Response to Demo Questions from California Community Colleges

October 2018

Ex Libris, A ProQuest Company
1350 E Touhy Avenue
Des Plaines, IL 60018
Phone: 847-296-2200
CONFIDENTIAL INFORMATION
The information herein is the property of Ex Libris Ltd. or its affiliates and any misuse or abuse will result in economic loss. DO NOT COPY UNLESS YOU HAVE BEEN GIVEN SPECIFIC WRITTEN AUTHORIZATION FROM EX LIBRIS LTD.
This document is provided for limited and restricted purposes in accordance with a binding contract with Ex Libris Ltd. or an affiliate. The information herein includes trade secrets and is confidential.

DISCLAIMER
The information in this document will be subject to periodic change and updating. Please confirm that you have the most current documentation. There are no warranties of any kind, express or implied, provided in this documentation, other than those expressly agreed upon in the applicable Ex Libris contract. This information is provided AS IS. Unless otherwise agreed, Ex Libris shall not be liable for any damages for use of this document, including, without limitation, consequential, punitive, indirect or direct damages.
Any references in this document to third-party material (including third-party Web sites) are provided for convenience only and do not in any manner serve as an endorsement of that third-party material or those Web sites. The third-party materials are not part of the materials for this Ex Libris product and Ex Libris has no liability for such materials.

TRADEMARKS
"Ex Libris," the Ex Libris bridge, Primo, Aleph, Alephino, Voyager, SFX, MetaLib, Verde, DigiTool, Leganto, Summon, 360, Intota, Rosetta, Alma, Voyager, ENCompass, Endeavor eZConnect, WebVoyage, Citation Server, LinkFinder and LinkFinder Plus, and other marks are trademarks or registered trademarks of Ex Libris Ltd. or its affiliates.
The absence of a name or logo in this list does not constitute a waiver of any and all intellectual property rights that Ex Libris Ltd. or its affiliates have established in any of its products, features, or service names or logos.
Trademarks of various third-party products, which may include the following, are referenced in this documentation. Ex Libris does not claim any rights in these trademarks. Use of these marks does not imply endorsement by Ex Libris of these third-party products, or endorsement by these third parties of Ex Libris products.
Oracle is a registered trademark of Oracle Corporation.
UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company Ltd.
Microsoft, the Microsoft logo, MS, MS-DOS, Microsoft PowerPoint, Visual Basic, Visual C++, Win32, Microsoft Windows, the Windows logo, Microsoft Notepad, Microsoft Windows Explorer, Microsoft Internet Explorer, and Windows NT are registered trademarks and ActiveX is a trademark of the Microsoft Corporation in the United States and/or other countries.
Unicode and the Unicode logo are registered trademarks of Unicode, Inc.
Google is a registered trademark of Google, Inc.

Copyright Ex Libris Limited, 2018. All rights reserved.
Document released: 2017

Web address: http://www.exlibrisgroup.com
General/Configuration

1. Will all the community colleges have a similar template? It appeared there was a great deal of customization possible. That customization will require staff training.

**Ex Libris:** Every institution will be configured according to your specifications during implementation, but you will have the option to make changes to configurations.

Some configurations can be set in the network zone and pushed out to member institutions. In this situation, the member institution will have the option to use the central configurations or override them with local configurations.

Staff training is included as part of the Alma implementation, and training materials are available on our Knowledge Center at knowledge.exlibrisgroup.com for ongoing training. The Knowledge Center also includes the Alma Online Help, which includes documentation for all configuration menus, as well as all other parts of Alma.

2. How to set up codes in Alma, such as Loan rules, Location codes and such.

**Ex Libris:** Terms of Use (TOU) refers to a list of policies that define the institution/library commitment to the patron according to which a service will be provided or terminated. Terms of Use are associated with a specific type of fulfillment activity, such as a loan, a request, or user registration. For details on the policies that can be included in terms of use, see Configuring Fulfillment Policies.

The fulfillment unit rules determine which Terms of Use to employ when delivering a particular service to the patron. For details, see Configuring Fulfillment Units, Policies, and Terms of Use.

If an item belongs to a location that does not have Terms of Use (for example, the location does not belong to any fulfillment unit), the system determines the Terms of Use based on the default policies. An item’s Terms of Use is re-calculated each time an activity is performed on a loaned item (such as renewal). Therefore, any change in a policy, fulfillment rule, patron information, or item information has an immediate effect on a loan’s or request’s Terms of Use.

You configure Terms of Use on the Terms of Use Management page (Configuration Menu > Fulfillment > Physical Fulfillment > Terms of Use and Policies).
In a collaborative network, you can create terms of use in the Network Zone and then distribute them to member institutions. For more information, see Configuring Fulfillment Information in the Network Zone.

Select the Terms of Use Name, Type, or Owner headings to sort the list alphabetically — in ascending or descending order.

The following actions can be performed on this page:
- Add a set of Terms of Use (see Adding a Set of Terms of Use)
- Edit a set of Terms of Use (Select Edit from the row actions list.)
- View a set of Terms of Use (Select View from the row actions list.)
- Delete a set of Terms of Use (Select Delete from the row actions list.)
- View the fulfillment rules related to the Terms of Use (see Viewing Related Fulfillment Rules)

A physical location (that is, a location, shelving location, or holding) is a physical place where items are stored. A physical location is associated with a library, not the institution. For more information on the relationship between institutions, libraries (organization units), and physical locations, see Configuring the Institution and Its Libraries. Note that physical locations may be located off-site in a remote location. For details, see Configuring Remote Storage Facilities.
You configure physical locations from the Physical Location List page (Configuration Menu > Fulfillment > Locations > Physical Locations) or (General System Administrator only) Configuration Menu > General > Locations > Physical Locations).

The following actions can be performed on this page:
- Add a physical location (see Adding a Physical Location)
- Edit a physical location (see Editing a Physical Location)
- Duplicate a physical location (Duplicate in the row actions list and edit the relevant fields)
- Delete a physical location (Delete in the row actions list)

Adding a Physical Location
You can add a physical location.
To add a physical location:
1. On the Physical Locations List page (Configuration Menu > Fulfillment > Locations > Physical Locations), select Add Location. A dialog box appears.
2. Enter the location code (up to 10 characters, no commas allowed) and name, which are both required fields, as well as the external location name, if applicable.

3. From the Type list, select the type of the location. Distinguishing between different types of locations enables you to filter by location type on the Physical Locations List page. Items in unavailable locations are considered unavailable when calculating display logic rules and the display of services in Primo. Otherwise, this field has no functional significance.
   - Open – A location that can be accessed by patrons, who can remove an item from the location and then check out the item.
   - Closed – A location that is accessible by library personnel only and is not accessible to patrons.
Remote Storage – A remote storage location, which is similar to a closed location, except that it is located off-site. Retrieving of an item from a remote storage location may take longer than retrieving an item from a regular closed location.

Unavailable – A location from which items are considered unavailable for calculating the general electronic services in Primo.

4. If the location has a remote storage facility, from the Remote storage list, select a remote storage option for the location. Note that a location of any type may be associated with a remote storage facility.

5. From the Fulfillment unit list, select a fulfillment unit for the location. The fulfillment unit defines the policy rule to be applied when circulating items from this location. For details, see Physical Fulfillment.

6. From the Call number type list, select a call number type for the location. This identifies the type of call number in the holdings record such as Library of Congress classification, Dewey Decimal classification, or National Library of Medicine classification.

7. Specify the URL of a map that can assist patrons in finding the location.

8. Select Add Location to add the location.

You can also edit a physical location. For more information visit the Alma Online Help section: https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_(English)/030Fulfillment/080Configuring_Fulfillment/010Configuring_Fulfillment_Activities_%E2%80%93_Overview

3. How to set up users and permissions.

Ex Libris: Alma’s user management system supports the definition of:

- **Role profiles** are bundled together role and role scopes that may be assigned in a single action. When creating a new user in the system, a role profile may be assigned to the user, effectively assigning all of the roles and scopes of that profile to that user.

- **Role Assignment Rules** – Rules may be set up for automatically assigning role profiles to newly created/imported users, based on user record attributes such as job category and job description or user group. Any user imported or manually created in the system will have the role that is bundled in role profiles automatically assigned if the user’s attributes match the rule parameters.

Alma handles permissions for all library functions, including circulation, via role-based management. The system includes an out-of-the-box set of roles relevant to library management (e.g. Acquisitions, Fulfilment, Cataloguing, etc.) while also allowing for the definition of role profiles that represent a pre-defined set of roles.
The use of profiles decreases the need to re-define the roles and privileges for each new user, and also enables bulk update in case of a change to the profile. While Alma offers quite granular permissions functionality, the interface for configuring permissions is intuitive and easy to use.

Role profiles and role assignment rules can be configured at the network level and shared with member institutions.

You can add new users from any of the tabs on the Find and Manage Users page. To add a new user:

   - On the All tab, you are prompted to select the record type (Staff, Public, or Contact).
   - On any other tab, the record type is set according to the tab.

The Quick User Management page appears.
2. Enter the following information. The fields marked as mandatory in the following table are by default; an administrator can configure which fields are mandatory. See Mandatory Field Configuration.

3. Select one of the following options: In either case, continue configuring user details as described in each of the following topics.
   - Select Save or Save and Continue. The new user is saved and you return to the Find and Manage Users page. Continue with editing the user; see Editing Users.
4. **How to integrate Alma with student registration system.**

**Ex Libris**: Alma, as the library management system, needs to know the user’s information, in order to give them library services. Therefore, the users should exist in Alma: they are copied from the SIS into Alma, and synchronized on a regular basis.

The relation between Alma and the SIS is in a “Parent-Child” module: the SIS is the “Parent” system, which is responsible for the users’ information. They are managed and maintained in the SIS. Alma is the “child” – in which the user information is replicated. The users’ information in Alma might be edited, but it will be overridden with the SIS information during synchronization. Users that are managed by the SIS are considered as “external” in Alma.

The integration between Alma and SIS is configured in an Integration profile of type “Users” in Alma. If your institution has several SIS systems, a separate profile should be defined for each of them.

There are few usages in which Alma and SIS can be integrated:
The common usage is
- import and synchronize External users from SIS into Alma

2 additional usages are available, but are not commonly in use:
- Export user blocks
- Export user

The loading from a Student Information System is performed using zipped XML files that are placed at a predefined, secure FTP location. Alma fetches the files, parses them, and updates external users according to the input file and the parameters defined in the integration profile. The following diagram illustrates the communication between the SIS and Alma:

The loading of external users into Alma can be performed in one of two modes:
- Import
- Synchronize
The **import** mode is a one-time load, used to initially create new external users. It is intended to be used only when you have a file of users you know are new, such as during the migration process, when you want to load users from your legacy system into Alma. The **synchronize** mode is an ongoing load, used to update external users and add new ones.

See [Introduction to SIS integration](#) and for more details please see the [Developer Network](#).

### 5. Do you know which colleges have implemented the online payment system, such as PayPal

**Ex Libris:** We don’t maintain records of which particular colleges use online payment systems, but most of them do. Alma can be integrated with online payment systems including PayPal.

The general flow for integrating with any payment system is the same, so we'll use PayPal in our example but other systems can be integrated as well.

