Setting Up The Computer for WOVOdat
And Installing WOVOdat database
(last updated: April 16, 2012)

Getting Started

The WOVOdat is a Linux base SQL of volcanic unrest database. In this tutorial we will describe an example on how to install WOVOdat database into a localhost on an Ubuntu base system.

Note: To be able to install WOVOdat packages, the user should be sys-admin or have sys-admin privileges.

Prerequisite:
Computer running Ubuntu operating system. The latest Ubuntu can be obtained from http://www.ubuntu.com.

The following packages are required:

- Apache2
- Mysql
- Php5
- Php-pear
- Php-db
- Phpmyadmin – The GUI tool to handle the administration of mysql

The following pcakages are optional:

- Openssh-server
- Filezilla --GUI tool to transfer file(s) between computers

The above packages can be download and install from the Ubuntu online repository using the Ubuntu apt-get tool or Synaptic Package Manager.

Installation

- **Install Apache2**

```
% sudo apt-get install apache2

% echo "ServerName  localhost" | sudo tee
/etc/apache2/conf.d/fqdn
```

Check the Apache2 installation

- Using web browser go to the URL http://localhost, if you see "It works!", this proves that the Apache works.

- **Install php5**

```
% sudo apt-get install php5
% sudo apt-get install libapache2-mod-php5

% echo "<?php phpinfo(); ?>" | sudo tee
/var/www/test.php
```

Check the PHP 5 installation

- Restart apache2:

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

- Go to the URL http://localhost/test.php, if you can see the description of PHP5 configuration, it proves that PHP5 installation is successful.

- **Install mysql**

```
% sudo apt-get install mysql-server mysql-client mysql-
common
```

Check the mysql installation

- From the terminal:

```
% mysql –u root –p
```

If it prompts you for the password to login, it means that MySQL is successfully installed.

- **Install phpmyadmin**

```
% sudo apt-get install phpmyadmin
% sudo /etc/init.d/apache2 restart
```

Check the phpmyadmin installation

- Go to the URL http://localhost/phpmyadmin, if you can see the phpmyadmin login page, it proves that the phpmyadmin works fine. The user will need to provide the root login of mysql to log into phpmyadmin. Once logged in, the user can create the phpmyadmin user account(s).
(Note: path will be different if you are installing on virtual machine)

- **Install php-pear**

```
% sudo apt-get install php-pear
```

- **Install php-db**

```
% sudo apt-get install php-db
```

- **Install openssh-server**

```
% sudo apt-get install openssh-server
```

- **Install filezilla**

```
% sudo apt-get install filezilla
```

Install WOVOdat Tool

- Download WOVODAT User Interface Tool (wovodat_Tool.tar) from http://wovodat.org/installing/download_installable.php and save it under the directory: /home. This tar file includes:
    - Subdirectory-paths to organize and store script and data files.
    - PHP and HTML scripts for web-based user interface; include WOVOdat ***Documentation*** and ***Submit Data*** with all scripts to convert WOVOdat CSV format into WOVOdat XML format, and upload WOVOdat XML to store the data into the database.

