

ILLiad Routing Rules & IDS Logic Rules



ILLiad Routing Rules

Which routing rules do we recommend?

- Rule of 5
- Direct Request Rule
- Document Type Rule
- Others?

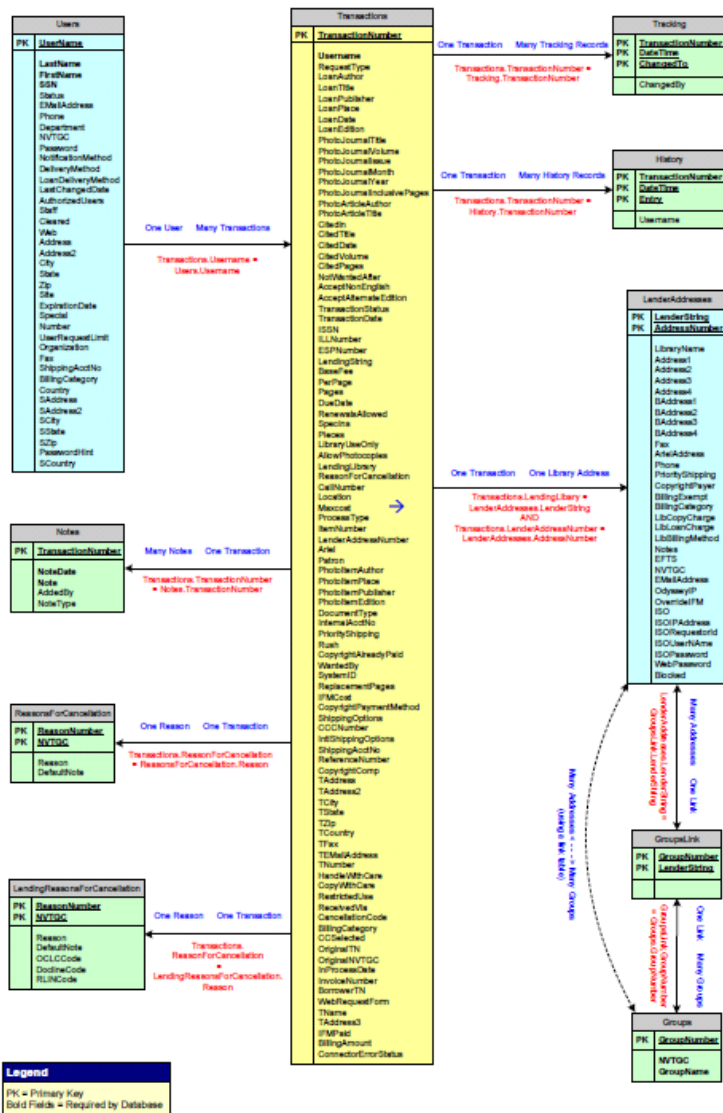
Biology class: We're dissecting a routing rule!

RuleNo	11
RuleActive	Yes
ProcessType	Borrowing
TransactionStatus	Awaiting Request Processing
MatchString	len(t.LoanDate) = 4 and t.LoanDate = convert(varchar(4),(datepart(year,getdate())))
NewProcessType	Doc Del
NewTransactionStatus	Awaiting Acquisitions Processing
RuleDescription	Routes new releases to Acquisitions for automatic purchase consideration.

Anatomy of a routing rule

- RuleNo = Each rule waits in line. This sets the order.
- RuleActive = The on/off switch.
- ProcessType = Apply this rule to Borrowing, Lending, or Doc Del.
- TransactionStatus = Apply this rule to a specific queue.
- MatchString = Apply this rule if it matches your criteria.
- NewProcessType = Move the request to Borrowing, Lending, or Doc Del.
- NewTransactionStatus = Move the request to a specific queue.
- RuleDescription = A brief note explaining what this rule does.

ILLiad Database - Key Table Relationships



Where can I find out more about
Tables & Fields?

