

# RSC19

**OCLC RESOURCE SHARING  
CONFERENCE**



## We're a Happy Family: ILLiad/Alma NCIP Integration

LAPIS DAVID COHEN, UNIVERSITY OF PENNSYLVANIA

**#OCLCRSC19**

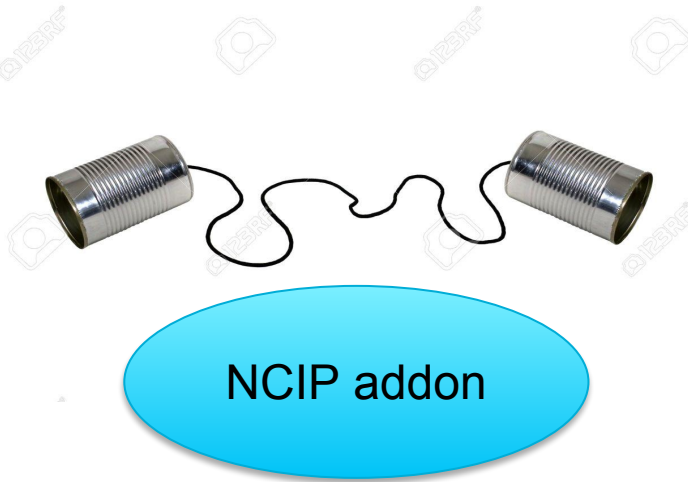




# Lapis David Cohen

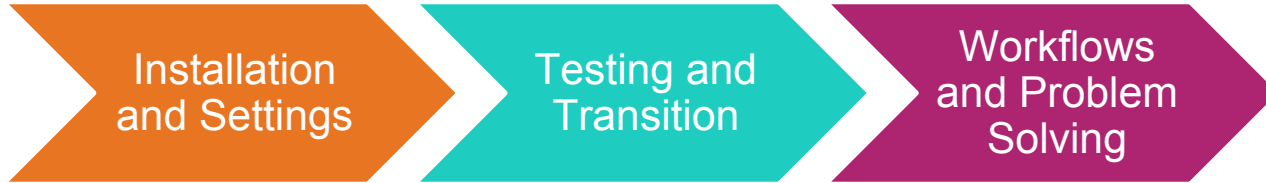
Library Specialist

# The Vital Connection is Made



(Not an actual photo)

# Order of the Day



# Dialogue, Not Monologue

Alas, poor NCIP! I knew  
them, Melvil, a NISO  
Circulation Interchange  
Protocol of infinite jest, of  
most excellent functionality.

# Fantastic Addons and Where to Find (and Save) Them

## Download the zip file from:

ILLiad Addon Directory -> ILLiad ALMA NCIP Client Addon

<https://prometheus.atlas-sys.com/display/ILLiadAddons/ILLiad+ALMA+NCIP+Client+Addon>

**Save the extracted folder to:** C:\Program Files (x86)\ILLiad\Addons  
(This is the typical destination location, save where you normally save addons)

((To be added and activated on the machines of Borrowing staff who process Receives and Returns and Lending staff who process Shipping and Returned Loans))

# Alma Set Up

1. **Create:** Resource Sharing Library
2. **Add:** Interlibrary Loan Resource Sharing Partner
3. **Edit:** Parameters

# Resource Sharing Library Setup

- Under **General Configuration**, choose configuration.
- Under General, choose Libraries and select Add a Library or Edit Library Information.
- Choose the tab for libraries, select the Resource Sharing Library. Under Resource Sharing Information, check the **Is Resource Sharing Library** box.
- Under Lending Set up, choose a Default Location of **Lending Resource Sharing Requests**.
- Under **Fulfillment Configuration**, choose the Configuration menu and select the Resource Sharing Library from the “You are Configuring” dropdown menu.
- Under the **Physical Fulfillment** area, click Fulfillment Units. Click the Add Fulfillment Unit button. Name the unit, assign it a code, and set the On Shelf Request Policy to “No Requesting from available holding”.
- Open the Unit and click on the **Fulfillment Unit Locations** tab. Add a borrowing and a lending location and make their Location type “Open”. Under the Fulfillment Unit Rules tab, choose Rule Type of “loan” and apply the Default Loan rule, or your choice of loan rule.

Source: <https://github.com/kurtmunson/ILLiad-NCIP>

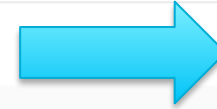
Note: Admin permissions  
needed!

