Resource Sharing Models

Moshe Shechter
Alma Product Manager, Ex Libris
Existing Models

Resource Sharing the way you like it
Broker Model

**Systems:**
- Relais D2D/ILL
- OCLC NRE
- ILLiad

**Protocols:**
- Z39.50 (OPAC)
- OpenURL
- NCIP (V2.0)
Peer to Peer Model

Protocols:
- ISO ILL
- BL ARTEmail
- Emails
Peer to Peer Workflow

- Data Elements and Infrastructure
- Request Placement
- Fulfillment Options
Peer to Peer Workflow

- Data Elements and Infrastructure
- Request Placement
- Fulfillment Options
Alma Data Elements and Infrastructure

- Partner
- Locate Profile
- Integration Type
- Workflow Profile

- Alma
- Z39.50
- Local
- Shared Catalog

- Email
- ISO
- ARTEMail
Alma Data Elements and Infrastructure

Request

Lender Institution

Partner
Integration Type
Workflow Profile

Item Moved to Temporary Location
Alma Data Elements and Infrastructure
Peer to Peer Workflow

- Data Elements and Infrastructure
- Request Placement
- Fulfillment Options
Request Placement

Citation Linker

Book Title: Studies by members of the French Department of Yale University
Date (YYYY-MM-DD): 
Volume: 
Part: 
ISBN: 0404532187
Author Last Name: Yale University, Dept.
Author First Name: 
Author Initials: 
Publisher: 
Publication Date: 

Go
Clear

Available Online
Details
View in a new window
No full text available
Place Resource Sharing Request

Find it in Library
Details Reviews & Tags Virtual Browse

Boston College Libraries

Resource Sharing Request:
Resource Information:
Citation type:
Title:
Author (Last name, first name):
Author initials:
ISBN: 
Publisher: 
Publication date:
Place of publication:
Additional Author (Last name, first name):
Volume:
Part:

Direct Link

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Resource Sharing in Alma
### Locate and Rota Management

#### Partners

<table>
<thead>
<tr>
<th>Name</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Washington</td>
<td>UW</td>
</tr>
<tr>
<td>Clark College</td>
<td>ALLIANCE_CC</td>
</tr>
<tr>
<td>Concordia University</td>
<td>ALLIANCE_CONC</td>
</tr>
<tr>
<td>Portland Community College</td>
<td>ALLIANCE_PCC</td>
</tr>
<tr>
<td>Reed College</td>
<td>ALLIANCE_REED</td>
</tr>
<tr>
<td>Oregon Health and Science University</td>
<td>ALLIANCE_OHSU</td>
</tr>
<tr>
<td>University of Idaho</td>
<td>ALLIANCE_UID</td>
</tr>
<tr>
<td>University of Oregon</td>
<td>ALLIANCE_UO</td>
</tr>
<tr>
<td>University of Western States</td>
<td>ALLIANCE_PAHL_UWS</td>
</tr>
<tr>
<td>Warner Pacific College</td>
<td>ALLIANCE_WPC</td>
</tr>
</tbody>
</table>
Locate and Rota Management
Lender Receives the Request

Resource Sharing Lending Requests Task List

Limit results to:

- Status
- Created lending request (1)
- Locate failed (1)
- Active Partner
- Pacific University (2)
- Requested Format
- Physical (2)
- Supplied Format
- Undefined (2)
- Due date

Search limited to:

- Creation Date: Today

Add

1. The Western planner.
   Article
   ISSN: 0279-0602 0279-0602
   Subject: Periodicals. -- United States, West. -- Regional planning. and others
   Availability: Physical version at beper; HT392.5.W4 W4 from:v.33 2012 until:v.35 2014
   External Identifier: 1/01ALLIANCEPU0000011
   Request Status: Created lending request
   Resource Locate Status: Resource Located

Edit | Manage Fulfillment Options | Duplicate | Reassign | Search | Detach from MMS | Reject | Print Slip | Ship non-returnable

- Report Identifiers that linked in local records
Peer to Peer Workflow

- Data Elements and Infrastructure
- Request Placement
- Fulfillment Options
Alma Resource Sharing

Request may be fulfilled in a number of formats:

- Returnable copy
- Digital copy
- Non Returnable copy
Lending Request is Created