Table names:

Users
Transactions
Tracking
History
LenderAddresses
Notes
ReasonsForCancellation
LendingReasonsForCancellation

URL for Table (older version):
<https://prometheus.atlas-sys.com/display/illiad85/ILLiad+Database+Key+Table+Relationships>

Tables that you will most likely use:

- Users
- Transactions

To query these tables, you need to append the first letter of the table name to the field that you want to query.

Example:

Users.FirstName would be u.FirstName

Transactions.Location would be t.Location

You can't spell MatchString without SQL

- Boolean operators: AND, OR, NOT
- Comparison operators: =, <>, >, <, >=, <=
- Use NULL to test for empty fields
- Can incorporate advanced SQL functions (i.e. “select”)
- Never use double-quotes
- All fields have table prefixes (i.e. “u.Status”)
- Don't exceed 255 characters

What can a MatchString do?

- MatchStrings can look at data from:
 - Transactions table
 - Users table (Borrowing & Doc Del)
 - LenderAddresses table (Lending)
- Route between Borrowing & Doc Del
- Move to any queue – including custom queues

How do you make the statement properly?

Tables: Spread, Bread

Statement:

Spread = 'Peanut Butter' AND Spread = 'Jelly' AND (Bread = 'White' OR Bread = 'Wheat')

Take note:

- Define table each time
- Use single quotes
- Use parenthesis around OR statements
- Capitalize Boolean Operators for readability



Routing rule rules to live by

- Routing rules cannot update an OCLC status
- No daisy chaining
- Order is important
- Requests can get stuck in loops
- Too many rules will slow down ILLiad
- Rube Goldbergs can break ILLiad

Now's your turn! Let's create a routing rule together!

Task: Create a routing rule that takes TNs from Awaiting Lending Request Processing that have a location of "BunniesField" and route them to Awaiting BunniesField Processing.

RuleNo	11
RuleActive	Yes
ProcessType	Borrowing
TransactionStatus	Awaiting Request Processing
MatchString	len(t.LoanDate) = 4 and t.LoanDate = convert(varchar(4),(datepart(year,getdate())))
NewProcessType	Doc Del
NewTransactionStatus	Awaiting Acquisitions Processing
RuleDescription	Routes new releases to Acquisitions for automatic purchase consideration.

Routing Rule Template

Rule Number	
RuleActive	
ProcessType	
TransactionStatus	
MatchString	
NewProcessType	
NewTransactionStatus	
RuleDescription	

Routing Rule Solution

Rule Number	10
RuleActive	Yes
ProcessType	Lending
TransactionStatus	Awaiting Lending Request Processing
MatchString	t.Location LIKE '%BunniesField%'
NewProcessType	Lending
NewTransactionStatus	Awaiting BunniesField Processing
RuleDescription	Routes items within BunniesField collection to special processing queue

Advanced Routing Rules: Copyright

Borrowing - Skipping Copyright Processing

In this example, you want to send all requests that are older than 5 years straight to Awaiting Request Processing, bypassing Awaiting Copyright Clearance.

RuleNo	1
RuleActive	Yes
ProcessType	Borrowing
TransactionStatus	Awaiting Copyright Clearance
MatchString	t.RequestType = 'Article' and len(t.PhotoJournalYear) = 4 and t.PhotoJournalYear < convert(varchar(4),(datepart(year,getdate()) - 5))
NewProcessType	Borrowing
NewTransactionStatus	Awaiting Request Processing
RuleDescription	Bypasses Copyright Clearance for articles older than 5 years

