Integrating EOSC services to enable FAIR principles

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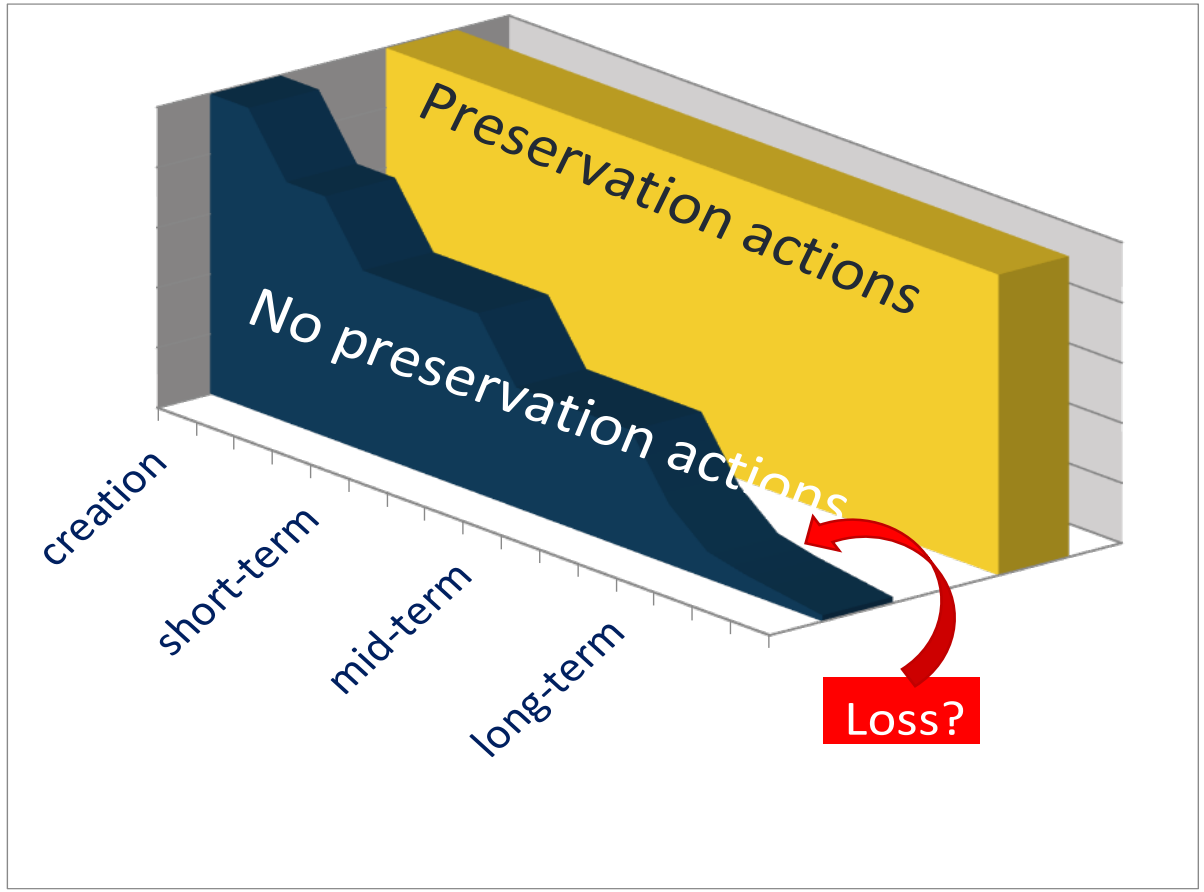
Long-term preservation



Main objectives:

- Preserve the content and form
- In the long-term (over decades)
- Making it accessible

Main risks deal with:

- Comprehension, knowledge of content
- File format obsolescence
- Corrupted storage media
- Software / hardware obsolescence

Long-term preservation

Challenge	Solutions
Loss of content knowledge	• Metadata; • Persistent, unique identifiers.
File format obsolescence	• Handling of a limited set of durable formats; • File format identification, validation; • Logical migration (format conversion).
Storage media failure	• Management of media ageing; • Physical migration.
Software or hardware disappearance	• Technology watching , anticipation , proactivity.

Long-term preservation

Include

- Capacity and resource planning,
- Application of long-term preservation techniques and technologies.

