

Activities Terminal ▾

Setting up openssh-sftp-server (1:8.2p1-4ubuntu0.4) ...
Setting up openssh-server (1:8.2p1-4ubuntu0.4) .
..
Creating config file /etc/ssh/sshd_config with new version
Creating SSH2 RSA key; this may take some time .
..
3072 SHA256:DynkxxyOfJf0S2c5UwBpBEUefdN3Ymtfov6uui0qnfg root@serhii-VirtualBox (RSA)
Creating SSH2 ECDSA key; this may take some time
...
256 SHA256:9Bcb0mUgqGX21RrE3rFcBcqN3aPSwqYxUVrA/479DkY root@serhii-VirtualBox (ECDSA)
Creating SSH2 ED25519 key; this may take some time ...
256 SHA256:JWMFtRSQy1m/Gl+iqkqrKdwbuAgS9CGWq2P1GcFHP3w root@serhii-VirtualBox (ED25519)
Created symlink /etc/systemd/system/ssh.service → /lib/systemd/system/ssh.service.
Created symlink /etc/systemd/system/multi-user.target.wants/ssh.service → /lib/systemd/system/ssh.service.
rescue-ssh.target is a disabled or a static unit, not starting it.
Setting up ssh-import-id (5.10-0ubuntu1) ...
Attempting to convert /etc/ssh/ssh_import_id
Setting up ncurses-term (6.2-0ubuntu2) ...
Processing triggers for systemd (245.4-4ubuntu3.15) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for ufw (0.36-6ubuntu1) ...
serhii@serhii-VirtualBox:~\$

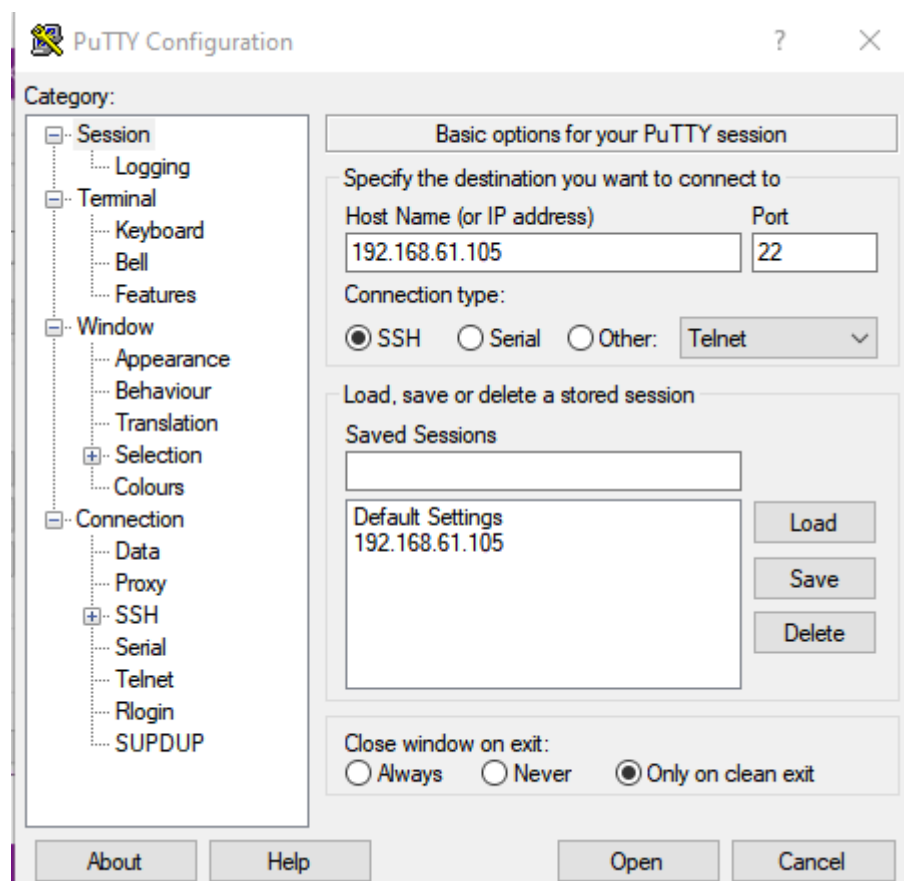
Установка ssh-сервера

```

serhii@serhii-VirtualBox:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc no
queue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00
:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu
1500 qdisc fq_codel state UP group default qlen
1000
    link/ether 08:00:27:bd:dc:a1 brd ff:ff:ff:ff
:ff:ff
    inet 192.168.61.105/24 brd 192.168.61.255 sc
ope global dynamic noprefixroute enp0s3
        valid_lft 3495sec preferred_lft 3495sec
    inet6 fe80::eb32:e9f9:12d3:92b9/64 scope lin
k noprefixroute
        valid_lft forever preferred_lft forever
serhii@serhii-VirtualBox:~$

