CEPLAS research data management (RDM)

Steering Committee Meeting
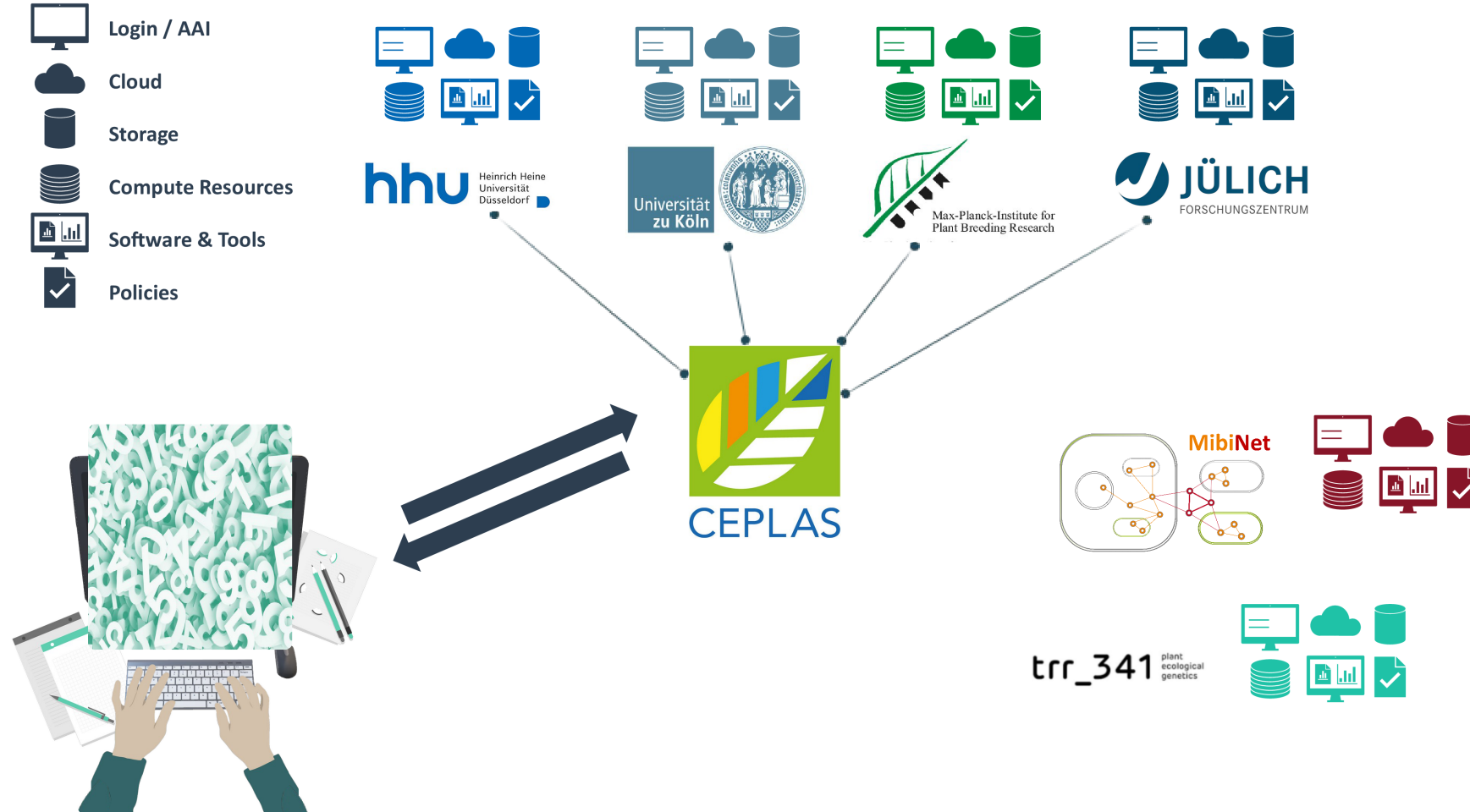
October 27th, 2023

