

From Scripts to Self-Service

Safe Bulk Content Updates in Adobe Document Authoring
and EDS

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What We'll Cover

From OOTB search limitations to a custom DA app and live demo

- Why OOTB search breaks down at scale
- How DA enables custom, author-first tools
- Designing, a safe, DOM-aware search & replace workflow
- Live Demo



What Are DA and EDS?

Authoring and delivery in the Edge Delivery architecture

Adobe Document Authoring (DA)

- Author-first content model built on simple documents
- Content is structured and versioned
- Optimized for speed, scale, and collaboration

Edge Delivery Services (EDS)

- High-performance content delivery system
- Turns authored documents into fast, globally distributed sites
- No traditional publish pipeline or authoring servers
- Enables rapid iteration and site-wide changes

DA defines how content is authored and structured.

EDS defines how that content is delivered at scale.

Existing Search Capabilities

Traditional AEM Search

Searching and replacing are fundamentally separate concerns in traditional AEM.

Search

- Powerful, repository-indexed content discovery
- Supports page, asset, and metadata queries
- Optimized for *finding* content, not changing it

Replace

- Separate workflow from search
- Authors must:
 - Open individual pages
 - Open component dialogs
 - Manually update properties
- Developers can:
 - Write and run scripts
 - Perform granular changes (e.g. component properties, nodes)
 - But this requires code, validation, and deployment overhead

Why This Becomes a Problem

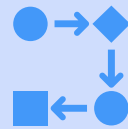
When scale, speed, and safety matter



No native, author-safe bulk replace workflow



High friction for repetitive or widespread changes



Developers become a bottleneck for “simple” updates



Increased risk without preview or impact visibility

DA (Edge Delivery) Site Search

Where DA Site Search Does Well

A fast, author-accessible way to search across sites

- Fast, full-site keyword search
- Accessible directly to authors
- No developer intervention required
- Can search across multiple sites
- Includes basic search & replace for simple text changes

Where DA Site Search Falls Short

Gaps between finding content and changing it

- Replace is string-based, not DOM-aware
- No contextual understanding of blocks or attributes
- No bulk preview or validation step
- No publish-status filtering
- No reporting or audit trail

Bridging the Gap with Custom Tools

Two Ways to Extend DA

Choosing the right extension for the job



Full Screen App

- Standalone, iframe-based tools
- Designed for multi-page and site-wide workflows
- Own the workflow end-to-end
- Ideal for long-running or high-risk actions



Library Plugin

- Page-level enhancements
- Run in the context of a single page
- Lightweight and fast
- Best for inline helpers and small author assists

We will be focusing on Apps.

Quick Start: Building Apps in DA

The minimum you need to get started

Core Requirements

- A simple HTML file for you UI
- A JavaScript file for logic and workflow

Optional (but Powerful)

- DA App SDK
 - Handles communication with DA and other apps

For more information: <https://docs.da.live/developers/guides/developing-apps-and-plugins>

