

How To Use Slurm (Connect)

Slurm (Simple Linux Utility for Resource Management) is a workload manager designed for clusters. It efficiently schedules jobs and manages resources, ensuring fair and effective utilization of computational power. Here's a brief guide to help you get started with Slurm.

To use SLURM, you will need to connect to the login node of your high-performance computing (HPC) cluster. Here's how to do it:

I. Remote Access to the login node

A. Terminal/Command Line

For all OS systems, the command used to connect to the workstation via terminal is the same. The command:

SSH Username@LoginNodeIP

```
mohammed_sinan = mohammed_sinan@jrcsitt:-

Last login: Wed Mar 22 16:52:25 on ttys000
((base) mohammed_sinan@Mohammeds=Mac-mini ~ % SSH mohammed_alsinan@10.22.188.21

mohammed_alsinan@10.22.188.21's password: ]
Welcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.19.0-95-generic x86_64)

* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://landscape.canonical.com
* Support: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage

* Introducing Expanded Security Maintenance for Applications.
Receive updates to over 25,000 software packages with your
Ubuntu Pro subscription. Free for personal use.

https://ubuntu.com/pro

Expanded Security Maintenance for Applications is not enabled.

9 updates can be applied immediately.
2 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

7 additional security updates can be applied with ESM Apps.
Learn more about enabling ESM Apps service at https://ubuntu.com/esm

Last login: Wed Mar 22 16:51:59 2023 from 10.22.191.222

[base] mohammed_alsinan@jrcaili:-$

Connected
```

B. Visual Studio Code (optional)

For all OS systems, if you have VS Code Installed, then follow these steps to connect to your workstation via VS Code. You can install VS Code through the link:

https://code.visualstudio.com/download

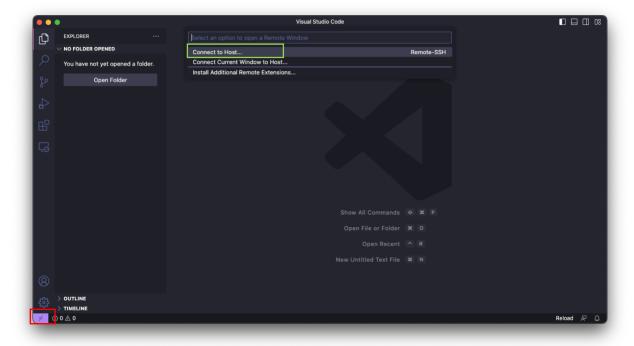
Once you run VS Code, then follow these steps to connect to your workstation via VS Code:

- 1. Click on the extension store.
- 2. Search for 'remote ssh'.
- 3. Choose the top extension.
- 4. Click on Install

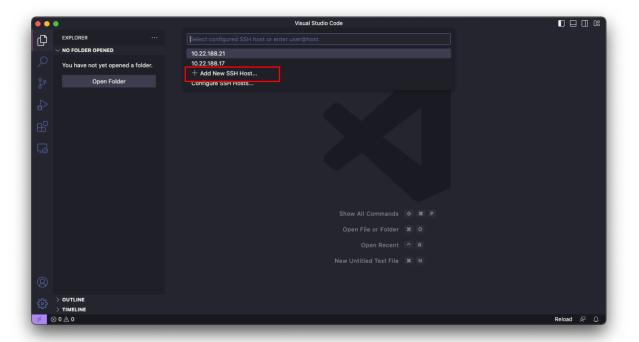




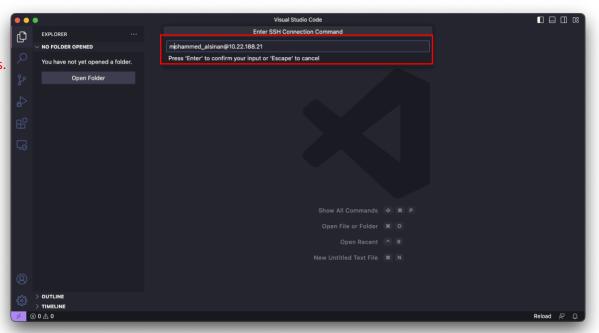
- 5. After Installation of the extension, you will find 'remote window button' bounded here by red box. Click on it.
- 6. Click 'Connect to Host'.



