

Arvados - Story #13823

Package Arvados for Ubuntu Bionic Beaver 18.04 LTS

07/16/2018 09:16 PM - Joshua Randall

Status: Resolved	Start date: 02/28/2019
Priority: Normal	Due date:
Assigned To: Ward Vandewege	% Done: 100%
Category:	Estimated time: 0.00 hour
Target version: 2019-03-13 Sprint	
Description It would be helpful to have arvados apt packages for ubuntu bionic, the "new" LTS release. One motivating reason is that none of the currently supported Debian/Ubuntu releases have a slurm package with functionality new enough to support the priority ranges Arvados uses when large number of containers are run (see issue 13489). Bionic has slurm 17.11.2 which would alleviate this issue.	
Subtasks: Task # 14549: Review Resolved	
Related issues: Related to Arvados - Bug #13435: a-c-r and python SDK ruamel.yaml versioning Resolved 05/07/2018 Related to Arvados - Story #14483: Update ruaml version for a-c-r Resolved	

Associated revisions

Revision e4fca76d - 08/22/2018 10:29 AM - Ward Vandewege

Merge branch 'master' into 13823-bionic

refs #13823

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <wvandewege@veritasgenetics.com>

Revision bc97d806 - 08/22/2018 12:40 PM - Ward Vandewege

Add support for package testing to our ubuntu 18.04 packages.

refs #13823

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <wvandewege@veritasgenetics.com>

Revision ac2cc876 - 08/23/2018 01:01 PM - Ward Vandewege

Merge branch '13823-bionic'

refs #13823

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <wvandewege@veritasgenetics.com>

Revision a1d78727 - 08/23/2018 01:27 PM - Ward Vandewege

Add support for ubuntu 18.04 (aka 'bionic') to run_upload_packages.py

refs #13823

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <wvandewege@veritasgenetics.com>

Revision e73008e4 - 08/24/2018 05:51 AM - Ward Vandewege

We need to build ws 0.4.2 for ubuntu1404 and ubuntu1604

refs #13823

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <wvandewege@veritasgenetics.com>

Revision 926dcfea - 02/28/2019 02:43 PM - Ward Vandewege

Ubuntu 18.04 ("bionic") packages are now confirmed working, add it to the list of supported GNU/Linux distributions.

refs #13823

Arvados-DCO-1.1-Signed-off-by: Ward Vandewege <wvandewege@veritasgenetics.com>

History

#1 - 08/02/2018 03:19 PM - Tom Morris

- *Tracker changed from Bug to Story*
- *Subject changed from package arvados for ubuntu bionic to Package Arvados for Ubuntu Bionic Beaver 18.04 LTS*
- *Target version set to To Be Groomed*

#2 - 08/07/2018 03:02 PM - Tom Clegg

- *Status changed from New to In Progress*

#3 - 08/07/2018 03:21 PM - Tom Clegg

Some work in progress on 13823-bionic.

easy_install3 has disappeared, and we're supposed to use "pip3 install" instead. This will be easy to migrate if it turns out "pip install" and "pip3 install" work for all older releases, too. Testing that.

#4 - 08/07/2018 05:05 PM - Tom Clegg

With the pip3 change I can build bionic packages, but the python packages have dependency problems.

"Depends: python-ws4py (< 0.4) but 0.4.2+dfsg1-2 is to be installed"

(python-arvados-python-client depends on ws4py<0.4 because tests failed with 0.4.1 -- but ubuntu:bionic ships 0.4.2)

SDK tests seem to pass with ws4py 0.4.2.

#5 - 08/07/2018 06:26 PM - Tom Clegg

Same problem with ruamel.yaml: bionic ships 0.15.34-1 but sdk/python requires <0.15.

```
python-arvados-python-client : Depends: python-ruamel.yaml (< 0.15) but 0.15.34-1 is to be installed
```

[d015f8bd07c4890b3084306a6cdd67aeda7f81f0](#) introduced the <0.15 part; [#13435](#) suggests we copied it from cwltool, which has since changed to <0.16 in [7f8a62c7b4f63480fb187fc7def4c6e3695e669c](#).

#6 - 08/07/2018 08:18 PM - Tom Clegg

13823-bionic @ [f8f3944e6ba1f470eedf48aa609a50c780fe4b6d](#)

...successfully produces packages for all distros on my dev box. Haven't tried test-packages.

Incidental changes (see commit comments for more details):

- switch from cure-fpm to fpm
- upgrade ws4py and ruamel.yaml python deps

#7 - 08/07/2018 10:11 PM - Tom Clegg

- Related to Bug [#13435](#): a-c-r and python SDK ruamel.yaml versioning added

#8 - 08/09/2018 01:49 PM - Tom Clegg

- Category deleted (Deployment)

- Target version deleted (To Be Groomed)

#9 - 08/09/2018 04:48 PM - Tom Morris

- Assigned To set to Tom Clegg

- Target version set to 2018-08-15 Sprint

Apparently this got urgently pulled onto the current sprint.