The flow can be summarized as follows:

1. A patron requests to view his fees on a student portal
2. The portal queries Alma and displays a list of fees and the balance. The patron requests to pay his fees via PayPal
3. The portal creates a transaction in PayPal for the relevant amount, then redirects the patron's browser to PayPal for approval
4. The patron logs into PayPal and approves the payment and payment method. PayPal redirects the browser back to the portal application
5. The portal executes the payment in PayPal using the specified transaction code
6. Once confirmation is received from PayPal, the portal posts the payment to Alma to be reflected in the patron's account
7. The portal displays a confirmation message and a zero balance


### 6. Individual item display (non-editing view) in staff backend

**Ex Libris:** The view-only display of an item record:
7. Configuring roles/permissions for a staff user

Ex Libris: See #3 above

8. Batch jobs: e.g. adding a note to all records in a set, changing the shelving location of a group of items
**Ex Libris:** Batch update actions may be performed using Alma’s Process Automation tools. These tools enable:

- Defining a set of records to work on. These records may be of various types:
  - Title records
  - Physical title records
  - Electronic title records
  - Physical item records
  - Digital file metadata records
- Defining a chain of defined tasks to be run on the set. These chains include:
  - Normalization of the set’s records
  - Global change of record information

The Metadata Editor enables you to create normalization rules and apply them to MARC 21 records, or apply normalization rules that have already been created to records, so that changes to MARC 21 bibliographic metadata can later be made globally, in bulk. Staff users can utilize the rich search functions within Alma to create sets for batch change.

9. **A list of things that, in a multi campus district that shares a catalog, can be customizable at the district level and at the campus level.**

**Ex Libris:** The Alma institution is the basic level of data and workflow management in Alma. The Alma library is comprised of one or more physical locations, each of which is normally housed in a single building or in several buildings in close physical proximity. A library may have several locations within it, such as the circulation desk and digital archiving. Each Alma Institution can have multiple Alma libraries.

![Institution/Library Hierarchy](image)

In addition to the institution and library organizational levels, Alma provides two additional optional organizational levels, a campus and a collaborative network.

**The Alma Institution**

The Alma Institution is the main building block of the organizational structure. It enables consolidated management of key workflows. The institution manages the following data as a single list, accessible to all institution staff with the relevant roles (authorization):
• User management – Alma handles permissions via role-based management. The system includes an out-of-the-box set of roles relevant to library management (for example, Acquisitions, Fulfillment, and so forth) while also allowing for the definition of role profiles that represent a predefined set of roles. The use of profiles decreases the need to redefine the roles and privileges for each new user, and also enables bulk update in case of a change to the profile. While Alma offers granular permissions functionality, the interface for configuring permissions is intuitive and easy to use.

• Vendors – Vendor records hold information about the vendors from which purchasing of physical or electronic resources is handled. This includes attributes such as the vendor’s type (material supplier, access provider, or licensor), the used currencies, the libraries that may buy from the vendor, and so forth. The attached vendor accounts include additional account specific information, such as the payment method and delivery and claim information. Vendor records are mandatory in order to be able to complete a purchasing process in Alma.

• Licenses – For licensed material (such as subscriptions to electronic resources), Alma can manage a copy of the license and associate it with the licensed resources. It is possible to associate a specific license with the activated electronic resources.

• Metadata management – The catalog metadata is shared and managed at the institution. All catalogers of the institution have access to the catalog, as per their cataloger role permission and cataloger level. The inventory, regardless of its format (physical, electronic or digital), is manageable at the specific library level.

• Configuration – Various settings such as metadata definitions (e.g. validations), acquisition related definitions (e.g. purchase cancellation reasons) as well as user related definitions (e.g. statistical categories) are managed at the Alma institution level.

• Integrations – Alma supports various integration points for interacting with external systems such as: Identity Management, Import/Export to Financial Systems, Import from Student Information Systems. The definitions related to these integrations are managed at the Alma institution level. Please note that in some cases there may be multiple definitions (e.g. Authentication in Alma can accommodate up to 5 different LDAP servers).

• Resource sharing partners – The resource sharing partner records hold attributes of the peer partners with which the resource sharing workflows are managed. Partner records attributes of potential borrowing or lending libraries, such as their communication method and their average time to deliver. The partners are then arranged in partner rota templates which are used to group partner records in functional groups. Although the partners list is managed by the institution, the partner rota templates may be independently managed by each library.

Alma Libraries
Libraries share the management of many data elements and workflows, as listed above. However, there are many options for libraries to separately manage aspects of their workflows, such as:

• Operator/staff roles

• Some staff may be granted roles for working only in the scope of a given library. The roles are listed in Managing User Roles.

• Fulfillment

• Policies - If libraries have unique fulfillment policies that are not shared with other libraries, they may set up library-level policies.

• Resource sharing rota templates and rules - Resource sharing libraries that have unique rota management requirements can set up rota templates that are independent of the rest of the institution.
• Acquisitions
• Purchase orders – Libraries can manage their acquisitions separately from one another, with each one managing its own PO lines.
• Fund ownership and availability – Funds may be owned by specific libraries and may be made available for PO lines of specific libraries only.
• Vendor availability – Libraries may be able to contact vendors that are not shared with the rest of the institution.
• Invoices - Invoices record actual purchase payments and are linked to the purchase orders and to funds. Invoices can be electronically updated in the system--for example, via EDI--or internally triggered in the system. Invoices can be owned by libraries. Only users with an Invoice Operator role at the library have access to library-owned invoices.
• Inventory – Physical and electronic inventory can be owned by libraries.

Alma Campuses
Multiple campuses may be implemented when there are geographically dispersed campuses with which patrons are affiliated, and there is need to group fulfillment services for each campus, such as:

Inventory Control:
• Limiting the availability of electronic resources to specific campuses
• Externally exposing the catalog (via Z39.50) sliced by campus level ownership of inventory

Fulfillment:
• Limiting allowed patron pick-up locations for requested resources by campus
• Grouping lists of pick-up locations by campus
• Limiting and controlling the availability of other services based on campus-level considerations

The Alma Collaborative Network
The Alma Collaborative Network is a network of Alma institutions connected together to facilitate collaboration/sharing of data and workflows. In some cases, a collaborative network requires the Alma Network Zone.

An Alma Network Zone may be set up where one of the following is required:
• Shared Catalog – A shared catalog consists of a single metadata catalog that is shared by all libraries. The single catalog source can also easily serve as the source for a shared discovery experience.
• Shared Acquisitions – Shared acquisitions consists of centralized purchasing of e-resources that are available to the member libraries.
• Centrally managed configurations – Additional functionality can be implemented on top of the Network Zone to facilitate centrally managed configurations for the following:
  o Shared fulfillment – The Network Zone can be used to centrally manage fulfillment policies and terms of use. The centrally managed policies and terms of use are then dispatched to all members of the network, where they are used in the local members’ fulfillment rules. This achieves a high level of consolidation in the fulfillment area, with agreed upon policies and terms of use being used by all members of the network.
  o Resource sharing – The basic configurations of the resource sharing component may be centrally managed at the Network Zone and shared by all members of the network. This includes a shared list of: Using a consolidated configuration set achieves the goal of unifying the user experience and library back office processing across all disparate libraries.
Resource sharing partners
Resource sharing rota templates and assignment rules
Workflow profiles
Locate profiles

- Vendors – Vendor records can be centrally managed at the Network Zone. Routine and automatic dispatching of the vendor records to all network members achieves the goal of having a single list of vendors that is used throughout all members of the network but is managed centrally by a single office.

- Mapping tables – Mapping tables govern a variety of system behaviors across all functional elements of the system. Maintaining a centrally managed mapping tables set is key to creating unified and consolidated workflows at the network members across the system.

There is a diagram on our Knowledge Center that shows the entities that can be managed on each level: https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_(English)/010Getting_Started/030Alma_Topologies#The_Alma_Collaborative_Network

10. How many data centers across the state? Any data replication throughout the date in case for disaster discovery? We had experienced a couple of extensive downtime from OCLC WMS.

**Ex Libris:** Alma is deployed in Ex Libris’ private cloud, based on a SaaS, multi-tenancy architecture in which one instance of Alma supports multiple customers. Ex Libris maintains a North American data center in the Chicago, Illinois area, as well as data centers in Amsterdam and Singapore. Additionally, in 2016 we added data centers in China and Canada.

The Ex Libris data center utilizes 1G bandwidth as its backbone and works with multiple ISP vendors (up to 8) at every point in time. As with every SaaS vendor, we measure the performance of our servers; we do not, however, have control of the ‘last mile’ at the institution level. We can report that, so far, our customers report a high performance level for all operations that met web application expectations. We also monitor our application and server throughput 24/7 in order to make sure that transactions are handled and sent to the user browser as expected.

Alma is designed in accordance with the SaaS model. The system is based on multitenant architecture, in which all the resources are shared (see diagram below). This model enables Ex Libris to provide its customers with a fault-tolerant computing environment that includes dynamic resource allocation.
Ex Libris has a well-developed backup plan consisting of multiple daily snapshots including a full daily backup. The backups are made to a separate set of disks which offers a much more reliable fast retrieve backup media and is stored at the data center site and in a remote secured location over a private dedicated fast secured line. This guarantees that at any point in time, in case of a disaster, Ex Libris holds copies of the data onsite and in a remote and secured disk backup. On a regular basis, Ex Libris performs a system backup to back up application files, database files, and storage files. The privacy controls in practice at the company apply as well to all backup files. All backup files are subject to the privacy controls in practice at Ex Libris. Ex Libris has a 10-week retention policy. The restore procedures are tested on an ongoing basis to ensure rapid restoration in case of data loss.

Ex Libris maintains both onsite and offsite data backups of all customer Data for disaster recovery purposes, and such backups are regularly monitored and checked for errors.

**On-site backup** - Incremental and full daily backups of the customer data maintained at Ex Libris' data center facility. Backups are based on multiple snapshots during the day using storage snapshot technology. The backups are kept for one week on-site at a separated set of disks. The snapshots are automatically mounted with specific access restriction values seen by the operating system in a special set of directories allowing for an easy and immediate restore at any time by Ex Libris authorized personnel.

**Off-site backup** – Full daily backups of customer data that are maintained at a secure offsite location for a period of 10 (ten) weeks. Backups are performed daily using snap mirror technology over a private dedicated fast secured network connection from the primary data center to an off-site backup location using the same storage technology as the storage at the primary location.

**Disaster Management**
Ex Libris is responsible for recovery and also maintains a business continuity plan which is implemented following a disruption to service. The Ex Libris cloud services group has classified disasters and emergencies into the following three levels – minor, major and catastrophic:
Minor Disaster - A minor disaster is characterized by an expected downtime of no more than 48 hours. Damage can be to hardware, software, and/or operating environment. Ex Libris cloud services could be restored to normal operations at the primary site and repairs can be started as soon as possible:

Major Disaster - A major disaster is characterized by an expected downtime of more than 48 hours but less than 7 days. A major disaster will normally have extensive damage to system hardware, software, networks, and/or operating environment. Ex Libris cloud services could be restored to normal operation with the assistance of certain recovery teams who will be called to direct restoration of normal operations at the primary site.

Catastrophic Disaster - A catastrophic disaster is characterized by expected downtime of greater than 7 days. The facility is destroyed to the extent that an alternate facility must be used. Damage to the system hardware, software, and/or operating environment requires total replacement / renovation of all impacted systems. The implementation of the Disaster Recovery Plan in a remote recovery site is required to restore Ex Libris cloud services to normal operation. In the event of a major or catastrophic event, data recovery is performed using backups retrieved from the disaster site from the offsite backup locations. After identifying salvageable equipment, early data recovery efforts first focus on restoring the operating system(s) for each system. Next, mission critical system data is restored. After system data is restored, individual customer data is restored.

