Subject: [SOLVED] IPTables connection tracking stopped working.
Posted by non7top on Sat, 19 Oct 2013 12:49:58 GMT
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Hello everyone.
Just about yesterday I decided to reboot several of my containers just to realize that iptables --state rules stopped working. I still have one container running without reboot(for 23 days) which has these rules working as expected. I don't think I made changes on containers iptables rules, but did make some changes on VE0, including several os updates. Ping from inside the container work just fine.
Here are the relevant config outputs.

VE0 iptables/route

```
# iptables-save
# Generated by iptables-save v1.4.7 on Sat Oct 19 16:38:33 2013
*mangle
:PREROUTING ACCEPT [104195:74172610]
:INPUT ACCEPT [22158:2977388]
:FORWARD ACCEPT [82037:71195222]
:OUTPUT ACCEPT [17925:31501333]
:POSTROUTING ACCEPT [99962:102696555]
COMMIT
# Completed on Sat Oct 19 16:38:33 2013
# Generated by iptables-save v1.4.7 on Sat Oct 19 16:38:33 2013
*filter
:INPUT ACCEPT [0:0]
:FORWARD ACCEPT [0:0]
:OUTPUT ACCEPT [17925:31501333]
-A INPUT -m state --state RELATED,ESTABLISHED -j ACCEPT
-A INPUT -p icmp -j ACCEPT
-A INPUT -i lo -j ACCEPT
-A INPUT -p tcp -m state --state NEW -m tcp --dport 45510 -j ACCEPT
-A INPUT -p tcp -m state --state NEW -m tcp --dport 80 -j ACCEPT
-A INPUT -p tcp -m state --state NEW -m tcp --dport 8080:8081 -j ACCEPT
-A INPUT -p tcp -m state --state NEW -m tcp --dport 20:21 -j ACCEPT
-A INPUT -p tcp -m state --state NEW -m tcp --dport 30000:31000 -j ACCEPT
-A INPUT -p udp -m udp --dport 33434:33523 -j REJECT --reject-with icmp-port-unreachable
-A INPUT -p udp -m udp --dport 44450:44500 -j REJECT --reject-with icmp-port-unreachable
-A INPUT -j REJECT --reject-with icmp-host-prohibited
-A FORWARD -s 37.200.71.8/29 -j ACCEPT
-A FORWARD -d 37.200.71.8/29 -j ACCEPT
-A FORWARD -s 192.168.11.0/24 -j ACCEPT
-A FORWARD -d 192.168.11.0/24 -j ACCEPT
-A FORWARD -j REJECT --reject-with icmp-host-prohibited
COMMIT
# Completed on Sat Oct 19 16:38:33 2013
# Generated by iptables-save v1.4.7 on Sat Oct 19 16:38:33 2013
```

```
*nat
:PREROUTING ACCEPT [2912:166427]
:POSTROUTING ACCEPT [1639:93157]
:OUTPUT ACCEPT [98:5998]
-A PREROUTING -d 37.200.71.10/32 -i eth0 -p tcp -m tcp --dport 10080 -j DNAT --to-destination
192.168.11.1:80
-A PREROUTING -d 37.200.71.10/32 -i eth0 -p tcp -m tcp --dport 45511 -j DNAT --to-destination
192.168.11.1:22
-A PREROUTING -d 37.200.71.10/32 -i eth0 -p tcp -m tcp --dport 10082 -j DNAT --to-destination
192.168.11.2:80
-A PREROUTING -d 37.200.71.10/32 -i eth0 -p tcp -m tcp --dport 45512 -j DNAT --to-destination
192.168.11.2:22
-A POSTROUTING -s 192.168.11.1/32 -o eth0 -j SNAT --to-source 37.200.71.10
-A POSTROUTING -s 192.168.11.2/32 -o eth0 -j SNAT --to-source 37.200.71.10
COMMIT
# Completed on Sat Oct 19 16:38:33 2013

# ip r
192.168.11.1 dev venet0  scope link
37.200.71.14 dev venet0  scope link
37.200.71.13 dev venet0  scope link
37.200.71.12 dev venet0  scope link
37.200.71.11 dev venet0  scope link
37.200.71.8/29 dev eth0  proto kernel  scope link  src 37.200.71.10
default via 37.200.71.9 dev eth0

# lsmod|grep -e ip_ -e xt_ -e nf_ -e ipta
xt_length              1338  0
xt_hl                  1547  0
xt_tcpmss              1623  0
xt_TCPMSS              3461  0
iptable_mangle         3493  0
xt_multiport           2716  0
xt_limit               2134  0
xt_dscp                2073  0
nf_nat_ftp             3523  0
nf_conntrack_ftp      12929  1 nf_nat_ftp
xt_DSCP                2849  0
xt_state               1508  10
iptable_filter         2937  5
iptable_nat            6302  1
nf_nat                23213  3 vzrst,nf_nat_ftp,iptable_nat
nf_conntrack_ipv4      9946  13 iptable_nat,nf_nat
nf_conntrack          80524  8   vzrst,vzcpt,nf_nat_ftp,nf_conntrack_ftp,xt_state,iptable_nat
,nf_nat,nf_conntrack_ipv4
nf_defrag_ipv4         1531  1 nf_conntrack_ipv4
ip_tables             18151  3 iptable_mangle,iptable_filter,iptable_nat
```

