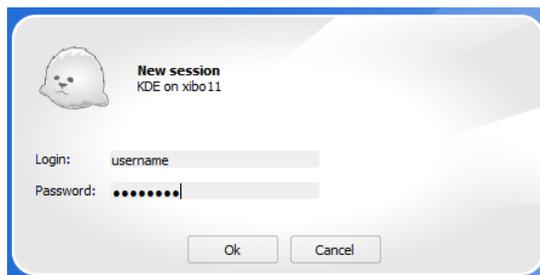


# EdLab

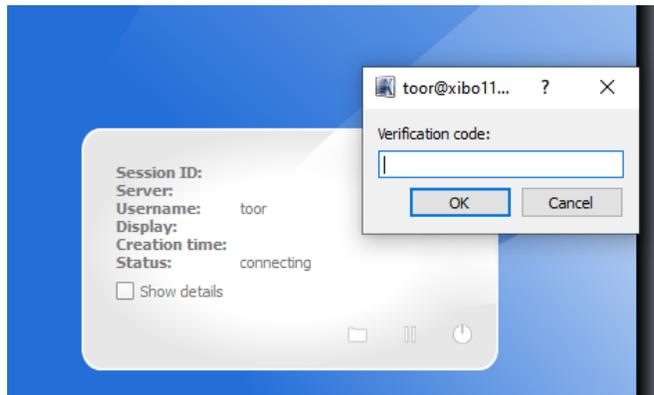
## TwoFactor Authentication Examples

---

1. **SSH**
  - a. **Command: ssh username@elinux.cs.umass.edu**
    - i. (username@elinux.cs.umass.edu) **Password:**
      1. Enter your password here.
    - ii. (username@elinux.cs.umass.edu) **Verification code:**
      1. Enter your 6-digit verification code.
  - b. You should now be able to log in.
2. **SCP**
  - a. scp test.txt username@elinux.cs.umass.edu:/path/test.txt
    - i. (username@elinux.cs.umass.edu) **Password:**
      1. Enter your password here.
    - ii. (username@elinux.cs.umass.edu) **Verification code:**
      1. Enter your 6-digit verification code.
  - b. The file(s) should now be transferred.
3. **SFTP**
  - a. Command: sftp username@elinux.cs.umass.edu
    - i. (username@elinux.cs.umass.edu) Password:
    - ii. (username@elinux.cs.umass.edu) Verification code:
    - iii. You should now see:
      1. **Connected to elinux.cs.umass.edu**
      2. **sftp>**
  - b. You should now be authenticated
4. **X2Go**
  - a. Open X2go
  - b. Open **Session > New session**
  - c. Input the hostname and your username for the login.
  - d. Next, to log in, ensure that you are inputting your username and password:



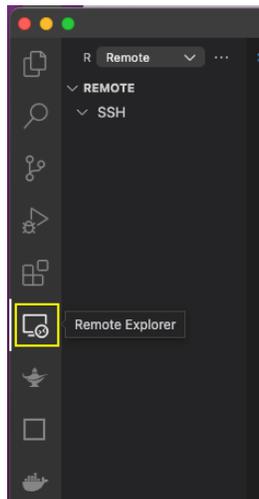
- e. Finally, you should get a new verification code window to pop up:



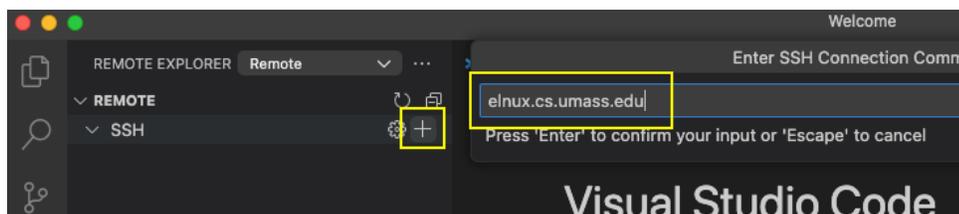
- f. You should now be connected successfully.

