

Learn about CSV and XML files for bulk upload

Last Modified on 05/06/2026 8:40 pm IDT

 This article is designated for administrators.

About

When performing a bulk upload in the Rich Media Content Management System (Rich Media CMS), you can use a CSV or XML file to define media, categories, users, or entitlements to import.

CSV files are simple and quick to prepare, while XML files provide more flexibility and support complex ingestion workflows.

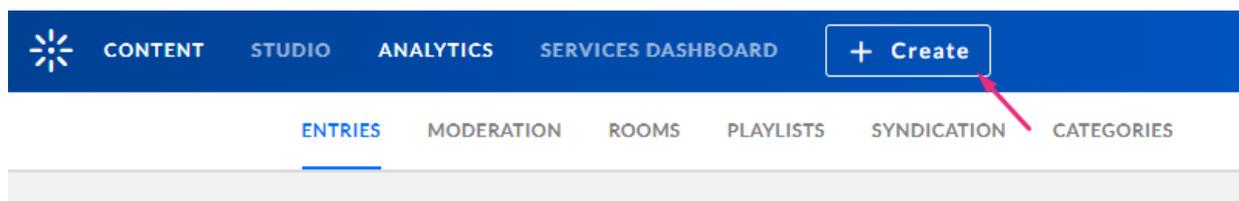


- For instructions on preparing a CSV file, see [Prepare a CSV file for media bulk upload](#).
- To learn how to submit your file in Rich Media CMS, see [Upload media in bulk](#).

Download sample templates

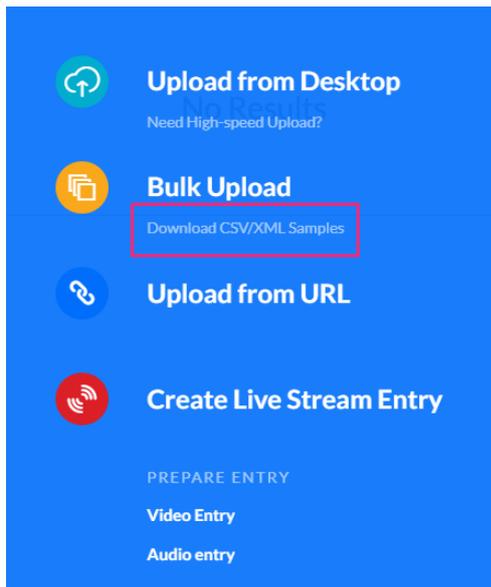
You can download ready-to-use templates directly from the Rich Media CMS.

1. In your Rich Media CMS, click **+Create** in the navigation bar.



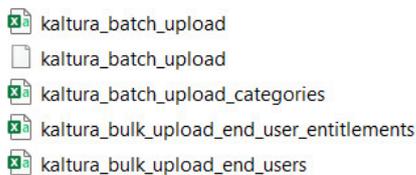
The download page opens.

2. Click **Download CSV/XML Samples**.



3. Open the downloaded folder (**kaltura_batch_upload_sample**).

Each sample file includes the correct column structure and example data for entries, categories, users, and entitlements.



CSV format

A CSV file is a spreadsheet-style list of items to upload, such as entries, categories, users, or entitlements. Each row represents one item, and each column defines a metadata field.

Key points

- Each row represents one entry.
- Metadata fields can be populated directly from the CSV
- Files can be hosted on your FTP server or any publicly accessible source
- Lines starting with a **#** are comments and are ignored during processing.
- The first line must start with an asterisk (*) followed by a comma-separated list of field names.
- If a field name doesn't exist in your account (for example, a metadata profile field), the upload will skip it and log an error in the Bulk Upload log.
- We recommend a maximum of 500 lines/uploaded media files included within one CSV file.



For detailed instructions on preparing the CSV file and understanding the template structure, see [Prepare a CSV file for media bulk upload](#).

XML bulk upload (recommended)

XML is Kaltura's recommended bulk upload format.

Unlike CSV, XML supports a **hierarchical structure** and full **CRUD** (Create, Read, Update, Delete), allowing you to define nested metadata, transcoding settings, distribution rules, and more.

Advantages of XML upload

- Import multiple files in one batch
- Ingest large files (>2GB) not supported via Rich Media CMS desktop upload
- Populate structured metadata without using the Rich Media CMS interface
- Automate ingestion processes
- Customize metadata and structure based on your account workflow

The full set of supported features is defined in the [XML schema](#) (XSD template).

Supported use cases

XML uploads are particularly useful when you need to:

- Include multiple transcoding flavors (pre-transcoded assets)
- Attach multiple thumbnails to a single entry
- Add custom metadata fields defined in your account
- Configure publishing or distribution settings as part of ingestion

Assign a transcoding profile

You can specify a transcoding profile in either file type:

- **CSV** - add the `conversionProfileId` column and enter the profile ID
- **XML** - include the `<conversionProfileId>` element within each `<entry>`

Profile IDs are listed under **Settings** → **Transcoding Profiles** in Rich Media CMS.



For more information, see our article [Transcoding](#).

API-based bulk uploads

If you are using the Kaltura API to automate ingestion instead of the Rich Media CMS interface, submit bulk uploads in batches of **500** entries. Pause **10-15 minutes between batches** before submitting the next batch.

This helps avoid queue overload during large ingestion jobs.

Validation and troubleshooting

If a bulk upload fails or entries are skipped:

- Verify column headers (CSV) or tags (XML) exactly match expected field names.
- Ensure file paths and URLs are valid and accessible.
- Check the Bulk Upload log in Rich Media CMS for errors or skipped entries.
- Save files using **UTF-8 encoding**, which preserves special and non-English characters so titles and metadata appear correctly in Kaltura.

To save files in UTF-8:

- **Excel**: choose CSV UTF-8 (Comma-delimited) when exporting.
- **Google Sheets**: select Download → Comma Separated Values (.csv).
- **XML**: add `<?xml version="1.0" encoding="UTF-8"?>` at the top of the file.