



Preservation Planning: from theory to practice

A simple preservation workflow
Two complementary approaches
to Preservation Planning

- OAIS
- PLATO

Validating a preservation plan
Some reflections
... then do your own!



Digital**Preservation**Coalition

Getting started in digital preservation in 6 simple steps

Know what you have



Prioritise the risks



Plan what to do about them



Test the plan



Implement the plan



Check the plan has worked

Preservation planning in outline

... a **series of actions** to be taken ... due to **identified risks** for a given **set of digital objects** along with **responsibilities** and **conditions** for implementation

It takes into account:

- preservation policies,
- legal obligations,
- organisational and technical constraints,
- user requirements
- preservation goals

It describes:

- the preservation context,
- the evaluated preservation strategies
- the resulting decisions for and reasons for the decisions



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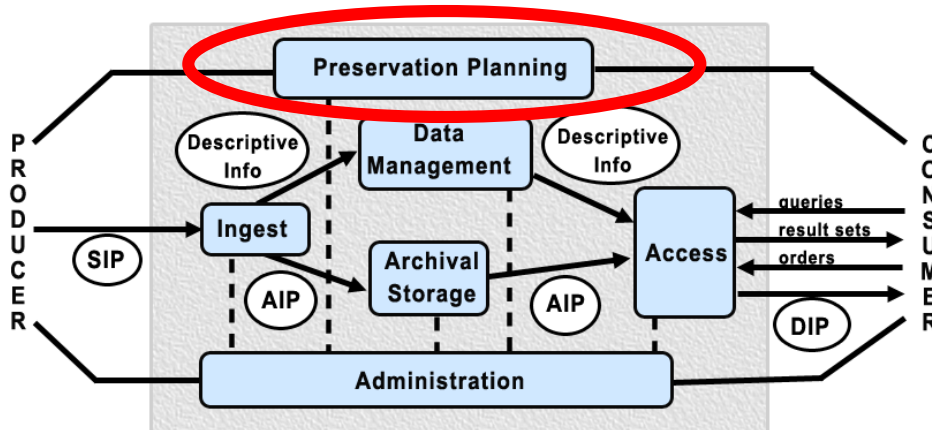
Getting stated in preservation planning

Six Questions:

1. What is the collection?
2. Why does it need to be preserved?
3. What risks does it face?
4. What actions are viable?
5. Who is responsible?
6. When do we need to act?



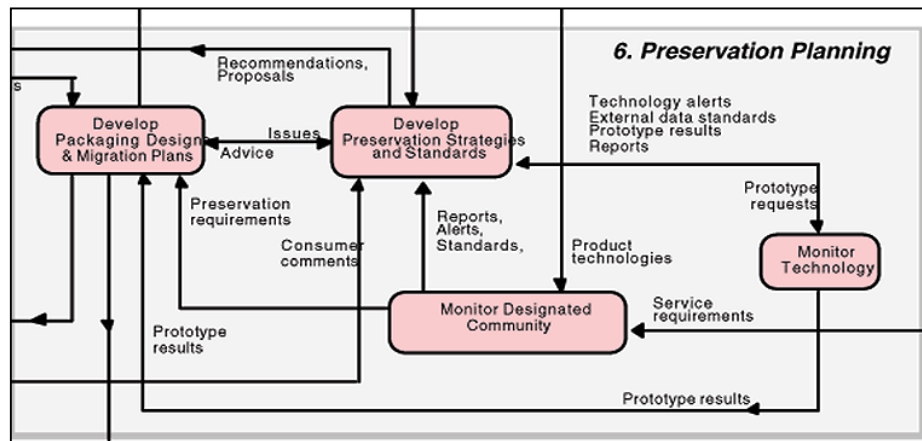
Preservation Planning via OAIS



Preservation Planning ... represents the OAIS's safeguard against a constantly evolving user and technology environment.

It detects changes impacting the OAIS's ability to meet its responsibilities, designs strategies for addressing these changes, and assists in the implementation of these strategies within the archival system.

