

MediaKind

Aquila Streaming

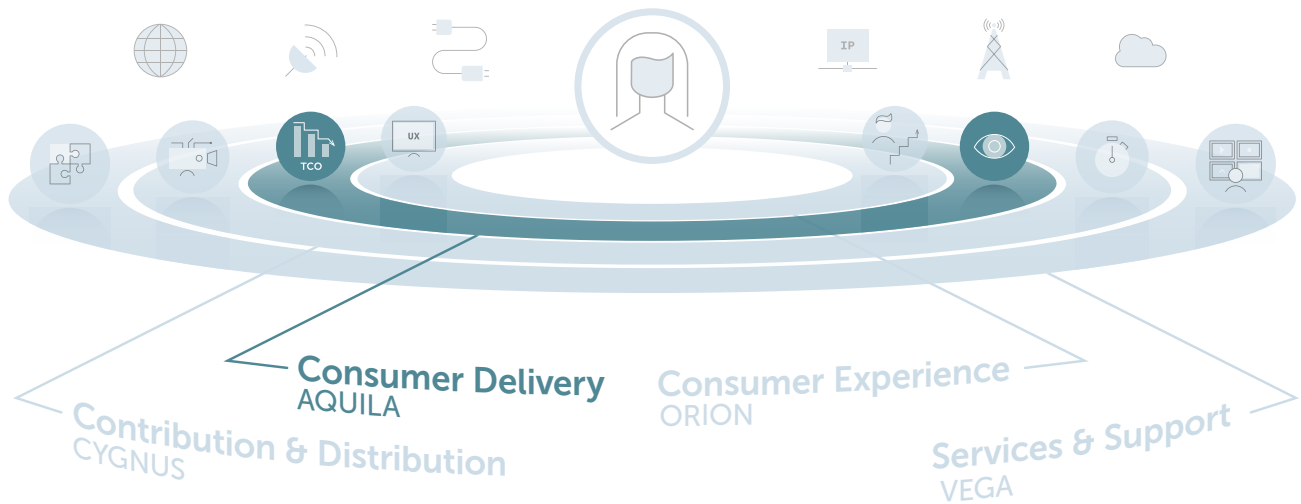
Stream Bigger



AQUILA
Consumer Delivery

Aquila Streaming is the solution for processing & delivering video over any streaming network (Cable, IPTV & OTT) to any device, whilst enabling a broadcast like experience.

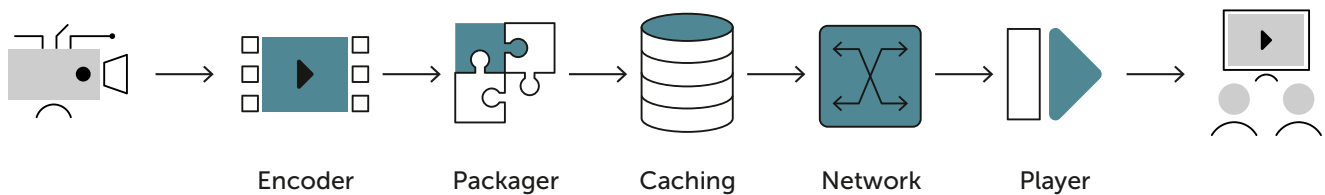
Create new revenue streams with digital ad-insertion and enable simple management of lifecycle management by leveraging cloud-native applications.



MediaKind's cutting-edge Consumer Delivery solutions embody creative thinking for today's challenging world of media delivery. Video is no longer stagnant nor immobile and no longer comes in limited flavors. Today's world of video requires bold solutions capable of ingesting any type of video feed and format, dynamically storing video when and where appropriate, doing so on a heterogeneous mix of physical storage hardware, and streaming live and stored video On-Demand to a wide variety of device types, each with their own technical requirements.

Aquila Streaming is one of the MediaKind solutions within the area of Consumer Delivery. It enables the ingest, transformation, processing, storage and delivery for both linear and non-linear video content. In addition, these highly efficient, broadcast-grade services enable innovative consumer experiences with flexible deployment and operating choices.

Aquila Streaming solution workflow



Aquila Streaming provides the end-to-end software and integral industry and technology partner integrations to securely deliver content from a contribution link to the consumer on any device.

