To a netfilter buildbot?

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Objectives

Automatic build test and release

- Nftables got a test system
- No automatic run of it
- Nedd an automatic build

Alternative

Automatic build test and release

- Jenkins
- Buildbot
- Travis-ci
- gitlab-ci

Jenkins

Java based with complete web GUI

- Web interface

Pros

- Big community
- Lots of plugins

Cons

- Java
- Web interface

Travis-ci

Hosted service
- single file to describe the build
- run in the cloud

Pros
- Hosted
- simple configuration file

Cons
- Hosted

gitlab-ci

Gitlab CI

- Self hosted Github clone
- Running a travis-ci clone
- Flexible and powerful
  - Standard runners
  - Docker based runners

Pros

- simple configuration file

Cons

- Depends on gitlab

Buildbot

Build test and release

- open-source framework for automating software build, test, and release processes.

Used in Suricata

- git monitoring
- prscript

Pros

- Python configuration file
- Flexible

Cons

- Python configuration file
- No Docker integration

Buildbot config

Master.cfg excerpt

```
trusted_dev=("regit","poona","inliniac","ken-tilera","jasonish","decanio"
custom_repo = {"decanio": "suricata-np"}
for dev in trusted_dev:
    if custom_repo.has_key(dev):
        factory_prepr = SuriBuildFactory(repo='git://github.com/' + dev
        factory_pcappr = SuriPcapTestBuildFactory(repo='git://github.com/'
```

Suricata Docker QA

Buildbot and prscript

- A Python system to automate the compile/test cycle to validate code changes.
- Prscript is pre Pull Request script:
  - Known developers have to run it before PR
  - Trigger a series of build in the buildbot
  - Also some basic functional tests

Docker mode for prscript

- Buildbot installed in a docker container
- Ready to use via prscript
- Available in docker hub
- Configuration in the source

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Netfilter specificity

Kernel part

- Need to be able to use latest/custom kernel
- May need to test backward compatibility
  - Distribution kernel
  - Stable kernel

Discussion