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Modul 4

Percobaan 1 : Menghapus “Rules” pada table

- Melihat Rules yang telah ada

Iptables -L

```
root@aulia-VirtualBox:/home# iptables -L
Chain INPUT (policy ACCEPT)
target     prot opt source               destination

Chain FORWARD (policy ACCEPT)
target     prot opt source               destination

Chain OUTPUT (policy ACCEPT)
target     prot opt source               destination
root@aulia-VirtualBox:/home#
```

- Mengapus Rules

Iptables -F

```
root@aulia-VirtualBox:/home# iptables -F
root@aulia-VirtualBox:/home#
```

2. Percobaan 2: Blocking semua traffic

- Mengijinkan sesi sambungan yang terbentuk untuk menerima traffic dari semua klien dengan perintah

Sudo iptables -A INPUT -m state --state ESTABLISHED,RELATED -j ACCEPT

```
root@aulia-VirtualBox:/home# iptables -A INPUT -m state --state ESTABLISHED,RELATED -j ACCEPT
root@aulia-VirtualBox:/home#
```

Pengujian:

1) PING (Terhubung)

```
C:\Users\ASUS>ping 192.168.100.104

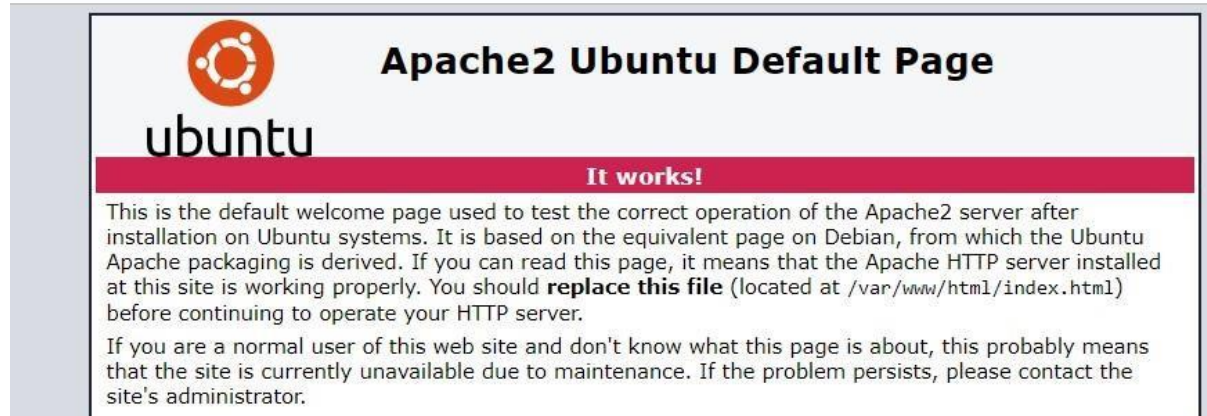
Pinging 192.168.100.104 with 32 bytes of data:
Reply from 192.168.100.104: bytes=32 time<1ms TTL=64
Reply from 192.168.100.104: bytes=32 time<1ms TTL=64
Reply from 192.168.100.104: bytes=32 time<1ms TTL=64
Reply from 192.168.100.104: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.100.104:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\ASUS>
```

```
aulia@aulia-VirtualBox: ~  
login as: aulia  
aulia@192.168.100.104's password:  
Welcome to Ubuntu 16.04.3 LTS (GNU/Linux 4.10.0-28-generic x86_64)  
  
 * Documentation:  https://help.ubuntu.com  
 * Management:    https://landscape.canonical.com  
 * Support:       https://ubuntu.com/advantage  
  
534 packages can be updated.  
347 updates are security updates.  
  
New release '18.04.2 LTS' available.  
Run 'do-release-upgrade' to upgrade to it.  
  
The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.  
  
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.  
  
aulia@aulia-VirtualBox:~$
```

192.168.100.104



- 2) SSH (Terhubung)
 - 3) WEB (Terhubung) - Blocking semua trafik
- Sudo iptables -A INPUT -j DROP

```
root@aulia-VirtualBox:/home/aulia# iptables -A INPUT -j DROP  
root@aulia-VirtualBox:/home/aulia#
```

