

CASE STUDY



PlayBox Neo

MainConcept powers ingest, playout and streaming automation in international broadcast solutions

Broadcasters have to deal with numerous formats and different content every day. The need for supporting and automate the complete production chain from ingest, decoding to encoding, playout and delivery is the key factor for any competitive platform on the market. More than 17,000 TV and branding channels are powered by PlayBox Neo Ltd. broadcast solutions. Users include broadcasters, start-up TV channels, webcasters, DVB (IP/ASI) TV channels, interactive TV and music channels, film channels, remote TV channels and disaster recovery channels. These customers have a strong requirement for ingest and playout technologies in their workflow.

CHALLENGES

To serve every aspect of the production workflow in the broadcast, PlayBox Neo Ltd. needs to offer solutions for each part of the process. The major challenge on the input side was the ingest of different media formats, such as MPEG-2, DV, DVCPRO 25/50, DVCPRO HD, AVC/H.264 and HEVC/H.265 coming from many different production and NLE systems.

On the playout side, **PlayBox Neo** had the urgent request to generate the content that is compliant with satellite channels, cable head-ends, over-the-air broadcasting. Finally, any solution in this market must comply with the specifications that control SCTE-35 generation for commercial ad-insertion. MainConcept provides SDK components for the complete professional production chain, and has the right technology to overcome these challenges.



PRODUCT

- AirBox Neo
- CaptureBox Neo

MARKET:

• Broadcast, TV & music channels, corporate sectors

USE CASE:

- Ingest
- Decoding / Encoding
- Streaming

MAINCONCEPT SDKS:

- HEVC/H.265
- AVC/H.264 Broadcast
- MPEG-1/2
- DVCPRO HD Decoder
- SCTE-35 SDK

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• AT A GLANCE:

- MainConcept is used for decoding / encoding video
- MainConcept reference customer for SCTE-35 SDK
- Powering automated ingest, playout & streaming solutions
- Deep understanding of the broadcast market's requirements
- Only about two weeks of SDK integration time
- Wide range codec & format support
- Providing easy to install & configurable solutions
- Reliable, robust & highly scalable overall package

SUCCESS STORY

When researching the market for a vendor who provides software components for ingesting multiple SD and HD channels into one system simultaneously, MainConcept was among PlayBox Neo's first successful hits. Moreover, the manufacturer of the Neo product series needed a reliable solution for their playout servers to fulfill the demands of their customers properly. As an international communications and IT company, **PlayBox Neo** serving the broadcast and corporate sectors in more than 120 countries, was looking for a state-of-the-art codec provider and had selected MainConcept and their renowned SDKs.

The huge codec and format library provided by MainConcept enabled PlayBox Neo to handle the many different formats provided by the broadcast customers. Adding ingest as well as playout capabilities by integrating MainConcept's robust audio and video decoders as well as demuxers and muxers to their TV Automation product portfolio was an easy task. The next logical step was to extend the offering by using MainConcept's best-in-class encoder and muxer components in the workflow to generate compliant output for the target delivery.

PlayBox Neo Ltd. has licensed MainConcept's HEVC/H.265, AVC/H.264, MPEG-2 and DVCPRO HD Decoder SDKs within their CaptureBox Neo and AirBox Neo solutions. CaptureBox Neo is a universal ingest solution supporting multiple channels of HD or SD content that can be captured from SDI digital feeds, and via MPEG-2 Transport Streams.

AirBox Neo is a highly efficient software for TV Broadcast with streaming capabilities. Powered by MainConcept's renowned Codec SDK, the extremely robust designed solution allows automated content playout for satellite channels, cable head-ends, over-the-air broadcasters and corporate TV users. **PlayBox Neo Ltd.** trusts the stability of MainConcept SDK components for the always-on-air channels, and benefits from the single API across MainConcept decoders providing playback capabilities of multimedia formats under one hood that has been produced by many different applications in different locations.



CREATE & PLAYOUT OUTPUT USING MAINCONCEPT A/V DECODERS





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PlayBox Neo uses various parts of the MainConcept Codec SDK within their Neo solutions over many years. Due to its highly flexible yet powerful DirectShow API, the initial integration during development of these solutions was only about two weeks of work. Extending the product format support with HEVC/H.265 was a small step for engineering, but was adding considerable value to PlayBox Neo exciting product line. HEVC/H.265 will be the driving force for the broadcast industry as well as OTT, and all global players including PlayBox Neo Ltd. have started integrating and promoting the high-efficiency codec within their products.

Besides its market proven Codec technology, AirBox Neo is also using MainConcept's SCTE-35 SDK for inserting Dynamic Ad markers on-the-fly into MPEG-2 Transport Streams.

"MainConcept has proved to be a highly competent partner in our strategy of remaining the world's leading provider of efficient and operator-friendly television broadcast and channelbranding products, software and supporting services. MainConcept understands the PlayBox Neo ethos of delivering solutions which are easy to install, fast to configure, reliable and easily scalable. That is the approach our customers appreciate." DON ASH, PRESIDENT @ PLAYBOX NEO

The SCTE-35 SDK was the missing piece in AirBox Neo by adding flexible generation of commercial insertion markers to the automated playout and streaming solution from PlayBox Neo. When the requirements for AirBox Neo were changing, MainConcept had the right components for enabling the functionality expected by the PlayBox Neo's customer base.

Thanks to MainConcept's modular and consistent Codec SDK approach, extending formats and features is a quick task. In case of any problems or question, there is always the worldwide professional engineering and integration support by the MainConcept Customer Care team to move forward fast and efficiently.



General Scte-35 Extraction	IDENTIFY SPLICES IN MPEG-TS BROADCAST STREAMS PROVIDES SCTE-35 COMPATIBLE XML
SCTE-35 PRODUCTION	INSERT SPLICE POINTS INTO MPEG-TS TRANSPORT STREAMS SET MARKERS IN PLAYLIST AND MANIFEST FILES FOR OTT

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CLOSING WORDS

MainConcept Codecs have a worldwide acceptance in the broadcast industry today. Licensing the full range of DirectShow encoders, decoders, multiplexers, splitters, etc. components out of one hand empowered the complete workflow that **PlayBox Neo** focuses on in their products. Broadcasters all around the world must rely on highly flexible and robust solutions for their 24/7 productions.

Integrating the industry-leading MainConcept SDKs into CaptureBox Neo and AirBox Neo fulfills the strong requirements of the market that strives for handling as many formats as possible at lowest possible cost.

In the future **PlayBox Neo** will further increase the value of the Neo product line. Migrating these solutions to utilize the MainConcept platform-independent Low Level SDKs will significantly improve performance and overall functionality of these automated ingest and playout systems.

At the same time, MainConcept will proceed to develop state-of-the-art codec and network streaming technologies for the broadcast market to satisfy the demand for higher compression in astounding quality. These goals will enable both companies to enter the next stage in their ongoing success and growth story.



REQUEST A DEMO:



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