

Steps for running the Open Source PCBO :

All the steps assume that the user has mysql, apache, and tomcat installed and is working on Fedora Core 5 (although they must work for other linux distributions too).

1. Start the services mysqld, httpd, tomcat5 and open the required ports.

- i) Go to System > Administration > Server Settings > Services.
- ii) Type the root password when prompted.
- iii) Make sure the checkbox beside mysqld is checked and then click on Start.
- iv) Do the same for httpd and tomcat5.
- v) Click on the Save button.

To open the required ports :

- vi) Go to System > Administration > Security Level and Firewall
- vii) Click on Add and type 3306 (default MySQL port) in the text box.
- viii) Repeat the same for port number 8080 (default tomcat port).
- ix) Click on OK to save the firewall settings.

2. Create the necessary users/databases/tables in mysql.

- i) Create the user PCBOuser with password PCBOpassword and with the following privileges -
 - a. SELECT
 - b. INSERT
 - c. UPDATE
 - d. DELETE
 - e. CREATE
 - f. DROP

You can do this by running the following code in mysql -

```
CREATE USER 'PCBOuser'@ 'localhost' IDENTIFIED BY 'PCBOpassword';

GRANT SELECT ,
INSERT ,
UPDATE ,
DELETE ,
CREATE ,
DROP ON * . * TO 'PCBOuser'@ 'localhost' IDENTIFIED BY 'PCBOpassword'
WITH MAX_QUERIES_PER_HOUR 0 MAX_CONNECTIONS_PER_HOUR 0
MAX_UPDATES_PER_HOUR 0 MAX_USER_CONNECTIONS 0 ;
```

- ii) Either follow the following steps to create the necessary database and tables or import the SQL file PCBO.sql into the MySQL database.

iii) Create the database for PCBO in the following structure :

<i>Field</i>	<i>Type</i>
Table - CONTROL	
parameter	varchar(10)
value	int(11)
Table - DATA	
data	tinyint(4)

You can do this by running the following code in mysql -

```
CREATE DATABASE `PCBO` ;
CREATE TABLE `CONTROL` (
  `parameter` VARCHAR( 10 ) NOT NULL ,
  `value` INT NOT NULL
) ENGINE = MYISAM ;
CREATE TABLE `DATA` (
  `data` TINYINT NOT NULL
) ENGINE = MYISAM ;
```

iv) Insert the following values in the table CONTROL :

<i>Parameter</i>	<i>value</i>
c_row	0
java_row	0

Do this by running the following code in MySQL -

```
INSERT INTO `CONTROL` ( `parameter` , `value` )
VALUES ('c_row', '0'), ('java_row', '0');
```

3. Install PARAPIN

Run the following code in the terminal

```
tar -xzf parapin-1.0.0.tar.gz
cd parapin-1.0.0
make
su
make install
```

4. Add the following lines to the file .bashrc file in your home folder -

```
CLASSPATH=/usr/share/tomcat5/common/lib/[servlet].jar:./
export CLASSPATH
```

Logout and login into the system again.

5. Extract the contents of PCBOtomcat.tar.gz in the folder /usr/share/tomcat5/webapps/ .

Open the terminal and type the following code -

```
su
cp PCBOtomcat.tar.gz /usr/share/tomcat5/webapps/
cd /usr/share/tomcat5/webapps/
tar -xzf PCBOtomcat.tar.gz
```

Restart tomcat server by entering the following in the terminal-

```
/sbin/service tomcat5 restart
```

6. Extract the contents of the PCBOc.tar.gz in a folder in the server PC.

Open the terminal and type the following code -

```
su
tar -xzf PCBOc.tar.gz
```

7. Install Sun Java and the Java plugin for firefox.

Follow the steps given in http://stanton-finley.net/fedora_core_5_installation_notes.html#Java

The steps are :

- i) Get the file jre-1_5_0_07-linux-i586.bin
- ii) Run the following commands in the terminal -

```
su
mv *.bin /opt
cd /opt
chmod +x *-linux-i586.bin
./*.bin
```

Hit enter. Hold enter key down until the yes/no line appears to allow you to agree to the license agreement. Type "ye s" and hit enter. Wait for the installation to complete.

```
rm *.bin
su -
ln -s /opt/jre1.5.0_07/plugin/i386/ns7/libjavaplugin_oji.so \
/usr/lib/mozilla/plugins/libjavaplugin_oji.so
```

- iii) Restart Firefox if already running.