Recommendation 3.0

Recommendation to use PIDInst as the standard reference in technical infrastructures to measuring devices or instruments where appropriate

Description

Status:

Motivation for this Recommendation:

To be able to identify the exact instrument or sensor, data has been obtained with, is crucial to be able to define what exactly has beeb measuered, repeat an experiment or measure, as well as to evaluate the precision and reliability of a measurement. Nevertheless this information is not recorded in a standard way in most cases.

We therefore recommend to assign PIDs to all instruments, sensors or other devices producing measurements, whether they are in laboratories, on field stations, platforms, like ships or airplanes, or other places. The process to register PIDs may be subject to the disciplinary culture, however, it may be connected to the acquisition of the instrument or device, as well as to the operation, e.g. in electronic lab notebooks (ELN) or other protocol tools.

Recommendation

PIDInst is used to identify instruments in data infrastructures.

For organizations this means:

- Employ measures and incentives to register instruments with PIDInst at acquisition.
- make a person responsible to maintain the PIDInst for each instrument (e.g. Lab technicians).

For technicians:

- register a PIDInst for instruments which weren’t registered yet.
- keep the PIDInst related metadata of your instruments current.
- Keep a written record of the PIDInst on every instrument, where possible
- share the PIDInst with the customer with any measurement data you deliver.

For researchers it means:

- Record an PIDInst with any measurement. You should find it on the instrument.

For data infrastructures:

- record a PIDInst with instruments registered in data infrastructures.
- treat PIDInst metadata as the primary source of truth and update your own metadata accordingly.
- inform the responsible person if you think the PIDInst metadata is not accurate.

[shortened from below]

[Format: Wer! macht was! wo! wann! unter welchen Voraussetzungen!]

Binding Convention:

	mandatory	**conditional**	**optional**
Helmholtz FAIR Principle			

Precondition for Implementation:

Related Recommendations

Parent:

Dependent:

Other: none

Contributors

Names of contributors to this recommendation

Content

1. Explanation of the Background and Benefits of the Recommendation

About

History and structure

Current Use of …

Motivation

2. Possible alternative solutions

3. Consideration of the advantages and disadvantages of implementing the recommendation

(quality of content, limitations, interoperability, sustainability: expected future dissemination / technical availability / funding)

4. The Recommendation

[Format: Wer! macht was! wo! wann! unter welchen Voraussetzungen!]

5. Naming of communities that have already implemented the recommendation

6. Documentation of the test to validate correct implementation

7. Examples of Instances

8. Further Information

References

Relevant Community Recommendations

9. History of this document