



## Setup for ROS-Development Studio

### 1. Introduction

This is an introductory document to getting familiar with **ROS Development Studio**, a free online workspace for learning ROS managed by **The Construct**: <https://www.theconstructsim.com/>. Some of the users of various services provided by The Construct have been shown in Fig. 1.



Figure 1: The famous institutions and companies making use of services offered by The Construct.

The **ROS Development Studio** (ROS-DS) (<https://www.theconstructsim.com/rds-ros-development-studio/>) is an useful service, which allows you to develop and work on your ROS projects from a single place online. It also lets multiple users to log-in and work collaboratively, from anywhere across the world. If you are a free user, then the only drawback of using ROS-DS is that you have limited time and resources available for you to use this service. We will understand these limitations and other features offered by ROS-DS in this introductory document.

Fig. 2 displays a screenshot of an example ROS-DS workspace.

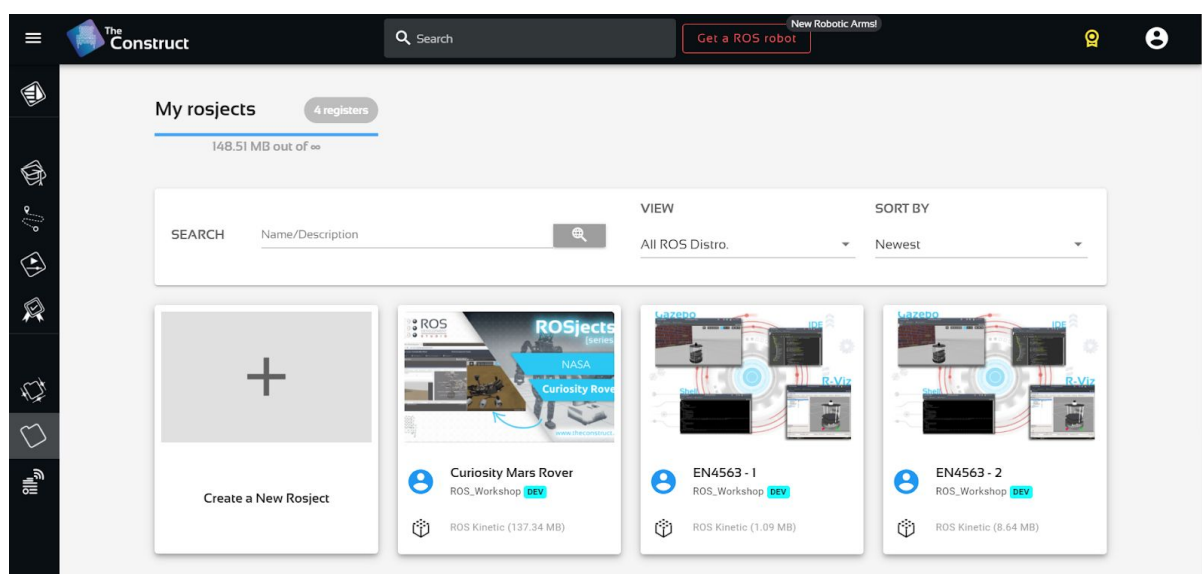


Figure 2: The ROS-DS Workspace.

### 2. Steps for Setting up a ROS-DS Workspace

## Step 01: Setting up an Account on ROS-DS

Create a new google account at <https://accounts.google.com/signup/v2> by following the instructions given below. **If you already have a google account then skip this step.**

Go to the ROS-DS page <https://rds.theconstructsim.com/r/>

Click **Sign Up Now** on the right (You will be redirected to authentication page) as shown in Fig. 3.