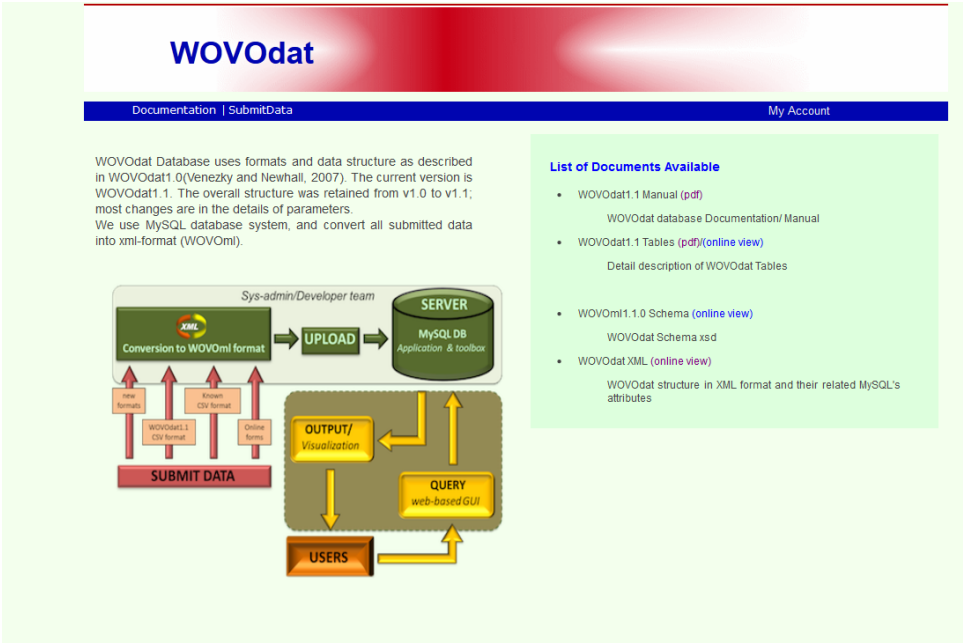

Figure 1. WOVOdat ***Documentation*** default webpage

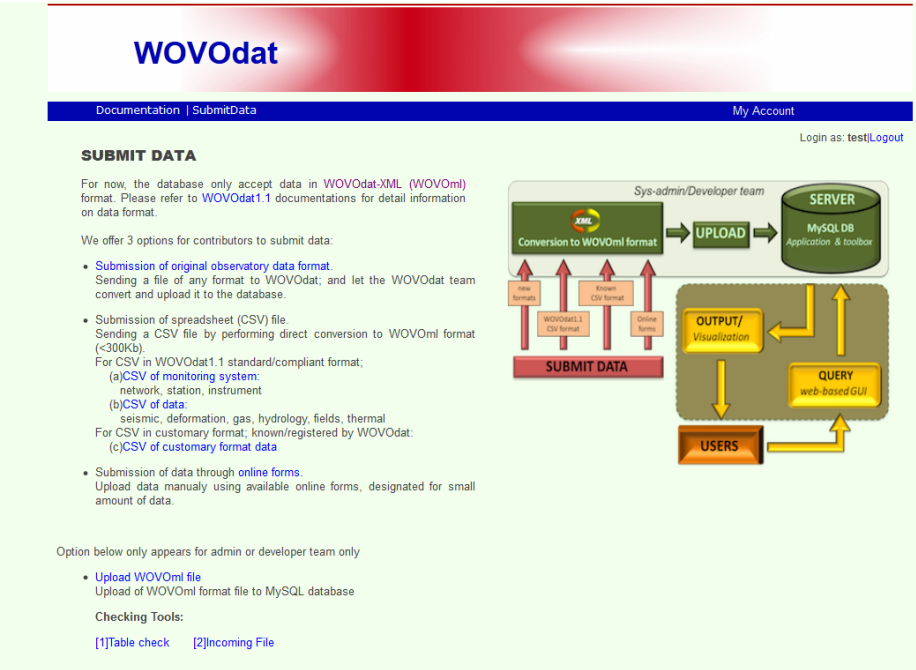

Figure 2. WOVOdat ***Submit Data*** default webpage

- Uncompress the tar file under directory: /home. The whole package of scripts will therefore store under: /home/wovodat

Install WOVOdat Database

❶ Download WOVOdat database template (wovodat.sql) file from http://wovodat.org/installing/download_installable.php and save it into your favorite directory.

❷ Use web browser to go to this link http://localhost/phpmyadmin to import a database and create a new account.

❸ Log in page will appear in the web browser, as shown in Figure 3. Type in MySQL username and password.

❹ Press on 'Go' button to log in.

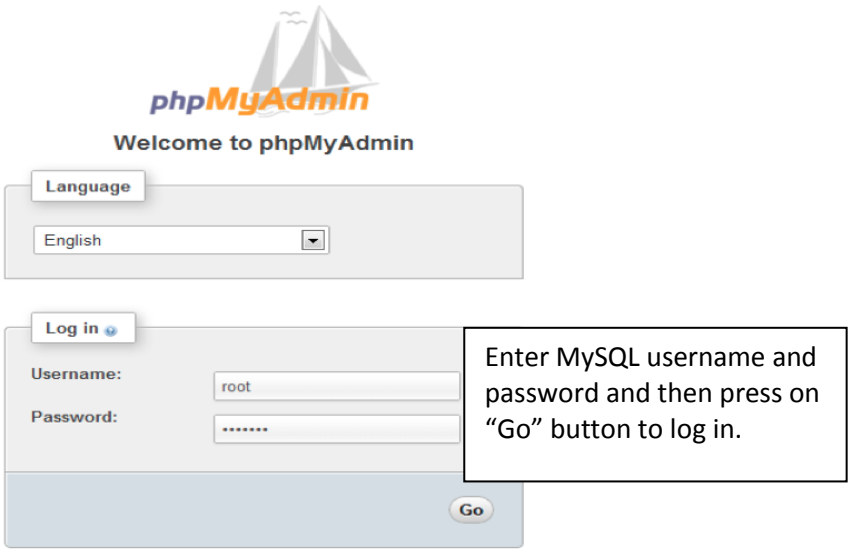

Figure 3. phpMyAdmin login page

Creating the new database and the new account using phpmyadmin

Default Database Name:	wovodatdb
Default Username:	wovodatuser
Default Password:	wovodatpassword

