

Aurora integration with Astec iBroadcast®





Integrating Aurora file-based QC into the iBroadcast® Network Management System for increased efficiency, lower operational cost and media compliance

Broadcast platforms typically contain vertical silos of equipment performing specific functions in a linear flow. The vendors of this equipment may offer Supervision systems, designed to provide monitoring and control of their own applications and products. Many of these Supervision systems may claim to be capable of monitoring equipment from other vendors but the reality is usually not that simple. iBroadcast offers the capability to sit above these proprietary Supervision systems and aggregate information from any equipment into a single, consolidated user interface. This increases efficiency of operations as users do not have to monitor and manage large numbers of disparate systems. For file-based QC iBroadcast provides the ability to monitor the Aurora software.

Aurora is the automated file-based QC tool that you can rely on to place in your station workflow to identify any visual, audio or metadata issues at ingest, post-production, archive and before distribution. 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 broadcast operation.

iBroadcast®

iBroadcast® is a multi-vendor, scalable, Network Management System. It enables the status monitoring status of 1000s of devices and applications to provide an accurate, real-time view of your entire operation. Designed specifically with broadcast operations in mind, the features and benefits of the application are aimed specifically at improving asset performance, maintaining business continuity, lowering operational cost and ensuring compliance.

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 Astec iBroadcast®

Solution Architecture and Workflow Overview

iBroadcast and Aurora on industry standard IT servers, both scaled from one server to many to meet the specific operational needs



iBroadcast System Groups screen shows Aurora QC systems within the overall workflow



Aurora System Screen showing the status of all Controller and VUs in a specific Aurora system



Aurora Controller Device Screen for monitoring QC task status and drilling down to Test Reports



iBroadcast® provides a highly-scalable, secure, fully distributed and fault-tolerant system which can be implemented across a fully virtualized infrastructure. Its software operates on industry standard IT hardware and can be scaled from a single server installation for monitoring small systems, to multi-server installations for monitoring thousands of devices across large organizations. iBroadcast collects data in real time from equipment, services and applications using standard communications protocols and vendor proprietary protocols.

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.

iBroadcast integrates to the Aurora solution through the Aurora SOAP API. The Aurora status, alarms and reports are then presented to users in a various iBroadcast screens through a system hierarchy from high level System Groups, to Aurora Systems, to individual Aurora Controller instances and specific QC Tasks.

At a System Group level iBroadcast presents independent Aurora systems as single nodes placed in the overall broadcast workflow. These nodes will turn from green to red if an alarm is triggered in the specific Aurora system. Double clicking on an Aurora System node opens the iBroadcast Aurora System Screen, which shows the status of all the Aurora Controllers and VUs in a graphical display representing the physical installation. Double clicking on an individual Aurora Controller opens the iBroadcast Aurora Device Screen, which shows the status of all QC jobs from a specific controller, or a group of controllers. Double clicking on any of the tasks in the Device Screen opens up the Aurora QC Test Report for the user to review.

Contact Us

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

Copyright © Tektronix, Inc. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks, or registered trademarks of their respective companies.