11. Extraction of data, MARC and otherwise (could be for projects, or for the next great migration in the future)

Ex Libris: Alma supports the ability to export bibliographic, inventory, and authority records in their native formats, including MARC 21 XML or binary and Dublin Core XML. The export of bibliographic records makes use of Publication Profiles. These profiles are defined to determine which records to export, on what schedule to export them, and additional services to run at export (which may include enhancing or cleaning up the outgoing records). This publication approach is the same infrastructure used for synchronizing holdings with WorldCat.

Additionally, Alma supports the ability to perform ad-hoc exports on demand. This can be used for external record processing, updating for a shared repository, loading into an institutional data warehouse, or any other purpose. The most versatile and ubiquitous type of data extract is the Tools button that is found on most list screens generated in Alma. This Tools button permits the user to save whatever list is present to an Excel spreadsheet for further work outside of Alma.

The Ex Libris contract specifies that customer data will be available in industry-standard format for download upon termination or completion of the service (free of charge). The customer will have 30 days to download the data before Ex Libris will delete it.

Discovery (Primo)

12. Is it possible to purchase a Syndetics subscription to interface with Primo? Our students really appreciate the "Look Inside" option. It isn't included, but can it be integrated?

Ex Libris: Yes, it is possible to purchase a Syndetics subscription. Let us know if you would like a quote.
Syndetics Unbound can be integrated into the Primo full details page. Recommendations for additional content from Syndetics Unbound appear in the right pane in Primo:

- **Premium Cover Service** — Syndetics Unbound offers the most comprehensive cover database in existence for libraries — over 25 million full-color cover images for books, videos, DVDs, and CDs, with thousands of new covers added every week. If a cover is missing for an item, Syndetics Unbound automatically generates a cover using the title, author, and media type.

- **Summary** — Over 18 million summaries and annotations covering fiction, non-fiction, and both trade and scholarly titles. Thousands of summaries are added each week.

- **About the Author** — This section includes the author biography and a shelf of other items by the author. The section is also adorned by a small author photo.

- **Look Inside** — Includes first chapters, book excerpts, and table of contents for millions of titles, enabling patrons to take a peek inside a book.

- **Series** — Shows a book's series, including the reading order. If the library is missing part of the series, those covers are shown, but grayed out.

- **You May Also Like** — Provides sharp, on-the-spot readers' advisory in your catalog, with the option to browse a larger world of suggestions, drawn from LibraryThing members and big-data algorithms. As with other enrichments, Syndetics Unbound only recommends items that your library owns.
• Professional Reviews — More than 5.4 million reviews are available from:
  o Library Journal
  o School Library Journal
  o New York Times
  o The Guardian
  o The Horn Book
  o BookList
  o BookSeller + Publisher Magazine
  o Choice
  o Publishers Weekly
  o Kirkus

• A la carte professional review options also include:
  o Voice of Youth Advocates: VOYA
  o Doody’s Medical Reviews
  o Quill and Quire

• Reader Reviews and Ratings — Includes more than 1.7 million vetted reader reviews from LibraryThing members. It also allows patrons and librarians to add their own ratings and reviews, right in their library’s catalog, and then showcase them on a library’s home page and social media.

• Also Available As — Help patrons find other available formats and versions of a title in your collection, including paper, audio, ebook, and translations.

• Tags — The Tags element updates LibraryThing’s celebrated tag clouds — redesigning them toward simplicity and consistency. Based on over 141 million tags created by LibraryThing members, tags are hand-vetted by our staff librarians for quality. A new exploration interface allows patrons to combine and filter tags, to focus in on the genres, subjects, and other categories they want most.

• Book Profile — A newly dynamic version of what Bowker has done for years — analyzing thousands of new works of fiction, short story collections, biographies, autobiographies, and memoirs annually. With Syndetics Unbound every term is clickable, and patrons can search and browse over one million profiles.

• Reading Level — See and explore other books in the same age and grade range. Reading Level also includes Metametrics Lexile® Framework for Reading.

• Awards — Highlights the awards a title has won, and helps patrons find highly-awarded books in your collection. Includes well-known awards, like the National Book Award and the Booker Prize, but also smaller awards like the Bram Stoker Award and Oklahoma's Sequoyah Book Award.

• Browse Shelf — Gives your patrons the context and serendipity of browsing a physical shelf, using your call numbers. Includes a mini shelf-browser that sits on your detail pages, and a full-screen version, launched from the detail page.

• Video and Music — Syndetics Unbound offers a wealth of descriptive information for more than 4 million video and music titles including annotations, performers, track listings, release dates, genres, keywords, and themes.

• Video Games— The video game element enriches your catalog with game covers, ESRB Rating, Star Rating, Game Information, System Requirements, Game Features, Game Description, Game Reviews, and Screenshots.
13. Primo back end. How to set up pipes and normalization rules. Please give an idea of what will be done at the consortial level and Ex Libris level in setting up normalization rules.

**Ex Libris:** Primo VE does not include pipes and normalization rules in the same way these tools are used in classic Primo. Instead, with Primo VE, records managed in Alma are simply visible in Primo with no need to publish the data. Each institution can add local fields to be used for search and/or display, as well as local facets. These are configured using the Discovery configuration menus in Alma. It is possible to add external data, such as from a digital repository. This is done using the Discovery configuration menus in Alma:
In this case, normalization rules are used to determine how the source data elements will map to the Primo data. These normalization rules can be shared with the network or with the Alma community. Once normalization rules have been configured, Discovery import profiles are used to load the external data into Alma for discovery. Import profiles can be shared with the network or with the Alma community.

14. Could you show how EBSCO database articles appear in Primo? What are workarounds that can be done through Alma if metadata isn't being shared directly by EBSCO? How does that expand to JSTOR and other non-ProQuest products?

Ex Libris: EBSCO database articles appear in the Primo results alongside all other resources:
The full details page shows the linking information for any resource, in this case, via Academic Search Premier:

EBSCO content can be made accessible to Primo users in the following two ways:
• Primo Central Index - EBSCO has chosen not to contribute content to the Primo Central Index (PCI). However, most article and some e-book content indexed by EBSCO is also indexed by other providers, many of whom do cooperate with Ex Libris and our mutual customers by contributing content to the PCI. We refer to this as “alternative coverage”. Access to this EBSCO content can be achieved by activating the alternative coverage collections for searching in Primo. Delivery of the full text content is handled by the Alma link resolver, which can link the Primo user directly to EBSCO.

• EBSCO search plug-in - The EBSCO search plug-in enables Primo to query and receive results from the EBSCOhost API. End users that are either logged on to Primo or using an on-campus terminal do not need to log on to EBSCO to search for EBSCO content.

The first method mentioned above, alternative coverage, is used for any content provider where we don’t receive the discovery records directly from the provider.

JSTOR collections and Gale Virtual Reference Library resources are included in the Primo Central Index. Primo does not prefer results from one vendor or another. Additionally, libraries may have access to articles through different providers and this will not affect their relevancy ranking in search results.

15. Demo the Discovery service within Primo, how is the ranking of resources determined and can the link resolver be demonstrated using Academic Search Complete using the Discovery product within Primo

Ex Libris: For a full demo of Primo please view the recording of the Primo demo.

**Search and Find: ScholarRank™ Intelligent Ranking Technology**

- **Query Match**
  - Language
  - Stemming
  - Title / Author
  - Citation
  - Stop words
  - Term variations
  - Compound words
  - Spelling mistakes
  - ...

- **Item’s Value Score**
  - Field boost
  - Frequency
  - Local blending settings
  - Phrase recognition
  - Phrase slop
  - Year boosting
  - Broad topic recognition
  - ...

- **User Profile**
  - User discipline
  - User preferences

Ranking of resources utilized our ScholarRank technology, which first determines the full set of applicable search results, then determine the relevancy ranking. Relevancy is based on many factors,
including which field the search terms appear in, how frequently the search terms appear, how close search terms are to each other, and other factors. In addition, the library can add additional blending settings. For example, the library can boost local materials higher in the results set or boost a particular unique collection. Finally, ranking can also account for additional factors set by the user, including preferred disciplines and a preference for newer material.

As mentioned above, relevancy ranking is not affected by the vendor. Resources available through Academic Search Complete will be included in results based on how well they match the patron query.

16. When using Primo, can we set up to search our local holding, including our course reserves, ebooks, ereources as the initial search

Ex Libris: Complies with all. Primo enables the institution to define one or more scopes to provide access to all or a discrete subset of its collection—whether local or remote resources. A scope determines the domain of the search. For example, a scope might restrict the search by location, area of interest, or other parameters determined by the institution. An institution may define multiple scopes and enable them for use by all users or by specific user groups. Each institution can determine the default search scope.

Additionally, Primo’s relevancy ranking configuration (“boosting”) allows the library to boost some items ahead of others, on a per-field basis, increasing the likelihood that a search for a specific title or author will be close to the top of the result set. Ranking is based on the metadata and full-text, and Primo provides the ability to manipulate the relevancy ranking algorithm by defining field-level boosting factors, as follows:

- Setting the importance of specific fields for boosting purposes;
- Boosting documents in publishing by use of normalization rules. A number is placed in the boost field in the Primo Normalized XML record, and the ranking algorithm relates to this number when defining the item’s rank. The boost field may push the item up or down in the ranking in varying degrees, depending on the value that populates it;
- Boosting by synonyms—typically, a record that contains a synonym to the searched term should be ranked below a similar record that contains the searched term. The degree to which the record that contains the synonym should be pushed down is configurable; and,
- Boosting local collections vs. Primo Central content.

An additional feature available in Primo that allows the library to promote special scopes that might be relevant for specific search scopes is the Featured Results Bar – this feature can be configured by the library to add to specific tabs/search scopes to search in parallel with additional scopes (that might include any collection) and highlight the results in a thumbnails display bar.

17. What course reserves searching is like in Primo. Is there a way for students to see a list of all items on reserve for a course? Or are they limited to searching by instructor and item title?

Ex Libris: Patrons access Course Reserves material through Primo. Many libraries include Course Reserves as a separate scope in the discovery layer. Below is a screenshot from Central Michigan University:
Links to electronic materials and information about print materials are visible in the same way as regular, non-course reserve materials.

A course reserves record can either be suppressed from the discovery interface completely or published in a manner that makes it discoverable only in the context of a courses related search. This type of cataloging may be preferable if the resource is expected to be re-used for subsequent courses but is not otherwise a part of the library inventory.

Citations that are linked to active courses are published to Primo with course information included. The following fields are indexed and can be retrieved by a Primo search: course IDs, course names, and instructor names. These fields can additionally be used as facets. This allows students to search for course materials with great flexibility. Additionally, Course reserves records include a Note field that can be used, for example, for recording information from the instructor about when the article/chapter etc. should be read. This note may be exposed in the Discovery Interface.

18. Discovery: How granular does the Discovery usage data go? It would be powerful to be able to generate a report that could be exported and provided to a campus' Institutional Research
dept to make connections between library users and larger datasets that the institution has to measure value and trends.

**Ex Libris:** There is a Primo analytics and reporting service for Primo cloud customers. The service is based on the Oracle Business Intelligence (OBI) platform, which is a leading platform for managing and delivering interactive reports and dashboards. OBI reports are easy to customize. Staff users can create their own reports and share report templates with other institutions. Ex Libris also provides a number of reports out of the box—for example, user actions, facet usage, and popular searches.

