

# 실습 서버 사용법

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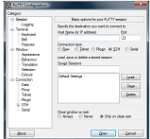
실습 환경 요약

**01**

# 실습 환경 사용

## ❖ 개인 PC, 노트북에 PuTTY 설치

- 다운로드 사이트 : <https://www.putty.org/>
- Putty 실행



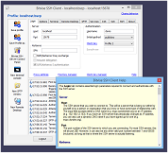
**Download PuTTY**

PuTTY is an SSH and telnet client, developed originally by Simon Tatham for the Windows platform. PuTTY is open source software that is available with source code and is developed and supported by a group of volunteers.

You can download PuTTY [here](#).

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Below suggestions are independent of the authors of PuTTY. They are *not* to be seen as endorsements by the PuTTY project.

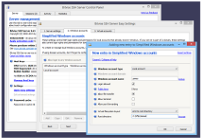


**Bitvise SSH Client**

Bitvise SSH Client is an SSH and SFTP client for Windows. It is developed and supported professionally by Bitvise. The SSH Client is robust, easy to install, easy to use, and supports all features supported by PuTTY, as well as the following:

- graphical SFTP file transfer;
- single-click Remote Desktop tunneling;
- auto-reconnecting capability;
- dynamic port forwarding through an integrated proxy;
- an FTP-to-SFTP protocol bridge.

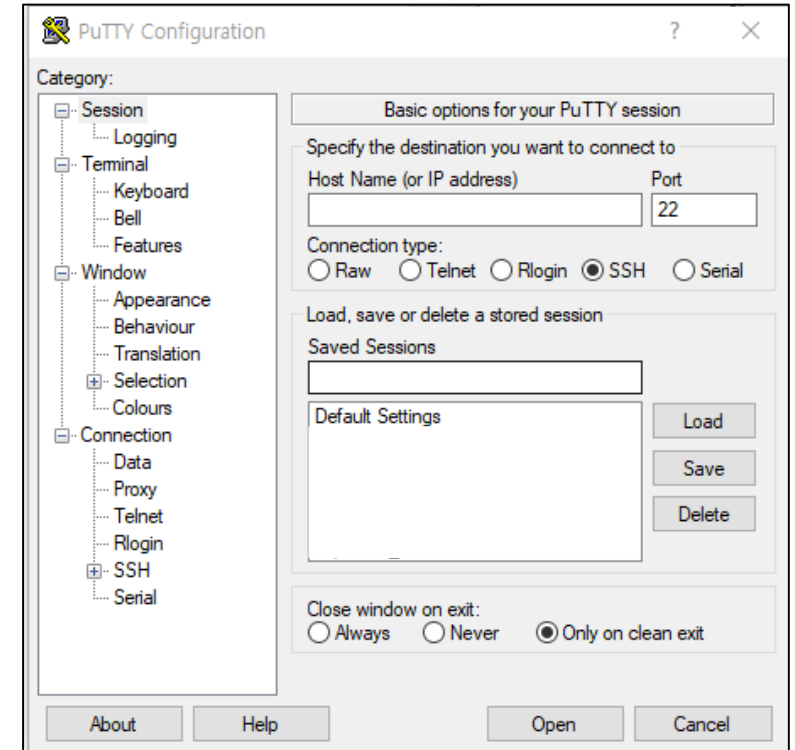
Bitvise SSH Client is **free to use**. You can [download it here](#).



**Bitvise SSH Server**

Bitvise SSH Server is an SSH, SFTP and SCP server for Windows. It is robust, easy to install, easy to use, and works well with a variety of SSH clients, including Bitvise SSH Client, OpenSSH, and PuTTY. The SSH Server is developed and supported professionally by Bitvise.

You can [download Bitvise SSH Server here](#).