<table>
<thead>
<tr>
<th>Lending Request Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Book</strong>: A short history of Australia / by Ernest Scott.</td>
</tr>
<tr>
<td><strong>Availability</strong>: Physical version at MAIN: main, DU112.54 1936 (1 copy, 1 available)</td>
</tr>
<tr>
<td><strong>External Identifier</strong>: /TRINTEGRATION0008632</td>
</tr>
<tr>
<td><strong>Resource Status</strong>: Created lending request</td>
</tr>
<tr>
<td><strong>Resource Location</strong>: Resource Located</td>
</tr>
</tbody>
</table>

![Alma Lending Request Interface](image-url)
**Resource is Requested for Shipment**

### Manage Resource Options

**Title:**

**Author:** Scott, Ernest, Sir, 1868-1939.

**Alerts:**

#### Electronic Services

No records were found.

#### Digital Services

No records were found.

#### Physical Services

<table>
<thead>
<tr>
<th>Library</th>
<th>Location</th>
<th>Call Number</th>
<th>No. of Items</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Library</td>
<td>Main</td>
<td>DU112 .S4 1936</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

No records were found.

---

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Resource is Shipped
Item & Request at Lender side

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Borrower Request Status

Limit results to:
- Status
- Shipped Physically (1)
- Active Partner
- Oregon Health and Science (1)
- Creation Date
- Today (1)
- Update Date
- Today (1)
- Requested Format

Add
- Select All

1
- Shipped Physically

- A short history of Australia
  Book
  By Scott, Ernest, (Oxford University Press c1936.)
  External Identifier: TRINTEGRATION0008631
  Partner: Oregon Health and Science
  Requester: George Fox, User
  Request Status: Shipped Physically
  Due date: 09/07/2014
  Pickup At: Main Library
  Creation Date: 12/06/2014
  Edit | Duplicate | Send | Send query to patron | Receive | General Message
Request at Lender Side
# Patron Return

## Manage Item Returns

<table>
<thead>
<tr>
<th>Title</th>
<th>Return Date</th>
<th>Due Date</th>
<th>Barcode</th>
<th>Loaned Date</th>
<th>Patron</th>
<th>Next Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>A short history of Australia</td>
<td>12/08/2014</td>
<td>08/07/2014</td>
<td>RS-TRINTEGRATION0008631</td>
<td>12/08/2014</td>
<td>George Fox, User</td>
<td>George Fox University</td>
</tr>
</tbody>
</table>

## Resource Sharing Borrowing Requests

<table>
<thead>
<tr>
<th>Limit results to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
</tr>
<tr>
<td>Returned by patron (1)</td>
</tr>
<tr>
<td>Active Partner</td>
</tr>
<tr>
<td>Oregon Health and Science (1)</td>
</tr>
<tr>
<td>Requested Format</td>
</tr>
<tr>
<td>Physical (1)</td>
</tr>
<tr>
<td>Supplied Format</td>
</tr>
<tr>
<td>Physical (1)</td>
</tr>
<tr>
<td>Due date</td>
</tr>
<tr>
<td>In the Future (1)</td>
</tr>
</tbody>
</table>

**Add**

Search limited to: Update Date: Today

1. **A short history of Australia**
   - **Book** By Scott, Ernest, (Oxford University Press c1936.)
   - External Identifier: TRINTEGRATION0008631
   - Partner: Oregon Health and Science
   - Requester: George Fox, User
   - Request Status: Returned by patron
   - Barcode: RS-TRINTEGRATION0008631
   - Due date: 09/07/2014
   - Pickup At: Main Library
   - Creation Date: 12/06/2014

Edit | Duplicate | Send | Send query to patron | Return | General Message
Borrower Return to Lender

Scan in Items

Automatically Print Slip: Yes
External Identifier: Yes
Work Order Type:
Scan item barcode: RS-TRINTEGRATION0008631
Scan Request ID:

Activated | Title | Destination | Request/Process Type |
-----------|-------|-------------|----------------------|
           | A short history of Australia / | System - Oregon Health and Science Request - TRINTEGRATION0008631 | - |

Clear List
Lender Receives Item Back

Scan in Items

- Automatically Print Slip
  - No
- External Identifier
  - No
- Scan item barcode: 95933
- Scan Request ID

