DALET

Dalet Digital Media Systems

MainConcept® powers Video Server, Transcoding, Media Asset Management & Orchestration Platforms in broadcast, sports and government media solutions

In order to serve every aspect in the broadcast market, there is the need to offer a broad product portfolio. Providing highly flexible and versatile business solutions, Dalet Digital Media Systems powers end-to-end workflows within their various platforms that address key tasks in multimedia environments like ingest, editing, transcoding, orchestration, QC, playout and distribution. In this context, broadcasters need to manage and cope with content in many different formats every day. Supporting and automating the complete production chain is the major factor for any competitive platform on the market. Enabling customers to process as many diverse formats as possible within their products, highly powerful, multifunctional and robust encoders, decoders and related components are required.

CHALLENGES

Dalet's solutions are not only widely deployed in TV news, sports and entertainment broadcast, but also directly by sports venues and teams, as well as among governmental, non-governmental institutions and online media distributors. Because of the requirement to serve every aspect of the production workflow, these markets cannot restrict themselves to only support a few video and audio codecs.

While codecs are evolving continuously at tremendous speed, Dalet's customers expect the Galaxy, AmberFin and Brio platforms to handle any kind of media type as an essential part of their workflow requirements. For Dalet, the major challenge is dealing with a wide variety of popular codec formats, e.g. HEVC/H.265, AVC/H.264, MPEG-2, VC-1, MPEG-4 Part 2, H.263 and DVCPRO HD, while enabling a seamless integration and interchangeability between all available platforms.

PLATFORMS

- Dalet Galaxy
- Dalet Brio
- Dalet AmberFin

MARKETS:

- TV News, Sports & Entertainment Broadcast
- Sports Venues & Teams
- Government & Online Media
- Studios & Post-production Houses

USE CASE:

- Production, QC, Orchestration, Ingest / Playout, Transcoding, Distribution

MAINCONCEPT SDKS:

- HEVC/H.265
- AVC/H.264 BC
- MPEG-1/2
- DVCPRO HD
- MPEG-4 Part 2 / H.263
- VC-1

AT A GLANCE:

- MainConcept is used for almost all media processing

- Trusted partner for 10 years

- In-depth knowledge of the broadcast market

- MainConcept offers largest library of codecs & formats

- MainConcept powers Dalet's combination of MAM, editorial, orchestration, production and distribution functionality under a single platform

- Best compromise between speed and quality

As a consequence, Dalet has been looking for a strong technology partner that is able to offer a robust, flexible and reliable codec framework which is constantly updated based on the latest specifications and can be leveraged across the different Dalet platforms.

MainConcept's expertise and renowned codec portfolio went above and beyond Dalet's requirements, because they provide a full set of SDK components for building a complete professional production chain, and additionally, offer the right technology to overcome these challenges.

SUCCESS STORY

Dalet's state-of-the-art product line provides a combination of MAM (Media Asset Management), orchestration, editorial, production and distribution functionality under a single platform. The enterprise-class Dalet solutions support a large network of more than 90 connected partner technologies. This powerful integration framework with an Open API unifies all tools within a single system supporting all popular industry standards. TV news, sports and entertainment broadcast channels, large radio networks, sports leagues and teams, online media distributors, government agencies, studios and post-production houses as well as educational institutions highly rely on Dalet's Galaxy, AmberFin and Brio flexibility in dealing with these standards.

When examining the market for a partner who offers components for handling common broadcast codecs and formats for their various solutions, MainConcept was Dalet's first choice. MainConcept provided a reliable and robust codec library for audio / video decoding, encoding as well as transcoding to fulfill the requirements of Dalet's professional customer base. The integration of MainConcept's renowned Encoder and Decoder SDKs across various Dalet products allowed them to implement streamlined workflows and a seamless user experience. Still each product plays an essential role within the complete production chain:

Dalet Galaxy is an enterprise level MAM and orchestration platform leveraged by MainConcept SDKs. Its powerful engine unifies the content processing chain by managing assets, metadata and workflows as well as permits control across multiple and diverse production and distribution systems. Tailored specifically for news and media workflows, the unique Dalet Galaxy platform helps broadcasters and media professionals all around the world to increase productivity, collaboration and content distribution, while at the same time providing operational and business visibility. The Dalet Workflow Engine enables customers to streamline their processes, efficiently managing and automating a combination of end-user tasks and system procedures. Within these flexible workspaces composed of easy to use editorial and production tools, the MainConcept Decoders, Encoders, Muxers and Demuxers help single users and entire teams to organize, produce and deliver a wide variety of content types, that get automatically packaged for any targeted distribution channel and audience.

