Subject: *CLOSED* Memory
Posted by Hsilamot on Wed, 02 May 2007 23:10:04 GMT
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got a problem with memory allocation

root@azx:[/etc/sysconfig/vz-scripts]# vzmemcheck -v
Output values in %

veid	LowMem util	LowMem commit	RAM util	MemSwap util	MemSwap commit	Alloc util	Alloc commit	Alloc limit
117	0.39	10.50	1.41	0.45	20.37	0.77	20.37	22.28
128	2.00	10.69	21.04	6.73	20.39	17.27	25.70	22.31
137	0.80	10.50	7.84	2.51	20.37	7.80	20.37	22.28
140	0.25	3.50	1.73	0.55	3.30	1.93	3.30	19.57
141	0.24	4.30	1.73	0.55	1.00	1.93	1.00	21.59
142	0.25	4.30	1.73	0.55	1.00	1.93	1.00	21.59
143	0.25	3.53	1.73	0.55	0.91	1.93	0.91	21.50
148	0.95	5.25	3.77	1.21	19.78	2.20	19.78	21.69
Summary:	5.13	52.58	40.99	13.11	87.10	35.76	92.41	172.81

i dont know how to Lower the Alloc limit on 140-143 and give more to 128

Subject: Re: Memory
Posted by rickb on Thu, 03 May 2007 08:27:29 GMT
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Read the UBC page on the wiki. Its the basic requirement for understanding resource management on the vz architecture. The metric you are looking for is privvmpages

Subject: Re: Memory
Posted by kir on Thu, 03 May 2007 08:32:07 GMT
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"Alloc limit" for a VE is a sum of its privvmpages*page_size + kmemsize + tcprcvbuf + tcpsndbuf + dgramrcvbuf + othersockbuf. If value is displayed in percent (i.e. when vzmemcheck is called without -A flag), it is divided by (RAM size + swap size).

So in your case you might want to try decreasing privvmpages value for VEs 140-143. Note however that total for "Alloc limit" may exceed 100%, and this is OK (see http://wiki.openvz.org/UBC_systemwide_configuration#Utilizat ion_4 for more details).

Subject: Re: Memory
Posted by Hsilamot on Thu, 03 May 2007 09:25:09 GMT
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your response is not very helpful , i have read all and don't get anything and read the pdf manual too

Subject: Re: Memory
Posted by Hsilamot on Thu, 03 May 2007 09:26:27 GMT
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Your response is very detailed, that explains well the case, i should check. i need to have about 60, 70% of resources in VZ 128 and 140-143 are just DB servers (for redundant backup) so they need about 3% of server capacity

Subject: Re: Memory
Posted by dev on Fri, 04 May 2007 13:23:57 GMT
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You don't need to set a limit so low usually.
Look, OpenVZ has one good advantage - overcommitment. If some VE doesn't use all the resources it can, then they are available to others. i.e. making a limit lower won't likely make much difference (and won't affect performance etc.), but when these VEs will suddenly need more resources they will fail due to tight constraints.

i.e. Alloc Limit doesn't reserve the memory for this particular VE. Hope I made it a bit more clear

Subject: Re: Memory
Posted by Hsilamot on Fri, 04 May 2007 21:26:45 GMT
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well, i don't know what to do, i got a cpanel server in the vz and the server fails constantly. it says "memory allocation failed" and don't know how to configure it to stop saying it

Subject: Re: Memory
Posted by rickb on Sat, 05 May 2007 05:13:35 GMT
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1) cat /proc/user_beancounters

2) duplicate problem
3) cat /proc/user_beancounters

--

paste the 2 UBC outputs here and we can help you. or, just look at the failcnt column and increase that metric.

Subject: Re: Memory
Posted by Hsilamot on Sat, 05 May 2007 06:07:35 GMT
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i have get rid of the problem raising the kmemsize but whold like to know what should be the best size

