ganeti.deb
Packaging Ganeti in Debian

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Ganeti in Debian

- Team-maintained: `pkg-ganeti-devel@lists.alioth.debian.org`
- 3 team members (help appreciated :)
- Package source tracked in `git`
  `http://anonscm.debian.org/gitweb/?p=pkg-ganeti/ganeti.git`

Release policy

- ▶ Latest stable release in unstable
  - ▶ Backport to jessie-backports as soon as it hits testing
- ▶ RCs usually in experimental
- ▶ PPA for Ubuntu LTS releases (currently 12.04 and 14.04)

News since GanetiCon1

Small bits

- ▶ Multiple versions support: tested heavily, no complaints so far (but must go through NEW for every minor release)
- ▶ 2.12 in Jessie: 2.12.0 updated to 2.12.4 via a stable update, most issues sorted out
- ▶ GHC 7.8 in unstable/testing: compatibility is fine
- ▶ GHC 7.10.2 in experimental: integer-gmp2 as default (?): check compatibility and re-evaluate SSL library choice.
- ▶ Switched the packaging repository to upstream-git: easier to cherry-pick patches (esp. autotools-related)

DEP-8 automatic as-installed tests

- Implemented automatic package tests using `vcluster` to run the QA suite.
- Test the actual built Debian package in a clean environment:
  - Useful to catch both packaging and upstream errors.
  - Runs with the "real" settings (most notably multiple user support).
- Requires `isolation-container` – currently does not run on ci.debian.net
- ... but it runs on my laptop before every upload :-)

Debian bug #783683

- cron's systemd unit has `KillMode=control-group`
- The watcher by default starts noded if it's not running → `ganeti-noded` ends up in `cron.service` cgroup.
- KVM processes spawned subsequently remain in `cron.service` cgroup.
- Restarting cron kills noded and all KVM processes in the cgroup.

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  # KABOOM!
- Although now fixed, there are some questions:
  - Do we need ganeti-watcher starting noded? How do you actually stop noded?
  - Should we coordinate with systemd and place instances under `machine.slice` (and depend on `python-dbus`)?

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  - May cripple the guest kernel's scheduler (3.16+ affected, possibly newer as well). The system reports 100% steal time.
  - Can be worked around: `cpu_type=qemu64,-kvm_steal_time`
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  - ► Forwarded upstream, no reaction sofar
- ► #786789: VM hangs post-migration due to TSC jumps
  - ► Fixed in QEMU 2.1.3
  - ► The fix is not yet in Jessie → use 2.3 from sid/stretch or build your own packages.

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- ► External repository for debian packages.
- ► Needed for 2.12+ on wheezy.
- ► Will probably offer long-ish term support for stable branches for multiple distributions (Wheezy and Jessie for now).
- ► amd64-only for now, needs proper build infrastructure.

Future work

ganeti-quickstart

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  - Single-node cluster
  - KVM (does not need reboot, setup is fairly easy)
  - Primarily file storage (LVM not guaranteed to be configured or have free extents)
  - Pre-configure ganeti-instance-debootstrap
- `ganeti-quickstart` package

Thank you!

Q&A