Open Source Software @EC and EU-FOSSA 2

Open Source Summit Europe 2018
Edinburgh, 22-24 October 2018

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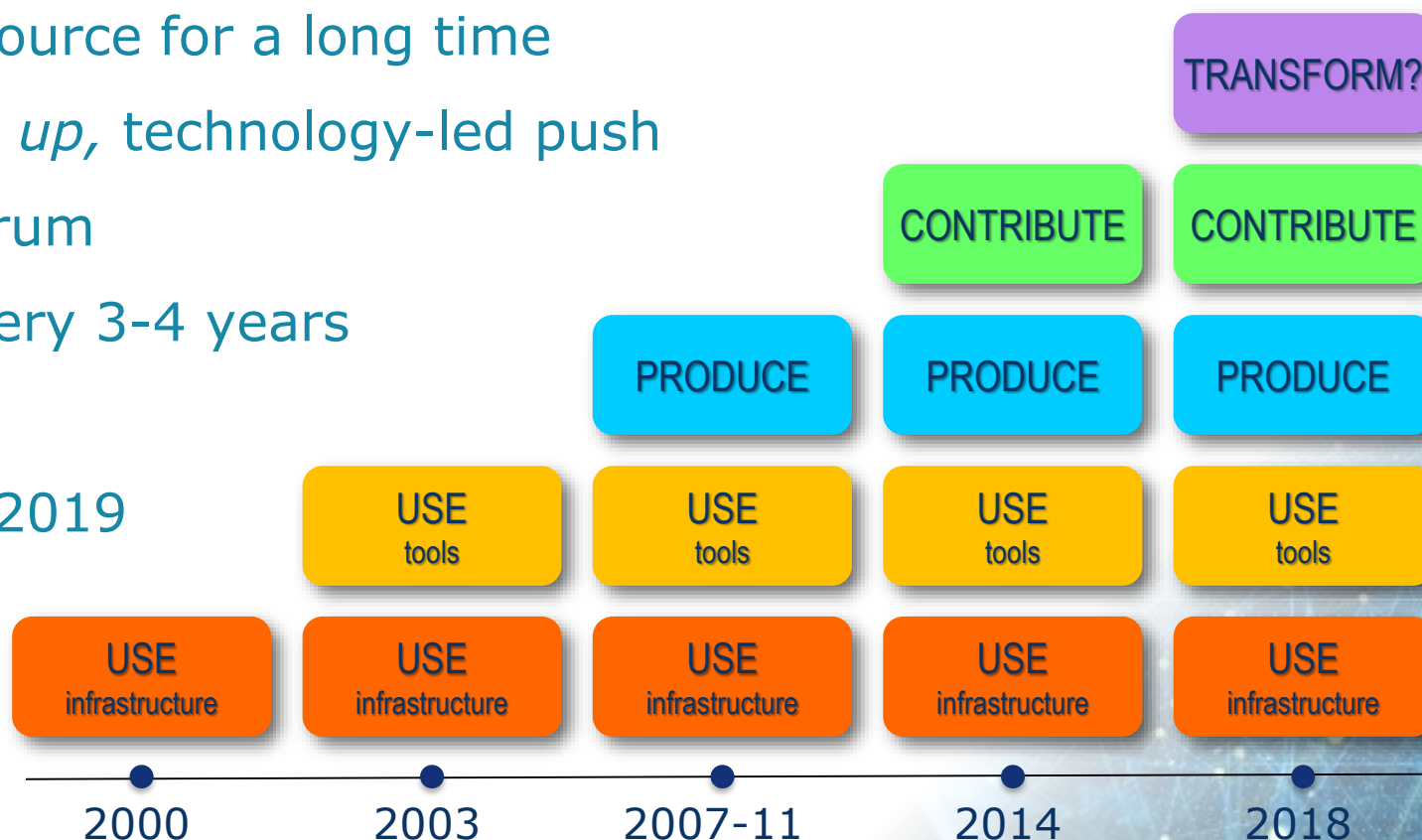European Commission

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Agenda

- Open source software at the European Commission

- EU-FOSSA 2

- Q&A

Open source software
at the European Commission

Wide OSS use at EC via bottom-up push

- Enthusiastic user of open source for a long time
- Growth driven by a *bottom up,* technology-led push
- OSS used across the spectrum
- OSS Strategy refreshed every 3-4 years
- Publicly available
- Next Strategy expected in 2019

TRANSFORM?