Dominik Brilhaus, CEPLAS Data Science

Goals of CEPLAS RDM

- share data

- share resources

- collaborate

Avoid Scattered Data Silos

Login / AAI

Cloud

Storage

Compute Resources

Software & Tools

Policies

hhu Heinrich Heine Universität Düsseldorf

Universität zu Köln

Max-Planck-Institute for Plant Breeding Research

JÜLICH FORSCHUNGSZENTRUM
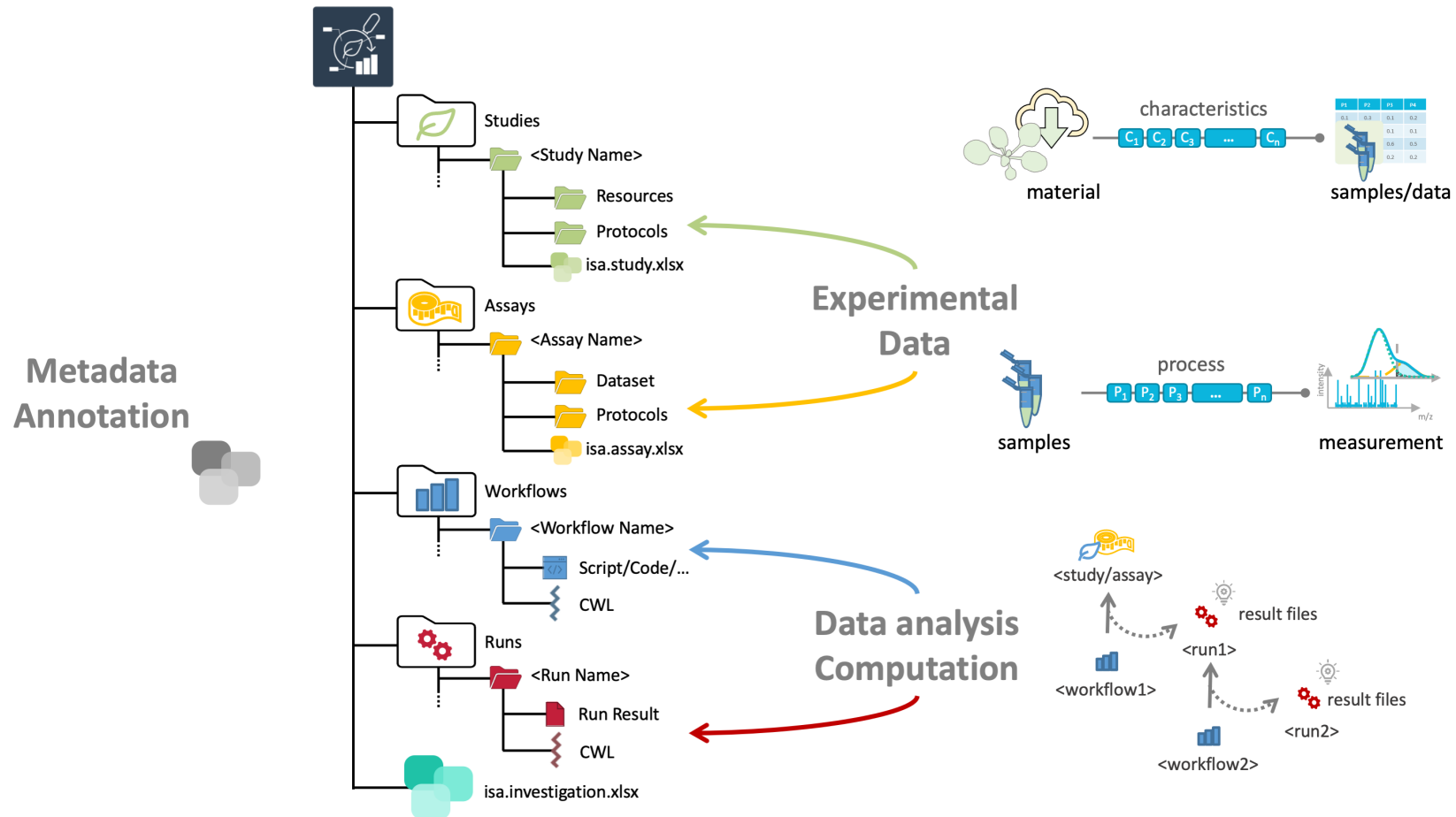
CEPLAS

MibiNet

trr_341 plant ecological genetics

Roadmap

