

FAIR Digital Objects

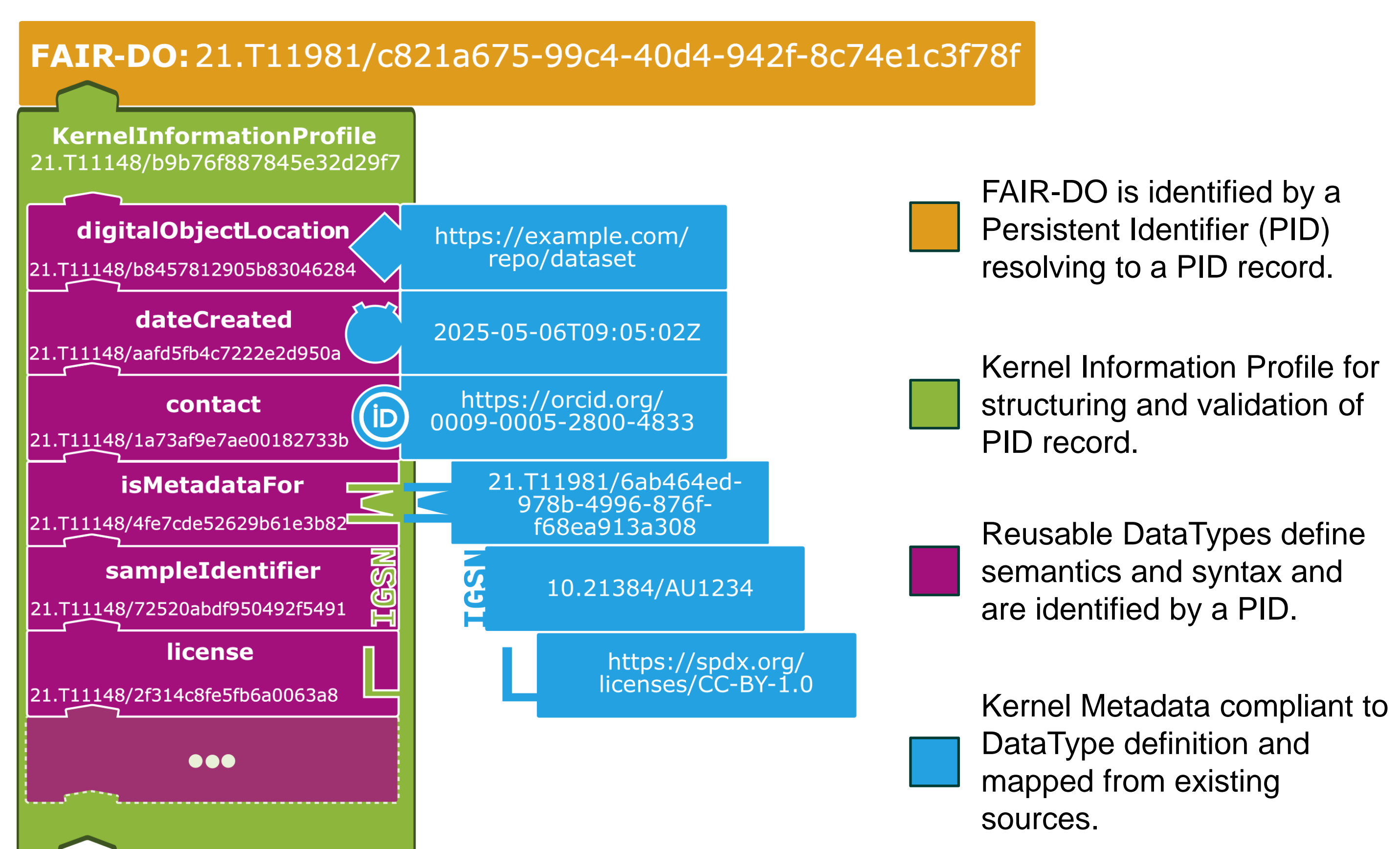
How to compare apples with oranges

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Benefit from a harmonized representation of digital assets using FAIR Digital Object technology.

Digital assets in today's research data infrastructures are highly diverse in shape and organization. This limits interoperability and makes them hard to reuse. FAIR Digital Objects (FAIR-DO) offer a solution to create harmonized, machine-actionable representations of arbitrary digital assets, which can be handled equally and automated no matter where they originate from.

