Sharing Breakthroughs

2017 OCLC RESOURCE SHARING CONFERENCE

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

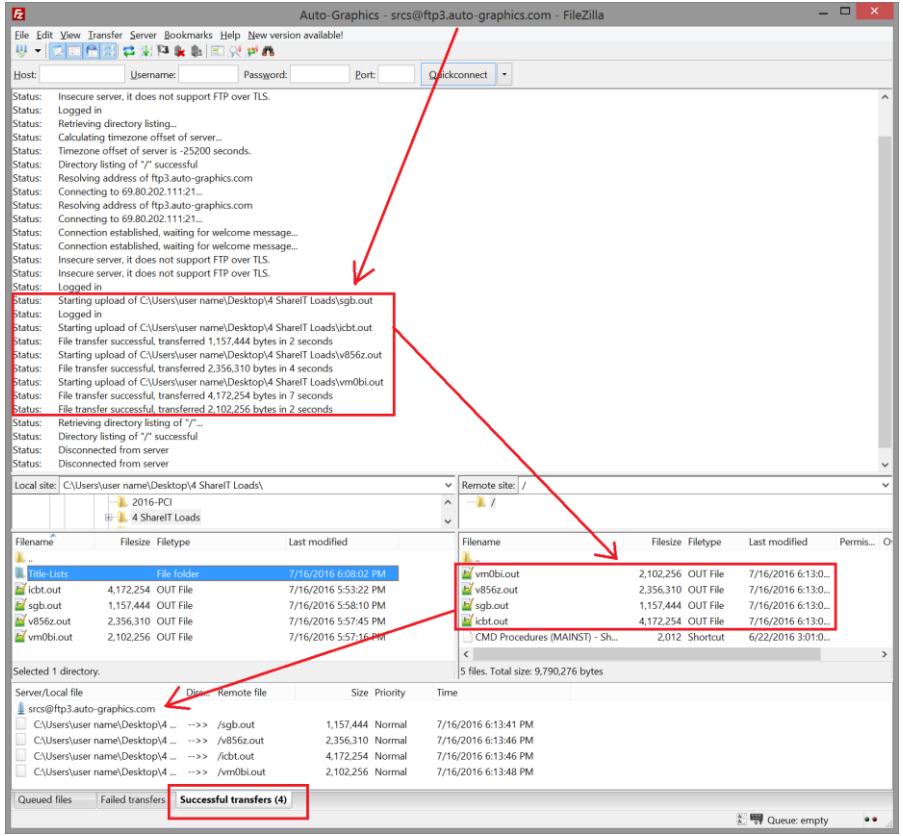
- Indiana's Statewide Remote Circulation Service
- Decentralized collaboration
  - Academic Libraries of Indiana (ALI) & State Library
- Phase 2
- SRCS uses AutoGraphics
- Indiana State University live in Lending, Nov 2016

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.

Z39.50

How do I know which ports to open for traffic 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.

Do I need to open ports for the Z39.50 Server for inbound traffic? Outbound? Or both?

Both.

Which ports should my library open for Innovative staff, the public, library staff, and other related groups such as partner libraries?

Refer to the following chart for all ports that you must open in your firewall for the appropriate parties.

Unless otherwise noted, both in-bound and out-bound access are required on the indicated port number.

If your organization allows Secure Shell (SSH) access, Innovative requires TCP/22 - Secure Shell (SSH) access through your organization's firewall to the Millennium system(s) and SFTP access between your server and upgrade.iii.com. Innovative can support the Millennium system and applications through SSH. For more information on Innovative's support access via SSH Tunneling, see the SSH (Secure Shell) FAQ.

