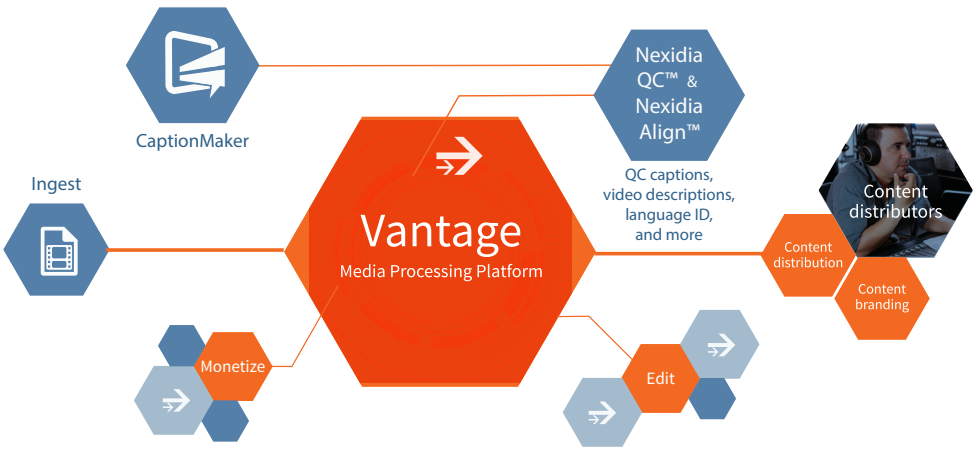
Nexidia Illuminate and Vantage

Partner Solution



Automate file-based video transcoding, media processing, caption QC and alignment with Telestream Vantage and Nexidia Illuminate™

Many Telestream customers need to provide proper closed captioning, video description, and language identification to meet broadcast and OTT delivery requirements. Adding Illuminate's Nexidia QC™ module enables automated file versioning, checks for missing, incorrect, or out-of-sync captions, video description verification, and language identification – all under unified system control. The addition of the Nexidia Align™ module enhances this capability with the ability to automatically fix caption synchronization problems.

Introduction

The world's most demanding broadcast and cable companies and OTT providers rely on Telestream to provide a complete portfolio of video transcoding and workflow automation solutions for video production, archiving and distribution. Telestream solutions enable format conversion, media processing, device interoperability, and workflow orchestration as well as caption creation, troubleshooting,and insertion. Most of these customers also need to provide proper closed captioning, video description, and language identification to meet broadcast and OTT delivery requirements.

In the United States, the FCC is actively working to expand the types of content requiring closed captions, extending requirements to much of the content distributed on the Internet, including content distributed through OTT vendors. In addition, the FCC has adopted caption quality standards, addressing caption accuracy, synchronicity, completeness, and placement. There is a possibility of wider adoption because regulatory bodies around the world are watching these actions.

At the same time, the growth of OTT/multiscreen distribution has caused a huge increase in the number of file versions being generated. The ability to manually check this increasing volume of content for features such as closed captions, video description, and language has become both increasingly burdensome and critically important.

The integration of Telestream Vantage transcoding and workflow automation products with Illuminate's Nexidia QC™ module enables automated file versioning, checks for missing, incorrect, or out-of-sync captions, video description verification, and language identification – all under unified system control. The addition of the Nexidia Align™ module enhances this capability with the ability to automatically fix caption synchronization problems.

telestream

Aiding in the caption QC and editing process is Telestream's Emmy award-winning CaptionMaker software, which allows Nexidia QC integration. Nexidia QC report files can be imported into CaptionMaker, which will then indicate regions of captions for an operator to efficiently spot check and correct if needed. This improves productivity for captioners by allowing them to jump directly to any problems detected in the captions and make changes in place.

