**openQA Tests - action #63610**

**[kernel][ltp][spvm] - test fails in pkey01 on spvm**

2020-02-19 13:40 - pcervinka

<table>
<thead>
<tr>
<th>Status:</th>
<th>Resolved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority:</td>
<td>High</td>
</tr>
<tr>
<td>Assignee:</td>
<td>pcervinka</td>
</tr>
<tr>
<td>Category:</td>
<td>Bugs in existing tests</td>
</tr>
<tr>
<td>Target version:</td>
<td>QE Kernel Done</td>
</tr>
<tr>
<td>Difficulty:</td>
<td></td>
</tr>
<tr>
<td>Start date:</td>
<td>2020-02-19</td>
</tr>
<tr>
<td>Due date:</td>
<td></td>
</tr>
<tr>
<td>% Done:</td>
<td>0%</td>
</tr>
<tr>
<td>Estimated time:</td>
<td>0.00 hour</td>
</tr>
</tbody>
</table>

**Description**

**Observation**

openQA test in scenario sle-15-SP2-Online-ppc64le-ltp_syscalls_spvm@ppc64le-spvm fails in pkey01

**Test suite description**

Maintainer: pcervinka, pvorel

**Reproducible**

Fails since (at least) Build 139.1

**Expected result**

Last good: (unknown) (or more recent)

**Further details**

Always latest result in this scenario: latest

Summary:

<table>
<thead>
<tr>
<th>passed</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>failed</td>
<td>0</td>
</tr>
<tr>
<td>skipped</td>
<td>0</td>
</tr>
<tr>
<td>warnings</td>
<td>0</td>
</tr>
</tbody>
</table>

**TEST pkey01 COMPLETE >>> 2**

kQ8Ut-0-

2020-02-14T11:16:10.473 CET] [debug] ||| starting pkey01 tests/kernel/run_ltp.pm

2020-02-14T11:16:10.480 CET] [debug] /var/lib/openqa/cache/openqa.suse.de/tests/sle/tests/kernel/run_ltp.pm:309 called testapi::type_string

2020-02-14T11:16:10.480 CET] [debug] <<< testapi::type_string(string="(pkey01; echo "### TEST pkey01 COMPLETE >>> "| tee /dev/sshserial
", max_interval=250, wait_screen_changes=0, wait_still_screen=0, timeout=30, similarity_level=47)

Summary:

<table>
<thead>
<tr>
<th>passed</th>
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</tr>
</thead>
<tbody>
<tr>
<td>failed</td>
<td>0</td>
</tr>
<tr>
<td>skipped</td>
<td>0</td>
</tr>
<tr>
<td>warnings</td>
<td>0</td>
</tr>
</tbody>
</table>

**TEST pkey01 COMPLETE >>> 2**


2020-02-14T11:16:13.260 CET] [debug] <<< testapi::wait_serial(no_regex=0, regexp=qr/### TEST pkey01 COMPLETE >>> \d+/u,_similarity_level=47)

Summary:

<table>
<thead>
<tr>
<th>passed</th>
<th>0</th>
</tr>
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<tr>
<td>failed</td>
<td>0</td>
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<tr>
<td>skipped</td>
<td>0</td>
</tr>
<tr>
<td>warnings</td>
<td>0</td>
</tr>
</tbody>
</table>
pkey01 test basically does nothing in 6 minutes with no output.
Manually tested on vugava-3 and it works fine, so it is not a bug.

Related issues:

| Related to openQA Tests | action #63943: [kernel][ltp] test fails in pkey01 | ... | Resolved | 2020-02-28 |

History

#1 - 2020-02-20 07:53 - pcervinka
OLD working one: https://openqa.suse.de/tests/3881063#step/pkey01/1

#2 - 2020-02-21 08:28 - pcervinka
- Status changed from New to In Progress
- Priority changed from Normal to High
- Target version changed from 454 to 445

