

Nordic resource sharing infrastructure (draft)

Tommy Schomacker, 22 April 2009

1. Background

SVUC

NOSP

2. Scope

Technical infrastructure.

Not covered:

Physical infrastructure. Political issues. Fees. National law.

3. Virtual databases

The technical infrastructure is based on two virtual databases.

Scandinavian Virtual Union Catalogue (SVUC)

The virtual union catalogue is composed of the national union catalogues, Linda and Manda, Geignir, Libris, Bibsys; Sambok and DanBib.

Not all libraries are covered for the moment. For example the Swedish public libraries are missing.

Scandinavian Virtual Library Directory (SVLD)

The virtual library directory is composed of the national library directories.

4. Services

Search in SVUC

The national union catalogues are accessed by Z39.50. SRU might be offered as an option.

Locate in SVUC

This is implemented as a web service in each national union catalogue, giving holdings information and, if possible, expected delivery.

Lookup in SVLD

This is implemented as a web service in the national library directories. The request contains a library ISIL-code. The response is basic contact information and information on how to order.

- Name
- Address
- Postal number
- City
- E-mail
- Telephone
- How to order (if possible)
- How to response to orders (if possible)

More information may be added later.

Ordering

The protocol may differ from library to library, or from country to country. It may be plain text send by e-mail or a standardised resource sharing protocol for automated processing. Information on the protocol is fetched by the SVLD lookup.

Other services

New services may be added later – e.g. renewal and statistics.

5. Scenarios for ordering across borders

General

Library X in country A searches SVUC and gets a number of hits.

Library X asks SVUC for localisations.

Library X chooses to send an order to library Y in country B.

Library Y handles the order in the same way as other orders.

Three generic scenarios

Note: all libraries in Iceland use the same system – Gegnir.

Nordic library searches and orders in the national user interface

Danish library searches and orders in netpunkt user interface (netpunkt.dk)

Swedish library searches and orders in Libris user interface (libris.kb.se)

Norwegian library searches and orders in Bibsys user interface (ask.bibsys.no)

Finnish library searches and orders in Linda user interface (www.linneanet.fi)

Icelandic library searches and orders in Gegnir user interface (www.gegnir.is)

Nordic library searches in own systems user interface and orders in the national user interface

Danish library searches in own systems user interface and orders in netpunkt user interface

Swedish library searches in own systems user interface and orders in Libris user interface

Norwegian library searches in own systems user interface and orders in Bibsys user interface

Finnish library searches in own systems user interface and orders in Linda user interface

Iceland library – option not available

Nordic library searches and orders in own systems user interface

Danish library searches and orders in own systems user

Swedish library searches and orders in own systems user interface

Norwegian library searches and orders in own systems user interface

Finnish library searches and orders in own systems user interface

Iceland library – option not available

A Danish example

The Danish national user interface netpunkt can (or will soon be able to) handle orders using the protocols Z-order, NCIP, RTM, and email (plain text, ILL0 or XML).

The protocol to use is registered in the Danish national library directory (VIP).

6. Standards, profiles and guidelines

This section gives a birds view of the relevant standards.

Generic protocols

Simple Mail Transfer Protocol (SMTP) – RFC 821 and RFC 5321

Hypertext Transfer Protocol (HTTP) – RFC 2616 and RFC 2617

Hypertext Transfer Protocol Secure (HTTPS)

SOAP

Z39.50 Information Retrieval ES (Extended Services)

Protocols for bibliographic search

Z39.50 Information Retrieval

SRU

Protocols for resource sharing

Z39.83 NISO Circulation Interchange Protocol (NCIP)

Z39.88 The OpenURL Framework for Content-Sensitive Services

Request Transfer Message (RTM)

Z-order

Implemented in Denmark, see the DanZig-profile section 7. D Ordering and Interlibrary Loans:

<http://www.bs.dk/publikationer/andre/danzig/01/html/chapter07.htm>

The protocol builds on Z39.50 ES and ILL XML Schema version 5:

<http://www.loc.gov/z3950/agency/defns/illv5.xsd>

Z-lookup

Implemented i Denmark. Holdings information is requested using Z39.50. See DanZig-profile, section 6. C Holdings Information Search and Retrieval:

<http://www.bs.dk/publikationer/andre/danzig/01/html/chapter06.htm>

The present format is according to ZIG Holdings.

Z-lookup is used in Denmark in connection to Z-bestil and to present red, yellow and green lights in netpunkt and bibliotek.dk.

Bibliographic formats and schemas

ISO 2709 Format for information exchange

ISO 25577 MarcXchange

MarcXchange is an XML-version of ISO 2709. Two sub schemas exists:

- MARCXML: used for MARC 21
- danmarxchange: used for danMARC2

MARC 21

UNIMARC

National MARC-formats and variations

Dublin Core (DC)

Formats and schemas for holdings and ordering

ISO 20775 Information and documentation -- Schema for holdings information

ZIG holdings

The ZIG Holdings Abstract Schema and the corresponding Holdings XML Schemas are available via the US Library of Congress: <http://www.loc.gov/z3950/agency/defns/holdings1-4.html>

ILL0

This is a text format for ordering, based on ISO 8459. Implemented in Denmark.

Character sets

ISO 646 (ASCII or Basic Latin)

ISO 8859-1 Latin-1

ISO 10464 (Unicode)

National character sets

In Denmark is used danMARC2 character repertoire. All characters from Unicode (Basic Multilingual Plane) may be represented.

Profiler and guidelines

Bath-profile

DanZIG-profilen

The danZIG profile specifies the guidelines for systems interconnection between library applications in Denmark. The danZIG profile is primarily based on the ANSI/NISO Z39.50, a.k.a. ISO 23950.

NCIP Implementation Guidelines: Collaboration between Danish libraries and other agencies

These guidelines describe the requester- and responder-side requirements for implementation of NCIP in Denmark. Use of HTTPS is required.

NCIP Implementation Guidelines: Collaboration between bibliotek.dk and local library systems

These guidelines describe a specific implementation of the Direct Consortial Borrowing: Broker Application Manages Transaction Application Profile (DCB-3). In this scenario bibliotek.dk takes the role of a broker between the end user and the local library system.

These guidelines require implementation of the following services NCIP services:

- Lookup Item Service
- Lookup User Service
- Lookup Request Service
- Request Item Service
- Cancel Request Item Service
- Renew Item Service