Planning the Future with Planets
Preservation Planning
What is a Preservation Plan?

Presented by Hans Hofman
Nationaal Archief Netherlands
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Overview

- Why would one need a preservation plan?
- What would a preservation plan include?
- How to build a plan?
- Some reflections
Why have a Preservation Plan?

Benefits

- To enable preservation actions to be carried out
- To document
  - any actions undertaken on digital objects at a point in time
  - context, reasons, criteria, choices and decisions for/about preservation actions for a given set of digital objects
- To enable accountability for those actions as well as for the authenticity and integrity of digital objects
- To ensure consistent and ongoing management of digital objects
Definition and position of a Preservation Plan

- ‘A preservation plan defines a series of preservation actions to be taken by a responsible institution to address an identified risk for a given set of digital objects or records (called collection).’

- The Preservation Plan takes into account the preservation policies, legal obligations, organisational and technical constraints, user requirements and preservation goal. It also describes the preservation context, the evaluated alternative preservation strategies and the resulting decision for one strategy, including the rationale of the decision.
Characteristics of a P-plan

- It is a concrete translation of a preservation policy how to handle/treat a certain type of digital objects in a given institutional setting.

- New plans will be needed over time due to:
  - changes in technology
  - changes in organisational setting
  - changes in user requirements
  - changes in available tools
  - changes in preservation methods

- It also specifies a series of steps or actions along with responsibilities and rules and conditions for execution.
  - This is called **preservation action plan**. It is in the form of an executable workflow definition, detailing the actions and the required technical environment.
  - Relationship with a specific action
  - The preservation plan provides the context/ background of the preservation action plan.
How to know things are at risk?

- Technology watch
  - developments or changes in information technology
  - Developments in research: new methods or tools in the area of digital preservation

- Developments in usage
  - new user requirements
  - new possibilities that would offer other usages

- Organisational developments
  - new policies
  - changes in regulatory context
  - new standards
The OAIS Preservation Planning Function

Triggers

Potential reasons for preservation actions include:
- AIP/SIP templates
- AIP/SIP review
- Migration packages
- Customization advice

Approved standards
- Migration goals

Policy

Administration

Develop Packaging Designs & Migration Plans
- Prototype results
- Preservation requirements

Issues
- Advice

Develop Preservation Strategies and Standards
- Reports
- Requirement alerts
- Emerging standards

Prototype requests

Monitor Designated Community
- Surveys
- Service requirements

Monitor Technology
- Prototype requests

CONSUMER

PRODUCER
## The content of a preservation plan

1. **Identification**
2. **Status**
   - What was the immediate reason for this plan?
   - Has it been approved and if so, when and by whom
   - How does it relate to other P-plans related to a specific type of objects?
3. **Description of institutional setting**
4. **Description of the collection (digital objects)**
5. **Purpose and requirements**
6. **Evidence of decision for a specific preservation action**
   - what is the foundation of the decision
   - description of evaluation of possible actions
7. **Costs considerations**
8. **Trigger for re-evaluation**
9. **Roles and responsibilities**
10. **Preservation action plan**
    - executable program
How to build a Preservation Plan?

- Identifying and analysing the trigger for the plan
- Identifying type of digital objects at risks
  - as well as the actual objects that have to be treated
- Documenting the steps by following the planning process
  - organisational context = policy framework
  - identifying user and usage requirements
  - identifying the rights associated to objects (if any) and the subsequent consequences for preservation
- Defining (or referring to) the essential characteristics of the objects involved
- Documenting the chosen preservation action (based on an evaluation)
- Calculating the costs of preservation using the chosen action
- ....
- Finally, validating and consolidating the plan
Example: possible P-plan of an archival institution

- **Context:**
  - Mandate: to preserve authentic records over time
  - Juridical requirements: records need to be authentic, usable, not tampered with
  - Maintain relationships between records (aggregates)

- **Status:** approved by the responsible ‘preservation manager’

- **Trigger:** preservation policy to have open standards, e.g. PDF/A or XML-wrapped

- **Type of digital objects:** text documents in MS Word
  - Includes the identification of the objects that need to be transformed

- **Object requirements:** essential characteristics of text documents (content, structure, form, behaviour)
  - can be different per type of document and
  - the business context

- **Cost considerations:**
  - The transformation will reduce costs for preserving them
  - Open standard well-documented and more stable format, so better control and less costs for migration
  - The quality of the tool
  - …

- **Chosen tool:** software migration using tool A
  - Result of an evaluation

- **Preservation action plan:**
  - Workflow that will execute the migration/ transformation

...
Reflections

- What should be the scope of a plan?
  - Should a preservation plan also include a executable workflow or should that be separate?

- What environment is required to execute a plan?
  - organisational
  - technological (infrastructure)
  - should every organisation do it itself or should it be a shared service/ environment?

- How can we properly calculate costs of a preservation plan?
  - What cost factors are relevant?

- Planets will develop an environment in which this will work and conduct experiments with preservation plans (including validation of them).