http://ldshake.upf.edu/

LdShake: How to install it

This document will guide you through the step by step installation process in an Ubuntu Linux distribution. At the end, you will end up with an instance of LdShake in your computer or server.

The sections of this document follow a chronological order from both installation and component configuration. Within orange squares you will find the essentials to install the tool. The rest are additional explanations of each step for beginners or novices.

If you have previous experiences installing web applications, you simply read and follow only the orange squares like this one.

1- Prerequisites

LdShake is a PHP-MySQL application like many other existing. However, Ldshake have some peculiarities that require additional components to be installed in your computer or server.
For a Windows Installation requirements are as follows:

- HTTP Server: **Apache** *
  - mod_rewrite installed and configured *
- PHP: **PHP 5.3** *
  - GD Library installed *
- Database Management System: **MySQL 5** *
- Python: **Python 2.7**

- **To install Apache**. `$sudo apt-get install apache2 php5 zip`
- **To install PHP:**
```
$sudo apt-get install php5-gd php5-mysqlnd php5-curl
$sudo apt-get install php5-xdebug
$sudo apt-get install php-apc
```
- **To install MySQL:** `$sudo apt-get install mysql-server mysql-client`
- **To Install Python 2.7.x**: `$sudo apt-get install python-zope python-setuptools python-imaging`

Doesn't matter where you install every component. However, you must remember where you have installed them.

2- To copy necessary files and directories

Once you have the HTTP (Apache) server installed, you must copy all the files and folders that compound the LdShake tool. First untar the whole package LdShakev1.tar.bz2 in a temporary folder. You can find the LdShake code inside the folder **ldshake**. All you have to do is go to the Apache public directory and copy the ldshake folder there.

Then you will access to the LdShake website through the next address: http://localhost/ldshake (you could substitute “localhost” from the address by the server DNS or name if it is the case).

Apart from the application files themselves, you have to create a couple of directories. For security issues must be out of the public directory of the HTTP server.

In one folder LdShake will store up all the files related to users and what they upload. In the other folder, LdShake will store temporal data. Normally it will be empty, but it is required :). You can locate it anywhere.

- **Create a folder** where files uploaded by users will store (**$sudo mkdir /var/lib/ldshake**).
- **Create a folder** to store LdShake’s temporary data (**$sudo mkdir /var/local/ldshake**).

3- To configure Apache

Once you have the HTTP (Apache) server installed, you must make some configurations. So as to allow LdShake to write in the public folder, activate the reverse proxy, g spelling and a couple more.

- **Activate mode_rewrite:** update the `000-default` file (**normally** in `/etc/apache2/sites-enabled/`) and be sure that AllowOverride is in All and not in NONE.

```
<Directory /var/www/>
          Options Indexes FollowSymLinks MultiViews
          AllowOverride All
          Order allow,deny
          allow from all
  </Directory>
```

- **Activate reverse proxy:**

```
$sudo a2enmod proxy
$sudo a2enmod proxy_http
```

- **To configure reverse proxy mod:** add this lines to the `proxy.conf` file inside `/etc/apache2/mods-enabled/` between the `<ifModule> </ifModule>` closures

```
#eXeLearning
ProxyRequests Off

<Proxy *>
Order deny,allow
Allow from all
</Proxy>

ProxyPass /exelearning http://127.0.0.1:8080/
ProxyPassReverse /exelearning http://127.0.0.1:8080/
```

- **Activate additional mods:**

```
$sudo a2enmod rewrite
$sudo a2enmod speling
```

- **Spelling configuration:** activate the discrimination between upper and lower case. Update or create the next file: `/etc/apache2/mods-enabled/speling.conf` and add the following lines:

```
CheckSpelling On
CheckCaseOnly On
```

- **Restart the server:** in order to update the apache configurations

```
$sudo service apache2 restart
```

4- Folders Access rights

```
$sudo chown www-data /var/local/ldshake
$sudo chgrp www-data /var/local/ldshake
$sudo chown www-data /var/lib/ldshake
$sudo chgrp www-data /var/lib/ldshake
$sudo chown www-data /var/local/exe
$sudo chown -R www-data /var/www/ldshake/content
$sudo chgrp -R www-data /var/www/ldshake/content
```

5- MySQL Database installation

If you are installing LdShake, you will probably know that have been making up over a CMS called ELGG. Although ELGG have documentation in order to install the proper DB, here you will find a proper configured DB named as LdShake-clean-AA-MM.sql that you will find inside the LdShake package.

