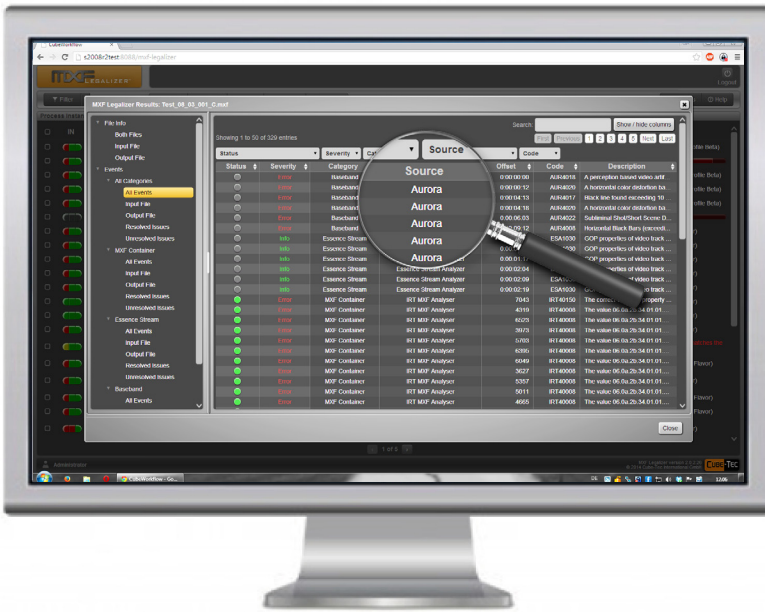


# Aurora integration with Cube-Tec CubeWorkflows



Aurora file-based QC integrated within the Cube-Tec CubeWorkflow collaborative framework technology, adding value to this smart next generation toolset with unrivalled speed and accuracy file-based QC

CubeWorkflow 2.0 is a lightweight Business Process Management (BPM) workgroup solution optimized for media centric organizations seeking to improve efficiency and quality control. Thanks to its modern Service Oriented Architecture (SOA) CubeWorkflow 2.0 is a collaboration framework technology of highly modular loosely coupled software components. Systems are assembled exact to the client demand. Thanks through latest Web portal technology and other open standards interfaces the integration in existing client infrastructures is straightforward.

CubeWorkflow 2.0 uses that Aurora API to integrate the Aurora automated file-based QC into wider frameworks and workflows to meet clients exact QC demands.

Aurora is the automated file-based QC tool that you can rely on to place in your CubeWorkflow framework to identify any visual, audio or metadata issues at ingest and before playout. 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, presented to the user in the CubeBoards interface. Our architecture delivers guaranteed QC capacity and unrivalled speed of QC analysis to meet the demands for whatever your size of media operation and CubeWorkflow system deployed.

## Cube-Tec International

Cube-Tec International develops integrated solutions for large media archives. As a pioneer in quality control of media workflows, the company focuses on open standards and agile process automation. Cube-Tec benefits from a great deal of experience with large-scale media digitization projects. Furthermore, Cube-Tec offers state-of-the-art products for content verification and media automation service platforms for modern file-based workflows using reference and non-reference based quality assessment methods. See [www.Cube-Tec.com](http://www.Cube-Tec.com) for more information.

## 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.

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## Solution Architecture and Workflow Overview

**CubeFlows**  
Create your workflows with automatic and human tasks



**CubeWorks**  
Prioritise and execute processes and load-balancing



**CubeResource**  
Creation and Management of all resources in use



**CubeBoards**  
Dashboard for process analytics with drill-down reporting



CubeWorkflow is based on a Service-Oriented Architecture (SOA). It uses BPMN to graphically model Business Processes and allow the orchestration and execution of these BPMN processes on a distributed server farm. External media processes can be integrated via standardized web services. CubeWorkflow is completely designed on advanced Web technologies and is easy to use within private clouds on premises as well as in hybrid and public Internet cloud stacks. All standard graphical user-interfaces are web browser-based.

Workflows combining automatic and human tasks with rule-based decision-making is designed in the CubeFlows component. This includes placing file-based QC tasks wherever quality checking is demanded in the client workflow. Steps in these workflows, like automated file-based QC, are performed by ProcessingUnits that perform the real media signal processing. The available infrastructure and load balancing for any such processes to be executed are managed by the CubeWorks component.

Cube Workflow allows performing of media validation processes (quality control QC) and automatic file-based repair in large-scale media collections. To achieve this Aurora verification units (VUs) are installed on 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.

Human tasks in the workflow, such as manual QC validation, are presented in personalised case-based interfaces using the MyTasks component. All the process information is stored in the CubeDB database. Process analytics, and essences and metadata insights, such as QC test reports, are presented with drill-down detailed reporting in role-based and user-definable dashboards using the CubeBoards GUI component.

## Contact Us

For complete information and sales contacts, go to [www.tektronix.com/file-based-qc](http://www.tektronix.com/file-based-qc).