PuTTY 다운로드 사이트

PuTTY 실행 화면

# 실습 환경 사용

## ❖ PuTTY 사용법

- IP 주소 : 220.149.236.145

PuTTY 콘솔 글자체 및 크기 설정

IP 입력

리스트에 저장할 이름 설정

포트 번호 : 22

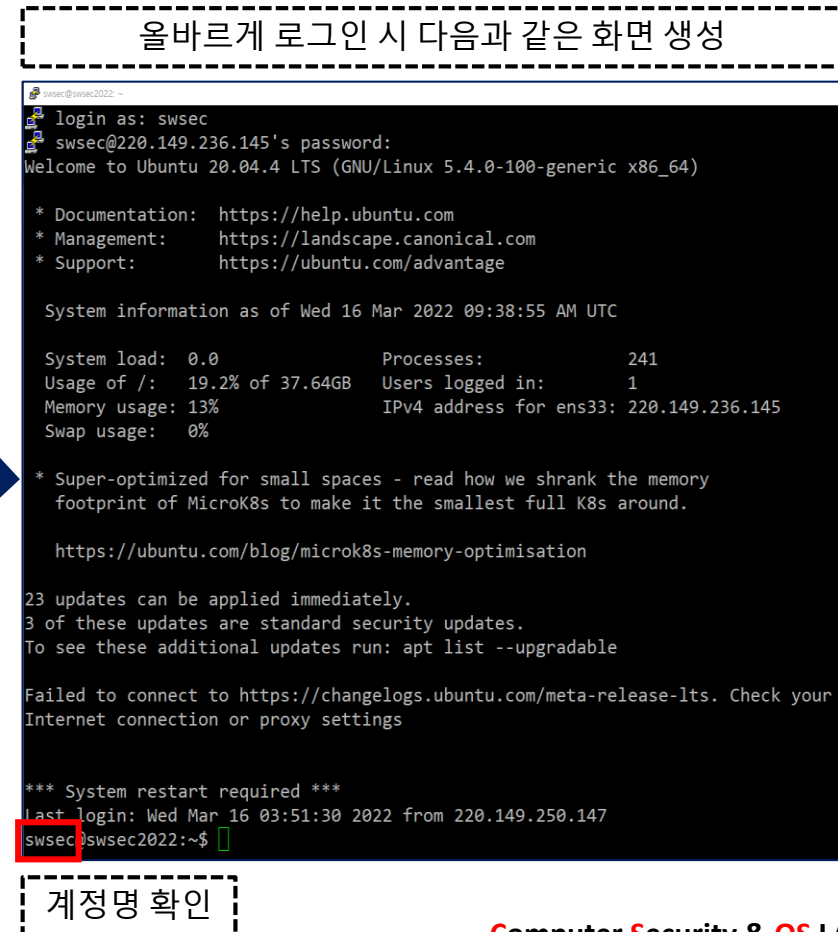
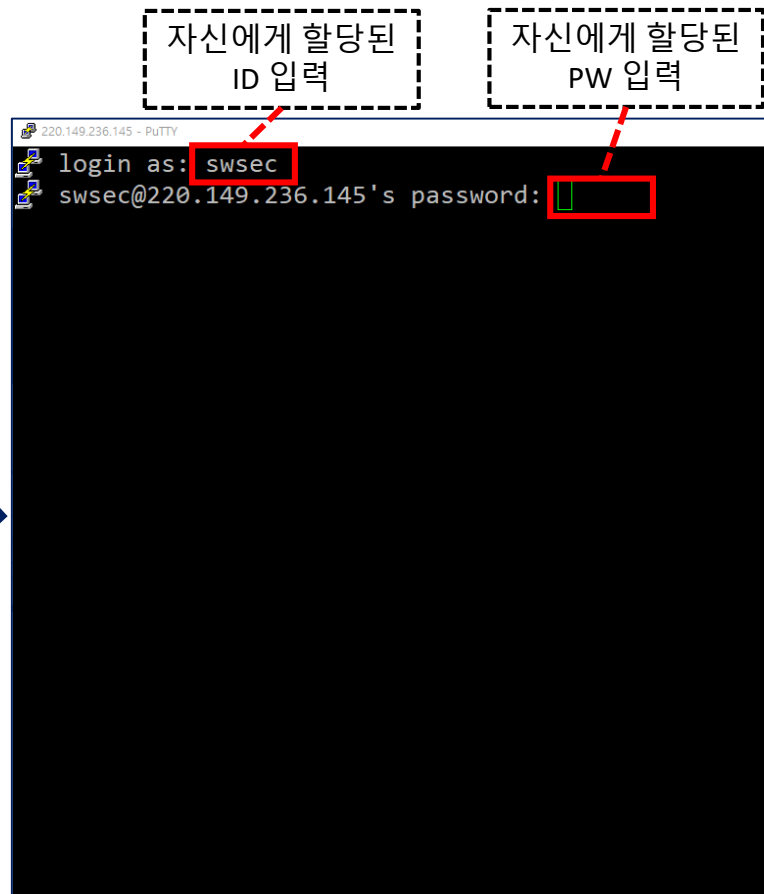
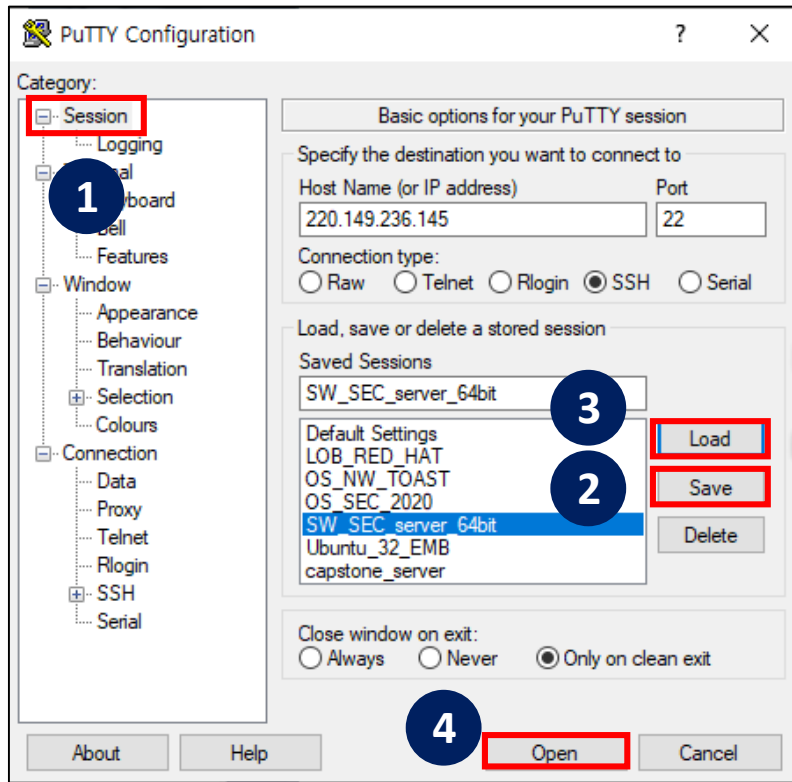
변경

