

# POLYVERIFICATION SUITE SETUP AND CONFIGURATION

This document contains the information of Setup and Installation process for PolyVerification suite in Linux/Unix. We have modified some of the open source packages which are added in repository.

Refer video link for installation steps:-

[https://drive.google.com/file/d/19neTWhZ8mszUmOSmY0U\\_rbdZZwjpPcZy/view?usp=drive\\_link](https://drive.google.com/file/d/19neTWhZ8mszUmOSmY0U_rbdZZwjpPcZy/view?usp=drive_link)

## System Requirements:

- CPU: at least 8 core CPU
- GPU: Nvidia GTX 1080 (8GB memory) or higher
- OS: Ubuntu 18.04 and above (20.04 is recommended)
- Python 3.8

Below are list of component and dependencies need to be installed for before start the PolyVerif suite.

- ✓ AutowareAuto
- ✓ lgsvl\_msgs
- ✓ Ros2-lgsvl-bridge
- ✓ PolyVerif repository
  - PythonAPI
  - Scenic SDL
  - OSSDC-SIM-v1\_1-Linux
  - Avp\_demo
  - Perception Validation Node
  - Control Validation Node
  - Test\_Cases
  - PolyVerif Suite

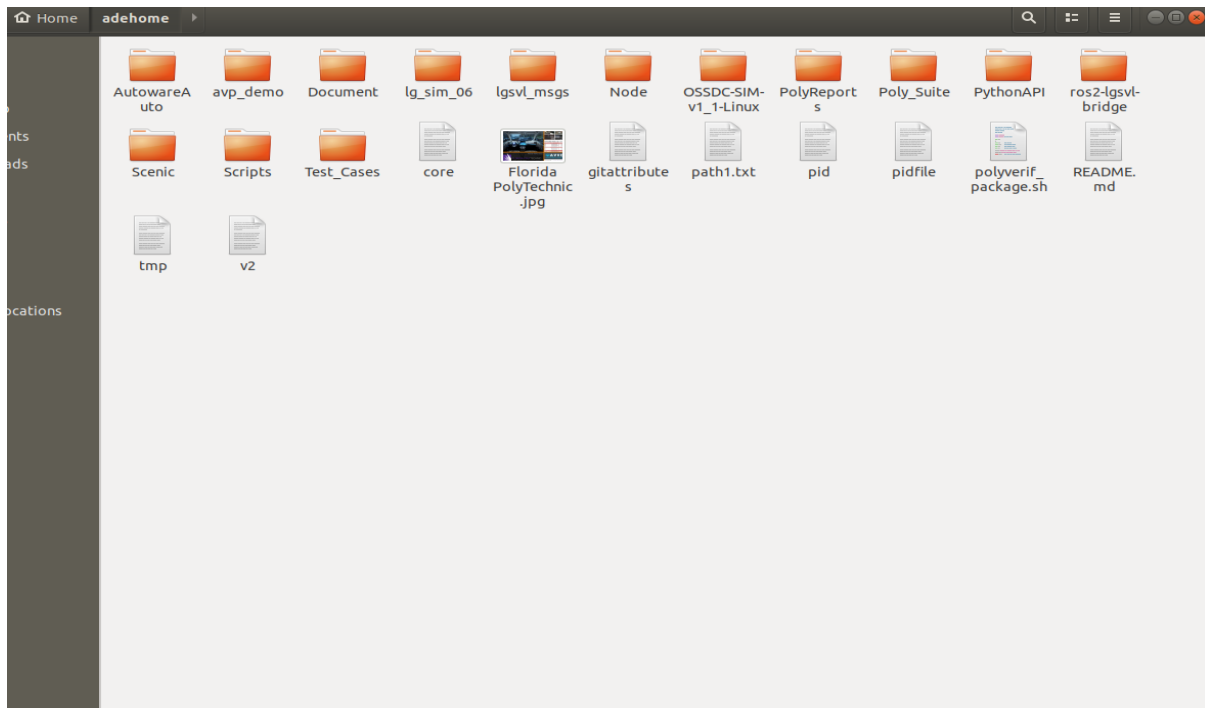
Above package and module need to be install and configured in the same sequence

And directory structure should look like this –

- **adehome**
  - **AutowareAuto**
  - **lgsvl\_msgs**
  - **ros2-lgsvl-bridge**
  - **OSSDC-SIM-v1\_1-Linux**

- PythonAPI
- Scenic
- Avp\_demo
- Node
  - Node\_Perception\_Validation
  - Node\_Control\_Validation
  - Node\_Localization\_Validation
  - Node\_Path\_Planner\_Validation
- Test\_Cases
- PolyReports
- Poly\_Suite

Below is the screenshot of the mention structure –



## 1. Check system requirements mention above before start:-

Python 3.8 will auto install with installation script.

## 2. Setup Docker

For docker installation please refer **Docker\_Installation.txt**

Please find **Docker\_Installation.txt** in Documents directory.  
<https://github.com/MaheshM99/PolyVerif/tree/PolyVerif-OSSDC-SIM>

### 3. PolyVerif setup:

For PolyVerif setup we need to run **Polyeverif-Setup.sh** script. It will automatically setup and installed all packages and nodes of PolyVerif suite.

**Note: We need to give execute permission to Polyverif-Setup script. For that run below command in home directory where we downloaded Polyverif-Setup.sh script.**

```
$ sed -i 's/\r$//' Polyverif-Setup.sh  
  
$ sudo chmod +x Polyverif-Setup.sh
```

Please find **Polyeverif-Setup.sh** in script directory.  
<https://github.com/MaheshM99/PolyVerif/tree/PolyVerif-OSSDC-SIM>

#### Run Polyverif-Setup.sh script:

Open terminal in home directory and make sure that Polyverif-Setup.sh is present in home directory.

Then execute below command to run installation script.

```
$ ./Polyverif-Setup.sh
```

- NOTE: This is error during the repository updates that will not affect anything.  
E: The repository 'http://packages.ros.org/ros2/ubuntu focal In Release' is not signed.