



## 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!



## 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

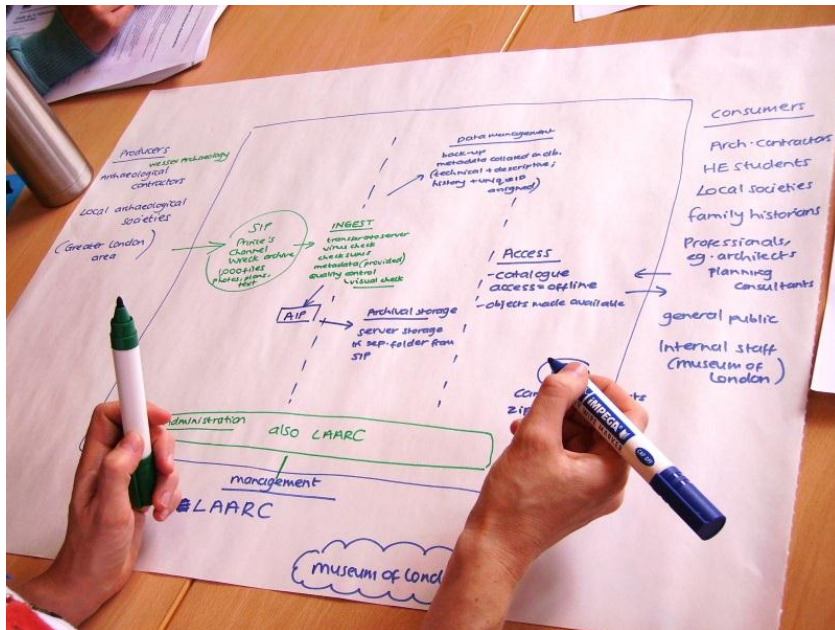
It takes into account:

- 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

# Getting stated in preservation planning

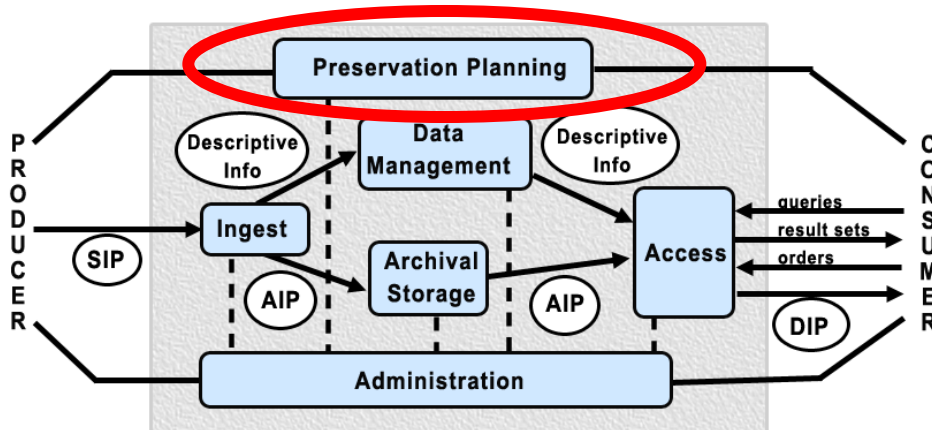


## Six Questions:

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?



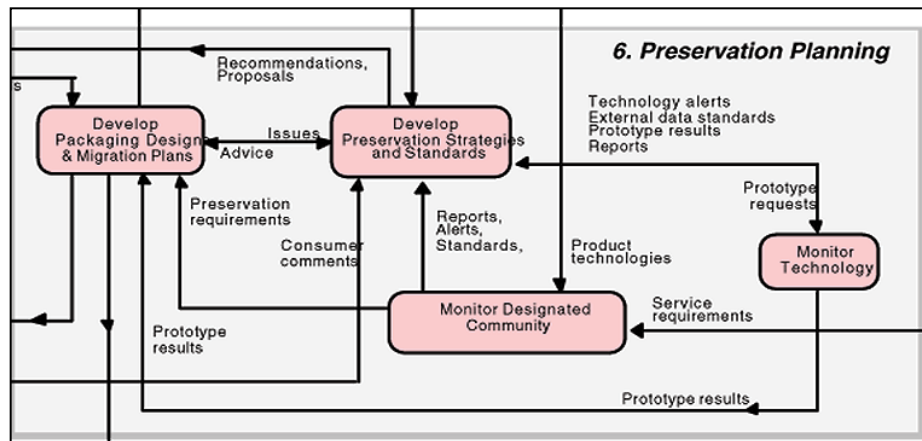
## Preservation Planning via OAIS



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.

