



CONTENT READINESS — BEYOND QC

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A JOINT WHITE-PAPER BY INTERRA SYSTEMS INC. & SIGNIANT INC.

BACKGROUND

As media content shifts from a tape-based to a file-based workflow, the status quo of content lifecycle becomes disrupted. The disruption spans two dimensions - faster lifecycle and new transformation activities. The lifecycle from creation to delivery would be significantly faster for file-based workflows compared to tape-based workflows due to the dynamic nature of the content. Content is also impacted by many new transformation activities. For example, material now arrives from new sources such as from user generated content and can be modified by new players (further blurring the lines between production and broadcast facilities). Content also must be modified in new ways due to multiple target platforms, demographics and devices, such as wireless, regional localization and handhelds..

In traditional tape-based workflows, the concept of quality control (or QC) had a specific point of applicability and in the context of a specific activity (such as post-transcoding). With file-based workflows, the concept of quality expands to content readiness. Content readiness spans multiple points of applicability in multiple contexts of activities across the content lifecycle. The disruption in content lifecycle due to file-based workflows now expands beyond faster lifecycle and new transformation activities to a third dimension—that of content readiness.

This third dimension of content readiness spans the entire content lifecycle and needs to be addressed with a consistent solution. Without this, file-based workflows become

vulnerable to inconsistent user experiences for content consumers and will result in limiting the monetization of content for content owners.

CONTENT READINESS - THE THIRD DIMENSION

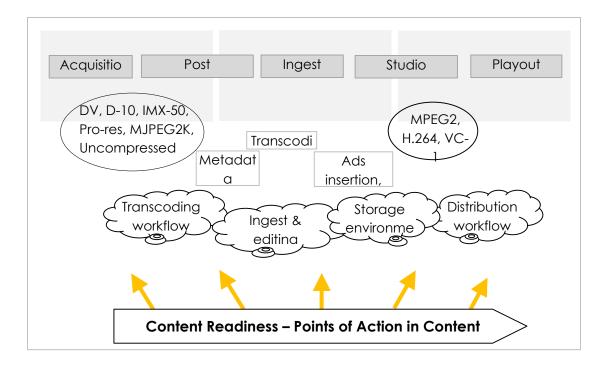
The third dimension of content readiness is an objective assessment of content and directly impacts consumer experience and supplier monetization. In this context, content readiness goes beyond traditional QC. Here are some of the requirements to ensure content readiness in file-based workflows:

- Must operate on a 24x7 basis because content files move automatically and faster across the network than the physical distribution and manual manipulation of videotape
- Must support all content attributes at all stages of content lifecycle with comprehensive support for all popular formats and common audio/video checks
- Requires built-in validation for each stage, such as metadata extraction, predefined playout specifications, etc.
- Must fit into automation initiatives- support multiple workflows and automation environments across the content lifecycle

CONTENT READINESS – POINTS OF ACTION

Content readiness spans the entire content lifecycle. What are some of the possible points of action for content readiness? What stages of the content lifecycle does content readiness specifically apply and how does it fit into the respective automation components? This can be a subjective discussion depending on the content lifecycle flow, the participants, the automation infrastructure and the sequencing of events (e.g. who performs which activity, what is the person-to-person hand-off, what is the process-to-process order?). The following diagram assumes a centrist approach for a typical file-based workflow content lifecycle and highlights relevant points of action for content readiness.

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CONTENT READINESS - SOLUTION

Interra's Baton is an automated content verification system to ensure content readiness throughout the content lifecycle. Baton is a software only solution that is differentiated by the following aspects:

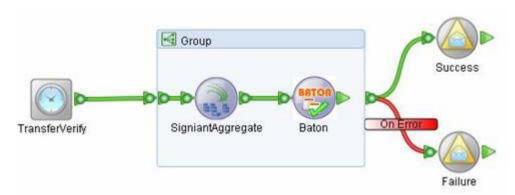
- Most comprehensive support for content formats
- Most comprehensive audio/video quality checks
- Supports fast validation based on metadata extraction and pre-defined playout specs
- Readily integrated into many standard workflows and automation environments at all points of action

Signiant's content distribution management software accelerates, secures, automates, and centrally manages the distribution of digital media.

- Central Dashboard providing full visibility into all global transfers
- File transport acceleration and latency compensation with 95+% bandwidth optimization
- Full Certificate Authority for security, media encryption, and certified delivery

Drag and Drop Workflow Modeling Engine for creation of automated workflows

Content Readiness – Sample Point of action with Baton-Signiant Integration



The integration of Baton and Signiant's Workflow Modeling Engine enables end-to-end visibility into the content readiness lifecycle. Through a drag-and-drop user interface, users can create unlimited numbers of workflows that support content ingest, transformation, quality control, distribution, and confirmed delivery. By collaborating on an API-level integration Baton will process files delivered to it via Signiant, run the required content verification routines, and based on pass/fail conditions, Signiant will then deliver the files to required destinations. The result of this collaboration is a streamlined, automated content verification and content readiness solution that can operate on a 24x7 basis in a "lights-out" operation. As a result, content can more easily flow from its origin point, through transformative and verification processes, and to distribution/consumption points.

CONCLUSION

This whitepaper discussed the disruptions in content lifecycle as media content shifts from tape-based to file-based workflows. Beyond faster lifecycle and new transformation activities, the third dimension of content readiness has been highlighted. Content readiness has multiple points of applicability across multiple contexts of activities across the content lifecycle. The automated movement and content verification is defined in some detail with sample solutions using Interra's Baton integration with Signiant's distribution workflow. While the specifics details of content readiness may vary across the customer spectrum, the need for a consistent solution for content readiness remains critical. Otherwise, file-based workflows will be vulnerable to inconsistent user experiences for both the content owner and the content consumer.