

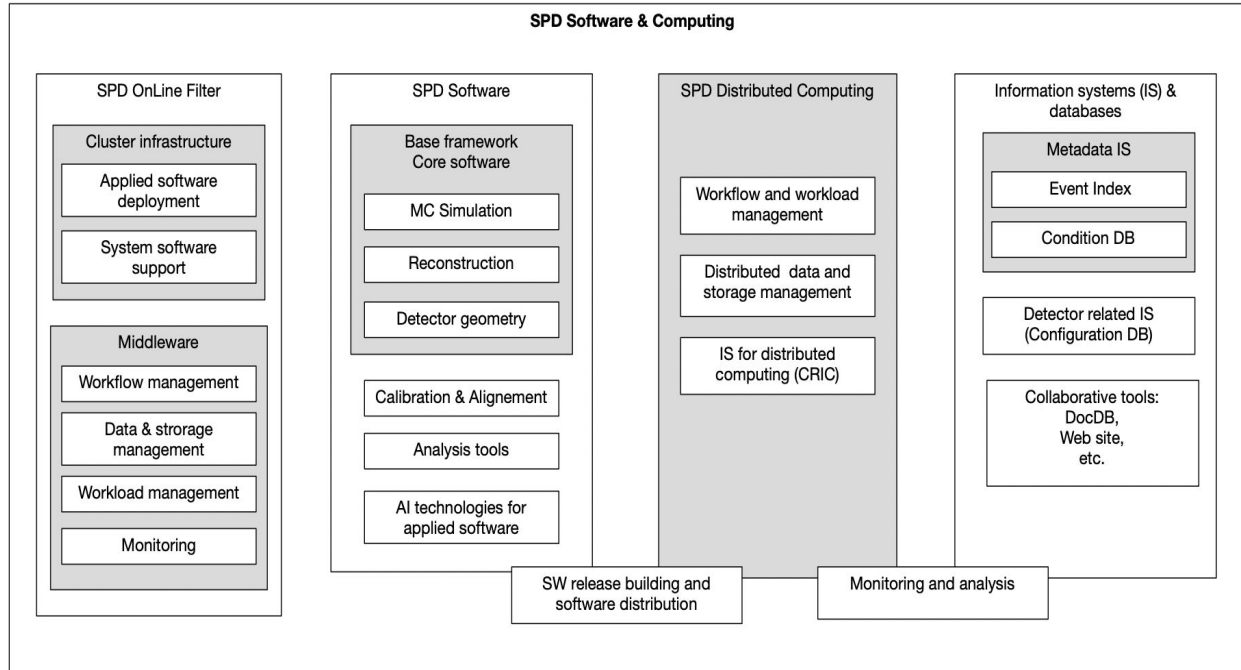
SPD Computing. Accounts, resources.

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Outline

- Structure of activities
- Collaboration membership
- Resources
 - Services
 - Facilities
- How to get an account?
 - What is JINR SSO?
- How to get resources?
- Distributed computing environment

SPD Software&Computing



It's painful, but computing involved quite deeply in the lifecycle of scientific research.

Collaboration membership

Membership in the collaboration is good by different reasons...

In general, it's first step to get access to resources of host lab (JINR). Of course, this has direct relation to access to computing facilities (including distributed facilities) and JINR-hosted digital services.

Some 'homemade' solutions for of collaboration members accounting already used, but it will be nice to have more or less common solution/instruments for this. (CERN Grey Book analog?)

Resources and Services (provided by host lab)

Computing facilities in JINR:

- MICC
 - Cloud infrastructure (IaaS, dedicated VM)
 - CICC (batch processing)
 - "Govorun" HPC & "HybriLIT" resources
- The NICA LHEP offline computing cluster

Services maintained or provided centrally by JINR:

- gitlab (<https://gitlab.jinr.ru>)
- Indico (<https://indico.jinr.ru>)
- docdb (<https://spd-docs.jinr.ru>)
- video conference (<https://jinr.webinar.ru>)
- over JINR Digital services

Some procedures should be established to clarify and simplify access for collaboration members. This work in progress, but it will take time. Most machinery for common authentication across resources and services almost in place, authorization policies in process of agreement.

JINR SSO

JINR SSO is the authentication system developed and used in JINR. Already integrated with a set of services and resources.

JINR SSO Account can be easily assigned for JINR staff members, in the nearest future it will work also for JINR associated staff. A significant part of collaborators will be covered by these two options.

For thus, how didn't include in these categories: students, short term visitors etc. some extra efforts are required from supervisor or over responsible person from JINR. [for bloody details of bureaucracy, you can contact me, directly]

What will I get with JINR SSO? (1)

Access to services:

- <https://helpdesk.jinr.ru> - will allow intercommunicating with support teams
 - <https://webinar.jinr.ru>
 - <https://disk.jinr.ru> - share documents and some files
 - <https://pm.jinr.ru> - for project management
 - <https://spd-docs.jinr.ru> - we (coordinators) need to define initial structure and roles in the system, before it will be comfortable to use
 - <https://wiki.jinr.ru> - similar situation as with DocDB
 - <https://gitlab.jinr.ru> - that's the core tool for collaborative development.
- Structure of groups and projects will be extended and optimized in mid-term, as well some changing of policy of usage

What will I get with JINR SSO? (2)

You will be able to request some cloud resources (VM and some storage). Usually - one VM per user. If you need more, again, ask me for the moment.

<https://micc.jinr.ru/?id=56>

One more step (one more form) will be required to get access to CICC.

<http://lxs-s03.jinr.ru/cicc/index.php/en/registration-at-cicc/>

NCX cluster in process with integration of SSO and some other changes: if you need urgent access: <https://webncx.jinr.ru/register/>

Quotas

That's an unpleasant part for resources consumers, but resource providers should be able to plan usage of their facilities.

Some small personal (quite limited) quota will be provided for each user. That's should be enough for testing and debugging.

Global quotas for computation and storage will be agreed for collaboration and distributed across activities by decision of collaboration.

Distributed computing (offline system)

Most important services for distributed computing are: authorization and authentication.

VOMS/IAM - authorization services supported by JINR (SPD VO already declared)

JINR CA (Certification authority) - should cover needs for authentication in distributed environment for JINR based experiments and facilities.

Tight integration with JINR SSO allow significant simplify process of retrieving of user certificate.

It's just a first step for settling of community for SPD distributed data processing, but we should keep moving to define some agreed rules, roles etc.