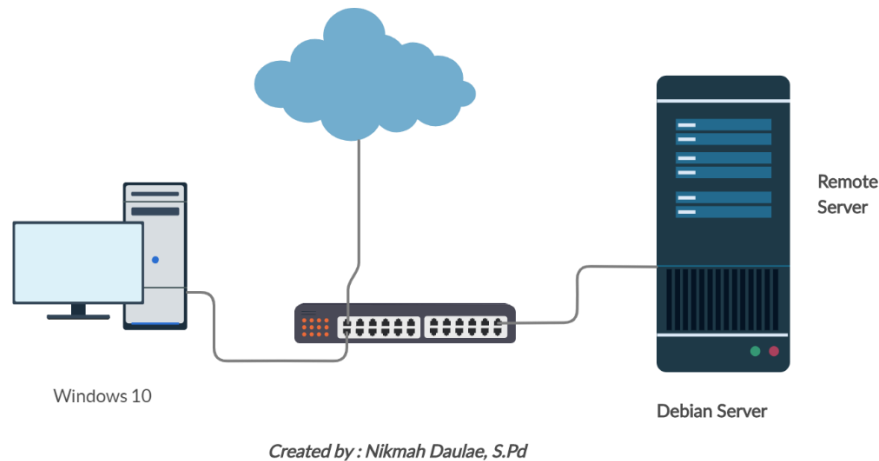


Konfigurasi Remote Server

1. Kompetensi Dasar

Mengevaluasi remote server.
Mengkonfigurasi remote server.

2. Topology Jaringan



3. Settingan ip address pada server.

```
niko@niko: ~  
root@niko: /home/niko# ifconfig  
ens33: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500  
    inet 192.168.43.100 netmask 255.255.255.0 broadcast 192.168.43.255  
    inet6 fe80::20c:29ff:fe04:d96 prefixlen 64 scopeid 0x20<link>  
    ether 00:0c:29:04:0d:96 txqueuelen 1000 (Ethernet)  
    RX packets 383 bytes 42174 (41.1 KiB)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 370 bytes 57828 (56.4 KiB)  
    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 1 (Local Loopback)  
    RX packets 0 bytes 0 (0.0 B)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 0 bytes 0 (0.0 B)  
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
root@niko: /home/niko#
```

4. Merubah hostname mesin menjadi **serverx** dimana x menunjukkan nomor absensi anda pada **file /etc/hosts**.

```
niko@niko: ~
GNU nano 2.7.4 File: /etc/hosts
127.0.0.1 localhost
192.168.43.100 server100

# The following lines are desirable for IPv6 capable hosts
::1 localhost ip6-localhost ip6-loopback
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
```