# ILL Partner Setup

## Resource Sharing Partner List

1 - 4 of 4

Code ▾



[+ Add Partner](#)



Status: All ▾ Profile Type: All ▾

▲ Name	↕ Code	Status	Profile Type	
1 BorrowDirect	BorrowDirect	Active	NCIP	...
2 BorrowDirect+	BorrowDirectPlus	Active	NCIP	...
3 E-ZBorrow	E-ZBorrow	Active	NCIP	...
4 Interlibrary Loan	ILLIAD	Active	NCIP	...

Alma Location: Fulfillment | Resource Sharing | Partners

# ILL Partner Setup, continued

< Resource Sharing Partner

Cancel

Save

## Interlibrary Loan

Partner Code: ILLIAD

Profile Type NCIP

System Type ILLiad

General Information

Contact Information

Parameters

Notes

Code \* ILLIAD

Profile Type \* NCIP

System Type \* ILLiad

Average Supply Time 0

Currency

Supports Borrowing

Supports Lending

Locate Profile

Default Partner

Name \* Interlibrary Loan

Status Active

Delivery Delay (days) 0

Borrowing Workflow

Lending Workflow

# Parameters, part one

General Information

Contact Information

Parameters

Notes

## GENERAL INFORMATION

User identifier type \* **PennKey**

URL template **https://franklin.library.upenn.edu/redir/ill**

Add user auto login to URL  Yes  No

Disable service when  Never  
 When resource is owned by the campus  
 When resource is owned by the campus and available  
 When resource is owned by the institution  
 When resource is owned by the institution and available

Loan period

[Download Certificate](#)

Request pushing method \*  Open URL  Link

Broker System NCIP URL **https://na03.alma.exlibrisgroup.com/view/NCIPServlet**

Enable service for guest user  Yes  No

Default library owner \* **Resource Sharing Library**

## REQUEST ITEM

Bibliographic record ID type \* **OCLC Number**

Support Borrowing

# Parameters, part two

## CHECK-OUT ITEM

Default location \* **Lending Resource Sharing Requests** ▼

Default item policy \* **Borrow Direct** ▼

## ACCEPT ITEM

Default location \* **Borrowing Resource Sharing Request** ▼

Default pickup library **Van Pelt Library** ▼

Automatic receive

Receive Desk \* **Resource Sharing Desk** ▼

## LOOK UP USER

Require Authentication  Yes  No

## EXPORT TO THIRD PARTY

Export to third party  Yes  No

## CREATE USER FISCAL TRANSACTION

Create fee using \* **Ignore message** ▼

# A Side Note on Due Dates

The default setting in the addon is for the NCIP message to send the ILLiad Due Date to Alma, unless a different policy is set under the Fulfillment Unit Rules for Resource Sharing Circulating Material.



You are configuring: Resource Sharing Library

Name Resource Sharing Circulating Material

Fulfillment Unit Details    Fulfillment Unit Locations    **Fulfillment Unit Rules**

Rule Type Loan

Alma Location: Fulfillment | Physical Fulfillment | Fulfillment Units

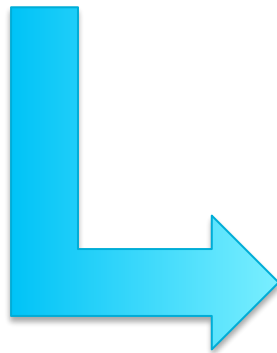
# ILLiad Set Up (System | Manage Addons)

