DAM Training & Usage Guide for Admins

Ticket: AAEMDAM-3736 — Enablement | DAM Training & Usage Guide for Admins

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Objective

Facilitate SHRSS readiness to sustainably govern, structure, and operationalize AEM Assets as a strategic platform foundation for scalable content delivery, metadata-driven discovery, digital growth, and transformative leverage of platform capabilities.

The focus is not only on current-state understanding, but on the structural and governance conditions required to support scalable growth, future migrations, and advanced capability adoption.

The session will address specific areas of interest and concern for SHRSS stakeholders including:

- Reviewing the **current state** DAM structural architecture, aligning on optimal **foundational state** as well as an foundational implementation, governance, and adoption strategy
- Clarifying **admin/author processes** (uploading, versioning, approvals, avoiding broken references)
- Describing how **tags (`shrss` namespace)** and **metadata (`shrssmetadataschema`)** should be used together
- Capturing **follow-up work** for a new backlog/roadmap

DAM Content Architecture

DAM Structure

Current State

DAM root: `/content/dam/shrss`

Folder Structure - Top-level branches

Top-level folder	Typical usage (current)	Example paths
`cafe`	Cafe-specific assets per location	`/content/dam/shrss/cafe/amsterdam/en/photography`
`cf`	Content fragments (locations, news, venues)	`/content/dam/shrss/cf/locations/europe/france`
`corporate`	Brand/corporate: logos, campaigns, careers	`/content/dam/shrss/corporate/careers/en/photography`
`hotel`	Hotel-specific assets (global + properties)	`/content/dam/shrss/hotel/davos/en/photography/media`
`reverb`	Reverb brand assets	`/content/dam/shrss/reverb/atlanta/en/photography`
`training`	Training/sample content (CF + images)	`/content/dam/shrss/training/cf/news/corporate/en/2025`

❗ **Important:** `/content/dam/shrss/cf` holds **content fragments**, not traditional media assets. They are part of the **content model** and used heavily for locations and news.

For complete hierarchical structure, reference:

- SHRSS_DAM_Structure_Outline.pdf
- SHRSS_DAM_Structure.xlsx
- SHRSS-Content-Architecture-Workbook-v1_3.xlsx
    - 📝 **NOTE:** Includes a sheet with original approved DAM structure. May be out of date, but provides context and historical perspective

Foundational State

Optimal structure, adoption strategy/roadmap

1. Possible approach for handling legacy/migrated assets while: also adopting new structure, optimizing for Dynamic Media
    1. Create a new folder under `/content/dam` named `“migrated-assets”`:
        - Define hierarchical structure to be created under `migrated-assets` (Do not create the child folder structure now. Just define folder naming conventions to later be configured in and created by automated bulk migration process using Renovator. See below.)
            - A-Z subfolders
                - Move assets by name
            - 0-9 subfolders
                - Move assets by number
            - Create nested folders as needed for < 1000 max per folder requirement (A-01, A-02).
                - MAYBE nested subfolders based on asset type here
    2. Using *“Assets -> Reports”* tool, create and export Excel report of all assets in: `<parent folder> / photography`
        - In report spreadsheet, map assets to new home under `migrated-assets`
    3. Use "Renovator" tool or equivalent to move migrated assets in bulk to migrated-assets. Tool will locate and update all corresponding asset references in pages, etc. https://adobe-consulting-services.github.io/acs-aem-commons/features/mcp-tools/renovator/index.html

        ⚠ **Caution:** Before executing on a large number of assets, or in production, execute on a small, targeted set of assets in a lower environment and perform regression testing. Example: Subset of assets referenced in a specific set of test pages, experience fragments, and content fragments
    4. Define new, optimized folder structure
        - Already done via `shrss-primary` structure?
    5. Enforce governance policy to require that all new assets are to be placed in new structure, and that no assets are to be added to the `migrated-assets` folder

- Considerations for Dynamic Media

    - See Adobe documentation for DAM structure, asset naming, and other requirements and best practices for Dynamic Media implementation
        - Dynamic Media: Determine Your Folder Structure and File Naming Convention
        - Dynamic Media best practices
        - Folder structure best practices for AEM Assets

Important: When defining DAM structure, adhere to the maxim that asset folder names are for structure and governance, not search. Search for assets by metadata and tags.

How Folder Structure, Tags, and Metadata Work Together

Conceptual model

- **Folder**: primary grouping by **brand/site + location + language**
- **Tagging (`shrss` namespace)**: cross-cutting dimensions:
    - Brand / line of business (`lob`)
    - Property / venue / region
    - Content category (e.g., lifestyle, rooms, menus, philanthropy)
    - Campaign / news / events categories
- **Metadata schema (`shrssmetadataschema`)**: currently mostly **technical fields** (width, height, PDF title, video tech info) plus a basic **Location** field.

Metadata Schema Observations

- There are **few to no business fields** in the metadata schema (e.g., rights, usage, internal/external, campaign name).
- Today, **tags are carrying most of the business semantics**. That means:
    - Tag governance is critical.
    - Future schema enhancements should align carefully with existing tag branches (no duplicate concepts in both places).

