



Integrated Transcriptions, Captions and Translation Workflows for News Production

Executive Summary

This brief will explain how news broadcasters can benefit from integrating real-time transcription to speed the creation and distribution of news content while laying a firm foundation for captions in multiple formats and translations for localization.



Scalability: Automated, real-time, cloud-based generation of highly accurate transcript metadata that does not require teams of 24/7 personnel to manually log and notate media.



Enhanced productivity: News teams can produce finished content significantly faster and easier than ever before.



Global visibility and accessibility: All media assets with transcript metadata are visible across the enterprise to identify, search for, and retrieve critical media assets based on time-indexed markers and transcript keywords.



Improved utilization: Awareness and identification of assets leads to better monetization and revenue generation from them. Transcripts can easily be converted to captions and/or translations for distribution into multiple distribution channels and in other languages.

Today's news organizations must create compelling stories and produce them for air almost in real-time. They also need to provide accurate content captions and translations for distribution in other regions. Many of today's media companies have disparate and separate workflows for these tasks. To counteract that complexity, Digital Nirvana developed a single integrated workflow that transcribes incoming content in real-time, adds it to Avid MAM/PAM for search and retrieval, and automatically creates captions and translations.

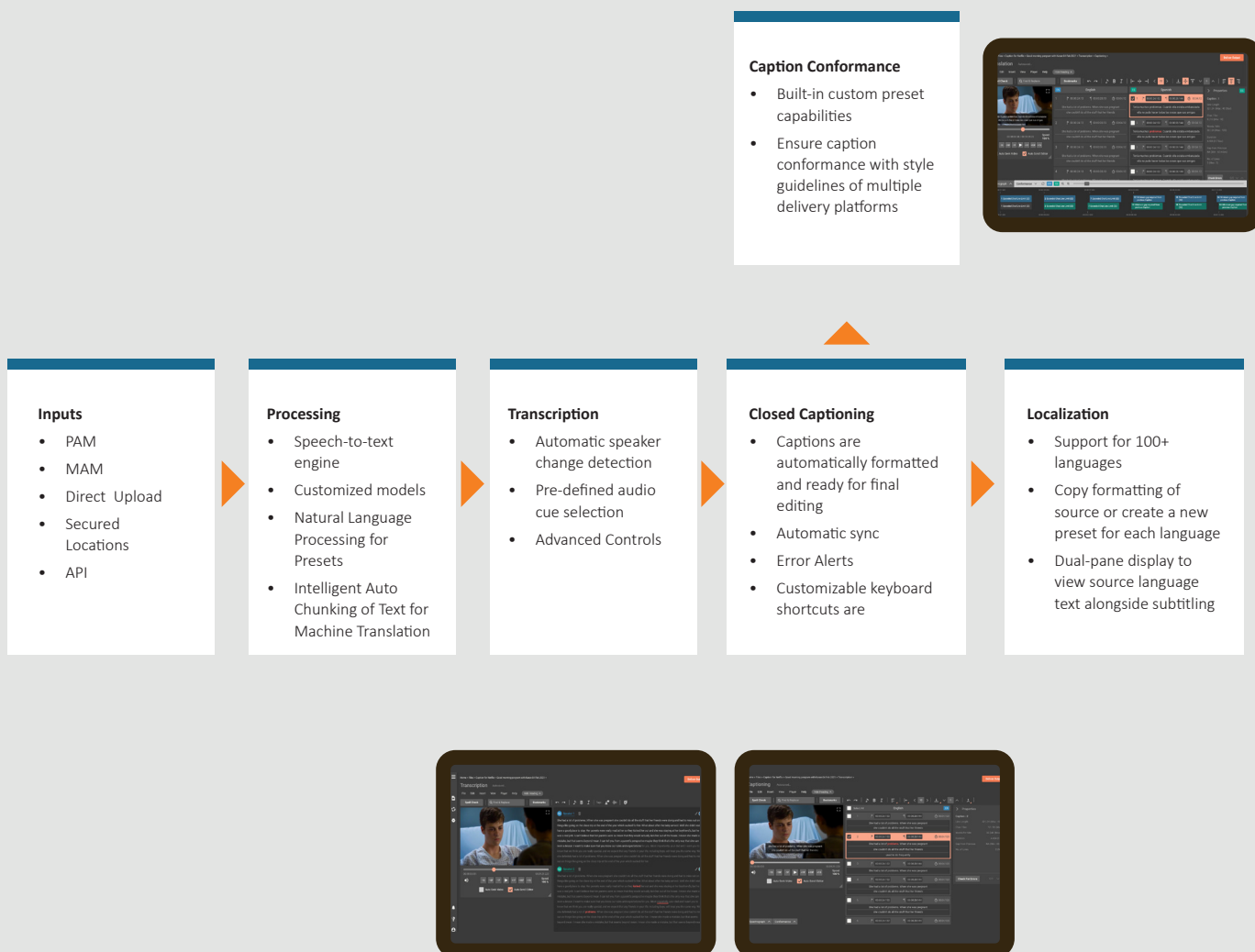
In partnership with a global news organization headquartered in New York City, Digital Nirvana deployed its MetadataIQ tool for automated speech-to-text (STT) generation for real-time indexing of transcript data with media.

