**Debian 10 Buster**

**About**

- FreeSWITCH project has been moved to GitHub: [https://github.com/signalwire/freeswitch](https://github.com/signalwire/freeswitch)
- Please open new issues in: [https://github.com/signalwire/freeswitch/issues](https://github.com/signalwire/freeswitch/issues)

Debian 10 "Buster" is the reference platform for FreeSWITCH™ as of version 1.10

- Dependencies are available from FreeSWITCH repository via the "apt-get build-dep freeswitch" command.

**Sofia-sip and SpanDSP Notice!**

- SpanDSP and sofia-sip
  - Sofia-sip and SpanDSP dependencies have been removed from the FreeSWITCH™ tree since v1.10.4 Release (05 August 2020).
  - You can find source files of Sofia-sip here: [https://github.com/freeswitch/sofia-sip](https://github.com/freeswitch/sofia-sip)
  - SpanDSP sources are here: [https://github.com/freeswitch/spandsp](https://github.com/freeswitch/spandsp)
  - Packages for Sofia-sip and SpanDSP are available for all supported platforms from our packaging repos.
  - You might have to visit each directory, run `./bootstrap.sh`, then `./configure`, then `make` then `install`

**Commit Log**

- See all FreeSWITCH commits here: [https://github.com/signalwire/freeswitch/commits/master](https://github.com/signalwire/freeswitch/commits/master)

**Installing FreeSWITCH - Package or Source**
Easy Way

Installing From Debian Packages

Latest Release Branch:

**Release package**

```bash
apt-get update && apt-get install -y gnupg2 wget lsb-release
wget -0 - https://files.freeswitch.org/repo/deb/debian-release/fsstretch-archive-keyring.asc | apt-key add -
echo "deb http://files.freeswitch.org/repo/deb/debian-release/ `lsb_release -sc` main" > /etc/apt/sources.list.d/freeswitch.list
echo "deb-src http://files.freeswitch.org/repo/deb/debian-release/ `lsb_release -sc` main" >> /etc/apt/sources.list.d/freeswitch.list
# you may want to populate /etc/freeswitch at this point.
# if /etc/freeswitch does not exist, the standard vanilla configuration is deployed
apt-get update && apt-get install -y freeswitch-meta-all
```

FreeSWITCH™ is now installed and can be accessed with

**FreeSwitch CLI**

```
fs_cli -rRS
```

Master Branch ("git"):

**WARNING** not suitable for production

**Master Test Package**

```bash
apt-get update && apt-get install -yg gnupg2 wget lsb-release
wget -0 - https://files.freeswitch.org/repo/deb/debian-unstable/freeswitch_archive_g0.pub | apt-key add -
echo "deb http://files.freeswitch.org/repo/deb/debian-unstable/ `lsb_release -sc` main" > /etc/apt/sources.list.d/freeswitch.list
echo "deb-src http://files.freeswitch.org/repo/deb/debian-unstable/ `lsb_release -sc` main" >> /etc/apt/sources.list.d/freeswitch.list
# you may want to populate /etc/freeswitch at this point.
# if /etc/freeswitch does not exist, the standard vanilla configuration is deployed
apt-get update && apt-get install -y freeswitch-meta-all
```

