



Automating Recorded Media Captioning Through Integration

WHITEPAPER



Introduction

In the age of digital content dominance, AI-Media leads the charge in advancing accessibility and inclusivity. Founded on the belief that everyone deserves access to information, AI-Media stands as the global leader in live and recorded captioning, transcription, and translation solutions. Pioneering seamless communication through innovative technologies, the company continues to revolutionize the way millions around the world consume content.

One of AI-Media's key offerings is LEXI Recorded, a groundbreaking automated captioning solution designed for quick and easy captioning of recorded content. With lightning-fast turnaround times, LEXI Recorded ensures high accuracy and low costs. LEXI Recorded automates broadcast-style formatting, meeting the short turnaround pressures of late-arriving content. Its API and automation capabilities enable large-volume captioning, supporting customizable workflows for efficient media processing.

This white paper unveils the potential of LEXI Recorded to streamline automated recorded media captioning through integration. Expanding on the benefits of fast turnaround, low cost, and unparalleled accuracy, the document navigates the integration capabilities of LEXI Recorded. Organizations can seamlessly incorporate automated captioning into their workflows, ensuring accessibility without compromising efficiency.



Audience

This white paper is tailored for professionals spanning various industries who are keen on elevating the accessibility and inclusivity of their recorded media content through automated captioning solutions, with a specific emphasis on integration with LEXI Recorded. The intended audience comprises executives, directors, and architects within organizations operating in pivotal sectors, including broadcast and media, corporate enterprises, government agencies, sports events and venues, and educational institutions. Decision-makers overseeing content strategy, accessibility initiatives, and media production workflows will gain valuable insights into the advantages and implementation nuances of LEXI Recorded. Architects responsible for designing and integrating technology solutions within their respective sectors will find guidance on achieving seamless integration, ensuring an efficient automated captioning process for recorded media across diverse industries.



Business Challenge

Navigating the complex landscape of media captioning, achieving a harmonious synergy between cost efficiency, reduced time-to-market, and unparalleled caption quality demands a comprehensive approach.

This involves addressing processing costs, which usually cover expenses tied to daily manual tasks such as transferring media content and captions, checking captioning order status, and topic model maintenance. Also, the cost caused by human errors cannot be ignored and should be considered.

The challenge extends beyond the traditional concept of captioning turnaround time to end-to-end turnaround time which is measured from media asset readiness to captions availability for consumers. It encompasses the intricate task of streamlining the entire workflow, potentially spanning across multiple organizations and systems. Ensuring a seamless and efficient process involves optimizing each stage, from initial media asset preparation to the final consumption of captions.

The complexity lies in harmonizing these diverse elements, navigating inter-organizational interfaces, and integrating various systems to achieve a cohesive and expedited end-to-end workflow.

For the highest quality in AI-based captioning, customizable topic model has been proven to be effective. However, setting up the topic model is just the beginning. The challenge lies in maintaining these models with optimal operational efficiency and low associated costs.

Solution

AI-Media's Orders API

AI-Media offers robust integration capabilities and flexible architecture to seamlessly incorporate LEXI Recorded into end-to-end media production workflows.

At the core of this integration is AI-Media's Orders API, providing customers with the ability to initiate new orders, monitor order outcomes, receive real-time notifications for order status changes, and retrieve captions.

The developer-friendly nature of the API is attributed to its adherence to industrial standards, including REST, JSON, API key, HTTPS, and TLS, making it straightforward to navigate and easy to work with. This single API interface supports both AI-fulfilled LEXI Recorded and captioner-fulfilled Premium Recorded order types, facilitating a smooth transition between AI and captioner-based captioning without hassle or disruption.

