
Subject: high load spikes average of 80

Posted by [mora](#) on Sat, 07 Oct 2006 13:48:23 GMT

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Hello all

i have the following problem

the server average load get too high over 80 or even 100 suddenly then gets okay from itself
when i run top command i cannot find anything causing this and when i run top on the hosted vps i
cannot find any processes having too much load

Hardware node specifications

P4 3.6 HT dual core

1 GB of ram

3 GB swap

kernel

Linux node.xxxx.org 2.6.8-022stab078.21-smp #1 SMP Sat Sep 9 00:34:35 MSD 2006 i686 i686
i386 GNU/Linux

i have 3 vps hosted on the server and they run cpanel with few websites on each vps
and the conf file for each one have this

```
DISABLED="no"  
CLASSID="2"  
TEMPLATES="devel-ce4/20051122"  
ONBOOT="no"  
OFFLINE_MANAGEMENT="yes"  
OSTEMPLATE="centos-4-i386-default"  
VE_TYPE="regular"  
SLMMODE="ubc"  
ORIGIN_SAMPLE="vps.cpanel"  
AVNUMPROC="32567:32567"  
NUMPROC="32567:32567"  
NUMTCPSOCK="2147483647:2147483647"  
NUMOTHERSOCK="2147483647:2147483647"  
VMGUARPAGES="6144:2147483647"  
KMEMSIZE="2147483647:2147483647"  
TCPSNDBUF="2147483647:2147483647"  
TCPRCVBUF="2147483647:2147483647"  
OTHERSOCKBUF="2147483647:2147483647"  
DGRAMRCVBUF="47483647:47483647"  
OOMGUARPAGES="6144:2147483647"  
LOCKEDPAGES="2147483647:2147483647"  
SHMPAGES="2147483647:2147483647"  
PRIVVMPAGES="2147483647:2147483647"  
NUMFILE="2147483647:2147483647"  
NUMFLOCK="2147483647:2147483647"
```

```
NUMPTY="255:255"
NUMSIGINFO="1024:1024"
DCACHESIZE="2147483647:2147483647"
PHYSPPAGES="0:2147483647"
NUMIPTENT="400:400"
DISKSPACE="20083647:20083647"
DISKINODES="2147483647:2147483647"
QUOTATIME="2147483647"
CPUUNITS="100000"
```

so what is the configuration recommended so each vps cannot use up all cpu resources and make the load average over 80 and make all other vps and the node itself inaccessible i also want to limit maximum usage of ram to 350 Mb each and will this conf be good for a cpanel vps or not waiting your reply thanks

Subject: Re: high load spikes average of 80
Posted by [HaroldB](#) on Sat, 07 Oct 2006 14:46:55 GMT
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This isn't a vz specific question, realistically you should read about how to monitor system resources and rates in the Linux OS. Obviously, some metric is exhausted. cpu power, memory, disk io, etc.

send us the output of:
vmstat 5 (let it run for a minute)
iostat -k 5 (run for a minute)
free -m

I can probably point you in the right direction.

If you are asking why one vps could be overrunning the entire node, send us the output of:

```
vzmemcheck -vA
vzcpucheck -v
```

Subject: Re: high load spikes average of 80
Posted by [mora](#) on Sat, 07 Oct 2006 14:51:14 GMT
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```
vmstat 5
procs -----memory----- ---swap-- -----io----- --system-- ----cpu----
 r b swpd free buff cache si so bi bo in cs us sy id wa
```

```

2 0 170840 5708 27036 329048 9 9 313 170 48 236 10 7 72 11
1 0 170840 11940 26792 327756 0 0 53 280 1277 2721 33 33 31 3
5 0 170840 8604 27024 330264 146 0 531 372 1452 2717 28 43 27 3
2 1 170840 17816 27072 322804 0 0 107 299 1328 2915 13 16 70 1
0 0 170840 18748 27128 322952 0 0 26 101 1179 2923 1 1 96 1
1 0 170840 19432 27244 324128 0 0 222 298 1288 3165 11 4 83 2
1 0 170840 18352 27308 324608 0 0 90 115 1255 3083 5 2 92 1

```

thats for vmstat 5 but iostat gave
[~]# iostat -k 5
-bash: iostat: command not found

and free -m says