Product (Protocol)	Port Number(s)	Public (Internet / External)	Staff/ Partners (Internal)	Innovative (External)	Other (External)
File Transfer Protocol (FTP) Port 21 is closed to inbound ftp access. Note, this does *not* affect outgoing traffic on port 21 such as FTP ordering.	20 and 21		x		
Secure Shell (SSH) and **Secure FTP** (SFTP) for full software upgrades, maintenance updates, and other system	22		x	x	

"How do I know which ports to open for tratnc: from searchers using our Z39.50 Client?
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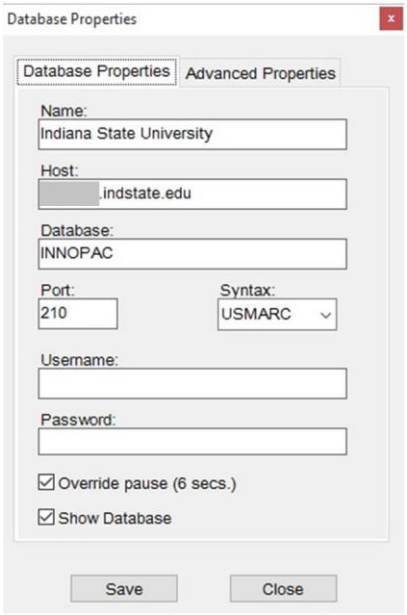
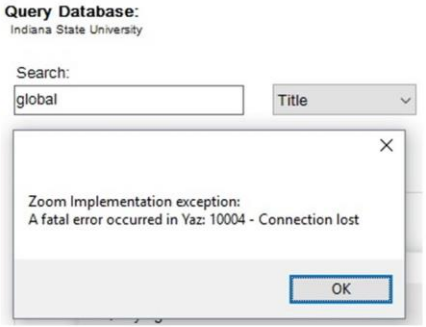
Product (Protocol)	*Port Number*	*External*	*Internal*
WebPAC Z39.50 Client (Z3950)	*210*	*X*	*X*
Z39.50 Client	*211*	*X*	*X*

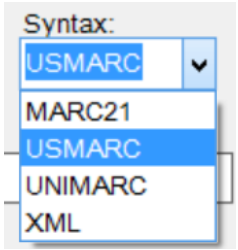
(Network Time Protocol)					
Z39.50 Server (z3950) *Primary database*	210	x	x		
WebPAC Z39.50 Client (Z3950)	211 *(Your library may require additional ports if your system runs multiple character sets on multiple ports.)*	x	x		
Z39.50 Client (Z3950)	Any *(The remote organization specifies the port; for example ports 210, 2200 and 7090 are commonly used.)*		x		

Z39.50

- 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

Z39.50

- 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

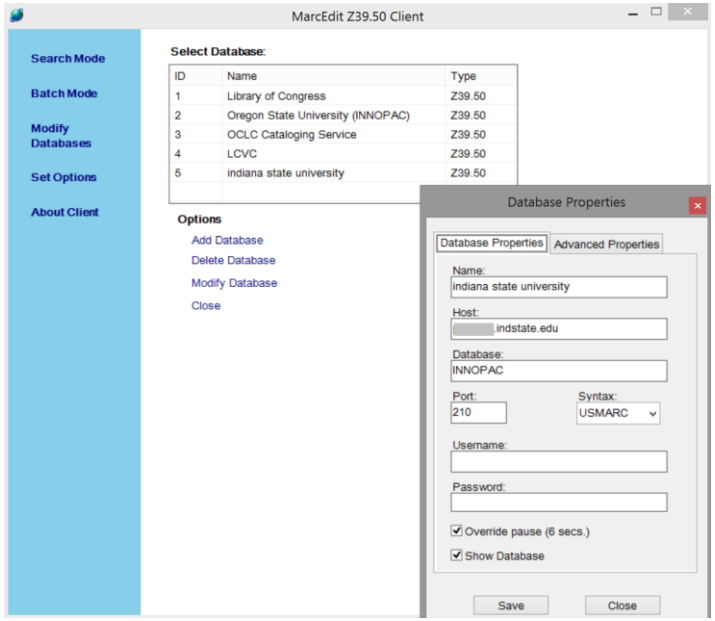
Again, the display name is not important.

