Arvados - Feature #15087

[Workbench] Show number of queued containers on dashboard (instead of busy/idle nodes)

04/09/2019 07:21 PM - Tom Clegg

Status:	Resolved		**Start date:**	06/14/2019
Priority:	Normal		**Due date:**	
Assigned To:	Peter Amstutz		**% Done:**	100%
Category:	Workbench		**Estimated time:**	0.00 hour
Target version:	2019-06-19 Sprint			

Description

Background: Currently Workbench1 has "busy/idle nodes" counters on the dashboard, but they stop working or disappear if the deprecated crunch1 services are not running. This issue suggests a low-cost way to maintain some semblance of an "is anything happening?" indicator on Workbench after migrating to crunch2.

Feature: On the Workbench1 dashboard, if crunch2 is enabled, show

- the number of containers (visible to the current user) that have state=Locked, or state=Queued and priority>0
- the number of containers (visible to the current user) that have Running
- time since the earliest start time of any running container (visible to the current user)
- how long the oldest visible queued container has been waiting

Benefits:

- Easy to implement[1] in Workbench in a way that works with all dispatch setups
- Corresponds to reasonable user expectations ("it shouldn't take 2 hours to start a container")

Shortcomings:

- "Lots of other users' containers are queued ahead of yours" looks identical to "nothing is running at all" (assuming user is not admin)
- "Cluster is at capacity, with long-running containers" looks identical to "cluster is unable to run anything at all"
- Doesn't take advantage of the metrics we are (or could be) tracking in arvados-dispatch-cloud, like recent queued-to-starting delays and # busy/idle/booting cloud instances.

[1] Assuming we aren't too picky about the definition of "oldest" -- currently we don't record how long a container has been ready to run, only when it was created (since when it might have spent lots of time having priority=0) and when it was last modified (at which point it might have merely raised its priority long after it was ready to run)

Subtasks:

Task # 15325: Review 15087-wb-queued-containers		**Resolved**

Related issues:

Related to Arvados - Bug #15036: [Crunch2] Idle/busy node count not accurate ...		**Duplicate**	
Related to Arvados - Bug #15014: [Workbench] Hide busy/idle nodes display whe...		**Resolved**	09/30/2019
Blocks Arvados - Story #15133: Remove crunch v1 (jobs api)		**Resolved**	08/08/2019

Associated revisions

Revision bf9803ee - 06/17/2019 03:20 PM - Peter Amstutz

Merge branch '15087-wb-queued-containers' closes #15087

Arvados-DCO-1.1-Signed-off-by: Peter Amstutz <pamstutz@veritasgenetics.com>

History

#1 - 04/17/2019 01:52 PM - Tom Clegg

- Description updated

#2 - 04/17/2019 01:53 PM - Tom Clegg

- Description updated

#3 - 04/17/2019 01:56 PM - Tom Clegg

- Target version changed from To Be Groomed to Arvados Future Sprints

- Story points set to 1.0

#4 - 05/01/2019 03:19 PM - Peter Amstutz

- Related to Story #15133: Remove crunch v1 (jobs api) added

#5 - 05/22/2019 05:33 PM - Tom Clegg

- Related to Bug #15036: [Crunch2] Idle/busy node count not accurate if crunch1 not running added

#6 - 05/22/2019 05:34 PM - Tom Clegg

- Related to Bug #15014: [Workbench] Hide busy/idle nodes display when crunch1 is not active added

#7 - 05/29/2019 02:53 PM - Tom Morris

- Related to deleted (Story #15133: Remove crunch v1 (jobs api))

#8 - 05/29/2019 02:53 PM - Tom Morris

- Blocks Story #15133: Remove crunch v1 (jobs api) added

#9 - 06/05/2019 03:33 PM - Peter Amstutz

- Assigned To set to Peter Amstutz

- Target version changed from Arvados Future Sprints to 2019-06-19 Sprint

#10 - 06/10/2019 02:15 PM - Ward Vandewege

- Release set to 22

#11 - 06/13/2019 07:58 PM - Tom Clegg

- Description updated

#12 - 06/13/2019 08:39 PM - Peter Amstutz

Do we actually want the oldest queued container, or the age of container at the top of the queue? (which would be highest priority)?

#13 - 06/14/2019 02:01 PM - Peter Amstutz

15087-wb-queued-containers @ 6b9eafb0de63da57e7b1a3945e7d16823e1c25df

Adds a new panel displaying pending/running containers and age of oldest container and longest running container.

#14 - 06/14/2019 04:57 PM - Lucas Di Pentima

Tried it locally by running some simple jobs on arvbox, seems to work ok! Just one comment:

- I noticed that no tests were modified/added — there're some failing at https://ci.curoverse.com/job/developer-run-tests/1308/

#15 - 06/14/2019 06:42 PM - Peter Amstutz

15087-wb-queued-containers @ 1cf8673787f9aa62d2a63212522f883c867219af

https://ci.curoverse.com/view/Developer/job/developer-run-tests/1310/

Fixed tests (hopefully).

#16 - 06/17/2019 01:48 PM - Peter Amstutz

15087-wb-queued-containers @ 466ae87ff214d37c0765ee64845941adcbae8af4

Added links to the oldest / longest running container. Tweaked the layout. Re-running tests:

https://ci.curoverse.com/view/Developer/job/developer-run-tests/1315/

#17 - 06/17/2019 02:51 PM - Lucas Di Pentima

Latest updates LGTM, thanks.

#18 - 06/17/2019 03:35 PM - Peter Amstutz

- Status changed from New to Resolved

- % Done changed from 0 to 100

Applied in changeset [arvados|bf9803ee5afb33231da7900dddfdfac34b7056a6](#).

- Status changed from New to Resolved

- % Done changed from 0 to 100

Applied in changeset [arvados|bf9803ee5afb33231da7900dddfdfac34b7056a6](#).