



Fusionpbx v4 Freeswitch v1.6 CentOS v7 Install Guide

Submitted by powerpbx on Sat, 01/02/2016 - 09:07



[\(http://www.fusionpbx.com/\)](http://www.fusionpbx.com/)

Fusionpbx is a full featured multi-tenant GUI for Freeswitch. This guide covers the installation of [Fusionpbx \(http://www.fusionpbx.com/\)](http://www.fusionpbx.com/) and [Freeswitch \(http://freeswitch.org\)](http://freeswitch.org) [®] (<http://asterisk.org>) with MariaDB and Apache on CentOS v7.

Tested on:

[CentOS \(http://centos.org\)](http://centos.org) v7

Freeswitch v1.6

FusionPBX v4

[MariaDB \(https://mariadb.org/\)](https://mariadb.org/) v5.5

Assumptions:

Console text mode (multi-user.target)

Installation done as root user (#)

Install Prerequisites

Ensure all required packages are installed.

```
yum install epel-release
yum update
```

```
yum install git nano httpd mariadb-server php php-common php-pdo php-soap
php-xml php-xmlrpc php-mysql php-cli php-imap php-mcrypt mysql-
connector-odbc memcached ghostscript libtiff-devel libtiff-tools at
```

Disable Selinux

Check status

```
sestatus
```

If not disabled, set `SELINUX=disabled` in `/etc/selinux/config`. Requires reboot for changes to take effect.

```
sed -i 's/\(^SELINUX=\).*\/SELINUX=disabled/' /etc/selinux/config
```

Timezone

```
## FIND YOUR TIMEZONE
tzselect

## SET TIMEZONE EXAMPLE
timedatectl set-timezone America/Vancouver

## CHECK TIMEZONE
timedatectl status
```

Reboot

To ensure the changes/additions are at their default states.

```
reboot
```

Install

Freeswitch

```
rpm -Uvh http://files.freeswitch.org/freeswitch-release-1-6.noarch.rpm
```

```
yum install freeswitch-config-vanilla freeswitch-sounds* freeswitch-lang*
freeswitch-lua freeswitch-xml-cdr
```

Database

```
systemctl start mariadb
mysql
```

From mysql prompt

```
CREATE DATABASE freeswitch;
GRANT ALL PRIVILEGES ON freeswitch.* TO fusionpbx@localhost IDENTIFIED BY
'somepassword';
flush privileges;
\q
```

ODBC

```
nano /etc/odbc.ini
```

```
[freeswitch]
Driver      = MySQL
SERVER     = 127.0.0.1
PORT       = 3306
DATABASE   = freeswitch
OPTION     = 67108864
Socket     = /var/lib/mysql/mysql.sock
threading=0
MaxLongVarcharSize=65536

[fusionpbx]
Driver      = MySQL
SERVER     = 127.0.0.1
PORT       = 3306
DATABASE   = fusionpbx
OPTION     = 67108864
Socket     = /var/lib/mysql/mysql.sock
threading=0
```

Test odbc driver

```
odbcinst -s -q
```

Test odbc connection

```
isql -v freeswitch fusionpbx somepassword
```

```
quit
```

Download Fusionpbx

There are fixes and enhancements in our fork so that it will install properly on MySQL. The developer appears to have addressed them now, so if you want the latest updates you can install from <https://github.com/fusionpbx/fusionpbx>

Make sure the "." is included at the end of the git clone command. That tells git to clone into the current directory instead of creating a /fusionpbx subdirectory.

```
cd /var/www/html
git clone -b 4.2 https://github.com/powerpbx (https://github.com/powerpbx)
/fusionpbx.git .
```

Copy conf Directory

```
mv /etc/freeswitch /etc/freeswitch.orig
mkdir /etc/freeswitch
cp -R /var/www/html/resources/templates/conf/* /etc/freeswitch
```

Apache config

```
# Add user freeswitch to group apache to avoid problems with /var/lib
/php/sessions directory
usermod -a -G apache freeswitch

# Set http server to run as same user/group as Freeswitch
sed -i "s/User apache/User freeswitch/" /etc/httpd/conf/httpd.conf
sed -i "s/Group apache/Group daemon/" /etc/httpd/conf/httpd.conf

# Set webserver to obey any .htaccess files in /var/www/html and subdirs
sed -i ':a;N;$!ba;s/AllowOverride None/AllowOverride All/2' /etc/httpd
/conf/httpd.conf
```