5. Merubah nama hostname pada file */etc/hostname*.

```
niko@niko: ~
GNU nano 2.7.4 File: /etc/hostname
server100
```

6. Perhatikan nama hostname sebelum dirubah.

```
root@niko: /home/niko#
```

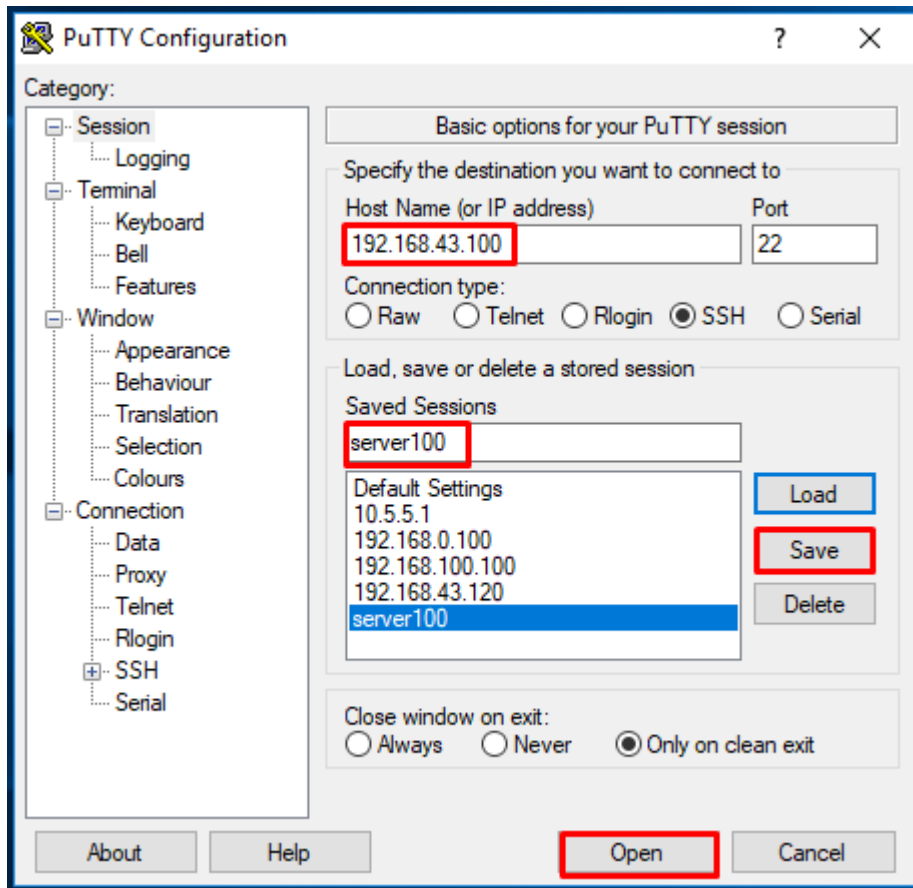
7. Reboot mesin dengan perintah *reboot* untuk melihat perubahan.

```
niko@server100: ~
login as: niko
niko@192.168.43.100's password:
Linux server100 4.9.0-7-686-pae #1 SMP Debian 4.9.110-3+deb9u2 (2018-08-13) i686

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Wed Oct 16 18:48:53 2019 from 192.168.43.118
niko@server100:~$ su
Password:
root@server100: /home/niko#
```

8. Untuk meremotnya dengan aplikasi putty dapat dilakukan dengan mengisi hostname atau ip address pada server.



TELNET

- Pertama sekali cek dulu paket yang dibutuhkan, dengan perintah **apt-cache search telnetd** contoh **telnetd**. Jika paket tidak tersedia maka tampilannya akan seperti dibawah ini.

```

niko@server100: ~
root@server100: /home/niko# apt-cache search telnetd
root@server100: /home/niko#

```

- Jika paket tersebut tidak ada dalam DVD Debian boleh digunakan repository local untuk menambahkan paket tersebut. Letak file tersebut ada pada folder **/etc/apt/sources.list**. Buka pada link dibawah ini kemudian tambahkan pada baris terakhir : <https://www.linuxsec.org/2019/01/repo-lokal-debian-stretch.html>

```

deb http://kambing.ui.ac.id/debian/ stretch main contrib non-free
deb http://kambing.ui.ac.id/debian/ stretch-updates main contrib non-free
deb http://kambing.ui.ac.id/debian-security/ stretch/updates main contrib non-free

```

```

niko@server100: ~
GNU nano 2.7.4 File: /etc/apt/sources.list Modified
# A network mirror was not selected during install. The following entries
# are provided as examples, but you should amend them as appropriate
# for your mirror of choice.
#
# deb http://deb.debian.org/debian/ stretch-updates main contrib
# deb-src http://deb.debian.org/debian/ stretch-updates main contrib
deb http://kambing.ui.ac.id/debian/ stretch main contrib non-free
deb http://kambing.ui.ac.id/debian/ stretch-updates main contrib non-free
deb http://kambing.ui.ac.id/debian-security/ stretch/updates main contrib non-f$

