
Alma Local Backup

Introduction

What is the Alma Local Backup service?

Alma Local Backup is a new premium service that provides your institution with a copy of your core Alma production data, enabling you to load this data into one of your institution's local, on-premises Oracle databases. The data included in the Alma Local Backup represents the key data elements managed in Alma. The local backup data is provided securely by Ex Libris on a secure FTP location provided by your institution.

When a subscription for the Alma Local Backup service is purchased:

- Up to once a calendar quarter following go-live with Alma, the customer may request (using the Ex Libris customer support portal) to receive a copy of the institution's local backup data.
- Within thirty (30) days of receiving such a request, Ex Libris will create a copy of the backup data and transfer the backup data to the customer.
- The transfer will be made by secure FTP to a storage location designated by the customer (the customer will need to provide the secure FTP connection details). For data privacy protection, the FTP location should be located in the same country as the customer's principal site.
- To avoid doubt, Ex Libris shall have no responsibility for any issues regarding the privacy, loss, or corruption of the copy of the backup data (i) after it has been successfully transferred to the designated storage location or (ii) if, contrary to the stipulation above, the storage location is not in the same country as the customer's principal site.
- The customer is responsible for meeting the technical prerequisites of the Alma Local Backup service set forth in this documentation.

Why is Ex Libris offering this premium service?

We are offering this premium service in response to requests from customers over the past few years. While there may be a number of different reasons for this request, the main reason voiced by customers is to have an "insurance policy" as they move to a cloud-based SaaS system.

The Alma Local Backup service is not...

Customers are free to use the data from the Alma Local Backup for different purposes, but as the refresh frequency is up to once a quarter, the Alma Local Backup service is not intended to replace any of Alma's data export/publishing capabilities. Customers who need to export/publish data to different external systems (national catalogs, resource sharing systems, institutional data warehouses, and so forth) should continue to use the wide variety of export and publishing capabilities that are an integral part of Alma (such as export tools in functional areas, batch publishing/export, Analytics export, and data retrieval using APIs).

Is this an annual subscription, or does the customer need to commit to a number of years?

Similar to the premium sandbox service, the Alma Local Backup service requires an annual subscription. Customers are not required to commit to multiple years of subscription.

Why is this a premium service and not a standard part of each customer's subscription?

As part of the service, our Cloud Operations group must perform an export of a "single tenant's" data from our multi-tenant environment (our backups are "multi-tenant" by nature). This complex process is labor-intensive and creates additional cloud operational costs. As such, it can be provided only as a premium service.

How will customers get a copy of their data?

The local backup data file will be provided securely by Ex Libris at an SFTP drop-point, using credentials provided by the institution.

What is required from the customer in order to use the local backup copy?

The customer must have a local SFTP location (Ex Libris will upload the backup file to this location) and a local/on-premises Oracle database (Enterprise edition, release 19c) so that they can locally load/restore the backup file to the local Oracle database.

What data is included in the Alma Local Backup, and in what format?

The data included in the Alma Local Backup includes all of the institution's core data and represents the key data elements managed in Alma. Certain data related to transient events and caches, configuration, and encrypted personal data elements are not included in the Alma Local Backup. The data is provided as an Oracle database "dump file" (.dmp file) which is commonly used for data export from Oracle databases. The table below represents a high-level list of the data elements. More detailed information can be found below in the [Alma Table/Field Definitions](#) section below.

Area	Data Elements
Resource Management	Bibliographic and inventory: physical, electronic and digital (holdings, items, e-collections, portfolios, digital representations, and file metadata; note that digital files are served from and backed up on, Amazon Web Services)
Acquisitions and ERM	Funds, vendors, orders, invoices, licenses
Fulfillment	Loans, requests and user fines/fees, resource sharing partners, courses and reading lists
General and Usage	Loan and request history, acquisitions history, counter e-usage data, libraries, locations

Preparatory Steps

Perform the following preparatory steps on your local on-premises Oracle database before you load the backup files Ex Libris provides. After your Oracle database is ready and configured, use Oracle's data pump import commands to load your institution's local backup data. The instructions for the setup and import of the local backup data, as well as an overview of the data elements included, are provided by Ex Libris.

1. Prepare a Linux server that will meet the Oracle 19c system requirements, with enough disk storage for running a considerably large database:
 - OS level – Linux x64-86 platform, version 7 or 8.

Note

RHEL9 only supports Oracle Database 19.19 or higher, and ExLibris has not certified Alma Database on RHEL9

- Filesystem disk space
 - Memory resource (CPU cores and RAM)
 - Please consult with ExLibris CPG for your system requirements
2. Install Oracle Software and Create Database
 - The required database is version 19c, Enterprise edition.
 - The database character set and national character set are both in UTF8.
 - Tune the DB parameters properly based on the DB size to be imported - check with Exlibris CPG/DBA as needed.

Note

Oracle Standard Edition is not supported as it lacks the features to support the running of the Alma database.

3. Create the USERS tablespace which will hold imported data

```
create tablespace USERS
datafile '/exlibris/oradata/alma/data/users_ts_01.dbf' size 10G autoextend on next 100M maxsize
unlimited;
```

4. Create oracle EXL_ADMIN schema user with proper roles and rights

```
CREATE USER EXL_ADMIN IDENTIFIED by EXL_ADMIN
DEFAULT TABLESPACE USERS
TEMPORARY TABLESPACE TEMP
ACCOUNT UNLOCK;
```

```
ALTER USER EXL_ADMIN DEFAULT ROLE ALL;
ALTER USER EXL_ADMIN QUOTA UNLIMITED ON USERS;
ALTER USER EXL_ADMIN QUOTA UNLIMITED ON SYSTEM;

GRANT CONNECT, RESOURCE, DBA TO EXL_ADMIN;
GRANT DATAPUMP_EXP_FULL_DATABASE TO EXL_ADMIN;
GRANT DATAPUMP_IMP_FULL_DATABASE TO EXL_ADMIN;
```

5. Create a mount point or a physical directory named /import_alma_backup on your filesystem where import data files will be placed. For example, /exlibris/import_alma_backup.

```
mkdir -p /exlibris/import_alma_backup
chown -R oracle:dba /exlibris/import_alma_backup
```

6. Create an oracle directory named EXP_DIR which points to the above physical directory

```
sqlplus / as sysdba
create or replace directory EXP_DIR as '/exlibris/import_alma_backup';
grant read, write on directory EXP_DIR to EXL_ADMIN;
```

Note

This directory name is defined as EXP_DIR and will be used in the import parfile. EXL_ADMIN user is granted read/write rights on this directory for export/import.

7. Review and tune database redo log sizes for the Alma database

```
sqlplus / as sysdba

set pause off

col member format a45

set linesize 150

col MB format 9999999999

col status format a10

col blocksize format 999999999
```

```
col group# format 999999

col thread# format 9999999

col sequence# format 9999999

col members format 999999

select a.group#, a.member, b.bytes/1024/1024 MB, b.blocksize, b.status
from v$logfile a, v$log b
where a.group# = b.group#;
```

Note

Ex Libris will deliver a set of useful scripts for local customers when delivering exported datapump files. Please unzip the scripts package and find all scripts in the scripts folder.

- Alma database needs to have 5 groups of redo logs, each 512M at minimum
- Run the above query to check for redo log files and size, Or run `scripts/check_logfile.sql`.

For example:

```
sqlplus / as sysdba
@check_logfile.sql
```

Read **scripts/README.logfile** for how to tune redo log files, step-by-step.

