

openQA Infrastructure - action #103518

opencv update broke os-autoinst (was: Tests on Raspberry Pi 2/3/4 are broken)

2021-12-06 08:20 - ggardet_arm

Status:	Resolved	Start date:	2021-12-06
Priority:	Normal	Due date:	
Assignee:	okurz	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:	Ready		

Description

Tests on Raspberry Pi 2/3/4 are broken since last Tumbleweed host update.

Log:

GOT GO

```
[2021-12-06T09:04:37.319492+01:00] [debug] Snapshots are not supported
[2021-12-06T09:04:37.336061+01:00] [debug] ||| starting prepare_firstboot tests/jeos/prepare_firstboot.pm
[2021-12-06T09:04:37.339090+01:00] [debug] tests/jeos/prepare_firstboot.pm:32 called testapi::select_console
[2021-12-06T09:04:37.339723+01:00] [debug] <<< testapi::select_console(testapi_console="root-ssh")
[2021-12-06T09:04:37.355665+01:00] [debug] Establishing VNC connection to localhost:33181
[2021-12-06T09:04:37.586016+01:00] [debug] Connected to Xvnc - PID 10542
icewm PID is 10546
[2021-12-06T09:04:38.605791+01:00] [debug] Wait for SSH on host 192.168.0.56 (timeout: 240)
xterm PID is 11012
[2021-12-06T09:06:52.797570+01:00] [debug] <<< backend::baseclass::start_ssh_serial(hostname="192.168.0.56", password="SECRET", username="root")
[2021-12-06T09:06:52.798257+01:00] [debug] <<< backend::baseclass::new_ssh_connection(password="SECRET", hostname="192.168.0.56", username="root")
[2021-12-06T09:06:53.048026+01:00] [debug] SSH connection to root@192.168.0.56 established
[2021-12-06T09:06:54.530075+01:00] [debug] ssh xterm vt: grabbing serial console
[2021-12-06T09:06:54.585865+01:00] [debug] led state 0 0 0 -261
[2021-12-06T09:06:54.635047+01:00] [debug] activate_console, console: root-ssh, type: ssh
[2021-12-06T09:06:54.635678+01:00] [debug] tests/jeos/prepare_firstboot.pm:32 called testapi::select_console -> lib/susedistribution.pm:807 called susedistribution::handle_password_prompt -> lib/susedistribution.pm:48 called testapi::assert_screen
[2021-12-06T09:06:54.636039+01:00] [debug] <<< testapi::assert_screen(mustmatch="password-prompt", timeout=60)
X connection to :33181 broken (explicit kill or server shutdown).
[2021-12-06T09:06:54.695511+01:00] [debug] backend process exited: 0
xterm: fatal IO error 11 (Resource temporarily unavailable) or KillClient on X server ":33181"
[2021-12-06T09:06:54.698685+01:00] [info] :: backend::driver::__ANON__: Driver backend collected unknown process with pid 10546 and exit status: 1
[2021-12-06T09:06:54.699638+01:00] [info] :: backend::driver::__ANON__: Driver backend collected unknown process with pid 11014 and exit status: 0
[2021-12-06T09:06:54.699977+01:00] [debug] stopping command server 7816 because test execution ended
[2021-12-06T09:06:54.700242+01:00] [debug] isotovideo: informing websocket clients before stopping command server: http://127.0.0.1:20033/XhYJpnZ3EKa3Iiaf/broadcast
[2021-12-06T09:06:54.701610+01:00] [info] :: backend::driver::__ANON__: Driver backend collected unknown process with pid 11012 and exit status: 84
[2021-12-06T09:06:54.708448+01:00] [info] :: backend::driver::__ANON__: Driver backend collected unknown process with pid 10542 and exit status: 0
[2021-12-06T09:06:55.067383+01:00] [info] :: backend::driver::__ANON__: Driver backend collected unknown process with pid 7825 and exit status: 0
[2021-12-06T09:06:55.671518+01:00] [debug] commands process exited: 0
[2021-12-06T09:06:55.772073+01:00] [debug] done with command server
[2021-12-06T09:06:55.772351+01:00] [debug] stopping autotest process 7819
[2021-12-06T09:06:55.773228+01:00] [debug] autotest received signal TERM, saving results of current test before exiting
```

```
[2021-12-06T09:06:55.783371+01:00] [debug] [autotest] process exited: 1
[2021-12-06T09:06:55.883881+01:00] [debug] done with autotest process
[2021-12-06T09:06:55.884093+01:00] [debug] isotovideo failed
[2021-12-06T09:06:55.885336+01:00] [debug] stopping backend process 7820
[2021-12-06T09:06:55.885547+01:00] [debug] done with backend process
7812: EXIT 1
[2021-12-06T09:06:56.026552+01:00] [info] Isotovideo exit status: 1
[2021-12-06T09:06:56.160740+01:00] [info] +++ worker notes +++
[2021-12-06T09:06:56.161131+01:00] [info] End time: 2021-12-06 08:06:56
[2021-12-06T09:06:56.161325+01:00] [info] Result: died
```

See: <https://openqa.opensuse.org/tests/2072487>

History

#1 - 2021-12-06 08:51 - okurz

- Status changed from New to Feedback

- Assignee set to okurz

- Target version set to Ready

Could be related to <https://github.com/os-autoinst/os-autoinst/pull/1868> but I don't see any obvious error message.

