

Complete Guide: AWS Account Setup Amazon Polly and CLI Text-to-Speech

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Introduction

X-ATC-Chatter uses the AWS CLI to generate audio from a text string using the Amazon Polly text to speech service. This document outlines the steps necessary to create your AWS account, provision the Polly TTS service, and install the CLI and verify that it works with your AWS account and the Polly TTS service.

Create an AWS Account

Official Reference

■ [Create and activate an AWS account \(AWS Support\)](#)

■ [AWS Free Tier Information](#)

Steps

Go to <https://aws.amazon.com> and click "Create an AWS Account".

Enter your email address and choose an AWS account name.

Click "Verify email address" — AWS will send a verification code.

Enter the verification code and click "Verify".

Create a root user password and confirm it.

Choose Personal or Business account type and fill in your contact details.

Enter your payment/credit card information (required even for free tier).

Complete identity verification via phone (voice or SMS).

Choose a Support Plan — select Basic (Free) for getting started.

Click "Complete sign up".

Wait for the confirmation email — account activation can take a few minutes.

Note: Amazon Polly is included in the AWS Free Tier, which provides 5 million characters per month free for the first 12 months.

Secure Your AWS Account

Official Reference

■ [AWS Security Best Practices – Root Account](#)

■ [Enable MFA on the AWS Root Account](#)

Steps

Sign in to the AWS Management Console.

Click your account name in the top-right corner → "Security credentials".

Under Multi-factor authentication (MFA), click "Assign MFA device".

Choose Authenticator app (e.g., Google Authenticator, Authy).

Follow the prompts to scan the QR code and enter two consecutive MFA codes.

Click "Add MFA" to confirm.

Best Practice: Never use the root account for daily tasks. Proceed to create an IAM user in the next step.

Create an IAM User for Polly Access

Official Reference

■ [Creating an IAM User in the Console](#)

■ [AWS Managed Policies for Polly](#)

■ [Creating Access Keys for an IAM User](#)

Steps

Create the IAM User

In the AWS Console, search for "IAM" in the search bar and open it.

In the left sidebar, click "Users" → "Create user".

Enter a User name (e.g., polly-cli-user).

Check "Provide user access to the AWS Management Console" only if you need console access; for CLI-only use, leave it unchecked.

Click "Next".

Attach Permissions

On the Set permissions page, choose "Attach policies directly".

Search for AmazonPollyFullAccess and check the box next to it.

Optionally, also attach AmazonS3FullAccess if you plan to store output in S3.

Click "Next" → "Create user".

Create Access Keys

Click on the newly created user → "Security credentials" tab.

Scroll to "Access keys" → click "Create access key".

Select "Command Line Interface (CLI)" as the use case.

Acknowledge the recommendation and click "Next".

(Optional) Add a description tag → click "Create access key".

IMPORTANT: Download the .csv file or copy both:

Access key ID (e.g., AKIAIOSFODNN7EXAMPLE)

Secret access key (e.g., wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY)

These will not be shown again. Store them securely (e.g., a password manager).

Provision Amazon Polly

Official Reference

■ [What is Amazon Polly?](#)

■ [Amazon Polly Getting Started](#)

■ [Available Voices in Amazon Polly](#)

Steps

Amazon Polly is a fully managed service — there is no server to launch or configure. You simply enable access through IAM and call the API. To confirm the service is accessible in your region:

In the AWS Console, search for "Amazon Polly" and open it.

You will see the Polly console with options to try voices interactively.

Under "Text-to-Speech", type a test phrase, select a voice, and click "Listen" to confirm the service is working in your region.

Note which AWS Region you are using (visible in the top-right corner of the console, e.g., us-east-1). You will need this when configuring the CLI.

📄 Supported Regions: See the full list at [Amazon Polly Endpoints and Quotas](#).

Install the AWS CLI

Official Reference

📄 [AWS CLI Installation – Official Documentation](#)

📄 [AWS CLI v2 Changelog and Releases](#)

macOS

bash terminal

Download the macOS installer package

```
curl "https://awscli.amazonaws.com/AWSCLIV2.pkg" -o "AWSCLIV2.pkg"
```

Install it (requires administrator password)

```
sudo installer -pkg AWSCLIV2.pkg -target /
```

Verify the installation

```
aws --version
```

📄 [macOS installation details](#)

Windows

Download the installer: AWSCLIV2.msi

Run the downloaded .msi file and follow the on-screen instructions.

Open a new Command Prompt or PowerShell window and verify:

Terminal (DOS Box)

```
aws --version
```

📄 [Windows installation details](#)

Linux (x86_64)

Bash Terminal

Download the Linux installer

```
curl "https://awscli.amazonaws.com/awscli-exe-linux-x86_64.zip" -o "awscliv2.zip"
```

Unzip the package

```
unzip awscliv2.zip
```

Run the install script

```
sudo ./aws/install
```

Verify the installation

```
aws --version
```

📄 [Linux installation details](#)

Expected Output After Installation

```
aws-cli/2.x.x Python/3.x.x Linux/... exe/x86_64.ubuntu.xx
```

Configure the AWS CLI

Official Reference

■ [Configuring the AWS CLI](#)

■ [AWS CLI Configuration File Reference](#)

■ [Available AWS Region Codes](#)

Steps

Open a terminal and run:

Bash Terminal

aws configure

You will be prompted for four values:

- AWS Access Key ID [None]: AKIAIOSFODNN7EXAMPLE
- AWS Secret Access Key [None]: wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY
- Default region name [None]: us-east-1
- Default output format [None]: json

Prompt What to Enter

- AWS Access Key ID The Access Key ID from Create Access Keys
- AWS Secret Access Key The Secret Access Key from Create Access Keys
- Default region name Your region (e.g., us-east-1, eu-west-1)
- Default output format json (recommended)

Verify Configuration

Terminal

aws sts get-caller-identity

Expected output:

json

```
{
  "UserId": "AIDAIOSFODNN7EXAMPLE",
  "Account": "123456789012",
  "Arn": "arn:aws:iam::123456789012:user/polly-cli-user"
}
```

If you see this output without errors, your CLI is correctly configured and authenticated.

Verify AWS CLI can list Polly Voices

In a terminal type:

```
aws polly describe-voices
```

You should see a list of Amazon Polly voices returned as a JSON object.