Note

If you are unsure about how to tune redo logs, please contact ExLibris DBA.

8. Review and resize database tablespaces

- Alma database requires considerable tablespace size to run
- To check overall tablespace health, please run `scripts/check_tbs.sql`
For example:

```
sqlplus / as sysdba
@check_tbs.sql
```
- To check SYSTEM, SYSAUX, UNDO tablespaces, please run `scripts/check_tbs_dbf.sql`
For example:

```
sqlplus / as sysdba
@check_tbs_dbf.sql SYSTEM
@check_tbs_dbf.sql SYSAUX
@check_tbs_dbf.sql UNDOTBS1
```
- To check TEMP tablespace, please run `scripts/check_tbs_TEMP.sql`
For example:

```
sqlplus / as sysdba
@check_tbs_TEMP.sql
```

Note

Please read **scripts/README.tablespace** on how to handle SYSTEM, SYSAUX, UNDO, TEMP tablespaces, step-by-step.

9. Prepare the USERS tablespace for data import

- ExLibris DBA will provide customer with an estimated tablespace sizing info for the USERS tablespace together with the exported data
- USERS tablespace must be at least 20% larger than required minimum tablespace size
- USERS tablespace can be resized by adding new datafiles
- To check USERS tablespace, run scripts/check_tbs_USERS.sql
For example:

```
sqlplus / as sysdba
@check_tbs_USERS.sql
```
- To create or resize USERS tablespace, please reference scripts/create_tbs_USERS.sql. The syntax is included in the commented-out section.
- Also reference scripts/README.tablespace for guidance

10. Ensure that you have a secure FTP location and credentials at your institution that:

- Is open to the Ex Libris Alma environment in your region. For details on the IPs in your region, refer to Technical Requirements for Alma and Discovery Implementation.
- Has enough space to temporarily hold the transfer of the Alma Local Backup.

11. Ensure that there is enough disk space to handle the transfer and load of your local backup. Local backup files are provided in a 90% compressed gz files and are expected to be 70G/M bibliographic records on your institution's secure FTP location after they are downloaded to /import_alma_backup.

Note

Some large databases may require far larger disk space on filesystem and database. You shall receive a sizing estimate from ExLibris team.

- Untar the local backup files: ~70G/M bibliographic records on /import_alma_backup
- Load the local backup files to your database: ~70G/M bib records
- Total: ~150G disk/M bib records required for download/import process per Alma institution. Half of the needed storage can be temporarily allocated on the secure FTP and on /import_alma_backup and removed after successfully importing to your local on-premises Oracle database.

As noted previously, when you are ready to request a local backup (up to once/quarter, when purchased), contact Ex Libris using the CRM system, indicating your institution's name, Alma domain, and your secure FTP access credentials. Allow up to 30 days for provision of local backup data.

Import Local Backup Data

Perform the following steps to import local backup data:

1. After you receive the Ex Libris notification that the local backup has been completed, download your institution's local backup files as prepared by ExLibris CPG or DBA, to the /import_alma_backup directory:
 - Download `alma_localbackup_customer.zip` that contains scripts
 - Download `local_backup_*.tar.gz`

Note

For Oracle Standard Edition users, please download `final_local_backup_*.tar.gz`

2. Unzip the downloaded scripts package using the unzip command: `unzip alma_localbackup_customer.zip`

Note

This will create a scripts folder which contains all supplied scripts and parfile for import

3. Untar the downloaded gzip files that contain data using this command: `cat *local_backup_*.gz* | tar xzvf -`

Note

This will create a folder called `:CUSTID_INSTID`, with all data dump files for a particular CustomerID/InstitutionID.

4. Move all data dump files from CustID_InstID folder to the /import_alma_backup directory. For example:
`mv 3975_3978/* /exlibris/import_alma_backup/.`
5. Review and edit parfile in the scripts folder, and ensure that customerID and institutionID are exactly matching with those data dump files:
 - View `scripts/script_par*`**Note:** For Oracle Standard Edition Users, please view `scripts/final_script_par`.

Note

This parfile will be prepared/delivered by Ex Libris CPG or DBA together with data dump files. It does not require any change, except ensuring that dumpfiles are matching.

- Sample content of `final_script_par.3975_3978`:

```
dumpfile=final_local_backup_3975_3978_%U.dmp
LOGFILE=import_3975_3978.log
REMAP_SCHEMA=LOCAL_URM:EXL_ADMIN
REMAP_TABLESPACE=LOCAL_URM_TS:USERS
```

6. Review and update `customer_local_backup.conf` as needed.
 - `cd scripts` and `vi customer_local_backup.conf`

- Update EMAIL_RECIPENT with your email address
 - Verify that CUSTID_INSTID are matching
 - Make sure that SCHEMA_OWNER=EXL_ADMIN
 - Make sure that SCHEMA_PASSWD=EXL_ADMIN. or update as needed
 - Make sure that PARFILE_LOC=/exlibris/import_alma_backup, or update as needed
 - Set the permission to 750 on the script: `chmod 750 RUN_IMPORT.sh`
7. Run the RUN_IMPORT.sh script in screen and bash mode, as this process might be time consuming, depending on the dump file size:
- `screen -R oralImport`
 - `bash -login`
 - `./RUN_IMPORT.sh`

Note

- If you catch 4 errors in the beginning regarding EXL_ADMIN user rights, they can be ignored. This is because the EXL_ADMIN in the source database has more rights than in the targeted database. See **Sample Output of import.log** below.
- Depending on data size, the import process can run from 30 minutes to 15 hours.
- When the process finishes, you can exit from screen by typing “exit”. If you lose screen session or connection lost, you can re-attach to the screen session by checking “screen -list” and then “screen -dr <screen_session_name>”.
- You can run scripts/check_longop.sql to monitor the import process and see the progress percentage. For example:


```
sqlplus / as sysdba
@check_longop.sql
```

-
- Use scripts/check_tbs.sql to monitor the USERS tablespace usage while the import process is running. Should the USERS tablespace get over 85% full, please add new datafiles to the USERS tablespace.

8. Post-Import checking:

- Run POST_IMPORT.sh bash script
This script will be included in the scripts folder delivered to the customer and will perform all needed work after import:
 - Verify total of tables imported
 - Rename table
 - Disable security group policy
 - Check and recompile invalid constraints
 - Check and recompile invalid indexes
 - Check and ensure no partitions
 - Check for any invalid objects
 - Email check results

Note

If you are a consortium and have more than one institution in your Alma local backup environment, repeat steps 1 and 2 for each Alma institution.

Please consider creating different schema user and/or tablespace for each subsequent unique Alma institution. For example, USERS2 tablespace with EXL_ADMIN_2, USERS3 tablespace and EXL_ADMIN_3 user.

If you have questions, please reach out to ExLibris for consultation.

Your local backup of your Alma institution's database is now ready for use. For more information on the Alma table data in your Alma local backup database, see [Alma Table/Field Definitions \(High-Level\)](#).

