



Mageia, successes and lessons learned 6 years after forking

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A brief presentation of Mageia



How to define Magiea community and distribution

Essentials

- A GNU/Linux-based, Free Software operating system, easy for both users and contributors
- A community project, supported by a nonprofit organisation of elected contributors

Some figures

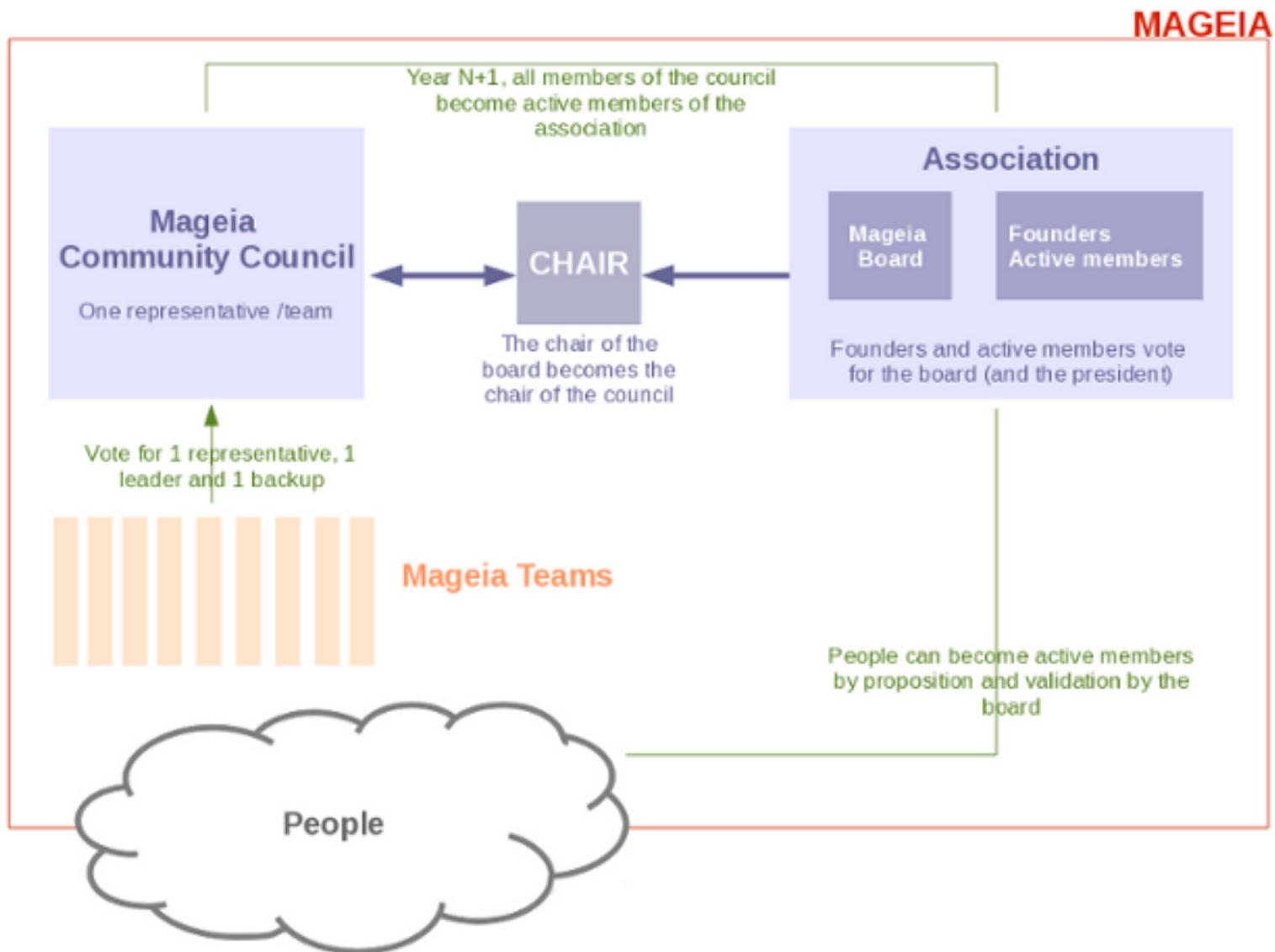
- 100 packagers accounts, 3 000 Bugzilla accounts, more than 20 000 bugs
- dev mailing-list (250), general dicussion mailing-list (300), forums (5 600 accounts, 66 000 posts)