Note that Primo analytics and Alma analytics share a single interface. Primo analytics is accessible via a link from the Primo administration module.

Alma also collects data on the usage of electronic resources via the Alma link resolver. These include OpenURL requests, services offered to the patrons and services which the patron chooses to use. Usage of electronic resources tracked via the link resolver can also be used for reporting using Alma Analytics. Reports can be created of usage statistics by journal, database, publisher, platform, and subscriber. The reports enable the library to drill down on data elements included in the report such as year range, titles, and so on.

Please note that usage statistics are only available at the institution level.

The fields of the Link Resolver Usage subject area can be used to create reports that provide both specific details of link resolver usage as well as a broad perspective of how the Alma link resolver is used. This provides libraries with a useful means of determining proper electronic collection development.

This subject area supplements the Usage Data subject area, which includes data from vendors, while the Link Resolver Usage subject area takes data directly from the Alma link resolver.

Using the Link Resolver Usage area, the Design Analytics you can create reports/dashboards for the Link Resolver Usage area and are able to answer the following types of business questions:

- How many times did users select **View It** in all sources over a specified period of time?
- How many times did users select **View It** in a specific source?
- How many times did users select **View It** and no results were produced?
- How many times did users select **View It** for a particular source that resulted in no full text?
- How many times did users select **View It** for the most frequently requested full-text journals from a particular source?
19. Discovery Question: How are collections (3rd party vendors for periodicals, eBooks, Open Access collections, and other multimedia collections) managed? Can custom collections be created? If a collection is purchased by a consortium and it is from vendor X -- and it is a shared collection how is that managed? AND if the members of the same consortium also purchase unique titles from vendor X on top of the consortium purchased collection how would those unique titles be managed.

Ex Libris: With regards to the end user display, Primo, by default, will display resources that are available to the patron. This can include resources that are only available at the individual institution and also resources available through consortial purchasing. Each Alma institution will have a dedicated Primo which can be used to search that institution’s holdings as managed in Alma.

Alma includes a Central KnowledgeBase. The Central KnowledgeBase (CKB) describes vendor offerings for electronic resources and is maintained by Ex Libris. By integrating the CKB into the data services environment (the Community Zone), Alma allows libraries to eliminate the need to manually synchronize records for electronic resources into the local catalog. When a complete or partial package is activated in the CKB, the individual titles in that package are immediately available in the library’s inventory. The CKB is tightly integrated with Alma acquisitions workflows and electronic management workflows:
The institution can search the CKB for electronic resources of different types, choosing resources as part of the selection workflow, and/or initiating a purchasing workflow for the selected resources.

An institution can also activate CKB electronic resources using an activation wizard. The Central Knowledge Base electronic resources details can be overwritten with an institution’s local information.

Since the CKB is maintained by Ex Libris, any CKB change related to the electronic resources used by the institution will be reflected in the institutional inventory, keeping the institution’s electronic resources up to date, and also taking into account any localization of the electronic resource.

The information in Alma’s CKB also provides the data needed for Alma’s link resolution functionality. Electronic resources linked to the CKB electronic resources can be resolved just as any other electronic resource, using the embedded OpenURL link resolver.

The Central Knowledge Base is updated on a weekly basis by a dedicated team at Ex Libris. High quality data is loaded regularly and updated frequently from all major vendors, platforms, and publishers. The Community Zone Updates Task List page in Alma displays these updates that were made to the Institution Zone (IZ) during updates from the Community Zone (CZ). These changes are specific to the institution and may include modifications to bibliographic records as well as changes to holdings, availability, security requirements, and parser parameters.

Users can search their own institution, the consortium (the Network Zone) and the Community Zone shared catalog (the Alma Community Zone incorporates the KnowledgeBase, a Community Bibliographic Catalog and Global Authority Files).

Because Alma was planned as a unified system, thereby integrating Electronic Resource Management, Acquisitions and Link Resolution, there is no need to load additional descriptive records when acquiring electronic resources based on the CKB. In other words, all electronic resources managed in the CKB will contain a descriptive record linked to locally activated resources. As policy, Ex Libris attempts to provide as full a description as possible for the CKB resources; for example, by enriching the records based on CONSER information (for e-journals). This makes any additional loading of full descriptive records into the local catalog unnecessary.

The Alma CKB describes collections of electronic resources offered by a wide variety of vendors, including the titles that are part of that package and linking information for individual titles and articles in those packages. The sources of the metadata come from the vendors providing the electronic resources. Ex Libris continually works to improve and add content to the Knowledge Base. Customers may request that resources be added to the Knowledge Base, and we endeavor to add them as quickly as possible. Customers request new resources to be added to the KnowledgeBase via Salesforce. In Salesforce, they can also view existing requests from other customers, and promote them.

Custom Collections
Electronic resources of any type (Database, Interface, Collection, Titles) can be locally created in the institution.

From the Alma Menu staff users can chose from different options to create local inventory:
Alma supports enriching the title information with complete descriptive records using MARC based imports as illustrated below:

Once the collection has been created, functionality to share with the rest of the consortium can be used. The CKB itself is maintained and updated by Ex Libris staff.

**Consortial Collection Development**

Designed to support consortia, Alma supports consortial purchasing and management of electronic resources. Electronic resource purchasing, negotiated by the consortium, will be managed in the Network Zone, and electronic resources can be owned by all consortium members, a group of members, or an individual member. Consortium members can benefit from electronic resources managed in the shared institution but also retain independence by purchasing and managing electronic resources that are not negotiated by the consortium.
The diagram below illustrates the relationships among consortium members in relation to electronic resource management:

In the example above:
- The consortium negotiated a purchase of the electronic journal title ‘Biochemical genetics’ for a member institution and the electronic journal title is available via the CKB.
- The consortium member independently purchased an electronic journal title, ‘Camera obscura’, which is available via the CKB.
- The consortium member independently purchased the electronic journal, ‘Challenge’, which is not part of the CKB.

The CKB is tightly integrated with Alma acquisition workflows and electronic management workflows:
- Every institution in the consortium can search the CKB for electronic resources of different types, choosing resources as part of the selection workflow, or/and initiating a purchasing workflow for the selected resources.
- An institution can also activate CKB electronic resources using an activation wizard. The Central Knowledge Base electronic resources details can be overwritten with an institution’s local information.

Acquisitions

20. Demonstrate how funds are managed such as creating specific vendor funds, encumbering ordered materials and invoicing received materials.

Ex Libris: Alma provides a flexible, hierarchical fund structure that the library can customize to meet its needs. The fund hierarchy:
1. Ledger
2. Summary
3. Allocated
A ledger must be defined, but not all the levels need to be utilized (e.g. it is possible to define a ledger, and an allocated fund, but not have a summary fund.) An institution may create many ledgers. A ledger generally contains one or more summary funds, and allocated funds under each summary fund. The allocated accounts contain actual monetary balances used to pay for library resources. There is no limit to the number of funds that can be created, and no limits to the number of funds that can be used for payments.

An example of a ledger record with its associated funds:

![Ledger and Fund Display](image)

Alma supports real-time fund balances, including a graphical display of the fund balance showing encumbrances and expenditures, based on the real-time balance of the account at any given moment.
Users can also see a graphic display of the fund burn down – generated from a standard report in Alma Analytics:

Additionally, each fund displays a history of transactions (including positive and negative transactions) and the balance in the fund at the point of each transaction. The following screen capture shows transaction details of a fund:
In Alma, an invoice can be created in several ways:
1. Electronic data interchange (EDI) with a vendor
2. Creating an invoice from the PO
3. Creating an invoice manually or
4. Loading invoices from an Excel file.

The invoice workflow in Alma
Receiving and invoicing can be done together or separately, depending on the library’s workflows. Alma uses library-defined rules to automatically process an invoice to determine whether there are elements that require special attention. If there are issues that require attention, the invoice is surfaced via the task list for review by a staff user.

The diagram below illustrates a typical workflow for invoicing materials.
EDI Invoices:
When invoices are placed at an FTP location by an EDI-enabled vendor, Alma will automatically load and parse the invoices.

Creating an invoice from the PO (Purchase Order):
Alma supports the creation of an invoice automatically from a PO. Once the PO is selected Alma will automatically create invoice lines based on the PO details; the invoice line fields are automatically populated and are displayed in the Summary tab, where they can be edited as needed:
Manual creation of an invoice:
Alma also supports the completely manual creation of an invoice using the following form:

When saving an invoice Alma checks whether the invoice foreign currency is different than the invoice line fund. If there is a difference, Alma calculates the expenditure price based on the foreign currency, according to the currency repository for the invoice date.

Alma also supports defining an explicit ratio per invoice. In this case, Alma calculates the expenditure based on the explicit ratio and does not consult the currency repository.

21. Ordering, invoicing, receiving/cataloging a single-piece and multi-piece monographs (all pieces available at time of purchase and in hand)
**Ex Libris**: Alma supports a variety of order types covering all options of material that might be ordered by a library. The list is supplied out of the box by Ex Libris, and can be customized by the library. For example, a library might choose to de-activate some of the order types because they are not relevant for their library. An example of the list of order types – including continuous order types (that are active – with a yellow check mark, or not-active without the yellow check mark) can be seen in the following screen capture:

<table>
<thead>
<tr>
<th>Enabled</th>
<th>ID</th>
<th>Description</th>
<th>Continuity</th>
<th>Inventory Format</th>
<th>Acquisition Material Type</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ACCESS _SERVIC</td>
<td>Access Ser</td>
<td>Continuous</td>
<td>Generic</td>
<td>Service</td>
<td>LOCALMM!</td>
</tr>
<tr>
<td>2</td>
<td>DB_CO</td>
<td>Database</td>
<td>Continuous</td>
<td>Electronic</td>
<td>Package</td>
<td>LOCALDB,L</td>
</tr>
<tr>
<td>3</td>
<td>DB_OT</td>
<td>Database</td>
<td>One-Time</td>
<td>Electronic</td>
<td>Package</td>
<td>LOCALDB,L</td>
</tr>
<tr>
<td>4</td>
<td>DB_SERVICE_OT</td>
<td>Database S</td>
<td>One-Time</td>
<td>Generic</td>
<td>Service</td>
<td>LOCALMM!</td>
</tr>
<tr>
<td>5</td>
<td>DIGITAL_NONAR</td>
<td>Digital - No</td>
<td>One-Time</td>
<td>Generic</td>
<td>Service</td>
<td>LOCALMM!</td>
</tr>
<tr>
<td>6</td>
<td>E_BOOK_CO</td>
<td>Electronic I</td>
<td>Continuous</td>
<td>Electronic</td>
<td>Book</td>
<td>LOCALMM!</td>
</tr>
<tr>
<td>7</td>
<td>E_BOOK_OT</td>
<td>Electronic I</td>
<td>One-Time</td>
<td>Electronic</td>
<td>Book</td>
<td>LOCALMM!</td>
</tr>
<tr>
<td>8</td>
<td>E_BOOK_PKG_CO</td>
<td>Electronic I</td>
<td>Continuous</td>
<td>Electronic</td>
<td>Package</td>
<td>GLOBALPA</td>
</tr>
<tr>
<td>9</td>
<td>E_BOOK_PKG_OT</td>
<td>Electronic I</td>
<td>One-Time</td>
<td>Electronic</td>
<td>Package</td>
<td>GLOBALPA</td>
</tr>
<tr>
<td>10</td>
<td>E_BOOK_SO</td>
<td>Electronic I</td>
<td>Standing O</td>
<td>Electronic</td>
<td>Book</td>
<td>LOCALMM!</td>
</tr>
<tr>
<td>11</td>
<td>E_JOURNAL_CO</td>
<td>Electronic I</td>
<td>Continuous</td>
<td>Electronic</td>
<td>Journal</td>
<td>LOCALMM!</td>
</tr>
</tbody>
</table>

**The Order Workflow**

When initiating an order, Alma will offer the staff user the option of choosing a Purchase Type – based on the type of media being ordered. (The list can be customized by the library.)
Based on this information, the PO Line that is created will be tailored to the type of material being order. For example, a monograph will have fields to define library and location; journals (print and electronic) will have subscription date fields.

