Would be nice to have automated quality checks for our .deb packages similar to nightly tests run for osmo-* projects.

Notable candidates:

- [https://wiki.debian.org/piuparts](https://wiki.debian.org/piuparts)
- [https://tracker.debian.org/pkg/lintian](https://tracker.debian.org/pkg/lintian)

This would allow us to catch packaging-related issues early on as well as prevent bitrot (like outdated standards version etc).

Related issues:

- Related to Cellular Network Infrastructure - Feature #4107: Start systemd services as non-root user added
  New 07/15/2019
- Related to Cellular Network Infrastructure - Feature #2385: validate debian rules/control as part of jenkins build testing added
  In Progress 07/21/2017

History

#1 - 08/30/2022 08:10 AM - msuraev
- Related to Feature #4107: Start systemd services as non-root user added

#2 - 08/30/2022 08:24 AM - msuraev
Handy test for "nightly" package builds would be upgrade from latest .deb packages.

Note: debspawn is a nice option for building .deb in isolated environment which does not require complex setup.

#3 - 09/21/2022 12:04 PM - msuraev
- Related to Feature #2385: validate debian rules/control as part of jenkins build testing added

#4 - 09/21/2022 12:25 PM - osmith
Note that we have some existing tests for the debian and centos packages with the repo-install-test jobs. It tests:

- packages from the repository can be installed
- packages conflicting between nightly and latest (so they don't get installed together by accident)
- osmo-* binaries running and printing a proper version
- systemd services running properly (also caught conflicting ports between Osmocom applications)

See:

- [https://gitea.osmocom.org/osmocom/osmo-ci/src/commit/4a0b42cc4f1ef0d79dea4ae5618213c3e3e4963f/scripts/repo-install-test/run-inside-docker.sh#L415-L434](https://gitea.osmocom.org/osmocom/osmo-ci/src/commit/4a0b42cc4f1ef0d79dea4ae5618213c3e3e4963f/scripts/repo-install-test/run-inside-docker.sh#L415-L434)

Maybe extend that / maybe add something like lintian in gerrit after #2385?

#5 - 09/21/2022 12:41 PM - msuraev
osmith wrote in [note-4]:

- packages from the repository can be installed

That's subset of what piuparts does.
- osmo-* binaries running and printing a proper version
- systemd services running properly (also caught conflicting ports between Osmocom applications)

That seems like smth which can be formalized with autopkgtest. The nice thing about it is that tests are part of the package itself (via debian/tests/) which makes it easier to track and maintain.

#6 - 09/21/2022 01:03 PM - osmith

piuparts and autopkgtest look nice! I'm sure there is room for improvement, just pointing out what is already there and that we also test centos packages. Probably best to discuss with Harald if he wants to have this set up.