UNIT

00

개발환경 구축2

로봇 SW 교육원 4기

학습 목표

- 리눅스를 설치할 수 있다.
- 임베디드 리눅스 개발환경을 이해한다.

리눅스(Linux)

- 1991년 11월에 리누스 토발즈(Linus Torvalds)가 공개한 유닉스 기반 개인 컴퓨터용 공개 운영체제

- 유닉스(Unix) 환경을 제공하면서 무료라는 장점 때문에 프로그램 개발자 및 학교 등을 중심으로 급속히 사용이 확되됨

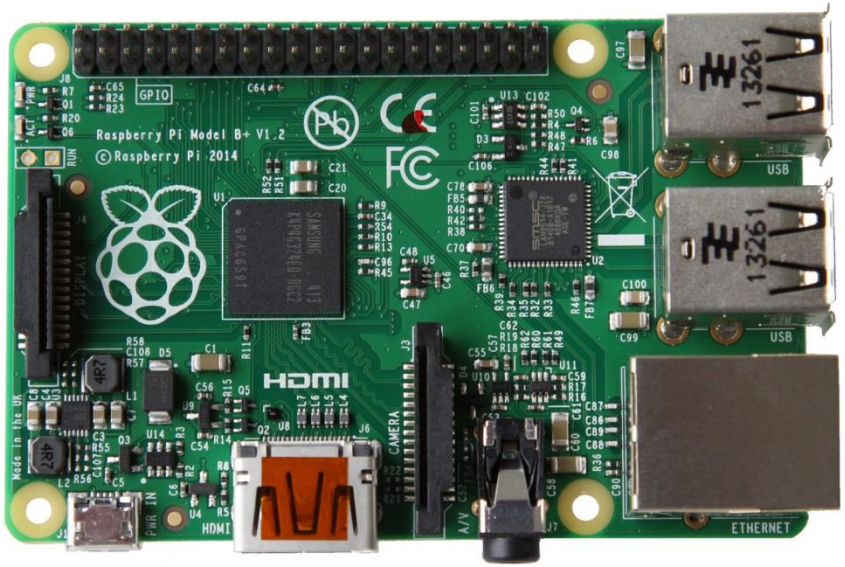
- 사이트
  - www.kernel.org

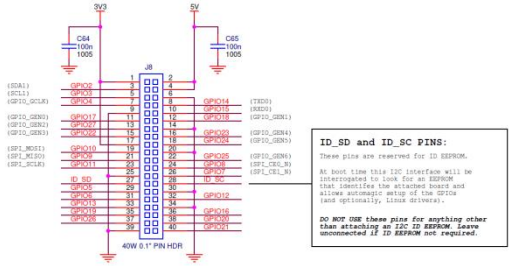
- 배포판

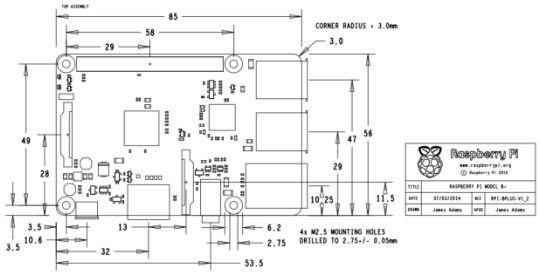
- 안드로이드

개발보드 Raspberry Pi

- Raspberry Pi B+





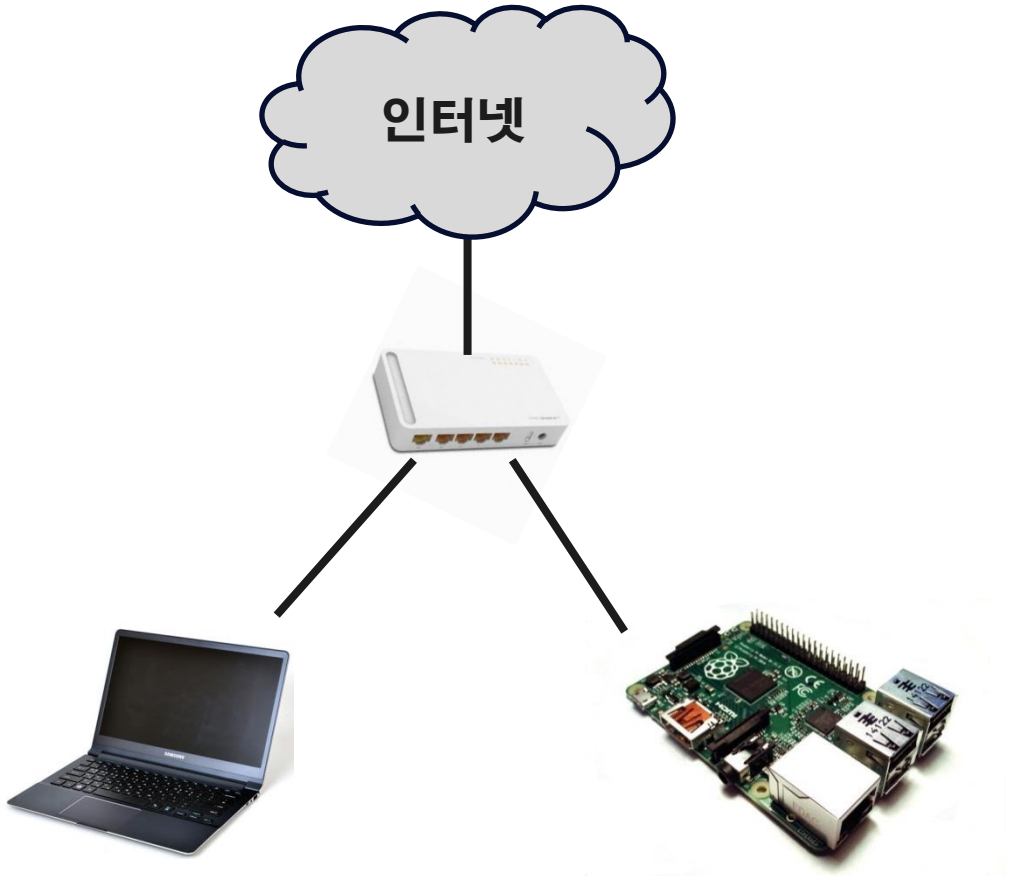


- BCM2835
  - http://www.broadcom.com/products/BCM2835
  - ARM1176JZ-F
    http://www.arm.com/products/processors/classic/arm11/arm1176.php

BROADCOM®

개발환경

- TARGET BOARD
  - Raspberry Pi B+
- HOST PC
  - Ubuntu (Virtual Box)
- **라우터**



실습 1: VirtualBox 설치

- VirtualBox **다운로드**
  - https://www.virtualbox.org/

실습 1: VirtualBox 설치

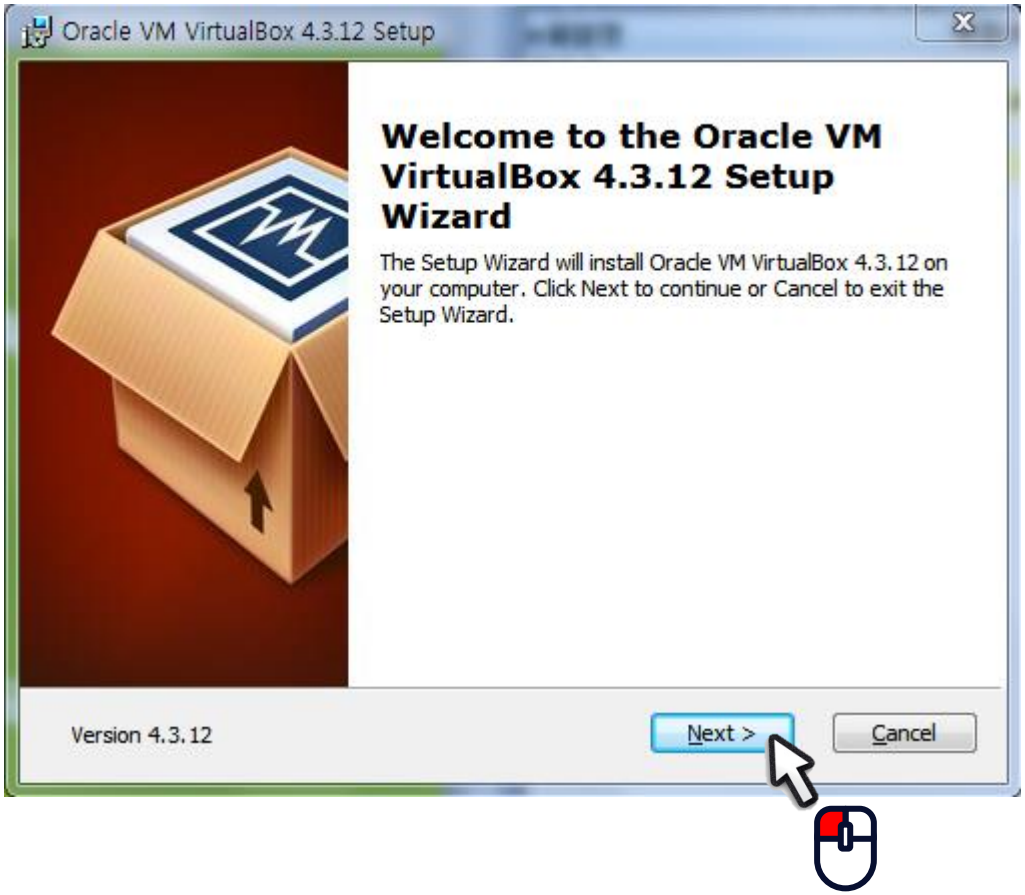
- VirtualBox **다운로드**
  - **파일명** : VirtualBox-4.3.12-93733-Win.exe

실습 1: VirtualBox 설치

- VirtualBox **확장 팩 다운로드** (USB**장치 인식하기 위해 필요함**)
  - **파일명** : Oracle_VM_VirtualBox_Extension_Pack-4.3.12-93733.vbox-extpack

실습 1: VirtualBox 설치

- VirtualBox **설치**(4.3.12 for windows hosts)



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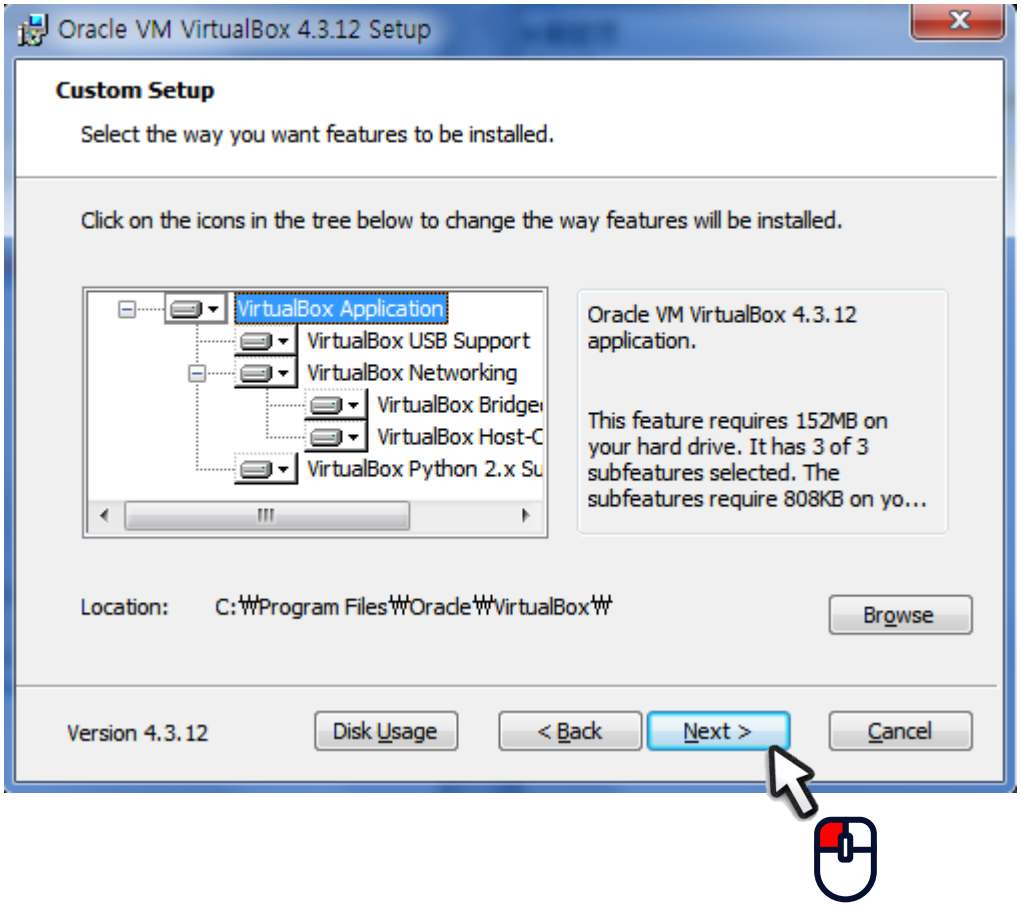

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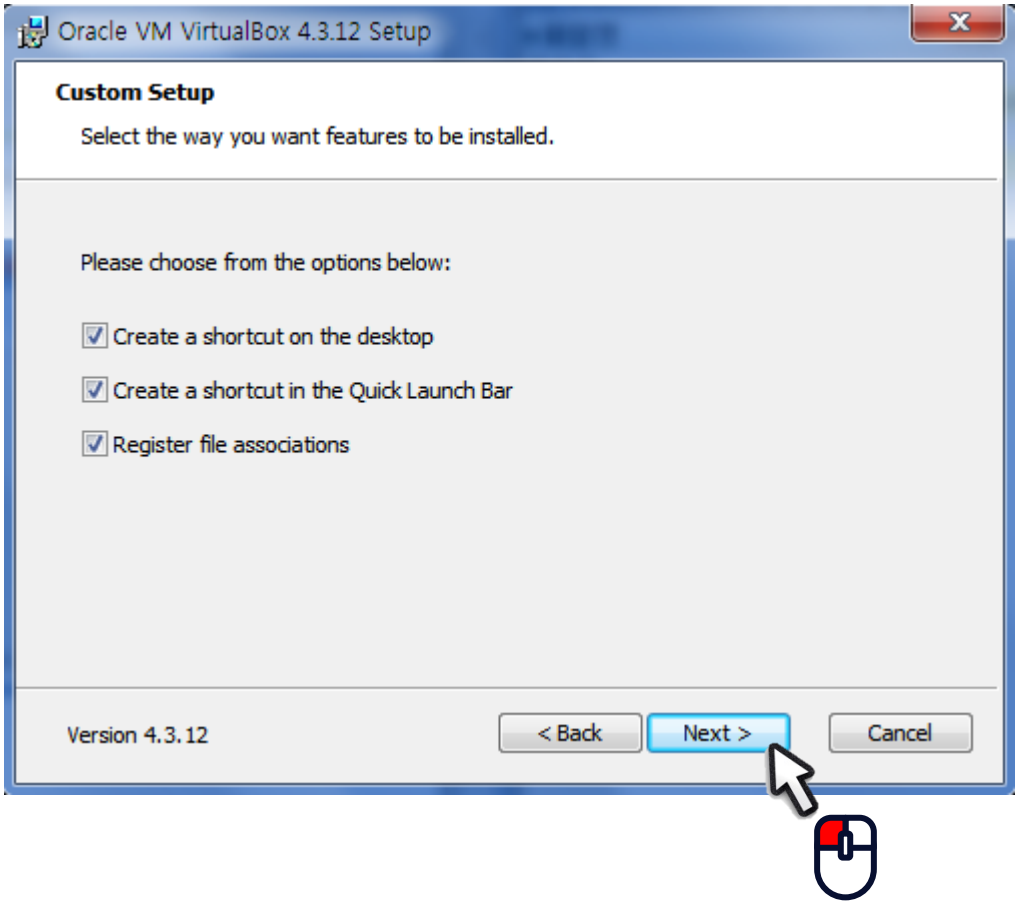

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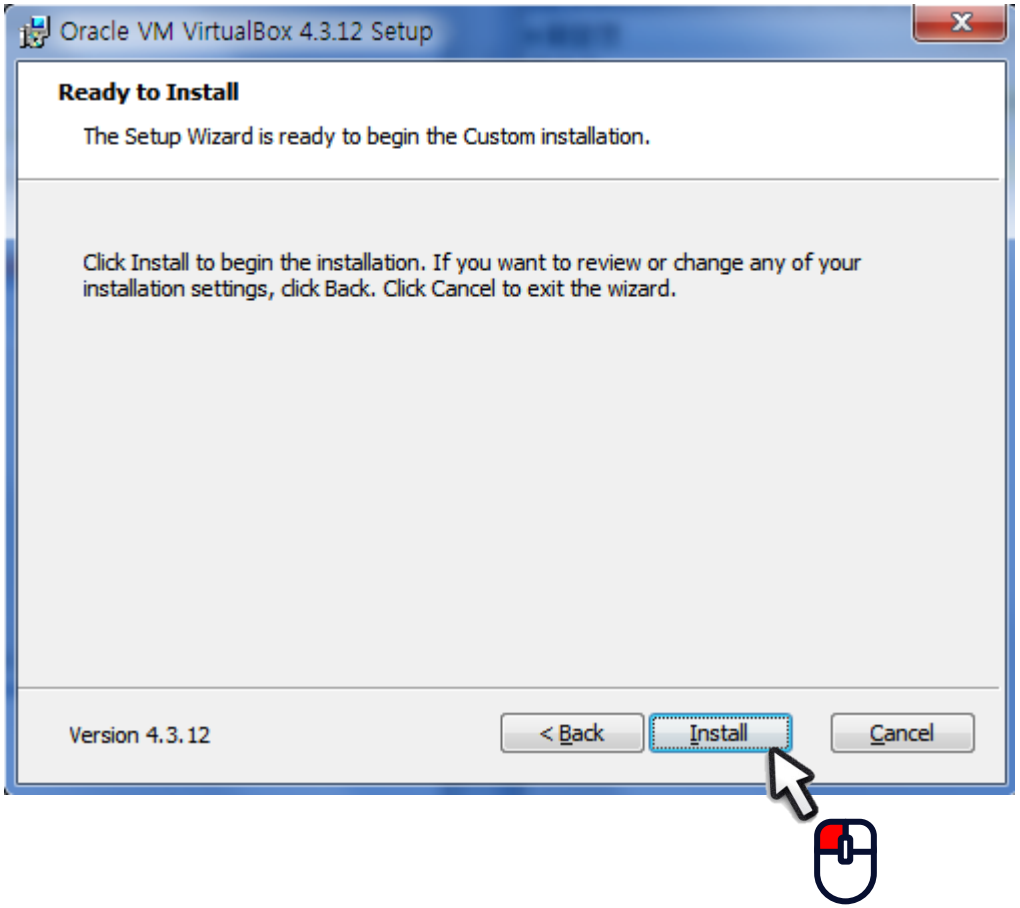

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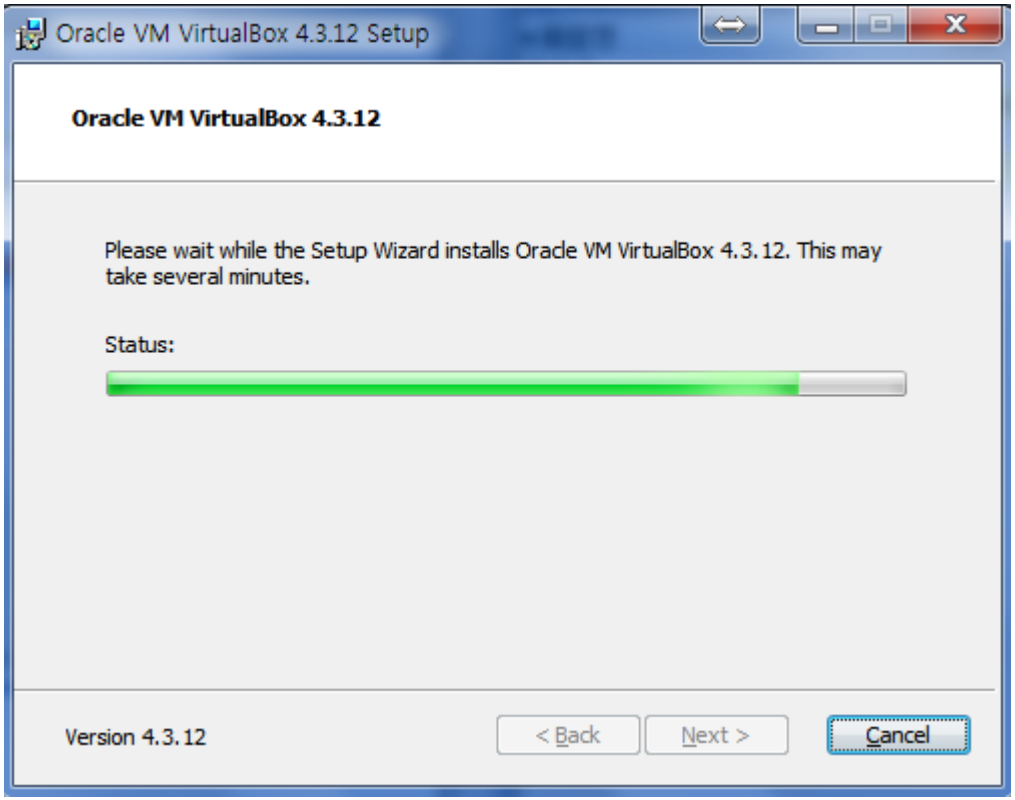

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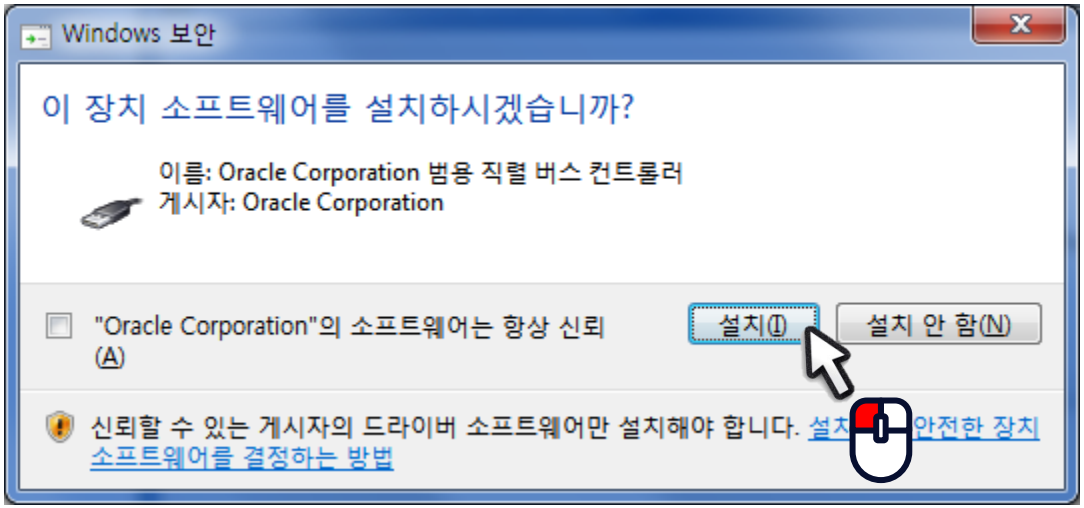

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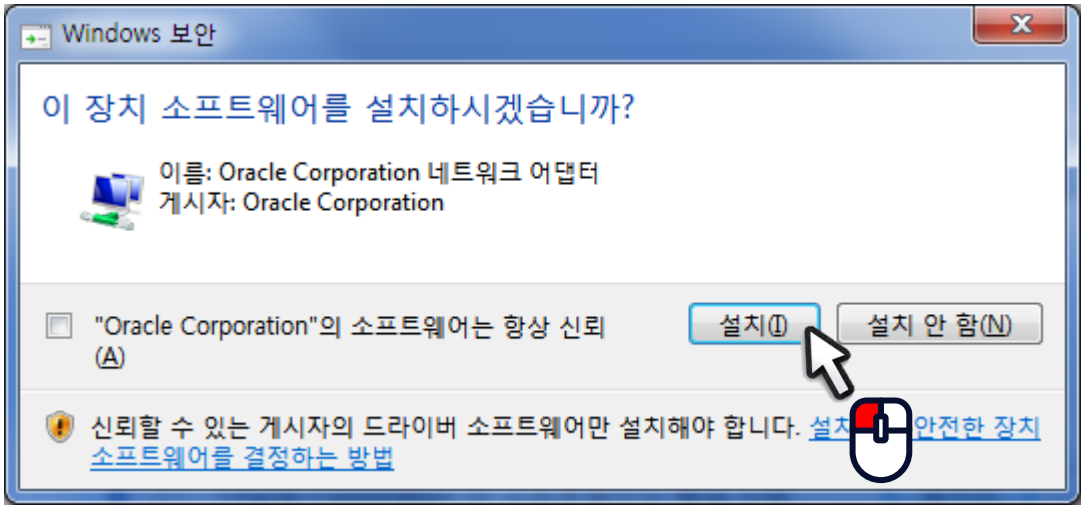

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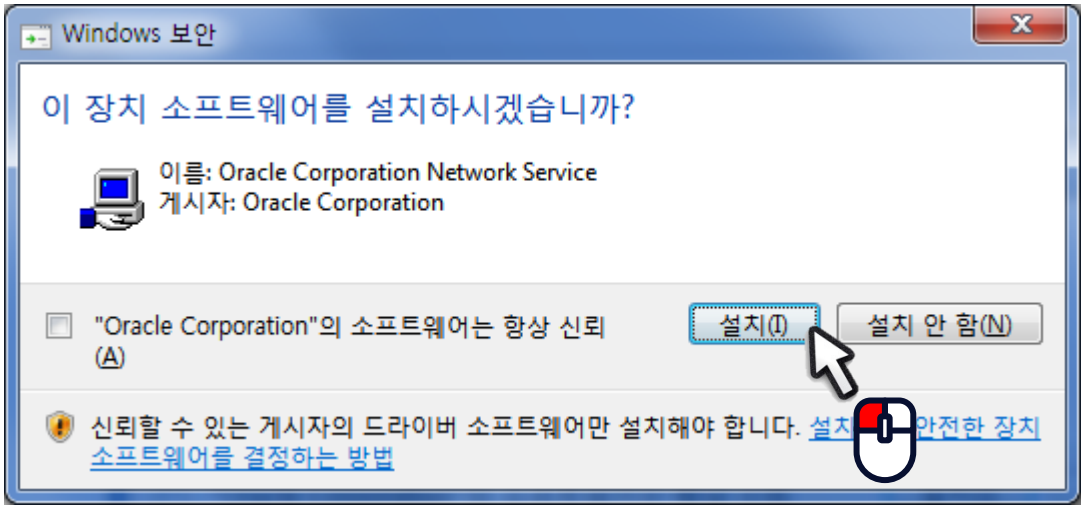