Combine policies, actions and (automated) processes

- To ensure access to "born-digital" and reformatted data,
- Regardless of the challenges of technological changes or failures (metadata, file format, media).

Rely on front-ends and interfaces to allow the ingestion of datasets.

To ensure that digital information remains available, understandable over time !

Long-term preservation & FAIR

- One phase in the Research data lifecycle
- Adresses the most of the FAIR principles
  - Persistent identifiers, provenance, authentication, etc.
  - Room for improvement
- Includes a « time » parameter which is not (yet?) considered in FAIR

From Research data lifecycle – UK Data Service
https://www.ukdataservice.ac.uk/manage-data/lifecycle

B2-Services enabling FAIR

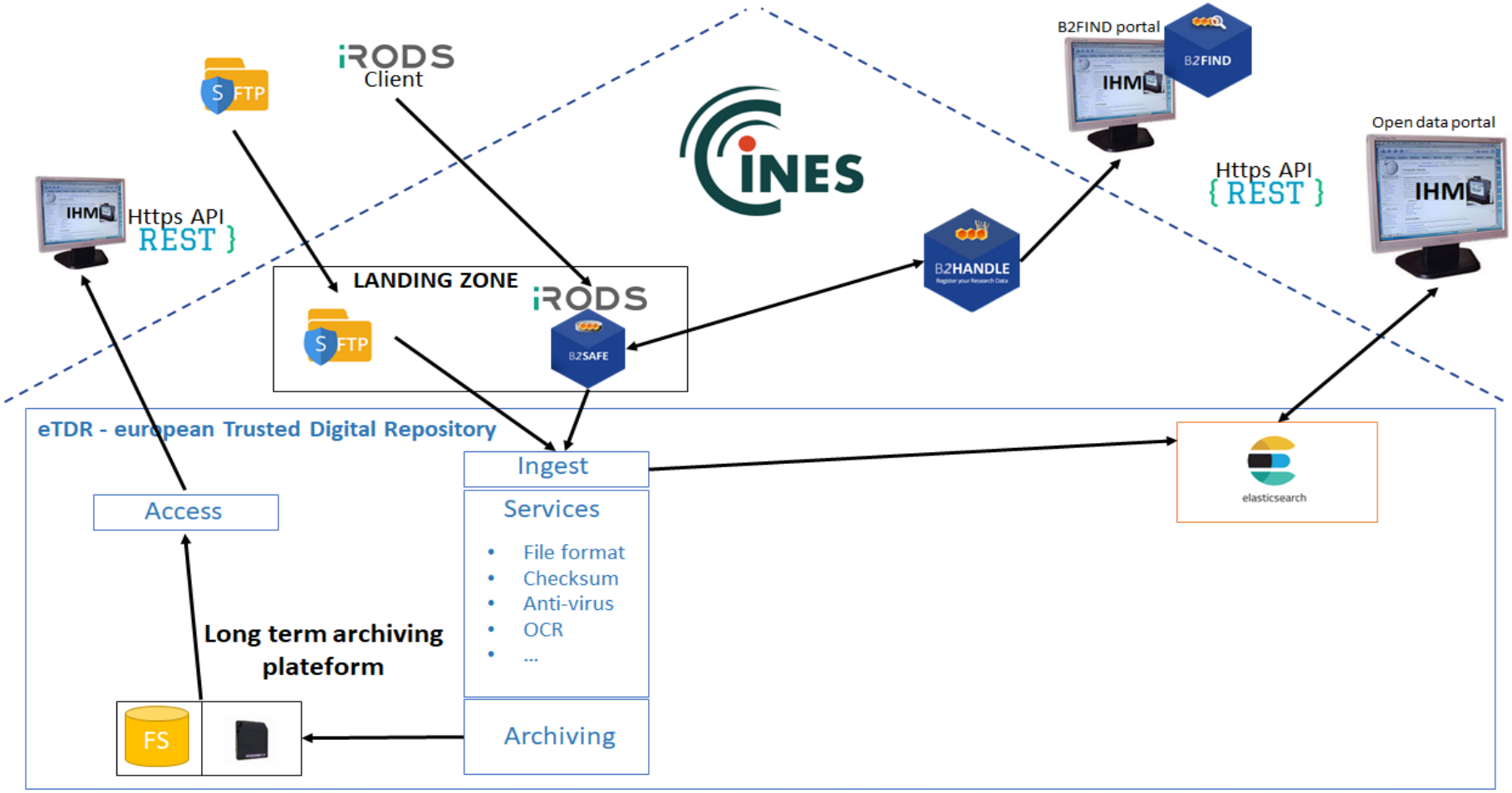
B2ACCESS service offers easy-to-use and secure Authentication and Authorization platform with different methods of authentication (home organization identity provider, Google account, EUDAT ID)