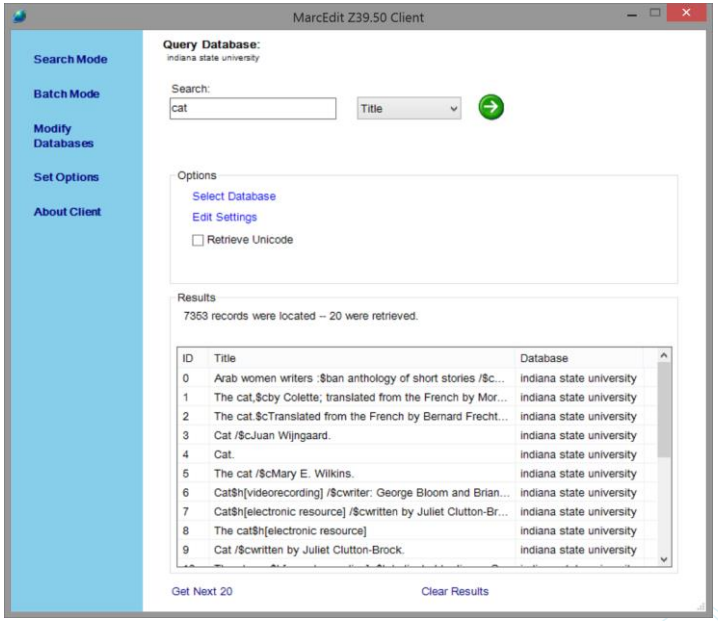
There are several search attributes, here are 3:

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
9 > ISBN (j): 1:7, 2:3, 3:1, 4:6, 5:1, 6:1

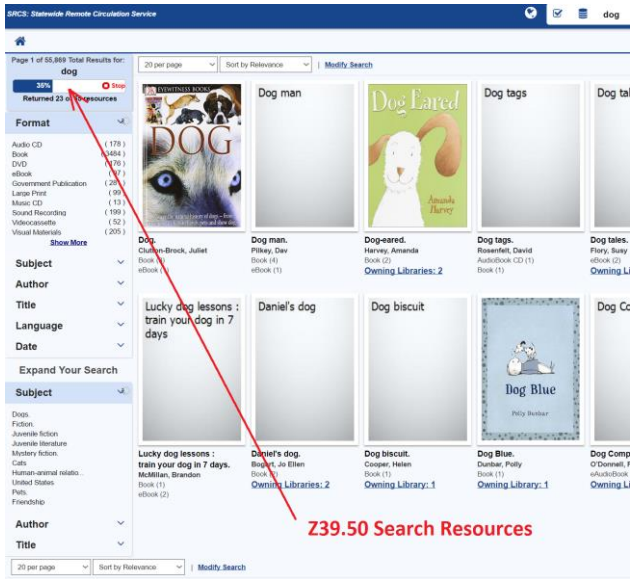
Z39.50

Successful Z39.50 connection after III's modification.





SRCS Z39.50 Search



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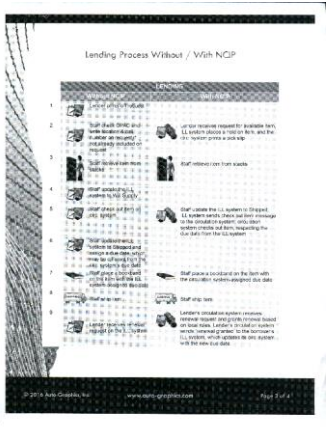
Exploring NCIP for the Consortium

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

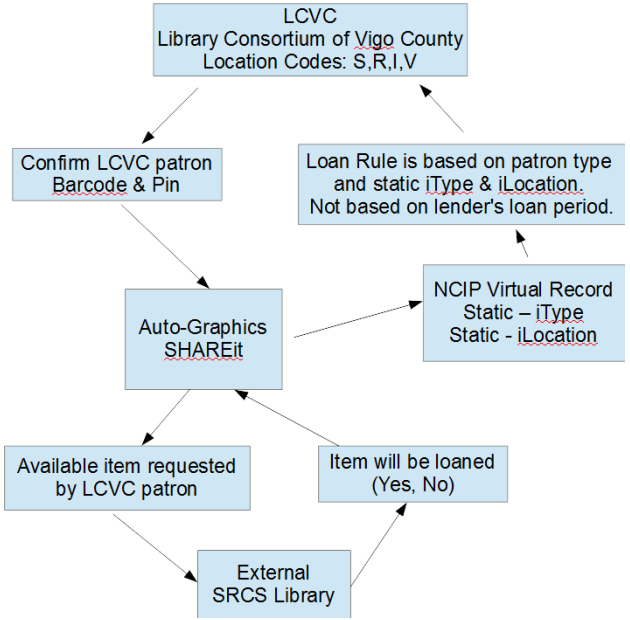


Exploring NCIP for the LCVC Consortium

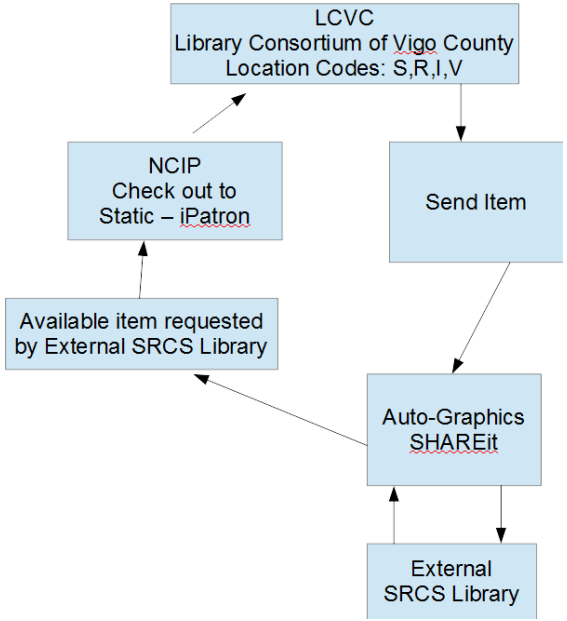
- LCVC decides to go with NCIP
- Signed contract
- Innovative has issues with AutoGraphics
- Each library would have to buy NCIP individually
- Annual cost is significant
- The Minuteman Library Network (MLN) is a consortium

NCIP “unmediated” workflow

Borrowing



Lending



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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

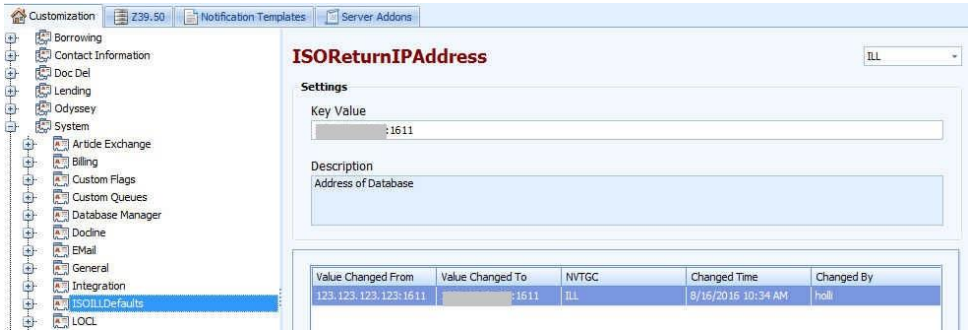
ISO ILLiad protocol at ISU

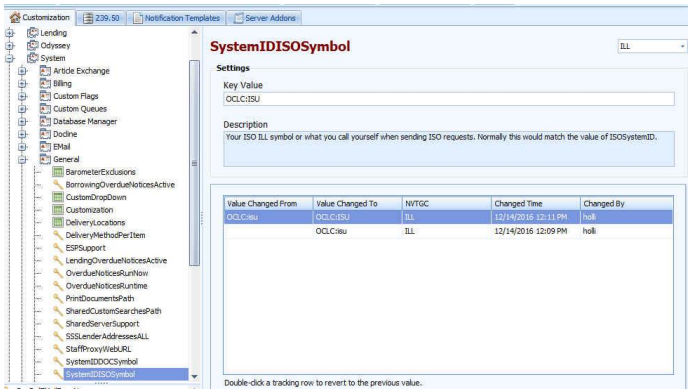
- ISO protocol allows ILLiad to communicate with another program
- Integrates SRCS lending requests into ILLiad
- ISO was included in our ILLiad subscription

