

27/3/25

OS - interface b/w user, hardware
Cloud computing:

- on demand delivery of IT resources over the internet
- Access technical resources such as storage, DB, compute, networking, security with pay as u go.

Deploy
Integrate

Data centerCloud data centerCloud providers:

- 1) AWS 2) Mic. Azure 3) GCP
google cloud platform

SDLC: s/w dev life cycle

Structured step by step process that dev teams use to create high quality, cost effective & secure s/w

Server Components: - OS (win/lin/mac)

- RAM

- ROM

- Networking

ec 2

inborn outborn.

ls - list files & directories

touch - create empty files

cat > filename → write in file

cat filename → display file

rm filename → delete

mkdir - new directory

cd - change directory

rmdir - delete empty directory

rm -r delete directories with files

ls -l file permissions

pwd print working dir path

history

cd .. prev. directory.

What is DevOps:

- Set of practices / principles & cultural philosophies & that aim to bridge the gap b/w dev & operatⁿ's.

- Goal: Shorten cycle, improve collab, b/w dev & ops teams & deliver high quality. S/w faster & more efficiently.

Key Elements: Automate
Continuous Integratⁿ (CI)
Continuous delivery/deployment (CD)
Collab /communicatⁿ
Continuous Monitoring (CM)

Waterfall Model: distinct goals for each phase of dev.

Requirements

↳ Analysis

↳ Design

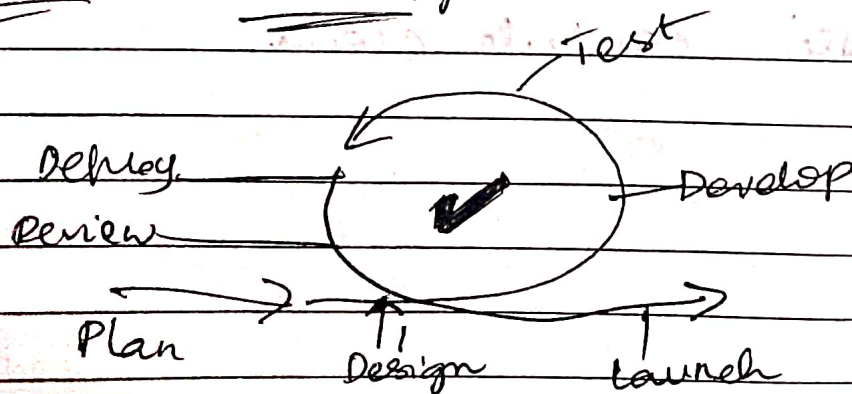
↳ Coding

↳ Testing

↳ Operatⁿ's

Once u reach a particular stage
no going back

Agile Methodology:



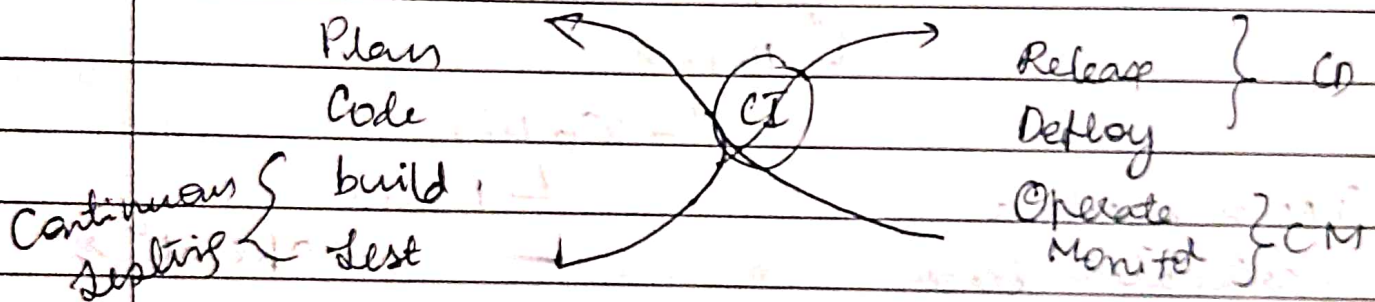
Dev
code in
my laptop

Ops
doesn't
work in
product

Why DevOps?

↓
it's a s/w dev & ops approach that enables faster dev of new products & easier maintenance of existing deployments.