B2SAFE service offers functionality to replicate datasets across different data centres in a safe and efficient way while maintaining all information required to easily find and query information about the replica locations

B2HANDLE service offers data persistency by maintaining opaque, globally unique PIDs.

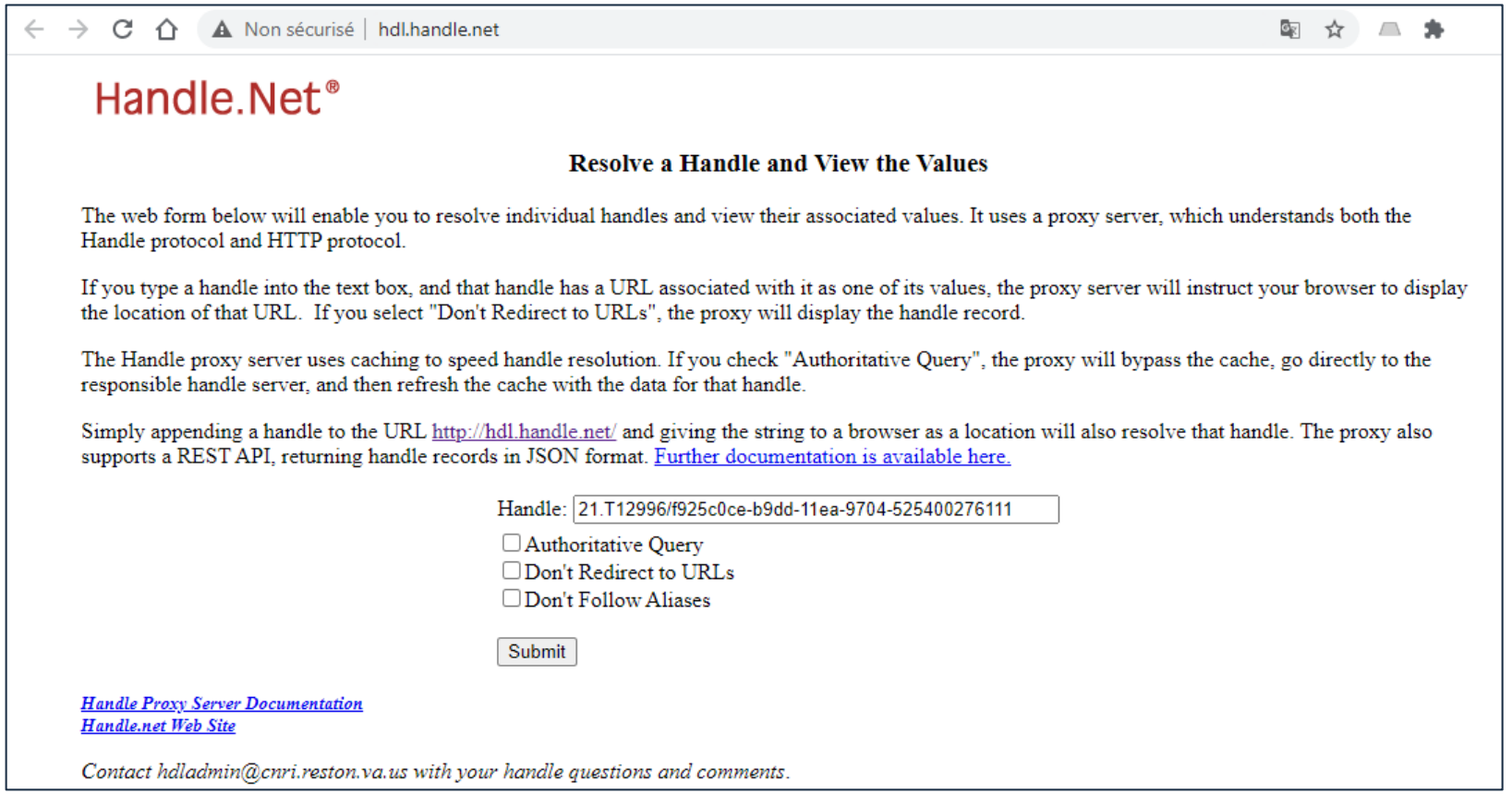
B2FIND service offers an interdisciplinary data discovery service based on a comprehensive metadata catalogue. Metadata are harvested from widely spread and inhomogenous services