vz.conf
 # cat /etc/vz/vz.conf
Global parameters
VIRTUOZZO=yes
LOCKDIR=/vz/lock
DUMPDIR=/vz/dump
VE0CPUUNITS=1000
VE_STOP_MODE=suspend

Logging parameters
LOGGING=yes
LOGFILE=/var/log/vzctl.log
LOG_LEVEL=0
VERBOSE=0

Disk quota parameters
DISK_QUOTA=yes
VZFASTBOOT=no

Disable module loading. If set, vz initscript does not load any modules.
#MODULES_DISABLED=yes

The name of the device whose IP address will be used as source IP for CT.
By default automatically assigned.
#VE_ROUTE_SRC_DEV="eth0"

Uncomment to limit CT IP ARP announces only to network interfaces
having IPs within the same IP network as a container IP.
Leave commented out to use all interfaces.
#NEIGHBOUR_DEVS=detect

Fail if there is another machine in the network with the same IP
ERROR_ON_ARPFAIL="no"

Template parameters
TEMPLATE=/vz/template

Defaults for containers
VE_ROOT=/vz/root/$VEID
VE_PRIVATE=/vz/private/$VEID
CONFIGFILE="vswap-256m"
DEF_OSTEMPLATE="centos-6-x86"
NAMESERVER=inherit # Copy from host system's /etc/resolv.conf
Filesystem layout for new CTs: either simfs (default) or ploop
#VE_LAYOUT=ploop

```
# User namespace configuration
LOCAL_UID=100000
LOCAL_GID=100000

## Load vzwdog module
VZWDOG="no"

## IPv4 iptables kernel modules to be enabled in CTs by default
IPTABLES="ipt_REJECT ipt_tos ipt_limit ipt_multiport iptable_filter iptable_mangle ipt_TCPMSS
ipt_tcpmss ipt_ttl ipt_length"
## IPv4 iptables kernel modules to be loaded by init.d/vz script
IPTABLES_MODULES="$IPTABLES"

## Enable IPv6
IPV6="no"

## IPv6 ip6tables kernel modules
IP6TABLES="ip6_tables ip6table_filter ip6table_mangle ip6t_REJECT"
```

Working VE101
iptables

```
 # iptables -vnL
Chain INPUT (policy DROP 0 packets, 0 bytes)
 pkts bytes target     prot opt in     out     source               destination
  19M   43G ACCEPT     all  --  lo     *       0.0.0.0/0            0.0.0.0/0
    0     0 ACCEPT     all  --  venet0:0 *       0.0.0.0/0            0.0.0.0/0
  58M   15G ACCEPT     all  --  venet0 *       0.0.0.0/0            0.0.0.0/0           state
RELATED,ESTABLISHED
  200  7124 REJECT     udp  --  *      *       0.0.0.0/0            0.0.0.0/0           udp dpts:33434:33523
reject-with icmp-port-unreachable
    0     0 REJECT     udp  --  *      *       0.0.0.0/0            0.0.0.0/0           udp dpts:44450:44500
reject-with icmp-port-unreachable
1563K   89M ALLOW      all  --  *      *       0.0.0.0/0            0.0.0.0/0
19503 1292K LOGDROP    all  --  *      *       0.0.0.0/0            0.0.0.0/0

Chain FORWARD (policy ACCEPT 0 packets, 0 bytes)
 pkts bytes target     prot opt in     out     source               destination

Chain OUTPUT (policy ACCEPT 103M packets, 143G bytes)
 pkts bytes target     prot opt in     out     source               destination

Chain ALLOW (1 references)
 pkts bytes target     prot opt in     out     source               destination
   95  5668 ACCEPT     tcp  --  venet0 *       0.0.0.0/0            0.0.0.0/0           tcp dpt:45510
1476K   83M ACCEPT     tcp  --  venet0 *       0.0.0.0/0            0.0.0.0/0           tcp dpt:80
   84  4000 ACCEPT     tcp  --  venet0 *       0.0.0.0/0            0.0.0.0/0           tcp dpt:8080
```

```
21689 1210K ACCEPT     tcp  --  venet0 *       0.0.0.0/0           0.0.0.0/0           tcp dpts:20:21
45216 3588K ACCEPT     icmp --  venet0 *       0.0.0.0/0           0.0.0.0/0

Chain LOGDROP (1 references)
 pkts bytes target     prot opt in     out     source               destination
19503 1292K LOG        all  --  *      *       0.0.0.0/0           0.0.0.0/0           LOG flags 0 level 7 prefix
`IPT_DROP: '
19503 1292K DROP       all  --  *      *       0.0.0.0/0           0.0.0.0/0
```

