

# Debian 8 Jessie

## About



Please NOTE that Debian 9 "Stretch" is now officially supported by FreeSWITCH™ .

Debian 8 "Jessie" was the reference platform for FreeSWITCH™ as of version 1.6. We recommend Debian 9 "Stretch" as it's most suitable for the FreeSWITCH™1.8 release.

```
echo "deb http://ftp.debian.org/debian jessie-backports main" >> /etc/apt/sources.list
```



2016.02.14 — Please note this important change that went into Master today. As of today, we are no longer using system versions of libyuv and libvpx due to major conflicts with system versions of these libraries. These are now built static into the freeswitch core. Also note, mod\_vpx no longer exists, it is automatically loaded as part of the core and you will no longer have `mod_vpx.so` nor have to load it manually. I'll have more details coming, but let me know if you have any questions.

Please note for anyone doing cross compiling, this probably means a bit more work for you, I'll be working on fixing that this week.

- Mike Jerris

## Commit Log

See all FreeSWITCH commits here: <https://freeswitch.org/stash/projects/FS/repos/freeswitch/commits>

## Easy Way

# Installing From Debian Packages

## Latest Release Branch:

### Release package

```
wget -O - https://files.freeswitch.org/repo/deb/freeswitch-1.8/fsstretch-archive-keyring.asc | apt-key add -  
  
echo "deb http://files.freeswitch.org/repo/deb/freeswitch-1.8/ jessie main" > /etc/apt/sources.list.d  
/freeswitch.list  
echo "deb-src http://files.freeswitch.org/repo/deb/freeswitch-1.8/ jessie 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

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

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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

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

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

# get the latest master. Use the -b flag to get a specific branch
mkdir /usr/src/freeswitch-debs
git clone https://freeswitch.org/stash/scm/fs/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 -cjessie

# 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
```

## Compiling from source code

### Building From Source

### Compiling Release Branch (production)

## Release source build

```
wget -O - https://files.freeswitch.org/repo/deb/freeswitch-1.8/fsstretch-archive-keyring.asc | apt-key add -

echo "deb http://files.freeswitch.org/repo/deb/freeswitch-1.8/ jessie main" > /etc/apt/sources.list.d
/freeswitch.list
echo "deb-src http://files.freeswitch.org/repo/deb/freeswitch-1.8/ jessie 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://freeswitch.org/stash/scm/fs/freeswitch.git -bv1.8 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

```
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/ jessie main" > /etc/apt/sources.list.d/freeswitch.list
echo "deb-src http://files.freeswitch.org/repo/deb/debian-unstable/ jessie 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://freeswitch.org/stash/scm/fs/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](#).

## Quick Start FreeSWITCH Demo With Verto Communicator

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## Script FreeSWITCH demo install

```
#!/bin/sh
# Simple script to setup a webrtc enabled lab with freeswitch, nginx, letsencrypt certificates and
verto_communicator.
# Adapt the DOMAIN & IP variables below and launch as root on on a freshly minimal installed debian 8 ( jessie
) server.
# DO NOT USE IN PRODUCTION, it's for proof-of-concept purposes.
# FreeSWITCH config is the default vanilla demo config, you SHOULD CHANGE the DEFAULT PASSWORDS ( extensions,
event_socket, etc ... )
# At the end of the script, you can navigate to https://$DOMAIN/vc and enjoy Verto Communicator in your web
browser!
# Author: "Tristan Mahe" <gled@remote-shell.net>
# License: WTFPL

DOMAIN="your.domain.here"
IP="1.2.3.4"

apt-get clean && apt-get update && apt-get -y upgrade && apt-get -y dist-upgrade

apt-get install -y wget git

wget -O - https://files.freeswitch.org/repo/deb/freeswitch-1.8/fsstretch-archive-keyring.asc | apt-key add -

echo "deb http://files.freeswitch.org/repo/deb/freeswitch-1.8/ jessie main" > /etc/apt/sources.list.d
/freeswitch.list
echo "deb-src http://files.freeswitch.org/repo/deb/freeswitch-1.8/ jessie main" >> /etc/apt/sources.list.d
/freeswitch.list

apt-get update

cd /usr/src

git clone https://freeswitch.org/stash/scm/fs/freeswitch.git -bv1.8 freeswitch

apt-get install -y freeswitch-meta-all nginx-extras freeswitch-mod-verto freeswitch-mod-rtc

apt-get install -y letsencrypt -t jessie-backports
letsencrypt certonly -a webroot --webroot-path=/var/www/html -d $DOMAIN

cat /etc/letsencrypt/live/$DOMAIN/fullchain.pem /etc/letsencrypt/live/$DOMAIN/privkey.pem > /etc/freeswitch/tls
/wss.pem

cp -f /usr/src/freeswitch/html5/verto/video_demo/dp/dp.xml /etc/freeswitch/dialplan/default/0000_dp.xml

perl -i -pe 's/# listen/listen/g' /etc/nginx/sites-enabled/default
perl -i -pe 's/# include snippets/snakeoil.conf/include snippets/letsencrypt.conf/g' /etc/nginx/sites-enabled
/default
perl -i -pe 's/<!-- <param name="ext-rtp-ip" value=""\> -->/<param name="ext-rtp-ip" value="$IP"\>/g' /etc
/freeswitch/autoload_configs/verto.conf.xml

echo "ssl_certificate /etc/letsencrypt/live/$DOMAIN/fullchain.pem;" >> /etc/nginx/snippets/letsencrypt.conf
echo "ssl_certificate_key /etc/letsencrypt/live/$DOMAIN/privkey.pem;" >> /etc/nginx/snippets/letsencrypt.conf

# Attention with this, it may break other software you want to get through Git
git config --global url."https://".insteadOf git://

cd /usr/src/freeswitch/html5/verto/verto_communicator/
./debian8-install.sh

ln -s /usr/src/freeswitch/html5/verto/verto_communicator/dist /var/www/html/vc

service nginx restart
service freeswitch restart
```