1. Agree on an RDM system

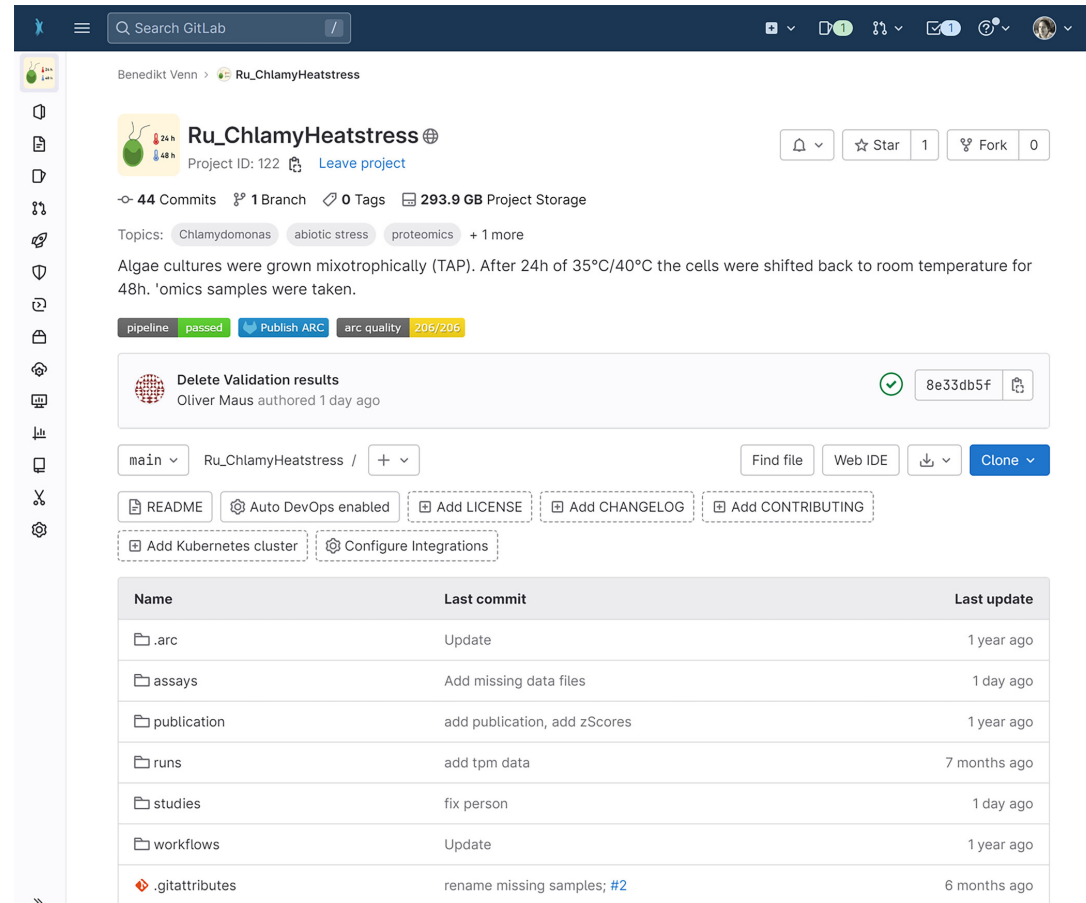2. Build use-cases and templates

3. Train researchers

4. Start sharing

How to store data – ARCs

ARC = Annotated Research Context

Where to share data – DataHUB

The DataHUB is a federated platform for ARCs

Weil, H.L., Schneider, K., et al. (2023), PLANTdataHUB: a collaborative platform for continuous FAIR data sharing in plant research. Plant J. https://doi.org/10.1111/tpj.16474

