universität freiburg

Where’s the data?

Data storage at the university’s compute center

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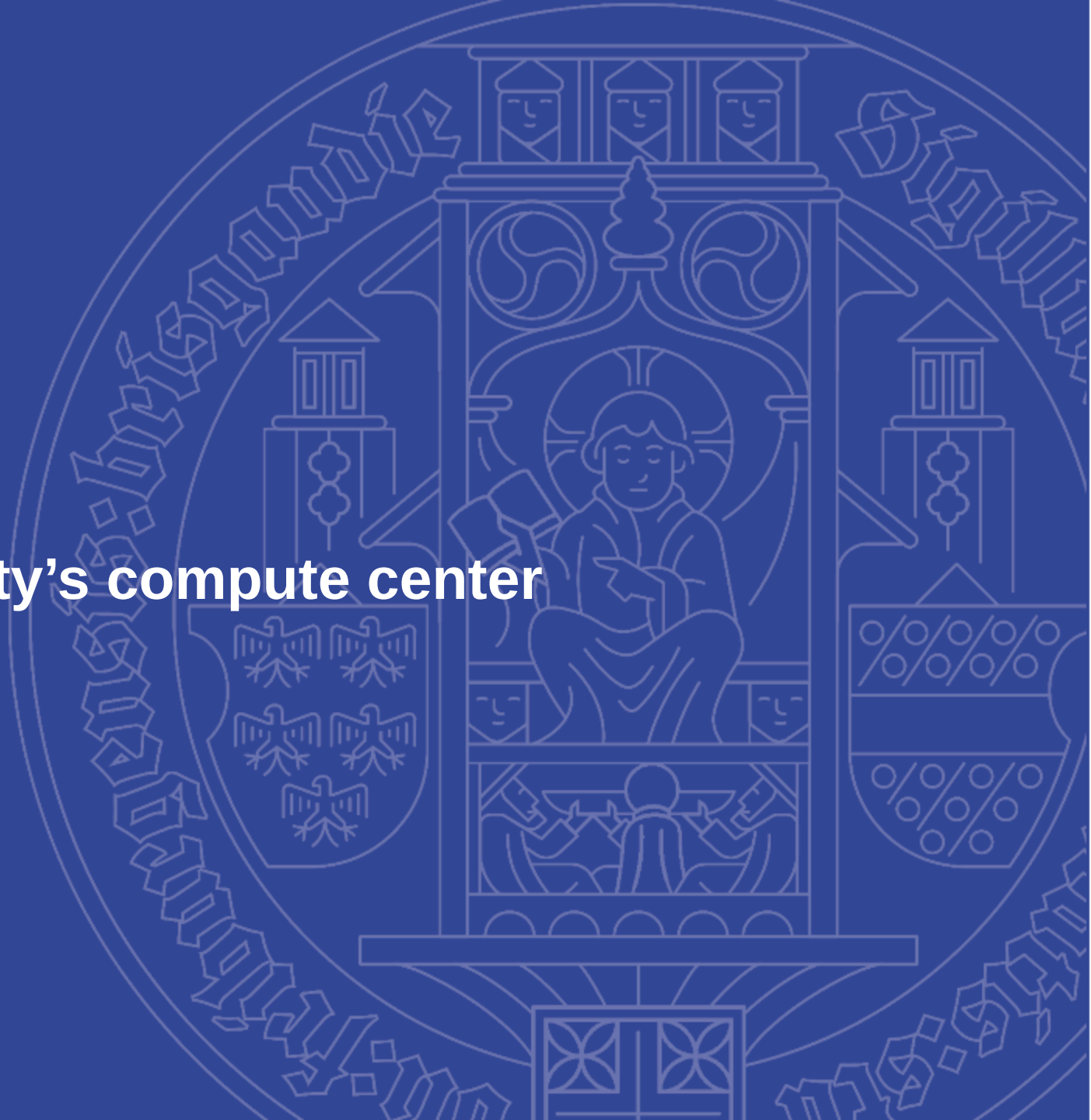


