Arvados - Bug #11948

Fix failing CWL conformance tests

07/08/2017 08:55 PM - Peter Amstutz

Status:	Resolved		**Start date:**	07/11/2017
Priority:	Normal		**Due date:**	
Assigned To:	Peter Amstutz		**% Done:**	100%
Category:			**Estimated time:**	0.00 hour
Target version:	2017-08-02 sprint			

Description
New CWL conformance tests were introduced which fail on Arvados.
Fix arvados-cwl-runner to pass these tests.

Subtasks:	
Task # 11963: Review 11948-cwl-conformance-fix	**Resolved**

Associated revisions

Revision a95c9948 - 07/13/2017 07:33 PM - Tom Clegg

Merge branch '11948-cwl-conformance-fix'

refs #11948

Arvados-DCO-1.1-Signed-off-by: Tom Clegg <tom@curoverse.com>

History

#1 - 07/08/2017 08:56 PM - Peter Amstutz

- Description updated

- Status changed from New to In Progress

- Assigned To set to Peter Amstutz

#2 - 07/11/2017 05:26 PM - Peter Amstutz

11948-cwl-conformance-fix @ d1a7f9691ff2b9d77106f953c714b1455b228c64

The main change in this branch is to accommodate a new CWL conformance test. This test checks that when a parameter has a default value that is a File or Directory, the default File is not required to exist provided some other File is assigned for the input parameter.

The implementation approach is to scan the document for "default" blocks, and check for Files under "default", and then check if those files exist. If the files do not exist, it deletes the "default" block (so that downstream processing will require a value for that parameter) and removes it from the list of files to try and upload.

#3 - 07/11/2017 09:01 PM - Lucas Di Pentima

Some questions:

- File sdk/cwl/arvados_cwl/runner.py
  - Line 53: Could that if be changed to an elif, or there's some case when a variable is a list and also a dict?
  - Lines 123-128: If I understand it correctly, is an in-place list modification, and I think could be written like this, what do you think?

        sc[:] = [x for x in sc if x["location"] != f["location"]]

  - Line 116: Why is remove a list and not simply a boolean var?

#4 - 07/11/2017 10:07 PM - Peter Amstutz

Lucas Di Pentima wrote:

> Some questions:
>
> - File sdk/cwl/arvados_cwl/runner.py
>   - Line 53: Could that if be changed to an elif, or there's some case when a variable is a list and also a dict?

You're right. Fixed.

- Lines 123-128: If I understand it correctly, is an in-place list modification, and I think could be written like this, what do you think?

That's a good one. Fixed.

- Line 116: Why is remove a list and not simply a boolean var?

Python scopes are a little weird. When you define a function inside a function, you can access variables in the outer scope, but assignment only modifies the local scope. So setting "removed = True" wouldn't change the value of the outer "removed" variable. Instead, I use a list to add a level of indirection (sort of like a pointer).

Now @ [2feec8cbac7ef28a47f3c3a9d071b070ef38cb6e](#)

Unit testing

```
arvbox start test --only sdk/cwl
```

Conformance tests

To set up, create a virtualenv on your host, install the CWL SDKs from the branch, start arvbox, then build a arvados/job Docker image:

```
virtualenv venv && . venv/bin/activate
cd ~/arvados/sdk/cwl && python setup.py install
arvbox restart dev
export ARVADOS_API_HOST=
export ARVADOS_API_TOKEN=
cd ~/arvados/build && WORKSPACE=$HOME/arvados ./build-dev-docker-jobs-image.sh
```

Now you can clone the repository with the CWL tests and run them:

```
git clone https://github.com/common-workflow-language/common-workflow-language.git
cd common-workflow-language
./run_test.sh RUNNER=arvados-cwl-runner EXTRA="--api=containers --compute-checksum --disable-reuse"
```

#5 - 07/12/2017 05:11 PM - Lucas Di Pentima

Local unit test worked ok on my end.
Updates LGTM.
Conformance tests couldn't be run because I wasn't able to start arvbox, just letting you know instead of blocking you because of my problem with arvbox.

#6 - 07/19/2017 06:45 PM - Tom Morris

- Target version changed from 2017-07-19 sprint to 2017-08-02 sprint

#7 - 07/19/2017 07:44 PM - Tom Clegg

- Status changed from In Progress to Resolved