

De geïnstalleerde packages (bind9, proftpd en apache):

```
taak1_connectingfirewalls [Draaiend] - Oracle VM VirtualBox
Bestand Machine Weergeven Invoer Apparaten Hulp
# DisplayChdir .message
#
# # Limit WRITE everywhere in the anonymous chroot
# <Directory *>
# <Limit WRITE>
# DenyAll
# </Limit>
# </Directory>
#
# # Uncomment this if you're brave.
# # <Directory incoming>
# # # Umask 022 is a good standard umask to prevent new files and dirs
# # # (second parm) from being group and world writable.
# # Umask 022 022
# # <Limit READ WRITE>
# # DenyAll
# # </Limit>
# # <Limit STOR>
# # AllowAll
# # </Limit>
# # </Directory>
#
# </Anonymous>
#
# Include other custom configuration files
Include /etc/proftpd/conf.d/
kjento@taak1server:~$ apt list -a apache2
Bezig met ophalen... Klaar
apache2/bionic-updates,bionic-security,now 2.4.29-1ubuntu4.11 amd64 [geïnstalleerd]
apache2/bionic 2.4.29-1ubuntu4 amd64
kjento@taak1server:~$ apt list -a bind9
Bezig met ophalen... Klaar
bind9/bionic-updates,bionic-security,now 1:9.11.3+dfsg-1ubuntu1.11 amd64 [geïnstalleerd]
bind9/bionic 1:9.11.3+dfsg-1ubuntu1 amd64
kjento@taak1server:~$
```

Not allow zone transfers:

```
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kjento@taak1server:~$
kjento@taak1server:~$ cat /etc/bind/named.conf.options
options {
    directory "/var/cache/bind";

    // If there is a firewall between you and nameservers you want
    // to talk to, you may need to fix the firewall to allow multiple
    // ports to talk. See http://www.kb.cert.org/vuls/id/800113

    // If your ISP provided one or more IP addresses for stable
    // nameservers, you probably want to use them as forwarders.
    // Uncomment the following block, and insert the addresses replacing
    // the all-0's placeholder.

    // forwarders {
    //     0.0.0.0;
    // };

    //=====  

    // If BIND logs error messages about the root key being expired,  

    // you will need to update your keys. See https://www.isc.org/bind-keys
    //=====
    dnssec-validation auto;

    auth-nxdomain no; # conform to RFC1035
    listen-on-v6 { any; };
    allow-transfer { none; };
};
kjento@taak1server:~$ _
```

Protect the server against ping flooding + server not allowed to make outgoing connections, EXCEPT for the installation of security updates. (commands)

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auth-nxdomain no;    # conform to RFC1035
listen-on-v6 { any; };
allow-transfer {none;};
};

kjento@taak1server:~$
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kjento@taak1server:~$
kjento@taak1server:~$ sudo systemctl restart bind9.service
kjento@taak1server:~$ sudo iptables -t filter -A INPUT -p icmp --icmp-type echo-request -m limit --limit
limit
iptables v1.6.1: option "--limit" requires an argument
Try `iptables -h' or 'iptables --help' for more information.
kjento@taak1server:~$ sudo iptables -t filter -A INPUT -p icmp --icmp-type echo-request -m limit --limit
limit 5/minute -j ACCEPT
kjento@taak1server:~$ sudo iptables -t filter -A INPUT -p icmp -j DROP
kjento@taak1server:~$ iptables -t filter -A OUTPUT -p icmp --icmp-type echo-reply -j ACCEPT
iptables v1.6.1: can't initialize iptables table 'filter': Permission denied (you must be root)
Perhaps iptables or your kernel needs to be upgraded.
kjento@taak1server:~$ sudo iptables -t filter -A OUTPUT -p icmp --icmp-type echo-reply -j ACCEPT
kjento@taak1server:~$ sudo iptables -A OUTPUT -m state --state RELATED,ESTABLISHED -j ACCEPT
kjento@taak1server:~$ sudo iptables -A OUTPUT -p tcp --dport80 -m state --state NEW -j ACCEPT
iptables v1.6.1: unknown option "--dport80"
Try `iptables -h' or 'iptables --help' for more information.
kjento@taak1server:~$ sudo iptables -A OUTPUT -p tcp --dport 80 -m state --state NEW -j ACCEPT
kjento@taak1server:~$ sudo iptables -A OUTPUT -p tcp --dport 53 -m state --state NEW -j ACCEPT
kjento@taak1server:~$ sudo iptables -A OUTPUT -p udp --dport 53 -m state --state NEW -j ACCEPT
kjento@taak1server:~$ sudo iptables -A INPUT -m state --state RELATED,ESTABLISHED -j ACCEPT
kjento@taak1server:~$
```

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kjento@taak1server:~$
kjento@taak1server:~$ sudo iptables -L
Chain INPUT (policy ACCEPT)
target     prot opt source                destination           icmp echo-request limit: avg 5/min bur
st 5
DROP       icmp -- anywhere         anywhere
ACCEPT     all  -- anywhere         anywhere              state RELATED,ESTABLISHED

Chain FORWARD (policy ACCEPT)
target     prot opt source                destination

Chain OUTPUT (policy ACCEPT)
target     prot opt source                destination           icmp echo-reply
ACCEPT     icmp -- anywhere         anywhere              state RELATED,ESTABLISHED
ACCEPT     all  -- anywhere         anywhere              tcp dpt:http state NEW
ACCEPT     tcp  -- anywhere         anywhere              tcp dpt:domain state NEW
ACCEPT     udp  -- anywhere         anywhere              udp dpt:domain state NEW
kjento@taak1server:~$
```