ARC ecosystem demo @ *Tag der Forschungsdaten*

November 14th, 2023

Nachmittagsprogrammn an der HHU

Wann: ab 13:00 Uhr

Wo: Hörsaal 6C (Gebäude 26.11)

ohne Anmeldung

Vorträge und Talks

13:00–13:10	Begrüßung		
13:10–13:40	Dr. Dominik Brilhaus	CEPLAS, Data Science and Management	Annotated Research Contexts (ARCs) – A FAIR research data management journey along a mutable data life cycle

https://www.fdm.hhu.de/veranstaltungen/tag-der-forschungsdaten-in-nrw-2023

CEPLAS research data policy

To be circulated in SC soon

- §1 Coverage

- §2 Legal framework conditions

- §3 Handling of research data

- §4 Responsibilities
    - Data delivery
    - Data access
    - Data selection
    - Data use
    - Training

- §5 Validity and governance

ARC entry points

Workshops and lab hackathons

Case studies
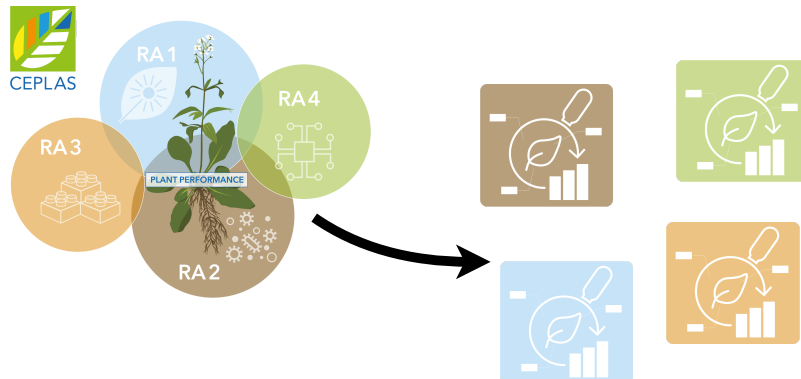
Core facilities
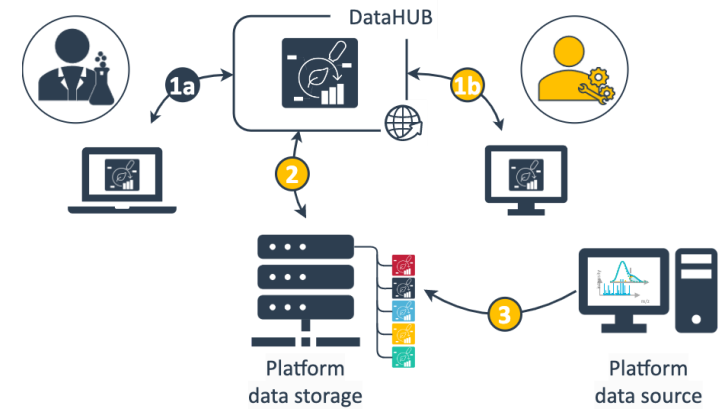
Resource ARCs
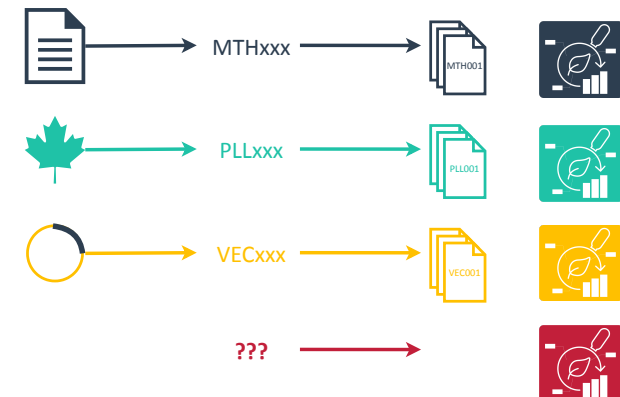
What I need from you

1. Lighthouse projects

      i. Mainly CEPLAS-funded

      ii. Cross-lab / Cross-RA collaborations

      iii. CEPLAS researchers still present, active and willing to polish ARC

2. Appointments for lab Hackathons

      i. Sit together two days to create ARCs

3. Your backing "My boss said..."

Available dates

for lab hackathons

- Nov 15th & 16th (Wed + Thu)