Sample Output of Import.log

```
Import done in AL32UTF8 character set and UTF8 NCHAR character set
export done in UTF8 character set and UTF8 NCHAR character set
Starting "EXL_ADMIN"."SYS_IMPORT_FULL_01":  EXL_ADMIN/***** directory=EXP_DIR parfile=/data/databases/Alma53/im
Processing object type SCHEMA_EXPORT/USER
ORA-39083: Object type USER:"EXL_ADMIN" failed to create with error:
ORA-02380: profile EXL_PROFILE does not exist

Failing sql is:

CREATE USER "EXL_ADMIN" IDENTIFIED BY VALUES
'S:93E742BC38EED452BF8CB13A367BFD93E2CFC07D3A17146D1089EBC2E6A4;T:E38FD39F5AFA93171D8B499855A7583E1E090B7DF23673AA3
DEFAULT TABLESPACE "USERS" TEMPORARY TABLESPACE "TEMP" PROFILE "EXL_PROFILE"

Processing object type SCHEMA_EXPORT/SYSTEM_GRANT
Processing object type SCHEMA_EXPORT/ROLE_GRANT
ORA-39083: Object type ROLE_GRANT failed to create with error:
ORA-01919: role 'EXL_SCHEMA' does not exist

Failing sql is:

GRANT "EXL_SCHEMA" TO "EXL_ADMIN"

ORA-39083: Object type ROLE_GRANT failed to create with error:
ORA-01919: role 'URM_SCHEMA' does not exist

Failing sql is:
```

```
GRANT "URM_SCHEMA" TO "EXL_ADMIN"
```

```
ORA-39083: Object type ROLE_GRANT failed to create with error:
```

```
ORA-01919: role 'PLUSTRACE' does not exist
```

```
Failing sql is:
```

```
GRANT "PLUSTRACE" TO "EXL_ADMIN"
```

```
...
```

```
Processing object type SCHEMA_EXPORT/TABLE/INDEX/INDEX
```

```
Processing object type SCHEMA_EXPORT/TABLE/CONSTRAINT/CONSTRAINT
```

```
Processing object type SCHEMA_EXPORT/TABLE/STATISTICS/TABLE_STATISTICS
```

```
Job "EXL_ADMIN"."SYS_IMPORT_FULL_01" completed with 4 error(s) at Fri Oct 9 02:10:05 2020 elapsed 0 00:03:55
```

Alma Table/Field Definitions (High-Level)

The majority of data elements in the Alma exit data include the following base set of 12 fields which give each table entry its relevant primary unique internal ID, ownership and editor history (for example, which user modified the record and when). All data provided is specific to the single institution exiting, even if the institution is part of a consortium.

Field	Description
ID	Primary Key
APPLICATION	Internal use
CREATOR	User Name of the record Creator
MODIFIED_BY	User Name the record was Modified By
MODIFIED_BY_JOB	The Job ID for records batch updated by a job
CREATE_DATE	Date Created (UTC)
MODIFICATION_DATE	Date Modified (UTC)

Field	Description
MODIFICATION_HISTORY	Internal session tracking of record modifications
CUSTOMERID	ORGANIZATION_UNIT.ID
INSTITUTIONID	ORGANIZATION_UNIT.ID
LIBRARYID	ORGANIZATION_UNIT.ID
LIBRARYUNITID	Not In Use

Certain data related to transient events and caches, configuration, and encrypted personal data elements are not included in the Alma local backup as they can be exported securely from Alma using standard export or analytics routines.

General

Field	Description
ORGANIZATION_UNIT	<p>This table manages institution and library definitions.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>STATUS</p> <ul style="list-style-type: none"> ACTIVE, DELETED <p>ORG_TYPE</p> <ul style="list-style-type: none"> CUSTOMER, INSTITUTION, LIBRARY <p><u>Primary Associated Table/s:</u></p> <p>All other tables reference ORGANIZATION_UNIT. ORGANIZATION_ID via their CUSTOMERID, INSTITUTIONID and LIBRARYID.</p>
ATTACHMENT	<p>All binary attachments of all areas of the system are stored here.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>ATTACHED_TO_TYPE - the data area type of each attachment – e.g. com.exlibris.repository.model.HLicense = License com.exlibris.core.infra.model.HFrUser = User</p> <p><u>Primary Associated Table/s:</u></p> <p>ATTACHED_TO_ENTITY_ID=ID of relevant data area indicated by ATTACHED_TO_TYPE (e.g. LICENSE.ID, HFRUSER.ID, PO_LINE.ID, etc.)</p>
NOTE	All area's notes (except inventory notes stored in HDEMETADATA.VALUE and user notes stored in USER_NOTES).

Field	Description
	<p><u>Key Fields with Set Enumeration:</u></p> <p>ATTACHED_TO_ENTITY_TYPE- the data area type of notes – e.g. com.exlibris.urm.acquisition.model.po.POLine = PO line</p> <p><u>Primary Associated Table/s:</u></p> <p>ATTACHED_TO_ENTITY_ID=ID of relevant data area indicated by ATTACHED_TO_ENTITY_TYPE (e.g. PO_LINE.ID, LICENSE.ID, etc.)</p>

Acquisitions and ERM

Table	Description
CONVERSATION	<p>Conversation chains opened per vendor typically based on a POL claim are managed here.</p> <p><u>Primary Associated Table/s:</u></p> <p>ENTITY_ID = VENDOR.ID</p> <p>RELATED_ENTITY_ID = PO_LINE.ID</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>RELATED_ENTITY_TYPE</p> <ul style="list-style-type: none"> com.exlibris.urm.acquisition.model.po.POLine
CONVERSATION_MESSAGE	<p>Each message of each conversation chain with a vendor triggered by a POL claim is managed here.</p> <p><u>Primary Associated Table/s:</u></p> <p>CONVERSATION_ID = CONVERSATION.ID</p>
FUND_LEDGER	<p>All ledgers, summary funds and allocated funds are defined here for all Fiscal years.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>STATUS</p> <ul style="list-style-type: none"> DRAFT, ACTIVE, INACTIVE <p>ENTITY_TYPE</p> <ul style="list-style-type: none"> LEDGER, SUMMARY, ALLOCATED <p><u>Primary Associated Table/s:</u></p> <p>POLICY_ID = FUND_POLICY.ID</p>
FUND_LEDGER_SERVED_UNITS	<p>Each ledger, summary fund and allocated fund's available organization levels served (e.g. which libraries within the institution may expend and encumber the fund) are managed here. When any library is allowed to use the fund in the institution, the SERVED_UNIT_ID = INSTITUTIONID and the INCLUDE_SUB_UNIT = 1 – meaning all of the institution's libraries may use the fund.</p> <p><u>Key Fields with Set Enumeration:</u></p>

Table	Description
	<p>INCLUDE_SUB_UNIT</p> <ul style="list-style-type: none"> • 0/1 <p><u>Primary Associated Table/s:</u></p> <p>SERVED_UNIT_ID = ORGANIZATION_UNIT.ID</p> <p>FUND_ID = FUND_LEDGER.ID</p>
FUND_POLICY	<p>Specific rules or behaviors defined for any given fund. For instance, overencumbrance % or overexpenditure allowance. Typically policies are shared and defined at the ledger level.</p>
FUND_TRANSACTION	<p>All fund transactions associated with allocated funds and their related orders or invoices, where relevant, are defined here.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>TRANSACTION_ITEM_TYPE</p> <ul style="list-style-type: none"> • ALLOCATION, ENCUMBRANCE, DISENCUMBRANCE, EXPENDITURE, TRANSFER <p><u>Primary Associated Table/s:</u></p> <p>FUND_ID = FUND_LEDGER.ID</p> <p>PO_LINE_ID = PO_LINE.ID</p> <p>INVOICE_LINE_ID = INVOICE_LINE.ID</p>
FUND_TRANSACTION_HISTORY	<p>Like FUND_TRANSACTION, but contains past historical fund transactions.</p>
INVOICE	<p>All invoices are managed here.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>PAYMENT_METHOD</p> <ul style="list-style-type: none"> • CREDITCARD, ACCOUNTINGDEPARTMENT <p>STATUS</p> <ul style="list-style-type: none"> • ACTIVE, CLOSED <p>TASK_NAME</p> <ul style="list-style-type: none"> • Ready to be Paid, InApproval, InReview, Waiting to be Sent, CLOSED <p>PAYMENT_STATUS</p> <ul style="list-style-type: none"> • NOT_PAID, PAID <p>APPROVAL_STATUS</p>

