# Large-Scale Direct SLAM

1. This guide demonstrates how to install the monocular LSD SLAM ROS package on Ubuntu 14.04.

## Installation

* 1. First, we install the LSD SLAM ROS package:
* Install all dependencies by executing '***sudo apt-get install ros-indigo-libg2o ros-indigo-cv-bridge liblapack-dev libblas-dev freeglut3-dev libqglviewer-dev libsuitesparse-dev libx11-dev'***
* Clone the LSD SLAM ROS package at <https://github.com/tum-vision/lsd_slam> into your ROS workspace. If you have followed the simulation tutorials of Erle-Robotics, this folder is located at *~/simulation/ros\_catkin\_ws/src.*
* Compile the ROS package by executing ***'rosmake lsd\_slam'***
* Install *rqt\_reconfigure* by running ***'sudo apt-get install ros-indigo-rqt\_reconfigure'***. This package will help us to change LSD SLAM parameters dynamically.