```

free -m
      total    used    free   shared  buffers   cached
Mem:      976    949     27      0       26     319
-/+ buffers/cache:    603    373
Swap:     4000    166    3833

```

im sorry im new to vz i just want to prevent one vps from making the Hardware node to reach high values and slows down everything

thanks for your help

Subject: Re: high load spikes average of 80
Posted by [HaroldB](#) on Sat, 07 Oct 2006 14:53:56 GMT
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check my edit about using the vz* shell scripts to see why one vps is overrunning the node..

Subject: Re: high load spikes average of 80
Posted by [mora](#) on Sat, 07 Oct 2006 15:03:16 GMT
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Hello
thanks for your help the following is the output please help me understand it and how to adjust my conf file for these so one of them cannot overload the node
many many thanks

```
root [~]# vzmemcheck -vA
```

Output values in Mbytes

veid	LowMem util	LowMem commit	LowMem util	RAM util	MemSwap commit	MemSwap util	MemSwap commit	Alloc limit	Alloc	Alloc
101	4.63	8332.65	127.21	182.31	8356.65	694.25	8356.65	8396940.65		
102	4.83	8237.28	210.19	255.09	8261.28	443.76	8261.28	8396845.28		

```
-----  
Summary: 9.45 16569.94 337.40 437.40 16617.94 1138.01 16617.94 16793785.93  
          326.00 326.00 976.00 4977.00 4977.00 4977.00 4977.00 4977.00
```

