How to Install Go on Debian 12

Introduction

Go, or Golang, is a relatively new, open-source language created by Google. Its purpose is to streamline software development and enable users to create simple and reliable apps.

As a modern language, Go offers memory allocation, concurrency support, garbage collection, coordination avoidance, etc.

This article explains how to install Go on Debian 12 in a few simple steps.

Prerequisites

- Debian system (this tutorial uses Debian 12).
- A sudo user.
- Access to the command line.

How to Install Go on Debian 12

Before starting the installation, ensure the Debian server is up to date. Update the repository with the following:

```
sudo apt update -y
```

```
sara@pnap:~$ sudo apt update -y
[sudo] password for sara:
Hit:1 http://security.debian.org/debian-security bookworm-security InRelease
Hit:2 http://deb.debian.org/debian bookworm InRelease
Hit:3 http://deb.debian.org/debian bookworm-updates InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
148 packages can be upgraded. Run 'apt list --upgradable' to see them.
sara@pnap:~$ █
```

Step 1: Download Go

To start the installation process:

1. Visit the Go downloads page.

2. Click the Linux box under **Featured downloads** to start the download.

> **Note:** Use wget or curl to download Go without accessing the browser.

Step 2: Extract Files

Extract files to the *usr/local* directory. To do that, take the following steps:

1. Navigate to **Downloads** using the cd command:

```
cd ~/Downloads
```

```
sara@pnap:~$ cd ~/Downloads
sara@pnap:~/Downloads$ █
```

2. Run the following command to extract files:

```
sudo tar -C /usr/local -xzf go1.22.5.linux-amd64.tar.gz
```


The command doesn't print any output. However, tar extracts the specified file (*go1.19.2.linux-amd64.tar.gz*) to the desired directory.

Step 3: Set the Environment

To set the environment variable, add */usr/local/go/bin* to PATH.

Take the following steps:

1. Access *.profile* in Vim or another text editor.

```
vim .profile
```

2. At the end of the file, paste the following lines:

```
export PATH=$PATH:/usr/local/go/bin

export GOPATH=$HOME/go

export PATH=$PATH:$GOPATH/bin
```


3. Save and close the file.

4. Reload your shell configuration to apply the changes with:

```
source ~/.profile
```

The command has no output.

Note: To install Go system-wide, edit */etc/profile*. To install it for the current user, access *$HOME/.profile*.