Name	ALMA_NCIP_Client	Setting Name	Value	Type	Description
Author	Tom McNulty, VCU Libraries	NCIP_Responder_URL *	https://na03.alma.exlibrisgroup.com/view/NCIPServlet	string	This setting value is the address for the NCIP Responder URL. For Alma this will always be https://alma.exlibrisgroup.com/view/NCIPServlet unless you are testing on a sandbox version of Alma.
Version	2.0	acceptItem_from_uniqueAgency_value	01UPENN_INST	string	This is your institutional Alma Code.
Active	<input checked="" type="radio"/> Yes <input type="radio"/> No	ApplicationProfileType	ILLIAD	string	Input the Resource Sharing Partner code used in Alma.
Description	This system level addon allows for ILLiad to communicate with Alma via NCIP protocol.	BorrowingAcceptItemFailQueue	NCIP Error: BorrowingAcceptItem Failed	string	This designates the name of the queue a Borrowing Transaction will be moved to if the BorrowingAcceptItem function fails.
		BorrowingCheckInItemFailQueue	NCIP Error: BorrowingCheckInItem Failed	string	This designates the name of the queue a Borrowing Transaction will be moved to if the BorrowingCheckInItem function fails.
		LendingCheckOutItemFailQueue	NCIP Error: LendingCheckOutItem Failed	string	This designates the name of the queue a Lending Transaction will be moved to if the CheckOutItem function fails.
		LendingCheckInItemFailQueue	NCIP Error: LendingCheckInItem Failed	string	This designates the name of the queue a Lending Transaction will be moved to if the CheckInItem function fails.
		EnablePatronBorrowingReturns	<input checked="" type="checkbox"/>	boolean	When this setting is enabled, patron returns will go through ILLiad and a message is sent to Alma. When this setting is disabled, patron returns will go through ILLiad and will need to also be returned through Alma.
		Use_Prefixes *	<input type="checkbox"/>	boolean	Determines whether or not you want to change prefixes of a transaction based on specific criteria (below).
		Prefix_for_LibraryUseOnly	LU-	string	This setting allows you to change the prefix of a transaction that is marked LibraryUseOnly Yes.
		Prefix_for_RenewablesAllowed	TN-	string	This setting allows you to change the prefix of a transaction that is marked RenewablesAllowed Yes.
Prefix_for_LibraryUseOnly_and_Renewa...	LU-	string	This setting allows you to change the prefix of a transaction that is marked both LibraryUseOnly and RenewablesAllowed Yes.		

\* See next slide...

# ILLiad Set Up (bits and bobs)

- You may need to “Run as Administrator” in order to edit and save the add-on settings in ILLiad
- **Use\_Prefixes** adds information to the Transaction Number which may render the printed TN barcode on the ILL Loan slip not scannable
- You **may** need to include **your** specific Alma instance in the URL for the NCIP\_Responder\_URL field (e.g., <https://na03.alma.exlibrisgroup.com/view/NCIPServlet>, rather than <https://alma.exlibrisgroup.com/view/NCIPServlet>)



A screenshot of the ILLiad user interface. The top navigation bar is blue and contains the text "Pelt Circulation" followed by icons for a user profile, a checklist, a gear (settings), and a question mark (help). A dropdown menu is open from the help icon, listing several options: "Browse Online Help", "Help For This Page", "What's New Videos", "Alma Release Schedule", "Suggest an Idea", "Generate Tracking ID", "Premium Sandbox", "Status of last indexing: Done, 12/24/2018", "March 2019 Release" (with an external link icon), and "Instance Name: NA03". A small black "Help" button is visible over the top right of the dropdown menu.

# Testing (Test Server/Alma Sandbox?)

## Pros:

- Can't break anything
- Can set up to mirror your “post-transition” settings and workflow

## Cons:

- Extra effort to set up

## Goal:

- Testing as many scenarios as possible in a non-production environment

## Alternative:

- Testing in production ILLiad, making TEST REQUEST situation **very** clear to other staff

# Testing Hints

- ILLiad Client Log file (set to Debug mode) can let you know if the addon has initialized successfully (Search for: **Starting script environment for addon ALMA\_NCIP\_Client -> Initialization Complete**). Errors may also be checked in the log.
- Make sure ILLiad System Manager (timer) is ON (if running on a test server)
- Run through as many variations as possible – different patron statuses, loan restrictions, pick up locations, Due Date situations (Open Hours for the Resource Sharing Library may affect Due Dates), foreign language scripts
- Keep a running log of any settings or LUA code changes made (and repercussions)

# Before Transition

- Decide on “go live” date (best during a slow period!)
- Decide Due Date policy
- Additional text to be added to the **ILL Request Confirmation** emails alerting patrons to the upcoming transition
- Staff education and training for changes in workflow (ILL, Circulation staff, Faculty Express, Departmental Circulation staff)
- If needed, prepare new **ILL Loan Slips** to be used after transition (for example, take out due date if using set loan period, patron due date to be stamped at check out)
- Install **ILLiad/Alma NCIP Client addon** on relevant staff computers
- Update your local Resource Sharing webpage and LibGuide with new policy information (and any other places on the library webpages with pertinent ILL policy info)

