openQA Tests - action #35215
[functional][u][epic][medium] test fails on shutdown module
19/04/2018 07:32 am - okurz

Status: Resolved
Priority: Urgent
Assignee: oorlov
Category: Bugs in existing tests
Target version: Milestone 19
Difficulty: medium

Description

**Observation**

openQA test in scenario opensuse-15.0-GNOME-Live-x86_64-gnome-live@uefi-usb-2G fails in shutdown to shutdown in time.

**Reproducible**

Fails since (at least) Build 15.1

**Expected result**

Last good: 14.8 (or more recent)

**Problem**

- H1: ACCEPT: Only usb-based images are affected -> other scenarios seem to be fine in general
- H2: REJECT: live-images shutdown does not work at all and needs to be reported as bug and worked around -> oorlov conducted two local verification runs, one passed and one fail so it can work
- H3: shutdown only takes much longer
- H4: Shutdown test fails because some of the installed services slow down it
  - H4.1 It fails due to services, that were installed during the test run
  - H4.2 It fails due to pre-installed service in the system itself

**Suggestions**

- Reproduce locally
- Investigate existing failures and see if we would maybe just need to bump the timeout
- Crosscheck other tickets about shutdown
- Make sure tests reliably shutdown and reboot by either just bumping timeout or finding out the real cause of being stuck or using another more reliant method to reboot as workaround
- If increasing timeout will not help or will show that shutdown takes too long time, then next step would beremoving splash screen and check what is happening in background
- Merge three shutdown files into one (x11/shutdown.pm, shutdown/shutdown.pm, kernel/shutdown_ltp.pm) to avoid duplication and have single place where shutdown logic is located (1d);
- Add generic method to raise 'soft fail' if some amount of time is exceeded but action is not finished. If the time exceeded, then soft fail should be reported and test could wait more time for the action to be finished (it is required, because we want to raise 'soft fail' if assert_shutdown() is not completed in time and then wait until shutdown will actually finish) (2d);
- Add ability to debug system shutdown, e.g. it could be done if job is started with "DEBUG_SHUTDOWN" parameter (4h)
- Test changed code on several combinations of tests (1d)

**Further details**

Always latest result in this scenario: latest

**Related issues:**

Related to openQA Tests - action # 35302: [opensuse][functional][u][epic][spo... Blocked 26/04/2018  31/07/2018
Related to openQA Tests - action # 33571: [opensuse][functional][u][medium] t... Resolved 21/03/2018  05/06/2018
| Related to openQA Tests - action # 36150: [opensuse][functional][u][sporadic]... | Resolved | 14/05/2018 | 31/07/2018 |
| Related to openQA Tests - action # 35011: [functional][sle][u][sporadic] test... | Resolved | 16/04/2018 | 28/08/2018 |
| Related to openQA Tests - action # 36040: [opensuse][functional][u] test fail... | Resolved | 09/05/2018 | 25/09/2018 |
| Related to openQA Tests - action # 40055: [functional][u][bsc#1105517][sporad... | Rejected | 21/08/2018 | 28/08/2018 |
| Related to openQA Tests - action # 43880: [functional][u][s390x][sporadic] te... | Resolved | 16/11/2018 | 28/08/2018 |
| Blocks openQA Tests - action # 36997: [opensuse][functional][u][wayland] test... | Resolved | 08/06/2018 | 25/09/2018 |

**History**

#1 - 19/04/2018 08:49 am - oorlov
- Assignee set to oorlov

#2 - 25/04/2018 08:43 am - okurz
- Subject changed from [functional][u][sporadic][fast] test fails in shutdown of new leap live image tests to [functional][u][sporadic][medium] test fails in shutdown of new leap live image tests
- Status changed from New to Workable
- Difficulty set to medium

#3 - 25/04/2018 02:49 pm - okurz
- Target version changed from Milestone 15 to Milestone 16

correcting milestone, it's actually M16

#4 - 25/04/2018 02:51 pm - okurz
- Description updated
- Status changed from Workable to In Progress

@oorlov I know you are actually working on this one :)

Please update this ticket accordingly on a more timely base because it is urgent.

