# **QSOS**

Qualification and Selection of Software Open Source

Felipe Ortega, Daniel Izquierdo, Pedro Coca

pcoca@libresoft.es GSyC/Libresoft

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### What is QSOS?

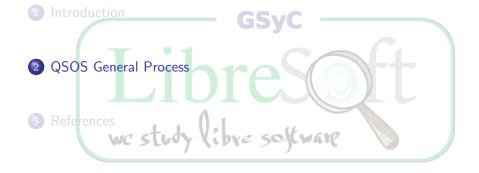
- QSOS Manifesto
  - Analyse needs and limitations in software adoption.
  - Evaluate functional and technical requirements.
  - Formalise a methodology.
  - Results reuse.
  - Provide a free method.
- Raphaël Semeteys at Atos Origin release in 2004 the first official QSOS version: 1.3.
- Afert Re-licensing, aditions and translations last released was done in 2006. QSOS 1.6.
- GNU Free Documentation License



# Target Audience of QSOS

Standard Software Quality Methodologies audience.
+ FLOSS Communities / Actors.

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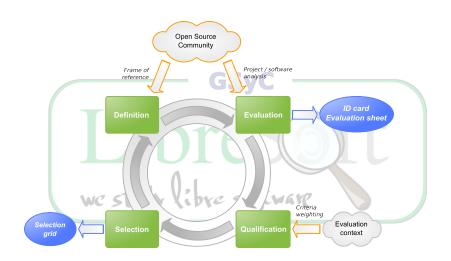
## **QSOS** Process overview

- Four independents steps
  - Definition.
  - Evaluation.
  - Qualification.
  - Selection.
- Iterative process
- Tools provided
  - O3S: Open Source Selection Software.



**GSyC** 

# **QSOS** Process overview



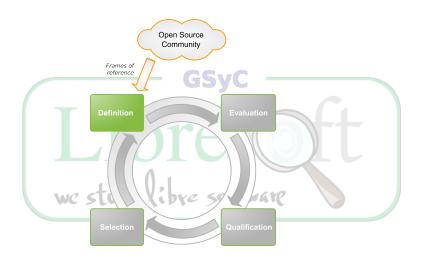
## **QSOS** Process: Definition

- Initial stage of the process.
- Define Frame of references.
  - Software Families.
  - Types of licenses.
    - Ownership.
    - Virality.
    - Inheritance.
  - Types of communities.
    - Insulated developer.
    - Group of developers.
    - Organization of developers.
    - Legal entity.
    - Commercial entity.



**GSVC** 

# **QSOS** Process: Definition



## **QSOS** Process: Evaluation

- Based on the Community information.
- Collected the relevant information.
- Targets:
  - Identity Card (Not directly scored!)

we study libre software

Evaluation Sheet



### **QSOS** Process: Evaluation

- Identity Card.
  - General Information
  - Existing Services
  - Functional and technical aspects
  - Synthesis
- Evaluation Sheet.
  - Functional Coverage
  - Risks (User's perspective)
  - Risks (Service provider's perspective)



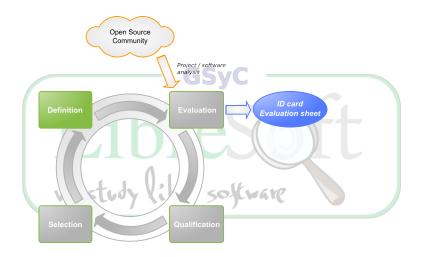
**GSyC** 

# **QSOS Process: Evaluation Sheet**

- Scoring
  - Criteria: [0-2]
- Functional Coverage
  - Not Covered(0)/Partially Covered(1)/Completely Covered(2)
- Risks (User's perspective)
  - Intrinsic durability (Maturity, Adoption, etc)
  - Industrialised solution (Services, Documentation, etc)
  - Integration (Packaging, etc)
  - Technical adaptability (Modularity, code modification, etc)
  - Strategy (License, Copyright, Independence, etc)
- Risks (Service provider's perspective)
  - Services providing (Maintenability, Code expertise, etc)



### **QSOS** Process: Evaluation



# **QSOS** Process: Qualification

- Define filters.
  - Take into account needs and limitations
  - Specific context!
- Filter on ID card.
- Filter on Functional grid.
  - Required functionality
  - Optional functionality
  - Not required functionality



# QSOS Process: Qualification



# **QSOS** Process: Selection

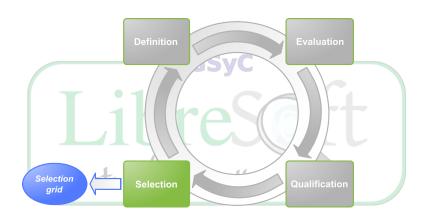
Identify software meeting the needs/requirements

we study libre software

- Compare sofware, targeting selection.
- Selection modes.
  - Strict selection
  - loose selection



# **QSOS** Process overview



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#### References

- QSOS Website. http://www.qsos.org.
- O3S Tool http://www.qsos.org/o3s/
- QSOS Community Web Site https://savannah.nongnu.org/projects/qsos/

