

Lab 13 – How to SSH into a server from a Windows machine using PuTTY

Lab Objective:

Using PuTTY to SSH into a server from a Windows machine.

Lab Purpose:

PuTTY is an open-source terminal emulator which supports several network protocols. It is also free and can be downloaded for Windows from the following link: <https://www.putty.org/>

Lab Tool:

Windows

Lab Topology:

You can use a Windows machine for this lab. In this lab, we need another SSH-enabled machine to make connections through. You can find a prebuilt Ubuntu Server image on

STEP 1:

Download and import it to your virtualization platform and run using <https://www.osboxes.org/ubuntu-server/>

Ubuntu Server 24.10 Oracular Oriole

VirtualBox VMware Info

VirtualBox (VDI) 64bit [Download](#) Size: 1.3GB
SHA256: db9595770ce925717011b41bab6ab7fc5c80195df711c15e0a898522

[Guide to verify/audit our VM images](#)

Ubuntu Server 24.04 Noble Numbat

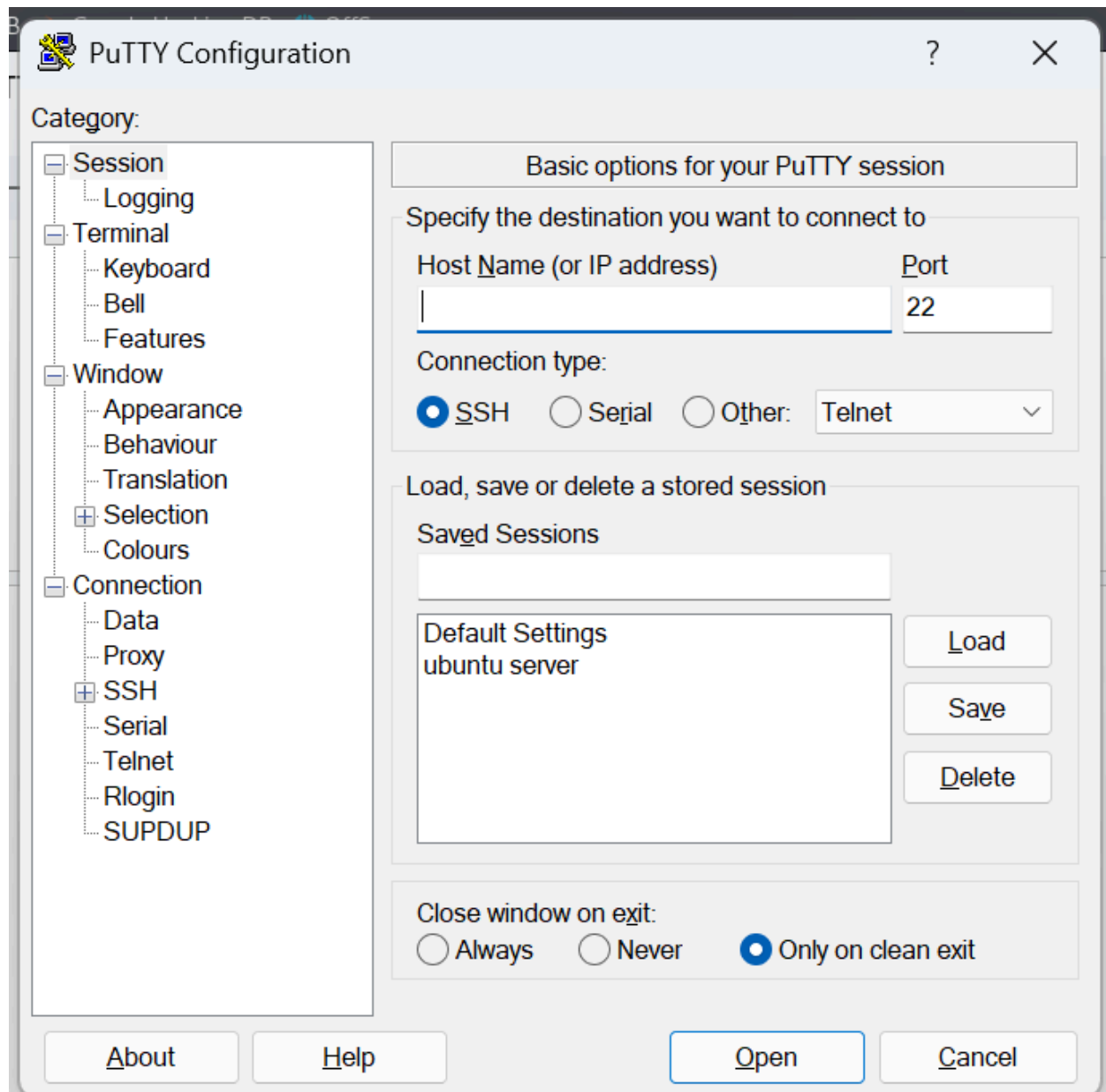
VirtualBox VMware Info

VirtualBox (VDI) 64bit [Download](#) Size: 943MB
SHA256: c81cee58c027fed0027bed392e0b7ccb430b9ae5296b71e116060735

STEP 2:

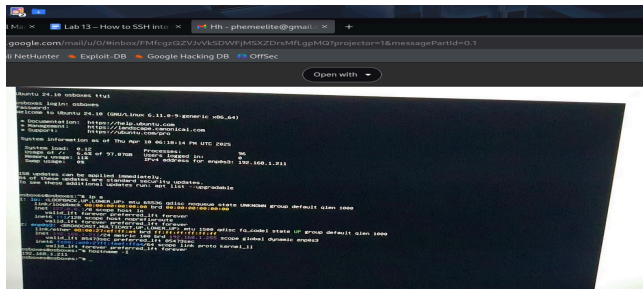
SSH stands for Secure Shell and it is used to connect to machines securely over the internet. For this lab, we will be using PuTTY to connect to a server using a Windows machine. Connecting to a server using a Linux machine will be covered in a different lab.

The next step is to download PuTTY from the following link: <https://www.putty.org/> . Click through the installer, and once it is finished, open the application. Once open, you will be met with the following screen:



STEP 3:

Open the Ubuntu server and type "ip a" or "hostname -I" to get the IP address of the Ubuntu server