Note: if you want to change default database name, username and password, edit the following files:

- /home/wovodat/public_html/WOVOdat/PEAR/php/MYDB.php
- /home/wovodat/public_html/WOVOdat//PEAR/php/include/db_connect.php
- /home/wovodat/public_html/WOVOdat/PEAR/php/include/db_connect_view.php

How to import wovodat database (see Figure 4)

❶ Click on “Import” button that is at the top right frame to import “wovodat.sql” file.

❷ Click on “Browse” button to locate and choose “wovodat.sql” file from your computer and select ‘utf8’ for the character set.

❸ Click on “Go” button to import it.

❹ Now “wovodatdb” database has been installed on your system.

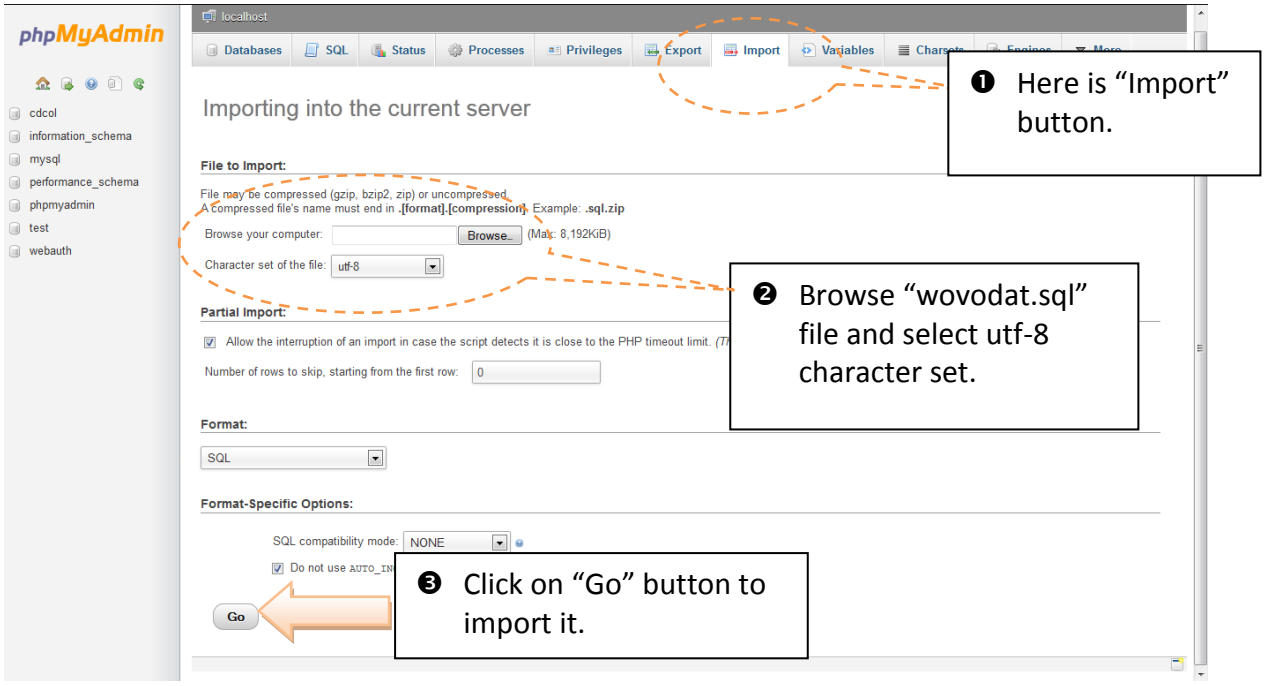

Figure 4. Importing a database into the current server using phpMyAdmin GUI

How to create a new account

Setting up new user account (see Figure 5)

❶ Click on Privileges menu that is at the left hand side panel.

❷ Click on “Add a new User” link near bottom left of Privileges page.

