

NeLS

Norwegian e-Infrastructure for Life Sciences

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Outline

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2. The simplified model
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What is NeLS ?

- Norwegian e-Infrastructure for Life Sciences
- Is one of the work packages of ELIXIR.NO
- Aims of ELIXIR.NO project:
 - to build a Norwegian Node in the pan-European research infrastructure
 - to continue a National help desk serving users a broader set of services and assistance; and
 - to provide an e-infrastructure allowing users to efficiently and safely store, share, analyze and publish their genomics scale data.



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The Simplified Model

○ We want to:

1. Run a tool or a sequence of tools on some data to produce results (new data)
2. Make sense of your result (data mining)



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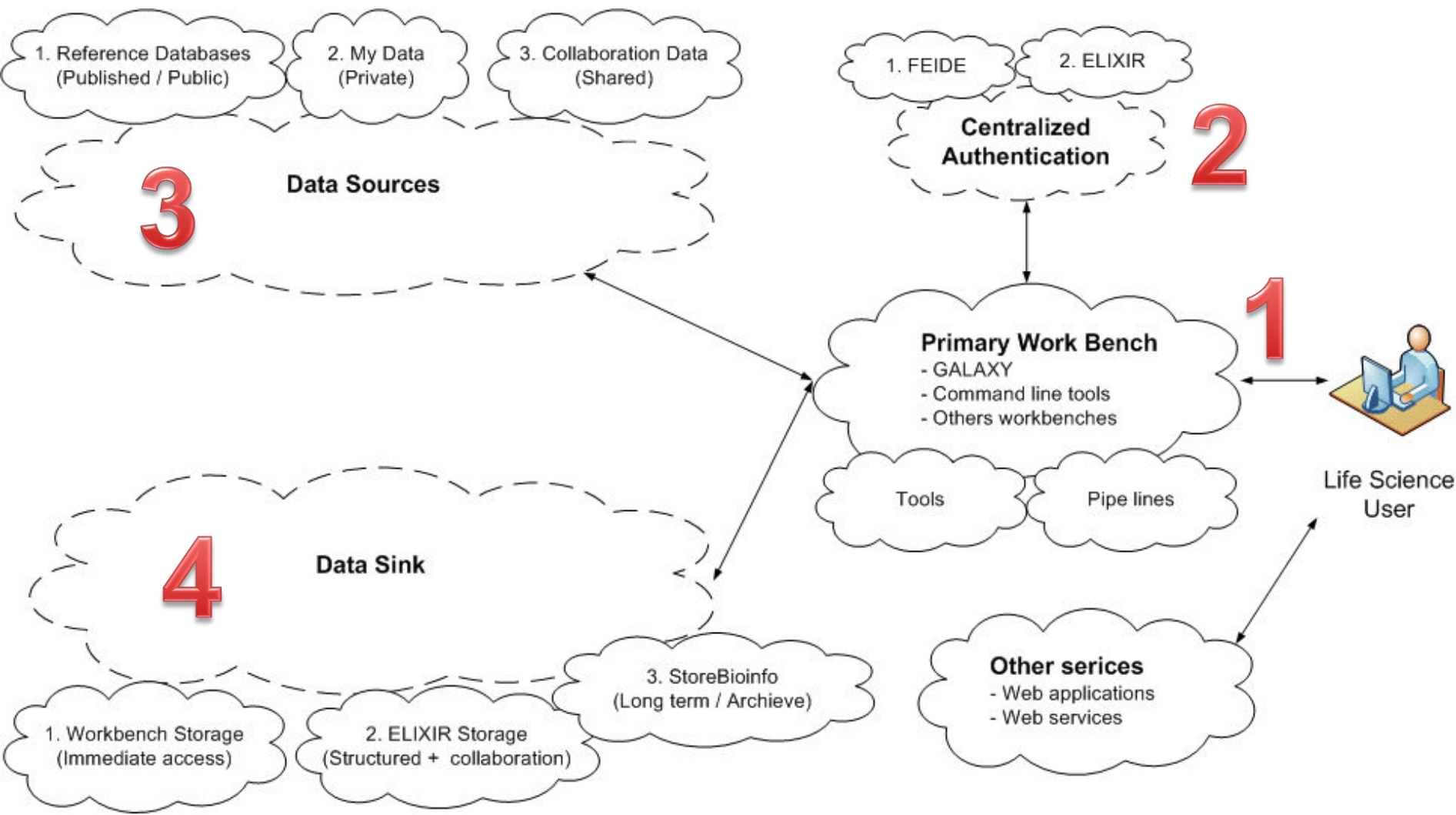
Concerns & success factors

- Authentication (Feide + Non-Feide)
- Secure
- Storage (Scratch, Short term, Long term)
- Compute power
- Ease of use
- Multiple accessibility providers
- Scalable
- Collaborative
- Integrated / inter-connected
- Helpdesk !



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NeLS from the Life Science user's view

NeLS concrete features

- Support for FEiDE + NeLS identity providers
- NeLS Portal
- API access
- SSH access to storage server
 - Interactive login OR sshfs mount
- NeLS Galaxies (5 instances, one per node)
 - Tools & pipelines within these galaxies
- Integration with other infrastructure
 - Storebioinfo integration (under development)
 - TSD integration with non-sensitive data (under consideration)
 - Etc . .



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Links

- NeLS portal - <https://nels.bioinfo.no>
- Galaxies
 - <https://galaxy-uib.bioinfo.no>
 - <https://galaxy-uio.bioinfo.no>
 - <https://galaxy-uit.bioinfo.no>
 - <https://galaxy-ntnu.bioinfo.no>
 - <https://galaxy-nmbu.bioinfo.no>
- Pipeline listing
 - https://galaxy-ntnu.bioinfo.no/www/nels_pipelines.html
- Storebioinfo
 - <https://storebioinfo.norstore.no>



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