

openQA Project - action #43715

coordination # 80142 (Blocked): [saga][epic] Scale out: Redundant/load-balancing deployments of openQA, easy containers, containers on kubernetes

coordination # 43706 (Blocked): [epic] Generate "download&use" docker image of openQA for SUSE QA

Update upstream dockerfiles to provide an easy to use docker image of workers

2018-11-13 10:19 - SLindoMansilla

Status:	Resolved	Start date:	2018-11-13
Priority:	Low	Due date:	
Assignee:	ilausuch	% Done:	0%
Category:	Feature requests	Estimated time:	0.00 hour
Target version:	Ready		
Difficulty:			
Description			
Acceptance criteria			
<ul style="list-style-type: none">• AC1: DONE Ensure there is a working Docker file that builds an image• AC2: DONE Documented steps to run the worker from the image• AC3: DONE The worker can connect to a webui and run tests			
Suggestions			
<ul style="list-style-type: none">• The upstream dockerfile can be used to generate a docker image of the worker in https://build.opensuse.org/package/show/devel:openQA/openQA• Docker images for the worker are generated each time a new build of openQA is triggered in https://build.opensuse.org/package/show/devel:openQA/openQA• QA developers can download that docker image and run a container from it that is ready to use (no configuration needed)• Proper documentation of the use of that docker image is available upstream: https://github.com/os-autoinst/openQA/tree/master/docker• OBS support for docker https://openbuildservice.org/help/manuals/obs-user-guide/cha.obs.building.html#id-1.5.8.3.8			
Related issues:			
Related to openQA Project - action #69355: [spike] redundant/load-balancing w...		Resolved	2020-07-25
Related to openQA Project - action #73450: POC: Create openQA worker containe...		Resolved	2020-10-16
Blocked by openQA Project - action #43712: Update upstream dockerfiles to pro...		Resolved	2018-11-13

History

#1 - 2018-11-20 20:14 - okurz

- Target version set to Milestone 22

#2 - 2019-01-16 09:48 - okurz

- Description updated

#3 - 2019-02-13 08:52 - szarate

- Related to action #43718: Docker image for webui and workers are versioned and uploaded to obs registry added

#4 - 2019-02-13 08:53 - szarate

- Related to deleted (action #43718: Docker image for webui and workers are versioned and uploaded to obs registry)

#5 - 2019-02-17 22:14 - okurz

- Target version changed from Milestone 22 to Milestone 24

#6 - 2019-03-04 14:55 - okurz

- Subject changed from [functional][u] Update upstream dockerfiles to provide an easy to use docker image of workers to Update upstream dockerfiles to provide an easy to use docker image of workers

- Category set to Feature requests

- Priority changed from Normal to Low
- Target version deleted (Milestone 24)

See [#43706#note-10](#)

#7 - 2020-07-09 14:01 - ilausuch

- Assignee set to *ilausuch*

#8 - 2020-07-28 11:31 - okurz

- Target version set to *Ready*

#9 - 2020-08-27 15:03 - cdywan

- Blocked by action #43712: Update upstream dockerfiles to provide an easy to use docker image of openQA-webui added

#10 - 2020-08-27 15:04 - cdywan

Let's consider this *Blocked* in the sense that the steps required are the same with a focus on the worker vs. the web UI.

#11 - 2020-10-02 10:27 - cdywan

- Status changed from *Workable* to *Blocked*

#12 - 2020-10-02 11:27 - ilausuch

Before to work on this ticket I would like to complete this one <https://progress.opensuse.org/issues/69355> because it's related and maybe dependent on how this is resolved

#13 - 2020-10-02 14:11 - cdywan

- Related to action #69355: [spike] redundant/load-balancing webui deployments of openQA added

#14 - 2020-10-06 08:02 - ilausuch

- Status changed from *Blocked* to *In Progress*

#15 - 2020-10-15 09:13 - ilausuch

One interesting thing should we consider is about the `--link` parameter in the docker run for the workers. There is an alert about that in this link <https://docs.docker.com/network/links/>

#16 - 2020-10-15 10:40 - ilausuch

Two initial problems to fix during the build

- Package 'qemu-uefi-aarch64' not found
- /root/qemu/kvm-mknod.sh: line 6: gunzip: command not found

