CWL tests sometimes get stuck and then time out. It does not happen consistently. Experimentally, running tests with -j5 seems to increase the odds of running into it. I've specifically noticed it with the arvbox-based tests running locally and on ci.commonwl.org. I'm not sure if I have observed it on the dev clusters.

What seems to happen is there is a container request where the underlying container is completed, but the container request is not finalized. The container request remains in "Committed" state, and the output or logs are not set. As a result, the workflow runner becomes cannot make progress.

Proposed solution:

- Container.handle_completed gets a row level lock on the container, and then on each container request (only when creating a new retry container)
- ContainerRequest.finalize_if_needed gets a row level lock on the container, then the container request, only then checks state and determines whether to finalize.
Addresses race condition between container completion and container reuse. Without this locking, a container request can resolve and attempt to reuse a container which is concurrently being completed, resulting in a race condition that results in the container request never being finalized.

#6 - 04/30/2019 04:00 PM - Peter Amstutz
   - Target version set to 2019-05-08 Sprint

#7 - 04/30/2019 04:01 PM - Peter Amstutz
   - Assigned To set to Peter Amstutz

#8 - 04/30/2019 06:40 PM - Lucas Di Pentima

   This LGTM, thanks!

#9 - 05/02/2019 02:35 PM - Peter Amstutz
   - Status changed from In Progress to Resolved
   - % Done changed from 0 to 100

   Applied in changeset arvados/cf7cdeb32bc3596f644ab0871924972abf972290.

#10 - 05/21/2019 10:27 PM - Tom Morris
   - Release set to 15