

openQA Tests - action #60161

[network][qem] auto_review:"The console.*(root-virtio-terminal1|sut).*is not responding.*half-open socket" test incompletes in t20_teaming_ab_all_link

2019-11-22 09:42 - okurz

Status:	Workable	Start date:	
Priority:	Normal	Due date:	
Assignee:	cfconrad	% Done:	0%
Category:	Bugs in existing tests	Estimated time:	0.00 hour
Target version:			
Difficulty:			

Description

Observation

openQA test in scenario sle-15-Server-DVD-Updates-x86_64-qam_wicked_aggregate_sut@64bit incompletes after [t19_teaming_ab_nsna_ping](#) . From autost-log.txt:

```
[2019-11-21T15:25:19.328 CET] [debug] ||| finished t19_teaming_ab_nsna_ping wicked/aggregate/sut a
t 2019-11-21 14:25:19 (84 s)
[2019-11-21T15:25:19.330 CET] [debug] Loading a VM snapshot lastgood
[2019-11-21T15:25:19.330 CET] [debug] EVENT {"data":{"path":"/machine/peripheral-anon/device[0]
/virtio-backend"},"event":"NIC_RX_FILTER_CHANGED","timestamp":{"microseconds":600175,"seconds":15
74346237}}
[2019-11-21T15:25:19.330 CET] [debug] EVENT {"data":{"path":"/machine/peripheral-anon/device[1]
/virtio-backend"},"event":"NIC_RX_FILTER_CHANGED","timestamp":{"microseconds":657272,"seconds":15
74346237}}
[2019-11-21T15:25:19.331 CET] [debug] Loading snapshot (Current VM state is running).
[2019-11-21T15:25:19.337 CET] [debug] EVENT {"event":"STOP","timestamp":{"microseconds":337351,"se
conds":1574346319}}
[2019-11-21T15:25:19.338 CET] [info] ::: OpenQA::Qemu::Proc::save_state: Saving QEMU state to qemu
_state.json
[2019-11-21T15:25:21.364 CET] [debug] QEMU: qemu-system-x86_64: terminating on signal 15 from pid
40115 (/usr/bin/isotovideo: backen)
[2019-11-21T15:25:21.368 CET] [debug] running /usr/bin/qemu-img create -f qcow2 -b /var/lib/openqa
/pool/7/raid/hd0-overlay1 /var/lib/openqa/pool/7/raid/hd0-overlay2 32212254720
[2019-11-21T15:25:21.390 CET] [debug] Formatting '/var/lib/openqa/pool/7/raid/hd0-overlay2', fmt=q
cow2 size=32212254720 backing_file=/var/lib/openqa/pool/7/raid/hd0-overlay1 cluster_size=65536 laz
y_refcounts=off refcount_bits=16
[2019-11-21T15:25:21.391 CET] [debug] running /usr/bin/qemu-img create -f qcow2 -b /var/lib/openqa
/pool/7/raid/cd0-overlay1 /var/lib/openqa/pool/7/raid/cd0-overlay2 665845760
[2019-11-21T15:25:21.410 CET] [debug] Formatting '/var/lib/openqa/pool/7/raid/cd0-overlay2', fmt=q
cow2 size=665845760 backing_file=/var/lib/openqa/pool/7/raid/cd0-overlay1 cluster_size=65536 lazy_
refcounts=off refcount_bits=16
[2019-11-21T15:25:21.411 CET] [debug] starting: /usr/bin/qemu-system-x86_64 -only-migratable -char
dev ringbuf,id=serial0,logfile=serial0,logappend=on -serial chardev:serial0 -soundhw hda -global i
sa-fdc.driveA= -m 1024 -cpu qemu64 -netdev tap,id=qanet0,ifname=tap6,script=no,downscript=no -devi
ce virtio-net,netdev=qanet0,mac=52:54:00:12:03:af -netdev tap,id=qanet1,ifname=tap70,script=no,dow
nscript=no -device virtio-net,netdev=qanet1,mac=52:54:00:12:43:af -boot order=c,menu=on,splash-tim
e=5000 -device usb-ehci -device usb-tablet -smp 1 -enable-kvm -no-shutdown -vnc :97,share=force-sh
ared -device virtio-serial -chardev socket,path=virtio_console,server,nowait,id=virtio_console,log
file=virtio_console.log,logappend=on -device virtconsole,chardev=virtio_console,name=org.openqa.co
nsole.virtio_console -chardev socket,path=virtio_console1,server,nowait,id=virtio_console1,logfile
