

One MAM for Playout and VoD

Most asset management platforms specialise in a certain area of the content chain, and there is nowhere where this issue is more prevalent than within Playout. Designed to support playout at a time when the only output was the linear channel itself, these systems have tried to be adopted over the years to handle the now standard challenges that face broadcasters globally. However, being initially designed for one purpose and used for another means that often the solutions are either expensive, clunky or both.

Cubix from its inception is a product, one that is modular by design, multi-tenanted and able to handle workflows all across the media spectrum. Its enterprise architecture ensures no single point of failure, and its ability to scale both on-premise and in the cloud ensures it can handle even the most demanding of throughput.

Cubix also has a workflow engine called Taskflow, complete with its own UI designer for workflows, using which Cubix customers are able to design and put live workflows in minutes. This means that these workflows are able to start all the way back where content is being acquired / complied - all the way through to playout and VoD. Different workflows can also be designed for different channels / content types - ensuring that the content is handled by the right team at the right time.

Playout schedules can be imported from scheduling systems such as Phoenix 7 Zeus and MediaGenix - and can be viewed and edited within the Cubix UI. Schedules can also be built from scratch within Cubix. Once the schedule is present, this in turn drives our orchestration engine to get content prepared and to playout / platform in time according to its next TX / publish date. The benefit to this method is that all content is now "stateful" - so that using our Missing Materials Manager it is possible to see in real time exactly where the content is in the process, which team needs to take action, and what the current predicted ETA is for the content to be ready. This is significantly different to many playout MAMs that simply show the status as either being "missing" or "present".

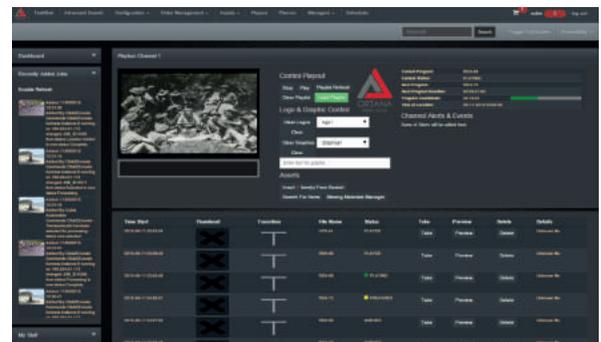
Cubix is able to deliver content and metadata to your playout engine, as well as to any VoD services for catch up and on-demand. Content is stored within the content hierarchies that can easily be defined within Cubix, and against which metadata schemas are defined and populated. This subtle feature of having a hierarchical structure that metadata can be associated to - separate to the media itself allows for many key benefits such as metadata inheritance, and the ability to easily swap out an asset without affecting the metadata. Cubix natively supports delivering content in such broadcast standards as DPP AS11, as well as web / STB standards such as HEVC (4K), MPEG-DASH, ADI (v1.1, 2 and 3), Microsoft Smooth Streaming and HLS Adaptive.

The support for both local LTO, spinning disk and cloud based storage platforms allows Cubix users to introduce cloud storage securely and safely as an alternative to LTO. This allows for many of the geographical challenges that cause the binary "main and backup" site to exist to be removed.

Cloud Enabled Edge Playout

Cubix is now fully integrated with the Playbox CloudAir solution - allowing for not only full asset management and orchestration of content for the playout channels, but also a direct control of the Airbox content via a secure web interface. This means that the Airbox servers can be located at edge locations, with content and schedules being securely delivered remotely to the edge - complete with live tracking and status via the Cubix Taskflow interface.

Another key feature to Cubix is its ability to support many different deployment models, due to its ability to support private, hybrid and public cloud platforms. Cubix systems can also talk to each other via their API - allowing for multi-site deployments that work seamlessly as one. One such example of this is "Cloud Enabled Edge Playout" or CEEP.



An instance of Cubix running in a public cloud for example could be natively managing Backblaze B2 or Amazon S3 / Glacier storage locations - acting as a landing pad for content being delivered from content producers, advertising agencies and other sources. This is easily done thanks to the different portals Cubix offers, and the fact everything is fully multi-tenanted ensuring that users only see the content they have rights to. This content can be managed in the cloud - processing the TX schedule, and preparing the content for playout. This can include such processes as file based QC, as we as review and approve workflows - where secure screener links are sent out for approval.

The content is then automatically transferred to the relevant edge locations, where local Cubix services receives the content and ensures it gets to the Airbox. Schedule management also occurs in a "lights out" fashion with schedules being automatically loaded. This can be useful in scenarios where ad-insertion is being done - and so a schedule for each TX break can be sent - and triggered using many different trigger formats such as DTMF, web service and more. The same Cubix instances can then perform all of the transcoding, packaging and delivery requirements to send this content then to an OVP platform for catch up VoD or other similar services.

The net result of this solution that leverages the latest technology and utilises the cloud for scale, stability and resilience - and provides you with a single pane of glass across the whole process.