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Open-Source is not new... at least not in Research and Education!

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Who are we?

- Restena Foundation is
  - National Research and Education Network since 1989
    - Restena Foundation since 2000
  - Registry for .lu domain names & DNS Services since 1993
  - Technical operations for LU-CIX



What are we doing?

- The Restena Foundation
  - Provides services to te R&E Community
    - Network connectivity , webhosting, Email services, security services
    - Operates the sectorial CSIRT for R&E
    - Part of the European NREN Association GEANT
  - Hold the register for the .lu top-level domain names
    - And operates associated DNS services
  - Perform technical operations for luxembourgish Internet Exchange LU-CIX

What is our philosophy?

Our Philosophy:

- "*priviledge the use and contribute to Open-Source to quickly adapt to the needs of the R&E community*"
- "*build a resilient ecosystem for R&E with only little vendor dependencies*"
- "*Data sovereignity by transparency and no vendor lockin*"
- Foster collaborations and promote innovation by using it

Community services based on open-source

- Based on open standards
- FileSender is an open-source file transmitting tool
- Edu.lu is an open-source URL -shortener
- Security Information and Event Management tool (SIEM)
- Webmail solution
- Authentication services based on open-source (SAML)
- DNS registry and services - open-source or in-house devs!

Well and inhouse, you're using O365 or MS?

- No MS operating systems inhouse
- Administration working open-source tools
- Network monitoring/management tools open-source and inhouse devs
- In 2026 we managed to
  - Replace MS Office by LibreOffice
  - Replace Zoom by eduMeet
  - Replace VMWare by ProxMox



What about governance and Open-Source?

A question we often get, how can you implement ISO27001 and by using open-source?

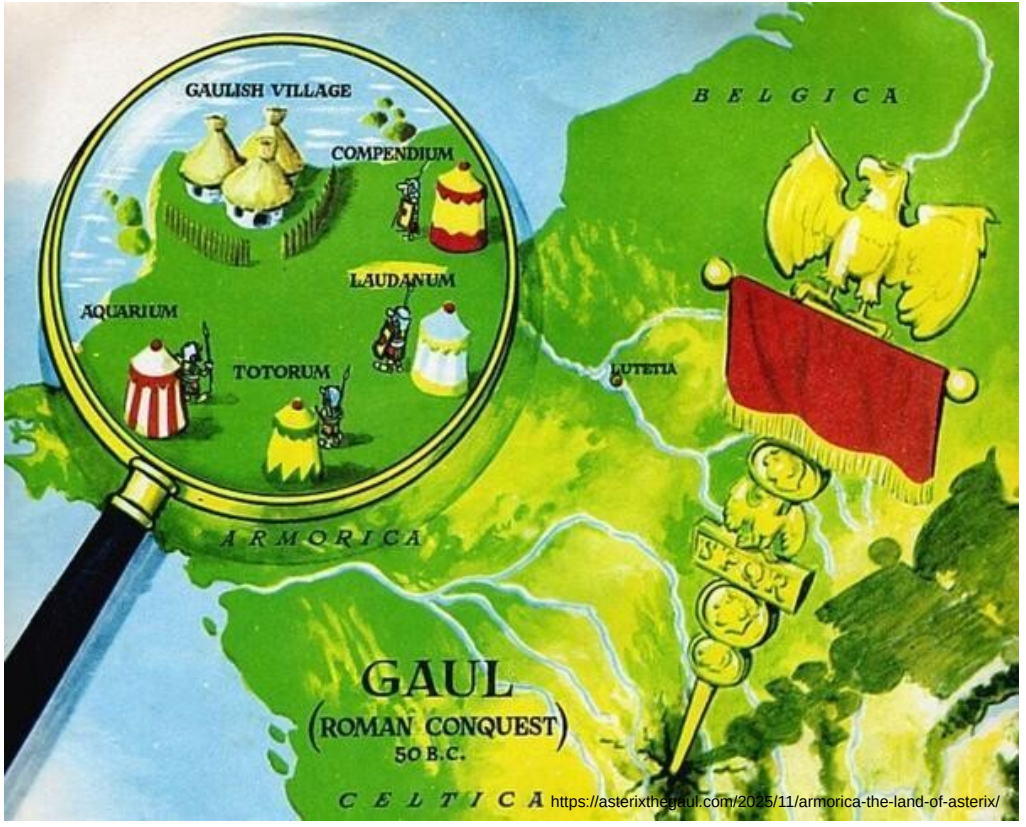
- Governance is a process of rules, processes controls, best practices etc. – not a proprietary tool that must be bought from the shelf!
- Could be easier something – let‘s blame the vendor not us
- “Are you using Power BI?” “Ah here you probably use OneDrive storage?”
- After a lot of audits, we now know, there is no need for commercial solutions

  → All you need is a capable auditor! (we have burnt a few...sorry!)

