



JOINING UP GOVERNMENTS

EUROPEAN
COMMISSION



ADMS.F/OSS Working Group

Motivation



Context

1

*A clear need for
sharing and reusing
free and open-source
software (F/OSS)*



The Digital Agenda for Europe and the EIF

interoperability

better administrative coordination

reuse

“Need for a better administrative coordination between public administrations and applications that are interoperable and based on open standards and open platforms”

share

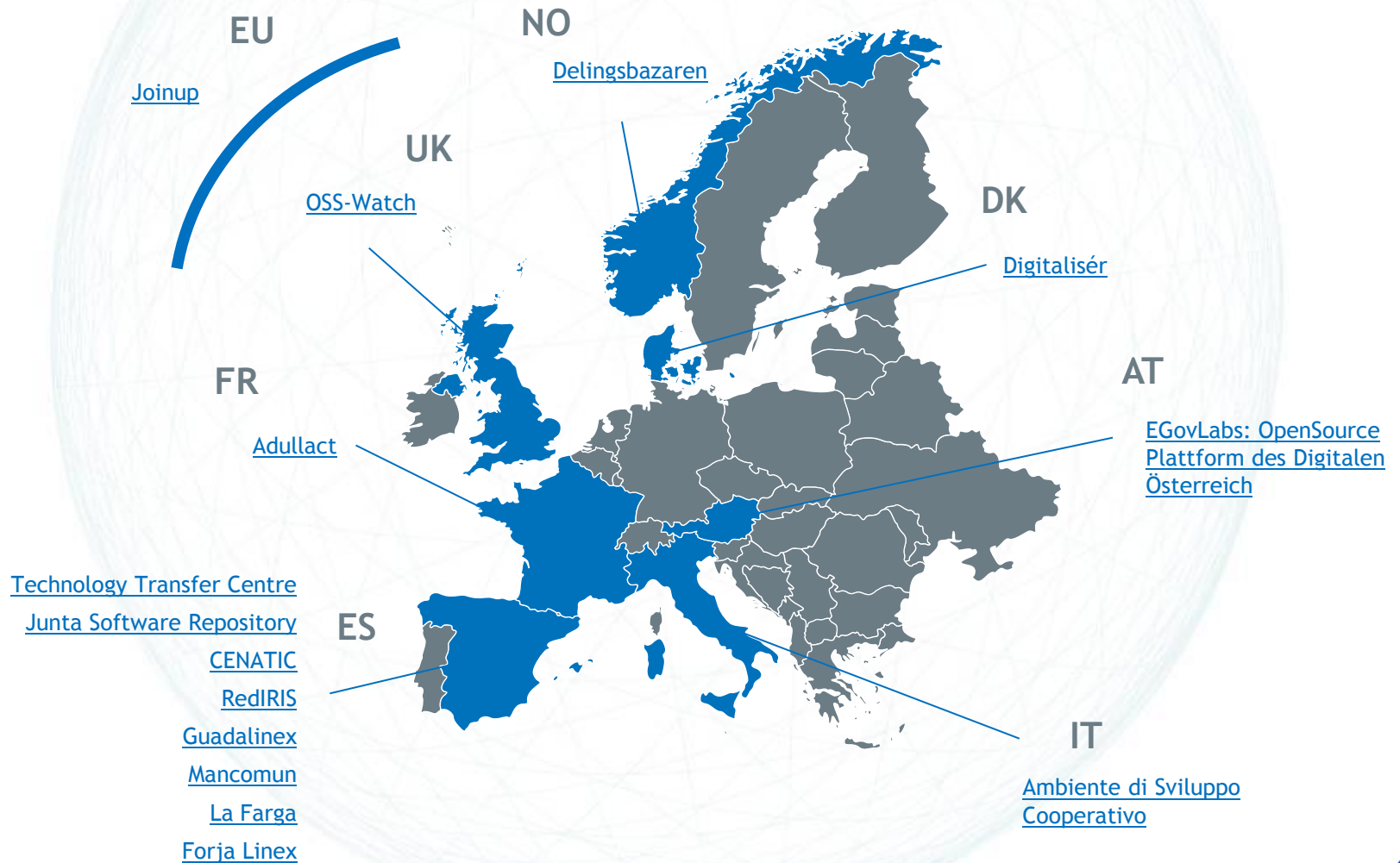
Open platforms

open standards

➤ *The European Interoperability Framework (EIF) recommends public administrations to “reuse and share solutions and to cooperate on the development of joint solutions when implementing European public services. In this context, the EIF encourages applying the principle of openness when jointly developing custom-made software systems.*