Assets Metadata

Current Configuration

Metadata Schema

- Name: `shrssmetadataschema`
- Path: `/conf/global/settings/dam/adminui-extension/metadataschema/shrssmetadataschema`

Asset types covered

- `image` (base node)
- `image/jpeg`
- `image/tiff`
- `application/pdf`
- `video`

Fields (summary)

- **Image (generic image tab)**
  - `Width` (read-only; `tiff:ImageWidth`)
  - `Height` (read-only; `tiff:ImageLength`)
- **JPEG / TIFF**
  - `Location` (free-text; `Iptc4xmpExt:LocationShown`)
- **PDF**
  - `Pdf Title` (free-text; `pdf:Title`)
- **Video**
  - `Size` (`./jcr:content/metadata/size`)
  - `Duration (seconds)` (`videoDuration`)
  - `Total Bit Rate (kbps)` (`bitrate`)
  - `Video Codec` (`videoCodec`)
  - `Video Bit Rate (kbps)` (`videoBitrate`)
  - (All free-text fields; primarily technical.)

NOTE: There are currently **no dedicated business fields** such as `Usage rights`, `Internal/External`, `Campaign`, or `Content owner`.

How Authors See This in the UI

- When an author opens **Properties** → **Metadata** for:
  - An **image**, they see a **Basic** tab with Width/Height; JPEG/TIFF also show **Location**.
  - A **PDF**, they see **Pdf Title**.
  - A **video**, they see **Size, Duration, Bitrate, Codec** info.
- Most fields are either **read-only technical data** or **one-off free-text**.

Implication

- The **primary semantic classification** right now is **tags**, not form-based metadata.
- Business-critical information such as:
  - “Can I use this off-property?”
  - “Is this asset limited to a specific region or campaign?”

…is **not captured in the schema** yet, and often not reliably in tags either.

Recommended Metadata Enhancements

For future rounds (requirements/discovery), consider adding:

- **Rights & usage**
    - `Usage rights` (controlled list: internal-only, paid media, organic social, etc.)
    - `Expiration date` (if legally required)
- **Business context**
    - `Content owner` (team or role)
    - `Primary brand` (align with `shrss/brands`)
    - `Primary product` (align with `shrss/products`)
- **Search helpers**
    - `Short description` (for authors, not public)

DAM Operations & Governance

How and where to store assets in the correct hierarchy - https://shrss.atlassian.net/browse/AAEMDAM-3736

NOTE: *In this section, we're discussing how/where to upload in the DAM <u>based on current state</u>. In that sense, "correct hierarchy" is defined as "correct hierarchy for current architectural structure."*

Creating (Uploading) assets

- Cafe imagery → /cafe/<property>/en/photography
- Hotel imagery → /hotel/<property>/en/photography
- Reverb imagery → /reverb/<property>/en/photography
- Corporate/careers imagery → /corporate/careers/en/...
- Training/demos → /training/... only

Updating assets

This section focuses on "update" actions: replacing files, refining metadata, and deciding when an update should be a new version vs. a brand-new asset.

Updating an asset file (same asset, new version)

Use this when the **identity of the asset stays the same** (same photo/graphic, improved crop, color correction, minor copy fix, etc.) and you want to preserve references and history.

Steps: Replace the binary and create a new version

1. **Locate the asset**
   - In **Assets > Files**, navigate to the asset's folder.
2. **Open the asset details**
   - Click the asset to open its detail page (or use the top toolbar if you prefer inline tools).
3. **Upload the updated file**
   - Use **Replace** (or Upload new version if surfaced in your UI) to upload the new binary with the **same filename**, or
   - Drag-and-drop the updated file **onto the existing asset** (depending on your configured UI/workflow).
4. **Confirm the version**
   - AEM automatically creates a **new version** of the asset.
   - Optionally, open the **Timeline** / **Versions** panel and:
     - Add a **label** and **comment** (e.g., v2 – color corrected; approved by Brand).
5. **Validate references**
   - Use **References** to confirm which pages/components use this asset.
   - Spot-check at least one **published page** to ensure the updated file looks correct.

When to use this path

- You're fixing **minor issues** (typos, color correction, safe-area tweaks).
- You want **all existing references** (Sites pages, CFs, external consumers) to get the updated asset.
- You need a **version history** for audit purposes.

When not to use this path

- The change fundamentally alters the **meaning or usage** of the asset (e.g., new campaign, new offer, new legal terms).
  - In that case, create a **new asset** with a new filename and retire or unpublish the old asset.

Updating metadata (title, tags, rights, usage)

Steps: Update metadata on an existing asset

1. **Open the asset details** in Assets.
2. Click **Edit** or **View Properties**.
3. Update relevant metadata fields:
   - **Title / Description** – human-readable; used in search and in authoring UI.
   - **Tags** – apply appropriate shrss:* tags (brand, location, usage type, rights, etc.).