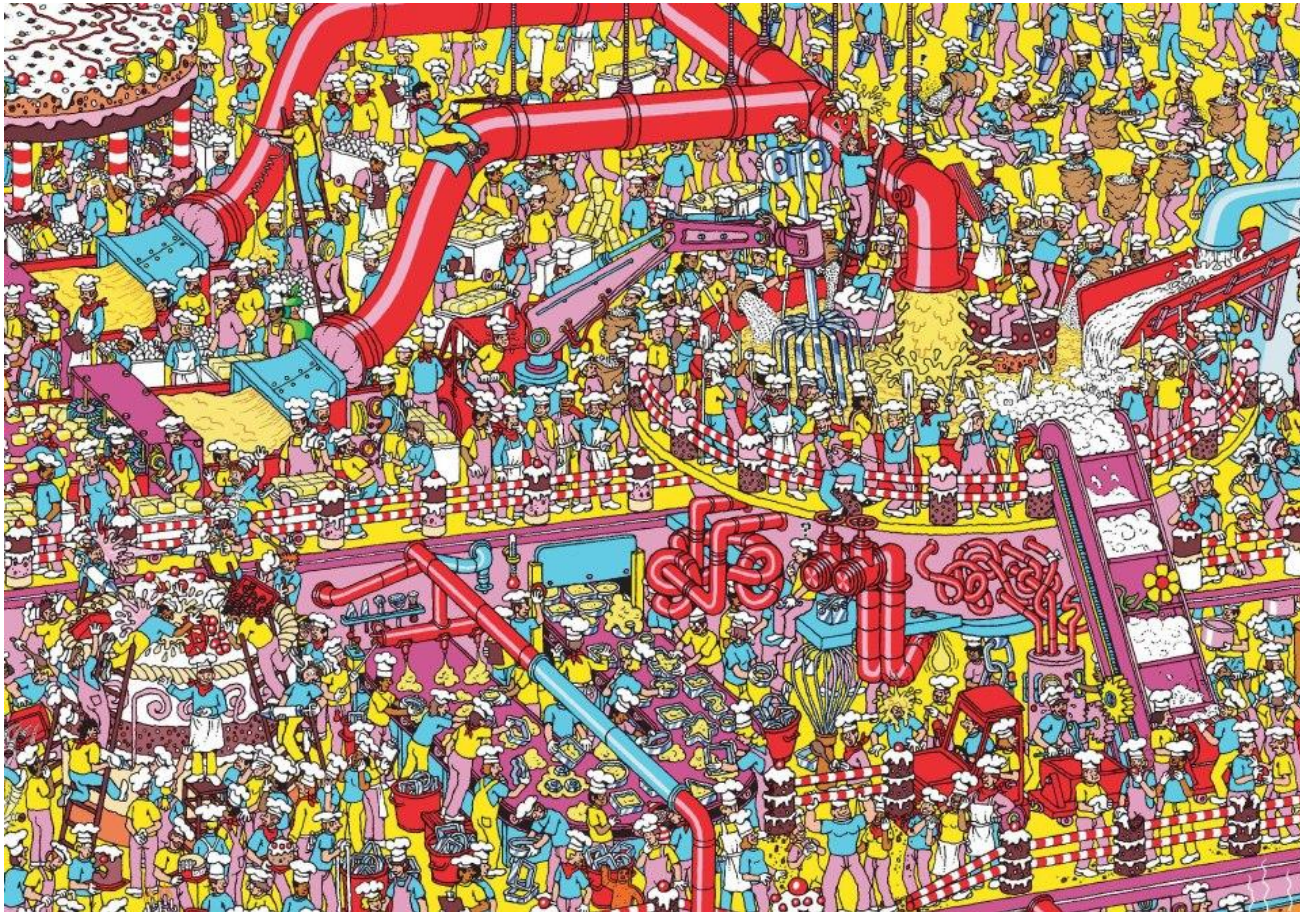
MatchString: Finding TNs that are Request Type = Article and the length of the PhotoJournalYear is equal to 4 characters and the TNs' PhotoJournalYear value is less than the current year minus 5

Advanced Routing Rules: GIST

RuleNo	8
RuleActive	Yes
ProcessType	Borrowing
TransactionStatus	Awaiting Request Processing
MatchString	(select 1 FROM GISTWeb gw WHERE gw.TransactionNumber = t.TransactionNumber AND PurchaseRecommendation='Yes') = 1 AND u.Status='Faculty' AND (u.Department='biology' OR u.Department='educa
NewProcessType	Doc Del
NewTransactionStatus	Needs Faculty Rep Review
RuleDescription	Routing rule sending purchase requests from specific departments to queue for rep review (overflow)

```
(select 1 FROM GISTWeb gw WHERE  
gw.TransactionNumber = t.TransactionNumber  
AND PurchaseRecommendation='Yes') = 1  
AND u.Status='Faculty' AND  
(u.Department='biology' OR  
u.Department='education' OR  
u.department='foreign languages')
```


Where's Waldo, errr... Where's the error?