Staff members receive new print material into the system using a dedicated receiving “workbench”. They locate the relevant purchase order lines with the material received, and then receive the items. Additionally, at this stage staff can add barcode information, perform copy cataloguing, etc. When relevant, they can also indicate whether further work must be performed (i.e., it needs to remain in Technical Service) before the material is available to the library for which it was ordered.

For single-title monographs, checking-in an item triggers marking the PO line as received, as well as routing the item to the appropriate next step (cataloging, physical processing, shelves, or patron pickup if a request has been placed). For standing orders (serials and serial monographs), the same actions will be triggered, but the PO line will remain open.

Alma streamlines the process of receiving items and allows for shelf-ready materials to be processed simply by scanning their barcode, saving staff time and effort.

Alma provides a task list to manage material that needs to be further processed before being shelved. Items in this process have distinct statuses assigned to them so they can be tracked and moved among the relevant units for physical processing, cataloging, and temporary storage.

Invoicing in Alma is described in a previous response.

22. Ordering, invoicing, receiving a multipiece monograph where all pieces are not available/not in hand, such as when all volumes are not yet published, and we would order them one by one as they became available, or a set is purchased together but one volume is on backorder and received at a later time

Ex Libris: Please see the response directly above. Alma’s streamlined acquisition processes allow for ordering new materials for which bibliographic data does not already exist; there is no dependency on
having complete bibliographic record information to initiate an acquisition process. The library staff member simply enters brief bibliographic information into a template and generates a purchase order line based on the brief record.

For brief records, the library determines which fields are mandatory before the record can be saved. The bib record can be completed at a later stage, once the item has arrived, or at any point in the process when more complete metadata becomes available.

23. **Ordering, invoicing, receiving non-magazine serial titles whether annual or irregular.** (Things like Nolo, college profile directories, Westlaw, Best American Short Stories.) Both when there is a standing order to receive each volume when it is published and one-off orders (such as replacements or gifts of a single volume).

**Ex Libris:** Alma supports purchasing workflows of all types.

- Approval orders are managed as standing orders, where the specific titles are loaded via MARC embedded order data/embedded order confirmation records. The system will check for approval titles that are already owned and flag them for staff review.
- Firm orders for print or electronic resources are managed by creating order lines attached to either a brief bibliographic record or a complete record from the Alma Community Catalog. Once the order has been processed, it may be sent via EDI, email, or print. The library may attach complete bibliographic records either from the Community Catalog or an external source. Print titles await receiving from the vendor, and electronic titles are activated as per agreement with the vendor. At that point, these resources are added to the permanent collection.
- Print continuations (print subscriptions and standing orders) and electronic subscriptions are both managed by Alma through ongoing open orders. The library establishes a purchase for the subscription, including a start and end date (the latter is optional). As new issues of print resources are received, inventory is created automatically. Electronic subscriptions may be activated and are subject to evaluation and renewal workflows.
- Alma also supports acquisition workflows for non-purchased materials, such as gifts, and legal deposit, without requiring that the items follow the traditional workflow of order, receipt, invoice, payment.
- Alma supports the ability to derive purchase orders based on EOD/EOCR records. The approach is flexible enough to accommodate mapping PO data from an array of different MARC fields and subfields, and can be customized based on different vendor requirements. Default profiles are included for common vendor mappings.
- Alma maintains a lifecycle of purchasing that allows orders to be processed automatically with no staff intervention. The library can set up rules that will flag an order for review or for automatic processing based on flags, e.g.:
24. **Ordering, invoicing, and receiving an item that was ordered as a single piece with a single price, but needs to be split apart into multiple titles for cataloging and receiving (such as a boxed set)**

**Ex Libris**: This scenario would probably best be handled as a standing order. There are ten steps involved in creating and processing a standing order. (Note that this is a recommended workflow, but it is possible to deviate from these steps based on local customs and needs, for example, #8 in the list below may not be relevant.)

1. Create a bibliographic record that will be used to create the order.
2. Suppress the bibliographic record because it is not a real record, but rather, a description of the standing order.
3. Create an order for the record and choose purchase type ‘Physical – Standing Order ...’
4. In the order price, enter the amount which you want to be encumbered on the budget(s) used for this order.
5. Send the order.
6. Whenever an item arrives for the standing order catalog it as a separate bibliographic record and add holding record and item. This can be done in one of two ways:
   1. Via the metadata editor
   2. Via menu ‘Resource management > Create Inventory > Add Physical Item’
7. In the item record enter the receiving date and link it to the POL.
8. When invoice arrives pay for each item that arrived as part of the standing order using a separate invoice line for each item.
9. Pay the invoice as you would pay any invoice.
10. When the vendor will no longer be sending items for the standing order, it should be manually closed.

Here is an example of the workflow. In this example, we will make a standing order for “All catalogs published by the German archaeological institute”. These are catalogs that are printed on an irregular, random basis. The vendor receives the order and knows that any time another catalog is published it should be sent to the library.

The example used here can be used for any type of physical material that is supplied from the same vendor in an irregular and unpredictable frequency, (or, as in your example, a box set which will be cataloged separately).

Create order for the suppressed record with title “All catalogs published by the German archaeological institute”:

![Screenshot of MD Editor with suppressed record and create order button highlighted.]

Here we create the order (POL-44573) and choose Purchase Type “Physical – Standing Order Monograph”: 
In the order price, enter the amount that you want to be encumbered on the budget(s) used for this order. This will likely be the amount, which you think the series of items will eventually cost.

The order is sent to the vendor:
The first pamphlet arrives for the standing order. It is “A report on the archaeological findings in and under the Town Hall Square in Cologne, Germany”. The bibliographic record, holding record and item are added. In the item record enter the receiving date and link it to the POL.

Here we add the Bibliographic record:

<table>
<thead>
<tr>
<th>PO Line Number</th>
<th>Date</th>
<th>ISSN/ISBN</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL-44573</td>
<td>17/09/2017</td>
<td>1</td>
<td>All catalogs published by the German archaeological institute</td>
</tr>
</tbody>
</table>

Here we add the item and then link the item to the PO Line of the standing order and add the Receiving Date:
At some later point, another record arrives for the standard order. As was done for the first order we catalog it, add a holding record and an item. We link the item to the same standing order POL.

The pamphlet that arrives now is “Archaeological discoveries of the Ubii village on the Rhine”. As with the previous item that already arrived for the standing order, we link this item to the standing order and add the receiving date:
When invoice arrives pay for each item that arrived as part of the standing order using a separate invoice line for each item:

The first item of the standing order in first invoice line:
The second item of the standing order in second invoice line:
Here are both invoice lines:

Pay the invoice in whatever manner you would normally pay an invoice.

When the vendor will no longer be sending items for the standing order it should be manually closed.
25. Alma/Acquisitions: Example of how a basic setup of the Acquisitions portion of Alma for electronic resources, and for book/eBook purchases with Gobi.

**Ex Libris**: Alma is a unified platform and handles resources of all types, regardless of format. This means that much of the functionality for e-resource management uses the same workflows as with physical resource management, allowing for consistent training, reporting, and a platform for workflow enhancements that applies to resources of any type.

Alma’s workflows support streamlining a variety of purchasing models for electronic journals and electronic books, including:
- Individual title subscriptions;
- Individual title purchases;
- Full collection subscriptions;
- “Selective” (partial) collection subscriptions; and
- Patron-driven acquisition of e-books.

A Central KnowledgeBase (CKB) managed, maintained and updated by Ex Libris, tracks the most up-to-date vendor offerings in the shared data services environment. When acquiring a new collection, libraries may search the CKB and, when they find the collection they wish to acquire, initiate an acquisition workflow based on either the full collection or a selective subset of titles they’ve licensed from the vendor. The workflow may begin with a trial, pass through purchasing, and ultimately end up in the activation of that resource for all users.

Search for and Order an Electronic Resource:

Based on agreements with the vendor, once the order has been sent, the library will be able to activate the e-resource. Staff members activate new electronic resource material in the system using a wizard from the Activation Task List.
Here, a staff member performs various activities related to activating the resource, including verification that the resource is available (using Alma’s embedded link resolver functionality), determination of the specific contents and coverage of the resource, and then making it available for discovery by the end user.

Once activated, descriptive metadata (bibliographic records) for the titles will automatically be added to the local catalog. Additionally, link resolution is built in; Alma will respond to any requests from discovery environments, with a menu with links to full text for all resources-types: print, electronic and digital.

When a subscription is nearing conclusion, Alma will prompt staff to initiate an evaluation process for the collection. In the evaluation function, staff may view information about usage, cost, and how the collection has changed, in order to decide whether to renew or cancel the subscription. Cancelation will automatically remove the descriptive records from the catalog.

**GOBI**

Alma integrates with commonly-used external selection portals such as YBP’s GOBI platform with automated import capabilities through extensive support for vendor-specific import profiles and embedded order data (EOD) records.
Real-time acquisition is an integration between Alma and Academic Library Service Providers, to streamline acquisitions workflows. It incorporates standard ordering and loading technologies with APIs to speed the availability of resources, increase the efficiency of integrating records, and enhance data enrichment.

**Workflow**

- The user searches for items in the vendor's system, and places them in the shopping cart (or equivalent).
- The user verifies owning library, fund codes and other relevant information.
- At checkout, the vendor sends the shopping cart data to Alma using the Create PO line API.
- Alma validates the received PO line information (see PO line object).
- Alma attempts to match the bibliographic data using standard identifiers. If no match is found, Alma creates a brief bibliographic record for the order.
- Alma responds with the newly created PO line number to the vendor.
- The PO line is processed in Alma as other PO lines are processed. If an order requires manual review, Alma sends it to the In Review task list.

The **vendor reference number** is kept as part of the Alma PO line. **Alma PO line number** is kept as part of the vendor order details.

The following flow chart represents the workflow.

The following vendors currently support this integration:
- **GOBI**
- **Harrassowitz**
• **OASIS**

The required steps for institutions to set up a real-time acquisitions workflow with participating vendors are available in this article: [https://developers.exlibrisgroup.com/blog/Real-time-Acquisitions-setup-for-institutions](https://developers.exlibrisgroup.com/blog/Real-time-Acquisitions-setup-for-institutions).

**Cataloging**

**26. How to setup Alma to import records from OCLC Connexion**

**Ex Libris**: Record import and publication is considered a core function, and it may be set up and run as a frequent process in Alma without intervention from Ex Libris. Libraries will set up one or more import and publication profiles, which can then be used to automatically import and export records on an ongoing basis. These processes may also be run on demand by the library.