Set ownership and permissions

```
# Ownership
chown -R freeswitch.daemon /etc/freeswitch /var/lib/freeswitch \
/var/log/freeswitch /usr/share/freeswitch /var/www/html
```

```
# Directory permissions to 770 (u=rwx,g=rwx,o='')
find /etc/freeswitch -type d -exec chmod 770 {} \;
find /var/lib/freeswitch -type d -exec chmod 770 {} \;
find /var/log/freeswitch -type d -exec chmod 770 {} \;
find /usr/share/freeswitch -type d -exec chmod 770 {} \;
find /var/www/html -type d -exec chmod 770 {} \;

# File permissions to 664 (u=rw,g=rw,o=r)
find /etc/freeswitch -type f -exec chmod 664 {} \;
find /var/lib/freeswitch -type f -exec chmod 664 {} \;
find /var/log/freeswitch -type f -exec chmod 664 {} \;
find /usr/share/freeswitch -type f -exec chmod 664 {} \;
find /var/www/html -type f -exec chmod 664 {} \;
```

Systemd config

```
nano /etc/systemd/system/freeswitch.service
```

```
[Unit]
Description=FreeSWITCH
Wants=network-online.target
After=syslog.target network-online.target
After=mariadb.service httpd.service

[Service]
Type=forking
User=freeswitch
ExecStartPre=/usr/bin/mkdir -m 0750 -p /run/freeswitch
ExecStartPre=/usr/bin/chown freeswitch:daemon /run/freeswitch
WorkingDirectory=/run/freeswitch
PIDFile=/run/freeswitch/freeswitch.pid
EnvironmentFile=-/etc/sysconfig/freeswitch
ExecStart=/usr/bin/freeswitch -ncwait -nonat $FREESWITCH_PARAMS
ExecReload=/usr/bin/kill -HUP $MAINPID

[Install]
WantedBy=multi-user.target
```

Create the `$FREESWITCH_PARAMS` file for extra parameters. If freeswitch was installed from RPM this will probably already exist.

```
nano /etc/sysconfig/freeswitch
```

```
## Type:                string
## Default:             ""
## Config:              ""
## ServiceRestart:     freeswitch
#
# if not empty: parameters for freeswitch
#
FREESWITCH_PARAMS=""
```

Enable services

```
systemctl daemon-reload
systemctl enable mariadb
systemctl enable httpd
systemctl enable freeswitch
systemctl enable memcached
systemctl restart freeswitch
```

Fix fs_cli

If `fs_cli` command does not work with freeswitch running change the following config line.

```
nano /etc/freeswitch/autoload_configs/event_socket.conf.xml
```

```
<param name="listen-ip" value="127.0.0.1"/>
```

```
systemctl restart freeswitch
```

Reboot and browse to the public IP address of the server

```
http://xx.xx.xx.xx
```

to complete the install using the following:

Username: `superadmin` (or whatever you want)

Password: `somepassword` (use whatever you want)

Database Name: `fusionpbx`

Database Username: `fusionpbx`

Database Password: `somepassword`

Create Database Options: check "Create the database"

Create Database Username: `root`

Create Database Password : (leave blank unless you have already added a root password)

Post install tasks are mandatory.

Post Install

Lock down the database server

```
mysql_secure_installation
systemctl restart mariadb
```

Answer to everything.

Enable freeswitch database connection

This sets Freeswitch to use mysql instead of sqlite.

```
nano /etc/freeswitch/autoload_configs/switch.conf.xml
```

```
<param name="core-db-dsn" value="freeswitch:fusionpbx:somepassword" />
```

```
systemctl restart freeswitch
```

Change Voicemail to Email app configuration

```
nano +119 /etc/freeswitch/autoload_configs/switch.conf.xml
```

```
<param name="mailer-app" value="/usr/bin/php /var/www/html/secure
/v_mailto.php"/>
    <param name="mailer-app-args" value="-t"/>
```

```
systemctl restart freeswitch
```

Configure firewall

```
firewall-cmd --permanent --zone=public --add-service={http,https}
firewall-cmd --permanent --zone=public --add-
port={5060,5061,5080,5081}/tcp
firewall-cmd --permanent --zone=public --add-
port={5060,5061,5080,5081}/udp
firewall-cmd --permanent --zone=public --add-port=16384-32768/udp
firewall-cmd --reload
```

Sections:

[Freeswitch \(/category/sections/install/freeswitch\)](#)

