

Aluno: Renan Lucas de Moura

1) Usando um WSL ou um Virtualbox faça as seguintes atividades:  
Instalar um SSH Server e um SSH Client (usar preferencialmente o Putty no Windows).

\$ sudo apt update:

```
renan@renanzada:~$ sudo apt update
[sudo] senha para renan:
Atingido:1 http://security.ubuntu.com/ubuntu focal-security InRelease
Atingido:2 http://archive.ubuntu.com/ubuntu focal InRelease
Atingido:3 http://archive.ubuntu.com/ubuntu focal-updates InRelease
Atingido:4 http://archive.ubuntu.com/ubuntu focal-backports InRelease
Obter:5 http://archive.ubuntu.com/ubuntu focal/main Translation-pt [166 kB]
Obter:6 http://archive.ubuntu.com/ubuntu focal/main Translation-pt_BR [287 kB]
]
Obter:7 http://archive.ubuntu.com/ubuntu focal/restricted Translation-pt_BR [1.308 B]
Obter:8 http://archive.ubuntu.com/ubuntu focal/restricted Translation-pt [1.300 B]
Obter:9 http://archive.ubuntu.com/ubuntu focal/universe Translation-pt [794 kB]
Obter:10 http://archive.ubuntu.com/ubuntu focal/universe Translation-pt_BR [1.016 kB]
Obter:11 http://archive.ubuntu.com/ubuntu focal/multiverse Translation-pt [8.348 B]
Obter:12 http://archive.ubuntu.com/ubuntu focal/multiverse Translation-pt_BR [18,5 kB]
Baixados 2.292 kB em 2s (1.058 kB/s)
Lendo listas de pacotes... Pronto
Construindo árvore de dependências
Lendo informação de estado... Pronto
110 pacotes podem ser atualizados. Corra 'apt list --upgradable' para vê-los.
```

\$ sudo apt upgrade:

```
renan@renanzada:~$ sudo apt upgrade
Lendo listas de pacotes... Pronto
Construindo árvore de dependências
Lendo informação de estado... Pronto
Calculando atualização... Pronto
Os NOVOS pacotes a seguir serão instalados:
  libxmlb2 linux-headers-5.15.0-52-generic linux-hwe-5.15-headers-5.15.0-52
  linux-image-5.15.0-52-generic linux-modules-5.15.0-52-generic
  linux-modules-extra-5.15.0-52-generic
Os pacotes a seguir serão atualizados:
  bind9-dnsutils bind9-host bind9-libs dbus dbus-user-session dbus-x11
  firefox fonts-opensymbol fwupd ghostscript ghostscript-x
  gir1.2-gdkpixbuf-2.0 gir1.2-notify-0.7 git git-man intel-microcode
  isc-dhcp-client isc-dhcp-common libasn1-8-heimdal libcurl3-gnutls
  libcurl4 libdbus-1-3 libfwupd2 libfwupdplugin5 libgdk-pixbuf2.0-0
  libgdk-pixbuf2.0-bin libgdk-pixbuf2.0-common libgmp10 libgs9
  libgs9-common libgssapi3-heimdal libhcrypto4-heimdal libheimbase1-heimdal
  libheimntlm0-heimdal libhx509-5-heimdal libjavascriptcoregtk-4.0-18
  libjpeg-turbo-progs libjpeg-turbo8 libjuh-java libjurt-java
  libkrb5-26-heimdal libksba8 libmysqlclient21 libnotify4 libnss-systemd
  libpam-systemd libpcre2-16-0 libpcre2-8-0 libperl5.30 libpoppler-cpp0v5
  libpoppler-qt5-1 libpoppler97 libreoffice-base-core libreoffice-calc
  libreoffice-common libreoffice-core libreoffice-draw libreoffice-gtk3
  libreoffice-impress libreoffice-math libreoffice-qt5
  libreoffice-style-breeze libreoffice-style-colibre
  libreoffice-style-tango libreoffice-writer libridl-java
  libroken18-heimdal libsqlite3-0 libsystemd0 libtiff5 libtss2-esys0
  libudev1 libuno-cppu3 libuno-cppuhelpergcc3-3 libuno-purpenvhelpergcc3-3
  libuno-sal3 libuno-salhelpergcc3-3 libunoloader-java libwayland-client0
  libwayland-cursor0 libwayland-egl1 libwayland-server0
```

\$ sudo apt install openssh-server / status:

```
renan@renanzada:~$ sudo systemctl status ssh.service
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enabled)
   Active: active (running) since Fri 2022-10-28 11:34:24 -03; 1min 38s ago
     Docs: man:sshd(8)
           man:sshd_config(5)
  Main PID: 29588 (sshd)
    Tasks: 1 (limit: 4554)
   Memory: 1.2M
    CGroup: /system.slice/ssh.service
            └─29588 sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups

out 28 11:34:24 renanzada systemd[1]: Starting OpenBSD Secure Shell server...
out 28 11:34:24 renanzada sshd[29588]: Server listening on 0.0.0.0 port 22.
out 28 11:34:24 renanzada sshd[29588]: Server listening on :: port 22.
out 28 11:34:24 renanzada systemd[1]: Started OpenBSD Secure Shell server.
```