- Nov 22nd & 23rd (Wed + Thu)

- Nov 30th & Dec 1st (Thu + Fri)

- Dec 7th & Dec 8th (Thu + Fri)

Lab Hackathons

- Good internet connection

- Isolated from lab // office // daily duties

- Access to the data to be ARCified
  (file share, hard disks)

- Agile, communicative, collaborative, positive

- Technical *ad-hoc* support by DataPLANT

💡 ARC Club (@HHU Plant Biochemistry)

Case studies

- Create ARCs from CEPLAS publications

- Publish CEPLAS data as ARCs

💡 Publication to ARC
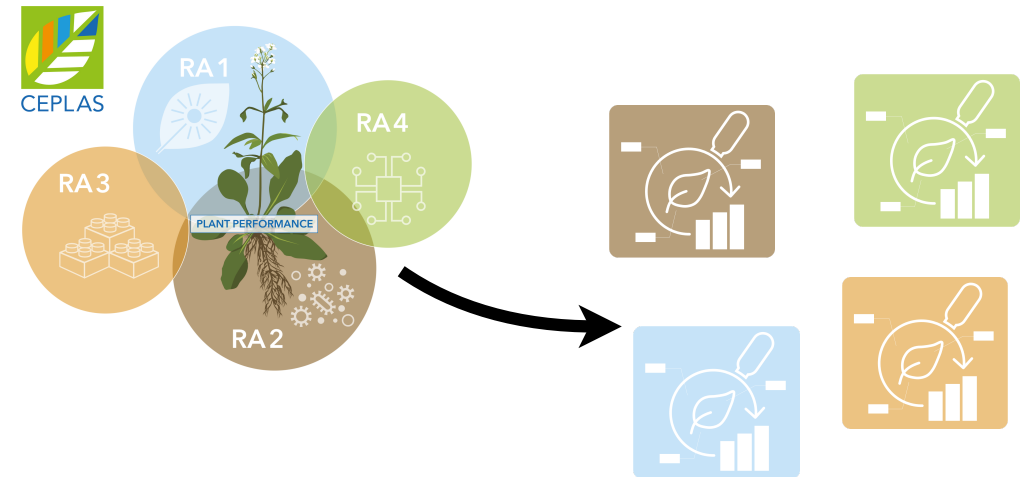
💡 ARC Data Publications

