#### AWS > Documentation > AWS Serverless Application Model > Developer Guide



# Installing the AWS SAM CLI

PDF (/pdfs/serverless-application-model/latest/developerguide/serverless-application-model.pdf#install-sam-cli)

RSS (serverlessapplication-modelupdates.rss)

Install the latest release of the AWS Serverless Application Model Command Line Interface (AWS SAM CLI) on supported operating systems.

For information on managing a currently installed version of the AWS SAM CLI, including how to upgrade, uninstall, or manage nightly builds, see Managing AWS SAM CLI versions (./manage-sam-cli-versions.html).

Is this your first time installing the AWS SAM CLI?

Complete all prerequisites (./prerequisites.html) in the previous section before moving forward. This includes:

- 1. Signing up for an AWS account.
- 2. Creating an administrative IAM user.
- 3. Creating an access key ID and secret access key.
- 4. Installing the AWS CLI.
- 5. Configuring AWS credentials.

#### **Topics**

- Installing the AWS SAM CLI (#install-sam-cli-instructions)
- Troubleshooting (#install-sam-cli-troubleshooting)
- Next steps (#install-sam-cli-next-steps)

## **Installing the AWS SAM CLI**

#### ① Note

Starting September 2023, AWS will no longer maintain the AWS managed Homebrew installer for the AWS SAM CLI (aws/tap/aws-sam-cli). If you use Homebrew to install and manage the AWS SAM CLI, see the following options:

- To continue using Homebrew, you can use the community managed installer. For more information, see Managing the AWS SAM CLI with Homebrew (./manage-sam-cli-versions.html#manage-sam-cli-versionshomebrew).
- We recommend using one of the first party installation methods that are documented on this page. Before using one of these methods, see Switch from Homebrew (./manage-sam-cli-versions.html#manage-samcli-versions-switch) .

To install the AWS SAM CLI, follow the instructions for your operating system.

#### **▶** Linux

#### x86\_64 - command line installer

ARM - command line installer

- Download the AWS SAM CLI .zip file (https://github.com/aws/aws-sam-cli/releases/latest/download/aws-sam-cli-linux-x86\_64.zip) to a directory of your choice.
- 2. **(Optional)** You can verify the integrity of the installer before installation. For instructions, see Verify the integrity of the AWS SAM CLI installer (./reference-sam-cli-install-verify.html).
- 3. Unzip the installation files into a directory of your choice. The following is an example, using the saminstallation subdirectory.

#### Note

**(1)** 

If your operating system doesn't have the built-in **unzip** command, use an equivalent.

\$ unzip aws-sam-cli-linuxx86\_64.zip -d sam-installation

- 4. Install the AWS SAM CLI by running the install executable. This executable is located in the directory used in the previous step. The following is an example, using the sam-installation subdirectory:
  - \$ sudo ./sam-installation/install
- 5. Verify the installation.

\$ sam --version

On successful installation, you should see output like the following:

SAM CLI, version 1.94.0

#### ▼ macOS

Install the AWS SAM CLI using its package installer.

### Using the package installer

The package installer has two installation methods that you can choose from:

- 1. GUI
- 2. Command line

You can install for all users or just your current user. To install for all users, superuser authorization is required.



### **Installation steps**

Install the AWS SAM CLI using any of the following options.

GUI - All users

**GUI - Current user** 

Command line - All use

#### To download the package installer

#### Note

If you previously installed the AWS SAM CLI through Homebrew or pip, you need to uninstall it first. For instructions, see Uninstalling the AWS SAM CLI (./manage-sam-cli-versions.html#manage-sam-cli-versions-uninstall) .

- To begin installation, download the macOS pkg to a directory of your choice:
  - x86\_64 (Intel) aws-sam-cli-macos-x86\_64.pkg (https://github.com/aws/aws-sam-cli/releases/latest/download/aws-sam-cli-macos-x86\_64.pkg)
  - o arm64 (Apple) aws-sam-cli-macos-arm64.pkg (https://github.com/aws/aws-sam-cli/releases/latest/download/aws-sam-cli-macos-arm64.pkg)

#### To verify the package installer (optional)

 You can verify the integrity of the installer before installation. For instructions, see Verify the integrity of the AWS SAM CLI installer (./reference-sam-cli-installverify.html).

#### To install the AWS SAM CLI

Modify and run the installation script:

\$ sudo installer -pkg path-to-pkginstaller/name-of-pkg-installer target /

installer: Package name is AWS SAM



CLI

installer: Upgrading at base path

/

installer: The upgrade was

successful.

#### Note

To invoke the AWS SAM CLI with the **sam** command, the installer automatically creates a symlink between /usr/local/bin/sam and /usr/local/aws-sam-cli/sam.

#### To verify a successful installation

 Verify that the AWS SAM CLI has properly installed and that your symlink is configured by running:

\$ which sam
/usr/local/bin/sam
\$ sam --version
SAM CLI, version 1.94.0

#### Windows

Windows Installer (MSI) files are the package installer files for the Windows operating system.

Follow these steps to install the AWS SAM CLI using the MSI file.

1. Download the AWS SAM CLI 64-bit 2

(https://github.com/aws/aws-sam-cli/releases/latest/download/AWS\_SAM\_CLI\_64\_PY3.msi) .

#### Note

If you use a 32-bit version of Windows, see
Installing the AWS SAM CLI on 32-bit Windows



(./important-notes.html#important-notes-2020-06-windows) .

- 2. **(Optional)** You can verify the integrity of the installer before installation. For instructions, see Verify the integrity of the AWS SAM CLI installer (./reference-sam-cli-install-verify.html).
- 3. Verify the installation.

After completing the installation, verify it by opening a new command prompt or PowerShell prompt. You should be able to invoke sam from the command line.

sam --version

After successful installation of the AWS SAM CLI, you should see output like the following:

SAM CLI, version 1.94.0

4. Enable long paths (Windows 10 and newer only).

## **▲** Important

The AWS SAM CLI app templates repository (https://github.com/aws/aws-sam-cli-app-templates) contains some long file paths which may cause errors when running sam init due to Windows 10 MAX\_PATH limitations. To resolve this issue, the new long paths behavior must be configured.

To enable long paths, see Enable Long Paths in Windows 10, Version 1607, and Later (https://learn.microsoft.com/en-us/windows/win32/fileio/maximum-file-path-limitation? tabs=powershell#enable-long-paths-in-windows-10-version-1607-and-later) in the *Microsoft Windows App Development Documentation*.

5. Install Git.

To download sample applications using the sam init command, you must also install Git. For instructions, see



Installing Git (https://git-scm.com/book/en/v2/Getting-Started-Installing-Git).

## **Troubleshooting**

If you come across issues while installing the AWS SAM CLI, see Installation errors (./sam-cli-troubleshooting.html#sam-cli-troubleshootinstall).

## **Next steps**

To learn more about the AWS SAM CLI and to begin building your own serverless applications, see the following:

- Tutorial: Deploying a Hello World application (./serverless-getting-started-hello-world.html) Step-by-step instructions to download, build, and deploy a basic serverless application.
- The Complete AWS SAM Workshop (https://catalog.workshops.aws/complete-aws-sam/en-US) A workshop designed to teach you many of the major features that AWS SAM provides.
- AWS SAM example applications and patterns (https://serverlessland.com/patterns?framework=SAM) Sample applications and patterns from community authors that you can further experiment with.

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