

## Arvados - Feature #3605

### [Workbench] improved dashboard page

08/15/2014 01:39 PM - Ward Vandewege

<b>Status:</b> Closed	<b>Start date:</b> 09/15/2014
<b>Priority:</b> Normal	<b>Due date:</b>
<b>Assigned To:</b>	<b>% Done:</b> 60%
<b>Category:</b>	<b>Estimated time:</b> 0.00 hour
<b>Target version:</b>	
<b>Description</b> High level overview (counts) of: <ul style="list-style-type: none"><li>• pipelines currently running</li><li>• jobs currently running</li><li>• pipelines recently finished</li><li>• jobs recently finished</li></ul> All of this subject to current permissions. No changes to the permission model required. Give the user a way to display only their stuff. All of the items that have been counted in the high-level summary appear in a table below the high-level overview, with more detail (again, subject to user permission). It should say what project things are in, and if permissions allow, whose they are. Add a warning triangle or red exclamation mark if anything is wrong, for example no log output in the last 3 minutes for jobs/pipelines that are supposed to be running. Add a column in the table with status: if normal, put "queued since ...". If something is wrong, put the best error message we can come up with (e.g. "no recent log output, dead?").	
<b>Subtasks:</b>	
Task # 3863: Review 3605-node-info-field	<b>Resolved</b>
Task # 3723: Implement dashboard layout at <a href="https://arvados.org/attachments/download/349...">https://arvados.org/attachments/download/349...</a>	<b>Resolved</b>
Task # 3887: Fix tests	<b>Closed</b>
Task # 3886: Review 3605-queue-position-size	<b>Resolved</b>
Task # 3884: Review 3605-improved-dashboard	<b>Closed</b>
<b>Related issues:</b>	
Related to Arvados - Feature #4456: [Workbench] Provide more feedback about w...	<b>New</b> 11/06/2014

#### Associated revisions

##### Revision 1f1963df - 09/17/2014 09:11 AM - Peter Amstutz

Merge branch '3605-node-info-field' refs #3605

##### Revision 274ca7a6 - 09/18/2014 05:33 PM - Peter Amstutz

Merge branch '3605-node-info-field' refs #3605

Conflicts:

services/api/db/structure.sql

##### Revision 403d9f6b - 09/18/2014 05:47 PM - Peter Amstutz

Merge branch '3605-queue-position-size' refs #3605

##### Revision b96a5d94 - 09/22/2014 02:05 PM - Peter Amstutz

Merge branch '3605-improved-dashboard' refs #3605

##### Revision 3e3df723 - 09/23/2014 02:36 PM - Tom Clegg

Report crunch\_worker\_state=down for nodes not occupying a worker slot. refs #3605

##### Revision eec77d22 - 09/23/2014 05:58 PM - Peter Amstutz

## History

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### #1 - 08/15/2014 01:39 PM - Ward Vandewege

- Subject changed from [Workbench] dashboard page to [Workbench] improved dashboard page
- Story points set to 2.0

### #2 - 08/15/2014 01:48 PM - Ward Vandewege

- Description updated

### #3 - 08/27/2014 02:05 PM - Ward Vandewege

- Target version changed from Arvados Future Sprints to 2014-09-17 sprint

### #4 - 08/27/2014 03:21 PM - Peter Amstutz

- Assigned To set to Peter Amstutz

### #5 - 09/09/2014 01:41 PM - Peter Amstutz

give some indication of how busy the cluster is, such as number of nodes busy/idle

### #6 - 09/15/2014 03:11 PM - Radhika Chippada

Review feedback for branch 3605-node-info-field:

Just a couple very minor comments:

- apps/workbench/app/views/application/\_arvados\_attr\_value.html.erb  
Just an observation. I tried to fix this in the past and Tom suggested that the user's of this should not send null attr parameter :).
- Is it possible to test the newly added api accessible info attribute? May be an integration test?
- Several api server tests are failing for me; but they are also failing in master branch. So, may not be anything to do with your code updates.

So, if api server tests are not failing for you, LGTM. Thanks.

