

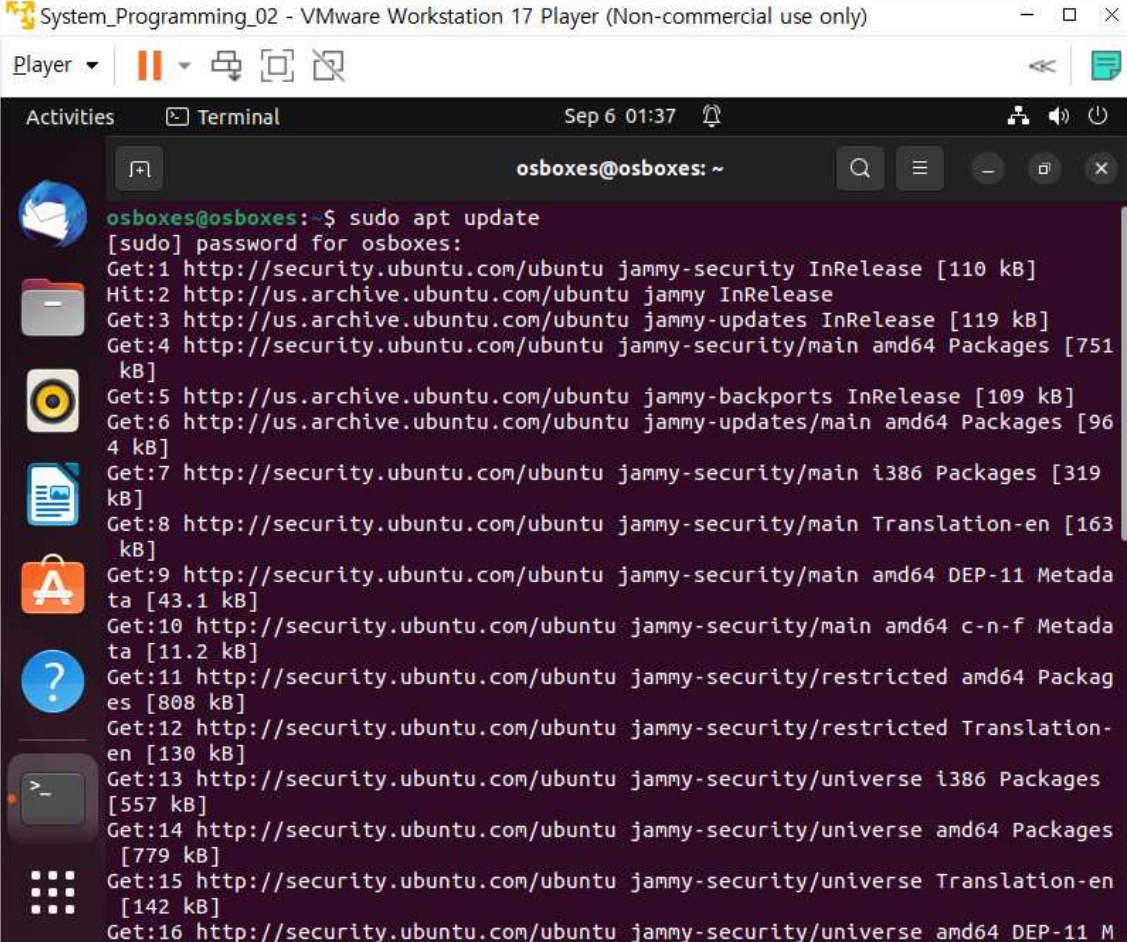
제목: 리눅스에 ssh 서버 설치 후 client에서 접속하기

이름: 조병하

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1. 패키지 정보 업데이트

가. sudo apt update

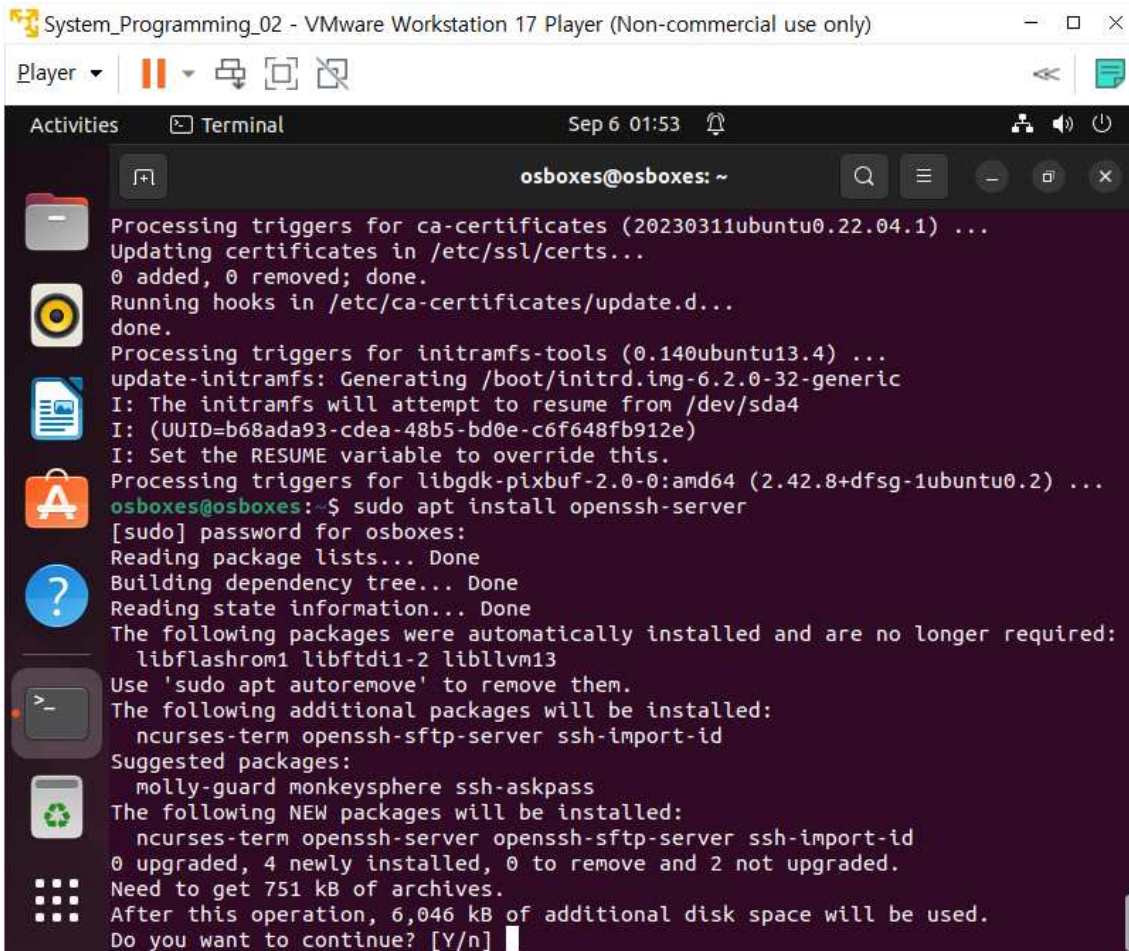


```
System_Programming_02 - VMware Workstation 17 Player (Non-commercial use only)
Player
osboxes@osboxes: ~
osboxes@osboxes:~$ sudo apt update
[sudo] password for osboxes:
Get:1 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Hit:2 http://us.archive.ubuntu.com/ubuntu jammy InRelease
Get:3 http://us.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [751 kB]
Get:5 http://us.archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
Get:6 http://us.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [964 kB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/main i386 Packages [319 kB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [163 kB]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/main amd64 DEP-11 Metadata [43.1 kB]
Get:10 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [11.2 kB]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [808 kB]
Get:12 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [130 kB]
Get:13 http://security.ubuntu.com/ubuntu jammy-security/universe i386 Packages [557 kB]
Get:14 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [779 kB]
Get:15 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [142 kB]
Get:16 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 DEP-11 M
```

나. sudo apt upgrade

2. ssh server 설치

가. `sudo apt install openssh-server`



```
System_Programming_02 - VMware Workstation 17 Player (Non-commercial use only)
Player
Activities Terminal Sep 6 01:53
osboxes@osboxes: ~
Processing triggers for ca-certificates (20230311ubuntu0.22.04.1) ...
