

## Arvados - Feature #17218

### debian package repos: switch from freight to something faster

12/21/2020 02:38 PM - Ward Vandewege

<b>Status:</b>	Resolved	<b>Start date:</b>	
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assigned To:</b>	Ward Vandewege	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	2021-01-06 Sprint		
<b>Description</b>			
Freight works great, except that it is extremely slow to add packages to an existing repository, the speed of addition is $O(n)$ for $n$ the number of packages in the repository.			
From preliminary testing, aptly seems like a good replacement candidate (it doesn't have this particular problem).			
<b>Related issues:</b>			
Related to Arvados - Bug #17219: refactor scripts that move old packages to a...		<b>Resolved</b>	<b>01/04/2021</b>

#### Associated revisions

##### Revision 40500de7 - 12/22/2020 07:52 PM - Ward Vandewege

We've made a change in the structure of our apt repositories.

refs #17218

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <[ward@curii.com](mailto:ward@curii.com)>

##### Revision 680f3a3c - 12/22/2020 07:56 PM - Ward Vandewege

We've made a change in the structure of our apt repositories.

refs #17218

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <[ward@curii.com](mailto:ward@curii.com)>

##### Revision 85b3e1e4 - 12/22/2020 10:09 PM - Ward Vandewege

Merge branch '17218-repository-update'

refs #17218

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <[ward@curii.com](mailto:ward@curii.com)>

##### Revision 533f0c79 - 12/22/2020 10:10 PM - Ward Vandewege

Merge branch '17218-repository-update'

closes #17218

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <[ward@curii.com](mailto:ward@curii.com)>

##### Revision b09f5cbc - 12/22/2020 10:16 PM - Ward Vandewege

We've made a change in the structure of our apt repositories.

refs #17218

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <[ward@curii.com](mailto:ward@curii.com)>

##### Revision 4c0f702a - 12/23/2020 01:45 AM - Ward Vandewege

Do not try to add packages to the repository that are already in it.

refs #17218

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <[ward@curii.com](mailto:ward@curii.com)>

#### Revision c16c3f3e - 12/23/2020 02:16 AM - Ward Vandewege

Fix detection of packages that were already built.

refs #17218

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <[ward@curii.com](mailto:ward@curii.com)>

#### Revision d0157c3b - 12/23/2020 09:15 PM - Javier Bértoli

Merge branch '17218-update-apt-repos'

closes #17218

Arvados-DCO-1.1-Signed-off-by: Javier Bértoli <[jbertoli@curii.com](mailto:jbertoli@curii.com)>

#### Revision 76e93fdb - 02/25/2021 06:13 PM - Ward Vandewege

Bugfix for the `testing\_to\_stable\_publish\_packages.sh` script to reflect our switch to aptly.

Some refactoring to remove exitcode nonsense.

refs #17218

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <[ward@curii.com](mailto:ward@curii.com)>

#### Revision 38c4ad77 - 02/25/2021 06:22 PM - Ward Vandewege

When a package can't be published, print which distribution the error is with.

refs #17218

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <[ward@curii.com](mailto:ward@curii.com)>

## History

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### #1 - 12/21/2020 02:38 PM - Ward Vandewege

- Assigned To set to Ward Vandewege

- Status changed from New to In Progress

### #2 - 12/21/2020 02:39 PM - Ward Vandewege

- Target version set to 2021-01-06 Sprint

### #3 - 12/21/2020 02:48 PM - Ward Vandewege

Aptly is much more strict about duplicate packages. Namely, from

[https://wiki.debian.org/DebianRepository/Format?action=show&redirect=RepositoryFormat#Duplicate\\_Packages](https://wiki.debian.org/DebianRepository/Format?action=show&redirect=RepositoryFormat#Duplicate_Packages):

A repository must not include different packages (different content) with the same package name, version, and architecture. When a repository is meant to be used as a supplement to another repository this should hold for the joint main+supplement repository as well.

### #4 - 12/22/2020 12:29 AM - Ward Vandewege

Almost ready for the migration.

As part of this, I am changing the Origin and Label fields of our apt repos. They currently say 'Freight', and that will become 'Arvados'.

Updating the buster-dev repo now takes on the order of 30 seconds, as opposed to ~1000 seconds with freight.

