

## How much does it cost to use AWS? – FAQs

### 1. What are the useful services in AWS free tier?

The AWS **Free Tier** is designed to give you hands-on experience with a range of AWS services at **no charge**. When you create an AWS account, you're automatically signed up for the **AWS Free Tier for 12 months**. When your Free Tier expires, AWS starts charging the regular rates for any AWS services and resources that you're using.

Here are some useful AWS service under free tier to build **corporate websites or high traffic website, Enterprises Applications, Mobile application backend** etc for few or many thousands of users.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><div>COMPUTE</div><div>Free Tier12 MONTHS FREE</div><div>Amazon EC2</div><div>750 Hours</div><div>per month</div><div>Resizable compute capacity in the Cloud.</div><div>750 hours per month of Linux, RHEL, or SLES t2.micro or t3.micro instance dependent on region</div><div>750 hours per month of Windows t2.micro or t3.micro instance dependent on region</div></div>                                                                                                                           | <div><div>STORAGE</div><div>Free Tier12 MONTHS FREE</div><div>Amazon Elastic Block Storage</div><div>30 GB</div><div>any combination of General Purpose (SSD) or Magnetic</div><div>Persistent, durable, low-latency block-level storage volumes for EC2 instances.</div><div>30 GB of Amazon EBS: any combination of General Purpose (SSD) or Magnetic</div><div>2,000,000 I/Os (with EBS Magnetic)</div><div>1 GB of snapshot storage</div></div> | <div><div>STORAGE</div><div>Free Tier12 MONTHS FREE</div><div>Amazon S3</div><div>5 GB</div><div>of standard storage</div><div>Secure, durable, and scalable object storage infrastructure.</div><div>5 GB of Standard Storage</div><div>20,000 Get Requests</div><div>2,000 Put Requests</div></div>                                                                                                                        |
| <div><div>DATABASE</div><div>Free Tier12 MONTHS FREE</div><div>Amazon RDS</div><div>750 Hours</div><div>per month of db.t2.micro database usage (applicable DB engines)</div><div>Managed Relational Database Service for MySQL, PostgreSQL, MariaDB, Oracle BYOL, or SQL Server.</div><div>750 Hours per month of db.t2.micro database usage (applicable DB engines)</div><div>20 GB of General Purpose (SSD) database storage</div><div>20 GB of storage for database backups and DB Snapshots</div></div> | <div><div>STORAGE</div><div>Free Tier12 MONTHS FREE</div><div>Amazon CloudFront</div><div>50 GB</div><div>of data transfer out</div><div>Web service to distribute content to end users with low latency and high data transfer speeds.</div><div>50 GB of Data Transfer Out</div><div>2,000,000 HTTP or HTTPS Requests</div></div>                                                                                                                 | <div><div>MOBILE</div><div>Free TierALWAYS FREE</div><div>Amazon Cognito</div><div>50,000</div><div>MAUs each month</div><div>Mobile user identity and synchronization.</div><div>The Your User Pool feature has a free tier of 50,000 MAUs each month**</div><div>10 GB of cloud sync storage. Expires 12 months after sign-up.</div><div>1,000,000 sync operations per month. Expires 12 months after sign-up.</div></div> |

| DATABASE                                                    | COMPUTE                                                                                      | MOBILE                                                |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Free Tier <span>ALWAYS FREE</span>                          | Free Tier <span>12 MONTHS FREE</span>                                                        | Free Tier <span>ALWAYS FREE</span>                    |
| Amazon DynamoDB                                             | Elastic Load Balancing                                                                       | Amazon SNS                                            |
| <b>25 GB</b>                                                | <b>750 Hours</b>                                                                             | <b>1 Million</b>                                      |
| of storage                                                  | per month shared between Classic and Application load balancers                              | publishes                                             |
| Fast and flexible NoSQL database with seamless scalability. | Automatic distribution of incoming application traffic across multiple Amazon EC2 instances. | Fast, flexible, fully managed push messaging service. |
| 25 GB of Storage                                            | 750 Hours per month shared between Classic and Application load balancers                    | 1,000,000 Publishes                                   |
| 25 provisioned Write Capacity Units (WCU)                   | 15 GB of data processing for Classic load balancers                                          | 100,000 HTTP/S Deliveries                             |
| 25 provisioned Read Capacity Units (RCU)                    | 15 LCUs for Application load balancers                                                       | 1,000 Email Deliveries                                |
| Enough to handle up to 200M requests per month.             |                                                                                              |                                                       |

