

The **SSH (Secure Shell)** is an access credential that is used in the SSH Protocol. In other words, it is a cryptographic network protocol that is used for transferring encrypted data over the network. The port number of SSH is 22. It allow users to connect with server, without having to remember or enter password for each system. It always comes in key pairs:

- **Public key** - Everyone can see it, no need to protect it. (for encryption function).
- **Private key** - Stays in computer, must be protected. (for decryption function).

Commands in SSH

There are multiple commands supported by SSH protocol, you can tap on the link if you want to know [commands](#) in SSH.

How does generally WorkThe generalasymmetric?

For performing encryption and decryption it uses asymmetric cipher. There are many encryption methods:

`rsa, dsa, ed25519 etc.`

The general procedure is:

- Public keys from the local computers (system) are passed to the server which is to be accessed.
- The server then identifies if the public key is registered.
- If so, the server then creates a new secret key and encrypts it with the public key which was sent to it via local computer.
- This encrypted code is sent to the local computer.
- This data is unlocked by the private key of the system and is sent to the server.
- The server after receiving this data verifies the local computer.
- SSH creates a route and all the encrypted data are transferred through it with no security issues.

Generating an SSH key pair

Open your command prompt

type : `ssh-keygen`

Press enter

It will ask you for a location. Press Enter for default location.

If its already there, press 'y' to overwrite.


You may enter passphrase as you like, press enter.

SSH keys

[New SSH key](#)

This is a list of SSH keys associated with your account. Remove any keys that you do not recognize.

Authentication keys



MyKey
SHA256:1tmUXTOVRa1hc55fgf0uv/iYgWwGYzs9h9qseco7VS0
Added on Feb 22, 2026
Last used within the last week — Read/write

Delete

Check out our guide to [connecting to GitHub using SSH keys](#) or troubleshoot [common SSH problems](#).

GPG keys

[New GPG key](#)