Import the database that you found in the support folder: **LdShake-clean-AA-MM.sql**.

If you want to change the database name, edit **before** executing the SQL file. Write the proper name inside the file. You will find the proper field around lines 21 and 22.

```
$mysql -u username --password --host db_host < LdShake-clean-11-02.sql
```

6- Support Software

From the support folder execute:

```
$sudo cp exe.conf /etc/init
$sudo tar xvf exe.tar.xz /opt
$sudo tar xvf wkhtmltox-$(uname -i).tar.xz /opt
$sudo start exe
```

7- Schedule email configuration

```
$sudo crontab -u www-data -e
0-59 * * * * php /var/www/ldshake/mod/lds/actions/lds/deferred_send.php prod false
```

8- Editing platform’s config file

The essential parameters are within the LdShake configuration file **/config/config.php** (in root folder where you installed the Web). This file is divided two sections:

The first section ($**envUrls** variable) defines different Web execution environments. You'll find that there are three environments defined: devel (your computer, developing stage), staging (testing server) and prod (production server). LdShake needs to know which one has to be applied to apply the proper settings, and it does so through the address from which to access it. For that reason, for each environment there is a **regular expression with host names from which to access it**. In principle you don’t need to do any modification. However, if the addresses of production and test server LdShake changed, you must change these regular expressions.

The second section of the configuration file **($confOptions** variable), defines the configuration options. These options are accessible from the code through the global object **$CONFIG**. These setting may depend on the execution environment or not. If the setting depends from this environment, consist of an array with a key for each environment and its corresponding value. If not depend from the environment, there are direct parameter values.

The options that we may consider are the following:

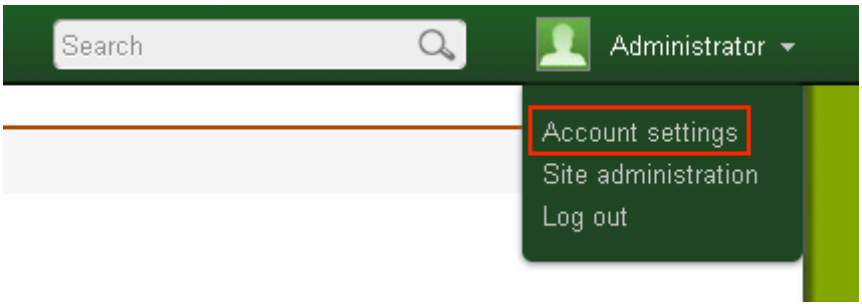
If needed**, change the appropriate settings** in the config file located at /config/config.php, located in the root folder where you installed LdShake. The choices that you have to consider are the following:
- **PYTHONPATH:** Python 2.x interpreter
- **pdf_converter_location:** Location of PDF converter
- **dataroot:** Folder where users will uploaded their data (finished with “/”)
- **tmppath:** Folder with temp data from LdShake(finished with “/”)
- **dbhost:** MySQL server host
- **dbname, dbus and dbpass:** Connection settings to LdShake’s database**.**

The parameters consist of an array of three key: **devel, staging** and **prod** are dependent on the execution environment. URLs that define the runtimes are at the beginning of the file. If you are installing on your computer LdShake just edit the options within **devel**.

9- Access to the LdShake website and change your admin password!

Right now, if you go to http://localhost/ldshake you should see the home page LdShake.

The database that you imported have already registered a user administrator, and is the user you can use to login. The **username** is **admin** and the **password** is **123456**. Obviously, the first thing you must do when accessing the platform is to change the password (and the email associated with that user). You will find this configuration within the Account Setting menu in right part from the top bar menu.



Congratulations!!. You have installed a running LdShake!

Access to LdShake using **admin** and the password **123456**. Once inside, change this password and the email address associated with the user admin. You can do this in the **Account Settings** section.

http://ldshake.upf.edu/ http://gti.upf.edu/ http://www.upf.edu/

Universitat Pompeu Fabra Barcelona

GTI Grup de Tecnologies Interactives