## 2. How much does it cost to host a Website or Mobile App backend on Amazon AWS?

- AWS has a free server called “**Free tier with a micro instance**” - this is for 1 year, after the period, there is a cost around **\$8 – \$10** per month. With a Micro Instance you could host a mini website, landing page, static website or small development server.
- Hosting **a few WP blogs, corporate websites and landing pages**, it shouldn't be expensive - as long as, you don't have plenty of traffic. The AWS Hosting cost could be around **\$20 – \$30** per month.
- For those “**Web Agencies**” that host several WordPress sites within a server/VPS. This scenario, you could get one medium instance (server) with 2 CPUs and 4 RAM on AWS, this AWS hosting cost, could be around: **\$40 – \$50** per month. If you have an E-commerce with high traffic, consider adding more instance capacity.
- Hosting **a high traffic website or application with a few thousands of users**, at least monthly. Initially, it is needed a database instance (AWS RDS) and 1 web server (instance) with reasonable capacity, it means: 2 medium instances. For this setup, the AWS hosting costs could be around: **\$60 – \$80**.
- Maintaining **Websites and/or applications with many thousands of users** per month. The AWS server capacity will vary, but you might need BIG servers such as 1 xlarge instance for the database and 1 xlarge instance for the web server. Definitely, the hosting costs will be around **\$300 – \$ 700**.
- For a “**highly scalable SaaS application or small startups**”. Advanced AWS setup with CDN, Caching, database clustering (RDS replication), ELB and multiple web servers. The Hosting costs could be around: **\$200 – \$800** per month.
- **Big Enterprises, Corporate Applications, and big startups**. Considering Multiple staging environments (Dev/Test/Prod), CI/CD, DevOps, AWS Auto Scaling, Clustering and Multiple Micro-services - for this scenario, costs could be around **\$1,000 - \$5,000** or even MUCH more. All depends on budget, traffic, and how big is your organization.

Please refer below questions for detailed understanding of usage vs cost analyses of EC2 instances, Volume storage, S3 bucket, Amazon RDS, CloudFront CDN etc

### 3. What will be AWS charge for 1 k users or 10 k users or how AWS charging works?

[Amazon EC2 is free to try](#) for a year. There are five ways to pay for Amazon EC2 instances: [On-Demand](#), [Savings Plans](#), [Reserved Instances](#), and [Spot Instances](#) but the most preferred way is On-Demand. The pricing is depending on the usage instead of number of users.

AWS Free Tier includes 750 hours of Linux and Windows t2.micro instances, 30GB of Storage, 2 million I/Os, and 1GB of snapshot storage with Amazon Elastic Block Store (EBS), each month for one year. To stay within the Free Tier, use only EC2 t2.micro instances.

With [On-Demand](#) instances, you pay for compute capacity by the hour or the second depending on which instances you run. No longer-term commitments or upfront payments are needed. You can increase or decrease your compute capacity depending on the load/demands of your application and only pay the specified per hourly rates for the instance you use.