        - **Rights / expiry / usage** – ensure rights information matches the current contract.
4. **Save & close**.
5. Optionally, **republish** the asset so downstream consumers see the updated metadata immediately (depending on your replication / CDN behavior).

Best practices

- Prefer **tags and structured fields** over free-text for any data you may search/filter on later.
- If metadata updates are part of a **larger correction** (e.g., fixing a rights issue), consider:
    - Creating a **new version** first, then updating metadata, so there's a clear audit trail.
- Avoid making **frequent tiny edits** (e.g., title changes several times a day) to reduce noisy version history.

Versioning assets

- Use **asset versioning** when updating images currently used on live pages.
- See *"Appendix - Asset Versioning & Cleanup"* for a deep dive into asset versioning use cases, how-to info, and best practices.

Deleting assets (safely)

Deleting is **destructive** and can break pages, content fragments, and external consumers. Treat deletion as a **last step** in an asset's lifecycle.

⚠ *Before you delete: checks for authors/admins*

Before deleting any asset:

- **Check references**
    - Select the asset and open the **References** panel:
        - Confirm whether it's used on **Sites pages**, **content fragments**, **experience fragments**, or **other assets**.
- **Unpublish first**
    - If the asset is published:
        - Use **Manage Publication** or **Unpublish** from the toolbar.
        - Confirm unpublish has completed (especially in prod).
    - This avoids 404s and broken content in the live experience while you clean up authoring references.
- **Update or remove references**
    - For each reference:
        - Replace with a **new asset**, *or*

        - Remove the asset from the component/CF entirely.
    - Only proceed to delete once you're confident no live or upcoming content needs it.

Deleting an asset (step-by-step)

1. **Navigate to the asset** in **Assets > Files**.
2. Confirm you've:
    - **Checked references**, and
    - **Unpublished** the asset (if needed), and
    - **Updated/remediated** all references.
3. Select the asset and click **Delete**.
4. Confirm the deletion in the dialog.

Deletion best practices

- **Never delete a published, referenced asset** without:
    - First unpublishing it, and
    - Updating or removing all references.
- **Time deletions carefully**
    - Perform deletions **outside of peak traffic** when possible.
    - Coordinate with **business owners** if assets are part of campaigns or legal content.
- **Prefer "retirement" over immediate deletion**
    - For high-risk assets (legal, brand, compliance):
        - Unpublish and clearly mark them as **Retired** via metadata or tags.
        - Only delete once the business confirms no future need.

Restoring deleted assets from backup

Understand AEMaaCS content backup/restore functionality:
https://experienceleague.adobe.com/en/docs/experience-manager-cloud-service/content/operations/restore

- Understand how long deleted assets are retained and who can restore them.
- Use restores sparingly; restored assets may still need **republishing** and **reference validation**.

Avoiding broken references (moving, renaming, deleting, updating)

*This section applies whenever you **move**, **rename**, **update**, or **delete** assets.*

Broken references typically show up as:

- Missing images on pages,

- Components showing “asset not found”,
- Or incorrect/old imagery lingering because the wrong asset was updated.

Core principle

> **Once an asset is in use, its path and identity are “contractual.” Treat changes as a controlled operation, not a casual tweak.**

How to avoid breaking references

- **Always use the References panel before changing an asset**
    - Before you **move**, **rename**, **delete**, or **bulk update**:
        - Open **References** to see where the asset is used.
        - If it appears on **critical pages** (home, navigation hubs, key campaigns), plan more carefully.
- **Avoid changing paths for in-use assets**
    - If you must move assets (e.g., folder cleanup):
        - Move them in **small batches**.
        - Immediately test key pages that reference them.
- **Be deliberate when replacing files**
    - If replacing the binary would **change the message, brand, or legal meaning**, create a **new asset** and update references instead of overwriting.
- **Do not delete referenced assets**
    - Only delete assets once:
        - All references have been updated or removed, and
        - The asset is **unpublished**, and
        - Stakeholders have confirmed it is safe to retire.
- **Use preview/stage (UAT) environments for risky changes**
    - For large cleanups (mass moves, tag overhauls, metadata refactors):
        - Trial the change in **stage/UAT**.
        - Validate that **no critical references break** before repeating in prod.

Suggested workflow for high-risk changes

For assets used on **critical pages** (home, key campaigns, navigation):

1. **Identify references**
    - Use **References** to list all consuming pages/CFs.
2. **Plan the change**
    - Decide if it’s a **version update** (same asset, new version) or a **replacement asset** (new identity).
3. **Apply change in stage/UAT**
    - Perform the move/rename/update.

    - Run link checks and visual tests on key pages.
4. **Communicate**
    - Let relevant stakeholders (marketing, brand, product owners) know what is changing and when.
5. **Apply in prod with validation**
    - Repeat the change in prod during a safe window.
    - Immediately verify that **pages load correctly** and **assets render as expected**.

Scheduling publication and unpublishing

Scheduling lets you plan **when** assets (and optionally their referencing content) go live or come down, instead of doing everything manually in real time. In AEM Assets, you typically schedule via **Manage Publication**.