### #7 - 09/15/2014 08:47 PM - Peter Amstutz

- Status changed from New to In Progress

### #8 - 09/17/2014 03:06 PM - Peter Amstutz

- Target version changed from 2014-09-17 sprint to 2014-10-08 sprint

### #9 - 09/17/2014 05:26 PM - Brett Smith

- Target version changed from 2014-10-08 sprint to 2014-09-17 sprint

Reviewing [fc2096f2](#).

So, we just had an issue where adding a new test fixture along with a new test broke an older test, because it was expecting a set of items to match an exact list. In general, I think it's worth trying to write tests to avoid these kinds of situations, and save our future selves some headache. For the job queue test, could we check for the presence of absence of a particular job UUID based on the user making the request? I think that would catch the same functionality while leaving more future flexibility.

The job queue size test is admittedly a tougher nut to crack. I'm not aware of a Railsy way to introspect all the test fixtures, and you'd have to reimplement some of the filtering yourself to figure out the "right" number, which is a slightly risky proposition. If you can think of a way to keep it flexible, that'd be awesome, but I understand if it's just not doable with our current infrastructure.

A couple of method FYIs, not necessary for merging, just in case they're helpful in the future: Ruby Enumerables have `each_with_index` to yield both the item and its index simultaneously. Our API server tests have a `json_response` method to save you incantation of decoding `@response.body` yourself.

Thanks.

### #10 - 09/17/2014 05:27 PM - Brett Smith

- Target version changed from 2014-09-17 sprint to 2014-10-08 sprint

### #11 - 09/18/2014 03:21 PM - Tom Clegg

(As discussed in IRC) Please add a new "properties" hash on the node model, leaving info as an admin-only hash, rather than combining the fields in one hash and pruning it at runtime.

#### #12 - 09/18/2014 04:29 PM - Tom Clegg

Looking at [4cf16efd](#) on 3605-node-info-field

The `.to_i` in the tests reveal that a `.to_i` should have happened during `node#ping` or even way back at `arvados/v1/nodes_controller.rb` line 29 when they were accepted from the client using a type-unaware encoding. (But I know this isn't a new bug, so I'll understand if you punt.)

Everything else looks great. Thanks.

#### #13 - 09/18/2014 05:28 PM - Peter Amstutz

3605-node-info-field changed `#ping` to do `to_i` on `total_cpu_cores`, `total_ram_mb`, and `total_scratch_mb`.

#### #14 - 09/19/2014 08:05 PM - Radhika Chippada

- *File Dashboard-1.tiff added*

- *File Dashboard-2.tiff added*

Peter,  
As we discussed, I will provide my feedback in two steps.

First, testing UI feedback:

- The new dashboard has much better information than before. Thanks.
- None of my feedback items below are critical, so you can either ignore them or address them later, whatever works for you.
- Compute nodes panel has a drop-down arrow, but is not really showing any drop-down menu.
- Clicking on the Panel title (Compute node status) or any of the items (Queue, Nodes, Busy, Idle) displays a new row (please see the attachment 1). Is it possible to have a separate icon in this panel or panel title to show this new row rather than showing it when any one of them is clicked. It is not obvious otherwise.
- The information in the Compute node status panel needs to be reversed. I think it is desirable that we have a title Row (Queue Nodes Busy Idle) on top, and the number (info) row below it.
- In the "Recently finished pipelines" panel, it might be helpful if the output file names are listed to the right (pull-right), so that they are displayed right below the Output button.
- Alternatively, you might want to display the "Active for ..." in the right (under the "created\_at" timestamp) and move the Outputs button to the left under the pipeline name.

Thanks.

#### #15 - 09/21/2014 10:54 PM - Radhika Chippada

My second review feedback:

- `apps/workbench/app/assets/javascripts/dates.js`

The timestamp display in the dashboard (2:41 PM 09/19/2014) is much different than in other areas in workbench such as Pipeline instance Advanced tab ( 2014-09-19 18:43:43 UTC). The timestamps in all workbench pages should use the same display strategy to be consistent.

I also think (2:41 PM 09/19/2014) is better to be displayed as (09/19/2014 2:41 PM)

- Compute nodes panel

Unless there is a serious performance concern about displaying all the details during dashboard loading, I think we should display the details that appear when individual items in that panel are clicked (`compute0`, `compute1` etc) right when Queue, Nodes. We also should consider replacing the clicks on Queue, Nodes etc with a single clickable item (such as the drop down in the panel title)

- `workbench/app/controllers/application_controller.rb`

I think the helper\_method `:running_pipelines` should use desc order.

