

Intern Project: Functional tests for Kubernetes deployments

Description	Create and integrate functional test cases for Baremetal container based deployments
Status	PROJECT COMPLETED
Difficulty	MEDIUM

Description:

Kubernetes has been introduced in Danube release (joid installer). Also, Compass is deploying a k8 scenario in CI.

Functest is managing testing suites for OPNFV. So far no K8 suites are referenced, we plan to introduce first ones for F-release (end of 2017 mid-half of 2018).

The goal of this internship is to study the upstream existing infrastructure testing projects and integrate k8 test suites in Functest (<https://github.com/kubernetes/test-infra>)

Additionally the deployment of Clearwater vIMS on k8 could be also added (<https://github.com/Intel-Corp/clearwater-kubernertes>)

Additional Information:

Desirable Skills:

- Linux, Python, Kubernetes, Jenkins

Expected Outcome:

- k8 upstream tests included in Functest
- k8 tests triggered manually on k8 scenarios
- k8 tests integrated in Functest (then CI)

Difficulty:

MEDIUM

Desired project timeline/completion date:

6 months part time

Mentor(s) & contact info:

- [Linda Wang](#) (main)
- [Narinder Gupta](#), [Jose Lausuch](#)

Intern:

- [Konrad Djimeli](#)

Reports:

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
FUNCT EST-969	Add k8s test details to K8sTesting class 'detail' dictionary	✓	May 22, 2018	Oct 08, 2018		Konrad Djimeli	Konrad Djimeli	✓	CLOSED	Fixed
FUNCT EST-967	Fix functest-k8s logging to log all k8s tests (even those which do not have the [k8s.io] tag)	✗	May 19, 2018	May 21, 2018		Konrad Djimeli	Konrad Djimeli	⬆	CLOSED	Fixed
FUNCT EST-963	Add and improve logging for functest-kubernetes	✓	Apr 23, 2018	Oct 08, 2018		Konrad Djimeli	Konrad Djimeli	⬆	CLOSED	Fixed
FUNCT EST-953	Add unit tests for k8s tests	✓	Apr 09, 2018	Apr 23, 2018		Konrad Djimeli	Konrad Djimeli	⬆	CLOSED	Fixed

FUNCT EST- 952	Compare the k8s results on Compass/Joid/XCI		Mar 19, 2018	Apr 09, 2018	Konrad Djimeli	Linda Wang		CLOSED	Fixed
FUNCT EST- 951	Add documentation for k8s tests		Mar 19, 2018	Apr 23, 2018	Konrad Djimeli	Linda Wang		CLOSED	Fixed
FUNCT EST- 905	Integrate conformance tests		Jan 12, 2018	Apr 09, 2018	Konrad Djimeli	Linda Wang		CLOSED	Fixed
FUNCT EST- 904	Create a smoke test for k8s deployment		Jan 12, 2018	Apr 09, 2018	Konrad Djimeli	Linda Wang		CLOSED	Fixed
FUNCT EST- 902	Investigate conformance tests in kubernetes		Jan 04, 2018	Apr 09, 2018	Konrad Djimeli	Linda Wang		CLOSED	Fixed

9 issues

Gerrit Patches: <https://gerrit.opnfv.org/gerrit/#/q/owner:%22Konrad+Djimeli%22>

ONS2018 functest-k8s breakout session presentation: <http://testresults.opnfv.org/funcctest/ons2018/>

Worklog: https://docs.google.com/document/d/1rqQ8BixrOr_jwoPGWGDAdMMHojl4GgwPQb2qCVp7GVg/edit?usp=sharing

Meetinglog: https://docs.google.com/document/d/1PPPI0irb4GArGGW_Gmxle2LaJQLeG1P4HceOMBIq-YQ/edit?usp=sharing