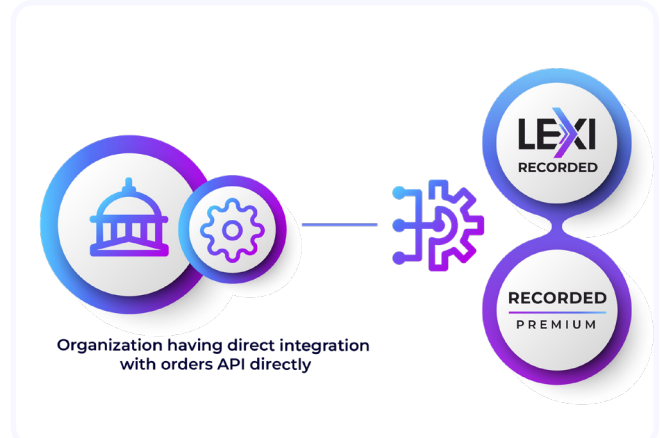
Integration Patterns

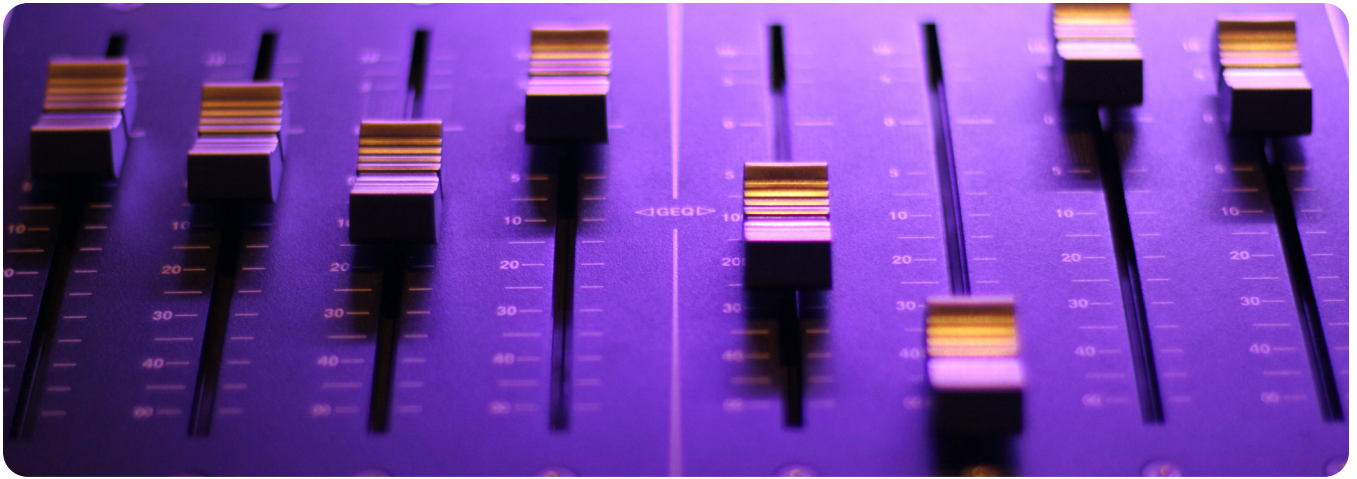
Recognizing the diversity of production workflows and unique business requirements, AI-Media ensures that integration with its platform is not a one-size-fits-all approach. In response to this, AI-Media summarized several architecture patterns that can be applied during the integration design process. These architecture patterns serve as adaptable frameworks, allowing organizations to tailor the integration to align seamlessly with their distinct workflows and business specifications.

API based integration

Organizations endowed with software development capabilities, whether through in-house teams or external contractors and vendors, could build direct integration using AI-Media's Orders API. This approach is future proof and grants maximum flexibility, enabling a customized integration aligned with the unique needs of the organization. By leveraging the Orders API, these organizations can seamlessly integrate AI-Media's services with their internal systems and workflows. This method offers the highest degree of automation, minimizing daily operational efforts, and affords full control over intricate details such as the formatting of captions, selection of output languages, and the utilization of topic models. This level of control empowers organizations to tailor the integration to their precise specifications, fostering a seamless and efficient workflow that aligns with their specific business requirements.

This diagram below illustrates a solution based on API integration:





Shared folder based integration

For organizations seeking minimal involvement in software development, opting for a solution based on mutually accessible file storage, such as an AWS S3 bucket, can be a practical starting point. In this scenario, AI-Media can periodically scan the designated input folder to identify and process new files. Once the caption file is ready, it is returned to the same folder or directed to a dedicated output folder, allowing it to be retrieved. While this approach may not deeply integrate with the organization’s internal workflows, making it less impactful in streamlining the end-to-end process, it presents a straightforward and easy-to-adopt solution for many organizations. This method minimizes implementation challenges and proves to be the least disruptive option, catering to organizations seeking a quick implementation with minimal software development involvement.