Ensure SSH Server is Installed

Ubuntu Server usually installs OpenSSH by default, but let's make sure it's running:

```
sudo systemctl status ssh
```

If it's not installed, install it:

```
sudo apt update
```

```
sudo apt install openssh-server
```

STEP 4:

We can see under the Host Name input box that PuTTY supports a number of different protocols, such as Telnet, which is the unsecure version of SSH. We have selected SSH and are thus ready to specify the server information, such as IP and port, to get connected.

Simply enter the IP address or hostname; for example, type the Ubuntu VM's IP you just created and the port which you want to connect on. For SSH, this is port 22. It is good practice to then go to saved sessions and enter a name for the connection and press save, so that you don't have to enter the information again next time. Once this is done, click open on the bottom right corner.

The image shows the PuTTY Configuration window. On the left is a tree view of configuration categories. The 'Session' category is selected. The main area is titled 'Basic options for your PuTTY session'. It contains fields for 'Host Name (or IP address)' and 'Port', both containing '192.168.1.211' and '22' respectively. Below these is a 'Connection type' section with radio buttons for 'SSH' (selected), 'Serial', and 'Other:'. The 'Other:' dropdown is set to 'Telnet'. There is also a section for 'Load, save or delete a stored session' with a list of saved sessions (currently empty) and buttons for 'Load', 'Save', and 'Delete'. At the bottom, there are buttons for 'About', 'Help', 'Open', and 'Cancel'. The 'Close window on exit' section has radio buttons for 'Always', 'Never', and 'Only on clean exit' (selected).