App Communication in DA

Using postMessage to coordinate with DA and other apps

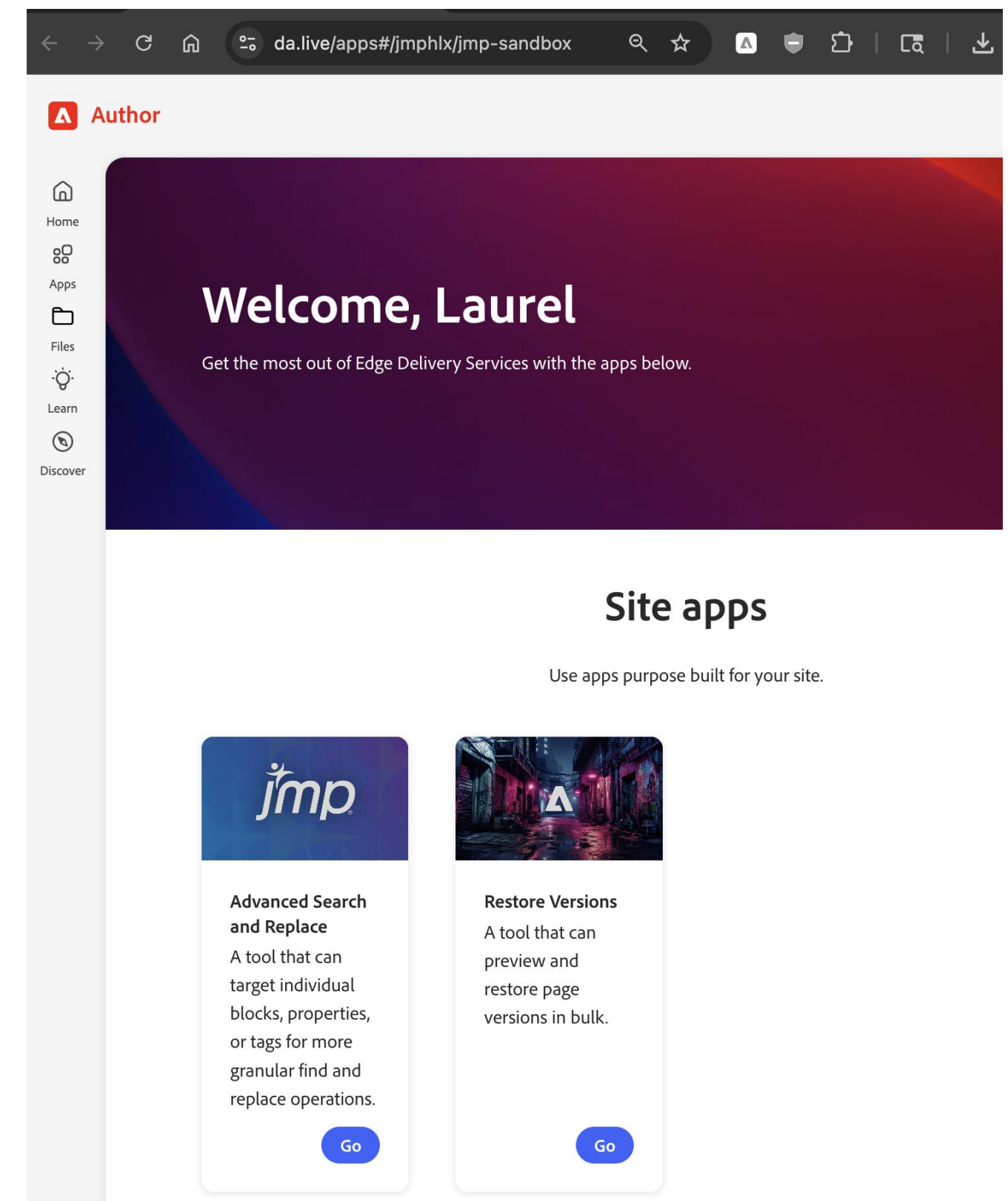
- DA apps run in an iframe
- Communication happens via the postMessage API
- Enables two-way messaging:
 - App ↔ DA (context, actions, auth)
 - App ↔ App (coordination, shared state)



Tips for App Development

Lessons learned from building real DA apps

- Visibility
 - Define your app in a sheet in your site config to view it from the Apps page
- Access
 - Apps are only accessible when scoped to the current site
- Local Development
 - Use ?ref=local to point DA to your local repo



Advanced Search & Replace


Advanced Search & Replace enables content authors to safely search, analyze, preview and apply structured content changes across large content repositories – without custom scripts, backend access, or developer dependency.

DOM Aware Search

Searching structure, not strings

- Pages are parsed into a DOM, not treated as plain text
- Every match retains full context
- **Block-level** targeting
 - Scope results to structured content areas (blocks)
 - Search within specific block tables for row values
- **Element-level** targeting
 - Target HTML elements and attributes
 - Search by tag, class, property, or value

My sample **Academic** page for search|

metadata	
Title	Sample Academic Page
Description	Provide examples of how to find structured content
Image	
releaseDate	2026-01-31
tags	industry academic , capability data-exploration-and-visualization, country united-states, resource-type article

Advanced Search Capabilities

Finding content you couldn't identify before

- Publish status awareness
 - Filter by live, preview, or unpublished content
- Empty and missing field detection
 - Find unset, blank, or incomplete properties
 - Surface hidden content gaps
- Preview matches without opening pages

Search Results & Impact Preview

Search Results for "block:metadata property:tags industry|chemical"

6 found for "block:metadata property:tags industry|chemical" | Search completed in 4.09 seconds