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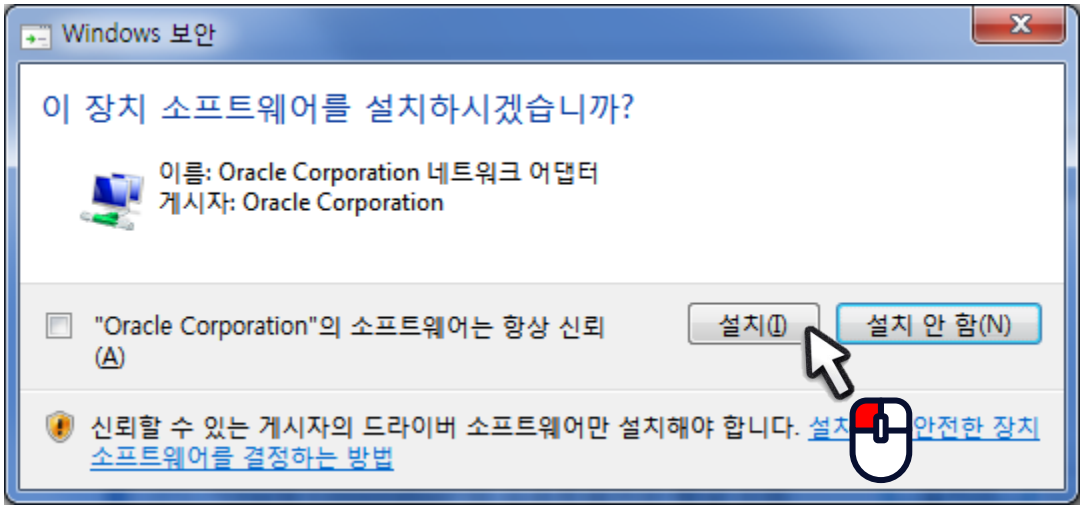

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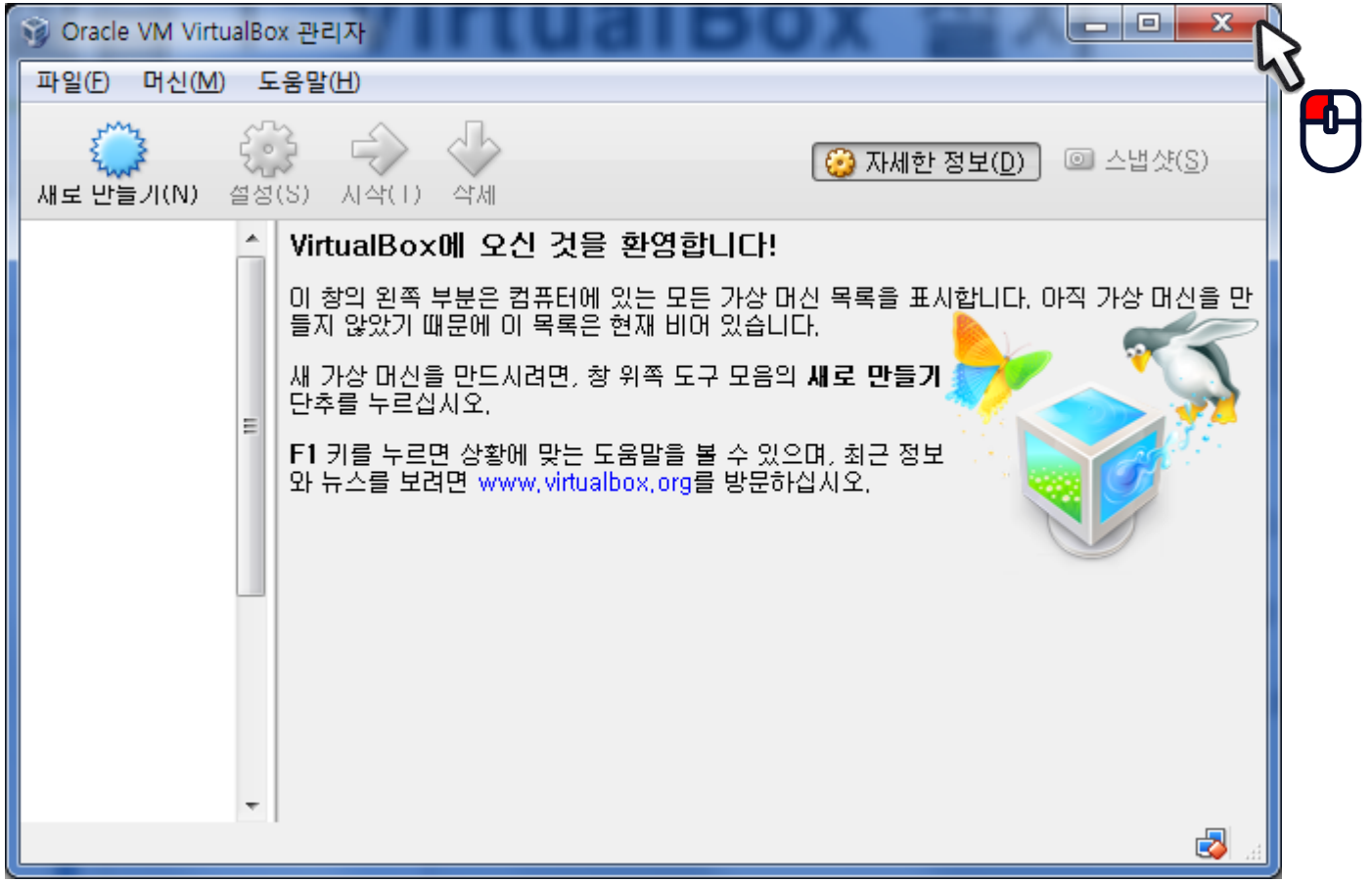
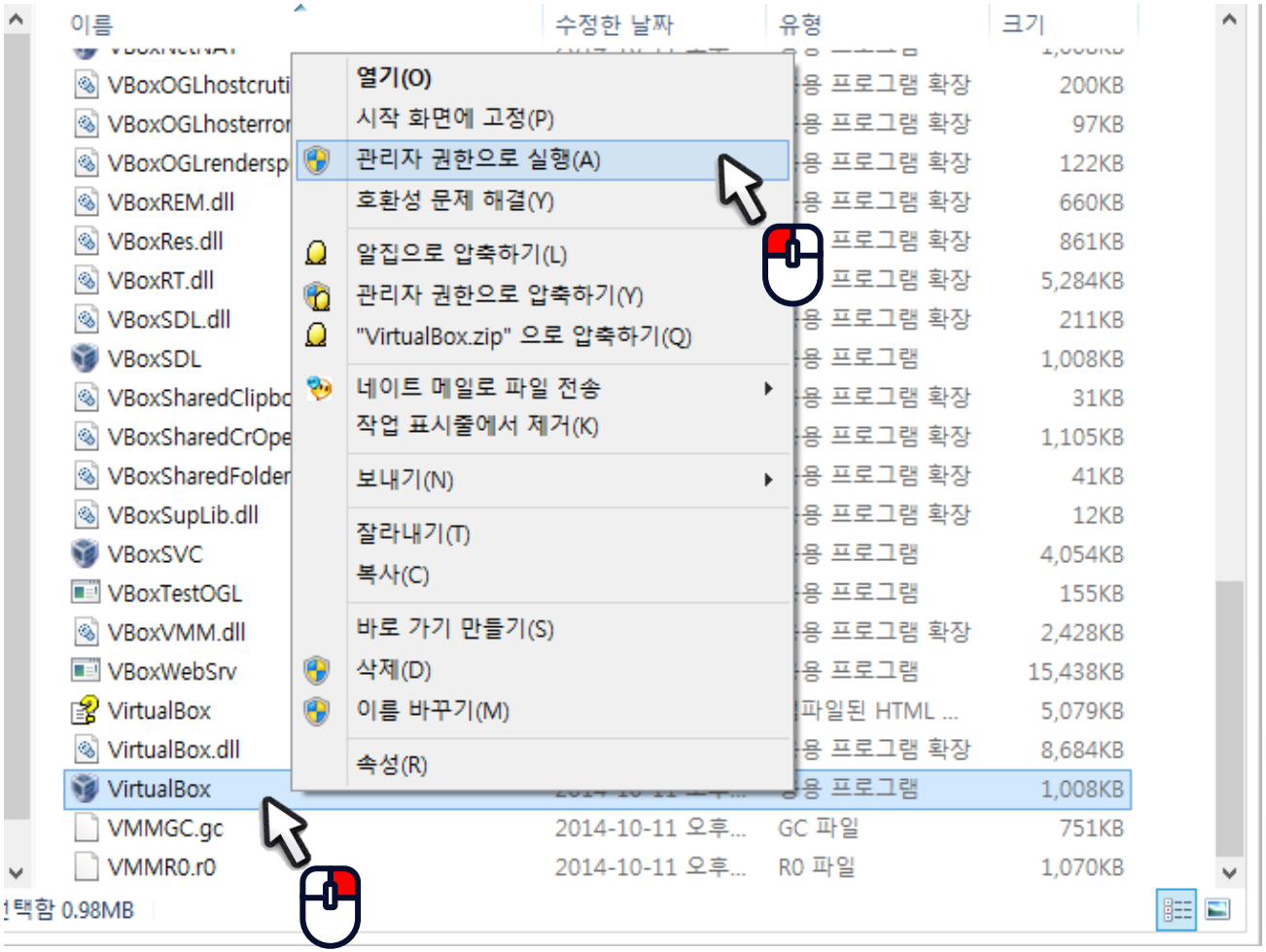


실습 1: VirtualBox 설치

- VirtualBox **확장팩 설치**
  - **관리자권한으로** VirtualBox **실행**
  - **파일명** : C:\Program Files\Oracle\VirtualBox\VirtualBox.exe



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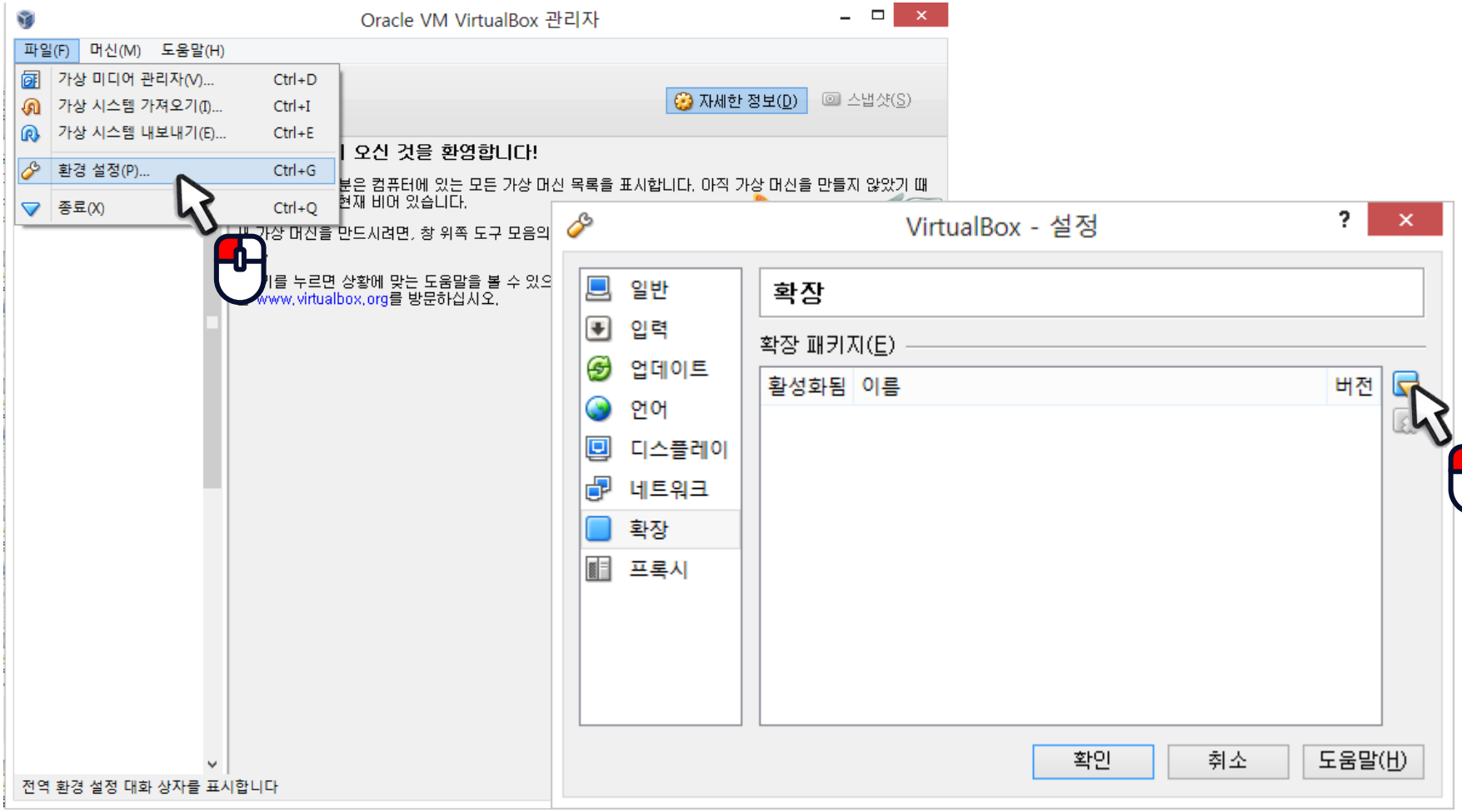
- VirtualBox **확장팩 설치**
  - **[파일] -> [환경 설정] -> 확장**



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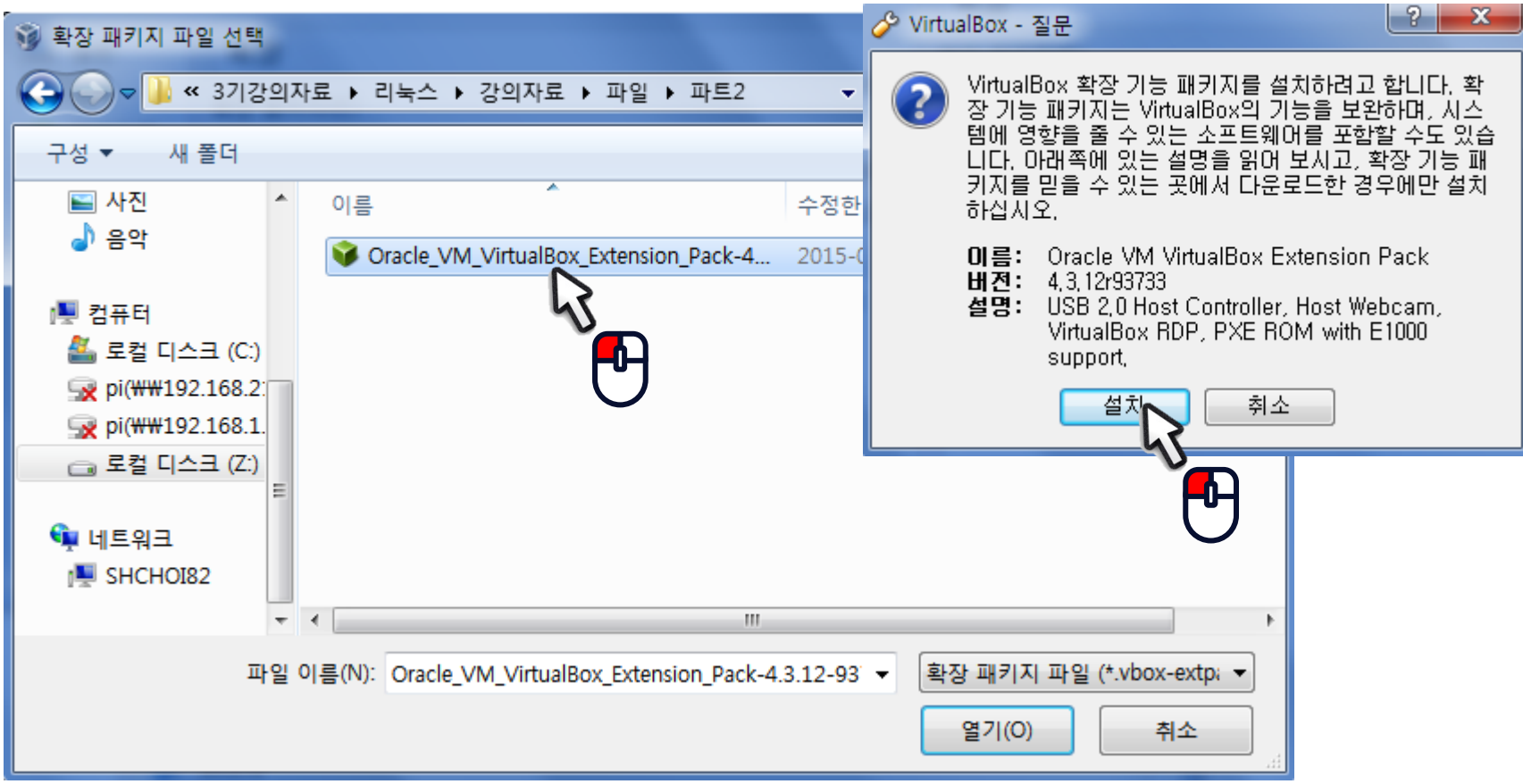

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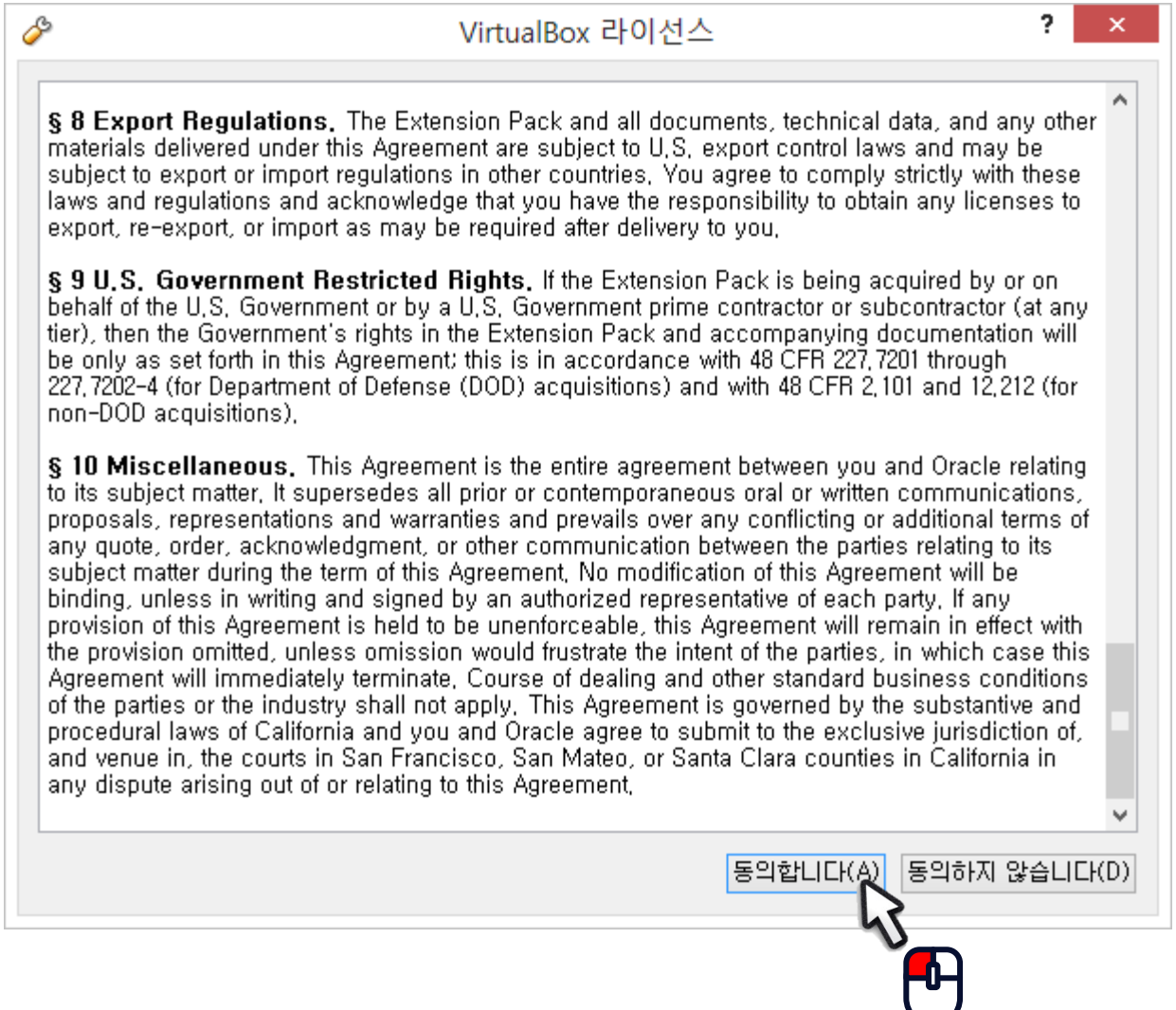
  - **라이선스 확인**



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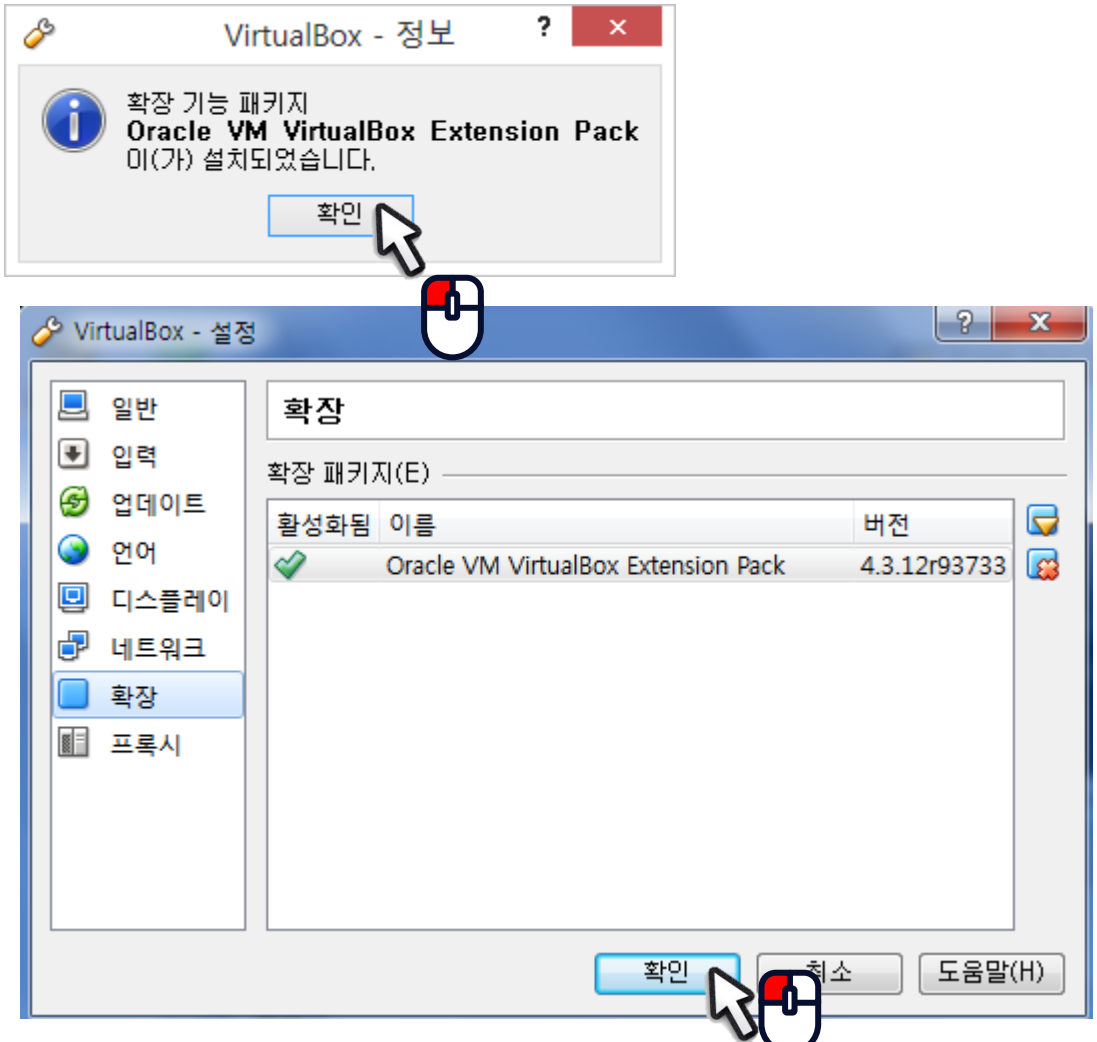
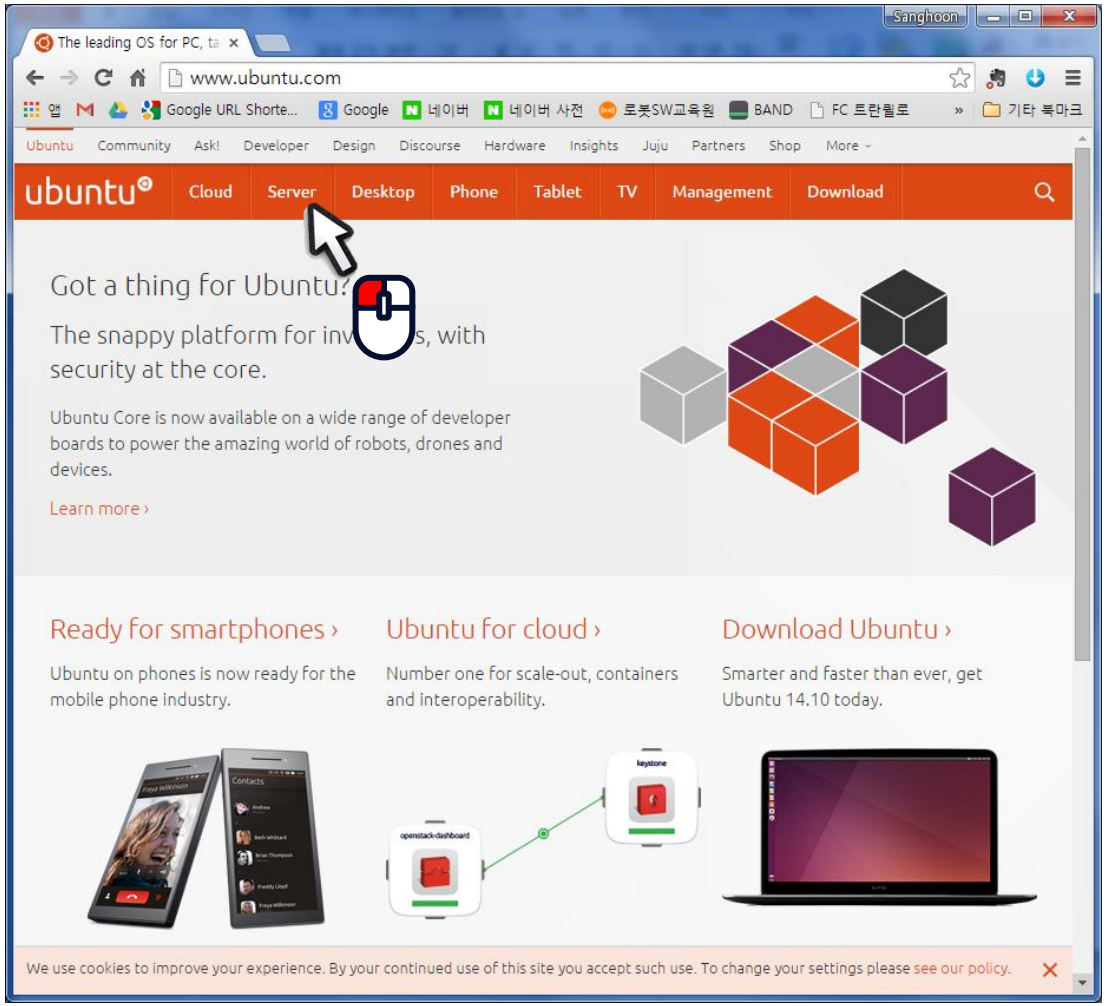
- VirtualBox **확장팩 설치**
  - **설치확인**