```

Поточний ip



Налаштування PuTTY

```
serhii@serhii-VirtualBox: ~  
login as: serhii  
serhii@192.168.61.105's password:  
Welcome to Ubuntu 20.04.4 LTS (GNU/Linux 5.13.0-39-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:        https://ubuntu.com/advantage  
  
106 updates can be applied immediately.  
83 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable  
  
Your Hardware Enablement Stack (HWE) is supported until April 2025.  
  
The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.  
  
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.  
  
serhii@serhii-VirtualBox:~$
```

Підключення по SSH

Putty Key Generator

File Key Conversions Help

Key

Public key for pasting into OpenSSH authorized_keys file:

```
+pK8INcFV0tsNGXypspOjFGZESJ311aHsY35nyEmoJsAH7CJ/QvvnHQvyTAK9IM3ryUw85Yfd9k1Ql/rzwLQC9  
X1JRQ2Zr9kxRIXnzsfWidwizAyYeD6G5oEFFq7e9MYTAGspLZamjVsaYsx0UY4NcBwL9QSCWbeBOj14kkwg2E  
6vIDTV  
+wqnrsxVhLFTIJe6cujXFiggh2XJrEIQiJ3ye288yBxlmSQzbmi//MUiZe1oolBZrgWfX62fTHTuhmlJr81SB8WH72s  
7UOC6A5/chSxCf rsa-key-20220411
```

Key fingerprint: ssh-rsa 2048 SHA256:PR2CyfOFCJ1KOLwuH9desBD6SNI0N1ij9Kfn3W+Lu44

Key comment: rsa-key-20220411

Key passphrase:

Confirm passphrase:

Actions

Generate a public/private key pair Generate

Load an existing private key file Load

Save the generated key Save public key Save private key

Parameters

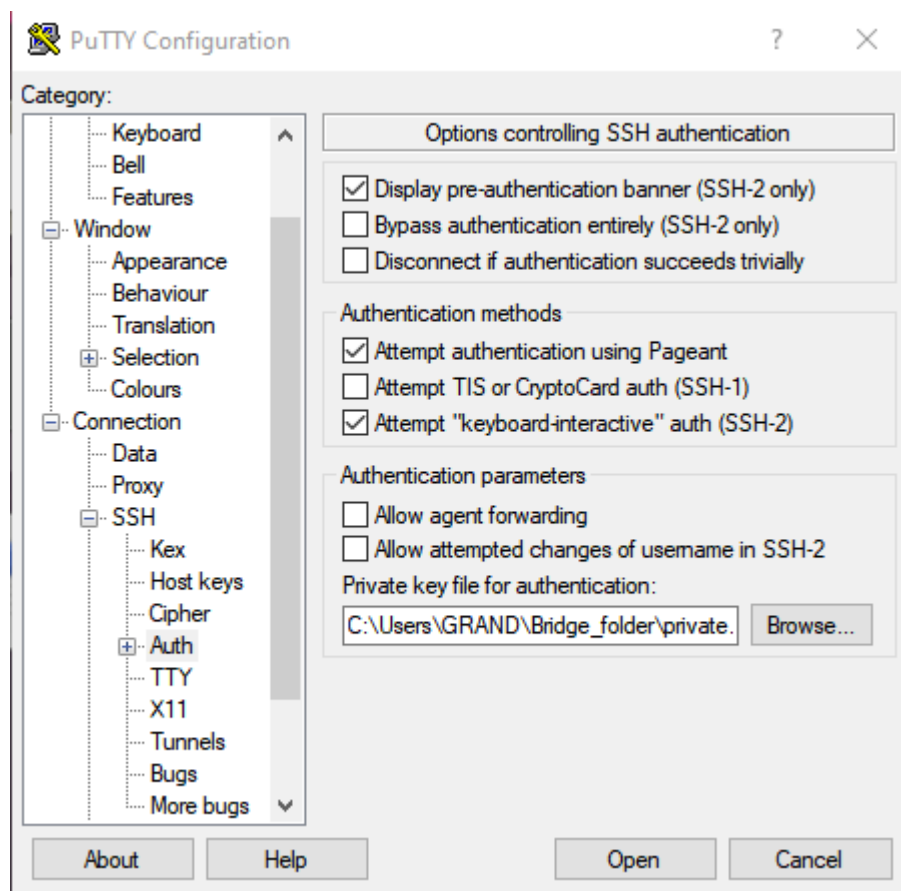
Type of key to generate:
☒ RSA ☐ DSA ☐ ECDSA ☐ EdDSA ☐ SSH-1 (RSA)