PuTTY Configuration

Category:

- Session
- Logging
- Terminal
 - Keyboard
 - Bell
 - Features
- Window
 - Appearance
 - Behaviour
 - Translation
 - Selection
 - Colours
- Connection
 - Data
 - Proxy
 - SSH
 - Serial
 - Telnet
 - Rlogin
 - SUPDUP

Basic options for your PuTTY session

Specify the destination you want to connect to

Host Name (or IP address)	Port
192.168.1.211	22

Connection type:

☒ SSH ☐ Serial ☐ Other: Telnet

Load, save or delete a stored session

Saved Sessions

Default Settings ubuntu server	Load
	Save
	Delete

Close window on exit:

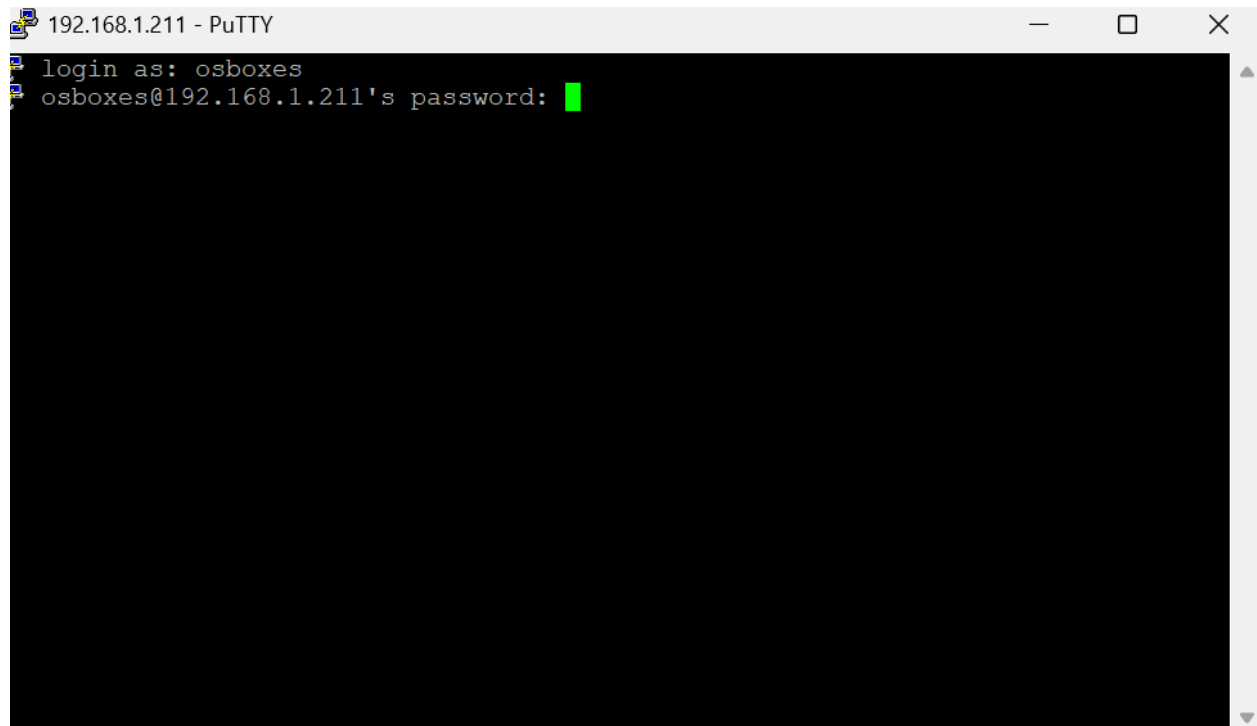
☐ Always ☐ Never ☒ Only on clean exit

About Help Open Cancel

STEP 5:

When connecting, a window will pop up with a warning. It will warn you that you have not connected to this server before and that you should only connect to servers you trust. Click yes and continue.

You will then be asked for login information to continue. Once this is entered you will have access to the server and its different file directories.



```
osboxes@osboxes: ~  
osboxes@192.168.1.211's password:  
Welcome to Ubuntu 24.10 (GNU/Linux 6.11.0-9-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:       https://ubuntu.com/pro  
  
System information as of Thu Apr 10 06:32:18 PM UTC 2025  
  
System load:  0.15          Processes:            100  
Usage of /:   6.6% of 97.87GB Users logged in:       0  
Memory usage: 11%          IPv4 address for enp0s3: 192.168.1.211  
Swap usage:   0%  
  
158 updates can be applied immediately.  
84 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable  
  
Last login: Thu Apr 10 17:46:47 2025 from 192.168.1.225  
osboxes@osboxes:~$ hostname -I  
192.168.1.211  
osboxes@osboxes:~$
```

END