# At Transition

- Turn off ILLiad email notifications for: **Loan Pick Up** and **Overdues**
- **Turn off blocking for Overdues in ILLiad** (all blocks and fines will be via Alma)
- **Enable ILLiad routing rule to bypass customer notification email** and move request to Checked Out to Customer in ILLiad
- Disable Due Date column and Renewal functionality on patrons' View ILL Requests page, if necessary (for example, if ILLiad and Alma due dates will not match up).
- We added a note at the top of our local patron View ILL Requests page: **Please see your [Local] Library Account for the real-time status of loans which are Checked Out to Customer, as well as current Due Date information.**

# Notification Routing Rule

Process Type = Borrowing

TransactionStatus = In Transit to Pickup Location

MatchString = t.RequestType = 'Loan'

NewTransactionStatus = Checked Out to Customer

This routing rule bypasses patron notification in ILLiad.  
Additional restrictions could be included in the MatchString,  
for example, specific patron status

# Go Live (or, is it wicked not to webcirc?)

- Patron notification prior to moving their requests into Alma accomplished with batch emails for loans in **Checked Out to Customer** and **Customer Notified via Email** statuses.
- In practice we were able to transition 1500+ received loans on to our patrons' Alma accounts in less than a week. We exported all loans that were currently received (**Checked Out to Customer** or **Customer Notified via Email**) to an Excel spreadsheet and processed the loans into Alma from there by running the requests through the Receiving workflow. This allowed easy cutting and pasting of needed field information as well as clear noting of **Library Use Only** and **Special Collections Use** loans (and also aided processing all loans for a specific patron at one time).
- Can stop using Webcirc as soon as all loans are processed into Alma
- Added a **Custom Flag** for loans unable to be immediately transferred into Alma (Overdue, No Alma patron record)

# Borrowing Workflow (Receive)

- ILLiad: Normal **Check In From Lending Library** workflow
- Note added in ILLiad record if successful: **NCIP Response for BorrowingAcceptItem received successfully**
- Alma: **Scan In Items**

Scanning in TN moves the request to the Hold Shelf (or In Transit for delivery to departmental



## Scan In Items

Scan in Items | Change Item Information

Automatically print slip  Yes  No

Register in-house use

Work Order Type:

Scan item barcode \*

# Checking Out to the Patron

- Patron receives pickup email notification from Alma when item moves to Hold Shelf (we added text: please wait 15-20 minutes before pickup)
- Loan checked out as per usual by Circ Desk staff
- We mirror our D2D service loan periods - **12 weeks, no renewals**

Clear and  
predictable  
loan periods!

# A Patron's Eye View

My Library Card

OVERVIEW **LOANS** REQUESTS FINE + FEES BLOCKS + MESSAGES PERSONAL DETAILS

Loans Sort by RENEW ALL ⌵

5 loans 📌 ⋮

1	THE CHICAGO MANUAL OF STYLE	Due: 05/03/2019, 17:00. Pick up:Resource Sharing Library Borrowing Resource ...		⌵
2	<b>How to Serve Patrons</b> McTester, Testy	Due: 05/10/2019, 17:00. Pick up:Resource Sharing Library Borrowing Resource ...		⌵
3	<b>The Vegan Alien's Guide to Patrons</b> Lector, CannibILL	Due: 05/10/2019, 17:00. Pick up:Resource Sharing Library Borrowing Resource ...		⌵
4	The collected works of G.K. Chesterton. (v.12) Chesterton, G. K.	Due: 05/14/2019, 23:59. Pick up:Van Pelt Library Van Pelt Library PR4453 .C4 1986	RENEW	⌵
5	The life and adventures of Martin Chuzzlewit / Dickens, Charles,	Due: 05/14/2019, 23:59. Pick up:Van Pelt Library Van Pelt Library PR4563.A2 I54...	RENEW	⌵

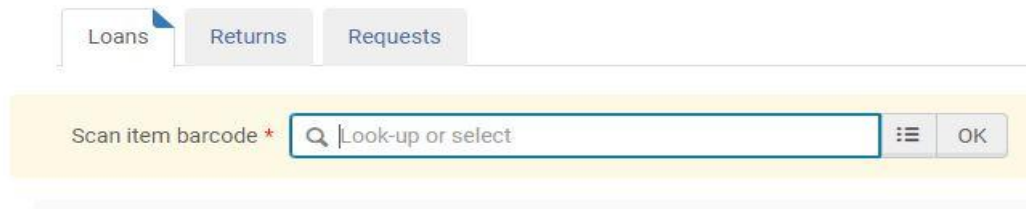
Due: 05/03/2019, 17:00.  
Pick up:Resource Sharing Library Borrowing Resource ...