Pengujian:

- 1) PING (tidak terhubung)

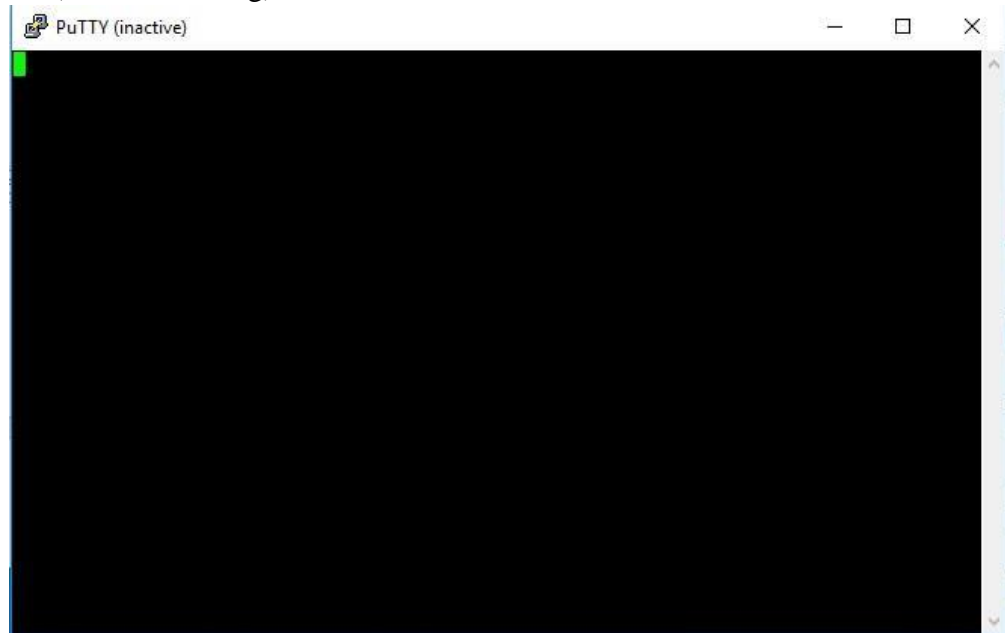
```
C:\Users\ASUS>ping 192.168.100.104

Pinging 192.168.100.104 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.104:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Users\ASUS>
```

2) SSH (tidak terhubung)



3) WEB (tidak terhubung)

192.168.100.104



This site can't be reached

192.168.100.104 took too long to respond.

Try:

- Checking the connection
- Checking the proxy and the firewall
- Running Windows Network Diagnostics

ERR_CONNECTION_TIMED_OUT

Reload

3. Percobaan 3 : mengizinkan traffic masuk hanya ke port SSH - Hapus Rules

```
root@aulia-VirtualBox:/home# iptables -F
root@aulia-VirtualBox:/home#
```

- Mengizinkan sesi sambungan untuk menerima traffic

```
root@aulia-VirtualBox:/home# iptables -A INPUT -m state --state ESTABLISHED,RELATED -j ACCEPT
root@aulia-VirtualBox:/home#
```

- Mengizinkan traffic masuk ke default SSH (port 22) Sudo iptables -A INPUT -p tcp --dport ssh -j ACCEPT

```
root@aulia-VirtualBox:/home/aulia# iptables -A INPUT -p tcp --dport ssh -j ACCEPT
root@aulia-VirtualBox:/home/aulia#
```

- Mengecek Rule
Iptables -L

```

root@aulia-VirtualBox:/home/aulia# iptables -L
Chain INPUT (policy ACCEPT)
target     prot opt source                destination          state RELATED,ESTABLISHED
ACCEPT     all  --  anywhere               anywhere
ACCEPT     tcp  --  anywhere               anywhere             tcp dpt:ssh

Chain FORWARD (policy ACCEPT)
target     prot opt source                destination

Chain OUTPUT (policy ACCEPT)
target     prot opt source                destination
root@aulia-VirtualBox:/home/aulia#

