

## Arvados - Feature #13993

### [API] Fetch remote-hosted collection by UUID

08/08/2018 02:40 PM - Peter Amstutz

<b>Status:</b> Resolved	<b>Start date:</b> 09/07/2018
<b>Priority:</b> Normal	<b>Due date:</b>
<b>Assigned To:</b> Peter Amstutz	<b>% Done:</b> 100%
<b>Category:</b>	<b>Estimated time:</b> 0.00 hour
<b>Target version:</b> 2018-09-19 Sprint	
<b>Description</b>	
Enable a client to retrieve a collection record (with a given UUID) from its home cluster, even if the collection is hosted on a different cluster in a federation.	
This issue covers the arvados-controller changes required for basic functionality.	
<ul style="list-style-type: none"><li>• proxy "get collection" requests with foreign UUIDs to the appropriate remote cluster (similar to <a href="#">#13493</a>)</li><li>• alter the signature hints in the returned record so keepstore will be able to get the data from the remote cluster (see <a href="#">Federated collections</a> wiki)</li></ul>	
This issue does not include	
<ul style="list-style-type: none"><li>• cache optimizations</li><li>• changes to keepstore (<a href="#">#13994</a>)</li></ul>	
<b>Subtasks:</b>	
Task # 14053: Review 13993-federated-collection	<b>Resolved</b>
<b>Related issues:</b>	
Related to Arvados - Feature #13493: Federated record retrieval	<b>Resolved</b> 06/28/2018
Related to Arvados - Feature #13994: [Keepstore] Fetch blocks from federated ...	<b>Resolved</b> 09/12/2018
Related to Arvados - Feature #14087: [controller] Fetch remote-hosted collect...	<b>Resolved</b> 09/10/2018

#### Associated revisions

##### Revision 2b0b0657 - 09/11/2018 03:40 PM - Peter Amstutz

Merge branch '13993-federated-collection' refs #13993

Arvados-DCO-1.1-Signed-off-by: Peter Amstutz <[pamstutz@veritasgenetics.com](mailto:pamstutz@veritasgenetics.com)>

#### History

##### #1 - 08/08/2018 03:12 PM - Peter Amstutz

- Subject changed from [API] Fetch remote-hosted container by UUID to [API] Fetch remote-hosted collection by UUID

- Description updated

##### #2 - 08/08/2018 03:13 PM - Peter Amstutz

- Related to Feature #13493: Federated record retrieval added

##### #3 - 08/08/2018 03:13 PM - Peter Amstutz

- Related to Feature #13994: [Keepstore] Fetch blocks from federated clusters added

##### #4 - 08/08/2018 03:13 PM - Peter Amstutz

- Description updated

##### #5 - 08/08/2018 03:14 PM - Peter Amstutz

- Description updated

##### #6 - 08/08/2018 03:18 PM - Peter Amstutz

- Description updated

**#7 - 08/08/2018 04:47 PM - Tom Morris**

- Target version changed from To Be Groomed to Arvados Future Sprints
- Story points set to 2.0

**#8 - 08/10/2018 03:26 AM - Tom Clegg**

- Description updated

**#9 - 08/15/2018 04:35 PM - Tom Morris**

- Target version changed from Arvados Future Sprints to 2018-09-05 Sprint

**#10 - 08/15/2018 04:36 PM - Tom Morris**

- Assigned To set to Fuad Muhic

**#11 - 08/20/2018 01:05 PM - Peter Amstutz**

- Assigned To deleted (Fuad Muhic)

**#13 - 08/21/2018 07:51 PM - Peter Amstutz**

- Related to Feature #14087: [controller] Fetch remote-hosted collections by PDH added

**#14 - 09/05/2018 02:49 PM - Peter Amstutz**

- Target version changed from 2018-09-05 Sprint to 2018-09-19 Sprint

**#15 - 09/05/2018 03:41 PM - Peter Amstutz**

- Subject changed from [API] Fetch remote-hosted collection by UUID to [API] Fetch remote-hosted collection by UUID
- Assigned To set to Peter Amstutz