Activated | Title | Destination | Request/Process Type | Requester
---|---|---|---|---
✔️ | A short history of Australia | Main Library | Transit for reshelving | -

Clear List
## Lender Audit

### General Information

**Operator**: OHS_USER

**Field name**: history_field_name_in_res Shr_request.item_return_date

<table>
<thead>
<tr>
<th>Date</th>
<th>Operator</th>
<th>Field name</th>
<th>Old value</th>
<th>New value</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/06/2014 06:34:07 EDT</td>
<td>OHS_USER</td>
<td>Status</td>
<td>Returned by partner</td>
<td>Request Completed</td>
</tr>
<tr>
<td>12/06/2014 06:34:07 EDT</td>
<td>OHS_USER</td>
<td>Partner Related Data</td>
<td>Returned message was received from GFU</td>
<td>Checkedin message was sent to GFU</td>
</tr>
<tr>
<td>12/06/2014 06:32:35 EDT</td>
<td>System</td>
<td>Status</td>
<td>Received by partner</td>
<td>Request Completed</td>
</tr>
<tr>
<td>12/06/2014 06:32:35 EDT</td>
<td>System</td>
<td>Partner Related Data</td>
<td>Received message was received from GFU</td>
<td>Returned by partner</td>
</tr>
<tr>
<td>12/06/2014 06:26:09 EDT</td>
<td>System</td>
<td>Status</td>
<td>Shipped Physically</td>
<td>Received by partner</td>
</tr>
<tr>
<td>12/06/2014 06:26:09 EDT</td>
<td>System</td>
<td>Partner Related Data</td>
<td>Shipped message was sent to GFU</td>
<td>Received message was received from GFU</td>
</tr>
<tr>
<td>12/06/2014 06:21:43 EDT</td>
<td>OHS_USER</td>
<td>Send Date</td>
<td>Created lending request</td>
<td>Shipped Physically</td>
</tr>
<tr>
<td>12/06/2014 06:21:43 EDT</td>
<td>OHS_USER</td>
<td>Due Date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/06/2014 06:21:43 EDT</td>
<td>OHS_USER</td>
<td>Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/06/2014 06:21:43 EDT</td>
<td>OHS_USER</td>
<td>Actual Shipped Format</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/06/2014 06:21:43 EDT</td>
<td>OHS_USER</td>
<td>Partner Related Data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/06/2014 06:21:43 EDT</td>
<td>OHS_USER</td>
<td>Shipping Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/06/2014 06:21:42 EDT</td>
<td>OHS_USER</td>
<td>Item Id</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/06/2014 06:21:42 EDT</td>
<td>OHS_USER</td>
<td>Item Barcode</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/06/2014 06:21:42 EDT</td>
<td>OHS_USER</td>
<td>Assign To</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Operator</td>
<td>Field name</td>
<td>Old value</td>
<td>New value</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------</td>
<td>--------------</td>
<td>----------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>12/06/2014 06:34:07 EDT</td>
<td>System</td>
<td>Status</td>
<td>Returned item to partner</td>
<td>Request Completed</td>
</tr>
<tr>
<td>12/06/2014 06:33:33 EDT</td>
<td>GFU_USER</td>
<td>Delivery Date</td>
<td>-</td>
<td>2014-06-12</td>
</tr>
<tr>
<td>12/06/2014 06:32:33 EDT</td>
<td>GFU_USER</td>
<td>Status</td>
<td>Returned by patron</td>
<td>Returned item to partner</td>
</tr>
<tr>
<td>12/06/2014 06:32:33 EDT</td>
<td>GFU_USER</td>
<td>Return Date</td>
<td>-</td>
<td>Returned message was sent to OHS</td>
</tr>
<tr>
<td>12/06/2014 06:30:21 EDT</td>
<td>main_operator</td>
<td>Loan Date</td>
<td>Loaned item to patron</td>
<td>Returned by patron</td>
</tr>
<tr>
<td>12/06/2014 06:29:37 EDT</td>
<td>main_operator</td>
<td>Status</td>
<td>Physically received by library</td>
<td>Returned item to partner</td>
</tr>
<tr>
<td>12/06/2014 06:29:37 EDT</td>
<td>main_operator</td>
<td>Return Date</td>
<td>-</td>
<td>Loaned message was sent to OHS</td>
</tr>
<tr>
<td>12/06/2014 06:26:09 EDT</td>
<td>GFU_USER</td>
<td>Item Barcode</td>
<td>2014-07-10</td>
<td>Received message was sent to OHS</td>
</tr>
<tr>
<td>12/06/2014 06:26:09 EDT</td>
<td>GFU_USER</td>
<td>Due Date</td>
<td>Request sent to partner</td>
<td>Shipped Physically</td>
</tr>
<tr>
<td>12/06/2014 06:26:09 EDT</td>
<td>GFU_USER</td>
<td>Actual Shipped Format</td>
<td>-</td>
<td>Shipped message was received from OHS</td>
</tr>
<tr>
<td>12/06/2014 06:21:43 EDT</td>
<td>System</td>
<td>Status</td>
<td>Ready to be sent</td>
<td>Request sent to partner</td>
</tr>
<tr>
<td>12/06/2014 06:21:43 EDT</td>
<td>System</td>
<td>Due Date</td>
<td>Locate in process</td>
<td>Request sent to partner</td>
</tr>
<tr>
<td>12/06/2014 06:21:43 EDT</td>
<td>System</td>
<td>Status</td>
<td>Ready to be sent</td>
<td>Request sent to partner</td>
</tr>
<tr>
<td>12/06/2014 06:21:43 EDT</td>
<td>System</td>
<td>Partner Related Data</td>
<td>-</td>
<td>Shipped message was received from OHS</td>
</tr>
<tr>
<td>12/06/2014 06:21:43 EDT</td>
<td>System</td>
<td>Active Partner</td>
<td>GFU</td>
<td>ILLRequest message was sent to OHS</td>
</tr>
</tbody>
</table>