#17 - 2020-10-15 14:38 - ilausuch

<https://github.com/os-autoinst/openQA/pull/3475>

#18 - 2020-10-15 14:44 - ilausuch

New problems to solve

- gzip: /proc/config.gz: No such file or directory
- mknod: /dev/kvm: File exists
- Unable to make /dev/kvm node; software emulation will be used (This can happen if the container is run without `-privileged`)

In the last case, I think is because of configuration

#19 - 2020-10-17 19:46 - okurz

- Related to action #73450: POC: Create openQA worker container image (feature) added

#20 - 2020-10-21 10:18 - cdywan

- Description updated

#21 - 2020-10-23 08:33 - okurz

- Due date set to 2020-10-28

As I think you are actually working on this we should aim for not exceeding our usual cycle times for tickets, hence setting the due date to what I consider feasible and useful. Please make sure to provide an update soon and feel free to unassign again if you are not actually (anymore?) working on this

#22 - 2020-10-23 10:02 - ilausuch

Doing some tests on the worker I realized that the worker cannot start because:

```
[info] [pid:44] Project dir for host http://webui_haproxy_1 is /var/lib/openqa/share
[info] [pid:44] Registering with openQA http://webui_haproxy_1
[info] [pid:44] Establishing ws connection via ws://webui_haproxy_1/api/v1/ws/1
[warn] [pid:44] Unable to upgrade to ws connection via http://webui_haproxy_1/api/v1/ws/1 - trying again in 10
seconds
```

Facts:

- The worker can connect to the web UI API and authenticate the user
- The worker cannot connect to the websockets

To solve that Christian and me were working on a replacement for haproxy with nginx allowing the reverse proxy for the websockets. This seems to work

```
server {
    listen      80;
    listen      9526;
    server_name localhost;

    location ~ /api/v1/ws/(.*) {
        proxy_set_header X-Real-IP $remote_addr;
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
        proxy_set_header Host $http_host;
        proxy_set_header X-NginX-Proxy true;

        rewrite ^//api/v1/ws/(.*)$ http://webui_websockets_1:9527/ws/$1;
        proxy_pass http://webui_websockets_1:9527;
        proxy_redirect off;
    }

    location / {
        proxy_set_header X-Real-IP $remote_addr;
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
        proxy_set_header Host $http_host;
        proxy_set_header X-NginX-Proxy true;

        proxy_pass http://webui_haproxy_1:9526;
        proxy_redirect off;
    }
}
```

Facts:

- nginx pass to the websockets the query
- nginx always return Not Found in plain text (tested from the worker, and also in the Christian environment)
- Christian checked that in O3 the websockets service also returns Not Found for the same path /api/v1/ws/1 however in O3 the worker is starting and in this test not. Why is the reason for that?

Ideas:

- check in a fake websockets service that nginx is sending the correct path
- Check what the worker spect from the websockets

Closely related with <https://progress.opensuse.org/issues/69355>. Both tickets are interdependent

#23 - 2020-10-23 14:17 - ilausuch

- Status changed from In Progress to Feedback

#24 - 2020-10-23 15:54 - mkittler

I see that your NGINX config differs from what we have in our repository:

<https://github.com/os-autoinst/openQA/blob/master/etc/nginx/vhosts.d/openqa.conf>

Maybe the lack of proxy_set_header Upgrade leads to the 404 response.

As mentioned in the chat yesterday: It is also possible to specify the web UI port directly within the worker config. The worker will then use this port +2 for the web sockets route making it unnecessary to proxy the web socket connection. Having NGINX proxying the web socket connection would be the nicer solution of course.

