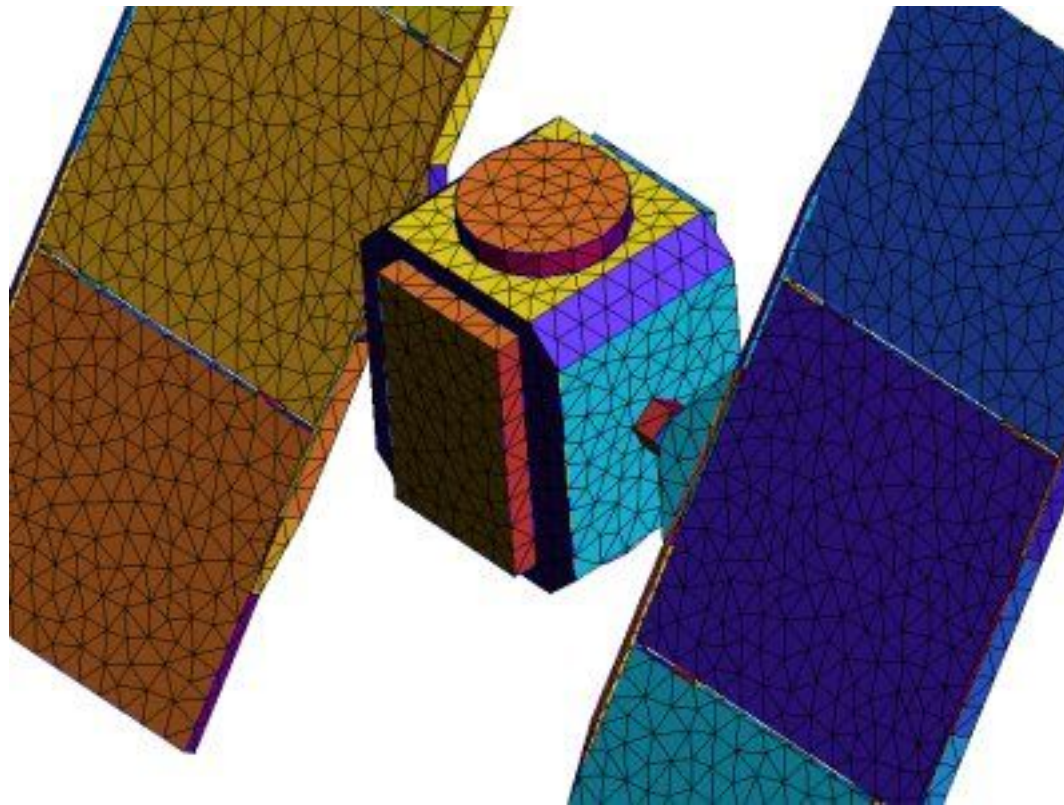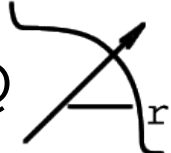# Hosting Spine on LibreSource

Spacecraft Plasma Interactions Network in Europe

Sébastien Jourdain

jourdain@ Artenum.com

The Spine community needs tools

- ✓ To cooperate, communicate and share their data
- ✓ To track their softwares bugs and versions
- ✓ To be aware of what's going on ?
- ✓ To be aware of who is doing what ?

The new Spine hosting on *LibreSource*

- ✓ Provide a virtual common collaborative space
- ✓ Dynamic, safe, flexible and simple to use

The new Spine hosting system

Spine is hosted on LibreSource
- ✔ The old Spine site has been transferred to
  - ✔ http://195.101.59.123/projects/spine/home
- ✔ The development process can be followed on-line
- ✔ The community can share their data
- ✔ The community can communicate

The LibreSource cooperative platform

LibreSource
- Open source project (www.libresource.org)
- Developed by a consortium (**Artenum-INRIA**)
- Co-founded in the frame of the **RNTL** network
- 100% Java (Based on J2EE server)