In the past:

Open what?
Ah okay...open-source...well how do you feel?

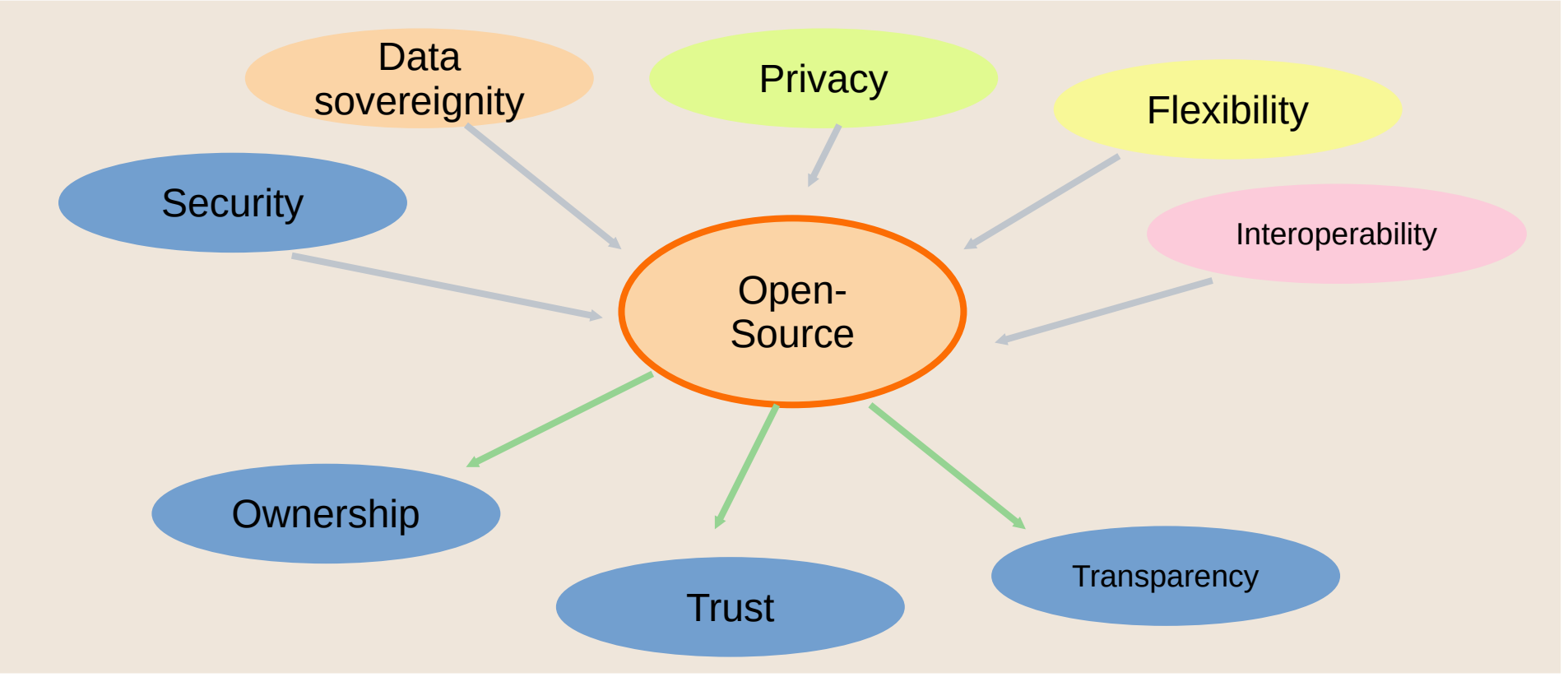
...what described it best!



...and nowadays?



The reality check: Advantages



Drawbacks: The reality check!

- „Does not look like the programme I‘m used to“
  - People do not want to use new tools with another design
  - People are „branded“ users of commercial tools
  - Open-source tool often rank functionality over user experience (but it improves)
- „We have money not resources! So we buy of the shelf!“
  - Prefer spending budget on commercial tools as it is easier
  - Buy tools with associated services/consultancy!



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Thank you!
Merci!