=virtio_console1.log,logappend=on -device virtconsole,chardev=virtio_console1,name=org.openqa.cons
ole.virtio_console1 -chardev socket,path=qmp_socket,server,nowait,id=qmp_socket,logfile=qmp_socket
.log,logappend=on -qmp chardev:qmp_socket -S -device virtio-scsi-pci,id=scsi0 -blockdev driver=file
,node-name=hd0-overlay2-file,filename=/var/lib/openqa/pool/7/raid/hd0-overlay2,cache.no-flush=on
-blockdev driver=qcow2,node-name=hd0-overlay2,file=hd0-overlay2-file,cache.no-flush=on -device vir
tio-blk,id=hd0-device,drive=hd0-overlay2,bootindex=0,serial=hd0 -blockdev driver=file,node-name=cd
0-overlay2-file,filename=/var/lib/openqa/pool/7/raid/cd0-overlay2,cache.no-flush=on -blockdev driv
er=qcow2,node-name=cd0-overlay2,file=cd0-overlay2-file,cache.no-flush=on -device scsi-cd,id=cd0-de
vice,drive=cd0-overlay2,serial=cd0 -incoming defer
```

```
[2019-11-21T15:25:21.417 CET] [debug] Waiting for 0 attempts
[2019-11-21T15:25:22.418 CET] [debug] Waiting for 1 attempts
[2019-11-21T15:25:23.418 CET] [debug] Finished after 2 attempts
[2019-11-21T15:25:23.419 CET] [debug] qmpsocket 14
[2019-11-21T15:25:23.422 CET] [debug] EVENT {"data":{"status":"setup"},"event":"MIGRATION","timestamp":{"microseconds":422209,"seconds":1574346323}}
[2019-11-21T15:25:24.424 CET] [debug] EVENT {"data":{"status":"active"},"event":"MIGRATION","timestamp":{"microseconds":426431,"seconds":1574346323}}
[2019-11-21T15:25:26.668 CET] [debug] EVENT {"data":{"status":"completed"},"event":"MIGRATION","timestamp":{"microseconds":668448,"seconds":1574346326}}
/usr/lib/os-autoinst/consoles/vnc_base.pm:62:{
  'connect_timeout' => 3,
  'hostname' => 'localhost',
  'port' => 5997
}
[2019-11-21T15:25:26.671 CET] [debug] <<< consoles::virtio_terminal::open_socket(socket_path='/var/lib/opensqa/pool/7/virtio_console1')
[2019-11-21T15:25:26.671 CET] [debug] <<< consoles::virtio_terminal::open_socket(socket_path='/var/lib/opensqa/pool/7/virtio_console')
[2019-11-21T15:25:26.724 CET] [debug] pointer type 1 0 1024 768 -257
[2019-11-21T15:25:26.724 CET] [debug] led state 0 1 1 -261
[2019-11-21T15:25:26.731 CET] [debug] Restored snapshot
[2019-11-21T15:25:26.731 CET] [debug] EVENT {"data":{"client":{"family":"ipv4","host":"127.0.0.1","service":"50346","websocket":false},"server":{"auth":"none","family":"ipv4","host":"0.0.0.0","service":"5997","websocket":false},"event":"VNC_CONNECTED","timestamp":{"microseconds":669821,"seconds":1574346326}}
[2019-11-21T15:25:26.731 CET] [debug] EVENT {"data":{"client":{"family":"ipv4","host":"127.0.0.1","service":"50346","websocket":false},"server":{"auth":"none","family":"ipv4","host":"0.0.0.0","service":"5997","websocket":false},"event":"VNC_INITIALIZED","timestamp":{"microseconds":671201,"seconds":1574346326}}
[2019-11-21T15:25:26.731 CET] [debug] EVENT {"event":"RESUME","timestamp":{"microseconds":731641,"seconds":1574346326}}
[2019-11-21T15:25:26.777 CET] [debug] Backend process died, backend errors are reported below in the following lines:
The console 'sut' is not responding (half-open socket?). Make sure the console is reachable or disable stall detection on expected disconnects with '$console->disable_vnc_stalls', for example in case of intended machine shutdown
```

so the problem seems to be related to forcing a rollback to a previous snapshot.

