

Debian 8 Jessie

About

Debian 8 "Jessie" is the reference platform for FreeSWITCH™ as of version 1.6 and is STRONGLY recommended for all applications due to its stability and broad support for the system libraries needed by FreeSWITCH.

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```
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/debian/freeswitch_archive_g0.pub |  
apt-key add -  
  
echo "deb http://files.freeswitch.org/repo/deb/freeswitch-1.6/ 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/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  
# 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 video 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

```
echo "deb 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

# we need some prepackaged libraries for video support from this repo
wget -O - https://files.freeswitch.org/repo/deb/debian/freeswitch_archive_g0.pub |
apt-key add -

# 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/debian/freeswitch_archive_g0.pub |
apt-key add -

echo "deb http://files.freeswitch.org/repo/deb/freeswitch-1.6/ jessie main" >
/etc/apt/sources.list.d/freeswitch.list
apt-get update
apt-get install -y --force-yes freeswitch-video-deps-most

# 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 -bv1.6
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)

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Master source build

```
wget -O -
https://files.freeswitch.org/repo/deb/debian/freeswitch_archive_g0.pub |
apt-key add -

echo "deb http://files.freeswitch.org/repo/deb/freeswitch-1.6/ jessie main" >
/etc/apt/sources.list.d/freeswitch.list
echo "deb http://files.freeswitch.org/repo/deb/debian-unstable/ jessie main"
>> /etc/apt/sources.list.d/freeswitch.list
apt-get update
apt-get install -y --force-yes freeswitch-video-deps-most

# 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/debian/freeswitch_archive_g0.pub |
apt-key add -

cd /usr/src

git clone https://freeswitch.org/stash/scm/fs/freeswitch.git -bv1.6 freeswitch

echo "deb http://files.freeswitch.org/repo/deb/freeswitch-1.6/ jessie main" >
/etc/apt/sources.list.d/freeswitch.list
echo "deb http://ftp.debian.org/debian jessie-backports main" >
/etc/apt/sources.list.d/debian-backports.list

apt-get update && apt-get install -y freeswitch-meta-all nginx-extras
freeswitch-mod-vertos 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/vertos/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/vertos.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
```