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Alma Resource Sharing

Request may be fulfilled in a number of formats:

- Returnable copy
- Digital copy
- Non Returnable copy
Requesting Digitally
Receive Lending Digital Request

[Image of the Alma interface showing a resource sharing lending request task list, focusing on an item with details like title, ISSN, availability, and status options.]
Manage Lending Digital Request

Create Request

- **Title**: The Quarterly journal of speech.
- **Institution**: Training and Integration
- **Request/Process Type**: Ship digitally
- **Part to Digitize**: Article: Developing Speech
- **Target Destination**: Digitization Department For Institution

Additional Request Attributes

- **Partial Digitization**: true

Add Request Attributes

- **Material Type**: JOURNAL

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### Lender Digitizes

![Ex Libris Alma interface](image)

#### Scan In Items

- **Scan in Items**
- **Change Item Information**

- **Scan in Items**
  - **Automatically Print Slip**: No
  - **Scan item barcode**: 70911
  - **Scan Request ID**

- **Activated**: Yes
- **Title**: The Quarterly journal of speech
- **Destination**: Digitization
- **Request/Process Type**: Ship digitally

#### Clear List
Request at Lender & Borrower Side
Borrower Receives Digital Copy

ExLibris Alma

Received Items

Received Format: Digital
External Identifier: TRINTEGRATION0008640
Complete the request: Yes

No records were found.

ExLibris Alma

Received Items

Received Format: Digital
External Identifier: TRINTEGRATION0008640
Complete the request: Yes

Activated
Title: Developing Speech
Destination: mosheshchtr@gmail.com
Request/Process Type: Borrowing Request
Requester: George Fox
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Broker Workflow
Broker based integration is a working model where a dedicated resource sharing system manages the resource sharing process, but relies on Alma for the inventory and the patron management, and for fulfillment aspects of the process.
Broker Based Integrations

Broker based integrations are based on three points of integration:

- Request placement (OpenURL)
- Exposing inventory status (Z39.50 OPAC/Publishing)
- Fulfillment actions – receive, put in transit, loan, return etc’ (NCIP)
Broker Based Integrations

Alma is currently used in a broker model with:

- Relais ILL/D2D system
- OCLC WorldCat Navigator
- ILLiad
Integration Points

✓ Creating the request
✓ Being a searchable target
✓ Integrating the Fulfillment process
Patrons may use the broker’s discovery

If using a discovery interface other than the broker as the starting point for searching (e.g. Primo or Google), it is possible to direct users to the Broker discovery.

