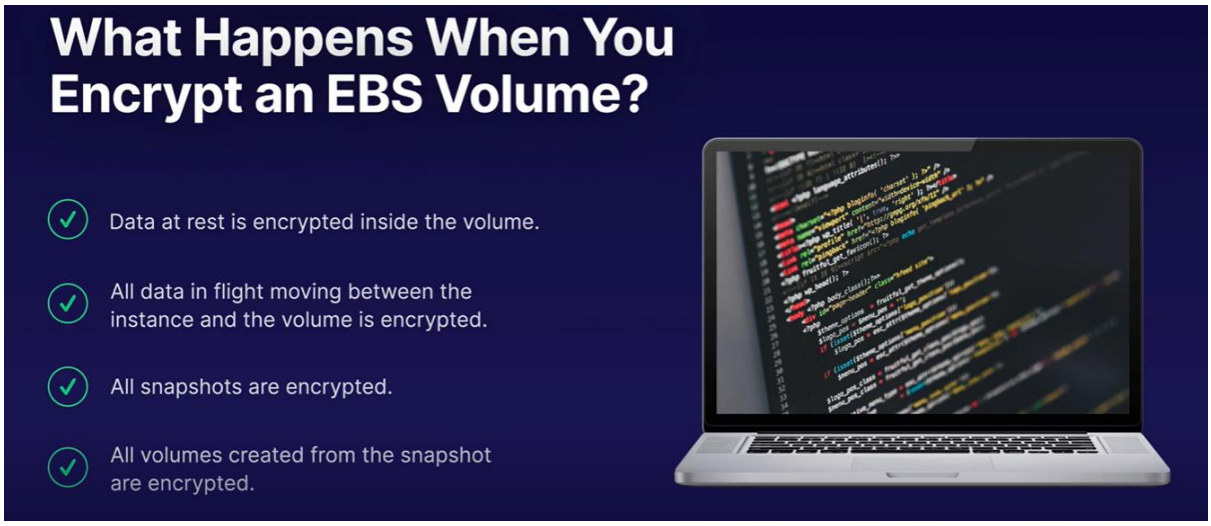
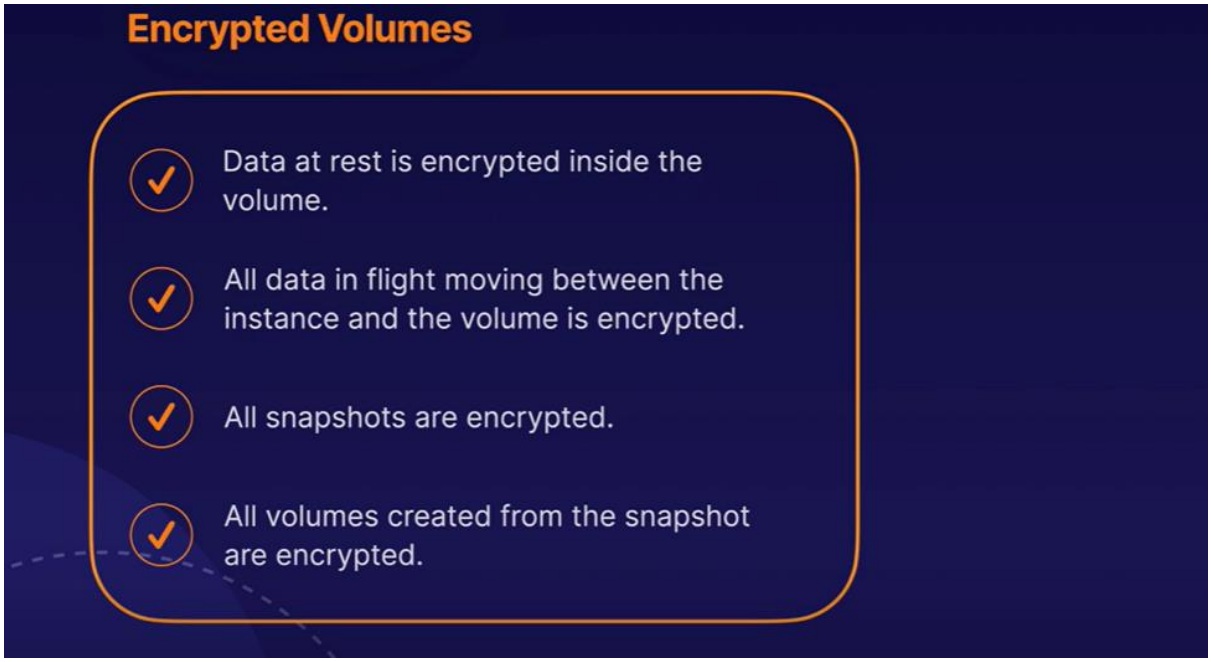
