

1) Instalar o Openssh server em uma máquina virtual Linux;

Instalação do Open Server SSH

```
administrador@joaovictor-server: ~  
administrador@joaovictor-server:~$ sudo apt install openssh-server  
[sudo] senha para administrador:  
Lendo listas de pacotes... Pronto  
Construindo árvore de dependências  
Lendo informação de estado... Pronto  
O seguinte pacote foi instalado automaticamente e já não é necessário:  
  libfwupdplugin1  
Utilize 'sudo apt autoremove' para o remover.  
Os pacotes adicionais seguintes serão instalados:  
  ncurses-term openssh-sftp-server ssh-import-id  
Pacotes sugeridos:  
  molly-guard monkeysphere  
Os NOVOS pacotes a seguir serão instalados:  
  ncurses-term openssh-server openssh-sftp-server ssh-import-id  
0 pacotes atualizados, 4 pacotes novos instalados, 0 a serem removidos e 0 não atualizados.  
É preciso baixar 688 kB de arquivos.  
Depois desta operação, 6.010 kB adicionais de espaço em disco serão usados.  
Você quer continuar? [S/n] S  
Obter:1 http://archive.ubuntu.com/ubuntu focal/main amd64 ncurses-term all 6.2-0ubuntu2 [249 kB]  
Obter:2 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 openssh-sftp-server amd64 1:8.2p1-4ubuntu0.4 [51,5 kB]  
Obter:3 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 openssh-server amd64 1:8.2p1-4ubuntu0.4 [377 kB]  
Obter:4 http://archive.ubuntu.com/ubuntu focal/main amd64 ssh-import-id all 5.10-0ubuntu1 [10,0 kB]  
Baixados 688 kB em 1s (549 kB/s)  
Pré-configurando pacotes ...
```

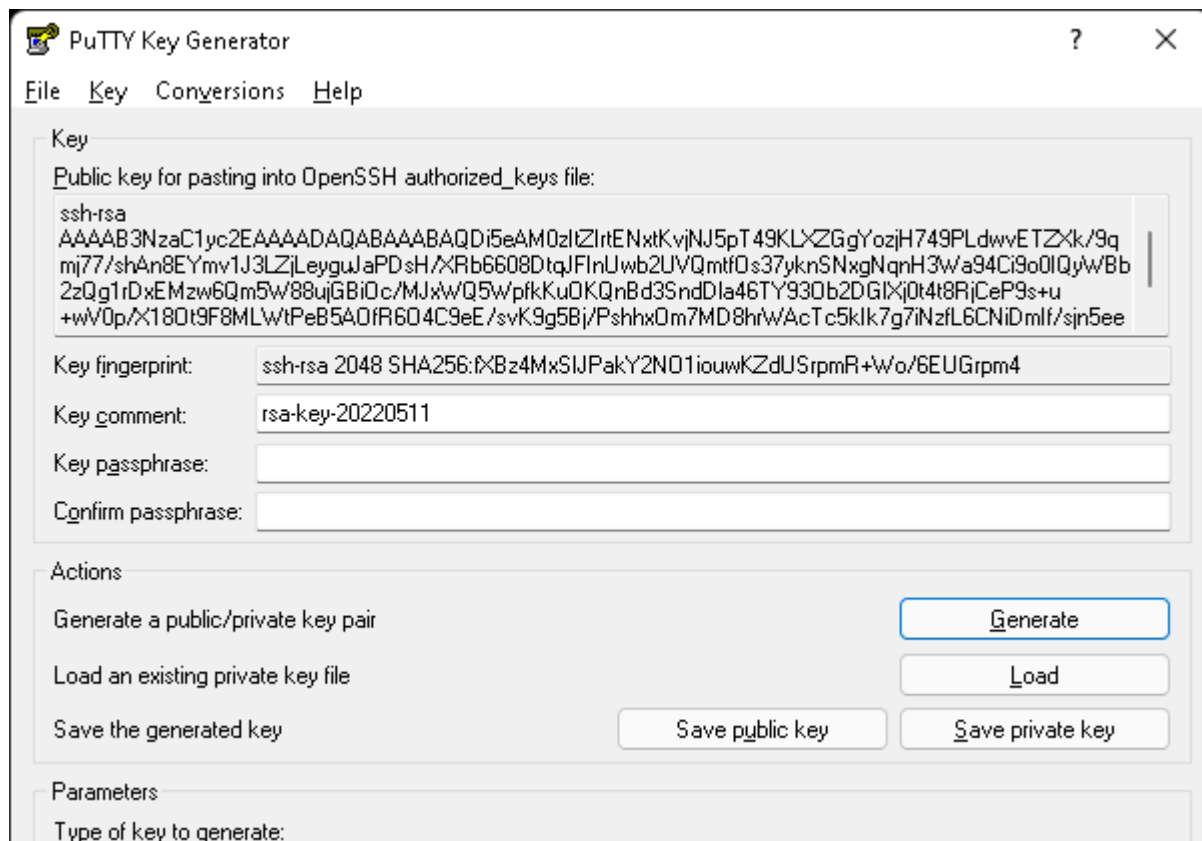
Iniciando o Open Server SSH

```
administrador@joaovictor-server: ~  
administrador@joaovictor-server:~$ sudo systemctl start ssh.service  
[sudo] senha para administrador:  
administrador@joaovictor-server:~$ 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 Wed 2022-05-11 18:55:24 -03; 4min 15s ago  
     Docs: man:sshd(8)  
           man:sshd_config(5)  
    Main PID: 43033 (sshd)  
      Tasks: 1 (limit: 2242)  
     Memory: 1.0M  
    CGroup: /system.slice/ssh.service  
            └─43033 sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups  
  
mai 11 18:55:24 joaovictor-server systemd[1]: Starting OpenBSD Secure Shell server...  
mai 11 18:55:24 joaovictor-server sshd[43033]: Server listening on 0.0.0.0 port 22.  
mai 11 18:55:24 joaovictor-server sshd[43033]: Server listening on :: port 22.  
mai 11 18:55:24 joaovictor-server systemd[1]: Started OpenBSD Secure Shell server.  
administrador@joaovictor-server:~$ sudo systemctl enable ssh.service  
Synchronizing state of ssh.service with SysV service script with /lib/systemd/systemd-sysv-install.  
Executing: /lib/systemd/systemd-sysv-install enable ssh  
administrador@joaovictor-server:~$ sudo systemctl is-enable ssh.service  
Unknown operation is-enable.
```