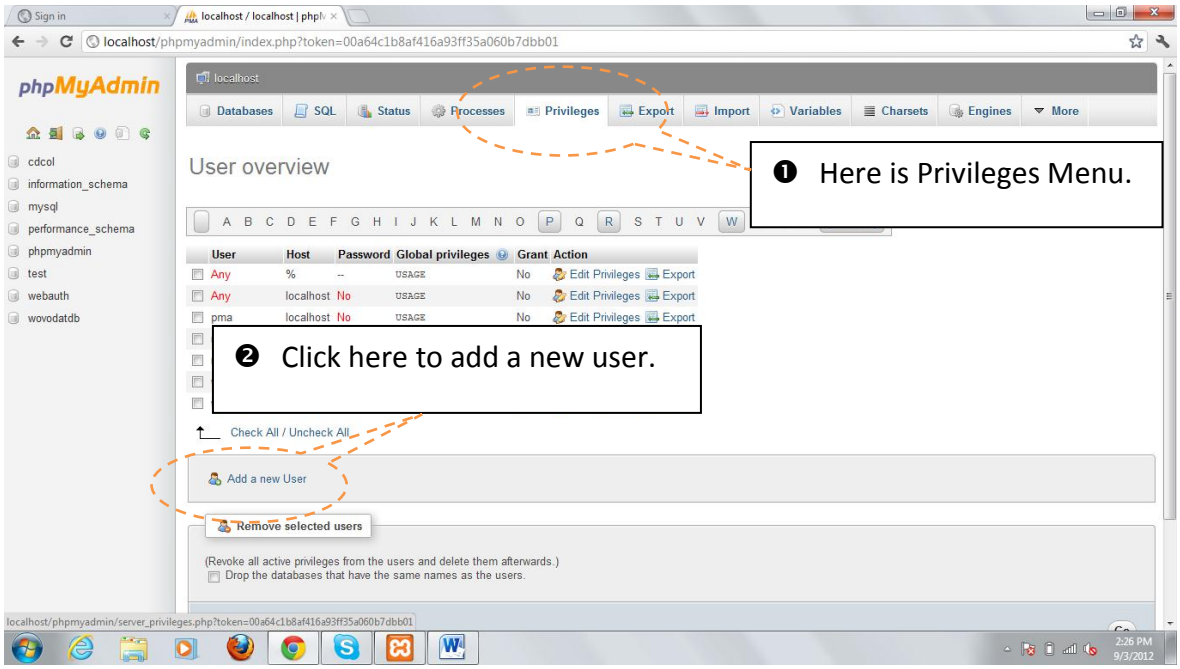

Figure 5. Create new account using phpMyAdmin GUI

Create login information and setting up privilege (see Figure 6)

❸ Choose the field category from the left hand side drop down box and then move the cursor to the right hand side and type fill in the fields.

❹ Click on 'none' radio button under "Database for user" section.

❺ Click on "Check All" beside Global Privileges to give all permissions for the "wovodatuser".

❻ There is no change under "Resource Limits" section.

❼ The last step is to click on "Create user" button to create the "wovodatuser" user account.