실습 2: 리눅스 설치

- ubuntu 14.04.3 **다운로드**
  - http://www.ubuntu.com



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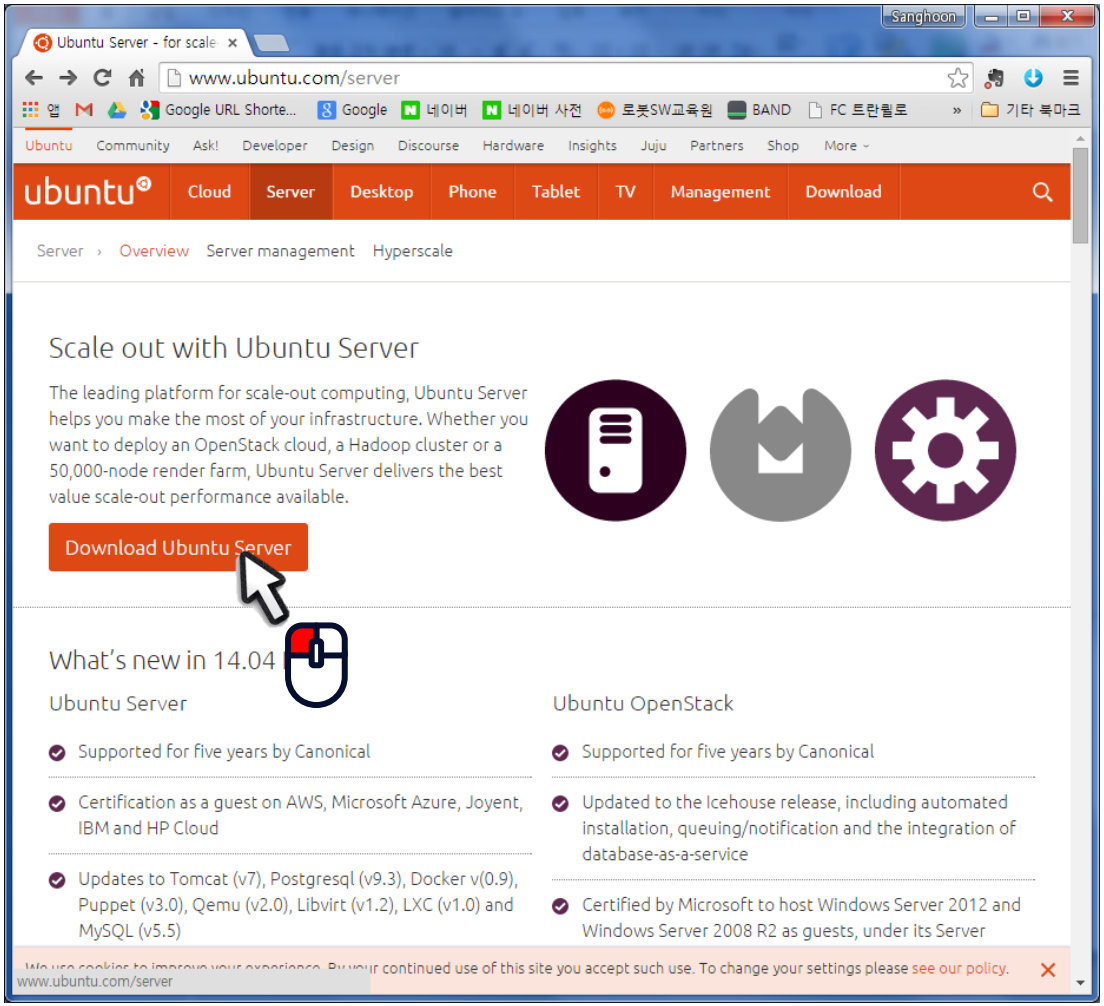

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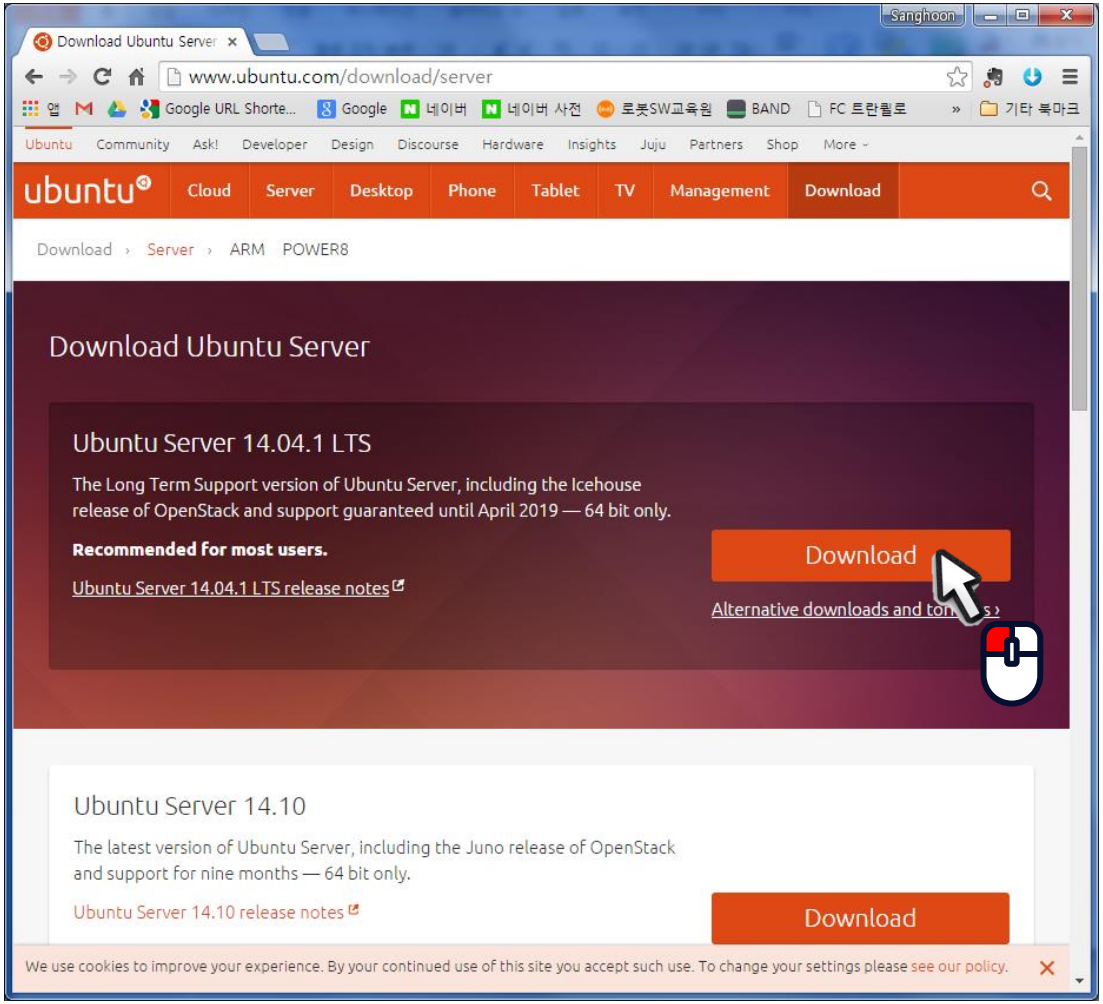
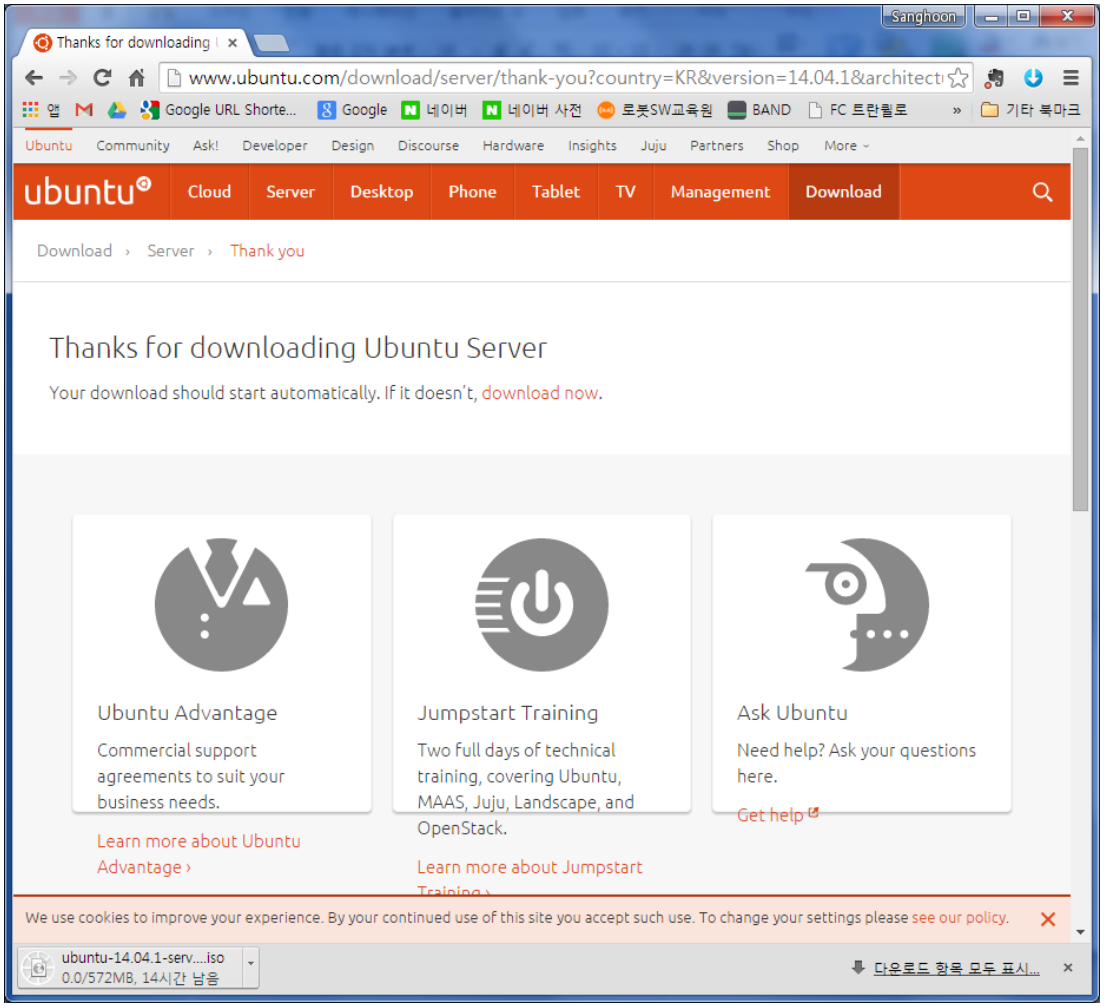


실습 2: 리눅스 설치

- ubuntu 14.04.1 **다운로드**
  - **파일명** : ubuntu-14.04.1-server-amd64.iso



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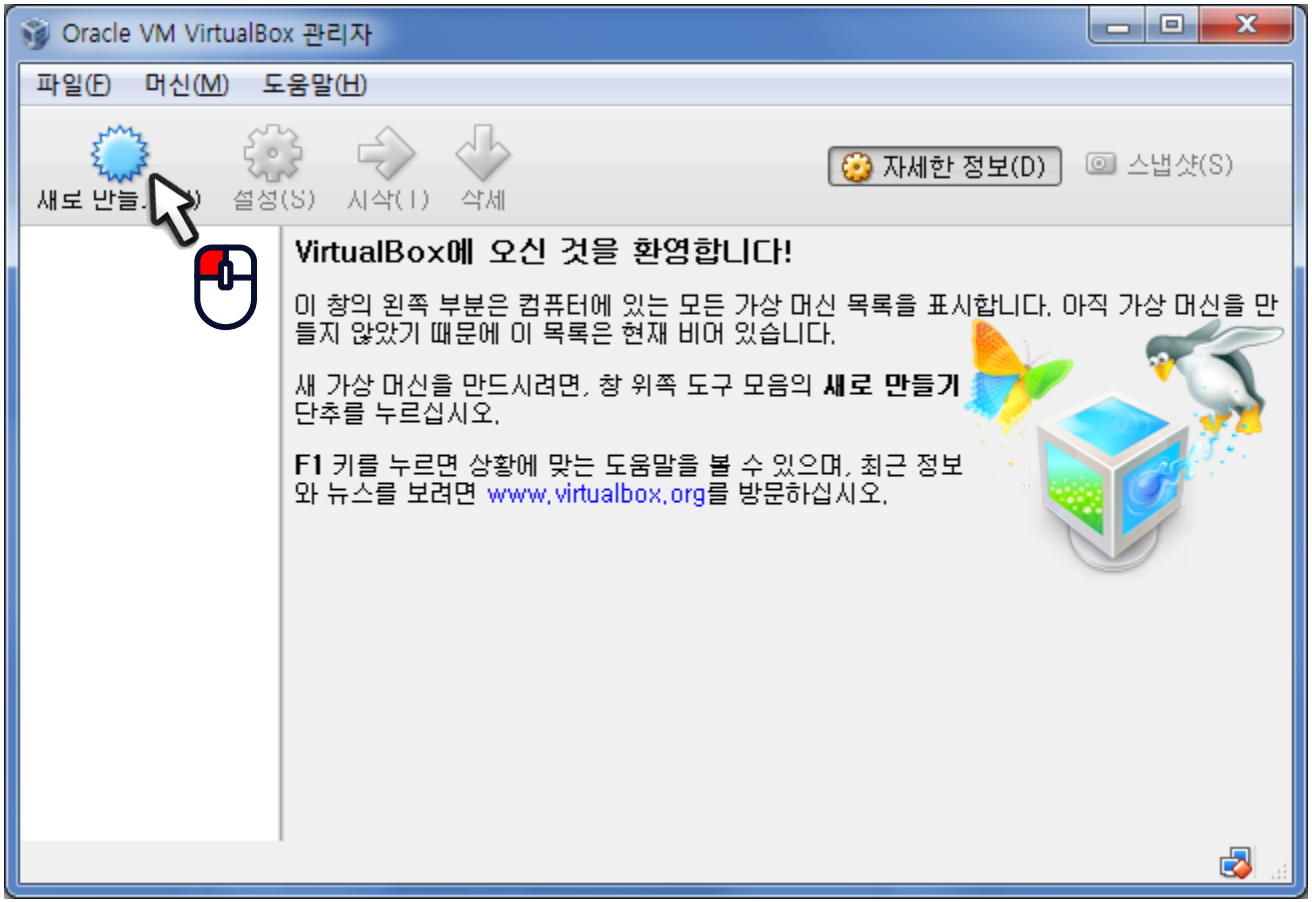

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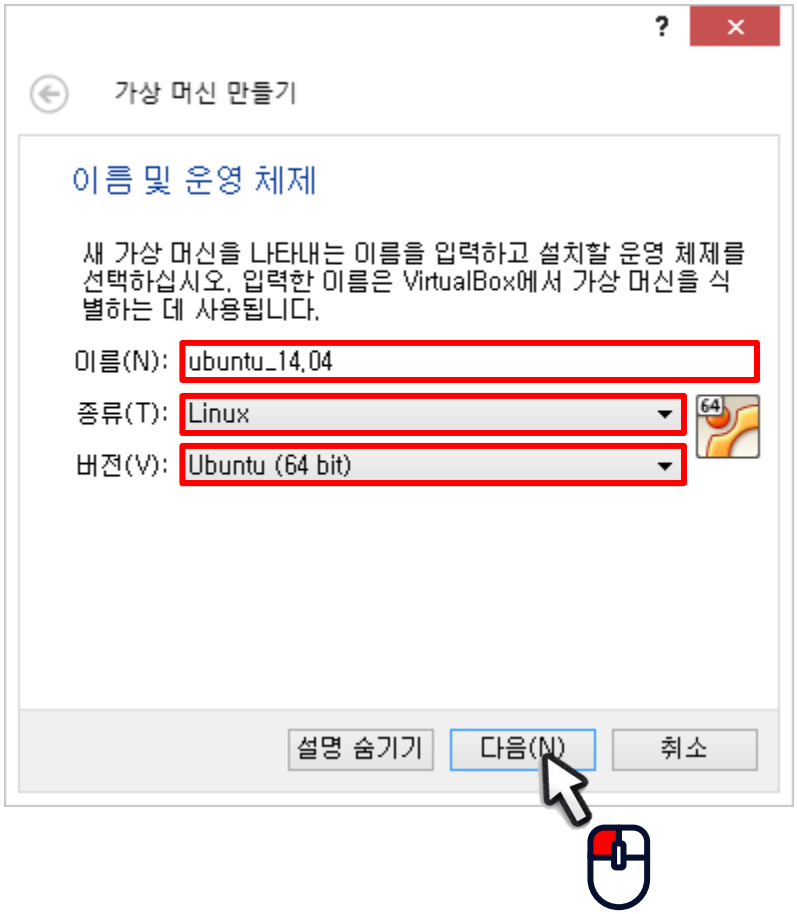

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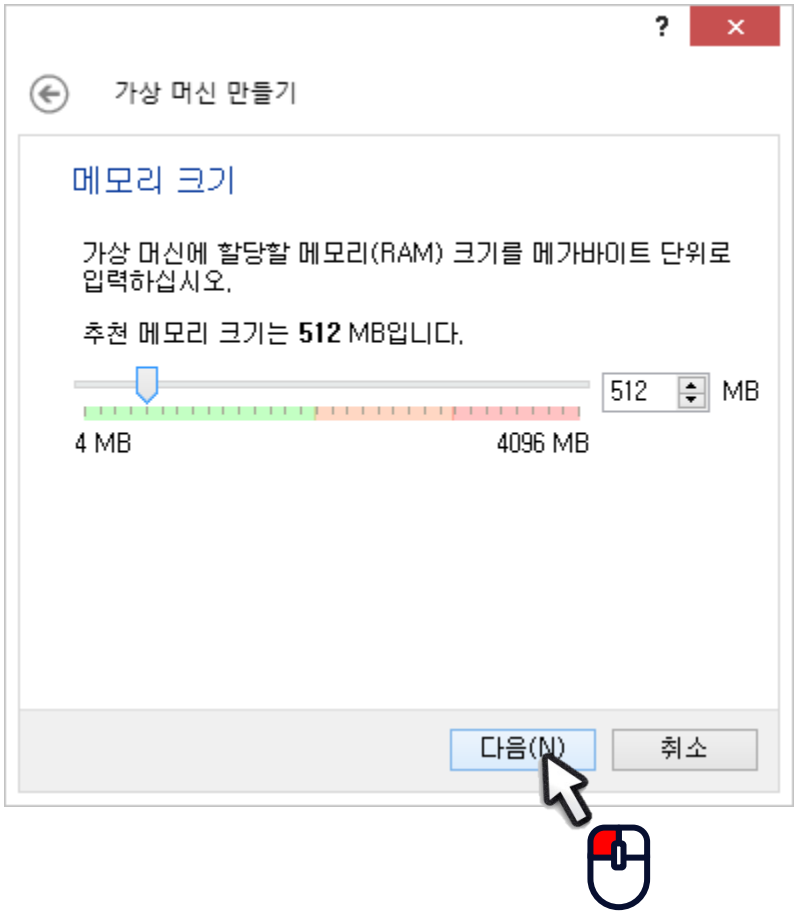

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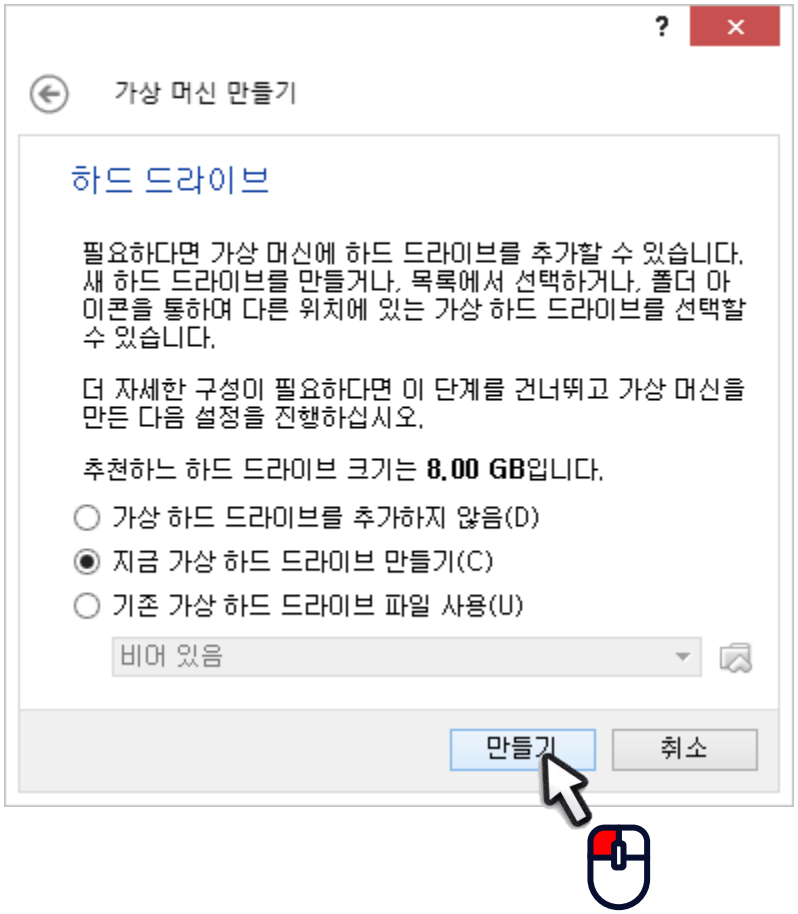

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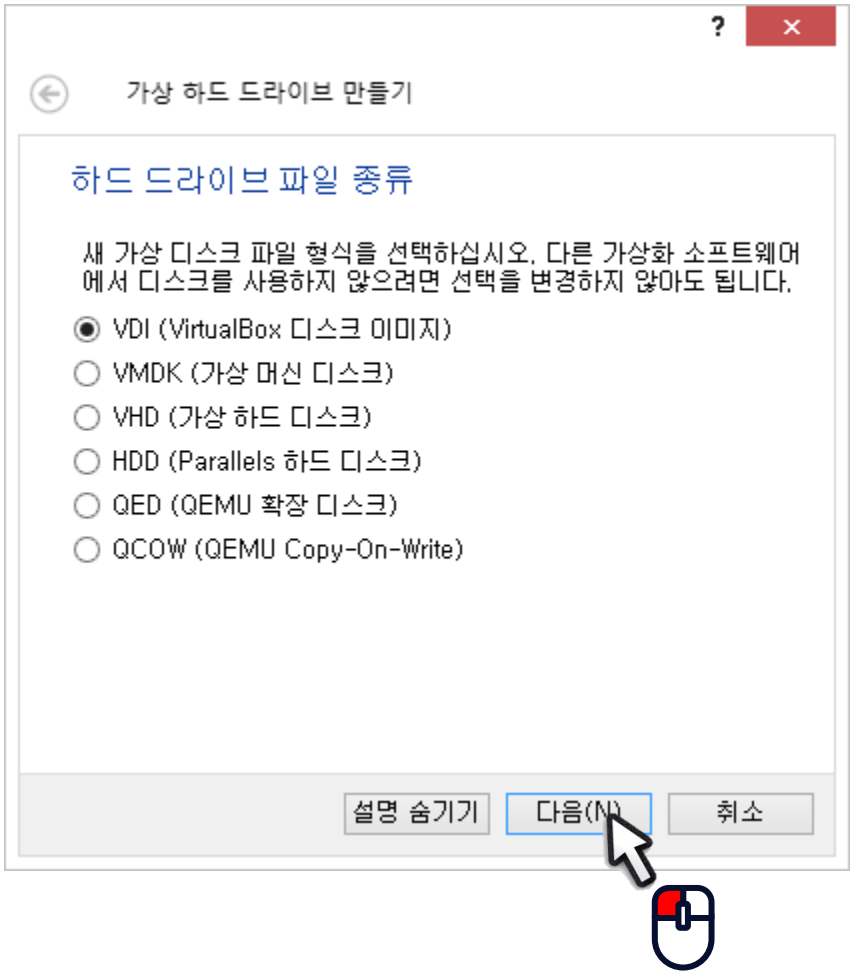