`PipelineInstance.order(["started_at asc", "created_at asc"]`

Currently, the individual day's items are displayed in reverse chronological order ( [4xphq-d1hrv-vng31w4sz1j7f6c](#) Started at 2:31 PM 07/08/2014, [4xphq-d1hrv-tq6scqzdm61fnub](#) Started at 2:38 PM 07/08/2014 etc)

- `apps/workbench/app/models/job.rb`

After merging in work from 3899, this should go away? ("def self.state job")

- `UserProfileTest < ActionDispatch::IntegrationTest`

"assert page.has\_text?('Active pipelines'), 'No text - My projects' " change to say "No text - Active pipelines"

**#16 - 09/22/2014 09:07 PM - Peter Amstutz**

Radhika Chippada wrote:

Peter,  
As we discussed, I will provide my feedback in two steps.

- Compute nodes panel has a drop-down arrow, but is not really showing any drop-down menu.

It does toggle collapsing of the nodes and provides an affordance for clicking. I don't think a separate icon would be any clearer.

- Clicking on the Panel title (Compute node status) or any of the items (Queue, Nodes, Busy, Idle) displays a new row (please see the attachment 1). Is it possible to have a separate icon in this panel or panel title to show this new row rather than showing it when any one of them is clicked. It is not obvious otherwise.

The table is no longer clickable to avoid confusion thinking that different that the table cells are buttons.

- The information in the Compute node status panel needs to be reversed. I think it is desirable that we have a title Row (Queue Nodes Busy Idle) on top, and the number (info) row below it.

Since this is one of the few parts that's based on an actual design suggestion from our graphic designer, I'd prefer to keep in this way.

- In the "Recently finished pipelines" panel, it might be helpful if the output file names are listed to the right (pull-right), so that they are displayed right below the Output button.

Fixed.

**#17 - 09/23/2014 01:28 PM - Tom Clegg**

Minor thing - in `_show_advanced.html.erb`, the spelling of "curl" is deliberately not "Curl", please don't fix. <http://curl.haxx.se/>

In `ApplicationController.running_pipelines`, it looks like pipelines that are running in the user's terminal will not show up here; they'll be hidden until they fail/succeed, at which point they will show up in the "recently finished" section. It would be better to show both kinds, and show a distinction between the two Running states. (The sentence "The new pipeline instance will also show up on the Workbench Dashboard." at <http://doc.arvados.org/user/topics/running-pipeline-command-line.html> should continue to be correct.)

`default_show.html.erb` is an unhelpful filename in an area where it's already hard to follow which file does what. Could we use a filename more suggestive of what it does? (It looks like it renders the page title, name, description, and copy/move buttons.)

- This is probably a good opportunity to fix the "content\_for :tab\_line\_buttons inside content\_for :content\_top" weirdness. Presumably those should be two separate content\_for sections?
- This is probably a good opportunity to remove the `:page_content` functionality that (AFAIK) has never been used or tested. It looks like it has already drifted far, far away from any likelihood of functioning correctly.

**#18 - 09/23/2014 02:43 PM - Peter Amstutz**

Radhika Chippada wrote:

My second review feedback:

- `apps/workbench/app/assets/javascripts/dates.js`

The timestamp display in the dashboard (2:41 PM 09/19/2014) is much different than in other areas in workbench such as Pipeline instance Advanced tab ( 2014-09-19 18:43:43 UTC). The timestamps in all workbench pages should use the same display strategy to be consistent.

**#3629**

I also think (2:41 PM 09/19/2014) is better to be displayed as (09/19/2014 2:41 PM)

- Compute nodes panel

Unless there is a serious performance concern about displaying all the details during dashboard loading, I think we should display the details that appear when individual items in that panel are clicked (compute0, compute1 etc) right when Queue, Nodes. We also should consider replacing the clicks on Queue, Nodes etc with a single clickable item (such as the drop down in the panel title)

I'm not entirely sure I understand the comment. The compute nodes list is hidden by default because if the number of compute nodes is very large (having 20 or 40 nodes in the future seems perfectly reasonable) it takes up a lot of space.

