**scenic with autoware**

## Setup Docker and Install AutowareAuto

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

**Installation*:***

**$ cd ${HOME}**

**$ mkdir adehome**

**$ cd adehome**

**$ 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**

**$ touch .adehome**

**$ git clone** [**https://gitlab.com/autowarefoundation/autoware.auto/AutowareAuto.git**](https://gitlab.com/autowarefoundation/autoware.auto/AutowareAuto.git)

**$ cd AutowareAuto/**

**$ ade start --update --enter # It will update and start the ade**

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

**Testing:**

**<your\_username>@ade:~$**

Check the distro of autoware auto by running the below command-

**@ade:~$ ls /opt**

**Expected Output: -**

**AutowareAuto # image: binary-foxy:master**

**lgsvl # image: ade-lgsvl/foxy:2020.06**

**ros # image: ade-foxy:master**

If you face any issue during the process please go through the below link –https://autowarefoundation.gitlab.io/autoware.auto/AutowareAuto/installation-ade.html

## Setup lgsvl\_bridge Ros2-lgsvl-bridge

The SVL Simulator can publish and subscribe to ROS 2 messages by connecting to the [ROS2 LGSVL Bridge](https://github.com/lgsvl/ros2-lgsvl-bridge).

It requires some package to build, follow the below steps to setup-

**Installation*:***

**$ cd AutowareAuto**

**$ ade start**

**$ ade enter**

**$ source /opt/AutowareAuto/setup.bash**

**$ sudo apt update**

**$ sudo apt install python3-colcon-common-extensions**

**$ sudo apt install libboost-all-dev**

**$ sudo apt update**

**$ sudo apt install ros-$ROS\_DISTRO-lgsvl-bridge**

**$ git clone** [**https://github.com/lgsvl/ros2-lgsvl-bridge.git**](https://github.com/lgsvl/ros2-lgsvl-bridge.git)

**$ cd ros2-lgsvl-bridge**

**$ git checkout ${ROS\_DISTRO}-devel**

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

**Testing:**

**$ source install/setup.bash**

**$ lgsvl\_bridge**

**Reference :** [**https://www.svlsimulator.com/docs/system-under-test/ros2-bridge/**](https://www.svlsimulator.com/docs/system-under-test/ros2-bridge/)

## Running scenic and autoware setup

Follow the steps to run lgsvl with autoware.

Step1 :Open **terminal 1** and start gsvl\_bridge

$ source /opt/AutowareAuto/setup.bash

$ source lgsvl\_msgs/install/setup.bash

$ source ros2-lgsvl-bridge/install/setup.bash

$ lgsvl\_bridge

Step2: Open **terminal 2** and run lgsimulator in API mode

$ cd adehome

$ cd AutowareAuto

$ ade start

$ ade enter

$ /opt/lgsvl/simulator

Step3: Open **terminal 3** and run scenic test script

$ ade enter

$ source /opt/AutowareAuto/setup.bash

$ cd Scenic/

$ pip3 install --user –e

$ scenic tcase.scenic

Step4: Open **terminal 4** and run autoware

$ source /opt/AutowareAuto/setup.bash

$ source lgsvl\_msgs/install/setup.bash

$ source ros2-lgsvl-bridge/install/setup.bash

$ ros2 launch autoware\_demos lidar\_bounding\_boxes\_lgsvl.launch.py