What we wanted

- Give back the control to the community
- Setup all the project organization: governance, teams and collaboration
- Setup a technical and dedicated infrastructure (reliable, maintainable, scalable, replicable)
- Ship a first independant, stable and reliable version without major innovation, upgradable from Mandriva Linux
- Long term goals were not that defined except rescue more than 10 years of history

Our organization





The autocongratulation slide

What we achieved and we are proud of it

- 5 distributions have been released and 6th is on it way
- A real community of users **and** contributors
- No nasty issues for now on released versions
no apocalyptic headline ever:)

OK... We may now be using the debian way of releasing : « **released when ready** »



From user to contributor



Lowering the entry barriers

Facts

- A healthy community project always needs to renew or grow its contributors base.
- Need to attract potential contributors and have them stay.

In Mageia

- Welcoming teams (even packagers).
- Joining teams is not just for elite. Anyone motivated and able to work in a team is welcome.
- Mentoring. Help them start in good conditions and learn our way of working together.

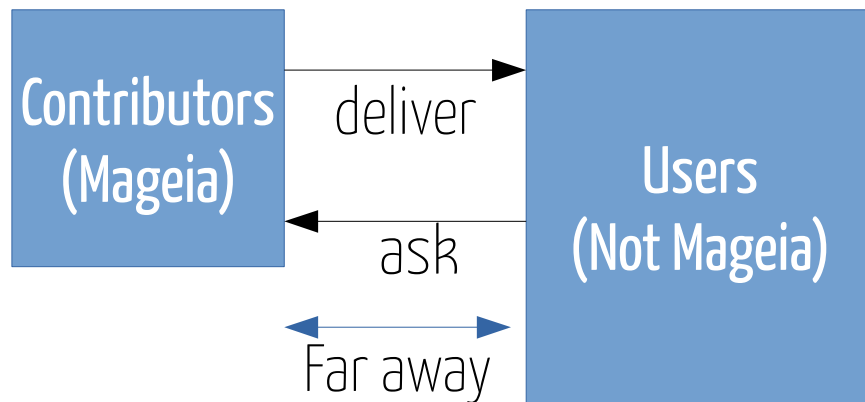
The barrier is usually higher in users heads than it is in reality.

- Belief that it requires extraordinary skills to contribute to such a big project.
 - Some users have a habit of considering themselves as "outside" (a client mentality?).
- => communicate and invite



Lowering the entry barriers

What many users think, by habit



How it is actually



Mageia as a community



A particular form of contribution: leadership

- Building a linux distribution: lots of different projects in one, need coordination.
- A need for leaders to show the way and act as catalysts.
- In mageia: elected team (co-)leaders and deputies. Almost all of them started as simple users.
- Also: anyone helping people to work together is doing unofficial leadership.



An example of unofficial leadership

- There's been an **annoying release-blocker** bug for months. It's been triaged correctly but nothing happens. You're not in an official leading position but you decide to act although you're not able to fix it yourself.
- Ask for **volunteers**. You can't give orders to specific people, of course. No success.
- Wait a little bit then ask **again**. Still no success. No one can / dares?
- Finally ask to **someone specifically**. He says OK.
- In some situations this would stop here, problem solved. But not in our example :)
- Several weeks or months later, notice there **still no progress** nor any new status on the bug report. Ask. The first volunteer finally tells he won't be able to do it in time (or can't be joined).
- Back to square one.
- It seems **no one wants to take responsibility alone** for this difficult task, so you try to form a commando of willing contributors and work with them off-list so that they feel more involved.
- It works, you finally find a **solution together**.
- **This is a form of contribution that is not easily described in « How to contribute ? » documents, but it's really valuable and doesn't require extraordinary skills. Just communication and commitment.**



Case study: The QA and security teams

Both teams used to rely entirely on paid employees at Mandriva

- Transition to full community involvement.
- A real concern when we started: not the sexiest of tasks.