- `workbench/app/controllers/application_controller.rb`

I think the `helper_method :running_pipelines` should use desc order.

`PipelineInstance.order(["started_at asc", "created_at asc"]`

Currently, the individual day's items are displayed in reverse chronological order ( [4xphq-d1hrv-vng31w4sz1j7f6c](#) Started at 2:31 PM 07/08/2014, [4xphq-d1hrv-tq6scqzdm61fnub](#) Started at 2:38 PM 07/08/2014 etc)

That's intentional, the idea is to show the running pipelines at the top.

- `apps/workbench/app/models/job.rb`

After merging in work from 3899, this should go away? ("def self.state job")

Probably, that code is also able to make sense of the jobs that are copied into the pipeline components, but I have to avoid using the job record copy because it's sometimes stale.

- `UserProfileTest < ActionDispatch::IntegrationTest`  
"assert page.has\_text?('Active pipelines'), 'No text - My projects' " change to say "No text - Active pipelines"

Fixed.

#### #19 - 09/23/2014 03:01 PM - Tom Clegg

There seem to be several items in the story description that aren't addressed yet (or maybe I'm missing them):

- Display only my stuff
- Show project & owner for each pipeline
- Warning signal for error conditions (e.g., no log output)
- Error message

The "Compute node status" area is a little confusing in that the first figure is a number of jobs (not compute nodes), and `nodes=idle+busy`. I think it would be clearer to

- drop the "nodes" total
- relabel "idle" to "idle nodes"
- relabel "busy" to "busy nodes"
- relabel "queue" to "queued jobs"
- relabel "Compute node status" panel title to "Cluster status" (or "Crunch job and worker status", or...?)

The expand/collapse feature on "Compute node status" panel is weird in that it doesn't expand/collapse the panel, but affects just a portion of the panel, far away from the caret. It's also a bit disappointing to click "expand" and see such a tiny amount of information that it might as well have been shown up front. Perhaps the easiest solution here is to show all nodes all the time, but put them in a div with a max-height that gets scrollbars when the number of nodes is big.

#### #20 - 09/23/2014 03:35 PM - Peter Amstutz

Tom Clegg wrote:

Minor thing - in `_show_advanced.html.erb`, the spelling of "curl" is deliberately not "Curl", please don't fix. <http://curl.haxx.se/>

Reverted.

In `ApplicationController.running_pipelines`, it looks like pipelines that are running in the user's terminal will not show up here; they'll be hidden until they fail/succeed, at which point they will show up in the "recently finished" section. It would be better to show both kinds, and show a distinction between the two Running states. (The sentence "The new pipeline instance will also show up on the Workbench Dashboard." at <http://doc.arvados.org/user/topics/running-pipeline-command-line.html> should continue to be correct.)

Put it back, didn't add new UI to distinguish them. There are stale client-run pipelines on 4xphq that need to be stopped.

`default_show.html.erb` is an unhelpful filename in an area where it's already hard to follow which file does what. Could we use a filename more suggestive of what it does? (It looks like it renders the page title, name, description, and copy/move buttons.)

Changed to "title\_and\_buttons".

- This is probably a good opportunity to fix the "content\_for :tab\_line\_buttons inside content\_for :content\_top" weirdness. Presumably those should be two separate content\_for sections?

Fixed.

- This is probably a good opportunity to remove the ;page\_content functionality that (AFAIK) has never been used or tested. It looks like it has already drifted far, far away from any likelihood of functioning correctly.

Took that out.

**#21 - 09/23/2014 06:05 PM - Peter Amstutz**

- Target version changed from 2014-10-08 sprint to Arvados Future Sprints

**#22 - 06/08/2016 07:02 PM - Peter Amstutz**

- Assigned To deleted (Peter Amstutz)

**#23 - 03/07/2017 06:20 PM - Peter Amstutz**

- Status changed from In Progress to Closed

Will dashboard design in future tickets.

**#24 - 03/09/2017 09:40 PM - Tom Clegg**

- Target version deleted (Arvados Future Sprints)

**Files**

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Dashboard-1.tiff	379 KB	09/19/2014	Radhika Chippada
Dashboard-2.tiff	450 KB	09/19/2014	Radhika Chippada