

IEC CI/CD

Architecture

Similar to OPNFV (and old Openstack before the transition to Zuul), Jenkins (and probably [JJB](#)) will be used for all CI/CD purposes.

Each POD will be connected as a Jenkins slave node to one public Jenkins [master](#) node **or** to a local Jenkins master node in the current lab (TBD).

Pipelines

- IEC Documentation building (on documentation patch submission for peer review) and publishing (on documentation patch merge);
A common approach in opensource projects is to rely on [RTD](#) for automating this, but we still need to implement the jobs triggering the builds on our end.
- IEC Verify jobs (on patch submission affecting the code in IEC repo) - i.e. linting input YAML/bash/python on patch submission, as well as deployment testing;
- IEC Daily jobs (scheduled to run recurrently)
 1. Deploy IEC using one of the agreed installers (see below);
 2. Run testing suites;
 3. Collect logs and publish them (e.g. on Google storage);Depending on the number of supported installers (e.g. Compass4NFV@OPNFV, Fuel@OPNFV, bash, heat templates, airship-in-a-bottle), we might create a matrix of scenario jobs that validate all or just some combinations of installer/PODs.
For example, one of the installers might not be supported on a certain POD (due to missing configuration data or incompatible hardware), in which case that installer/POD combination should be blacklisted.

Artifacts

- Documentation
- Installation scripts (the main IEC repository)
- Test logs and results

Setting up a static Jenkins Slave

To setup a static Jenkins Slave for CI, follow the instructions [here](#) but make sure you replace all instances of "opnfv" with "akraino", and in step 5, replace "git clone <https://gerrit.opnfv.org/gerrit/p/releng.git>" with "git clone <https://gerrit.akraino.org/r/ci-management>".

Two servers have been set up for development in Enea Lab <https://jenkins.akraino.org/computer/prd-ubuntu1604-dev-48c-256g-1/> and <https://jenkins.akraino.org/computer/prd-ubuntu1604-dev-48c-256g-2/>

The same servers are available in sandbox too: <https://jenkins.akraino.org/sandbox/computer/snd-ubuntu1604-dev-48c-256g-1/> and <https://jenkins.akraino.org/sandbox/computer/snd-ubuntu1604-dev-48c-256g-2/>



Don't run any jobs in sandbox if there are CI jobs running on the slaves in the production environment, as the two jobs will interfere with each other!

Jenkins Jobs

Daily: <https://jenkins.akraino.org/view/iec/job/iec-fuel-virtual-ubuntu1604-daily-master/>

We're using Jenkins (the standard community version) 2.164.3 Long-Term Support (LTS) release.

Logs

From <https://nexus.akraino.org/#view-repositories;public~browsestorage>

You need to go to

Production -> vex-yul-akraino-jenkins-prod-1 -> iec-deploy-fuel-virtual-daily-master