The overarching requirement for this client was to create real-time visibility of and actionable intelligence on incoming news feeds for its numerous Avid-based news producers and editors. With upwards of 60 total daily news feeds — many of which operate on a 24/7 basis and few if any of which have any context — this client had neither the personnel nor the time required to monitor and log this content effectively.

In this deployment, as RTMP streams are ingested into Avid encoders, an API call is triggered. MetadataIQ immediately begins transcoding the media, stripping off the video, and sending the audio portion of the content with original time code data to Digital Nirvana's cloud-based STT engines for processing. Within less than five seconds, the system returns a continual stream of growing STT data into on-premises virtual machines, where it is time-indexed with the original source media within two redundant Avid Interplay workgroups. Additionally, MetadataIQ simultaneously and automatically generates markers within Avid based on NLP and client parameters. The markers assist producers and editors in quickly locating and retrieving critical media assets.

If an operator needs to perfect transcript metadata for archival purposes, create closed captions or subtitles, or translate captions or subtitles into alternate languages, MetadataIQ can send files directly to Digital Nirvana's TranceIQ application, where in-house personnel can seamlessly do this editorial work. Once complete, TranceIQ can publish separate sidecar files in all industry-supported formats. Alternatively, TranceIQ can republish the completed projects back into the Avid Interplay environment for later use by other personnel for other applications.

Similarly, if the same requirements exist but an operator does not have in-house personnel to perform this work, then MetadataIQ can send media assets directly from Avid to Digital Nirvana's transcript and captions services team for a turnkey, hands-off experience. Digital Nirvana's team of professionally trained transcriptionists and captioners will do this work and provide clients with fully perfected and finished projects. Like before, these projects can either be published as dedicated sidecar files or automatically republished back into Avid Interplay.



MetadataIQ Technical Brief

MetadataIQ: How it works?

MetadataIQ provides off-the-shelf integration with Avid Interplay and simplifies the process of automated transcription and other metadata generation for Avid users. When installed as a hybrid, on-premises solution, MetadataIQ is configured with access to the Interplay Web Services API and an ISIS storage mount. When new files get added to the configured storage locations, also known as watch folders, MetadataIQ automatically retrieves these files as new jobs and sends them to the cloud for processing.

For real-time transcript generation, the customer will publish an RTMP stream (or similar) to the local MetadataIQ instance with the MOB ID in the URL. Once complete, this stream goes through real-time speech-to-text processing in the cloud. From there it is correctly formatted, and then the time-coded text is streamed back into Avid as markers for the asset with the MOB ID given in the RTMP URL.

Applications for MetadataIQ

MetadataIQ is the ideal solution for Avid-based media operators with the following three use cases:

- Organizations that deal with large volumes of the raw field content.
- Outlets that routinely take in large volumes of news feeds lacking metadata references.
- Operators with media libraries that lack accessibility and visibility into the nature of archived assets.

MetadataIQ creates real-time speech-to-text transcript metadata of live, growing files as well as existing Avid legacy assets. This automated metadata process empowers media professionals across the organization to easily search for and retrieve critical assets within Interplay or Media Central to reduce the time and effort needed to produce finished content.

For certain reality-style programs with extensive man-on-the-street interviews and raw camera footage, automated machine transcripts are useful for identifying relevant sound bites, greatly reducing — and in some cases, eliminating — the manual logging process.

For post-production requirements, operators can use MetadataIQ to submit files directly from their Avid workflow to Digital Nirvana to generate transcripts, closed captions, subtitles, and caption translations. The output of these processes appears in separate sidecar files.

For media operators with in-house transcription, captioning, or translation teams, MetadataIQ is useful for sending media assets with transcript data from Avid to Digital Nirvana's TranceIQ SaaS application for refinement before permanent archiving. Other uses include creating perfect closed captions or subtitles or localizing content for delivery in alternate languages. As we've already discussed earlier, refined content can always be reingested back into the Avid environment for future use.

MetadataIQ and other Digital Nirvana Solutions

MetadataIQ was designed to take advantage of and interact with Digital Nirvana's other media applications — TranceIQ and Transcript and Captions Services.



Digital Nirvana delivers knowledge management technologies and automated AI workflows that empower organizations to create, share, and mine actionable insights from electronic media. As a result, media companies can lighten manual workloads and accelerate content creation and delivery time. Digital Nirvana's solutions generate and manage closed captions, subtitles, transcripts, translations, and metadata enrichment using advanced, AI-based technologies. Machine learning ensures that workflows continually improve. Companies and entities worldwide rely on Digital Nirvana to improve scale and operational efficiencies, ensure compliance, reduce costs, and expand revenue streams. Digital Nirvana's solutions deliver unmatched quality, proven versatility, and best-in-class performance to help organizations surmount complex business challenges and drive rapid and profitable growth.

For more information, write to marketing@digital-nirvana.com

www.digital-nirvana.com