Dalet Brio is a video server for high-density video ingest and playout. Powered by a large set of MainConcept SDK components, Dalet was able to handle many different broadcast formats within their solution addressing the demanding needs of studio production, multi-camera ingest, sports logging and highlights production. To satisfy their c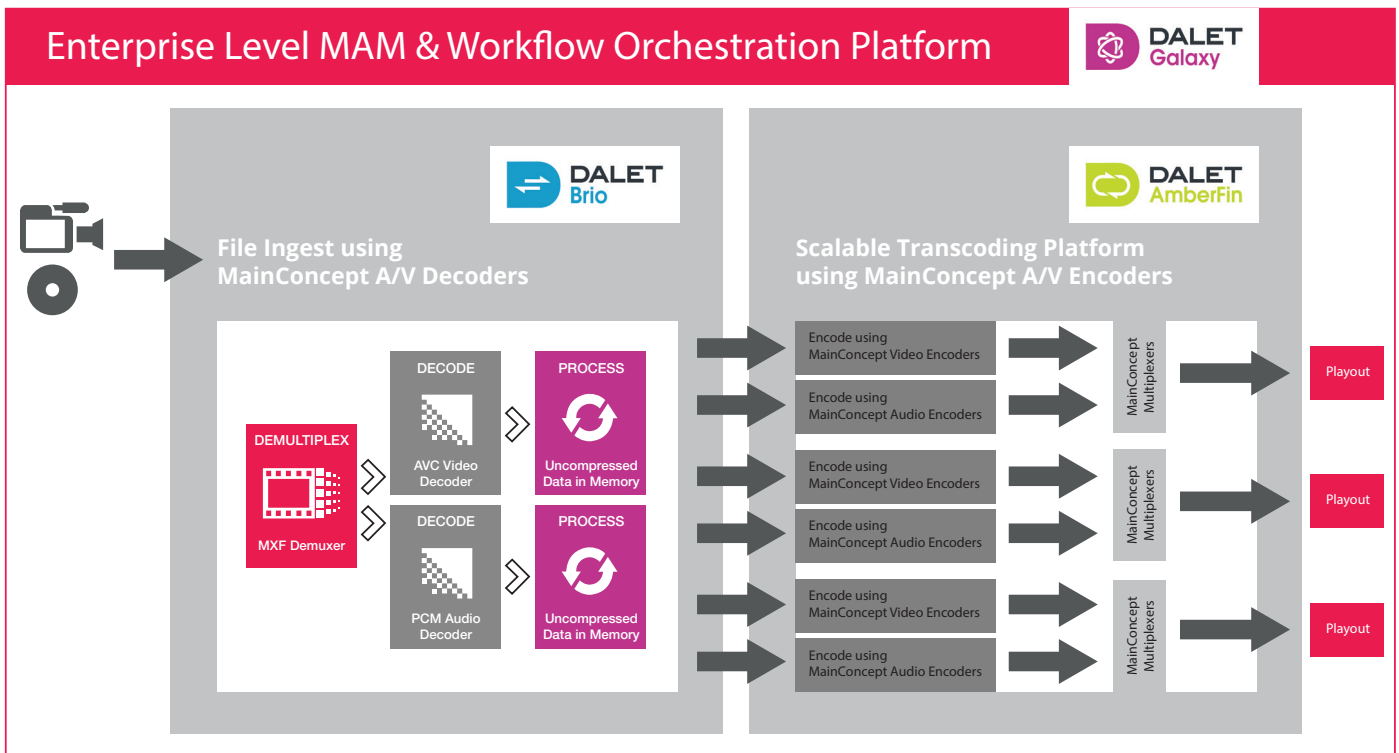ustomers' high expectations, Dalet developed a cost-effective video server platform supporting multiple SD, HD and UHD channels that combines high reliability with extreme flexibility. Using MainConcept Encoder and Decoder SDK components guarantees broad interoperability between industry standards designed for fully automated ingest and playout services.

"MainConcept has proven to be a trusted partner for Dalet over the last 10 years. Its library of codecs is probably one of the largest in the market, with a subtle compromise between speed and quality. Besides, MainConcept stays constantly at the forefront of the industry's next need with new codecs, which is critical for our customers as the media formats landscape keeps evolving."

