

SSH Key Generation



Objective for Exercise

- To generate SSH Key and add it to repository

An SSH key is an access credential in the SSH protocol. Its function is similar to that of user names and passwords, but the keys are primarily used for automated processes.

- Launch Git Bash.
- Type the following, replacing with the email address that is linked to your Github account, and hit Enter:

```
ssh-keygen -t rsa -b 4096 -C "<your email address>"
```

This will generate a new SSH key.

- Next, you will be prompted to enter a directory to save the key. I simply press Enter to accept the default location, which is a .ssh folder in the home directory. In other words, you will be able to locate the key in `~/.ssh/id_rsa`
- You will then be prompted to choose a passphrase. I prefer not to have a passphrase; so just press Enter and Enter again to confirm the empty passphrase.

Now, if you navigate to the `.ssh` directory, i.e., if you run the following in the Git Bash terminal,

```
cd ~/.ssh
```

and then,

```
ls
```

To the list the contents of the `.ssh` directory, you should find `"id_rsa"` and `"id_rsa.pub"` in the list of contents, where `"id_rsa"` is the private version of your key and `"id_rsa.pub"` is the public version of your key.

- Finally, you will need to add the SSH key to the `ssh-agent`, which is meant to help with the authentication process. To do that, first you need to start the `ssh-agent`, so run the following in the Git Bash terminal:

```
eval "$(ssh-agent -s)"
```

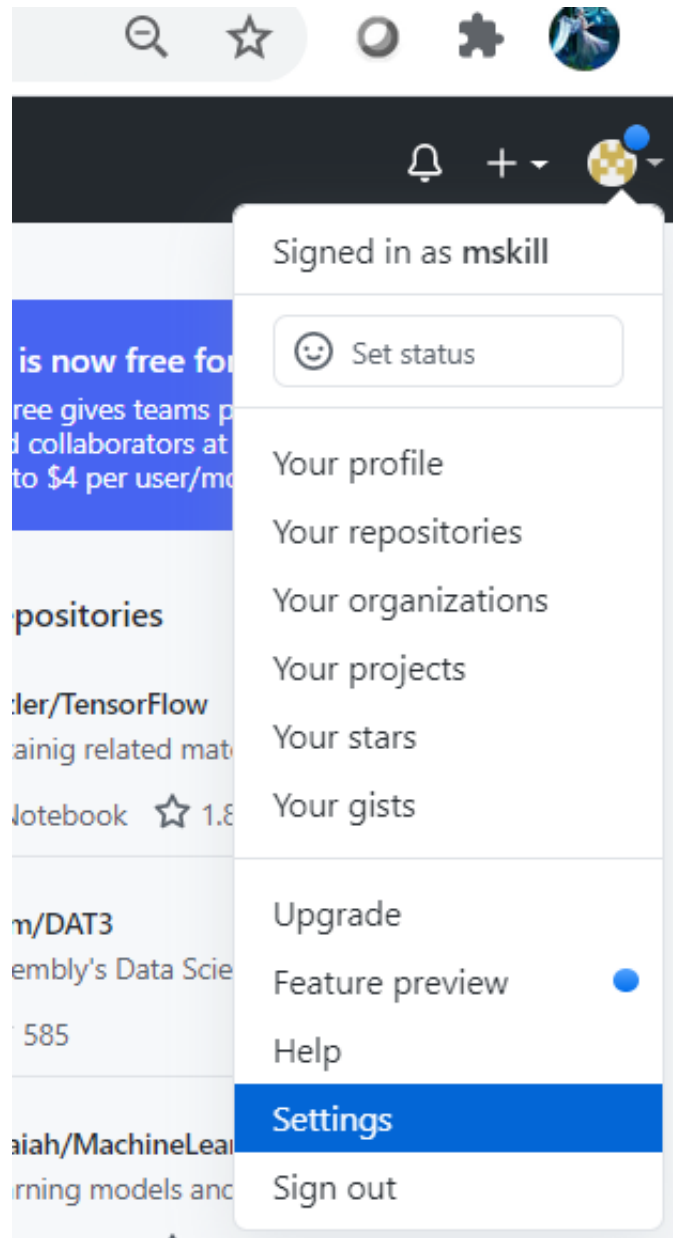
- And then add the key to the agent by running the following in the Git Bash terminal:

```
ssh-add ~/.ssh/id_rsa
```


