## **ExFacLab Documentation**

## sdvun\_sim packages

This page lists the structure of *sdvun\_sim* metapackage.

## **Package Summary**

- sdvun\_sim: Metapackage that contains all packages that belongs to this project. Not contains executable files.
- labfabex\_gazebo: Package that contains LabFabEx model (walls, textures). Contains *launch* files, 3D files and *world* files required by Gazebo.
- sdvun\_description: Package with *xacro* files and 3D files. Used to describe any SDVUN robot model in ROS and Gazebo.
- sdvun\_gazebo: Package with *launch* files to run Gazebo simulations.
- sdvun\_navigation: Package with launch that configurates and runs Navigation Stack nodes of SDVUN mobile robot.
- sdvun\_rviz: Package with *config* files for RViz.
- labfabex\_gazebo Package
  - LabFabEx walls
  - LabFabEx world
  - labfabex\_bringup.launch
- sdvun\_description Package
  - XACRO files
    - Structure
    - Generating a robot model
    - Viewing a SDVUN model in RViz
  - · Links of interest
    - Tutorial: Adding a new robot description
      - Inertial model
      - Visual model
      - Colission model
      - Joints and Links
      - Gazebo Plugins
- sdvun\_gazebo Package
  - sdvun\_nav.launch
  - sdvun\_empty\_world.launch
  - spawn\_sdvun.launch
  - spawn\_sdvun\_nav.launch
- sdvun\_navigation Package
  - Navigation Stack: amcl, hector and move\_base launch files
    - move\_base
    - hector\_mapping
    - amcl

- sdvun\_rviz Package
  - Configuration files for RViz
  - View Robot Model in RViz

## Links of interest