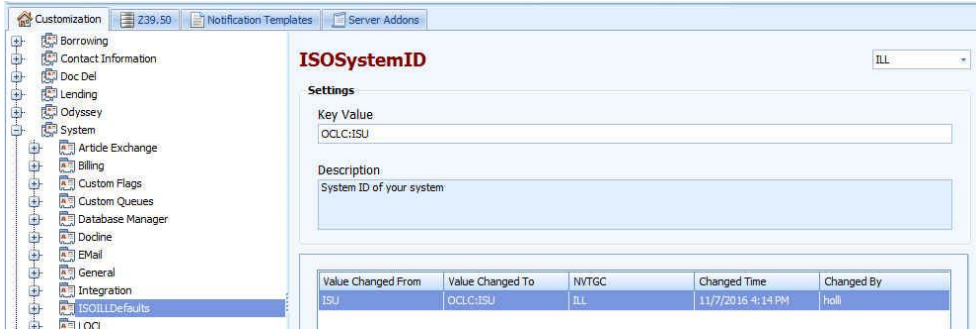
ISO ILLiad protocol at ISU

- 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







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SRCS Auto-Graphics setup

External Communications

System type:	ISO ILL
Transport method:	Direct connection (TCP/IP)
Computer or Email Address:	**Your IP address or Host Name**
Computer Port No.:	1611
ISO System Code:	ISU
Code Type:	OCLC

ISO ILLiad protocol at ISU

Port 1611 (ISO return address) transmit and receive

Must use IP address not a DNS host name

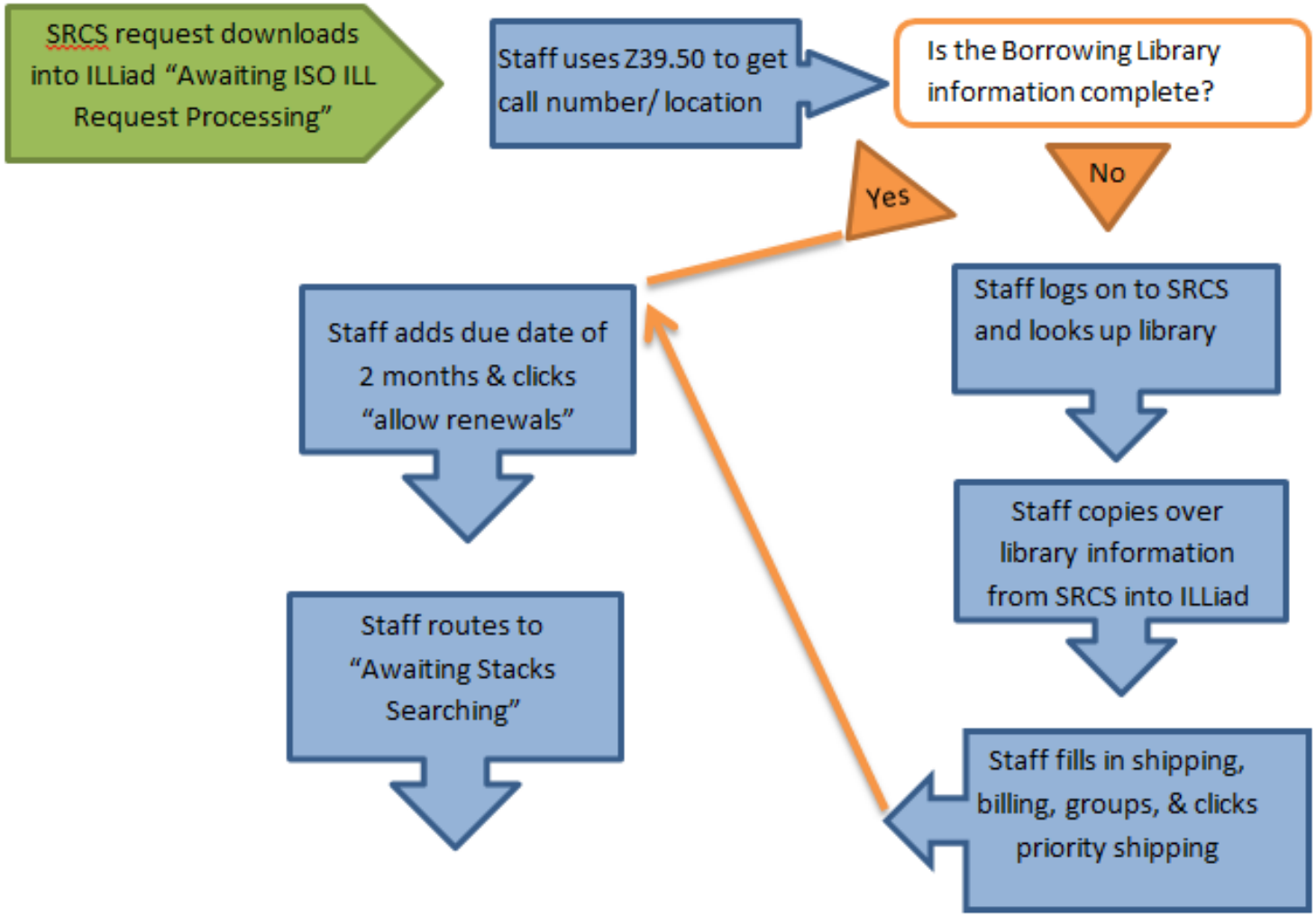
Automatic check in on Auto-Graphics and ILLiad

