Subject: *SOLVED* Out of Socket Memory on the Hardware Node
Posted by jubo on Mon, 12 Feb 2007 22:24:21 GMT
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I am running about 10 VEs on a hardware node. These are primarily web servers that get a decent amount of traffic. When I check the /proc/user_beancounters I notice that the following values sometimes go over limit: tcpsndbuf,tcprcvbuf,othersockbuf. So naturally I raise them up. However, now I am starting to get some Out of Socket Memory Errors in the logs on the Hardware Node. I did the following:

Added these increased values to the sysctl.conf

net.core.rmem_max=262144
net.core.wmem_max=262144

However, I still get the error, so I was wondering if people could suggest the correct value to use here. Is the sum of all the buffer sizes of all the VEs on the hardware node the correct value? Also, what are safe values to use if you want to ensure little or no loss of service on a web server VE if it encounters a lot of traffic.

Thanks

Subject: Re: Out of Socket Memory on the Hardware Node
Posted by Vasily Tarasov on Tue, 13 Feb 2007 16:08:45 GMT
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Hello,

I can suggest you the following:
- increase tcp_max_orphans (sysctl)
- increase barrier and limit (not only limit!) for numtcpsock
- increase tcp_mem (sysctl)

HTH,
Vasily

Subject: Re: Out of Socket Memory on the Hardware Node
Posted by jubo on Tue, 13 Feb 2007 17:29:53 GMT
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Vasily,

Thanks for the reply. Is there any sort of formula for how much tcp_mem and tcp_max_orphans

to provision. According to the /proc/user_beancounters I have more than enough numtcpsock for the VEs. What I am trying to do is minimize loss of service for the web applications.

Subject: Re: Out of Socket Memory on the Hardware Node
Posted by Vasily Tarasov on Wed, 14 Feb 2007 07:30:46 GMT
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Hello,

Unfortunately, I can't provide you an exact formula. I can only inform you under which conditions the message "Out of socket memory" appears:

Let 'count' is the number of orphaned sockets for some VE.

if (count > (VE.numtcpsock.barrier / 4))
  ---> output the message

if (count > sysctl_tcp_max_orphans)
  ---> output the message

if (tcp_memmory_allocated > sysctl_tcp_mem[2])
  ---> output the message

(this is right for 028test series. I think, it's the same for 023stable series)

HTH,
Vasily.

Subject: Re: Out of Socket Memory on the Hardware Node
Posted by jubo on Wed, 14 Feb 2007 18:31:45 GMT
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Thanks for the info, Vasily. I am going to try to bump those original parameters you mentioned and hope for the best.

-Curtis