Services
- Simple and powerful versionning system (So6)
- Simple data sharing system
    - Upload / Download files with security restriction
- Advanced communication tools
- Full text indexation (forum, wiki, files...)
- Flexible interface to manage the **community**

The Spine web site objectif

Objective of moving to LibreSource
- ✓ Simplify the code access
- ✓ Simplify the documentation sharing
    - ✓ CAD files, results, rapports, documentation...
- ✓ Provide public and private sharing working area

The Spine development objectives

Development team
- The core team (reference version)
  - ***ONERA, Artenum, ESA***
- The community (contributions)
  - ***You!***

Developments
- The goal of LibreSource is to provide to the Spine community the opportunity to maintain and support its various work.

The Spine web site

http://195.101.59.123/projects/spine/home

Organization

Working group (1,2,3...)

http://195.101.59.123/projects/spine/home/community/workingGroups/WG1/

Forum   Download   ...

...   .
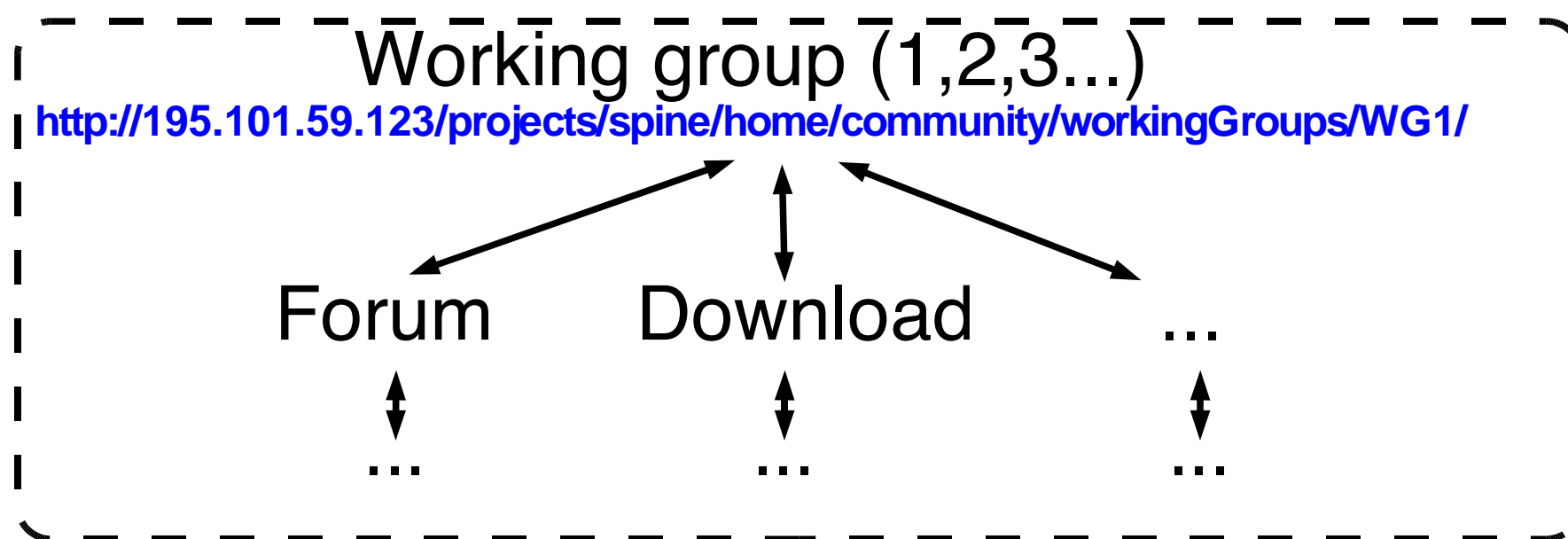
Management

✓ Specific role for management and security

http://195.101.59.123/projects/spine/spis

Platform Home | Search | My Page | Sebastien Jourdain - Logout

location : **Platform Home > SPINE > SPINE Homepage > Spis home page**

SPINE

SPINE Home

SPIS

SPIS Home
Documentation
News and events
Software
Workshops

Members

Spis observers
Spis developers
Core team
Spis managers

Spis home page

ls://ganesh.artenum.com/projects/spine/home/spis

SPIS stands for Spacecraft Plasma Interaction System.