eTDR@CINES integration



Handle PIDs resolution

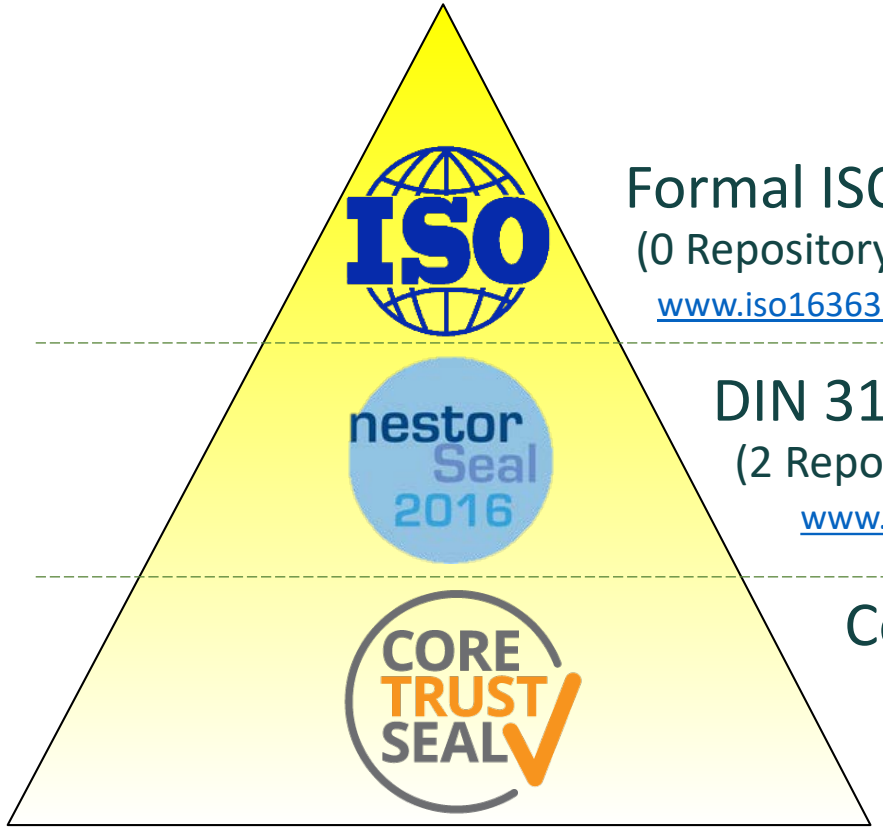
- PIDs assigned through B2HANDLE can be resolved
- http://hdl.handle.net
- 21.T12996/f925c0ce-b9dd-11ea-9704-525400276111



EOSC-hub achievements

- eTDR @ CINES now part of EOSC-hub catalogue – https://marketplace.eosc-portal.eu/services/etdr-european-trusted-digital-repository
- Demonstrate the possibility of archiving datasets from B2SHARE (another interface) in the DANS datavault – code published on Git-hub : https://github.com/ekoi/b2share-dtap
- Business model in progress
  - Annual fee
  - Subject to change pending the EOSC business model

European certification framework



Formal ISO 16363:2012 certification
(0 Repository certified, 100+ criteria)
www.iso16363.org/

DIN 31644 Extended certification
(2 Repositories certified, 34 criteria)
www.langzeitarchivierung.de