root@man:[/]# cat /proc/user_beancounters
Version: 2.5

uid	resource	held	maxheld	barrier	limit	failcnt
128:	kmemsize	7099477	18527131	1342177280	1342177280	20326611
	lockedpages	0	8	4501	4501	0
	privvmpages	136137	180944	153471	168818	379679
	shmpages	731	9848	15347	15347	0
	dummy	0	0	0	0	0
	numproc	123	245	2048	3192	0
	physpages	51203	84320	0	2147483647	0
	vmguarpages	0	0	196000	2147483647	0
	oomguarpages	51203	94088	153471	2147483647	0
	numtcpsock	47	216	4000	4000	0
	numflock	9	70	1000	1000	0
	numpty	1	3	400	400	0
	numsiginfo	0	88	1024	1024	0
	tcpsndbuf	100080	2870928	14347059	30731059	19
	tcprcvbuf	2400	521520	14347059	30731059	0
	othersockbuf	39504	668112	7173529	23557529	0
	dgramrcvbuf	0	120000	7173529	7173529	0
	numothersock	34	96	2000	2000	0
	dcachesize	727196	977248	20132038	20736000	0
	numfile	1450	3751	36000	36000	0
	dummy	0	0	0	0	0
	dummy	0	0	0	0	0
	dummy	0	0	0	0	0
	numiptent	57	110	200	200	0

root@azx:[/etc/sysconfig/vz-scripts]# vzmemcheck -v
Output values in %

```
veid       LowMem  LowMem     RAM MemSwap MemSwap   Alloc   Alloc   Alloc
           util  commit    util    util  commit    util  commit   limit
117          0.48   10.50    1.60    0.62   20.37    4.20   20.37   22.28
128          1.99  388.96   20.74    6.63   62.96   17.24   68.27   64.88
137          1.10   10.50   21.02    6.72   20.37   12.19   20.37   22.28
140          0.34    2.35    2.31    0.96    3.17    2.42    3.17    3.17
141          0.24    2.35    1.45    0.55    0.78    1.92    0.78    3.17
142          0.24    2.35    1.00    0.53    0.78    1.90    0.78    3.17
143          0.25    2.35    1.45    0.55    0.78    1.92    0.78    3.17
148          1.24    5.25   10.36    3.31   19.78    7.81   19.78   21.69
 ------------------------------------------------------------ -------------
Summary:      5.89  424.61   59.94   19.87  128.96   49.62  134.28  143.82
root@azx:[/etc/sysconfig/vz-scripts]# vzmemcheck -v -A
Output values in Mbytes
veid       LowMem  LowMem     RAM MemSwap MemSwap   Alloc   Alloc   Alloc
           util  commit    util    util  commit    util  commit   limit
117          1.69   36.93   16.03   19.47  636.42  131.40  636.42  696.37
128          7.27 1367.92  214.35  214.35 1967.42  547.74 2133.55 2027.37
137          3.39   36.93  205.70  205.70  636.42  374.03  636.42  696.37
140          1.21    8.27   23.10   30.10   99.04   75.77   99.04   99.04
141          0.86    8.27   14.53   17.10   24.27   60.08   24.27   99.04
142          0.86    8.27    9.95   16.43   24.27   59.40   24.27   99.04
143          0.86    8.27   14.48   17.09   24.27   60.05   24.27   99.04
148          4.34   18.46  103.51  103.51  617.96  244.07  617.96  677.91
 ------------------------------------------------------------ -------------
Summary:     20.47 1493.32  601.64  623.75 4030.08 1552.53 4196.21 4494.20
       351.00  351.00  999.00 3124.00 3124.00 3124.00 3124.00 3124.00
```

is the VE 128 the one with the CPanel

Other question, do you know if there's a way to evade the "fork: memory allocation fail" when the memory is full (i think that because the vz sees the 1 gb of ram it tryes to allocate the memory, i whould like to know if there's some way that the virtualz only sees the ram that has available for himself)

Subject: Re: Memory
Posted by rickb on Sat, 05 May 2007 06:15:11 GMT
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there is no best size for any metric. Whats the best size pair of pants? Its different for almost everyone.

What I do, is set the limit very high, duplicate your highest anticipated application load, look at the maxheld, and set the limit to some value greater then that.

Subject: Re: Memory
Posted by Hsilamot on Sat, 05 May 2007 06:18:42 GMT
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uid resource held maxheld barrier limit failcnt

what does it means held? and failcnt?

and the other thing is if you know anything about my second question?

Subject: Re: Memory
Posted by rickb on Sat, 05 May 2007 07:44:21 GMT
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have you read the UBC page in the wiki and/or the pdf manual?

Subject: Re: Memory
Posted by Hsilamot on Sat, 05 May 2007 07:50:23 GMT
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yes, i'm Mexican so maybe the solution is there and i don't understand it

Subject: Re: Memory
Posted by Hsilamot on Sun, 06 May 2007 21:35:57 GMT
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