Reproducible

Fails sporadically in about 2/3 cases since multiple weeks at least

Expected result

[20191120-1](#) (or more recent)

Further details

Always latest result in this scenario: [latest](#)

Related issues:

Related to openQA Tests - action #32746: [\[sle\]\[tools\]\[remote-backends\]\[hard\]](#) ...

Resolved

2018-03-05

History

#1 - 2019-11-27 08:59 - szarate

- Related to action #32746: [\[sle\]\[tools\]\[remote-backends\]\[hard\]](#) Incomplete job because console isn't responding correctly. Half-open socket on IPMI added

#2 - 2019-11-27 09:00 - szarate

- Subject changed from "The console 'sut' is not responding (half-open socket?)." test incompletes in t20_teaming_ab_all_link to [\[functional\]\[u\]](#) "The console 'sut' is not responding (half-open socket?)." test incompletes in t20_teaming_ab_all_link

I just want to discuss it further, and maybe prepare it for later. So adding to the U team's backlog for the time being.

#3 - 2019-11-27 09:28 - szarate

- Subject changed from [functional][u] "The console 'sut' is not responding (half-open socket?)." test incompletes in t20_teaming_ab_all_link to [functional][u][qam] "The console 'sut' is not responding (half-open socket?)." test incompletes in t20_teaming_ab_all_link

#4 - 2019-12-03 09:56 - okurz

- Subject changed from [functional][u][qam] "The console 'sut' is not responding (half-open socket?)." test incompletes in t20_teaming_ab_all_link to [network][qam] "The console 'sut' is not responding (half-open socket?)." test incompletes in t20_teaming_ab_all_link

that's actually "network"

#5 - 2019-12-03 10:01 - okurz

- Priority changed from Normal to Urgent

actually "incompletes" should be handled as "Urgent" as also the label carry over would not work without a module mentioned

#6 - 2019-12-12 12:40 - asmorodskyi

Failing at PowerKVM job <https://openqa.suse.de/tests/3687312> . Exactly same code run fine on x86 and aarch64 . I would say that tags [network] and [qam] are misleading here . Issue not related to network or QAM . SOMething is broken in revert to snapshot mechanism

#7 - 2019-12-12 13:54 - okurz

Maybe but whatever the test does it seems to be very specific so I suggest to avoid that :) There is a "feature request" hidden inside this ticket to make the problem more obvious, I agree :)

#8 - 2019-12-12 20:39 - okurz

- Subject changed from [network][qam] "The console 'sut' is not responding (half-open socket?)." test incompletes in t20_teaming_ab_all_link to [network][qam] auto_review:"The console 'sut' is not responding (half-open socket?)." test incompletes in t20_teaming_ab_all_link

#9 - 2019-12-12 20:56 - okurz

- Subject changed from [network][qam] auto_review:"The console 'sut' is not responding (half-open socket?)." test incompletes in t20_teaming_ab_all_link to [network][qam] auto_review:"The console. 'sut.' is not responding. 'half-open socket' test incompletes in t20_teaming_ab_all_link

#10 - 2019-12-12 21:39 - okurz

asmorodskyi wrote:

Failing at PowerKVM job <https://openqa.suse.de/tests/3687312> . Exactly same code run fine on x86 and aarch64 . I would say that tags [network] and [qam] are misleading here . Issue not related to network or QAM . SOMething is broken in revert to snapshot mechanism

https://openqa.suse.de/tests/3697797#next_previous shows that the issue also happens on x86_64 and that it is not always happening, like 9/10 times.