Agenda

Solutions at the university of Freiburg

Storage planning as process

bwSFS as platform for an UFR ecosphere

Storage solutions

Storage system	Provider	System	Self-Service
Homedirectory	RZ	Mounting as drive	√
Group share (Isilon)	RZ	Classic file storage	
Group share (bwSFS)	RZ	Hot/warm research data	
bwSync&Share	KIT	Cloud storage (Nextcloud)	√
FreiData	UFR	Publication of research data	√
OpenCloud (in discussion)	RZ	Flexible data handling	
TSM tape library	RZ	Cold research data	

Data lifecycle as planning scheme

Phases in lifecycle are connected

Data changes through lifecycle

Access rights changes between phases

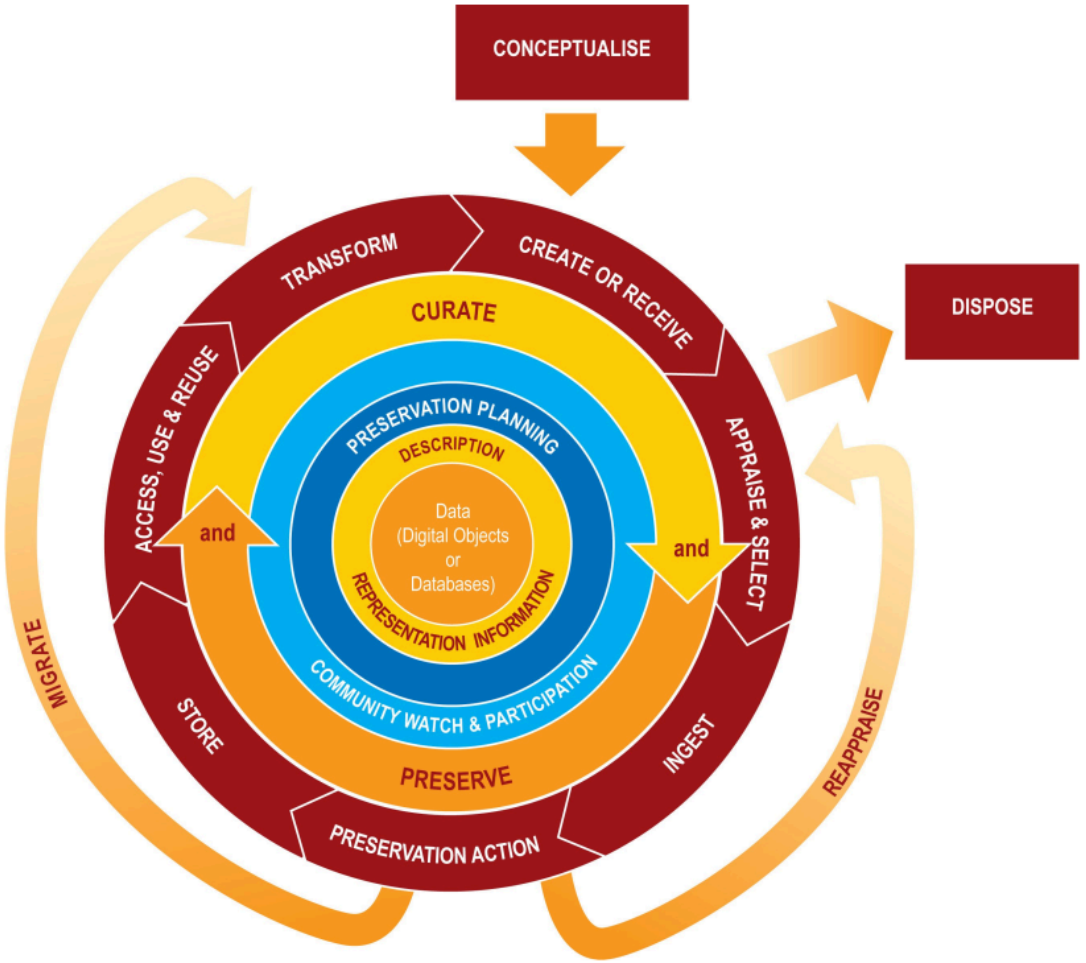


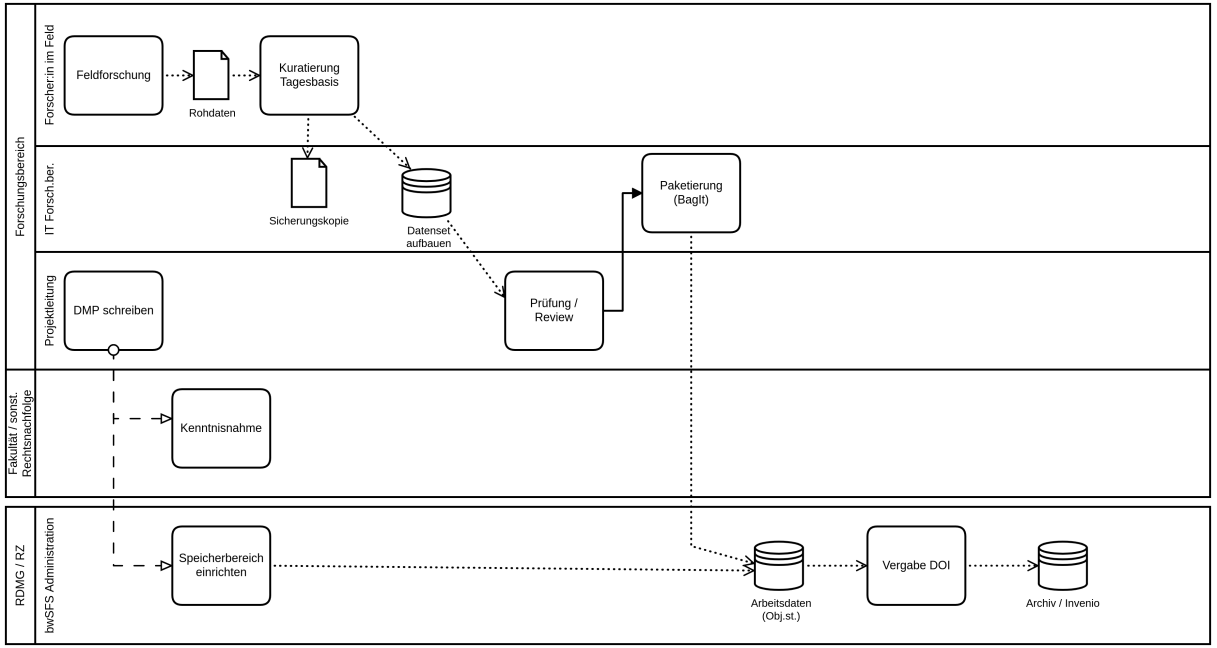
Figure 1. The DCC Curation Lifecycle Model.

Example from archaeology

Process oriented graphics in BPMN

Data produced on external camp sites

Connectivity between storage systems part of planning



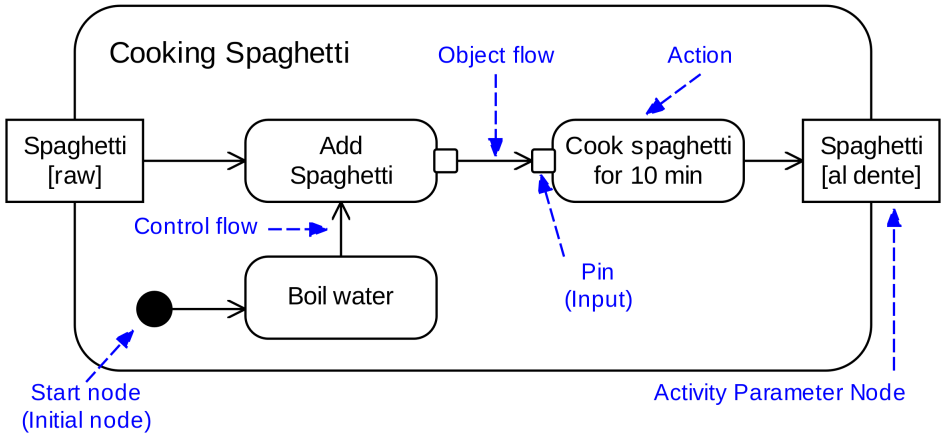
Yet another lifecycle model

See https://cdf.uni-freiburg.de/en/rdm-catalogue/

Data management is a continuous process, and storage planning is an (important) detail

