

World Data System Webinar Series 2024

CoreTrustSeal – Levels of Curation & Preservation: Towards an Inclusive Repository Typology

19 November 2024
15:00 UTC / 11:00 EST



DOI: 10.5281/zenodo.14198830



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WDS Virtual Meeting Etiquette

- We welcome your questions in the Q&A section
- Please note that this webinar will be recorded

Speakers



Olivier Rouchon



Hervé L'Hours

Agenda

- Welcome & Logistics
- CoreTrustSeal Certification Presentation
- Discussion and Q/A
- Closing

Please Welcome Olivier Rouchon
And Hervé L'Hours

CoreTrustSeal certification of trustworthy data repositories

Status update

WDS Webinar - Nov. 19th 2024

Olivier Rouchon: CoreTrustSeal Chair

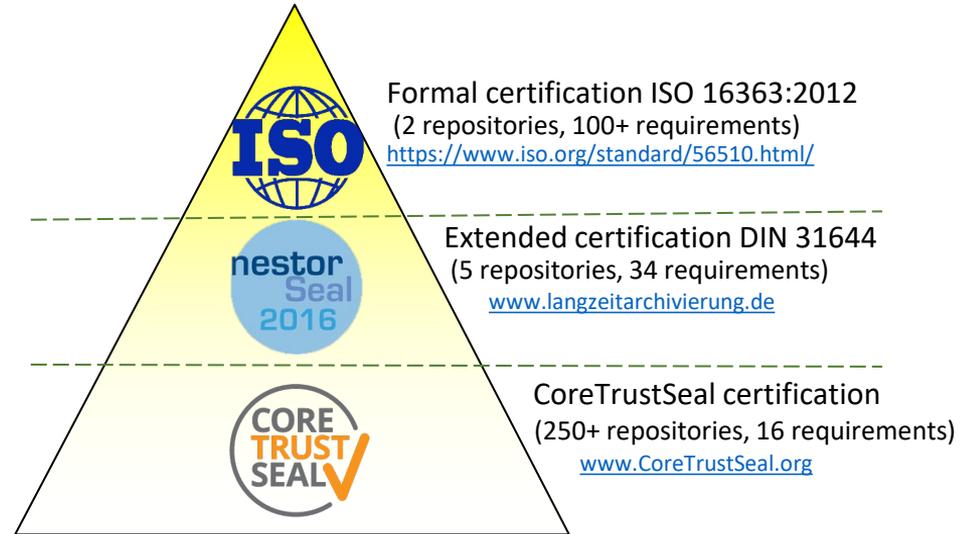
Hervé L'Hours – Reviewer Community, Past Chair, Past Vice Chair



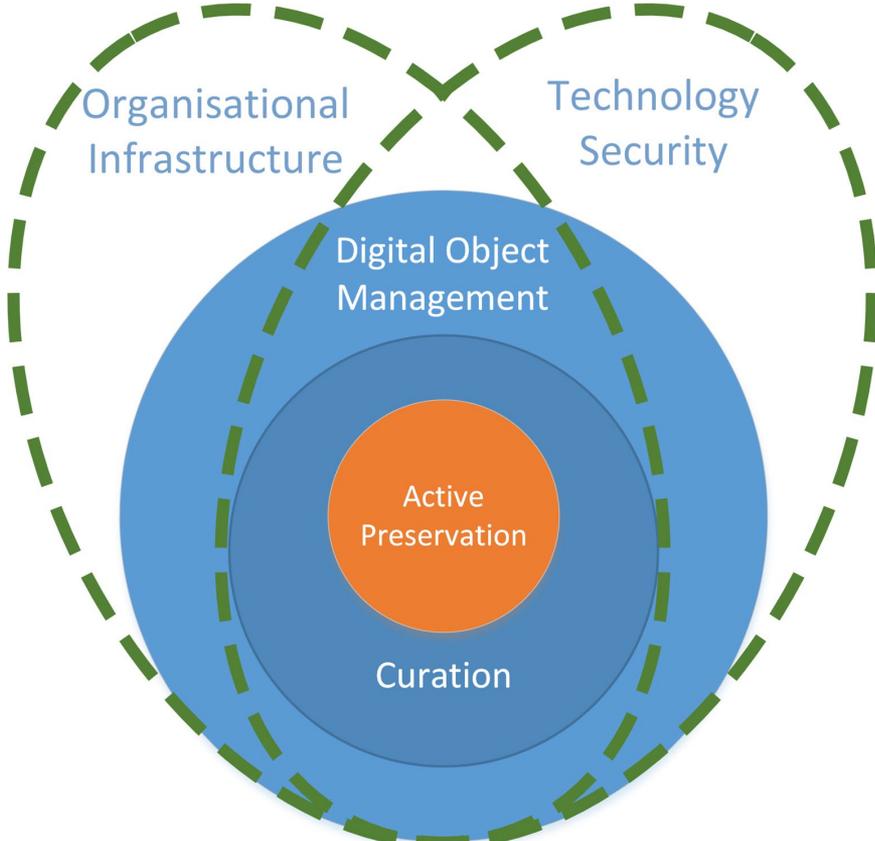
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CoreTrustSeal

