Amazon EBS volumes

PDF (/pdfs/ebs/latest/userguide/ebs-ug.pdf#ebs-volumes)

RSS (amazon-ebs-user-guide-updates.rss) Focus mode

An Amazon EBS volume is a durable, block-level storage device that you can attach to your instances. After you attach a volume to an instance, you can use it as you would use a physical hard drive. EBS volumes are flexible. For current-generation volumes attached to current-generation instance types, you can dynamically increase size, modify the provisioned IOPS capacity, and change volume type on live production volumes.

You can use EBS volumes as primary storage for data that requires frequent updates, such as the system drive for an instance or storage for a database application. You can also use them for throughput-intensive applications that perform continuous disk scans. EBS volumes persist independently from the running life of an EC2 instance.

You can attach multiple EBS volumes to a single instance. The volume and instance must be in the same Availability Zone. Depending on the volume and instance types, you can use Multi-Attach (./ebs-volumes-multi.html) to mount a volume to multiple instances at the same time.

Amazon EBS provides the following volume types: General Purpose SSD (`gp2` and `gp3`), Provisioned IOPS SSD (`io1` and `io2`), Throughput Optimized HDD (`st1`), Cold HDD (`sc1`), and Magnetic (`standard`). They differ in performance characteristics and price, allowing you to tailor your storage performance and cost to the needs of your applications. For more information, see Amazon EBS volume types (./ebs-volume-types.html) .

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Your account has a limit on the total storage available to you. For more information about these limits, and how to request an increase in your limits, see Amazon EBS endpoints and quotas (https://docs.aws.amazon.com/general/latest/gr/ebs-service.html#limits_ebs) .

A *managed EBS volume* is managed by a service provider, such as Amazon EKS Auto Mode. You can't directly modify the settings of a managed EBS volume. Managed EBS volumes are identified by a **true** value in the **Managed** field. For more information, see Amazon EC2 managed instances (https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/amazon-ec2-managed-instances.html) .

For more information about pricing, see Amazon EBS Pricing (https://aws.amazon.com/ebs/pricing/) .

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