Benefits : Speed / Rapid-Delivery / Reliability / Scale
Improve Collab / Security



EC2

elastic compute cloud

What is a server?

A powerful computer system that provides services or data to other computers not as clients over a network.

These are designed to manage, store, process data and they play a critical role in handling requests delivering responses within a network.

Types of servers:

1) Web server: Delivers webpages to users' browsers

eg: Nginx

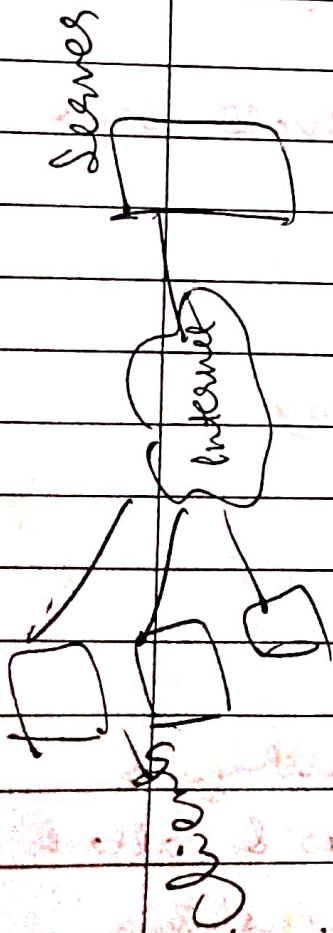
2) File server: Stores & manages files that clients can access & share over a network.

3) Database server: Manage DB & provide access to clients for reading, writing, updating data.

eg: MySQL, MongoDB

4) Mail server: Handles the sending, receiving & storage of emails.

eg: Microsoft Exchange



Server Components

OS ROM CPU Storage
RAM Network NIC
 network
 interface
 card

EC2 Configuratiⁿ:

- name of server
- Applicatiⁿ & OS Images (Amazon M/C Image)
 - OS selectⁿ
- Instance type: choose no. of CPU's & RAM
- Keypair: used to connect securely to instance
- Networking:
 - firewalls
 - VPC: virtual private cloud
 - Subnets:
 - Route tables
 - NAT
 - Internet gateway
 - Elastic IP

Configure settings

- EBS (Elastic block store)
 - similar to harddisk

- Persistent block level storage

- can create new volumes & attach to

Launch instance: ^{Running instance} w/ server / windows server

New sign in

Multi-session disabled

English



You are currently using the improved sign in UI experience.



The [improved sign in](#) experience will launch soon. During this time, you can still change back to legacy sign in using the dropdown in the upper right corner.



IAM user sign in

Account ID or alias [\(Don't have?\)](#)

151006775912

☐ Remember this account

IAM username

Password

☐ Show Password

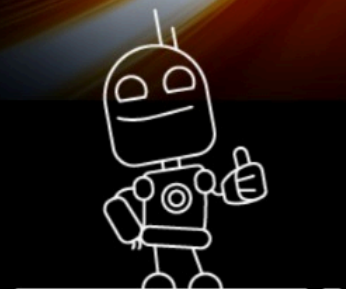
[Having trouble?](#)

Sign in

Amazon Lightsail

Lightsail is the easiest way to get started on AWS

[Learn more »](#)



MobaXterm

TerminalSessionsViewX serverToolsGamesSettingsMacrosHelp

SessionServersToolsGamesSessionsViewSplitMultiExecTunnelingPackagesSettingsHelp

X serverExit

Quick connect...

User sessions

2. /home/mobaxterm

• MobaXterm Personal Edition v25.1 •
(X server, SSH client and network tools)

▸ Your computer drives are accessible through the /drives path

▸ Your DISPLAY is set to 192.168.1.41:0.0

▸ When using SSH, your remote DISPLAY is automatically forwarded

▸ Each command status is specified by a special symbol (✓ or ✗)

• Important:

This is MobaXterm Personal Edition. The Professional edition allows you to customize MobaXterm for your company: you can add your own logo, your parameters, your welcome message and generate either an MSI installation package or a portable executable. We can also modify MobaXterm or develop the plugins you need. For more information: <https://mobaxterm.mobatek.net/download.html>

2025-04-11 21:19:15 /home/mobaxterm history

1 [2025-03-27 14:49:04] ls

2 [2025-03-27 14:49:51] cd Desktop

3 [2025-03-27 14:49:55] cd ..