See how I updated the description as an example.

#5 - 26/04/2018 07:23 am - oorlov

I've reproduced the issue locally. From 3 runs it failed twice.

After that I've commented all the modules in between boot and shutdown and executed 10 times. All the tests passed.

So, my assumption is that some of the installed packages slow the shutdown. I'll try to increase the timeout and see what will happen.

#6 - 26/04/2018 07:58 am - JERiveraMoya

Seen also in SLE15: [https://openqa.suse.de/tests/1647051#step/shutdown/15](https://openqa.suse.de/tests/1647051#step/shutdown/15)

#7 - 27/04/2018 09:29 am - okurz

[https://github.com/os-autoinst/os-autoinst-distri-opensuse/pull/4956](https://github.com/os-autoinst/os-autoinst-distri-opensuse/pull/4956) created and merged, test changes were synced to o3 and I retriggered some tests
which failed in shutdown. Please monitor:

- gnome next
- [tw](https://openqa.opensuse.org/tests/664780)
- https://openqa.opensuse.org/tests/664781
- https://openqa.opensuse.org/tests/664782
- https://openqa.opensuse.org/tests/664783

#8 - 27/04/2018 10:06 am - oorlov

- Description updated

After discussion with okurz it was decided to increase the timeout dramatically and trigger huge amount of test runs on o3 in order to check if it may solve the issue or it will still fail regardless of the timeout.

Pull request: https://github.com/os-autoinst/os-autoinst-distri-opensuse/pull/4956

Build on o3: https://openqa.opensuse.org/tests/overview?version=15.0&build=poo35215_investigation&distri=opensuse&groupid=39

#9 - 30/04/2018 09:53 am - okurz

- Related to action #35302: [opensuse][functional][u][epic][sporadic] Various unstable tests on o3 added

#10 - 03/05/2018 08:52 am - oorlov

I've verified a lot of failed 'shutdown' modules on o3 and found out, that they could be divided into two groups (for now I'm not sure if it is caused by the same reason):

- First group: KDE tests. After pressing 'ctrl+alt+del' the popup with 'power-off' button is not appeared and test fails after 15 seconds of waiting for it. For these tests I've made snapshots and will try investigate the problem locally.
- Second group: Gnome tests. After pressing 'Power Off' button, test fails after 60 seconds of waiting in assert_shutdown. There are similar issue for sle15, with soft-fail mark bsc#1055462. So I'll try to increase timeout and see what will happen.

#11 - 07/05/2018 08:11 am - oorlov

So, for KDE case I've created a ticket bsc#1091933, increased wait timeout and added soft-fail for case if waiting for "Power Off" popup to be appeared is more, than 15 seconds.

Gnome case seems to be different issue, as it is stuck on Plymouth splash screen while powering off the machine. Trying to investigate the root case of that behavior.

Also, I'm working on improving shutdown hook (to grab more information about the system in case of failed test).

#12 - 08/05/2018 07:27 am - oorlov

Added pool request for workaround on KDE.

Need a time to investigate Gnome problem, as I slow down with the snapshots due to qemu issue. I've found workaround and can proceed further now.
Also I want to improve the shutdown fail hook (to add more info to the logs on).

#13 - 08/05/2018 08:45 am - mgriessmeier
- Due date changed from 08/05/2018 to 22/05/2018

#14 - 08/05/2018 08:57 pm - okurz
- Related to action #33571: [opensuse][functional][u][medium] test fails in shutdown - emoticon settings are opened added

#15 - 15/05/2018 08:59 am - oorlov

Improved post_fail_hook with more logging was added. PR: https://github.com/os-autoinst/os-autoinst-distri-opensuse/pull/5048

Currently, the issue looks more like timeout issue. And it happened randomly to different test runs, regardless of desktop (gnome/kde), mostly for livecd installation and update OS.

I’m running today a lot of builds locally with different timeouts to find the timeout that will allow the test to check the shutdown properly.

#16 - 17/05/2018 09:26 pm - okurz
- Related to action #36040: [opensuse][functional][u] test fails in shutdown - need a way to check after shutdown needle got matched but shutdown hasn’t been executed for unknown reason added

#17 - 18/05/2018 06:19 am - okurz

one of the latest examples: https://openqa.opensuse.org/tests/678386#step/shutdown/15

any news?

#18 - 18/05/2018 09:36 am - oorlov

I’ve added PR with the increased timeout for Live CD, as it solves the issue.

I’ve executed 18 runs and all of them were passed.

Pull Request: https://github.com/os-autoinst/os-autoinst-distri-opensuse/pull/5094

#19 - 21/05/2018 06:07 pm - oorlov
- Status changed from In Progress to Feedback

#20 - 22/05/2018 08:23 am - oorlov
- Status changed from Feedback to Resolved

I’ve checked two latest builds. Shutdown module stopped failing on Live CD due to timeout issue.

We still have several failed shutdown modules in other jobs, but they are related to another issue (e.g. poo#36150).

#21 - 22/05/2018 12:54 pm - okurz
- Due date changed from 22/05/2018 to 05/06/2018
As decided in the sprint review meeting: You removed the urgency by introducing a higher timeout for the live media but we IMHO we have not solved the underlying issue or understood it well enough. This is something we should track better still.

#22 - 22/05/2018 01:58 pm - riafarov
- Related to deleted (action #36040: [opensuse][functional][u] test fails in shutdown - need a way to check after shutdown needle got matched but shutdown hasn't been executed for unknown reason)

#23 - 22/05/2018 01:58 pm - riafarov
- Blocks action #36040: [opensuse][functional][u] test fails in shutdown - need a way to check after shutdown needle got matched but shutdown hasn't been executed for unknown reason added

#24 - 04/06/2018 01:16 pm - oorlov
- File shutdown-logs.tar.gz added

I've executed the tests in the following way (as suggested by @nsinger):
1. Specify parameters on bootload: "systemd.log_level=debug systemd.log_target=kmsg log_buf_len=1M printk.devkmsg=on enforcing=0";
2. Mount a drive to the system;
3. Add 'debug.sh' script with the following content

```
#!/bin/sh
mount /dev/vda1 /tmp/test/
dmesg > /tmp/test/shutdown-log.txt
umount /dev/vda1
to /usr/lib/systemd/system-shutdown.
```

After the job finishes, mount a qcow2 image in the local system and copy shutdown-log.txt.

I've added logs of 3 failed jobs and 1 passed. Please see them in the attached 'shutdown-logs.tar.gz' archive.
Tests failed while shutdown timeout was set up to 60 sec.

#25 - 05/06/2018 08:37 am - mgriessmeier
- Due date changed from 05/06/2018 to 19/06/2018
- Target version changed from Milestone 16 to Milestone 17

#26 - 06/06/2018 12:34 pm - oorlov

After investigating the logs with @riafarov and @SLindoMansilla it was decided to create a [bcn#1096241](https://example.com)

An appropriate workaround with soft-fail will be added to the tests.

#27 - 12/06/2018 08:22 am - oorlov
- Description updated

#28 - 12/06/2018 08:24 am - oorlov
Please add your time estimation for the individual tasks

- Related to action #36150: [opensuse][functional][u][sporadic] test fails in shutdown on unsafe code looking for "sddm_shutdown_option_btn" added

- Target version changed from Milestone 17 to Milestone 17

- Due date changed from 19/06/2018 to 03/07/2018

- Added PR with merged shutdown modules and divided shutdown to 'cleanup' and 'shutdown' parts.

https://github.com/os-autoinst/os-autoinst-distri-opensuse/pull/5296

Also, I've made a debug part that should be called while running job with "DEBUG_SHUTDOWN" flag, but did not made a PR for it as it depends on the code from the previous PR.

Currently I'm working on the assert shutdown with soft fail.

Please provide it nevertheless as WIP-PR. We won't merge it but we should provide feedback as early as possible, ok?

- Related to deleted (action #36150: [opensuse][functional][u][sporadic] test fails in shutdown on unsafe code looking for "sddm_shutdown_option_btn")

- Blocks action #36150: [opensuse][functional][u][sporadic] test fails in shutdown on unsafe code looking for "sddm_shutdown_option_btn" added

- Due date changed from 03/07/2018 to 31/07/2018

Please provide it nevertheless as WIP-PR. We won't merge it but we should provide feedback as early as possible, ok?
I've also tried to make assert shutdown with soft fail message without changing os-autoinst code. But it seems like it is impossible, as the
assert_shutdown also marks test as failed if the shutdown is not finished and then sends 'croak'. Even if catch the 'croak' with the 'eval' or 'try-catch',
the test will proceed further (i.e. no post_fail_hook will be called), but it will be marked as failed anyway.

So, that part needs further discussion.

#40 - 06/07/2018 08:10 am - oorlov
- Status changed from In Progress to Feedback

Implemented assert_shutdown_soft_fail helper function: [WIP] PR: https://github.com/os-autoinst/os-autoinst-distri-opensuse/pull/5371

It also dependent on the PR in os-autoinst repo: https://github.com/os-autoinst/os-autoinst/pull/988

So, all the tasks for the ticket are covered. Now, waiting for the PRs to be reviewed.

#41 - 17/07/2018 08:34 am - oorlov

I've added unit tests to os-autoinst project, as they were requested by the reviewers: https://github.com/os-autoinst/os-autoinst/pull/988

#42 - 19/07/2018 09:13 pm - okurz
- Blocks deleted (action #36150: [opensuse][functional][u][sporadic] test fails in shutdown on unsafe code looking for "sddm_shutdown_option_btn")

#43 - 19/07/2018 09:13 pm - okurz
- Related to action #36150: [opensuse][functional][u][sporadic] test fails in shutdown on unsafe code looking for "sddm_shutdown_option_btn" added

#44 - 20/07/2018 05:54 am - okurz
- Target version changed from Milestone 17 to Milestone 18

#45 - 20/07/2018 09:17 am - zluo
- Related to action #35011: [functional][sle][u][sporadic] test fails in user_defined_snapshot during reboot because shutdown is not working or it takes
too long added

#46 - 23/07/2018 10:03 pm - okurz
- Blocks action #36997: [opensuse][functional][u][wayland] test fails in shutdown - xterm does not start added

#47 - 26/07/2018 01:42 pm - okurz
- Priority changed from Normal to High

-> blocked tickets

#48 - 29/07/2018 03:22 pm - okurz
- Priority changed from High to Urgent

This seems to become more severe now. Please urgently visit current test failures, e.g.
#49 - 30/07/2018 07:59 am - oorlov

So, what I’ve got for now:

- The issue occurs on Live images only;
- The issue started happening after my PR with cleanup_shutdown was merged. The difference between previous shutdown and current one is that instead of X11 Terminal the test opens tty console. And ‘Stall detected’ occurs while switching back to desktop;
- Some of the tests failed with ‘Test died: ensure_unlocked_desktop repeated too much. Check for X-server crash.’, some with ‘Stall was detected during assert_screen fail’;
- It is failing with 100% ratio on Krypton and Argon builds.

#50 - 30/07/2018 07:59 am - oorlov

- Status changed from Feedback to In Progress

#51 - 31/07/2018 08:21 am - oorlov

After deeper investigation I’ve found that it is not related to ‘cleanup_before_shutdown’ module.

The issue seems to be appear, because of console selecting in ‘power_action’ function. In the scenario, Wayland is used, but in power_action function it tries to select X11 console. Currently, I’m trying to reproduce the issue locally by removing all unnecessary modules in between to ensure, that the issue is related to the console.

#52 - 31/07/2018 08:37 am - mgriessmeier

- Due date changed from 31/07/2018 to 14/08/2018

to remove urgency it might make sense to just stop execution of some modules to make it pass and solve it properly afterwards

#53 - 01/08/2018 10:44 am - oorlov

fvogt made a PR, that fixes an issue with setting up the console for Wayland session.

https://github.com/os-autoinst/os-autoinst-distri-opensuse/pull/5496

#54 - 01/08/2018 10:44 am - oorlov

- Status changed from In Progress to Feedback

#55 - 06/08/2018 07:45 pm - oorlov

- Blocks deleted (action #36040: [opensuse][functional][u] test fails in shutdown - need a way to check after shutdown needle got matched but shutdown hasn't been executed for unknown reason)

#56 - 06/08/2018 08:06 pm - oorlov

- Subject changed from [functional][u][sporadic][medium] test fails in shutdown of new leap live image tests to [functional][u][epic][medium] test fails on shutdown module

#57 - 06/08/2018 08:13 pm - oorlov
- Related to action #36040: [opensuse][functional][u] test fails in shutdown - need a way to check after shutdown needle got matched but shutdown hasn't been executed for unknown reason added

#58 - 13/08/2018 02:32 pm - oorlov
- Description updated

PR that allows to gather more logs on shutdown: https://github.com/os-autoinst/os-autoinst-distri-opensuse/pull/5314. Merged.

PR that allows to set shutdown timeout to any value by passing it to DEBUG_SHUTDOWN parameter: https://github.com/os-autoinst/os-autoinst-distri-opensuse/pull/5578

#59 - 14/08/2018 11:49 am - okurz
- Due date changed from 14/08/2018 to 28/08/2018

bulk move to next sprint as could not be discussed in SR

#60 - 15/08/2018 07:27 am - SLindoMansilla
- Status changed from Feedback to In Progress

- No PR open
- not waiting for a verification run

#61 - 15/08/2018 07:31 am - oorlov

PR on os-autoinst, that introduces check_shutdown function: https://github.com/os-autoinst/os-autoinst/pull/988
PR on os-autoinst-distri-opensuse, that is dependent on the PR above: https://github.com/os-autoinst/os-autoinst-distri-opensuse/pull/5371

#62 - 21/08/2018 12:25 pm - oorlov
- Related to action #40055: [functional][u][bsc#1105517][sporadic][fast] - running application preventing the system from shutdown on otherDE_mate added

#63 - 23/08/2018 08:47 am - oorlov


#64 - 23/08/2018 08:49 am - oorlov

The PR in os-autoinst with check_shutdown has been merged.

So, currently I'm waiting for it to be appeared on o3 and on osd. Then my PR in os-autoinst-distri-opensuse could be merged: https://github.com/os-autoinst/os-autoinst-distri-opensuse/pull/5371

#65 - 28/08/2018 11:52 am - mgriessmeier
Due date changed from 28/08/2018 to 11/09/2018

#66 - 11/09/2018 08:51 am - mgriessmeier
- Due date changed from 11/09/2018 to 25/09/2018
- Target version changed from Milestone 18 to Milestone 19

#67 - 11/09/2018 07:45 pm - okurz

I checked the workers and both the osd and o3 workers have the os-autoinst change – have found #40880 though in the process. Please rebase your PR for the tests and expedite the merging.

#68 - 13/09/2018 01:01 pm - oorlov
- Status changed from In Progress to Feedback

The PR that introduces assert_shutdown_with_soft_timeout merged: https://github.com/os-autoinst/os-autoinst-distri-opensuse/pull/5371

After several successful builds, this ticket could be finally closed, as all the requirements from this ticket are covered.

Further shutdown issues could be opened as alone tickets as for other issues.

#69 - 13/09/2018 09:54 pm - okurz

oorlov wrote:

> After several successful builds, this ticket could be finally closed, as all the requirements from this ticket are covered.

Fine, don't hesitate to actually close it :) Latest job https://openqa.opensuse.org/tests/752806 in the originally mentioned scenario is fine regarding shutdown.

#70 - 13/09/2018 09:55 pm - okurz
- Status changed from Feedback to Resolved

#71 - 09/12/2018 08:14 am - okurz
- Related to action #43880: [functional][u][s390x][sporadic] test fails in shutdown on s390x added

Files

<table>
<thead>
<tr>
<th>File</th>
<th>Size</th>
<th>Date</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>shutdown-logs.tar.gz</td>
<td>275 KB</td>
<td>04/06/2018</td>
<td>oorlov</td>
</tr>
</tbody>
</table>