Subject: SSH stop responding on HN
Posted by stec on Wed, 13 Dec 2006 23:21:55 GMT
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This happend regularly after, especialy after a long up-time. When I try to connect to ssh on the host node, it either reply "ssh: connect to host hostname port 22: Operation timed out" or "ssh_exchange_identification: Connection closed by remote host". After shutting down all vm (which are working properly and responding to ssh), the reply is more likely the second one.

Any clue of what could be wrong ?

Denis
PS: This a 2.6.16-026test018 self built kernel and I have no physical access to the host.

Subject: Re: SSH stop responding on host node
Posted by rickb on Thu, 14 Dec 2006 07:08:42 GMT
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Hi, do you have ssh access to the HN now? If not, one could only theorize what the problem could be. sshd is not processing your authentication request, theres really no further details beyond that. This could be due to many thing, however without access to the server anything we tell you would be speculation and useless anyway. My recommendation would be to reboot the HN and check /var/log/messages and /var/log/secure on the HN around the times when you could not ssh to the HN..

Rick

Subject: Re: SSH stop responding on host node
Posted by stec on Thu, 14 Dec 2006 08:12:10 GMT
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Oh, sorry , I have forgot to tell you that I have an another issue found in the logs, that some process of the host are complaining that fopen report "Too many open files in system". Last time there were nothing about ssh at all, but this time, I have checked again, and here is what I found:

* A few days ago, sshd has reported "error: fork: Cannot allocate memory"
* Before I shutdown all vm, ssh report no connection attempt
* After, these shutdowns, ssh complains:
  sshd[3014]: error: fork: Cannot allocate memory
  Fatal resource shortage: kmemsize, UB 0.

I really do not catch from where these issues may came from, can you suggest me some investigation path ?

Subject: Re: SSH stop responding on host node
Posted by rickb on Thu, 14 Dec 2006 08:25:20 GMT
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OK, I see now. When you said:
"When I try to connect to ssh on the host node"
You meant using ssh from the HN to the VE. Metrics numfiles, kmemsize, privvmpages exhaustion would all explain why any software malfuncitons in a VE. To verify:

cat /proc/user_beancounters

and paste here. All you need to do is raise the limits for the failcnt'ing metrics, understand how much resources your applications need and give them more then that. Have you read the UBC page in the wiki?

Rick

Subject: Re: SSH stop responding on host node
Posted by stec on Thu, 14 Dec 2006 08:47:28 GMT
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No, you are wrong, I said that I am trying to connect from home to the HN, the one that is running the VEs (sorry I am still not use to these abreviation, I am learning now). VEs seems to be working really well, as far as I know, and they fulfill my needs.

This is the HN that complains about file issues and I am pretty sure that this the sshd of the HN that complains. Hope this clarify the situation.

Thanks for helping.

Denis

Subject: Re: SSH stop responding on host node
Posted by rickb on Thu, 14 Dec 2006 08:59:23 GMT
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HN has no resource limits. but anyway, send us user_beancounters so we can speak intelligently about the problem. Also check your logs like I mentioned at first. You need to give us specifics, as there is now possible way for us to identify the problem based on errors like "operation timed out"..

Rick

Subject: Re: SSH stop responding on host node
Posted by stec on Thu, 14 Dec 2006 10:00:13 GMT
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Dear Rick,

Here is an excerpt of my logs. I have remove many "fopen: Too many open files in system". Note that I have tried to connect using ssh before and after shutting down the VEs.

