

Create Own GitLab Testing Environment For wikisuite-packages

By following this guide, you will learn how to create a dedicated testing environment using your personal GitLab account. This will allow you to test changes to the WikiSuite installer ([WikiSuite packages](#)) and verify that the changes work as expected before being deployed to [packages.wikisuite.org](#).

Let's get started!

1. Create a project on Gitlab and add wikisuite-packages source code.

- Follow this link to see how to create a gitlab blank project: <https://docs.gitlab.com/ee/user/project>.
- Once the project is created, clone it on your computer.
- Download the ZIP file of the wikisuite-packages source code on <https://gitlab.com/wikisuite/wikisuite-packages>.
- Extract the ZIP and move all the code into the source tree of your project you just cloned.

Now leave your project as is; we'll come back to it later...

2. Create a new, dedicated GPG key pair.

Important :

During the creation of the key, you will provide certain necessary information for its generation. Ensure that you do not have a key created with the same information you are providing. This could lead to pipeline errors when using the key on GitLab.

Open your terminal and enter the following command:



```
gpg --full-generate-key --openpgp
```

This command generates a key pair that consists of a public and a private key. A series of prompts directs you through the process:

- Select what kind of key you prefer:



```
Please select what kind of key you want:
(1) RSA and RSA (default)
(2) DSA and Elgamal
(3) DSA (sign only)
(4) RSA (sign only)
(14) Existing key from card
```

Your selection?

Choose An RSA/RSA key that allows you not only to sign communications, but also to encrypt files.

- Choose the key size:



RSA keys may be between 1024 and 4096 bits long.
What keysize do you want? (3072)

You can take the default value.

- Specify how long the key should be valid:



Please specify how long the key should be valid.
0 = key does not expire
<n> = key expires in n days
<n>w = key expires in n weeks
<n>m = key expires in n months
<n>y = key expires in n years
Key is valid for?

- Valide the provided infos:



Is this correct? (y/N)

Enter **y** to finish the process.

- Enter your name and email address and comment for your GPG key:



GnuPG needs to construct a user ID to identify your key.

Real name: your real name
Email address: example@gmail.com
Comment: your comment

- Confirme your informations:



```
Change (N)ame, (C)omment, (E)mail or (O)kay/(Q)uit?
```

Enter the letter **O** to continue if all entries are correct.

- Passphrase for your secret key:

Important :

You will be asked for a passphrase to create your key. **Note that the GPG key should not have a passphrase**, leave it blank whenever prompted.



```
We need to generate a lot of random bytes. It is a good idea to perform
some other action (type on the keyboard, move the mouse, utilize the
disks) during the prime generation; this gives the random number
generator a better chance to gain enough entropy.
```

```
Please enter the passphrase to protect your key:
```

After that, the key is created and some information is displayed in the terminal



```
public and secret key created and signed.

pub   rsaXXXX 2023-11-30 [SC]
      xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
uid           your real name <example@gmail.com>
sub   rsaXXXX 2023-11-30 [E]
```

Be sure to keep your uid (in our example: **your real name <example@gmail.com>**), it will be useful to you later.

- Export the private key as ASCII.



```
gpg --output private.pgp --armor --export-secret-key "your uid"
```

This will generate a private.pgp file containing your private key. Please make sure to not store/commit the private key into the source tree.

3. Configure your GitLab project.

On your project page, under the "Settings > CI/CD Pipelines", create a secret variable

Important: Your secret variable should not be protected, unchecked protected checkbox.

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- The first one be called GPG_PRIVATE_KEY and copy/paste all the content of the private.pgp file in the value field.
- Create a second secret variable called SIGN_USER, whose value will be the user_ID (uid in our example: **your real name <example@gmail.com>**) of your private key.

4. Commit and push to main.

Now, let's get back to your project.

- On your project, create and checkout to a new branch main if not yet:



```
git checkout -b main
```

- Add and commit all your changes:



```
git add .  
git commit -m "a message"
```

- Push to your repository:



```
git push origin main
```

or



```
git push --set-upstream origin main
```

if the branch does not exist on your GitLab repository.

After commit and push, once the pipelines have passed, the packages are automatically built by Gitlab-CI, then hosted on Gitlab-Pages. The access link for the packages is available under the "Deploy > Pages" section of your GitLab project.

5. Configure wikisuite-installer script.

The final step is to modify the wikisuite-installer script so that it can point to your project.

- Find the link to your project pages under the "**Deploy > Pages > Access pages**" section of your GitLab project.
- In your project's source tree, open the wikisuite-installer file. Find the

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WIKISUITE_DEV_INSTALL_FROM_FOLDER var and change its value by to the link to your project pages.

Example:

if your link is: <https://my-ws-packages-test.gitlab.io>



```
WIKISUITE_DEV_INSTALL_FROM_FOLDER="https://my-ws-packages-test.gitlab.io"
```

- On the same file find:



```
run "cat ${WIKISUITE_DEV_INSTALL_FROM_FOLDER}/GPG_PUBLIC_KEY"
```

and replace with:



```
run "curl -s -S -L ${WIKISUITE_DEV_INSTALL_FROM_FOLDER}/GPG_PUBLIC_KEY"
```

- And then find:



```
run "echo 'deb file:${WIKISUITE_DEV_INSTALL_FROM_FOLDER}/${os_type}'"
```

and replace with:



```
run "echo 'deb ${WIKISUITE_DEV_INSTALL_FROM_FOLDER}/${os_type}'"
```

- Add, commit and push to main



```
git add wikisuite-installer
git commit -m "Update wikisuite-installer"
git push origin main
```

tips

1. How to test.

- Download the installation script to your server



```
curl -o wikisuite-installer link_to_your_wikisuite-installer_script
```

- Run the installation script



```
sudo bash wikisuite-installer
```

2. Revert all your changes and update your repository with the original wikisuite-packages

- Add an upstream that points to the original wikisuite-packages repository



```
git remote add upstream git@gitlab.com:wikisuite/wikisuite-packages.git
```

- Fetch the latest changes from the original wikisuite-packages repository



```
git fetch upstream
```

- Merge the changes from the original repository into your local branch



```
git merge upstream/main
```

- Push the changes from your local branch to your repository



```
git push origin main
```