

Launch an instance | EC2

Instance details | EC2 | eu-north-1

Instances | EC2 | eu-north-1

EC2 Instance Connect | eu-north-1

chmod 400 command in

New Tab

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

aws

Search

[Alt+S]

Europe (Stockholm)

Account ID: 9473-0977-8595

Balaji R

EC2 > Instances

Dashboard

AWS Global View

Events

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

Images

AMIs

AMI Catalog

Elastic Block Store

Volumes

Snapshots

Instances (2/5) Info

Last updated 5 minutes ago

Connect

Instance state

Actions

Launch Instances

Find Instance by attribute or tag (case-sensitive)

All states

1

Find Instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type	Status check	Alarm stat
taskk	i-074e9d15f947797d7	Terminated	t3.micro	-	View alarm
privateinstance	i-04f5e54cd5f3e30fa	Running	t3.micro	3/3 checks passed	View alarm
publicinstance	i-09ca2d5e3b18b3d33	Running	t3.micro	3/3 checks passed	View alarm
privateinstance	i-0d89f906c7f5095d8	Terminated	t3.micro	-	View alarm
publicinstance	i-005b574cde73e8ee6	Terminated	t3.micro	-	View alarm

2 instances selected

Monitoring

Configure CloudWatch agent

Alarm recommendations

3h 1d 1w 1h

UTC timezone

Explore related

CPU utilization (%)

Network in (bytes)

Network out (bytes)

Network packets in (count)

Percent

Bytes

Bytes

Count

1.51

24.3M

43.9k

3.15k

Amazon Q

Free Tier

Hello! I'm Amazon Q, your AWS generative AI assistant.

Chatting about your resources

Understanding and optimizing your costs

Analyzing network troubleshooting

Investigating operational issues

Ask me anything about AWS

Max 1000 characters

Amazon Q Developer uses generative AI. You may need to verify responses. See the AWS Responsible AI Policy.

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Search

13:07 01-10-2025

Launch an instance | EC2 x Instance details | EC2 | eu x Instance details | EC2 | eu x EC2 Instance Connect | e x chmod 400 command in x New Tab x + -

eu-north-1.console.aws.amazon.com/ec2-instance-connect/ssh/home?region=eu-north-1&connType=standard&instanceId=i-09ca2d5e3b18b3d33&osUser=ec2-user&sshPort=22&addr...

aws Search [Alt+S] Europe (Stockholm) Account ID: 9473-0977-8595 Balaji R

```
~
~      \###|
~      \|/  '---> https://aws.amazon.com/linux/amazon-linux-2023
~
~      /m/'
~
[ec2-user@ip-172-31-42-114 ~]$ touch privatekey.pem
[ec2-user@ip-172-31-42-114 ~]$ vi privatekey.pem
[ec2-user@ip-172-31-42-114 ~]$ chmod 400 privatekey.pem
[ec2-user@ip-172-31-42-114 ~]$ ssh -i privatekey.pem ec2-user@172.31.41.176
The authenticity of host '172.31.41.176 (172.31.41.176)' can't be established.
ED25519 key fingerprint is SHA256:V8xbt2UggvK7ILrvUlhQ+pKdFkd7xbi8q2Gkdfwi.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? y
Please type 'yes', 'no' or the fingerprint: yes
Warning: Permanently added '172.31.41.176' (ED25519) to the list of known hosts.

~
~      \###|
~      \|/  '---> Amazon Linux 2023
~
~      /m/'
~
~      \###|
~      \|/  '---> https://aws.amazon.com/linux/amazon-linux-2023
~
~      /m/'
~
[ec2-user@ip-172-31-41-176 ~]$
```

i-09ca2d5e3b18b3d33 (publicinstance)

PublicIPs: 13.51.85.2 PrivateIPs: 172.31.42.114

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CloudShell Feedback

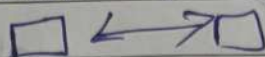
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Network.

What is network?

Communication between two electronic device.



Types of network:

- (branch) → Local area network * LAN - Small area, home, office, school
 Wide area network * WAN - covers large area, like the internet
 metropolitan * MAN - cover a city or campus.
 Personal Area * PAN - Very small range like hot spot or Bluetooth

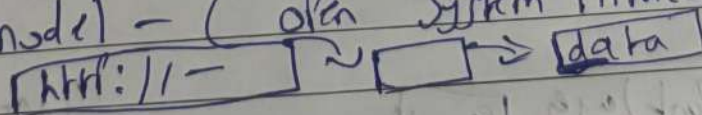
Key networking devices:

- * Router - Connects networks
eg: home wifi router
- * Switch: Connects multiple devices inside a network.
- * Hub: Basic connection for devices (less common now)
- * Firewall: Protects network traffic by filtering threats

Common Networking Protocol:

- * TCP/IP - foundation of internet communication
- * HTTP/HTTPS - for web browsing
- * FTP/SFTP - for file transfer.
- * SMTP/IMAP/POP3 - for email

OSI model - (Open System Interconnection)



There are 7 layers in OSI model:

Bottom up Approach

→ Application Layer

→ Presentation Layer

→ Session Layer

→ Transport Layer

→ Network Layer

→ Data Link Layer

→ Physical Layer

OSI is a conceptual framework that explains how data moves from one computer to another over a network

Device 1

Sender

Application Layer

Message

Presentation Layer

Translation
Encryption
Compression

(SSL/TLS)

Session Layer

Dialog Control
Synchronization

Transport Layer

Segment

Sequence number
Port address

Network Layer

(Packets)

IP address
Routing

Data Link Layer

(Frame)

MAC address

Physical Layer

(Bits)

Transmission medium

Device 2

Receiver

Application Layer

Message

Presentation Layer

Translation
decryption
decompression

Session Layer

Transport Layer / Segment / Receive

Network Layer

(Packets)

Data Link Layer

(Frame)

Physical Layer

(Bits)

Source-destination
information source

- Application - App you use (wp, Chrome, Email)
- Presentation - formats data (Encryption, Compression)
- Session - Starts / end connection (like login, logout)
- Transport - Breaks data into pieces, ensures delivery (rebuild)
- Network - Finds the address and best path (ip, route)
- Data link - Drives data to the right device (MAC)
- Physical - wires, wifi signals, electricity carrying data.