#11 - 2020-01-09 22:08 - okurz

Latest example: <https://openqa.suse.de/tests/3772385/file/autoinst-log.txt>

[asmorodskyi](#) I consider this *still* urgent, on [network], so for you, right?

#12 - 2020-01-15 12:38 - okurz

- Subject changed from [network][qam] auto_review:"The console. 'sut.' is not responding. 'half-open socket' test incompletes in t20_teaming_ab_all_link to [network][qam] auto_review:"The console. '(root-virtio-terminal1|sut). 'is not responding. 'half-open socket' test incompletes in t20_teaming_ab_all_link

#13 - 2020-01-15 14:49 - okurz

- Status changed from New to In Progress

- Assignee set to okurz

After asking [asmorodskyi](#) clarified to me that he does not want to look into this. I will see about excluding the test module causing the test module from the test schedule to prevent further incompletes which do not add more information.

Using an SQL query to find out where we use this label lately:

```
select jobs.id, jobs.test, result_dir from jobs, comments where (result='incomplete' and t_finished >= (NOW()
- interval '240 hour')) and jobs.id in (select job_id from comments where id is not null)) and jobs.id = job_id
and comments.text ~ 'poo#60161';
```

so we have 15 and 15-SP1 qam jobs in the job groups 165 and 232. I added in the testsuite over https://openqa.suse.de/admin/test_suites

```
EXCLUDE_MODULES=t20_teaming_ab_all_link
```

Triggered with openqa-clone-job --within-instance <https://openqa.suse.de> --skip-chained-deps 3789105
EXCLUDE_MODULES=t20_teaming_ab_all_link

```
Cloning dependencies of sle-15-SP1-Server-DVD-Updates-x86_64-Build20200115-2-qam_wicked_aggregate_sut@64bit
Created job #3789474: sle-15-SP1-Server-DVD-Updates-x86_64-Build20200115-2-qam_wicked_aggregate_ref@64bit -> h
https://openqa.suse.de/t3789474
Created job #3789475: sle-15-SP1-Server-DVD-Updates-x86_64-Build20200115-2-qam_wicked_aggregate_sut@64bit -> h
https://openqa.suse.de/t3789475
```

-> <https://openqa.suse.de/tests/3789475#>

EDIT: Interesting. All modules passed but job still incompletes with "sut is not responding". Trying to also exclude the now latest test module with
openqa-clone-job --within-instance <https://openqa.suse.de> --skip-chained-deps 3789105
EXCLUDE_MODULES=t20_teaming_ab_all_link,t19_teaming_ab_nсна_ping :

```
Cloning dependencies of sle-15-SP1-Server-DVD-Updates-x86_64-Build20200115-2-qam_wicked_aggregate_sut@64bit
Created job #3789496: sle-15-SP1-Server-DVD-Updates-x86_64-Build20200115-2-qam_wicked_aggregate_ref@64bit -> h
https://openqa.suse.de/t3789496
Created job #3789497: sle-15-SP1-Server-DVD-Updates-x86_64-Build20200115-2-qam_wicked_aggregate_sut@64bit -> h
https://openqa.suse.de/t3789497
```

<https://openqa.suse.de/t3789497>

#14 - 2020-01-15 16:30 - okurz

- Due date set to 2020-01-22
- Status changed from In Progress to Feedback
- Target version set to Current Sprint

<https://openqa.suse.de/t3789497> -> passed. Updated https://openqa.suse.de/admin/test_suites and monitoring.

#15 - 2020-01-21 13:52 - okurz

- Due date deleted (2020-01-22)
- Status changed from Feedback to Workable
- Assignee deleted (okurz)
- Priority changed from Urgent to Normal
- Target version deleted (Current Sprint)

scenario is currently green so the incomplete is averted and another person can now pick up to fix the issue that the two excluded modules triggered.

#16 - 2020-01-24 09:30 - okurz

seems that product validation tests incomplete now as well as QAM tests again: <https://openqa.suse.de/tests/3820231>

Seems someone added removed the testsuite setting so I added it back. The comment in the test suite description was still there as well.