Dec 13 21:24:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:24:25 ns22021 Neighbour table overflow.
Dec 13 21:25:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:25:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:25:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:26:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:26:21 ns22021 IPv6 addrconf: prefix with wrong length 56
Dec 13 21:27:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:28:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:29:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:29:36 ns22021 IPv6 addrconf: prefix with wrong length 56
Dec 13 21:30:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:30:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:30:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:30:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:31:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:32:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:32:29 ns22021 IPv6 addrconf: prefix with wrong length 56
Dec 13 21:33:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:34:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:35:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:35:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:35:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:35:28 ns22021 VPS: 18639: stopped
Dec 13 21:35:38 ns22021 IPv6 addrconf: prefix with wrong length 56
Dec 13 21:35:52 ns22021 VPS: 18638: stopped
Dec 13 21:36:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:37:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:38:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:38:01 ns22021 Uncharging too much 2220 h 1368, res othersockbuf ub 18637
Dec 13 21:38:01 ns22021 Uncharging too much 2220 h 0, res othersockbuf ub 18637
Dec 13 21:38:01 ns22021 Uncharging too much 2220 h 0, res othersockbuf ub 18637
Dec 13 21:38:01 ns22021 Uncharging too much 2220 h 0, res othersockbuf ub 18637
Dec 13 21:38:01 ns22021 Uncharging too much 2220 h 0, res othersockbuf ub 18637
Dec 13 21:38:01 ns22021 Uncharging too much 2220 h 0, res othersockbuf ub 18637
Dec 13 21:38:07 ns22021 VPS: 18637: stopped
Dec 13 21:38:11 ns22021 IPv6 addrconf: prefix with wrong length 56Dec 13 21:38:26 ns22021 VPS: 18636: stopped
Dec 13 21:38:31 ns22021 Fatal resource shortage: kmemsize, UB 0.

Dec 13 21:38:31 ns22021 sshd[3014]: error: fork: Cannot allocate memory
Dec 13 21:38:35 ns22021 Fatal resource shortage: kmemsize, UB 0.
Dec 13 21:38:35 ns22021 sshd[3014]: error: fork: Cannot allocate memory
Dec 13 21:38:36 ns22021 Fatal resource shortage: kmemsize, UB 0.
Dec 13 21:38:36 ns22021 sshd[3014]: error: fork: Cannot allocate memory
Dec 13 21:38:37 ns22021 Fatal resource shortage: kmemsize, UB 0.
Dec 13 21:38:37 ns22021 sshd[3014]: error: fork: Cannot allocate memory
Dec 13 21:39:01 ns22021 cron[8714]: (CRON) error (can't fork)
Dec 13 21:39:16 ns22021 Ub 18636 helds 13320 in tcpsndbuf on put

Here is the beancounters as of now. Of course, I cannot produce those when the issue occurs since I cannot ssh anymore.

