

Quality Assurance Framework for Linux releases delivery

Evaluating Beaker-project

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Background

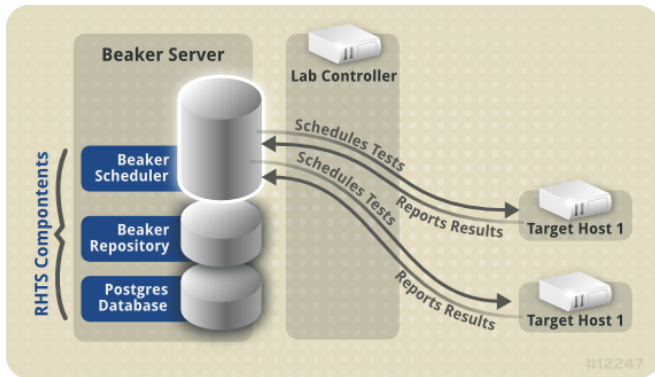
We need to automate in a better way the Quality Assurance for new Linux releases

Use cases

- Test new hardware
- Test minor release updates on:
 - lab hardware
 - virtual machines
- Life cycle of a lab hardware, reservation by users, scheduling

Diagrams

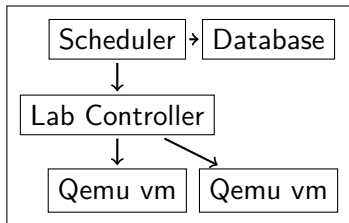
How it should be



Diagrams

How it is now

Openstack instance



Example task

```
<job retention_tag="scratch">
  <whiteboard>centos version test</whiteboard>
  <recipeSet priority="Urgent">
    <recipe whiteboard="" role="None" ks_meta="harness='restraint_␣beakerlib'"
      kernel_options="" kernel_options_post="">
      <packages>
        <package name="rhts-test-env"/>
      </packages>
      <repos>
        <repo name="beaker-harness" url="http://beaker.cern.ch/harness/CentOS7"/>
      </repos>
      <distroRequires/>
      <hostRequires/>
      <task name="version-minor-task" role="None">
        <fetch url="git://192.168.122.1/version-minor-task"/>
      </task>
      <reservesys duration="10800" when="always"/>
    </recipe>
  </recipeSet>
</job>
```

Web Interface

Jobs

beaker.cern.ch/bkr/jobs/

Beaker Systems ▾ Devices ▾ Distros ▾ Scheduler ▾ Reports ▾ Activity ▾ Admin ▾ Hello, admin ▾ My Jobs Help ▾

Jobs

Show Search Options

Lookup ID Queued Running Completed

Items found: 61 1 2

ID	Whiteboard	Group	Owner	Progress	Status	Result	Action
J.61	centos version test		admin	0% <div><div style="width: 0%;"></div></div>	Updating...	New	Clone Cancel Export
J.60	centos version test		admin	0% <div><div style="width: 0%;"></div></div>	Installing	New	Clone Cancel Export
J.59	multihost test(ping) debug		admin	100% <div><div style="width: 100%;"></div></div>	Completed	New	Clone Delete Export
J.58	multihost test(ping) debug		admin	100% <div><div style="width: 100%;"></div></div>	Completed	New	Clone Delete Export
J.57	multihost test(ping) debug		admin	100% <div><div style="width: 100%;"></div></div>	Completed	Warn	Clone Delete Export
J.56	multihost test(ping) debug		admin	100% <div><div style="width: 100%;"></div></div>	Completed	Warn	Clone Delete Export
J.55	multihost test(ping)		admin	100% <div><div style="width: 100%;"></div></div>	Cancelled	Warn	Clone Delete Export
J.54	multihost test		admin	100% <div><div style="width: 100%;"></div></div>	Completed	Warn	Clone Delete Export
J.53	multihost test		admin	100% <div><div style="width: 100%;"></div></div>	Cancelled	Warn	Clone Delete Export
J.52	Update Inventory for 192.168.122.156		admin	100% <div><div style="width: 100%;"></div></div>	Completed	Pass	Clone Delete Export
J.51	Update Inventory for 192.168.122.100		admin	100% <div><div style="width: 100%;"></div></div>	Completed	Pass	Clone Delete Export
J.50	Update Inventory for 192.168.122.100		admin	100% <div><div style="width: 100%;"></div></div>	Cancelled	Warn	Clone Delete Export
J.49	Update Inventory for toto4toto.cern.ch		admin	0% <div><div style="width: 0%;"></div></div>	Waiting	New	Clone Cancel Export
J.48	centos version test		admin	100% <div><div style="width: 100%;"></div></div>	Completed	Pass	Clone Delete Export
J.47	centos version test		admin	100% <div><div style="width: 100%;"></div></div>	Completed	Fail	Clone Delete Export
J.46	centos version test- with restraint		admin	100% <div><div style="width: 100%;"></div></div>	Completed	New	Clone Delete Export

What is working

- Scheduling tasks to run on one or more systems
- Pulling tests from git
- Multihost tasks
- Web interface/cli
- Maintaining lab:reservation, scheduling, hardware detection

Should work with

- 1 Physical machines

Should work with

- 1 Physical machines
- 2 Openstack

Should work with

- 1 Physical machines
- 2 Openstack
- 3 Docker

Should work with

- 1 Physical machines
- 2 Openstack
- 3 Docker
- 4 Architectures other than x86_64

Plans

- 1 Physical machines
- 2 Develop a puppet module for beaker server and controllers

The end

Questions?