Verificando se o Open Server SSH está instalado

```
administrador@joaovictor-server:~$ sudo dpkg -l | less | grep ssh  
ii  libssh-4:amd64                0.9.3-2ubuntu2.2      amd64  
ii  libssh-gcrypt-4:amd64        0.9.3-2ubuntu2.2      amd64  
ii  libssh2-1:amd64              1.8.0-2.1build1       amd64  
ii  lxqt-openssh-askpass         0.14.1-1ubuntu1       amd64  
ii  lxqt-openssh-askpass-l10n    0.14.1-1ubuntu1       all  
ii  openssh-client               1:8.2p1-4ubuntu0.4     amd64  
ii  openssh-server               1:8.2p1-4ubuntu0.4     amd64  
ii  openssh-sftp-server          1:8.2p1-4ubuntu0.4     amd64  
ii  ssh-import-id                5.10-0ubuntu1         all  
administrador@joaovictor-server:~$
```

2) Criar um par de chaves (Publica/Privada);



PuTTY Key Generator

File Key Conversions Help

Key

Public key for pasting into OpenSSH authorized_keys file:

```
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQADi5eAM0zItZIntENxtKvjNJ5pT49KLXZGgYozjH749PLdwvETZXk/9q
mj77/shAn8EYmv1J3LZjLeyguJaPDsH/XRb6608DtqJFIInUwb2UVQmtfOs37yknSNxgNqnH3Wa94Ci9o0IQyWBb
2zQg1rDxEWzW6Qm5W88ujGBiOc/MJxwQ5WpfkKuOKQnBd3SndDla46TY93Ob2DGIXj0t4t8RjCeP9s+u
+wV0p/X18Ot9F8MLwtPeB5AOFR6O4C9eE/svK9g5Bj/PshhxOm7MD8hrwAcTc5kIk7g7iNzfL6CNI dmlf/sjn5ee
```

Key fingerprint: ssh-rsa 2048 SHA256:fXBz4MxSIJPakY2N01iouwKZdUSrpmR+W/o/6EUGrpm4

Key comment: rsa-key-20220511

Key passphrase:

Confirm passphrase:

Actions

Generate a public/private key pair

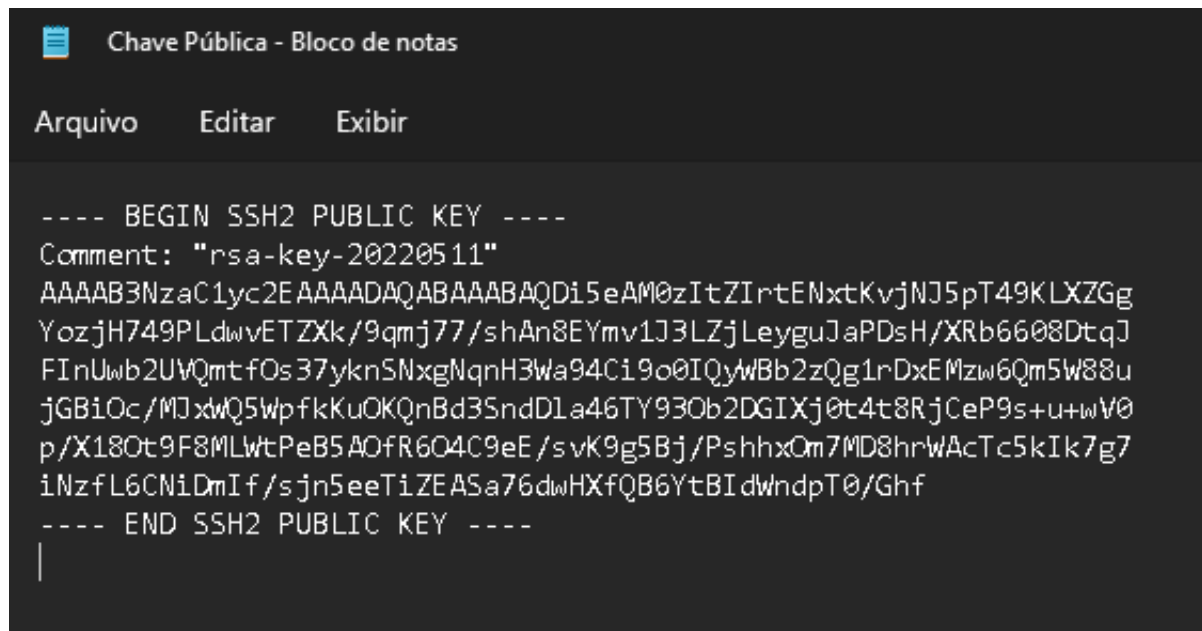
Load an existing private key file

Save the generated key

Parameters

Type of key to generate:

Chave Pública



Chave Pública - Bloco de notas

Arquivo Editar Exibir

```
----- BEGIN SSH2 PUBLIC KEY -----
Comment: "rsa-key-20220511"
AAAAB3NzaC1yc2EAAAADAQABAAQADi5eAM0zItZIntENxtKvjNJ5pT49KLXZGg
YozjH749PLdwvETZXk/9qmj77/shAn8EYmv1J3LZjLeyguJaPDsH/XRb6608DtqJ
FIInUwb2UVQmtfOs37yknSNxgNqnH3Wa94Ci9o0IQyWBb2zQg1rDxEWzW6Qm5W88u
jGBiOc/MJxwQ5WpfkKuOKQnBd3SndDla46TY93Ob2DGIXj0t4t8RjCeP9s+u+wV0
p/X18Ot9F8MLwtPeB5AOFR6O4C9eE/svK9g5Bj/PshhxOm7MD8hrwAcTc5kIk7g7
iNzfL6CNI dmlf/sjn5eeTiZEASa76dwHXfQB6YtBI dWndpT0/Ghf
----- END SSH2 PUBLIC KEY -----
```