All importing of metadata records in Alma is managed using “Import Profiles”:

![Import Profiles](image)

As shown above, Import Profiles can be shared in the Community Zone for use by any Alma Institution. These profiles define all aspects of the loading process. This process is split into a sequence of steps:

- Loading the file
- Normalizing and validating the records in the file
- Finding an existing match in the catalog
- Merging into the existing record (when relevant)
- EOD (Embedded Order Data) files – creation of order line records (when relevant)

This can be summarized as follows:
The import process supports the maximum possible automation. For example, the import can be defined to merge an imported record into the catalog automatically in cases where the system finds a single match.

When importing any record, Alma goes through specific steps according to the rule of the appropriate import profile. It validates each record for encoding and content. It checks for matching records that already exist in the catalog, then can be set up to either merge, overlay, ignore (importing anyway), or flag matched records for review.
If at any stage during the import process, either because of errors, or because the import profile definition requires mediated intervention, the staff user will be able to review issues using a dedicated task list. This task list will provide the staff user with information on what the issue is as well as the relevant actions the user can perform.

Alma also allows for catalogers to use merge, match and overwrite options for individual bibliographic records as they are imported from another library system that is being used as an external resource. In this way it is possible for the Library to prevent duplication of records in the catalog.

### 27. Interface(s) for bib/MARC editing and individual item editing

**Ex Libris:** Alma’s cataloging workbench, the Metadata Editor, supports editing any MARC tag, subfield, and indicator. Catalogers can use the Metadata Editor for day-to-day cataloging activities. Alternatively, Alma can be integrated with Connexion if staff prefer to do cataloging work there. An example of the Metadata Editor interface is shown below:
Staff will benefit from an intuitive, feature-rich user interface designed to save time and effort. As an example, fixed fields can either be edited inline, or in a form that presents all values for the relevant position in the field:

Alma offers a series of default templates for each media type, a great time-saving feature. Staff can also create their own templates, which can be private or shared.

An example of a default template with RDA populated fields:
In addition, catalogers can copy catalog or download records from shared catalogs into the local Institution Zone catalog. The metadata management environment provides an External Search function, streamlining the process of sourcing records for copy cataloging. Alma supports searching an external bibliographic database in the Metadata Editor based on content of the bibliographic record or by populating fields in the External Search window seen below:
The knowledge base of external bibliographic databases that can be configured includes more 80 external bibliographic databases such as:

- Library of Congress (United States Library of Congress (LOC))
- WorldCat (OCLC)
- German National Library
- British Library
- National Library of Australia

In the following image, an external catalog has been searched, and staff can choose how to import a matching record—whether to bring in a new copy, overlay the record being edited, or merge the edited record with the external record.
The Alma item record consists of a great number of fields including item barcode, temporary and permanent locations, material type, fulfillment (circulation) policy, enumeration and chronology fields for serials, and numerous fields for registering note information — e.g. internal note, fulfillment note etc. In addition, staff will always have an indication of the item’s availability. Some of this detailed information can be seen in the following screen capture:

The item record in Alma supports fields for defining temporary locations. When moving items from one location to another staff have the option of inputting an end date for the temporary location. On this date a regular job process will warn staff to return these items to their regular location.
On the item level, Alma allows you to add a public note and a fulfilment note. Furthermore, several internal notes and statistical notes can be added:

The history tab of each item record provides a history of all fulfillment activities. Users can also view the history of item changes and holding record changes:
28. Merced College has a custom index to our local newspaper using unique Newspaper fields. Can unique databases such as this be integrated in Alma? SIRSI DYNIX created the files for us.

**Ex Libris:** If the newspaper records include fields that are relevant for end users, the library can configure local fields to be used for search, display, and/or faceting in Primo. Primo VE allows you to map information from the following MARC21 fields in the source records to local fields in Primo VE, where these fields can then be used to extend search queries, to filter search results with facets, and to display additional information in the record's brief and full displays:

MARC21: 009, 09X, 490, 5XX, 69X, and 9XX

Generally speaking, MARC records will migrate as they exist in the source system. Our goal is to make the migration process as smooth as possible and so we do not perform extensive record validation or manipulation during the migration process. Alma will preserve unique fields and lowered encoding levels, though each condition may be logged when the incoming records are validated. We provide record cleanup tools in Alma that allow you to resolve any record issues post migration. Therefore, all records in your source ILS files will migrate to Alma in their current form unless they are missing a MARC 245 tag with a subfield a. No further validation is performed on bibliographic records meaning that invalid MARC records will load to Alma as is. Also, records marked as suppressed in your ILS will load to Alma as suppressed. For administrative data (patrons, items, Orders, Invoices, holds, etc.), our migration specifications indicate that this data will be provided to us in .csv format which will be validated against a field mapping form that you will complete as part of your migration form for your ILS.

In cases of duplicate barcodes being encountered during the migration process, an additional value will be appended to the subsequent instances of the barcode to ensure uniqueness. At the end of each
migration process a report will be shared with you listing the records that failed the migration process along with the reason. After the test load you will be able to review the list of failed records and resolve any issues in your ILS prior to the cutover load.

**Customized Indexing**

In a cloud-based multi-tenant solution, the fields that are indexed are set by the system, and libraries can define from the indexed fields which are to be used for searching and sorting. Local 99X fields are indexed in Alma and available for staff to define for search criteria. With many hundreds of institutions live, we cover an extensive number of indexed fields that meet our customers' needs. The Alma architecture is designed to allow for the immediate indexing of new data upon saving. That is, for the fields defined in the system as indexed, when new data is entered by the user for that field, it will be saved when indexing occurs. This type of system architecture and operation does not impact or limit the user experience or performance.

There are options to:
- Define whether an index should be enabled or not
- If the index should be available for Simple and/or Advanced Search

The display order of the index:

<table>
<thead>
<tr>
<th>Enabled</th>
<th>Index Code</th>
<th>Object Type</th>
<th>Simple Search?</th>
<th>Adv. Search?</th>
<th>Index Label Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>available_for</td>
<td>PORTFOLIO</td>
<td>false</td>
<td>true</td>
<td>UILABELS</td>
</tr>
<tr>
<td>44</td>
<td>available_for_group</td>
<td>PORTFOLIO</td>
<td>false</td>
<td>true</td>
<td>UILABELS</td>
</tr>
<tr>
<td>45</td>
<td>available_only_for</td>
<td>PORTFOLIO</td>
<td>false</td>
<td>true</td>
<td>UILABELS</td>
</tr>
<tr>
<td>46</td>
<td>available_only_for,</td>
<td>PORTFOLIO</td>
<td>false</td>
<td>true</td>
<td>UILABELS</td>
</tr>
<tr>
<td>47</td>
<td>barcode</td>
<td>ITEM</td>
<td>true</td>
<td>true</td>
<td>UILABELS</td>
</tr>
<tr>
<td>48</td>
<td>baseStatus</td>
<td>ITEM</td>
<td>false</td>
<td>true</td>
<td>UILABELS</td>
</tr>
<tr>
<td>49</td>
<td>bib_level</td>
<td>BIB_MMS</td>
<td>false</td>
<td>true</td>
<td>UILABELS</td>
</tr>
</tbody>
</table>

All local (9XX) fields can be renamed and activated:
29. Link Resolver For Databases Suite or "Add-On"? (Link from an Individual Database to content in another individual different vendor database--not from Primo. Currently a Link Resolver such as this are included via another Discovery service)

**Ex Libris:** Alma includes an embedded Link Resolver which provides patrons with context-sensitive electronic, digital and print services. The embedded link resolver is a standard functionality in Alma (no additional subscription fee is required) and is based on Ex Libris’ experience delivering the SFX link resolver to over 2500 institutions worldwide.

The Alma link resolver offers services via a menu that can be customized by the institution, defining the labels of the services and the order which they appear.

The link resolver will link to all available options. An example can be seen following (in Primo) of a record with print and electronic versions of a record. Users can check the availability for the electronic version via the View It and the print version from the Get It window in Primo:
Patrons have access to the full text versions (View it):

And can view the items in the library’s repository (Get It):
30. Direct example/connection of loading database content into KnowledgeBase and then testing it on Primo (Please include Academic Search Complete as an example). Another example should include GVRL—an example of individual Library owns certain titles/new titles to add.

Ex Libris: Academic Search Complete and Gale Virtual Reference library are included in the Alma Central Knowledgebase. The library only needs to activate these resources in Alma. There is no need to load additional content into Alma, unless your negotiated subscription includes additional content.
Once activated, all titles within the collection as well as the collection itself are immediately indexed for search within Alma. New records will be visible in Primo within 15 minutes.

A staff operator can click on the “Portfolio List” for a collection to see all of the titles that are part of that collection. From the portfolio list, it is possible to test access for any title or to view in discovery to see how it displays within Primo:
31. Please show us the COUNTER reports

Ex Libris: Alma facilitates the collection and reporting of usage statistics information supplied by vendors (content providers) in COUNTER 4 format. Alma Analytics provides usage statistics reporting capabilities that enable the creation of reports such as usage statistics by journal, database, publisher, platform, and subscriber. The reports enable the library to drill down on data elements included in the report such as year range, titles, etc. Alma includes cost per use data elements and reports out of the box, and reports can be done on both the level of institution and the Network level.
Support for COUNTER 5 and SUSHI lite is on the Alma Roadmap. Ex Libris is closely following developments in the industry regarding these protocols and will incorporate them into Alma in a timely manner, as the industry develops. We are aware that COUNTER has stated that “In January 2019, all publishers and vendors are required to comply with the new Release of the Code of Practice” and Ex Libris product management is therefore closely following all developments.

Below is a list of out-of-the-box COUNTER reports in Alma Analytics. More information may be found at https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_(English)/080Analytics/060Out-of-the-Box-Reports

<p>| Usage via COUNTER Reports |<br />
|---------------------------|---|
| Top ten title accesses via OpenURL requests in the previous year | Displays which titles are being most searched for via the Alma link resolver to know what areas should be stressed in collection development. |
| Top ten Title accesses via OpenURL requests without services in the previous year | Displays which titles are being most searched for via the Alma link resolver, but do not have services. This may indicate areas where collection development should be increased so that end users will have less results with no services. This will typically not happen when coming from Primo because the search was already made on a record with inventory holdings, but it may happen when coming from an external native interface or database such as PubMed. |
| Top ten LC Subject categories accesses via | Displays which subjects are being most searched for via the Alma link resolver to know what areas should be stressed in collection development. |</p>
<table>
<thead>
<tr>
<th>OpenURL in the previous year</th>
<th>Bibilographic records with subjects are matched from the Open URL via ISBN, ISSN, DOI or IE ID to the local repository.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top ten LC Subject categories accesses via OpenURL in the previous year</td>
<td>Displays which subjects are being most searched for via the Alma link resolver to know what areas should be stressed in collection development. Bibilographic records with subjects are matched from the Open URL via ISBN, ISSN, DOI or IE ID to the local repository.</td>
</tr>
<tr>
<td>Top ten article title accesses via OpenURL in the previous year</td>
<td>Displays which article titles are being most searched for via the Alma link resolver to know what areas should be stressed in collection development.</td>
</tr>
<tr>
<td>Top ten article title accesses via OpenURL requests without services in the previous year</td>
<td>Displays which article titles are being most searched for via the Alma link resolver but do not have services. This may indicate areas where collection development should be increased so that end users will have less results with no services.</td>
</tr>
<tr>
<td>Resolver Statistics by Source</td>
<td>Displays resolver statistics according to source.</td>
</tr>
<tr>
<td>Top Ten Requests</td>
<td>Displays the top ten rested items</td>
</tr>
<tr>
<td>Requests by Source</td>
<td>Displays requests according to source.</td>
</tr>
<tr>
<td>Resolver Statistics by Journal</td>
<td>Displays resolver statistics according to journal.</td>
</tr>
<tr>
<td>Top Ten journals by requests</td>
<td>Displays the top ten journal requests.</td>
</tr>
</tbody>
</table>

**Fulfillment**

32. I would like to see a much more detailed look at Course Reserves.
33. It would be very helpful to see how class records can be built & searched using the course reserve module and also how to link the item records to the course reserve module.