#3 - 2020-02-21 08:29 - pcervinka
Looks like hugepages are not available.
You can specify with option -z
COMMAND: /opt/ltp/bin/ltp-pan -e -S -a 8690 -n 8690 -p /tmp/ltp-e6swym63uL/alltests -l
/opt/ltp/results/LTP_RUN_ON-2020_02_21-03h_13m_21s.log -C /opt/ltp/output/LTP_RUN_ON-2020_02_21-03h_13m_21s.failed -T
/opt/ltp/output/LTP_RUN_ON-2020_02_21-03h_13m_21s.tconf
INFO: Restricted to pkey
LOG File: /opt/ltp/results/LTP_RUN_ON-2020_02_21-03h_13m_21s.log
FAILED COMMAND File: /opt/ltp/output/LTP_RUN_ON-2020_02_21-03h_13m_21s.failed
TCONF COMMAND File: /opt/ltp/output/LTP_RUN_ON-2020_02_21-03h_13m_21s.tconf
Running tests..........<<>>
tag=pkey01 stime=1582272807
cmdline="pkey01"
contacts=""
analysis=exit
<<>>
tst_test.c:1217: INFO: Timeout per run is 0h 05m 00s
incrementing stop
pkey01.c:69: BROK: nr_hugepages = 0, but expect 1

#4 - 2020-02-21 08:36 - pcervinka
grenache-2:/boot # ls /sys/kernel/mm/hugepages/
hugepages-16384kB hugepages-16777216kB
grenache-2:/boot # ls /proc/sys/vm/nr_hugepages
/proc/sys/vm/nr_hugepages
grenache-2:/boot # cat /proc/sys/vm/nr_hugepages
0
Few minutes later on grenache and started to work....
pkey01.c:187: PASS: Child ended by SIGSEGV as expected
pkey01.c:191: INFO: Remove PKEY_DISABLE_WRITE from the buffer
pkey01.c:205: PASS: Read & Write buffer success, buffer[0] = 97

Summary:
  passed   96
  failed   0
  skipped  0
  warnings 0

<<>>
  initiation_status="ok"
  duration=0
  termination_type=exited
  termination_id=0
  corefile=no
  ctime=0

<<>>
  INFO: ltp-pan reported all tests PASS
  LTP Version: 20200120

grenache-2:/opt/ltp #
grenache-2:/opt/ltp #
grenache-2:/opt/ltp # cat /proc/sys/vm/nr_hugepages
  0

<<>>
  INFO: ltp-pan reported all tests PASS
  LTP Version: 20200120

#6 - 2020-02-21 08:51 - pcervinka
And another run fails...

<<>>
tst_test.c:1217: INFO: Timeout per run is 0h 05m 00s
incrementing stop
pkey01.c:69: BROK: nr_hugepages = 0, but expect 1

#7 - 2020-02-21 11:53 - pcervinka
It randomly fails (on PowerVM only) in pkey01.c:

```c
64   int val;
65   SAFE_FILE_PRINTF(PATH_VM_NRHPHS, "%d", 1);
66   SAFE_FILE_SCANF(PATH_VM_NRHPHS, "%d", &val);
67   if (val != 1)
68       tst_brk(TBROK, "nr_hugepages = %d, but expect %d",
69                val, 1);
```

Line 65 writes 1 to /proc/sys/vm/nr_hugepages and line 66 reads from /proc/sys/vm/nr_hugepages. If content of /proc/sys/vm/nr_hugepages is not 1, it fails.

#8 - 2020-02-21 12:07 - pcervinka
- Status changed from In Progress to Feedback

Should be fixed in https://patchwork.ozlabs.org/project/ltp/list/?series=157441.
Patch will be merged soon to LTP, so let's wait for next results.

#9 - 2020-02-21 12:23 - pvorel
Fix merged. I tested it on pinotage.arch.suse.de, but it worked there before, so we need to wait for next build.

#10 - 2020-02-21 12:41 - pcervinka
Pinotage is not spvm/PowerVM system, and vugava-* in orthos is Power9, i was able to randomly reproduce it only on osd grenache worker, which is Power8 spvm backend.

#11 - 2020-02-26 07:57 - pcervinka
- Status changed from Feedback to Resolved

#12 - 2020-02-27 10:02 - metan
- Target version changed from 445 to 457

2021-05-08
#13 - 2020-02-28 06:54 - pcervinka
- Related to action #63943: [kernel][ltp] test fails in pkey01 - Setup hugepages before test execution added

#14 - 2020-10-23 13:42 - pcervinka
- Target version changed from 457 to QE Kernel Done