Table	Description
	<ul style="list-style-type: none"> • CREDITCARD, ACCOUNTINGDEPARTMENT <p><u>Primary Associated Table/s:</u></p> <p>VENDOR_ID= VENDOR.ID</p> <p>VENDOR_ACCOUNT_ID= VENDOR_ACCOUNT.ID</p>
INVOICE_EXPLICIT_RATE	<p>Holds any explicit rate invoice currency details – where a specific currency rate defined should override the actual date’s rate of exchange.</p> <p><u>Primary Associated Table/s:</u></p> <p>INVOICE_ID=INVOICE.ID</p>
INVOICE_LINE	<p>All invoices’ lines are managed here.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>INVOICE_LINE_TYPE</p> <ul style="list-style-type: none"> • REGULAR, DISCOUNT, ADJUSTMENT, SHIPMENT, OVERHEAD, INSURANCE <p><u>Primary Associated Table/s:</u></p> <p>INVOICE_ID=INVOICE.ID</p>
LICENSE	<p>Holds all core license information other than license terms.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>REVIEW_STATUS</p> <ul style="list-style-type: none"> • INREVIEW, PENDING, ACCEPTED <p>TYPE</p> <ul style="list-style-type: none"> • ADDENDUM, LICENSE <p>STATUS</p> <ul style="list-style-type: none"> • DELETED, DRAFT, ACTIVE, EXPIRED, RETIRED <p>LICENSE_STORAGE_LOCATION</p> <ul style="list-style-type: none"> • Code table LicenseStorageLocation <p><u>Primary Associated Table/s:</u></p> <p>LICENSOR_ID=VENDOR.ID</p>
LICENSE_HISTORY	<p>Same as License, but stores historical information about past license changes and updates.</p>

Table	Description
LICENSE_ INVENTORY	<p>Indicates which e-inventory records are associated with which license.</p> <p><u>Primary Associated Table/s:</u></p> <p>LICENSE_ID=LICENSE.ID</p> <p>PACKAGE_ID=HDEMETADATA.ID</p>
LICENSE_ NEGOTIATION	<p>For Network Zones only. Used to negotiate license terms for member institutions.</p> <p><u>Primary Associated Table/s:</u></p> <p>LICENSE_ID.LICENSE.ID</p> <p>MEMBER_CODE=ORGANIZATION_UNIT.CODE</p> <p>MEMBER_NAME=ORGANIZATION_UNIT.NAME</p>
LICENSE_ NEGOTIATION_ HISTORY	<p>Same as License Negotiation, but historical negotiations and activity are stored here.</p>
LICENSE_TERM	<p>Stores all the license terms of each license.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>LICENSE_TERM_CODE and LICENSE_TERM_VALUE are determined by DLF-ERMI standard values.</p> <p><u>Primary Associated Table/s:</u></p> <p>LICENCE_ID=LICENSE.ID</p>
LICENSE_TERM_ HISTORY	<p>Same as License term, but stores historical license terms and activity previously stored on licenses.</p>
PDA	<p>Patron Driven Acquisition vendor profile information managed here.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>STATUS</p> <ul style="list-style-type: none"> ACTIVE, CANCELLED, DRAFT, PAUSED <p><u>Primary Associated Table/s:</u></p> <p>REPOSITORY_PROFILE_ID=MD import repository-level profile id</p> <p>ORDER_PROFILE_ID=MD import order-level profile id</p> <p>VENDOR_ID=VENDOR.ID</p> <p>LICENSE_ID=LICENSE.ID</p>

Table	Description
PO	<p>Stores and manages all purchase orders.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>STATUS</p> <ul style="list-style-type: none"> ACTIVE, CLOSED, CANCELLED <p>TASK_NAME</p> <ul style="list-style-type: none"> NEW, INREVIEW, WAITING_FOR_SENDING_APPROVAL, WAITING_FOR_READY_LINES, INAPPROVAL,SENT <p><u>Primary Associated Table/s:</u></p> <p>VENDOR_ID=VENDOR.ID</p> <p>VENDOR_ACCOUNT_ID=VENDOR_ACCOUNT.ID</p>
PO_LINE	<p>Stores and manages all PO lines.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>PO_LINE_TYPE</p> <ul style="list-style-type: none"> All Physical, Electronic and Services POL types both continuous, one-time and standing. <p>STATUS</p> <ul style="list-style-type: none"> ACTIVE, CLOSED, CANCELLED <p>TASK_NAME</p> <ul style="list-style-type: none"> TRIAL, INREVIEW, WAITING_FOR_MANUAL_RENEWAL, RENEWAL_TRIAL, WAITING_FOR_INVOICE, AUTO_PACKAGING, MANUAL_PACKAGING, SENT, READY, CYCLIC_RENEWAL, TASK_NAME, DEFERRED <p>CLAIMED</p> <ul style="list-style-type: none"> 0/1 <p>MANUAL_RENEWAL</p> <ul style="list-style-type: none"> 0/1 <p>INVOICE_STATUS</p> <ul style="list-style-type: none"> PARTIALLY_INVOICED, FULLY_INVOICED, NO_INVOICE <p>RECEIVING_STATUS</p> <ul style="list-style-type: none"> 0/1 <p>REVIEW_STATUS</p> <ul style="list-style-type: none"> NEED_REVIEW, NO_REVIEW, UNCHECKED_REVIEW <p>ACQUISITION_METHOD</p> <ul style="list-style-type: none"> TECHNICAL, DEPOSITORY, EXCHANGE, APPROVAL, PURCHASE, VENDOR_SYSTEM, GIFT, OTHER, LEGAL_DEPOSIT <p>INVENTORY_MATERIAL_TYPE</p>

Table	Description
	<ul style="list-style-type: none"> Any value in Physical or Electronic material type. Only used to initially populate the material type of the inventory the POL creates <p><u>Primary Associated Table/s:</u></p> <p>PO_ID=PO.ID</p> <p>VENDOR_ID=VENDOR.ID</p> <p>VENDOR_ACCOUNT_ID=VENDOR_ACCOUNT.ID PDA_ID=PDA.ID</p> <p>LICENSE_ID=LICENSE.ID (Only used for populating LICENSE_INVENTORY when initially creating PO_LINE)</p>
PO_LINE_HISTORY	Like PO_LINE, but historical changes to PO_LINES are stored here.
POLINE_STAKE_HOLDERS	<p>Indicates all interested users for each PO line and their preference for being notified once the material is received/activated.</p> <p><u>Primary Associated Table/s:</u></p> <p>USER_ID=HFRUSER.ID</p> <p>PO_LINE_ID=PO_LINE.ID</p>
TRIAL	<p>Manages the PO line trials for specific e-inventory.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>STATUS</p> <ul style="list-style-type: none"> ACTIVE, DRAFT, ANALYSIS, SENT, CLOSED <p>TRIAL_STATUS</p> <ul style="list-style-type: none"> RECOMMENDED, NOT_RECOMMENDED, NO_DESICION, RECOMMENDED_RESERVATION <p><u>Primary Associated Table/s:</u></p> <p>ACQ_ITEM_ID=PO_LINE.ID</p>
TRIAL_PARTICIPANT	<p>Indicates which users are participating in each trial.</p> <p><u>Primary Associated Table/s:</u></p> <p>USER_ID=HFRUSER.ID</p> <p>TRIAL_ID=TRIAL.ID</p>
TRIAL_QUESTION	<p>Indicates the staff-determined questions used by each trial participant for each trial.</p> <p><u>Primary Associated Table/s:</u></p> <p>TRIAL_ID=TRIAL.ID</p>

