## How to Connect Lab Computers via SSH

Install an SSH client to your computer. For Windows install Putty or some other ssh client you prefer. All Linux distributions and Mac OS include an SSH client by default.

SSH servers of the department:

1. external.ceng.metu.edu.tr (port: 8085)
2. login.ceng.metu.edu.tr (port: 8085)

## Linux

Follow these steps:

1. Open terminal.
2. Type "sshe1234567@external.ceng.metu.edu.tr - p8085" then enter your password as shown in figure 1.
3. After connecting successfully, type "sshinek $[1-100]$ " then enter your password as shown in figure 1.
4. After connecting successfully, you can start using lab computers.
```
File Edit View Search Terminal Help
student@pc> ssh e1 2@external.ceng.metu.edu.tr -p 8085
e1 2@external.ceng.metu.edu.tr's password:
Linux divan 4.9.0-8-amd64 #1 SMP Debian 4.9.144-3.1 (2019-02-19) x86_64
The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Wed Oct 7 11:03:19 2020 from
e1 2@divan:~$ ssh inek10
/etc/ssh/ssh_config line 52: Unsupported option "rhostsrsaauthentication"
e1 2@inek10's password:
Welcome to Ubuntu 18.04.4 LTS (GNU/Linux 4.15.0-111-generic x86_64)
Last login: Wed Oct 7 01:24:00 2020 from
e1 2@inek10:~$
```

Figure 1:

To run graphics applications via SSH , follow these steps:

1. Open terminal.
2. Type "ssh-Xe1234567@login.ceng.metu.edu.tr $-p 8085$ " then enter your password as shown in figure 1.
3. After connecting successfully, type "ssh-Xinek[1-100]" then enter your password.
4. After connecting successfully, type the name of the program you want to run. You will see the application gui on your computer as shown in the figure 3.
$-Y$ option can be used instead of $-X$ as well.
```
File Edit View Search Terminal Help
student@pc> ssh -X e1 2@login.ceng.metu.edu.tr -p 8085
e1 2@login.ceng.metu.edu.tr's password;
Linux login 3.16.0-5-amd64 #1 SMP Debian 3.16.51-3+deb8u1 (2018-01-08) x86_64
The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Wed Oct 7 11:06:32 2020 from
e1 2@login:~$ ssh -X inek10
e1 2@inek10's password:
Welcome to Ubuntu 18.04.4 LTS (GNU/Linux 4.15.0-111-qeneric x86 64)
Last login: Wed Oct 7 11:06:43 2020 from
e 2@inek10:~$ firefox
```

Figure 2:


Figure 3:

## Mac

Follow steps in linux section. To run graphic applications follow these steps:

1. Install XQuartz from here.
2. Run XQuartz.
3. Open Terminal.
4. Follow the steps in linux section.

## Windows

1. Run Putty.
2. Fill the necessary fields as shown in the figure 4 and press Open.
3. Login with your student id.
4. After connecting successfully, type "ssh inek[1-100]", and your password as shown in the figure 5.

To run graphic applications:

1. Install Xming X server for windows from here.
2. Run Xming.
3. Run Putty.
4. Enable X11 forwarding as shown in figure 6 from Connection $>\mathbf{S S H}>\mathbf{X 1 1}$
5. Fill the necessary fields, shown in figure 4 and press Open.
6. Login with your student id.
7. After connecting successfully, type "ssh -X inek[1-100]", and your password as shown in figure 5 .

Category:


Figure 4


Figure 5:


## Category:



Figure 6:

