

## openQA Project - action #101015

[tools][sle][x86\_64][aarch64][QEMUTPM] can openqa create swtpm device automatically? size:M

2021-10-15 03:40 - rfan1

<b>Status:</b>	Resolved	<b>Start date:</b>	2021-09-16
<b>Priority:</b>	Normal	<b>Due date:</b>	2021-11-26
<b>Assignee:</b>	cdywan	<b>% Done:</b>	0%
<b>Category:</b>	Feature requests	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	Ready		
<b>Difficulty:</b>			

### Description

Hello openQA experts:

### Observation

I tried to boot a vm with swtpm device attached, however, it reported error msg "[2021-10-15T05:01:44.346271+02:00] [warn] !!! : qemu-system-x86\_64: -chardev socket,id=chrtpm,path=/tmp/mytpm1/swtpm-sock: Failed to connect socket /tmp/mytpm1/swtpm-sock: No such file or directory"

### Acceptance criteria

- **AC1:** qemu tpm device is created automatically

<https://openqa.suse.de/tests/7422844#details>

### Steps to reproduce

1) re-run a job with "QEMUTPM"=1

```
openqa-clone-job --from http://openqa.suse.de --skip-deps --host http://openqa.suse.de 7369899 --apikey "xxx" --apisecret "xxx" --skip-download _GROUP=0 EXCLUDE_MODULES=openssl_alpn,build_hdd QEMUTPM=1
```

2) We can hit the issue mentioned above

### Problem

As described in [https://github.com/os-autoinst/os-autoinst/blob/master/doc/backend\\_vars.asciidoc](https://github.com/os-autoinst/os-autoinst/blob/master/doc/backend_vars.asciidoc)

Configure VM to use a TPM emulator device, with appropriate args for the arch. sysadmin is responsible for running swtpm with a socket at /tmp/mytpmX, where X is the value of QEMUTPM or the worker instance number if QEMUTPM is set to 'instance'

However, IMO, the job should be assigned a random worker to run. we need have to configure a swtpm device there before start my job. at the same time, I may need swtpm 1.2 or swtpm 2.0 device based on the test requirement.

### Suggestion

- Create the swtpm device automatically once "QEMUTPM" is defined
- Delete exposed credentials and inform the user
- Follow steps in [https://en.opensuse.org/Software\\_TPM\\_Emulator\\_For\\_QEMU](https://en.opensuse.org/Software_TPM_Emulator_For_QEMU)

### Workaround

n/a

Can someone help take a look at this issue?

### History

#1 - 2021-10-15 03:40 - rfan1

- Copied from action #98727: [tools][sle][aarch64] the published hdd can't be booted up due to wrong format added

**#2 - 2021-10-15 03:42 - rfan1**

- Copied from deleted (action #98727: [tools][sle][aarch64] the published hdd can't be booted up due to wrong format)

**#3 - 2021-10-18 01:00 - rfan1**

- Priority changed from Low to Normal

**#4 - 2021-10-21 10:00 - cdywan**

- Subject changed from [tools][sle][x86\_64][aarch64][QEMUPTM] can openqa create swtpm device automatically? to [tools][sle][x86\_64][aarch64][QEMUPTM] can openqa create swtpm device automatically? size:M

- Description updated

- Status changed from New to Workable

**#5 - 2021-10-21 10:21 - cdywan**

- Status changed from Workable to In Progress

- Assignee set to cdywan

I'll grab it. Should be nice to have a ticket that's not depending on a moving target.

**#6 - 2021-10-22 00:48 - rfan1**

- Description updated

**#7 - 2021-10-22 04:10 - openqa\_review**

- Due date set to 2021-11-05

Setting due date based on mean cycle time of SUSE QE Tools

**#8 - 2021-10-22 17:19 - cdywan**

<https://github.com/os-autoinst/os-autoinst/pull/1834>

**#9 - 2021-10-25 16:04 - cdywan**

cdywan wrote:

<https://github.com/os-autoinst/os-autoinst/pull/1834>

PR is under review. On top of the initial poc I added an additional swtpm package, check that existing devices continue to work (i.e. not creating a new device if one exists) and adjust tests to put the device file in place.

**#10 - 2021-10-28 10:24 - rfan1**

Thanks for the update!

For now, tpm2 support is high priority.

**#11 - 2021-11-08 15:44 - cdywan**

- Due date changed from 2021-11-05 to 2021-11-12

rfan1 wrote:

For now, tpm2 support is high priority.

I now added an additional variable QEMUPTM\_VER. While the default is still 2.0 will be able to use both. And I also added tests for the respective cases.

**#12 - 2021-11-15 16:29 - cdywan**

- Due date changed from 2021-11-12 to 2021-11-19

Since the tests don't seem to behave correctly without it I prepared <https://github.com/os-autoinst/os-autoinst/pull/1853>

**#13 - 2021-11-22 17:46 - cdywan**

- Due date changed from 2021-11-19 to 2021-11-26

- Status changed from In Progress to Feedback

Still need to verify in a "full openQA job" context, with the branch installed. Trying to do that on openqa-staging-1.qa.suse.de but seemingly running into unrelated issues

#### #14 - 2021-11-24 15:47 - cdywan

cdywan wrote:

Still need to verify in a "full openQA job" context, with the branch installed. Trying to do that on openqa-staging-1.qa.suse.de but seemingly running into unrelated issues

```
sudo mv /usr/lib/os-autoinst{,.bak}
sudo git clone -b qemutpm_device https://github.com/kalikiana/os-autoinst /usr/lib/os-autoinst
sudo systemctl restart openqa-worker@42
sudo openqa-clone-job --from http://openqa.suse.de --skip-deps 7656835 _GROUP=0 CASEDIR="https://github.com/rfan1/os-autoinst-distri-opensuse.git#swtspm_test_only"
Created job #40945: sle-15-SP4-Online-x86_64-Build63.1-create_swtspm_hdd@64bit -> http://localhost/t40945
```

This [unfortunately fails](#) because /var/lib/openqa/share/tests/sle is **not** on swtspm\_test\_only. Maybe a bug?

I manually updated the distri anyway, and with QEMUTPM=1 QEMUTPM\_VER=2 you [something may be broken](#) - need to investigate what that is.

#### #15 - 2021-11-25 17:31 - cdywan

- Status changed from Feedback to Resolved

cdywan wrote:

I manually updated the distri anyway, and with QEMUTPM=1 QEMUTPM\_VER=2 you [something may be broken](#) - need to investigate what that is.

Btw to add swtspm I added the according repo:

```
releasever=15.2; sudo zypper ar -p 95 -f 'https://download.opensuse.org/repositories/security/openSUSE_Leap_${r
eleasever}' security; sudo zypper dup --from security --allow-vendor-change
```

I tried the variants i.e. QEMUTPM=1 QEMUTPM\_VER=2 but also QEMUTPM=1 QEMUTPM\_VER=1 and that seems to work. The test also [shows the devices](#):

```
crw-rw---- 1 tss root 10, 224 Nov 25 12:17 /dev/tpm0
crw-rw---- 1 tss tss 253, 65536 Nov 25 12:17 /dev/tpmrm0
```

And e.g. [debug] running swtspm socket --tpmstate dir=/tmp/mytpm1 --ctrl type=unixio,path=/tmp/mytpm1/swtspm-sock --log level=20 -d --tpm2 is visible in autoinst-log.txt.

Note that porting the test is not part of this ticket.

#### #16 - 2021-11-25 17:33 - cdywan

- Status changed from Resolved to Feedback

Bad muscle memory, obviously the branch still needs to be merged :-D

#### #17 - 2021-11-26 06:42 - rfan1

Thanks much for your kindly help on this case again!

#### #18 - 2021-11-26 10:01 - cdywan

- Status changed from Feedback to Resolved

rfan1 wrote:

Thanks much for your kindly help on this case again!

You're very welcome!

**#19 - 2021-11-26 10:18 - okurz**

- *Project changed from openQA Tests to openQA Project*
- *Category changed from Bugs in existing tests to Feature requests*