<https://whereswaldoemotionally.files.wordpress.com/2013/09/waldo81.jpg>

What's wrong with this picture?

Rule Number	10
RuleActive	Yes
ProcessType	Lending
TransactionStatus	Awaiting Lending Request Processing
MatchString	t.Location LIKE '%BunniesField'
NewProcessType	Lending
NewTransactionStatus	Awaiting BunniesField Processing
RuleDescription	Routes items within BunniesField collection to special processing queue

What's wrong with this picture?

Rule Number	10
RuleActive	No
ProcessType	Lending
TransactionStatus	Awaiting Lending Request Processing
MatchString	t.Location LIKE '%BunniesField'
NewProcessType	Lending
NewTransactionStatus	Awaiting BunniesField Processing
RuleDescription	Routes items within BunniesField collection to special processing queue

What's wrong with this picture?

Rule Number	10
RuleActive	No
ProcessType	Lending
TransactionStatus	Awaiting Lending Request Processing
MatchString	u.TransactionStatus = 'Exhausted' AND t.TransactionStatus = 'Undergraduate'
NewProcessType	Lending
NewTransactionStatus	Awaiting BunniesField Processing
RuleDescription	Routes items within BunniesField collection to special processing queue

What's wrong with this picture?

Rule Number	10
RuleActive	No
ProcessType	Lending
TransactionStatus	Awaiting Lending Request Processing
MatchString	u.TransactionStatus = 'Exhausted' OR t.TransactionStatus = 'Undergraduate' OR t.RequestType = Article OR
NewProcessType	Lending
NewTransactionStatus	Awaiting BunniesField Processing
RuleDescription	Routes items within BunniesField collection to special processing queue

Now it's your turn!

Create a Routing Rule to
share out to the group

Routing Rule Template

Rule Number	
RuleActive	
ProcessType	
TransactionStatus	
MatchString	
NewProcessType	
NewTransactionStatus	
RuleDescription	

10 minute break

IDS Logic Rules

In Transit to Pickup Location

Skip In Transit to Pickup Location for all Loan Requests

This rule will route all loan requests directly from In DD Stacks Searching to Awaiting Doc Del Customer Contact, skipping the In Transit to Pickup Location status.

RuleActive	Yes
ProcessType	Borrowing
TransactionStatus	In Transit to Pickup Location
MatchString	t.RequestType = 'Loan'
NewProcessType	Borrowing
NewTransactionStatus	Awaiting Customer Contact
RuleDescription	Moves all loan requests straight to Awaiting Customer Contact (bypassing In Transit to Pickup Location) for immediate notification.

OR...do this through IDS Logic, with a timer!

LogicRule: In Transit to Pickup Location

```
#####  
## BorrowingLoanDelayReceived: InTransitToPickupLocationDelayer ##  
#####  
LRBorrowingLoanDelayReceived:  
  NVTGCList:  
    - ILL  
  UpdatedMinutes: 2
```

How to Build Your Own Logic Rule

```
LogicRule_1:
Enabled: "0"
RuleName: "BorrowingUserAccountSuspended"
PreventReruns: "1"
NVTGCList:
- "ILL"
ProcessTypeList:
- "Borrowing"
RequestTypeList:
- "Loan"
TransactionStatusList:
- "Checked Out to Customer"
FlagList: ""
Query: ""
# This is anything that was updated within X minutes
UpdatedMinutes: ""
# This is anything created within X minutes
CreatedMinutes: ""
# This is anything that was marked as due within X minutes
DueMinutes: ""
# This is anything overdue
OverDueMinutes: "30240"
RouteTo: ""
RouteToBorrowing: ""
RouteToDocDel: ""
AddFlag: "Overdue: 14+ Days"
RemoveFlag: ""
EmailTemplate: "Borrowing User Account Suspended"
EmailSubject: "Borrowing User Account Suspended"
AddNote: ""
SetFields:
- ItemInfo1: ""
- ItemInfo2: ""
- ItemInfo3: ""
- ItemInfo4: ""
- ItemInfo5: ""
#The valid actions for below are "Cancel", "ILLAnswer – Unfilled", "Cond", "ILLAnswer – Conditional", "Shipped"
OCLCUpdate: ""
```



