Subject: Init Problem on Ubuntu Gutsy Gibson
Posted by ckpeter on Tue, 23 Oct 2007 19:06:28 GMT
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I am working on a gutsy 7.10 template cache for OpenVZ.

The way I have done so is by using the available dapper 6.06 template as a base, and progressively upgrade to edgy, then feisty, and gutsy.

I now have the template built out, but I am having trouble with init. It seems like the init daemon is stuck on something and is consuming 100% CPU. I am able to enter the VE by vzctl enter, and I can even install packages and perform other tasks, but no service is started up and runlevel says it is unknown.

The host OS is CentOS 5.

uname -a:
2.6.18-8.1.8.el5.028stab039.1 #1 SMP Mon Jul 23 18:02:32 MSD 2007 x86_64 x86_64 x86_64 GNU/Linux

rpm -q vzctl:
vzctl-3.0.18-1

Any idea why init is stuck on 100% CPU usage? I read about problems with OpenVZ and the upstart implementation in prior version of ubuntu, but I assume that that has already been fixed.

Subject: Re: Ubuntu Gutsy Gibson Template Cache
Posted by rickb on Wed, 24 Oct 2007 06:41:38 GMT
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when you strace the init process, is it looping on any obvious problems?

generally when a linux process is doing something but at the same time accomplishing nothing, ie looping, strace is your best ally.

Subject: Re: Ubuntu Gutsy Gibson Template Cache
Posted by ckpeter on Wed, 24 Oct 2007 16:06:34 GMT
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I ran a strace:

[root@host ~]# strace -fF -o vz.out vzctl --verbose start 3001
Starting VE ...

```
VE is mounted
Adding IP address(es): x.x.x.x
Running VE script: /etc/vz/dists/scripts/debian-add_ip.sh
[ Process PID=18853 runs in 32 bit mode. ]
[ Process PID=18852 runs in 64 bit mode. ]
Execution timeout expired
ptrace: umoven: Input/output error
Got signal 15
Setting CPU units: 1000
Configure meminfo: 204800
Running VE script: /etc/vz/dists/scripts/set_dns.sh
[ Process PID=19118 runs in 32 bit mode. ]
[ Process PID=19117 runs in 64 bit mode. ]
[ Process PID=19118 runs in 32 bit mode. ]
[ Process PID=19117 runs in 64 bit mode. ]
[ Process PID=19118 runs in 32 bit mode. ]
[ Process PID=19117 runs in 64 bit mode. ]
Execution timeout expired
ptrace: umoven: Input/output error
Got signal 15
File resolv.conf was modified
VE start in progress...
[ Process PID=18826 runs in 32 bit mode. ]
```

At this point I control-C to get out of the process.

The trace file reveals that it is choking on /dev/console:

```
18826 open("/dev/console", O_WRONLY|O_NOCTTY) = -1 EACCES (Permission denied)
18826 read(3, 0xbff6f20b, 1)            = -1 EAGAIN (Resource temporarily unavailable)
18826 waitid(P_ALL, 0, {}, WNOHANG|WEXITED|WNOWAIT, NULL) = 0
18826 time(NULL)                        = 1193241775
18826 select(4, [0 3], [], [], NULL)    = 1 (in [0])
18826 getsockname(0, 0xbff6ef04, [112]) = -1 ENOTSOCK (Socket operation on non-socket)
18826 recvmsg(0, 0xbff6efa8, MSG_PEEK)  = -1 ENOTSOCK (Socket operation on non-socket)
18826 time(NULL)                        = 1193241775
18826 stat64(0xb7fb83a6, 0xbff6ebe8)    = 0
18826 stat64(0xb7fb83a6, 0xbff6eaa0)    = 0
18826 stat64(0xb7fb83a6, 0xbff6eaa0)    = 0
18826 socket(PF_FILE, SOCK_DGRAM, 0)    = 1
18826 fcntl64(1, F_SETFD, FD_CLOEXEC)   = 0
18826 connect(1, {sa_family=AF_FILE, path="/dev/log"}, 110) = -1 ENOENT (No such file or
directory)
18826 close(1)                          = 0
18826 open("/dev/console", O_WRONLY|O_NOCTTY) = -1 EACCES (Permission denied)
18826 read(3, 0xbff6f20b, 1)            = -1 EAGAIN
```

The preceding output repeats over and over.

Subject: Re: Ubuntu Gutsy Gibson Template Cache
Posted by rickb on Wed, 24 Oct 2007 23:21:40 GMT
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is /dev mounted? ls -dl /dev

Subject: Re: Ubuntu Gutsy Gibson Template Cache
Posted by ckpeter on Thu, 25 Oct 2007 00:56:04 GMT
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It looks like /dev is mounted with a number of entries in it. I also see console listed:

crw------- 1 root tty   5, 1 Oct 20 23:16 console

Subject: Re: Init Problem for Ubuntu Gutsy Gibson
Posted by ckpeter on Fri, 26 Oct 2007 18:29:47 GMT
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I have been playing more with it. After I replace /dev/console with a plain file, it look like the problem is not with /dev/console. The real problem, as suggested by the error message written to /dev/console, is:

init: Error on control socket: Socket operation on non-socket

I also see /dev/log being mentioned in the trace.

This seems reminiscent of the upstart problem that OpenVZ had with Ubuntu's init. However, all the postings that I was able to find suggest that this was a bug in upstart that has already been fixed.

Any idea if there is a workaround for this?

Subject: Re: Init Problem on Ubuntu Gutsy Gibson
Posted by ckpeter on Fri, 26 Oct 2007 21:39:38 GMT
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One more update:

It looks like there is also a bug report filed for Ubuntu feisty:

http://bugzilla.openvz.org/show_bug.cgi?id=662

Incidentally, I also have some other Ubuntu VE that has been upgraded from dapper to feisty, yet they start fine. It is only the latest template, which I want to build from scratch, that I have problem with.

Subject: Re: Init Problem on Ubuntu Gutsy Gibson
Posted by vaverin on Wed, 31 Oct 2007 12:14:36 GMT
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Hi Peter,

as work-around I would like propose you to replace "upstart" to "sysvinit" in your template.

Thank you,
Vasily Averin

Subject: Re: Init Problem on Ubuntu Gutsy Gibson
Posted by kir on Wed, 31 Oct 2007 13:30:01 GMT
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So, the thing is, upstart will not work in Ubuntu until bug #662 will be fixed. For now, you can use sysvinit package instead of upstart.

Subject: Re: Init Problem on Ubuntu Gutsy Gibson
Posted by ckpeter on Wed, 31 Oct 2007 15:28:34 GMT
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Thanks for the suggestion. I had to do that to get Gutsy to work. I followed the instruction from http://wiki.vpslink.com/index.php?title=HOWTO:_Fix_Missing_u buntu-minimal_dependencies_for_Ubuntu_6.10_(Edgy_Eft) to make a dummy upstart package, and the Gutsy VE now starts fine.

Subject: Re: Init Problem on Ubuntu Gutsy Gibson

Posted by dobias on Fri, 02 Nov 2007 02:17:36 GMT
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I encountered the same problem but after replacing "upstart" with "sysvinit" (using aptitude) and rebooting the virtual machine the problem with 100% CPU load was gone
Vladimir