Due: 05/10/2019, 17:00.  
Pick up:Resource Sharing Library Borrowing Resource  
Sharing Request  
Year: 2013  
Main Location: Resource Sharing Library  
Secondary Location: Borrowing Resource Sharing  
Request  
Loan Date: 02/15/2019  
Loan Status: Normal  
Item Status: Loan  
Ils Institution Code: 01UPENN\_INST  
Ils Institution Name: University of Pennsylvania  
**Barcode: 1371313**

# Borrowing Exceptions

In cases where a loan has to be checked out directly to a patron (for delivery to Faculty, or restricted to Special Collections Use):

- **ILLiad:** Send patron canned notification email (moves request to Checked Out to Customer)
- **Alma:** Fulfillment | Manage Patron Services
- Look up patron and open their record
- Scan Item Barcode (in Loans tab)
- Stamp Due Date on ILL slip



The screenshot shows a web interface with three tabs: 'Loans', 'Returns', and 'Requests'. The 'Loans' tab is active. Below the tabs is a search bar with the text 'Scan item barcode \*' and a search icon. The search bar contains the text 'Look-up or select'. To the right of the search bar are two buttons: a menu icon (three horizontal lines) and an 'OK' button.

# Borrowing Returns

- **Alma:** Return Items scan at Circ desk moves loan from patron's Loan tab to the Returns tab and directs transit back to the ILL Office (Resource Sharing Library)
- **ILLiad:** Regular Return (**Check Item In**) procedure (Note will be added: **NCIP Response for BorrowingCheckInItem received successfully**)
- Item record automatically deleted from Alma when successfully returned in ILLiad

# Pickup Locations

If you have multiple pickup locations in Illiad you should Uncomment line 363 in the .lua file

```
-- m = m .. '<PickupLocation>' .. pickup_location .. '</PickupLocation>'
```

This is done by taking out the two dashes at the beginning of the line, so that it reads:

```
m = m .. '<PickupLocation>' .. pickup_location .. '</PickupLocation>'
```

Please note that the line number of this code may vary, or you may be opening the LUA code using a program which does not display the line numbers. One way to find the line is to use the find text (often CTRL-F) functionality available in most text reading programs to search for the original line of code.

# We Could Not Get Sublibraries.txt to Work

So we took out the following code from the LUA file:

Original code:

```
local pickup_location_full = GetFieldValue("Transaction", "Location");
local sublibraries = assert(io.open(AddonInfo.Directory .. "\\sublibraries.txt", "r"));
local pickup_location = "";
local templine = nil;
if sublibraries ~= nil then
    for line in sublibraries:lines() do
        if string.find(line, pickup_location_full) ~= nil then
            pickup_location = string.sub(line, line:len() - 2);
            break;

        else
            pickup_location = "nothing";
        end
    end
end
sublibraries:close();
End
```

# We Hardcoded Our Pickup Locations in the LUA Code

## New code:

```
local templine = nil;
local pickup_location = "";
local pickup_location_full = GetFieldValue("Transaction", "NVTGC");
if pickup_location_full == "VPL" then pickup_location = "VanPeltLib";
elseif pickup_location_full == "BIOMED" then pickup_location = "BiomLib";
elseif pickup_location_full == "VET" then pickup_location = "VetPennLib";
elseif pickup_location_full == "DENTAL" then pickup_location = "DentalLib";
else
    pickup_location = "EMPTY";
End
```

VPL, BIOMED, VET and DENTAL are our local User NVTGCs, to designate patron pickup location.

VanPeltLib, BiomLib, VetPennLib and DentalLib are the Alma codes for the corresponding physical locations.

