



# Types of Repository: Entities, Responsibilities, Objects

## CoreTrustSeal Board Discussion Paper v1.0

The CoreTrustSeal position paper on Curation & Preservation Levels<sup>1</sup> provides the Board, and potential applicants, with a reference point for defining repositories that are in scope for certification. Current CoreTrustSeal Trustworthy Digital Repository (TDR) certification is limited to candidates that take responsibility for active long-term preservation. Active preservation repositories may also intervene in other points in the digital object lifecycle. These intervention points, as defined in the CoreTrustSeal levels of care, include criteria that digital objects must comply with at the point of deposit and after initial curation. All of the levels assume a retention commitment.

This discussion paper briefly describes the wider significance of the curation and preservation levels and their alignment with the CoreTrustSeal Requirements. This has implications for the specification of supporting evidence for compliance, including that provided by third party service providers, and potential future assessment and certifications approaches.

### Repository Typology Based on Curation & Preservation Levels & Intervention Points

Retention Only (no further responsibilities)

Deposit Compliance (no initial curation or active preservation undertaken)

Initial Curation (could also offer deposit criteria, not active preservation)

Active Preservation (could also offer deposit criteria & initial curation)

A repository may be retention-only, but all repositories are assumed to provide effective retention-based services. An active long-term preservation repository will usually set deposit compliance and undertake initial curation, but these levels can also describe repository types through the inclusion and exclusion of key activities and associated responsibilities. The curation & preservation levels position paper notes that repositories may provide one or more levels of care across their collection, and that this would ideally be supported by specific statements about levels of care and reappraisal criteria at the object level.

Defining repository types based on their levels of care provides clearer differentiation. This can support repository selection by depositors, clarify expectations to funders and users, and support more aligned common practice. The typology provides a starting point for further investigation, including the differentiation of generic and specialist services and the logical (technical) and semantic measures to be taken at each intervention point.

The immediate benefit of this perspective is to consider where repositories, and the service providers that support them, can take a common approach to defining their characteristics (through metadata) and

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<sup>1</sup> CoreTrustSeal Standards and Certification Board. (2024). Curation & Preservation Levels: CoreTrustSeal Position Paper. Zenodo. <https://doi.org/10.5281/zenodo.11476980>

supporting artefacts (such as policies and standard operating procedures). This alignment would enable the specification of supporting evidence for assessment processes, including certification, from ‘minimal viable’ to more rigorous requirements (e.g. elaborations to protect sensitive data). The future benefits of this approach include identifying points of alignment across data and metadata services that would support common practice, federation and interoperability,

Despite the opportunities to streamline, and even automate, aspects of assessment through the adoption of community endorsed metadata, a great deal of relevant supporting information remains in less structured prose form. While standardised metadata supports machine actionability’, the CoreTrustSeal remains committed to the open sharing of the varied and unique details of every repository. The availability of this less structured prose information does depend on human assessment, but also provides an essential resource to depositors, users, funders and policy makers as they select, invest in and trust the repositories that care for digital objects. Furthermore, the broad range of open and transparent information about repositories is a resource for the discovery of emergent properties and factors through further research.

The adoption of this typology, alongside the defined ‘levels of curation’ and the provision of associated structured metadata<sup>2</sup> and supporting evidence artefacts would improve the availability of clear information about repositories as organisational entities and their responsibilities for digital objects.

The table below displays each of the repository types alongside each of the CoreTrustSeal Requirements.

Green cells (1) indicate requirements that are **applicable** to the repository type to the extent that this aligns with the relevant intervention points, e.g. a Deposit Compliance repository should consider the need for immediate ReUse (R13) in setting deposit compliance criteria, but would not be expected to ensure the objects remained usable over time.

Red cells (0) indicate requirements that are **not applicable** to the repository type, e.g. a Preservation plan (R09) is only relevant to a repository taking responsibility for Active Preservation.

The mapping retains the CoreTrustSeal focus on clear repository responsibility and transparency. The applicability of terms used in the requirements (e.g. ‘curation’ and ‘preservation’) and supporting evidence would depend on repository type. For example, for R1 a Retention Only repository would be expected to define its Mission & Scope but would not be expected to “preserve digital objects”, while the necessary Technical Infrastructure (R15) would vary between an initial curation and an active preservation repository.

<sup>2</sup> CoreTrustSeal Levels of Curation and Preservation: Implied Repository and Object Metadata Characteristics (v01.00). Zenodo. <https://doi.org/10.5281/zenodo.12701324>

# Table of Repository Type Alignment to CoreTrustSeal Requirements

## CoreTrustSeal Requirements 2023-2025

1-Applicable, 0- Not applicable,

			Retention Only	Deposit Compliance	Initial Curation	Active Preservation
Part	Short Name	Full Text	1	1	1	1
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

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