Install FreePBX

> **PBXact Notice**
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> All PBXact and PBXtended systems come pre-installed on hardware in most cases. In the rare case you are installing on your own hardware please contact your sales representative on how to proceed with installing PBXact

Installing the FreePBX application

FreePBX is a program that works together with Asterisk and a number of other programs to make it easy to set-up and configure a VOIP PBX. By itself, FreePBX won't do anything. You also need to install Linux, Asterisk, Dahdi, Postfix/Sendmail, TFTP, and a host of other programs.

If you are not an expert with Linux and its dependent components, you'll want to choose and install a Distro. If you are an expert, you can simply install FreePBX on top of an existing Linux/Asterisk installation.

The Easy Way (use a Distro)

There are a number of distributions ("Distros") available that will automatically install include FreePBX, Linux, and all the other components you need. When you use a distribution, you avoid having to learn how to install, compile, and configure each of these required components. A good distribution comes with everything you need to get started.

The easiest way to install FreePBX is to download the FreePBX Distro from the download page. For step by step instructions to install the FreePBX distro, click on this link: Installing the FreePBX Distro

For information on the release versions and how to upgrade the FreePBX Distro read Upgrading the FreePBX Distro.

Be sure not to confuse "FreePBX" (which is a program) with the FreePBX Distro (which is a distribution that includes FreePBX and all the other stuff you need).

The Hard Way

The hard way to install FreePBX is to set-up a machine running Centos, Asterisk, and all other required applications, and then install FreePBX manually.

First Steps After Installation

For some suggestions on what to do after you finish the installation read about Configuring your PBX here.

Configuring FreePBX with Remote CDR Database

There are TWO steps to get CDRs working with a remote MySQL database. This should work on FreePBX Distro versions 6.12 and 10.13 running either Asterisk 11 or 13. Other versions or non-distro systems may also work, but have not been tested. There are legacy options to use non-mysql databases, but it's not a supported configuration. It is assumed that the remote MySQL database has already been created with user credentials set to appropriate permissions.

1. In FreePBX, Advanced settings, scroll to the CDR section and enter necessary details for host, database name, user, password, tables, etc. You can leave fields empty if they are the same default value on the remote database as they are on the local. Click submit, and apply settings. If the details are correct, and the user details have the appropriate permissions, the apply settings will work. If not, you have to address your connectivity issues. Once this step is done, you can browse to Reports, CDR and view the records in the remote database.

2. Step one done, you must configure asterisk to write the CDR records to the new database. At the Asterisk CLI, type: "odbc show all", you will see output like:

```
*CLI> odbc show all
ODBC DSN Settings
  ----------------
Name: asteriskcdrdb
DSN: MySQL-test
Last connection attempt: 1969-12-31 20:00:00
```

Take note of the DSN. Now locate the file: /etc/odbc.ini and create a new section that matches the DSN like this:

```
[MySQL-test]
Description=MySQL connection to remote 'test' database
driver=MySQL
user=remote_user
password=password
server=hostname.fqdn.com
database=test
Port=3306
option=BIG_PACKETS=1
Charset=utf8
```

Save the file and restart asterisk with 'fwconsole restart' (or 'amportal restart'). Going back to asterisk again, the earlier command will now show something a bit different:

```
*CLI> odbc show all
ODBC DSN Settings
  ----------------
Name: asteriskcdrdb
DSN: MySQL-test
Last connection attempt: 1969-12-31 20:00:00
Pooled: No
Connected: Yes
```

You want to confirm that the database is now connected. Now when you make calls, they get written to the remote database and you can see them in FreePBX. This technique should work in both FreePBX 12 and 13 with Asterisk versions 11 and 13.

Configuring FreePBX with Remote Settings Database

Locate the file /etc/freepbx.conf and change values as necessary.