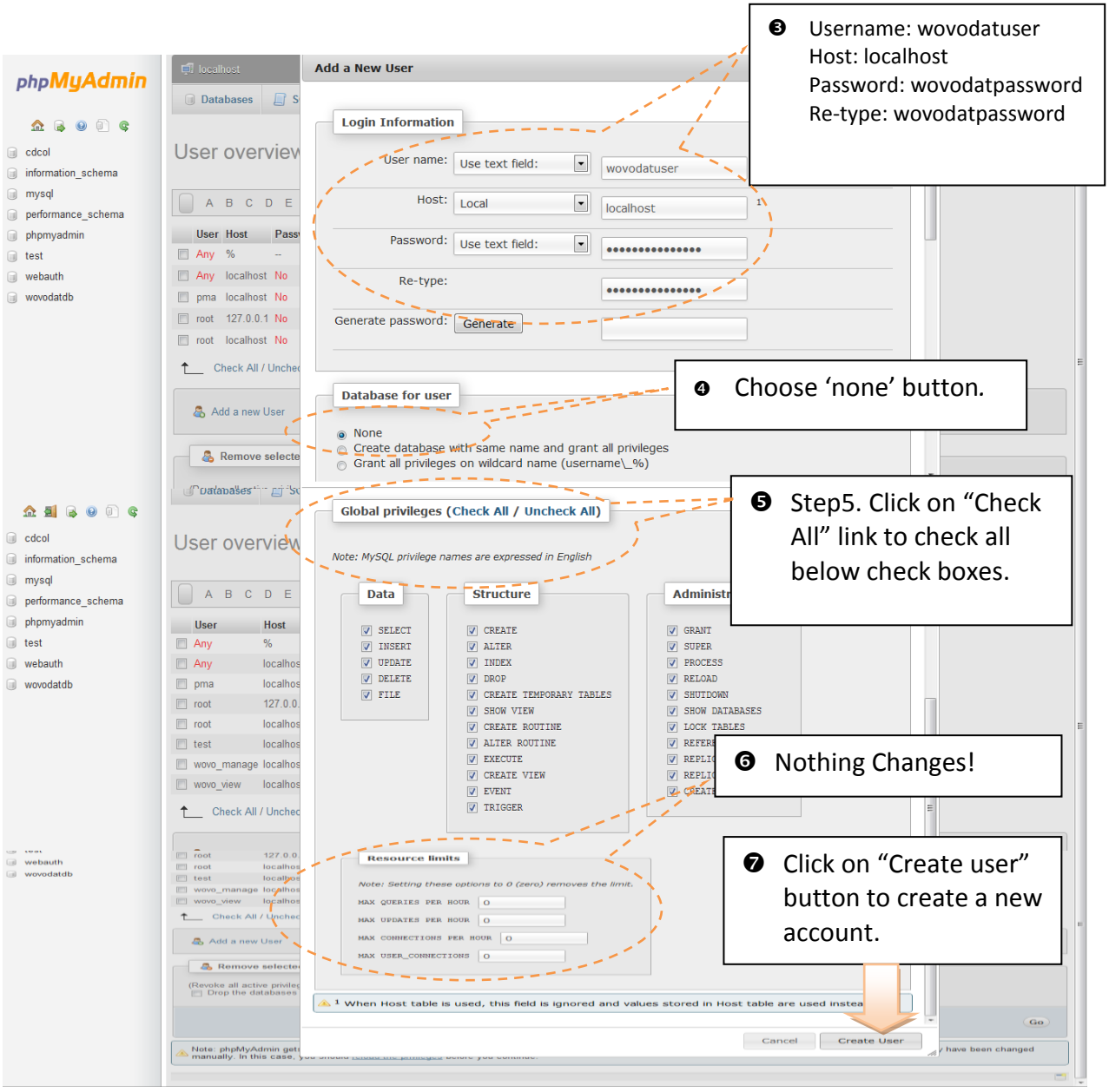

Figure 6. Create login information and setting up privilege using phpMyAdmin GUI

Configuration

After finish with the installation, the next step is to configure Apache2 and PHP5 for the WOVOdat website and the database.

- Configure the default site to **/home/wovodat/public_html/WOVOdat/**
  Edit *default* file using *vi* or other editor:

```
% sudo vi /etc/apache2/sites-available/default
      ⇨ Replace the path /var/www with
        /home/wovodat/public_html/WOVOdat/
```

- Refer to the sample default file below:

```
<VirtualHost *:80>
        ServerAdmin webmaster@localhost
        DocumentRoot  /home /wovodat/public_html/WOVOdat
        <Directory />
                Options FollowSymLinks
                AllowOverride None
        </Directory>

       <Directory /home/wovodat/public_html/WOVOdat >
                Options Indexes FollowSymLinks MultiViews
                AllowOverride None
                Order allow,deny
                allow from all
        </Directory>

        <Directory /home/wovodat/public_html/WOVOdat/output>
                Options Indexes FollowSymLinks MultiViews
                AllowOverride None
                Order allow,deny
                allow from all
        </Directory>

        ScriptAlias  /cgi-bin/  /usr/lib/cgi-bin/
        <Directory  "/usr/lib/cgi-bin">
                AllowOverride None
                Options +ExecCGI -MultiViews +SymLinksIfOwnerMatch
                Order allow,deny
                Allow from all
        </Directory>

        ErrorLog /var/log/apache2/error.log

        # Possible values include: debug, info, notice, warn, error, crit,
        # alert, emerg.
        LogLevel warn

        CustomLog /var/log/apache2/access.log combined

       Alias /doc/ "/usr/share/doc/"
       <Directory "/usr/share/doc/">
            Options Indexes MultiViews FollowSymLinks
            AllowOverride None
            Order deny,allow
            Deny from all
            Allow from 127.0.0.0/255.0.0.0 ::1/128
       </Directory>
</VirtualHost>
```

- Change the owner of the */home/wovodat/incoming* to “www-data”.

```
% sudo chown –R www-data:root  /home/wovodat/incoming
% sudo chown www-data:root  /home/wovodat/login_history.txt
```

- Edit the *php.ini* to include */home/wovodat/PEAR*

```
% sudo vi /etc/php5/apache2filter/php.ini
 ⇨ Modify the include_path entry as following:
include_path = ".:/home/wovodat/PEAR:/usr/share/php"
```

- Restart Apache2

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

- Using the web-browser and type in “http://localhost”. The website should appear in your web browser.

For any inquiries and comments please contact WOVOdat developer team:
http://www.wovodat.org/populate/contact_us_form.php