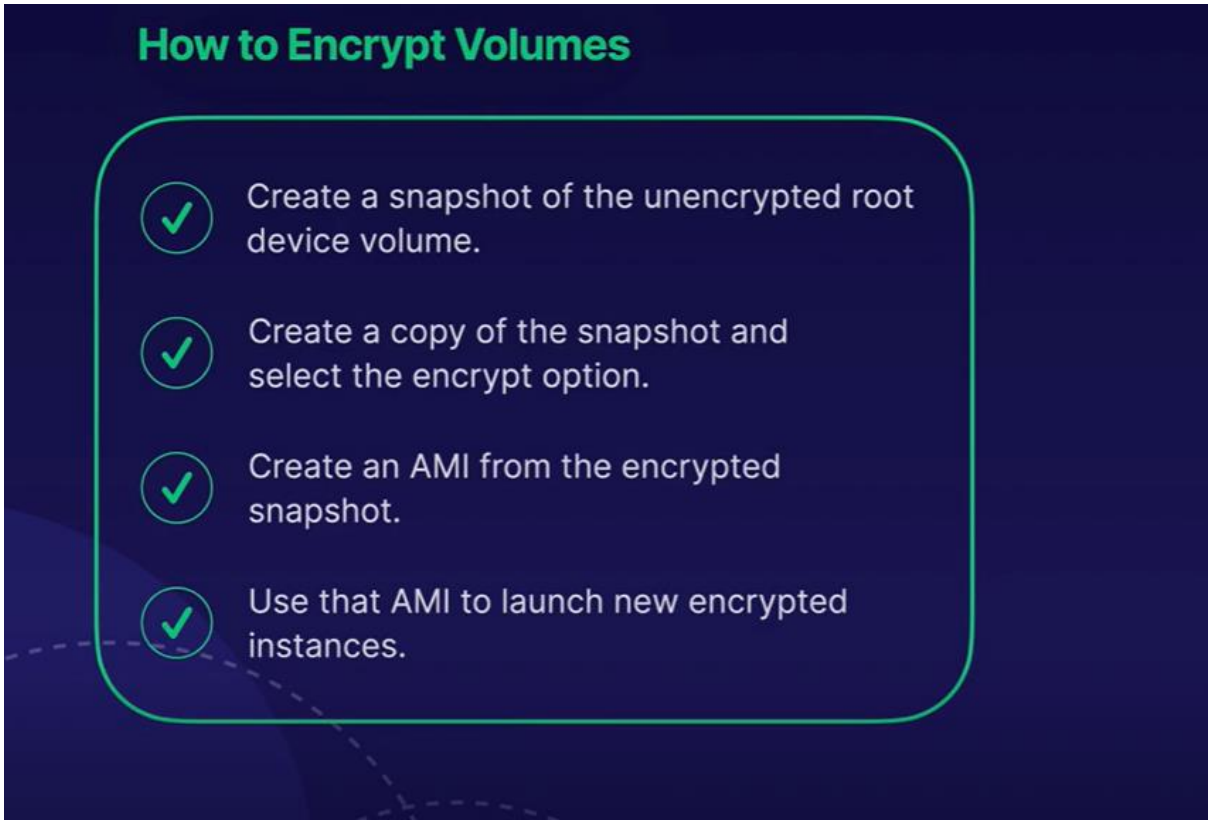
EBS Encryption:




4
Steps to Encrypt an Unencrypted Volume
Create a snapshot of the unencrypted root device volume.
Create a copy of the snapshot and select the encrypt option.
Create an AMI from the encrypted snapshot.
Use that AMI to launch new encrypted instances.


Encrypted Volumes
Data at rest is encrypted inside the volume.
All data in flight moving between the instance and the volume is encrypted.
All snapshots are encrypted.
All volumes created from the snapshot are encrypted.



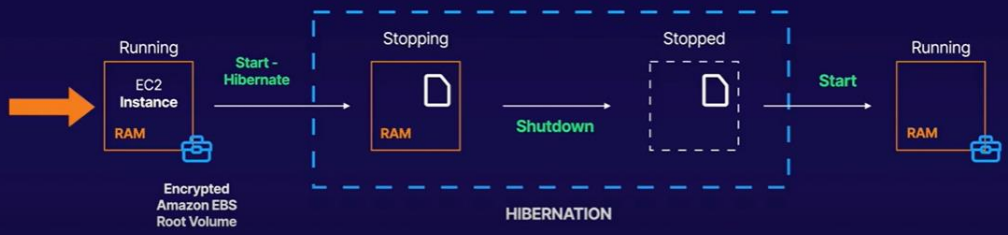
EC2 Hibernation:

EC2 Hibernation

When you hibernate an EC2 instance, the operating system is told to perform hibernation (suspend-to-disk). Hibernation **saves the contents** from the instance memory (RAM) to your Amazon EBS root volume. We persist the instance's Amazon EBS root volume and any attached Amazon EBS data volumes.

When you start your instance out of hibernation:

- The **Amazon EBS** root volume is restored to its previous state.
- The **RAM** contents are reloaded.
- The processes that were previously running on the instance are resumed.
- Previously attached data volumes are **reattached and the instance retains its instance ID**.

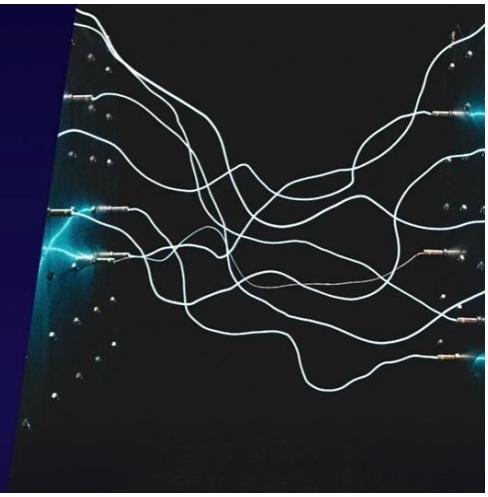


https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Hibernate.html

EC2 Hibernation

With EC2 hibernation, **the instance boots much faster**. The operating system does not need to reboot because the in-memory state (RAM) is preserved. This is useful for:

1. **Long-running processes**
2. **Services that take time to initialize**



What You Need to Know about EC2 Hibernation

- **EC2 hibernation** preserves the in-memory RAM on persistent storage (EBS).
- **Much faster to boot up** because you **do not need to reload the operating system**.
- **Instance RAM** must be less than **150 GB**.
- **Instance families include** C3, C4, C5, M3, M4, M5, R3, R4, and R5.
- **Available for** Windows, Amazon Linux 2 AMI, and Ubuntu.
- **Instances can't be hibernated** for more than **60 days**.
- **Available for** On-Demand instances and Reserved Instances.