

Managing Named Users in Alma: Multi-Step Process

Step 1 - Find Alma Users Without Expiration Dates

Based on [Code from Github](#)

At a glance

Status: In-Process

Workflow ID: 9hWFoIOOCuguN86e

Version: 95997d36-81cc-43b3-9d5a-811a6960d07c

Environment / Tags: User Record Management; NZ Sandbox; NZ Production

Applies consortium-wide?: No

Runs on: NZ Sandbox and a second selectable Alma environment labeled NZ Production

Trigger: A LibOW web form submitted on demand; there is no automatic schedule.

Primary outcome: Scans Alma user records and emails a CSV listing accounts whose expiry_date is missing or blank.

Who receives results: shields@wrlc.org

Why this exists

User records without an expiration date may remain eligible longer than intended and can be difficult to locate through routine review. This workflow gives staff a repeatable audit that can be run against a selected Alma environment, first on a limited set of records for testing or across all available users.

The results provide the starting CSV for later workflows that assign purge dates and manage expired accounts.

What it does

- Presents a form where the operator chooses NZ Sandbox or NZ Production and enters the maximum number of users to scan.
- Treats a maximum of 0 as “scan all available users”; positive values are capped at 10,000.
- Routes the request to the Alma node associated with the selected environment.
- Requests full Alma user records in pages of up to 100.
- Checks each returned user for an absent, null, blank, or empty-object expiry_date.
- Extracts the Primary ID, preferred or first email address, and patron group for matching users.
- Stores matching rows and internal page-state rows in the users_missing_expiration LibOW data table.
- Continues requesting pages until it reaches the selected limit or Alma’s total record count.
- Builds a CSV report and emails it when matches exist.
- Sends a no-results email when no matching users are found.

Where it runs

Alma IZ(s)

- NZ Sandbox
- A second branch labeled NZ Production

Systems touched

- LibOW / n8n: Hosts the form and coordinates the workflow.
- Alma Users API: Retrieves full user records. An API is a controlled way for one system to request data from another.
- LibOW Data Tables: Temporarily stores matching rows and page-state information.
- Gmail: Delivers the report or no-results notice.

Credentials referenced

- NZ Sandbox - Alma APIs - Read Only
- SCF Sandbox - Alma APIs - Read Only
- Gmail Credentials - Generic LibOW

Reports / queries used

No Alma Analytics report is used.

The workflow queries the Alma Users API with:

- Full expansion
- Page size up to 100
- Offset-based pagination

LibOW data table:

- users_missing_expiration

How it works

Logic overview

The workflow validates the form, creates a timestamp-based run ID, and starts at offset zero. A Switch node selects the environment-specific Alma API node. Each response page is inspected in JavaScript rather than with a visual filter, allowing the workflow to detect several ways an expiration field can be missing or empty.

A page-state row records the next offset and whether more records remain. After the final page, the workflow retrieves all rows for the current run, removes the internal state rows, and creates the report.

If results exist:

The workflow creates and emails a CSV containing:

- Primary ID
- Email Address
- Patron Type

The email includes the run ID, selected environment, number of users scanned, and number of users without an expiration date.

If no results exist:

The workflow sends an email confirming completion and reporting that zero users without an expiration date were found. No attachment is sent.

CSV filename pattern:

alma-users-missing-expiration-<run ID>.csv

Step 2: Add Purge Dates to Alma Users from CSV

At a Glance

Status: In-Process

Workflow ID: WToSDYo9SCv2iZux

Version: 492f03e1-ca18-4316-8507-97642e38075a

Environment / Tags: User Record Management; SCF Sandbox credential

Applies consortium-wide?: No

Runs on: SCF Sandbox Alma environment

Trigger: A LibOW web form submitted on demand; there is no automatic schedule.

Primary outcome: Applies a selected purge date to Alma users listed in an uploaded Step 1 CSV and emails a detailed audit report.

Who receives results: shields@wrlc.org

Why this exists

Step 1 identifies accounts that lack an expiration date. This workflow provides a controlled follow-up process for assigning a purge date to those accounts. It requires an uploaded CSV, a selected date, a processing limit, and explicit confirmation before any Alma record is changed.

The workflow retrieves each complete Alma user record before updating it, reducing the risk of unintentionally replacing unrelated user data.

What it does

- Presents a form for a CSV upload, purge date, maximum number of users, and confirmation checkbox.
- Validates the date, confirmation, file upload, and processing limit.
- Converts the selected date to Alma's YYYY-MM-DDZ format.
- Reads the uploaded CSV and requires a Primary ID column.
- Removes blank and duplicate Primary IDs and applies the maximum-user limit.
- Processes one user at a time.
- Retrieves the complete Alma user record by Primary ID.
- Changes only the purge_date field and submits the complete user object back to Alma.
- Records GET failures, update failures, and successful updates without stopping the remaining rows.
- Creates a CSV audit report and emails the completion summary.

