Trisquel GNU/Linux new architectures and other challenges

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What is Trisquel?

- A fully-free GNU/Linux OS
- Based on Ubuntu/Debian
- Focused on
 - Freedom: 100% recycled free software
 - Privacy: default settings to protect confidenciality
 - Accessibility: made for all users
- For PC, ARM and POWER architectures
- Easy to contribute to

The road to Aramo



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Big tasks for v11

- Debian-installer (netinstall)
- Abrowser (Firefox) packaging
- New architectures: arm64 ppc64el
- Compatibility with Radeon GPUs
- Bring back support for 32 bit PCs

Debian Installer

- Used for custom installations and servers
- Dropped by Ubuntu in favor of Subiquity
- Source code still present, binaries missing
- Many packages needed to be rebuilt, customized or ported from Debian

Abrowser Packaging

- Trisquel distributes its own flavors of Mozilla applications to remove licensing issues and provide better privacy defaults:
 - Abrowser, based on Firefox
 - Icedove, based on Thunderbird
- Ubuntu started to package Firefox and other applications as snap packages instead of deb. We had to port the deb sources from Debian directly
- Key build dependencies were missing too

New arch: arm64 ppc64el

- In Trisquel 10 we added 32bit ARM (armhf)
- Now adding 64bit ARM and OpenPOWER support
 - Building ARM on Raspberry Pi 4
 - Building ppc on Talos II station
- To do:
 - Specific platform support
 - Bootloader work
 - Installation instructions and packaging

Support Radeon GPUs

- AMD graphics cards use 2 drivers in the Linux kernel:
 - Radeon, for pre-2014 cards
 - Amdgpu, for later cards
- Both require nonfree binary firmware blobs.
 - Radeon: can now work without blobs, but doesn't enable 2D/3D acceleration.
 - Amdgpu: does not work, but has been set in Trisquel to default to Vesa drivers, providing native resolution non-accelerated graphics
- More testing is needed, please report!

Revert support for 32 bit

- Ubuntu dropped support for the i386 (x86 32 Bit) architecture in 2019
- Trisquel 9 shipped without any support for i386
- For Trisquel 10 there was the goal to bring support back, by compiling the missing packages
- We failed.

What is next?

- We are looking for help
 - Contributing is very easy
 - Customize packages with shell scripts
 - Automated builds and testing repositories for contributors.
 - More reviewers welcome
 - Improve observability and alerts
 - Improve Continuous Integration

Other tasks

- New website
 - Upgrade Drupal to current version
 - New site design, more accessible and responsive
 - New forum/lists setup, move to Mailman / Hyperkitty
 - Improve the wiki editing tools
 - More community presence from dev site

More information

- Support and community:
 - https://trisquel.info/download
 - https://trisquel.info/documentation
 - https://trisquel.info/forums
 - https://listas.trisquel.info
- Development:
 - https://devel.trisquel.info
 - Trisquel-devel at https://listas.trisquel.info

Thanks! Questions?