

# Table of Contents

1. Functions of the webserver .....	2
1.1. Topics .....	3
1.2. Survey .....	3
1.3. Onderhoud .....	4
1.4. Willy management .....	4
1.5. Willy Wiki .....	4

## **Welcome**

### **Project Willy**

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

### **Getting started**

- [Development Guide](#)
- [Driving Willy](#)
- [Documentation](#)

### **Build of Willy**

- [Design history](#)
- [Requirements](#)
- [Design reference](#)
- [Physical build](#)
- [Hardware](#)

### **Robotic Operating System**

- [Introduction to ROS](#)
- [ROS Tutorials](#)
- [Multi master](#)

### **Architecture**

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

### **Hardware nodes**

- [sensor node](#)
- [si node](#)
- [power node](#)
- [WillyWRT](#)

### **Components**

- [ROS master](#)
- [New ROS master on Ubuntu](#)
- [Brain](#)

- [Sonar](#)
- [Lidar](#)
- [Localization and navigation](#)
- [Motor controller](#)
- [Joystick](#)
- [Social interaction](#)
- [Speech](#)
- [Speech recognition](#)

## **Skylab**

- [Setup Skylab](#)
- [Python scripts](#)
- [Webserver](#)
- [Functions of the webserver](#)
- [Skylab servers](#)
- [ROS installation on Ubuntu VMs in Skylab](#)
- [DNS,DHCP, pfSense & Ubuntu](#)

## **Radeffect App**

- [Radeffect App](#)

## **Lessons learned**

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

## **Archive**

- [Previous Groups](#)
- [Research Archive](#)

# **1. Functions of the webserver**

The webserver is the central information and management point of Willy.

The webserver is situated in Skylab and is connected to Willy by the VPN connection between Sylab and Willy. The Webserver is installed on Ubuntu 16.04 LTS and additionally installed with LAMP (<https://windesheim-willy.github.io/WillyWiki/skylab/Webserver.html>).

The main functions of the webserver are divided in:

- [Topics](#)
- [Enquete](#)

- Onderhoud
- Willy management
- Willy Wiki

## 1.1. Topics

The first item Topics gives access to the saved content of several Topics. The script `make_web_oage.php` ([https://github.com/Windesheim-Willy/Skylab/blob/master/webserver/make\\_web\\_page.php](https://github.com/Windesheim-Willy/Skylab/blob/master/webserver/make_web_page.php)) is the central used script. Calling this script with the wanted tabel constructs the complete page. The second function on the Topics page is the display of graphical representation of Topic contents. The webserver works together with the Processor node wich constantly updates the graphical representation so all graphics are near-realtime up-to-date.

## 1.2. Survey

The Enquete (Dutch for survey) item provides all functions to supply and retrieve the survey function on the SI brain node. The items on the page are:

For upload to the SI brain:

- Upload enquete vragen (survey.csv & survey.json) van lokale PC naar Webserver
- Bekijk en edit enquete informatie op Webserver
- Bekijk enquete vragen op Webserver
- Voeg enquete vragen en enquete informatie toe aan Postgres database
- Upload enquete vragen van Webserver naar Willy

For download from the SI brain:

- Download enquete antwoorden van Willy naar Webserver
- Bekijk enquete antwoorden op Webserver
- Voeg enquete antwoorden toe aan Postgres database
- Download enquete antwoorden van Webserver naar lokale PC

The first item gives the possibility to upload the prepared questions and general survey information from a PC of an operator to the website. The PC must have a direct VPN connection to Skylab. The format of both files are described in the file "Willy enquete.docx" on the Sharepoint site of Willy.

The second item gives the possibility to look at and if wanted change the information of the general survey information.

The third item gives the possibility to look at the questions of the survey.

The fourth items gives the possibility to add the general survey information and questions to the Postgres database server in Skylab.

The fifth item gives the possibility to upload the general survey information and questions from the webserver to the SI brain. When the general information is uploaded from the webserver to the SI brain the data is converted from the TXT format to the required JSON format.

The sixth item gives the possibility to download the given answers from the SI brain to the webserver.

The seventh item gives the possibility to look at the answers of the survey.

The eighth item gives the possibility to add the survey answers to the Postgres database server in Skylab.

The last item gives the possibility to download the answers from the website to a PC of an operator. The PC must have a direct VPN connection to Skylab.

## 1.3. Onderhoud

The Onderhoud (Dutch for maintenance) item give the possibility to edit the configuration and password file used by several scripts in the Webserver.

## 1.4. Willy management

The Willy management item gives the possibility to do RDP sessions to the two Hyper-V hosts in Skylab and take over the screen of Willy (the SI node).

## 1.5. Willy Wiki

The items on the page are:

- Wiki van Willy in nieuw venster
- Maak Wordcloud (duurt een paar seconden)
- Beheer Wordcloud websites
- Beheer Wordcloud stopwoorden
- Beheer Wordcloud cloudset

The first option links to the Wiki of Willy.

The second option makes a Wordcloud of the Wiki of Willy. The processing takes several seconds.

The third option gives the possibility to look at and if wanted change the websites that are included in the Wordcloud.

The fourth option gives the possibility to look at and if wanted change the stopwords will be excluded when making the Wordcloud.

The last options gives the possibility to look at and if wanted change configuration settings on how to make the Wordcloud.