CONTRIBUTE   CONTRIBUTE

PRODUCE   PRODUCE   PRODUCE

USE tools   USE tools   USE tools   USE tools

USE infrastructure   USE infrastructure   USE infrastructure   USE infrastructure   USE infrastructure

2000   2003   2007-11   2014   2018

Areas of use

USE	USE	USE	USE	PRODUCE
Data Center	**Web and social tools to collaborate**	**Desktop**	**Tools and methods to develop software**	**Software based on ODD license**
Web servers	Forums	Browsers	Tools	Citizen's Initiative
Application servers	Blogs	File Management	Libraries	EUSurvey
Operating Systems	Content Management	Media Players	Collaboration	JoinUp
Linux	Drupal	Firefox / VLC	eclipse	EUSurvey / LEOS
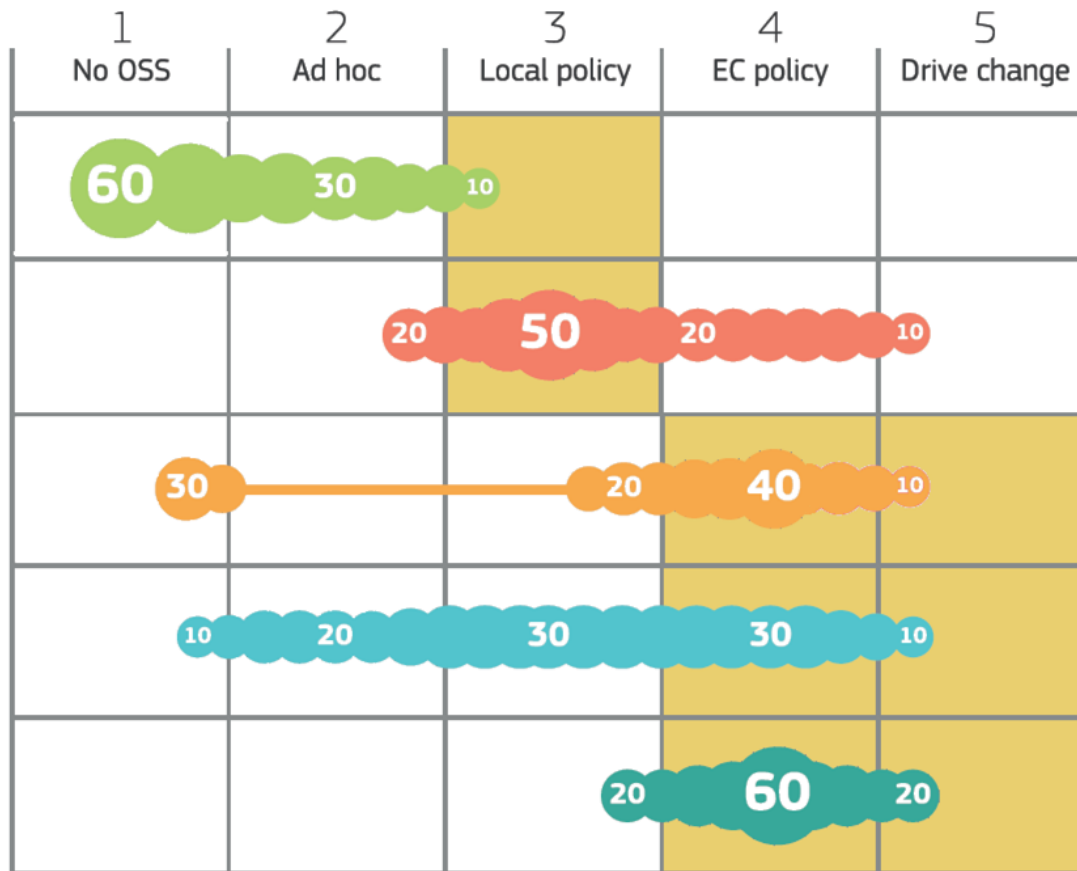
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OSS adoption index (2014)

Existing OSS Strategy: a publicly available "Decalogue"

1. OSS in product management
2. Procurement of software and OSS

Acquisition

3. Standards-based and interoperable software
4. OSS as default choice for systems deployed outside EC

Domains

5. Legal issues around OSS
6. Addressing governance of OSS – guidelines
7. OSS and communities

Contribution

8. OSS in e-Government

Domains

9. Alignment of internal and external strategies
10. Inter-Institutional collaboration

Coordination

https://ec.europa.eu/info/departments/informatics/open-source-software-strategy_en