Aquila Streaming solution values

- **Push your video quality higher** leveraging MediKind's Encoding Live award-winning technology to provide the highest video quality and guaranteed performance across multiple codecs (MPEG-2, H.264 & HEVC)
- **Enabling a better consumer experience** with support for a wide variety of devices by leveraging MediKind's packager with support for all major segment and manifest formats (HLS, SS, DASH, CMAF)
- **Faster time to market** by leveraging a single solution to address all networks and all infrastructures (Appliances, IT datacenter & private and public clouds)
- **Reduce operational complexity** using a single point of entry for all your services and servers' operations
- **Optimize OPEX and CAPEX** when migrating to full IP leveraging the latest IT & cloud technologies (containers & orchestration) to significantly reduce infrastructure costs
- **Highly Available** with a variety of redundancy and recovery schemes. This ensures the maximum uptime and minimizing servicing costs but also reducing consumer churn and maintaining important revenue streams

Broadcast quality streaming market challenges

With drivers such as innovation, convergence and cost rationalization, OTT streaming is increasingly becoming the right solution to deliver content. However, there are many challenges in order to maintain or exceed the expectation of an equal to or better than 'broadcast experience' when leveraging streaming delivery.

The benchmark for quality of experience has been set by broadcast, and this is being further evolved as OTT

and Streaming providers offer new and higher quality services especially in the area of live event delivery.

Challenges such as latency, picture quality and offering content for consumption on multiple devices both inside and outside of the home continue to exist for TV Service Providers either already in the streaming world or new to the market.

Delivering broadcast-like OTT streaming experiences

MediaKind's Aquila Streaming solution for OTT is evolving to remove the final barriers that have been preventing OTT from being the right solution for content such as live sport events and content linked to social media.

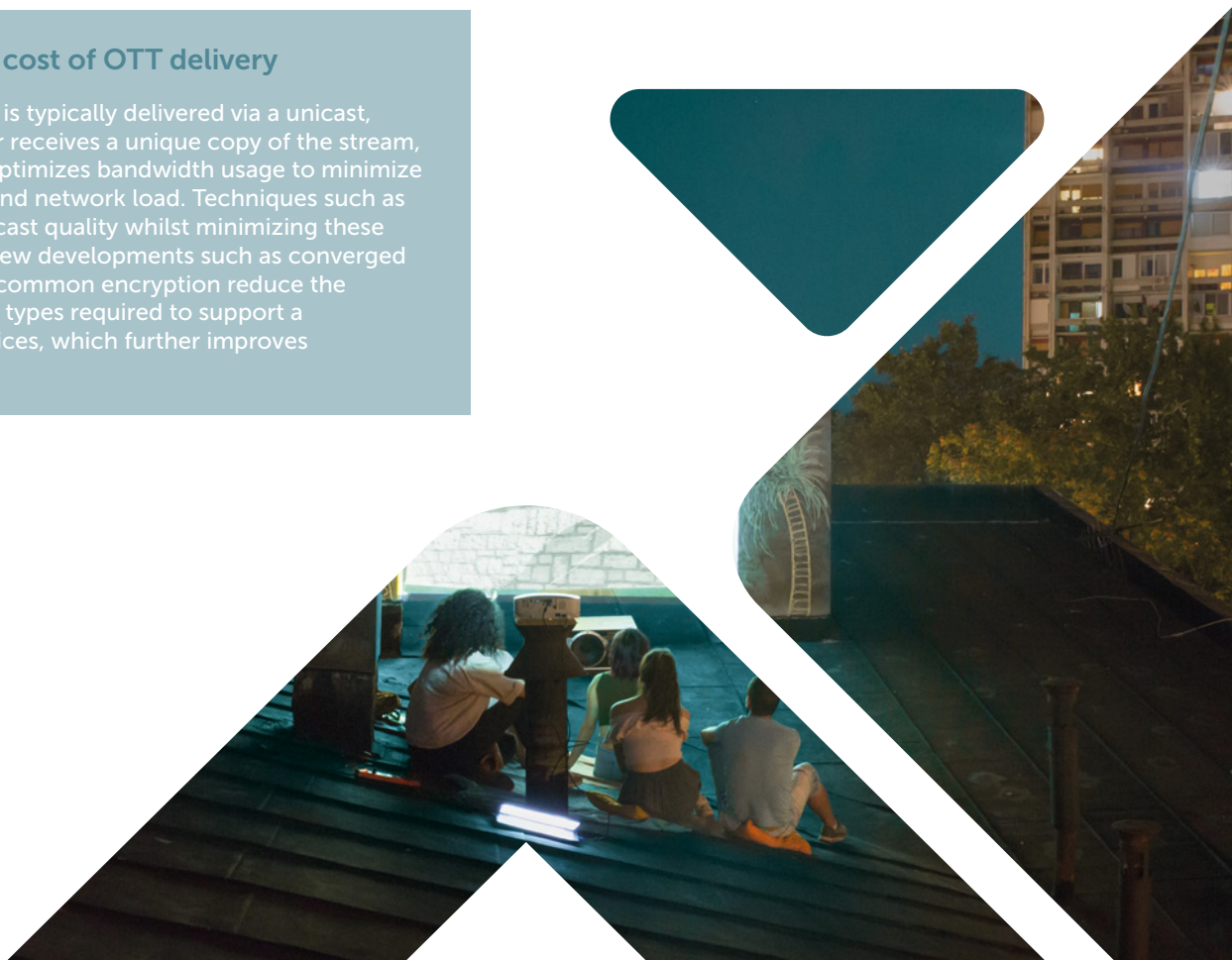
To achieve broadcast-like experiences, MediaKind Aquila Streaming leverages technology innovations developed for MediaKind's range of Consumer Delivery solutions including:

- Deep rooted technology to reduce bandwidth and storage usage without impacting video quality namely Constant Video Quality (CVQ).
- Low latency OTT implementation using the CMAF LLC standard and the in-house innovation "Direct path" to lower the end to end latency from up to 30 seconds down to approximately 5 seconds.

Aquila streaming provides a rich user experience not only by generating high quality audio and video without a glitch, but also by being able to provide the same experience as with digital home cinema: playing video up to UHD with surround sound, alternate audio tracks, closed captions & subtitles in different languages or navigating through the content using video thumbnails.

Optimizing the cost of OTT delivery

Since OTT content is typically delivered via a unicast, where every viewer receives a unique copy of the stream, Aquila Streaming optimizes bandwidth usage to minimize distribution costs and network load. Techniques such as CVQ enable broadcast quality whilst minimizing these costs. In addition new developments such as converged CMAF chunks and common encryption reduce the number of content types required to support a wider range of devices, which further improves delivery efficiency.



As a Service model

Aquila Streaming as a service leverages benefits of the overall Aquila Streaming solution for processing video for OTT delivery, and extends these to offer them as a fully managed service.

This type of solution deployment enables some key additional benefits:

- Faster time to market for media content
- Peace of mind from proven integration with ecosystem partners to offer a full turn-key solution
- Significant cost efficiencies from the reduction of locally deployed equipment procurement or management since the solution leverages public cloud infrastructure
- Reduced in-house operational requirements and lifecycle cost implications as these are managed by MediaKind
- Applications supported for 24/7 live channels, occasional use/events, and additional use cases such as disaster recovery for on-premises headends

Reclaiming the full potential of a media delivery infrastructure

Thanks to its micro-services architecture, Aquila Streaming and its components are designed to leverage the core advantages of their inner technology and the IT & Cloud tools to provide a reduced footprint within any infrastructure significantly saving operational costs and ongoing Total Cost of Ownership (TCO).

Aquila Streaming has been designed with video Headend operations in mind in order to enhance the deployment and lifecycle of your headend. This flexible architecture allows Aquila Streaming to be deployed as an appliance

on-premises, as software running on either dedicated or shared infrastructure (private and public clouds), or offered as a service.

With the increasing number of streams, devices and delivery scenarios to address combined with requirements to secure the content, Aquila Streaming is the center piece of a wider ecosystem. In order to deliver these requirements, the solution is pre-integrated with industry leading technology partners who offer integral ecosystem elements such as CDNs, DRMs, players, devices and monitoring solutions.

Value to the consumer

- Delivering more content, more rapidly with an optimized Picture Quality regardless of resolution (SD, HD, UHD)
- Putting the consumer experience first when viewing live or social media related events and shows with by delivering broadcast-like low latency OTT services
- Ensuring consumers have a rich user experience across all devices, anywhere.