Updating certificates in /etc/ssl/certs...
0 added, 0 removed; done.
Running hooks in /etc/ca-certificates/update.d...
done.
Processing triggers for initramfs-tools (0.140ubuntu13.4) ...
update-initramfs: Generating /boot/initrd.img-6.2.0-32-generic
I: The initramfs will attempt to resume from /dev/sda4
I: (UUID=b68ada93-cdea-48b5-bd0e-c6f648fb912e)
I: Set the RESUME variable to override this.
Processing triggers for libgdk-pixbuf-2.0-0:amd64 (2.42.8+dfsg-1ubuntu0.2) ...
osboxes@osboxes:~$ sudo apt install openssh-server
[sudo] password for osboxes:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libflashrom1 libftdi1-2 libllvm13
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  ncurses-term openssh-sftp-server ssh-import-id
Suggested packages:
  molly-guard monkeysphere ssh-askpass
The following NEW packages will be installed:
  ncurses-term openssh-server openssh-sftp-server ssh-import-id
0 upgraded, 4 newly installed, 0 to remove and 2 not upgraded.
Need to get 751 kB of archives.
After this operation, 6,046 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```

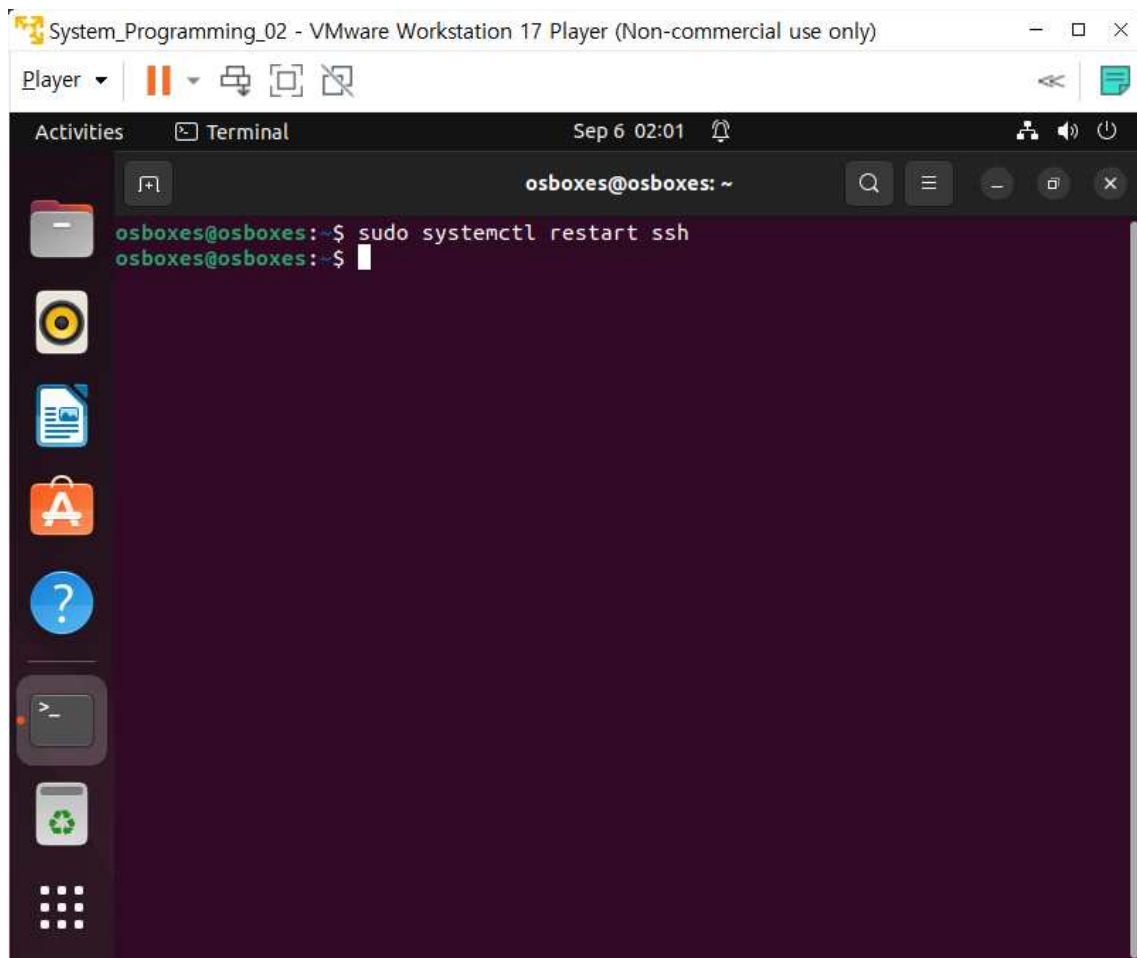
3. ssh 서버 보안 설정

가. `sudo vi /etc/ssh/sshd_config`

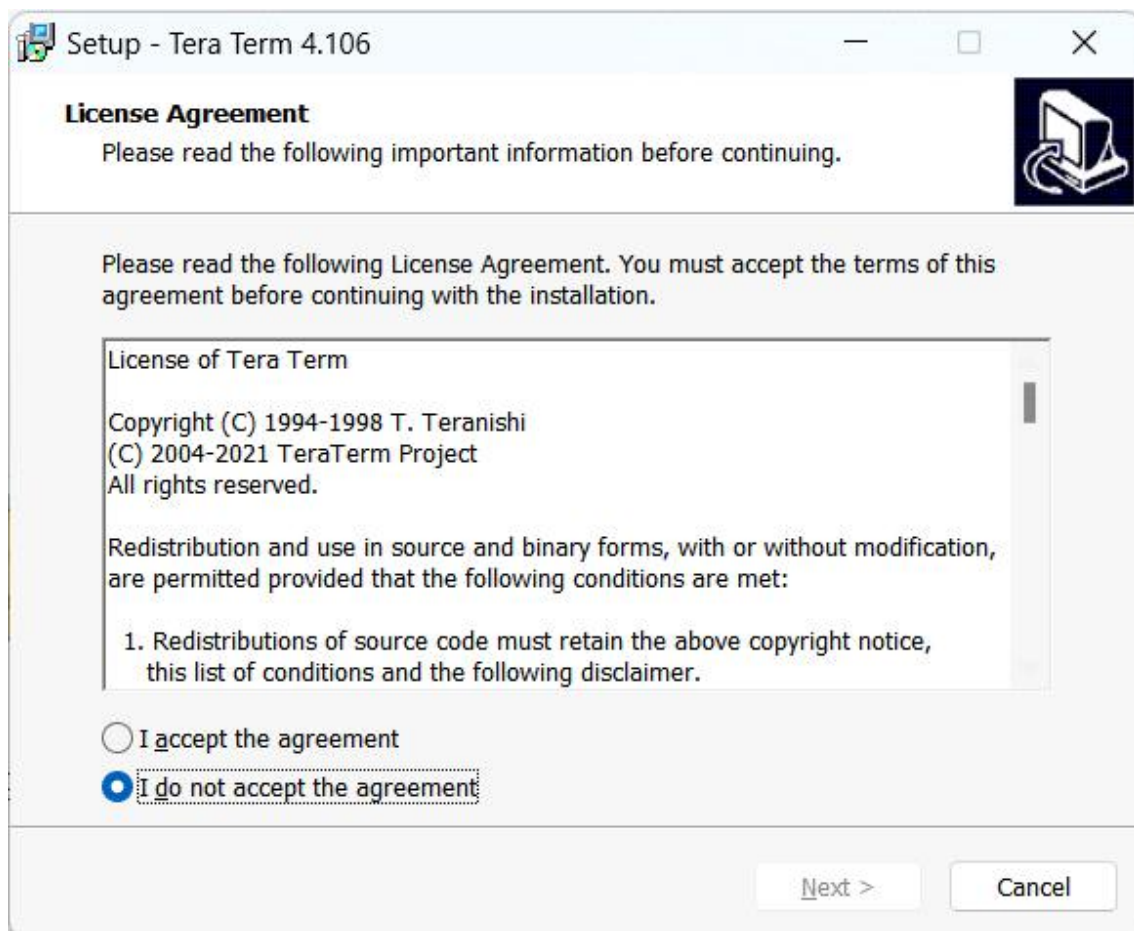

```
System_Programming_02 - VMware Workstation 17 Player (Non-commercial use only)