**#16 - 09/07/2018 08:08 PM - Peter Amstutz**

13993-federated-collection @ [9c1f24050cca97fe986b529fcfc9c7f9fe1a283](https://ci.curoverse.com/view/Developer/job/developer-run-tests/877/)

<https://ci.curoverse.com/view/Developer/job/developer-run-tests/877/>

**#17 - 09/10/2018 04:17 PM - Lucas Di Pentima**

Some comments:

- On file lib/controller/federation.go
  - Line 96 - Small detail: I think just multiplying by 1.1 would more readable
  - Line 76: Docs about locator format talks about lowercase hex digits (<https://doc.arvados.org/api/storage.html> & [https://dev.arvados.org/projects/arvados/wiki/Keep\\_locator\\_format](https://dev.arvados.org/projects/arvados/wiki/Keep_locator_format)), should we stick to that definition?
- I think it would be convenient to update the locator format documentation to describe a +R hint
- We have a previous signed locator Regexp on sdk/go/keepclient/perms.go:68 that looks more correct (because I believe the current one doesn't allow +A hints that aren't signature hints), should we export it so it can be reused here?
- Tests are failing

**#18 - 09/10/2018 08:19 PM - Peter Amstutz**

Lucas Di Pentima wrote:

Some comments:

- On file lib/controller/federation.go
  - Line 96 - Small detail: I think just multiplying by 1.1 would more readable

I was trying to avoid converting to double precision and back but I agree that's a silly micro-optimization in this case at the expense of readability

- Line 76: Docs about locator format talks about lowercase hex digits (<https://doc.arvados.org/api/storage.html> & [https://dev.arvados.org/projects/arvados/wiki/Keep\\_locator\\_format](https://dev.arvados.org/projects/arvados/wiki/Keep_locator_format)), should we stick to that definition?

See below

- I think it would be convenient to update the locator format documentation to describe a +R hint

I have a documentation story to write up federation features (the task on [#13493](#) assigned to me), maybe I can do it there?

- We have a previous signed locator Regex on `sdk/go/keepclient/perms.go:68` that looks more correct (because I believe the current one doesn't allow `+A` hints that aren't signature hints), should we export it so it can be reused here?

I consolidated the regex so the one in `keepclient` can be used by `federation.go`

- Tests are failing

Works for me... Kicked off a run here: <https://ci.curoverse.com/view/Developer/job/developer-run-tests/881/>

**#19 - 09/10/2018 10:16 PM - Peter Amstutz**

Now [fe235611ed2a624783067e65b02b319fa687f372](https://ci.curoverse.com/view/Developer/job/developer-run-tests/881/?id=fe235611ed2a624783067e65b02b319fa687f372)

Try this <https://ci.curoverse.com/view/Developer/job/developer-run-tests/882/>

**#20 - 09/11/2018 02:01 PM - Lucas Di Pentima**

Just one question: Would it be convenient to also add a test for a local collection request, so we test both sides? Apart from that, it LGTM.

**#21 - 09/11/2018 03:06 PM - Peter Amstutz**

Lucas Di Pentima wrote:

Just one question: Would it be convenient to also add a test for a local collection request, so we test both sides? Apart from that, it LGTM.

Added `TestGetLocalCollection` @ [9d2e1158e961801db714236c6942bd3596b867e7](https://ci.curoverse.com/view/Developer/job/developer-run-tests/882/?id=9d2e1158e961801db714236c6942bd3596b867e7)

**#22 - 09/11/2018 03:32 PM - Lucas Di Pentima**

Thanks! This lgtm.

**#23 - 09/14/2018 02:35 PM - Peter Amstutz**

- *Status changed from New to Resolved*

**#24 - 11/13/2018 09:00 PM - Tom Morris**

- *Release set to 14*