# More Pickup Location Fun

- The physical library location codes should be accessible in Alma: Configuration menu> General> Libraries> “add a library or edit library information”> Click Libraries tab> select each library> note code under details header. **Access to this route requires the General Administrator user role.**
- The Alma Library Codes may also be found at: Fulfillment -> Fulfillment Configuration -> Configuration Menu -> You Are Configuring [choose library] -> Library Management -> Library Details -> Summary Tab -> Code. Again, **access may well be restricted by user role in Alma.**
- Fields other than NVTGC (such as an ItemInfo field) can be used to designate patron pickup location from ILLiad
- In the LUA code “NVTGC” would be replaced with whatever ILLiad field name you wanted to use (these are the column header names for fields in ILLiad)

# A Word (or Two) on Multi-volume Loans

- **Multi-volume sets** are charged out under a single barcode (TN)
- Number of pieces are noted in the Special Instructions field and ALSO **added in the Title field in ILLiad** (and so transferred to the Alma record for the item), e.g. **Gao deng shu xue\*\*FOUR VOLUMES\*\***
- Bright green sticker: **Multi-volume** is placed on each ILL Loan slip
- **If a patron returns only part of a multi-volume set** a Custom Flag is put on the request in ILLiad: **Multi-volume Incomplete Awaiting Return**
- Patron is sent a canned email letting them know only part of their multi-volume loan has been received back in the ILL office and we are charging the title back to their library account
- Charge the loan back out to patron in Alma (adjusting due date as needed)

# Ramifications of a Set Loan Period

- ILL staff manually request renewals for ILL items
- ILL staff Recall loans that have reached their final due date, have renewal requests denied or are recalled by the lender
- Recall in Alma: Search for Physical Item by Barcode (TN) -> Item Record -> Request -> Move Temporarily

# Lending Workflow

Enter the item barcode for the loan in the **Ref Num** field! Some documentation may indicate using an ItemInfo field, but the field in the LUA code is Reference Number:

```
local refnumber = GetFieldValue("Transaction", "ReferenceNumber");
```

(or you can edit the LUA code to use your preferred ILLiad request form field for the barcode)

# Lending Check Out

- [ILLiad] Item in **In Stack Searching** status -> open request
- [ILLiad] Paste item barcode into the **Ref Num** (Reference Number) field and verify Due Date
- [ILLiad] **Mark Found**
- [Alma] Item should be **automatically Checked Out in Alma** with due date as per ILLiad (item moved to Resource Sharing Library)
- [ILLiad] **NCIP Response for LendingCheckOutItem received successfully** message added
- [ILLiad] Print Shipping Labels -> request moves to Item Shipped

# Lending Check In

- [ILLiad] Lending Ribbon -> **Lending Returns** -> enter request TN or ILL request number -> **Process Returns**
- [Alma] Item should be automatically **Checked In**
- [ILLiad] **NCIP Response for LendingCheckInItem received successfully** message added
- [Alma] Resource Requests -> **Scan In Item** to move from **In Transit** to **Reshelving** at permanent location

# But We Don't Use the Lending Side!

## So we got errors!

- NCIP Error: LendingCheckOutItem Failed (instead of: Awaiting Shipping Label Printing)
- NCIP Error: LendingCheckInItem Failed (instead of: Request Finished)

## So we deleted the following lines from the LUA code!

```
RegisterSystemEventHandler("LendingRequestCheckOut", "LendingCheckOutItem");  
RegisterSystemEventHandler("LendingRequestCheckIn", "LendingCheckInItem");
```

Reason for not using Lending component: issues with multiple volumes, all ILL loans would be checked out to Resource Sharing Library, rather than the pseudo-patrons we currently use. **Only need to take out this code if Borrowing + Lending done on same computer.**

# Error Messages

Errors get routed to an error queue (named per values in the ILLiad addon settings) and add a note in the Note field of the ILLiad request, for example:

ILLiad queue: **NCIP Error: BorrowingAcceptItem Failed**

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?><ns1:NCIPMessage xmlns:ns1="http://www.niso.org/2008/ncip"
ns1:version="http://www.niso.org/schemas/ncip/v2_0/imp1/xsd/ncip_v2_0.xsd"><ns1:AcceptItemResponse><ns1:ResponseHeader>
<ns1:FromAgencyId><ns1:AgencyId>01UPENN_INST</ns1:AgencyId></ns1:FromAgencyId><ns1:ToAgencyId><ns1:AgencyId>01U
PENN_INST</ns1:AgencyId></ns1:ToAgencyId></ns1:ResponseHeader><ns1:Problem><ns1:ProblemType>Unknown
User</ns1:ProblemType><ns1:ProblemDetail>failed to get user by identifier: pennkey and institution:
3681</ns1:ProblemDetail><ns1:ProblemElement>///AcceptItem/UserId/UserIdentifierValue</ns1:ProblemElement><ns1:ProblemVal
ue>[Unique User ID Here]</ns1:ProblemValue></ns1:Problem></ns1:AcceptItemResponse></ns1:NCIPMessage>
```

The devil is in the  
ProblemDetail!

# More Problems, More Solutions

**Problem:** Failed to get user by identifier

**Solution:** Unique Patron Identifier needs to be added in Alma account (or Alma account needs to be activated)

**Problem:** Failed to create stub item without mmsld.

**Solution:** Route request back to Request Sent status and attempt to Check In again

**Problem:** Failed to search the inventory for barcode

**Solution:** Search patron's record in Alma and click on Requests. Click on the zero in the Place in Queue column for the problem ILL title. On the Request Queue page click on the Barcode link (ILLiad TN). On the Physical Item Editor page click on the SAVE button at the upper right side of the page. A confirmation will appear that the item has been successfully updated: "The data for [Your Book Title Here] has been successfully updated". The origin of the problem appears to be that the item record was not saved initially.

**Problem:** Temporary Processing Failure (or, Exception creating the NCIPInitiationData object from the servlet's input stream)

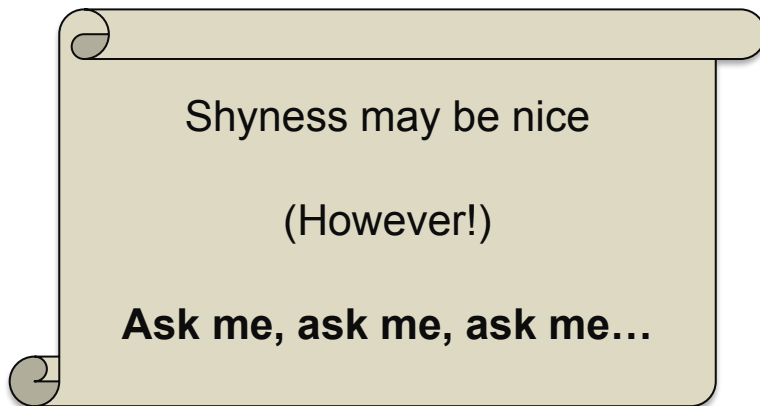
**Solution:** The problem seems to originate from the loan title imported from OCLC as simply <> (most often found with Hebrew titles, cataloged at libraries in Israel. Copy and paste the full title, which should be in the Original Loan Title field into the Title field (overwrite the <>). Route the request back to Request Sent and go through the receiving process again.

# Higher! Further! Faster! Resources

- Kurt Munson's Github page: <https://github.com/kurtmunson/ILLiad-NCIP>
- ILLiad/Alma NCIP Integration FAQ: <https://bit.ly/2lvdezo>
- [https://knowledge.exlibrisgroup.com/Alma/Product\\_Documentation/010Alma\\_Online\\_Help\\_\(English\)/030Fulfillment/050Resource\\_Sharing/060Configuring\\_Alma\\_Broker\\_Integration](https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_(English)/030Fulfillment/050Resource_Sharing/060Configuring_Alma_Broker_Integration)
- [https://knowledge.exlibrisgroup.com/Alma/Product\\_Documentation/010Alma\\_Online\\_Help\\_\(English\)/090Integrations\\_with\\_External\\_Systems/040Fulfillment/020Resource\\_Sharing\\_Partners](https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_(English)/090Integrations_with_External_Systems/040Fulfillment/020Resource_Sharing_Partners)
- [https://knowledge.exlibrisgroup.com/Alma/Product\\_Documentation/010Alma\\_Online\\_Help\\_\(English\)/030Fulfillment/080Configuring\\_Fulfillment/020Library](https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_(English)/030Fulfillment/080Configuring_Fulfillment/020Library)
- <https://prometheus.atlas-sys.com/display/ILLiadAddons/ILLiad+ALMA+NCIP+Client+Addon>

# Questions? (hopefully answers too!)

With (alphabetical) thanks to: Chris Clement (Penn), Bill Jones (YGM), Heather Klish (Tufts University) and Tom McNulty (VCU), Kurt Munson (INU), and DaVonne Rooney (Penn)!



# RSC19

**OCLC RESOURCE SHARING  
CONFERENCE**

thank you

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**#OCLCRSC19**

