
Subject: IP Contrack /DST Cache Overflow issue
Posted by [KevinH](#) on Mon, 04 Nov 2013 21:24:11 GMT
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My network slowly experinces slowness, intill it eventually dies off. And i am hoping someone that has had this problem could help:

Kernel: 2.6.18-348.4.1.el5.028stab107.1
OS: CentOS release 5.8 (Final)

```
Nov 3 07:41:18 90917 kernel: process `sysctl' is using deprecated sysctl (sysc$
Nov 3 09:36:09 90917 kernel: Fatal resource shortage: privvmpages, UB 167.
Nov 3 09:36:09 90917 last message repeated 3 times
Nov 3 21:05:01 90917 auditd[8428]: Audit daemon rotating log files
Nov 4 00:18:56 90917 kernel: ip_contrack: CT 102: table full, dropping packet.
Nov 4 00:18:58 90917 last message repeated 9 times
Nov 4 00:19:01 90917 kernel: printk: 2 messages suppressed.
```

```
Nov 4 00:18:58 90917 last message repeated 9 times
Nov 4 00:19:01 90917 kernel: printk: 2 messages suppressed.
Nov 4 00:19:01 90917 kernel: Route hash chain too long!
Nov 4 00:19:01 90917 kernel: Adjust your secret_interval!
Nov 4 00:19:06 90917 kernel: printk: 11 messages suppressed.
Nov 4 00:19:06 90917 kernel: Route hash chain too long!
Nov 4 00:19:06 90917 kernel: Adjust your secret_interval!
Nov 4 00:19:11 90917 kernel: printk: 9 messages suppressed.
Nov 4 00:19:11 90917 kernel: ip_contrack: CT 102: table full, dropping packet.
Nov 4 00:19:13 90917 kernel: venet0: 5 rebuilds is over limit, route caching d$
Nov 4 00:19:16 90917 kernel: printk: 15 messages suppressed.
Nov 4 00:19:16 90917 kernel: ip_contrack: CT 102: table full, dropping packet.
Nov 4 00:19:21 90917 kernel: printk: 13 messages suppressed.
Nov 4 00:19:21 90917 kernel: ip_contrack: CT 102: table full, dropping packet.
Nov 4 00:19:26 90917 kernel: printk: 3 messages suppressed.
Nov 4 00:19:26 90917 kernel: ip_contrack: CT 102: table full, dropping packet.
Nov 4 00:19:31 90917 kernel: printk: 5 messages suppressed.
Nov 4 00:19:31 90917 kernel: ip_contrack: CT 102: table full, dropping packet.
Nov 4 00:19:36 90917 kernel: printk: 6 messages suppressed.
Nov 4 00:19:36 90917 kernel: ip_contrack: CT 102: table full, dropping packet.
Nov 4 00:19:41 90917 kernel: printk: 6 messages suppressed.
Nov 4 00:19:41 90917 kernel: ip_contrack: CT 102: table full, dropping packet.
Nov 4 00:19:46 90917 kernel: printk: 7 messages suppressed.
Nov 4 00:19:46 90917 kernel: ip_contrack: CT 102: table full, dropping packet.
```

It will then slowly DST Cache overflow.

At this point, i am a tad lost on what to do.

here is the sysctl.conf file:

```
net.ipv4.ip_forward = 1
net.ipv6.conf.default.forwarding = 1
net.ipv6.conf.all.forwarding = 1
net.ipv4.conf.default.proxy_arp = 0
net.ipv4.conf.all.rp_filter = 1
kernel.sysrq = 1
net.ipv4.conf.default.send_redirects = 1
net.ipv4.conf.all.send_redirects = 0
kernel.panic = 10
net.ipv4.tcp_mem = 786432 1048576 1572864
net.ipv4.netfilter.ip_conntrack_max=196608
net.ipv4.tcp_syncookies = 1
net.ipv4.tcp_no_metrics_save=1
net.ipv4.netfilter.ip_conntrack_tcp_timeout_syn_recv = 5
net.ipv4.netfilter.ip_conntrack_tcp_timeout_established = 600
net.ipv4.netfilter.ip_conntrack_tcp_timeout_syn_sent = 15
net.ipv4.netfilter.ip_conntrack_tcp_timeout_fin_wait = 3
net.ipv4.netfilter.ip_conntrack_tcp_timeout_close_wait = 3
net.ipv4.netfilter.ip_conntrack_tcp_timeout_time_wait = 3
net.ipv4.route.gc_thresh = 131072
```

Any help to fix this so it stops the crashes and slowness, is greatly helpful.

