# TV 2 DANMARK – Playout Automation Migration brings new revenue opportunities and operational savings



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**Ole Møller**
Senior Project Manager,
TV 2 DANMARK

TV 2 DANMARK is the most popular commercial television network in Denmark and provides national channels including news and sports programming as well as a number of thematic channels. The channels are  all HD and include four fully scheduled, clip-based thematic channels. A further two channels feature a high proportion of live content — the news channel and the main TV 2 channel, which has eight regional opt outs to accommodate local regional content.

The broadcast chain spans a workflow that encompasses ingest of tape and file-based content, QC and archive, as well as playout. It is based on Pebble Beach Systems' Marina which controls Imagine Communications Nexio video servers along with Miranda processing, master control and graphics insertion. It also features 'cascaded' routing, with control of three mixers and routers to allow the system to access additional upstream sources, principally for live events.

Faced with the need to move to a new technical area within their Odense based broadcast headquarters, TV 2 decided that they would also update the automation system. At the time an aging ADC 100 automation system was in place.

A more sophisticated playout infrastructure – with the ability to broadcast unique content to Denmark's eight regions synced to a master list – was planned for the main operations control building in Odense, and there was also a desire to increase revenue from streamed versions of channels.

Having chosen Pebble Beach Systems' Marina as their preferred solution, TV 2 needed to plan a phased changeover from their legacy automation. Pebble provided a method of database synchronisation that allowed the ADC and Marina automation systems to be used alongside each other to exchange metadata and media status information. "There's something called a "database bridge" which made it possible to do a smooth migration and run both systems perfectly in parallel. We started with some non-complex channels and took one channel at a time and put them on air, then moved on to fairly complex channels, moving channel by channel. The database bridge updated every 2 mins from the Harris database and made every piece of metadata available in the Marina system," said Ole Møller, Senior Project Manager, TV 2 DANMARK.

> **Marina has performed beyond our expectations. The experience, responsiveness, and attention to detail from the Pebble Beach Systems staff has helped us achieve our goals while preparing us for the future.**

### Staggered Migration Plan

After TV 2's immediate priority to upgrade the playout automation was achieved, it was decided that the ingest side – which had previously been upgraded to HD – could wait. The goal was for the ADC database to coexist with Marina handling the playout, and for the ingest workflow not to change at all. As new material was added or modified, Marina would receive updates and notifications that something had changed. If, for example, an operator modified a segment to be 20 secs instead of 30 secs in the ADC Media Client, that change would ripple all the way through to the Marina playlist. To mitigate any risks, both the legacy and Marina ingest systems were run in parallel for over a year. This allowed TV 2 to keep their existing work-flow, coexisting side by side with Marina and to delay a complete cut-over until the team was ready.

"Quite often it's the operators who are most afraid of change" said Møller. "When you move from a system that you've used for 10-15 years or longer, it's easy to forget what it was like when it was introduced. They can get very nervous when you show them something different."

Møller was pleasantly surprised with how quickly the operators got to grips with Marina. Credit is probably due to the Pebble Beach Systems user interface 'speaking the same language' since some of Pebble's founders came from Louth (the original makers of the ADC 100). As a result, many features and functions tend to be called the same or similar names, and work in the same way.  This is one of the reasons Pebble Beach Systems has successfully migrated so many legacy ADC customers over the years.

### New Workflows for Regional Ad Playout

Part of the playout rebuild was to change how the regions handled local commercial breaks.  Historically, each region would play its own commercials, so they effectively had to have video servers and commercial playout solutions located in every region. One of the project's main achievements was to bring all the commercial playout back to the broadcast center in Odense, saving substantial costs, while vastly simplifying video distribution. The system is configured with multiple flexible regional playlists which are synced to a master list. Broadcast master control then hands control to these local regions during their regional programming blocks. Each region receives a live feed when its local news is coming in, and when they roll their commercial breaks, all of the eight regions roll their own local content from the central location. This has saved TV 2 a lot of time and has given them a "best of both worlds" approach to managing the content nationally and locally.

### OTT Dynamic Ad Insertion Brings New Revenue Stream

One of the most significant revenue enablers with the new Marina system is from ad insertion derived from the internet streamed versions of TV 2's channels. Utilising Marina's sophisticated SCTE insertion capabilities has allowed TV 2 to add DAI (dynamic ad insertion) into their internet streams. Marina's advanced SCTE rules-based logic allows the automation system to work out how and where to insert the SCTE triggers. TV2 didn't have to change anything in their traffic system or provide special playlists, and Marina communicates directly with Google's system to drive the DAI, allowing TV2 to reap the benefits of moving to a modern platform. "Marina has performed beyond our expectations. The experience, responsiveness, and attention to detail from the Pebble Beach Systems staff has helped us achieve our goals while preparing us for the future," comments Møller.