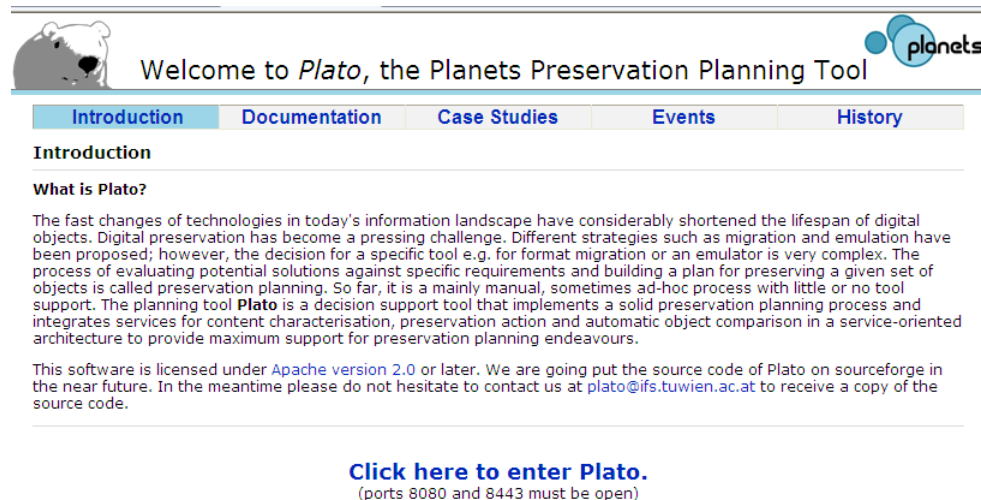
# Preservation Planning via OAIS



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 part of the Plato website. On the left is a cartoon polar bear. 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 main text describes the challenges of digital preservation and the role of the Plato 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](mailto: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!



Digital**Preservation**Coalition

## Reflections that you won't find in the literature

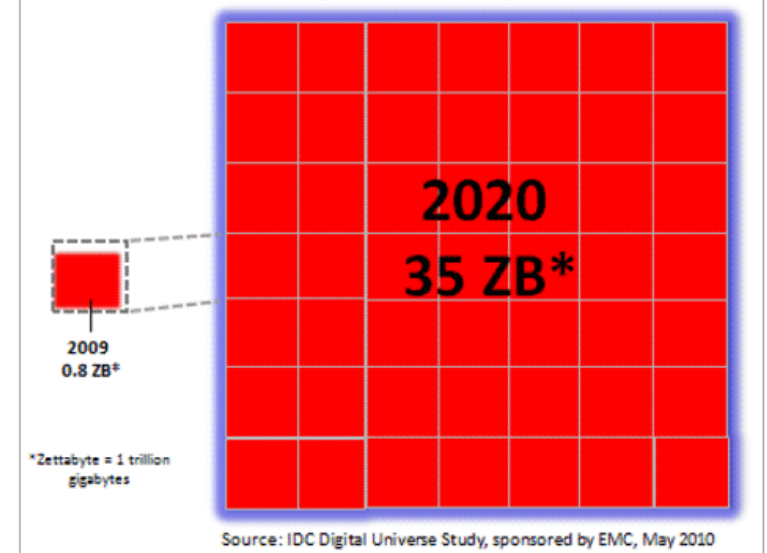
Plans need to be realistic  
Plans need to be scalable  
Automation is your friend  
Plans need to be validated  
Ready made area for collaboration  
Plans can (must?) be shared  
Plans must be followed  
Plans must be updated

And you probably know a lot of this already

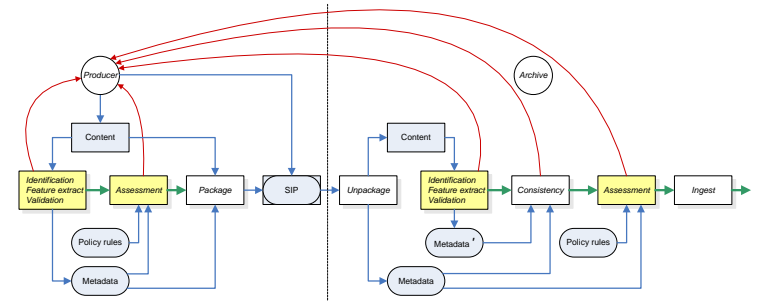
## 'Digital Universe' Nears A Zettabyte

May 4th, 2010 : Rich Miller

**Figure 1: The Digital Universe 2009 – 2020**  
*Growing by a Factor of 44*



The Great Recession hasn't slowed the breakneck growth of the Digital Universe. In 2010 the volume of digital information created and duplicated in a year will reach 1.2 zettabytes, according to new data from IDC.





## 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 the value?
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 pose?
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?

For Court? Slow

For Court? Follow  
legal guidelines  
and case law

For research?

For research?

Track specialist

For research?

Available in  
current machine

For research?

For research?

Insufficient

For research?

For research? Get  
a specialist to

For research?

For research?

For research?

For research:  
Every year

For research?  
Bake off



## 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?
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