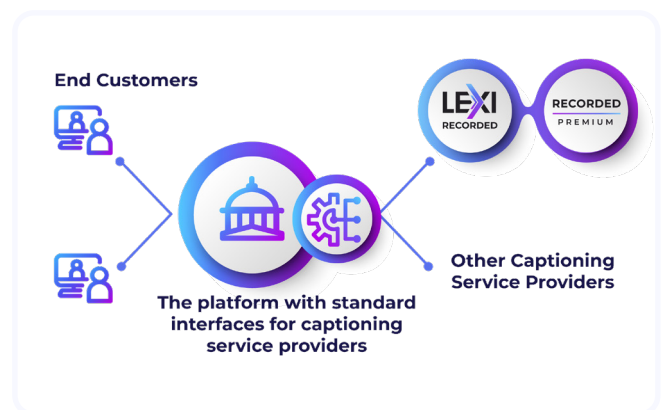
The shared folder could be provided by either the customer or AI-Media. The diagram below illustrates the scenario that the customer provides the shared folder for AI-Media to access:



Custom integration

For organizations that have already established standard interfaces for captioning service providers, AI-Media offers to develop integrations based on their existing interface specifications. This tailored approach allows AI-Media to support those organizations to offer advanced captioning services to their customers.

The diagram below illustrates how AI-Media can join the ecosystem and make its services available through the platform:



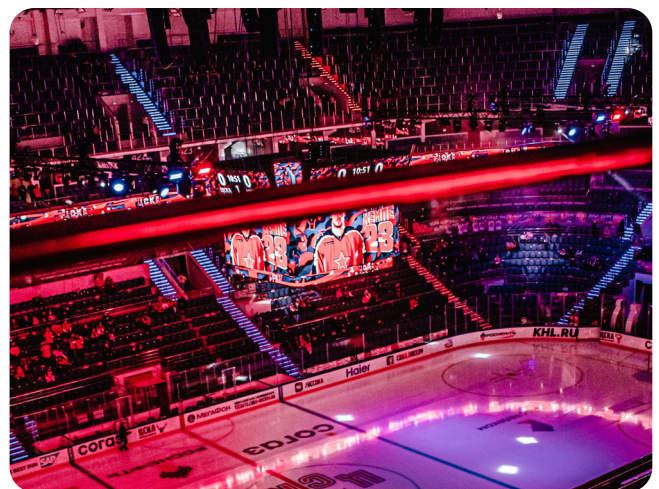
Benefits

Automating LEXI Recorded captioning through integration offers a myriad of benefits, transforming the captioning process into a streamlined, efficient and user-friendly experience.

Foremost among these benefits is a substantial improvement in cost efficiency, achieved by diminishing manual efforts and reducing operational expenses. Simultaneously, the integration drastically minimizes time-to-market, allowing organizations to deliver captioned content to their audiences with least end-to-end delay. This seamless end-to-end workflow not only optimizes the entire captioning life cycle but also ensures a consistent and high-quality output. The risk of errors associated with manual captioning is mitigated, fostering reliability. Additionally, API based integration empowers organizations with unprecedented control, offering customizable options for formatting, language selection, and the utilization of topic models. Automating LEXI Recorded captioning through integration enhances operational efficiency, providing organizations with the agility and precision necessary to meet the dynamic demands of today's media landscape.

Engagement model

Upon mutual agreement, sponsorship commitments and responsibilities will be defined for the integration. AI-Media will designate a coordination contact within the local region and a technical contact from its global software development team. The integration solution will be thoroughly discussed and finalized by both parties before commencing the implementation project.



Technical Specifications

Integration through Orders API

Supported order types	All the order types offered by AI-Media
Supported media formats	All the media formats supported by AI-Media
Supported notifications	<ul style="list-style-type: none">• Webhook callback• Notification email (can be specified per order)
Topic model	Supported
Standards	<ul style="list-style-type: none">• HTTPS• TLS• JSON• REST
Authorization	API key in HTTP request header
Orders API available regions	<ul style="list-style-type: none">• AU• US• EU

Integration through AWS S3 bucket

Supported order types	All the order types offered by AI-Media
Supported media formats	All the media formats supported by AI-Media
Supported notifications	<ul style="list-style-type: none">• Notification email (can be configured per integration)
Topic model	Supported
Typical folder scan interval	<ul style="list-style-type: none">• 10 minutes if the bucket is within customer's account• No delay if the bucket is within AI-Media's account
Configurable pick-up logic	<ul style="list-style-type: none">• Output folder• Output file naming convention• Caption file type/format
S3 bucket regions	The S3 bucket can be in any region



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Find out more about AI-Media's
captioning solutions at AI-MEDIA.TV
or contact SALES@AI-MEDIA.TV