Chave Privada

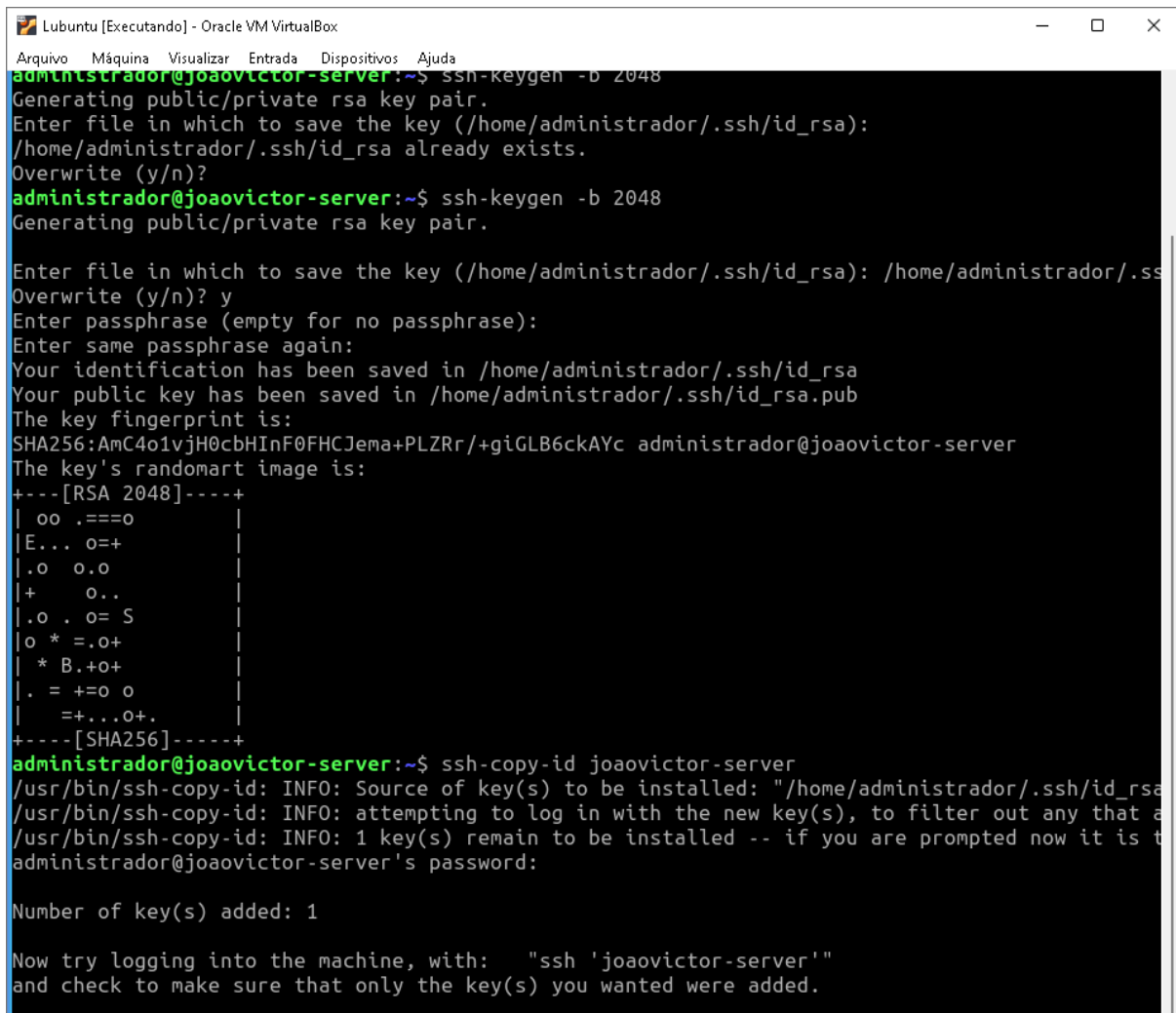


Chave Privada - Bloco de notas

Arquivo Editar Exibir

```
PuTTY-User-Key-File-3: ssh-rsa
Encryption: aes256-cbc
Comment: rsa-key-20220511
Public-Lines: 6
AAAAB3NzaC1yc2EAAAADAQABAAQADi5eAM0zItZIRtENxtKvjNJ5pT49KLXZGg
YozjH749PLdwvETZXk/9qmj77/shAn8EYmv1J3LZjLeyguJaPDsH/XRb6608DtqJ
FIInUwb2UVQmtfOs37yknSNxgNqnH3Wa94Ci9o0IQyWbB2zQg1rDxE MzW6Qm5W88u
jGBiOc/MJxwQ5WpfkKuOKQnBd3SndDla46TY93Ob2DGIXj0t4t8RjCeP9s+u+wV0
p/X18Ot9F8MLWtPeB5AOFR6O4C9eE/svK9g5Bj/PshhxOm7MD8hrWAcTc5kIk7g7
iNzfL6CNiDmIf/sjn5eeTiZEASa76dwHXfQB6YtBI dWndpT0/Ghf
Key-Derivation: Argon2id
Argon2-Memory: 8192
Argon2-Passes: 21
Argon2-Parallelism: 1
Argon2-Salt: 622c8fad3ba5a18f1a28b356085d501e
Private-Lines: 14
DkeygYtv+7cP+udV2qXnXwQYwPX3qj/egSnW6+X5tGuLsidvhQewlFpmAlcozrY6
1FBdIS1It0Nv64p6dplzFOJzPpyYK2Bk73uyZK6yMsP7IOencD116uJ56dNg3jJd
cj81fXW0L2PKhxNUyXcO/9Adj1EZ7KUzWlwAPYuzd/MDF12bD/bA/iQYGWGbbsSZ
w+U1V0uAw1+tIEAwOU7TACwCOLb+1cgJ8ur8QK8rpSbqsx8FrLH/Hx0w/5xIxcSa
sDpBZkk90u/1dwYRf6Bp/trvJ2jiYaa7p6MDtFgzsl7CMRTmxrL3IZccx2L2X2XW
qs5ocoszOC71k+Mu8YVtw19IQw1GWQTpDSKSTyWz7QSLja/73UKQyUdWxjCheQVw
1sNYCiTdeM5mLo3Q4z8+ZXtkdhFWS85VgaYJJym1QNAjzIqqoFPi37dfYTLGItqc
UWoSEbrrQD5toMYhRm1DovNSaknoD4HRNW5COLwqiYay8BnhD1Av1tEqN35vDDX5
qgG5JtDnSK/ywNUbkSOEnDUya8UCHThyq1T1GNNOzJL9fFZ8IVem79OSUYT/ygO
1jU+TD1YtviX0G9AZ2ogYoAx84vPxg5IbH5VHXaQ955qq0+iABcqR1Pe2b+zIqNr
lgJ9uxI18K9/HoQERS/KhOApmhSq9vBqTqho6S3HSeiicIuC101NjvYR/MAMlLfO
cgmWFPAAaG4nc8q0woxgZW16swO56aD3O57sO/BZXaK1RpyGkMPZJ+L7NuIFYSmd
yJWRHuBgDG1L9bJ3hFy561NMEiCJXimffXrRHZAOx04VLN75Yh7tzN4gsw8NYbN1
3wXNGsGZ31nNGQRcFYoAwI7BkRhnuCToz22X7L/Tjq9OeuY5PN+ZNXrhG2YCMGla
Private-MAC: d47d1883e942deba6680fd0fcfef42f17f6f54ef5605239a044004f63998cc5
|
```

3) Copiar a chave pública em uma máquina virtual que está executando o Openssh Server;




```
Lubuntu [Executando] - Oracle VM VirtualBox