Building Debian Packages From Master Branch

**WARNING** not suitable for production

The master branch depends on different libraries which are not available as packages in Debian distribution, but are available from FreeSWITCH repository. Thus, you will need internet access to the FreeSWITCH DEB repository.
Build your own .deb Master package

```bash
apt-get update && apt-get install -yq gnupg2 wget lsb-release
wget -O - https://files.freeswitch.org/repo/deb/debian-unstable/freeswitch_archive_g0.pub | apt-key add -

echo "deb http://files.freeswitch.org/repo/deb/debian-unstable/ `lsb_release -sc` main" >> /etc/apt/sources.list.d/freeswitch.list

echo "deb-src http://files.freeswitch.org/repo/deb/debian-unstable/ `lsb_release -sc` main" >> /etc/apt/sources.list.d/freeswitch.list

apt-get update && apt-get install -y xz-utils devscripts cowbuilder git screen

# nonstandard packages from freeswitch repo are not trusted by pbuilder !!
echo "ALLOWUNTRUSTED=yes" >> /etc/pbuilderrc

# get the latest master. Use the -b flag to get a specific branch
mkdir /usr/src/freeswitch-debs
git clone https://github.com/signalwire/freeswitch.git /usr/src/freeswitch-debs/freeswitch

cd /usr/src/freeswitch-debs
# here it's good to run screen with logging, so that you can detach from the shell prompt
screen -L

cd freeswitch
./debian/util.sh build-all -aamd64 -cbuster

# here you can detach by Ctrl-a Ctrl-d and see the log files in /usr/src/freeswitch-debs/log/ folder.
# The build may last about an hour, depending on your CPU speed.
# If the build is successful, you will have a bunch of .deb files in /usr/src/freeswitch-debs
```

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**Compiling from source code**

**Building From Source**

**Compiling Release Branch (production)**
Release source build

```
apt-get update && apt-get install -yq gnupg2 wget lsb-release
wget -o - https://files.freeswitch.org/repo/deb/debian-release/fsstretch-archive-keyring.asc | apt-key add -
echo "deb http://files.freeswitch.org/repo/deb/debian-release/ `lsb_release -sc` main" > /etc/apt/sources.list.d/freeswitch.list
echo "deb-src http://files.freeswitch.org/repo/deb/debian-release/ `lsb_release -sc` main" >> /etc/apt/sources.list.d/freeswitch.list
apt-get update
# Install dependencies required for the build
apt-get build-dep freeswitch
# then let's get the source. Use the -b flag to get a specific branch
cd /usr/src/
git clone https://github.com/signalwire/freeswitch.git -bv1.10 freeswitch
cd freeswitch
# Because we're in a branch that will go through many rebases, it's
# better to set this one, or you'll get CONFLICTS when pulling (update).
git config pull.rebase true
# ... and do the build
./bootstrap.sh -j
./configure
make
make install
```

Compiling Latest Master (for testing)

**WARNING** not suitable for production
Master source build

apt-get update && apt-get install -yq gnupg2 wget lsb-release
wget -O - https://files.freeswitch.org/repo/deb/debian-unstable/freeswitch_archive_g0.pub | apt-key add -
echo "deb http://files.freeswitch.org/repo/deb/debian-unstable/ `lsb_release -sc` main" > /etc/apt/sources.list.d/freeswitch.list
echo "deb-src http://files.freeswitch.org/repo/deb/debian-unstable/ `lsb_release -sc` main" >> /etc/apt/sources.list.d/freeswitch.list
apt-get update

# Install dependencies required for the build
apt-get build-dep freeswitch

# Then let's get the source. Use the -b flag to get a specific branch
cd /usr/src/
git clone https://github.com/signalwire/freeswitch.git freeswitch
cd freeswitch

# Because we're in a branch that will go through many rebases, it's
# better to set this one, or you'll get CONFLICTS when pulling (update).
git config pull.rebase true

# ... and do the build

# The -j argument spawns multiple threads to speed the build process, but causes trouble on some systems
./bootstrap.sh -j

# if you want to add or remove modules from the build, edit modules.conf
vi modules.conf

# add a module by removing '#' comment character at the beginning of the line
# remove a module by adding the '#' comment character at the beginning of the line
# containing the name of the module to be skipped in the build process

./configure
make
make install

# Install audio files:
make cd-sounds-install cd-moh-install

# To update an installed build:
cd /usr/src/freeswitch
make current

Before Starting FreeSWITCH

If you built FreeSWITCH™ from source code you should set file permissions and ownership before starting FreeSWITCH. Follow the post-installation instructions.