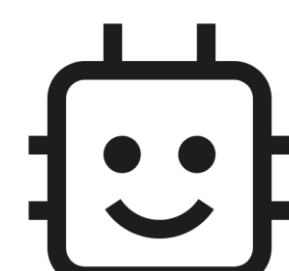
FAIR-DOs Under the Hood



- Persistent, globally unique identification of digital asset representations.
- Represented utilizing generic, reusable profiles and DataTypes that enable syntactic validation
- Contents, mapped from existing metadata sources, i.e., APIs or offline documents, are harmonized and potentially extended (see Poster *FAIR-DOs for NMR Spectroscopy Data*)
- Harmonized representation allows common, reusable tooling for automated processing (see Poster *Type-associated Operations for FAIR-DOs*)



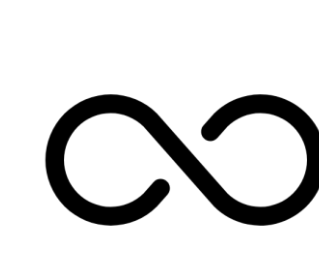
Harmonized
representation of all kinds
of digital assets.



Focus on **machine-**
actionability and fast
decision making.

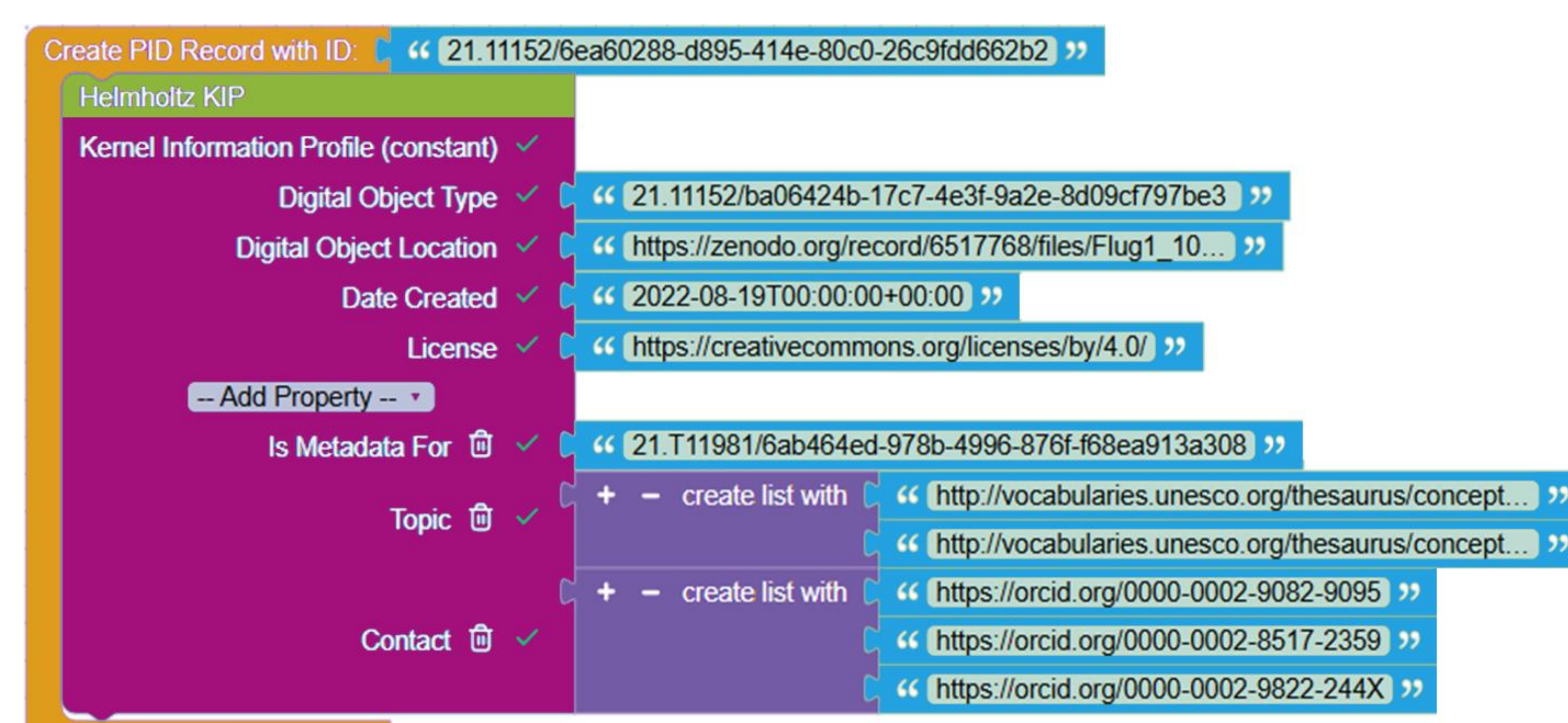


Non-invasive application
on top of existing research
data infrastructures.



Persistence beyond service
life of underlying research
data infrastructure.

FAIR-DO Designer



- Web-based, graphical tool utilizing Google Blockly
- Allows to create FAIR-DO designs from existing metadata documents
- Generated Python code from finished designs allows batch processing for automated FAIR-DO creation
- Initial version available for testing, suggestions and remarks highly welcome!

