

Interoperability Requirements for Integrated Library Systems in Saskatchewan Public Libraries

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Introduction

Part of the on-going dialogue about the need for a single integrated library system resulted in the need for interoperability standards that could be used by the Provincial Library, individual public library systems, or, possibly, school divisions. The requirements could be used in Business Cases, Requests for Information or Requests for Proposal or other documents identifying the needs and requirements to support interoperability of library applications and software. This document will assist in the "weighting" and evaluation of the interoperability functionality of any given integrated library system.

1. Bibliographic data interchange:

- 1.1 MARC21 import and export capabilities for both bibliographic and authority records.
- 1.2 The MARC21 exported record must support character sets utilizing standard hardware peripherals.

2. Search and Retrieval from Library Catalogues:

- 2.1 Conformance to Z39.50, Version 3, first published in 1995 in server mode.
- 2.2 The Z39.50 server is required to allow inbound and outbound traffic on port 210.
- 2.3 The Z39.50 server must be able to return the following Bath profile Level 0 searches:

Author Search -- Keyword
Title Search -- Keyword
Subject Search -- Keyword
Any Search -- Keyword
- 2.4 The Z39.50 server should provide an ISBN exact match search.
- 2.5 The Z39.50 server should provide MARC21 record data if requested by the client.
- 2.6 A searchable web interface to the library catalogue that provides the same search functionality as 2.3 to 2.5.
- 2.7 A staff client search, either by desktop software or web interface catalogue that provides the same search functionality as 2.3 to 2.5.
- 2.8 The Web interface and the Z39.50 server should provide holdings level information that provides an item status to the searcher (i.e. Checked-out, Available, etc.)

3. Patron authentication:

- 3.1 Either an open SQL connection or a proprietary connection that allows a patron lookup through third party authentication software.
- 3.2 Functionality to import and export patron records in batch mode.

4. For Inter-library Loan:

- 4.1 Interlibrary loan software requires conformance to the following standards to communicate properly:
- ISO 10160/10161 protocol support to communicate with external ISO-based Inter-library loan packages.
 - Generic Script Messaging (GSM) to communicate with external non-ISO based Inter-library loan packages.
 - Z39.50 searching within the Inter-library loan software and the ability to capture and utilize and re-use the record.
 - Open URL facilities for bibliographic transfer from another system (i.e. Gateway server to ILL Web Forms server)

5. NCIP/CIP (Circulation Interchange Protocol ANSI/NISO Z39.83)

- 5.1 The implementation of a future Universal Library Card would require the adoption of the NCIP standard to exchange patron transactions between different ILS systems.

6. Electronic Data Interchange (ANSI X12)

- 6.1 In anticipation of future electronic ordering in acquisitions, an implementation of the Electronic Data Interchange standard that conforms to the ANSI X12 for ordering, claiming, cancelling, invoicing and reporting for both monographic and serial purchases.