2) Criar as Chaves Pública e Privada.

```
renan@renanzada:~$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/renan/.ssh/id_rsa):
Created directory '/home/renan/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/renan/.ssh/id_rsa
Your public key has been saved in /home/renan/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:lo/ch937dfK2Sx9Xqtcejrvn0yxM6QswGL50SaYOAEM renan@renanzada
The key's randomart image is:
+---[RSA 3072]---+
| E                |
|.                 |
|o                 |
| o      . +       |
| .      S o      ..|
| .      * * = .o..|
| .      * + +++*=|
|   o o  . o0*%    |
|   . .  . =B@0    |
+---[SHA256]---+
```

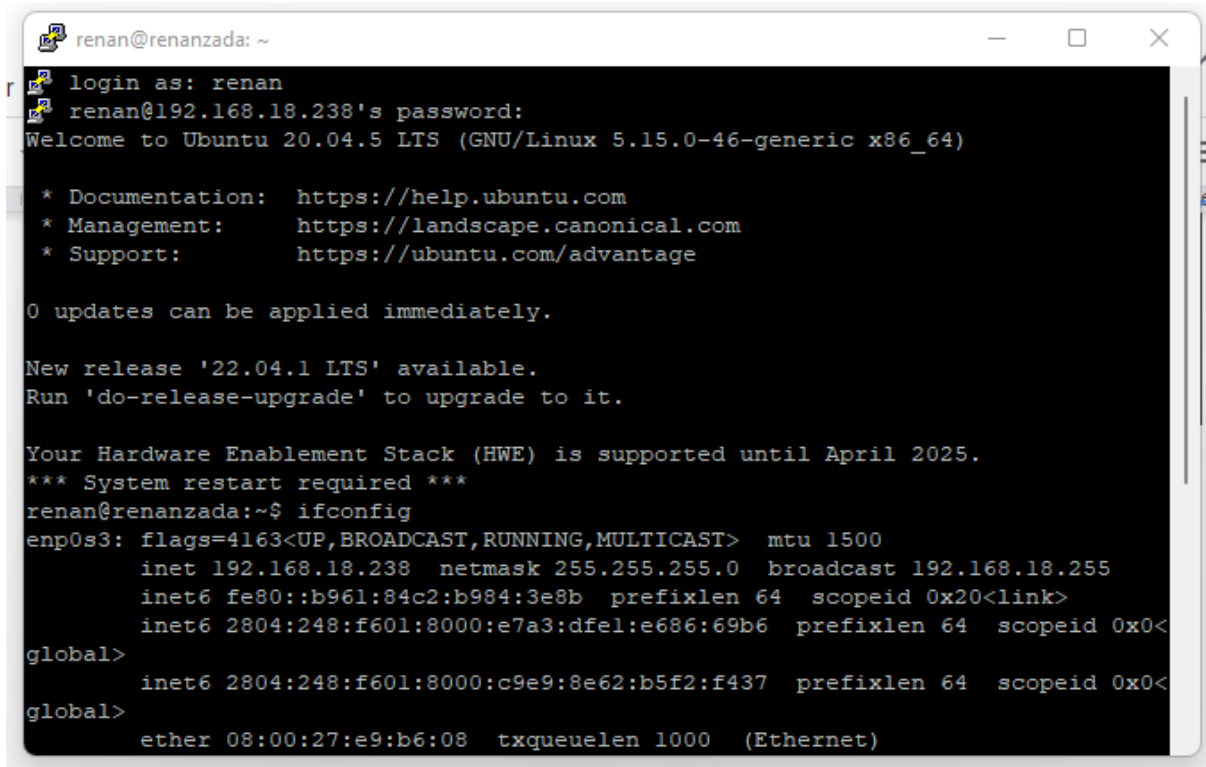
### 3) Copiar a chave Pública no SSH Server.

```
renan@renanzada:~$ ssh-copy-id renan@192.168.18.238
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/renan/.ssh/id_rsa.pub"
The authenticity of host '192.168.18.238 (192.168.18.238)' can't be established.
ECDSA key fingerprint is SHA256:aH5wGND5QaKqMm2o9oVHU08KBz6z/s76ND4JP10eo68.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are al
ready installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to ins
tall the new keys
renan@192.168.18.238's password:

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'renan@192.168.18.238'"
and check to make sure that only the key(s) you wanted were added.
```

### 4) Fazer um login remoto a partir do SSH Client para um SSH Server.



The screenshot shows a terminal window titled 'renan@renanzada: ~'. The user has successfully logged into a remote server. The terminal output includes the login prompt, password entry, and a welcome message from Ubuntu 20.04.5 LTS. It also displays system information, including the hardware enablement stack (HWE) support until April 2025, and a list of network interfaces and their configurations.

```
renan@renanzada: ~
login as: renan
renan@192.168.18.238's password:
Welcome to Ubuntu 20.04.5 LTS (GNU/Linux 5.15.0-46-generic x86_64)

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

0 updates can be applied immediately.

New release '22.04.1 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Your Hardware Enablement Stack (HWE) is supported until April 2025.
*** System restart required ***
renan@renanzada:~$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.18.238 netmask 255.255.255.0 broadcast 192.168.18.255
    inet6 fe80::b961:84c2:b984:3e8b prefixlen 64 scopeid 0x20<link>
    inet6 2804:248:f601:8000:e7a3:dfel:e686:69b6 prefixlen 64 scopeid 0x0<
global>
    inet6 2804:248:f601:8000:c9e9:8e62:b5f2:f437 prefixlen 64 scopeid 0x0<
global>
    ether 08:00:27:e9:b6:08 txqueuelen 1000 (Ethernet)
```