Player
Activities Terminal Sep 6 02:17
osboxes@osboxes: ~
# This sshd was compiled with PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr
r/bin:/sbin:/bin:/usr/games
# The strategy used for options in the default sshd_config shipped with
# OpenSSH is to specify options with their default value where
# possible, but leave them commented. Uncommented options override the
# default value.
Include /etc/ssh/sshd_config.d/*.conf
#Port 2
Port 22000
ClientAliveInterval 600
ClientAliveCountMax 3
PermitRootLogin no
PasswordAuthentication yes
UsePrivilegeSeparation yes
PermitEmptyPasswords no
MaxAuthTries 5
LoginGraceTime 30
AllowUsers xmaaks
#HostKey /etc/ssh/ssh_host_rsa_key
#HostKey /etc/ssh/ssh_host_ecdsa_key
#HostKey /etc/ssh/ssh_host_ed25519_key
Show Applications 25,0-1 2%
```

4. 데몬 재구동

가. `sudo systemctl restart ssh`



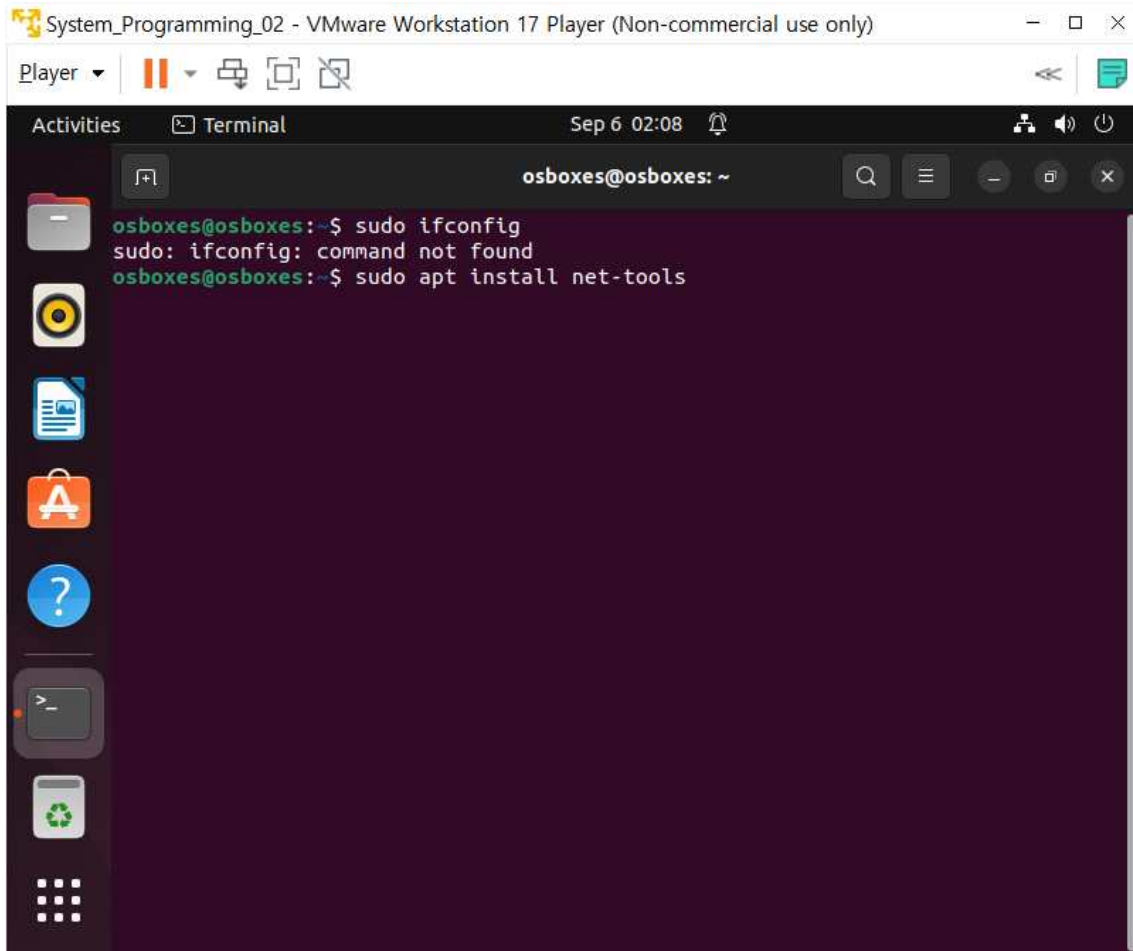
5. 테라텀 설치



6. 서버 호스팅 주소 확인

가. 오류: ifconfig 명령어가 존재하지 않음

나. 해결: sudo apt install net-tools명령어 실행



7. ssh서버 접속을 위한 사용자 추가

System_Programming_02 - VMware Workstation 17 Player (Non-commercial use only)