LogicRule: The Search Part

LogicRule_1:
Enabled: "0"
RuleName: "BorrowingUserAccountSuspended"
PreventReruns: "1"
NVTGCList:
- "ILL"
ProcessTypeList:
- "Borrowing"
RequestTypeList:
- "Loan"
TransactionStatusList:
- "Checked Out to Customer"
FlagList: ""
Query: ""
This is anything that was updated within X minutes
UpdatedMinutes: ""
This is anything created within X minutes
CreatedMinutes: ""
This is anything that was marked as due within X minutes
DueMinutes: ""
This is anything overdue
OverDueMinutes: "30240"

*Anything with “List” can have multiple values

(example: RequestTypeList could have both Borrowing and Lending)

LogicRule: The Action Part

```
RouteTo: ""
RouteToBorrowing: ""
RouteToDocDel: ""
AddFlag: "Overdue: 14+ Days"
RemoveFlag: ""
EmailTemplate: "Borrowing User Account Suspended"
EmailSubject: "Borrowing User Account Suspended"
AddNote: ""
SetFields:
- ItemInfo1: ""
- ItemInfo2: ""
- ItemInfo3: ""
- ItemInfo4: ""
- ItemInfo5: ""
```

#The valid actions for below are "Cancel", "ILLAnswer – Unfilled", "Cond", "ILLAnswer – Conditional", "Shipped"
OCLCUpdate: ""

*Queues do not need to exist in advance

*Flags and email templates needs to exist in advance

*SetFields can be any field within the Transactions table

How to start: Ask yourself these questions:

- What is the process type?
- What is the request type?
- What is the transaction status?
- Does the TN have any flags attached?
- Is there a specific query you want to run to identify the TN?
- Is this relevant: Created minutes, Updated minutes, Due minutes, Overdue minutes?

Then...

What do you want to do to the TN?

- Do you want to route it somewhere?
- Do you want to change the process type?
- Do you want to add a flag?
- Do you want to remove a flag?
- Do you want to leave a note?
- Do you want to send an email?
- Do you want to add additional information to the TN?



Things to consider:

- It is recommended that these run on a test queue first!
- LogicRules automatically leave notes behind
- You can daisy chain Logic Rules
- You can prevent them from re-running on a TN
- Logic Rules run in order
- You will still need to contact me to set these up at your site

Now it's your turn!

Create a LogicRule to share
out to the group

Bonus!

How to Create a Test Queue

ILLiad Customization Manager (jonesw)

