# SSH keys for GitLab

#### Generate a new SSH key pair – example Windows 10

Startup Git Bash

Generate an ED25519 key with the following command:

ssh-keygen -t ed25519 -C <u>pietje.puk@wur.nl</u> The -C flag indicates a quoted comment - use your email address to label your SSH key.

You will see a response similar to:

Generating public/private ed25519 key pair. Enter file in which to save the key (/m//.ssh/id\_ed25519):

Just press Enter to accept the suggested file.

After assigning a file to save your SSH key, set up a <u>passphrase</u> which is used for encrypting your private SSH key.

A passphrase is a series of four random common words like mothersugarbutterflycupcake which is easier to remember than a password like H0nkyT0nkY35!

```
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
```

If successful, a public key file (extension .pub) and a private key file (no extension) is saved. You will see a response similar to:

(a lot of characters are replaced with asterisks \*\*\*\*\*\*\*)

```
Your identification has been saved in /m//.ssh/id ed25519
Your public key has been saved in /m//.ssh/id ed25519.pub
The key fingerprint is:
The key's randomart image is:
+--[ED25519 256]--+
| ******
| ******
| ******
| ******
| ******
| ******
| ***********
| *********
| ******
+----[SHA256]----+
```

### Copy your public ssh key file

Copy your public ssh ED25519 key file to the clipboard of the operating system with the following command:

Mac OS X:

pbcopy < ~/.ssh/id ed25519.pub</pre>

Linux/Ubuntu:

clip.exe < ~/.ssh/id\_ed25519.pub</pre>

Git Bash on Windows 10:

clip < ~/.ssh/id ed25519.pub</pre>

### Add an SSH key to your GitLab account

After you copied the **public** SSH key file in your terminal, you have to add it to your GitLab account.

- 1. Start up your browser and navigate to WUR GitLab: <u>https://git.wur.nl</u> and sign in.
- 2. <u>Navigate to User Settings</u> by selecting the option Preferences below your avatar

2	11 ~ E3 ()	•	• •
	Lean, Davies		
	0.00102		
0	9 Set status Edit profile		
	Preferences		
	Get a free instance review		
	Sign out		

- At the left side a lot of User Settings can be chosen. Click SSH Keys
   Paste the copied public key into the Key text box
- Remove the carriage return / line feed, so the cursor is behind the last character! 5. Click the Add key button

## Test your SSH key

To test whether you can connect with the WUR GitLab server using the SSH protocol, run the following command in your terminal: Start Git Bash for Windows 10

```
ssh -T git@git.wur.nl
```

Hopefully you will see a response similar to this:

```
Enter passphrase for key '/m/.ssh/id_ed25519':
Welcome to GitLab, @Puk002!
```

If you are prompted for a password like:

git@git.wur.nl's password:

There is something wrong with your SSH setup (password of the user git is asked). Users connecting to the WUR GitLab server over SSH are identified by their SSH key instead of their username!

If you entered the wrong passphrase several times you also get the message:

```
git@git.wur.nl's password:
```