When to use scheduling

- **Planned launches** – campaign start times, new site/section go-lives, promotions.
- **Planned takedowns** – rights expiry, end of campaigns, legal or compliance deadlines.
- **Off-hours operations** – avoid making changes during peak business hours but have them take effect at a specific time.

How to schedule a publish

1. In **Assets > Files**, select one or more assets.
2. Click **Manage Publication**.
3. Choose **Publish**.
4. Decide whether to:
    - Publish **now**, or
    - **Schedule** for a specific date/time.
5. (Recommended) Enable the option to **include references** (pages, CFs, XFs) where appropriate so those consumers are published along with the asset.
6. Review the summary and **Confirm**.

How to schedule an unpublish

1. In **Assets > Files**, select the asset(s) you plan to retire.
2. Click **Manage Publication**.
3. Choose **Unpublish**.
4. Choose a **future date/time** (for scheduled takedown) or **now**.
5. Decide whether to include **referencing pages/CFs/XFs** if you also want those to unpublish or be updated.
6. Review and **Confirm**.

Scheduling best practices

- **Coordinate with campaigns and business owners** – especially for Homepage, navigation, and major campaign assets.
- Use **scheduling for predictable events** (launches, takedowns, rights expiry), but still:
    - Verify content in **Stage/UAT** before the scheduled time.
    - Add a brief **calendar reminder** around the scheduled event to double-check live behavior.
- Be mindful of **time zones** (for example, confirm whether the instance is using [INSERT_TIME_ZONE_REFERENCE] as the reference time).
- For critical assets, plan **staggered scheduling**:
    - Schedule assets first,
    - Then pages/CFs/XFs in the same window,
    - And monitor the live site right after the window.

Workflows and approvals for asset changes (future capability)

Today, SHRSS does **not** have formal approval workflows configured for Sites or Assets. Authors and admins coordinate approvals **outside AEM** (for example, via email or chat), and then publish assets manually.

AEM, however, supports **workflows** that can be used to enforce approvals before assets are published. Even if not implemented yet, it's useful for Admins and Authors to understand what a **basic approval workflow** could look like.

What workflows do (conceptually)

- Provide a **structured sequence of steps** (review, approve, reject) for changes.
- Assign **tasks** to specific roles or groups (for example, DAM Reviewer, Brand/Legal).
- Optionally **automate publish/unpublish** when approvals are complete.
- Record an **audit trail** (who approved what, when, with what comments).

Out of the box AEM workflows

- Technical workflows like **DAM Update Asset** (handles renditions, metadata extraction).
- General models like **Request for Activation** for content approvals.

For SHRSS, a future **"Asset Approval"** workflow could be based on these patterns and tailored to your groups.

Example: Lightweight SHRSS asset approval workflow (future blueprint)

This is a proposed model; it does ***not*** *exist yet in the current SHRSS implementation.*

Roles (example)

- **Content Author** – uploads/updates assets, sets metadata and tags.
- **DAM Reviewer** – checks metadata quality, tagging, folder placement.
- **Brand/Legal Approver (optional)** – reviews high-risk assets (brand, legal, rights sensitive).

Proposed flow

1. **Author prepares the asset**
    - Uploads the asset into the correct **folder**.
    - Sets mandatory **metadata and tags** (for example brand, usage, rights, expiry).
    - Reviews the asset in **Stage/UAT** if needed.
2. **Author starts the approval workflow**
    - From the asset, chooses **Start Workflow** (or similar) and selects:
        - SHRSS – Asset Approval (future custom model based on OOTB patterns).
    - Adds a brief **comment** (what changed, campaign, due date).
3. **DAM Reviewer step**
    - Workflow assigns a task to the **DAM Reviewer** group.
    - Reviewer checks:
        - **Metadata completeness and accuracy**.
        - **Tagging and folder placement** against SHRSS guidelines.
        - **Rights/usage fields** for compliance.
    - Reviewer chooses:
        - **Approve** – moves the workflow forward, *or*
        - **Reject** – sends the asset back to the author with comments.
4. **Brand/Legal step (optional)**
    - For specific folders or tag combinations (for example, brand-critical or legal-sensitive assets), the workflow adds a second approval step.
    - Brand/Legal Approver:
        - Confirms **visual and messaging alignment**.
        - Confirms **rights and restrictions**.
        - Approves or rejects with comments.
5. **Automatic publish on final approval**
    - When all required steps are approved:
        - Workflow can **auto-publish** the asset to **Publish**.
        - Optionally, it can **notify the author** that the asset is live.
    - If desired, the workflow can also:
        - Trigger a reminder to **publish referencing pages/CFs/XFs**, or

        - Automatically create a task for page authors.

6. **Audit and reporting**
    - Workflow history provides a **trace**:
        - Who approved,
        - When they approved,
        - What comments they added.
    - This is especially useful for **rights management and compliance**.

