

Module 00 CREATING YOUR AWS FREE TIER ACCOUNT

This module covers the following subjects:

- **Creating Your Free Tier Account:** The Free Tier in AWS is an excellent way to start with Amazon Web Services. In this module section, you get details about a Free Tier account and perform a lab that sets you up with this service level.

FOUNDATION TOPICS

CREATING YOUR AWS FREE TIER ACCOUNT

Although the terms of the Free Tier account could change over time, let's start by looking at the impressive number of resources you receive for free for one year. We will then follow up with the free components after the first year.

Here are some of the “free for a year” components (notice for any services not covered elsewhere in this text, we provide some details on these services for you):

- **API Gateway:** One million API calls per month
- **Cloud Directory:** Fully managed, cloud-native directory-building service for data with multiple hierarchies; 1 GB of monthly storage.
- **CloudFront:** 50 GB of data transfers out.
- **Comprehend:** Continuously trained and fully managed natural language processing (NLP); 50,000 units of text (5M characters) for each API per month.
- **Connect:** A simple-to-use, cloud-based contact centre that scales to support any size business; 90 minutes per month of Amazon Connect usage.
- **EC2:** 750 hours per month.
- **EFS:** 5 GB of storage.

- **EBS:** 30 GB for any combination of general-purpose (SSD) or magnetic.
- **Elastic Container Registry:** 500 MB of storage per month.
- **Elastic Transcoder:** 20 minutes of audio transcoding.
- **ElastiCache:** 750 hours of cache.t2.micro Node usage.
- **Elasticsearch:** 750 hours per month of a single-AZ t2.micro.elasticsearch or t2.small.elasticsearch instance.
- **GameLift:** Simple, fast, cost-effective dedicated game server hosting; 125 hours per month of Amazon GameLift c4.large.gamelift On-Demand instance usage, plus 50 GB EBS general-purpose (SSD) storage
- **Lex:** Build voice and chat text chatbots; 10,000 text requests per month.
- **MQ:** Amazon MQ is a managed message broker service for Apache ActiveMQ; 750 hours of a single-instance mq.t2.micro broker per month.
- **Pinpoint:** Targeted push notifications for mobile apps; 5,000 free targeted users per month.
- **Polly:** Turn text into speech; 5 million characters per month.
- **RDS:** 750 hours per month of db.t2.micro database usage (applicable DB engines).
- **Rekognition:** Deep learning-based image recognition service; 5,000 images per month.
- **S3:** 5 GB of standard storage.
- **Sumerian:** Build and run virtual reality, augmented reality, and 3D applications; 50 MB published scene that receives 100 views per month for free in the first year.
- **Transcribe:** Add speech-to-text capability to your applications with automatic speech recognition; 60 minutes per month.
- **Translate:** Fast, high-quality, and affordable neural machine translation; 2 million characters per month.
- **Data Pipeline:** Orchestration for data-driven workflows; three low-frequency preconditions
- **Greengrass:** Three devices for free.
- **IoT:** 250,000 messages published or delivered per month.

- **IoT Device Management:** 50 remote actions per month.
- ~~**OpsWorks** for Chef Automate: 7,500 node hours. (deprecated)~~
- ~~**OpsWorks** for Puppet Enterprise: 7,500 node hours. (deprecated)~~
- AWS has discontinued OpsWorks, so use Systems Manager and CloudFormation instead.

<https://aws.amazon.com/blogs/mt/migrate-your-aws-opsworks-stacks-to-aws-systems-manager/>

- **Trusted Advisor:** Four checks on performance and security.
- **ELB:** 750 monthly hours shared between Classic and Application Load Balancers.

Here are the services that will remain free for you after the one year is up:

- **Chime:** A modern unified communications (UC) service that offers frustration-free meetings with exceptional audio and video and unlimited usage of Amazon Chime Basic.
- **CloudWatch:** Ten custom metrics and ten alarms.
- **Cognito:** 50,000 MAUs each month.
- **DynamoDB:** 25 GB of storage.
- **Glacier:** 10 GB of storage retrievals.
- **Macie:** Discover, classify, and protect data; 1 GB processed by the content classification engine.
- **SES:** Cost-effective email in the cloud; 62,000 outbound messages per month.
- **SNS:** One million publishes.
- **SQS:** One million requests.
- **SWF:** 10,000 activity tasks.
- **CodeBuild:** 100 build minutes.
- **CodeLimit:** Highly scalable, managed source control service; five active users per month.
- **CodePipeline:** One active pipeline per month.
- **Database Migration Service:** 750 hours of Amazon DMS Single-AZ DMS.t2.micro instance usage.

