

Table of Contents

1. Skylab Webserver	2
1.1. The installation of LAMP is done by:	3
1.2. Install MySQL	3
1.3. Install PHP	3
1.4. Finalizing	4
1.5. Install additional packages & commands	4
1.6. reference:	5

Welcome

Project Willy

- [History of Willy](#)
- [Project Willy](#)
- [Publicity](#)
- [Sponsors](#)

Getting started

- [Introduction to ROS](#)
- [Development Guide](#)
- [Driving Willy](#)
- [Manual](#)
- [Wiki Manual](#)

Build of Willy

- [Design history](#)
- [Hardware](#)

Architecture

- [Software Architecture](#)
- [ROS topic design](#)

Raspberry Pi's

- [Sensor node](#)
- [Social Interaction node](#)
- [Power node](#)

Components

- [ROS master](#)
- [New ROS master on Lubuntu](#)
- [Sonar](#)

- [Lidar](#)
- [Kinect](#)
- [Localization and navigation](#)
- [Motor controller](#)
- [Joystick](#)

Lessons learned

- [Todo & Advice](#)
- [Lessons Learned](#)

Archive

- [Previous Groups](#)
- [Research Archive](#)
- [Skylab Architecture](#)
- [Skylab](#)
- [Multi master](#)
- [WillyWRT](#)
- [Realisation](#)
- [Hardware](#)
- [Brain](#)
- [Design Guild](#)
- [Social interaction](#)
- [Speech](#)
- [Speech recognition](#)
- [IMU](#)
- [Human Detection](#)
- [Radeffect App](#)

1. Skylab Webserver

In Skylab a webserver is installed on 10.10.1.45. The webserver can be used for

- Seeing the content of the fetched topics
- Upload and download survey files
- Maintenance on the webserver environment

The installation is on Ubuntu 16.04 and has a LAMP installation.

1.1. The installation of LAMP is done by:

```
sudo apt-get update
sudo apt-get install apache2

sudo nano /etc/apache2/apache2.conf
```

Add at the bottom:

```
ServerName 10.10.1.45
```

Restart Apache with:

```
sudo systemctl restart apache2
```

Allow incoming traffic:

```
sudo ufw allow in "Apache Full"
```

1.2. Install MySQL

```
sudo apt-get install mysql-server
```

use standard password

Secure MySQL environment

```
mysql_secure_installation
```

1.3. Install PHP

```
sudo apt-get install php libapache2-mod-php php-mcrypt php-mysql
```

edit dir.conf and move index.php higher up in the list

```
sudo nano /etc/apache2/mods-enabled/dir.conf
```

Activate PostgreSQL connectivity: Open the php.ini file (/etc/php/7.0/cli/php.ini) and check if the following line is un-commented. If it is not, you can remove the semicolon (;) in front of the entry.

```
extension=php_pdo_pgsql.dll
```

Install Postgres driver

```
sudo apt-get install php-pgsql
```

1.4. Finalizing

Restart Apache

```
sudo systemctl restart apache2
```

Test server:

```
sudo nano /var/www/html/info.php
```

```
<?php  
phpinfo();  
?>
```

Check with:

```
http://10.10.1.45/info.php
```

1.5. Install additional packages & commands

```
sudo apt-get install libssl-dev  
sudo apt-get install php7.0-cli -y  
sudo apt-get install libssh2-1 php-ssh2 -y
```

add to php.ini

```
extension = ssh2.so
```

Give website rights in home directory of Willy

```
sudo chmod -R 777 /home/willy
```

Enable CGI

```
sudo a2enmod cgi
```

Restart Apache

```
sudo systemctl restart apache2
```

1.6. reference:

<https://www.digitalocean.com/community/tutorials/how-to-install-linux-apache-mysql-php-lamp-stack-on-ubuntu-16-04>