Version: 2.5

uid	resource	held	maxheld	barrier	limit	failcnt
0:	kmemsize	109296870	109841586	2147483647	2147483647	0
	lockedpages	0	0	2147483647	2147483647	0
	privvmpages	3262	14897	2147483647	2147483647	0
	shmpages	679	695	2147483647	2147483647	0
	dummy	0	0	2147483647	2147483647	0
	numproc	61	82	2147483647	2147483647	0
	physpages	1560	6760	2147483647	2147483647	0
	vmguarpages	0	0	2147483647	2147483647	0
	oomguarpages	1560	6760	2147483647	2147483647	0
	numtcpsock	3	5	2147483647	2147483647	0
	numflock	1	2	2147483647	2147483647	0
	numpty	1	1	2147483647	2147483647	0
	numsiginfo	0	2	2147483647	2147483647	0
	tcpsndbuf	31080	35520	2147483647	2147483647	0
	tcprcvbuf	87564	87564	2147483647	2147483647	0
	othersockbuf	11100	16224	2147483647	2147483647	0
	dgramrcvbuf	0	8364	2147483647	2147483647	0
	numothersock	23	27	2147483647	2147483647	0
	dcachesize	0	0	2147483647	2147483647	0
	numfile	525860	526009	2147483647	2147483647	0
	dummy	0	0	2147483647	2147483647	0
	dummy	0	0	2147483647	2147483647	0
	dummy	0	0	2147483647	2147483647	0
	numiptent	0	0	2147483647	2147483647	0
18636:	kmemsize	2162620	2702410	18486804	20335484	0
	lockedpages	0	0	902	902	0
	privvmpages	63043	69808	152556	167811	0
	shmpages	14	350	15255	15255	0
	dummy	0	0	0	0	0
	numproc	46	58	800	800	0
	physpages	39341	42286	0	2147483647	0
	vmguarpages	0	0	152556	2147483647	0

```
      oomguarpages      39341      42286     152556 2147483647          0
      numtcpsock            7         19        800        800          0
      numflock              6          7        720        792          0
      numpty                0          0         80         80          0
      numsiginfo            0          2       1024       1024          0
      tcpsndbuf         62160     417360    2885468    6162268          0
      tcprcvbuf        114688     147456    2885468    6162268          0
      othersockbuf     133012     376720    1442734    4719534          0
      dgramrcvbuf           0       4268    1442734    1442734          0
      numothersock         95        100        800        800          0
      dcachesize            0          0    4026407    4147200          0
      numfile            1339       1736       7200       7200          0
      dummy                 0          0          0          0          0
      dummy                 0          0          0          0          0
      dummy                 0          0          0          0          0
      numiptent             0          0        200        200          0
18637: kmemsize        890020    1425116   18486804   20335484          0
      lockedpages           0          0        902        902          0
      privvmpages       12696      19885     152556     167811          0
      shmpages             14        350      15255      15255          0
      dummy                 0          0          0          0          0
      numproc              18         31        800        800          0
      physpages          3081       6911          0 2147483647          0
      vmguarpages           0          0     152556 2147483647          0
      oomguarpages       3081       6911     152556 2147483647          0
      numtcpsock           11         25        800        800          0
      numflock              2          3        720        792          0
      numpty                0          0         80         80          0
      numsiginfo            0          2       1024       1024          0
      tcpsndbuf         97680     426240    2885468    6162268          0
      tcprcvbuf        180224     368984    2885468    6162268          0
      othersockbuf      15540      19128    1442734    4719534          0
      dgramrcvbuf           0     606056    1442734    1442734          0
      numothersock          7         11        800        800          0
      dcachesize            0          0    4026407    4147200          0
      numfile             619        820       7200       7200          0
      dummy                 0          0          0          0          0
      dummy                 0          0          0          0          0
      dummy                 0          0          0          0          0
      numiptent             0          0        200        200          0
18638: kmemsize        454989    1046206   18486804   20335484          0
      lockedpages           0          0        902        902          0
      privvmpages        1253       8677     152556     167811          0
      shmpages              0        336      15255      15255          0
      dummy                 0          0          0          0          0
      numproc               8         20        800        800          0
      physpages           837       1734          0 2147483647          0
      vmguarpages           0          0     152556 2147483647          0
```

```
      oomguarpages       837      1734     152556 2147483647         0
      numtcpsock           4         6        800        800         0
      numflock             2         3        720        792         0
      numpty               0         0         80         80         0
      numsiginfo           0         2       1024       1024         0
      tcpsndbuf        35520     35520    2885468    6162268         0
      tcprcvbuf        65536     65536    2885468    6162268         0
      othersockbuf     86580     90168    1442734    4719534         0
      dgramrcvbuf          0      8536    1442734    1442734         0
      numothersock        41        45        800        800         0
      dcachesize           0         0    4026407    4147200         0
      numfile            255       473       7200       7200         0
      dummy                0         0          0          0         0
      dummy                0         0          0          0         0
      dummy                0         0          0          0         0
      numiptent            0         0        200        200         0
18639: kmemsize       260964    857866   18486804   20335484         0
      lockedpages          0         0        902        902         0
      privvmpages        709      7954     152556     167811         0
      shmpages             0       336      15255      15255         0
      dummy                0         0          0          0         0
      numproc              5        18        800        800         0
      physpages          414      1234          0 2147483647         0
      vmguarpages          0         0     152556 2147483647         0
      oomguarpages       414      1234     152556 2147483647         0
      numtcpsock           2         4        800        800         0
      numflock             2         3        720        792         0
      numpty               0         0         80         80         0
      numsiginfo           0         2       1024       1024         0
      tcpsndbuf        17760     17760    2885468    6162268         0
      tcprcvbuf        32768     32768    2885468    6162268         0
      othersockbuf      2220      5808    1442734    4719534         0
      dgramrcvbuf          0      4268    1442734    1442734         0
      numothersock         1         5        800        800         0
      dcachesize           0         0    4026407    4147200         0
      numfile            122       382       7200       7200         0
      dummy                0         0          0          0         0
      dummy                0         0          0          0         0
      dummy                0         0          0          0         0
      numiptent            0         0        200        200         0
```