Copy Results

[Copy Published Result URLs To Clipboard](#) [Copy All Results](#) [Open Bulk Operations Tool](#)

Open Bulk Editor

Expand for Match preview

▼ /jmphlx/jmp-da/en/sandbox/laurel/display-image.html	●	🔗
▼ /jmphlx/jmp-da/en/sandbox/laurel/sprint-demos/listgroup-refactor.html	●	🔗
▼ /jmphlx/jmp-da/en/sandbox/laurel/find/test.html	●	🔗
▼ /jmphlx/jmp-da/en/sandbox/laurel/events/a-event.html	●	🔗
▼ /jmphlx/jmp-da/en/sandbox/laurel/sprint-demos/aem-tags/chemical-article.html	●	🔗
▼ /jmphlx/jmp-da/en/sandbox/laurel/sprint-demos/find-metadata/case-sensitive.html	○	🔗

Open Page In Edit Mode

Publish Status

○ Not Previewed nor Published ● Previewed ● Published ● Status Error



Search Results & Impact Preview

Search Results for "block:metadata property:tags industry|chemical"

6 found for "block:metadata property:tags industry|chemical" | Search completed in 4.09 seconds

- Copy Published Result URLs To Clipboard
- Copy All Results
- Open Bulk Operations Tool

Preview Matched Content →

^	/jmphlx/jmp-da/en/sandbox/laurel/display-image.html	●	🔗
tags	industry chemical, capability predictive-modeling-and-machine-learning, resource-type article, user-level intermediate, capability design-of-experiments		
▼	/jmphlx/jmp-da/en/sandbox/laurel/sprint-demos/listgroup-refactor.html	●	🔗

Safe, Structured Replace

Applying changes with context and control

Block-Aware Transformations

- Targeted text transforms
 - Replace, prepend, or append text
 - Applied only within matched blocks or rows
- Cell-level replacement
 - Replace an entire cell, not just the matched substring
 - Preserves surrounding structure

Row-Level Block Operations

- Add new block rows
 - Insert structured content, not freeform text
- Delete existing block rows
 - Remove outdated or incorrect entries
- Merge block rows
 - Merge into an existing named row, or
 - Create a new row if none exists

(Operations are not limited to the originally matched row.)

Additional Capabilities

Turning search results into operational workflows

- CSV Export
 - Turn search results into a structured, customizable report
 - Combines data from multiple sources into a single view
- Bulk Publish Acceleration
 - Quickly act on verified search results
 - Copy selected pages and transition to Bulk Operations
 - Eliminate manual page-by-page publishing

Guardrails

Patterns that enable safe scaling

Bulk Versioning

- Create page versions in bulk before changes
- Optional per operation – not forced for every edit
- Provides a clear rollback point for large updates

Undo & Recovery

- Undo action available after execution
- Revert impacted pages to their previous state at time of search
- Designed for fast recovery, not manual cleanup

User Based Access Control

- Restrict actions by user or role
- Integrates with existing custom DA access controls
- Ensures only approved users can perform high-impact operations

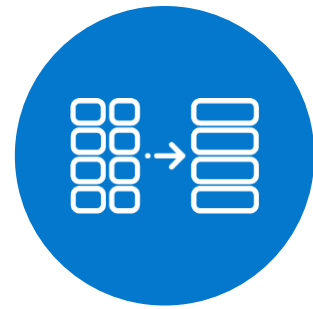
Known Limitations

Where this workflow is intentionally constrained

- Not a replacement for complex migrations
 - Best suited for targeted, structured changes
- Requires access to affected pages
 - Honors existing author permissions
- Long-running operations favor safety over speed
 - Rate limits and batching are deliberate

When is this app useful?

Practical use cases at scale



Large-Scale Taxonomy Changes

Taxonomy updates are one of the highest-risk content operations. This tool turns them into a controlled, author-driven workflow instead of a developer-written script.



Post-Migration Cleanup

Migrations rarely result in perfect content. This enables teams to clean and standardize content at scale without reopening migration projects or creating technical debt.



Accessibility and Quality Remediations

Accessibility and quality issues often span entire repositories. This tool enables proactive remediation instead of reactive page-by-page fixes.

Live Demo



Thank you

Advanced Search
& Replace on GitHub



Send Feedback to Laurel.Timko@jmp.com