Where it runs

Alma IZ(s)

- SCF Sandbox

Systems touched

- LibOW / n8n: Hosts the submission form, CSV processing, loop, and reporting logic.
- Alma Users API: Retrieves and updates full Alma user records.
- Gmail: Sends the completion summary and audit report.

Credentials referenced

- SCF Sandbox - Alma APIs - Read & Write
- Gmail Credentials - Generic LibOW

Reports / queries used

No Alma Analytics report is used.

Input requirement:
CSV column: Primary ID

Alma operations:

- Get one complete user record
- Update one complete user record

How it works

Logic overview

The form submission is validated before processing begins. The CSV is converted into one LibOW item per unique Primary ID, subject to the maximum-user safety limit. A loop retrieves the complete user, makes a deep copy, changes purge_date, and sends the updated record through the Alma API node.

Each iteration returns a final success or failure row. The loop's completed output is checked against the number of queued users before the final report is created.

If results exist

This workflow always produces an audit result for every queued row:

- Successful users are marked Success.
- Retrieval or update failures are marked Failed, with the failure stage and available error details.

The workflow emails the CSV audit report after processing completes.

If no results exist

The workflow does not have a separate no-results branch. It stops with an error when the uploaded CSV has no data rows or contains no usable Primary IDs.

Step 3: Alma Expiration Checker

At a glance

Status: In-Process

Workflow ID: JjlojFEXPvTm7D06

Version: d93597a4-ef2b-43d3-afe8-ca234c4b4d2b

Environment / Tags: User Record Management; NZ Sandbox; NZ Production

Applies consortium-wide?: No

Runs on: NZ Sandbox and a second selectable Alma environment labeled NZ Production

Trigger: A LibOW web form submitted on demand; there is no automatic schedule.

Primary outcome: Finds users whose expiration date is on or before a selected date and emails CSV and JSON reports.

Who receives results: shields@wrlc.org

Why this exists

After purge dates have been assigned, staff need a repeatable way to identify accounts that have reached or passed an expiration threshold. This workflow scans a selected Alma environment and produces a reviewable list without changing user records.

The output CSV is designed to serve as the input for the later deactivation workflow.

What it does

- Presents a form for Alma environment, expiration cutoff date, and maximum users to scan.
- Treats 0 as “scan all users.”
- Converts the selected date to the end of that calendar day.
- Routes the request to the selected environment’s Alma node.
- Retrieves full Alma user records in pages of up to 50.
- Reads multiple possible expiration-field names and parses date-only or ISO date formats.
- Includes users whose expiration date is on or before the selected cutoff date.
- Collects Primary ID, first name, last name, preferred email, and expiration date.
- Continues through pages until the selected limit or total Alma user count is reached.
- Emails CSV and JSON reports when matches exist, or a no-results notice otherwise.

Where it runs

Alma IZ(s)

- NZ Sandbox
- A second branch labeled NZ Production

Systems touched

- LibOW / n8n: Hosts the form, pagination, date comparison, and report creation.
- Alma Users API: Retrieves full user records.
- Gmail: Sends reports or a no-results notice.

Credentials referenced

- NZ Sandbox - Alma APIs - Read Only
- SCF Sandbox - Alma APIs - Read Only
- Gmail Credentials - Generic LibOW

Reports / queries used
No Alma Analytics report is used.

Alma Users API configuration:

- Full user expansion
- Page size up to 50
- Offset-based pagination

How it works

Logic overview

The form validates the selected environment, cutoff date, and scan limit. The cutoff is stored as 23:59:59.999 UTC on the chosen date, so users expiring at any time on that date are included. The workflow accumulates matching users across Alma pages. Pagination continues until all selected users have been examined. The final report builder creates both CSV and JSON versions of the matching records.

If results exist

The workflow emails two attachments:

1. A CSV report with:
 - primary_id
 - first_name
 - last_name
 - email
 - expiration_date
2. A JSON report containing the same matching user records.

If no results exist

The workflow sends a completion email reporting that no expired users were found. It does not attach CSV or JSON files.

Step 4: Deactivate Alma Users from Step 3 CSV

At a glance

Status: In-Process

Workflow ID: H6EbLWv8vYyUf1AY

Version: 1ed30e19-195a-42f1-97be-a9cc0bdb16eb

Environment / Tags: User Record Management; NZ Sandbox; NZ Production

Applies consortium-wide?: No

Runs on: NZ Sandbox and NZ Production

Trigger: A LibOW web form submitted on demand; there is no automatic schedule.

Primary outcome: Changes users listed in the Step 3 CSV to INACTIVE, assigns the PurgePending user group, and emails an audit report.