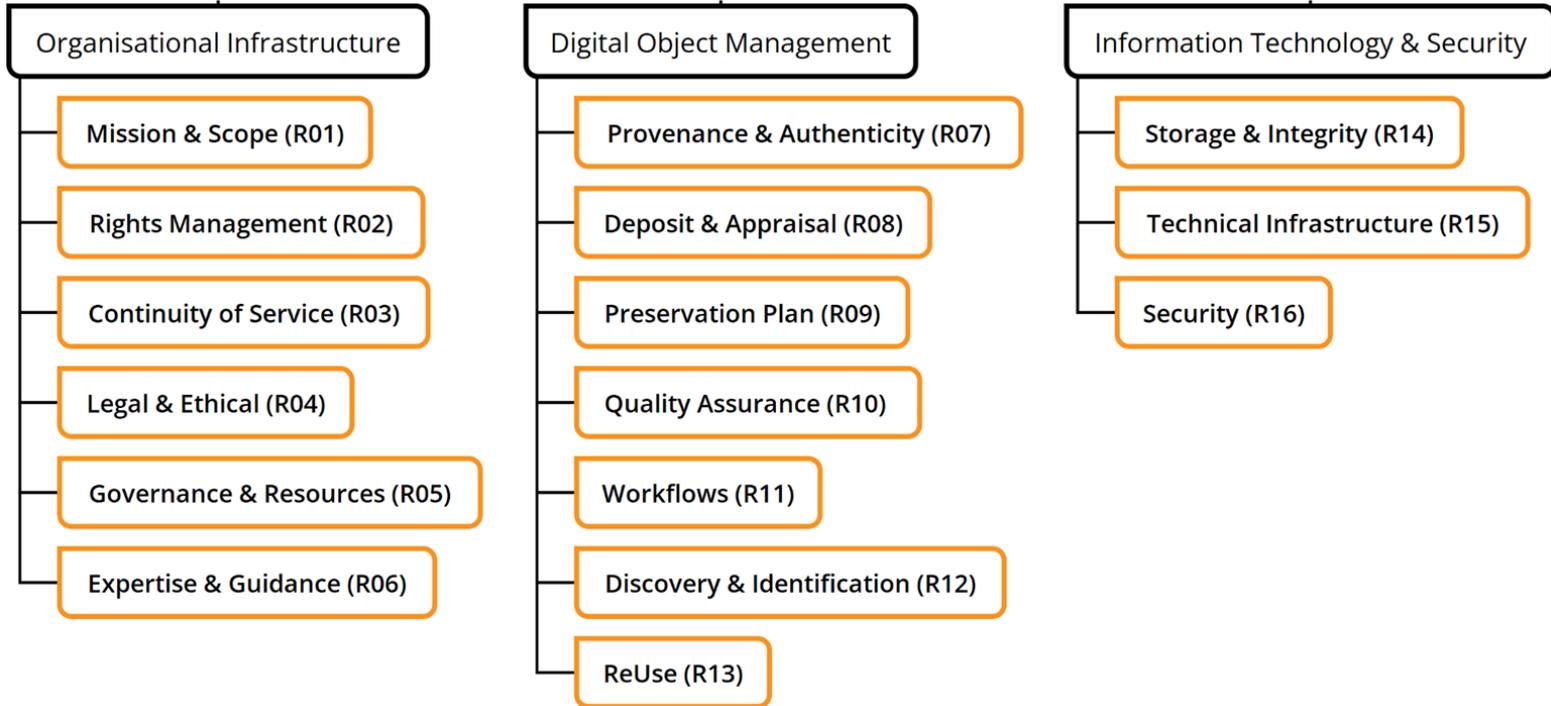
- Trustworthy Digital Repository (TDR)
 - Requirements
 - Certification
- RDA Endorsed Recommendation
 - Work Group (WDS-DSA)
 - Under this Interest Group
- Single, 'core', sustainable TDR certification
- Since 2017 not-for-profit foundation
- Three year certification
- Periodic Review of Requirements

