# Lampiran

**Konfigurasi Firewall dengan iptables**

```
#!/bin/bash

# IPTABLES VERSION
# This sample configuration is for a screened subnet firewall configuration
# With no services supported by the firewall machine itself.

# USER CONFIGURABLE SECTION

# The name and location of the iptables utility.
IPTABLES=iptables

# The path to the iptables executable.
PATH="/sbin"

# Our internal network address space and its supporting network device.
OURNET ="10.31.11.0/24"
OURBCAST="10.31.11.225"
OURDEV="eth0"

# The outside address and the network device that supports it.
ANYADDR="0/0"
ANYDEV="eth0"

# The TCP services we wish to allow to pass – “” empty means all ports
# note: comma separated
TCPIN="smtp, www"
TCPOUT="smtp, www, ftp, ftp-data, irc"

# The UDP Services we wish to allow to pass – “” empty means all ports
# note: comma separated
UDPIN="domain"
UDPOUT="domain"

# The ICMP services we wish to allow to pass – “” empty means all type
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# ref: /usr/include/netinet/ip_icmp.h or type numbers
# note: comma separated
ICMPIN="0 3 11"
ICMPOUT="8 3 11"
# Logging; uncomment the following line to enable logging of the datagrams
# that are blocked by the firewall.
# Logging=1

# END USER CONFIGURATION SECTION
#########################################################
# Flush the input table rules
$IPTABLES –F Forward

# We want to deny incoming access by default.
$IPTABLES –P FORWARD deny

# Drop all datagrams destined for this host received from outside
$IPTABLES –A INPUT –I $ANYDEV –j DROP

# SPOOFING
# We should not accept any datagrams with a source address matching ours
# from the outside, so we deny them.
$IPTABLES –A input –s $OURNET –I $ANYDEV –j deny

# SMURF
# Disallow ICMP to our broadcast address to prevent "Smurf" style attack.
$IPTABLES –A input –p icmp –w $ANYDEV –d $OURBCAST –j deny

# We should accept fragments, in iptables we must do this explicitly.
$IPTABLES –A input –f –j accept

# TCP
# We will accept all TCP datagrams belonging to an existing connection
# (i.e. having the ACK bit set) for the TCP ports we’re allowing through.
# This should catch more than 95% of all valid TCP packets.
$IPTABLES -A input –m multiport –p tcp – d $OURNET --dports $TCPIN / ! –
tcp=flags SYN,ACK ACK –j ACCEPT
IPTABLES -A input –m multiport –p tcp –d SOURNET --sports $TCPIN / ! --tcp=flags SYN,ACK ACK –j ACCEPT

#TCP – INCOMING CONNECTIONS
# We will accept connection requests from the outside only on the allowed TCP ports.
$ IPTABLES -A FORWARD –m multiport –p tcp –i $ANYDEV –d SOURNET $TCPIN / --syn --j ACCEPT

# TCP – OUTGOING CONNECTIONS
# We will accept all outgoing TCP connection requests on the allowed / TCP ports.
$ IPTABLES -A FORWARD –m multiport –p tcp –i $OURDEV –d SOURNET / --dports $TCPOUT --syn --j ACCEPT

# UDP – INCOMING
# We allow UDP datagrams in on the allowed ports and back.
$ IPTABLES -A FORWARD –m multiport –p udp –i $ANYDEV –d SOURNET / --dports $UDPIN --j ACCEPT
$ IPTABLES -A FORWARD –m multiport –p udp –i $ANYDEV –s SOURNET / --sports $UDPIN --j ACCEPT

# UDP – OUTGOING
# We will allow idp datagrams out on the allowes ports and back.
$ IPTABLES -A FORWARD –m multiport –p udp –i $OURDEV –d $ANYADDR / --dports $UDPOUT --j ACCEPT
$ IPTABLES -A FORWARD –m multiport –p udp –i $OURDEV –s $ANYADDR / --sports $UDPOUT --j ACCEPT

# ICMP – INCOMING
# We will allow ICMP diagrams in of the allowed types.
$ IPTABLES -A FORWARD –m multiport –p icmp –i $ANYDEV –d SOURNET / --dports $ICMPIN --j ACCEPT

# ICMP – OUTGOING
# We will allow ICMP diagrams out of the allowed types.
$ IPTABLES -A FORWARD –m multiport –p icmp –i SOURDEV –d $ANYADDR / --dports $ICMPOUT --j ACCEPT
# IP FIREWALL FILTER

$ip firewall layer7-protocol add comment="" name=bittorrent
regexp="^\(\x13bittorrentprotocol|azver\x01\$\|get/scrape\?\info_hash=|get/announcement\?\Info_hash=|get/clients\|GET/data\?\fid=\|d1:ad2:id20:|\x08\7P\]\[RP\]"

$ip firewall layer7-protocol add comment="" name=telnet
regexp="^\xff[\xfb-\xfe].\xff[\xfb-\xfe].\xff[\xfb-\xfe].\xff[\xfb-\xfe]"

$add action = accept chain=input comment="" disabled=no layer7-protocol=telnet
protocol=tcp

$add action=passthrough chain=output comment="" disabled=no layer7-
protocol=tcp

iptables -t filter -A INPUT -p tcp --dport 22 -j ACCEPT
iptables -D INPUT -p tcp --dport 22 -j ACCEPT
iptables -I INPUT 2 -p tcp --dport 110 -j ACCEPT iptables -D INPUT 2
iptables -A FORWARD -m --ipp2p -j DROP
iptables -A FORWARD -m layer7 --proto bittorrent -j DROP

# DEFAULT and LOGGING

# All remaining datagrams fall through to the default
# rule and are dropped. They will be logged if you’ve
# configured the LOGGING variable above
#
If[ " $LOGGING" ]
Then
# Log barred TCP
$iptables --A FORWARD -m tcp -p tcp -j LOG

# Log barred UDP
$iptables --A FORWARD -m udp -p tcp -j LOG

# Log barred ICMP
$iptables --A FORWARD -m icmp -p tcp -j LOG
fi
#
# end.