DASISH

DIGITAL SERVICES INFRASTRUCTURE FOR SOCIAL SCIENCES AND HUMANITIES

Dutch View on URN:NBN and Related PID Services

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Dutch view → DANS-view

Agreement to some extent

Minor differences

Mainly the view of the institute DANS

What is DANS?

Institute of Netherlands Academy of Arts and Science and of Netherlands Organisation for Scientific Research, the Dutch Funding Organisation (NWO)

Our mission: promote and provide permanent access to digital research information

Main Activities and Services

- Encourage researchers to self-archive and reuse data by means of our Electronic Archiving SYstem EASY

- Provide access, through Narcis.nl, to thousands of scientific datasets, e-publications and other research information in the Netherlands

Advice, training and support (Data Seal of Approval, Persistent Identifier Infrastructure) of other organisations

PID system at DANS

Rapid growth of electronic publishing has revealed fundamental problems in our existing identifier systems

To each resource a persistent, location-independent identifier is being assigned to assure the reliability of its retrieval

DANS has chosen to implement URN:NBN in 2007

Why URN:NBN?

URN:NBN is based on Internet standards (IETF, RFC 2141 and RFC 3188)

It is a generic solution

Major role for National Libraries guarantees sustainability and trust: e-depot for publications and Trusted Digital Repositories (DSA-level minimally) for datasets

URN: Benefits

No assignment cost

Trivial to create from existing identifiers

Present architecture for resolver discovery service is robust and scalable

Both an identifier and resolution service

No semantics!

Background Information on URN:NBN

General Structure (example from the Netherlands)

URN:NBN::NL:UI:17-15043

URN: Uniform Resource Name (URI-schema)
NBN: National Bibliography Number (Namespace)
NL: ISO 3166 Country Code for the Netherlands
UI: Community ID (mainly universities)
17: Repository ID
15043: Record ID

National Bibliography Number

Traditionally: the identifier for records in the national bibliography

New scope: identifier for (electronic) resources to which no other identifier applies

Implemented as URNs in order to guarantee global uniqueness

RFC 3188 is being used (Using National Bibliography Numbers as Uniform Resource Names)

URN:NBN - a Dutch example

URN:NBN:NL:UI:17-15043 leads to:

http://depot.knaw.nl/15043/

(the actual URL; using the resolver).

[TI: Access to Data, the Soundbites Collection of the Meertens Institute]

URN: Namespace Registration

Each namespace must be registered as specified in RFC 2611

- Registration must contain the proposed Namespace Identifier (NID, such as “nbn”) and an outline of how the global URN resolver discovery service will function within the namespace

Administration of the NBN Namespace

Each national library is allowed to do whatever it wants with its own part of the NBN namespace (as long as the identifiers remain unique and persistent)

Dutch regulations

- All agreements formalised in EDUStandaard URN:NBN:NL:UI
- All regulations may be consulted at the NBN Registration Agency, a service of the National Library

URN Resolution Process

The Dutch example: URN:NBN:NL:UI:17-15043

Without a resolver no access to the actual URL of the resource

In the Netherlands: KB for the vision, policy and communities and DANS for the resolving of URN:NBNs

DANS resolver

- National resolver, based on URN:NBN
- http://persistent-identifier.nl
- For resolving both datasets and publications
- Agreements on a national level, supervised by National Library

DANS resolver functionality

- Translates the URN:NBN into the actual URL
- Two major components:
  - Resolver
  - Harvester
- Harvester for getting the actual URLs form the various repositories/archives
- Common harvester KB/DANS under development (harvesting metadata for the harvester, EASY and e-Depot simultaneously)

URN Cluster

- URN Services may be developed on a supranational level
- Example: the URN-cluster
- Initiative of the German National Library

URN Cluster

- Each Namespace (NBN:DE; NBN:NL; NBN:IT etc) has set up its own resolver
- Needed: a common infrastructure for URN resolving, the so-called URN-cluster
- One resolving function for all URN namespaces
- Higher stability thanks to distributed, redundant nodes
- URN resolving algorithm is namespace independent

URN Cluster Structure

- Resolving is relatively easy
- URN resolving data may be distributed over a number of resolving instances (national resolvers), leading to improvement of the performance
- Mirroring PID databases and parallel URN resolver instances
- Creating a single point of entry resolving URN:NBNs from any namespace

Newest development

- URN:NBN is archive/repository focused
- Researcher unaware of existence URN:NBN
- Researcher is familiar with DOI
- DANS will start to assign both URNs and DOIs to datasets starting 2015