Search & Findability

- **Current authoring search experience**
    - Authors likely search by **free text** (filename/title) and maybe by **tags**, or opt to **browse** to locate an asset.
    - Many assets might not be consistently tagged yet.
- **Optimal authoring search experience**
    - Author uses magnifying glass in header of AEM admin console and enters minimal criteria based on asset metadata/tags and immediately finds the relevant asset resource
- **Best practices**
    - Always apply:
        - At least **one tag** (lob?)
        - A **property** tag (when property-specific)
        - A **category** tag (logo, lifestyle, rooms, etc.)

Roles & Responsibilities

In addition to **Librarian**, **Content Admins** and **Product Owner** will have access to the Adobe DAM, but Content Authors will not. - https://shrss.atlassian.net/browse/AAEMDAM-3736

Roles

- **DAM Architect/Librarian**
    - Owns folder conventions.
    - Owns shrss taxonomy and metadata schema roadmap.
    - Approves new top-level tags and schema changes.
- **Content Administrators (Brand/Property author leads?)**
    - Train their teams on “golden path” folder + tag usage.
    - Request changes to tags/metadata.
- **Developers / AEM TAs**

    - Ensure Sites templates and components correctly use tags and metadata.
    - Support automation where possible (e.g., default tags by folder).

Recommended Exercise

- As an exercise, align current **user/group/permission** reality to *Permissions* sheet in `SHRSS-Content-Architecture-Workbook-v1_3.xlsx`
    - How do **Librarian**, **Content Admins**, **Product Owner**, and **Content Author** roles align to currently defined AEM groups and permissions?
        - Are changes required based on updated governance policies, business processes, etc.?

Dynamic Media (DM)

How Dynamic Media fits into publishing - https://shrss.atlassian.net/browse/AAEMDAM-3736

- **Current state**
    - Dynamic Media is:
        - **Provisioned**, configured in lower environments.
        - **Not configured** in production.
        - Sites authoring components currently **do not use DM components**.
- **DM adoption/content strategy**
    - Which content types would benefit most from DM?
        - Hero images? Carousels? Media-heavy experiences?
    - What would need to change in DAM to adopt DM smoothly?
        - Clear separation of hero vs. raw imagery?
        - Consistent aspect-ratio tagging or naming?
    - **Implementation roadmap**
        - Prerequisite: DAM structural architecture migration: **current state** -> **foundational state**
        - Determine DM approach for legacy/migrated assets:
            - Add legacy assets to DM and run a script to update referencing pages, content fragments, and experience fragments

            OR
            - Only use DM for new assets created after **foundational state** governance cut-off/cutover
        - DAM integration and asset processing
        - Update relevant Sites authoring components

Appendix A - Asset Versioning & Cleanup

Audience: Authorized content authors, DAM architect, and admins
Purpose: Explain *how* to version assets in AEMaaCS, *when* to version, what SHRSS's **automatic version retention** looks like, and how to avoid both data loss and unnecessary bloat.

What a "version" is in AEM Assets

In AEM Assets, a **version** is a snapshot of an asset at a point in time:

- The **binary file** (image, video, PDF, etc.)
- Its **metadata** (title, description, tags, custom fields)
- Sometimes associated renditions and technical properties (as handled by DAM Update workflows)

Versions are accessed via the **Timeline** in the Assets UI, and can be:

- **Compared** (e.g., see when something changed)
- **Restored** (roll back to an earlier state)
- **Labelled** (e.g., "Approved 2026-03", "Pre-campaign update")

For SHRSS, versions are meant to be a **short-to-medium-term safety net**, not long-term archival.

How authors create versions (step-by-step)

A. Automatic versioning on replace/upload

Whenever you **upload a new file over an existing asset** (same path + same asset), AEM automatically creates a new version.

1. Navigate to the asset in **Assets**.
2. Click **Upload** and select a file **with the same name** into the same folder or drag & drop into the folder and choose to **replace** the existing asset.
3. AEM:
    - Re-runs the **DAM Update Asset** processing.
    - **Creates a new version** in the background.

   Result: You now have Version N+1 with the new binary. Older versions (N, N-1, …) are still visible in Timeline (subject to retention described in 4.x.4).

B. Manual "Save as Version" (metadata or binary changes)

Use this when you're making a **significant change** (binary or critical metadata) and you want an explicit rollback point.

1. Open the asset's details page.
2. Click **Timeline** on the left.
3. In the Timeline panel, use the **"Save as Version"** option.
4. Optionally:
    - Enter a **label** (e.g., "Legal-approved", "Pre-localization").
    - Enter a **comment** (why you're versioning).

  Result: A new version is created with current binary + metadata. You can restore this specific version later.

C. Restoring a previous version

When an asset update goes wrong:

1. Go to the asset and open **Timeline**.
2. Scroll to the desired older version (e.g., "Version 3", or the one with your label).
3. Click **Revert** / **Restore** (wording may differ slightly depending on UI version).
4. Confirm.

  Result: AEM creates a new *current* version whose content equals the previously selected version (i.e., rollback creates yet another version).