How it works

Users can automatically check media at any point in its lifecycle – from ingest though versioning – simply by adding the Nexidia QC action to existing Vantage workflows. Using a platform already familiar to them, Vantage users can easily utilize Nexidia QC to ensure media meets standards and regulations set forth by the FCC and OTT providers like iTunes, Netflix, and Amazon. Moreover, captions exhibiting synchronization problems due to live captioning or frame rate conversions can be automatically corrected using Nexidia Align.

The simplicity of Nexidia QC and Nexidia Align integrations afforded by Telestream Vantage means that checks can be done at all stages of the media lifecycle, ensuring that media containing problematic captions, missing video description, or incorrect language can be identified as soon as the problem occurs and before it is allowed to propagate. All this can be accomplished automatically and without human intervention, saving time and money over comparable manual solutions.

Why Choose the Combined Solution

Vantage offers a suite of tools that perform high-quality transcoding and video processing, such as frame rate conversion, that scale to meet the multiplatform needs of users.

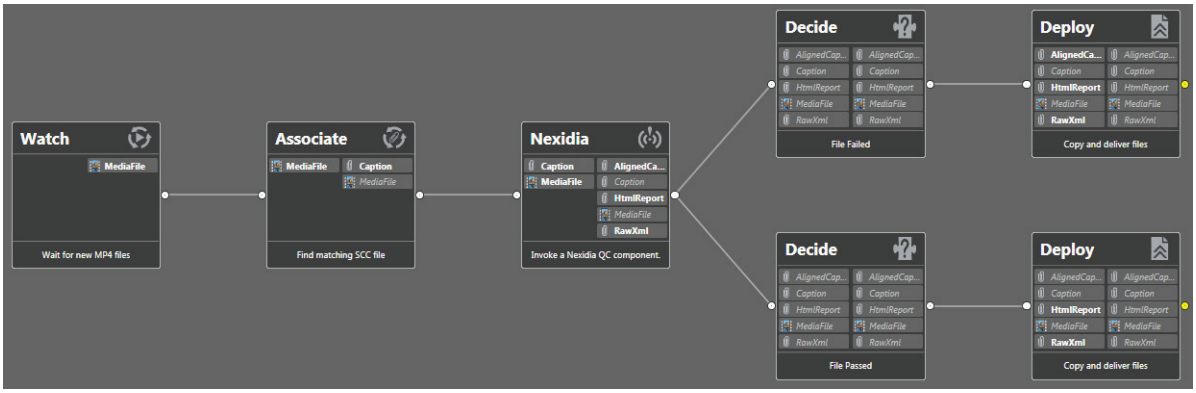
Any program going to air through conventional means, and many programs being streamed, require accurate closed captioning that meets the new FCC regulations and OTT delivery standards for completeness, accuracy and sync.

Nexidia QC offers an automated solution that easily integrates into Vantage, creating a complete production, delivery and caption, description, and language QC solution. The combination easily scales to meet the growing number of programs and platforms. Nexidia QC processes jobs at up to 30x realtime, depending on the media format. A single system can run as many simultaneous jobs as there are CPU cores available, enabling customers to easily verify thousands of hours of media per day with a single server.

About Telestream and Vantage

Telestream provides world-class live and on-demand digital video tools and workflow solutions that allow consumers and businesses to transform video on the desktop and across the enterprise. Many of the world's most demanding media and entertainment companies as well as a growing number of users in a broad range of business environments, rely on Telestream products to streamline operations, reach broader audiences and generate more revenue from their media.

Vantage combines media capture, transcoding, clip management, analysis, decision-making and metadata processing into one workflow framework. Vantage is designed to be more than a transcoder, offering a comprehensive workflow design, automation and management tool that can direct a range of video and audio processing tasks, using either Telestream video processing tools or third-party software and hardware. Vantage also integrates with all the major broadcast servers, edit systems, streaming servers, cable VOD (video on demand) servers and storage area networks (SANs).