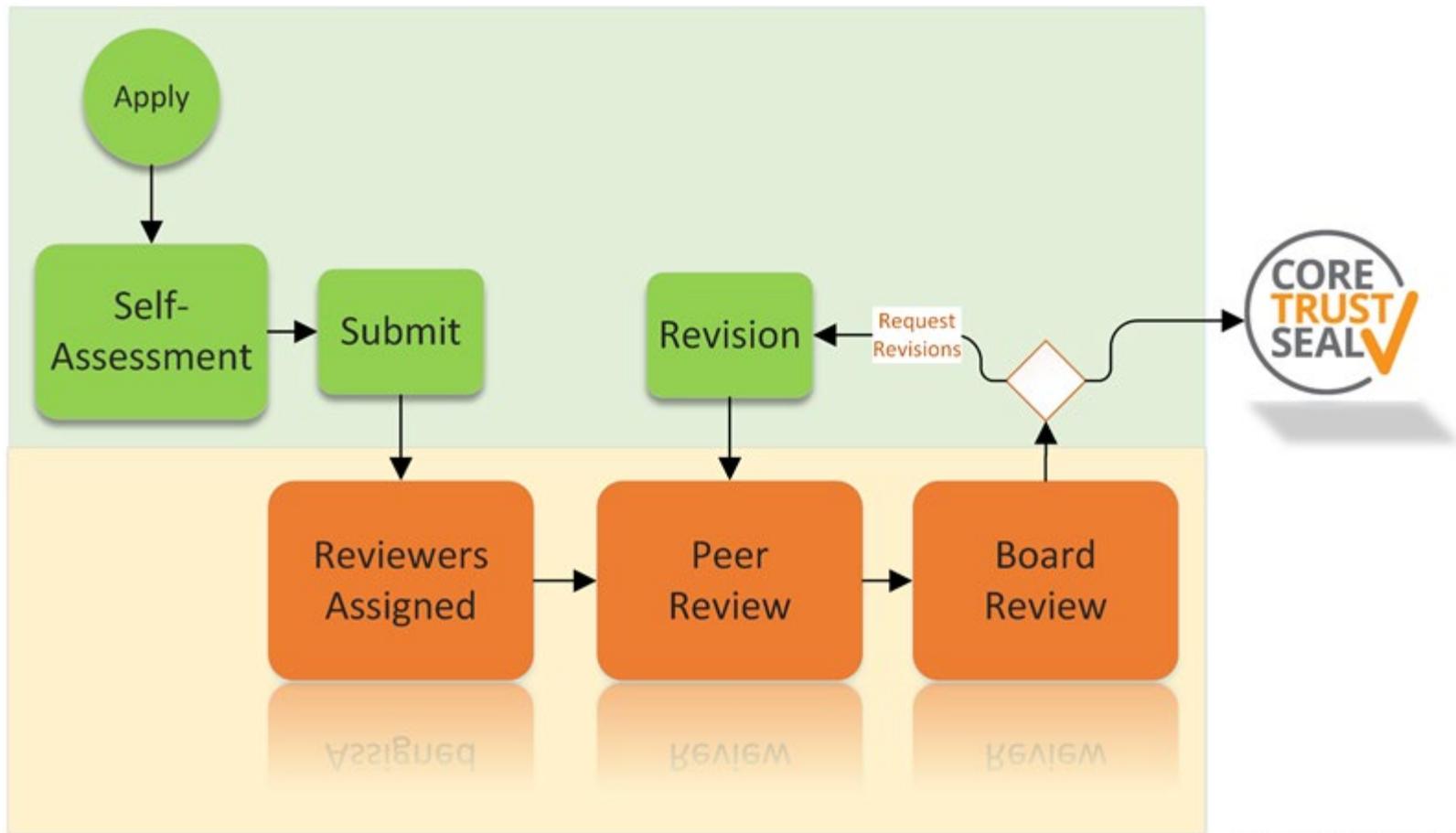


Scope of the Requirements



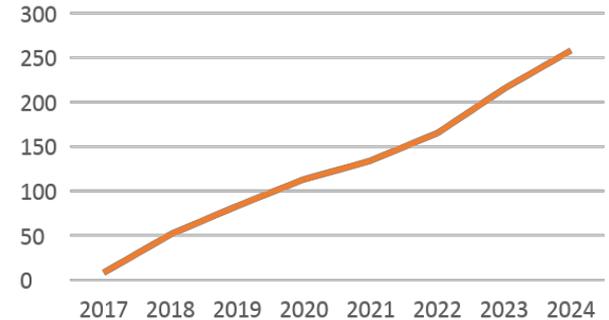
CoreTrustSeal 2023-2025





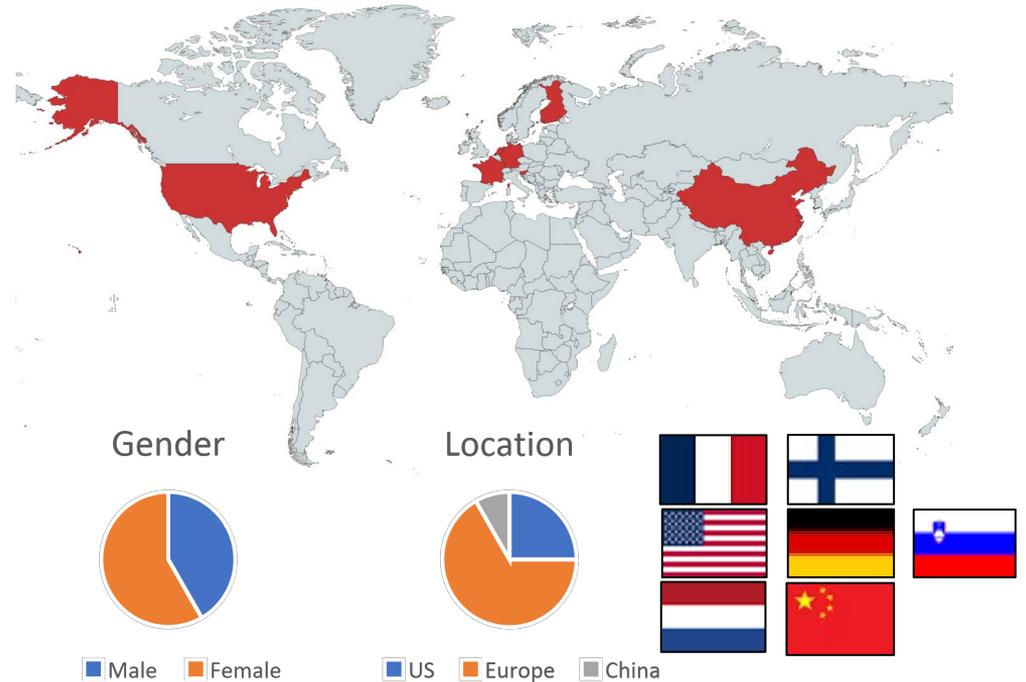
Overview, Update and Next

- Growth
- Board Elections
- Requirements Revision
- Maintenance Group
- Related Progress, Efforts and Priorities
 - Preservation levels
 - Repository types
 - Next steps



