

AI Clip Search

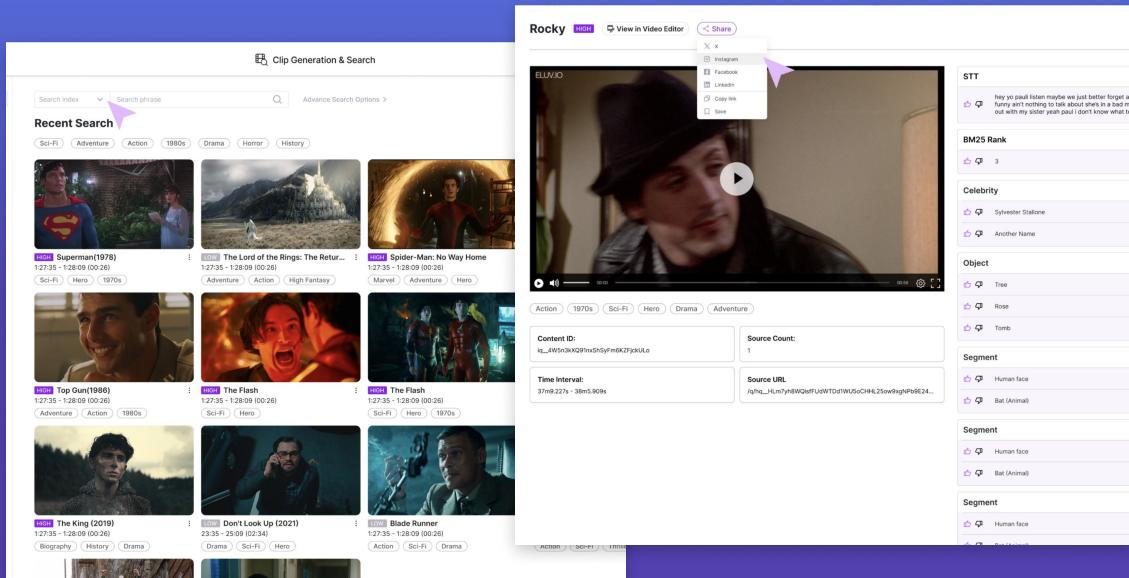
Search across content libraries to retrieve relevant clips based on in-Fabric generative AI/ML tagging, speech-to-text transcription, and content metadata.

With the **AI Clip Search v2** and **Video Editor v2** apps, Content Fabric users can take advantage of the comprehensive AI Content Understanding features built into the fabric. The **Fabric AI Content Tagging service** provides one shot or continuous frame and segment level tagging of Fabric content, and now includes new generative AI models, as well as six other models - celebrity/face detection, automatic speech to text, logo recognition, OCR, activity detection and shot boundary detection. Tags are recorded in the metadata of Content Objects (in place), aggregated by shot, indexed by Fabric Search and are directly usable in the Fabric's dynamic streaming pipeline - to create clips, insert content/ads, create highlights etc.

Unlike other AI content tagging workflows, no content or metadata ever has to move avoiding egress charges and forklift content transfers, and the AI metadata is directly and dynamically actionable. The ground truth for the logo and celebrity models can be continuously extended for custom identification of players, actors, brands, etc. without retraining.

The latest **Fabric Search service** provides fast re-crawl across content object metadata, including frame and video level tags (both AI and 3rd party provided), and includes enhanced text-based and semantic search capabilities.

AI Tagging and Search together create a powerful pipeline that enables this second generation **AI Clip Search app**. Users can search across their Content libraries to retrieve relevant clips matching semantic, text, and category based queries. The Fabric returns relevant clips automatically that are built dynamically and just-in-time in playout. This pipeline avoids the time and cost of manually identifying, cutting and storing clips or highlights. The latest release includes shareable links for copy-paste streaming or download of the clip, and side panels for viewing the relevant tags and semantic descriptions of each content and is fully embeddable in any applications via its APIs.



