Table of Contents

1. Sponsors 2
    1.1. Windesheim 2
    1.2. The Art of Robotics 3
    1.3. Sick 3
    1.4. Multibat 3
    1.5. Automaterialenland 3
    1.6. Koers Polyestertechniek 4
    1.7. Multimate Vollenhove 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 Lubuntu
- 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. Sponsors

This document contains a list of all the companies sponsoring Willy.

1.1. Windesheim

Windesheim provides students and financial support for the project.

1.2. The Art of Robotics

The art of Robotics foundation is the product owner, financial support and a way of getting new sponsors.

1.3. Sick

Sick provided the project with a very expensive LIDAR sensor. Sick provided this in cooperation with our product owner.

SICK
Sensor Intelligence.

1.4. Multibat

The battery company Multibat showed via our product owner interest in our project. After a conversation with the company they proposed a deal. Multibat now provides six batteries to us.

MULTIBAT
ACCU'S & INDUSTRIE BATTERIJEN

1.5. Automaterialenland

When the batteries were sponsored by Multibat, there were unfortunately no cables to connect the batteries. Then we got Automaterialenland as contact to provide free cables.

1.6. Koers Polyestertechniek

Our product owner found a company for us to create the outer plating with. After creating a foam mold, we drove it to Koers in Nieuwleusen and made the outer skin of Willy from fiberglass.

[image]

1.7. Multimate Vollenhove

Multimate provided the project with building materials and small accessories.