New Board elected – 2024-2027

- Alina Danciu (Sciences Po, FR)
- Andrea Lammert (DKRZ, G)
- Aude Chambodut (CNRS, FR)
- Debbie Roth (WHOAS, US)
- Guoqing Li (RADI, CN)
- Jared Lyle (ICPSR, US)
- Maaïke Verburg (DANS, NL)
- Maja Dolinar (ADP-SSDA, SI)
- Marjan Hartsuiker (RAZ, NL)
- Olivier Rouchon (CNRS, FR)
- Peter McGarvey (UniProt, US)
- Tuomas J. Alaterä (FSSDA, FIN)



Requirements revision 2026-2028

Review

- Review applications over last three years
- Draft suggested changes and additions

Consultation

- Survey the community
- Review feedback
- Incorporate feedback into draft
- Board review and approval new draft



Publication

- Release of final draft
- Final error checking by community and board
- Release of 2026-2028 requirements

Maintenance Group

- CoreTrustSeal Maintenance WG Established
 - <https://www.rd-alliance.org/groups/coretrustseal-maintenance-wg>
- Join
 - Contribute to future revisions
 - Champion CoreTrustSeal
 - Support inclusion & improvement
- Other involvement
 - RDA/WDS Certification of Digital Repositories IG
 - RDA/WDS TRUST Principles Outreach and Adoption WG
 - Community-based catalogue of requirements for trustworthy Technical Repository Service Providers WG



Modelling curation and preservation levels for trustworthy digital repositories



CTS Levels of Curation 2019-2025

2019-2021, 2020-2022

- Curation understood as “adding value by enhancing content”
- Initial deposits unchanged, edits only on copies

2023-2025

- Curation as prerequisite for “assuring long-term accessibility and understandability of data as the needs of the Designated Community change”
- Initial deposits unchanged, edits only on copies
- Sufficient metadata for independent use by Designated Community
- Measures for active preservation in place

Level	Description
A.	Content distributed as deposited.
B.	Basic curation – e.g. brief checking, addition of basic metadata or documentation
C.	Enhanced curation – e.g. conversion to new formats during ingest, enhancement of documentation and metadata
D.	Data-level curation – as in C above, but with additional editing of deposited data

CoreTrustSeal Standards and Certification Board. (2019). CoreTrustSeal Trustworthy Data Repositories Requirements 2020–2022 (v02.00-2020-2022). Zenodo. <https://doi.org/10.5281/zenodo.3638211>

CoreTrustSeal Standards and Certification Board. (2022). CoreTrustSeal Requirements 2023-2025 (v01.00). Zenodo. <https://doi.org/10.5281/zenodo.7051012>



Revising CTS Levels of Curation

- Integrate community consensus into
 - a “core” level for trusted digital repositories
 - a definition of “levels of care” provided by a repository (reference point)
- Community consultation & requests for feedback
 - during two revisions of the CoreTrustSeal Requirements (2019, 2021)
 - CoreTrustSeal Discussion Paper on “Curation and Preservation Levels”
 - Version 1 published during the 2022 revision of the CTS requirements
 - Version 2 to reflect feedback from community & members of the EOSC LTDP TF
 - Version 3 = position paper approved by CTS Board

CoreTrustSeal Standards and Certification Board. (2022). Curation & Preservation Levels: CoreTrustSeal Discussion Paper (v02.00). Zenodo.
<https://doi.org/10.5281/zenodo.6908019>



Revising CTS Levels of Curation

- Comments/suggestions received:
 - clarification of concepts and terminology
 - relationship between levels of curation and (expectations for) digital preservation measures not sufficiently defined
 - seemingly prescriptive of particular preservation strategies (normalization and migration)
 - strongly focused on curation at ingest

See, for example,

<https://www.coretrustseal.org/why-certification/review-of-requirements/>; Lindlar, Micky, & Rudnik, Pia. (2019). “Eye On CoreTrustSeal - Recommendations for Criterion R0 from Digital Preservation and Research Data Management Perspectives.” iPRES2019.

<https://doi.org/10.5281/zenodo.3529423>; CoreTrustSeal Standards and Certification Board. (2022). CoreTrustSeal Revision Working Group Change Log and Associated Materials (v01.00). <https://doi.org/10.5281/zenodo.7051237>



Revised curation & preservation levels

A. Active preservation	In addition to D and/or C above the repository takes long-term responsibility for ensuring that the data and metadata can be understood and rendered as required by the designated community for reuse.
C. Initial Curation	In addition to Level D., if these criteria are not met the digital objects are curated by the repository to meet the defined criteria.
D. Deposit Compliance	Data content and supporting metadata deposited are checked at the point of deposit for compliance with defined criteria .
Z. Content distributed as deposited (Retention Only)	Data content and supporting metadata are distributed to users exactly as they are provided by depositors . Data content and supporting metadata are stored for a given time period, or indefinitely.