```

- Blocking traffic

Sudo iptables -A INPUT -j DROP

```

root@aulia-VirtualBox:/home/aulia# iptables -A INPUT -j DROP
root@aulia-VirtualBox:/home/aulia#

```

Iptables -L

```

root@aulia-VirtualBox:/home/aulia# iptables -L
Chain INPUT (policy ACCEPT)
target     prot opt source                destination          state RELATED,ESTABLISHED
ACCEPT     all  --  anywhere               anywhere
ACCEPT     tcp  --  anywhere               anywhere             tcp dpt:ssh
DROP       all  --  anywhere               anywhere

Chain FORWARD (policy ACCEPT)
target     prot opt source                destination

Chain OUTPUT (policy ACCEPT)
target     prot opt source                destination
root@aulia-VirtualBox:/home/aulia#

```

Pengujian :

- 1) PING (Tidak Terhubung)

```

C:\Users\ASUS>ping 192.168.100.104

Pinging 192.168.100.104 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.104:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Users\ASUS>

```

- 2) SSH (Terhubung)


```
aulia@aulia-VirtualBox: ~  
login as: aulia  
aulia@192.168.100.104's password:  
Welcome to Ubuntu 16.04.3 LTS (GNU/Linux 4.10.0-28-generic x86_64)  
  
 * Documentation:  https://help.ubuntu.com  
 * Management:    https://landscape.canonical.com  
 * Support:       https://ubuntu.com/advantage  
  
534 packages can be updated.  
347 updates are security updates.  
  
New release '18.04.2 LTS' available.  
Run 'do-release-upgrade' to upgrade to it.  
  
The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.  
  
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.  
  
aulia@aulia-VirtualBox:~$
```

3) WEB (Tidak terhubung)

192.168.100.104



This site can't be reached

192.168.100.104 took too long to respond.

Try:

- Checking the connection
- Checking the proxy and the firewall
- Running Windows Network Diagnostics

ERR_CONNECTION_TIMED_OUT

Reload

4. Mengizinkan traffic masuk hanya ke port Web dan SSH

- Hapus Rule
Iptables -F

```
root@aulia-VirtualBox:/home# iptables -F
root@aulia-VirtualBox:/home#
```

- Mengizinkan semua traffic masuk

Sudo iptables -A INPUT -p tcp --dport 80 -j ACCEPT

```
root@aulia-VirtualBox:/home/aulia# iptables -A INPUT -p tcp --dport 80 -j ACCEPT
root@aulia-VirtualBox:/home/aulia#
```

- Cek Rules

Iptable -L

```
root@aulia-VirtualBox:/home/aulia# iptables -L
Chain INPUT (policy ACCEPT)
target     prot opt source                destination          tcp dpt:http
ACCEPT     tcp  --  anywhere              anywhere             tcp dpt:http

Chain FORWARD (policy ACCEPT)
target     prot opt source                destination

Chain OUTPUT (policy ACCEPT)
target     prot opt source                destination
root@aulia-VirtualBox:/home/aulia#
```

- Blocking Traffic

Sudo iptables -A INPUT -j DROP

```
root@aulia-VirtualBox:/home/aulia# iptables -A INPUT -j DROP
root@aulia-VirtualBox:/home/aulia#
```

Sudo iptables -L

```
root@aulia-VirtualBox:/home/aulia# iptables -L
Chain INPUT (policy ACCEPT)
target     prot opt source                destination          tcp dpt:http
ACCEPT     tcp  --  anywhere              anywhere             tcp dpt:http
ACCEPT     tcp  --  anywhere              anywhere             tcp dpt:http
DROP       all  --  anywhere              anywhere

Chain FORWARD (policy ACCEPT)
target     prot opt source                destination

Chain OUTPUT (policy ACCEPT)
target     prot opt source                destination
root@aulia-VirtualBox:/home/aulia#
```

Pengujian

- 1) PING (Tidak Terhubung)