QA (Quality Assurance) team:

- Tests update candidates and ISOs.
- Lucky to find a great team leader who shaped the team.
- Great communication.
- Weekly meetings on IRC. Helps feeling like a crew.
- Efficient mentoring program: “go-to” team for new contributors.
- Can be a step towards packaging or other contribution forms.
- Tailor-made tools for the QA workflow.

Community QA team now as effective as the previous Mandriva QA labs (who worked on a subset of packages only).



Case study: The QA and security teams

Security team

- One extremely dedicated contributor handling most of the security watch
- Difficulty to get packagers to fix security issues in a timely manner (even more if the package has no official maintainer)
- Same one contributor ends up doing the majority of the patching work
- Surprisingly, often as fast as distros who have more resources to handle security issues.
- High confidence in our updates thanks to QA testing.

→ Worked so far, but not sustainable

Additional packager focusing on security, there is hope :)

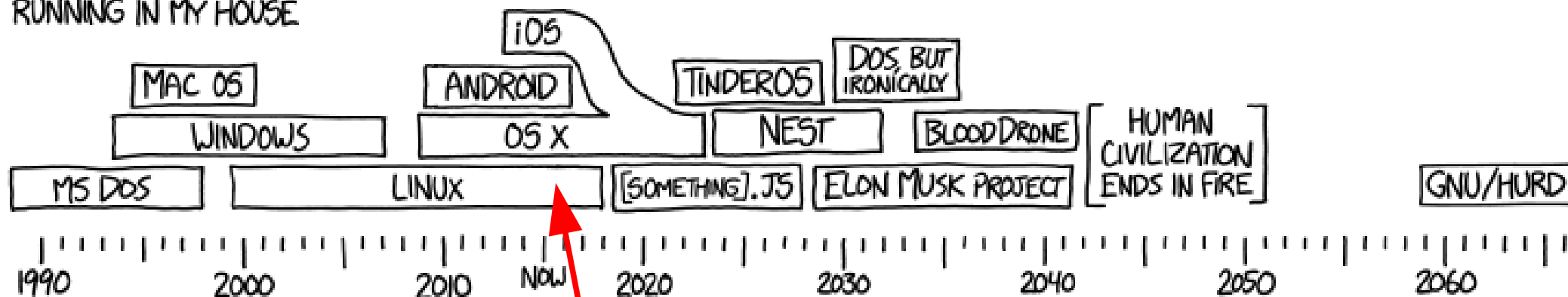


The way forward...



So what's now ???

OPERATING SYSTEMS RUNNING IN MY HOUSE



xkcd.com





Infrastructure and tools : what about the original goals ?

What we wanted

- Start simple and clean, following the main project priorities (big delay after announcement)
- Infrastructure to enable the project, empower contributors
- Make it simple but strong... **6 years ago**

What we did

- Build infrastructure managing both resources and reliability (now more than it was in Mandriva)
- A small but motivated and experienced sysadmins team (Mandriva + technical skills)



Infrastructure and tools : empower the community

Reliable but far from being perfect

- Update an oldish infrastructure (finalize svn=>git migration)
- Adapt to current tool to fit with potential new/existing contributors
- A sysadmin is rare – lack of delegation (trust needed / missing granular rights)
- Patches management tool: mailing list / irc / Bugzilla

Let's increase our todo list

- Enforce existing workflow using 2017 tools : gitlab (easy access to code and packages), code review (make contribution easier)
- Create real project for Mageia upstream tools using a set of coherent tools to give more visibility
- Rethink our workflow properly : stop a svn-like use of git



We need your feedback



Packagers organization : which model in other distributions ?

How to get people interested in bug fixing ?

How to get more contributions in non technical areas ? (design, communication)