

# OSSR ESA Open Source Software Repository

October 2014

Jakob Livschitz (TEC-SWG) Robert Blommestijn (TEC-SWG)

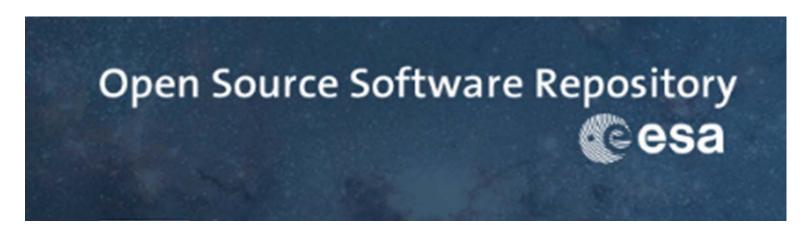
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## Outline



#### OSSR:

- Objectives
- Scope
- Overview
- Access
- Process
- Status/Way forward





[ESAIPC(2009)88] Establish an Open Source Software **Repository** (OSSR), to **promote reuse** of (open source) software and provide all parties involved in European Space software development (in particular SMEs) **access to results** of previous investments

Objective of implementing a web portal, hosting the OSSR:

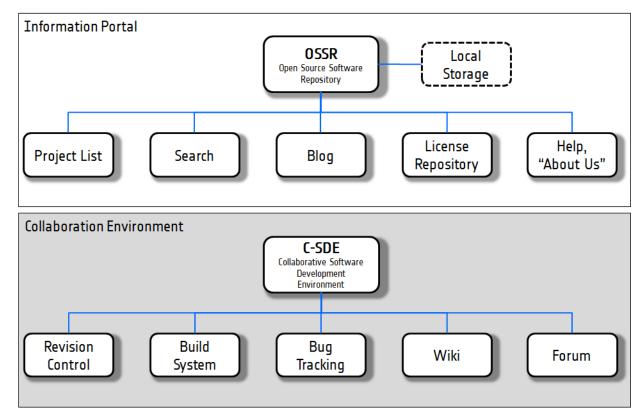
- Guide European Space Industry in identifying available OSS
- Allow Industry to make their OSS products and associated services known to the space community and beyond
- Help European industry in joining ongoing OSS collective development projects;
- Provide visibility on licensing schemes and legal aspects on European products
- Support building up of collaborative OSS initiatives



#### Information Portal: OSSR (Open Source Software Repository)

versus

**Collaboration:** C-SDE (Collaborative Software Development Environment)



## **OSSR Overview – Web portal**



	ABOUT US   DEMO ESA
Open Source Software Repository	Project Vhat are you looking for ?
HOME ABOUT US TEST-TEST BLOG CONTACT	
LATEST PROJECTS	
→ NEW PORJECT 234 a,agteufaf READ MORE →	<ul> <li>Updated on: 10/24/2014</li> <li>Created on: 10/24/2014</li> <li>License: Apache License, Version 2.0</li> <li>Project tags: tAgs</li> </ul>
→ ZXC zxc project, beware READ MORE →	<ul> <li>Updated on: 09/04/2014</li> <li>Created on: 09/04/2014</li> <li>License: License TEST Mutthik totality az</li> <li>Project tags: asd project tag</li> </ul>
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Image: Book of the second s	Open Source Software Repository

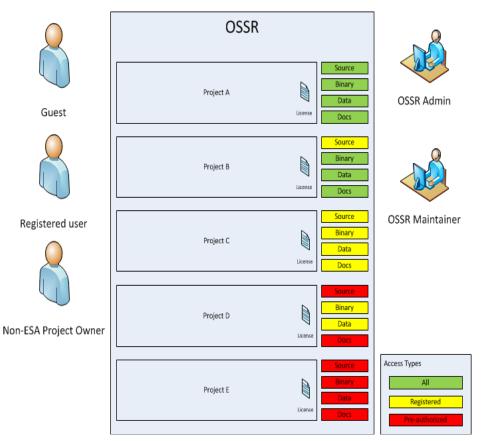
# **OSSR Overview - Users**

## Front-end:

- Users: Guest and Registered (different access types)
- ESA Project Owners
- Non-ESA Project Owners

#### Back-end:

- Administrator
- Maintainer





### **OSSR Overview - Front-end**



Informational repository containing

Search

- List of projects
- Search functions, tags
- Blog

Project List

- License repository
- Help, "about us" etc.