Arquivo  Máquina  Visualizar  Entrada  Dispositivos  Ajuda
administrador@joaovictor-server:~$ ssh-keygen -b 2048
Generating public/private rsa key pair.
Enter file in which to save the key (/home/administrador/.ssh/id_rsa):
/home/administrador/.ssh/id_rsa already exists.
Overwrite (y/n)?
administrador@joaovictor-server:~$ ssh-keygen -b 2048
Generating public/private rsa key pair.



Enter file in which to save the key (/home/administrador/.ssh/id_rsa): /home/administrador/.ssh/id_rsa
Overwrite (y/n)? y
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/administrador/.ssh/id_rsa
Your public key has been saved in /home/administrador/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:AmC4o1vjH0cbHInF0FHCJena+PLZRr/+giGLB6ckAYc administrador@joaovictor-server
The key's randomart image is:
+---[RSA 2048]-----+
| oo .==o          |
|E... o=+         |
|.o  o.o          |
|+   o..          |
|.o . o= S        |
|o * =.o+         |
| * B.+o+         |
|. = +=o o        |
|  =+...o+.       |
+---[SHA256]-----+
administrador@joaovictor-server:~$ ssh-copy-id joaovictor-server
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/administrador/.ssh/id_rsa"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to
administrador@joaovictor-server's password:

Number of key(s) added: 1

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

4) Testar a conexão entre a máquina cliente e a servidora.

 administrador@joaovictor-server: ~

```
 login as: administrador
 Authenticating with public key "rsa-key-20220511" from agent
Welcome to Ubuntu 20.04.4 LTS (GNU/Linux 5.13.0-41-generic x86_64)

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

0 updates can be applied immediately.

Your Hardware Enablement Stack (HWE) is supported until April 2025.
Last login: Tue May 17 23:37:24 2022 from 10.0.0.107
administrador@joaovictor-server:~$
```