Software catalogues in the EU public sector





Software catalogues in the EU public sector



15 *software forges and repositories have been constructed in 7 countries to encourage the sharing and reuse of F/OSS for e-Government system development*

[RedIRIS](#)
[Guadalinux](#)
[Mancomun](#)
[La Farga](#)
[Forja Linex](#)

IT
[Ambiente di Sviluppo Cooperativo](#)



General-purpose software catalogues

A world map is centered on the slide, overlaid on a faint globe grid. Four colored rectangular boxes are placed over different regions of the map, each containing the name of a software catalogue. The boxes are: a dark blue box over North America labeled 'Google Code', a light blue box over Europe labeled 'Apache', a dark blue box over South America labeled 'SourceForge', and a purple box over Asia labeled 'GitHub'.

Google Code

Apache

GitHub

SourceForge




Stakeholder needs

ISA Programme

Encourage the sharing and reuse of interoperability solutions for public administrations across border an sectors.

Public administrations

Increasing need for cross-border and cross-sector digital interactions with external parties

A blue silhouette of a world map is centered on the slide. Four grey arrows point from the corners of the map towards a central dark blue text box. The text box contains the following text:

The sharing and reuse of F/OSS for e-government across borders and sectors corresponds to an actual and increasing need of important stakeholders

F/OSS projects

Attract public administrations to reuse their software and want to build a community of contributors.
Equal visibility, independent of the hosting location.

Governments

Encourage the sharing and reuse of F/OSS for e-Government.



Problem 2

How to overcome information barriers to the sharing and reuse of e-Government F/OSS?



Information barriers to the sharing and reuse of F/OSS

Language barrier

Lack of quality assurance

Lack of information on standards and specifications implemented by an F/OSS

Lack of visibility

Lack of confidence in F/OSS solutions

Features are not well documented

Limited view of public administrations usage of existing F/OSS solutions



Problems with the federated forges on Joinup

joinup



Open-Source Software
Find, reuse and develop Open-Source Software

The current “federation” of software project descriptions on Joinup does not overcome all information barriers to the sharing and reuse of F/OSS.

It only federates 3 elements: name, description and URL

Dependent on a technology that is specific to GForge 4 and FusionForge. Software description metadata from other infrastructures cannot be automatically retrieved



Solution 3

1. An XML and RDF vocabulary to describe software assets
2. An enhanced, federated catalogue of F/OSS for e-Government



Opportunities

“Semantic Web” and “Linked Data”

Initiatives such as the “Semantic Web” and “Linked Data” are making it possible to integrate information from disparate information sources

DOAP specification

Several software catalogues provide or harvest software descriptions via the DOAP specification.

DOAP has become a de-facto standard to describe software projects on the Web.

Machine-readable format

Publication of software description metadata on the Web in an open, machine-readable format further enhances its visibility and reuse

ADMS

ADMS entails a opportunity for the ISA programme to relate (semantic) interoperability assets, to the sharing and reuse of, and free and open software for e-Government system development.

Metadata harmonization

Several initiatives to harmonize metadata about software assets in the open-source community.



an XML and RDF vocabulary to describe software assets

Metadata category	Metadata property or relationship	Available in DOAP	Description	Explore	Find	Identify	Select	Obtain
descriptive metadata	title	name	the title of the software in multiple languages		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
	description	description, shortdesc	descriptive text in multiple languages		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	identifier		identifier for the software		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
	URI	location	uniform resource identifier		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
	version	version	version of the software release		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
	related software		related software		<input type="checkbox"/>			
	is replaced by		a newer version of the software		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
	release	file-release	a release of the software					<input type="checkbox"/>
applicability	domain		the domain of the software (e.g. using EuroVoc descriptors)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
	spatial coverage		geographic region in which the software can be used	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
	multilingual		whether or not the software can be configured to have a multilingual user interface				<input type="checkbox"/>	

The solution is twofold. On the hand, there is the enhanced software description metadata schema (ADMS.F/OSS)



Building an enhanced, federated catalogue of F/OSS for e-Government

With common metadata schema



EXPLORE
FIND
IDENTIFY
SELECT
OBTAIN



Software repository



Software forge



On the other hand, there is the enhanced federation of the different national software catalogues, repositories, and forges which enhances the sharing and reuse of F/OSS solutions.

the catalogue



Advantages

overcome information barriers

help overcome the information barriers related to the sharing and reuse of interoperability solutions among public administrations

Better search

Allows searching for software from a single point of access

A common specification to describe software assets on the Web will give better visibility, better search, help overcome information barriers and provide a better linking

Better visibility


Increased and equal visibility, independent of the hosting location.