실습 2: 리눅스 설치

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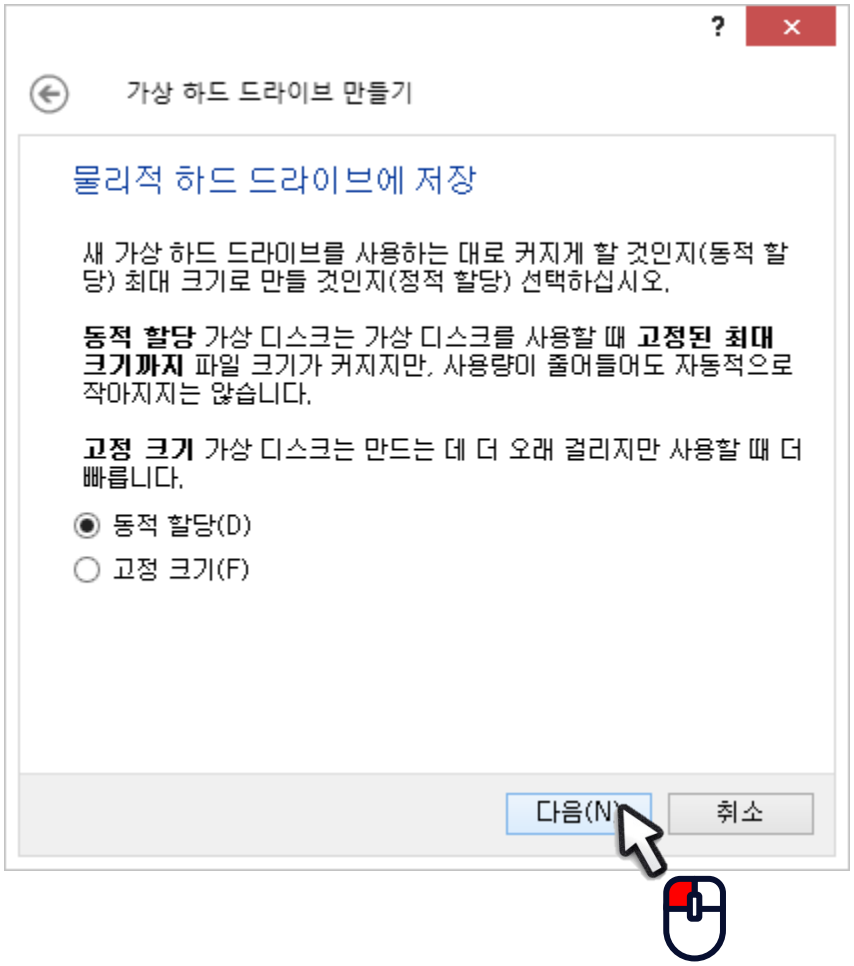

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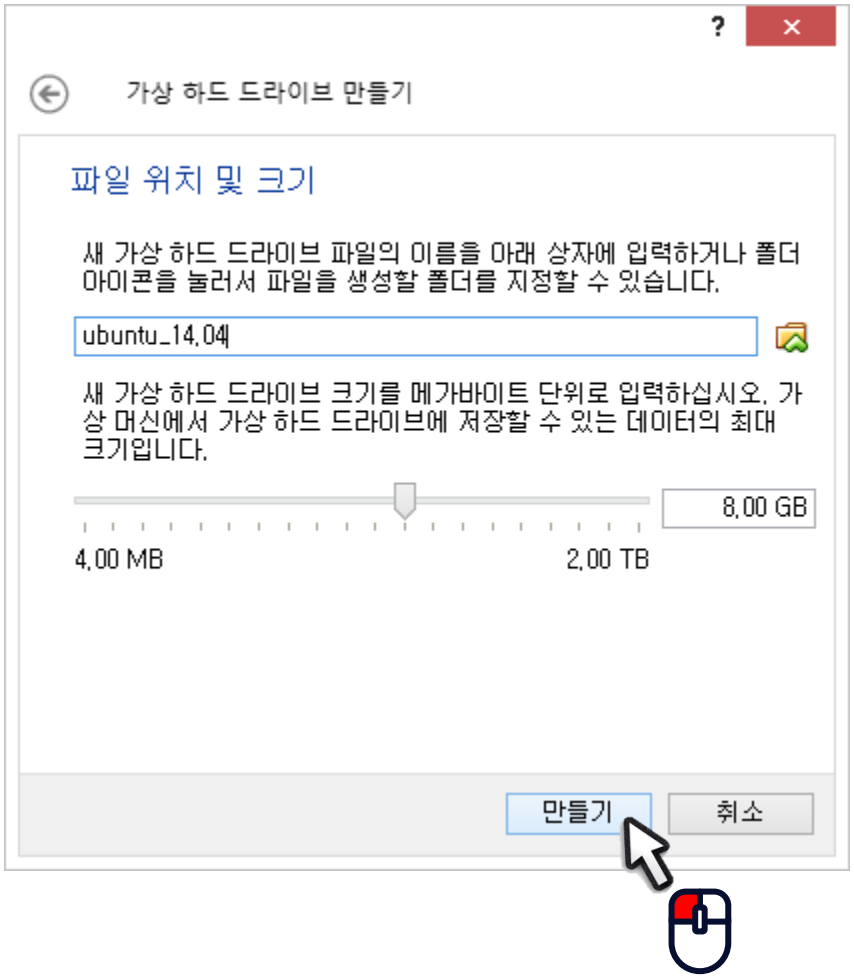

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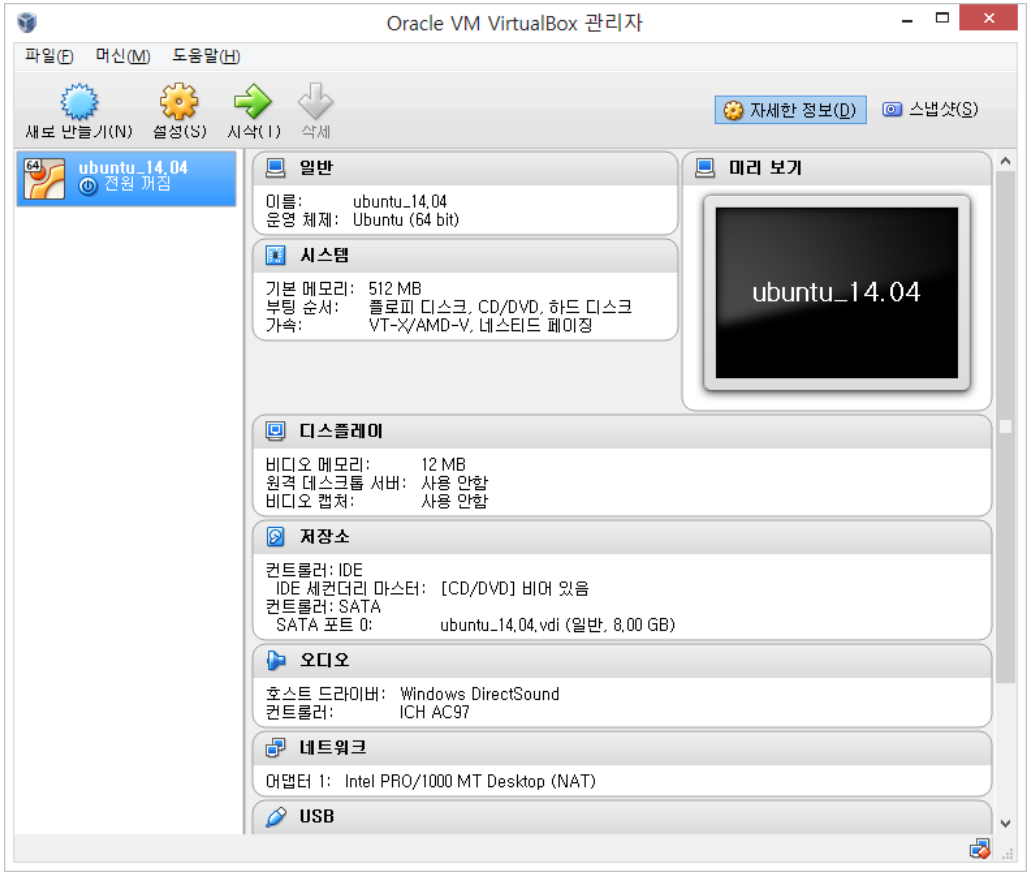

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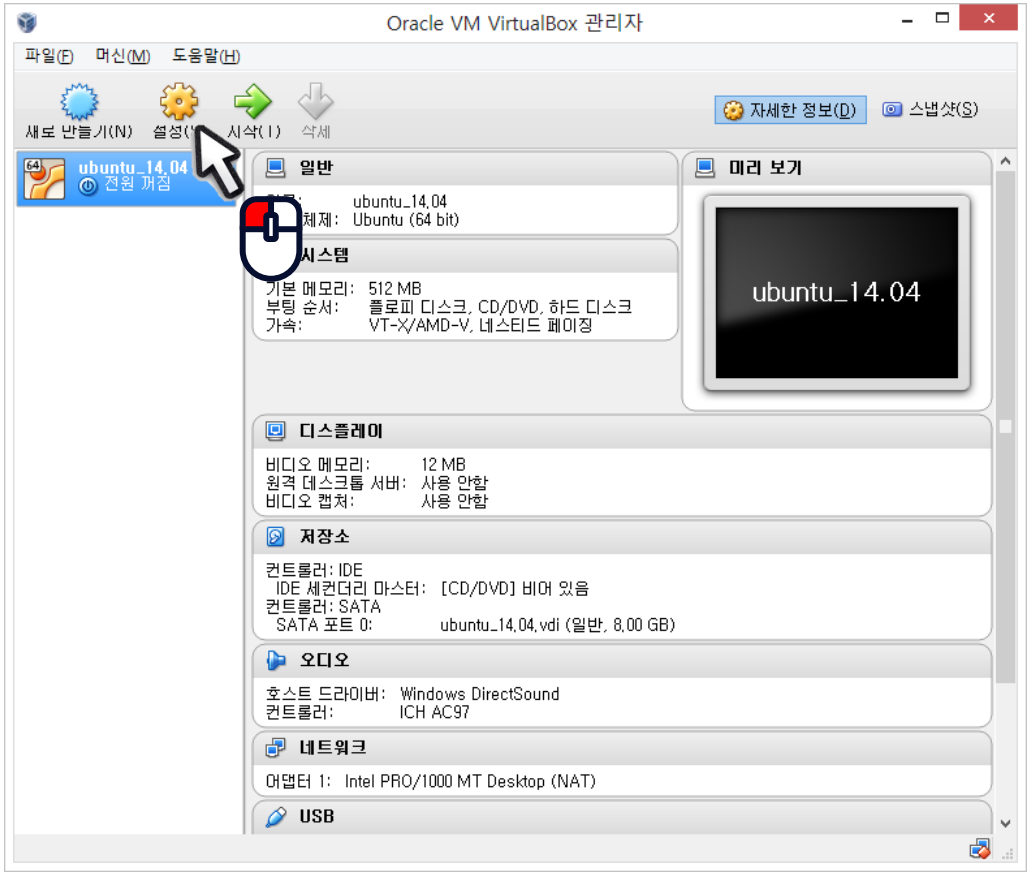
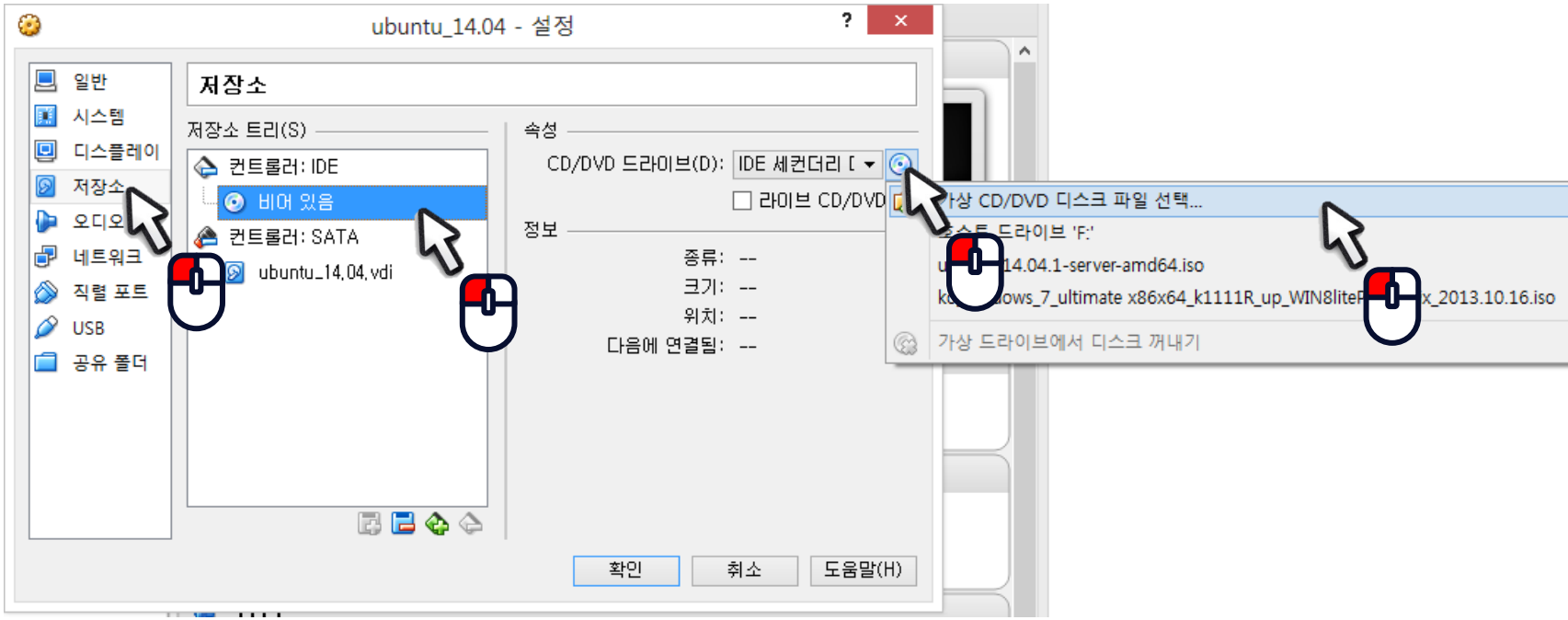


실습 2: 리눅스 설치

- ubuntu **이미지 삽입**



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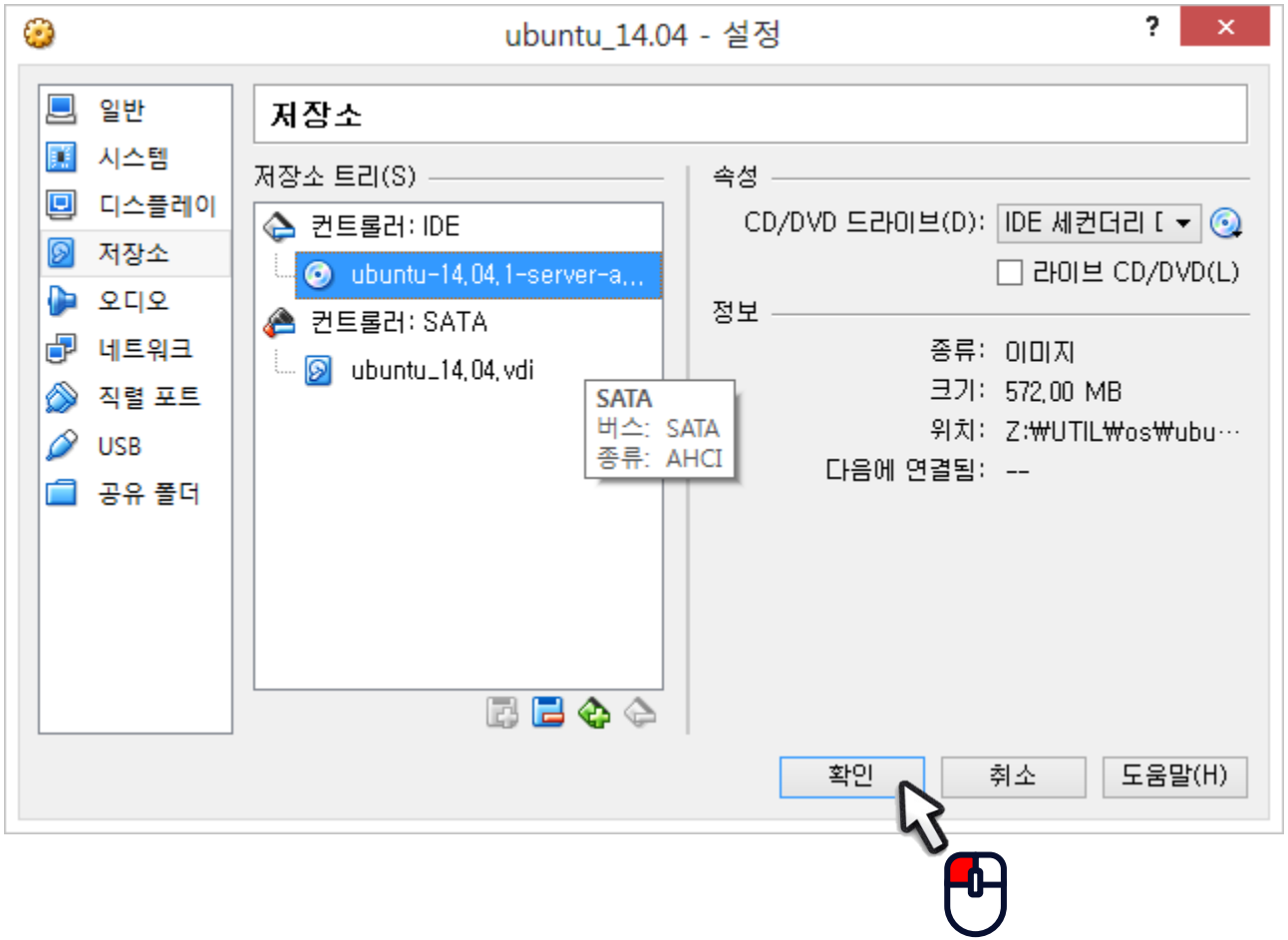
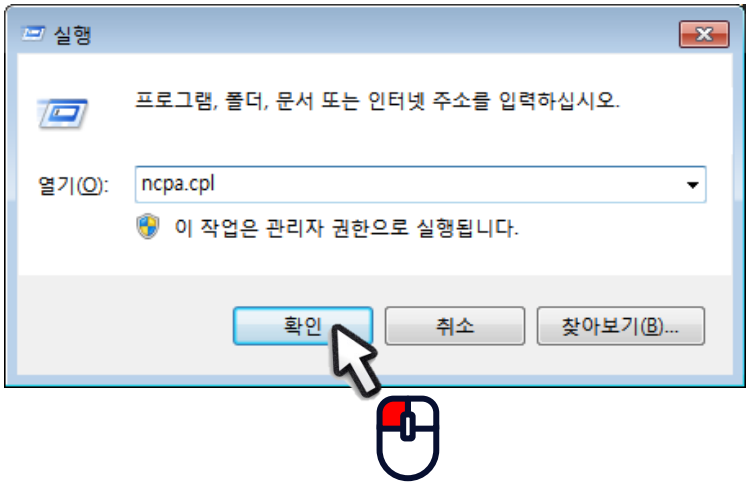
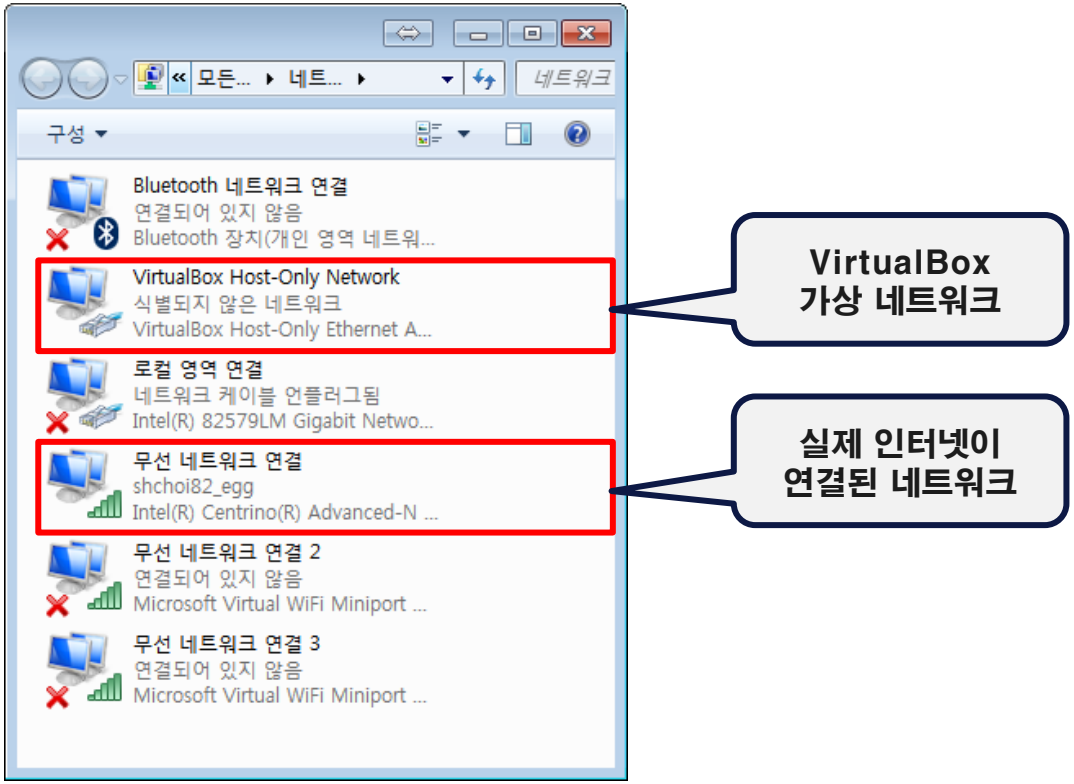


실습 2: 리눅스 설치

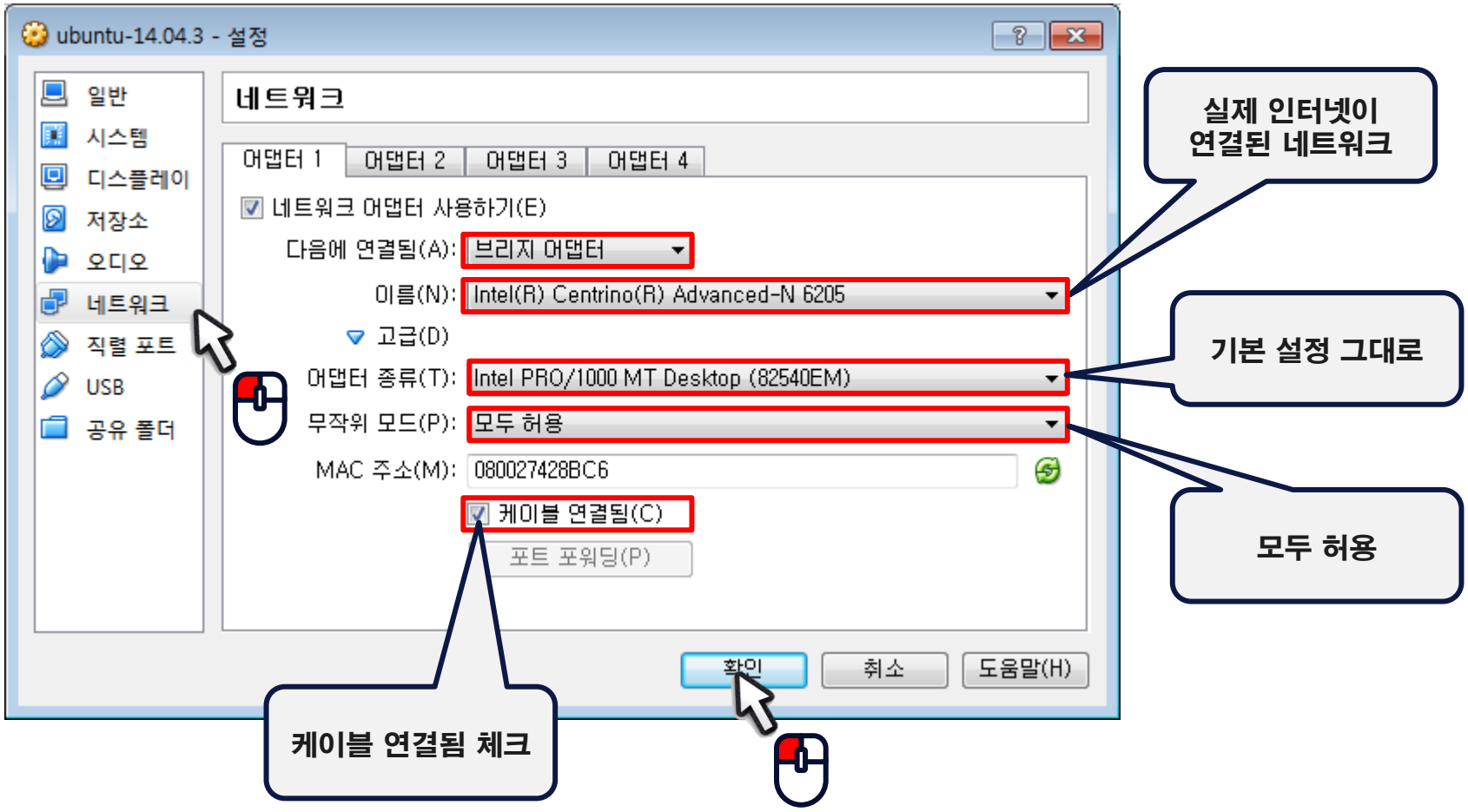
- **네트워크 확인**
  - **실행** -> ncpa.cpl





실습 2: 리눅스 설치

- 네트워크 설정



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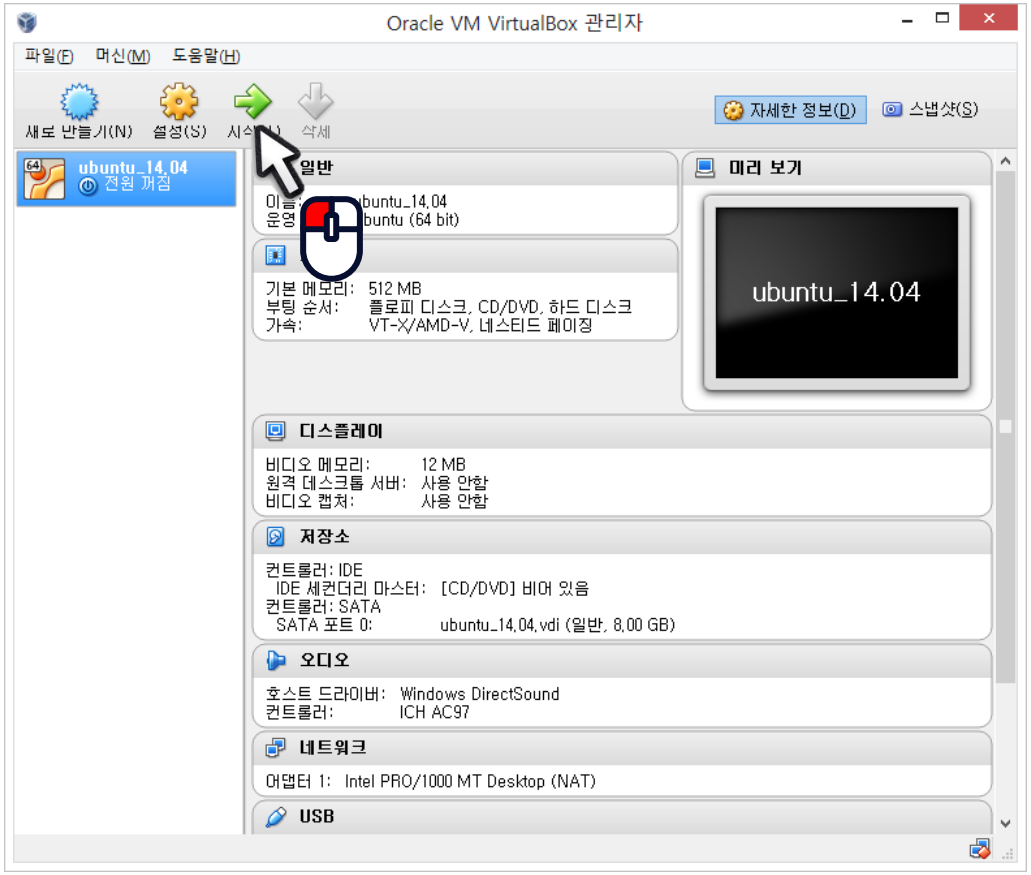