4 [2025-03-27 14:50:56] touch shobhitha

5 [2025-03-27 14:50:58] ls

6 [2025-03-27 14:53:03] cat > shobhitha

7 [2025-03-27 14:54:28] clear

8 [2025-03-27 14:54:34] ls

9 [2025-03-27 14:57:43] cat shobhitha

10 [2025-03-27 14:58:37] rm shobhitha

11 [2025-03-27 14:58:39] ls

12 [2025-03-27 15:00:57] mkdir dir1

13 [2025-03-27 15:01:11] ls

14 [2025-03-27 15:02:53] cd dir1

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27°C
Mostly clear

Search

ENG
IN

10:26 PM
11-04-2025

MobaXterm

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

User sessions

```
2. /home/mobaxterm
15 [2025-03-27 15:03:07] touch file1
16 [2025-03-27 15:03:08] ls
17 [2025-03-27 15:04:35] cd ..
18 [2025-03-27 15:04:44] cd dir1/
19 [2025-03-27 15:04:46] ls
20 [2025-03-27 15:06:55] cd ..
21 [2025-03-27 15:06:56] ls
22 [2025-03-27 15:07:32] mkdir mangalore
23 [2025-03-27 15:07:33] ls
24 [2025-03-27 15:07:38] cd mangalore/
25 [2025-03-27 15:07:42] cd ..
26 [2025-03-27 15:07:57] rmdir mangalore
27 [2025-03-27 15:07:58] ls
28 [2025-03-27 15:08:06] rmdir dir1
29 [2025-03-27 15:08:13] mkdir mangalore
30 [2025-03-27 15:09:11] rm -r dir1
31 [2025-03-27 15:09:13] ls
32 [2025-03-27 15:09:18] mkdir dir1
33 [2025-03-27 15:09:21] cd dir1
34 [2025-03-27 15:09:26] touch file1
35 [2025-03-27 15:09:28] ls
36 [2025-03-27 15:09:31] cd ..
37 [2025-03-27 15:09:33] ls
38 [2025-03-27 15:12:51] ls -l
39 [2025-03-27 15:14:28] pwd
40 [2025-03-27 15:14:31] cwd
41 [2025-03-27 15:15:47] cd dir1
42 [2025-03-27 15:15:50] pwd
43 [2025-03-27 15:16:17] mkdir devopscls
44 [2025-03-27 15:16:21] pwd
45 [2025-03-27 15:16:26] ls
46 [2025-03-27 15:16:32] cd ..
47 [2025-03-27 15:16:49] cd dir1/devopscls
```

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MobaXterm

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

User sessions

2. /home/mobaxterm

```
49 [2025-03-27 15:17:02] touch filename
50 [2025-03-27 15:17:04] ls
51 [2025-03-27 15:17:07] cd ..
52 [2025-03-27 15:17:16] history
53 [2025-03-27 15:18:11] cd dir1/devopscls
54 [2025-03-27 15:18:13] ls
55 [2025-03-27 15:18:16] cd ../../
56 [2025-03-27 15:18:21] history
57 [2025-03-27 15:19:59] ls
58 [2025-03-27 15:20:03] cd dir1
59 [2025-03-27 15:20:08] cat > newfile
60 [2025-03-27 15:20:17] cat newfile
61 [2025-03-27 15:20:25] cat > newfile
62 [2025-03-27 15:20:36] cat newfile
63 [2025-03-27 15:21:11] ls
64 [2025-03-27 15:21:18] rm newfile
65 [2025-03-27 15:21:19] ls
66 [2025-03-27 15:22:18] mkdir newdir
67 [2025-03-27 15:22:21] cd newdir/
68 [2025-03-27 15:22:23] cd ..
69 [2025-03-27 15:22:24] ls
70 [2025-03-27 15:22:56] rmdir newdir
71 [2025-03-27 15:22:57] ls
72 [2025-03-27 15:26:46] cd ..
73 [2025-03-27 15:27:07] cd home/mobaxterm
74 [2025-04-02 13:55:18] ls
75 [2025-04-02 13:55:24] cd dir1
76 [2025-04-02 13:55:26] ls
77 [2025-04-02 13:55:35] cd ..
78 [2025-04-10 07:27:20] history
```

2025-04-11 21:19.19 /home/mobaxterm

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