Read me

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This document has the information of installing and setup the component for running Poly\_Suite. These libraries and package are need to be install in sequence as mention below.

## Pre requisite:

**PC Configuration:**

* CPU: Intel i7 10700
* GPU: Nvidia RTX 2070 (8GB memory)
* OS: Ubuntu 64-bit

## Steps follow to run the poly\_suite application-

## Install and setup AutowareAuto

1st step is to setup and install the **AutowareAuto**, so follow the below link to setup the AutowareAuto in your system-

**https://gitlab.com/ApexAI/autowareclass2020/-/blob/master/lectures/01\_DevelopmentEnvironment/devenv.md**

## Install and setup the LG Simulator

2nd step is to install the lg simulator. We have uploaded the modified version of lg simulator which have the functionality to modify the point cloud data for lidar sensor. You can install and setup the lg simulator by following below documentation in the document folder –

**Simulator\_Setup: Point no. – 3**

## Install and build ros2-lgsvl-bridge

3rd step is to install and setup the **ros2 lg bridge** which will help lg simulator to communicate over the ROS2 bridge. Refer the below document for setup-

**Simulator\_Setup: Point no. – 2**

## Install and setup the PythonAPI

4th step is to install the **PythonAPI**. We have uploaded the modified version of the PythonAPI which provide the hook of modifying the point cloud data of lidar. You can follow steps from the below document-

**Simulator\_Setup: Point no. – 4**

## Install and build lgsvl-msgs

5th step is to setup and install the **lgsvl-msgs** which is used by the perception validation node. Please refer the below document-

**Node\_Setup: Point no. – 1**

## Install and setup the Node package

6th step is to install and build the validation node package for perception stack of the autoware. We have uploaded the node package on the git, just copy or install to the adehome folder and refer the below document for setup and build-

**Node\_Setup: Point no. – 2**

## Install and run the Poly\_Suite application

Once the above steps are completed successfully, Copy/Install the **Poly\_Suite** binary in the adehome folder, also copy the **PolyReports, Test\_Cases** along with the Poly\_Suite binary in the same path parallel to the binary. It writes the data into the PolyReports directory and run test cases from the Test\_Cases directory. Please refer the below document to how to use the Suite.

**PolyVerification\_Suit**