
Subject: Re: Fine Tuning system resources and power of VE / asterisk optimizations

Posted by [explidous](#) on Wed, 26 Nov 2008 14:01:26 GMT

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Some more information om this problem...

- VE0 shows barely any load / CPU utilization usually < 10%
- Guest VEs show frequently 100% usage on all 8 CPU cores.
- processes seem to be stalled and system/kernel time is very/unusually high on the guest VEs

System should have plenty of power available but obviously it does not get to the guests...

root@vici106:~# cat /proc/user_beancounters

Version: 2.5

uid	resource	held	maxheld	barrier	limit	failcnt
106:	kmemsize	36701631	48079881	1690776371		1859854008
0						
	lockedpages	0	0	82557	82557	0
	privvmpages	97219	126466	4953446	5448790	
0						
	shmpages	16398	29287	495344	495344	
0						
	dummy	0	0	0	0	0
	numproc	163	246	41278	41278	0
	physpages	57903	79643	0	9223372036854775807	
0						
	vmguarpages	0	0	3332643	9223372036854775807	
0						
	oomguarpages	57903	79643	3332643	9223372036854775807	
0						
	numtcpsock	79	128	41278	41278	0
	numflock	6	8	1000	1100	0
	numpty	9	10	512	512	0
	numsiginfo	5	16	1024	1024	0
	tcpsndbuf	1605888	6303744	394517435	563592123	
0						
	tcprcvbuf	1826560	2740224	394517435	563592123	
0						
	othersockbuf	39168	70144	197258717	366333405	
0						
	dgramrcvbuf	0	487424	197258717	197258717	
0						
	numothersock	21	35	41278	41278	0
	dcachesize	503685	625086	369337910	380418048	
0						
	numfile	5757	6657	660448	660448	0
	dummy	0	0	0	0	0

```

dummy          0          0          0          0          0
dummy          0          0          0          0          0
numiptent      10         10        200        200          0
root@vici106:~#

```

```

top
Linux vici106 2.6.24-openvz #2 SMP Fri Oct 31 23:39:58 CET 2008 x86_64

```

```

root@vici106:~# cat /proc/user_beancounters

```

```

Version: 2.5

```

uid	resource	held	maxheld	barrier	limit	failcnt
106:	kmemsize	36701631	48079881	1690776371		1859854008
0	lockedpages	0	0	82557	82557	0
0	privvmpages	97219	126466	4953446	5448790	
0	shmpages	16398	29287	495344	495344	
0	dummy	0	0	0	0	0
0	numproc	163	246	41278	41278	0
0	physpages	57903	79643	0	9223372036854775807	
0	vmguarpages	0	0	3332643	9223372036854775807	
0	oomguarpages	57903	79643	3332643	9223372036854775807	
0	numtcpsock	79	128	41278	41278	0
0	numflock	6	8	1000	1100	0
0	numpty	9	10	512	512	0
0	numsiginfo	5	16	1024	1024	0
0	tcpsndbuf	1605888	6303744	394517435	563592123	
0	tcprcvbuf	1826560	2740224	394517435	563592123	
0	othersockbuf	39168	70144	197258717	366333405	
0	dgramrcvbuf	0	487424	197258717	197258717	
0	numothersock	21	35	41278	41278	0
0	dcachesize	503685	625086	369337910	380418048	
0	numfile	5757	6657	660448	660448	0
0	dummy	0	0	0	0	0
0	dummy	0	0	0	0	0
0	dummy	0	0	0	0	0
0	numiptent	10	10	200	200	0

```

root@vici106:~# top
top - 14:52:53 up 3:47, 1 user, load average: 1.22, 0.87, 0.75
Tasks: 102 total, 1 running, 101 sleeping, 0 stopped, 0 zombie
Cpu0 : 50.0%us, 50.0%sy, 0.0%ni, 0.0%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Cpu1 : 75.0%us, 25.0%sy, 0.0%ni, 0.0%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Cpu2 : 73.3%us, 26.7%sy, 0.0%ni, 0.0%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Cpu3 : 0.0%us, 0.0%sy, 0.0%ni, 100.0%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Cpu4 : 40.9%us, 59.1%sy, 0.0%ni, 0.0%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Cpu5 : 79.2%us, 20.8%sy, 0.0%ni, 0.0%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Cpu6 : 50.0%us, 50.0%sy, 0.0%ni, 0.0%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Cpu7 : 9.5%us, 3.2%sy, 0.0%ni, 87.3%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Mem: 19813784k total, 401188k used, 19412596k free, 0k buffers
Swap: 0k total, 0k used, 0k free, 0k cached

