

SSH Key Generation



**IBM Developer
SKILLS NETWORK**

Effort: 30 min

Introduction

SSH

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.

Step 1: Launch Git Bash.

Step 2: 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.

Step 3: 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`

Step 4: 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 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.

Step 5: 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)"
```

Step 6: And then add the key to the agent by running the following in the Git Bash terminal:

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

Summary

In this document, you have learned how to generate the SSH key.

Author(s)

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Changelog

Date	Version	Changed by	Change Description
2020-07-22	0.3	Malika Singla	Removed quotes and replaced with italic
2020-07-16	0.2	Malika Singla	Spell check, step number added
2020-07-15	0.1	Malika Singla	Initial version created

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