Data Stewardship @ WUR

Systems and Synthetic Biology (SSB) and Microbiology

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1st Data Steward @WUR network meeting, November 8, 2018







What kind of data at SSB and MIB

- Genomics
- Transcriptomics
- Proteomics
- NGS Marker/Amplicon data (MIB)
- ~5TB of (raw) data and growing rapidly



Current (meta) data control and storage

Control

- Excel sheet with metdata regarding the experiment
 - Samples, conditions, organism(s), people, sequencing center etc.
- When correct/complete → make data available for analysis

Storage

- Local NAS + offline/cold storage
- External backup (SURF SARA)





Current obstacles

- Tailored to raw data only
- Find ability
- Unaware researchers already having data
- Old data



(near) Future deployment

iRODS for new projects

- Open source, data management middle ware
- Integrated user management
- Browse and **search** (**meta**)**data**
- In collaboration with SURF SARA







Automated Ingest



Storage **Tiering**



Compliance







Publishing





iRODS Rule Engine

Create customized workflow and trigger analyses

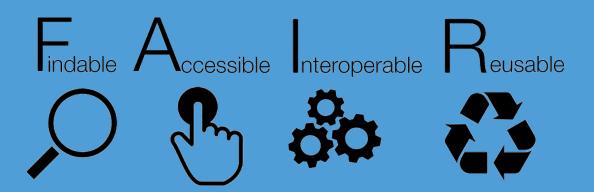




Recommendations

- Actionable Data Management Plan (also group wide)
- Enforce policies, i.e. data embargo

Data steward



Work <u>FAIR</u> by Design