Levels of Object Care vs Types of Repository



Levels of Repository & Object Care

The Curation & Preservation Levels imply explicit expressions of:

Repository: Levels of Care Provided

Digital Object: Level of Care Received



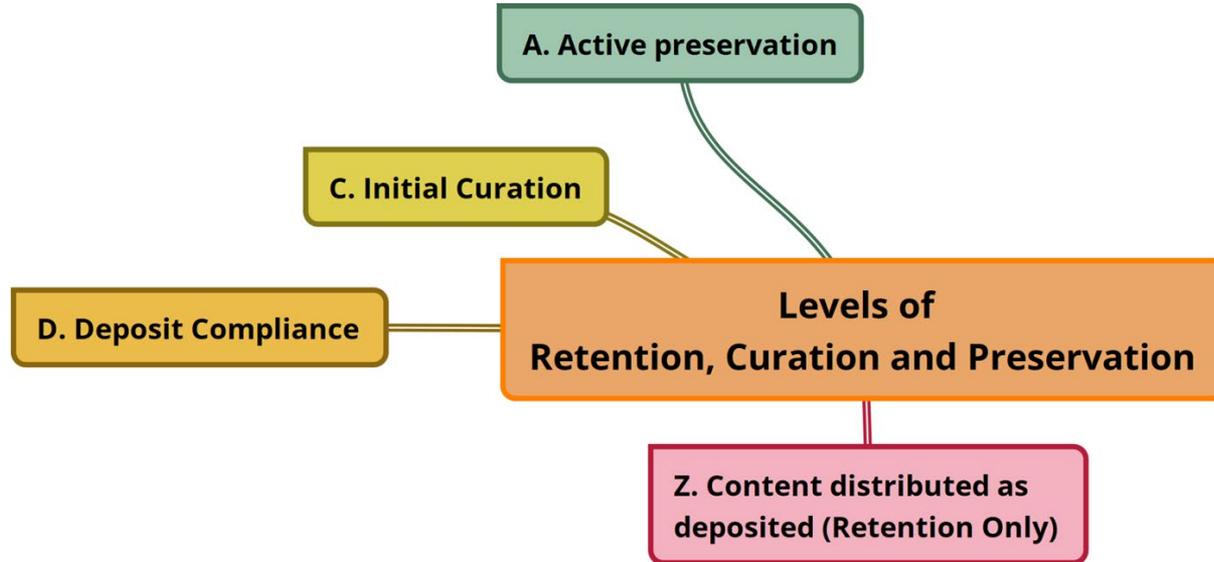
“Levels” Position Paper

Position Paper: supports **defining in-scope candidates for CoreTrustSeal**

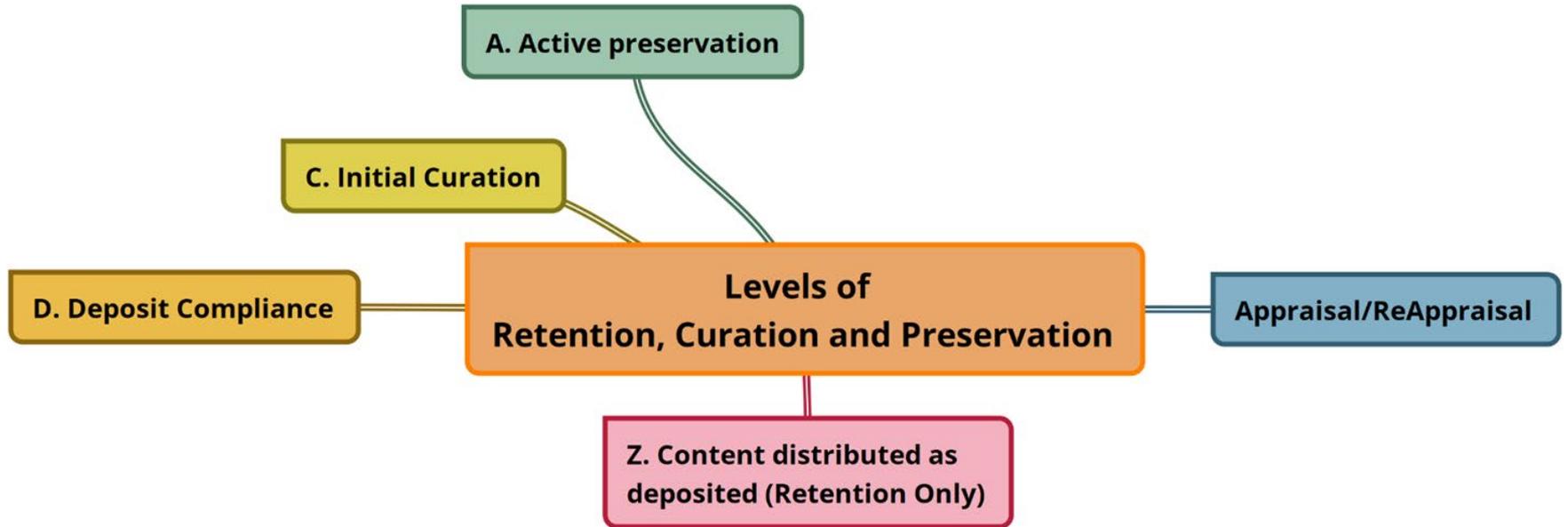
- A CoreTrustSeal Trustworthy Digital Repository **must offer active preservation**
- But... how should we think about:
 - the wider group of repositories
 - their assessment and certification needs



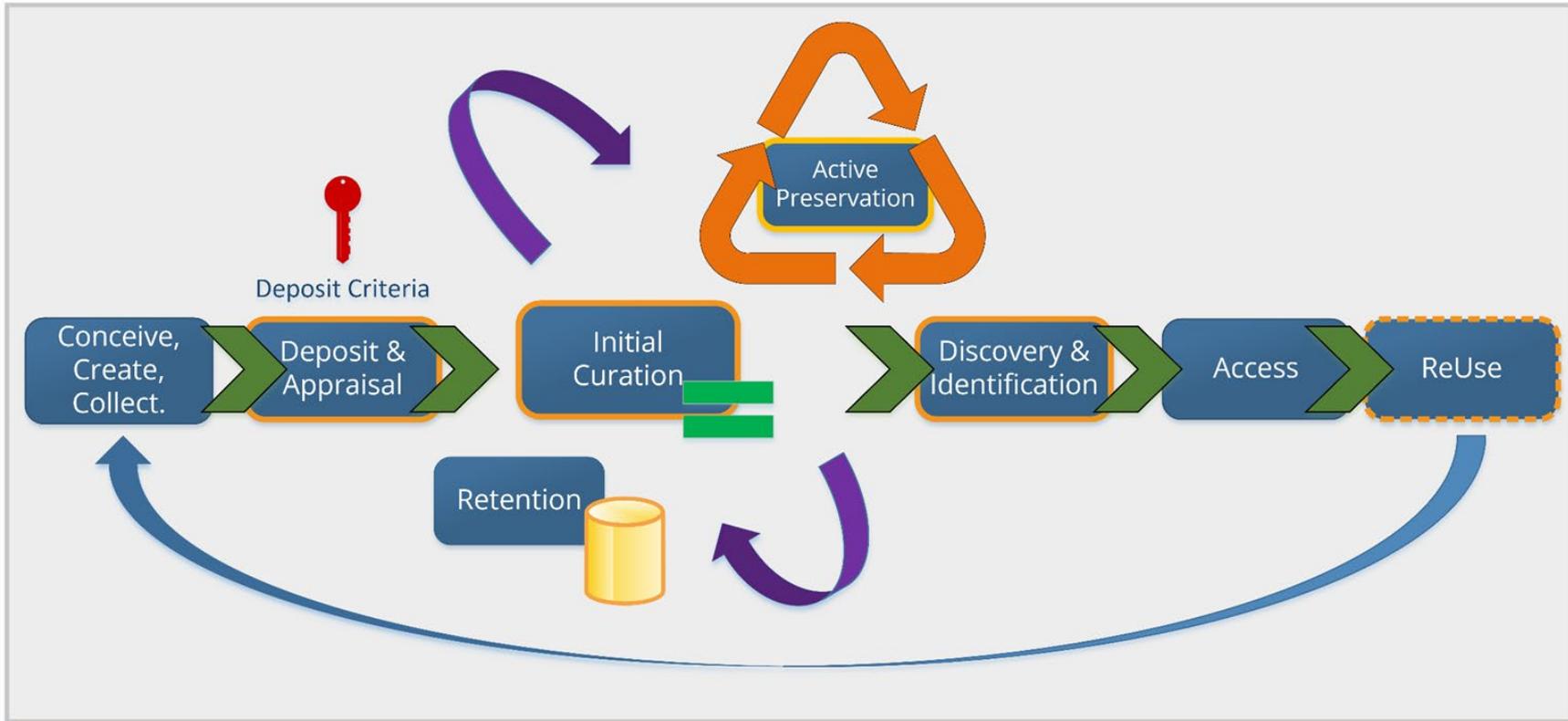
“Levels” Position Paper



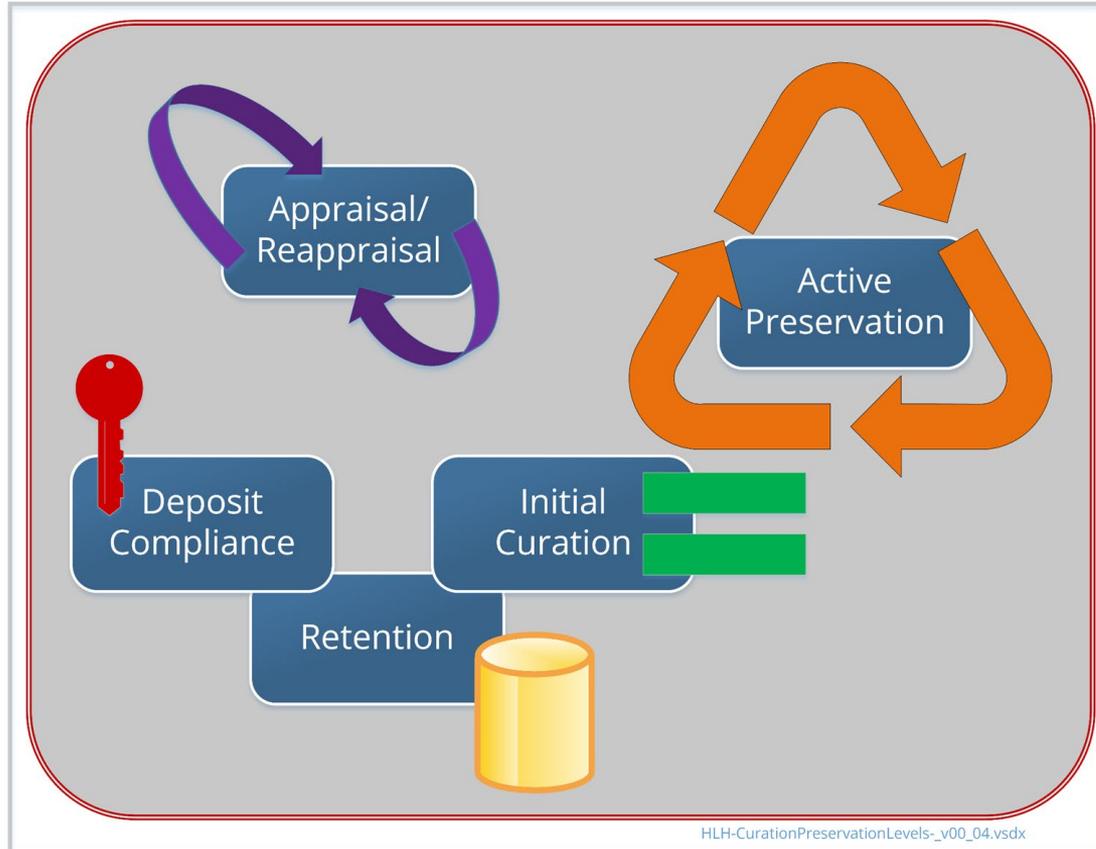
“Levels” Position Paper



“Levels” Position Paper: Lifecycle

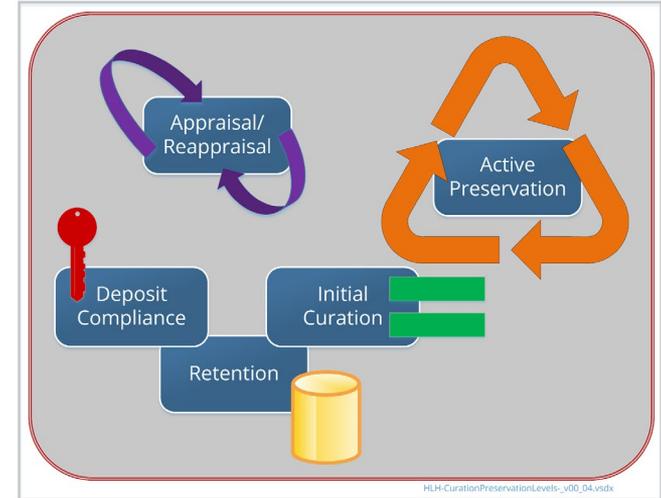


“Levels” Position Paper



Implied Repository and Object Metadata Characteristics

- Retention Periods
- Deposit metadata & formats
- Curation & Preservation actions
- logical (e.g. technical formats)
- semantic (e.g. metadata, ontologies)