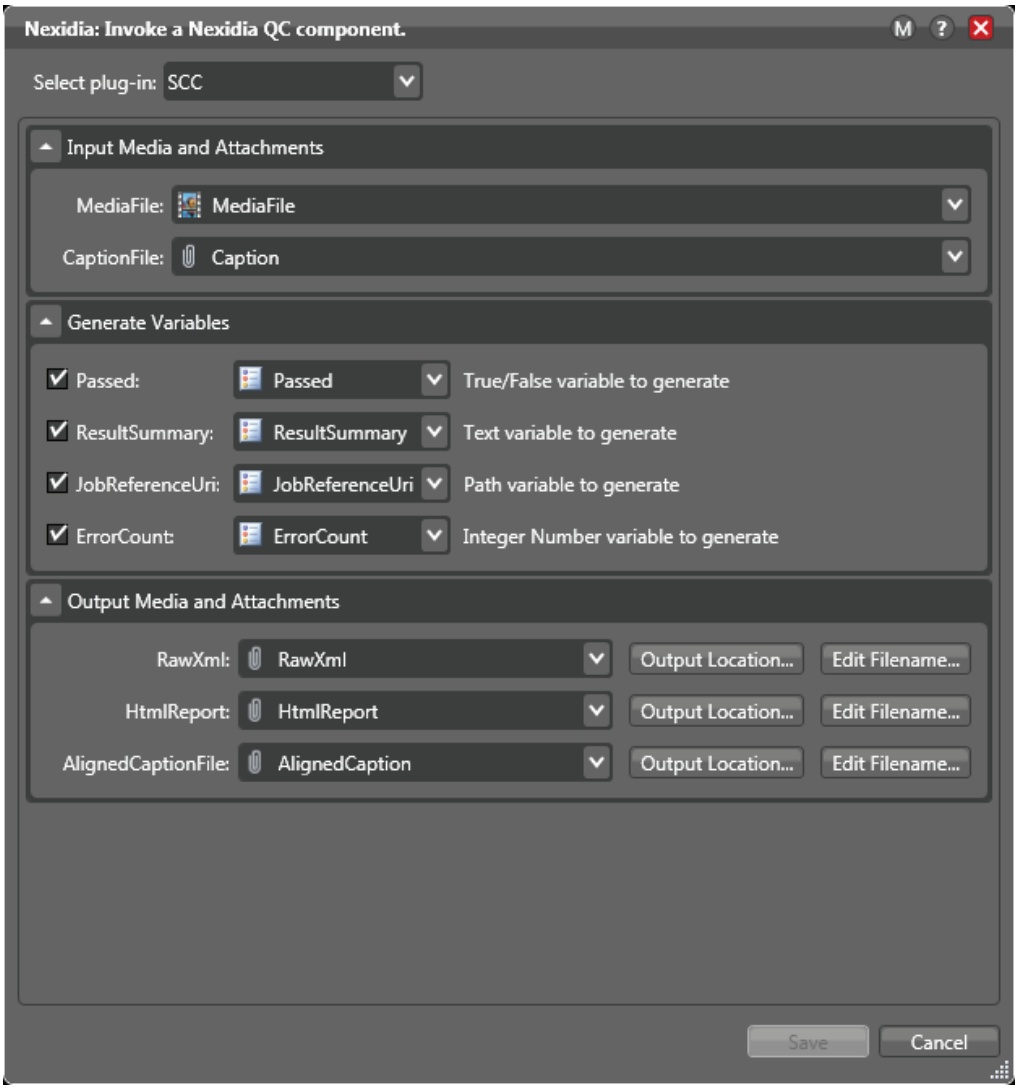
Vantage user interface depicting the combined technical solution within a typical file-based workflow