Process modelling

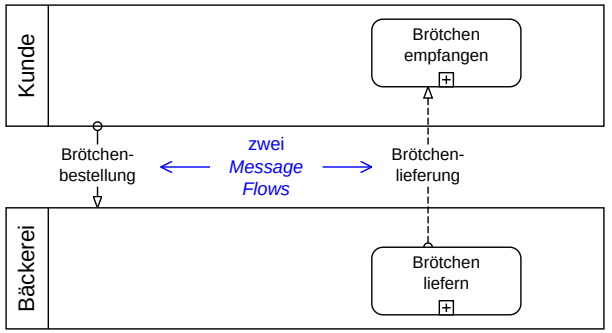
UML



Another notation tool

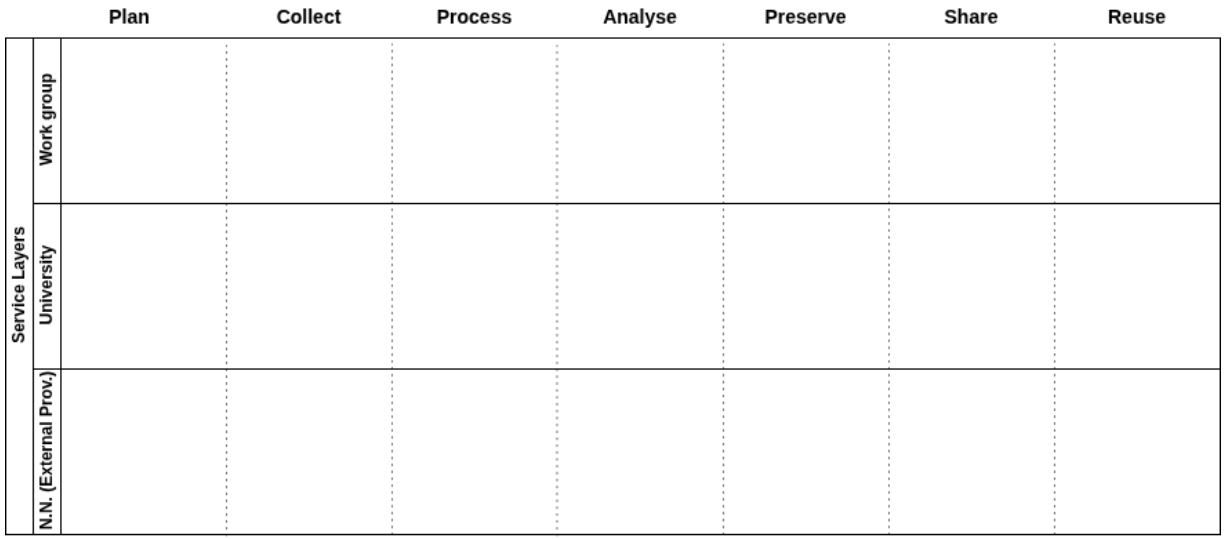
Business process notation

http://www.bpmb.de/images/BPMN2_0_Poster_DE.pdf



Template with service layers

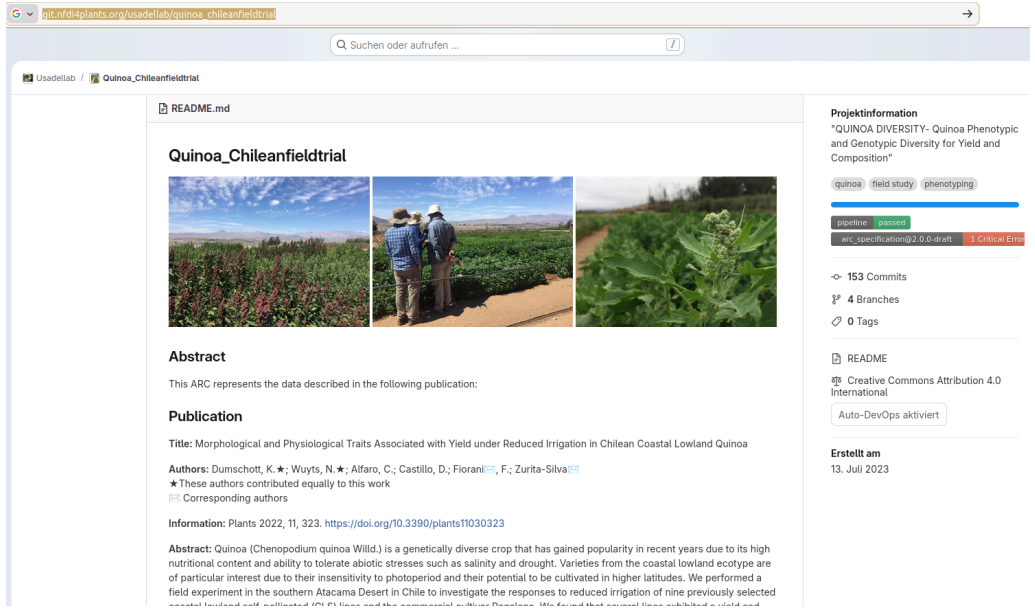
Phases in linear and with layer switching



Workflow for datasets

