# Installation

```
smallstep.com/docs/step-ca/installation
```

It's trivial to install the step-ca binary on your local machine.



Building from source?

Check out our guide to getting started with development.

Select your operating system or infrastructure:

#### macOS

```
Install step and step-ca together, via <u>Homebrew</u>:
brew install step
```

### Linux Packages (amd64)



Install both step-ca and the step CLI tool.

The <u>step CLI tool</u> is the easiest way to initialize, configure, and control <u>step-ca</u>. While <u>step</u> is not technically required to run <u>step-ca</u>, it is very much recommended.

Debian

1. Install step

Download and install the Debian package for your platform from our <u>latest release</u>:

```
wget https://dl.step.sm/gh-release/cli/docs-ca-install/v0.19.0/step-
cli_0.19.0_amd64.deb
sudo dpkg -i step-cli_0.19.0_amd64.deb
```

2. Install step-ca

Download and install the Debian package for your platform from our <u>latest release</u>:

```
wget https://dl.step.sm/gh-release/certificates/docs-ca-install/v0.19.0/step-ca_0.19.0_amd64.deb sudo dpkg -i step-ca_0.19.0_amd64.deb
```

To configure step-ca as a daemon, see our <u>systemd configuration guide</u>.

To uninstall, run dpkg - r step-cli step-ca and remove the configuration directory \$HOME/.step.

**Arch Linux** 

There are community-driven Arch Linux packages.

You can use <u>pacman</u> to install the packages.

```
pacman -S step-cli step-ca
```

The binary tarballs can be found here:

```
step-ca
step-cli
```

Big shout out to the maintainers of these packages! We appreciate you.

To uninstall, run pacman -R step-ca step-cli and remove the configuration directory \$HOME/.step.

Alpine Linux



This package is in a testing repository.

```
To install it, you'll need to append <a href="http://dl-cdn.alpinelinux.org/alpine/edge/testing">http://dl-cdn.alpinelinux.org/alpine/edge/testing</a> to /etc/apk/repositories . Alternatively, see <a href="Linux">Linux</a> (other).
```

There are community driven Alpine Linux Packages for step and step-ca.

```
Use apk to install step:
```

```
apk add step-cli step-certificates
```

To uninstall, run apk del step-cli step-certificates and remove the \$HOME/.step configuration directory.

The binary tarballs can be found here:

```
step-cli
step-certificates
```

Big shout out to the maintainers of these packages! We appreciate you.

**NixOS** 

There are community-maintained packages for NixOS:

```
step-ca
step-cli
```

FreeBSD

There are community-maintained packages for FreeBSD:

```
step-certificates
step-cli
```

Here's an <u>installation transcript</u> for installing both packages in a FreeBSD jail.

Big shout out to the maintainers of these packages! We appreciate you.

#### Linux binaries

We distribute pre-compiled binaries for amd64, arm64, armv6, armv7, mips, mips64, ppc64le, and 386. See the <u>latest release</u> page.

Here's how to download and install the step and step-ca binaries on an amd64 machine:

1. Install step

Download and install the Linux tarball from our <u>latest release</u>:

```
wget -0 step.tar.gz https://dl.step.sm/gh-release/cli/docs-ca-
install/v0.19.0/step_linux_0.19.0_amd64.tar.gz
tar -xf step.tar.gz
sudo cp step_0.19.0/bin/step /usr/bin
```

2. Install step-ca

Download and install the Linux tarball from our latest release:

```
wget -0 step-ca.tar.gz https://dl.step.sm/gh-release/certificates/docs-ca-
install/v0.19.0/step-ca_linux_0.19.0_amd64.tar.gz
tar -xf step-ca.tar.gz
sudo cp step-ca_0.19.0/bin/step-ca /usr/bin
```

To configure step-ca as a daemon, see our <u>systemd configuration guide</u>.

#### **Kubernetes**

We publish <u>helm charts</u> for easy installation on kubernetes:

```
helm install step-certificates
```

You can see all the configuration options at <a href="https://hub.helm.sh/charts/smallstep/step-certificates">https://hub.helm.sh/charts/smallstep/step-certificates</a>.



Autocert

If you're using Kubernetes, make sure you <u>check out autocert</u>: a kubernetes add-on that builds on <u>step-ca</u> to automatically inject TLS/HTTPS certificates into your containers.

### **Docker**

We publish <u>docker images</u> for easy container installation.

## **Test your installation**

\$ step version

Smallstep CLI/0.10.0 (darwin/amd64) Release Date: 2019-04-30 19:01 UTC

\$ step-ca version

Smallstep CA/0.10.0 (darwin/amd64) Release Date: 2019-04-30 19:02 UTC

## **Next Steps**

Learn about the <u>core concepts and design principles</u> behind <u>step-ca</u>. Read the <u>Getting Started guide</u> to set up a CA and get your first certificate.