

# Gitlab - GIT repository and continuous integration

## Service description

GitLab server, a tool to manage GIT repositories easily, very similar to GitHub.

It has GitLab CI activated with a Docker runner (and the possibility to add more runners) and Gitlab Pages.

## Activation

All CITIUS users can use this service automatically.

## User manual

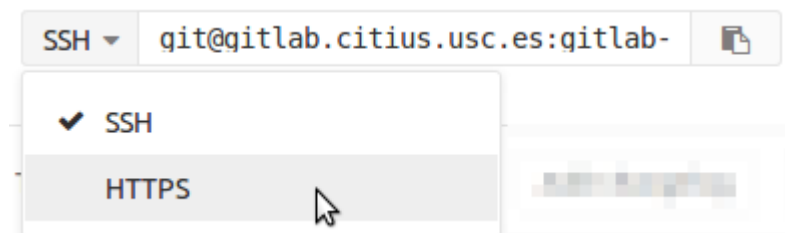
### GitLab access and first steps

Go to <https://gitlab.citius.usc.es/> and use your CITIUS credentials in the LDAP tab.

Once logged in create a new project. Then the steps needed to initialize the repository will be displayed.

Remember that if you choose SSH as the access method (default option), you'll only be capable of doing so from inside the CITIUS network or using the VPN and you'll need to upload a public key in the preferences section. Adding the public key is a simple task and GitLab instructs you on the procedure. This is the recommended choice when working inside the building.

HTTPS access on the other hand works from everywhere and only a valid username and password are needed.



Clicking the dropdown menu the HTTPS address is shown.

### GitLab CI

From version 8.0 onwards Gitlab CI is integrated with Gitlab. To start it is enough to create a file

named `.gitlab-ci.yml` following the [Gitlab CI guide](#).

## Gitlab Pages

Pages in Gitlab Pages are served from a `pages.citius.usc.es` subdomain (with an alias in `citiususc.io`), and are created by a Gitlab CI job. There is a basic guide about Gitlab Pages in <https://pages.citius.usc.es/> and more information available in [Gitlab Pages hosting](#)

## Project creation by groups

Gitlab projects can be created by a user or by a group. If the project implies collaboration with other users or if it may be transferred to other user at some point then it is advisable to create the project in a group. To do so push the *Create a group* button inside the *Groups* page.

## Big files (git lfs)

Files bigger than 100MB shouldn't be uploaded to the git repository the same way as the others but using `git-lfs`:

1. Install the `git-lfs` client, available in the `git-lfs` package in the CITIUS Ubuntu 14.04 or [here](#) for other distros.
2. Inside the repository directory install LFS: `git lfs install`
3. Specify which files are going to be managed with LFS (wildcards can be used): `git lfs add "*.ova"`
4. Add the files to commits as usual: `git add file.ova; git commit -m "Added big file"`
5. LFS only works using HTTPS, not SSH. If using *remote* through SSH, then HTTPS has to be added with a different name before doing *push*, for example: `git remote add origin-https https://gitlab.citius.usc.es/grupo/proxecto.git`
6. Finally make a *push* to *remote* HTTPS: `git push origin-https master`

To clone the repository there are also additional steps:

1. Do the *clone* as usual using HTTPS: `git clone https://gitlab.citius.usc.es/grupo/proxecto.git`
2. Change the repository's directory and get the files from the LFS: `git lfs fetch`

## Problems and frequent questions

**When making a push the following error appears: "error: RPC failed; result=22, HTTP code = 411"**

If you see error `HTTP code = 411`, you need to configure the git command to increase the HTTP buffer size:

```
git config --global http.postBuffer 524288000 # permite ata 500MB
```

If receiving HTTP code = 413, it is because push is too big. Server accepts HTTP pushes to 70MB, more than that will produce an error. If you need to do bigger pushes you will have to use SSH with a pair of keys instead of HTTP.

## When cloning the repository I see the following error: "Agent admitted failure to sign using the key."

If the SSH key is correctly configured in the server but you have just created it and never tried to use it, then execute the following command to add it to the local authentication agent:

```
ssh-add
```

From:

<https://wiki.citius.usc.es/> - **Wiki do CiTIUS**

Permanent link:

<https://wiki.citius.usc.es/en:centro:servizos:gitlab>

Last update: **2018/05/24 17:32**