- **Glue:** Simple, flexible, and cost-effective extract, transform, and load (ETL) service; one million objects stored in the AWS Glue Data Catalog.
- **Key Management Service:** 20,000 free requests per month.
- **Lambda:** One million free requests per month.
- **Step Functions:** Coordinate components of distributed applications; 4,000 state transitions per month.
- **Storage Gateway:** 100 GB free per account.
- **X-ray:** Analyse and debug your applications; 100,000 traces are recorded monthly.

There is also several services that are available with generous trial periods.

Always check the AWS Site to ensure you have the most up-to-date information on the Free Tier products, services and limits at:

<https://aws.amazon.com/free>

This lists all 12-month free/ always free and free trial services and is always current.

Lab: Creating Your Free Tier Account

If you do not already have a Free Tier account with AWS, it is time for you to create one! Follow these steps:

Step 1. Search Google for AWS Free Tier. Select the link from Amazon for the Free Tier or type it <https://aws.amazon.com/free/>

Step 2. Click the **Create a Free Account** button, as shown in Figure 1.

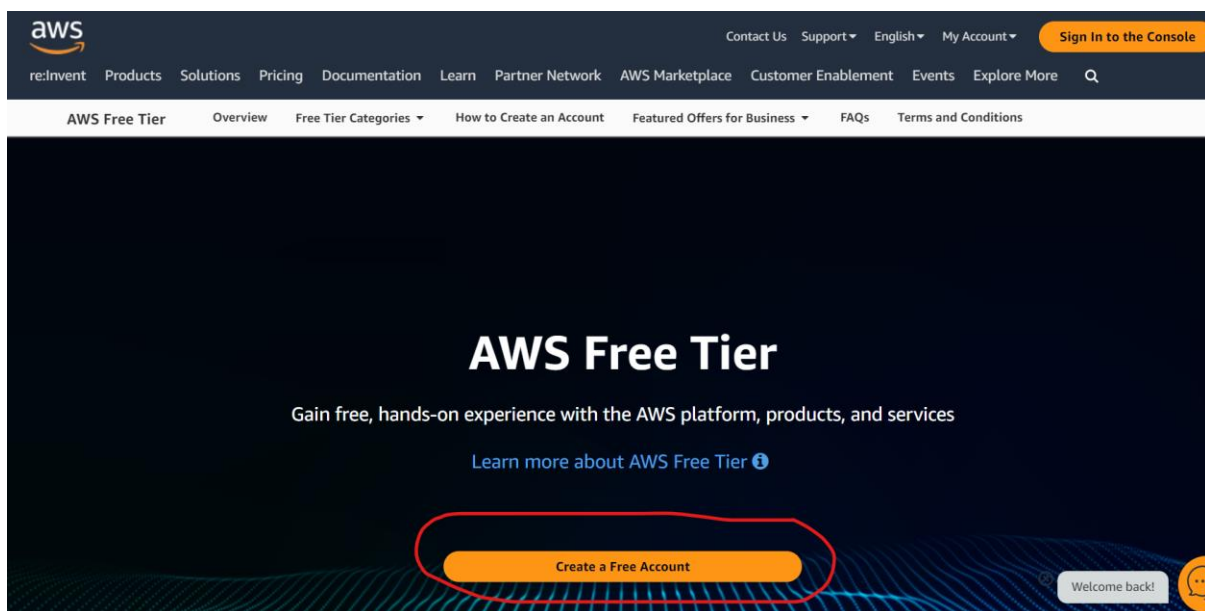


Figure 1 The Create a Free Account Button on the AWS Free Tier Page

Step 3. Provide your email address, password, and account name on the Create an AWS Account page. The email address is critical and will be the username entry when you log in to this all-powerful root account. The account name is how your account will display in AWS. This is not nearly as critical and can be changed at any time.

Step 4. Complete your basic contact information.

Step 5. Provide your payment information; note that you are not charged anything in the first year as long as you do not exceed your Free Tier limits.

Step 6. Provide the phone number for your phone verification and input the security check.

Step 7. In the **Select a Support Plan** window, choose your support options. Note that there is only one free plan – choose it.

Step 8. Sign into your new AWS account! Use the email address that you used for the account creation. Remember, this is your root AWS account. You should use this account to create “normal” admin accounts for AWS management. You should very rarely need to log in as this powerful root account.

Step 9. You are now ready to explore the wonders of AWS! Figure 2 shows the welcome screen for the AWS Management Console.

Figure 2 The AWS Management Console