Table	Description
FEEDBACK	<p>Trial feedback for each trial question from each trial participant.</p> <p><u>Primary Associated Table/s:</u></p> <p>TRIAL_ID=TRIAL.ID</p> <p>TRIAL_PARTICIPANT_ID=HFRUSER.ID</p> <p>TRIAL_QUESTION_ID=TRIAL_QUESTION.ID</p>
SURVEY_FORM	<p>Surveys created for running evaluations and trials in Alma. Contains a form name and code based on the survey created by staff.</p>
SURVEY_QUESTION	<p>The questions and order of questions included in each survey.</p> <p><u>Primary Associated Table/s:</u></p> <p>SURVEY_ID= SURVEY_FORM.ID</p>
USAGE_DATA_LOCAL	<p>Electronic usage / Counter data is harvested here and used by Analytics e-usage and e-usage/cost reports.</p>
VENDOR	<p>Core vendor data information.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>STATUS</p> <ul style="list-style-type: none"> • 1=Active, 0=Inactive, 2=Deleted <p><u>Primary Associated Table/s:</u></p> <p>USERID=HFRUSER.ID (Every vendor has a non-viewable user record in order to allow association of contact info with the vendor)</p>
VENDOR_ACCOUNT	<p>Core vendor account data information</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>STATUS</p> <ul style="list-style-type: none"> • 1=Active, 0=Inactive, 2=Deleted <p><u>Primary Associated Table/s:</u></p> <p>VENDOR_ID=VENDOR.ID</p>
VENDOR_ACCOUNT_PAY_METHODS	<p>Includes all the payment methods supported by each specific vendor account. This ties together with invoicing preferences when invoicing on a specific vendor and vendor account.</p> <p><u>Key Fields with Set Enumeration:</u></p>

Table	Description
	<p>PAYMENT_METHOD_STR</p> <ul style="list-style-type: none"> ACCOUNTINGDEPARTMENT, ATTACHMENT, INVOICE, CASH, BANKTRANSFERS, DEPOSITACCOUNT, PREPAYMENT, CREDITCARD <p><u>Primary Associated Table/s:</u></p> <p>VENDOR_ACCOUNT_ID=VENDOR_ACCOUNT.ID</p>
<p>VENDOR_ACCOUNT_SERVED_UNITS</p>	<p>Each vendor or vendor account's available organization levels served (which libraries may manage/own a PO/PO line) are managed here. When any library is allowed in the institution, the SERVED_UNIT_ID = INSTITUTIONID and the INCLUDE_SUB_UNIT = 1 – meaning all of the institution's libraries may use the vendor/vendor account.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>INCLUDE_SUB_UNIT</p> <ul style="list-style-type: none"> 0/1 <p><u>Primary Associated Table/s:</u></p> <p>SERVED_UNIT_ID = ORGANIZATION_UNIT.ID</p> <p>VENDOR_ACCOUNT_ID=VENDOR_ACCOUNT.ID</p> <p>VENDOR_ID=VENDOR.ID</p>
<p>VENDOR_AND_ACCOUNT_PERSON</p>	<p>Contact users who associate with vendor/vendor account records.</p> <p><u>Primary Associated Table/s:</u></p> <p>VENDOR_ACCOUNT_ID= VENDOR_ACCOUNT.ID</p> <p>VENDOR_ID= VENDOR.ID</p> <p>USER_ID=HFRUSER.ID (contact user associated with vendor/account)</p>
<p>VENDOR_INTERFACE</p>	<p>Vendor electronic interface records associated with vendors.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>Various fields based on fixed values for interface field definition consistent with UI options.</p> <p><u>Primary Associated Table/s:</u></p> <p>VENDOR_ID=VENDOR.ID</p>
<p>VENDOR_SUSHI_ACCOUNT</p>	<p>A vendor's specific SUSHI accounts used for Counter data loading connection details.</p>

Field	Description
MMS_RECORD	<p>All Bib, Holding and local Authority metadata is managed here – the core metadata is managed in the VALUE field as standard metadata xml (MARC, UNIMARC, KORMARC, Dublin Core). Management fields, such as suppressed records, are stored as table fields.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>OBJECTTYPE</p> <ul style="list-style-type: none"> • BIB_MMS, HOLDING, AUTHORITY_MMS <p>REGISTRY_ID</p> <ul style="list-style-type: none"> • 3 = Marc21, 8=Unimarc, 7=Kormarc, 9=CnMarc <p>LIFE_CYCLE</p> <ul style="list-style-type: none"> • 0=Active, 3=Deleted <p>TAG_SUPPRESSED</p> <p>TAG_SYNC_EXTERNAL_CATALOG</p> <p>TAG_BRIEF</p> <p>TAG_SYNC_NATIONAL_CATALOG</p> <ul style="list-style-type: none"> • 0, 1 <p>CATALOGER_LEVEL</p> <ul style="list-style-type: none"> • 00-99 <p><u>Primary Associated Table/s:</u></p> <p>LINK_INST and LINK_ID are used for records which are managed outside of your institution (either CZ or NZ for network zone members)</p>
MMS_RECORD_VERSION	Same as MMS_RECORD but stores all history of metadata updates.
HDEMETADATA	<p>All inventory (P, E and D) and levels are managed here – the primary metadata for non-MARC/UNIMARC/KORMARC based metadata used by everything other than Holdings is managed in the VALUE field as xml. VALUE stores all inventory attributes such as BARCODE and ENUM/CHRON for items and proxy and linking information for electronic inventory.</p> <p>Holding record primary xml (managed as MARC/UNIMARC/KORMARC) is stored in MMS_RECORD whereby HDEMETADATA.MID=MMS_RECORD.MMS_ID when OBJECTTYPE='HOLDING'.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>OBJECTTYPE</p> <ul style="list-style-type: none"> • IEP, HOLDING, ITEM <p>IEP is for physical inventory. It aggregates all physical holdings and items for a particular title. PARENT_ID links items to holdings and holdings to IEP.</p> <ul style="list-style-type: none"> • IEE, TPS, PORTFOLIO