Non working VE102
iptables

```
# iptables -vnL
Chain INPUT (policy DROP 0 packets, 0 bytes)
 pkts bytes target     prot opt in     out     source               destination
 8222 9208K ACCEPT     all  --  lo     *       0.0.0.0/0           0.0.0.0/0
    0     0 ACCEPT     all  --  venet0:0 *       0.0.0.0/0           0.0.0.0/0
    0     0 ACCEPT     all  --  *      *       0.0.0.0/0           0.0.0.0/0           state
RELATED,ESTABLISHED
    0     0 REJECT     udp  --  *      *       0.0.0.0/0           0.0.0.0/0           udp dpts:33434:33523
reject-with icmp-port-unreachable
    0     0 REJECT     udp  --  *      *       0.0.0.0/0           0.0.0.0/0           udp dpts:44450:44500
reject-with icmp-port-unreachable
11603  817K ALLOW      all  --  *      *       0.0.0.0/0           0.0.0.0/0
   68 10972 LOGDROP    all  --  *      *       0.0.0.0/0           0.0.0.0/0

Chain FORWARD (policy ACCEPT 0 packets, 0 bytes)
 pkts bytes target     prot opt in     out     source               destination

Chain OUTPUT (policy ACCEPT 37542 packets, 48M bytes)
 pkts bytes target     prot opt in     out     source               destination

Chain ALLOW (1 references)
 pkts bytes target     prot opt in     out     source               destination
  103 10396 ACCEPT     tcp  --  venet0 *       0.0.0.0/0           0.0.0.0/0           tcp dpt:45510
11391  792K ACCEPT     tcp  --  venet0 *       0.0.0.0/0           0.0.0.0/0           tcp dpt:80
    0     0 ACCEPT     tcp  --  venet0 *       0.0.0.0/0           0.0.0.0/0           tcp dpt:8080
    0     0 ACCEPT     tcp  --  venet0 *       0.0.0.0/0           0.0.0.0/0           tcp dpts:20:21
    0     0 ACCEPT     tcp  --  venet0 *       0.0.0.0/0           0.0.0.0/0           tcp dpt:53
   39  2718 ACCEPT     udp  --  venet0 *       0.0.0.0/0           0.0.0.0/0           udp dpt:53
    2   148 ACCEPT     icmp --  venet0 *       0.0.0.0/0           0.0.0.0/0

Chain LOGDROP (1 references)
 pkts bytes target     prot opt in     out     source               destination
   68 10972 LOG        all  --  *      *       0.0.0.0/0           0.0.0.0/0           LOG flags 0 level 7 prefix
`IPT_DROP: '
```

68 10972 DROP all -- * * 0.0.0.0/0 0.0.0.0/0

From dmesg, blocked by LOGDROP
[5618.085257] IPT_DROP: IN=venet0 OUT= MAC= SRC=8.8.8.8 DST=37.200.71.12 LEN=72 TOS=0x00 PREC=0x00 TTL=51 ID=55483 PROTO=UDP SPT=53 DPT=46732 LEN=52
[5618.092405] IPT_DROP: IN=venet0 OUT= MAC= SRC=8.8.8.8 DST=37.200.71.12 LEN=121 TOS=0x00 PREC=0x00 TTL=51 ID=56508 PROTO=UDP SPT=53 DPT=46732 LEN=101
[5619.105489] IPT_DROP: IN=venet0 OUT= MAC= SRC=8.8.8.8 DST=37.200.71.12 LEN=179 TOS=0x00 PREC=0x00 TTL=51 ID=55484 PROTO=UDP SPT=53 DPT=50782 LEN=159