**Research software services**

**FG-SOL : access & preservation for research software**

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**Résumé**

- collaborative design: CNRS, EGI.eu, IASA, University of Edinburgh
- user-driven design approach
- considering research software producer needs
- structure: sound, flexible, scalable, easily adaptable

**SOL2020**  
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**Access**

- based in two existing components: EGI AppDB, PLUME
- metadata, software description, with links to publications and data
- produces: catalogue, search interface

**Preservation**

- first level of preservation
- to recover a fixed copy of RS
- based in EUDAT data services: B2SHARE, B2SAFE
- produces: RS retrieval interface

**Testing & Computing**

- user interface for RS test and re-use
- access to source code
- based in EGI computing services
- produces: RS user interfaces

**Consulting**

- Software Sustainability Institute (SSI), PLUME
- goal: improve research software dissemination
- produces: documentation, support, training

**FG-SOL**  
work in progress

**Aims**

- to implement SOL2020 research software services
- following a pragmatic roadmap
- to be opened soon in France Grilles
- goal1: provide services in France
- goal2: to be extended to European level in collaboration with our SOL2020 partners, and to link with existing e-infrastructures

**Technical Architecture**

- based on FG existing services and resources
- portal with its own VIP instance
- use of FG-DIRAC instance to execute jobs
- execution on the IPHC Cloud Computing resources
- data storage using FG-iRODS

**France Grilles**

- French National Grid Initiative
- represents France within EGI
- distributed computing infrastructures for data storage and analysis

**VIP architecture adopted by FG-SOL**

**Vision:** to create the necessary environment where research software can be discovered, studied and re-used by other researchers in order to validate and reproduce published results, which will produce new knowledge.

**Keywords:** infrastructures, open science, research software, reproducibility, accessibility, free/open access.