European Commission

Frameworks for collaboration with other public organisations

EUPL - European Union Public License

- In 23 official languages
- EU law compliant

ISA^2

- Open Source Observatory Repository (OSOR)
- JoinUp
- European Interoperability Framework
- OSS developed: EUSurvey, LEOS, ECI/OCS, CIRCABC, …

Open PM^2

- Common project management language
- Increase collaboration efficiency and success rate
- Certification
- Guide freely available

Connecting Europe Facility

- Targeted infrastructure investment

eDelivery

- Open technical specifications
- OSS and added value services

For Research and Innovation

Increasing top-down policy push

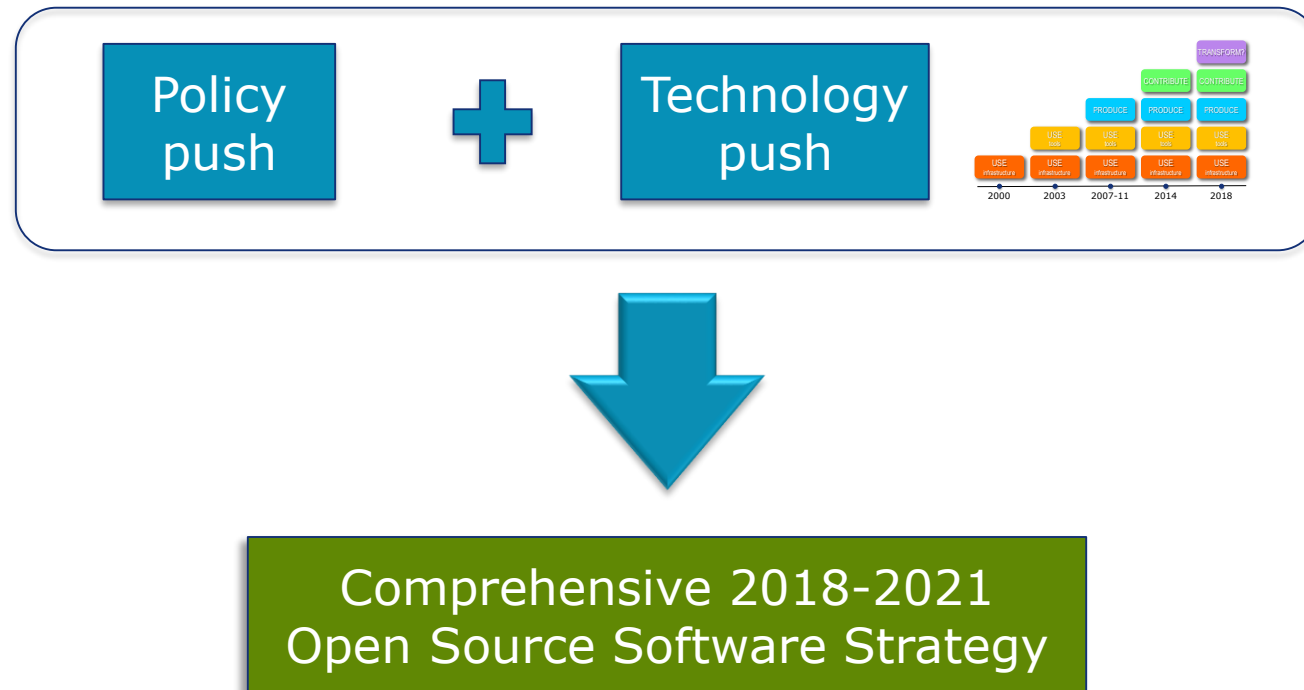- New European Interoperability Framework, 23/03/2017

Rec. 2: adoption of Open Source Software as enabler of **reusability**

- Tallinn Declaration on eGovernment, 6/10/2017

The Ministers call on the Commission "to consider strengthening the requirements for use of open source solutions and standards when (re)building of ICT systems and solutions takes place with EU funding, including by an appropriate open licence policy – by 2020."