#17 - 2020-01-24 14:49 - dzedro

[okurz](#) when you do something, check if it does what you think it should do!
EXCLUDE_MODULES does not work on qam_wicked_aggregate_ref!

#18 - 2020-01-28 14:46 - okurz

- Priority changed from Normal to Urgent

As "EXCLUDE_MODULES" was deleted again from settings we are back with incompletes, putting prio back to Urgent

#19 - 2020-01-30 12:01 - dzedro

QAM tests on sle15+ are passing with WICKED_EXCLUDE=t19_teaming_ab_nсна_ping, appears to me that t19_teaming_ab_nсна_ping is problematic

#20 - 2020-05-27 07:05 - tjyrinki_suse

- Priority changed from Urgent to High
- Start date deleted (2019-11-22)

Still passing with WICKED_EXCLUDE=t19_teaming_ab_nsna_ping: https://openqa.suse.de/tests/4287132#next_previous

Maybe priority does not need to be Urgent if this workaround has brought an adequate level of testing, but should be still fixed to work fully.

#21 - 2020-10-08 09:58 - cfconrad

- Tags set to wicked

#22 - 2020-10-08 10:02 - cfconrad

- Assignee set to cfconrad

#23 - 2020-10-08 14:21 - cfconrad

Current investigation:

- the error appear also with a minimal set of test-modules like WICKED_EXCLUDE='^(?!t19_teaming_ab_nsna_ping|t18_teaming_ab_arp_ping)
- If you set WICKED_TCPDUMP=0 will also avoid the problem
- Using only one serial console with VIRTIO_CONSOLE_NUM=1, also doesn't show this error.
- the problem is in serial_terminal::upload_file()! For some reason, if we upload a file from 2Mb we get such error.
<https://openqa.suse.de/tests/4794708>
- I'm not able to reproduce this error constantly in one of my openQA test environments (cfconrad-vm.qa.suse.de, autobot.qa.suse.de or openqa.wicked.suse.de)

#24 - 2020-10-28 16:45 - cfconrad

Did a manual test of using the second virtio_console and doing some output there. The log file is about ~190MB so there are some characters written. But I don't see the error.

<https://openqa.suse.de/tests/4896792>

Different things are:

- single machine job
- no snapshot loading during each test

#25 - 2020-11-02 22:04 - jlausuch

- Project changed from openQA Tests to Wicked
- Category deleted (Bugs in existing tests)

#26 - 2020-11-16 20:07 - okurz

- Project changed from Wicked to openQA Tests
- Category set to Bugs in existing tests

guys, please find a better solution than hiding tickets used on public open servers behind a private issue tracker. This is really annoying for outside contributors (and not really supportive of our company values even) and also it failed for the "auto-review" process in <https://gitlab.suse.de/openqa/auto-review/pipelines> to label the incomplete raising an alert for the team SUSE QE Tools.

#27 - 2020-11-26 12:53 - tjyrinki_suse

- Subject changed from [network][qam] auto_review:"The console.*(root-virtio-terminal1|sut).*is not responding.*half-open socket" test incompletes in t20_teaming_ab_all_link to [network][qem] auto_review:"The console.*(root-virtio-terminal1|sut).*is not responding.*half-open socket" test incompletes in t20_teaming_ab_all_link

#28 - 2021-09-01 13:48 - okurz

- Priority changed from High to Normal

This ticket was set to "High" priority but was not updated within 120 days which is 4 times the period of the SLO for "High" tickets (30 days) as described on <https://progress.opensuse.org/projects/openqatests/wiki/Wiki#SLOs-service-level-objectives> . The ticket will be set to the next lower priority of "Normal".

#29 - 2021-11-11 10:18 - cfconrad

I got a very good reproducer environment so I could restart investigating these things.

