

The role of Persistent Identifiers for interoperability in EOSC

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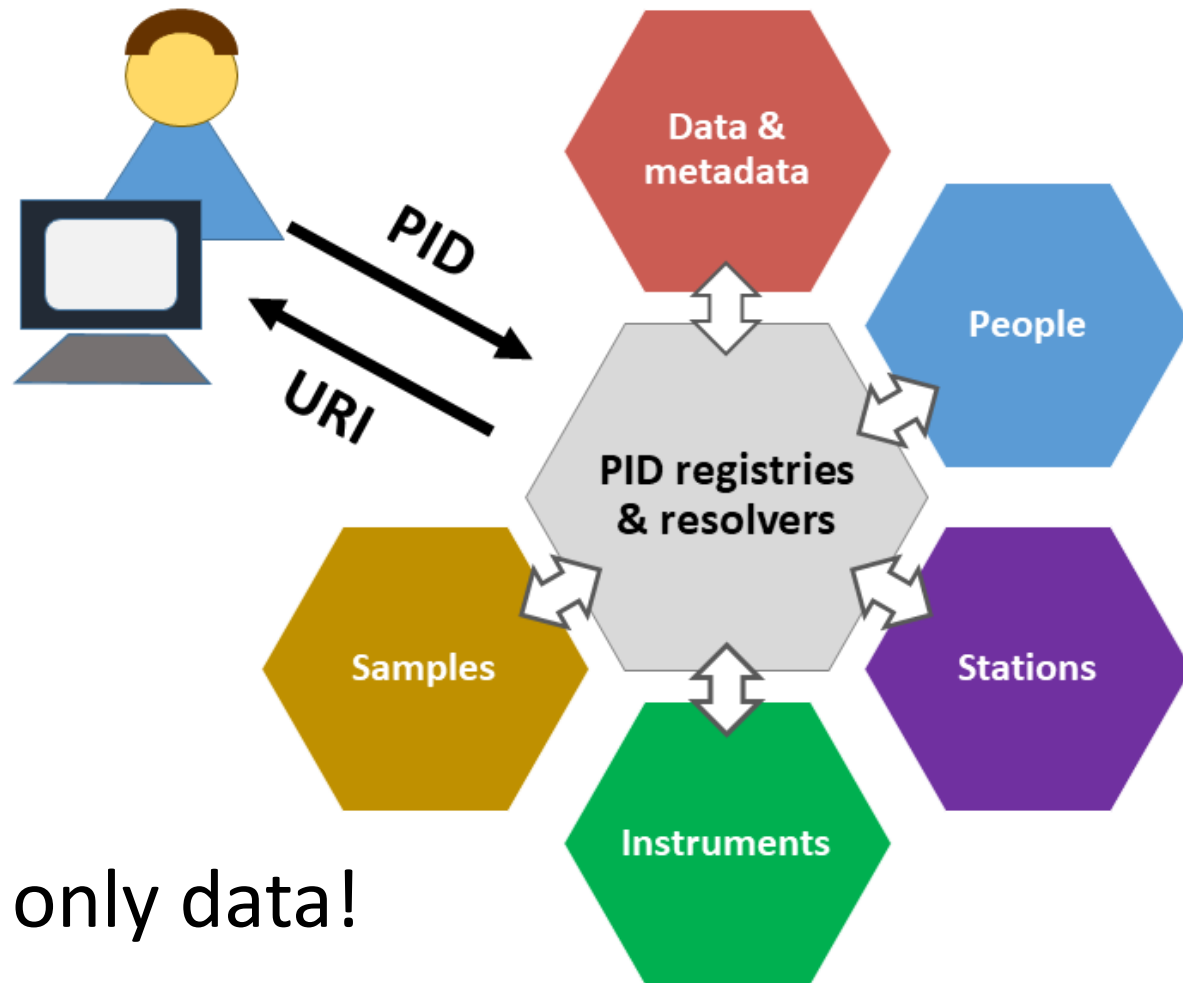
PT presidency e-IRG workshop May 25, 2021