Who receives results: shields@wrlc.org

Why this exists

Step 3 identifies accounts that have reached or passed the selected expiration threshold. Step 4 performs the controlled account change: it deactivates the selected users and places them in the PurgePending Alma user group.

Because this workflow modifies patron records, it includes an explicit confirmation checkbox, environment selection, and a maximum-user testing limit.

What it does

- Presents a form for the Step 3 CSV, Alma environment, maximum users, and deactivation confirmation.
- Treats a maximum of 0 as “process all CSV rows.”
- Validates the file, environment, limit, and confirmation.
- Reads primary_id values from the Step 3 CSV and removes blanks and duplicates.
- Processes one user at a time.
- Retrieves the complete user record from the selected Alma environment.
- Skips a user only when the account is already INACTIVE and already belongs to PurgePending.
- Otherwise sets status to INACTIVE and user group to PurgePending.
- Removes fields known to cause update errors, filters unsupported phone types, and deduplicates identifiers.
- Updates the full Alma user record and records success, skip, retrieval failure, or update failure.
- Creates CSV and JSON audit reports and emails them after the loop completes.

Where it runs

Alma IZ(s)

- NZ Sandbox
- NZ Production

Systems touched

- LibOW / n8n: Hosts the form, file processing, loop, record preparation, and reporting.
- Alma Users API: Retrieves and updates complete user records.
- Gmail: Sends the completion report and attachments.

Credentials referenced

- NZ Sandbox - Alma APIs - Read & Write
- NZ Production - Alma APIs - Read & Write
- Gmail Credentials - Generic LibOW

Reports / queries used

No Alma Analytics report is used.

Input CSV must contain one of these user identifier headings:

- primary_id
- Primary ID
- user_id
- User ID

Alma operations:

- Get User Details
- Update User Details

How it works

Logic overview

The workflow turns each unique identifier in the uploaded file into one loop item. A Switch node chooses the correct environment-specific GET credential. The complete user record is inspected before any change is made.

If the user is already inactive and in PurgePending, the workflow records a skip. Otherwise, it prepares a full update payload that changes the status and group while retaining the rest of the user data. A second environment Switch sends that payload to the corresponding update node.

All terminal paths return a final audit row to the loop. The report builder verifies that the number of final rows equals the number of queued users.

If results exist

Every queued user produces one of these outcomes:

- Success: Alma accepted the update.
- Skipped: The user was already inactive and already in PurgePending.
- Failed: The user could not be retrieved or updated.

The workflow emails CSV and JSON audit reports containing these results.

If no results exist

There is no separate no-results email branch. The workflow stops with an error if the uploaded CSV has no rows or contains no usable user identifiers.

Artifacts produced

Filename patterns:

deactivation_results_<environment>_<run ID>.csv

deactivation_report_<environment>_<run ID>.json

CSV columns:

- primary_id
 - status
 - stage
 - http_status
 - reason
 - tracking_id
 - processed_at
-

Step 5: Check PurgePending Users

At a glance

Status: In-Process

Workflow ID: iCDoBVA4jONrRGWc

Version: efa5b58e-02ac-4e3a-83f3-569ae76405cd

Environment / Tags: User Record Management; NZ Sandbox; NZ Production

Applies consortium-wide?: No

Runs on: NZ Sandbox and NZ Production

Trigger: A LibOW web form submitted on demand; there is no automatic schedule.

Primary outcome: Reviews uploaded Alma users, identifies those in PurgePending or DEL, classifies their expiration status, and emails CSV and JSON reports.

Who receives results: shields@wrlc.org

Why this exists

After user accounts have been deactivated and moved into a purge-oriented user group, staff need a verification step before any later deletion or cleanup process. This workflow provides a read-only audit of the selected accounts.

It distinguishes users that are expired, not yet expired, missing an expiration date, assigned to another group, or unavailable through the API.

What it does

- Presents a form for a CSV or TXT file, Alma environment, and maximum number of users.
- Treats 0 as “check all uploaded IDs.”

- Accepts the Step 4 results CSV or a single-column list of Alma Primary IDs.
- Recognizes several identifier headings and removes blank or duplicate IDs.
- Processes one user at a time.
- Retrieves the complete user from the selected read-only Alma credential.
- Checks whether the user group is exactly PurgePending or DEL.
- Classifies matching users as EXPIRED, NOT_EXPIRED, or NO_EXPIRY.
- Counts users in other groups and users that could not be retrieved.
- Creates a CSV containing the PurgePending and DEL analysis and a JSON file containing the full summary.
- Emails both files after all IDs have been checked.

Where it runs

Alma IZ(s)

- NZ Sandbox
- NZ Production

Systems touched

- LibOW / n8n: Hosts the form, uploaded-file processing, loop, classification, and report creation.
- Alma Users API: Retrieves complete user records without modifying them.
- Gmail: Sends the analysis and summary.

