Subject: Java(Sun) problem with kernel RHEL6 042stab055.10
Posted by yasuyuki on Fri, 01 Jun 2012 12:20:32 GMT
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We found Java (which is downloaded from Sun(Oracle)) doese not run normaly in 32 bit CentOS 5 VE.
The kernel of HN is RHEL6 042stab055.10.
When we downgrade to RHEL6 042stab044.11, the Java runs normaly.
Using 62 bit CentOS template, we cannot observe java related problems.

We found some applications (tomcat, user created apps and so on) cannot run with this environment.

JVM Version:
/usr/java/jdk1.6.0_31/bin/java -version
java version "1.6.0_31"
Java(TM) SE Runtime Environment (build 1.6.0_31-b04)
Java HotSpot(TM) Client VM (build 20.6-b01, mixed mode)

Have you seen same problem? and know solutions?
If you have same environment, how about you?

Subject: Re: Java(Sun) problem with kernel RHEL6 042stab055.10
Posted by yasuyuki on Fri, 01 Jun 2012 12:23:57 GMT
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In addition, OpenJDK is fine.

Subject: Re: Java(Sun) problem with kernel RHEL6 042stab055.10
Posted by khorenko on Mon, 04 Jun 2012 09:17:17 GMT
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Hi,

can you please describe in more details what do you mean under "java does not run normally", "other applications like ... cannot run".

Ideally - please post here a set of commands which can be executed in order to reproduce the problem and how this problem can be checked - if it exists or not.

Thank you.

Subject: Re: Java(Sun) problem with kernel RHEL6 042stab055.10
Posted by yasuyuki on Mon, 04 Jun 2012 12:28:28 GMT
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Tomcat6 and Tomcat7 cannot work on new stable kernel(055.10) and JDK 1.6.0_20-b02.

But JDK 1.6.0_07-b06 and OpenJDK are fine.
And when I downgrade to kernel(044.11), JDK 1.6.0_20-b02 is fine.

Subject: Re: Java(Sun) problem with kernel RHEL6 042stab055.10
Posted by yasuyuki on Mon, 04 Jun 2012 12:32:51 GMT
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"not work normally" means I cannot open tomacat management page.

Subject: Re: Java(Sun) problem with kernel RHEL6 042stab055.10
Posted by khorenko on Mon, 04 Jun 2012 13:53:51 GMT
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Please post here a set of commands which can be executed in order to reproduce the problem and how this problem can be checked - if it exists or not.

Step by step like:
1) get a fresh CentOS6.2 64bit node, install OpenVZ on it - kernel version, vzctl version
2) get a template from "link", vzctl create 100 --ostemplate <template_name>
3) assign an IP address - exact command
4) enter inside a CT - vzctl enter 100
5) install tomcat - how? you download it from a centos repo or someother repo? Again - exact command you issue to install tomcat.
6) any configuration you've done to tomcat
7) and how to open a tomcat page - using curl or what? What url do you use? What error message do you receive?

Subject: Re: Java(Sun) problem with kernel RHEL6 042stab055.10
Posted by yasuyuki on Sat, 23 Jun 2012 09:10:24 GMT
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It seems that OpenJDK may have same problem.

I've tested with several environments.
Now I can explain the exact reproduction steps.

1) get a fresh CentOS6.2 64bit node, install OpenVZ on it.
   it is on KVM VM which has 2 cores cpu
   kernel version: 2.6.32-042stab055.10
   vzctl-3.2-1.x86_64

2) get a template from "link", vzctl create 100 --ostemplate centos-5-x86 --config ve-vasic.conf

3) add a line 'CPUS="1"' into 100.conf

4) enter inside a CT - vzctl enter 100

5) download java vm (jdk-6u31-linux-i586-rpm.bin) and install it

6) javac MemoryCheck.java
   MemoryCheck is a code to new object until throws OutOfMemoryError.
   I attache this code.

7) while : ; do java MemoryCheck ; done

 stpe 7 should not be stopped. the process is finished with throwing exception and next process should be executed.
   But after several hours, the process will be hung-up.
   If you remove a line 'CPUS="1"' from container config file, this phenomenon is not appeared.

recently change some behaviors about this?
should I fill a bug on bugzilla?

File Attachments
1) MemoryCheck.java, downloaded 989 times

Subject: Re: Java(Sun) problem with kernel RHEL6 042stab055.10
Posted by khorenko on Tue, 17 Jul 2012 11:19:43 GMT
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Sorry for the delay.

Well, we found the reason of the problem: "--cpus 1" in fact currently does not make sure that processes from the CT run on exactly a single physical cpu, it only ensures that the total cpu power provided to the CT is not greater than the power of a single cpu =>

please just use "--cpulimit 100" instead of "--cpus 1"
or
use "--cpus 1" along with the "--cpumask=X" option.

Subject: Re: Java(Sun) problem with kernel RHEL6 042stab055.10
Posted by khorenko on Fri, 20 Jul 2012 14:57:33 GMT
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bug http://bugzilla.openvz.org/show_bug.cgi?id=2206