

Gpg key

Tuesday, March 8, 2022 7:49 AM

Windows:

1. Install Gpg (Gpg4win) <https://www.gnupg.org/download/index.html>
2. Add path to gpg.exe to windows variables
 - a. Right click windows icon in task bar > system > advanced system settings > environment variables
 - b. Click new under user variables and add path

Name: gpg

Path: C:\Users\simeransandhu\AppData\Local\GnuPG\bin

- c. Do the same for system variables

3. open your terminal and run below to see if you have a key created. If there's a key created already, you'll see something like the output below so you can skip to step 5. If not, step 4.

```
gpg --list-secret-keys --keyid-format long
```

```
$ gpg --list-secret-keys --keyid-format long
/c/Users/simeransandhu/.gnupg/pubring.kbx
-----
sec   rsa4096/XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX 2022-03-08 [SC]
uid           [ultimate] Simeranjeet Sandhu (no comment) <simeransandhu@del
ssb   rsa4096/XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX 2022-03-08 [E]
```

4. Create a gpg key
 - a. gpg --full-gen-key
 - b. select option 1 (RSA and RSA)
 - c. RSA keysize: 4096
 - d. Key is valid for: 0
 - e. key does not expire at all: y
 - f. Enter your name, email address
 - g. comment: no comment
 - h. Enter O and enter a passphrase of choice to generate a random key

5. once the key is generated, configure the private key to your git
 - a. List your key

```
gpg --list-secret-keys --keyid-format long
```

- b. copy the part after the '/' in the line that starts with 'sec'. For example 0E6198DFB2D67A26
- c. configure git to use the selected key for signing commits

```
git config --global user.signingkey 0E6198DFB2D67A26
```

6. Add the public gpg to your GitLab account
 - a. Take your serial number you got in step 5 and run the command below

```
gpg --armor --export 0E6198DFB2D67A26
```

- b. Copy and paste the output that pub key under your GitLab account preferences
preferences > gpg keys

7. When running git commit, make sure to add the -S flag to sign it

```
git commit -S -m "this is a signed commit"
```

If no secret key error happens:

<https://stackoverflow.com/questions/36810467/git-commit-signing-failed-secret-key-not-available>

<https://elrr-access:repo1-dso-milGRwTV4xv93CE5K2Xk-pd@repo1.dso.mil/dsop/opensource/adl-initiative/elrr/elrr-portal.git>

<https://elrr-access:repo1-dso-milGRwTV4xv93CE5K2Xk-pd@repo1.dso.mil/dsop/opensource/adl-initiative/elrr/repo1.dso.mil/dsop/opensource/adl-initiative/elrr/elrr-aggregator.git>

PW GPG
K82!sam*1121S