When to version vs. when it may not make sense

Good times to create a new version (or rely on auto-versioning):

- You are **replacing the asset binary** (new design, updated photo, fixed typo in PDF).
- A change is **legally or compliance significant** (e.g., removing sensitive info, updating T&Cs).
- You're introducing a **campaign-critical change** right before go-live and want a quick rollback path.
- You're making **major metadata changes** that change how an asset is discovered or used (e.g., changing campaign, brand, usage rights tags).

Usually *not* worth a manual version:

- Small metadata tweaks (fixing a misspelled title, adding one non-critical keyword).
- Bulk tag cleanups that can be redone easily in bulk if needed.
- Temporary edits that you will immediately overwrite again before anything is published or used.

  Rule of thumb for authors:

- If it directly affects what end-users see or what legal/compliance expects → **version**.
- If it's minor internal housekeeping → **no manual version**, rely on the normal automatic versions on binary changes.

SHRSS version retention and audit log policy (stage + prod)

The **mt-stage-prod** maintenance configuration defines how long versions and audit logs last in SHRSS **Stage** and **Prod** environments:

```
kind: "MaintenanceTasks"
version: "1"
metadata:
 envTypes: ["stage", "prod"]
data:
 versionPurge:
  maximumVersions: 10
  maximumAgeDays: 30
  paths: ["/content"]
  minimumVersions: 1
  retainLabelledVersions: false
 auditLogPurge:
  rules:
   - all:
     maximumAgeDays: 30
     contentPath: "/content"
     types: ["replication", "dam", "pages"]
```

Practical implications for authors:

- **Where this applies:**
  - All content under /content, **including /content/dam/....**
- **How many versions are kept:**
  - At least **1 version** per asset.
  - Up to **10 versions** per asset.
- **How long versions are kept:**
  - Versions older than **30 days** are eligible for purge.
  - Combined with the 10-version cap, this means you can't rely on very old or very frequent versions being available.
- **Labelled versions are *not* exempt:**
  - retainLabelledVersions: false means labels are **for human clarity only**—they do **not** protect a version from purge.
- **Audit logs:**
  - Detailed DAM audit events (dam, replication, pages) older than **30 days** are purged.
  - You cannot rely on more than ~30 days of audit history for troubleshooting "who changed what when?"

Takeaway for authors:
Essentially, you have a **working month** of history and up to ~10 recent versions per asset as your safety net—this is not long-term archive.

Automated versioning: what is and isn't recommended

What AEM does by default (SHRSS included):

- **Binary replacement creates a version automatically.**
    - Anytime you upload a new file for an existing asset (same path), AEM versions it.
- **Metadata-only edits do *not* auto-version** unless you explicitly do "Save as Version".
- **There is no default "version on publish" workflow**:
    - Publishing/unpublishing does not, by itself, create versions.

Custom "auto versioning" workflows (what we're *not* doing today):

You *could* build custom workflows, for example:

- Create a version every time an asset is published.
- Create a version every time specific metadata fields change.

However, given SHRSS's current **purge policy (max 10 versions, 30 days)**, heavy automatic versioning:

- Increases storage churn and processing load.
- Makes version history noisier (harder to find the one "meaningful" change).
- Doesn't actually extend your retention because the purge still trims versions beyond 10 / 30 days.

Current stance / recommendation:

- Keep relying on AEM's **standard automatic versioning on binary replacement**.
- Use **manual "Save as Version"** for important transitions.
- Avoid extra auto-versioning (such as "version on publish") unless there's a clear business/compliance requirement.

Versioning scenarios: what authors should do

Scenario	What you do	Version behavior	Recommendation
New final design for an image or PDF	Upload new file with the same name to the same folder, replacing the existing asset	AEM automatically creates a new version	✅ Rely on this; no manual "Save as Version" needed unless you want a special label/comment

Scenario	What you do	Version behavior	Recommendation
Fixing a small metadata typo (title, description)	Edit metadata and save	No new version unless you explicitly "Save as Version"	✅ No manual version needed; low risk
Changing usage rights, legal disclaimer, or key tags	Update metadata; optionally "Save as Version" with label "Legal-approved"	If you "Save as Version", a new version is created, often without changing binary	✅ Use manual version with a label – makes rollbacks and audits simpler
Complete visual redesign of a heavily reused asset	Replace the binary (auto version), then optionally "Save as Version" with note "New visual direction"	Auto version on replace; manual version adds clarity	✅ Use both: rely on auto version and add a label/comment for future you
Testing out a temporary crop or experimental variant	Prefer uploading as a **separate asset** (e.g., in a /temp or /working folder)	Separate asset has its own version history	✅ Don't clutter the main asset's versions with experiments; use a separate working asset
Big multi-step metadata cleanup on many assets	Use bulk editing; avoid creating manual versions on each small step	No extra versions unless you "Save as Version"	✅ If nervous, create **one version before** the cleanup for a representative asset; don't version each tiny change

Version cleanup best practices (for a mature DAM)

Because versions are purged after ~30 days and capped at 10, the main risk is **over-relying** on versions or **creating excessive noise**, not "running out of space."

