

# How to setup the environment for S3 Benchmark

S3 Benchmark tool

Source:

<https://github.com/wasabi-tech/s3-benchmark>

Execute:

```
>./s3-benchmark -a <ACCESS_KEY> -b <BUCKET_NAME> -s <SECRET_KEY> -t 10 -l 5 -u  
https://s3.ap-northeast-1.wasabisys.com -z 1M
```

## UPDATED VERSION

<https://github.com/luizcarloskazuyukifukaya/s3-benchmark-updated>

(note) log file with CSV format so it should be easier to be used for analysis.

## UPDATE THE SOURCE CODE

You need to understand Go to update the source code.

The following is the main source code you need to understand so you can change the behavior of the benchmark tool.

- s3-benchmark.go - Original version
- s3-benchmark-updated.go - Updated version for CSV output and so on

## COMPILE THE SOURCE CODE

The current source code is based on Go 1.7.0 version, and thus before executing the compiler you need to setup the environment, so all dependents are looked up correctly.

### Setup Environment

Install Go environment

```
$ sudo apt install -y golang-go
```

```
$ go version
```

```
(base) wasabi@jp-se-ubuntu-kfukaya:~/.goenv$ go version  
go version go1.13.8 linux/amd64
```

Install goenv ([詳細](#))

```
$ git clone https://github.com/syndbg/goenv.git ~/.goenv
```

Add to environment variables

```
$ echo 'export GOENV_ROOT="$HOME/.goenv"' >> ~/.bashrc
$ echo 'export PATH="$GOENV_ROOT/bin:$PATH"' >> ~/.bashrc
$ echo 'eval "$(goenv init -)"' >> ~/.bashrc
$ source ~/.bashrc
```

## Install Go 1.7.0

List versions that CAN BE installed

```
$ goenv install -l
```

```
(base) wasabi@jp-se-ubuntu-kfukaya:~$ goenv install -l
Available versions:
  1.2.2
  1.3.0
  1.3.1
  1.3.2
  1.3.3
  1.4.0
  1.4.1
  1.4.2
  1.4.3
  1.5.0 ....
```

List versions that IS ALREADY installed

```
$ goenv versions
xfukaya@kfukaya:~/projects/python/s3-benchmark-updated$ goenv versions
  1.11.0
  1.16.0
  1.17.0
  1.19.1
  1.19.10
  1.20.0
  1.21.0
* 1.21.1 (set by /home/xfukaya/.go-version)
  1.7.0
xfukaya@kfukaya:~/projects/python/s3-benchmark-updated$
```

Install specific Go version (**Version: 1.7.0 REQUIRED**)

**IF THE 1.7.0 version IS NOT SHOWN YOU NEED TO INSTALL IT.**

## Install specific Go version (Version: 1.7.0)

**\$ goenv install 1.7.0**

```
(base) wasabi@jp-se-ubuntu-kfukaya:~$ goenv install 1.7.0
Downloading go1.7.linux-amd64.tar.gz...
-> go1.7.linux-amd64.tar.gz
#####
#####
100.0%#####
##### 100.0%
Installing Go Linux 64bit 1.7.0...
Installed Go Linux 64bit 1.7.0 to /home/wasabi/.goenv/versions/1.7.0

(base) wasabi@jp-se-ubuntu-kfukaya:~$ goenv versions
* system (set by /home/wasabi/.goenv/version)
  1.7.0
(base) wasabi@jp-se-ubuntu-kfukaya:~$
```

## Switch to Go 1.7.0

**IMPORTANT: Make sue you are executing the commands on the project directory where the source file (\*.go) is placed.**

**\$ goenv local 1.7.0**

```
(base) wasabi@jp-se-ubuntu-kfukaya:~$ goenv local 1.7.0
(base) wasabi@jp-se-ubuntu-kfukaya:~/projects/python/s3-benchmark-updated$ goenv
version
1.7.0 (set by /home/wasabi/projects/python/s3-benchmark-updated/.go-version)
```

## Install dependencies

Install AWS GO SDK

**\$ sudo go get github.com/aws/aws-sdk-go**

Install bytefmt

**\$ sudo go get code.cloudfoundry.org/bytefmt**

```
(base) wasabi@jp-se-ubuntu-kfukaya:~/projects/python/s3-benchmark-updated$ sudo go
get github.com/aws/aws-sdk-go
[sudo] password for wasabi:
(base) wasabi@jp-se-ubuntu-kfukaya:~/projects/python/s3-benchmark-updated$ sudo go
get code.cloudfoundry.org/bytefmt
```

```
(base) wasabi@jp-se-ubuntu-kfukaya:~/projects/python/s3-benchmark-updated$
```

## Compile Source Code

```
$ sudo go build s3-bechmark.go
```