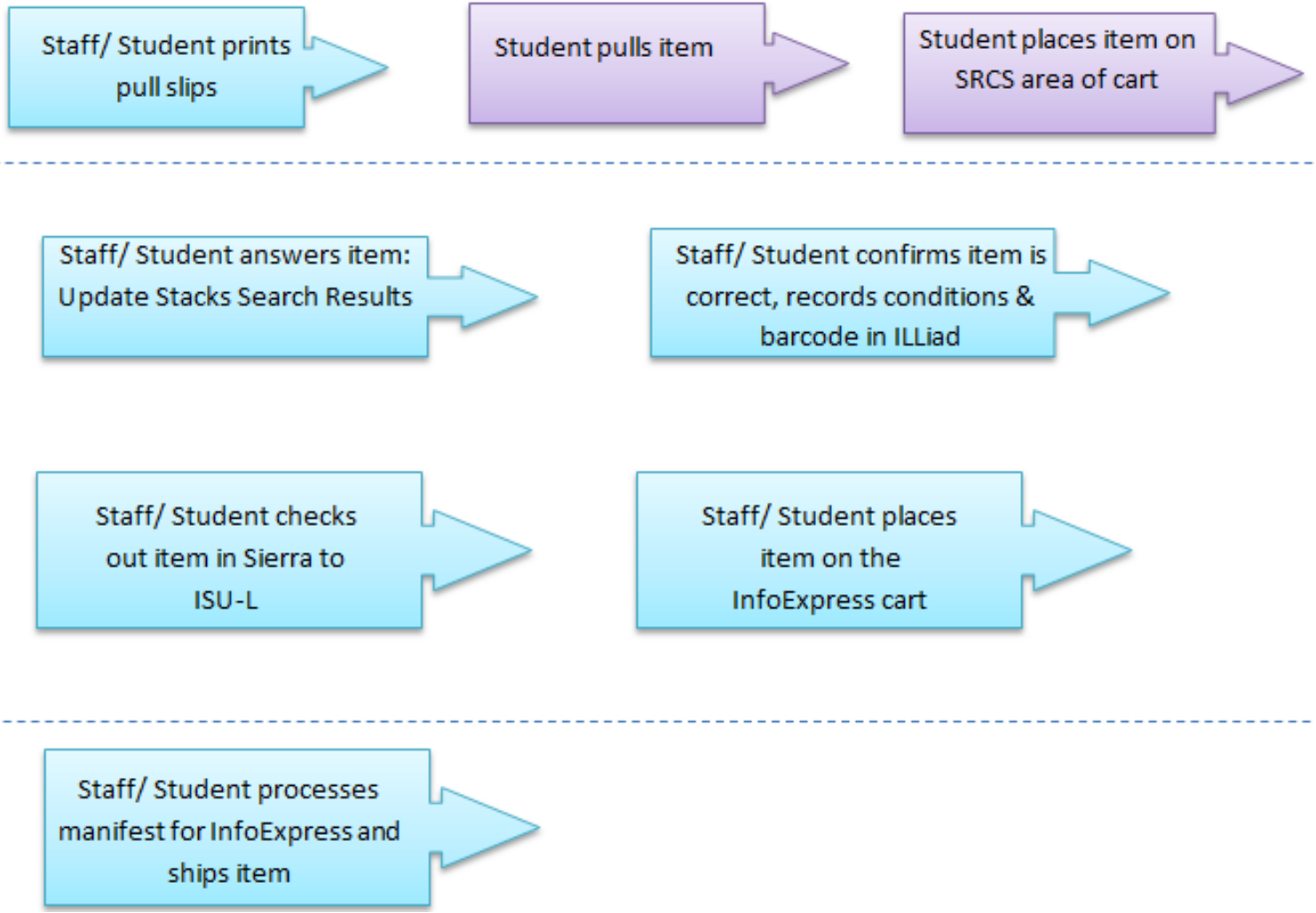
system ID ISO symbol - OCLC:XXX

(your symbol all caps) must match

