The Kartoza Handbook



Your Open Source Geospatial Experts. Kartoza Pty (Ltd.) 2022

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1 For Developers

1.1 Setup

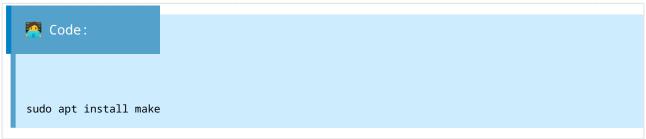
This document covers how you can set up the project, for production and development environment setup.

1.1 Installation

1.1.1 Preparation

1.1.1.1 Dependencies installation

The project provide make command that making setup process easier. To install make on your machine or virtual box server, do:

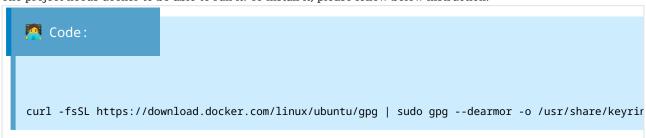


Project has recipe that you can use to run the project in one command. This recipe needs docker-compose to be able to use it. To install it, do:



1.1.1.2 Docker installation

The project needs docker to be able to run it. To install it, please follow below instruction.





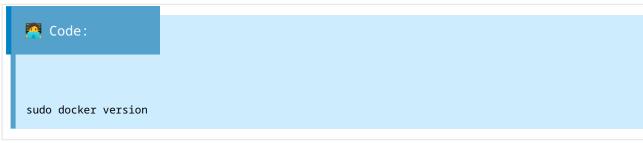
Run apt update:



This will install docker



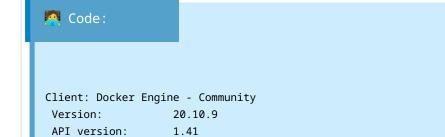
This will check if installation of docker was successful



And it should return like this

Go version:

Git commit:



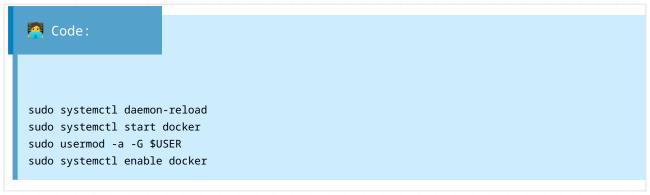
c2ea9bc Built: Mon Oct 4 16:08:29 2021

go1.16.8

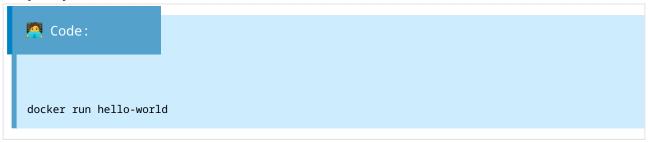
OS/Arch: linux/amd64 default Context: Experimental: true

Manage docker as non-root

This will ensure that the docker can be executed without sudo.



Verify that you can run docker commands without sudo.

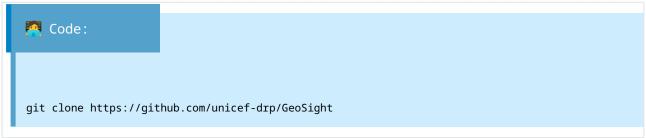


For more information how to install docker, please visit <u>Install Docker Engine</u>

1.1.1 Project Setup

1.1.1.1 Clone GeoSight repository

This will clone the GeoSight repository to your machine



1.1.1.2 Set up the project

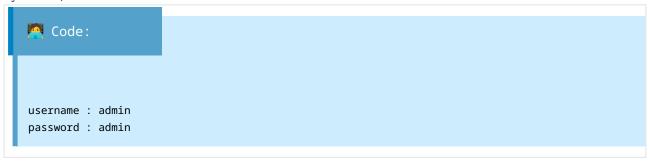
This will set up the GeoSight project on your machine

```
cd GeoSight
cd deployment
cp docker-compose.override.template.yml docker-compose.override.yml
cp .template.env .env
cd ..
make up
```

Wait until everything is done.

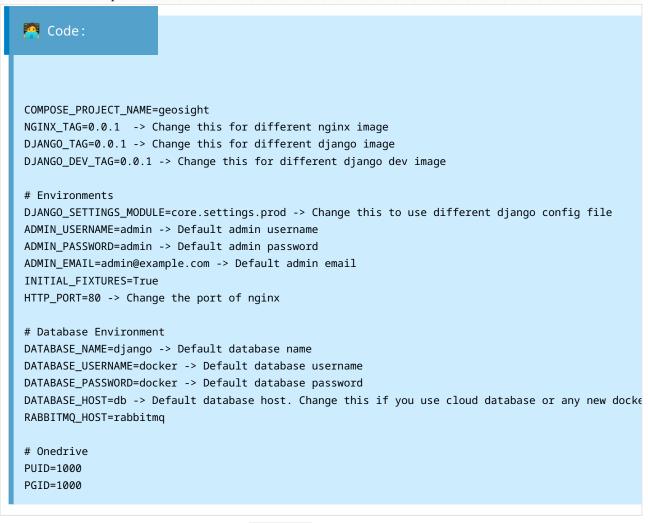
After everything is done, open up a web browser and go to http://127.0.0.1/ and the dashboard will open:

By Default, we can use the admin credential:



1.1.1.3 Set up different environment

To set up different environment, for example the Default credential, or the port of server, open **deployment/.env**. You can check the description below for each of variable.



After you change the desired variable and do make up . It will rerun the project with new environment.

1.1.1 Development setup

1.1.1.1 Development Environment

This section is for setup development, so we can develop the project and check the changes in runtime. The sections														ns					
depend	l on wh	nat int	erpre	ter th	at yo	u use	Э												

1.1.1.2 Using pycharm

This section is for using pycharm.

Requirements:

- Pycharm
- * Finished Setting up the project

Setup interpreter

- $^{2\cdot}$ Go to ssh interpreter -> Fill the form like below Project Interpreter
- 3. Click next and fill **docker** as password

 Project Interpreter
- $^{4\cdot}$ Click next and change interpreter like below and click finish Project Interpreter
- $^{5\cdot}$ After finish, it will show all package like below. Project Interpreter
- 6 . In current page, click **path mappings**, click + button and put local path to where the project (django-project folder) and remote path is like below. and click oK.

Project Interpreter

Now the interpreter is done. When we restart the machine, we need to do make up to run the project.

Setup run configuration

After the interpreter is done, we need configuration to run the project in development mode.

- $^{
 m 1.}$ Click "Add configuration" like in the cursor in the image below. (top-right)
 - Project Interpreter
- 2. There will be a popup, and click +, then click **django server** like below Project Interpreter

Project Interpreter

- ³. It will show the form and fill like below. Project Interpreter

4. Don't click the OK yet, but click **Environment Variables** and add environments like below 9by clicking + button).

Project Interpreter

- ^{5.} After that, click OK.
- $^{6\cdot}$ Now we need to run the server by clicking \mathbf{go} button in below image. Project Interpreter
- $^{7}\cdot$ When we click the **go** button, pycharm will run a process until like image below. Project Interpreter
- 8. Now it is done. We can access the development server in http://localhost:2000/ This development mode is DEBUG mode, and also whenever we change the code, the site will also change in runtime. For more information how to set up on pycharm, please visit <u>Using a Docker Compose-Based Python Interpreter in</u> **PyCharm**



https://github.com/unicef-drp/GeoSight