#10 - 08/15/2018 02:44 PM - Tom Morris

- Target version changed from 2018-08-15 Sprint to Arvados Future Sprints

#11 - 08/22/2018 02:55 PM - Ward Vandewege

I reviewed and made some more improvements on this branch, latest at [bc97d806fa1fb15e49cefe819f00089ebc33d376](#)

- fixed package testing for bionic
- merged latest master

From my perspective this is now ready for merging. Then:

- add the build steps to CI to build, upload and publish the packages in -dev
- do some functional testing (i.e. do the packages actually create a working version of Arvados?) on a bionic system
- update the <https://doc.arvados.org/install/install-manual-prerequisites.html> page to list bionic as a supported distribution

#12 - 08/26/2018 07:33 PM - Ward Vandewege

This was merged, and the necessary CI changes have been made. Packages have been published to the bionic-dev repo, and will be going forward.

Next step is a functional test.

#13 - 09/17/2018 12:57 PM - Ward Vandewege

- Release set to 14

#14 - 11/13/2018 09:42 PM - Tom Morris

This was tagged for the upcoming release, but I can't tell if it's done or not. Merged, but needs to be tested still?

#15 - 11/14/2018 04:35 PM - Tom Morris

- Related to Story #14483: Update ruaml version for a-c-r added

#16 - 11/14/2018 04:35 PM - Tom Morris

- Target version changed from Arvados Future Sprints to 2018-11-28 Sprint

#17 - 11/21/2018 03:05 PM - Ward Vandewege

Tom Morris wrote:

This was tagged for the upcoming release, but I can't tell if it's done or not. Merged, but needs to be tested still?

Everything is done in this ticket, but there is a known issue with a cwltool/ruamel version incompatibility with bionic, which is being handled in [#14483](#). Once that is merged, this should work, and we can test our 18.04 packaging.

#18 - 11/22/2018 08:44 PM - Ward Vandewege

Well, the ruamel issue is resolved, but there's one more dependency issue, now with python-avro:

```
root@1aa90ea77c25:/etc/apt/sources.list.d# apt-get install python-schema-salad
Reading package lists... Done
Building dependency tree
Reading state information... Done
Some packages could not be installed. This may mean that you have
requested an impossible situation or if you are using the unstable
distribution that some required packages have not yet been created
or been moved out of Incoming.
The following information may help to resolve the situation:

The following packages have unmet dependencies:
 python-schema-salad : Depends: python-avro (< 1.8.2) but 1.8.2+dfsg-1 is to be installed
E: Unable to correct problems, you have held broken packages.
root@1aa90ea77c25:/etc/apt/sources.list.d# apt-cache policy python-avro
python-avro:
  Installed: (none)
  Candidate: 1.8.2+dfsg-1
  Version table:
   1.8.2+dfsg-1 500
                500 http://archive.ubuntu.com/ubuntu bionic/universe amd64 Packages
   1.8.1-2 500
                500 http://apt.arvados.org bionic-dev/main amd64 Packages
```

#19 - 11/26/2018 03:40 PM - Tom Clegg

- Assigned To changed from Tom Clegg to Ward Vandewege

I think the next step is one of

- update schema-salad so it works with avro \geq 1.8.2
- update schema-salad to use the avro-cwl fork in python2 (avro-cwl is at 1.8.4, but it's used by schema-salad only when in python3)
- update a-c-r packaging to use virtualenv for python deps

#20 - 11/28/2018 04:21 PM - Ward Vandewege

- Target version changed from 2018-11-28 Sprint to 2018-12-12 Sprint

#21 - 12/12/2018 03:29 PM - Ward Vandewege

- Release changed from 14 to 15

#22 - 12/12/2018 04:34 PM - Tom Morris

- Target version changed from 2018-12-12 Sprint to 2018-12-21 Sprint

#23 - 01/02/2019 04:19 PM - Tom Morris

- Target version changed from 2018-12-21 Sprint to 2019-01-16 Sprint

#24 - 01/16/2019 04:24 PM - Tom Morris

- Target version changed from 2019-01-16 Sprint to 2019-01-30 Sprint

#25 - 01/30/2019 04:06 PM - Ward Vandewege

- Target version changed from 2019-01-30 Sprint to 2019-02-13 Sprint

#26 - 01/30/2019 04:23 PM - Ward Vandewege

- Story points set to 0.5

#27 - 02/13/2019 03:55 PM - Ward Vandewege

- Target version changed from 2019-02-13 Sprint to 2019-02-27 Sprint

#28 - 02/27/2019 04:22 PM - Tom Morris

- Target version changed from 2019-02-27 Sprint to 2019-03-13 Sprint

#29 - 02/28/2019 02:40 PM - Ward Vandewege

- Status changed from In Progress to Resolved

Packages have been available for a while, and I've confirmed that they work in our Arvados on Kubernetes environment.