```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
530	root	20	0	518m	17m	4996	S	17	0.1	17:05.63	asterisk
561	root	20	0	48184	9552	2612	S	2	0.0	5:23.39	AST_update.pl
32205	root	20	0	41800	7260	2528	S	2	0.0	0:00.07	agi-VDAD_ALL_ou
32216	root	20	0	41800	7256	2528	S	2	0.0	0:00.06	agi-VDAD_ALL_ou
32201	root	20	0	26688	6120	1788	S	2	0.0	0:00.05	AST_send_action
32186	root	20	0	26688	6128	1788	S	1	0.0	0:00.04	AST_send_action
569	root	20	0	44300	9812	2532	S	0	0.0	0:35.67	AST_VDauto_dial
576	root	20	0	41484	10m	2480	S	0	0.1	0:30.53	AST_VDadapt.pl
630	root	20	0	53876	9948	1452	S	0	0.1	0:02.90	FastAGI_log.pl
631	root	20	0	53876	9948	1452	S	0	0.1	0:02.77	FastAGI_log.pl
7278	www-data	20	0	198m	10m	5764	S	0	0.1	0:02.91	apache2
7737	www-data	20	0	198m	11m	5888	S	0	0.1	0:03.32	apache2
11342	www-data	20	0	198m	11m	5856	S	0	0.1	0:02.49	apache2
13932	www-data	20	0	198m	9624	4600	S	0	0.0	0:02.09	apache2
16468	www-data	20	0	199m	10m	5516	S	0	0.1	0:03.36	apache2
16479	www-data	20	0	198m	10m	5452	S	0	0.1	0:01.85	apache2
24286	www-data	20	0	198m	9.9m	5100	S	0	0.1	0:00.93	apache2
24287	www-data	20	0	198m	10m	5244	S	0	0.1	0:01.00	apache2
25023	www-data	20	0	198m	10m	5160	S	0	0.1	0:01.34	apache2
25581	www-data	20	0	198m	9m	5176	S	0	0.1	0:00.75	apache2
27031	www-data	20	0	198m	9148	4140	S	0	0.0	0:00.58	apache2
27089	www-data	20	0	198m	9552	4536	S	0	0.0	0:00.70	apache2
27092	www-data	20	0	198m	9572	4524	S	0	0.0	0:00.59	apache2

Sometimes it even looks worse.

top on VE0 at about the same time:

Linux vicidial 2.6.24-openvz #2 SMP Fri Oct 31 23:39:58 CET 2008 x86_64

Last login: Wed Nov 26 13:38:19 2008 from

xxx@vicidial:~\$ top

top - 14:55:08 up 5 days, 11:55, 1 user, load average: 0.77, 0.76, 0.72

```

Tasks: 242 total,  1 running, 241 sleeping,  0 stopped,  0 zombie
Cpu0  : 2.0%us, 0.3%sy, 0.0%ni, 97.7%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Cpu1  : 2.0%us, 1.0%sy, 0.0%ni, 97.0%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Cpu2  : 0.0%us, 0.7%sy, 0.0%ni, 99.3%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Cpu3  : 0.3%us, 0.3%sy, 0.0%ni, 99.4%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Cpu4  : 4.0%us, 4.0%sy, 0.6%ni, 89.1%id, 0.0%wa, 0.0%hi, 2.3%si, 0.0%st
Cpu5  : 1.5%us, 0.9%sy, 0.0%ni, 97.3%id, 0.0%wa, 0.0%hi, 0.3%si, 0.0%st
Cpu6  : 1.2%us, 0.9%sy, 0.0%ni, 97.6%id, 0.0%wa, 0.0%hi, 0.3%si, 0.0%st
Cpu7  : 12.7%us, 3.4%sy, 0.0%ni, 82.1%id, 0.0%wa, 0.3%hi, 1.5%si, 0.0%st
Mem: 33022976k total, 8305536k used, 24717440k free, 177108k buffers
Swap: 33559704k total,      0k used, 33559704k free, 7142256k cached

```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1419	root	20	0	518m	17m	4996	S	5	0.1	17:19.07	asterisk
1457	root	20	0	48184	9552	2612	S	3	0.0	5:27.31	AST_update.pl
4396	root	20	0	41800	7260	2528	S	2	0.0	0:00.07	agi-VDAD_ALL_ou
303	www-data	20	0	198m	9996	4964	S	0	0.0	0:00.47	apache2
1458	root	20	0	23592	1020	600	S	0	0.0	0:00.61	screen
1460	root	20	0	41268	6772	2536	S	0	0.0	0:49.39	AST_manager_sen
1465	root	20	0	44300	9832	2532	S	0	0.0	0:36.14	AST_VDauto_dial
1472	root	20	0	41600	10m	2480	S	0	0.0	0:30.83	AST_VDadapt.pl
1528	root	20	0	53876	9952	1452	S	0	0.0	0:02.86	FastAGI_log.pl
1676	www-data	20	0	198m	9636	4188	S	0	0.0	0:00.53	apache2

and here

```
root@vicidial:/etc/vz/conf# vzcpucheck -v
```

```
VEID      CPUUNITS
```

```
-----
0          5000
```

```
106        250000
```

```
Current CPU utilization: 255000
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Power of the node: 880229
```