

Free and Open Source Software Auditing (FOSSA) Pilot Project

DISSEMINATION MATERIALS

Work Package 5 - EXECUTIVE SUMMARY

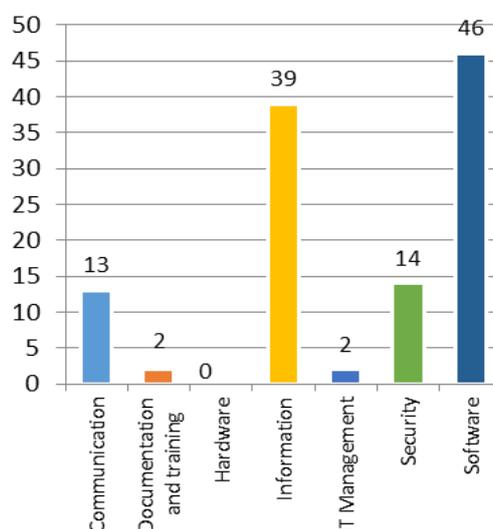
Work Package 5 (WP5) of the EU-FOSSA Pilot Project prepared a full inventory of Open Source standards in the European Commission and the European Parliament based on the methodology and the architecture developed earlier in the project¹.

The inventory scope covers the infrastructure managed by DIGIT, including Datacenter applications and Desktop applications.

A web application has been developed for maintaining the inventory of standards. It is integrated within the overall inventory architecture and is linked with the software inventory environment. The application manages the inventory taxonomy in a flexible way, allowing to add further attributes coming from future possible enrichments of the input data.

Inventoried standards have been classified into Areas and Sub-areas, in line with the inventory performed in 2011. Information on each standard was retrieved from the official sites of the standardization bodies or other available sources.

The inventory has identified 116 standards (vs. 104 inventoried in 2011), divided by the following areas:



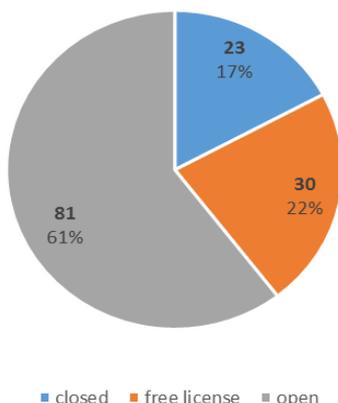
Some of the areas are not directly related to software (Documentation and training, Hardware, IT Management), so that they report no changes from 2011 to 2016. Some examples of standards in the other areas (in bold those not present in the 2011 inventory, in parenthesis their respective sub-areas) are:

Area	Examples of standards
Communication	S/MIME (E-mail), SFTP SSHFTP (Networking), NNTP (Newsgroup), RTSP (Streaming)
Information	AAC , MP3 (Audio), Unicode (Character sets), PDF (Complex documents), AVI, MIDI, MP4 (Container format), Atom , RSS (Content syndication), HTML (Hypertext documents), GIF, JPG (Raster graphics), CSV (Structured data), SVG (Vectorial graphics), H264 MPEG-4 (Video)
Security	RSA (Cryptography), AES (Encryption), TLS (Networking), ISO/IEC 27000:2009 (Policy)
Software	JCE (Cryptography), SQL (Database), Javamail (Email), SAML (Identity management), JCA, SOAP, WSDL (Interoperability), EJB, JSON (Languages), JMS (Messaging), BPML (Process), UML (Structured data)

¹ See deliverables (DLV) 1, 2 and 3 of WP3 ([link](#)).

In the Communication area almost all inventoried standards belong to the sub-area “Networking”, while in the Information area they mostly concern audio, complex documents, container formats, hypertext documents, raster graphics and structured data. In the Security area most standards are policies deriving from ISO/IEC norms, and in Software most standards belong to the sub-areas “Interoperability” and “Language”.

The major part (around 60%) of the standards applicable to the inventoried OSS are actually open standards. The remaining 40% is split between free license standards and closed standards (i.e. proprietary and not publicly and freely available).



The detailed analysis of the correspondence between software and standards, performed on the shortlist of critical software², has identified the following top standards by occurrences (where the number of occurrences is the number of shortlisted software items referring to a certain standard).

Standard name	Occurrences	Applied on
SSL v3/TLS	3	Filezilla, openssl, Winscp
SFTP SSHFTP	3	Filezilla, Putty, Winscp
JavaScript (ECMAScript)	3	Eclipse, Firefox, Netbeans
HTTP/S	2	Filezilla, VLC
HTML5	2	Firefox, Netbeans
IP	2	Filezilla, Putty
CSS	2	Netbeans, Firefox
FTP	2	Filezilla, Winscp
Atom	2	Firefox, VLC
RSS	2	Firefox, VLC

The inventory process is fully documented³ and can be repeated and applied to a wider scope in the European institutions.

² “As defined in the DLV 6 of WP4 of this project: “Inventory of standards in use at the European Institutions”, p. 9 ([link](#))

³ See WP5-01 on https://joinup.ec.europa.eu/community/eu-fossa/og_page/project-deliveries