

In order to install the Firesignal database, you will first need to install a PostgreSQL server on your machine. This, and other PostgreSQL related software can be found on their [main site](#).

As user `root`, after starting the server, change to user `postgres`.

```
su postgres
```

Create the user owner of this database and the database. For example, if the user is `genericdbadmin` and the database is `genericdb`

```
createuser -A -D genericdbadmin -P
createdb -O genericdbadmin genericdb
```

Although not required, is advisable to allow connections to the database only from the localhost, since the database controller will be installed in the same machine. This is done by editing the file `/var/lib/pgsql/data/pg_hba.conf`. Change the last lines in the file to:

```
# "local" is for Unix domain socket connections only
local  all          all                                ident sameuser
# IPv4 local connections:
host   all          all          127.0.0.1          255.255.255.255
password
# IPv6 local connections:
host   all          all          ::1/128           ident sameuser
```

Save the file and restart the PostgreSQL server. You should now be able to connect to the database:

```
psql -h localhost genericdb -U genericdbadmin -W
```

Creating The Database

If you use one of the FireSignal's ready to run controllers you have to different options. The first is to store all data inside the database and the other to store the data in the file system.

With binary data inside database

The database needs eight tables: `events`, `hardware_description`, `hardware_template`, `intitution`, `user_informations`, `users`, `names` and `comments`. To create them, input the following commands in the PostgreSQL prompt:

```
CREATE TABLE events (id bigint, eventid text, tevent timestamp, tevent_np
int4, CONSTRAINT events_pk PRIMARY KEY (id, eventid));
CREATE TABLE hardware_description (nodeuniqueid text, hardwareuniqueid
text, hardwarexml bytea, CONSTRAINT hw_desc_pk PRIMARY KEY (nodeuniqueid,
hardwareuniqueid));
CREATE TABLE hardware_template (parameteruniqueid text, configuration_xml
bytea, tstart timestamp, tstart_np int4, tend timestamp, tend_np int4,
eventid bigint[], eventnameid text[], data bytea, CONSTRAINT
```

```

hw_template_pk PRIMARY KEY (parameteruniqueid,tstart,tstart_np));
CREATE TABLE institution(name text, address text, phone text, fax text,
webpage text, CONSTRAINT inst_pk PRIMARY KEY (name));
CREATE TABLE user_informations(username text, name text, email text,
phone1 text, phone2 text, fax text, country text, prof int2,
institute_name text, picture bytea, CONSTRAINT users_info_pk PRIMARY KEY
(username));
CREATE TABLE users(username text, password int4, operator bool,
administrator bool, ipaddresses text, hostname text, groupids text,
CONSTRAINT users_pk PRIMARY KEY (username));
CREATE TABLE names(node_unique_id text, hw_unique_id text,
parameter_unique_id text, lastchange timestamp, name text, description
text, CONSTRAINT names_pk PRIMARY KEY (hw_unique_id, parameter_unique_id,
lastchange));
CREATE TABLE comments (username text, time timestamp, comment text,
CONSTRAINT comment_pk PRIMARY KEY (username, time));

```

First User

You should also add an “administrator” to the system:

```
INSERT INTO users VALUES('admin', 0, 'f', 't', '', '', '');
```

This user, it doesn't have to have the login “admin”, will have no password. Login to FireSignal and update the password immediately. Even better, create another administrator with a different login and remove the “admin” user.

Configure your system to start the server at boot and the database should be ready to use.