34. Creating courses/instructors for Reserves and putting items on Reserve

**Ex Libris:** In response to #32-34: Courses may be imported into Alma in batch, by a course loader that accepts a file of courses. The loader may be used to update certain elements of the course information such as number of participants. The loader may also be used to create new courses based on older ones’ description.

Course information includes instructor, start and end dates, number of participants, and weekly hours. The staff operator may add, delete, or edit courses in a department. Creating a course is a prerequisite to enable access to reading lists.

Alma-Primo integration means that Course reserves are automatically published to Primo for discovery once the course is active in Alma, and then removed from discovery when the course is over. Citations that are linked to active courses are published to Primo with course information included. The following fields are indexed and can be retrieved by a Primo search: course IDs, course names, and instructor names. These fields can additionally be used as facets. This allows students to search for course materials with great flexibility. Additionally, Course reserves records include a Note field that can be used, for example, for recording information from the instructor about when the article/chapter etc. should be read. This note may be exposed in the Discovery Interface. Primo may be configured to include a specific Course Reserves search scope.

Alma’s course reserve functionality is fully integrated and uses the same user and bibliographic databases as the rest of the system. Additionally, Alma provides searching of both bibliographic records and course reserve information in a single interface for library staff, and through a common discovery interface, such as Primo, for end users.

Dedicated workflows facilitate the temporary change of item information for physical copies that have been moved to a reserved area. For example, changing their temporary location or the terms of use by which they are circulated, and setting the date on which the item is expected to be moved back to its permanent location. This date may be automatically calculated based on the length of course for which the item is moved.

Automatic processes trigger the moving of these items back to their permanent shelving locations. For titles that have been made part of the reading list, the system will display the available inventory, be it physical, digital or electronic, and supply management tools to the operator, for example for requesting the transfer of physical items to a reserved area, or for requesting the digitization of physical copies.
Adding a new item record from within a course reserves reading list.

Course Reserve information can be found in the Fulfillment menu under courses, reading lists, and citations. Citations refer to items that students must view or read for a course.

Reading lists are comprised of citations.
and courses may have multiple reading lists.

35. Please show us the offline circulation module

**Ex Libris:** Alma includes an offline circulation tool that will allow for the continuation of check-in and check-out activities when the system is available. The offline circulation tool can be installed locally and allows the data to be synced back to Alma when the network connection is back following a network.
failure. In addition, as Alma is hosted in the cloud, in case of local network outage there is also the option of using 3G or 4G mobile networks to access the system, enabling normal operations. The offline circulation utility can be downloaded from the Developers Network. The offline circulation client stores patron barcodes and item barcodes. Loans are generated when the offline circulation files are uploaded to Alma. To upload offline loans and returns, on the Offline Circulation List page click in the File Name field and select the .dat file containing the list of loans and returns performed during connection downtime. Click Upload and Validate File Content. The job is displayed in the table at the bottom of the page. Its status is displayed in the Status column.

To view details of a job, click View for the relevant job. The Job Report page opens, detailing the number of items processed successfully and unsuccessfully.

36. Please show us the item check-in screen, I would like to know if which fields are being displayed, especially for an item with overdue fees. Does it display the original due date besides the new due date (if the item was renewed after the original due date), checked out date, etc.

**Ex Libris:** Below is the check-in screen.

When an item is returned in Alma, the staff user is advised of the next step for this item, such as item has to be re-shelved to a certain location or placed on the hold shelf if it has been requested by another patron:
Each individual user can customize which columns display in the check in screen, the width of each column, and the order in which they appear:
The Due Date can display on the main check in history. It is possible to click on the patron name in order to navigate to the patron circulation account and view the loan history:

37. When items are checked in, what happens to the patron data linked to that circulation - can we retrieve patron data for prior checkouts, or is it wiped for security? Will libraries be able to set that parameter individually or is it set at the system level?

**Ex Libris**: The only configuration that is required for anonymization is whether to activate it or not. Alma automatically anonymizes all complete hold requests. Other elements related to anonymization may be switched on or off:

Loans
Anonymizing loans will cause every complete loan (i.e. loan that has been returned) to have its link to the borrower removed from the system. This is a database removal action that is not revertible. Loans will not be anonymized if:

- Are marked Lost but not checked in\deleted
- Are marked Claimed Returned but not checked in\deleted
- Are linked to still in process fees. The loan will be anonymized only after all attached fees are closed

Anonymized loans are reportable by statistic dimensions such as user statistical categories and user group.

**Fines and Fees**

Fines and Fees are anonymized only after they are fully closed, i.e. fully paid, waived or extracted to the bursar. The link to the patron is removed from the Fine/Fee. This is a database removal action that is not reversible. Anonymized fines/fees are reportable by statistic dimensions such as user statistical categories and user group.

**Borrowing and Lending Resource Sharing Request**

Resource Sharing Requests are anonymized only after their lifecycle is complete, for example when the item has been checked back in. Link to the patron is removed from the request. This is a database removal action that is not revertible. Anonymized Resource Sharing Requests are reportable by statistic dimensions such as user statistical categories and user group. Cancelled/Rejected resource sharing requests are also anonymized. No anonymization takes place if the request status is not updated to one of these statuses.

**Impact of anonymization on reporting**

The anonymization process strips relevant fulfillment records of their patron personal information where that information is not required for a current patron service (i.e. the record is a historical record), while retaining enough information to be able to meet the auditing and reporting requirements of the libraries. The relevant entities (loans, fees, requests and resource sharing requests) remain fully reportable, but without any information on the linked patron, other than statistical information based on the user’s user group and statistical categories.

Anonymized records have no link to any details of the patron, but they remain reportable by statistic dimensions such as user statistical categories and user group.

**Configurability of anonymization jobs**

Loan anonymization is configured in the Fulfillment Configuration > Fulfillment Jobs Configuration menu.
As is evident from this screen, the library may decide which element to anonymize, independently of any other element that may be anonymized. Unlike loans, fees and resource requests, which a library may decide not to anonymize, requests are always anonymized.

Anonymizing fulfilment elements is a configurable option. The library may turn it on or off at any point during an implementation phase or after the library is already using Alma in production. Anonymization jobs are configured at the level of the institution, however, the loan anonymization rules can be set to anonymize loans from different libraries separately.

Options for Anonymization include:
- Days since loan ended
- Days since user expiry
- Library
- Location
- Number of loans to retain. For example, if a rule is set with Number of loans to retain = 3 and there are three loan history records for an item, they are not anonymized. If there are four loan history records for the item, then only the oldest one is anonymized.
- User group

These options can be combined. As an example, it can be configured that course reserves loans for undergraduates are anonymized after 3-month but course reserves loans for instructors are anonymized immediately.

Loans with unpaid fees are not anonymized because they still await processing (paying the fines). Keeping them linked to the patron is necessary for functional reasons, for example for dispute handling. All Alma libraries are currently using the loans anonymization in this manner.

38. Inventory management overview and demo

**Ex Libris:** Alma includes inventory management functionality. Using a hand-held scanning device, you can scan items on your shelves and receive a beep when the scanned barcode has some condition, for
example: is marked missing, is marked on loan, and so forth. To do this, you must upload a file generated by Alma to your scanning device. The generated file is not designed for a specific device and can be used by any such scanning device.

You generate and export these files on the Items Requiring Action page (Fulfillment > Advanced Tools > Items Requiring Action). The file is created according to criteria you define and is uploaded to an FTP site using the FTP connection that you specify. A separate file is created for each library and type of criteria. The code of the library and criteria are included in the file name. After exporting the file from Alma, you must import the files to your device (which is not covered in this documentation).

To create a file of items requiring action:
1. On the Items Requiring Action page, enter the following information.
   - S/FTP connection type – Select a connection type from a predefined list (see Configuring S/FTP Connections). Note that the connection type selected must have a subdirectory defined.
   - Items that do not belong to the current library – When selecting this option, the Library field appears, enabling you to select a library. Items that belong to the selected library are included in the file.
     Select the required criteria that will cause the scanner to beep.
     - Items that are marked as missing
     - Items that have requests waiting for them
     - Items that are on loan
     - Items that are claimed to be returned
     - Loaned items that are lost
2. Select OK to create a job that exports the files. The job appears in the table at the bottom of the page.
The files created by the job are uploaded to the FTP server.
39. If you could demonstrate how hourly items can be given overnight or no overnight circulation rules, that would be useful.

Ex Libris: See #41 below.

40. Demonstrate how resource sharing works and if/how we can prioritize searches of local resources

Ex Libris: California Community Colleges Libraries will be members of a Fulfillment network in Alma that work together by allowing their patrons to interact directly with other institutions in that network. Additionally, these members may be willing to accept and process items from other institutions and ship them back. Two primary use cases are currently supported:

- Walk-in Registration
- Direct requesting
- Return Anywhere
- Pickup Anywhere
- A network patron card in Primo

In a Fulfillment Network process, Alma’s standard loan and item transit processes are used. In other words, as long as the item is held by the borrower, the standard loan control mechanisms for tracking overdue loans is used. After the item is checked in, standard transit routines are used to track where the item has been put in transit, where the item has been put in transit to, and when it is expected to arrive at its target destination.

A single institution may participate in multiple fulfillment networks.

It is possible to block requesting of on shelf items. All of the items from a location (fulfillment unit) that has been defined as ‘requesting available items is not allowed’ will not be requestable if some of the items are available. Managing the potential suppliers for a resource sharing request is done in three tiers:

1. Each institution defines profiles of target institution rotas*. Each rota is an ordered or non-ordered list of potential suppliers. The rota will be used as a list of targets to request from, one at a time. Different rotas may be used for different purposes. For example, an institution may set up a ‘quick to respond’ rota, an ‘expensive but likely to fulfill’ rota or an ‘e-material experts’ rota. Institutional rules as well as manual operations may be used to attach a specific rota to a specific request.

2. The suppliers on a rota are checked to see whether they own relevant holdings. Potential suppliers will be contacted only if they appear to own relevant holdings.

3. Within the consortium, a supplier that is an Alma institution will be ranked lower in the rota if the number of requests from the consortium partners has exceeded a defined threshold. This way, an overloaded partner will get fewer new requests directed at it. Calculating an overloaded target is based on Alma being able to collect information from each consortium member with regard to how many requests that institution has open with any target supplier.

In addition, each consortium campus and resource sharing partner using Alma can automatically reject new incoming requests based on how many open incoming requests are currently managed at that institution. If the number is past a defined threshold, requests may be automatically turned down.

Ex Libris Response to California Community Colleges
Proprietary and Confidential
Page 79
Rota - An ordered list of potential suppliers that are assigned by Alma to a resource sharing request. The rota, sometimes termed also “roster” or “lending string”, is used by Alma to attempt to fulfill a resource sharing request. Alma assigns the request to the first potential supplier on the rota, and then to the next potential supplier on the list whenever the active supplier fails to supply the requested material.