- Copy the command using the below command:

```
cat ~/.ssh/id_rsa.pub | clip
```

- Now, Open GitHub and go to Setting



Under Personal settings, select "SSH and GPG keys", as shown below:

 **Malika-s**
Personal settings


- Profile
- Account
- User security
- Security log
- Security & analysis
- Emails
- Notifications
- Billing
- SSH and GPG keys**
- Blocked users
- Repositories
- Organizations
- Saved replies

Public profile

Name

Your name may appear around GitHub where you contribute or are mentioned. You can remove it at any time.

Public email

Select a verified email to display 

You have set your email address to private. To toggle email privacy, go to [email settings](#) and uncheck "Keep my email address private."

Bio


Tell us a little bit about yourself

You can [@mention](#) other users and organizations to link to them.

URL

Twitter username

click the button to add a new SSH key

 **Malika-s**
Personal settings

- Profile
- Account
- User security
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- Emails
- Notifications
- Billing
- SSH and GPG keys**

SSH keys

[New SSH key](#)

There are no SSH keys associated with your account.

Check out our guide to [generating SSH keys](#) or troubleshoot [common SSH Problems](#).

GPG keys

[New GPG key](#)

There are no GPG keys associated with your account.

Learn how to [generate a GPG key and add it to your account](#).

Provide the title. Then select the Key field, and press Ctrl-v to paste the key from the clipboard buffer. The pasted key should have your email address at the end, as shown below:

Malika-s
Personal settings

- Profile
- Account
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- Security log
- Security & analysis
- Emails
- Notifications
- Billing
- SSH and GPG keys**
- Blocked users

SSH keys / Add new

Title

AddingKey

Key

```
AAAAB3NzaC1yc2EAAAADAQABAAQCAQC5b03Zdc9zRTA7ZRJ384mn5ZMTFDkWqbpqZjXTv2dlMv6xbsDkwzEkH8bYxEgUubj07K0uiXlZsL3atfx4E3Wm+B8zVnBxb897CbH/fCDpPXA7eSLT91NyZUEJLpt0F6BmWRqzqtV4kxlydNKG9R7c2btK3CQ3jGR57z/MX9/zXK3MjK9erUke4CWKFlwR2GeXDOat86an97odssi6PIRjkl17m6Qs5odJUP11jsrLjsAmlUsQPd6bpfm3EtgVkfHUTGm/jMOllws9MYASP5VOhte2s5nXAY/gIA3obe6ZPWUjpenSxRd1qZgeRhs9WHw0YpSrKrUf5u0tEy+QcB7lcShkrRqgBssSsrbc7/bTZZ/5YU0SUNMBDkW7/uSLw3Gah6jKBEX4RqjsjnfQ+5d3N6WNMI2+jL7Fn18+ugguRY9CcfsgF7qlqZD/SZfedol7k6gWnXKrqGCZ2mPTTvfKJTrRGbfiFtWAVAmuWoSl5kblI8fYbOs8Hfm+iD2GyA2RVQDQMhPEVx+4QyJG/wzPu0IHBEyNwiZMhm6JrJwwLV3wkwKa9DGdwhbMjsSoW3W8nGDnNRFRFHGbeU5Bh+R3or0lvDS0RIBfDiVkcGHXak1VwMP3Czo4FwGs5C4zCigysjfyV3bZ9lcz6R/Nzt2WRGP9eGS8fEDKAzdzjQ==
```

Your email address

Add SSH key

and click 'Add SSH Key'.

Now, the SSH key is added to your account.

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Changelog

Date	Version	Changed by	Change Description
2020-08-25	2.0	Lavanya	Migrated Lab to Markdown and added to course repo in GitLab

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