telestream

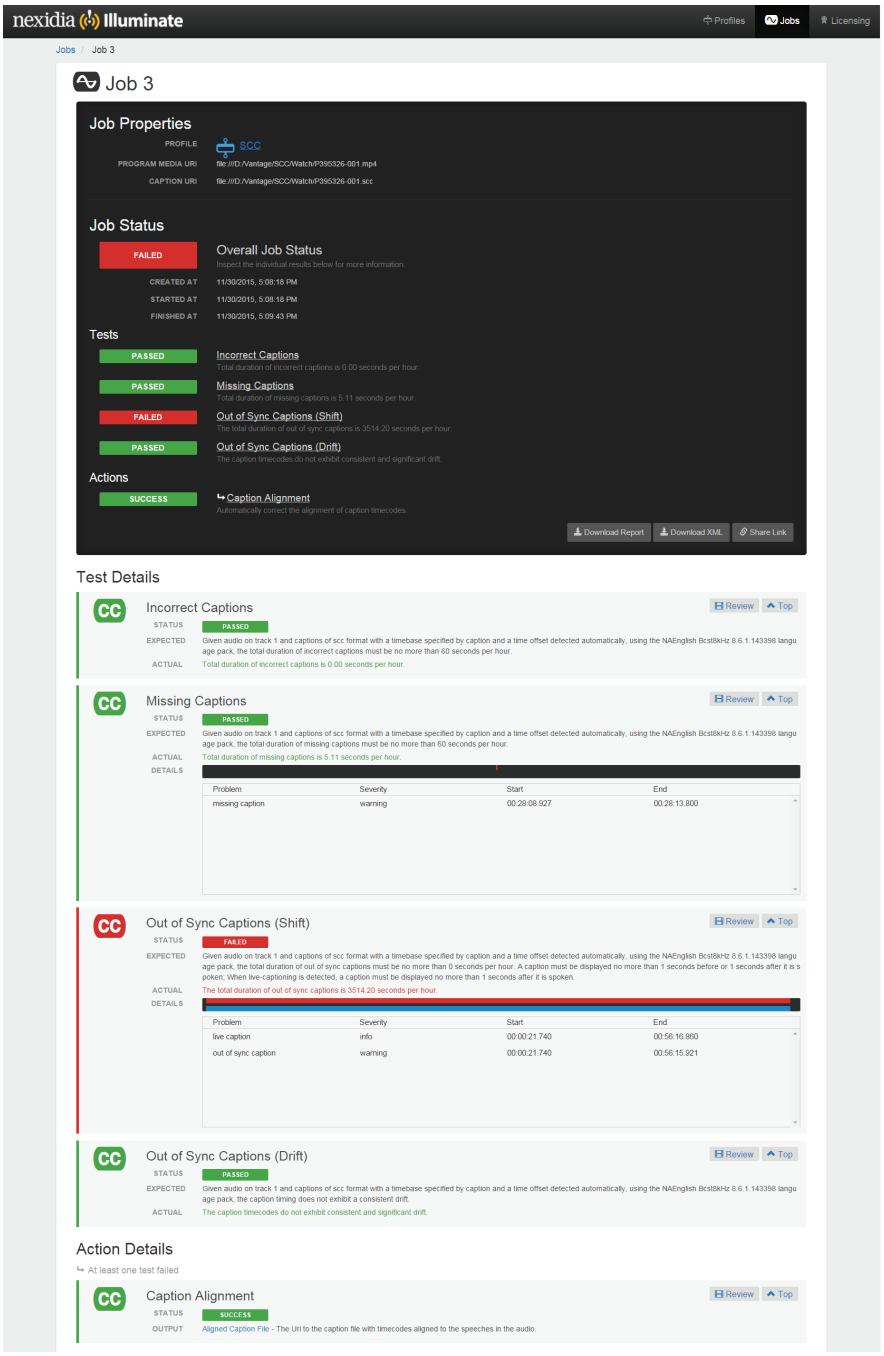
About Nexidia Illuminate

The Nexidia QC module offers a unique solution that automates the complete captioning QC process as well as language identification and video description of programs. In cases where captions have poorly timed captions due to frame rate conversions or live captioning, Nexidia Align can automatically align the mistimed captions, all without human intervention.

