

# Digital Object Management

## 4.1 – Ingest – Acquisition of Content

- 4.1.1 - The repository shall identify the Content Information and the Information Properties that the repository will preserve.
  - 4.1.1.1 - The repository shall have a procedure(s) for identifying those Information Properties that it will preserve.
  - 4.1.1.2 - The repository shall have a record of the Content Information and the Information Properties that it will preserve.
- 4.1.2 - The repository shall clearly specify the information that needs to be associated with specific Content Information at the time of its deposit.
- 4.1.3 - The repository shall have adequate specifications enabling recognition and parsing of the SIPs.
- 4.1.4 - The repository shall have mechanisms to appropriately verify the identity of the Producer of all materials.
- 4.1.5 - The repository shall have an ingest process which verifies each SIP for completeness and correctness.
- 4.1.6 - The repository shall obtain sufficient control over the Digital Objects to preserve them.
- 4.1.7 - The repository shall provide the producer/depositor with appropriate responses at agreed points during the ingest processes.
- 4.1.8 - The repository shall have contemporaneous records of actions and administration processes that are relevant to content acquisition.

## 4.2 – Ingest – Creation of the AIP

- 4.2.1 - The repository shall have for each AIP or class of AIPs preserved by the repository an associated definition that is adequate for parsing the AIP and fit for long-term preservation needs.
  - 4.2.1.1 - The repository shall be able to identify which definition applies to which AIP.
  - 4.2.1.2 - The repository shall have a definition of each AIP that is adequate for long-term preservation, enabling the identification and parsing of all the required components within that AIP.
- 4.2.2 - The repository shall have a description of how AIPs are constructed from SIPs.
- 4.2.3 - The repository shall document the final disposition of all SIPs.
  - 4.2.3.1 - The repository shall follow documented procedures if a SIP is not incorporated into an AIP or discarded and shall indicate why the SIP was not incorporated or discarded.
- 4.2.4 - The repository shall have and use a convention that generates persistent, unique identifiers for all AIPs.
  - 4.2.4.1 - The repository shall uniquely identify each AIP within the repository.
    - 4.2.4.1.1 - The repository shall have unique identifiers.
    - 4.2.4.1.2 - The repository shall assign and maintain persistent identifiers of the AIP and its components so as to be unique within the context of the repository.
    - 4.2.4.1.3 - Documentation shall describe any processes used for changes to such identifiers.
    - 4.2.4.1.4 - The repository shall be able to provide a complete list of all such identifiers and do spot checks for duplication.
    - 4.2.4.1.5 - The system of identifiers shall be adequate to fit the repository's current and foreseeable future requirements such as numbers of objects.
  - 4.2.4.2 - The repository shall have a system of reliable linking/resolution services in order to find the uniquely identified object, regardless of its physical location.
- 4.2.5 - The repository shall have access to necessary tools and resources to provide authoritative Representation Information for all of the digital objects it contains.
  - 4.2.5.1 - The repository shall have tools or methods to identify the file type of all submitted Data Objects.
  - 4.2.5.2 - The repository shall have tools or methods to determine what Representation Information is necessary to make each Data Object understandable to the Designated Community.
  - 4.2.5.3 - The repository shall have access to the requisite Representation Information.
  - 4.2.5.4 - The repository shall have tools or methods to ensure that the requisite Representation Information is persistently associated with the relevant Data Objects.
- 4.2.6 - The repository shall have documented processes for acquiring Preservation Description Information (PDI) for its associated Content Information and acquire PDI in accordance with the documented processes.
  - 4.2.6.1 - The repository shall have documented processes for acquiring PDI.
  - 4.2.6.2 - The repository shall execute its documented processes for acquiring PDI.
  - 4.2.6.3 - The repository shall ensure that the PDI is persistently associated with the relevant Content Information.
- 4.2.7 - The repository shall ensure that the Content Information of the AIPs is understandable for their Designated Community at the time of creation of the AIP.
  - 4.2.7.1 - Repository shall have a documented process for testing understandability for their Designated Communities of the Content Information of the AIPs at their creation.
  - 4.2.7.2 - The repository shall execute the testing process for each class of Content Information of the AIPs.
  - 4.2.7.3 - The repository shall bring the Content Information of the AIP up to the required level of understandability if it fails the understandability testing.
- 4.2.8 - The repository shall verify each AIP for completeness and correctness at the point it is created.
- 4.2.9 - The repository shall provide an independent mechanism for verifying the integrity of the repository collection/content.
- 4.2.10 - The repository shall have contemporaneous records of actions and administration processes that are relevant to AIP creation.

## 4.3 – Preservation Planning

- 4.3.1 - The repository shall have documented preservation strategies relevant to its holdings.
- 4.3.2 - The repository shall have mechanisms in place for monitoring its preservation environment.
  - 4.3.2.1 - The repository shall have mechanisms in place for monitoring and notification when Representation Information is inadequate for the Designated Community to understand the data holdings.
- 4.3.3 - The repository shall have mechanisms to change its preservation plans as a result of its monitoring activities.
  - 4.3.3.1 - The repository shall have mechanisms for creating, identifying or gathering any extra Representation Information required.
- 4.3.4 - The repository shall provide evidence of the effectiveness of its preservation activities.

## 4.4 – AIP Preservation

- 4.4.1 - The repository shall have specifications for how the AIPs are stored down to the bit level.
  - 4.4.1.1 - The repository shall preserve the Content Information of AIPs.
  - 4.4.1.2 - The repository shall actively monitor the integrity of AIPs.
- 4.4.2 - The repository shall have contemporaneous records of actions and administration processes that are relevant to storage and preservation of the AIPs.

- 4.4.2.1 - The repository shall have procedures for all actions taken on AIPs.
- 4.4.2.2 - The repository shall be able to demonstrate that any actions taken on AIPs were compliant with the specification of those actions.

#### 4.5 – Information Management

- 4.5.1 - The repository shall specify minimum information requirements to enable the Designated Community to discover and identify material of interest.
- 4.5.2 - The repository shall capture or create minimum descriptive information for each AIP.
- 4.5.3 - The repository shall create bi-directional linkages between each AIP and its descriptive information.
  - 4.5.3.1 - The repository shall maintain the bi-directional associations between its AIPs and their descriptive information over time.

#### 4.6 – Access Management

- 4.6.1 - The repository shall comply with Access Policies.
  - 4.6.1.1 - The repository shall log and review all access management failures and anomalies.
- 4.6.2 - The repository shall follow policies and procedures that enable the dissemination of digital objects that are traceable to the originals, with evidence supporting their authenticity.
  - 4.6.2.1 - The repository shall record and act upon problem reports about errors in data or responses from users.