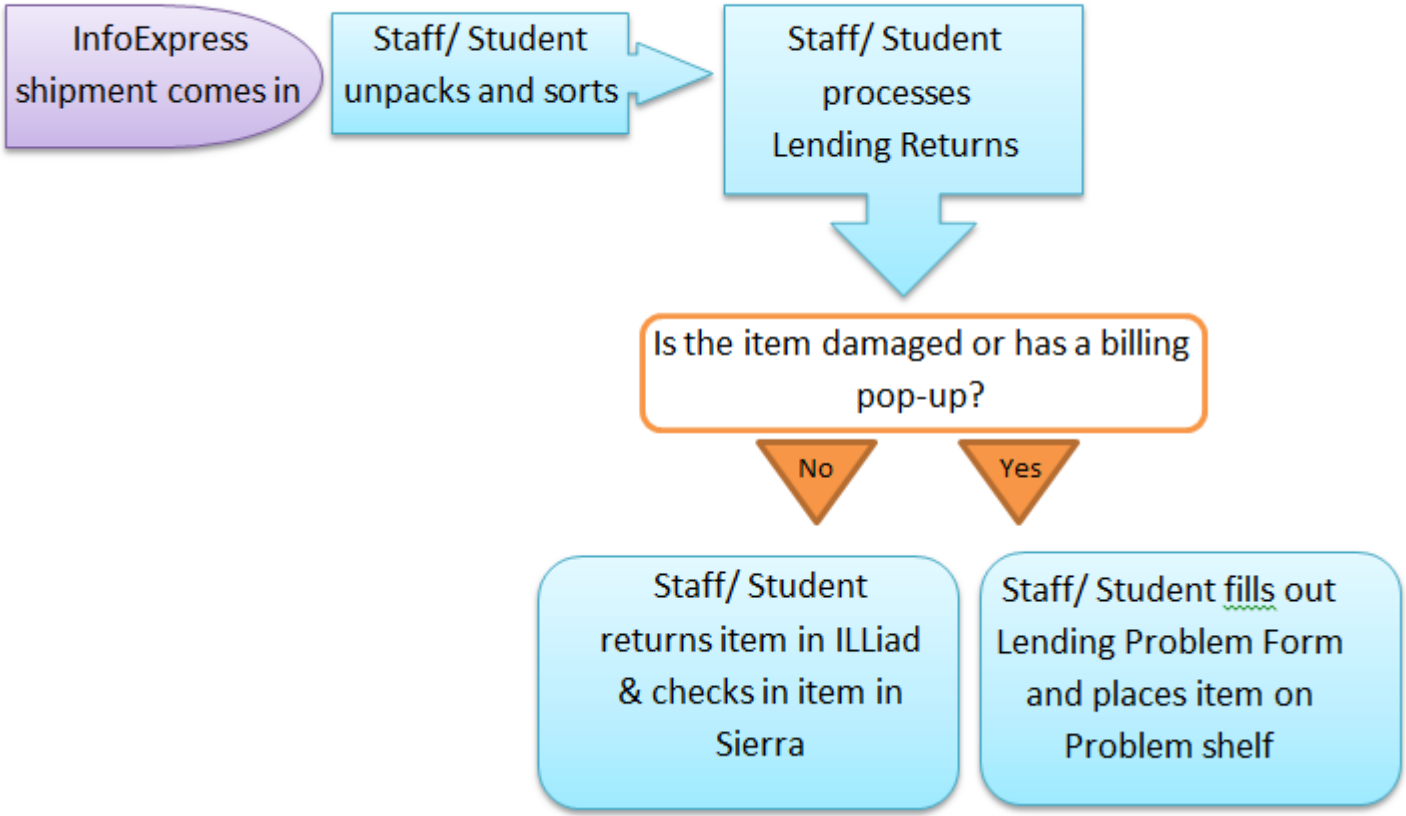
ISO system ID - OCLC:XXX (your symbol all caps)