Field	Description
	<p>IEE is for electronic portfolio title inventory. It aggregates all e-portfolios for a particular title in a specific package's service. PARENT_ID links PORTFOLIO to TPS and TPS to IEE.</p> <ul style="list-style-type: none"> • IEPA, PPS <p>IEPA is for e-packages. PPS associates specific package services for specific e-titles. PPS links to IEPA via PARENT_ID.</p> <ul style="list-style-type: none"> • IED, REPRESENTATION, REMOTE_REPRESENTATION, FILE <p>IED is for digital inventory. It aggregates all digital inventory for a particular title. REPRESENTATIONS have files and are managed by Alma. REMOTE_REPRESENTATIONS do not have files and are linked to an external repository. PARENT_ID links REPRESENTATION and REMOTE_REPRESENTATION to IED and FILES to REPRESENTATION</p> <ul style="list-style-type: none"> • IE_MMS – used when a Bib title has no inventory for Primo publishing purposes. • COLLECTION – for collection entity used to aggregate records into groups. <p>LIFECYCLE</p> <ul style="list-style-type: none"> • IN_PERMANENT_REPOSITORY, DELETED <p>PROCESS_TYPE</p> <ul style="list-style-type: none"> • ILL, HOLDSHELF, LOAN, CLAIM_RETURNED_LOAN, LOST_LOAN, TRANSIT, WORK_ORDER_DEPARTMENT, ACQ, TECHNICAL <p>BASE_STATUS (available/not available)</p> <ul style="list-style-type: none"> • 0, 1 – for Physical • 10,11 – for Electronic <p><u>Primary Associated Table/s:</u></p> <p>MMSID=MMS_RECORD.ID (IE-title level points to BIB, Holdings points to metadata Holding stored in MMS_RECORD)</p> <p>LINK_INST and LINK_ID are used for records which are managed outside of your institution (either CZ or NZ for network zone members)</p> <p>PROCESS_ID (goes with PROCESS_TYPE for physical ITEMS):</p> <p>-HOLDSHELF, TRANSIT, WORK_ORDER_DEPARTMENT, ILL:</p> <p>PROCESS_ID = FUL_REQ_WORKFLOW_ENTITY.ID</p> <p>-LOAN, CLAIM_RETURNED_LOAN, LOST_LOAN</p> <p>PROCESS_ID=ITEM_LOAN.ID</p> <p>-ACQ</p> <p>PROCESS_ID=PO_LINE.ID</p> <p>-TECHNICAL</p> <p>No PROCESS_ID – this is used for migrated not on shelf item statuses</p> <p>PO_LINE_ID=PO_LINE.PO_LINE_REFERENCE</p>
INVENTORY_AF_MANAGEMENT	Electronic inventory which has 'available for' group settings (for multi-campus and central network zone e-inventory management) are managed here; indicating which e-inventory records are available for which group.

Field	Description
	<p><u>Primary Associated Table/s:</u></p> <p>PID=HDEMETADATA.MID</p> <p>GROUP_ID=Mapping table InventoryAFManagementGroup Group ID</p>
GROUP_PARAMETERS	<p>Electronic inventory local attributes when 'available for' group settings are in use. For instance, group-level local proxy settings or notes. When available for groups are not in use, the local settings are stored in HDEMETADATA.VALUE.</p> <p><u>Primary Associated Table/s:</u></p> <p>PID=HDEMETADATA.MID</p> <p>GROUP_ID=Mapping table InventoryAFManagementGroup Group ID</p>
HDESTREAMREF	<p>Local digital management stores digital-related metadata and storage pointers for HDEMETADATA.OBJECTTYPE=FILE here.</p>
COLLECTION_MEMBERS	<p>Contains the individual Bib and inventory records included in a Collection.</p> <p><u>Primary Associated Table/s:</u></p> <p>COLLECTION_PID=HDEMETADATA.MID</p> <p>MMS_ID=MMS_RECORD.ID</p>

Fulfillment

Field	Description
FUL_REQ_APPROVAL	<p>Fulfillment requests which require approval such as copyright clearance requests.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>APPROVAL_STATUS</p> <ul style="list-style-type: none"> • Approved, Rejected, WaitingForCC, <p><u>Primary Associated Table/s:</u></p> <p>MMS_ID=MMS_ID.ID</p> <p>REQUEST_ID= FUL_REQ_WORKFLOW_ENTITY.ID</p> <p>APPROVER_ID=HFRUSER.ID</p>
FUL_REQ_DESTINATION	<p>Fulfillment requests which are routed to a different library, desk, department or institution.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>DESTINATION_TYPE</p> <ul style="list-style-type: none"> • CIRCULATION_DESK, SERVICE_UNIT, LIBRARY, USER_WORK_ADDRESS, USER_HOME_ADDRESS, OUT_OF_INSTITUTION

Field	Description
	<p><u>Primary Associated Table/s:</u></p> <p>REQUEST_ID= FUL_REQ_WORKFLOW_ENTITY.ID</p> <p>DESTINATION_ID= ORGANIZATION_UNIT.ORGANIZATION_ID (for other Libraries or Institutions)</p> <p>DESTINATION_INST_CODE= ORGANIZATION_UNIT.CODE</p>
FUL_REQ_ITEM	<p>Item-level requests item and priority tracking.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>PRIORITY</p> <ul style="list-style-type: none"> • A numeric value from lowest priority to highest priority <p><u>Primary Associated Table/s:</u></p> <p>ITEM_ID=HDEMETADATA.MID</p> <p>REQUEST_ID= FUL_REQ_WORKFLOW_ENTITY.ID</p>
FUL_REQ_TOU	<p>Tracks the terms of use applied at the time of specific requests.</p> <p><u>Primary Associated Table/s:</u></p> <p>REQUEST_ID= FUL_REQ_WORKFLOW_ENTITY.ID</p> <p>TOU_ID=The Terms of Use defined for the particular request</p>
FUL_REQ_WORKFLOW_ENTITY	<p>The co-primary request tracking table which tracks all requests' workflow.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>PRIORITY</p> <ul style="list-style-type: none"> • A numeric value from lowest priority to highest priority <p>STATUS – Can be any status defined in various departments and workflows of the institution.</p> <p>STEP_TYPE</p> <ul style="list-style-type: none"> • PICKUP_FROM_SHELF, DEPOSIT, HOLD_SHELF_PROCESSING, WAITING_FOR_REMOTE_STORAGE, DIGITIZATION, WORK_ORDER, COMM_WITH_REMOTE_STORAGE, OUT_OF_LIBRARY, IN_LIBRARY, ON_HOLD_SHELF, STEP_TYPE, DOCUMENT_DELIVERY <p>NEXT_STEP</p> <ul style="list-style-type: none"> • DEPOSIT, OUT_OF_LIBRARY, IN_LIBRARY, ON_HOLD_SHELF <p>DESTINATION_TYPE</p> <ul style="list-style-type: none"> • CIRCULATION_DESK, SERVICE_UNIT, LIBRARY <p>TASK_NAME</p> <ul style="list-style-type: none"> • DocumentDelivery, PlaceOnHoldShelf, PickupFromShelf, DepositItem, WorkOrderDepartment, WaitingForRemoteStorage, TransitItem, DigitizetItem, CommunicatingWithRemoteStorage, HoldShelfProcessing