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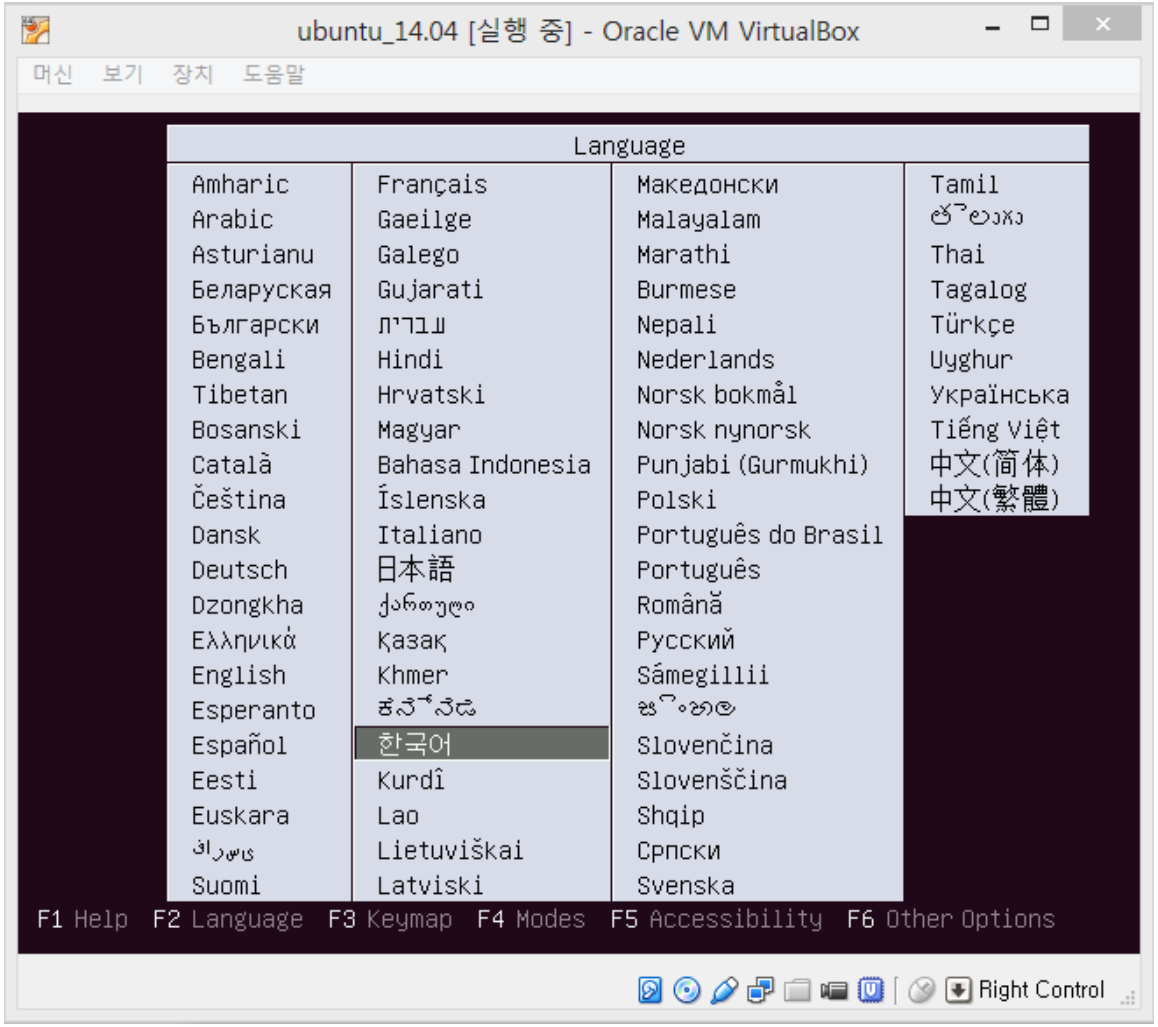
- 가상머신 시작



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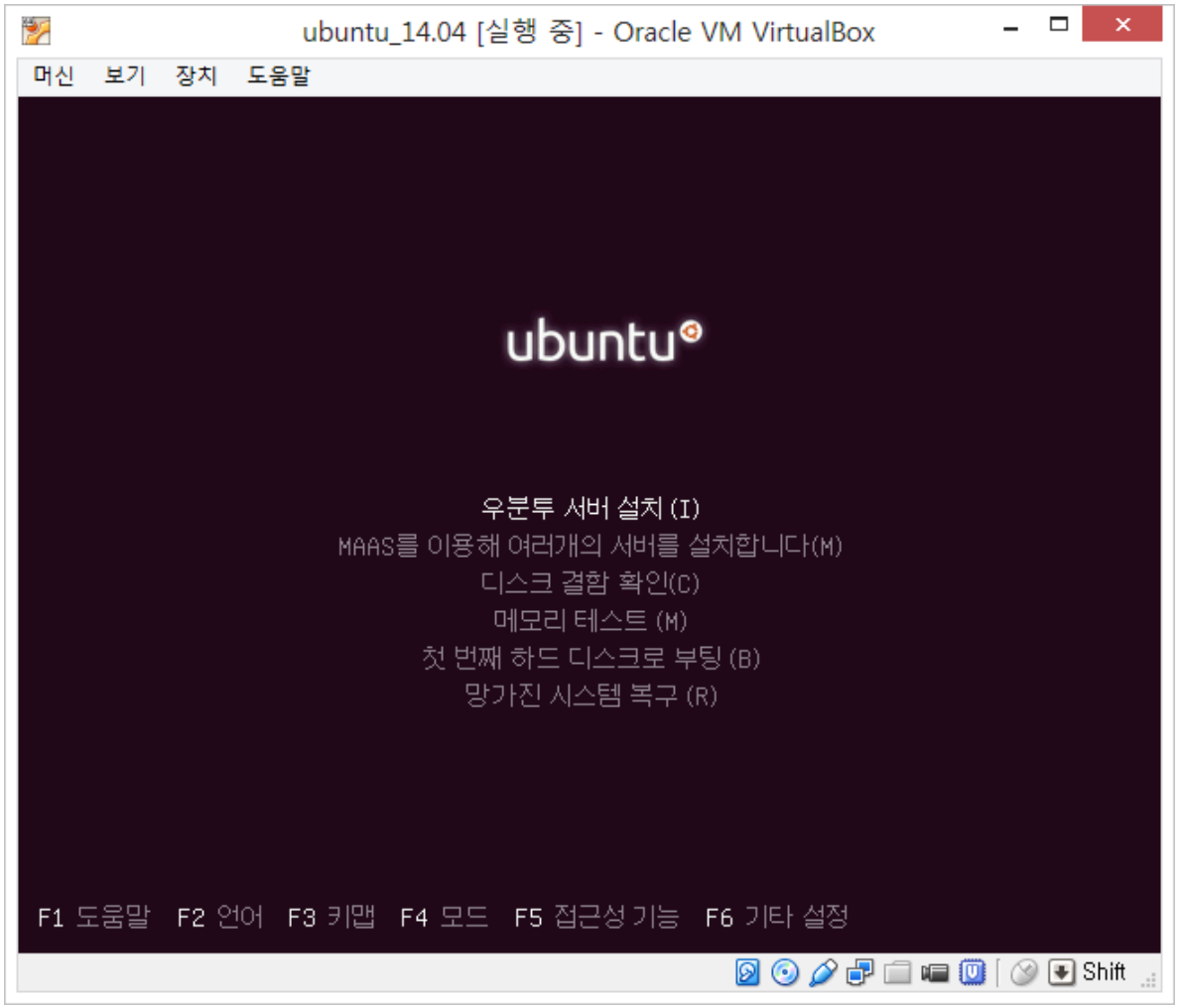

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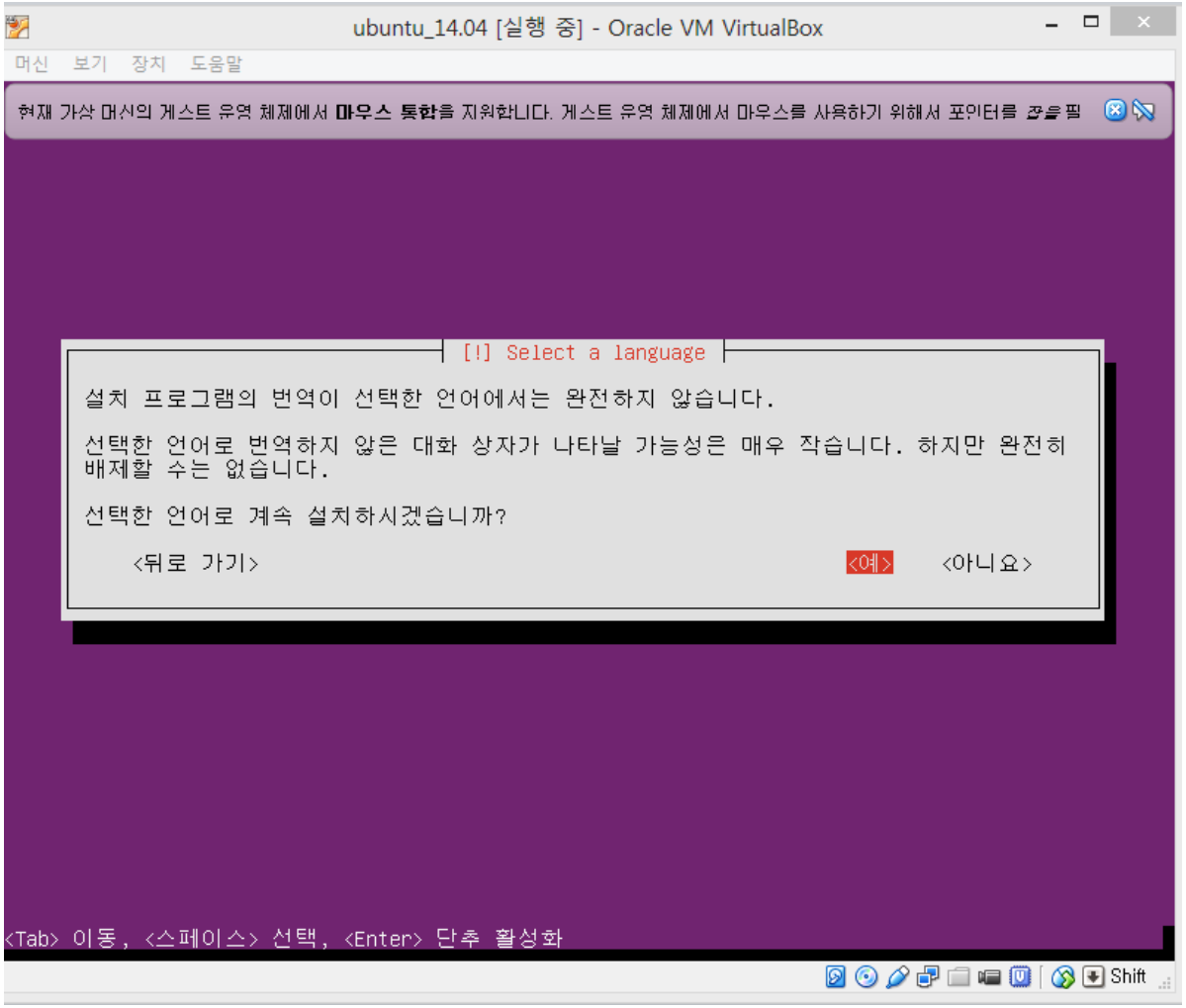

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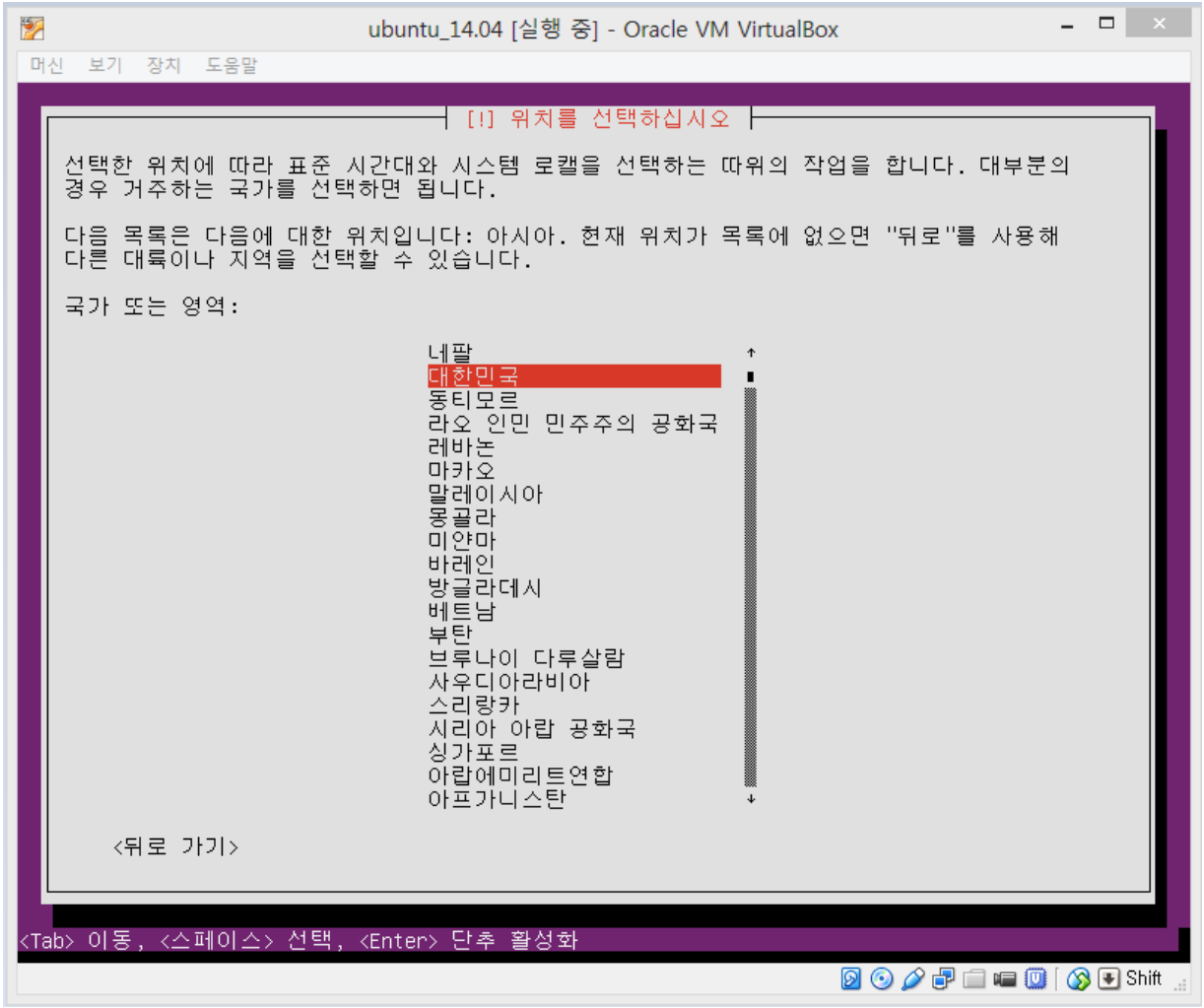

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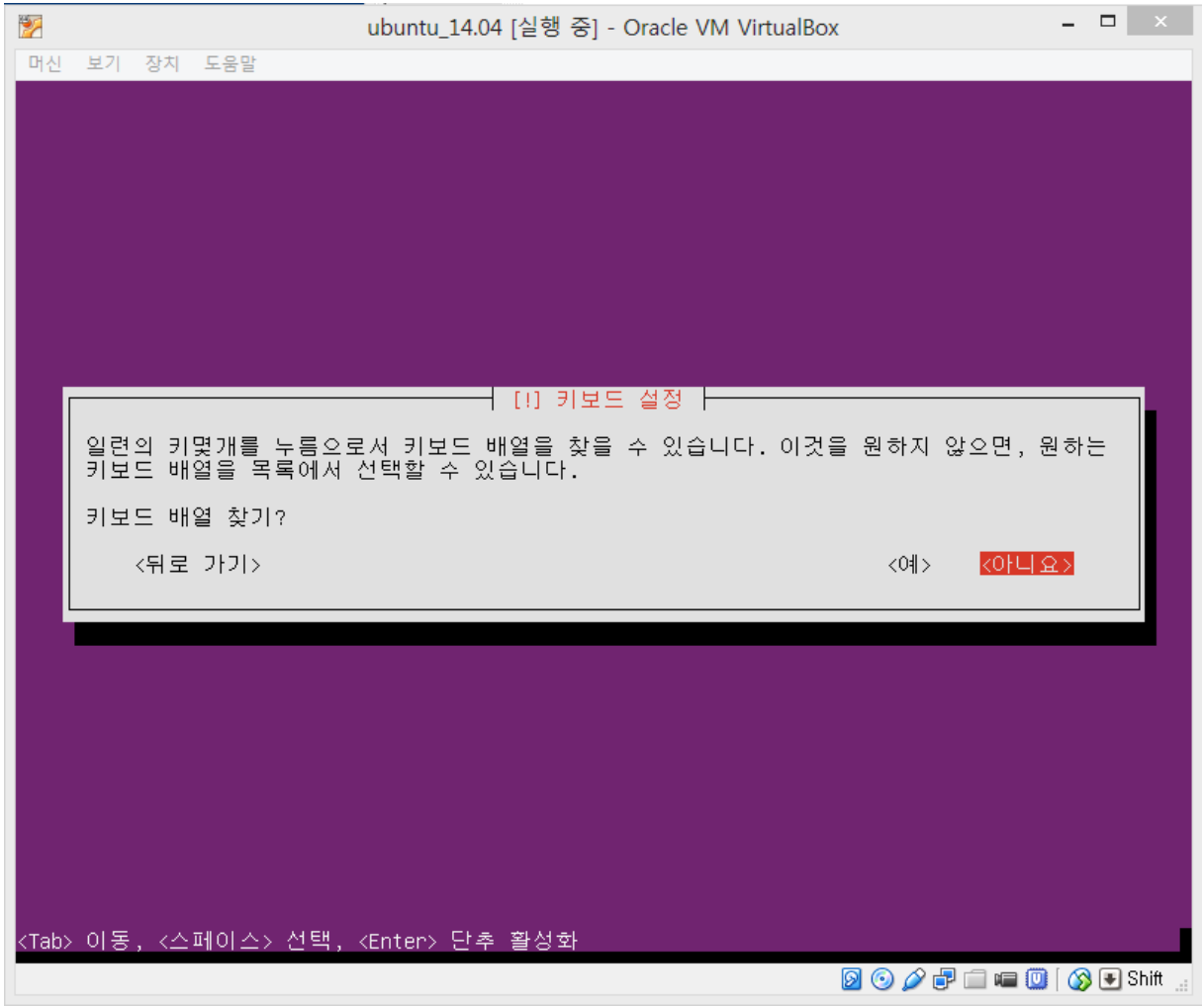

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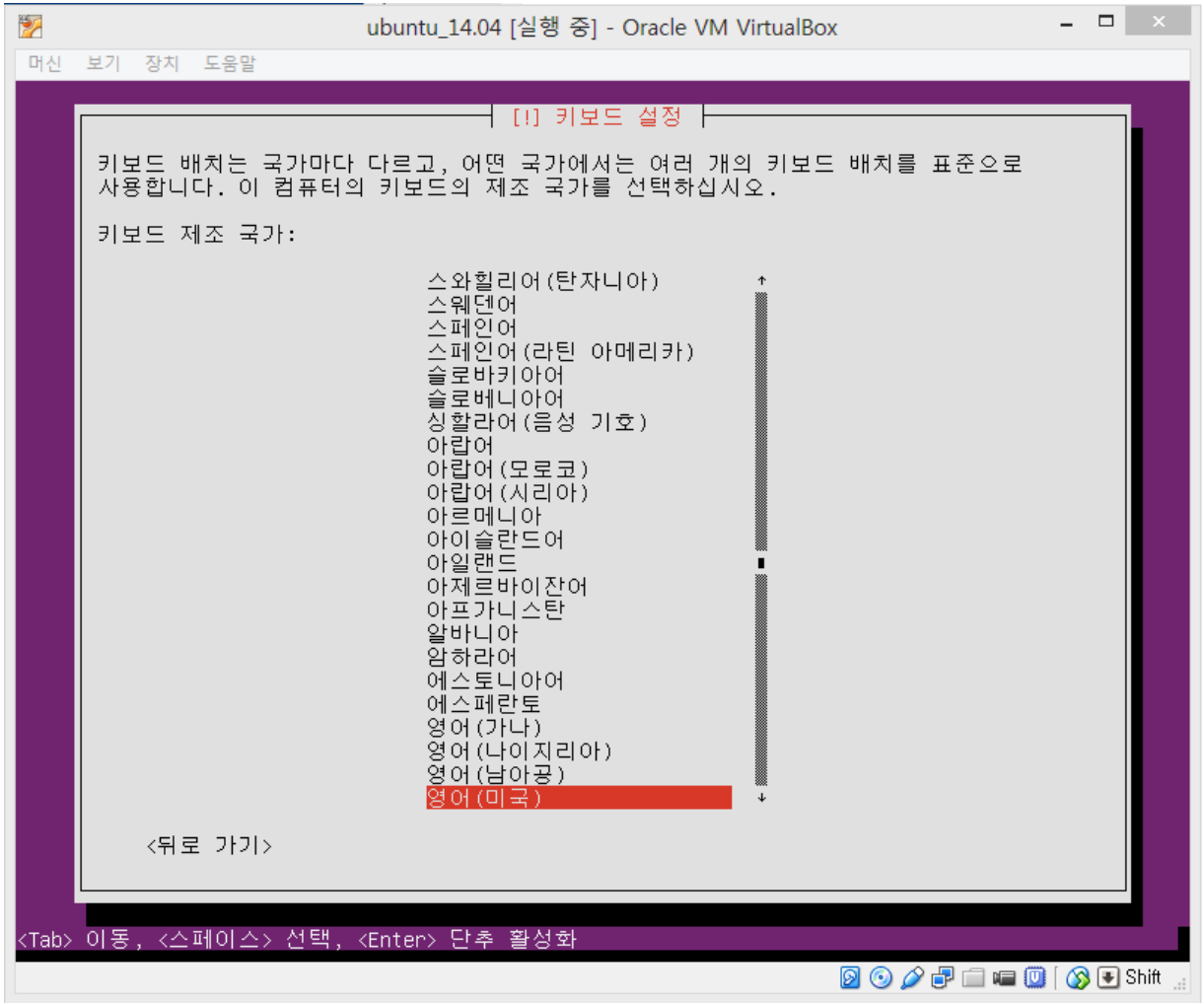
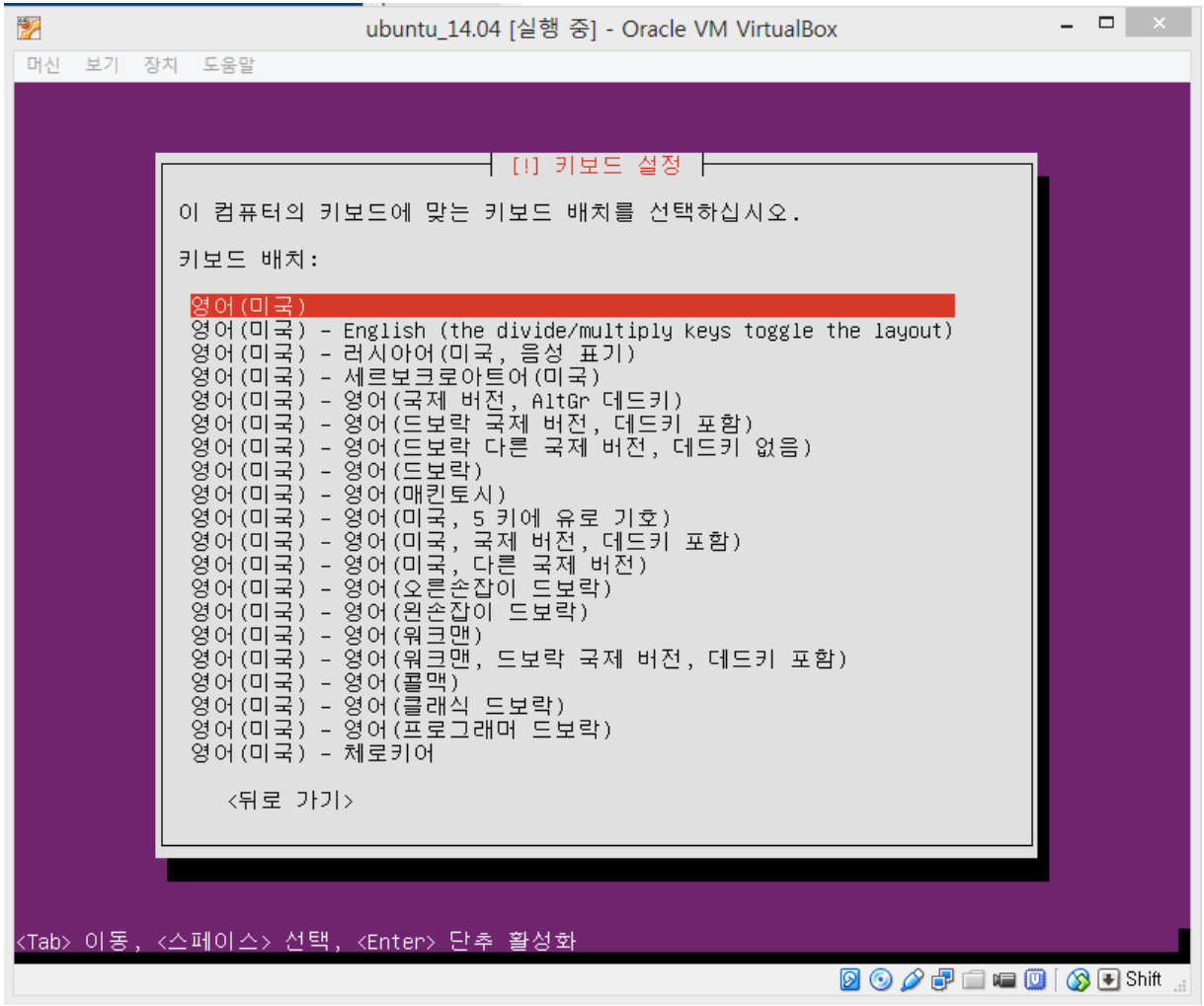