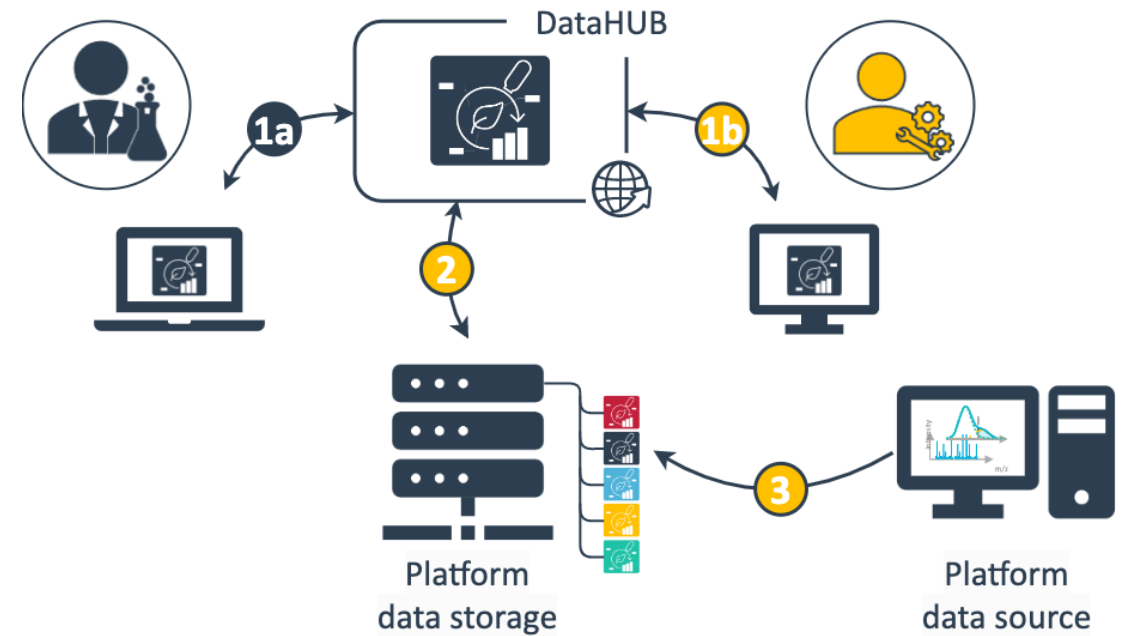# Core facilities / enabling platforms

- Help with switch towards ARC ecosystem
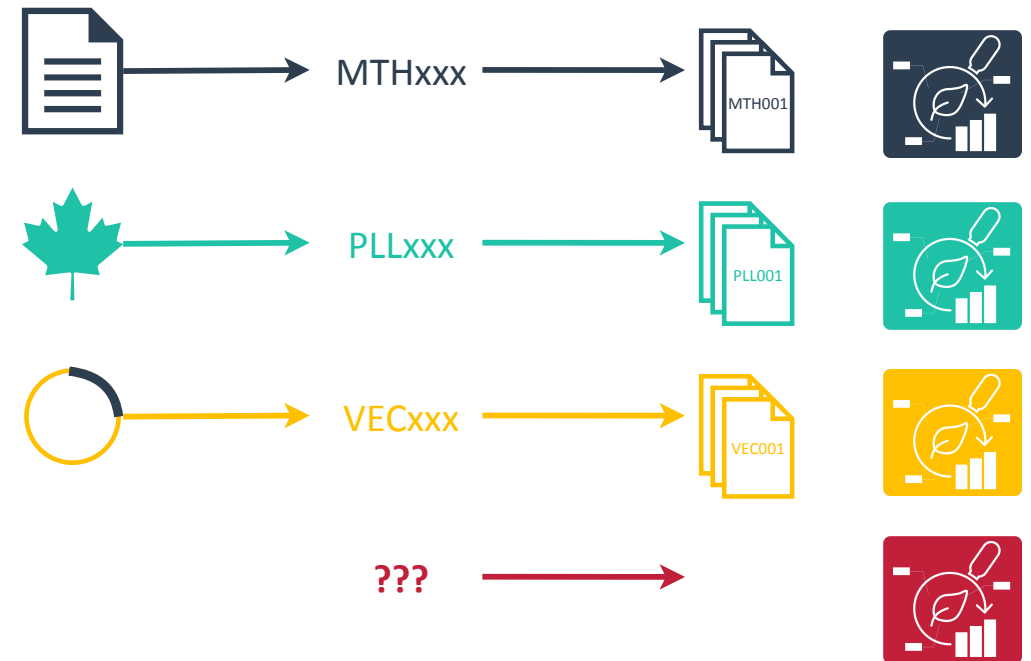
- Create templates

- Create use-cases

💡 ARCs in Enabling Platforms

Data of common interest: resources

In addition to *research data*, which CEPLAS resources do we want to share and catalog?

- Identify standards
- Identify / build databases
- Create templates

MTHxxx   MTH001

PLLxxx   PLL001

VECxxx   VEC001

???

Network

We're connecting to other consortia using ARCs

- TRR341, https://trr341.uni-koeln.de/
- CRC1535, https://www.sfb1535.hhu.de/
- FAIRagro, https://www.fairagro.net/
    - IPK -> TransCend
- NFDI4BioImage, https://nfdi4bioimage.de/

Resources

DataPLANT (nfdi4plants)

Website: https://nfdi4plants.org/

Knowledge Base: https://nfdi4plants.org/nfdi4plants.knowledgebase/

DataHUB: https://git.nfdi4plants.org

GitHub: https://github.com/nfdi4plants