7. Click on 'Add New SSH Host'

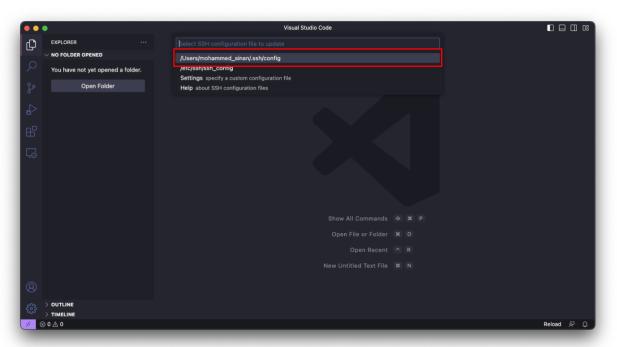


8. The command you need to enter is: username@workstation_ip_address.

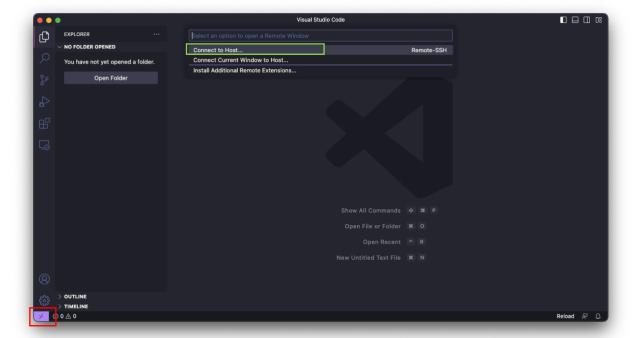




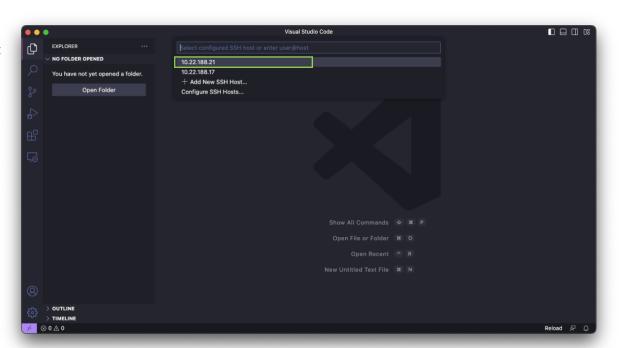
9. Choose the first option.
It might be different than shown here.



- 11. After successful addition of host, click again on 'remote window button'.
- 10. Click 'Connect to Host'.

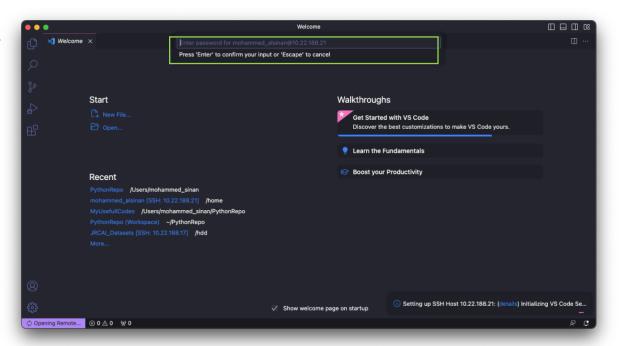


12. Choose the host you just Added. If Asked About remote host platform, choose Linux.

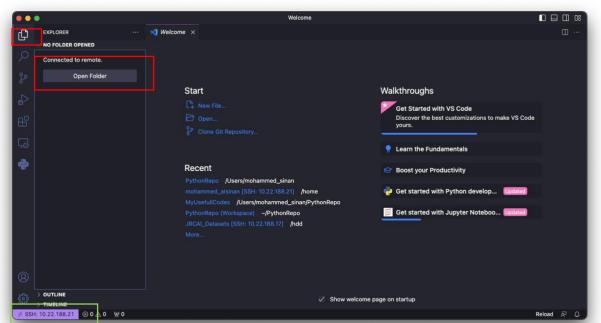




13. Enter your password for your intended workstation.



- 14. Now You are Connected.
- 15. You can open your home directory from the explorer tab then pressing 'Open Folder'.



16. After pressing 'Open Folder', press 'OK'. You are all set.