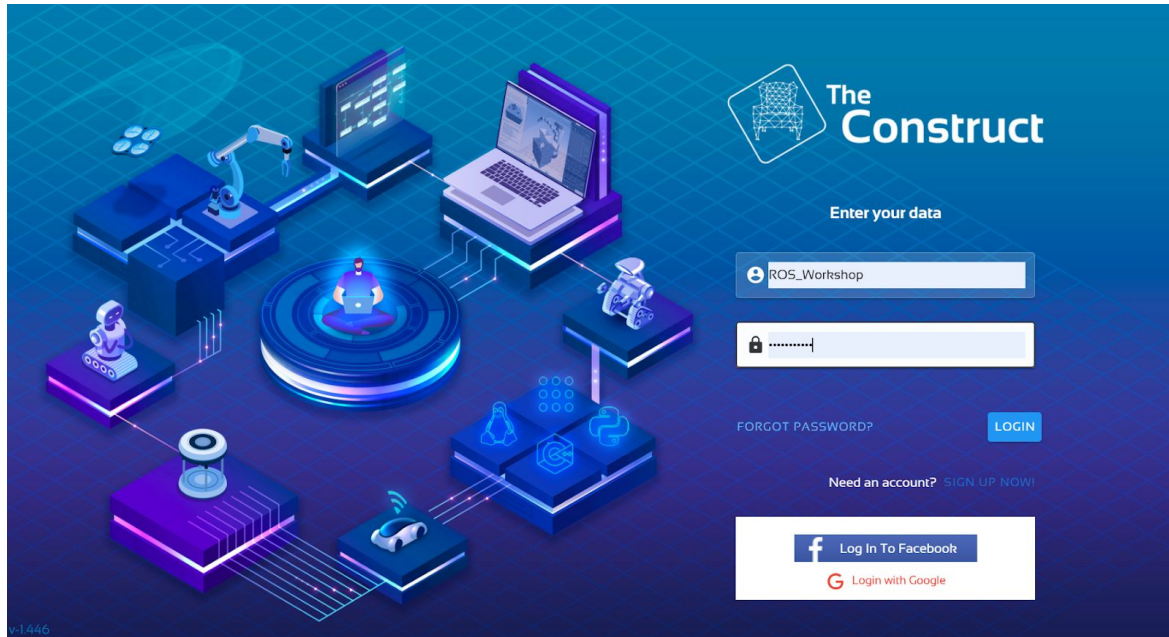


Figure 3: The ROS-DS website when you go the link.

Click “Sign Up” tab and choose “Sign up with Google” option as shown in Fig. 4.

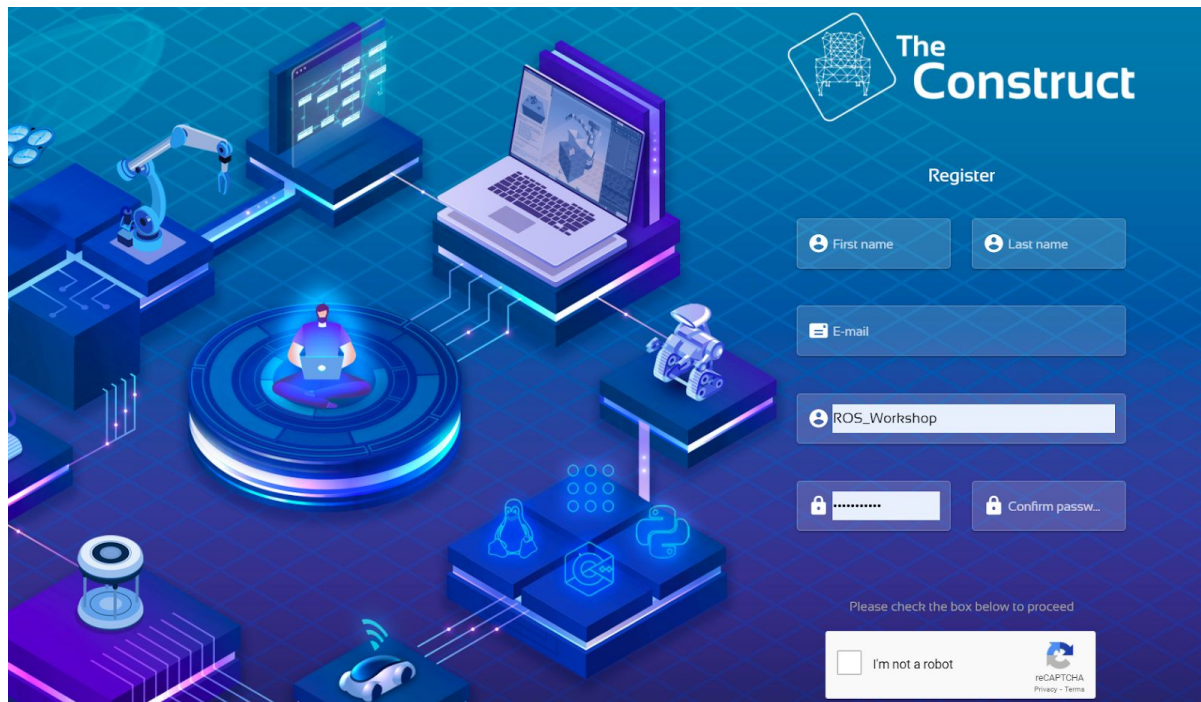
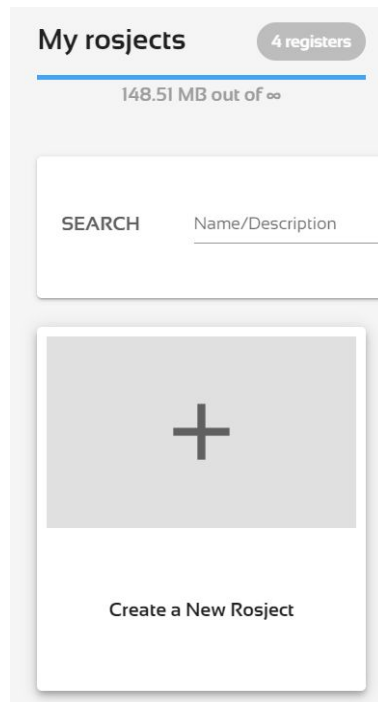