For authors:

- **Don't use versions as long-term storage.**
  - If you want to keep old creative directions for months/years, store them as **separate assets** in clearly named folders (e.g., /archive/2025/campaign-x/...), not just as versions.
- **Minimize unnecessary "Save as Version" clicks.**
  - Reserve manual versions for *meaningful* states: "Approved", "Pre-legal-change", "Pre-localization".
- **Batch your changes.**

    - When working on many small tweaks, try to batch them into a single “before” and “after”, rather than creating many intermediate versions.

For the DAM architect/admin:

- Confirm that the **maintenance tasks** (max 10 versions, 30 days, /content) are appropriate for SHRSS’s risk tolerance.
- Consider **excluding specific paths** from the strictest purge policy *only* if:
    - There are assets with heavy compliance or long audit requirements, and
    - The storage/cost/performance trade-off is justified.
- Periodically **communicate the retention rules** to authors:
    - “If you need to be able to roll back months later, versions are *not* the right tool; create archived copies.”

Key assets versioning takeaways

- **You *do* have version safety – but it’s short-term.**
    - Typically a month or so of history, and up to ~10 recent changes.
- **Replacing files is safe and versioned.**
    - Don’t fear replacing an asset when you have a better or fixed version; AEM keeps recent history.
- **Use manual versions sparingly but intentionally.**
    - Think “significant milestone” or “legal/brand critical change”.
- **Versions are not archives.**
    - For long-term historical reference, use separate archived assets and/or controlled archive folders.

*If there’s any doubt about whether to rely on versions or to duplicate/archive an asset, authors should **ask the DAM architect or TA** for guidance on that specific use case.*

Appendix B - How asset updates flow to live pages (AEM Sites/Assets)

This section explains, step-by-step, how an update in DAM flows (or does not flow) to live pages, content fragments (CFs), and experience fragments (XFs) in AEM Sites — and where authors need to intervene.

Important: Pages always point to assets by their path. If we just update the file but keep the path, the change flows through automatically once we publish the asset and caches clear. If we move or rename the asset, we must update and republish anything that references it; otherwise, live pages can break. Deletions are final and should only happen after unpublishing and cleaning up references.

This section explains at a high level how **asset changes** in DAM flow through to **pages, content fragments (CFs), experience fragments (XFs), and the live site**, and where manual actions are still required.

Flow 1 – Updating an asset (binary/metadata, no path change)

Use this model when:

- The **asset path does not change**.
- You are **replacing the file** (new version) and/or **updating metadata** on an existing asset.

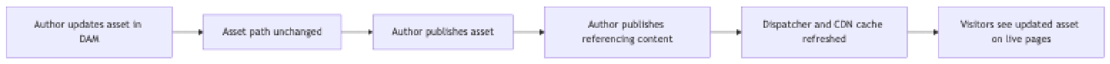
High-level flow

1. **DAM author updates the asset**
   - Uploads a **new version** of the same asset (same path).
   - And/or updates **metadata/tags/rights**.
2. **References remain intact**
   - AEM retains the **same asset path**, so references in:
     - Pages (Sites components),
     - Content Fragments (CFs),
     - Experience Fragments (XFs),
     - Other assets and components

     continue to point to the same asset.
3. **Author publishes the asset**
   - Author publishes the updated **asset**.
   - The UI may **prompt to publish referencing resources** (pages, CFs, XFs using the asset).
4. **Author publishes referencing pages, CFs, XFs**
   - Author confirms and publishes the **referencing content**.

5. **Dispatcher and CDN cache invalidation**
    - Publish triggers **cache invalidation** at dispatcher and CDN for affected paths.
    - New asset binary and/or metadata is retrieved on the next requests.
6. **Live site reflects the change**
    - Site visitors now see the **updated asset** and/or metadata on all published pages, CFs, XFs that reference it.

Diagram – Update flow


Author updates asset in DAM
Asset path unchanged
Author publishes asset
Author publishes referencing content
Dispatcher and CDN cache refreshed
Visitors see updated asset on live pages

Flow 2 – Moving or renaming an asset (path change)

Use this model when:

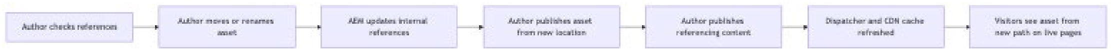
- You are **moving an asset to a new folder**, or
- **Renaming** the asset so that its **path changes**.

