

# Aurora integration with Disk Archive ALTO





Delivering confidence in the quality of your deep archive content with Aurora file-based QC and Hydra Player integrated within ALTO-II Archives & Content Libraries

Making your media assets more accessible makes good business sense. News, sports and factual programs are more appealing and your content can be more easily re-purposed for new revenue streams. For high-capacity local storage or enterprise archives ALTO is the most cost effective and proven solution for a totally tapeless workflow. Now with Aurora file-based QC and the Hydra Player from Tektronix integrated in your ALTO solution you can have added confidence in the quality of your archived media.

Aurora is the automated file-based QC tool that can be includes in an ALTO workflow to identify any visual, audio or metadata issues before archiving. The Tektronix focus on minimising false positives and a high degree of correlation to human perception, means that its test reports highlight just the issues you need to address. The Aurora architecture delivers guaranteed QC capacity and unrivalled speed of QC analysis to meet the demands for whatever size of archive.

Hydra Player enables frame-accurate preview of any content to be stored on the ALTO, complete with video, audio waveform monitor and peak meters. Aurora provides a range of tools that significantly speed-up manual review, including jumping to the exact frame of any reported QC issue.

## DAC ALTO

ALTO is a Disk Archive system based on hard disks offering superior performance and lower total cost of ownership than a Data Tape Library. ALTO Archives use "sub-nearline" disk drives which support spin-down operation. Any disk which is not reading or writing is switched off saving power and extending the life of the disks. ALTO is a purpose-designed off-line Archive offering faster access for more concurrent users than a Data Tape Library, equally suitable for small workgroup Content Libraries and multi-Petabyte Archives.

## 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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The main building block of the ALTO modular solution is the 48 Slot System Chassis. One or more EX-60 Expansion Chassis' can be added to this for additional storage capacity. ALTO systems can begin with a single System Chassis populated with just two 4TB disk drives, giving 4TB of protected storage with 2:1 Replication. Additional locally sourced disks can be added on a buy-as-required basis to scale the archive to multi-petabyte capacity. For example, an ALTO Chassis with two EX-60 Expansion Chassis' has a full capacity of 300TB of usable protected storage with 2:1 Replication. Multiple ALTO Nodes can be combined to create Petabyte class storage solutions.

For Enterprise deployment to potentially large numbers of operators, integration of the ALTO system is implemented with leading MAM, DAM and Archive Management systems from a wide range of Application Partners. This integration is based on the ALTO Filer, Virtual File System and Content Replicatior software from Disk Archive, or native integration using the ALTO API. In these configurations the Aurora file-based QC is typically integrated with the third party solution as an integral part of the wider system workflow. Aurora VUs (verification units) are installed on industry standard IT hardware servers, blades or fully virtualized infrastructure for Enterprise solutions. 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. Files can therefore be tested before delivery to the ALTO system.

For smaller Workgroup operations, say for News Production and Post-Production, Aurora can be embedded with the ALTO system. In this configuration the Aurora software is directly installed on the ALTO Chassis and is allocated CPU resources from the second built-in processor. Automated workflows can be configured within the Aurora software to manage automated application of test plans according to file attributes, and an Aurora decision engine can be configured to manage the post QC test archive or corrective action workflows.

## Contact Us

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

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