

WG PID Information Types

RDA Deutschland, 20 Nov 2014

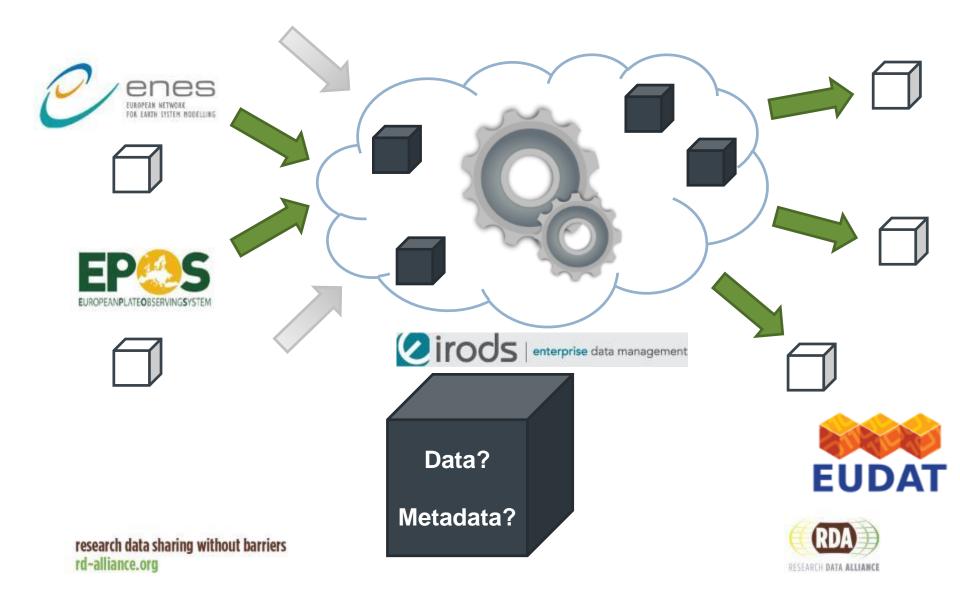
Tobias Weigel (DKRZ / Universität Hamburg)
Tim DiLauro (Data Conservancy / Johns Hopkins University)

research data sharing without barriers rd-alliance.org

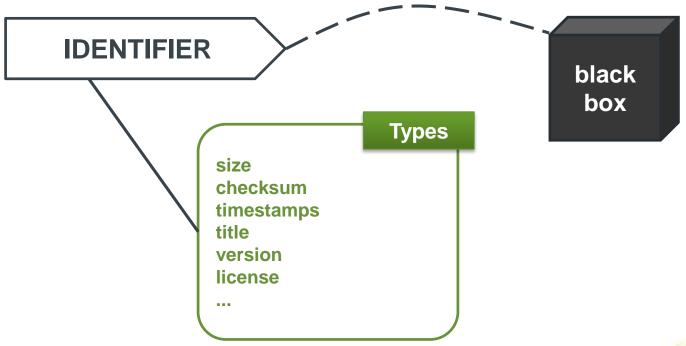
- 18 months, RDA P1 to P4
- co-chairs: Tim DiLauro (JHU); Tobias Weigel (DKRZ)
- Goal: Hamonization of basic information types associated with PIDs across disciplines and infrastructures
- Approach: Design an API and type examples to target practical usage
- Strong interaction with Data Type Registries WG



Example scenario



What are PID Information Types?



Higher level APIs and services

PID Info Types API

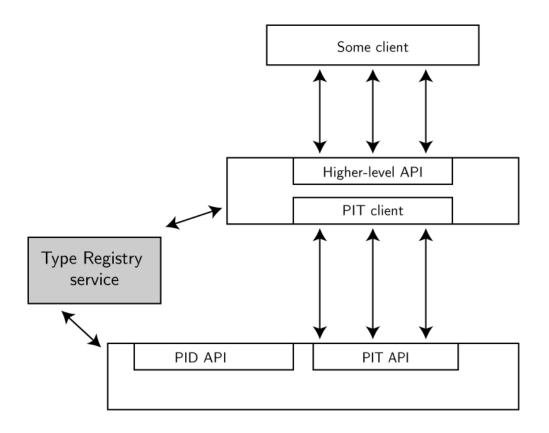
PID system

PID system

PID system



PIT architecture



Higher-level service

PIT service at existing PID infrastructure



6

- Some essential core type examples to illustrate generic use cases
- Prototypical API implementation and exemplary client
- RESTful protocol specification



http://smw-rda.esc.rzg.mpg.de/PitApiGui/

Client prototype implemented by Tom Zastrow (RZG)

- RDA Recommendation with three parts
 - Final report document
 - Prototypical implementation (source code)
 - API specification and prototype documentation

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- Types depend on use cases and semantics differ between disciplines
- There is no single set of types fitting all cases
- Community processes must define types from practical adoption



Future plans

- Motivate adoption and further implementations in grassroots scientific communities
- Further testing and adoption of the Type Registry
- Come to a consolidated set of core types in a bottom-up process



 Example at DKRZ:
 Implementating PIT concepts for versioning within the Earth System Grid Federation for CMIP6 / IPCC AR6



- Increase in number of data objects exceeds capabilities of manual curation
- Continuously automated process, bundle information through PIDs
- Use PIDs for dissemination, publication and archiving
- Symbiotic benefits from using same interfaces
- Additional user value
 - References for preliminary data
 - Traceability and accountability of data provenance and versioning









Take-home messages

- Pragmatism: Concrete outcome is a crucial success factor
- Less discussions as WG progresses
- Keep It Simple & Stupid
- Local take-up!



Vielen Dank für Ihre Aufmerksamkeit.





