# How do I back up all my Gitlab repositories?

#### Goal

The goal of this article is to explain how to back up all your Gitlab repositories with a utility script.

I wrote this script in order to be able to:

- the personal user repositories private and public,
- the user organization repositories,
- the fork repositories.

When the script is run for the first time, it will retrieve all the repositories if the repositories have been previously retrieved it will do an update.

**Important:** The repository name with space will be replace in clone folder by -. Example the repository name like **repo 1** will be clone with name **repo-1**.

### Installation

Before getting started, you'll need to install **Python** and **Git** on your machine:

Python >=3.9

Git

After installation, you can clone the utility script at the following address: Gitlab Clone Repo

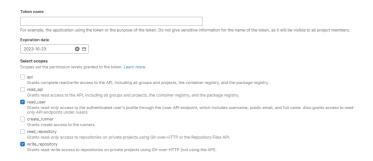
# Preparation

Token creation

Go to your **Gitlab** account to generate a token with read-only authorization as below:



**Important:** If you want to update fork repositories, you need to give workflow authorization to allow repositories to be updated. Activate the option as shown below:



## Initializing environment variables

In the clone utility project repository folder, create the file **.env** with the following contents:

```
# Clone repo host
DOMAIN = gitlab.com
# Domain protocol type http or https
PROTOCOL = https
# Access Token To Domain
TOKEN = your_generate_token_here
# Username gitlab
USERNAME = your_gitlab_username
# Storage Folder => Folder where the repositories will be save => example
/home/toto or C:\users\toto for windows
FOLDER = folder_path_here
```

You must enter specific values as shown in the example below:

```
| Compared to the compared to
```

Information: During execution, destination folders will be created if they do not exist.

### Execution

1. Run the following command in the project folder (must be run once):

```
python -m venv env
```

or

```
python3 -m venv env
```

or for ubuntu

virtualenv venv

**Information:** If you encounter an error, please check the following link: https://gist.github.com/frfahim/73c0fad6350332cef7a653bcd762f08d

2. Run the following command to activate the environment:Lancez la commande suivante pour activer l'environnement:

```
source env/bin/activate
```

or on windows

```
env\Scripts\activate.bat
```

3. Install the modules from the command:

```
pip install -r requirements.txt
```

4. Run the backup script with the command: python main.py or python3 main.py.

At the end you'll have all the repositories in the destination folder.

```
The summary of actions are:

Number of new repository clones: 3

Number of repository updates: 0

Number of failures: 0

Number of failures: 0

Number of successes: 3

This programme takes: 0 year(s) and 0 month(s) and 0 day(s) and 0 hour(s) and 0 minute(s) and 14 second(s)
```

**Information:** Note that for each execution you have the log generated inside utility script folder inside subfolder **logs**.