what is snapshot of ec2

**ChatGPT said:**

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A **snapshot** in AWS EC2 is a point-in-time backup of an Amazon Elastic Block Store (EBS) volume. Snapshots capture the data present on an EBS volume at the time the snapshot is taken and can be used to create new volumes or restore data to an existing volume. Here's how it works:

**Key Features of EC2 Snapshots**

1. **Incremental Backups:**
   * Snapshots are incremental after the first one, meaning only the blocks that have changed since the last snapshot are stored. This reduces storage costs and speeds up backup processes.
2. **Stored in Amazon S3:**
   * Snapshots are stored in Amazon S3 but are not directly accessible. AWS handles the storage and ensures durability.
3. **Cross-Region and Cross-Account Sharing:**
   * Snapshots can be copied across regions or shared with other AWS accounts, enabling disaster recovery and collaboration.
4. **Volume Restoration:**
   * You can use a snapshot to create a new EBS volume. The restored volume can then be attached to an EC2 instance for use.
5. **Backup Automation:**
   * Snapshots can be automated using AWS Backup or lifecycle policies to ensure regular backups are taken.

**Use Cases**

* **Disaster Recovery:** Quickly restore lost data by creating a new volume from a snapshot.
* **Data Migration:** Migrate EBS volumes to other regions or accounts.
* **Backup:** Regular backups of data to safeguard against accidental deletion or corruption.

**Types of Snapshots**

1. **Manual Snapshots:** Created on demand by the user via the AWS Management Console, CLI, or SDK.
2. **Automated Snapshots:** Configured through AWS services like Data Lifecycle Manager (DLM).

**How Snapshots Differ from AMIs**

* A **snapshot** is specific to EBS volumes, whereas an **Amazon Machine Image (AMI)** includes snapshots of the root volume and metadata about the instance (e.g., OS, instance type).

For further details, refer to the [AWS Documentation on Snapshots](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-snapshots.html).

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**You said:**

aws ec2 create-snapshot --instance-id i-0629b4