provides access to the objects stored in the bucket. Bucket policies don't apply to objects owned by other accounts. [Learn more](#)

[Policy examples](#) [Policy generator](#)

Bucket ARN

arn:aws:s3:::my-static-s3-website

Policy

```

1  {
2    "Version": "2012-10-17",
3    "Statement": [
4      {
5        "Sid": "PublicReadGetObject",
6        "Effect": "Allow",
7        "Principal": "*",
8        "Action": [
9          "s3:GetObject"
10         ],
11        "Resource": [
12          "arn:aws:s3:::my-static-s3-website/*"
13        ]
14      }
15    ]
16  }

```

[Edit statement](#) [Remove](#)

PublicReadGetObject

1. Add actions

Choose a service

Included

S3

Available

AMP

API Gateway

API Gateway V2

Let's write an index.html file with all the necessary information with a photo and a cv file.

```

<!DOCTYPE html>
<html>
  <head>
    <title>EPAM Cloud&DevOps Fundamentals Autumn 2022</title>
  </head>
  <body>
    <h1>My photo:</h1>
    
    <h1>Educational Program: EPAM Cloud&DevOps Fundamentals Autumn 2022</h1>
    <h2>AWS Services worked with:</h2>
    <ul>
      <li>EC2</li>
      <li>S3</li>
      <li>Route53</li>
      <li>Lambda</li>
      <li>RDS</li>
      <li>VPC</li>
      <li>IAM</li>
      <li>Elastic Container Service</li>
      <li>Lightsail</li>
      <li>AWS Budgets</li>
    </ul>
    <h2>Completed Labs:</h2>
    <ul>
      <li><a href="https://aws.amazon.com/ec2/getting-started/?nc1=h_ls">Getting Started with Amazon EC2</a></li>
      <li><a href="https://aws.amazon.com/getting-started/hands-on/get-a-domain/?nc1=h_ls">How to Register a Domain Name with Amazon Route 53</a></li>
      <li><a href="https://aws.amazon.com/getting-started/hands-on/launch-a-wordpress-website/?t=rgs_card">Launch and Configure a WordPress Site Using Amazon RDS</a></li>
      <li><a href="https://aws.amazon.com/getting-started/hands-on/backup-files-to-amazon-s3/">Store and Retrieve a File with Amazon S3</a></li>
      <li><a href="https://aws.amazon.com/getting-started/hands-on/backup-to-s3-cli/?nc1=h_ls">Batch Upload Files to Amazon S3 Using the AWS Command Line Interface</a></li>
      <li><a href="https://aws.amazon.com/getting-started/hands-on/deploy-docker-containers/?nc1=h_ls">Deploy Docker Containers on Amazon ECS</a></li>
      <li><a href="https://aws.amazon.com/getting-started/hands-on/run-serverless-code/?nc1=h_ls">Run a Serverless "Hello, World!" with AWS Lambda</a></li>
      <li><a href="https://docs.aws.amazon.com/AmazonS3/latest/userguide/HostingWebsiteOnS3Setup.html">Configuring a static website on Amazon S3</a></li>
      <li><a href="https://docs.aws.amazon.com/AmazonS3/latest/userguide/website-hosting-custom-domain-walkthrough.html">Configuring a static website with a custom domain</a></li>
    </ul>
    <h2>My CV:</h2>
    <ul>
      <li><a href="CV.docx" download>Download My CV</a></li>
    </ul>
  </body>
</html>

```

Next upload those files to our S3 bucket.

Files and folders (3 Total, 46.7 KB)

Name	Folder	Type	Size	Status	Error
CV.docx	-	application/vnd.openxmlformats-officedocument.wordprocessingml.document	11.9 KB	Succeeded	-
IMG_3347.jpeg	-	image/jpeg	32.7 KB	Succeeded	-
index.html	-	text/html	2.1 KB	Succeeded	-

Now let's go and check our static website.

My photo



Educational Program: EPAM Cloud&DevOps Fundamentals Autumn 2022

AWS Services worked with:

- EC2
- S3
- Route53
- Lambda
- RDS
- VPC

Everything works fine. Next, we have to attach my personal domain to the website.

Delete zone Test record Configure query logging

▶ Hosted zone details [Edit hosted zone](#)

[Records \(3\)](#) [Info](#) DNSSEC signing Hosted zone tags (0)

Records (3) Info
Automatic mode is the current search behavior optimized for best filter results. To change modes go to settings.

[Delete record](#) [Import zone file](#) [Create record](#)

Filter records by property or value Type: [Type](#) Routing policy: [Routing policy](#) Alias: [Alias](#) [<](#) [1](#) [>](#) [⚙️](#)

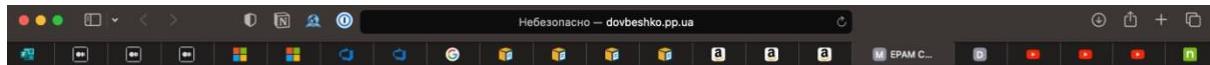
<input type="checkbox"/>	Record name	Type	Routing	Differences	Value/Route traffic to
<input type="checkbox"/>	dovbeshko.pp...	A	Simple	-	s3-website-us-east-1.amazonaws.com
<input type="checkbox"/>	dovbeshko.pp...	NS	Simple	-	ns-1637.awsdns-12.co.uk. ns-449.awsdns-56.com. ns-878.awsdns-45.net. ns-1373.awsdns-43.org.
<input type="checkbox"/>	dovbeshko.pp...	SOA	Simple	-	ns-1637.awsdns-12.co.uk. aw...

NS-серверы

Собственные серверы им... ▾

Список своих серверов имен [Изменить](#)

1. ns-449.awsdns-56.com
2. ns-1373.awsdns-43.org
3. ns-878.awsdns-45.net
4. ns-1637.awsdns-12.co.uk



My photo



Educational Program: EPAM Cloud&DevOps Fundamentals Autumn 2022

AWS Services worked with:

- EC2
- S3
- Route53
- Lambda
- RDS
- VPC
- IAM
- Elastic Container Service
- Lightsail
- AWS Budgets

Completed Labs:

- Getting Started with Amazon EC2
- How to Register a Domain Name with Amazon Route 53
- Launch and Configure a WordPress Instance with Amazon Lightsail
- Store and Retrieve a File with Amazon S3
- Batch Upload Files to Amazon S3 Using the AWS CLI
- Deploy Docker Containers on Amazon ECS
- Run a Serverless "Hello, World!" with AWS Lambda
- Configuring a static website on Amazon S3
- Configuring a static website using a custom domain registered with Route 53

My CV:

[Download My CV](#)