FAIR Assessment and DataRepositóriUM: OSTrails pilot use case

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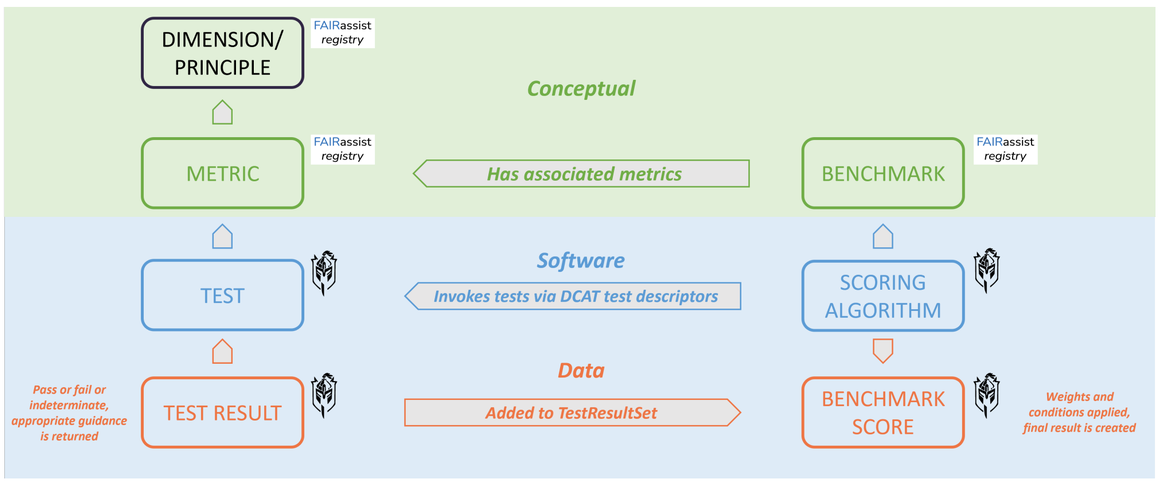
Goals

- Introduce the essentials of the OSTrails FAIR Reference Model
- Demonstrate its practical application through the use case of DataRepositóriUM - University of Minho Data Repository
- Showcase the procedures to assess the FAIR compliance of datasets deposited in repositories

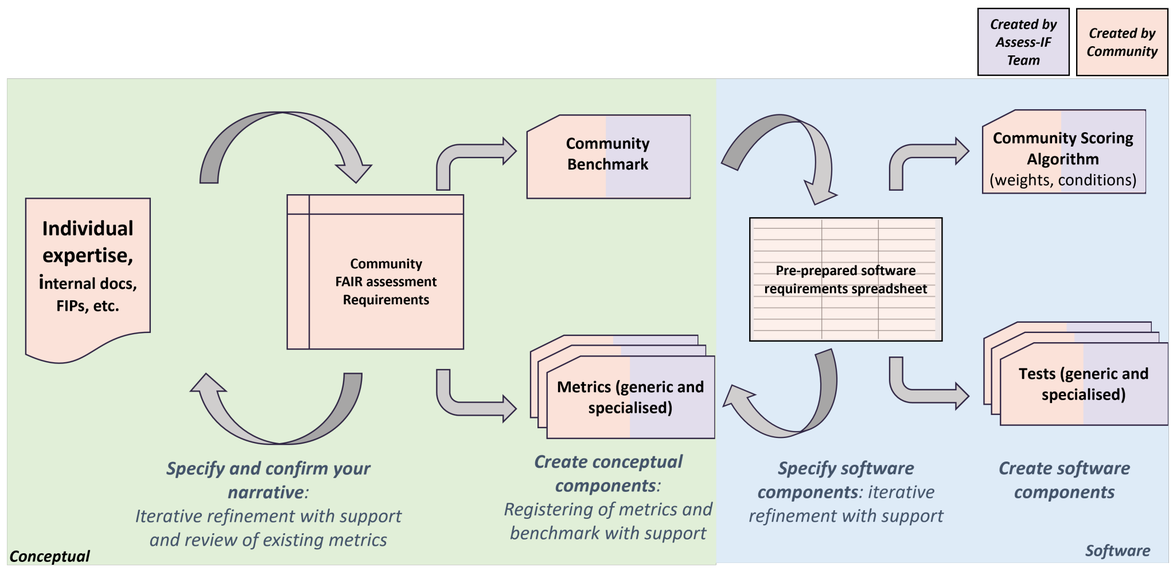
FAIR Reference Model

Provides a unified conceptual and structural foundation for evaluating how well datasets comply with the principles of being Findable, Accessible, Interoperable, and Reusable.
Identifies the core components essential for FAIR assessment (Dimensions, Metrics, Tests, and Benchmarks) and defines how these components should be represented, related, and expressed through machine-actionable metadata.

FAIR Assessment Components



Building an Assessment Framework



Communities can build their own FAIR Benchmark or use other of their choice that meets their requirements to run a FAIR assessment.
FAIR Dataverse Portugal Benchmark: https://fairsharing.org/7978

FAIR assessment in practice

FAIR Champion
https://tools.ostrails.eu/champion

Select the Benchmark Quality Assessment Algorithm

FAIR Dataverse Portugal Benchmark

Identify the Dataset to be assessed

Dataset DOI

Run Benchmark Quality Assessment

Check the Assessment Results

Test Results

Test ID	Result	Weight
F1-PID	pass	5.0
F1-GUID	pass	1.0
F2A	fail	-1.0
F2B	fail	-1.0
F4	indeterminate	0.0
A1-1	indeterminate	0.0
A1-2	fail	-1.0
I1-A	indeterminate	0.0
I2-A	fail	-1.0
R1-2-CPI	pass	3.0
R1-3-CEK	fail	-1.0
R1-3-CTV	pass	5.0
R1-3-DMOCV	pass	5.0
R1-3-DAUV	pass	5.0
R1-3-DTMV	pass	5.0
R1-3-DSPV	fail	-1.0

Conclusions:

Condition	Discussion	Guidance
1	Acceptable: metadata are assigned globally unique identifiers	
2	Acceptable: metadata are assigned persistent identifiers	
3	Unacceptable: data are not described with structured metadata	FAIR Principles F2. More Information DANS FAIR Guidance. More Information
4	Unacceptable: data are not described with grounded metadata	FAIR Principles F2. More Information DANS FAIR Guidance. More Information

Key results and Conclusions

- The FAIR Reference Model provides a structured and transparent framework to enhance dataset quality.
- Community-developed reference models support the evaluation and improvement of dataset FAIRness.
- DataRepositóriUM and Portuguese Dataverse generic repositories can benefit of this FAIR Benchmark to assess datasets according to their specific needs.

Documentation:
https://ostrails.eu/fair-if
https://docs.ostrails.eu/en/latest/commons/fair/fair-commons.html

https://hdl.handle.net/1822/101486

Partners

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