Autoware\_Setup

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This document contains the information of Setup and Installation process for Autoware.Auto in Linux/Unix. Also provide the supported package required to run the complete tool.

Setup Ade docker for Autoware.Auto

Autoware.Auto

Lgsvl\_msgs

Rviz2

## Setup Docker and Install Autoware.Auto

The requirement for ADE is to install docker, please follow below steps –

$ cd ${HOME}

$ mkdir polyverification

$ cd polyverification

$ wget <https://gitlab.com/ApexAI/ade-cli/uploads/85a5af81339fe55555ee412f9a3a734b/ade+x86_64>

$ mv ade+x86\_64 ade

$ chmod +x ade

$ mv ade ~/.local/bin

$ which ade

$ ade update-cli # Update ade

$ touch . polyverification # Now setup ade

$ git clone --recurse-submodules https://gitlab.com/autowarefoundation/autoware.auto/AutowareAuto.git

$ cd AutowareAuto/

$ ade start # It will start the ade

$ ade enter # It will enter into the ade

Now if you should see the following in your prompt then it successfully installs the autoware:

<your\_username>@ade:~$

## Install and Setup lgsvl\_msgs package

**Install ROS2 LGSVL Messages:** lgsvl\_msgs is a ROS / ROS2 hybrid package that provides AD stack agnostic message definitions for interfacing with the LGSVL Simulator.

Installation***:***

$ sudo apt update

$ sudo apt install ros-$ROS\_DISTRO-lgsvl\_msgs

Clone repository and build with colcon:

$ git clone https://github.com/lgsvl/lgsvl\_msgs.git

$ cd lgsvl\_msgs

$ colcon build

//

**Downloading-**

$ mkdir -p ~/ polyverification/AutowareAuto/src/external/lgsvl\_msgs

$ cd ~/ polyverification/AutowareAuto/src/external/lgsvl\_msg

$ git clone https://github.com/lgsvl/lgsvl\_msgs.git

**building –**

In the ade container

$ cd ~/AutowareAuto

$ colcon build --cmake-args '-DCMAKE\_BUILD\_TYPE=Release'

You may want to build only lgsvl\_msgs package with the following command.

$ colcon build --packages-select lgsvl\_msgs --cmake-args '-DCMAKE\_BUILD\_TYPE=Release'

//

Source in terminal where rosnodes who publish / subscribe to the messages are running:

$ source install/setup.bash

Testing:

$ source install/setup.bash

$ ros2 msg list |grep lgsvl\_msgs

# If you can see the list of lgsvl\_msgs, they're ready to be used.

Link : https://github.com/lgsvl/Documentation/blob/master/docs/autoware-auto-instructions.md

## Setup Rviz2

// TODO

Need to add the Rviz2 installation

## TODO