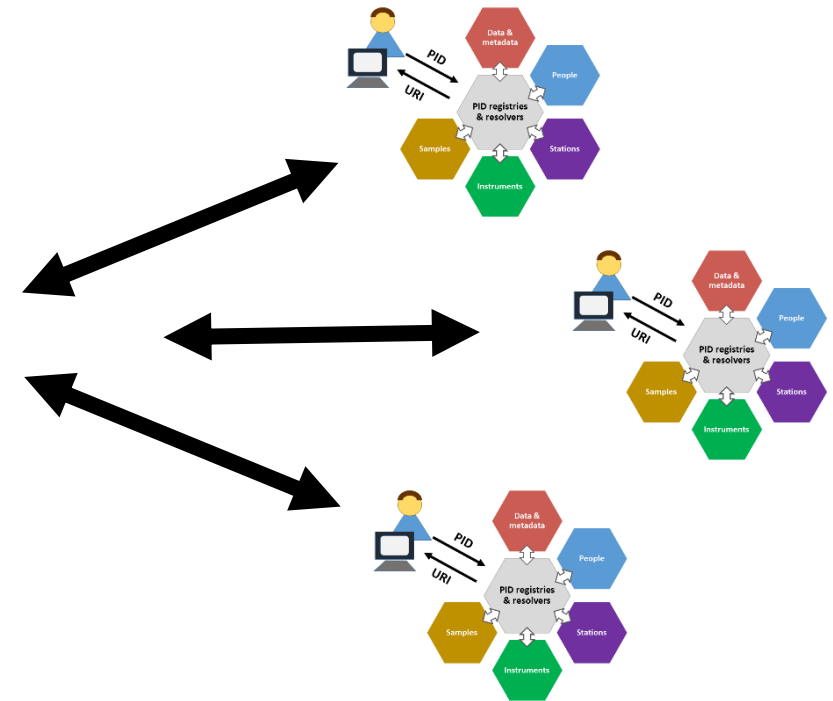
Key aspects

- To support and enable research that is FAIR, identifiers must be globally unique, persistent and resolvable (PID-> GUPRID)
- Three important functions:
 - Unambiguous identity (tied to fixity)
 - Indirection to “landing page” and/or resource itself
 - Basic metadata at registry level (“kernel” profiles)

Resolution gives access to DOs & metadata



not only data!



iterative lookups:
metadata, types, ...

PID Policy for EOSC

- Principles, desired results and governance for a viable, trusted PID infrastructure suitable for the long-term sustainability of the EOSC
- Towards a future where PIDs can be used as the preferred method of referring to its assigned entity
- A functioning PID ecosystem requires interoperability both between PID Services and between PID Service Providers
- The Policy may be targeting service providers, but is relevant for all stakeholders!

European Commission (2020): A Persistent Identifier (PID) policy for the European Open Science Cloud.