- quality aspects of digital objects



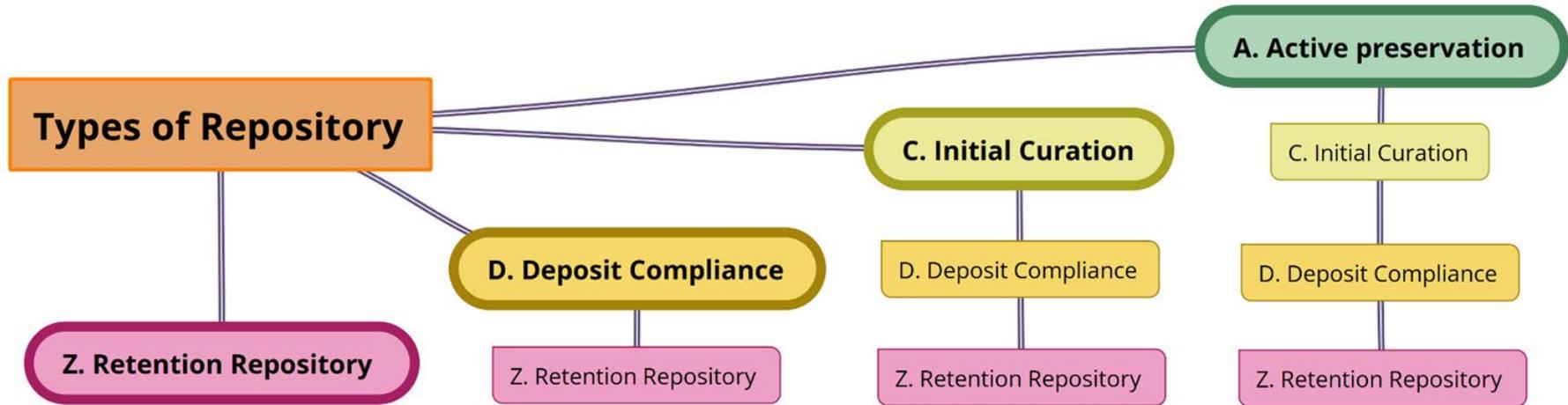
“Types” Discussion Paper

Position Paper & metadata issues inform a new Discussion Paper:

- Proposes a repository typology with implications for:
 - the specification of **supporting evidence** for compliance,
 - including that provided by **third party service providers**,
 - potential **future assessment and certification** approaches.