SPIS project aims at developing a software toolkit for spacecraft-plasma interactions modelling. It was started in December 2002. The ESA contractors, ONERA, Artenum and University Paris 7, have three major responsibilities:

- build the architecture of the Spacecraft-Plasma Interaction Software to be developed
- implement some of the physical routines of the code
- organise and coordinate with SPINE community

The SPINE community will:

- guide the software development through requirements and testing via the Software Development Advisory Board,
- participate to the software development and testing with in-house implementations

News and Events

- **December 2004: new SPIS release (v3.1)** before 8th SPINE Meeting.
- June 2004: extended SPIS release before 7th SPINE Meeting.
- April 2004: full SPIS release (including solvers) after 6th SPINE Meeting.
- 14-17 March 2004: 6th SPINE Meeting - course on SPIS software
- January 2004: Release of full SPIS User Interface and framework (post-processing included)
- 16-17 September 2003: SPIS User Interface pre-release at 5th SPINE Meeting.

Artenum
.com

(**Spis home**)   Documentation   News and events   Software   Workshop

http://195.101.59.123/projects/spine/home/spis/

SPIS stands for Spacecraft Plasma Interaction System.

SPIS project aims at developing a software toolkit for spacecraft-plasma interactions modelling. It was started in December 2002. The ESA contractors, ONERA, Artenum and University Paris 7, have three major responsibilities:

- build the architecture of the Spacecraft-Plasma Interaction Software to be developed
- implement some of the physical routines of the code
- organise and coordinate with SPINE community

The SPINE community will:

- guide the software development through requirements and testing via the Software Development Advisory Board,
- participate to the software development and testing with in-house implementations

News and Events

- **December 2004: new SPIS release (v3.1)** before 8th SPINE Meeting.
- June 2004: extended SPIS release before 7th SPINE Meeting.
- April 2004: full SPIS release (including solvers) after 6th SPINE Meeting.
- 14-17 March 2004: 6th SPINE Meeting - course on SPIS software
- January 2004: Release of full SPIS User Interface and framework (post-processing included)
- 16-17 September 2003: SPIS User Interface pre-release at 5th SPINE Meeting.

Artenum
.com

The Spis sub-project

Spis home   **(Documentation)**   News and events   Software   Workshop

http://195.101.59.123/projects/spine/home/spis/documentation/

FAQ

- What is SPIS?
- What is the perimeter of the physics to be modelled ?

Manual

- Quick start
- Advance used

Technical documents

- SPIS_URD.pdf

Software API

- SpisNum - Private
- SpisUI

Artenum
.com

Spis home   Documentation   **News and events**   Software   Workshop

Upcoming events related to SPIS:

- **December 2004: new SPIS release (v3.1)** before 8th SPINE Meeting.

Past events:

- June 2004: extended SPIS release before 7th SPINE Meeting.
- March 2004: full SPIS release (including solvers) before 6th SPINE Meeting.
- November 2003: Release of SPIS User Interface and framework (post-processing included)
- Early October 2003: Release of the first part of SPIS User Interface and framework (pre-processing and some extra framework capabilities)
- 16-17 September 2003: SPIS User Interface pre-release at 5th SPINE Meeting.
- 11 June 2003: SPIS PDR and SRD discussion (SDAB)
- 25-26 February 2003: Presentation of the SPIS Project, and URD discussion, at the 4th Spine Meeting, ESTEC.
- 9 December 2002: SPIS Project start

SPIS long term development programme: (chronological order)