- 1) The socket which pretend to be half open is *never* one of the consoles it is [\[\[cmdpipe https://github.com/os-autoinst/os-autoinst/blob/master/backend/baseclass.pm#L105\]\]](https://github.com/os-autoinst/os-autoinst/blob/master/backend/baseclass.pm#L105) or [\[\[qemupipe https://github.com/os-autoinst/os-autoinst/blob/master/backend/qemu.pm#L465\]\]](https://github.com/os-autoinst/os-autoinst/blob/master/backend/qemu.pm#L465)
- 2) The socket isn't "half-open" as pretended but there is a "bucket" system which check how often read is triggered.

=> This read is just triggered more often then the bucket expect it, see `_CHKSEL_RATE_WAIT_TIME` and `_CHKSEL_RATE_HITS`

The issue is very easy to trigger by just running `script_output` inside a loop for more then 30 seconds. In a test where I added some debugs to `backend/baseclass.pm` I got the following statistics:

```
CB(13) abs:55 1.8333333333333333/s avg:1.83
CB(13) abs:39302 1310.066666666667/s avg:655.95
CB(13) abs:54248 1808.266666666667/s avg:1040.06
CB(13) abs:54544 1818.133333333333/s avg:1234.57
CB(13) abs:54356 1811.866666666667/s avg:1350.03
CB(13) abs:54516 1817.2/s avg:1427.89
CB(13) abs:54350 1811.666666666667/s avg:1482.72
CB(13) abs:54072 1802.4/s avg:1522.68
CB(13) abs:54466 1815.533333333333/s avg:1555.22
CB(13) abs:54936 1831.2/s avg:1582.82
CB(13) abs:54558 1818.6/s avg:1604.25
```

The abs value is the absolute value within 30s, the value in the () is the fd fileno, the value xxxx/s is the value per seconds and the avg value is the average.

So we see that we hit the threshold of 15k very easy with this simple test:

```
use Mojo::Base 'opensusebasetest';
use TestAPI;

sub run {
    my ($self, $ctx) = @_;
    $self->select_serial_terminal;

    my $start_time = time;
    my $duration = get_var('CLEMIX_DURATION', 300);

    while (time - $start_time < $duration) {
        script_output("true\n", quiet => 1);
    }
}
```

Trigger this test with:

```
_CHKSEL_RATE_HITS=${1:-15000}
openqa-cli api --host http://openqa-3.wicked.suse.de -X POST jobs \
  'ARCH=x86_64' 'BACKEND=qemu' 'BOOT_HDD_IMAGE=1' 'BUILD=baseclass-14_1' \
  'CASEDIR=https://github.com/cfconrad/os-autoinst-distrib-opensuse#stress_cmdpipe_socket' \
  'DESKTOP=textmode' 'DISTRIB=opensuse' 'FLAVOR=stress_cmdpipe' 'HDDSIZEGB=30' \
  'HDD_1=tumbleweed.qcow2' 'KEEP_GRUB_TIMEOUT=1' 'MACHINE=64bit' \
  'NICTYPE=tap' 'NOIMAGES=1' 'NOVIDEO=1' 'OVS_DEBUG=1' \
  'QEMU_CPU=qemu64' 'QEMU_VGA=cirrus' 'TAPDEV=auto,auto' \
  'UEFI_PFLASH_VARS=tumbleweed-uefi-vars.qcow2' 'VERSION=Tumbleweed' \
  'VIDEOMODE=text' 'VIRTIO_CONSOLE=1' 'VIRTIO_CONSOLE_NUM=2' \
  'WORKER_CLASS=openqa-3' '_GROUP_ID=18' '_QUIET_SCRIPT_CALLS=1' \
  SCHEDULE='tests/boot/boot_to_desktop,tests/clemix/stress_cmdpipe_socket' \
  TEST=clemix_stress_cmdpipe_socket \
  _CHKSEL_RATE_HITS=$_CHKSEL_RATE_HITS \
  | openqa-wait-job --host http://openqa-3.wicked.suse.de
```

<http://openqa-3.wicked.suse.de/tests/31388> with `_CHKSEL_RATE_HITS=15000` => FAILED

<http://openqa-3.wicked.suse.de/tests/31387> with `_CHKSEL_RATE_HITS=100000` => SUCCESSFUL