Number of bits in a generated key: 2048

Генерування SSH ключа

```
serhii@serhii-VirtualBox: ~/.ssh
serhii@serhii-VirtualBox:~/.ssh$ touch authorized_keys
serhii@serhii-VirtualBox:~/.ssh$ chmod 600 authorized_key
chmod: cannot access 'authorized_key': No such file or directory
serhii@serhii-VirtualBox:~/.ssh$ chmod 600 authorized_keys
serhii@serhii-VirtualBox:~/.ssh$ ls -la
total 8
drwx----- 2 serhii serhii 4096 Kbi 11 13:59 .
drwxr-xr-x 15 serhii serhii 4096 Kbi 11 12:31 ..
-rw----- 1 serhii serhii 0 Kbi 11 13:59 authorized_keys
serhii@serhii-VirtualBox:~/.ssh$ cat >> authorized_keys << EOF
> ssh-rsa AAAAB3NzaClyc2EAAAADAQABAAQACkd0MvoP0kyYA+KBZ37C52Dfn71Av67Ih17WFQUqDu
DuatuhmaJFWG8VK62W+pK81NcFV0tsNGXypspOjFGZESJ311aHsY35nyEmoJsAH7CJ/QvvnHQvyTAK9
1M3ryUw85Yfd9klQI/rzwLQC9XlJRQ2Zr9kxRIXnzsfWidwzjAyYeD6G5oEFFq7e9MYTAGspLZamjVsa
Ysx0UY4NcBwL9QSCWbeBOjl4kkwg2E6v1DTV+wqnrqxsVhLFTIJe6cuXfIghh2XJrElQiJ3ye288yBx
lmSQzbmi//MUiZelooIBZrgWfX62fTHTuhmlJr81SB8WH72s7UOC6A5/chSxCf rsa-key-20220411
> EOF
serhii@serhii-VirtualBox:~/.ssh$ cat authorized_keys
ssh-rsa AAAAB3NzaClyc2EAAAADAQABAAQACkd0MvoP0kyYA+KBZ37C52Dfn71Av67Ih17WFQUqDu
atuhmaJFWG8VK62W+pK81NcFV0tsNGXypspOjFGZESJ311aHsY35nyEmoJsAH7CJ/QvvnHQvyTAK91M
3ryUw85Yfd9klQI/rzwLQC9XlJRQ2Zr9kxRIXnzsfWidwzjAyYeD6G5oEFFq7e9MYTAGspLZamjVsaYs
x0UY4NcBwL9QSCWbeBOjl4kkwg2E6v1DTV+wqnrqxsVhLFTIJe6cuXfIghh2XJrElQiJ3ye288yBxlm
SQzbmi//MUiZelooIBZrgWfX62fTHTuhmlJr81SB8WH72s7UOC6A5/chSxCf rsa-key-20220411
serhii@serhii-VirtualBox:~/.ssh$
```