"Member States commit to make more use of open source solutions […] when (re)building ICT systems and solutions […]"

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Drivers for a new OSS strategy

Policy push **+** Technology push

⬇

Comprehensive 2018-2021
Open Source Software Strategy

Next OSS Strategy

Policy in other public administrations

Licencing and IPR

Action within public administrations

Developer communities

Technology and community trends

OSS thinking/practices within the EC

Comprehensive 2018-2021
Open Source Software Strategy

Tackling roadblocks for greater use

- Legacy

- Legislation

- Support

- Security

Tackling roadblocks for greater use

- Legacy

- Legislation

- Support

- Security

**European Union
Free and Open Source
Software Auditing**

EU-FOSSA journey

Initiative → Pilot project → Preparatory Action → Standing EU activity

EU-FOSSA (2015-2016)

EU-FOSSA 2 (2017-2019)

European Parliament 1M€

European Parliament 2,6M€

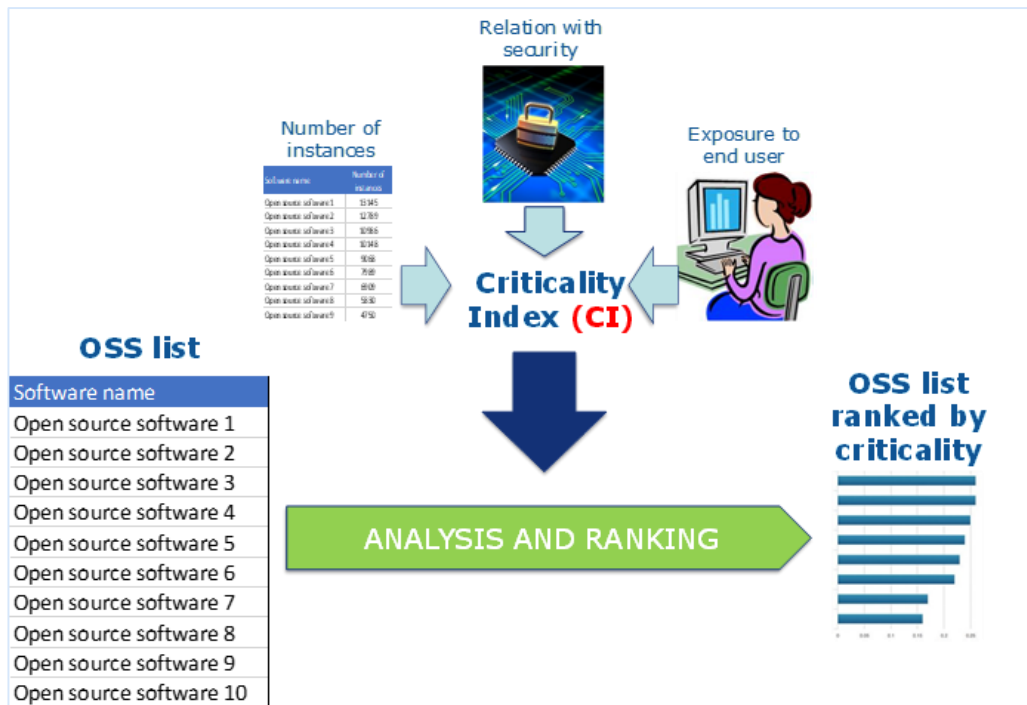Informatics

EU-FOSSA - the pilot project (2015-2016)