- 9 December 2002: SPIS Project start
- 25-26 February 2003: Presentation of the SPIS Project, and URD discussion, at the 4th Spine Meeting.
- 11 June 2003: PDR with SRD and top level design
- 16-17 September 2003: SPIS User Interface release during 5th SPINE Meeting
- Early October 2003: Release of the first part of SPIS User Interface and framework (pre-processing and some extra framework capabilities)
- November 2003: Release of full SPIS User Interface and framework (post-processing included)
- March 2004: full SPIS release (including solvers) before 6th SPINE Meeting.
- June 2004: SPIS v2.0 release, including planned upgrades (7th SPINE Meeting)
- September 2004: SPIS v3.0 release following WG1 and community work and requests (8th SPINE Meeting)
- December 2004: SPIS v4.0 release following WG2 and community work and requests (9th SPINE Meeting)
- March 2005: SPIS v5.0 release following WG3 and community work and requests (10th SPINE Meeting)
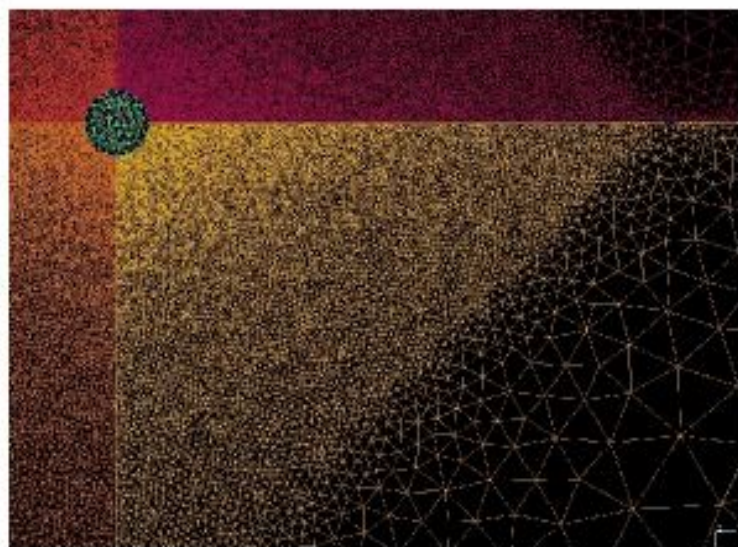- June 2005: SPIS final presentation

Artenum
.com

The Spis sub-project

Spis home   Documentation   News and events   (**Software**)   Workshop

http://195.101.59.123/projects/spine/home/spis/software/

Download area
- Official releases

Bugs tracker
- SPIS bugs tracker

Workshops
- Core team workshop
- Community workshop

Download area *(users)*
- ✓ Binary packages

Official bugs tracker
- ✓ For Spis
- ✓ For ...

Development Area *(developers)*
- ✓ Contractors
  - ✓ ONERA, Artenum, ESA
- ✓ You

