Planning the Future with Planets
The Planets Testbed

Presented by Eleonora Nicchiarelli
Researcher, Austrian National Library
Overview

- What is a Testbed?
- Why do we need one?
- The Planets Testbed
  - Foundations
  - Participants
  - Implementation
  - Roadmap
What is a Testbed?

- „Any device, facility, or means for testing something in development“ (Merriam-Webster Dictionary)

- In the digital preservation domain:

  “A controlled environment for experimentation and evaluation, with metrics and benchmark content that allow comparison of tools and strategies”
Why do we need a Testbed?

- Perform scientific research in digital preservation
- Evaluate preservation approaches in diverse “real life” settings
- Avoid duplication of work
- Maximise use of invested resources

→ Need for a dedicated research environment
  - Systematic execution of experiments by different institutions with
    - automated evaluation
    - reproducibility
    - documentation and accessibility
The Planets Testbed - Foundations

- Inspired by work undertaken by the Dutch Digital Preservation Testbed and DELOS Testbed, but
  - Integration with Planets Interoperability Framework $\rightarrow$ web-service based approach
  - Focus on workflow design and on automation
- Experiment methodology: based on that of the Dutch and DELOS testbeds, but
  - different end-user typology $\rightarrow$ experiment process simplification
    (from 12 steps to 6)
Main Participants

Austrian National Library (ÖNB)
Humanities Advanced Technology and Information Institute at the University of Glasgow (HATII)
National Archive of the Netherlands (NANETH)
Austrian Research Centers (ARC)
British Library (BL)
Vienna University of Technology (TUWIEN)
Universität zu Köln (UzK)
The Planets Testbed

- A web-based application:
  - Load content
  - Perform experiments
  - Find support for validation of preservation strategies
  - Benchmark tools and services

- Consists of
  - Data storage, hardware, Planets software, Testbed application
  - Corpora: benchmark and other content

- Implemented in a platform-independent manner by means of JBoss Java EE 1.4 certified application server

- JSF for presentation, JPA for data persistency

- It already allows experiments with any WSI basic-profile v1.1-compliant migration or characterisation service
Role of the Planets Testbed in the Digital Preservation Community

- In phase 1 (March 2008 – March 2009), Testbed services are available for Planets partners only

- In phase 2 (April 2009 onwards), the Testbed will offer services to external users:
  - Support institutions to validate their preservation plans
  - Enable researchers, developers and third party vendors to submit tools for benchmarking and certification on the Testbed corpora
Contact:
Eleonora Nicchiarelli
Austrian National Library
eleonora.nicchiarelli@onb.ac.at