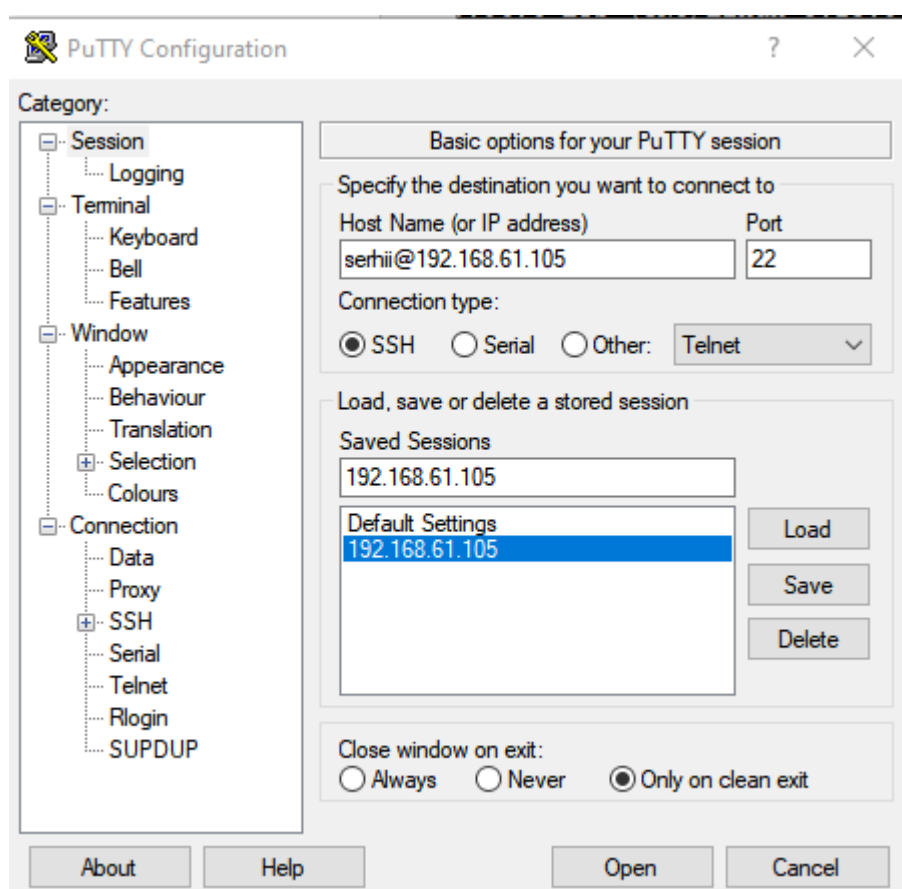
Створення файлу для запису згенерованого SSH ключа



Конфігурація PuTTY


```
serhii@serhii-VirtualBox: ~  
login as: serhii  
Authenticating with public key "rsa-key-20220411"  
Welcome to Ubuntu 20.04.4 LTS (GNU/Linux 5.13.0-39-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:        https://ubuntu.com/advantage  
  
106 updates can be applied immediately.  
83 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable  
  
Your Hardware Enablement Stack (HWE) is supported until April 2025.  
Last login: Mon Apr 11 13:34:18 2022 from 192.168.61.102  
serhii@serhii-VirtualBox:~$
```