```
root [~]# vzcpucheck -v
```

vpsid	units
-------	-------

```
-----  
0      1000  
101     100000  
102     100000  
103     100000
```

Current CPU utilization: 201000

Power of the node: 319144

Subject: Re: high load spikes average of 80

Posted by [HaroldB](#) on Sat, 07 Oct 2006 15:21:05 GMT

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Based on your output, your server load is fine right now. Give us the output of those commands when the problem happens. Your cpu and memory allocation parameters look ok.

The HN load value is not a huge concern for you, since its possible for one VE to have 75 concurrent processes, while its cpu usage is limited by the cpulimit. In such a scenario, the HN load would then be 75++, but the speed of the other VPS should not be effected. If this is incorrect, someone please correct me.

Subject: Re: high load spikes average of 80

Posted by [mora](#) on Sat, 07 Oct 2006 16:53:25 GMT

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Hello

the problem is that when the load is suddenly rise from 0.25 to 95 , 100 or even more i cannot login to the server and if im already inside i can run no command and i have to hard reboot the whole server

so please guide me on how to limit the cpu usage to 300 MHZ only and 256 as a maximum and hard limit for each vps so if one vps experience too high load then its only that vps affected and

not the whole server
thanks in advance

Subject: Re: high load spikes average of 80
Posted by [mora](#) on Sat, 07 Oct 2006 17:54:23 GMT
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here is the readings when the load is high

vzmemcheck -vA

Output values in Mbytes

veid	LowMem util	LowMem commit	RAM util	MemSwap commit	MemSwap util	MemSwap commit	Alloc limit	Alloc	Alloc
108	4.54	8332.65	118.61	190.95	8356.65	688.22	8356.65	8396940.65	
109	5.74	8237.28	254.52	318.75	8261.28	507.80	8261.28	8396845.28	

Summary: 10.28 16569.94 373.13 509.70 16617.94 1196.02 16617.94 16793785.93
326.00 326.00 976.00 4977.00 4977.00 4977.00 4977.00 4977.00

vzcpucheck -v

vpsid	units
-------	-------

0 1000
109 100000
108 100000

Current CPU utilization: 201000

Power of the node: 319144

the top of thje hardware node says

- 13:56:34 up 23:48, 3 users, load average: 94.03, 93.03, 87.88
Tasks: 398 total, 63 running, 317 sleeping, 0 stopped, 18 zombie
Cpu(s): 41.3% us, 58.0% sy, 0.0% ni, 0.0% id, 0.0% wa, 0.3% hi, 0.3% si
Mem: 1000068k total, 942376k used, 57692k free, 20612k buffers
Swap: 4096532k total, 254020k used, 3842512k free, 357000k cached

the uptime for the second vps says

19:58:56 up 23:11, 0 users, load average: 32.91, 32.94, 30.75

the ps auxf for it says

9 ps auxf

USER	PID	%CPU	%MEM	VSZ	RSS	TTY	STAT	START	TIME	COMMAND
root	1	0.0	0.0	1624	512	?	Ss	Oct06	0:00	init [3]
root	12057	0.0	0.0	1528	572	?	Ss	Oct06	0:00	syslogd -m 0
root	12133	0.0	0.0	1456	404	?	S	Oct06	0:00	/usr/sbin/courierlogger
-pid=/var/spool/authdaemon/pid -facility=mail -start /usr/libexec/courier-authlib/authdaemond										
root	12134	0.0	0.0	1800	480	?	S	Oct06	0:00	_
/usr/libexec/courier-authlib/authdaemond										
root	12149	0.0	0.0	1800	580	?	S	Oct06	0:00	_
/usr/libexec/courier-authlib/authdaemond										
root	5222	0.0	0.3	9828	3556	?	S	09:26	0:00	_ /etc/authlib/authProg
root	12150	0.0	0.0	1800	588	?	S	Oct06	0:00	_
/usr/libexec/courier-authlib/authdaemond										
root	1951	0.0	0.3	9828	3352	?	S	13:23	0:00	_ /etc/authlib/authProg
root	12151	0.0	0.0	1800	552	?	S	Oct06	0:00	_
/usr/libexec/courier-authlib/authdaemond										
root	1832	0.0	0.2	9828	2964	?	S	13:22	0:00	_ /etc/authlib/authProg
root	12153	0.0	0.0	1800	584	?	S	Oct06	0:00	_
/usr/libexec/courier-authlib/authdaemond										
root	9266	0.0	0.6	9832	6932	?	S	18:41	0:00	_ /etc/authlib/authProg
root	12154	0.0	0.0	1800	532	?	S	Oct06	0:00	_
/usr/libexec/courier-authlib/authdaemond										
nobody	12251	0.0	0.1	4356	1164	?	SLs	Oct06	0:00	proftpd: (accepting connections)
root	17843	0.0	0.1	4016	1224	?	Ss	Oct06	0:00	/usr/sbin/sshd
root	17905	0.0	0.2	9756	2536	?	S	Oct06	0:01	chksservd
root	17916	0.0	0.0	1460	468	?	S	Oct06	0:00	/usr/sbin/courierlogger
-pid=/var/run/imapd.pid -start -name=imapd /usr/lib/courier-imap/libexec/couriertcpd -address=0										
-maxprocs=40 -maxperip=30 -nodnslookup -noidentlookup 143										
/usr/lib/courier-imap/sbin/imaplogin /usr/lib/courier-imap/bin/imapd Maildir										
root	17917	0.0	0.0	1568	484	?	S	Oct06	0:00	_
/usr/lib/courier-imap/libexec/couriertcpd -address=0 -maxprocs=40 -maxperip=30 -nodnslookup										
-noidentlookup 143 /usr/lib/courier-imap/sbin/imaplogin /usr/lib/courier-imap/bin/imapd Maildir										
root	17923	0.0	0.0	1452	340	?	S	Oct06	0:00	/usr/sbin/courierlogger
-pid=/var/run/imapd-ssl.pid -start -name=imapd-ssl /usr/lib/courier-imap/libexec/couriertcpd										
-address=0 -maxprocs=40 -maxperip=30 -nodnslookup -noidentlookup 993										
/usr/lib/courier-imap/bin/couriertls -server -tcpd /usr/lib/courier-imap/sbin/imaplogin										
/usr/lib/courier-imap/bin/imapd Maildir										
root	17924	0.0	0.0	1560	404	?	S	Oct06	0:00	_
/usr/lib/courier-imap/libexec/couriertcpd -address=0 -maxprocs=40 -maxperip=30 -nodnslookup										
-noidentlookup 993 /usr/lib/courier-imap/bin/couriertls -server -tcpd										
/usr/lib/courier-imap/sbin/imaplogin /usr/lib/courier-imap/bin/imapd Maildir										
root	17929	0.0	0.0	1452	464	?	S	Oct06	0:00	/usr/sbin/courierlogger
-pid=/var/run/pop3d.pid -start -name=pop3d /usr/lib/courier-imap/libexec/couriertcpd -address=0										
-maxprocs=40 -maxperip=30 -nodnslookup -noidentlookup 110										
/usr/lib/courier-imap/sbin/pop3login /usr/lib/courier-imap/bin/pop3d Maildir										
root	17930	0.0	0.0	1560	480	?	S	Oct06	0:00	_
/usr/lib/courier-imap/libexec/couriertcpd -address=0 -maxprocs=40 -maxperip=30 -nodnslookup										
-noidentlookup 110 /usr/lib/courier-imap/sbin/pop3login /usr/lib/courier-imap/bin/pop3d Maildir										