```

11. Setelah itu update paket dengan perintah **apt-get update**

```

root@server100: /home/niko# apt-get update

```

12. Instal aplikasi telnet server dengan perintah **apt-get install telnetd**

```

niko@server100: ~
root@server100: /home/niko# apt-get install telnetd
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libevent-2.0-5 libfile-copy-recursive-perl openbsd-inetd update-inetd
The following NEW packages will be installed:
  libevent-2.0-5 libfile-copy-recursive-perl openbsd-inetd telnetd
  update-inetd
0 upgraded, 5 newly installed, 0 to remove and 13 not upgraded.
Need to get 83.3 kB/287 kB of archives.
After this operation, 741 kB of additional disk space will be used.
Do you want to continue? [Y/n] y

```

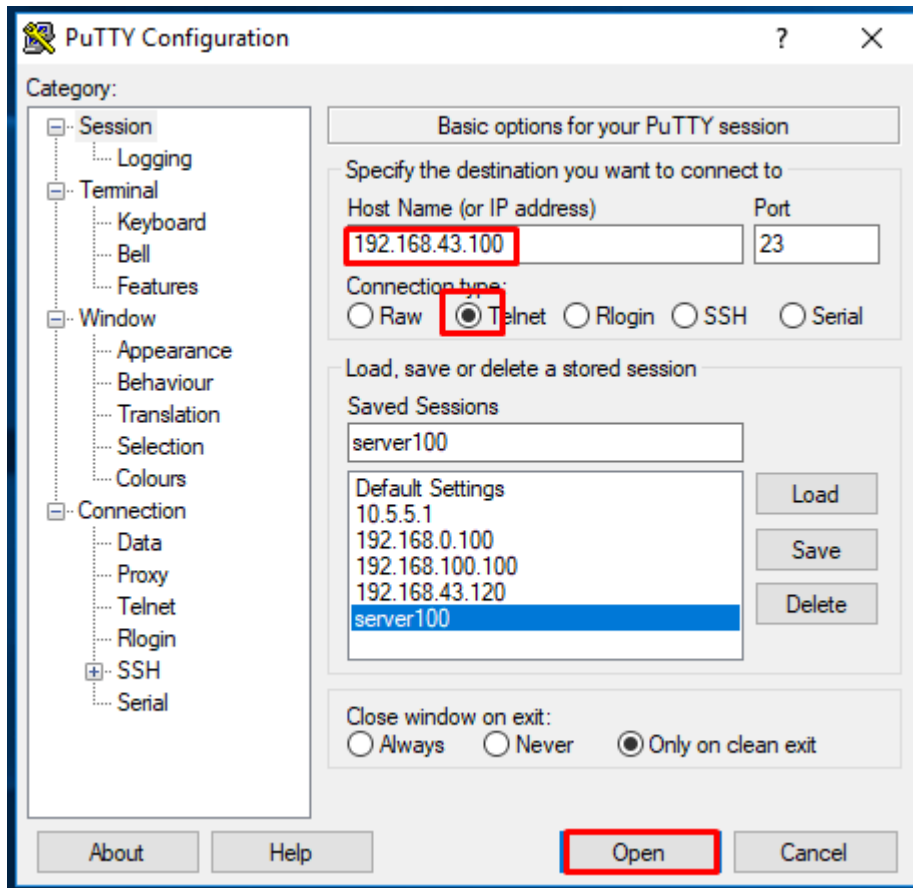
13. Cek paket yang sudah terinstal dengan perintah **dpkg -l telnetd**

```

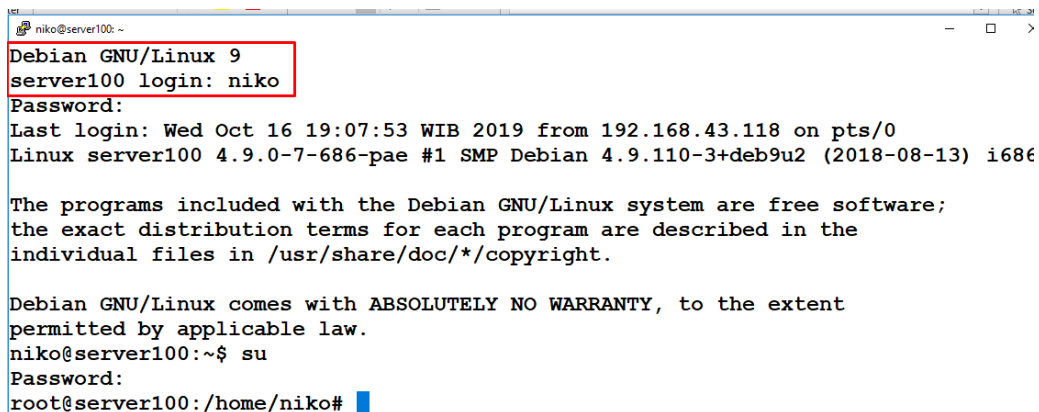
niko@server100: ~
root@server100: /etc# dpkg -l telnetd
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/half-Inst/trig-await/Trig-pend
|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name          Version          Architecture Description
+++-+-----+-----+-----+-----+
ii telnetd        0.17-41         i386          basic telnet server
root@server100: /etc#

