



Testbed

A Controlled Environment for Experimentation and Evaluation in Digital Preservation

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Goal of the Testbed

- ❑ Understand which tools serve best digital preservation needs
- ❑ Enable informed decisions on the applicability of tools in various settings



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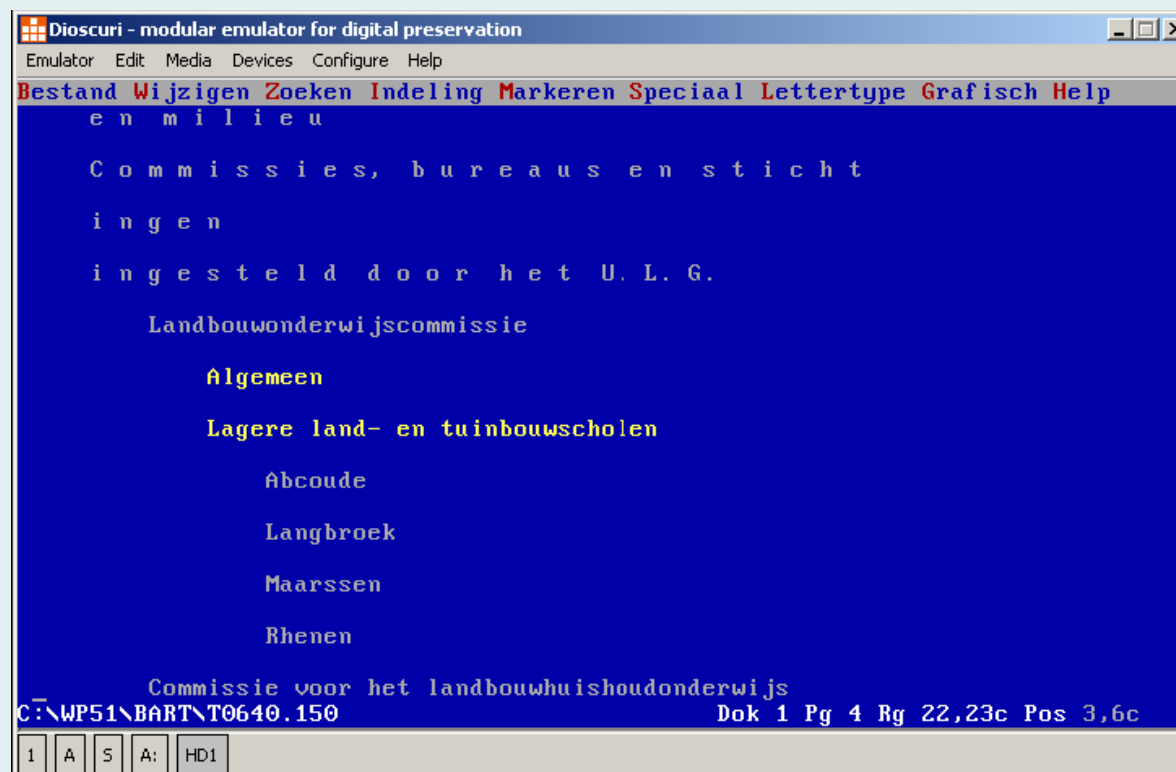
Questions

- ❑ What file formats do I have in my collection?
- ❑ Some file formats are becoming obsolete. I want to migrate them. But to what file format? And with which migration tool?
- ❑ Can I preserve the original with an emulation service?



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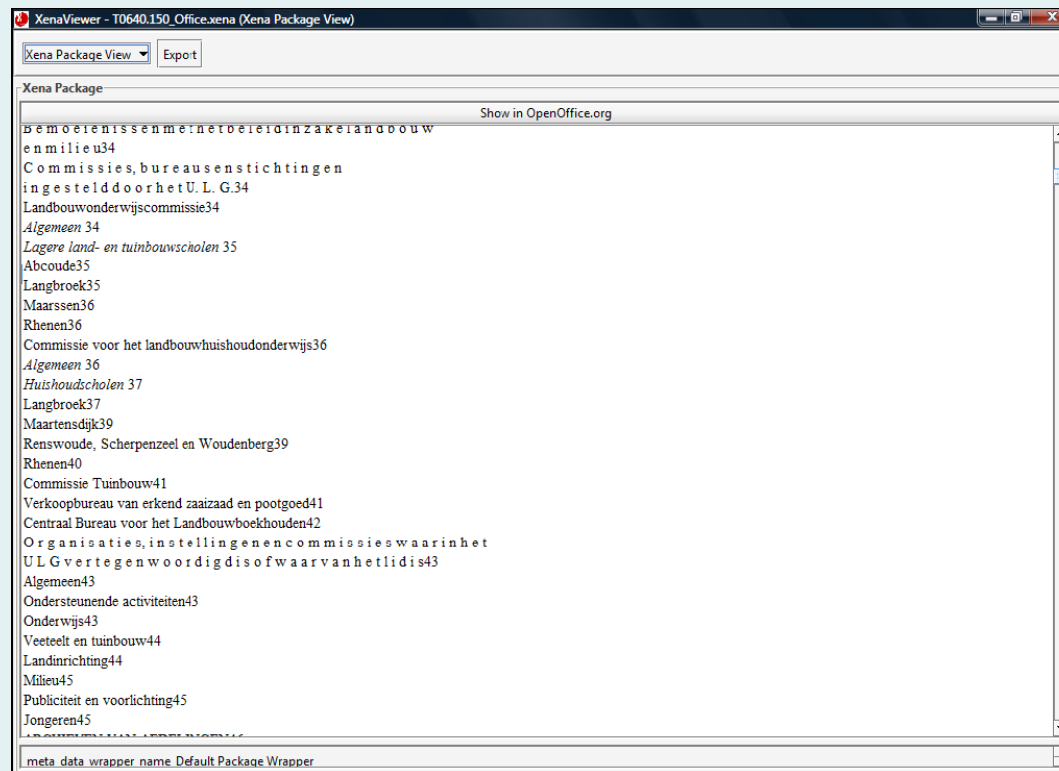
Example 1 – Original file