```

root 17936 0.0 0.0 1452 340 ? S Oct06 0:00 /usr/sbin/courierlogger
-pid=/var/run/pop3d-ssl.pid -start -name=pop3d-ssl /usr/lib/courier-imap/libexec/couriertcpd
-address=0 -maxprocs=40 -maxperip=30 -nodnslookup -noidentlookup 995
/usr/lib/courier-imap/bin/couriertls -server -tcpd /usr/lib/courier-imap/sbin/pop3login
/usr/lib/courier-imap/bin/pop3d Maildir
root 17937 0.0 0.0 1560 404 ? S Oct06 0:00 \_
/usr/lib/courier-imap/libexec/couriertcpd -address=0 -maxprocs=40 -maxperip=30 -nodnslookup
-noidentlookup 995 /usr/lib/courier-imap/bin/couriertls -server -tcpd
/usr/lib/courier-imap/sbin/pop3login /usr/lib/courier-imap/bin/pop3d Maildir
root 18105 0.0 0.3 9604 3520 ? Ss Oct06 0:10 /usr/local/apache/bin/httpd -DSSL
nobody 28001 0.1 1.1 17148 11988 ? S 13:50 0:40 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28002 0.2 1.2 17388 12116 ? S 13:50 0:45 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28003 0.1 1.2 17584 12456 ? S 13:50 0:40 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28004 0.1 1.2 17440 12276 ? S 13:50 0:37 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28005 0.1 1.2 16976 12024 ? S 13:50 0:36 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28007 0.1 1.1 17008 11844 ? S 13:50 0:37 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28008 0.1 1.2 17084 12152 ? S 13:50 0:28 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28009 0.2 1.2 17576 12580 ? S 13:50 0:52 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28015 0.1 1.2 17512 12440 ? S 13:50 0:41 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28016 0.1 1.2 17348 12056 ? S 13:50 0:41 \_ /usr/local/apache/bin/httpd -DSSL
nobody 19766 0.2 1.2 17252 12440 ? S 17:58 0:16 \_ /usr/local/apache/bin/httpd -DSSL
nobody 29910 0.0 0.8 13944 8792 ? S 19:09 0:01 \_ /usr/local/apache/bin/httpd -DSSL
nobody 17544 0.0 0.8 13088 8004 ? S 19:42 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 24016 0.0 0.5 10944 5800 ? S 19:52 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 25795 0.1 0.8 13736 8528 ? S 19:54 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 26095 0.6 0.8 13924 8732 ? S 19:54 0:01 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27671 0.2 0.6 11644 6624 ? S 19:56 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27673 0.6 0.8 13808 8620 ? S 19:56 0:01 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27674 0.0 0.7 12336 7188 ? S 19:56 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27800 0.5 0.8 13928 8716 ? S 19:56 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27809 0.0 0.3 9604 3704 ? S 19:56 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27814 0.1 0.8 13604 8276 ? S 19:56 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27969 0.4 0.8 13804 8552 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27976 0.2 0.8 13356 8100 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27977 0.0 0.6 12120 6792 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27979 0.4 0.8 13888 8688 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27980 0.0 0.3 9604 3704 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27981 0.8 0.8 13740 8540 ? S 19:57 0:01 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27982 0.5 0.7 13096 7892 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27983 0.7 1.1 16880 11676 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27984 0.4 0.7 12564 7312 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27985 0.0 0.3 9612 3752 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27986 0.4 0.9 14332 9012 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 27988 0.2 0.6 11304 6216 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28020 0.1 0.8 13436 8108 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28021 0.0 0.3 9604 3712 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28023 1.2 0.8 13968 8832 ? S 19:57 0:01 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28026 0.0 0.3 9604 3704 ? S 19:57 0:00 \_ /usr/local/apache/bin/httpd -DSSL

```