To take advantage of this option it is necessary for the discovery interface to generate an OpenURL which includes a query with appropriate search terms.
Alma & the "Broker" – Creating the Request

Primo GetIt Tab
Alma & the "Broker" – Creating the Request
Integration Points

✓ Creating the request
✓ Being a searchable target
✓ Integrating the Fulfillment process
Alma & the "Broker" – Being Searchable

Borrower:
Self and partner ownership
• Based on Z39.50 and OPAC Syntax
• Based on published information

Lender:
Availability and slip printing
• Based on Z39.50 and OPAC Syntax
• Based on published information
Alma & the "Broker" – Being Searchable

```xml
<holdingsRecord>
  <which>2</which>
  <holdingsAndCirc>
    <typeOfRecord>u</typeOfRecord>
    <encodingLevel>1</encodingLevel>
    <localLocation>Main Library</localLocation>
    <shelvingLocation>Depository</shelvingLocation>
    <callNumber>Heb 9472.800.9</callNumber>
    <copyNumber>1.0</copyNumber>
    <num_volumes>1</num_volumes>
    <num_circulationData>1</num_circulationData>
    <circulationData>
      <circRecord>
        <availableNow>1</availableNow>
        <availablityDate></availablityDate>
        <availableThru></availableThru>
        <itemId>HNRNWG</itemId>
        <renewable>0</renewable>
        <onHold>0</onHold>
      </circRecord>
    </circulationData>
  </holdingsAndCirc>
</holdingsRecord>
```
Integration Points

✓ Creating the request
✓ Being a searchable target
✓ Integrating the Fulfillment process
Alma & the "Broker" – Fulfillment Actions

- `<xs:element name="InitiationHeader">`
- `<xs:complexType>`
  - `<xs:sequence>`
    - `<xs:element ref="FromSystemId" minOccurs="0" />`
    - `<xs:element ref="FromSystemAuthentication" minOccurs="0" />`
    - `<xs:element ref="FromAgencyId" />`
    - `<xs:element ref="FromAgencyAuthentication" minOccurs="0" />`
    - `<xs:element ref="OnBehalfOfAgency" minOccurs="0" />`
    - `<xs:element ref="ToSystemId" minOccurs="0" />`
    - `<xs:element ref="ToAgencyId" />`
    - `<xs:element ref="ApplicationProfileType" minOccurs="0" />`
    - `<xs:element ref="Ext" minOccurs="0" />`

Institution

NCIP Partner

Resource Sharing Library

NCIP Partner

Campus A

Campus B
Fulfillment Actions – Borrowing Side

- Found Record
- Citation Linker

Resource Sharing staff work only in the broker system

Policies and limits may be imposed

Receive Item

Move item to pickup

Lend to Patron

Notify Patron

Regular desk operators use standard Fulfillment interfaces and procedures
Request information is found at Library Card and Circulation Desk Operators UI

Resource Sharing staff work only in the broker system

Regular desk operators use standard Fulfillment interfaces and procedures

Send item back to Resource Sharing Department

Receive from Patron

Fulfillment Actions – Borrowing Side
LookUpUser is used to:

- **Authorize** the borrowing patron at the point when they try and place a request.
- The patron’s **contact information** (email address, contact phone and mailing address) is retrieved at this point along with the internal ILS patron id.
AcceptItem is used to:

✓ **Notify** Alma that an item has arrived
✓ **Temporary item is created** in Alma, with a request that is linked to the Relais request ID
CheckInItem is used to:

- **Notify** Alma that temporary item has been shipped back to lender
- **Temporary item is deleted** in Alma, and the loan is cancelled (if has not been cancelled before)
Fulfillment Actions – Lending Side

Wand in at broker notifies Alma that item has been shipped away.
Item is moved to temporary location in Alma’s resource sharing library.

Alma Operator may trigger a move process.
Operator will use slips generated by broker/Alma.

Alma management may be the triggering of a digitization processes, sending digitized material to resource sharing library account.
CheckOutItem is used to:

- **Notify** Alma that item has been shipped to borrower
- Item is identified as in a resource sharing process
CheckInItem is used to:

- **Notify** Alma that item has been returned by borrower
- Item is processed back for shelving at original location
THANK YOU!

moshe.shechter@exlibrisgroup.com