Successes & Failures of Implementing Resource Sharing Workflows & Protocols in a Consortial Environment

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Agenda

- Indiana's Statewide Remote Circulation Service (SRCS)
- Library Consortium of Vigo County (LCVC)
- Consortium holdings & Z39.50
- Exploring NCIP for the consortium
- ISO ILLiad protocol at Indiana State University (ISU)
- Workflow for SRCS at Indiana State University (ISU)
- Future
SRCS

- Indiana's Statewide Remote Circulation Service
- Decentralized collaboration
  - Academic Libraries of Indiana (ALI) & State Library
- Phase 2
- SRCS uses AutoGraphics
- Indiana State University live in Lending, Nov 2016
Library Consortium of Vigo County (LCVC)

• Share Sierra and Encore: Innovative Interfaces Inc.
  – Indiana State University Library
  – Rose-Hulman Logan Library
  – Saint Mary-of-the-Woods Rooney Library
  – Vigo County Public Library

LCVC shares bibliographic records but not item records or patron accounts. Sierra onsite hosting.
Consortium Holdings

FTP MARC records into the SRCS / AutoGraphics database

“Remember, anything you load into this database will be considered loanable in SRCS, so don’t load anything that you don’t want to lend.” ~ SRCS administrators.
“How do I know which ports to open for trancn: from searchers using our Z39.50 Client? The administrators of the remote Z39.50 Server you want to search should be able to tell you. Port 210 is the standard, but some developers and vendors of Z39.50 Server software do use different ports.”

<table>
<thead>
<tr>
<th>Product (Protocol)</th>
<th>Port Number</th>
<th>External</th>
<th>Internal</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebPAC Z39.50 Client</td>
<td>210</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Z39.50 Client</td>
<td>211</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Product (Protocol) Port Number External Internal
Z39.50 Server (Z3950) Primary database 210 X X
WebPAC Z39.50 Client (Z3950) 211 (Your library may require additional ports if your system runs multiple character sets on multiple ports.) X X
Z39.50 Client (Z3950) Any (The remote organization specifies the ports; for example ports 210, 2200 and 7090 are commonly used.) X
Email to innovative on 05-25-2016 “Based on the firewall documentation I am assuming that sierra uses TCP as the transport protocol for z3950. I tested ports 210-211 off campus with no vpn. When I attempt to test the Z3950 connection with MarcEdit I receive an error.”

192.168.99.99 Online
- SYN sent to 192.168.99.99:210
- SYN ACK received from 192.168.99.99:210
192.168.99.99 210 Open TCP
- bytes sent to 192.168.99.99:210 via UDP
- ICMP type 3 received from 192.168.99.99:210
192.168.99.99 210 Closed UDP

192.168.99.99 Online
- SYN sent to 192.168.99.99:211
- SYN ACK received from 192.168.99.99:211
192.168.99.99 211 Open TCP
- bytes sent to 192.168.99.99:211 via UDP
- ICMP type 3 received from 192.168.99.99:211
192.168.99.99 211 Closed UDP
These are the server details Auto-Graphics uses to connect:

1 > Internal code for server: INNOPAC
2 > Display name for server: Indiana State University
3 > IP address of server: xxxxxxx.indstate.edu
4 > Port: 210

The display name has no impact on connecting, but the other 3 elements do. There is no login required.

This is the database details:

01 > Code for database: INNOPAC
02 > Display name for database: Library Catalog
03 > Type of query: 1
04 > Data Format: OPAC
05 > Type Of Updating: NONE

Again, the display name is not important.

There are several search attributes, here are 3:

7 > TITLE (t): 1:4, 2:3, 3:1, 4:1, 5:1, 6:1
8 > AUTHOR (a): 1:1003, 2:3, 3:1, 4:1, 5:1, 6:1
Successful Z39.50 connection after III’s modification.
SRCS Z39.50 Search

Z3950 Search
Exploring NCIP for the Consortium

- NCIP: NISO Circulation Interchange Protocol
  - (National Information Standards Organization)
- SRCS training advocated for NCIP
Exploring NCIP for the LCVC Consortium

- LCVC decides to go with NCIP
- Signed contract
- Innovative has issues with AutoGraphics
- Each library would have to buy NCIP individually
- Annual cost is significant
- The Minuteman Library Network (MLN) is a consortium
NCIP “unmediated” workflow