Credentials referenced

- NZ Sandbox - Alma APIs - Read Only
- NZ Production - Alma APIs - Read Only
- Gmail Credentials - Generic LibOW

Reports / queries used

No Alma Analytics report is used.

Accepted input formats:

- CSV
- TXT
- Step 4 results CSV
- Single-column identifier list

Recognized identifier headings:

- primary_id
- Primary ID
- user_id
- User ID
- ID

How it works

Logic overview

Each unique uploaded identifier becomes one loop item. A Switch node selects the appropriate Alma environment. The returned user record is inspected for its user-group code and expiration date.

Only users whose group code is exactly PurgePending or DEL are included in the CSV analysis. Users in other groups and API failures are retained in the JSON summary and counted in the email. Expiration comparison uses the current UTC calendar date:

- Earlier than today: EXPIRED
- Today or later: NOT_EXPIRED
- Missing or unreadable date: NO_EXPIRY

If results exist

The workflow always produces an analysis package when valid IDs were queued. The CSV includes only PurgePending and DEL users with:

- Primary ID
- User Group
- Expiry Date
- Status

The JSON summary also includes:

- Users in other groups
- Failed API retrievals
- Counts for each classification

If no results exist

There is no separate no-results branch. If no uploaded IDs belong to PurgePending or DEL, the CSV contains only its header row, while the JSON and email report zero matching users and include the other-group or failure counts.

Step 6 - Find Inactive PurgePending Alma Users

At a glance

Status	Inactive
Workflow ID	fdQ4jR6mvGdGdXB7
Version	48c34d9b-6201-4058-8498-d0831d8e5ce5

Environment / Tags	User Record Management; NZ Sandbox; NZ Production
Applies consortium-wide?	No
Runs on	NZ Sandbox and NZ Production
Trigger	On-demand LibOW web form; no automatic schedule
Primary outcome	Finds Alma users whose status is INACTIVE and whose user group code is PurgePending, then emails the results.
Who receives results	shields@wrlc.org

Why this exists

This workflow provides a direct, repeatable way to identify accounts that have already been deactivated and moved into the PurgePending user group. It supports the final review stage of the user-record cleanup process by producing a clear list of accounts that may be ready for later purge or deletion work.

Member library and WRLC HQ staff benefit from a controlled audit that can be tested on a limited number of users before scanning the complete selected Alma environment. The workflow is read-only: it retrieves and reports user information but does not modify Alma records.

What it does

- Displays a LibOW form where the operator selects NZ Sandbox or NZ Production.
- Accepts a maximum-user test limit; entering 0 scans all available users.
- Validates the selected environment and limit, caps positive limits at 10,000, and creates a timestamp-based run ID.
- Routes each page request to the corresponding read-only Alma API credential.
- Retrieves full Alma user records in pages of up to 100 users.
- Keeps only users whose status code is exactly INACTIVE and whose user group code is exactly PurgePending.
- Collects Primary ID, first name, last name, preferred or first email address, status, user group, expiration date, and purge date.
- Continues requesting pages until it reaches the selected test limit or Alma's total record count.

- Creates CSV and JSON reports when matching users are found.
- Emails a completion notice without attachments when no matching users are found.

Where it runs

Alma IZ(s)

- NZ Sandbox
- NZ Production

Systems touched

- LibOW / n8n: Hosts the request form, validates inputs, controls paging, filters users, and creates reports.
- Alma Users API: Retrieves full Alma user records. An API is a controlled way for one system to request data from another.
- Gmail: Sends the result package or the no-results completion notice.

Credentials referenced

- NZ Sandbox - Alma APIs - Read Only
- NZ Production - Alma APIs - Read Only
- Gmail Credentials - Generic LibOW

Reports / queries used

No Alma Analytics report is used. The workflow queries the Alma Users API directly with full expansion, a page size of up to 100, and offset-based pagination.

How it works

Logic overview

The form submission creates a new run and starts at offset zero. A Switch node chooses the sandbox or production Alma node. Each returned page is examined in code. The workflow normalizes the status and user-group values, then retains only records matching both required conditions: status INACTIVE and user group PurgePending.

Matching users are accumulated temporarily for the current run. After each page, the workflow calculates the next offset and determines whether another page is needed. When scanning is complete, the report node builds the output files, removes the temporary run data, and routes the result to the appropriate email branch.

If results exist

The workflow creates and emails both a CSV report and a JSON report. The email states the selected environment, the number of users scanned, and the number of matching users found.

If no results exist

The workflow sends a completion email stating that no matching users were found. No CSV or JSON attachment is included.

Error handling

If an Alma page request fails, the workflow removes the temporary run data and stops with an error that identifies the failed offset and the available Alma error message. No separate error workflow is referenced in the export.

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