실습 2: 리눅스 설치

- 리눅스 설치



실습 2: 리눅스 설치

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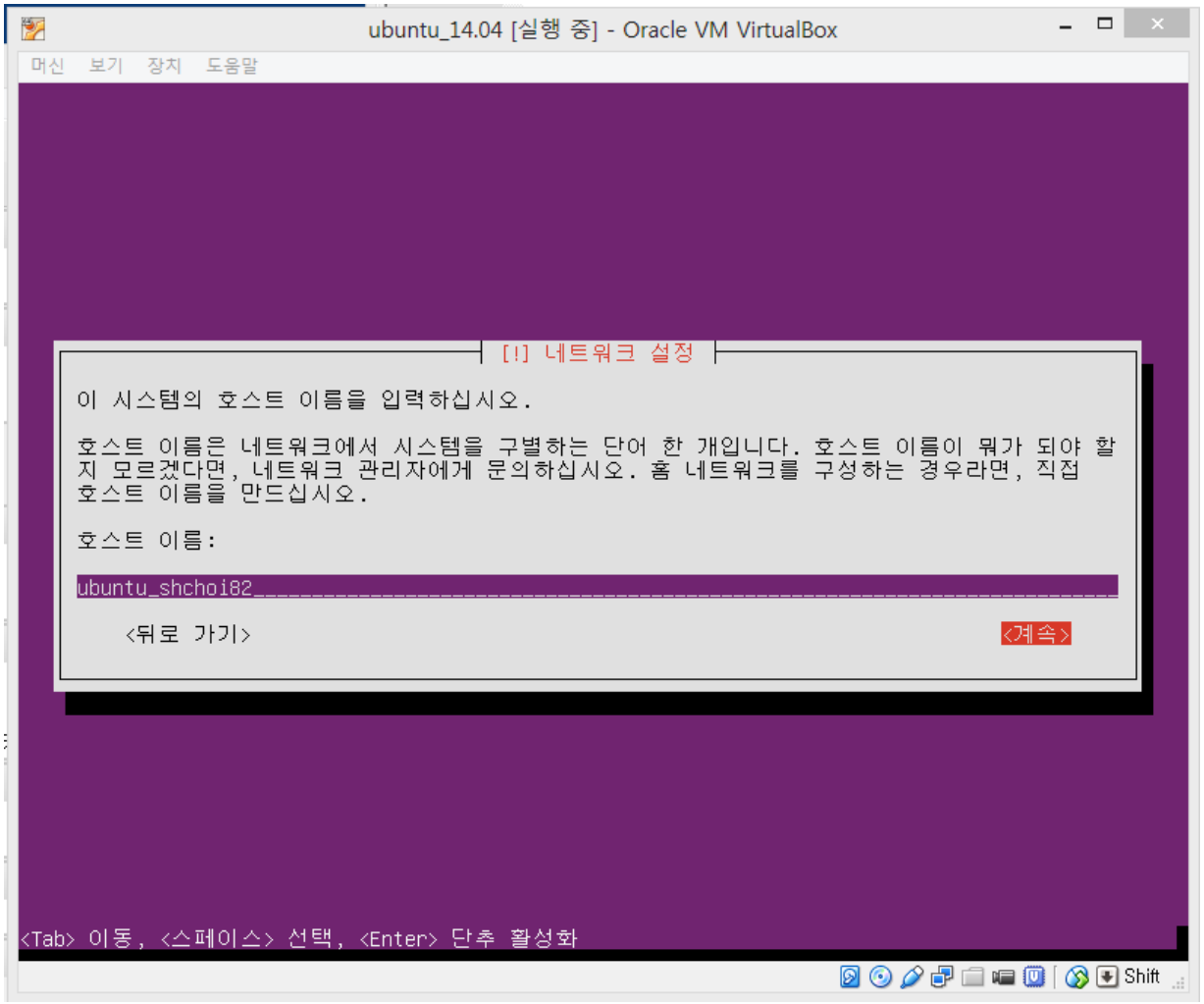

실습 2: 리눅스 설치

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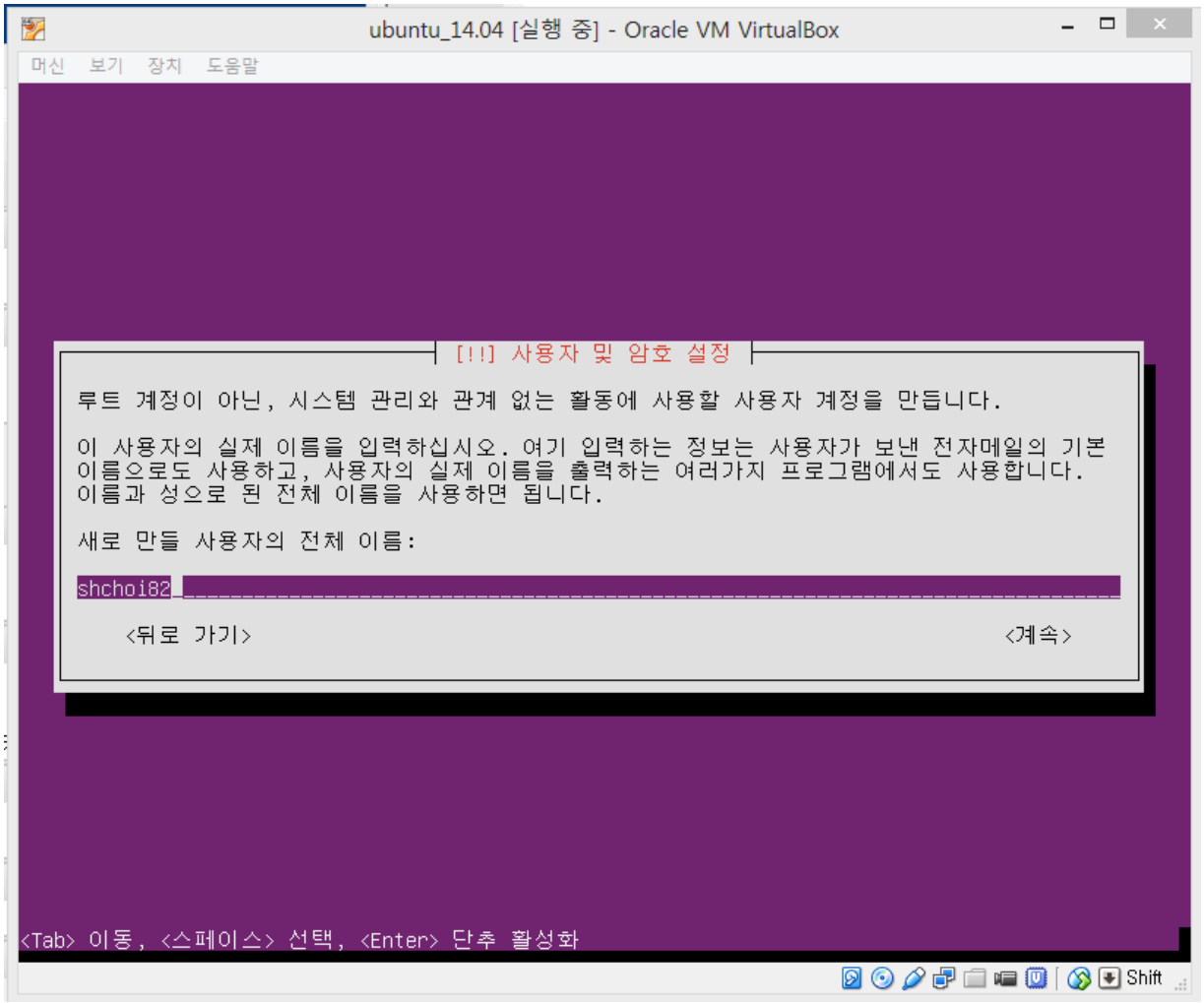

실습 2: 리눅스 설치

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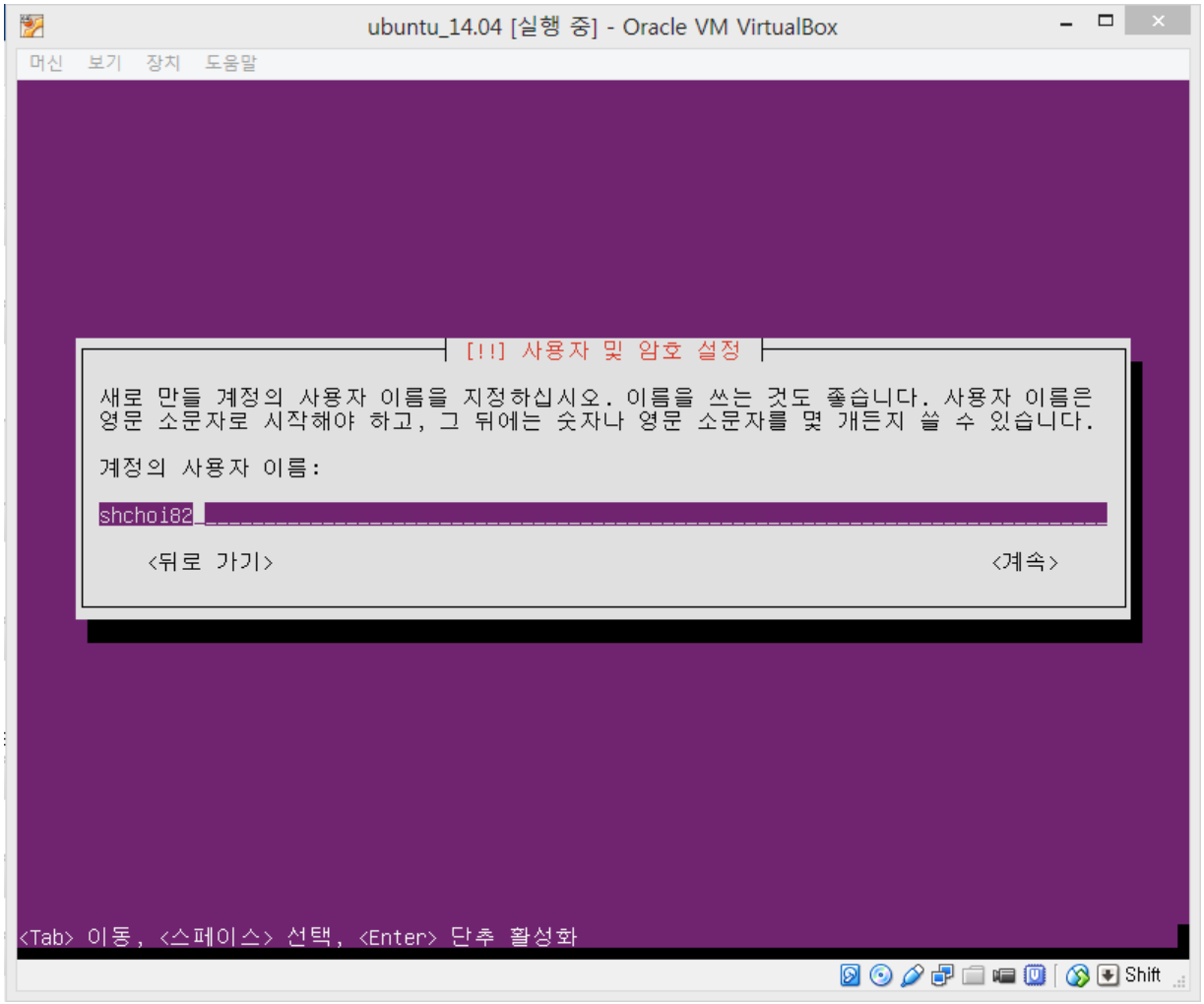

실습 2: 리눅스 설치

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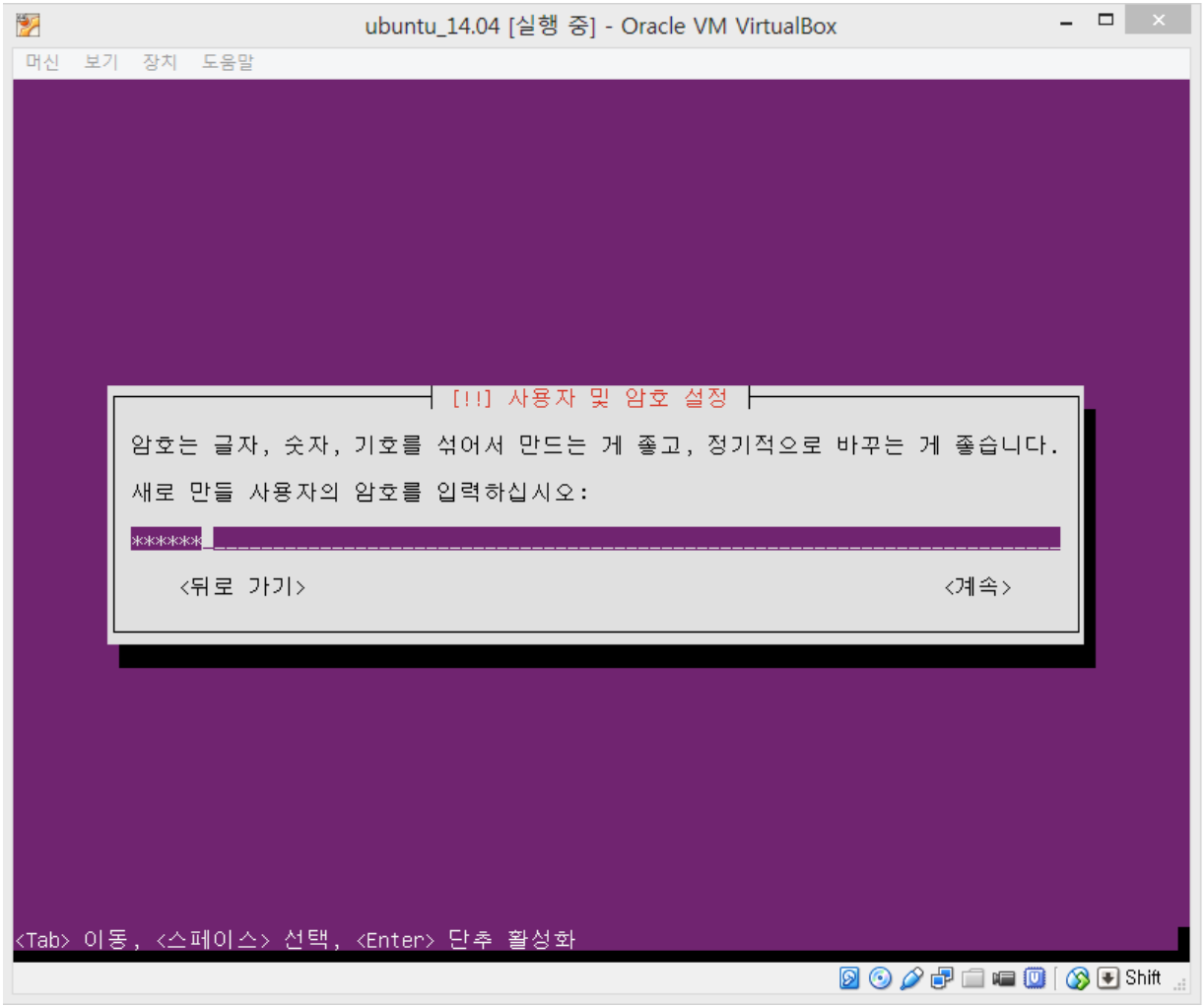

실습 2: 리눅스 설치

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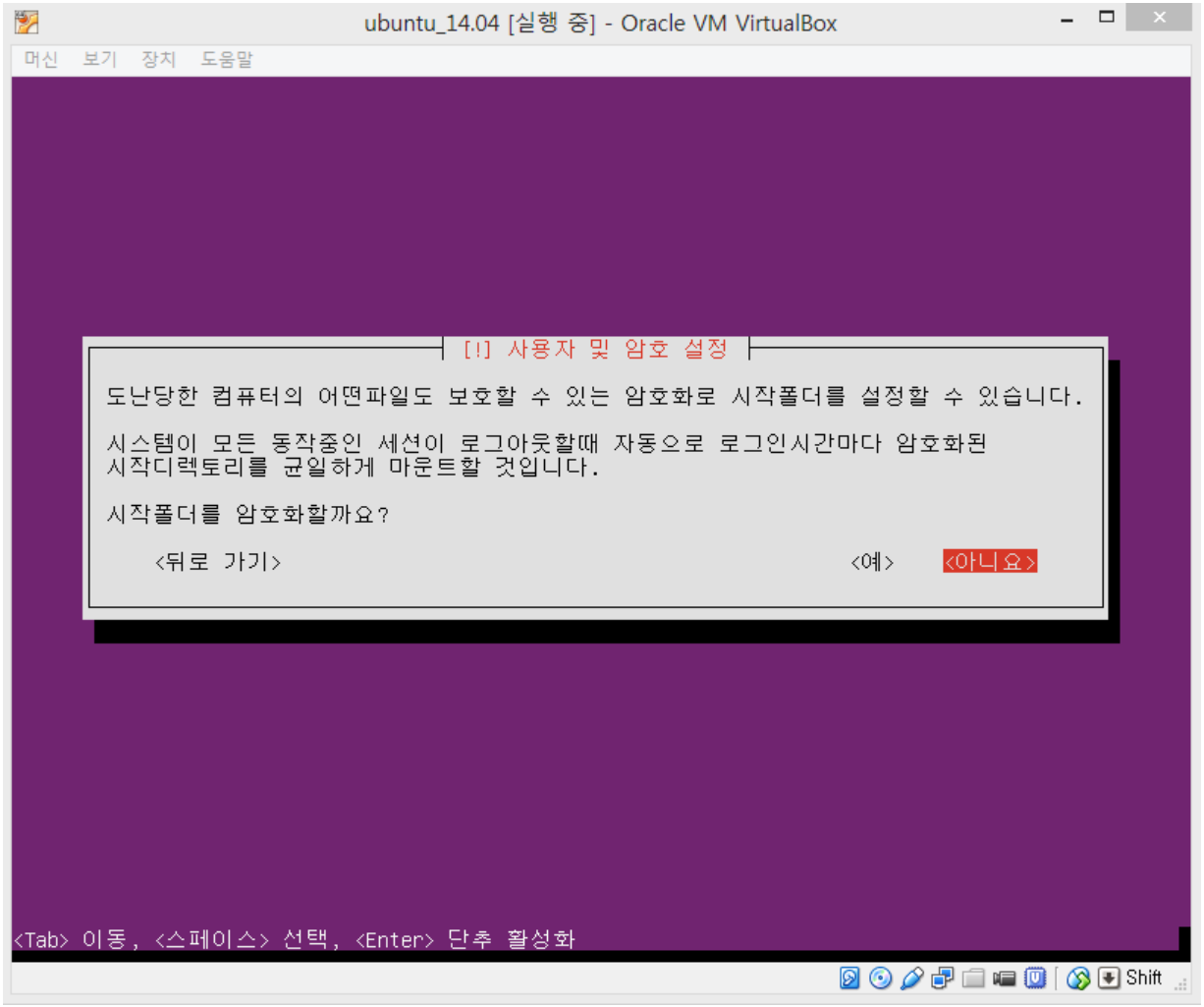

실습 2: 리눅스 설치

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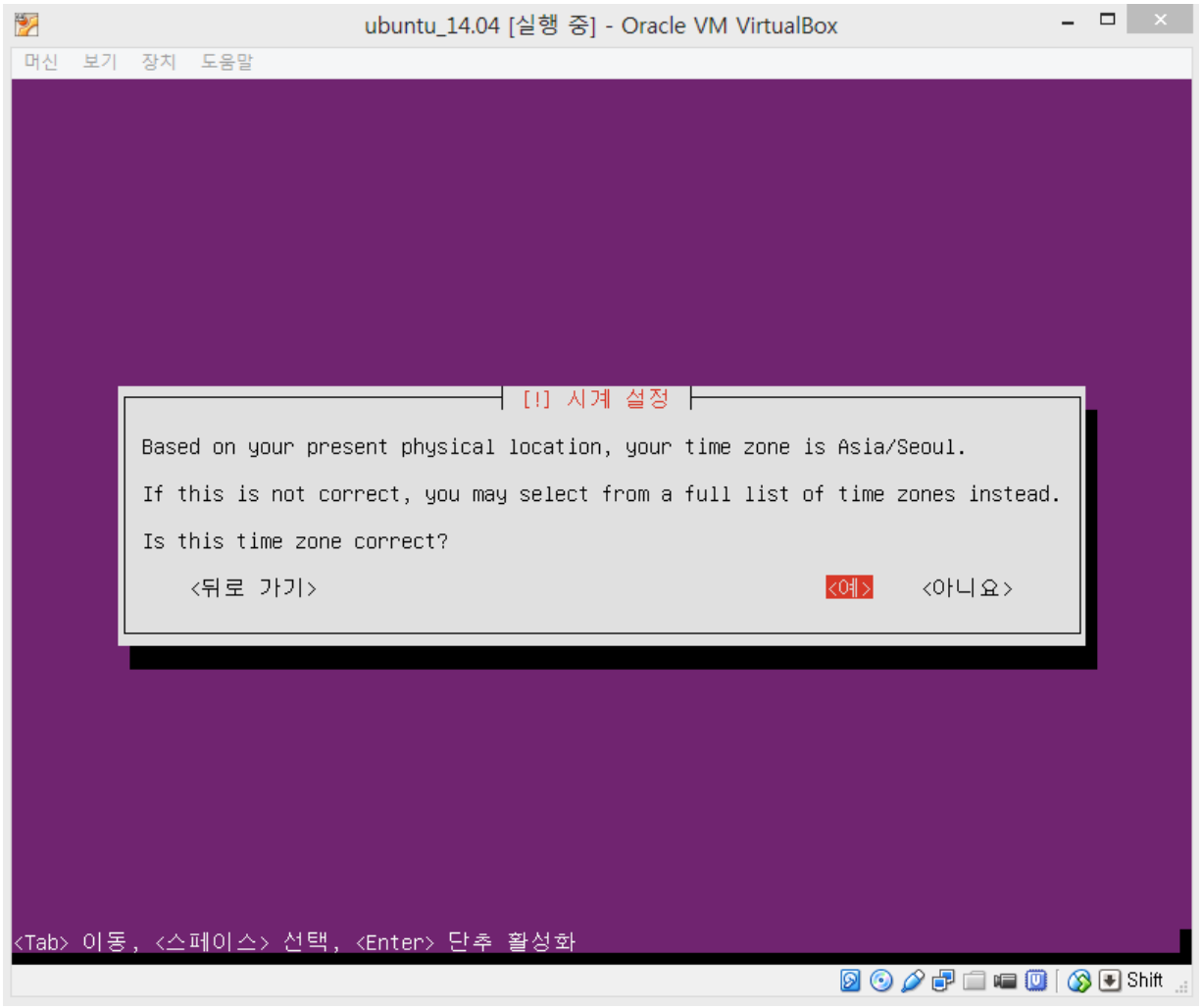