Field	Description
	<p><u>Primary Associated Table/s:</u></p> <p>ITEM_LOCATION_CODE = LOCATION_CODE</p> <p>ITEM_LOCATION_LIB_ID=ORGANIZATION_UNIT.ORGANIZATION_ID</p> <p>DESTINATION_ID=ORGANIZATION_UNIT.ORGANIZATION_ID</p> <p>DESTINATION_INST_CODE= ORGANIZATION_UNIT.CODE</p> <p>LOCATION = Target LOCATION LOCATION_CODE USER_ID= HFRUSER.ID</p> <p>ASSIGN_TO = HFRUSER.ID</p>
FUL_REQUEST	<p>The co-primary request tracking table which tracks all requests.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>REQUEST_STATUS</p> <ul style="list-style-type: none"> • FAILED, REJECTED, ACTIVE, READY <p>SEARCH_TYPE</p> <ul style="list-style-type: none"> • PHYSICAL_TITLE, PHYSICAL_ITEM, ELECTRONIC_TITLE <p>SEL_INVENTORY_TYPE</p> <ul style="list-style-type: none"> • ITEM, VIRTUAL_HOLDING, HOLDING, IEE <p><u>Primary Associated Table/s:</u></p> <p>SEL_MMS_ID= MMS_RECORD.ID</p> <p>SEL_INVENTORY_ID=HDEMETADATA.MID</p> <p>SUP_INSTITUTION_ID= ORGANIZATION_UNIT.ORGANIZATION_ID</p> <p>REQUESTER_ID=HFRUSER.ID</p> <p>MOVE_LIBRARY_ID= ORGANIZATION_UNIT.ORGANIZATION_ID</p> <p>MOVE_LOC_CODE=LOCATION_CODE</p> <p>WORK_FLOW_ID= FUL_REQ_WORKFLOW_ENTITY.ID</p> <p>RECALLED_ITEM_LOAN_PID= HDEMETADATA.MID</p> <p>READING_LIST_CITATION_ID= READING_LIST_CITATION.ID</p> <p>RS_REQUEST_ID= IN_RES_SHR_REQUEST.ID or OUT_RES_SHR_REQUEST.ID</p>
FUL_REQUEST_HISTORY	Same as FUL_REQUEST for older fulfilled requests
IN_RES_SHR_	<p>Manages incoming (lending) requests for resource sharing.</p> <p><u>Key Fields with Set Enumeration:</u></p>

Field	Description
REQUEST	<p>FORMAT</p> <ul style="list-style-type: none"> DIGITAL, PHYSICAL, PHYSICAL_NON_RETURNABLE <p>LOCATE_STATUS</p> <ul style="list-style-type: none"> ResourceLocated, NoResourcesLocated <p>CITATION_TYPE</p> <ul style="list-style-type: none"> BK (Book), CR (Course Reserve) <p>IN_RES_REQUEST_STATUS</p> <ul style="list-style-type: none"> RETURNED_BY_PARTNER, RECEIVED_BY_PARTNER, SHIPPED_PHYSICALLY, CANCELLED, REJECTED, DELETED, SHIPPED_DIGITALLY, RENEW_REQUESTED, LOCATE_FAILED, BEING_PROCESSED, EXPIRED, WILL_SUPPLY, OVERDUE_ITEM, REQUEST_COMPLETED, REQUEST_CREATED_LEND <p>LEVEL_OF_SERVICE</p> <ul style="list-style-type: none"> WHEN_CONVINIENT, RUSH_LOCAL, EXPRESS_LOCAL, NORMAL_LOCAL, NORMAL_FULL <p><u>Primary Associated Table/s:</u></p> <p>MMS_ID=MMS_RECORD.ID</p> <p>IE_ID=HDEMETADATA.MID</p> <p>ASSIGN_TO=HFRUSER.ID</p> <p>EXTERNAL_PROFILE_ID=RS Profile ID</p> <p>PARTNER_ID= RES_SHR_PARTNER.ID</p> <p>ITEM_BARCODE=Item's Barcode</p> <p>ITEM_ID=HDEMETADATA.MID</p>
IN_RES_SHR_REQUEST_HISTORY	Same as IN_RES_SHR_REQUEST, but for historical fulfilled incoming (lending) resource sharing requests
ITEM_LOAN	<p>Manages all active loans.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>LOAN_STATUS</p> <ul style="list-style-type: none"> 0 (Active), 1 (Renewed/Recalled), 2 (Completed) <p><u>Primary Associated Table/s:</u></p> <p>ITEM_ID=HDEMETADATA.ID</p> <p>USER_ID=HFRUSER.ID</p> <p>MMS_ID=MMS_RECORD.ID</p> <p>LOAN_CIRC_DESK_ID=Circulation Desk ID</p>

Field	Description
ITEM_LOAN_CHANGE	<p>Manages all activities within each loan such as Renewals and recalls.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>LOAN_STATUS</p> <ul style="list-style-type: none"> • 0 (Active), 2 (Completed) <p>LOAN_STATUS_CHANGE</p> <ul style="list-style-type: none"> • LOAN • UNDO_RETURN, WB_CHANGE_BACKWARD, CLAIMED_RETURN, LOST, AUTO_RENEW, OVERDUE_CLAIMED_RETURN, BULK_CHANGE_FORWARD, BULK_CHANGE_BACKWARD, OVERDUE_NOTIFICATION, RECALL, NORMAL, OVERDUE_LOST, WB_CHANGE_FORWARD, RENEW <p><u>Primary Associated Table/s:</u></p> <p>ITEM_LOAN_ID=ITEM_LOAN.ID</p> <p>CIRC_DESK_ID=Circulation desk ID</p>
OUT_RES_SHR_REQUEST	<p>Manages outgoing (borrowing) requests for resource sharing.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>FORMAT</p> <ul style="list-style-type: none"> • DIGITAL, PHYSICAL, PHYSICAL_NON_RETURNABLE <p>LOCATE_STATUS</p> <ul style="list-style-type: none"> • ResourceLocated, NoResourcesLocated <p>CITATION_TYPE</p> <ul style="list-style-type: none"> • BK (Book), CR (Course Reserve) <p><u>Primary Associated Table/s:</u></p> <p>MMS_ID =MMS_RECORD.ID</p> <p>ITEM_LOAN_ID=ITEM_LOAN.ID</p> <p>REQUESTER_ID=HFRUSER.ID</p> <p>STUB_ITEM_PID=HDEMETADATA.MID</p> <p>FUL_REQUEST_ID= FUL_REQUEST.ID</p>
OUT_RES_SHR_REQUEST_HISTORY	<p>Same as OUT_RES_SHR_REQUEST, but for completed historical outgoing (borrowing) resource sharing requests.</p>
RES_SHR_GENERAL_MESSAGE	<p>Resource sharing messages sent to/from RS partners.</p> <p><u>Key Fields with Set Enumeration:</u></p>

Field	Description
	<p>STATUS</p> <ul style="list-style-type: none"> DISMISSED, ACTIVE <p>TYPE</p> <ul style="list-style-type: none"> RECEIVED, SENT <p><u>Primary Associated Table/s:</u></p> <p>REQUEST_ID= FUL_REQUEST.ID</p>
RES_SHR_PARTNER	<p>Resource sharing partners are managed here.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>PROFILE_TYPE</p> <ul style="list-style-type: none"> EMAIL, ART_EMAIL, ISO, NCIP <p><u>Primary Associated Table/s:</u></p> <p>LOCATE_PROFILE_ID=Resource sharing locate profile ID config</p>
RES_SHR_PARTNER_RECORD	<p>Specific resource sharing partner request-related details</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>OUT_RES_REQUEST_STATUS</p> <ul style="list-style-type: none"> REQUEST_CREATED_BOR, CANCEL_NOT_ACCEPTED, READY_TO_SEND, REPORT_LOST, CANCELLED_BY_PATRON, REJECTED, LOANED, RECEIVED_DIGITALLY, CANCELLED, CANCEL_REPLY, RETURNED_BY_PATRON, RETURNED_TO_PARTNER, CANCEL_REQUESTED, LOCATE_FAILED, REQUEST_SENT, REQUEST_ACCEPTED, RECEIVED_PHYSICALLY, REQUEST_COMPLETED, RENEWED, RECEIVED_NOT_FOR_LOAN <p>RECORD_STATUS</p> <ul style="list-style-type: none"> Active, NonActive, Expired, Cancelled, Rejected <p><u>Primary Associated Table/s:</u></p> <p>OUT_RES_SHR_REQUEST_ID= OUT_RES_SHR_REQUEST.ID</p> <p>PARTNER_ID= RES_SHR_PARTNER.ID</p>
RES_SHR_PARTNER_REC_PARAM	<p>Specific parameters used by a resource sharing partner record.</p> <p><u>Primary Associated Table/s:</u></p> <p>RS_PARTNER_REC_ID= RES_SHR_PARTNER_RECORD.ID</p>