Home Z39.50 Notification Templates Server Addons

New Record Copy Record Save Delete Cancel Show Change History Maintenance

Search All Tables and Keys

custom

Search

Favorites Setup Wizards Setup

Routing

```

MatchString
t.DocumentType = 'Eres' AND t.CitedIn='Yes'
t.RequestType='Article' and len(t.PhotoJournalYear) = 4 and t.PhotoJournalYear < convert(varchar(4),(datepart(year,getdate()) - 4))
t.RequestType='Article' AND (t.LendingString = NULL or t.LendingString = '')
u.Status='GIST Guest'
u.Status='Faculty' AND (select 1 FROM GISTWeb gw WHERE gw.TransactionNumber AND PurchaseRecommendation='Yes') = 1 AND t.TransactionNumber not in (select transactionnumber from tracking where changedto='awaiting ac
(select 1 FROM GISTWeb gw WHERE gw.TransactionNumber = t.TransactionNumber AND LocallyHeld = 'Yes') = 1 AND t.TransactionNumber Not In (Select TransactionNumber from Tracking where ChangedTo='Awaiting Document De
(select 1 FROM GISTWeb gw WHERE gw.TransactionNumber = t.TransactionNumber AND PurchaseRecommendation='Yes') = 1 AND u.status='Faculty' AND (u.Department='math' OR u.department='computer science' OR u.departm
(select 1 FROM GISTWeb gw WHERE gw.TransactionNumber = t.TransactionNumber AND PurchaseRecommendation='Yes') = 1 AND u.Status='Faculty' AND (u.Department='biology' OR u.Department='education' OR u.department=
(select 1 FROM GISTWeb gw WHERE gw.TransactionNumber = t.TransactionNumber AND PurchaseRecommendation='Yes') = 1 AND u.Status='Faculty' AND (u.department='political science (includes international relations)')
(select 1 FROM GISTWeb gw WHERE gw.TransactionNumber = t.TransactionNumber AND PurchaseRecommendation='Yes') = 1 AND t.TransactionNumber not in (select transactionnumber from tracking where changedto='awaiting ac
len(t.LoanDate) = 4 and t.LoanDate = convert(varchar(4),(datepart(year,getdate()))))
(select 1 FROM GISTWeb gw WHERE gw.TransactionNumber = t.TransactionNumber AND Group2Libraries <= 1) = 1 and len(t.LoanDate) = 4 and t.LoanDate < convert(varchar(4),(datepart(year,getdate()) - 5))
t.RequestType='Loan' AND ISNULL(t.LendingString,'') not in ('Direct Request','RAPID','Manual Request','')
  
```

Edit Row

RuleNo	8
RuleActive	Yes
ProcessType	Borrowing
TransactionStatus	Awaiting Request Processing
MatchString	(select 1 FROM GISTWeb gw WHERE gw.TransactionNumber = t.TransactionNumber AND PurchaseRecommendation='Yes') = 1 AND u.Status='Faculty' AND (u.Department='biology' OR u.Department='ed...
NewProcessType	Doc Del
NewTransactionStatus	Needs Faculty Rep Review
RuleDescription	Routing rule sending purchase requests from specific departments to queue for rep review (overflow)

ILLiad Customization Manager (jonesw)

Home Z39.50 Notification Templates Server Addons

New Record Copy Record Save Delete Cancel Show Change History Maintenance

Search All Tables and Keys

custom Search Favorites Setup Wizards Setup

Routing

```

MatchString
t.DocumentType = 'Eres' AND t.CitedIn='Yes'
t.RequestType='Article' and len(t.PhotoJournalYear) = 4 and t.PhotoJournalYear < convert(varchar(4),(datepart(year,getdate()) - 4))
t.RequestType='Article' AND (t.LendingString = NULL or t.LendingString = '')
u.Status='GIST Guest'
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(select 1 FROM GISTWeb gw WHERE gw.TransactionNumber = t.TransactionNumber AND PurchaseRecommendation='Yes') = 1 AND u.Status='Faculty' AND (u.department='political science (includes international relations)')
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len(t.LoanDate) = 4 and t.LoanDate = convert(varchar(4),(datepart(year,getdate())))
(select 1 FROM GISTWeb gw WHERE gw.TransactionNumber = t.TransactionNumber AND Group2Libraries <= 1) = 1 and len(t.LoanDate) = 4 and t.LoanDate < convert(varchar(4),(datepart(year,getdate()) - 5))
t.RequestType='Loan' AND ISNULL(t.LendingString,'') not in ('Direct Request','RAPID','Manual Request','')
  
```

Edit Row

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RuleActive	Yes
ProcessType	Borrowing
TransactionStatus	Awaiting Request Processing
MatchString	(select 1 FROM GISTWeb gw WHERE gw.TransactionNumber = t.TransactionNumber AND PurchaseRecommendation='Yes') = 1 AND u.Status='Faculty' AND (u.Department='biology' OR u.Department='ed...
NewProcessType	Doc Del
NewTransactionStatus	Needs Faculty Rep Review
RuleDescription	Routing rule sending purchase requests from specific departments to queue for rep review (overflow)

ArticleExchangeTrusted
AutomaticRenewals
BorrowingBlockOnThirdOverdue
CustomDropDown
CustomFlags
Customization
CustomQueues
ElecDelCustomDeleteDelay
SLChangeUserOpen
SLDisavowed

ILLiad Customization Manager (jonesw)