**MATTHIEU FASANI, PRODUCT LINE MANAGER,
MEDIA ASSET MANAGEMENT & SAAS SOLUTIONS @ DALET**
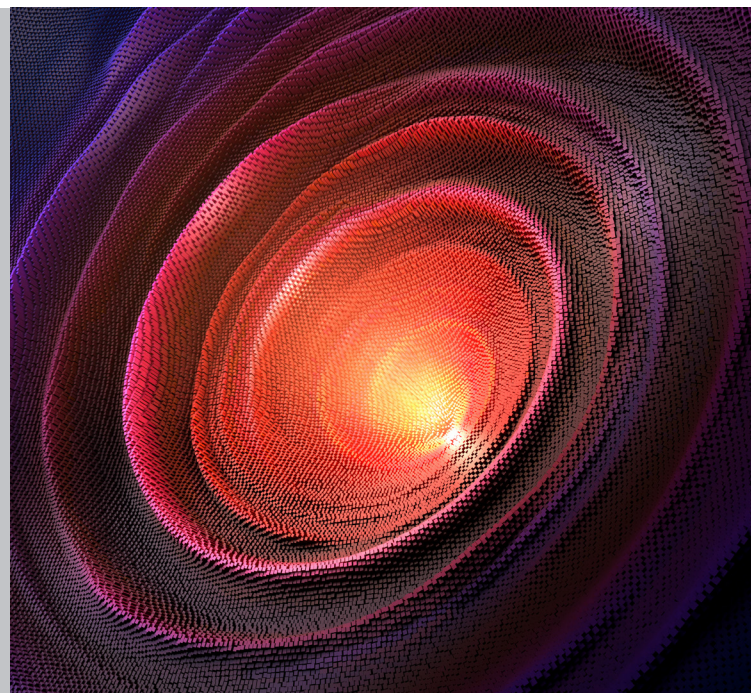
NeuLion™ | MAIN CONCEPT™

DALET AmberFin

Dalet AmberFin is a high-quality and scalable media processing platform for numerous professional formats. Taking over fully integrated ingest, mastering, QC (Quality Control) and review functionalities, Dalet AmberFin enables production facilities to generate high quality content in a scalable, reliable and interoperable way. The huge codec and format library provided by MainConcept is used for transcoding input and output HEVC/H.265, AVC/H.264, MPEG-2, DVCPRO HD, including special support for professional camcorder formats from Sony and Panasonic, such as XAVC, XDCAM, DVCAM, P2 DVCPRO and P2 AVC-Intra. Dalet is able to process High Dynamic Range (HDR) metadata in a single workflow. Even playing back HEVC footage up to 4K in real-time is powered by MainConcept decoding components. Built upon unique and state-of-the-art technologies in every aspect of the software, Dalet AmberFin ensures that media assets retain the highest quality from ingesting new media content to outputting 4K resolutions with the entire process controlled and monitored by an intuitive web-based user-interface. The MainConcept codecs always provide best-in-town quality and performance regardless whether the transcoding in Dalet's software is targeted at a single application-specific product or a large-scale, enterprise-class server farm.

Enterprise Level MAM & Workflow Orchestration Platform

DALET Galaxy

DALET Brio

File Ingest using MainConcept A/V Decoders

- DEMULTIPLEX — MXF Demuxer
- DECODE — AVC Video Decoder
- DECODE — PCM Audio Decoder
- PROCESS — Uncompressed Data in Memory
- PROCESS — Uncompressed Data in Memory