Nexidia Illuminate and the QC and Align modules are based on 12 granted patents, and offer the only automated way to verify captions, description, and language by analyzing the speech within a media file with the option to automatically correct caption synchronization problems.



The Nexidia QC workflow shown monitors a watch folder for new media, and an associate action finds the corresponding caption file, both of which are submitted to the Nexidia Illuminate action. The captions are then checked for missing, incorrect, or out-of-sync captions. Based on Nexidia QC's pass/fail analysis, media is then deployed either to a pass or fail output directory, along with an XML and HTML report, both containing detailed test result information. Out-of-sync captions will automatically trigger Nexidia Align to retime the caption file, which is also available at the output of the Nexidia Illuminate action.



The Nexidia QC workflow shown above demonstrates automatic discovery of an out-of-sync caption followed by the successful task aligning of closed captions.

A customer example: PBS

PBS currently employs eight people in QC operations at PBS Media Operations Center. With the volume of content doubling every 14 months and growing, manually verifying closed captioning requirements for broadcast and OTT for all their content is increasingly burdensome and costly. Continuing to approach QC manually would require them to add an additional person every two months. With as much as a quarter of all their iTunes submissions being rejected due to caption synchronization, finding an automated solution to verify closed captions is extremely important. The automation provided by Vantage, in combination with Nexidia QC and Nexidia Align, will enable them to avoid lost revenue, additional work, and high costs associated with re-captioning.

PBS is deploying Telestream Vantage together with Nexidia QC to automate their ingest processes. This will allow PBS to verify all incoming content, ensuring that media containing missing, incorrect, or out-of-sync captions are rejected. The process will occur without human effort being required, freeing QC operators to work on other tasks. When caption problems are detected in the content, PBS will be able to provide detailed reports of the exact locations of missing, incorrect, or out-of-sync captions, aiding in the correction of these problems. All of this is determined by comparing the closed captions to the spoken word. In cases where Nexidia QC determines that captions are out-of-sync, PBS will use Nexidia Align to correct the caption timing. With these automated processes, PBS can feel confident that problematic media is caught before it ever enters their archive.

PBS also uses Telestream Vantage to transcode the many different versions their OTT partners require. Using Nexidia QC at the end of their transcoding workflow, PBS can ensure captions are correct and meet the quality standards required by the OTT vendors – preventing costly delays and corrections, and ensuring that they are delivering a high quality product to their customers.

"We are using Nexidia Illuminate on every piece of media leaving the Media Operations Center. The Nexidia QC module is extremely fast and allows me to forgo the expense of manually checking every program end to end and allows us to certify to member stations that the captions meet FCC caption quality requirements. Nexidia QC allows me to ensure caption quality standards are met, against ever increasing volumes of programming, while focusing my existing team on alternative high value tasks. Nexidia Align is probably the single most valuable feature of Nexidia Illuminate. It allows caption sync problems to be adjusted in minutes rather than time-consuming manual attempts to fix caption sync."

– Steve Scheel, Senior Director, PBS Media Operations

For more information

Visit or contact Telestream at: www.telestream.net, enterprisesales@telestream.net, tel: +1 530 470 1300

Visit or contact Nexidia at: www.nexidia.tv, mediapartners@nexidia.com, tel: +1 866 355 1241

Specifications subject to change without notice. Copyright © 2015 Telestream, LLC. Telestream, CaptionMaker, Episode, Flip4Mac, FlipFactory, Flip Player, Lightspeed, ScreenFlow, Switch, Vantage, Wirecast, GraphicsFactory, MetaFlip, and Split-and-Stitch are registered trademarks and Gameshow, MacCaption, e-Captioning, Pipeline, Post Producer, Tempo, TrafficManager, and VOD Producer are trademarks of Telestream, LLC. All other trademarks are the property of their respective owners. December 2015