```

nobody 28078 0.3 0.0 0 0 ? Z 19:57 0:00 \_ [httpd] <defunct>
nobody 28344 0.0 0.3 9604 3704 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28350 0.3 0.8 13488 8208 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28351 0.8 0.8 14156 8904 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28359 0.0 0.3 9604 3704 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28360 0.2 0.6 11620 6440 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28361 0.0 0.3 9604 3704 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28363 0.0 0.3 9604 3704 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28370 0.0 0.3 9604 3704 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28371 0.0 0.3 9604 3704 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28372 0.0 0.3 9604 3704 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28373 0.0 0.3 9604 3704 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28374 0.0 0.3 9604 3704 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28375 0.0 0.3 9604 3704 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28385 0.6 0.6 11300 6148 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28387 0.0 0.3 9712 3788 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28395 0.5 0.6 11300 6140 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28398 0.0 0.3 9908 3856 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28399 0.0 0.3 9604 3704 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
nobody 28400 0.6 0.8 13744 8476 ? S 19:58 0:00 \_ /usr/local/apache/bin/httpd -DSSL
root 18125 0.0 0.0 2472 692 ? Ss Oct06 0:00 crond
root 18182 0.0 0.1 30368 1644 ? SI Oct06 0:00 ./sc_serv
root 18183 0.0 0.0 30208 724 ? SI Oct06 0:00 ./sc_serv
root 18335 0.0 0.0 1480 416 ? Ss Oct06 0:00 /usr/sbin/portsentry -tcp
root 3424 0.0 0.2 6916 2564 ? S Oct06 0:00 cpbandwd
root 8156 0.0 0.0 2148 964 ? S 14:41 0:00 /bin/sh /usr/bin/mysqld_safe
--datadir=/var/lib/mysql --pid-file=/var/lib/mysql/server.epouro.com.pid
mysql 8186 0.0 3.1 121292 31288 ? SI 14:41 0:00 \_ /usr/sbin/mysqld --basedir=/
--datadir=/var/lib/mysql --user=mysql --pid-file=/var/lib/mysql/server.epouro.com.pid
--skip-external-locking
named 19744 0.0 0.2 39424 2404 ? Ssl 14:57 0:00 /usr/sbin/named -u named
root 28406 0.0 1.0 17316 10280 ? S 17:45 0:00 cpsrvd - waiting for connections
root 27524 0.0 0.0 2300 816 ? Rs 19:59 0:00 ps auxf

```

the uptime for the first vps

19:58:43 up 23:06, 0 users, load average: 0.00, 0.04, 0.02

Subject: Re: high load spikes average of 80
 Posted by [sspt](#) on Sat, 07 Oct 2006 19:10:25 GMT
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You can limit these vps to 15% of the cpu power each, the maximum usage from those VPS will be 30% of the entire Hardware Node


```
vzctl set 101 --cpulimit 15 --save  
vzctl set 102 --cpulimit 15 --save
```

Cpu units are no more than one suggestion, if you want to limit the power usage of each VPS you should use cpulimit

Subject: Re: high load spikes average of 80
Posted by [mora](#) on Sat, 07 Oct 2006 19:54:04 GMT
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hello
after applying this and restarting vz and both vps i got this only after few seconds

Hardware Node
16:01:20 up 1:43, 4 users, load average: 22.78, 11.85, 6.71
VE 101
22:01:21 up 11 min, 0 users, load average: 1.13, 0.56, 0.34
VE 102
22:01:28 up 11 min, 0 users, load average: 20.34, 10.38, 4.86

also how can i gurantee 128 MB ram with maximum of 250 MB ram for each vps and how can i calculate how much Mb is their current usage ? i know i ask too many questions but many many thanks for your help

Subject: Re: high load spikes average of 80
Posted by [mora](#) on Sun, 08 Oct 2006 14:41:44 GMT
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anybody please help

Subject: Re: high load spikes average of 80
Posted by [dev](#) on Sun, 08 Oct 2006 17:05:44 GMT
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when you are limiting VEs your loadavg can go higher due to delayed VEs processeses and it is ok.

So you need to understand first what is your problem...

loadavg?

or node hangs and your statement that sometimes node becomes inaccessible?

BTW, try loading kernel with "elevator=cfq". under some load patterns this decreases loadavg and makes disk I/O feel better.

Subject: Re: high load spikes average of 80
Posted by [mora](#) on Sun, 08 Oct 2006 21:47:58 GMT
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hellothe problem is that one vps suddenly has its load average hit the roof to 80-90 and the load average on the hardware node get too high as well and reach over 100 load average therefore the hardware node itself becomes inaccessible
i just want to prevent the ve from increasing the load average of the hardware node to that very high amount

also how to load kernel with "elevator=cfq"

i appreciate your help

Subject: Re: high load spikes average of 80
Posted by [HaroldB](#) on Mon, 09 Oct 2006 03:07:05 GMT
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As I said before, and as Dev verified, the load value of the HN is not a primary indicator of the server being *slow*, overrun, overcommitted, or generally a problem situation. Since your VEs have a low cpu limit, their running procs get queued. Since the load is just the number of processes that are "trying to run at the same time", this should seem normal. Think if one VE had a cpulimit of 2 (very very low) and launched 50 concurrent running processes. This would absolutely add 50 to your HN load while using very little cpu resources. In this case, despite your HN having a load of 50, your server is extremely responsive, the other VEs are unaffected, and overall there is no general problem.

You put the cfq scheduler definition in the grub.conf as a boot argument to your kernel.

Subject: Re: high load spikes average of 80
Posted by [dev](#) on Mon, 09 Oct 2006 06:44:22 GMT
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I couldn't say that better!

Subject: Re: high load spikes average of 80
Posted by [mora](#) on Mon, 09 Oct 2006 06:53:36 GMT
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Hello

i understand that problem configuration of the ve should lead to node stability but in my case the node becomes inaccessible

i have this in my grub so how to add