The functionality can be tested on the (temporary) apt-dev host. E.g. put this in /etc/sources.list.d/arvados.list

```
deb http://apt-dev.arvados.org/buster buster main
```

(or use stretch, jessie, wheezy, bionic, xenial, trusty or precise)

Because we have to change the URLs in people's sources.list files, they will get a 404 on the old URLs after we flip the switch. It was not possible to rewrite the URLs automatically and make apt happy, because the `Packages` file relies on relative URLs.

Unfortunately, it seems to be impossible to get some sort of warning through to the command line when `apt` gets a 404. Apt even rewrites most error codes... sigh. So, I did the next best thing, and put a file here: [http://apt-dev.arvados.org/REPOSITORIES\\_HAVE\\_BEEN\\_REORGANIZED.txt](http://apt-dev.arvados.org/REPOSITORIES_HAVE_BEEN_REORGANIZED.txt) (this file will appear at [http://apt.arvados.org/REPOSITORIES\\_HAVE\\_BEEN\\_REORGANIZED.txt](http://apt.arvados.org/REPOSITORIES_HAVE_BEEN_REORGANIZED.txt)) when the switch is flipped.

There is one more loose end - the set of scripts that move files from the -dev to -attic repos will need to be updated. They are not checked into our code tree. I will correct that, fix and simplify, as part of ticket [#17219](#).

This is the forum post that I would like to put under 'Announcements':

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#### Debian/Ubuntu apt repository changes

The Arvados project has reorganized its package repositories for Debian and Ubuntu.

If you installed Arvados before 2020-12-22 on a Debian/Ubuntu system using the Arvados package repositories, you need to update your apt config, because `apt-get update` will print output similar to this:

```
# apt-get update
...
Err http://apt.arvados.org buster/main amd64 Packages
 404 Not Found
...
W: Failed to fetch http://apt.arvados.org/dists/buster/main/binary-amd64/Packages 404 Not Found

E: Some index files failed to download. They have been ignored, or old ones used instead.
```

The layout of the repositories has changed. The new repository URLs are:

Distribution	
-	-
Debian 10 ("buster")	deb <a href="http://apt.arvados.org/buster">http://apt.arvados.org/buster</a> buster main
Debian 9 ("stretch")	deb <a href="http://apt.arvados.org/stretch">http://apt.arvados.org/stretch</a> stretch main
Ubuntu 18.04 ("bionic")	deb <a href="http://apt.arvados.org/bionic">http://apt.arvados.org/bionic</a> bionic main
Ubuntu 16.04 ("xenial")	deb <a href="http://apt.arvados.org/xenial">http://apt.arvados.org/xenial</a> xenial main

The repository URLs for older, no longer supported distributions has also changed:

Distribution	
-	-
Debian 8 ("jessie")	deb <a href="http://apt.arvados.org/jessie">http://apt.arvados.org/jessie</a> jessie main
Debian 7 ("wheezy")	deb <a href="http://apt.arvados.org/wheezy">http://apt.arvados.org/wheezy</a> wheezy main
Ubuntu 14.04 ("trusty")	deb <a href="http://apt.arvados.org/trusty">http://apt.arvados.org/trusty</a> trusty main
Ubuntu 12.04 ("precise")	deb <a href="http://apt.arvados.org/precise">http://apt.arvados.org/precise</a> precise main

After updating your `/etc/sources.list.d/arvados.list` file, it is necessary to run `apt-get update`.

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There are 2 branches to review:

- arvados: 40500de7ecb33a0f2197b2fe2449e6fc14b835a4 on branch 17218-repository-update
- arvados-dev: 680f3a3c0e6092013126959188a06c1b8bc5ce4c on branch 17218-repository-update

#### #5 - 12/22/2020 08:12 PM - Ward Vandewege

- Related to Bug #17219: refactor scripts that move old packages to attic repos added

#### #6 - 12/22/2020 10:16 PM - Ward Vandewege

- % Done changed from 0 to 100

- Status changed from In Progress to Resolved

Applied in changeset [arvados!533f0c79e26d71f9ea24a82f7857ede35aa4d12a](#).

#### #7 - 12/23/2020 07:08 PM - Ward Vandewege

commit:a83c3cfdfe62d6a01e1aa33360e11908cbdbd4f1 on the arvados-formula repo is ready for review.

**#8 - 12/23/2020 09:00 PM - Javier Bértoli**

Merged and updated the salt formula (new version, 1.1.4).

updated the provision script (commit 3d7250d6e, branch 17218-update-apt-repos)

**#9 - 05/13/2021 03:06 PM - Peter Amstutz**

- *Release set to 38*