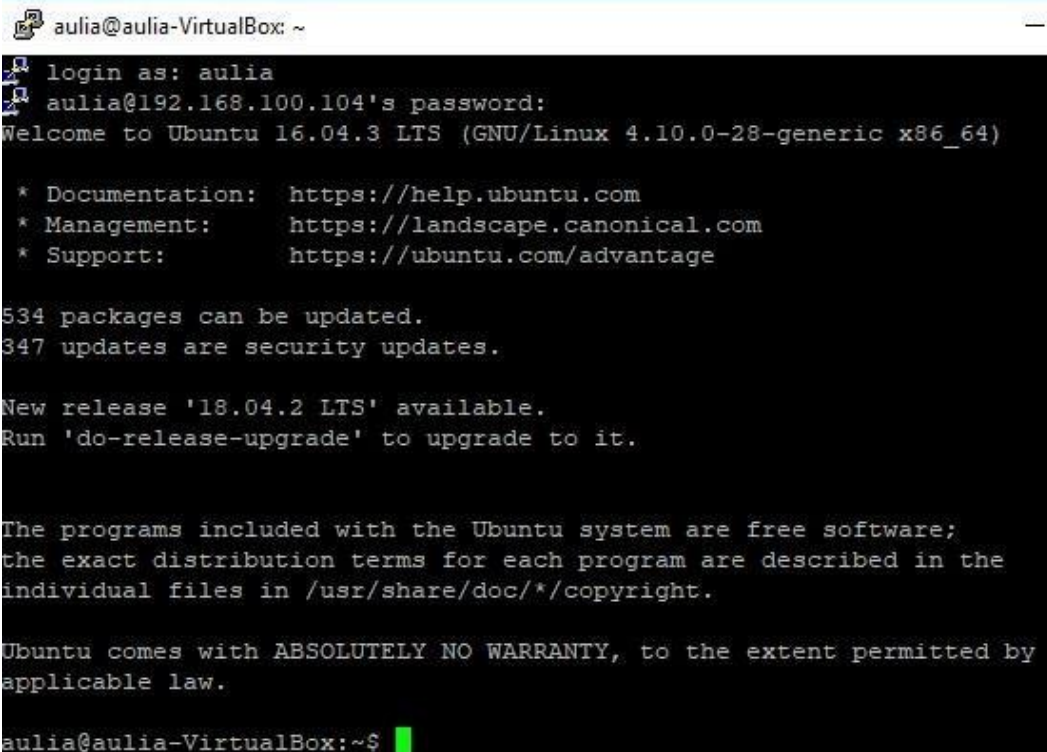
```
C:\Users\ASUS>ping 192.168.100.104

Pinging 192.168.100.104 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.104:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Users\ASUS>
```

2) SSH (Terhubung)



```
aulia@aulia-VirtualBox: ~  
login as: aulia  
aulia@192.168.100.104's password:  
Welcome to Ubuntu 16.04.3 LTS (GNU/Linux 4.10.0-28-generic x86_64)  
  
 * Documentation:  https://help.ubuntu.com  
 * Management:    https://landscape.canonical.com  
 * Support:        https://ubuntu.com/advantage  
  
534 packages can be updated.  
347 updates are security updates.  
  
New release '18.04.2 LTS' available.  
Run 'do-release-upgrade' to upgrade to it.  
  
The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.  
  
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.  
aulia@aulia-VirtualBox:~$
```

3) WEB (Terhubung)

5. Blocking IP Address

- Hapus Rules

192.168.100.104



Apache2 Ubuntu Default Page

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

```
root@aulia-VirtualBox:/home# iptables -F
root@aulia-VirtualBox:/home#
```

Iptables -F

- Blok IP Address

Sudo iptables -A INPUT -s 198.168.100.102 -j DROP

```
root@aulia-VirtualBox:/home/aulia# iptables -A INPUT -s 192.168.100.102 -j DROP
root@aulia-VirtualBox:/home/aulia#
```

Pengujian

- 1) PING (Tidak Terhubung)