User Management

Field	Description
HFRUSER	This table manages users of the system. The information and user identifying information are not stored

Field	Description
	<p>here and are not provided in the Alma local backup. This table is provided with an ID and USER_NAME to enable interpretation user-related activity such as loans and requests.</p>
HFRUSERROLES	<p>All users' roles are managed here.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>ROLE_TYPE</p> <ul style="list-style-type: none"> • Each role in the system has a numeric value. <p><u>Primary Associated Table/s:</u></p> <p>USER_ID=HFRUSER.ID</p>
HFRUSERROLESPARAMETERS	<p>Some specific roles have special parameters, for instance circulation desk operators define circulation desks in which their role is relevant.</p> <p><u>Primary Associated Table/s:</u></p> <p>USERROLE_ID= HFRUSERROLES.ID</p>
USER_BLOCK	<p>Manages all cases where a user of the system has been blocked from any fulfillment service.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>TYPE</p> <ul style="list-style-type: none"> • A numeric value for each block type <p><u>Primary Associated Table/s:</u></p> <p>USER_ID=HFRUSER.ID</p> <p>BLOCK_DEFINITION_ID= A specific block configuration definition for the user's specific block.</p>
USER_DEMERIT	<p>When demerits are in use, all users' demerits are managed here.</p> <p><u>Primary Associated Table/s:</u></p> <p>LOAN_ID=ITEM_LOAN.ID</p> <p>USER_ID=HFRUSER.ID</p>
USER_FINES_FEES	<p>The sum of the outstanding users fines/fees are managed here.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>FINE_FEE_TYPE = Any of the supported fine fee types in your institution.</p> <p>FINE_FEE_STATUS = ACTIVE, INDISPUTE, CLOSED</p> <p><u>Primary Associated Table/s:</u></p>

Field	Description
	<p>ITEM_ID=HDEMETADATA.MID</p> <p>ITEM_LOAN_ID=ITEM_LOAN.ID</p> <p>USER_ID=HFRUSER.ID</p>
USER_FINE_FEE_TRANSACTION	<p>Each individual fine/fee a user accrues and/or pays partially or fully to reduce is tracked here.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>FINE_FEE_TRANSACTION_TYPE</p> <ul style="list-style-type: none"> • PAYMENT, WAIVE, EXPORTED_AND_PAID, REFUND <p>TRANSACTION_METHOD</p> <ul style="list-style-type: none"> • ONLINE, CASH, DEBIT_CARD, VISA, CREDIT_CARD, CHECK <p><u>Primary Associated Table/s:</u></p> <p>FINE_FEE_ID=USER_FINES_FEES.ID</p>
USER_NOTE	<p>Users' notes are tracked in this specific user note table.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>TYPE</p> <ul style="list-style-type: none"> • Each type is a numeric value <p>USERVIEWABLE</p> <ul style="list-style-type: none"> • 0, 1 <p><u>Primary Associated Table/s:</u></p> <p>USER_ID=HFRUSER.ID</p>
USER_PROXY	<p>Some users may have a proxy user defined for them. The link between users and their proxy users is set here.</p> <p><u>Primary Associated Table/s:</u></p> <p>PROXY_FOR_ID=HFRUSER.ID</p> <p>USER_ID=HFRUSER.ID</p>
USER_STATISTICS	<p>Users may optionally have statistical categories tagged for use in analytics reports. The user association with those category tags are managed here.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>STATISTICAL_CATEGORY</p> <ul style="list-style-type: none"> • A supported statistical category defined in the institution's configuration.

Field	Description
	<p><u>Primary Associated Table/s:</u></p> <p>USER_ID=HFRUSER.ID</p>

Course Management

Field	Description
COURSE	<p>All courses are managed here.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>STATUS</p> <p>0 (Inactive), 1 (Active)</p>
COURSE_INSTRUCTOR	<p>Links between courses and their instructors, defined as users in Alma.</p> <p><u>Primary Associated Table/s:</u></p> <p>USER_ID=HFRUSER.ID</p> <p>COURSE_ID=COURSE.ID</p>
COURSE_TERM	<p>Courses with multiple terms are defined here.</p> <p><u>Primary Associated Table/s:</u></p> <p>COURSE_ID= COURSE.ID</p>
READING_LIST	<p>Courses typically have reading lists; a grouping of a set of resources to be used in a course.</p> <p>Key Fields with <u>Set</u> Enumeration:</p> <p>READING_LIST_STATUS</p> <ul style="list-style-type: none"> • ReadyForProcessing, BeingProcessed, Inactive, Complete, BeingPrepared <p>STATUS</p> <ul style="list-style-type: none"> • DRAFT, PUBLISHED <p>VISIBILITY</p> <ul style="list-style-type: none"> • OPEN_TO_WORLD, PUBLIC, RESTRICTED <p><u>Primary Associated Table/s:</u></p> <p>COURSE_ID=COURSE.ID</p> <p>ASSIGN_TO=HFRUSER.ID</p>
READING_LIST_CITATION	<p>The specific Bibliographic resources grouped in a reading list.</p> <p>Key Fields with <u>Set</u> Enumeration:</p>

Field	Description
	<p>LOCATE_STATUS</p> <ul style="list-style-type: none"> MultipleResourcesLocated, ResourceLocated, NoResourcesLocated <p>CITATION_STATUS</p> <ul style="list-style-type: none"> A status for citations configured in your institution <p>CITATION_TYPE</p> <ul style="list-style-type: none"> E_BK (E-Book), BK (Book), E_CR (E-course reserve), CR (Course reserve) <p>Primary Associated Table/s:</p> <p>MMS_ID= MMS_RECORD.ID</p>
READING_LIST_COLLECTION	Relevant only for Leganto subscribers, for managing reading lists and their related citations.
READING_LIST_SECTIONS	Relevant only for Leganto subscribers, for managing reading lists and their citations.
READING_LIST_SUGGESTION	Relevant only for Leganto subscribers, for managing reading lists and their citations.
OWNER	<p>Used to set ownership of courses and reading lists.</p> <p><u>Key Fields with Set Enumeration:</u></p> <p>ATTACHED_TO_ENTITY_TYPE</p> <ul style="list-style-type: none"> <u>com.exlibris.urm.fulfillment.model.course.HCourse, com.exlibris.urm.fulfillment.model.course.HReadingList</u> <p><u>Primary Associated Table/s:</u></p> <p>ATTACHED_TO_ENTITY_ID=ID of relevant data area indicated by ATTACHED_TO_ENTITY_TYPE (e.g. COURSE.ID, READING_LIST.ID)</p> <p>USER_ID=HFRUSER.ID</p>