실습 2: 리눅스 설치

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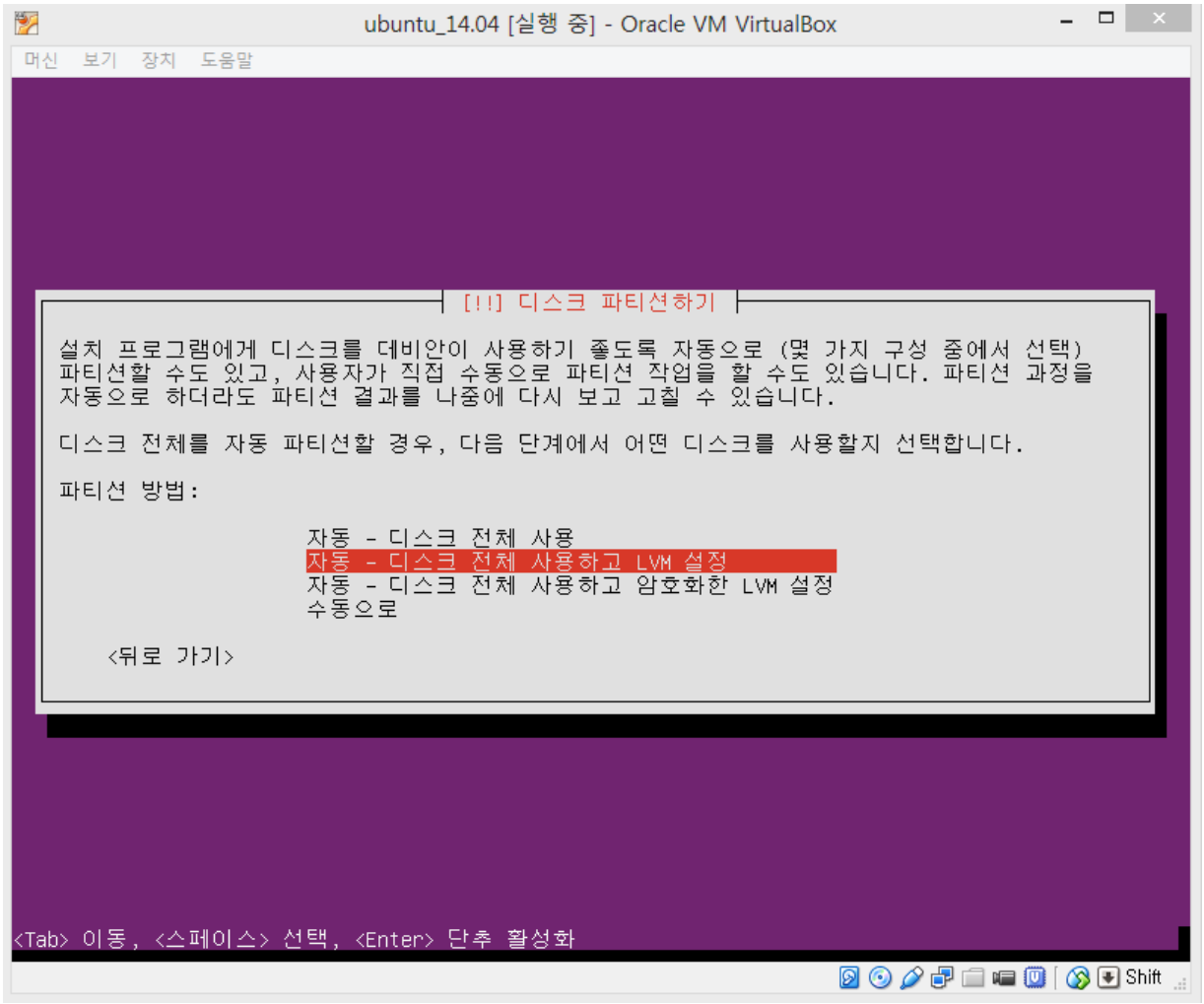
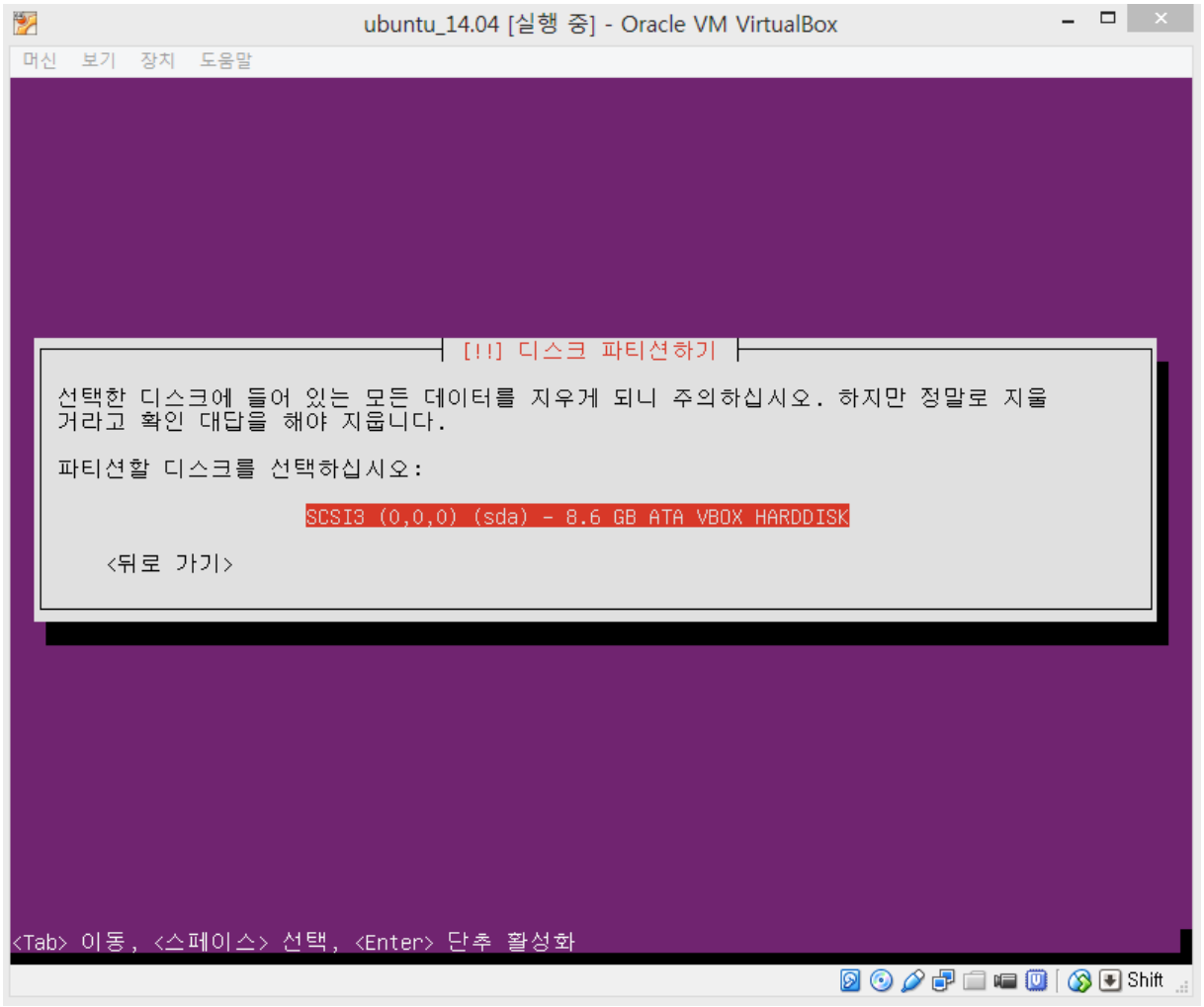


실습 2: 리눅스 설치

- 리눅스 설치



실습 2: 리눅스 설치

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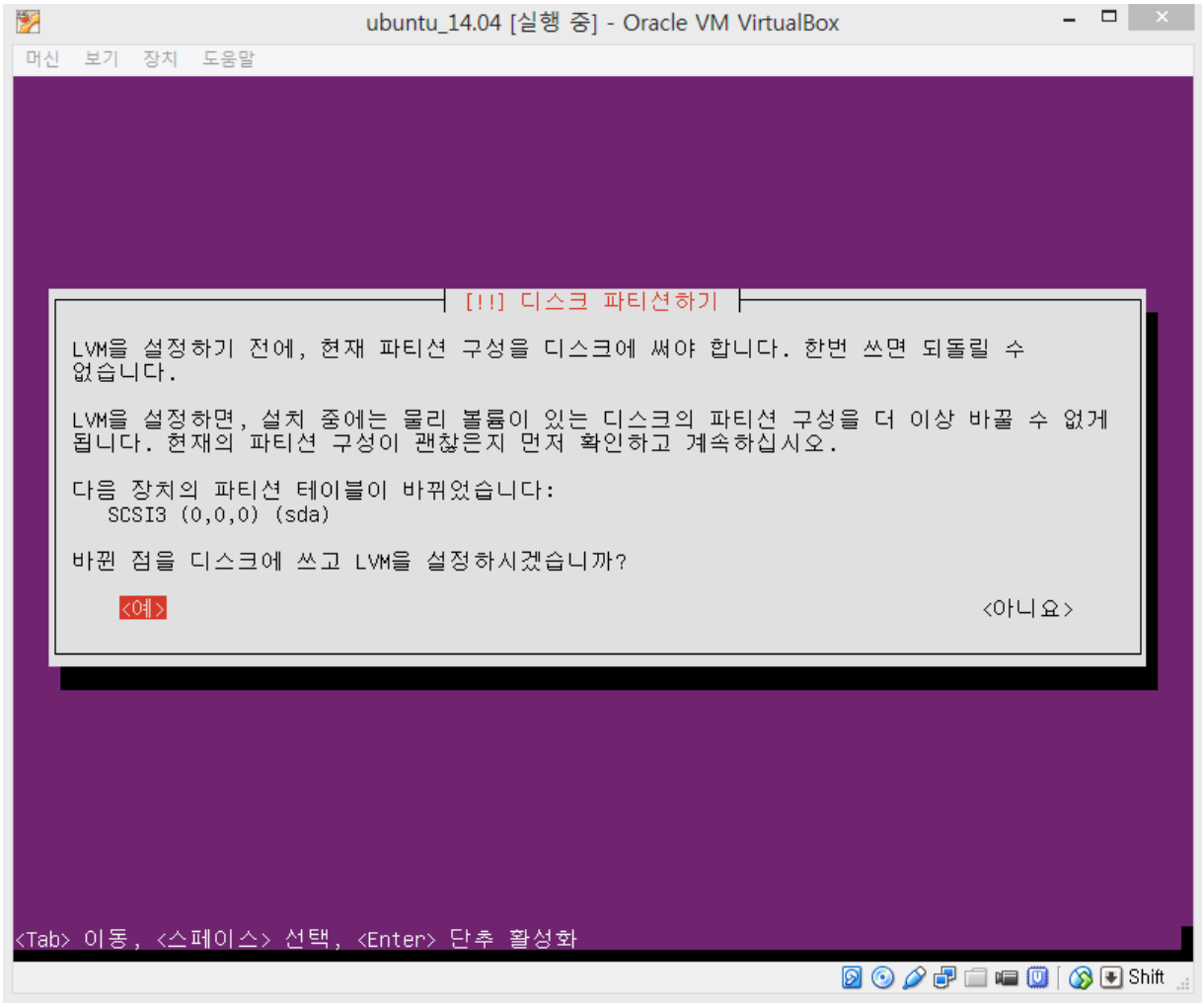

실습 2: 리눅스 설치

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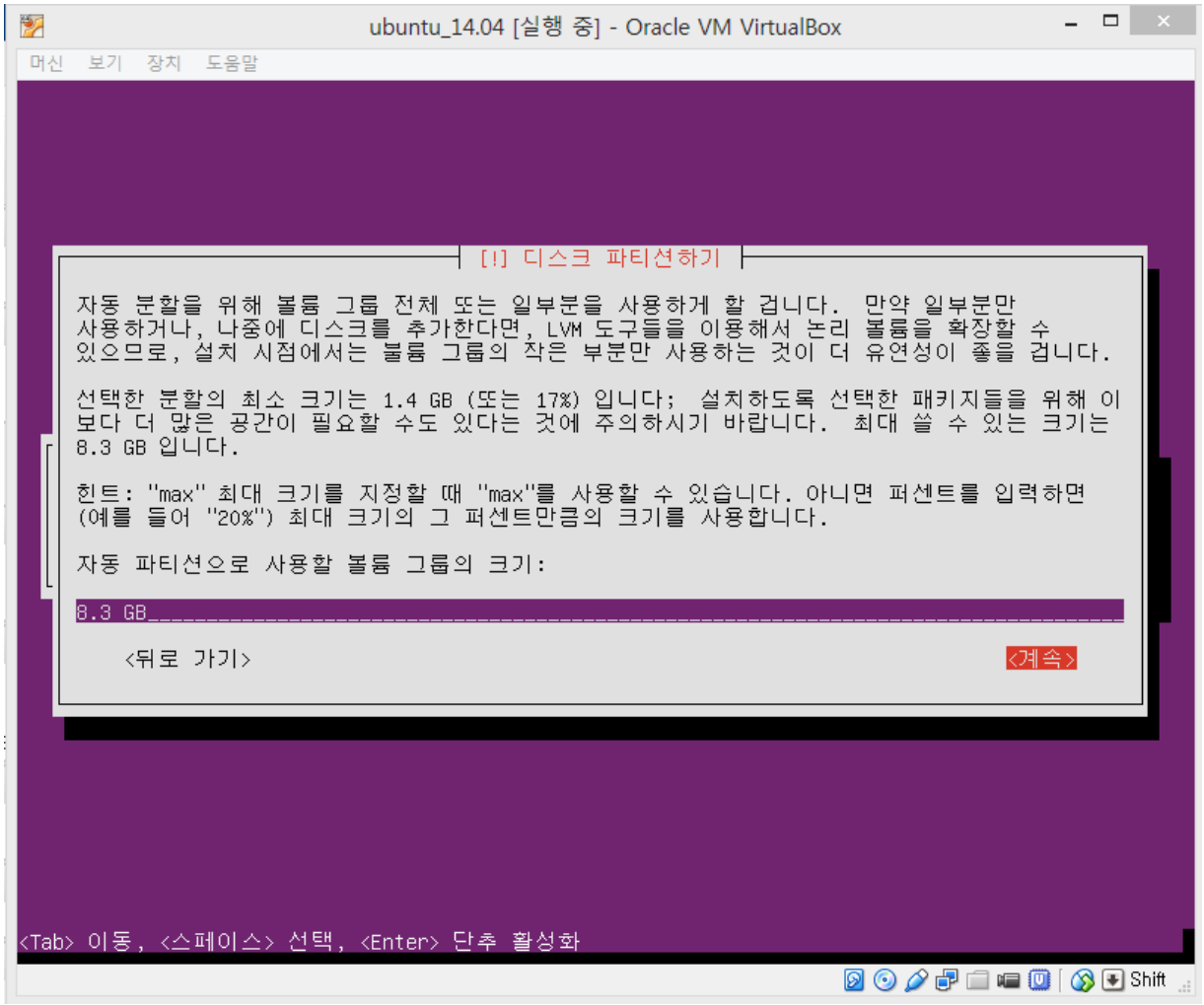

실습 2: 리눅스 설치

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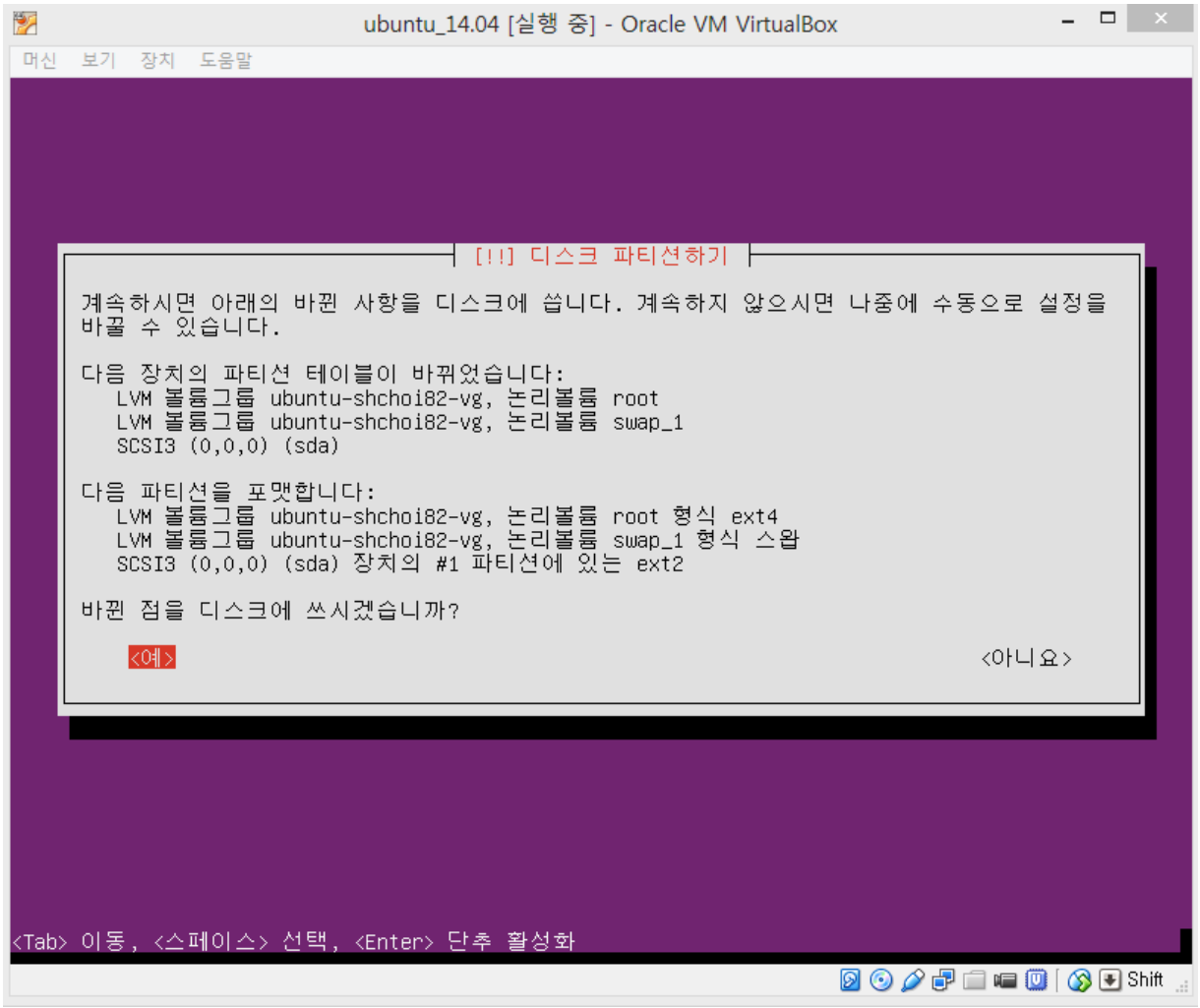

실습 2: 리눅스 설치

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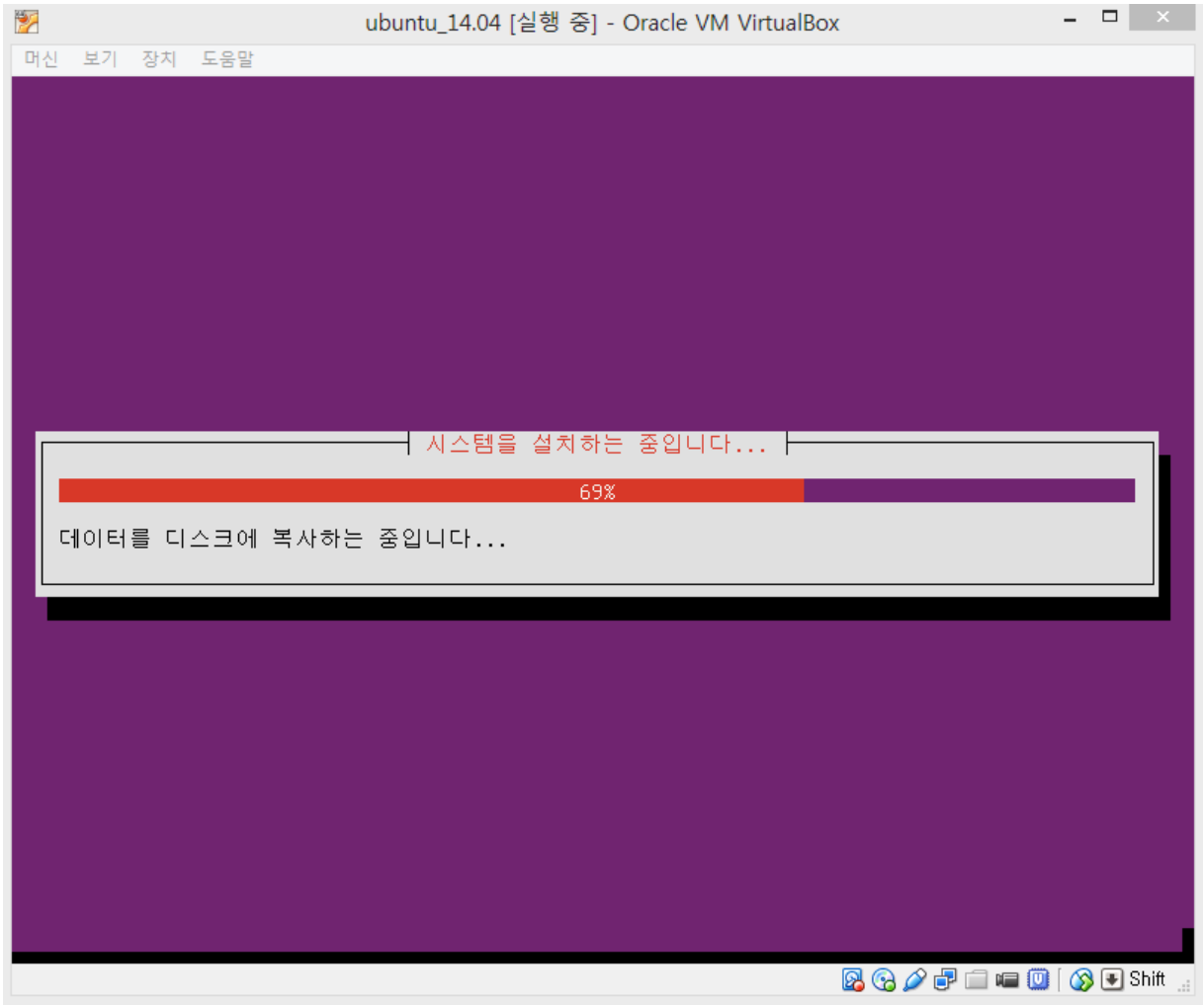

실습 2: 리눅스 설치

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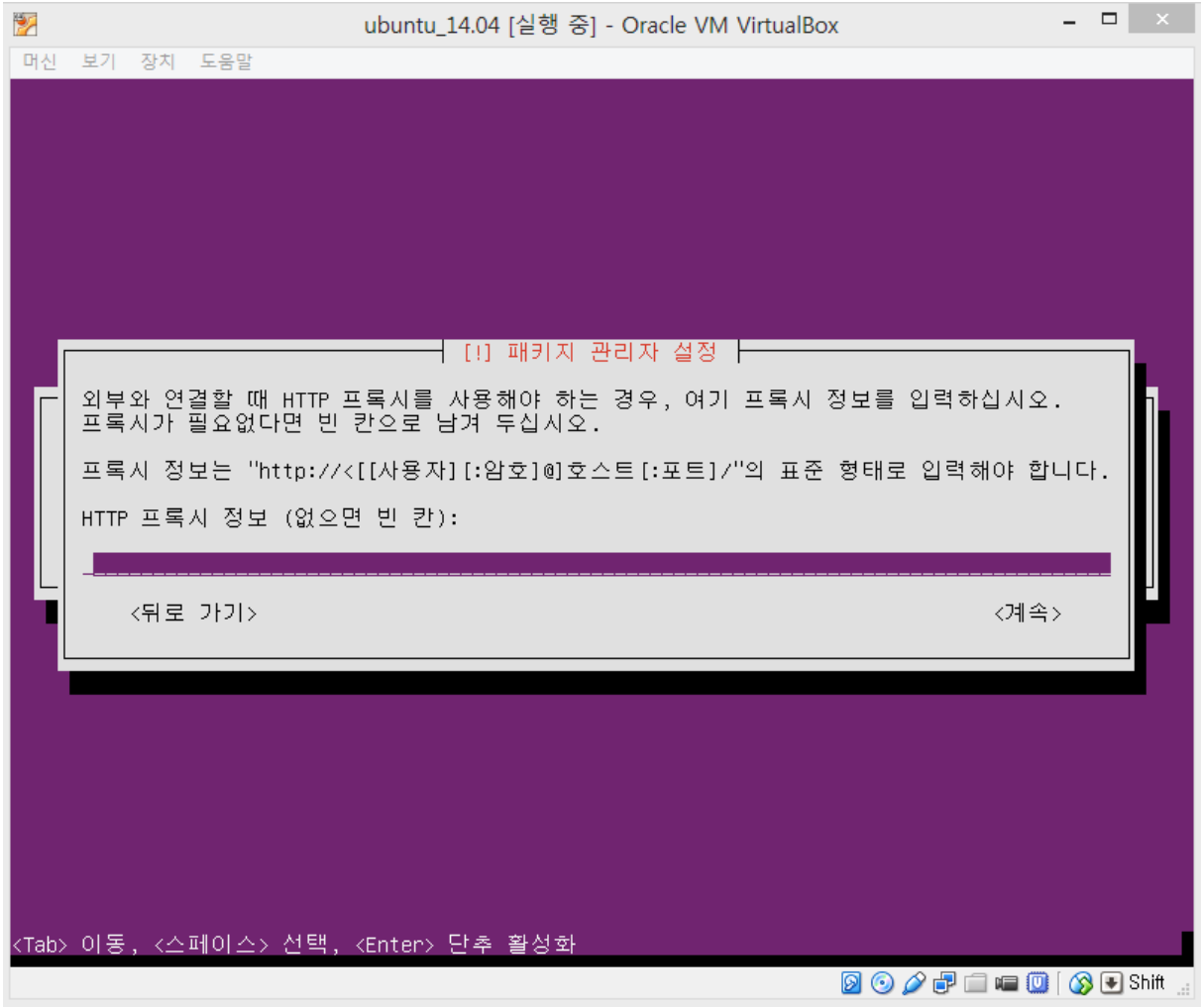