Sébastien Jourdain   13-18

Artenum
.com

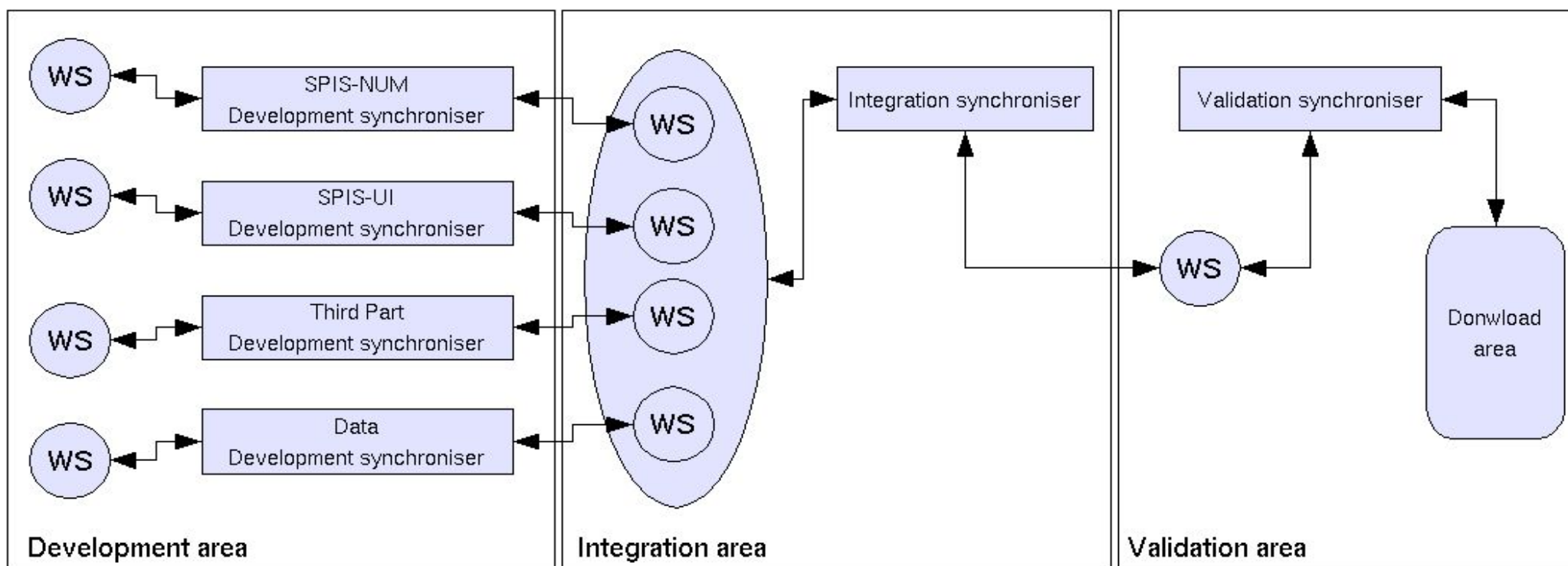Spis home　　　Documentation　　　News and events　　　Software　　　**Workshop**

(**Core team workshop**)　　　Community workshop

Improvement of the process quality control

The Spis community development

Spis home   Documentation   News and events   Software   **Workshop**

Core team workshop   **Community workshop**

Installation and settings of the synchronisers and the development workshop

The developement workshop has been divided into four sub-projects:

- SPIS-NUM: dedicated to the developement of the SPIS-NUM components.
- SPIS-UI: dedicated to the developement of the SPIS-UI components.
- Third Part: set of extenal librairies (VTK, JVMs....)
- Data: set of input files

Tree structure

Before to synchronise, you MUST reduild locally the following file system structure in order to have a complete and self-consistent archive of SPIS.

```
"SPIS-ROOT"
   |- SpisUI
   |- SpisNum
   |- ThirPart
   |- Doc
   |- Data
```

Local workspace creation

For the details regarding the creation a locate work space, please see the **How to install Java Web Start** and **How to create a local workspace** pages. Please pay attention too the fact that data under this directory will be shared by all users of the current syncrhoniser after synchronisation.

Each synchroniser should be attached to the corresponding directory.

Additionnal files

You must add the following files into the SPIS-ROOT directory:

- ___init___.py, empty file.

Synchronisers

- SpisNum
- SpisUI
- Data
- Documentation

Comments: The first synchronisation may be long.

Need registration !!!

Contact: *SpineManager@artenum.com*

Sébastien Jourdain   15-18

The Spis development process

Spis is splited in 5 components

- SpisNum
  - The numerical kernel
- SpisUI
  - The modeling framework
- Doc
  - The documentation of Spis
- Data
  - Some examples
- ThirdPart
  - External library (vtk, jython...)