The first bad job in this scenario in <https://openqa.opensuse.org/tests/2069354/logfile?filename=autoinst-log.txt> shows "Current version is 4.6.1638454781.7b07525b [interface v24]", last good <https://openqa.opensuse.org/tests/2066263/logfile?filename=autoinst-log.txt> has "Current version is 4.6.1638007345.ae6eed2a [interface v24]" . <https://github.com/os-autoinst/os-autoinst/compare/ae6eed2a...7b07525b> shows 15 commits. I suspect that either <https://github.com/os-autoinst/os-autoinst/commit/68625004e128b5565353fcbf5ff366bb271ebb74> or <https://github.com/os-autoinst/os-autoinst/commit/b1bfd883c185034f1c48385636ba8cef9bb17f24> cause problems here. Could you try to go back to an os-autoinst version before the mentioned pull request? As an alternative you might be able to give me access?

#2 - 2021-12-06 09:04 - ggardet_arm

Trying with os-autoinst from aarch64 Tumbleweed OSS repo: 4.6.1638289529.0a3f5b98-1.1 at <https://openqa.opensuse.org/tests/2072532>

#3 - 2021-12-06 09:16 - ggardet_arm

ggardet_arm wrote:

Trying with os-autoinst from aarch64 Tumbleweed OSS repo: 4.6.1638289529.0a3f5b98-1.1 at <https://openqa.opensuse.org/tests/2072532>

This version indeed works! What do you want I try to debug this further?

#4 - 2021-12-06 11:25 - okurz

- I wonder why we don't see error messages that point to the real problem. I would expect something like perl warnings like "Too many arguments for subroutine \$foo" or similar. You might be able to see more when running tests on that machine manually with isotovideo. Could you put the vars.json file of one job, e.g. <https://openqa.opensuse.org/tests/2072487> into a local directory on that worker host, provide assets there locally e.g. symlink "openSUSE-Tumbleweed-ARM-JeOS-raspberrypi2.armv7l-2021.12.02-Snapshot20211202.raw.xz" from the worker cache into /tmp and run isotovideo from that directory. Then you might see more.
- Do you know which consoles are being used? Only some files have been changed in <https://github.com/os-autoinst/os-autoinst/commit/b1bfd883c185034f1c48385636ba8cef9bb17f24>
- As the changes done in the mentioned commits are only perl code changes you can try to manually patch changes and bisect this way

#5 - 2021-12-08 09:08 - ggardet_arm

<https://build.opensuse.org/package/show/devel:openQA/os-autoinst> shows errors :

```
[ 141s] The following tests FAILED:
[ 141s]      3 - test-perl-testsuite (Failed)
```

Maybe related?

With latest openCV, we now hit the following error:

```
[2021-12-08T10:00:42.317288+01:00] [debug] tests/jeos/prepare_firstboot.pm:32 called testapi::select_console -
> lib/susedistribution.pm:807 called susedistribution::handle_password_prompt -> lib/susedistribution.pm:48 ca
lled testapi::assert_screen
[2021-12-08T10:00:42.317662+01:00] [debug] <<< testapi::assert_screen (mustmatch="password-prompt", timeout=60)
```

```
terminate called after throwing an instance of 'cv::Exception'  
  what(): OpenCV(4.5.4) /home/abuild/rpmbuild/BUILD/opencv-4.5.4/modules/imgproc/src/smooth.dispatch.cpp:293:  
  error: (-215:Assertion failed) ksize.width > 0 && ksize.width % 2 == 1 && ksize.height > 0 && ksize.height %  
  2 == 1 in function 'createGaussianKernels'
```

```
Unexpected end of data 0  
X connection to :37707 broken (explicit kill or server shutdown).  
[2021-12-08T10:00:42.362835+01:00] [debug] backend process exited: 0  
xterm: fatal IO error 11 (Resource temporarily unavailable) or KillClient on X server ":37707"
```

See: <https://openqa.opensuse.org/tests/2076217>

I am still with os-autoinst from aarch64 Tumbleweed OSS repo: 4.6.1638289529.0a3f5b98-1.1

#6 - 2021-12-08 11:29 - favogt

- Status changed from *Feedback* to *Workable*

I can reproduce the crash on x86_64 Tumbleweed as well, after upgrading OpenCV 4.5.2-2.2 -> 4.5.4-1.1.

With GDB, it looks like the ABI got broken and inside OpenCV the value of ksize is corrupt: \$2 = {width = 0xe87a3e08, height = 0x7fff}

#7 - 2021-12-08 12:57 - favogt

The ABI breakage is because class Size is trivially copyable in the new version, so it can be passed in a register (\$rdx). In the older version it's not the case, and it's pushed to the stack instead. So tinyvc writes 0x30000003 to the stack, but the OpenCV library reads \$rdx again, which contains random stuff.

According to upstream, OpenCV 4.x does not provide ABI compatibility: <https://github.com/opencv/opencv/issues/20878>

<https://build.opensuse.org/request/show/936484> will enforce rebuilds of packages using OpenCV on every version change.

Until that is merged, we'll have to ensure that os-autoinst got rebuilt.

#8 - 2021-12-08 13:30 - ggardet_arm

Thanks for all the details and tests Fabian!

#9 - 2021-12-08 14:06 - ggardet_arm

- Status changed from *Workable* to *Resolved*

I tested os-autoinst 4.6.1638540755.a348c6d8 built against latest opencv and it works. So, we should be good now.

#10 - 2021-12-08 14:09 - okurz

+1, thx!

#11 - 2021-12-08 14:10 - ggardet_arm

- Subject changed from *Tests on Raspberry Pi 2/3/4 are broken* to *opencv update broke os-autoinst (was: Tests on Raspberry Pi 2/3/4 are broken)*