DALET AmberFin

Scalable Transcoding Platform using MainConcept A/V Encoders

- Encode using MainConcept Video Encoders
- Encode using MainConcept Audio Encoders
- Encode using MainConcept Video Encoders
- Encode using MainConcept Audio Encoders
- Encode using MainConcept Video Encoders
- Encode using MainConcept Audio Encoders
- MainConcept Multiplexers
- MainConcept Multiplexers
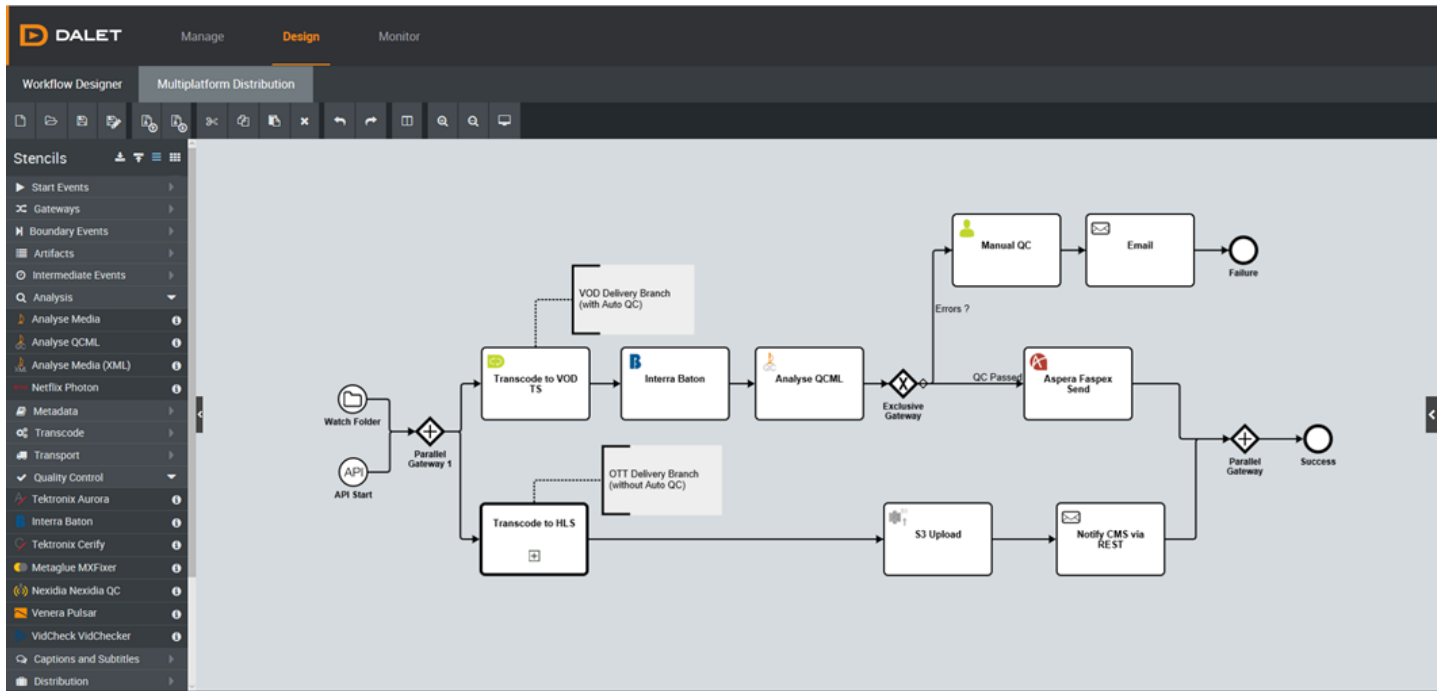- MainConcept Multiplexers
- Playout
- Playout
- Playout

Over the past decade, Dalet Digital Media Systems has used a large set of MainConcept SDK components within Dalet Galaxy, AmberFin and Brio to enable professional broadcast clients to deal with the many formats they require. Due to MainConcept's highly flexible yet powerful API, integration time for development was not a big challenge.

Expanding the codec offering to HEVC/H.265 lifted Dalet's product portfolio to the next level. Dalet has integrated and is now actively promoting MainConcept's HEVC/H.265 Decoder to expand their market coverage in the broadcast and OTT spaces.

Because of MainConcept's common and consistent API across all SDK components, extending codecs and formats is easy. MainConcept's Customer Care team provided worldwide professional engineering and integration support to help Dalet move forward quickly and efficiently.

CLOSING WORDS

MainConcept's codec library has an excellent reputation in the broadcast industry all around the world. Licensing a huge set of different Encoder and Decoder SDKs from a single codec manufacturer allows Dalet to build their broadcast-leading platforms on top of the most reliable yet easy-to-integrate video technology foundation.

MainConcept's SDK components are integrated in the Dalet platforms as an essential part of their application servers that are in charge of processing all sorts of different media files. Nearly every Dalet media workflow is based on MainConcept Encoder and Decoder SDKs.

Today and tomorrow, Dalet's customers expect end-to-end workflow capabilities in their solutions, ranging from studio production to linear, OTT as well as VOD distribution, regardless whether content is carried as a file or streamed via a network. For the short-term future, hot topics for Dalet are IMF (Interoperable Master Format) workflows and CMAF (Common Media Application Format) as key enablers of component based workflows. Advanced HDR support for both HD and 4K resolutions and ABR (Adaptive Bit-Rate) formats with extended MPEG-DASH and HLS features also rank high on Dalet's roadmap.

Concurrently, MainConcept continues to develop state-of-the-art codec technologies for broadcasters to fulfill the demand for higher compression in extraordinary quality. These goals will enable both companies to enter the next stage in their ongoing success and growth story.

REQUEST A DEMO:

MAINCONCEPT SDKs DALET GALAXY, DALET AMBERFIN, DALET BRIO

Free evaluation downloads are available for testing.

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