

When you stop an EBS Backend EC2 Instance

- ~~stop~~ Statuses → Stopping
- Instance perform a shutdown
- EBS Volume remains attached to instance
- Any data cached in RAM or instance store volume is stop.
- Instance retains its private IP or any IPv6.
- Instance release its public IPv4 address back
- Instance retains its Elastic IP address
↓
permanent

EC2 Terminate

- Running → Shutting down → Terminate
- During Shutting down / Terminate status you do not incur charges
- By default EBS Root device volume are deleted automatically when EC2 instance are terminated

→ Any additional (non boot / boot) Volume attached to the instance by default, persist after instance is terminated

→ You can modify both behaviours by modifying the 'Delete on termination' attribute launch or while running

→ Enable 'EC2 Termination Protection' against accidental Termination

EC2 Meta data

This is instance data that you can use to configure or manage the instance

Eg:- IPv4, IPv6 addressing, DNS hostname, AMI-id, Instance ID, Instance type, local hostname, public key, Security groups.

→ It can be only viewed from within instance itself i.e you have to login to the instance

It is not protected by Encryption, anyone that has access to the instance can view this data

To View instance Metadata

Get - <https://169.254.169.254>

Instance User data

- Data Supplied by User at instance launch in the form of a script to be executed during instance boot
- User data is not Encrypted
- User data is limited to 16 KB
- You Can Change User data, by Stopping EC2 ^{first}

EC2 bare metal Instance

- Non Virtualised Environment
- OS runs directly on Hardware
- Suitable for licensing Restricted fair use

business Critical Application.

eg:- i3 metal, i5-metal, z1d metal, U-bt 1-m_{et}

Elastic Block Storage

- Most Common Replicate with A-Z
- EBS Volume attached at launch, are delete when instance terminate
- EBS Volume attached to a running instance is ^{not} ~~terminated~~ delete when instance is termin. but detached with data interact

EBS Backed Instance

faster

Instance Storage

- Physically attach to the host server.
- Data not lost when OS is Rebooted
- Data lost when:
 - Underlying drive fails
 - Instance is stop or terminated
 - You Can't detach or attach to another instance.
 - Do not Rely on for Valuable long term data