openQA Infrastructure - action #61994

VNC console corruption on aarch64

2020-01-10 09:46 - MDoucha

Status:	Resolved		**Start date:**	2020-01-10
Priority:	Low		**Due date:**	2020-01-21
Assignee:	okurz		**% Done:**	0%
Category:			**Estimated time:**	0.00 hour
Target version:	Ready			

Description

A random problem sometimes appears on aarch64 test machines where the VM screen isn't properly cleared after boot and console output gets drawn over remnants of boot splash screen. Then the job fails because needles don't match. The problem appears less than once a week and job restart usually fixes it but it might be worth investigating further.
https://openqa.suse.de/tests/3773959#step/update_kernel/6

Related issues:

Related to openQA Project - action #81142: VNC console corruption	**New**	**2020-12-17**

History

#1 - 2020-01-10 20:32 - coolo

How do you imagine we investigate this? I expect a qemu problem - and all such random qemu problems we filed, just got old in bugzilla.

#2 - 2020-01-11 10:02 - okurz

- File Screenshot_20200111_110145.png added

- Due date set to 2020-01-21

- Status changed from New to Feedback

- Assignee set to okurz

- Target version set to Current Sprint

While I agree with coolo that the fix probability is low I also think that mdoucha picked a valid approach. I prefer having actual issues reported and trying to at least handle workarounds automatically rather than repeatedly manually retriggering jobs :)

I reported https://bugzilla.opensuse.org/show_bug.cgi?id=1160707 and will create a workaround needle referencing the bug. This should be good enough to keep tests running. If the test will be closed without a fix we can replace the workaround needle with a normal needle that is forgiving enough to also accept the distorted screen as usable.

Setting to "Feedback" with due date for myself to check if the workaround needle is effective.

Created new needle "linux-login-corrupted_boot_screen-boo1160707-20200111" like this:

```
[    7.893449] raid6: int64x4  gen()  1803 MB/s
[    7.894000] hid-generic 0003:0627:0001.0002: input,hidraw1: USB HID v1.11 Ke
.0-2/input0
[    8.073446] raid6: int64x4  xor()  1100 MB/s
[    8.243449] raid6: int64x8  gen()  1247 MB/s
[    8.413438] raid6: int64x8  xor()   890 MB/s
[    8.583433] raid6: neonx1   gen()  1334 MB/s
[    8.753433] raid6: neonx1   xor()   923 MB/s
[    8.923448] raid6: neonx2   gen()  1545 MB/s
[    9.093455] raid6: neonx2   xor()  1097 MB/s
[    9.263440] raid6: neonx4   gen()  1634 MB/s
[    9.433433] raid6: neonx4   xor()  1135 MB/s
[    9.603441] raid6: neonx8   gen()  1484 MB/s
[    9.773449] raid6: neonx8   xor()  1029 MB/s
[    9.779019] raid6: using algorithm int64x4 gen() 1803 MB/s
[    9.785373] raid6: .... xor() 1100 MB/s, rmw enabled
[    9.791251] raid6: using intx1 recovery algorithm
[    9.798695] xor: measuring software checksum speed
[    9.903433]    8regs      : 2840.000 MB/sec
[   10.003428]    8regs_prefetch:  2392.800 MB/sec
[   10.103432]    32regs     : 4041.200 MB/sec
[   10.203428]    32regs_prefetch:  3191.600 MB/sec
[   10.209030] xor: using function: 32regs (4041.200 MB/sec)
[   10.247312] [drm] Initialized virtio_gpu 0.0.1 0 for virtio1 on minor 0
[   10.293139] Btrfs loaded, crc32c=crc32c-generic, assert=on
[   10.301033] BTRFS: device fsid f5fb0f3f-8a7a-4570-bdc1-b474e228d96c devid 1
[   10.359022] BTRFS info (device vda3): disk space caching is enabled
[   10.366188] BTRFS info (device vda3): has skinny extents
[   10.745817] systemd-journald[153]: Received SIGTERM from PID 1 (systemd).
[   10.842915] systemd: 18 output lines suppressed due to ratelimiting
[   11.270279] BTRFS info (device vda3): disk space caching is enabled
[   11.602580] input: Power Button as /devices/LNXSYSTM:00/LNXSYBUS:00/PNP0C0C:
[   11.613719] ACPI: Power Button [PWRB]
[   11.751337] Adding 1502204k swap on /dev/vda2.  Priority:-1 extents:1 across
[   11.785192] snd_hda_intel 0000:00:01.0: enabling device (0000 -> 0002)
[   11.795940] snd_hda_intel 0000:00:01.0: Force to snoop mode by module option
[   11.918463] snd_hda_codec_generic hdaudioC0D0: autoconfig for Generic: line
[   11.928431] snd_hda_codec_generic hdaudioC0D0:    speaker_outs=0 (0x0/0x0/0x
[   11.936991] snd_hda_codec_generic hdaudioC0D0:    hp_outs=0 (0x0/0x0/0x0/0x0
[   11.936993] snd_hda_codec_generic hdaudioC0D0:    mono: mono_out=0x0
[   11.936996] snd_hda_codec_generic hdaudioC0D0:    inputs:
[   11.936999] snd_hda_codec_generic hdaudioC0D0:      Line=0x5

Welcome to SUSE Linux Enterprise Server 12 SP4  (aarch64) - Kernel 4.12.14-95.6

susetest login: _
```

#3 - 2020-01-20 12:20 - okurz

- Status changed from Feedback to Resolved

- Target version changed from Current Sprint to Done

The needle hasn't matched anywhere yet but is used according to https://openqa.suse.de/admin/needles . As the tests did not fail again in the same step in the original scenario I will resolve this ticket. The bug mentions a potential QEMU patch to fix corruptions though:
https://lists.gnu.org/archive/html/qemu-devel/2020-01/msg03545.html

#4 - 2020-01-31 08:47 - MDoucha

- Status changed from Resolved to Feedback

- Target version changed from Done to Ready

The bug made another appearance and the workaround needle was not used. You'll need to create another needle for SLE-15+ and add "tty1-selected" tag to the old one.
https://openqa.suse.de/tests/3850002#step/boot_ltp/11
https://openqa.suse.de/tests/3849935#step/boot_ltp/6

#5 - 2020-02-03 13:43 - okurz

- Status changed from Feedback to Resolved

no problem to create an updated needled: tty1-selected-corrupted_boot_screen-boo1160707-20200203

#6 - 2020-02-17 08:35 - MDoucha

It looks like creating workaround needles for this issue will be a lot of work.
https://openqa.suse.de/tests/3889963#step/boot_ltp/6

#7 - 2020-02-17 12:22 - okurz

Oh, I see. I didn't know that the white circles can be covered by text as well. I assumed the animation would keep a detectable picture in foreground often enough. Ok, created "linux-login-corrupted_boot_screen-boo1160707-20200217" which should be even more resilient.

#8 - 2020-02-18 09:31 - MDoucha

okurz wrote:

> Oh, I see. I didn't know that the white circles can be covered by text as well. I assumed the animation would keep a detectable picture in foreground often enough. Ok, created "linux-login-corrupted_boot_screen-boo1160707-20200217" which should be even more resilient.

If this is a VNC bug, there is no animation running in the background anymore when this corruption happens. Then animation ended. The console was cleared with solid black color but the VNC client didn't notice. *THEN* the text was printed on empty black screen but the VNC client rendered it into its dirty buffer.

#9 - 2021-02-09 15:10 - MDoucha

- Related to action #81142: VNC console corruption added

Files

Screenshot_20200111_110145.png	396 KB	2020-01-11	okurz