Alma Analytics will allow the institution and the consortium to create decision-making reports such as borrowing request fill time. An example of this is displayed directly below:

<table>
<thead>
<tr>
<th>Borrowing Creation Month</th>
<th>Num of Requests</th>
<th>Filled (Request Status)</th>
<th>Filled (Arrival Date)</th>
<th>Unfilled (Request Status)</th>
<th>Unfilled (No Arrival Date)</th>
<th>Average Turnaround Time (Created to Received)</th>
<th>Fill Rate</th>
<th>Fill Rate (Arrival Date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 - 12</td>
<td>7</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0.00</td>
<td>42%</td>
<td>42%</td>
</tr>
<tr>
<td>2017 - 01</td>
<td>11</td>
<td>7</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>0.00</td>
<td>63%</td>
<td>45%</td>
</tr>
<tr>
<td>2017 - 02</td>
<td>17</td>
<td>12</td>
<td>4</td>
<td>5</td>
<td>13</td>
<td>0.08</td>
<td>70%</td>
<td>23%</td>
</tr>
<tr>
<td>2017 - 03</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0.00</td>
<td>66%</td>
<td>66%</td>
</tr>
<tr>
<td>2017 - 04</td>
<td>18</td>
<td>6</td>
<td>1</td>
<td>12</td>
<td>17</td>
<td>0.00</td>
<td>33%</td>
<td>5%</td>
</tr>
<tr>
<td>2017 - 05</td>
<td>17</td>
<td>14</td>
<td>10</td>
<td>3</td>
<td>7</td>
<td>2.00</td>
<td>62%</td>
<td>51%</td>
</tr>
<tr>
<td>2017 - 06</td>
<td>16</td>
<td>11</td>
<td>7</td>
<td>5</td>
<td>9</td>
<td>3.64</td>
<td>68%</td>
<td>43%</td>
</tr>
<tr>
<td>2017 - 07</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>2017 - 08</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0.00</td>
<td>25%</td>
<td>59%</td>
</tr>
<tr>
<td>2017 - 09</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0.00</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2017 - 10</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>0.00</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>103</td>
<td>69</td>
<td>38</td>
<td>43</td>
<td>65</td>
<td>1.15</td>
<td>58%</td>
<td>36%</td>
</tr>
</tbody>
</table>

41. What level of complexity in circ rules is supported for items with loan periods in hours (For example, is it possible to have some items' due time cut off at library closing time, and others to automatically advance to [x] hours after opening on the next available day)

Ex Libris: Alma offers the option of defining a calendar of open and closed hours. Definitions can be on the level of the Institution, or on the level of the library. In addition, it is possible to define:

- Events – special dates, such as the end of the year or the end of the semester
- Exceptions – exceptions for open/closed dates and times, such as holidays

An event or an exception is defined on the Institution level.

In addition, the Terms of Use Policy includes a parameter for defining the behavior of due dates related to library hours and closures. For example, if an item is due when the library is closed, Alma can automatically change the due time to the upcoming closing time, the next open time, or leave the time as is. Similarly, booking requests are automatically adjusted by the system so that their start and end time be on library open time slots. This is set at the level of the policy, so it would be possible to have different policies assigned to different items.

Closed Library Due Date Management
How to manage fulfillment activities when the library is closed. The available options, displayed in the Value field of the Policy Details page when this policy type is chosen, are:

- Keep – Keep the current due date
- Move backward – Move to the end of the previous open day
- Move forward – Move to the beginning of the next open day
- Move to the end of the next open day (affects due dates that would otherwise fall on a day that the library is closed)

Due Date
The institution can set up due date policies regarding the length of time an item may be borrowed. You can specify the following period types for due date policies:

- Fixed – Based on your institution’s calendar, such as the End of Term.
• **Non Fixed** – Based on the date the item was borrowed. The following values are valid: **Days, Exact Days, Hours, Minute, Month**, and **Week**.

If you set the **Unit of Measurement** field to **Days, Month**, or **Week**, you can also specify a specific time. If you don’t specify a time, the default is your institution’s closing time.

**Hold Shelf Period**
The Hold Shelf Period value does not include days that the library is closed. For example, if the Hold Shelf Period value is 5 days and the library is closed for 2 days during that period, the 2 days are not calculated as part of the Hold Shelf Period.

**Analytics**

**42. Database schema and an overview of writing/running reports**

**Ex Libris**: Alma includes advanced data analytics, Alma Analytics, based on a worldwide leading Business Intelligence platform: Oracle Business Intelligence Enterprise Edition (OBIEE). Alma Analytics is fully integrated into Alma and transparent to the end user.

The data warehouse is organized into subject areas which are designed as a star schema and which classifies the attributes of an event into facts (measures) and descriptive dimensions.

The benefits of a star schema are:
- Simpler queries - star schema joined logic is generally simpler
- Simplified business reporting logic
- Query performance gains - star schemas can provide performance enhancements for read-only reporting applications
- Fast aggregations - the simpler queries against a star schema can result in improved performance for aggregation operations
• Reports which cross subject areas are possible through dimensions, which are shared by multiple subject areas. For example, Classification is a joint dimension of Expenditure and Circulation subject areas, so it is possible to create reports that match expenditure and usage of a specific location.

Alma contains numerous operational, analytical, and assessment data points to enable staff to create traditional and advanced library reports. The data points are organized into Subject Areas within Analytics, so users can easily drag and drop elements to build reports. The relevant data points necessary to create reports across Subject Areas are shared within folders.

Alma Analytics uses a drag and drop query method to build powerful reports; it is easy to learn and fully documented in Alma’s Help Documentation. For all of the reports contained within this section, all that is required to build the report is the application of the Design Analytics role to the library user account.

All reports in Analytics are customizable to enable staff to add, remove, filter, and rearrange fields to meet library requirements.

You can create new reports to provide you with information on library activities. The simplest way to create a report is based on one subject area. You can combine data from more than one subject area to create an advanced report; this is a more complex process that requires understanding of the data dependencies.

43. Please show sample reports and review any procedural differences as it relates to barcode vs rfid users

**Ex Libris:** Every patron must have one unique identifier assigned to their account, but it is possible to have multiple identifiers, such as barcode and student ID number. For reporting purposes, this is the same patron. The various identifiers are available in analytics:

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Primary Identifier</th>
<th>User Id</th>
<th>Identifier Type</th>
<th>Identifier Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberg</td>
<td>Oscar</td>
<td>252571</td>
<td>39484045300000121</td>
<td>Barcode</td>
<td>0000000004931</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>39484045300000121</td>
<td>System number</td>
<td>252571</td>
</tr>
<tr>
<td>Aaregd</td>
<td>Krista</td>
<td>2525347058</td>
<td>40254254900000121</td>
<td>Barcode</td>
<td>0000000000809</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40254254900000121</td>
<td>System number</td>
<td>2525347058</td>
</tr>
<tr>
<td>Aeker</td>
<td>Krisay</td>
<td>252518</td>
<td>1586213000000121</td>
<td>Barcode</td>
<td>000000001075</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1586213000000121</td>
<td>FEIDE</td>
<td>9283761253</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1586213000000121</td>
<td>System number</td>
<td>252518</td>
</tr>
<tr>
<td>Aalbers</td>
<td>Sol</td>
<td>2525104544</td>
<td>1585086000000121</td>
<td>Barcode</td>
<td>0000000000509</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1585086000000121</td>
<td>System number</td>
<td>2525104544</td>
</tr>
<tr>
<td>Aamott</td>
<td>Domenica</td>
<td>252504</td>
<td>1578528000000121</td>
<td>Barcode</td>
<td>000000000120</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1578528000000121</td>
<td>System number</td>
<td>252504</td>
</tr>
<tr>
<td>Aamot</td>
<td>Albert</td>
<td>2525364337</td>
<td>1596925000000121</td>
<td>Barcode</td>
<td>0000000002429</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1596925000000121</td>
<td>System number</td>
<td>2525364337</td>
</tr>
<tr>
<td>Aanerud</td>
<td>Krishna</td>
<td>252534</td>
<td>1595878000000121</td>
<td>Barcode</td>
<td>0000000004696</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1595878000000121</td>
<td>System number</td>
<td>252534</td>
</tr>
<tr>
<td>Aaron</td>
<td>Daren</td>
<td>252541</td>
<td>1602431000000121</td>
<td>Barcode</td>
<td>0000000004447</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1602431000000121</td>
<td>System number</td>
<td>252541</td>
</tr>
<tr>
<td>Aeagroen</td>
<td>Price</td>
<td>2525411197</td>
<td>1603012000000121</td>
<td>Barcode</td>
<td>0000000002506</td>
</tr>
</tbody>
</table>
Alma does not support RFID for user records, only for physical resources. The supported RFID actions include:

- Read barcode from item on pad
- Update security tag on loan and return
- Update item information (for single piece item and multi pieces item)

44. Creating reports and any statistical information that might be needed

**Ex Libris**: The simple way to create a report is using one specific subject area. Creating reports using one subject area does not require any deep knowledge of the data structure and relationship of the star scheme.

The following is a basic example of how to create a report. The example is performed in Alma Analytics using an Alma subject area, but the same exact steps apply to any Ex Libris Analytics product ( Summon, campusM, Primo, and so forth).

To create a report:

1. Select New > Analysis. The Select Subject Area menu appears. For the list of subject areas, see [Alma Analytics Subject Areas](#), [campusM Analytics Subject Areas](#), or [Primo Subject Areas](#).

2. Select a subject area, for example Funds Expenditure, to open the Analysis Editor.
The columns of the selected subject area appear as folder icons in the left pane.

4. Expand a column, for example Library Unit, and double-click a dimension, for example Library Name, to add it to the Selected Columns pane.

5. You can add an additional column, for example Vendors > Vendor Name.

6. You can add an additional column, for example Fund Transactions > Transaction Amount. The selected columns appear as follows.

   ![Select Columns](image)

   **Select Columns**

   Double click on column names in the Subject Areas pane to add them to the analysis. Once added, drag-and-drop columns to reorder them. Edit a column’s properties, formula and filters, apply sorting, or delete by clicking or hovering over the button next to its name.

   - Library Unit
   - Library Name
   - Vendor
   - Fund Transactions
   - Vendor Name
   - Transaction Amount

6. You can apply filters to limit the amount of data displayed in the report. Filters are applied before the report is aggregated. Filters affect the report and the resulting values for measures. Filters can be applied directly to attribute columns and measure columns.

   a. Select the More Options icon next to the column whose data you want to filter and then select Filter. (Alternatively, select the Filter icon and then select the appropriate column from the drop-down list.) The New filter dialog Box appears.
b. Select an operator and enter a value. Only items matching the filter will appear in the report.

c. Select OK to save the filter. The filter appears in the Filter pane of the report.

7. To sort a column: Select the More Options icon next to the column whose data you want to sort, select Sort, and select a sort option.

8. Select the Results tab to see the report results.
Compound Layout

9. To save a report: Select the Save icon (top right). Note that the name of the report should not contain the following characters: ampersands (&), commas (,), semicolons (;), colons (:), hashtags (#), or slashes (/)
You can save the report under Shared Folders/<your institution>. If it is a private report, you can save the report in the My Folders area. (Do not place reports in the Subject Area Contents folder, since this folder is meant to contain filters.) After you save a report, the title appears at the top of the report. To change the title, from the Results tab, select the Edit icon in the Views pane and enter a new title in the Title field.