“Types” Discussion Paper



Types of Repository: Entities, Responsibilities, Objects

Part	Short Name	Full Text	Retention Only	Deposit Compliance	Initial Curation	Active Preservation
Organisational Infrastructure	Mission & Scope (R01)	R01. The repository has an explicit mission to provide access to and preserve digital objects.	1	1	1	1
Organisational Infrastructure	Rights Management (R02)	R02. The repository maintains all applicable rights and monitors compliance.	1	1	1	1
Organisational Infrastructure	Continuity of Service (R03)	R03. The Repository has a plan to ensure ongoing access to and preservation of its data and metadata.	1	1	1	1
Organisational Infrastructure	Legal & Ethical (R04)	R04. The repository ensures to the extent possible that data and metadata are created, curated, preserved, accessed and used in compliance with legal and ethical norms.	1	1	1	1
Organisational Infrastructure	Governance & Resources (R05)	R05. The repository has adequate funding and sufficient numbers of staff managed through a clear system of governance to effectively carry out the mission.	1	1	1	1
Organisational Infrastructure	Expertise & Guidance (R06)	R06. The repository adopts mechanisms to secure ongoing expertise, guidance and feedback-either in-house, or external.	1	1	1	1
Digital Object Management	Provenance and authenticity (R07)	R07. The repository guarantees the authenticity of the digital objects and provides provenance information.	0	1	1	1
Digital Object Management	Deposit & Appraisal (R08)	R08. The repository accepts data and metadata based on defined criteria to ensure relevance and understandability for users.	0	1	1	1
Digital Object Management	Preservation plan (R09)	R09. The repository assumes responsibility for long-term preservation and manages this function in a planned and documented way.	0	0	0	1



Types of Repository: Entities, Responsibilities, Objects

Part	Short Name	Full Text	Retention Only	Deposit Compliance	Initial Curation	Active Preservation
Digital Object Management	Quality Assurance (R10)	R10. The repository addresses technical quality and standards compliance, and ensures that sufficient information is available for end users to make quality-related evaluations.	0	1	1	1
Digital Object Management	Workflows (R11)	R11. Digital object management takes place according to defined workflows from deposit to access.	1	1	1	1
Digital Object Management	Discovery and Identification (R12)	R12. The repository enables users to discover the digital objects and refer to them in a persistent way through proper citation.	1	1	1	1
Digital Object Management	Reuse (R13)	R13. The repository enables reuse of the digital objects over time, ensuring that appropriate information is available to support understanding and use.	0	1	1	1
Information Technology & Security	Storage & Integrity (R14)	R14. The repository applies documented processes to ensure data and metadata storage and integrity.	1	1	1	1
Information Technology & Security	Technical Infrastructure (R15)	R15. The repository is managed on well-supported operating systems and other core infrastructural software and hardware appropriate to the services it provides to its Designated Community.	1	1	1	1
Information Technology & Security	Security (R16)	R16. The repository protects the facility and its data, metadata, products, services, and users.	1	1	1	1



Next Steps

Make repository service offerings and digital object care levels more transparent

- Types of Repository Feedback

Types of Repository: Entities, Responsibilities, Objects. CoreTrustSeal Board Discussion Paper (v01.00). Zenodo. <https://doi.org/10.5281/zenodo.13133041>

- Implied Metadata Feedback

CoreTrustSeal Levels of Curation and Preservation: Implied Repository and Object Metadata Characteristics (v01.00). Zenodo. <https://doi.org/10.5281/zenodo.12701324>

- RDA Maintenance Group: CoreTrustSeal revisions
- EOSC Retention Task Force

<https://eosc.eu/wp-content/uploads/2024/03/Data-Retention-TF-ToR.pdf>

FAIR IMPACT Project (now), FIDELIS & EDEN projects (soon)





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- 4 December at 10 am EST with ARL
- 14 and 15 January WDS-ITO Webinar with re3data
- 26 February 2025 with CODATA and WorldFAIR+



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- Reminder to participate in a short survey after the webinar concludes.
- Your feedback is key to refining our future webinars to cater more effectively to your interests and needs.
- We appreciate your input!



WDS and ECR Newsletters

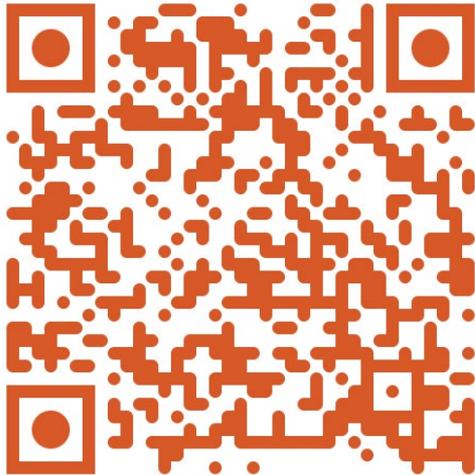
- Next WDS Newsletter Release: December 5
- Next ECR Newsletter Release: December 19



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