Turris OS 4.0

Rethinking our releases...

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What is Turris OS

- Linux distribution
- based on OpenWRT
- powering up awesome Turris routers
- much simpler web interface
 - advance functionality in an end-user-friendly way
- updater and automatic updates
- few extra integration bits



History

- OpenWRT when we started
 - SVN, sporadic releases
- we were doing security probe
 - it was by an accident also router
- we had to make it user friendly
- we had to break stuff less often than OpenWRT
- we forked it to be more in control
- we merged newer releases



History

- people in OpenWRT were unhappy with status quo
- they forked themselves
- LEDE project started OpenWRT reboot
 - move to git
 - plenty of big changes started landing in
- OpenWRT project was dying
- we started to diverge quickly from LEDE
- LEDE and OpenWRT merged back together
 - with all the cool stuff



Our own reboot

- Let's start from vanilla OpenWRT (after merge)
- Let's add our feed
- Let's add few important patches
- Blend it well together
- Watch whether it explodes :-)

Here be dragons!



Technically

Git repository with:

- patches against feeds
- patches against main OpenWRT repo
- our configuration
- script that mixes and builds everything

https://gitlab.labs.nic.cz/turris/turris-build



Here be dragons (HBD)

Mix of

- OpenWRT master
- masters of all feeds
- cleanup branch of our feed
 - will be master branch, once we finish cleanup

If it builds, ship it.

Builds often, changes often, breaks often.



Here be kittens (HBK)

Mix of

- OpenWRT release we are building on top of
 - currently 18.06
- corresponding branch of all feeds
- cleanup branch of our feed
 - will be master branch, once we finish cleanup

If it builds, ship it.

Builds often, changes less, breaks less (still often).



Rest of the zoo

Turtles = frozen kittens

When we freeze kittens to do some testing before release.

Should be pretty stable.

Released manually when kittens are cuddly enough.

Sloths = turtles in the wild

Real releases.

Released manually when turtles stop biting.



How to try Turris OS 4.0

Choose a branch

currently we have HBD and HBK

For old Turris

- migrate to Btrfs
- replace content of your card with new rootfs

For Omnia

rename rootfs to medkit and flash it

More on forum:

https://forum.turris.cz/t/turris-os-4-0-here-be-dragons/8384

Turris OS 4.0 current issues

- No migration path yet
 - will be worked on after it settles down
- Turris 1.X still uses swconfig
- Omnia has no SFP support and just one CPU port in switch
- You have to run switch-branch --force hbd before first update
- Probably some more



Plans

- Turris MOX will come with 4.0
 - easier no migration needed
- test and finish Omnia/Turris 1.X
- announce once we believe it is ready for testing
 - currently changes too often
- release it after quite some testing