Вхід за допомогою SSH ключа



Конфігурація PuTTY для входу без вводу логіну

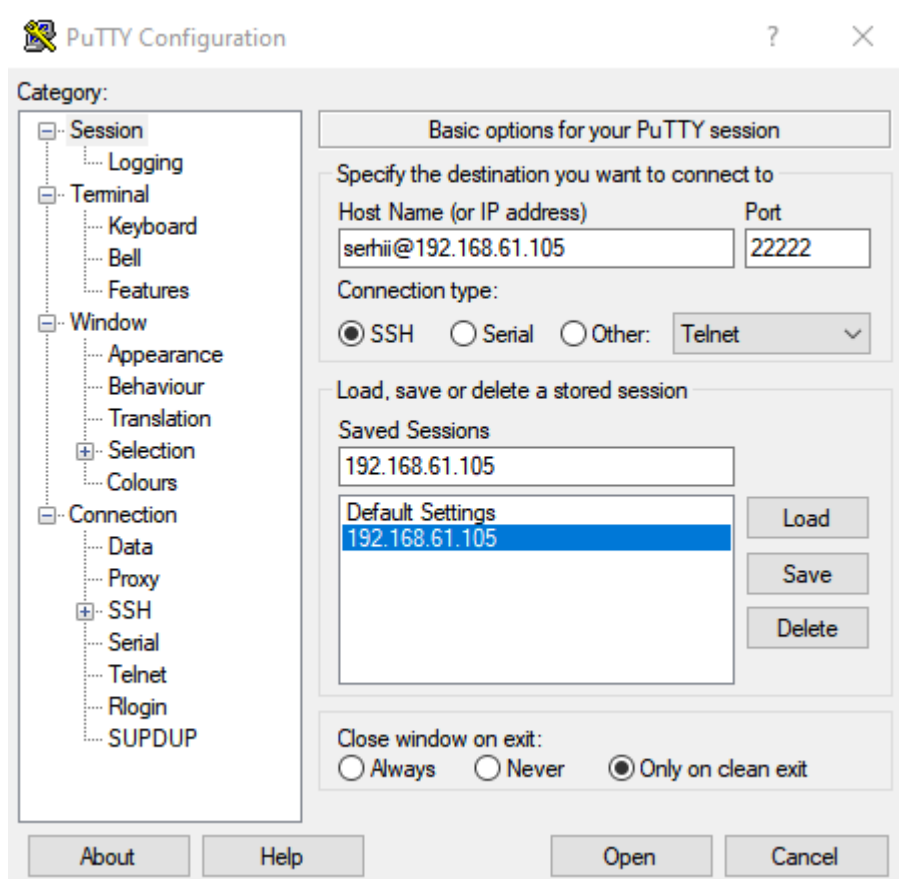
```
serhii@serhii-VirtualBox: ~  
Using username "serhii".  
Authenticating with public key "rsa-key-20220411"  
Welcome to Ubuntu 20.04.4 LTS (GNU/Linux 5.13.0-39-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:        https://ubuntu.com/advantage  
  
106 updates can be applied immediately.  
83 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable  
  
Your Hardware Enablement Stack (HWE) is supported until April 2025.  
Last login: Mon Apr 11 14:01:58 2022 from 192.168.61.102  
serhii@serhii-VirtualBox:~$
```

Результат

Завдання**

```
serhii@serhii-VirtualBox: ~  
Authenticating with public key "rsa-key-20220411"  
Welcome to Ubuntu 20.04.4 LTS (GNU/Linux 5.13.0-39-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:        https://ubuntu.com/advantage  
  
106 updates can be applied immediately.  
83 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable  
  
Your Hardware Enablement Stack (HWE) is supported until April 2025.  
Last login: Mon Apr 11 14:01:58 2022 from 192.168.61.102  
serhii@serhii-VirtualBox:~$ sudo nano /etc/ssh/sshd_config  
[sudo] password for serhii:  
serhii@serhii-VirtualBox:~$ /etc/init.d/ssh restart  
Restarting ssh (via systemctl): ssh.service==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ===  
Authentication is required to restart 'ssh.service'.  
Authenticating as: ,,, (serhii)  
Password:  
==== AUTHENTICATION COMPLETE ====  
.  
serhii@serhii-VirtualBox:~$
```

Зміна номера порта із 22 на 2222 та рестарт SSH-сервера



Зміна номера порту із 22 на 2222 у PuTTY

```
serhii@serhii-VirtualBox: ~  
Using username "serhii".  
Authenticating with public key "rsa-key-20220411"  
Welcome to Ubuntu 20.04.4 LTS (GNU/Linux 5.13.0-39-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:       https://ubuntu.com/advantage  
  
106 updates can be applied immediately.  
83 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable  
  
Your Hardware Enablement Stack (HWE) is supported until April 2025.  
Last login: Mon Apr 11 14:05:19 2022 from 192.168.61.102  
serhii@serhii-VirtualBox:~$
```

Підключення по новому порту