FUNCTEST 2019

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GATES

TODAY'S VERIFY-1

- one error is detected by yamllint, pep8, pylint, ansible-lint, bashate or doc8
- one unit test fails (py27 and py35)
- specific modules are not rated 10/10 by pylint
- our Framework is not fully covered
- unix permissions are wrong
- one doc cannot be generated without warning

Please see tox.ini for details

GREAT! BUT

- the current gate checks all coding rules, our Framework and all interfaces to third-parties but not our testcases
- it doesn't break the circular dependencies between Installers and Functest (Installers ask for a trustable healthcheck but we need results of "Installer runs" as prerequisites)

Our testcases have still **to be verified by hand** what differs from OpenStack Workflow.

FUNCTIONAL GATING

- we need to run all Functest patches before merge against reference plateforms (OpenStack and Kubernetes)
- a voting job must forbid the merge if one test fails (as the workflow process implemented by OpenStack)

IMPROVE THE CURRENT DAILY MODEL

- all Functest jobs are linked to the OPNFV installers and can hardly be reused by endusers
- all test suites are run sequentially
- rally_full is excluded due to its duration (~3 hours)
- all possible remaining resources are cleant when installing the scenarios

It's fine for gating installers but not for verifying that Functest supports parallel and live testing

NEW XTESTING ANSIBLE ROLE

- deploy anywhere the full OPNFV CI/CD toolchain in few commands
- easily add external bots voting in reviews
- produce all Xtesting-based fonctional jobs (Xtesting, Functest and Functest Kubernetes) in Releng
- could be instanciated for testing services out of the infrastructure domain

It's already in a good shape. Try it!

QUALITY ASSURANCE

Functest is matching the OpenStack Quality Golden rules

PYLINT AND COVERAGE (STARTED FROM E RELEASE)

- only need to refactor several vnf testcases and to remove duplicated code
- document well and cover Functest utils: they are reused by OPNFV third-parties (SFC, SDNVPN)

Functest will be rated 10/10 very soon

RELEASING

- Functest could be also released as a classical Python packages like Xtesting(PyPI)
- Xtesting and Functest could be released as GNU/Linux distribution packages

OTHER CHALLENGES

PROPOSALS

- integrate Rally and Tempest as core modules in Functest (we do merge tempest.py and conf_utils.py)
- deploy cloud-native VNF (Clearwater IMS?)
- why not leveraging on OpenStack middlewares such as oslo.config?
- promote our VNF testcases in the upstream communities

Any new testcase is more than welcome!

THANK YOU