실습 2: 리눅스 설치

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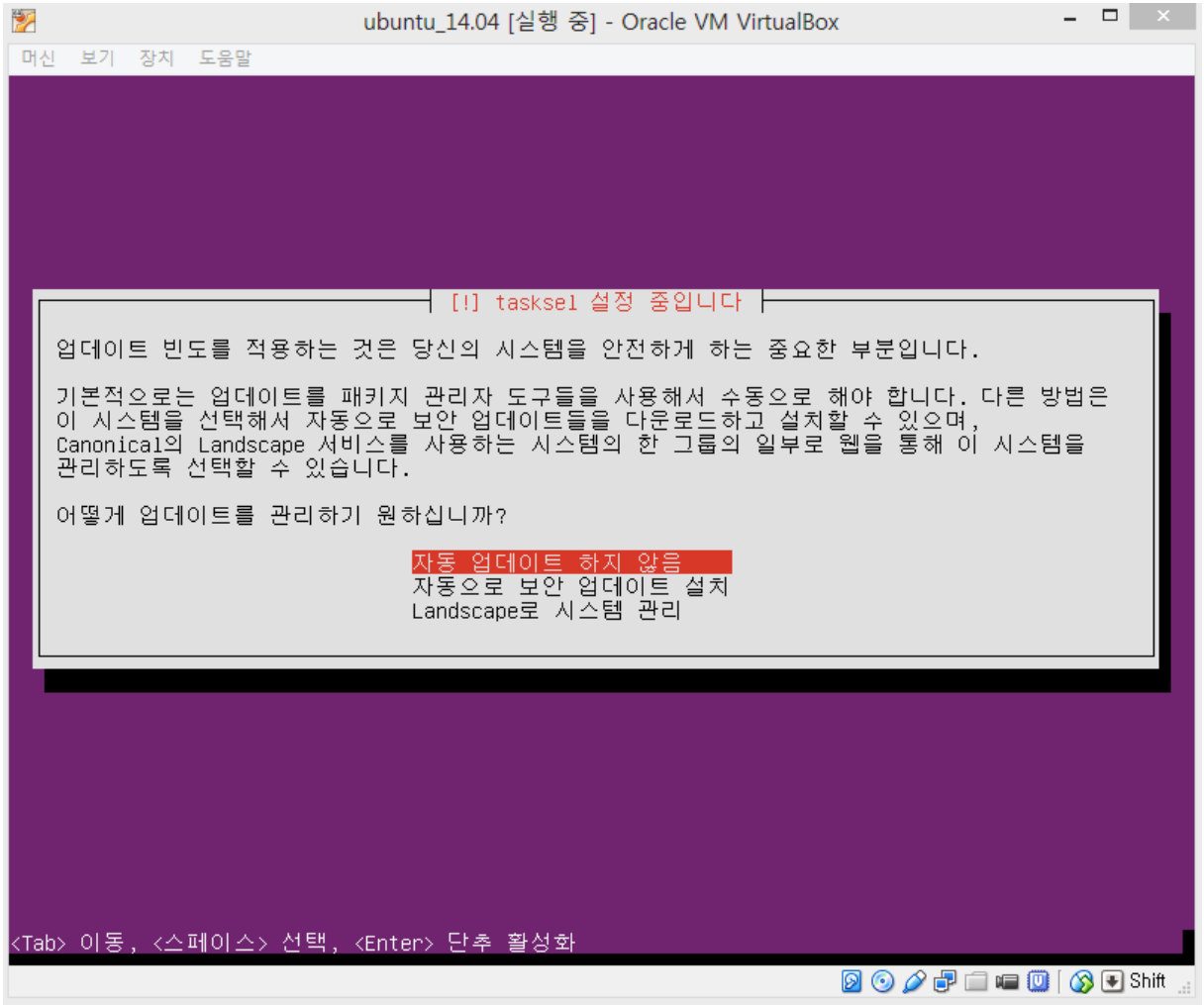
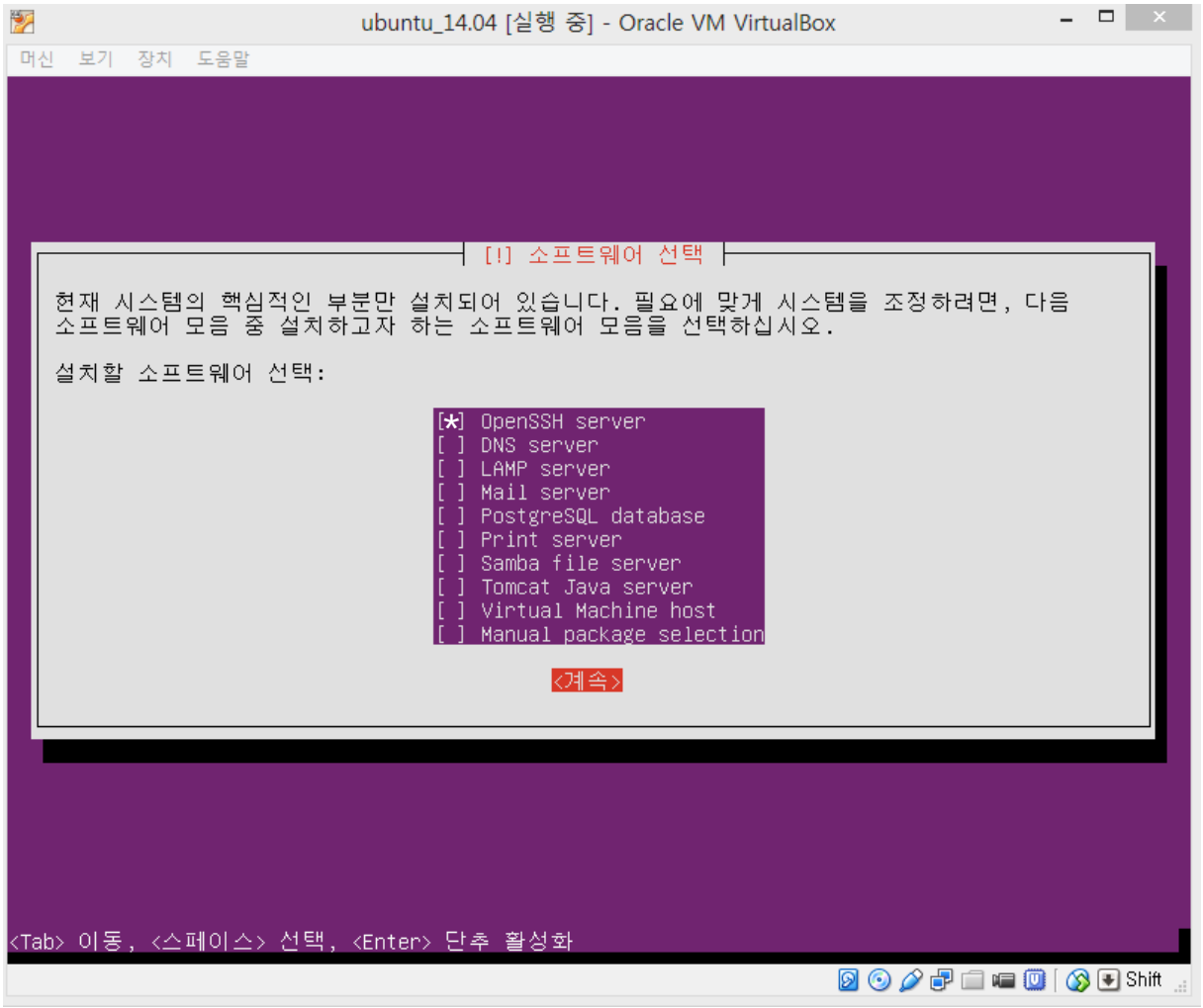


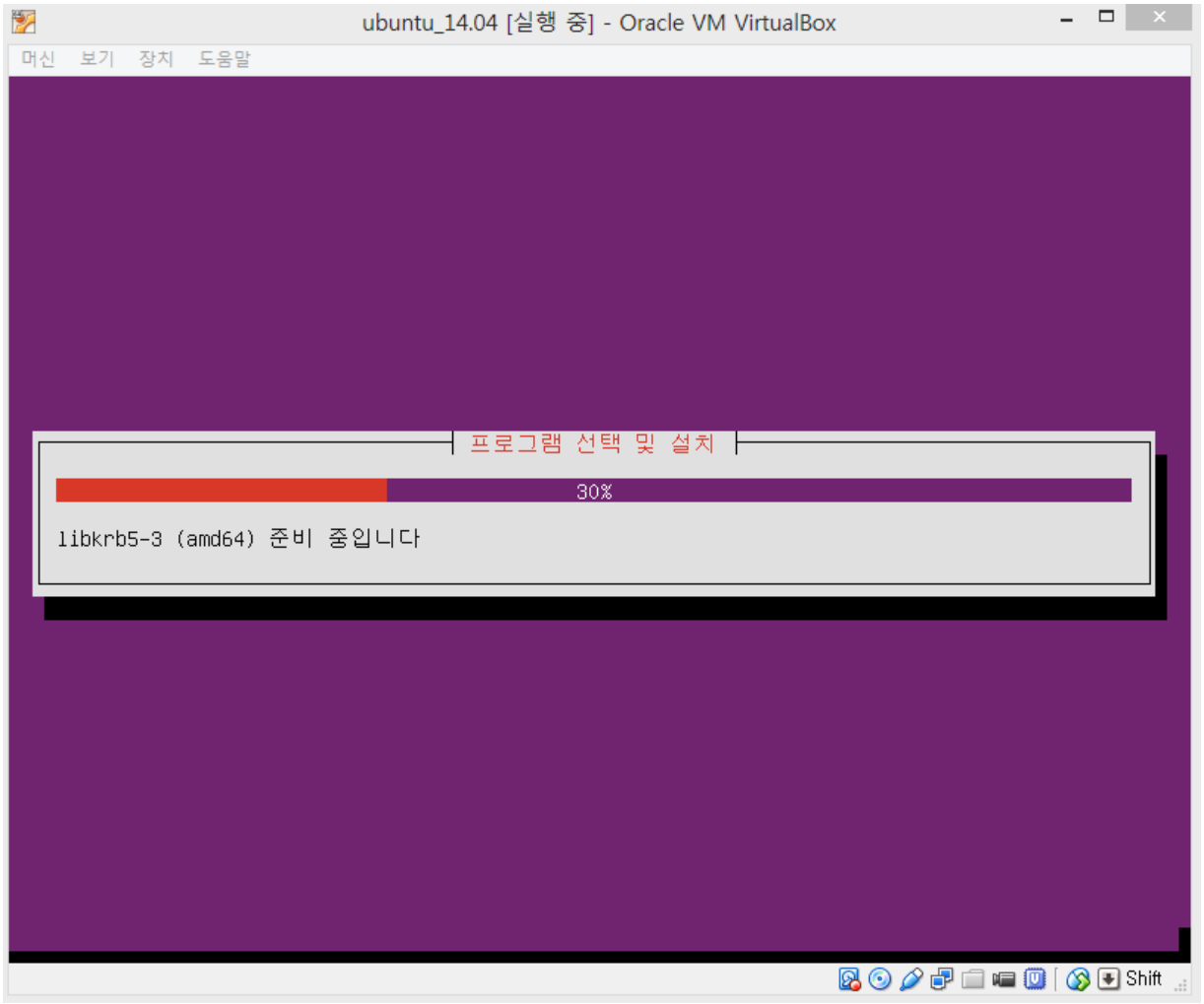
실습 2: 리눅스 설치

- 리눅스 설치



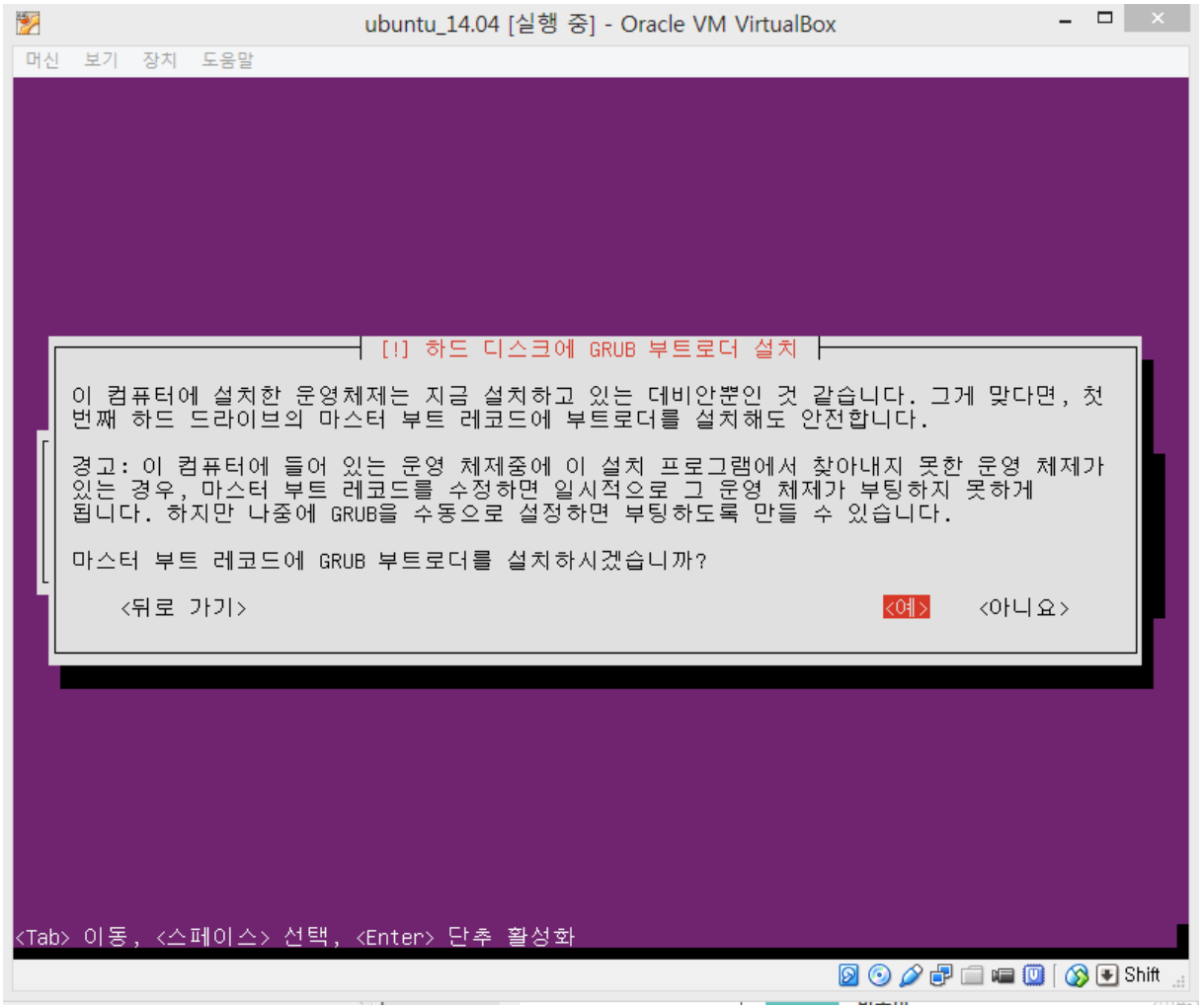
실습 2: 리눅스 설치

- 리눅스 설치



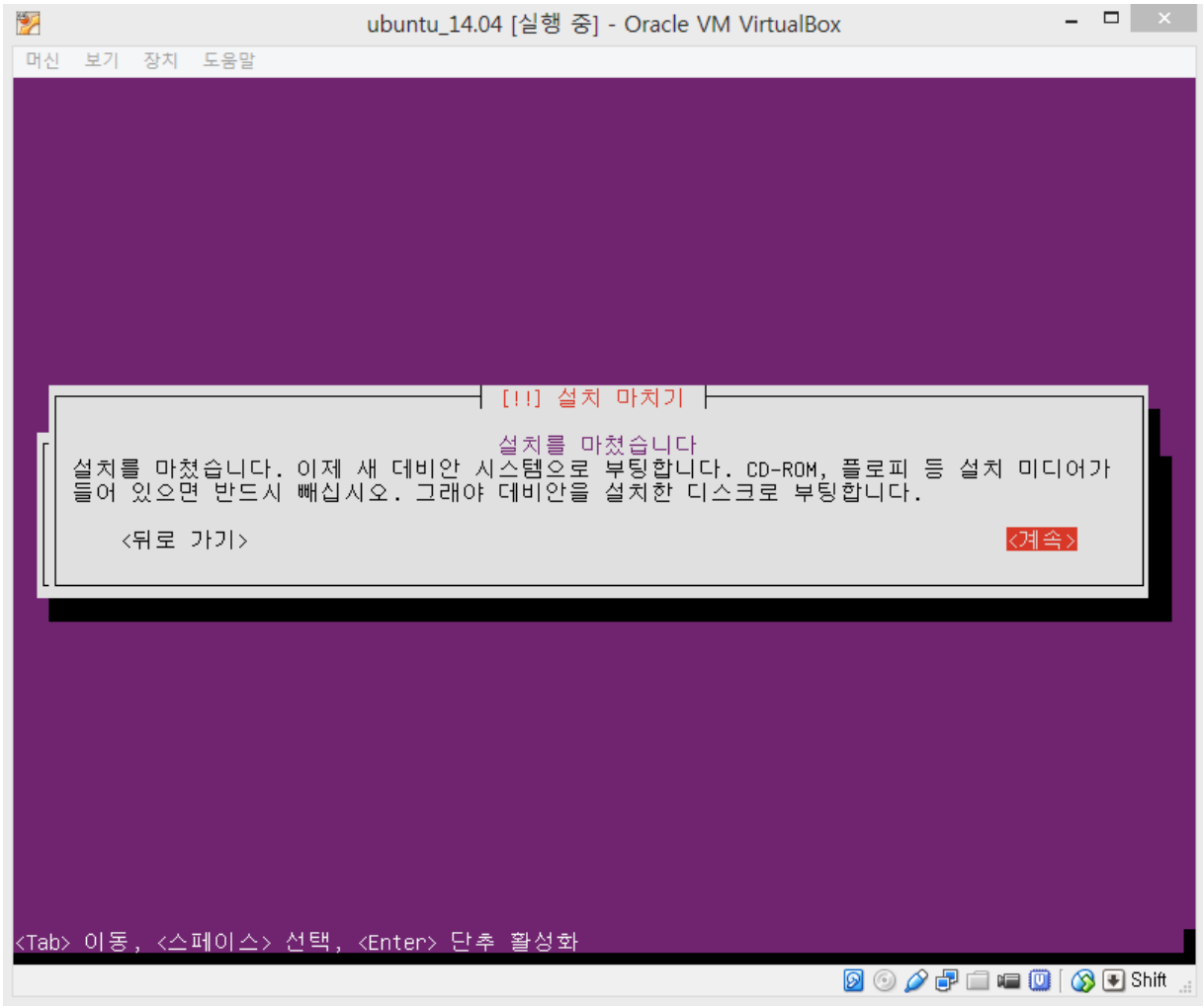
실습 2: 리눅스 설치

- 리눅스 설치



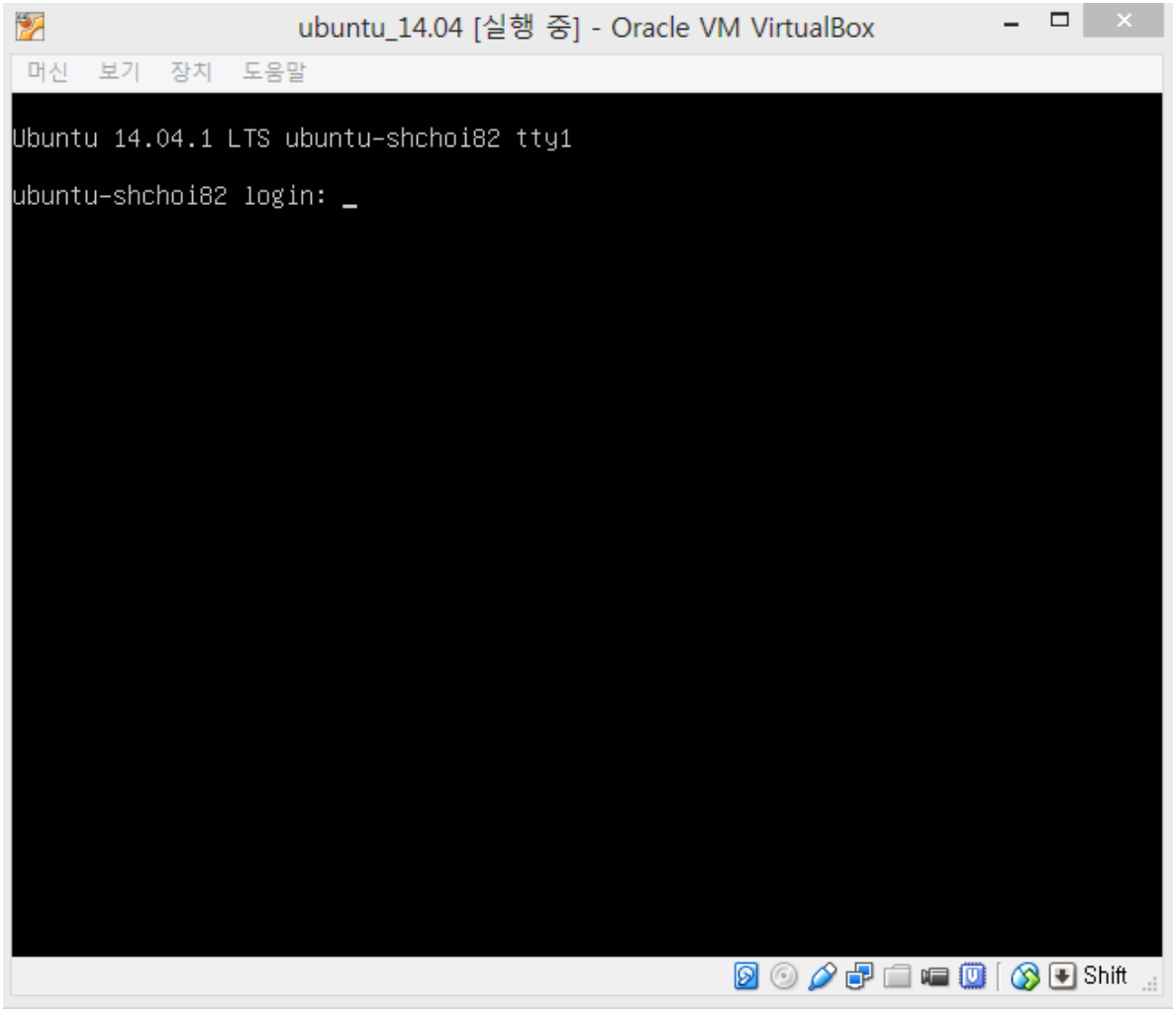
실습 2: 리눅스 설치

- 리눅스 설치



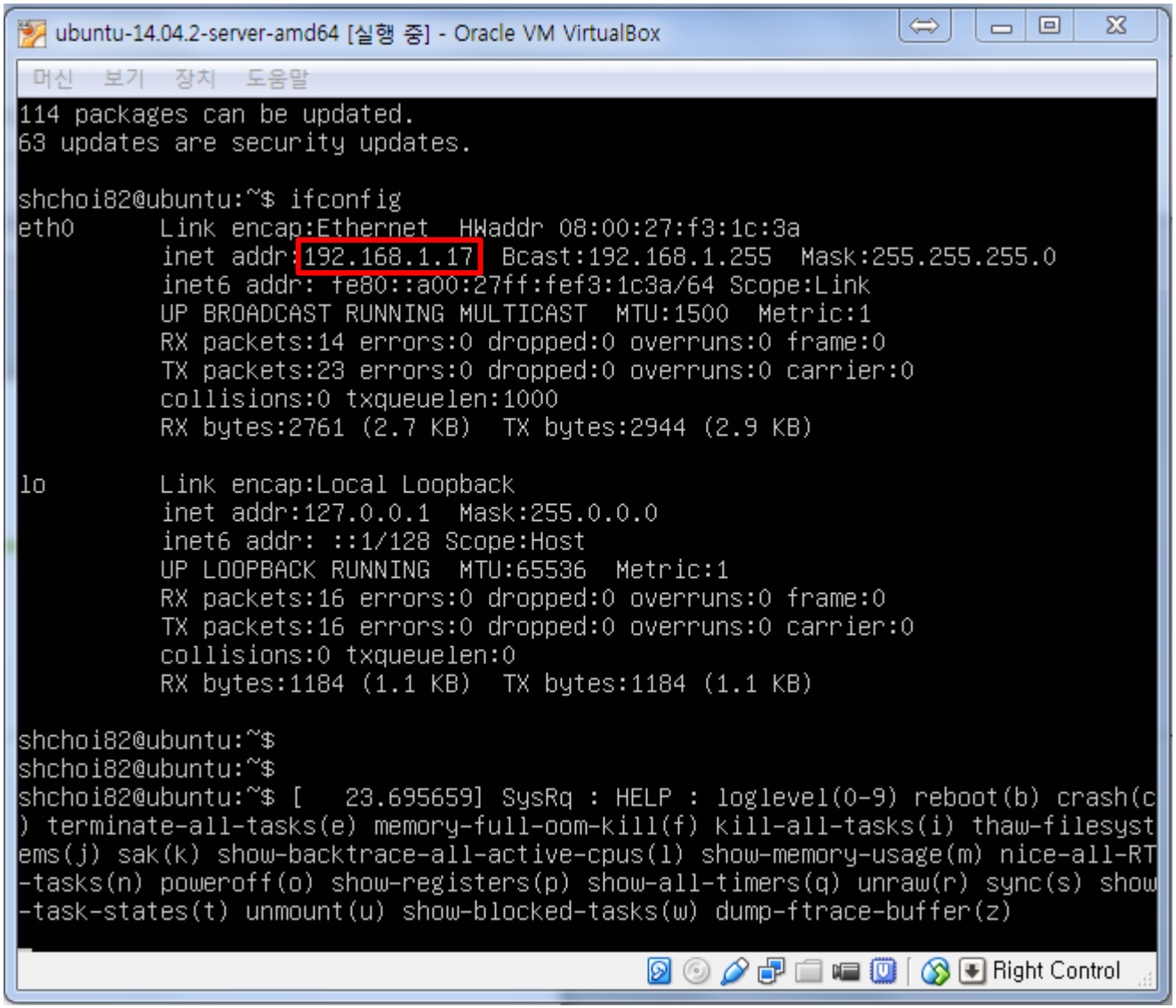
실습 2: 리눅스 설치

- 리눅스 설치



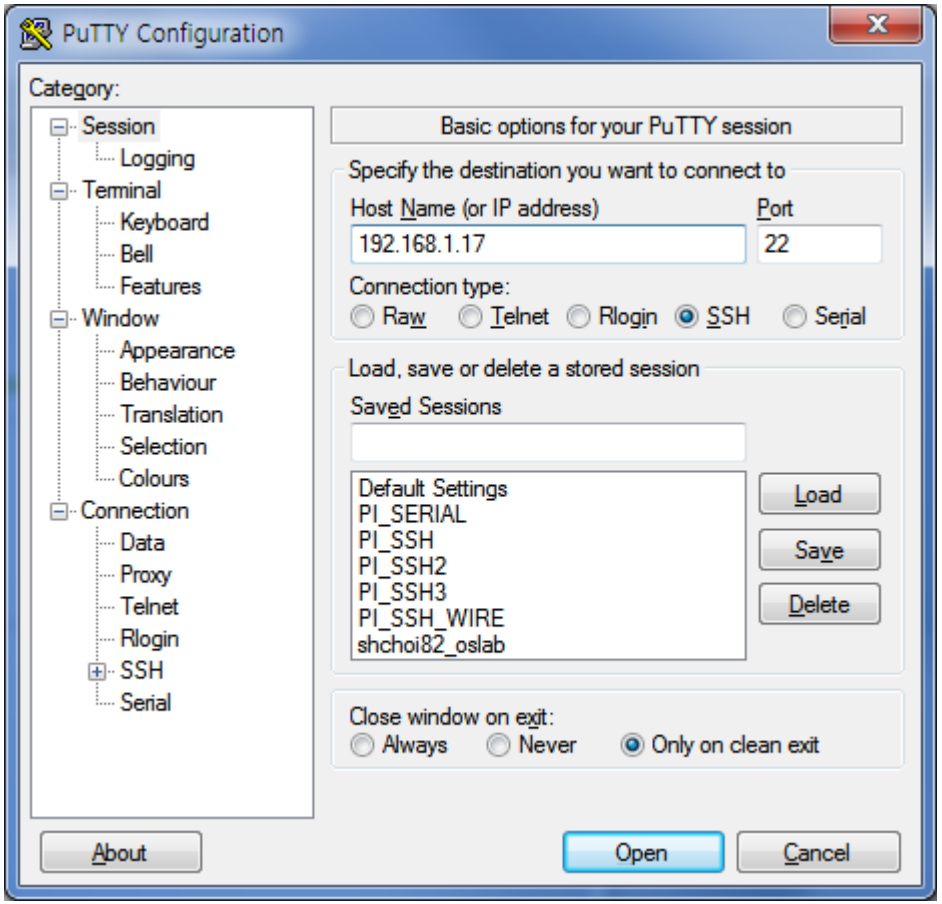
실습 3: SSH접속

- **가상머신 IP 확인**



실습 3: SSH접속

- ssh **접속**



실습 3: SSH접속

- ssh **접속**