**Borrowing**

1. **LCVC**
   - Library Consortium of Vigo County
   - Location Codes: S,R,I,V

2. Confirm LCVC patron
   - Barcode & Pin

3. Loan Rule
   - Is based on patron type and static IType & iLocation, not based on lender's loan period.

4. **Auto Graphics SHAREit**

5. **Available item requested by LCVC patron**

6. Item will be loaned (Yes, No)

7. **External SRCS Library**

**Lending**

1. **LCVC**
   - Library Consortium of Vigo County
   - Location Codes: S,R,I,V

2. **NCIP**
   - Check out to Static – iPatron

3. **Send Item**

4. **Available item requested by External SRCS Library**

5. **Auto Graphics SHAREit**

6. **External SRCS Library**
Exploring NCIP for the Consortium

• LCVC meets again
• Decides NCIP isn’t worth the cost or the workflow issues
• Vigo County Public Library said
  • Borrowing won’t be that high
  • Workflow isn’t that much different from what they do currently
• VCPL at present is not live
Exploring NCIP for the Consortium

- Indiana State University decided not to use NCIP
  - SRCS uses proprietary logon
    - ISU is a single logon environment
    - Patrons to place request in ILLiad
  - Involve Circulation
  - Lending is done with ISO protocol in ILLiad
ISO ILLiad protocol at ISU

• ISO protocol allows ILLiad to communicate with another program
• Integrates SRCS lending requests into ILLiad
• ISO was included in our ILLiad subscription
ISO ILLiad protocol at ISU

• Set-up with AutoGraphics
• Set-up with OCLC (ILLiad onsite hosting)
• Set-up in ILLiad Customization Manager
• Resource sharing friends
• Error messages and technical support
ILLiad Customization Manager
## SRCS Auto-Graphics setup

<table>
<thead>
<tr>
<th>External Communications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System type:</strong></td>
<td>ISO ILL</td>
</tr>
<tr>
<td><strong>Transport method:</strong></td>
<td>Direct connection (TCP/IP)</td>
</tr>
<tr>
<td><strong>Computer or Email Address:</strong></td>
<td>Your IP address or Host Name</td>
</tr>
<tr>
<td><strong>Computer Port No.:</strong></td>
<td>1611</td>
</tr>
<tr>
<td><strong>ISO System Code:</strong></td>
<td>ISU</td>
</tr>
<tr>
<td><strong>Code Type:</strong></td>
<td>OCLC</td>
</tr>
</tbody>
</table>
ISO ILLiad protocol at ISU

Port 1611 (ISO return address) transmit and receive
Must use IP address not a DNS host name

Automatic check in on Auto-Graphics and ILLiad
  system ID ISO symbol - OCLC:XXX
  (your symbol all caps) must match
ISO system ID - OCLC:XXX (your symbol all caps)
Workflow for SRCS at ISU
SRCS request downloads into ILLiad “Awaiting ISO ILL Request Processing”

Staff uses Z39.50 to get call number/location

Is the Borrowing Library information complete?

Yes

Staff adds due date of 2 months & clicks “allow renewals”

Staff routes to “Awaiting Stacks Searching”

No

Staff logs on to SRCS and looks up library

Staff copies over library information from SRCS into ILLiad

Staff fills in shipping, billing, groups, & clicks priority shipping
Staff/Student prints pull slips → Student pulls item → Student places item on SRCS area of cart →

Staff/Student answers item: Update Stacks Search Results → Staff/Student confirms item is correct, records conditions & barcode in ILLiad →

Staff/Student checks out item in Sierra to ISU-L → Staff/Student places item on the InfoExpress cart →

Staff/Student processes manifest for InfoExpress and ships item
ISU SRCS Lending Return Workflow

InfoExpress shipment comes in

Staff/Student unpacks and sorts

Staff/Student processes Lending Returns

Is the item damaged or has a billing pop-up?

No

Staff/Student returns item in ILLiad & checks in item in Sierra

Yes

Staff/Student fills out Lending Problem Form and places item on Problem shelf
Future of SRCS

• ISU and staff borrowing summer 2017
• ISU begin talking about SRCS as a database
  – How will ISU use it?
  – Will it be added to Database List?
  – Will it be added to Teaching?
• Encourage the rest of LCVC to participate
Special Thanks

• Pam Childers & Alison Johnson
  – Indiana Wesleyan University

• Stephanie Frederick
  – Valparaiso University

• The Minuteman Library Network (MLN) consortium
Questions?