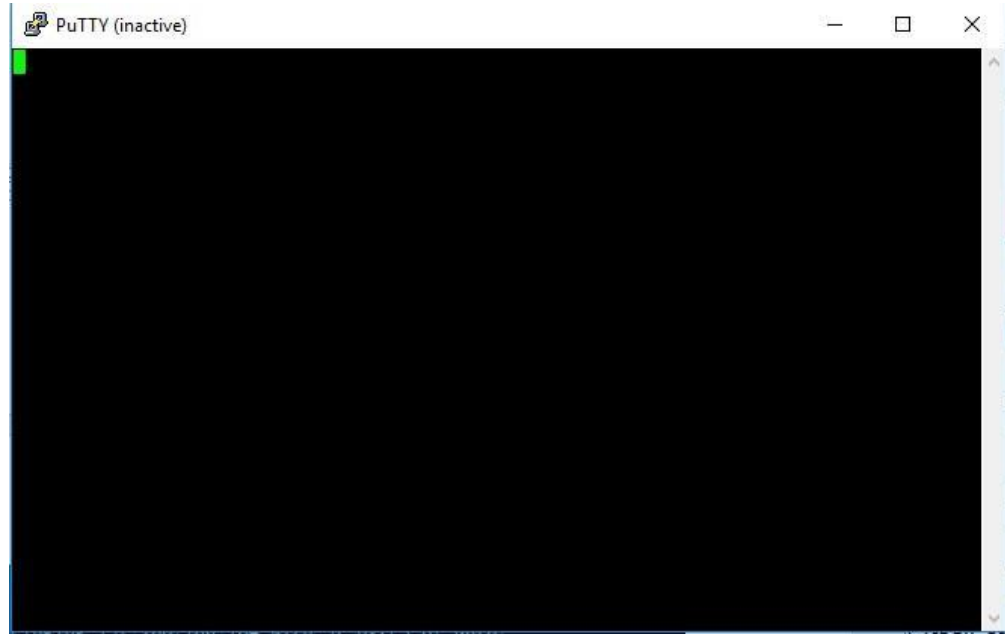
```
C:\Users\ASUS>ping 192.168.100.104

Pinging 192.168.100.104 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.104:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Users\ASUS>
```

- 2) SSH (Tidak Terhubung)



3) WEB (Tidak Terhubung)

192.168.100.104



This site can't be reached

192.168.100.104 took too long to respond.

Try:

- Checking the connection
- Checking the proxy and the firewall
- Running Windows Network Diagnostics

ERR_CONNECTION_TIMED_OUT

Reload

- Menghapus Bloking ip address

Sudo iptables -D INPUT -s 198.168.100.102 -j DROP

```
root@aulia-VirtualBox:/home/aulia# iptables -D INPUT -s 192.168.100.102 -j DROP
root@aulia-VirtualBox:/home/aulia#
```

Pengujian

1) PING (Terhubung)

```
C:\Users\ASUS>ping 192.168.100.104

Pinging 192.168.100.104 with 32 bytes of data:
Reply from 192.168.100.104: bytes=32 time<1ms TTL=64
Reply from 192.168.100.104: bytes=32 time<1ms TTL=64
Reply from 192.168.100.104: bytes=32 time<1ms TTL=64
Reply from 192.168.100.104: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.100.104:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\ASUS>
```

2) SSH (Terhubung)

```
aulia@aulia-VirtualBox: ~
login as: aulia
aulia@192.168.100.104's password:
Welcome to Ubuntu 16.04.3 LTS (GNU/Linux 4.10.0-28-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

534 packages can be updated.
347 updates are security updates.

New release '18.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

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

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applicable law.

aulia@aulia-VirtualBox:~$
```

3) WEB (Terhubung)

6. Bloking MAC Address

- Block MAC Address

Sudo iptables -A INPUT -m mac --mac-source A0:A4:C5:BA:B4:59 -j DROP

192.168.100.104



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If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

```
root@aulia-VirtualBox:/home/aulia# iptables -A INPUT -m mac --mac-source A0:A4:C5:BA:B4:59 -j DROP
root@aulia-VirtualBox:/home/aulia#
```