Hope this helps diagnosing better.

Denis

Subject: Re: SSH stop responding on host node
Posted by rickb on Thu, 14 Dec 2006 10:44:19 GMT
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500,000 open files..

this is probably related to a ulimit limit and not due to an openvz resource limitation. I suspect you are doing something zany in your HN node to have 500k open files. Move that application into a VE so that your HN cannot crash.

Rick

Subject: Re: SSH stop responding on host node
Posted by stec on Thu, 14 Dec 2006 11:13:06 GMT
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Nice, but how do I determine which application is allocating so much files ? I do not run anything on the HN, except some monitoring stuff of my hosting company.

Thanks again for your help.

Denis

Subject: Re: SSH stop responding on host node
Posted by stec on Fri, 15 Dec 2006 00:26:00 GMT
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I do not understand why numfile report this increasing number. Using lsof | wc -l do not report a large number. What should I conclude ?

Subject: Re: SSH stop responding on HN
Posted by xemul on Fri, 15 Dec 2006 09:23:33 GMT
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We had some BUGS in numfile and kmemsize accounting in 026test018 kernel due to ported optimizations from stable OpenVZ branch. They were fixed in 026test020 kernel and in 028 kernels.

Obviously you're experiencing them, so update will definitely help.

But note, that if you want to stay on 026 kernels then you'll have to download the sources and add top patch from GIT - it wasn't included into any 026 release as we dropped this branch for a while and started with 028.

Thank you.

Subject: Re: SSH stop responding on HN
Posted by stec on Fri, 15 Dec 2006 10:33:50 GMT
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Thanks for this information, this is really good news.
I am currently in the process of building a new server that will replace the old one, and I expect to use the latest build on 2.6.18 kernel. I am really happy to know that my effort will solve that issue.

Anyway, great job guys ! Many thanks !

Subject: Re: SSH stop responding on HN
Posted by John Kelly on Fri, 15 Dec 2006 14:40:41 GMT
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xemul wrote on Fri, 15 December 2006 04:23But note, that if you want to stay on 026 kernels then you'll have to download the sources and add top patch from GIT

OK. But there are many patches in GIT. Which one is it?

Subject: Re: SSH stop responding on HN
Posted by dim on Tue, 19 Dec 2006 13:38:05 GMT
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This one:
http://git.openvz.org/?p=linux-2.6.16-openvz;a=commit;h=46d1
e25bce7440b23652caf7f463670a5360890a.

Subject: Re: SSH stop responding on HN
Posted by John Kelly on Tue, 19 Dec 2006 14:56:34 GMT
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OK. I was looking in the 2.6.18 tree for a "top" patch. But now I see that "top" meant, not the command "top", but the latest patch in the 2.6.16 tree, which was not included in the final tarball.

BTW, your raw URL does not work, you have to edit it and extract the portion between the double quotes.

Subject: Re: SSH stop responding on HN
Posted by dim on Tue, 19 Dec 2006 15:05:08 GMT
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Hmm, it works for me. Ok, I'll replace link.