ontaining:	Open Source Software Repository	ABOUT US		
	→ FLYSAFE HELPS START-UP TO NEW HEIGHTS  Over the past four years, small Dutch company Robin Radar has been building a business out of FlySafe, ESA's project for preventing bird strikes on aircra  READ MORE	Updated on: 09/11/2014 Created on: 09/16/2014 Version Control System: mercurial Uccense: Apache Uccense, Version 2.0 Project tags FLYSAFE Tags		
	PROJECT TEST ORBIT MARE ZODIAC TERMINATOR ASTRONOMER NORTH STAR YELLOW DWARF INNER PLANETS DWARF PLANET GRAVITATION heading: heading: heading: headings heading6 Coffee Tea Black tea Green tea Milk Bolditalic Paragraph     READ MORE	<ul> <li>Updated on: 09/07/2014</li> <li>Created on: 09/07/2014</li> <li>Locnse: Locnse TST Constellation earth</li> <li>Department: His/R2jaé</li> <li>Project tags: parallax local arm north star conjunction</li> </ul>		
<b>OSSR Front-en</b> (Informationa				
Blog	License Repository	Help, "About Us"		

## **OSSR Overview– Project List**

**Project List**: main element of the OSSR portal. Every project listed on the OSSR will contain:

- Name, Description and Read More link
- Creation and modification date
- Version Control System
- License information
- Owner
- Links homepage and download (code, binary, ...)
- Project tags

#### → OPENSPIFE

The Scheduling and Planning Interface for Exploration (SPIFe) is an integrated planning and scheduling toolkit based on hundreds of hours of expert observation,...





- Created on: 07/28/2014
- Version Control System: mercurial
- License: Apache License, Version 2.0
- a Owner: ESA
- Links: Homepage Download
- Project tags: analysis data collection data processing data quality gsfc materials engineering matlab msfc ontology orbit planning remote sensing scheduling toolkit web services



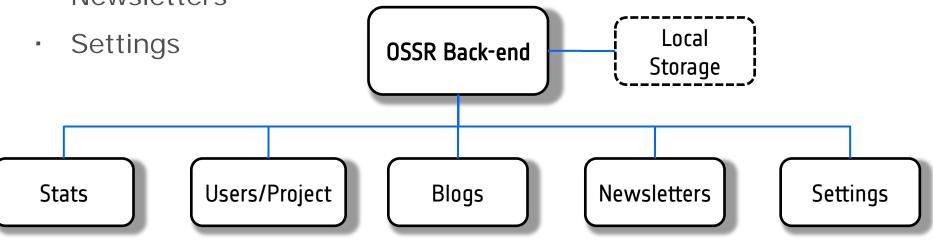
#### **OSSR Overview - Back-end**



Backend contains number of functions:

- Statistics on user/projects/
- Users data
- Projects data
- CMS (Content Management System)
- Blogs maintenance
- Newsletters

ROJECTS I	PENDING				
тн	ERE ARE 31 PENDING PROJECT	5			
SERS PEN					
	ERE ARE 28 PENDING USERS		THERE ARE 1336 UNC	INFIRMED USERS	



#### **OSSR** Access



#### **Owner**: a project belongs either to

- ESA (most cases)
- Different entity, represented by registered/authorised named user

License: a project has one or more licenses assigned to it

• ESA Licensing Board responsible for creation and maintenance of the licenses

Access type: License defines default project access level

- Guest access: request registration, download permitted for public data only
- Registered access: registration process, download permitted after log-in
- Authorised access: authorisation process per project/information, download permitted after prior authorization

#### Data access links:

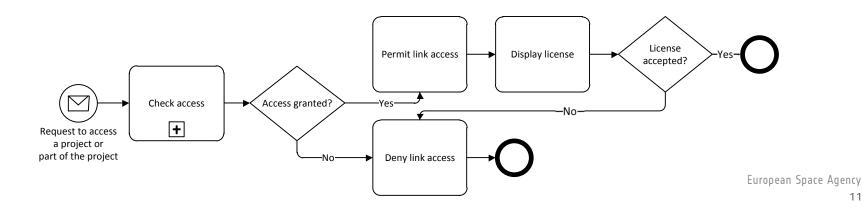
 Links to different project-related files (source code, data, binary, etc.) may have a <u>different</u> access level (by default – the same as the project itself).

#### **OSSR Process**



OSSR (Business) Process model requiring manual intervention:

- Registration of a new named user
- Checking access
- Setting-up a new project
- Setting up license for a new external project
- Approval of external project updates
- Approval of blog posts
- Processing (link) access request





Different phases:

- Phase 1: <u>Definition</u> : completed
  - Task1: State of State of the art" analysis and demonstration
  - Task 2: User, legal and Security Requirements and workshop
  - Task 3: System definition and proof-of-concept prototype
- Phase 2: <u>Implementation</u>: **completed**
  - Preliminary acceptance completed (1035 tests passed)
- Phase 3: Operations & maintenance: in progress
  - Security checks (threads & vulnerability analysis)
  - Pilot projects
  - Go live !! End of 2014





## Thank you for attention

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