## 5. VSCode

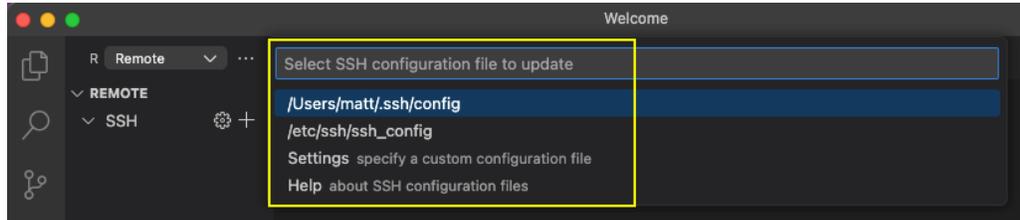
- Note: to avoid vs code issues it is best to connect directly to either elnux1, elnux2, elnux3 or elnux7 instead of elnux. This reduces errors if reconnecting and getting another node which will cause issues with hanging processes with vscode.
- Open **VSCode**.
- Click on Remote Explorer:



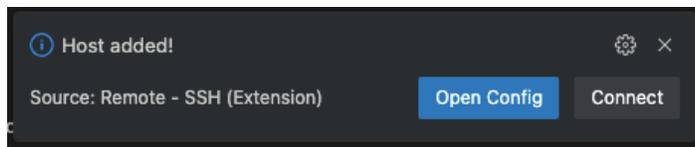
- Click on the + symbol next to SSH to add the server you wish to connect to. Input the server address in the box that appears.



- e. You will now be asked to update your ssh configuration file. This most likely is the first in the list that appears:



- f. You now should see that the host has been added:



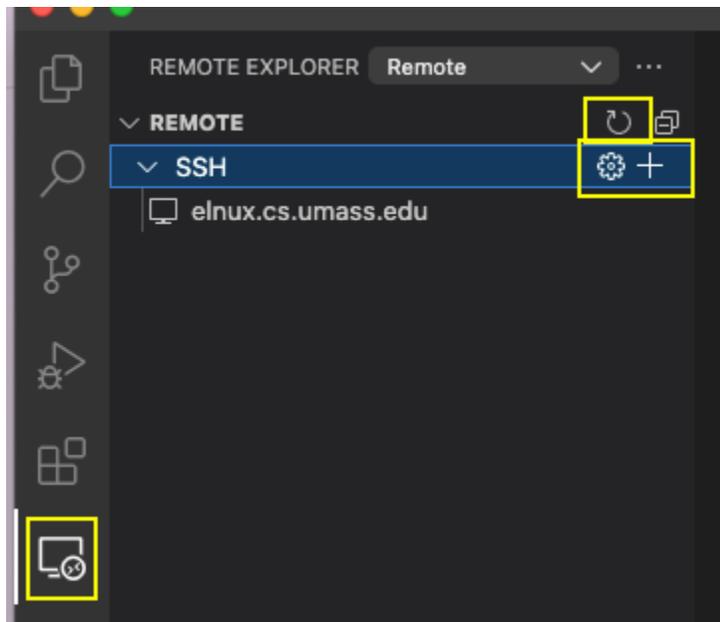
- g. You can click on **Open Config** to specify a username.  
i. Within the config you should see something like the below (it will have the server you added):

```
≡ config ×
Users > matt > .ssh > ≡ config
1 Host elnux.cs.umass.edu
2   HostName elnux.cs.umass.edu
3
```

- ii. You can modify the hostname to use a specific username by adding User your-username such as:

```
≡ config ●
Users > matt > .ssh > ≡ config
1 Host elnux.cs.umass.edu
2   HostName elnux.cs.umass.edu
3   User username
4
```

- h. Return to **Remote Explorer** and locate the server you added. click on either the arrow or folder with a + sign on it. the arrow will open the server in the same window and the + with folder will open in a new window. Note: if the server isn't listed, click on the refresh button highlighted to the right of **REMOTE**, this will refresh the server list.



- i. When prompted, input your **password**:

Press 'Enter' to confirm your input or 'Escape' to cancel

- j. When prompted, input your **verification code**:

Press 'Enter' to confirm your input or 'Escape' to cancel

- k. You should now be successfully logged in.