#25 - 2020-10-26 11:50 - ilausuch

Works, preparing the <https://progress.opensuse.org/issues/69355> finishing before

#26 - 2020-10-26 15:47 - ilausuch

- Status changed from Feedback to In Progress

#27 - 2020-10-26 15:49 - ilausuch

Thanks Marius, this worked and now we have a new PR for the web UI that solves all these problems. Now I am preparing this PR to use api keys and hosts for use with <https://progress.opensuse.org/issues/69355>

#28 - 2020-10-29 11:37 - ilausuch

Additionally and following the subject of this task "provide an easy to use..." I created a script to launch a pool of workers <https://github.com/os-autoinst/openQA/pull/3495>

#29 - 2020-10-29 13:44 - cdywan

- Description updated

#30 - 2020-11-04 10:29 - ilausuch

- Description updated

The acceptance criteria AC1, AC2 and AC3 are covered by <https://github.com/os-autoinst/openQA/pull/3475> and <https://github.com/os-autoinst/openQA/pull/3495>
My next step is to build the docker image

#31 - 2020-11-06 15:57 - ilausuch

I am preparing a PR to fix some problems in the Dockerfile <https://github.com/os-autoinst/openQA/pull/3523>

In my home there are the packages I am working on https://build.opensuse.org/package/show/home:ilausuch:branches:devel:openQA/openQA_container_image_worker_x86
https://build.opensuse.org/package/show/home:ilausuch:branches:devel:openQA/openQA_container_image_worker_aarch64

#32 - 2020-11-06 16:21 - cdywan

- Due date changed from 2020-10-28 to 2020-11-13

For the record, these questions were still being discussed today:

- We might need different containers for specific architectures with their own tags
- What base image to use
- Fetching repos via <http://download.opensuse.org>

Setting up working builds in a home project was far from straightforward even with OBS expertise on hand so I recommend this gets documented in a blog post or wiki page after, although it's not required to finish the ticket.

#33 - 2020-11-06 21:37 - pdostal

As well as I know, no tags are required for different architectures. There can be multiple builds of the same Dockerfile with the same tag for different architectures.

#34 - 2020-11-10 11:55 - ilausuch

I created a PR to discuss about all of that <https://github.com/os-autoinst/openQA/pull/3533>

Also there are two build on my home

- https://build.opensuse.org/package/show/home:ilausuch:branches:devel:openQA/openQA_container_image_worker_x86
- https://build.opensuse.org/package/show/home:ilausuch:branches:devel:openQA/openQA_container_image_worker_aarch64

The x86 works

#35 - 2020-11-10 14:55 - cdywan

- Description updated

- Status changed from In Progress to Feedback

Publishing images on OBS is raising a lot of questions on top of a usable image that have nothing to do with containerizing the worker in general, and we actually have [#43718](#) so I'm removing it from the AC here.

#36 - 2020-11-10 15:56 - ilausuch

Associated patch <https://github.com/os-autoinst/openQA/pull/3534>

#37 - 2020-11-10 22:05 - okurz

Please keep in mind, even if this is not explicitly mentioned: We probably all agree that without automatic tests we would not call any contributions properly long-term supportable. These tests could be very simple, e.g. something like `podman run --rm -it openqa-worker --help` or something. But if you do not plan to add tests as part of this ticket which is of course ok then please create a follow-up so that we don't forget that.

#38 - 2020-11-11 09:37 - ilausuch

Last changes on the PR works on the testing package in my home

https://build.opensuse.org/package/show/home:ilausuch/branches:devel:openQA/openQA_container_image_worker_x86

#39 - 2020-11-13 17:13 - cdywan

okurz wrote:

Please keep in mind, even if this is not explicitly mentioned: We probably all agree that without automatic tests we would not call any contributions properly long-term supportable. These tests could be very simple, e.g. something like `podman run --rm -it openqa-worker --help` or something. But if you do not plan to add tests as part of this ticket which is of course ok then please create a follow-up so that we don't forget that.

Ack. The specific AC however had build and publish in OBS in it (which [#43718](#) basically is), and we don't even know that we can run tests in OBS after building the image. Although adding two lines in our existing setup *might* be more straightforward.

#40 - 2020-11-18 11:11 - ilausuch

- Status changed from Feedback to Resolved

The PR is merged and there is a build in OBS (

https://build.opensuse.org/package/show/home:ilausuch/branches:devel:openQA/openQA_container_image_worker_x86) that builds the container image

#41 - 2020-11-27 10:26 - okurz

unfortunately it seems you overlooked [#43715#note-37](#) . I created [#43706](#) for that now.

#42 - 2021-03-18 13:20 - okurz

- Due date deleted (2020-11-13)