Pengujian

1) PING (Tidak Terhubung)

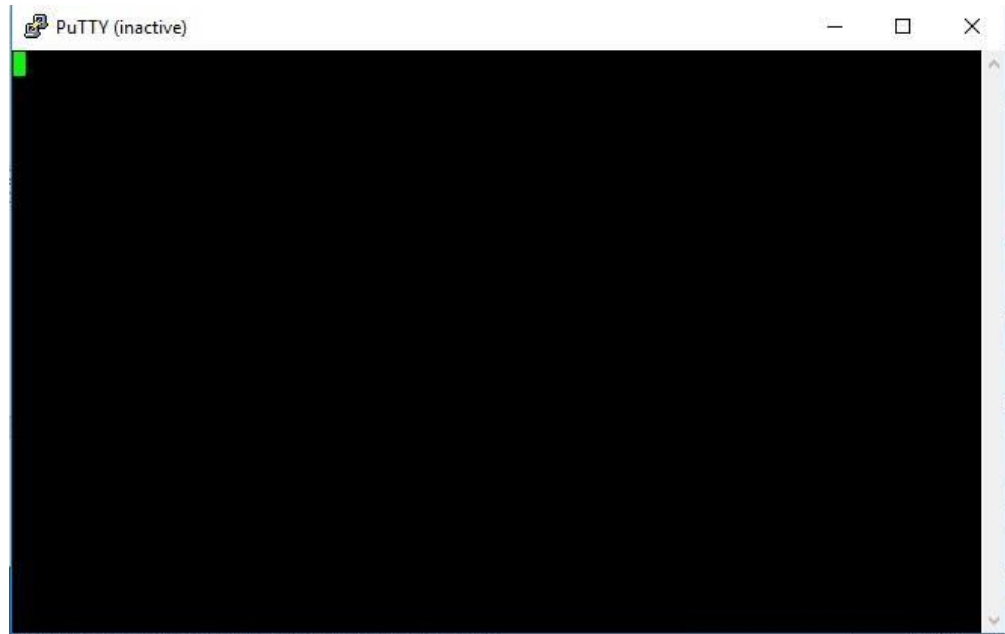
```
C:\Users\ASUS>ping 192.168.100.104

Pinging 192.168.100.104 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.104:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Users\ASUS>
```

2) SSH (Tidak Terhubung)



3) WEB (Tidak Terhubung)

① 192.168.100.104



This site can't be reached

192.168.100.104 took too long to respond.

Try:

- Checking the connection
- Checking the proxy and the firewall
- Running Windows Network Diagnostics

ERR_CONNECTION_TIMED_OUT

Reload

- Menghapus Bloking MAC Address

Sudo iptables -D INPUT -m mac --mac-source A0:A4:C5:BA:B4:59 -j DROP

```
root@aulia-VirtualBox:/home/aulia# iptables -D INPUT -m mac --mac-source A0:A4:C5:BA:B4:59 -j DROP
root@aulia-VirtualBox:/home/aulia#
```

Pengujian

1) PING (Terhubung)


```
C:\Users\ASUS>ping 192.168.100.104

Pinging 192.168.100.104 with 32 bytes of data:
Reply from 192.168.100.104: bytes=32 time<1ms TTL=64
Reply from 192.168.100.104: bytes=32 time<1ms TTL=64
Reply from 192.168.100.104: bytes=32 time<1ms TTL=64
Reply from 192.168.100.104: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.100.104:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\ASUS>
```

- 2) SSH (Terhubung)
- 3) WEB (Terhubung)

```
aulia@aulia-VirtualBox: ~
login as: aulia
aulia@192.168.100.104's password:
Welcome to Ubuntu 16.04.3 LTS (GNU/Linux 4.10.0-28-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

534 packages can be updated.
347 updates are security updates.


New release '18.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

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

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

aulia@aulia-VirtualBox:~$
```

192.168.100.104



Apache2 Ubuntu Default Page

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This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.