Thanks,

Kevin Hammett

Subject: Re: IP Contrack /DST Cache Overflow issue
Posted by [Paparaciz](#) on Sun, 10 Nov 2013 14:12:19 GMT
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please paste CT "102.conf" file, and /proc/user_beancounters stats for this CT

Subject: Re: IP Contrack /DST Cache Overflow issue
Posted by [KevinH](#) on Sun, 10 Nov 2013 15:04:38 GMT
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102.conf:

```

NUMPROC="999999"
PHYSPAGES="0:2147483647"
VMGUARPAGES="263168:2147483647"
OOMGUARPAGES="263168:2147483647"
NUMTCPSOCK="7999992"
NUMFLOCK="999999"
NUMPTY="500000"
NUMSIGINFO="999999"
TCPSNDBUF="214748160:396774400"
TCPRCVBUF="214748160:396774400"
OTHERSOCKBUF="214748160:396774400"
DGRAMRCVBUF="214748160:396774400"
NUMOTHERSOCK="7999992"
DCACHESIZE="2147483646"
NUMFILE="23999976"
AVNUMPROC="1000:1000"
NUMIPTENT="999999"

```

```

# Disk quota parameters (in form of softlimit:hardlimit)
DISKSPACE="524288000:524288000"
DISKINODES="262144000:262144000"
QUOTATIME="0"

```

And beancounters:

```
[root@pronto /]# cat /proc/user_beancounters
```

Version: 2.5

uid	resource	held	maxheld	barrier	limit	failcnt
102:	kmemsize	9670459	10723310	2147483646		2147483646
0	lockedpages	8190	8190	999999	999999	
0	privvmpages	307642	332446	1548288	1548288	
0	shmpages	31	703	263168	263168	0
	dummy	0	0	0	0	0
	numproc	125	137	999999	999999	0
0	physpages	151112	151373	0	2147483647	
0	vmguarpages	0	0	263168	2147483647	
0	oomguarpages	151112	151373	263168	2147483647	
0	numtcpsock	13	21	7999992	7999992	
	numflock	9	14	999999	999999	0
	numpty	14	14	500000	500000	0
	numsiginfo	0	3	999999	999999	0

tcpsndbuf	227968	1793056	214748160	396774400	
0					
tcprcvbuf	212992	926848	214748160	396774400	
0					
othersockbuf	21024	33120	214748160	396774400	
0					
dgramrcvbuf	86432	1123616	214748160	396774400	
0					
numothersock	38	53	7999992	7999992	
0					
dcachesize	0	0	2147483646	2147483646	
0					
numfile	3130	3292	23999976	23999976	
0					
dummy	0	0	0	0	0
dummy	0	0	0	0	0
dummy	0	0	0	0	0
numiptent	0	0	999999	999999	0

Hope this helps

Subject: Re: IP Contrack /DST Cache Overflow issue
 Posted by [pavel.odintsov](#) on Sun, 10 Nov 2013 22:30:08 GMT
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Hello, KevinH!

I will recommend you to enlarge a buffer for contrack buckets up to 1-3 millions (it's ok for modern systems).

You can do it by a following commands:
 edit /etc/sysctl.conf and fix:
 net.ipv4.netfilter.ip_contrack_max=1548576

Apply changes:

```
sysctl -p
```

You can entirely disable connection tracking for certain CT with following commands:

```
iptables -t raw -A PREROUTING -d VPS_IP -j NOTRACK
iptables -t raw -A PREROUTING -s VPS_IP -j NOTRACK
```

Be aware about using last command, it result to completely disable RELATED/ESTABLISHED flags to working inside container.

In addition I recommend you to upgrade from pretty old kernels 2.6.18 to modern 2.6.32 kernel series. Oh, sorry, I forgot to specify link, it's here https://openvz.org/028_to_042_kernel_upgrade
