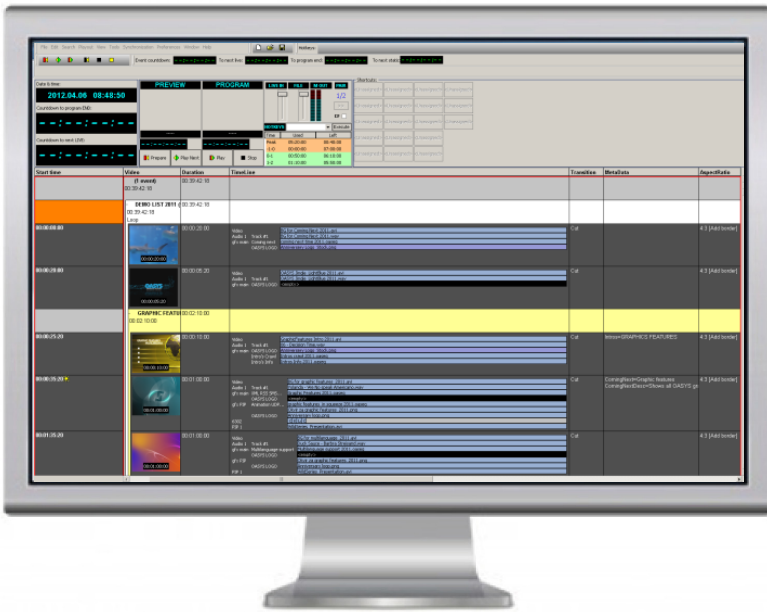# Aurora integration with BroadStream OASYS

BroadStream SOLUTIONS

Aurora file-based QC integrated within the BroadStream workflow, building confidence in your media file quality before playout

Channel playout comes in all forms, with a wide variety in functional requirements. All require a high level of reliability and quality. Unfortunately many playout solutions on the market simply do not have the breadth of functionality, nor the performance that the modern broadcaster now demands.

Built on 25 years of playout experience and pioneering IT playout, BroadStream keeps your solution architecture simple with optional software that enables you to have just the functionality you need. BroadStream applications are very powerful and feature-rich, providing operators with all the tools and workflows that a modern broadcasters needs for scalable operations. Integrated into the BroadStream workflow is now Aurora file-based QC from Tektronix.

Aurora is the automated file-based QC tool that you can rely on to place in your BroadStream workflow to identify any visual, audio or metadata issues before your content is played to air. The Tektronix focus on minimising false positives and a high degree of correlation to human perception means that our test reports highlight just the issues you need to address. Our architecture delivers guaranteed QC capacity and unrivalled speed of QC analysis to meet the demands for whatever your size of playout facility.

Broadstream Solutions

BroadStream Solutions (www.broadstream.com) is a broadcast solutions provider specializing in the playout of linear television channels and news production tools for global broadcasters, systems integrator and technical partners. Built on foundations of development expertise and dependability, we offer our clients peace of mind. BroadStream's vision is to become the #1 linear television playout solutions provider and to better serve our customers by offering pioneering technology and delivering industry-leading customer service.
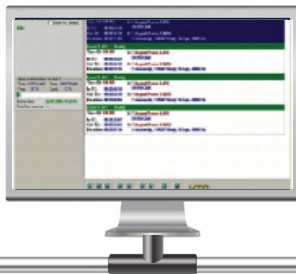
Aurora

Visual artifacts that can be detected by Aurora include Macro-block Noise/Cloud, Up-conversion, Comb Artifacts, Field Order Swaps, Tape/Digital Hits, Perceptual & Film Artifacts, Black/Freeze Frames, Letter-boxing/Pillar-boxing, Color Bars, PSE/Flash Detection, and Cadence Change. Audio artifacts that can be tested include Silence, Drop-outs, Peaks (dBTP, PPM, dBFS), Average Levels (R128, ATSC, ARIB), Clipping, Snaps/Clicks/Pops, Test Tones, Phase Swaps and Hiss/Hum.
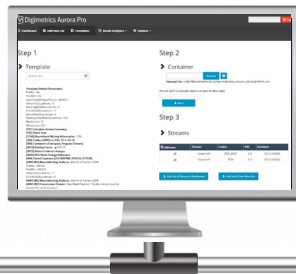
Aurora integration with BroadStream OASYS

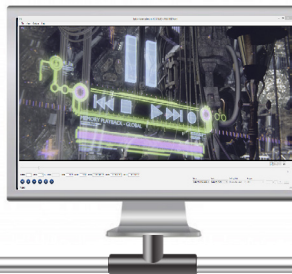## Solution Architecture and Workflow Overview

BroadStream Maker
Manage the ingest of media, creating files from SDI

Aurora QC
Set-up test plans and automated QC workflows

Hydra Player
Manual review with annotation and QC decision-making

OASYS Player
Automated playout of single or multiple channels

BroadStream Maker software operating on a server to BroadStream spec and fitted with a Matrox XMIO2 card ingests SDI from VTR and lines to file format and automatically places the ingested file on the central NAS in a QC watch folder. Files may also be imported directly in the same folder.

Aurora VUs (verification units) are installed on separate standard IT hardware servers, blades or fully virtualized infrastructure. The quantity of VUs installed and the number of servers depends on the number of concurrent QC tasks and the speed of QC analysis required. One or more Aurora Controllers are installed to manage QC job queues, allocating QC tasks to the next available VU instance. Each VU tests one file at a time with dedicated CPUs and GPU acceleration for guaranteed QC capacity.

Aurora Smart Test Plan functionality automatically applies the appropriate QC test plan to each ingested and imported file according to each file's attributes.

Operators review the QC Test Report on platform independent Aurora Web Clients from any machine on the network. On machines with Hydra Player installed they can click on any issue in the report and jump directly to view the frame of any issue with HDMI or SDI output. The Hydra Review Bar enables rapid movement between QC issues, and operators can enter QC decisions and add annotations. This review process speeds up manual review by up to 8 times.

Files that have passed the automated QC test plan or have been approved after a manual review using Hydra are automatically moved to a part of the NAS reserved for "ready for playout" content.

BroadStream software automatically indexes these files, making them available for playout use. The Media Manager software within the OASYS Player system will transfer these known good files to the playout servers in accordance with the playout schedule requirements, and then they are played to air. .

Contact Us

For complete information and sales contacts, go to www.tektronix.com/file-based-qc.