On-Demand instances are recommended for:

- Users that prefer the low cost and flexibility of Amazon EC2 without any up-front payment or long-term commitment
- Applications with short-term, spiky, or unpredictable workloads that cannot be interrupted
- Applications being developed or tested on Amazon EC2 for the first time

|            | vCPU | Memory (GiB) | Linux/UNIX Usage  |
|------------|------|--------------|-------------------|
| t2.nano    | 1    | 0.5 GiB      | \$0.0058 per Hour |
| t2.micro   | 1    | 1 GiB        | \$0.0116 per Hour |
| t2.small   | 1    | 2 GiB        | \$0.023 per Hour  |
| t2.medium  | 2    | 4 GiB        | \$0.0464 per Hour |
| t2.large   | 2    | 8 GiB        | \$0.0928 per Hour |
| t2.xlarge  | 4    | 16 GiB       | \$0.1856 per Hour |
| t2.2xlarge | 8    | 32 GiB       | \$0.3712 per Hour |

*In initial stage of MVP, most preferred instance is Amazon EC2 **t2.micro** instance and according to above pricing, you may have to pay **\$8.468 per month** only after completion of free tier.*

#### Pricing examples - EBS General Purpose SSD (gp2) Volumes

Volume storage for General Purpose SSD (gp2) volumes is charged by the amount you provision in GB per month until you release the storage. Provisioned storage for gp2 volumes will be billed in per-second increments, with a 60 second minimum. I/O is included in the price of the volumes, so you pay only for each GB of storage you provision.

For example, let's say that you provision a 1000 GB volume for 12 hours (43,200 seconds) in a 30 day month. In a region that charges \$0.10 per GB-month, you would be **charged \$1.66** for the volume ( $\$0.10 \text{ per GB-month} * 1000 \text{ GB} * 43,200 \text{ seconds} / (86,400 \text{ seconds/day} * 30 \text{ day-month})$ ).

Over all, you may have to pay approx **8.4 + 1.6 = \$10 per month** if you are using EC2 **t2.micro** instance with storage volume of 1TB

Please visit <https://aws.amazon.com/ec2/pricing/on-demand/> to see pricing in more detail.

If you have any questions regarding Amazon Elastic Compute Cloud (Amazon EC2), please visit <https://aws.amazon.com/ec2/faqs/>.

#### 4. Would there be extra fee if we need more storage in cloud (to store user videos in GBs per user)

Amazon S3 is a best option to store any kind of data in any format, example media files like images, video, documents etc. Amazon S3 is a storage built to store and retrieve any amount of data from anywhere on the Internet. It's a simple storage service provided by AWS that offers an extremely durable, highly available, and infinitely scalable data storage infrastructure at very low costs.

With Amazon S3, you pay only for what you use. There is no minimum fee.

With the **AWS Free Usage Tier**, you can get started with Amazon S3 for free. Upon sign-up, new AWS customers receive **5 GB** of Amazon S3 Standard storage, 20,000 Get Requests, 2,000 Put Requests, 15GB of data transfer in, and 15GB of data transfer out each month for one year.

**S3 Standard Storage pricing** - General purpose storage for any type of data, typically used for frequently accessed data

|                     |                |
|---------------------|----------------|
| First 50 TB / Month | \$0.023 per GB |
| Next 450 TB / Month | \$0.022 per GB |
| Over 500 TB / Month | \$0.021 per GB |

For Example, you may have to pay **\$2.3 per month** for 100 GB)

Please visit [Amazon S3 Pricing page](#) to see pricing in more detail.

If you have any questions regarding Amazon S3, please visit <https://aws.amazon.com/s3/faqs/>.

#### 5. How much data transfer rate we get in basic plan cost, do we need more data transfer rate for this app and if yes then how much can be the cost?

**Regarding S3**, you pay for all bandwidth into and out of Amazon S3, except for the following:

- Data transferred in from the internet.
- Data transferred out to an Amazon Elastic Compute Cloud (Amazon EC2) instance, when the instance is in the same AWS Region as the S3 bucket

- Data transferred out to Amazon CloudFront (CloudFront).