Player ▾ | [Icons] | [Icons]

Activities | Terminal | Sep 6 02:12 | [Icons]

osboxes@osboxes: ~

```
ens33: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.92.128 netmask 255.255.255.0 broadcast 192.168.92.255
    inet6 fe80::7cf8:5d4f:2ced:acc9 prefixlen 64 scopeid 0x20<link>
    ether 00:0c:29:cc:68:27 txqueuelen 1000 (Ethernet)
    RX packets 800700 bytes 1206033843 (1.2 GB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 54834 bytes 3503887 (3.5 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 440 bytes 48371 (48.3 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 440 bytes 48371 (48.3 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

osboxes@osboxes:~$ hostname -I
192.168.92.128
osboxes@osboxes:~$ sudo useradd xnaaks -d /home
osboxes@osboxes:~$ sudo passwd xnaaks
New password:
jaRetype new password:
Sorry, passwords do not match.
New password:
Retype new password:
passwd: password updated successfully
osboxes@osboxes:~$
```

8. 테라텀에 접속 정보 입력

Tera Term: New connection

☒ TCP/IP Host: 192.168.92.128

☒ History

Service: ☐ Telnet TCP port#: 22000

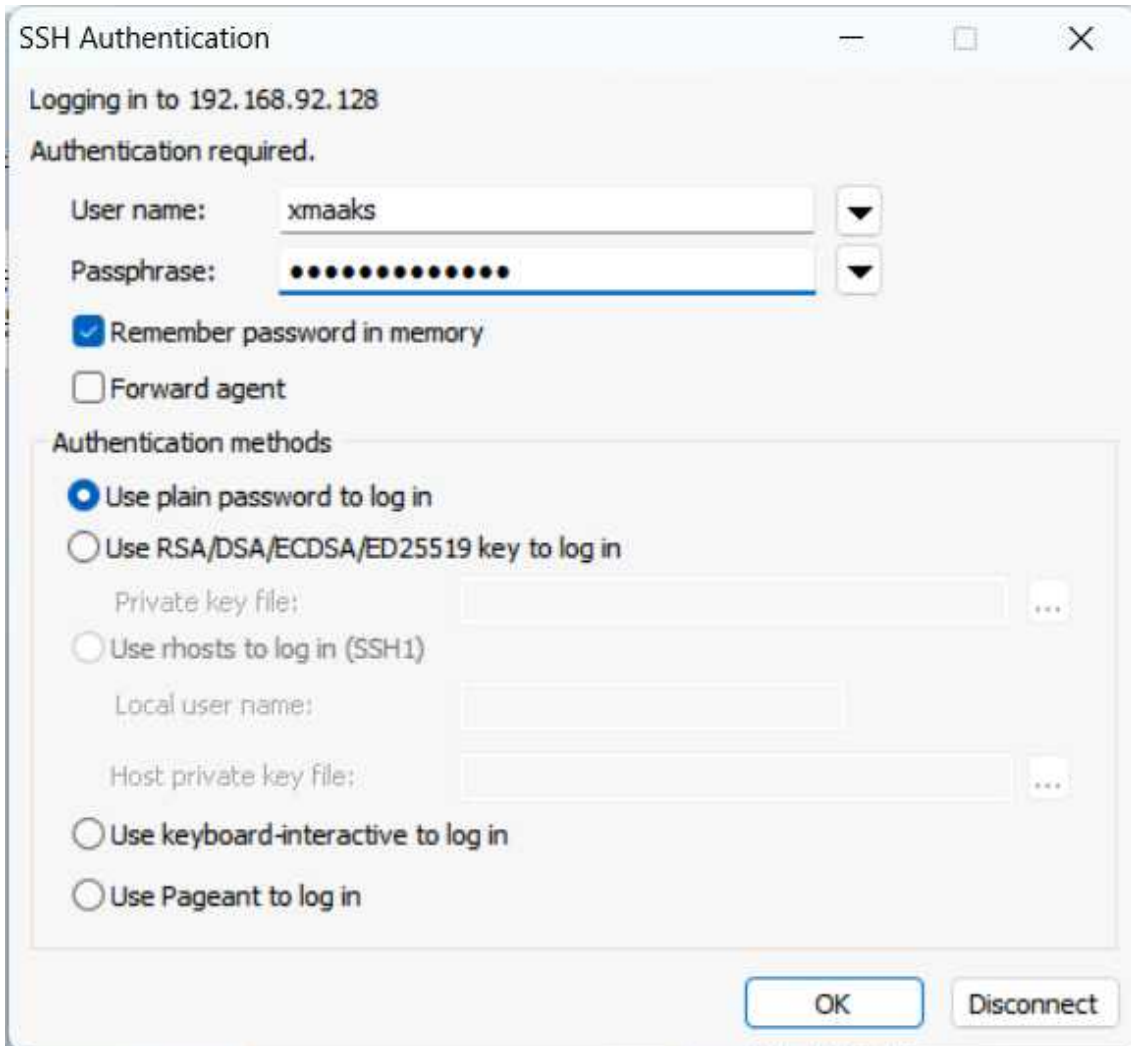
☒ SSH SSH version: SSH2

☐ Other IP version: AUTO

☐ Serial Port: COM4: 표준 Bluetooth에서 직렬 링크(

OK Cancel Help

9. 7번에서 생성한 유저 정보 입력



SSH Authentication

Logging in to 192.168.92.128

Authentication required.

User name: ▼

Passphrase: ▼

☒ Remember password in memory

☐ Forward agent

Authentication methods

☒ Use plain password to log in

☐ Use RSA/DSA/ECDSA/ED25519 key to log in

Private key file: ...

☐ Use rhosts to log in (SSH1)

Local user name:

Host private key file: ...

☐ Use keyboard-interactive to log in

☐ Use Pageant to log in

OK Disconnect

10. 접속 완료

```
192.168.92.128 - Tera Term VT
File Edit Setup Control Window Help
ls
lost+found osboxes
$ ls
lost+found osboxes
$ dir
lost+found osboxes
$ cd os
-sh: 4: cd: can't cd to os
$ cd osboxes
-sh: 5: cd: can't cd to osboxes
$ ls
lost+found osboxes
$ cd lost+found
-sh: 7: cd: can't cd to lost+found
$ cd osboxes
$ ls
Desktop Documents Downloads Music Pictures Public snap Templates Videos
$ cd Desktop
$ ls
$ cd ..
$
```