Better linking

Build and explore semantic networks of people, free and open software, and open standards



Example 1: Simal - The software catalogue of OSS Watch



Simal Project and Community Registry Framework

Simal Person Browser Category Browser Project Browser DOAP Form Reports Tools Add Project

Project List

Name:

Showing 1 to 7 of 1915 << < 1 2 3 4 5 6 7 8 9 10 > >>

Name	Description
14-19 prospectus pilot in the East Midlands	The project will aggregate 14-19 Area Prospectus course advertising information from at least four different areas into Aim Higher East Midlands' Progression Pathways database, as part of a wider pro
157 Group	An examination of cloud computing opportunities through action research in 157 Group colleges.
18th Century parliamentary papers	The 18th century printed British parliamentary papers proposal originated from the community consultation carried out in early 2003. The aim of the project is to digitise up to 900,000 pages 18th century House of Commons and House of Lords reports and bills. creating a

People List

Name:

Showing 1 to 7 of 1399 << < 1 2 3 4 5 6 7 8 9 10 > >>

Name	Email	Project
Aaron Burrell	Aaron.burrell [at] create...suffolk...ac...uk	The East of England's Educational Resource Network
Adam Mannis	a.mannis [at] liverpool...ac...uk	Supporting Personalised and Collaborative E-learning in Foundation Degrees
Adam Rusbridge	A.Rusbridge [at] hatii...arts...gla...ac...uk	UK LOCKSS Pilot Programme
Adele Edgar	adele.edgar [at] gmsa...ac...uk	Supporting Ongoing Learning in Vocational Settings
		ASPIS Architecture



Example 2: The Software Catalogue of the Apache Software Foundation



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Feeds

DOAP Files

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Documentation

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- [Standards](#)

References & Thanks

Apache Batik



Batik is a Java-based toolkit for applications or applets to use images in the Scalable Vector Graphics (SVG) format for various purposes, such as display, generation and manipulation.

Programming Languages

[SVG](#)

Categories

[xml](#), [graphics](#)

Mailing Lists

<http://xmlgraphics.apache.org/batik/mailling-list.html>

Bug/Issue Tracker

http://issues.apache.org/bugzilla/buglist.cgi?query_format=specific&order=relevance+desc&bug_status=_open_&product=Batik&content=

License

[Apache License Version 2.0](#)

Project Website

<http://xmlgraphics.apache.org/batik/>

PMC

[Apache XML Graphics](#)

Project Release Information

Releases can be downloaded from <http://xmlgraphics.apache.org/download.cgi>

Most recent releases:

Release	Version	Date
Batik 1.6	1.6	2005-04-11
Batik 1.7beta1	1.7beta1	2007-03-29
Batik 1.7	1.7	2008-01-09

Access to the source code:

Browse <http://svn.apache.org/viewcvs.cgi/xmlgraphics/batik/>

SVN Direct <http://svn.apache.org/repos/asf/xmlgraphics/batik/trunk>



Part of a bigger solution

The maintenance of a software catalogue for e-Government system development is not an isolated measure. Policy makers and public administrations need to continue to invest in a combination of measures:

1. The provision of legal advice related to the sharing and reuse of F/OSS;
2. The creation of procurement policies, regulations, guidelines, and processes to support the procurement of F/OSS;
3. The construction and maintenance of a catalogue of open-standards and a software catalogue for e-Government system development;
4. Guidance with the effective support of a community of developers and users.



Annex 4



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Get involved: Join ISA Initiatives on Joinup

ADMS ASSET DESCRIPTION METADATA SCHEMA	CESAR COMMUNITY OF EUROPEAN SEMANTIC ASSETS REPOSITORIES	eGOVERNMENT CORE VOCABULARIES	CORE PERSON VOCABULARY	CORE BUSINESS VOCABULARY	CORE LOCATION VOCABULARY	ADMS F/OSS
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