```

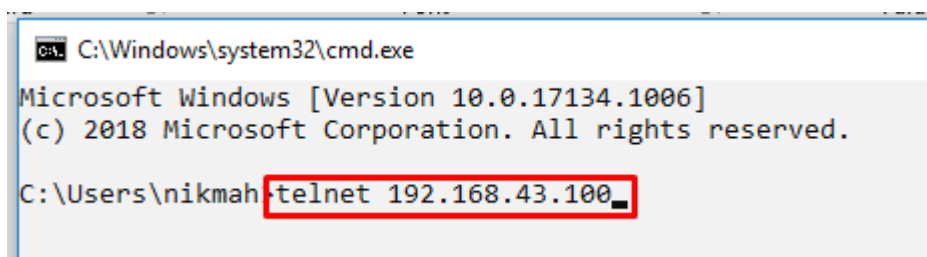
14. Buka aplikasi putty kemudian connection typenya rubah menjadi telnet.



15. Jika berhasil maka tampilannya akan seperti dibawah ini



16. Bila menggunakan melalui command prompt perintahnya **telnet ipserver**.



17. Tampilannya akan seperti gambar dibawah ini .

```
ca Telnet 192.168.43.100
Debian GNU/Linux 9
server100 login: niko
Password:
Last login: Wed Oct 16 19:50:03 WIB 2019 on pts/1
Linux server100 4.9.0-7-686-pae #1 SMP Debian 4.9.110-3+deb9u2 (2018-08-13) i686

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

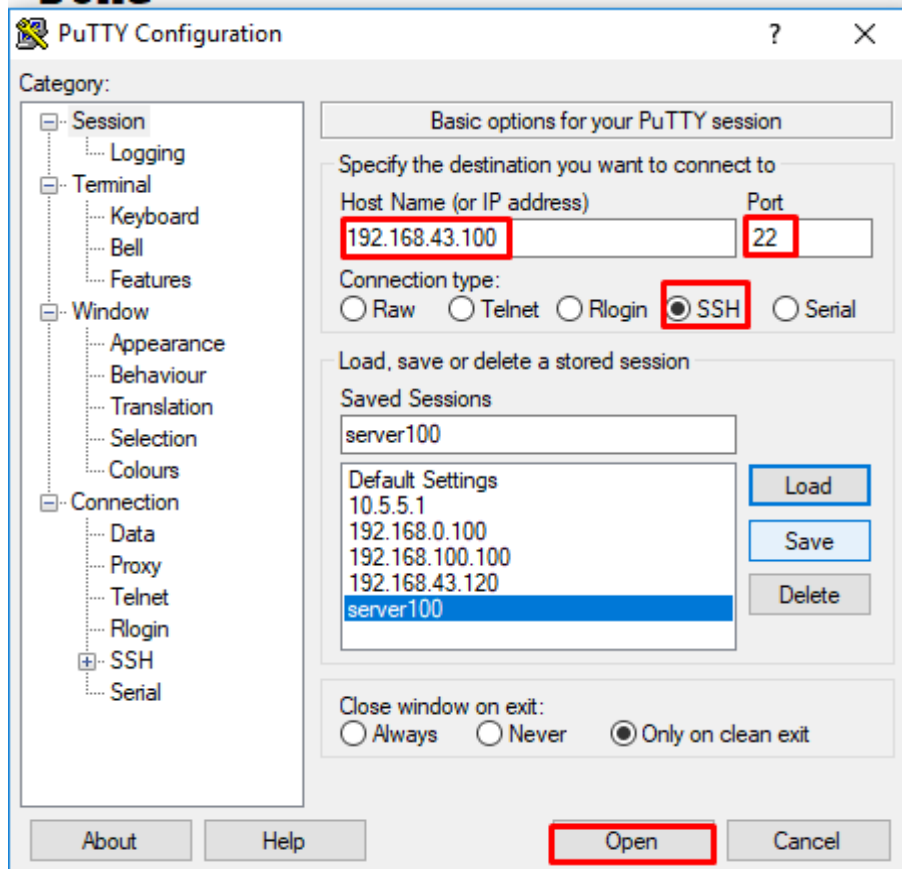
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
niko@server100:~$ su
Password:
root@server100:/home/niko#
```