Figure 4: The Sign Up tab of ROS-DS.

## Step 02: Creating a new ROS project

After you have finished signing in:

Go to **My Rosjects** by selecting from the menu on the right.



Click **Create a New Rosject**

A screenshot of the 'Create new rosject' form. At the top, there is a breadcrumb trail: 'Home > My Rosjects > Create rosject'. The form has a title 'Create new rosject'. Below the title is a dropdown menu for 'ROS Distro'. Below that is a text input field for 'Name'. Below the 'Name' field is a toggle switch for 'Make it private?'. Below the toggle is a text input field for 'Description'. Below the 'Description' field is a checkbox for 'Are you creating a course for the Academy?'. At the bottom of the form is a green button labeled 'CREATE'.

Figure 5: An example of creating a new ROSject.

Click on **RUN** (wait a few moments for the project to load.) as shown in Fig. 6.



Figure 6: How to open a new ROSject.

You will be directed to your project site on the ROS Development Studio shown in Fig. 7.

From **Tools** you can open a new **Shell** that can run the commands. Additionally, it provides **Jupyter Notebook** and **Visual Studio Code** IDE for writing scripts.

Your current workspace already contains ROS and python3, and you can check it using the following.

```
$ rosversion -d
```

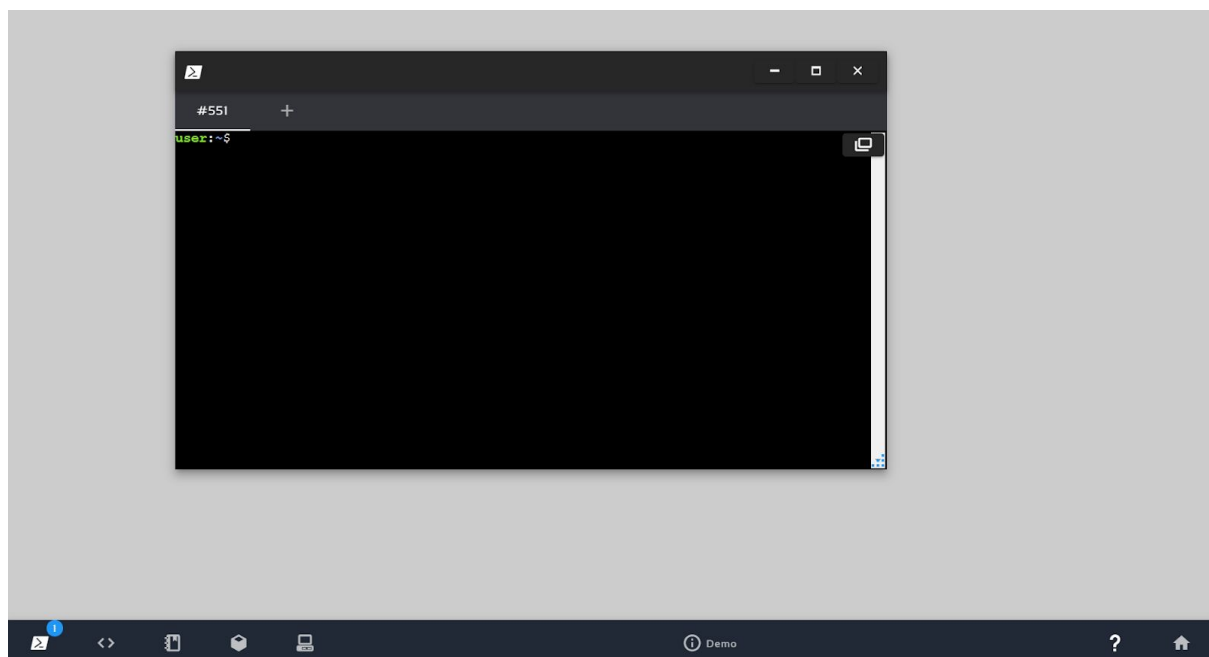


Figure 7: The ROS-DS workspace.