Key Features

Fabric AI Content Tagging Service v2

- New Generative Image Transform (GIT) model for semantic tagging of individual frames
- Fully integrated in Tagger service for one time and continuous tagging of video frames and segments and audio transcription
- Adds to celebrity/face recognition, automatic speech to text, logo recognition, OCR, activity detection and shot boundary detection
- Speech to Text now supports all major EU languages

AI/ML Tags in Content Objects

- All tags are frame accurate and time coded, and stored in the corresponding content object as JSON metadata
- Tags are metadata to drive any dynamic representation from the Fabric - clips, content/ad insertions, highlights
- Tags are viewable and downloadable on demand
- Tags are automatically aggregated by shot for further indexing
- All in place - no media or metadata has to move

Fabric Search Service v2

- Provides fast re-crawl and instant update across content object metadata (<3 seconds for typical indices)
- Accurate text based search (BM25 algorithm)
- New Embedding algorithm supports semantic queries
- Enhanced ranking and retrieval yields best matches in top 5 results
- Indexes any content object metadata such as 3rd party provided data feeds and AI tags published to the object
- API for searching across all or subset of tags by model
- Fabric fine-grained permissions restricts search results to authorized entities

Clip Search v2

- Search across content libraries to retrieve relevant clips and images matching semantic, text, and category based queries.
- Playable/downloadable links are built dynamically and just-in-time from the full length source for extreme savings \$\$.
- Eliminate manually identifying, cutting and storing clips or highlights.
- New shareable links for copy-paste streaming or download of the clip
- New side panels display relevant tags and semantic descriptions
- Embeddable APIs for integration in any app



Video Editor

View and scrub frame-by-frame through playable content objects and their AI/ML metadata tags. Create and download clips dynamically generated from the source object.

The **Video Editor** app provides frame-accurate timeline viewing/scrubbing for any playable content in the Fabric and its metadata, in the browser. The **Video Editor v2** also acts as a lightweight clip generator, supporting saving of key frames, and mark-in/mark-out selection, and dynamic generation and download of subsections or clips. Any timecode metadata in the object is displayed on timecode synchronized tracks. Users can view the AI tags applied by the ML Tagging service, one track per model. 3rd party metadata such as play-by-play data feeds, AI metadata, and human curated descriptions can also be posted to content objects and will automatically present in the Video Editor for easy review and clipping.

The Fabric's unique and efficient content native model (component based media & object metadata with just-in-time processing) all come together, making possible new, radically efficient and simpler pipelines. Examples include recording live streams during playout, converting to VoD within seconds, ML tagging and generating clips, and searching content, without ever moving files or metadata or duplicating content – all operations occur directly upon the source content object in the Fabric.



Fabric Browser and Video Editor Views

This screenshot shows the Eluvio Fabric interface. On the left, there's a video preview of a man eating a sandwich. On the right, a larger video player shows a soccer match. Between them is a sidebar with various filters and search fields.



External tags, Data feeds (EPCR example) - Video Editor

This screenshot shows the Video Editor interface with a soccer match video. A sidebar on the left displays external tags and data feeds, specifically mentioning "Ingest Time Coded External Tags and Data Feeds." Below the video player, there are three cards showing specific clips: "McDonalds & Eating burger," "McDonalds & McDonalds," and "big mac."



Video Editor: New Generative Image-to-Text Transform

This screenshot shows the Video Editor interface with a soccer match video. A sidebar on the left displays generated text descriptions. One card says "More descriptive texts: Ex - a soccer player is shown a yellow card".

Key Features

Timeline

Scrubbing for Content and Time Coded Metadata Tags

- Per frame scrubbing and playout for any content object in browser
- Displays timecoded tags such as Fabric-generated AI/ML tags on separate timeline tracks synchronized with playout track
- Displays timecoded 3rd party tags added to the content object
- Step through tags with instant seek and play
- Edit tag values and save back to Content Fabric

Clip and Key Frame Generation

- Set mark-in, mark-out points
- Download dynamically generated playable clips
- Select the video and audio resolution of the downloadable clip
- Save key frames

Images

- Support viewing AI/ML tags per image