Plato: A Preservation Planning Tool

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ABSTRACT

Creating a concrete plan for preserving an institution's collection of digital objects requires the evaluation of available solutions against clearly defined and measurable criteria. Preservation planning aids in this decision making process to find the best preservation strategy considering the institution's requirements, the planning context and possible actions applicable to the objects contained in the repository. Performed manually, this evaluation of possible solutions against requirements takes a good deal of time and effort. In this demonstration, we present Plato, an interactive software tool aimed at creating preservation plans.

Categories and Subject Descriptors

H.3 [**Information Storage and Retrieval**]: H.3.7 Digital Libraries

General Terms

Design,Experimentation,Measurement,Standardization

Plato

Plato[1] implements the PLANETS[2] Preservation Planning approach [2] which provides a solid way of making informed and accountable decisions on which solution to put into practise in order to optimally preserve digital objects for a given purpose. The tool is integrated into the PLANETS Interoperability Framework based on open J2EE and web technologies. Through this environment it integrates registries and services for preservation action and characterisation through flexible discovery and invocation.

Characterisation services such as DROID[3] and JHove[4] are used for format identification and property extraction; based on this information, applicable action services such as emulation tools or the migration services provided by CRiB[3] are discovered through available registries. Comparison and validation of objects as an essential feature of the system maps the specified requirements such as essential object characteristics to measurable criteria that can be compared auto-

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[1] http://www.ifs.tuwien.ac.at/dp/plato
[2] http://www.planets-project.eu
[3] http://droid.sourceforge.net
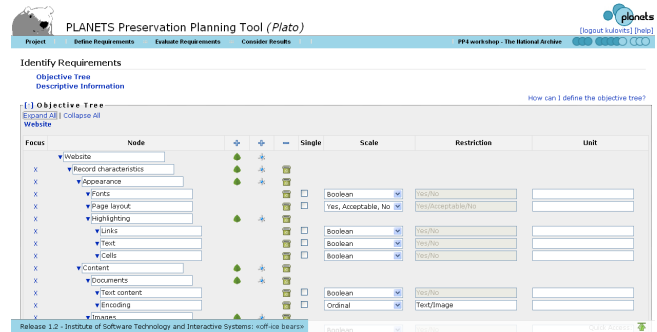[4] http://hul.harvard.edu/jhove

Figure 1: Requirements tree in Plato

matically. It thus considerably improves the repeatability, documentation and automation of preservation planning.

Plato has been developed with very close attention to the web user interface to not impose any technical restrictions on the user when determining the requirements. Figure 1 shows the requirements for a preservation endeavour of a web archive laid out in a tree structure. The tool offers a fully flexible way to enable the specification of a wide range of measurement scales. As the definition of requirements in a tree structure is often done in a workshop setting, Plato also supports tree import from mind-mapping software[5].

The applicability and usefulness of the tool has been validated in a series of workshops and case studies which involved various institutions [2, 1].

Acknowledgements

1. REFERENCES

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[5] http://freemind.sourceforge.net