<https://doi.org/10.2777/926037>

PID Architecture for EOSC

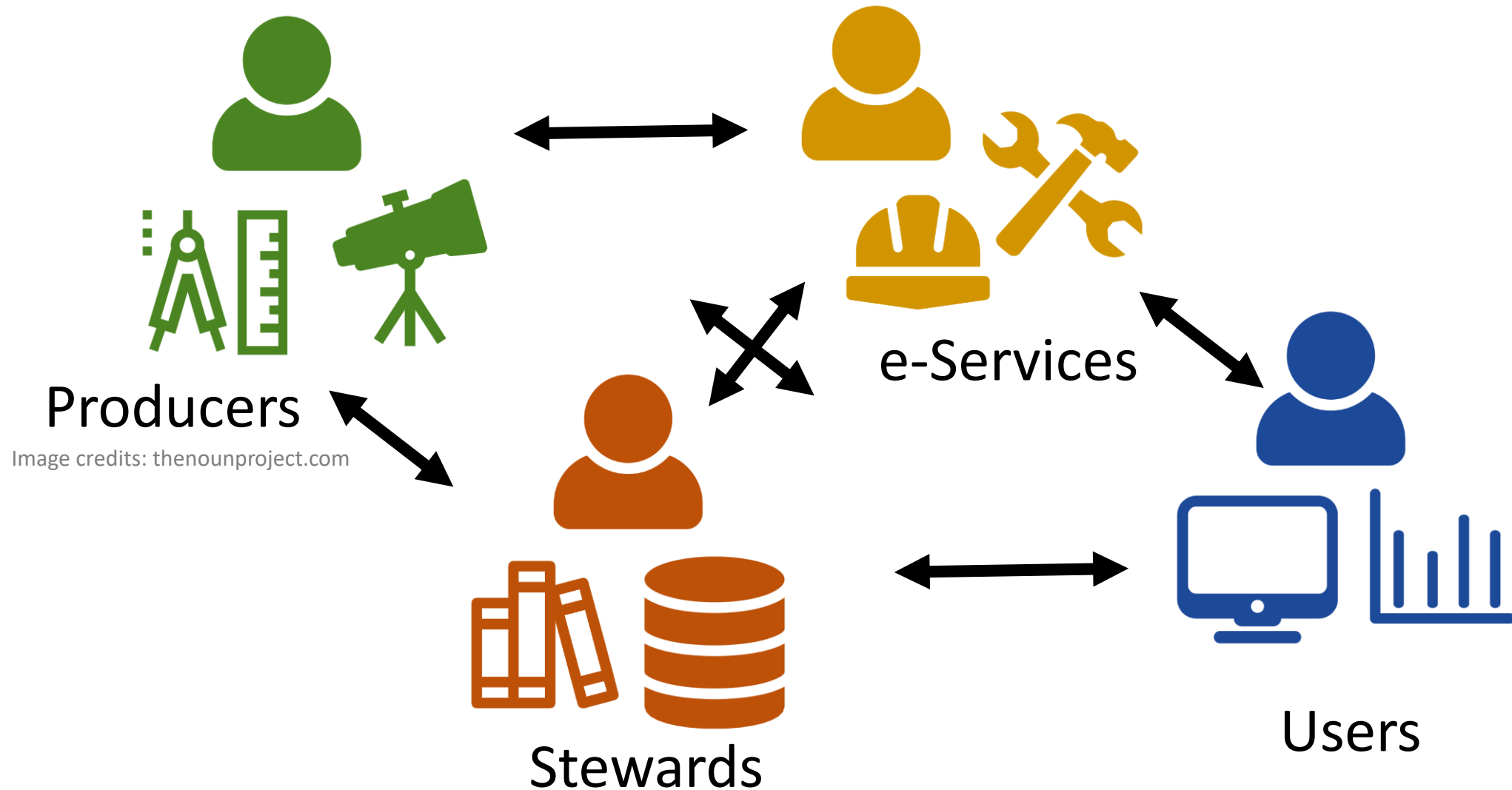
- Components, Actors and Activities involved in PID “ecosystem”
- Performance and Scalability
- Security, Reliability and Resilience
- Needs for certification
- Example implementations
- Gaps in the Existing PID Landscape
- Challenges for Investigation and Development

European Commission (2020): PID Architecture for the European Open Science Cloud.

<https://doi.org/10.2777/525581>

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Actors in the PID ecosystem



Challenges ahead

- Existing PID service landscape is rich, but not fully developed
- Need for sustainable services, also for non-data resources, including basic system support PIDs (types, metadata models, ...)
- A number of challenges, technical and metadata-related
 - Generic PID minting (free at point of use)
 - Common mechanisms for (complex) querying across PID systems
 - Comprehensive application of PID kernel metadata profiles and types
 - Performance & scalability of PID registries & resolvers
 - Security, reliability & resilience

European Commission (2020): PID Architecture for the European Open Science Cloud.

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