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?
No
Yes
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 adds due date of 2 months & clicks "allow renewals"
Staff routes to "Awaiting Stacks Searching"

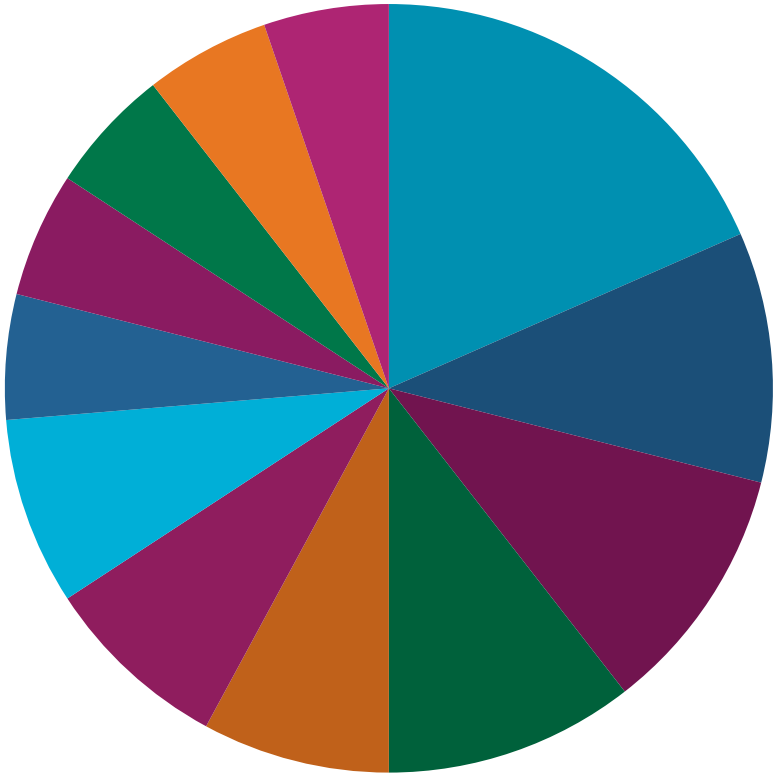

Staff/ Student prints pull slips
Student pulls item
Student places item on SRCS area of cart
Staff/ Student answers item: Update Stacks Search Results
Staff/ Student confirms item is correct, records conditions & barcode in ILLiad
Staff/ Student checks out item in Sierra to ISU-L
Staff/ Student places item on the InfoExpress cart
Staff/ Student processes manifest for InfoExpress and ships item

ISU SRCS Lending Return Workflow



ISU SRCS

West Lafayette Public Library	7
Delphi Public Library	4
Hamilton East Public Library	4
La Porte County Public Library	4
Charlestown Clark County Public Library	3
Goshen Public Library	3
New Albany-Floyd County Public Library	3
Alexandrian Public Library	2
Ball State University	2
Middlebury Community Public Library	2
Peabody Public Library	2
Porter County Public Library System	2
	38



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?

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thank you

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