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Example 1 – Migrated file



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Objective - No value judgement

- ❑ The performance of the tool is captured -"objectively"
- ❑ Usability of specific outcome is attached to specific needs
 - Is it ok to keep the text but lose the layout?
 - You can use your neighbour's results



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What is the Testbed?



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The Testbed

Is...

- ☐ A controlled hardware & software environment

Has...

- ☐ A consistent methodology
- ☐ Structured processes for the arrangement and evaluation of experiments
- ☐ Structured test data (Corpora)

Makes

- ☐ Experiments reproducible



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Testbed application

- ❑ Web application
- ❑ Planets runs a Central Instance which you can access online (Plug & Play)

Testbed MVC architecture

web tier



JSF, CSS, XHTML, AJAX

business tier



Java EE (EJB, JAX-WS,...)

data tier



Java EE, IF Registries,...



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Preservation services

- ❑ Characterisation service
 - What are the values of certain properties?
e.g. font size = 11, image height = 135
- ❑ Migration service
 - Migrate this file for me into another file format
e.g..doc >> .pdf/a
- ❑ Emulation service
 - I want to see a file; emulate an old environment for me



Testbed components - Services

- ❑ Wrap tools into services -> put them up in the IF and use them in Testbed
- ❑ Examples:
 - JHOVE
 - PS2PDF
 - ImageMagik
 - Sanselan
 - MSWord migration
 - HTMLCleaner

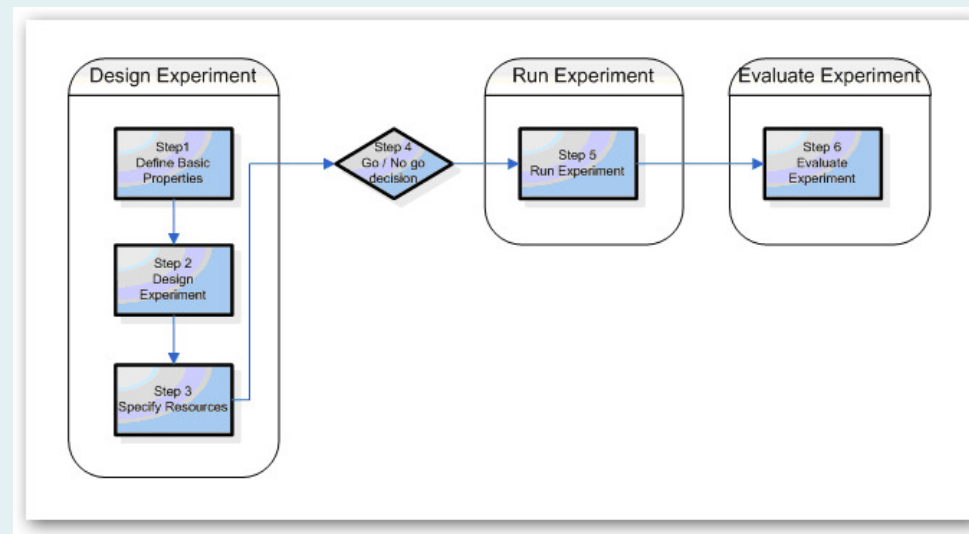


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Testbed components - Workflow

- Every experiment follows a fixed experimentation workflow that consists of six steps:



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Testbed components - Corpora

- ❑ Constructed „known“ files (annotated)
 - Wide range of different files and formats (+4.500 different files)
- ❑ „Real“ files provided by all partners



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What are Testbed's benefits?

- ❑ Allows users to understand which tools best serve their digital preservation needs
- ❑ Enables informed decisions on the applicability of tools in various settings
- ❑ → Information can be used to build and assess preservation plans



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The Testbed and who?

Through its extensible structure and tight connection to practitioners and research Testbed is a valuable application for a wide range of partners,

such as...



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The Testbed and ...

... heritage institutions and content holders

- ❑ Have a look into representative simulation of problems without exposing own material by using Corpora
- ❑ Get information on behaviour of tools at a „one-stop-shop“
- ❑ May use a set of readily available digital content for experiments
- ❑ Upload own files for special needs



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The Testbed and ...

... tool and service providers

- ❑ helps to understand needs of user community.
- ❑ Test tools and see if they behave the way expected



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The Testbed and ...

... the digital community

- ❑ Find knowledge, expertise and people involved in digital preservation
- ❑ Become a practical and active part of the preservation community



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Testbed time scale

End 2009:

- ☐ Involvement of external institutions
- ☐ Installation of peer2peer system

Q1 2010:

- ☐ External release



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Interested?

- ❑ Interested in Testbed?

- > Register without any obligations on Planets website

- www.planets-project.eu/community

- ❑ Carrying out experiments?

- > contact Testbed Helpdesk

- helpdesk@planets-project.eu

- * information on becoming an active partner

- * further information on training events, community,..



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Thank you for your attention!

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