High-level flow

1. **DAM author checks references**
    - Before moving or renaming, the author opens **References** to see:
        - Which **pages**,
        - Which **CFs or XFs**, and
        - Which **other assets** currently use the asset.
2. **Author moves or renames the asset in DAM**
    - Asset is **moved** to a new folder and/or **renamed**.
    - AEM attempts to **update internal references** for:
        - Standard Sites components,
        - CFs and XFs using supported reference patterns.
3. **References are updated (where supported)**
    - For supported components and models, AEM rewrites the **stored path** to the new asset location.
    - Any **custom or external references** (for example stored in plain text, third-party systems, APIs) must be updated **manually**.
4. **Author publishes asset from new location**
    - Author publishes the **moved or renamed asset**.
5. **Author publishes referencing pages, CFs, XFs**
    - Author publishes the **referencing content** so it points to the **new path** on publish.
6. **Dispatcher and CDN cache invalidation**

    - Publish triggers **cache invalidation** at dispatcher and CDN for affected pages and asset URLs.
7. **Live site reflects the new path**
    - Site visitors see the asset from its **new path** on all published pages, CFs, XFs that reference it.

Diagram – Move/Rename flow


Author checks references
Author moves or renames asset
AEM updates internal references
Author publishes asset from new location
Author publishes referencing content
Dispatcher and CDN cache refreshed
Visitors see asset from new path on live pages

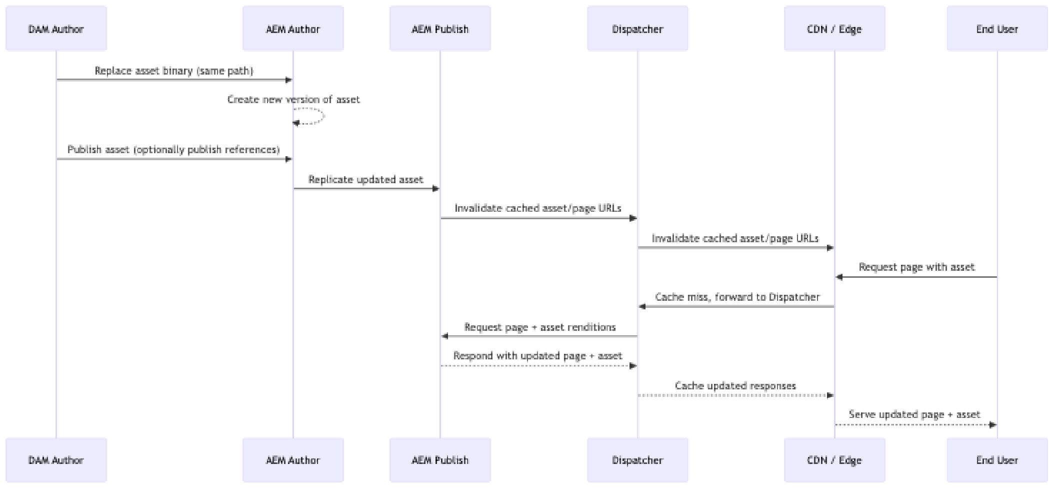
High-level flow overview

At a high level, when an asset is updated in AEM Assets:

1. **DAM author updates the asset** in the **author** environment
    - Update can be: new binary (file), new metadata, move/rename (path change), or delete.
2. **References in author** (pages, CFs, XFs) point to the asset by its **JCR path**
    - If the path doesn't change, references keep working automatically.
    - If the path changes via AEM's **Move** operation (with reference update), AEM updates internal references.
3. **Author publishes the asset** (and sometimes its references)
    - The updated asset is replicated to **publish**.
    - Authors are usually prompted to **publish referencing pages/CFs/XFs** when needed.
4. **Dispatcher + CDN cache are invalidated** for the affected paths
    - AEM's flush mechanism invalidates cached entries, so new content is fetched.
5. **End users request pages**
    - Pages on publish still reference the **same asset path**, now backed by the new binary/metadata.
    - If paths changed, pages/CFs/XFs must be republished so the new path reaches publish.

Flow diagram – asset update to live page

The following diagram illustrates a **binary update with no path change** (the most common case):


DAM Author
AEM Author
AEM Publish
Dispatcher
CDN / Edge
End User
Replace asset binary (same path)
Create new version of asset
Publish asset (optionally publish references)
Replicate updated asset
Invalidate cached asset/page URLs
Invalidate cached asset/page URLs
Request page with asset
Cache miss, forward to Dispatcher
Request page + asset renditions
Respond with updated page + asset
Cache updated responses
Serve updated page + asset
DAM Author
AEM Author
AEM Publish
Dispatcher
CDN / Edge
End User

When updates do *not* flow automatically

Updates do **not** automatically flow in these situations:

- **External systems / hard-coded URLs**
  - Any URL to the asset that is:
    - Hard-coded in external websites, emails, PDFs, or apps, or
    - Stored in external systems (e.g., campaign tools)
  - will **not** be updated if the asset is moved/renamed or replaced.
- **Manual path edits / package operations**
  - If someone changes asset paths or references via **CRXDE** or content packages without using the AEM Move/Reference Update tools, AEM cannot reliably update all references.
- **Metadata copied, not read dynamically**
  - For pages/components that **copy metadata** at authoring time (rather than reading from DAM each render), you must **resave and republish** those pages/CFs after metadata changes.
- **Cached pages that are not invalidated**
  - If Dispatcher/CDN flushing is misconfigured, pages may continue serving **stale content** even after updates are published.