SSH SERVER

1. File aplikasi yang dibuthkan adalah ***apt-get install openssh-server***

```
root@server100:/etc# apt-get install openssh-server
```

2. Buka aplikasi putty kemudian isikan ip server.



- Secara default ssh menggunakan port 22 sedangkan telnet menggunakan port 23. Untuk melakukan perubahan dapat dilihat pada file `/etc/ssh/sshd_config`. Dengan menghilangkan tanda # pada port 22.

```
niko@server100: ~
GNU nano 2.7.4 File: /etc/ssh/sshd_config

# Ciphers and keying
#RekeyLimit default none

# Logging
#SyslogFacility AUTH
#LogLevel INFO

# Authentication:

#LoginGraceTime 2m
#PermitRootLogin prohibit-password
PermitRootLogin yes
#StrictModes yes
#MaxAuthTries 6
#MaxSessions 10
```

- Selanjutnya restart aplikasi ssh dengan perintah `/etc/init.d/ssh restart`

```
root@server100:/etc# /etc/init.d/ssh restart
[ ok ] Restarting ssh (via systemctl): ssh.service.
root@server100:/etc#
```

- Cek status ssh dengan perintah `systemctl status ssh`.

```
root@server100:/etc# systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enab
   Active: active (running) since Wed 2019-10-16 20:19:11 WIB; 59s ago
     Process: 10289 ExecStartPre=/usr/sbin/sshd -t (code=exited, status=0/SUCCESS)
    Main PID: 10290 (sshd)
      Tasks: 1 (limit: 4915)
     CGroup: /system.slice/ssh.service
            └─10290 /usr/sbin/sshd -D

Oct 16 20:19:11 server100 systemd[1]: Starting OpenBSD Secure Shell server...
Oct 16 20:19:11 server100 sshd[10290]: Server listening on 0.0.0.0 port 22.
Oct 16 20:19:11 server100 sshd[10290]: Server listening on :: port 22.
Oct 16 20:19:11 server100 systemd[1]: Started OpenBSD Secure Shell server.
lines 1-13/13 (END)
```

- Cek port yang sudah dipakai dengan perintah `netstat -tanp |grep 23`

```
root@server100:/etc# netstat -tanp |grep 23
tcp        0      0 0.0.0.0:23          0.0.0.0:*          LISTEN
9597/inetd
root@server100:/etc#
```

TUGAS

1. Buatlah tutorial remote server dengan menggunakan telnet dan ssh?
2. Apakah perbedaan kedua remote server tersebut?
3. Rubah port sesuai dengan nomor absensi anda, jika port tersebut sudah terpakai silakan gunakan menjadi double port?

Selamat Mengerjakan !!!