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Nim : L200160030

Kelas : A

-Modul 4-

- 1. 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,RELA TED -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
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</pre>
C:\Users\ASUS>
```

## 2) SSH (Terhubung)

```
🚰 aulia@aulia-VirtualBox: ~
                                                                          X
  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)

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.

- 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.
Ping statistics for 192.168.100.104:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\Users\ASUS>
```

2) SSH (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

- 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,RELA
TED -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 ACCEP
T
```

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
ACCEPT
                                        anywhere
           all -- anywhere
                                                             state RELATED, ESTA
BLISHED
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

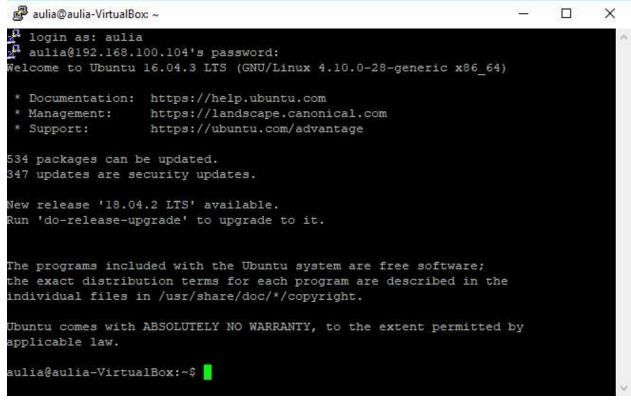
```
root@aulia-VirtualBox:/home/aulia# iptables -L
Chain INPUT (policy ACCEPT)
           prot opt source
                                          destination
target
ACCEPT
           all -- anywhere
                                          anywhere
                                                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



### 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

- 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
ACCEPT
           tcp -- anywhere
                                         anywhere
                                                              tcp dpt:http
Chain FORWARD (policy ACCEPT)
          prot opt source
                                         destination
target
Chain OUTPUT (policy ACCEPT)
          prot opt source
                                         destination
target
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)
           prot opt source
                                        destination
target
          tcp -- anywhere
                                        anywhere
ACCEPT
                                                             tcp dpt:http
          tcp -- anywhere
ACCEPT
                                        anywhere
                                                             tcp dpt:http
DROP
           all --
                                        anywhere
                   anywhere
Chain FORWARD (policy ACCEPT)
          prot opt source
                                        destination
target
Chain OUTPUT (policy ACCEPT)
           prot opt source
target
                                        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.
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: ~
                                                                         X
🙎 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)

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.

### 5. Blocking IP Address

Hapus Rules
 Iptables -F

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

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)

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 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
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</pre>
C:\Users\ASUS>
```

2) SSH (Terhubung)

```
aulia@aulia-VirtualBox: ~
                                                                         X
🙎 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
                  https://ubuntu.com/advantage
* Support:
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)

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.

### 6. Bloking MAC Address

Block MAC Address

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

```
root@aulia-VirtualBox:/home/aulia# iptables -A INPUT -m mac --mac-source A0:A4:C
5: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:C 5: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
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</pre>
C:\Users\ASUS>
```

## 2) SSH (Terhubung)

```
aulia@aulia-VirtualBox: ~
                                                                         X
🙎 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
                  https://ubuntu.com/advantage
 * Support:
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)

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.