

Table of Contents

1. Servers in Skylab	2
2. Ubuntu servers in Skylab	3

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 Ubuntu](#)
- [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. Servers in Skylab

Skylab is the private cloud environment of Windesheim. The management portal of Skylab can be found here: skylab.windesheim.nl

In Skylab there are several servers active. Two servers are Windows 2016 Hyper-V servers. Both have Virtual box installed. In VirtualBox there are several Ubuntu 16.04 VM's active.

All the servers with their functions are listed in the next table.

Server name	IP number	OS	Function
pfSense.localdomain	10.10.1.1		Firewall, DHCP, DNS, Gateway, VPN to Willy
dbsvr.willy.local	10.10.1.5	Windows 2016	Hyper-V host of 10.10.1.3x VM's

appsvr.willy.local	10.10.1.10	Windows 2016	Hyper-V host of 10.10.1.4x - 5.x VM's
u1633.willy.local	10.10.1.33	Ubuntu 16.04 LTS	Fetcher of topics to PostgreSQL, Interface to and from RAEffect app
u1634.willy.local	10.10.1.34	Ubuntu 16.04 LTS	ROS master for Skylab, not used anymore, only for test purposes
u1635.willy.local	10.10.1.35	Ubuntu 16.04 LTS	PostgreSQL database
u1644.willy.local	10.10.1.44	Ubuntu 16.04 LTS	Server for several Data Science and other scripts
u1645.willy.local	10.10.1.45	Ubuntu 16.04 LTS	Webserver of Willy, based on LAMP
zabbix.willy.local	10.10.1.55	Ubuntu 16.04 LTS	Zabbix management server

2. Ubuntu servers in Skylab

The servers in Skylab are all Ubuntu 16.04 LTS servers and installed with default settings. The used user and password can be found in the file "inloggegevens.docx" at SharePoint.

The images of the Ubuntu servers in OVA format can be found in the map "Winnie Skylab\OVA" at SharePoint. The images are the status of December 21, 2018. Some scripts are updated at a later date which can be found at Github.

On both the Fetcher (10.10.1.33) and the ROS master (10.10.1.34) ROS Kinetic is installed as described at <http://wiki.ros.org/kinetic/Installation/Ubuntu>. For the ROS master Multimaster as the "second" master (port 11312) is installed as described at https://windesheim-willy.github.io/WillyWiki/ROS/Multi_master.html

On the Postgres server (10.10.1.35) PostgreSQL is installed with default settings. The used user and password can be found in the file "inloggegevens.docx" at SharePoint.

On the Fetcher and the Processor (10.10.1.45) the following Python packages are additionally installed:

- * Pandas
- * Configparser
- * Time
- * Random
- * urllib3
- * json
- * ssl
- * datetime
- * sqlalchemy
- * psycopg2

On the Zabbix server (10.10.1.55) Zabbix is installed with default settings. The used user and password can be found in the file "inloggegevens.docx" at SharePoint. Some implementation of servers is done in Zabbix, but is stopped as not being part of the MVP.