The Spis development process

Sébastien Jourdain

Conclusion
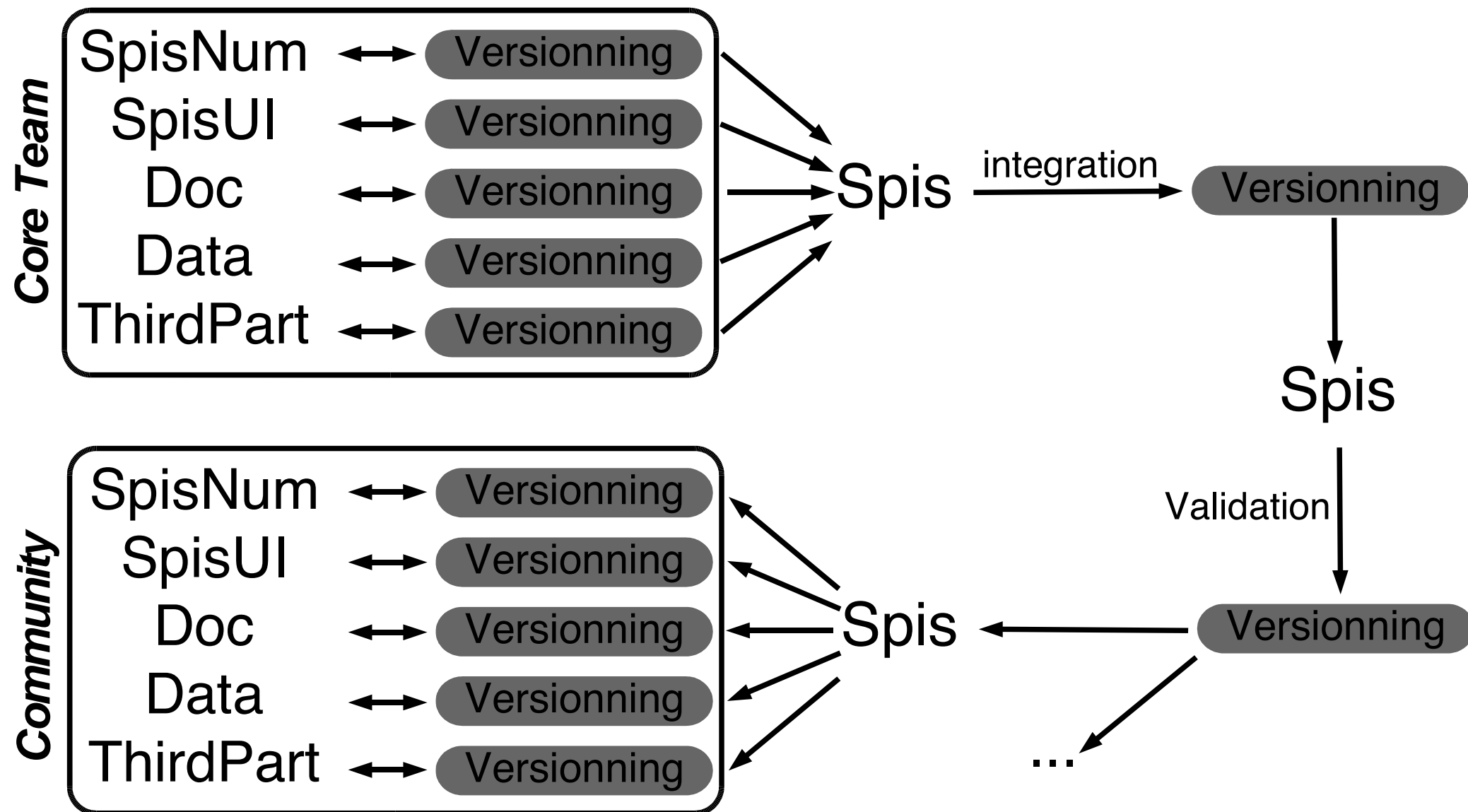
LibreSource is a collaborative platform
- to share your work (versionning system)
- to share your data (upload, download, search...)
- to communicate (forum, news)
- to help to organize meetings (next Spine meetings)

Offer an advanced versionning system to Spis
- To track their softwares bugs and versions
- To be aware of what's going on ?
- To be aware of who is doing what ?

Allow
- private/public working areas
- various groups of users

Sébastien Jourdain   18-18