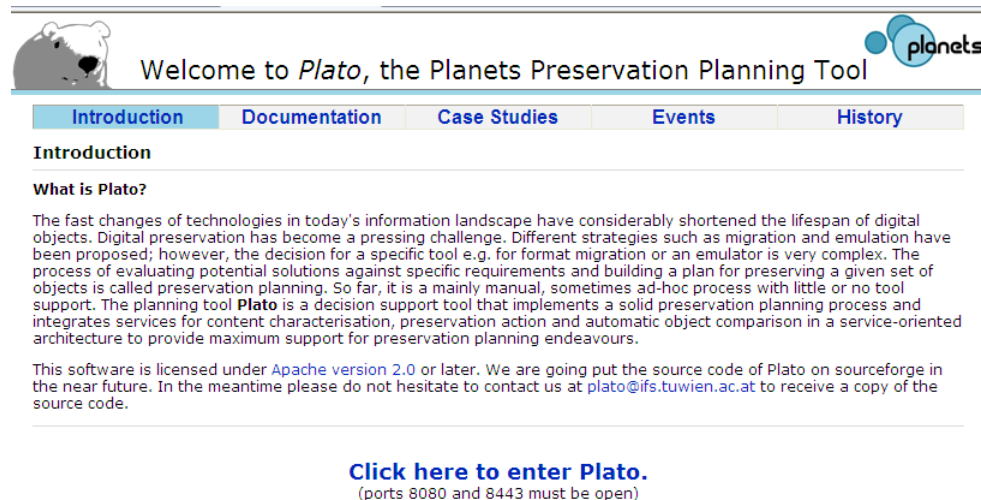
Preservation Planning via OAIS



Four things in practice:

- Monitor Technology
- Monitor 'Designated Community'
- Develop Preservation Strategies and Standards
- Develop Packaging Design and Migration Plans

Preservation Planning with PLATO



The screenshot shows the top of the Plato website. On the left is a cartoon polar bear icon. To its right is the text 'Welcome to *Plato*, the Planets Preservation Planning Tool'. Further right is the 'planets' logo. Below this is a navigation bar with five tabs: 'Introduction' (highlighted in blue), 'Documentation', 'Case Studies', 'Events', and 'History'. Under the 'Introduction' tab, the heading 'Introduction' is followed by 'What is Plato?'. The text explains that digital preservation is a challenge and that Plato is a decision support tool. At the bottom, there is a link 'Click here to enter Plato.' with a note '(ports 8080 and 8443 must be open)'.

Welcome to *Plato*, the Planets Preservation Planning Tool

[Introduction](#) [Documentation](#) [Case Studies](#) [Events](#) [History](#)

Introduction

What is Plato?

The fast changes of technologies in today's information landscape have considerably shortened the lifespan of digital objects. Digital preservation has become a pressing challenge. Different strategies such as migration and emulation have been proposed; however, the decision for a specific tool e.g. for format migration or an emulator is very complex. The process of evaluating potential solutions against specific requirements and building a plan for preserving a given set of objects is called preservation planning. So far, it is a mainly manual, sometimes ad-hoc process with little or no tool support. The planning tool **Plato** is a decision support tool that implements a solid preservation planning process and integrates services for content characterisation, preservation action and automatic object comparison in a service-oriented architecture to provide maximum support for preservation planning endeavours.

This software is licensed under [Apache version 2.0](#) or later. We are going put the source code of Plato on sourceforge in the near future. In the meantime please do not hesitate to contact us at plato@ifs.tuwien.ac.at to receive a copy of the source code.

[Click here to enter Plato.](#)
(ports 8080 and 8443 must be open)

Preservation planning methodology
Preservation planning tool
Library of preservation plans

4 stage process:

- Define requirements
- Evaluate actions
- Analyse results
- Build and execute plan

<http://www.ifs.tuwien.ac.at/dp/plato/intro.html>



Nine elements of a PLATO Preservation Plan

1. Identification
2. Status and triggers
3. Description of the institutional setting
4. Description of the collection
5. Requirements for preservation
6. Evidence of decision for a preservation strategy
7. Cost constraints
8. Roles and responsibilities
9. Preservation action plan

How to validate my plan ...

Experimentation

Test bed

Review published work

Engage user community

Send it for peer review

Match to institutional goals

Review, refresh and update!



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Reflections that you won't find in the literature

Plans need to be realistic

Plans need to be scalable

Automation is your friend

Plans need to be validated

Ready made area for collaboration

Plans can (must?) be shared

Plans must be followed

Plans must be updated

And you probably know a lot of this
already

Preservation Planning in 12 Questions

1. Why do we want to keep this stuff?
2. For whom are we keeping it? How do we test their expectations?
3. What are our preferred preservation approaches?
4. What is the collection? How does it break down?
5. What risks do the different parts of the collection face?
6. What are the highest priorities for action?
7. What actions should we take to meet them?
8. What tools do we have available to carry them out?
9. What are our constraints in terms of cost / resources?
10. What are our expectations of quality?
11. How will we validate our plans?
12. How and when will we update our plans?