

SETTING-UP THE USAGE CONTROL SYSTEM TO WORK WITH THE SOCIAL NETWORK

The procedure to be described below can be done on any Linux distribution though it has been tested on Debian Linux 3.0.23 and Ubuntu Linux 12.10. There are 3 files provided and necessary to be setup in order to have a smooth running system:

1. Elgg and TUMFormatics web applications, ***elgg.zip***
2. The Firefox extension, ***ucpelauncher.xpi***. This extension is responsible for passing information about images to the usage control system.
3. The usage control policy editor, ***ucpe.zip***.

INSTALLING THE ELGG SOCIAL NETWORK WEB APPLICATION

Elgg requires Linux Apache Mysql and PHP (LAMP) server to be installed first. To install LAMP, do the following:

1. Install Apache by typing (all together) in the command line
***apt-get install apache2 apache2.2-common apache2-utils apache2-doc
apache2-mpm-prefork apache2-utils libexpat1 ssl-cert***

Enable required modules

a2enmod ssl

a2enmod rewrite

a2enmod include

Restart the Apache web server

/etc/init.d/apache2 restart

2. Install MySQL
apt-get install mysql-server mysql-client

You will be prompted for a password for the root administrator user.

Login to the mysql server from the command line and create a database for elgg

> mysql -u root -p

> create database elgg;

3. Install PHP

```
apt-get install libapache2-mod-php5 php5 php5-common php5-gd php5-mysql  
phpmyadmin
```

When asked for a web server to reconfigure automatically, use apache2. Also when asked to configure database for phpmyadmin with dbconfig-common, answer no.

The next step is to install Elgg and TUMFormatics web applications. Follow the steps below:

1. Extract the **elgg.zip** archive into a folder named **elgg** in the document root **/var/www**.
2. Create the data folder (i.e. elgg-data) for Elgg outside of document root, in **/var**
3. Rename the **htaccess_dist** file in **/var/www/elgg** to **.htaccess**.
4. Edit the file **/etc/apache2/sites-available/default** so as to enable **.htaccess** processing, i.e. so that rules inside the **.htaccess** files are honoured. You can run

```
sudo gedit /etc/apache2/sites_available/default
```

Upon opening the file, look for the **AllowOverride** command. Just after it, change its value from **None** to **All**

5. Restart the Apache server.

```
/etc/init.d/apache2 restart
```

6. Set the permissions of these folders and their contents: **/var/www/elgg** and **/var/elgg-data**. How?

```
sudo chmod -R 755 /var/www/elgg
```

```
sudo chmod -R 755 /var/elgg-data
```

Its important **sudo** (or another high privilege command on some other Linux distribution) is used so ownership goes to root user and so that apache runs fine without permission errors. **-R** means recursive approach to effect the change on sub-folders and files.

7. Just to make sure, also run

```
sudo chown -R root /var/www/elgg
```

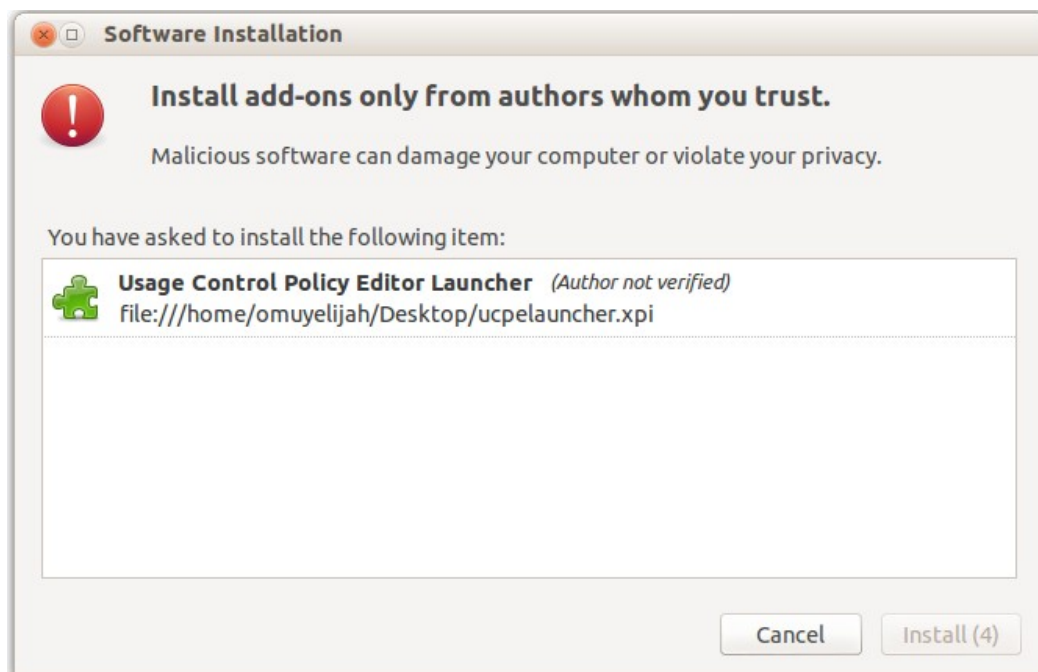
```
sudo chown -R root /var/elgg-data
```

to also set the ownership of these folders to root.

8. Finally, run <http://localhost/elgg>. This should show up the install page and then you can configure the rest. As you move through the web installer, be careful to remember your database connection values of username, password and database name. Also remember the data directory used above in step 2 (i.e. /var/elgg-data) as it will be provided.
9. The last stage of the web installer is for creating site administrator information. As administrator, you are also a member of the social network. In addition, you can activate users too.

INSTALLING THE FIREFOX EXTENSION

In order to install the Mozilla Firefox extension, first open the web browser and drag the ***ucpelauncher.xpi*** file into the web browser. A dialog box will open up. Click install and allow restart of the browser.



INSTALLING THE USAGE CONTROL SYSTEM

Unzip ***ucpe.zip*** file and copy its contents into ***/usr/local/ucpelauncher*** folder on your system.