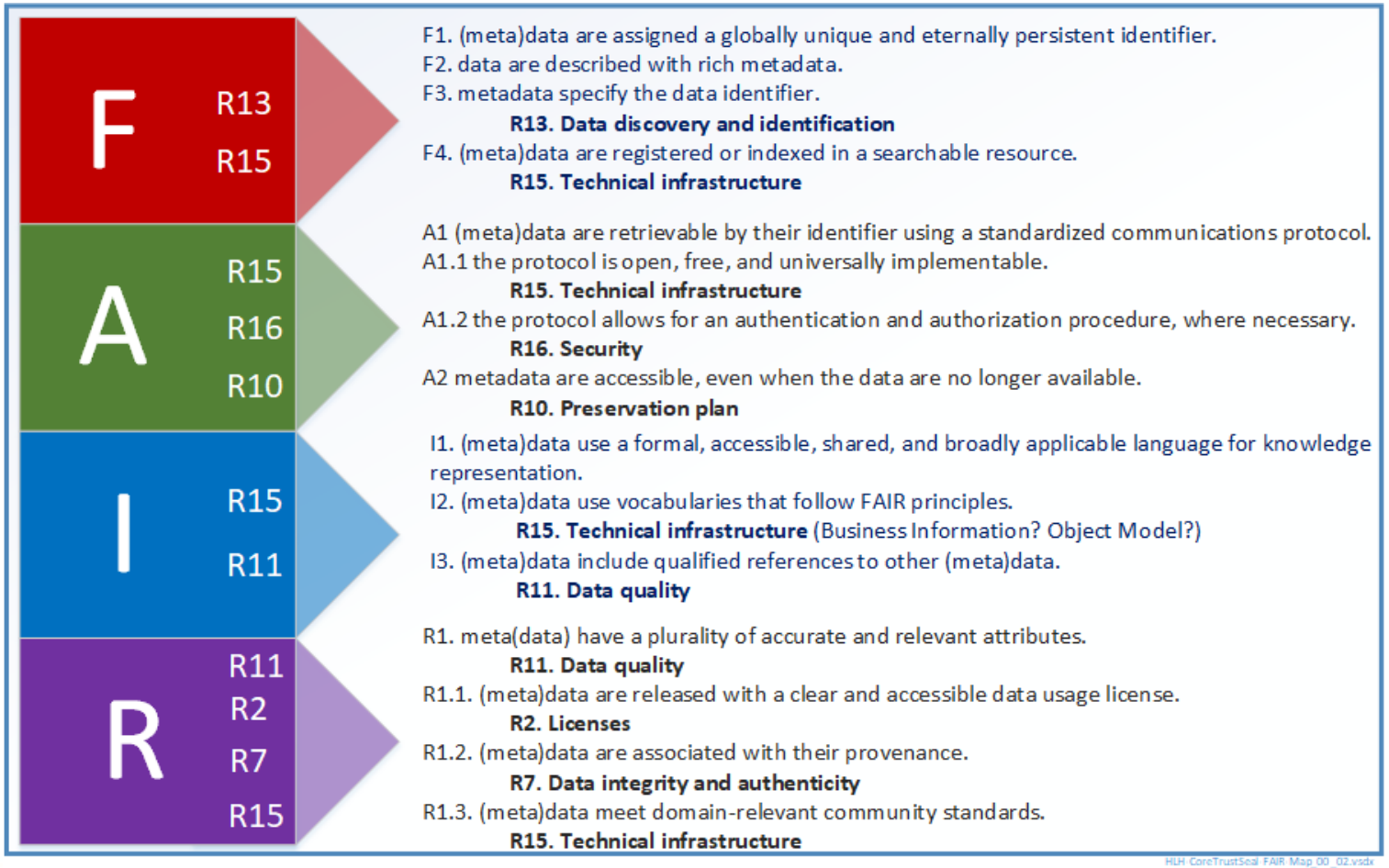
Certification CoreTrustSeal
(100+ repositories, 16 criteria)
www.CoreTrustSeal.org

Trustworthy Data Repositories

CoreTrustSeal certification

- Replaces DSA & WDS certifications
- 16 evaluation criteria for trustworthy data repositories
  - Designated community, mandate, organization, security, in addition to data quality
- 100 certified repositories
- Open to all data repositories
- Self-assessment/certification tool available online
- CoreTrustSeal Standards and Certification Board - https://www.coretrustseal.org/
- Assembly of Reviewers

EOSC-hub & FAIRsFAIR



- CTS+FAIR mapping
- Certification support programme
- Joint Activity EOSC-hub & FAIRsFAIR

FAIRSFAIR
Fostering Fair Data Practices in Europe

Thank you!

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Realising the European Open Science Cloud

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