#### Data Transfer IN To Amazon S3 From Internet

|                      |               |
|----------------------|---------------|
| All data transfer in | \$0.00 per GB |
|----------------------|---------------|

#### Data Transfer OUT From Amazon S3 To Internet

|                             |                |
|-----------------------------|----------------|
| Up to 1 GB / Month          | \$0.00 per GB  |
| Next 9.999 TB / Month       | \$0.09 per GB  |
| Next 40 TB / Month          | \$0.085 per GB |
| Next 100 TB / Month         | \$0.07 per GB  |
| Greater than 150 TB / Month | \$0.05 per GB  |

#### Data Transfer OUT From Amazon S3 To

|                                            |               |
|--------------------------------------------|---------------|
| Amazon CloudFront                          | \$0.00 per GB |
| US East (N. Virginia)                      | \$0.01 per GB |
| US West (Los Angeles)                      | \$0.02 per GB |
| US West (N. California)                    | \$0.02 per GB |
| US West (Oregon)                           | \$0.02 per GB |
| US East (Verizon) - Boston                 | \$0.01 per GB |
| US West (Verizon) - San Francisco Bay Area | \$0.02 per GB |

For Example, you may have to pay **\$9 per month** for 100 GB)

## 6. Is there any cost of using a CDN? Any cost of using S3 bucket? Motive is to keep app faster for all locations like USA and Europe or Australia?

The cost of using S3 bucket already explained in above question.

About Amazon CloudFront CDN, you can get started with Amazon CloudFront for free under AWS Free Usage Tier. Upon sign-up, new AWS customers receive 50 GB Data Transfer Out and 2,000,000 HTTP and HTTPS Requests each month for one year.

#### On-demand Pricing

Regional Data Transfer Out to Internet (per GB)

|           |                        |                 |           |
|-----------|------------------------|-----------------|-----------|
| Per Month | United States & Canada | Europe & Israel | Australia |
|-----------|------------------------|-----------------|-----------|

|            |         |         |         |
|------------|---------|---------|---------|
| First 10TB | \$0.085 | \$0.085 | \$0.114 |
| Next 40TB  | \$0.080 | \$0.080 | \$0.098 |
| Next 100TB | \$0.060 | \$0.060 | \$0.094 |
| Next 350TB | \$0.040 | \$0.040 | \$0.092 |
| Next 524TB | \$0.030 | \$0.030 | \$0.090 |
| Next 4PB   | \$0.025 | \$0.025 | \$0.085 |
| Over 5PB   | \$0.020 | \$0.020 | \$0.080 |

For Example, you may have to pay **\$8.5 per month** for 100 GB)

If you have any questions regarding Amazon CloudFront, please visit <https://aws.amazon.com/cloudfront/faqs/>.

## 7. Is there any other cost that we may need to for any service not listed above or know to client now?

Yes, if your application needs a RDBMS database like MySQL, PostgreSQL, MS SQL Server, Oracle etc then we have to use Amazon Relational Database Service (Amazon RDS) It easy to set up, operate, and scale a relational database in the cloud.

**AWS Free Tier** includes 750hrs of Amazon Relational **Database** Service (**RDS**) in a **db.t2.micro** Instance, 20GB of Storage, and 20GB for Backups each month, for one year.

The Pricing of Amazon RDS is depending on the type of instance & database you have chosen. Please visit

Amazon RDS for MySQL Pricing - <https://aws.amazon.com/rds/mysql/pricing/?nc=sn&loc=4>

Amazon Aurora Pricing - <https://aws.amazon.com/rds/aurora/pricing/?nc=sn&loc=4>

Amazon RDS for PostgreSQL Pricing - <https://aws.amazon.com/rds/postgresql/pricing/>

Amazon RDS for SQL Server Pricing - <https://aws.amazon.com/rds/sqlserver/pricing/?nc=sn&loc=4>

For example, if you are using **db.t2.micro** instance and according to mentioned pricing per hour, you may have to pay **\$12.75 per month** only after completion of free tier.

If you have any questions regarding Amazon RDS, please visit <https://aws.amazon.com/rds/faqs/>.