Approach

- Methodology
- Inventory of FOSS used at the EC
- Developer communities
- Public survey
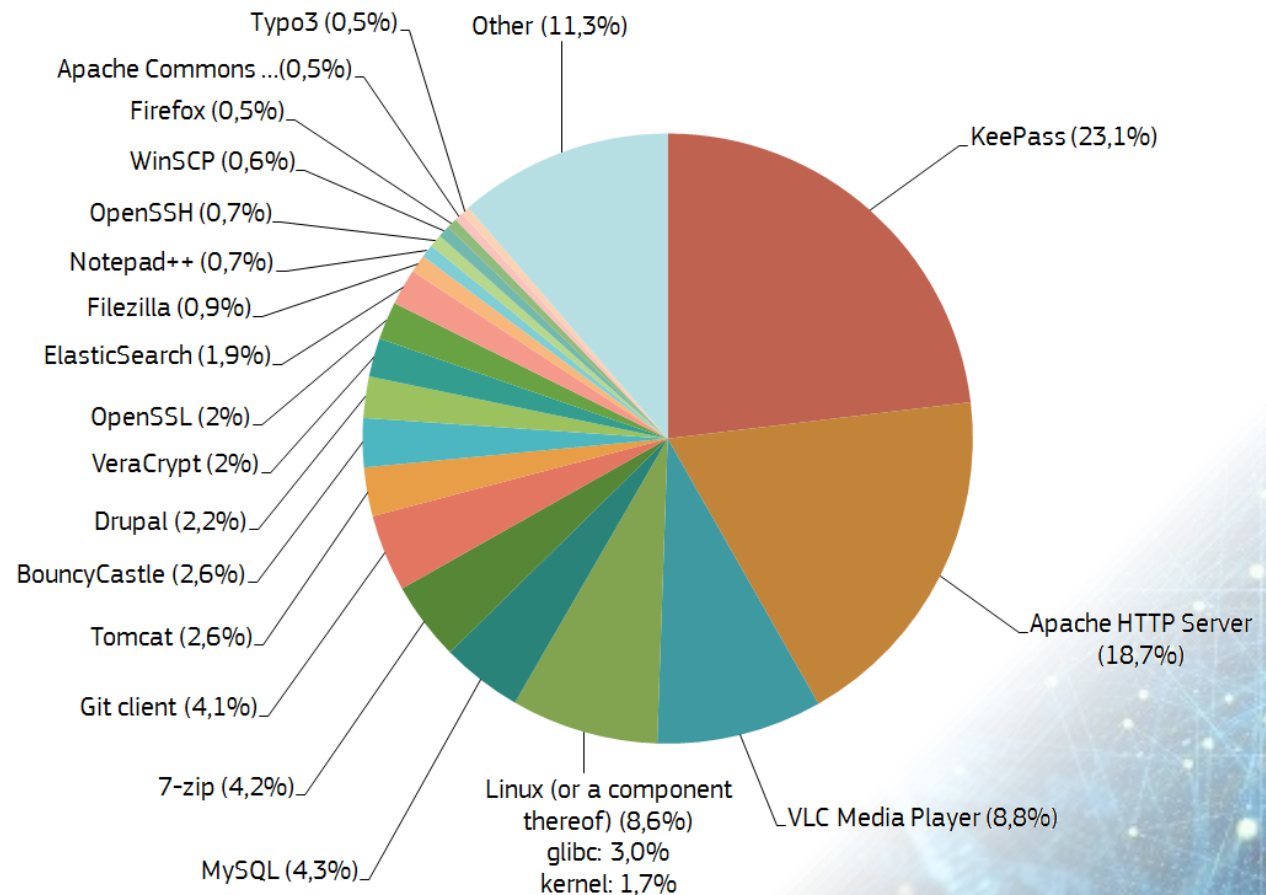- Formal code review

Lessons learned

- Methodology works
- What about fixing bugs?
- Improve cooperation with communities
- Positive reaction
- Code reviews useful (but...)

EU-FOSSA - OSS criticality ranking

EU-FOSSA - public survey

- June 2016

- 3282 participants

Typo3 (0,5%)
Apache Commons ...(0,5%)
Firefox (0,5%)
WinSCP (0,6%)
OpenSSH (0,7%)
Notepad++ (0,7%)
Filezilla (0,9%)
ElasticSearch (1,9%)
OpenSSL (2%)
VeraCrypt (2%)
Drupal (2,2%)
BouncyCastle (2,6%)
Tomcat (2,6%)
Git client (4,1%)
7-zip (4,2%)
MySQL (4,3%)
Linux (or a component thereof) (8,6%)
glibc: 3,0%
kernel: 1,7%
Other (11,3%)
KeePass (23,1%)
Apache HTTP Server (18,7%)
VLC Media Player (8,8%)

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EU-FOSSA 2 (2017-2019)

What is new?

- Increased scope

- Bug Bounties

- Hackathons

- Fixing already known bugs

- Closer cooperation with developer communities

- Improved communications programme

EU-FOSSA 2 - Bug Bounty programme

Proof of concept

- First time in EU institutions

- 28 active participants

- 6 weeks

- 6 bounties paid

Main programme

- ~20 activities

- Critical OSS used by EU institutions

- >1 M€ budget

- Including high rewards

EU-FOSSA 2 - cooperation with communities

Proof of concepts

- Hackathons

- Improving software

More communication

- Awareness about EU-FOSSA 2

- Awareness about the importance of software security
  in general

- Listening to you

EU-FOSSA 2 - the ultimate goal

- Improve security of open source software

- EU institutions working with
  open source software communities

- Make investment into the security of open source
  software a permanent action of the EU

Thank you

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