Arvados - Bug #11561

[API] Limit number of lock/unlock cycles for a given container

04/26/2017 07:17 PM - Tom Clegg

<table>
<thead>
<tr>
<th>Status:</th>
<th>Resolved</th>
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<tbody>
<tr>
<td>Priority:</td>
<td>Normal</td>
</tr>
<tr>
<td>Assigned To:</td>
<td>Peter Amstutz</td>
</tr>
<tr>
<td>Category:</td>
<td>API</td>
</tr>
<tr>
<td>Target version:</td>
<td>2019-02-27 Sprint</td>
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<table>
<thead>
<tr>
<th>Start date:</th>
<th>04/26/2017</th>
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<tbody>
<tr>
<td>Due date:</td>
<td></td>
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<tr>
<td>% Done:</td>
<td>100%</td>
</tr>
<tr>
<td>Estimated time:</td>
<td>0.00 hour</td>
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Description
Currently, if a container cannot be started due to some infrastructure problem (whether or not it's related to the specific container) it will be retried repeatedly forever.

Proposed solution:
Add a site config knob (analogous to num_retries) that limits the number of times a container can be unlocked (moved from Locked to Queued state) before being automatically cancelled.

Add:
- Config key max_container_dispatch_attempts (default 5)
- DB column "lock_count" (do not include in API response)
- Increment lock_count during lock()
- When unlocking a container, if lock_count >= Rails.configuration.max_container_dispatch_attempts, change state to Cancelled instead of Queued (the unlock API should still respond 200 in this case) and update runtime_status[error] with an error message.

Write tests and update documentation.

Subtasks:
- Task # 14837: Review 11561-limit-container-locks

Related issues:
- Related to Arvados - Bug #11190: Containers seem to run more than once, which... Resolved 03/01/2017
- Has duplicate Arvados - Bug #14540: [API] Limit number of container lock/unlo... Duplicate
- Is duplicate of Arvados - Bug #9688: [Crunch2] Limit number of dispatch attem... Duplicate 08/02/2016

Associated revisions
Revision a4efc217 - 02/19/2019 04:40 PM - Peter Amstutz
Merge branch '11561-limit-container-locks' refs #11561
Arvados-DCO-1.1-Signed-off-by: Peter Amstutz <pamstutz@veritasgenetics.com>

History
#1 - 04/26/2017 07:20 PM - Tom Clegg
- Description updated
#2 - 08/28/2017 10:03 PM - Tom Morris
- Target version set to Arvados Future Sprints
#3 - 01/03/2019 09:08 PM - Peter Amstutz
- Related to Bug #9688: [Crunch2] Limit number of dispatch attempts per container added
#4 - 01/03/2019 09:11 PM - Peter Amstutz
- Target version changed from Arvados Future Sprints to To Be Groomed
#5 - 01/03/2019 09:12 PM - Tom Morris
This is a near duplicate of #9688. We should probably just merge the two.
#6 - 01/03/2019 09:43 PM - Tom Morris
- Related to Bug #14540: [API] Limit number of container lock/unlock cycles added

#7 - 01/10/2019 08:45 PM - Peter Amstutz
- Related to deleted (Bug #14540: [API] Limit number of container lock/unlock cycles)

#8 - 01/10/2019 08:46 PM - Peter Amstutz
- Has duplicate Bug #14540: [API] Limit number of container lock/unlock cycles added

#9 - 01/10/2019 08:46 PM - Peter Amstutz
- Related to deleted (Bug #9688: [Crunch2] Limit number of dispatch attempts per container)

#10 - 01/10/2019 08:46 PM - Peter Amstutz
- Is duplicate of Bug #9688: [Crunch2] Limit number of dispatch attempts per container added

#11 - 01/10/2019 08:47 PM - Peter Amstutz
- Status changed from New to Duplicate

#12 - 01/10/2019 08:47 PM - Peter Amstutz
- Status changed from Duplicate to New
- Priority changed from Normal to High

#14 - 01/10/2019 09:14 PM - Peter Amstutz
- Description updated

#15 - 01/10/2019 09:16 PM - Peter Amstutz
- Description updated

#16 - 01/10/2019 09:16 PM - Peter Amstutz
- Story points set to 2.0

#17 - 02/13/2019 04:27 PM - Tom Morris
- Target version changed from To Be Groomed to 2019-02-27 Sprint

#18 - 02/13/2019 04:30 PM - Peter Amstutz
- Assigned To set to Peter Amstutz

#19 - 02/15/2019 02:46 PM - Peter Amstutz
11561-limit-container-locks @ 0f14b3456d2d3bdf95b78b65a1a41280a7416928
Added lock_count + migration
Updated lock/unlock
Added test
Added configuration parameter (and added it to the new cluster config design doc as well)

#20 - 02/19/2019 03:35 PM - Lucas Di Pentima
This LGTM, thanks!

#21 - 02/19/2019 04:40 PM - Peter Amstutz
- Status changed from New to Resolved

#22 - 03/01/2019 07:33 PM - Tom Morris
- Release set to 15