Access to the Documents in the Long Term. 
Resolution Service for Resolution of Persistent Identifiers

Peter Hansson, Ronnie Kolehmainen, Eva Müller

Electronic Publishing Centre, Uppsala University Library, Sweden
Box 510, SE-751 20 Uppsala
{peter.hansson | ronnie.kolehmainen | eva.muller}@ub.uu.se

Abstract

Persistent Identifiers are important conditions for an efficient management of digital resources and trustworthy access to electronic documents now and in the more distant future. At present several services have been established. Though, only a few of these services support access to the actual documents in the long term.

In our demo we introduce a service, which is based on the use of National Bibliographic Number as Persistent Identifier scheme. This service is integrated in the archiving workflow between institutional repositories and archives for long-term preservation.

The first prototype of the resolution service was developed within the DiVA project and was put into operation in October 2002. The DiVA project identified some basic requirements for the application of Persistent Identifiers and URN:NBN was found to be the best choice. The requirements included that the Persistent Identifiers system should be non-proprietary, be easily administrated and maintained and should be associated with a preservation version of the object. Additionally the system should be low-cost and possible to integrate in automated workflows.

Based on the experiences from the prototype it was decided to develop the Resolution Service further. This has been done within two succeeding projects: SVEP, which is funded by the “Royal Library’s Department for National Co-ordination and Development” (BIBSAM), and within the project “Access to Documents. Now and in the Future”, a cooperation between universities and national libraries in the Nordic region funded by The Nordic Council for Scientific Information (NORDINFO).

Within the first project, a format including all necessary metadata of the digital object, such as identifier and location mappings were developed and finally established as a recommendation. Also, support for harvesting data at scheduled time intervals, as well as from multiple repositories, was added. The harvesting model used makes the updating of the mapping registry very reliable and relatively straightforward and simple. A step towards internationalisation was taken by introducing multilingual html templates. These are used to build up the presentation layer of the Resolution Service.

During the time of the second project, the Resolution Service was fully internationalised. Support for resolving identifiers not known by the local service was added with the help of reading data from a centralized routing table. Administrative tools were also developed to make the maintenance of the locally installed Resolution Service an easy task.

The application—Resolution Service—is available under an open source license and is currently used in several Nordic countries.

As a complement to this demo, a poster will be available which illustrates a complete infrastructure for long-term preservation. It enables the access of electronically published documents in a long-term perspective, with the Resolution Service as a fundamental component.
Figure 1: A consumer's perspective of Resolution Service and Resolution Service harvesting process

References

Access to Documents Now and in the Future, NORDINFO granted project,
URL: http://epc.ub.uu.se/niwiki/pmwiki.php/Main/HomePage, 2005-04-28
DiVA—Academic Archive Online, URL: http://www.diva-portal.org/about.xsql, 2005-04-28
Electronic Publishing Centre at Uppsala University, URL: http://publications.uu.se/epcentre/, 2005-04-28
SVEP (Coordination of Electronic Publishing at Swedish Universities),
URL: http://www.svep-projekt.se/english/, 2005-04-28