원하는 글꼴 및 크기로 변환 (크기는 20pt 이상을 추천)

# 실습 환경 사용

## ❖ PuTTY 사용법

- 설정이 끝나면 다시 “Session” 탭으로 복귀
- “Save” 후 “Load” -> Open





**02**

## 실습 환경 요약

## ❖ Ubuntu 20.04 LTS – Server

- Ubuntu 20.04에서는 32bit를 지원하지 않음
- 따라서, 별도의 라이브러리 설치 및 컴파일 옵션 입력 필요 ( -m32)
  - 별도의 라이브러리는 설치됨

```
$ gcc a.c -o a.out -m32
```



## ❖ Server 용이기 때문에 GUI(Graphic User Interface)를 지원하지 않음

- 오직, CLI(Command Line Interface)에만 의존
- 명령어 Googling 필수적!!



## ❖ Recommendation to students

- 비밀번호 변경 !
- 별도로 서버를 사용하다가 문제 발생 시 메일로 문의 !
- GUI가 존재하는 Ubuntu Desktop 버전을 별도로 설치 및 구성하여 사용하는 것을 권장함 !
- 서버에 대해 불필요한 공격 금지 !



### ❖ 설치 패키지 목록

- net-tools : 네트워크 툴 패키지
- emacs : 편집기
- vim : 편집기
- pip : 파이썬 소프트웨어 설치 관리 패키지
- python(사전에 설치되어 있음)
- gcc-multilib : 64bit 환경에서 32bit로 compile 하기위한 크로스 컴파일 패키지
- build-essential : C, C++로 작성된 기본 소프트웨어 컴파일에 필요한 리소스
- gdb : GNU 디버거
- openssh : ssh 프로토콜을 사용, putty 연결을 위한 도구

## ❖ 우분투 환경 구성

### ▪ Download Links

- <https://ubuntu.com/download/desktopemacs> - Ubuntu 22.04 Release Download
- <https://releases.ubuntu.com/focal/> - Ubuntu 20.04 Release Download
- <https://www.vmware.com/products/workstation-player/workstation-player-evaluation.html> - VMware Player Download

### Ubuntu 22.04.1 LTS

Download the latest LTS version of Ubuntu, for desktop PCs and laptops. LTS stands for long-term support — which means five years, until April 2027, of free security and maintenance updates, guaranteed.

[Ubuntu 22.04 LTS release notes](#)

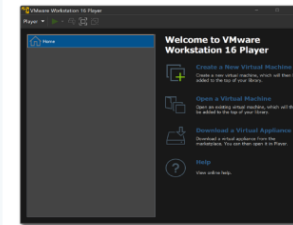
Recommended system requirements:

- ✓ 2 GHz dual-core processor or better
- ✓ 4 GB system memory
- ✓ 25 GB of free hard drive space
- ✓ Internet access is helpful
- ✓ Either a DVD drive or a USB port for the installer media

Download

For other versions of Ubuntu Desktop including torrents, the network installer, a list of local mirrors, and past releases [see our alternative downloads](#).

### VMware Workstation 16 Player



#### VMware Workstation Player

VMware Workstation Player is an ideal utility for running a single virtual machine on a Windows or Linux PC. Organizations use Workstation Player to deliver managed corporate desktops, while students and educators use it for learning and training.

The free version is available for non-commercial, personal and home use. We also encourage students and non-profit organizations to benefit from this offering.

Commercial organizations require commercial licenses to use Workstation Player.

Need a more advanced virtualization solution? Check out Workstation Pro.

Try Workstation 16.0 Player for Windows

[DOWNLOAD NOW >](#)

Try Workstation 16.0 Player for Linux

[DOWNLOAD NOW >](#)

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# Q&A

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