Transparent repository

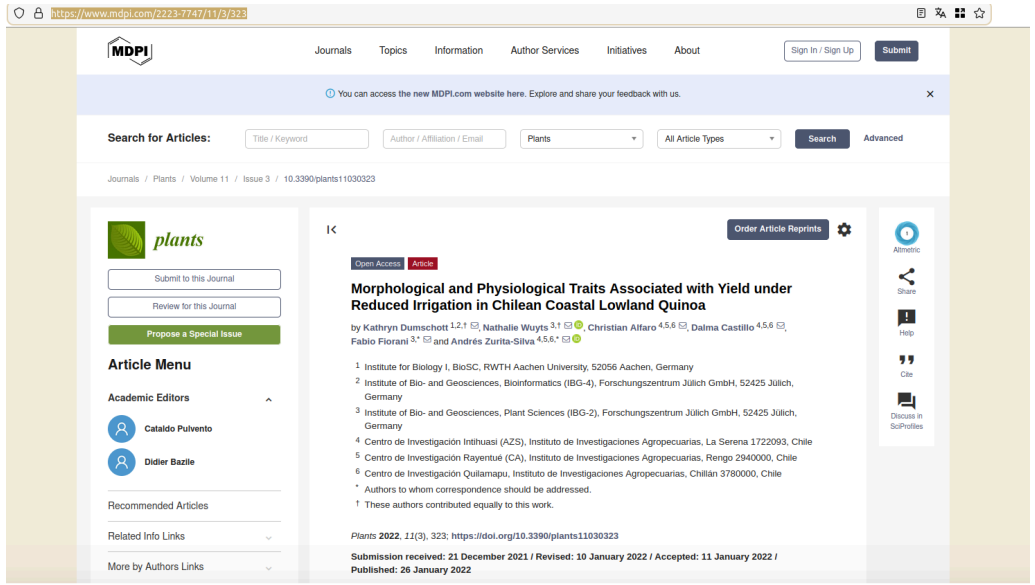
https://git.nfdi4plants.org/usadellab/quinoa_chileanfieldtrial



Data publication

Depending on automation citable publication on prepared publication platform

External platform



How to contribute

bwSFS is a storage cluster with additional service layers

Contributions open on several layers