Home Z39.50 Notification Templates Server Addons

New Record Cop Record Options Editing Options Save Delete Cancel Show Change History Maintenance Search All Tables and Keys custom Search Favorites Setup Wizards Setup

CustomQueues

QueueName	ProcessType	NVTGC
Available in Milne	Borrowing	ILL
Awaiting Acquisitions Processing	Doc Del	ILL
Awaiting Conditional Processing	Borrowing	ILL
Awaiting Conditional Request Processing	Lending	ILL
Awaiting Direct Request Sending	Borrowing	ILL
Awaiting Extensive Searching	Borrowing	ILL
Awaiting Faculty Rep Approval	Doc Del	ILL
Awaiting Lending Request Processing	Lending	ILL
Awaiting Librarian Approval	Doc Del	ILL
Awaiting OCLC Sending	Borrowing	ILL
Awaiting Purchase Requests - Pre Pub	Doc Del	ILL
Awaiting Renewal Request Processing	Lending	ILL
Awaiting Response from User	Borrowing	ILL
Awaiting Response from User	Doc Del	ILL
Awaiting Unfilled Processing	Borrowing	ILL
Billed for Replacement	Borrowing	ILL
Billed for Replacement	Lending	ILL
Claimed Returned	Borrowing	ILL
Milne Delivered to Web	Borrowing	ILL
Needs Faculty Rep Review	Doc Del	ILL
Purchase Pending Budget Availability	Doc Del	ILL
Purchase Pending Vendor Availability	Doc Del	ILL
Purchase Request Denied	Doc Del	ILL
Purchase Request Exceeds CCD Limit	Doc Del	ILL
Purchase Request Locally Held	Doc Del	ILL
Purchase Request Ordered from Vendor	Doc Del	ILL

ArticleExchangeTrusted
AutomaticRenewals
BorrowingBlockOnThirdOverdue
CustomDropDown
CustomFlags
Customization
CustomQueues
ElecDelCustomerDeleteDelay
OCLCILAutoBackgroundHoldings
OdysseyAutoElecDel
SharedCustomSearchesPath
SLAutoRenewalRequested
SLBlocked
SLChangeUserOpen
SLDisavowed

ILiad Customization Manager (jonesw)

Home Z39.50 Notification Templates Server Addons

New Record Copy Record Save Delete Cancel Show Change History Maintenance Search All Tables and Keys custom Favorites Setup Wizards Setup

CustomQueues

QueueName	ProcessType	NVTGC
Available in Milne	Borrowing	ILL
Awaiting Acquisitions Processing	Doc Del	ILL
Awaiting Conditional Processing	Borrowing	ILL
Awaiting Conditional Request Processing	Lending	ILL
Awaiting Direct Request Sending	Borrowing	ILL
Awaiting Extensive Searching	Borrowing	ILL
Awaiting Faculty Rep Approval	Doc Del	ILL
Awaiting Lending Request Processing	Lending	ILL
Awaiting Librarian Approval	Doc Del	ILL
Awaiting OCLC Sending	Borrowing	ILL
Awaiting Purchase Requests - Pre Pub	Doc Del	ILL
Awaiting Renewal Request Processing	Lending	ILL
Awaiting Response from User	Borrowing	ILL
Awaiting Response from User	Doc Del	ILL

Edit Row

QueueName	Put Your New Queue Name Here
ProcessType	Put Borrowing, Lending, or Doc Del in Here
NVTGC	ILL

ArticleExchangeTrusted
AutomaticRenewals
BorrowingBlockOnThirdOverdue
CustomDropDown
CustomFlags
Customization
CustomQueues
ElecDelCustomerDeleteDelay
OCLCILAutoBackgroundHoldings
OdysseyAutoElecDel
SharedCustomSearchesPath
SLAutoRenewalRequested
SLBlocked
SLChangeUserOpen
SLDisavowed

Soon there will be a form online where you can submit your LogicRule ideas.

For now, email me (jonesw@geneseo.edu) or call me (585-245-5172) and let me know about your ideas!

Questions?



Thank you!

<http://rulekit.idsproject.org>

jonesw@geneseo.edu