```
title CentOS VZ smp (2.6.8-022stab078.21-smp)
    root (hd0,0)
    kernel /vmlinuz-2.6.8-022stab078.21-smp ro root=/dev/sda7 acpi=ht
    initrd /initrd-2.6.8-022stab078.21-smp.img
```

so it should be after modifictaions

```
title CentOS VZ (2.6.8-022stab078.21-smp)
    root (hd0,0)
    kernel /vmlinuz-2.6.8-022stab078.21-smp ro root=/dev/sda7 acpi=ht elevator=cfq
    initrd /initrd-2.6.8-022stab078.21-smp.img
```

also what about my previous question "how can i gurantee 128 MB ram with maximum of 250 MB ram for each vps and how can i calculate how much Mb is their current usage ? i know i ask too many questions but many many thanks for your help "

Subject: Re: high load spikes average of 80
Posted by [dev](#) on Mon, 09 Oct 2006 11:14:36 GMT
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Quote:

i understand that problem configuration of the ve should lead to node stability but in my case the node becomes inaccessible

if node becomes inaccessible, try collect some information about why. For this you can do the

following:

1. connect your box to another one with serial cable and install serial console.

(http://wiki.openvz.org/Remote_console_setup)

Make sure all that it works and messages are saved on the 2nd box.

2. load vzwdog module. It will print some health information every minute.

3. When your node becomes inaccessible press Alt-SysRq-P 5 times and 1 time Alt-SysRq-T and Alt-SysRq-m

(http://wiki.openvz.org/Magic_SysRq_Key)

Collect these message from 2nd node and send/post for us.

Quote:

title CentOS VZ (2.6.8-022stab078.21-smp)

root (hd0,0)

kernel /vmlinuz-2.6.8-022stab078.21-smp ro root=/dev/sda7 acpi=ht elevator=cfq

initrd /initrd-2.6.8-022stab078.21-smp.img

exactly!

Quote:

also what about my previous question "how can i gurantee 128 MB ram with maximum of 250 MB ram for each vps and how can i calculate how much Mb is their current usage ? i know i ask too many questions but many many thanks for your help "

The only way to guarantee is to have enough memory.

You can also set oomguarpages/vmguarpages limit to this value to make sure that VE gets its guarantees even in case of global shortage.

Use privvmpages to set upper boundary on user memory.

Subject: Re: high load spikes average of 80

Posted by [mora](#) on Mon, 09 Oct 2006 15:41:21 GMT

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Hello

thanks for your help

i wish i could do that but its a dedicated server on a DC i cannot connect a serial cable or anything to it as i only have ssh access to it

but what is the benefit of elevator=cfq what does that do i tried searching the forums nobody has talked about it

also

the ram , memory limitations are obscure to me in openvz

could you please provide a sample configuration file to use for a server in order to gurantee 128 Mb ram with max of 256 MB of ram and 333 MHZ of cpu please

Subject: Re: high load spikes average of 80
Posted by [mora](#) on Wed, 18 Oct 2006 22:51:35 GMT
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hello
anybody please
still facing same problem

Subject: Re: high load spikes average of 80
Posted by [dev](#) on Thu, 19 Oct 2006 08:20:52 GMT
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it is known that anticipatory elevator used by default in 2.6.8 can sometimes lead to high loadaverages, and cfq behaves much better.

use vzsplitt to "split" your node equal pieces. or take a look at example configs in /etc/vz/conf
