

Arvados - Feature #8470

[Crunch2] [API] Use exact values for runtime_constraints and mounts in Container records

02/17/2016 08:45 PM - Peter Amstutz

Status: Resolved	Start date: 06/23/2016
Priority: Normal	Due date:
Assigned To: Tom Clegg	% Done: 100%
Category: Crunch	Estimated time: 0.00 hour
Target version: 2016-07-06 sprint	
Description	
Currently, the API satisfies a Container Request by copying its attributes into a new Container.	
However, a Container record is meant to specify a container unambiguously, while a Container Request describes a set of acceptable Containers (e.g., "between 1 and 2 GB of RAM") and uses identifiers like UUIDs and git branch names, which resolve to different values at different times.	
New behavior:	
<ul style="list-style-type: none">• If cr.container_image is not already a collection PDH, resolve it (as a docker tag or a collection UUID) to a PDH. Use the resulting PDH as the container_image for the new Container.• If any entries in cr.mounts specify collection UUIDs, look them up and specify them as PDH instead in the new Container.• If any entries in runtime_constraints specify ranges (e.g., "vcpus":[2,null] signifying "at least two cores"), use the minimum (2 in this case) as the value for the corresponding key in the new Container's runtime_constraints.	
Subtasks:	
Task # 9477: Use numbers for runtime constraints	Resolved
Task # 9478: Resolve collections to PDH	Resolved
Task # 9479: Resolve docker image tag to PDH	Resolved
Task # 9480: Review 8470-resolve-container-req	Resolved
Related issues:	
Related to Arvados - Story #9273: [Crunch2] Do not satisfy container requests...	Closed

Associated revisions

Revision 01ea0e9f - 06/27/2016 07:10 PM - Tom Clegg

Merge branch '8470-resolve-container-req'

closes #8470

History

#1 - 04/27/2016 08:20 PM - Peter Amstutz

- Subject changed from [Crunch2] API resolves Docker, API, collection uuids to content addresses in container request to [Crunch2] API resolves Docker, git, collection uuids to content addresses in container request

#2 - 05/03/2016 02:05 PM - Peter Amstutz

Should also include satisfying defaults such as RAM and CPUs.

#3 - 06/14/2016 06:19 PM - Tom Clegg

- Category set to Crunch

- Assigned To set to Tom Clegg

#4 - 06/22/2016 03:27 PM - Tom Clegg

- Subject changed from [Crunch2] API resolves Docker, git, collection uuids to content addresses in container request to [Crunch2] [API] Use exact values for runtime_constraints and mounts in Container records

- Description updated

#5 - 06/22/2016 07:58 PM - Tom Clegg

- Target version set to 2016-07-06 sprint

#6 - 06/22/2016 08:02 PM - Tom Clegg

- Story points set to 1.0

#7 - 06/24/2016 03:02 AM - Tom Clegg

- Status changed from New to In Progress

#8 - 06/24/2016 06:01 PM - Tom Clegg

8470-resolve-container-req @ [be4ca15](#)

#9 - 06/27/2016 06:12 PM - Radhika Chippada

container_request.rb

- In resolve method
 - the comment "TODO: resolve container_image to a content address." seems to have been addressed in container_image_for_container method?
 - If it is not too much to ask, in "Container.create!(command: self.command," can you place all self.X items first and then the derived ones to improve readability of code?
- In mounts_for_container, line 139, can we say "mount #{uuid} not found" instead of "collection #{uuid} ..."? Also, "uuid #{uuid} has portable_data_hash ...", can you say "mount uuid #{uuid} has ..."?

container_request_test.rb

- In 'test "Container request max priority" do' , please add a comment explaining why cr2 priority is expected.
- In 'test "Container makes container request, then is cancelled" do' :
 - Add an assertion to check priority on cr after line 223 (after cancel)
 - I think you can use create_minimal_req! for the first cr creation
 - Can you please add a comment in this or in test "container cancelled finalizes request" or in code listing canceling what cancels what. I think a comment listing the relationships between Cs and CRs and Requesting_Cs and Container_uuids would be quite helpful.
- "resolve runtime constraint range #{mounts} to values" => mounts is not from runtime constraints, correct? should the name of this test be something like "resolve mounts to values ..."?

#10 - 06/27/2016 07:11 PM - Tom Clegg

Radhika Chippada wrote:

- the comment "TODO: resolve container_image to a content address." seems to have been addressed in container_image_for_container method?

indeed. removed.

- If it is not too much to ask, in "Container.create!(command: self.command," can you place all self.X items first and then the derived ones to improve readability of code?

done

- In mounts_for_container, line 139, can we say "mount #{uuid} not found" instead of "collection #{uuid} ..."? Also, "uuid #{uuid} has portable_data_hash ...", can you say "mount uuid #{uuid} has ..."?

improved error messages

- In 'test "Container request max priority" do' , please add a comment explaining why cr2 priority is expected.

done

- In 'test "Container makes container request, then is cancelled" do' :
 - Add an assertion to check priority on cr after line 223 (after cancel)
 - I think you can use create_minimal_req! for the first cr creation
 - Can you please add a comment in this or in test "container cancelled finalizes request" or in code listing canceling what cancels what. I think a comment listing the relationships between Cs and CRs and Requesting_Cs and Container_uuids would be quite helpful.

fixed up some comments here

- "resolve runtime constraint range #{mounts} to values" => mounts is not from runtime constraints, correct? should the name of this test be something like "resolve mounts to values ..."?

whoops, yes, fixed... thanks

#11 - 06/27/2016 07:15 PM - Tom Clegg

- *Status changed from In Progress to Resolved*

- *% Done changed from 75 to 100*

Applied in changeset arvados|commit:01ea0e9faa0b29ef747699f7f4b728d4e888ef83.