



How AWS Pricing Works – Whitepaper Review Part 2

Amazon Web Services

EC2 Pricing

What determines the price of your EC2 Instance

- Clock hours of server time
- Instance type
- Pricing model
- Number of instances
- Load balancing
- Detailed monitoring
- Auto Scaling
- Elastic IP addresses
- Operating systems and software packages



EC2 Pricing – Per Second Billing

Per-second billing saves money. It is particularly effective for resources that have periods of low and high usage such as development and testing, data processing, analytics, batch processing, and gaming applications.

- EC2 usage of Linux based instances that are launched in On-Demand, Reserved and Spot form will be billed on one second increments, with a minimum of 60 second
- Per-second billing is not currently applicable to instances running Microsoft Windows or Linux distributions that have a separate hourly charge
- Dedicated Instances, EBS Snapshots, and products in AWS Marketplace are still billed on an hourly basis.



Per-second
Billing

Per-hour
Billing

AWS Lambda

AWS Lambda lets you run code without provisioning or managing servers. You pay only for the compute time you consume and there is no charge when your code is not running. With Lambda, you can run code for virtually any type of application or backend service, all with zero administration



AWS Lambda – Pricing Model

You are charged based on the number of requests for your functions and the time it takes for your code to execute. Duration is calculated from the time your code begins executing until it returns or otherwise terminates, rounded up to the nearest 100 milliseconds.

Request pricing

- Free Tier: 1 million requests per month, 400,000 GB-seconds of compute time per month
- \$0.20 per 1 million requests thereafter, or \$0.00000022 per request



AWS Lambda – Pricing Model

You are charged based on the number of requests for your functions and the time it takes for your code to execute. Duration is calculated from the time your code begins executing until it returns or otherwise terminates, rounded up to the nearest 100 milliseconds.

Duration pricing

- 400,000 GB-seconds per month free, up to 3.2 million seconds of compute time
- \$0.00001667 for every GB-second used thereafter

AWS Lambda – Pricing Model

Additional charges

- You may incur additional charges if your Lambda function uses other AWS services or transfers data. For example, if your Lambda function reads and writes data to or from Amazon S3, you will be billed for the read/write requests and the data stored in Amazon S3.



AWS EBS– Pricing Model

Amazon Elastic Block Store (EBS) provides block level storage volumes for use with Amazon EC2 instances. Amazon EBS volumes are off-instance storage that persists independently from the life of an instance.

Volume Types

- SSD-backed volumes
- HDD-backed volumes

Pricing Model

- Volumes
- Snapshots
- Data transfer



Amazon S3 – Pricing Model

Amazon S3 is object storage built to store and retrieve any amount of data from anywhere: websites, mobile apps, corporate applications, and data from IoT sensors or devices.

Pricing is based on:

- Storage class (S3 Standard, S3 IA, One Zone IA...)
- Storage
- Requests
- Data transfer



Amazon Glacier – Pricing Model

Amazon Glacier is a secure, durable, and extremely low-cost cloud storage service for data archiving and long-term backup. It is designed to deliver 99.999999999 percent durability, with comprehensive security and compliance capabilities that can help meet even the most stringent regulatory requirements. Amazon Glacier provides query-in-place functionality, allowing you to run powerful analytics directly on your archived data at rest.

- Glacier storage pricing starts at \$0.004 per GB per month



Amazon Glacier – Pricing Model

Retrieval Costs

	Expedited	Standard	Bulk
Data access time	1–5 minutes	3–5 hours	5–12 hours
Data retrievals	\$0.03 per GB	\$0.01 per GB	\$0.0025 per GB
Retrieval Requests	On-Demand: \$0.01 per request Provisioned: \$100 per Provisioned Capacity Unit	\$0.050 per 1,000 requests	\$0.025 per 1,000 requests

Note:

- Amazon Glacier Select pricing

Amazon Snowball – Pricing Model

AWS Snowball is a PB-scale data transport solution that uses secure appliances to transfer large amounts of data into and out of the AWS cloud. Using Snowball addresses common challenges with large-scale data transfers, including high network costs, long transfer times, and security concerns. Transferring data with Snowball is simple, fast, and secure, and can be as little as one-fifth the cost of high-speed internet.

- Snowball appliance for 10 days of onsite usage for free



AWS Snowball

Amazon Snowball – Pricing Model

AWS Snowball pricing details

- Service fee per job
 - Snowball 50 TB: \$200
 - Snowball 80 TB: \$250

Extra-day charge

- The first 10 days of onsite usage are free. Each extra onsite day is \$15.

Data transfer

- Data transfer in to Amazon S3 is free. Data transfer out of Amazon S3 is priced by region