

BENCHMARK

Ad **Benchmark's Insertion Workflow**

***Increase revenues and flexibility with
advanced regionalization for broadcast ads and programs***

BACKGROUND

A leading cable TV aggregator in South East Asia approached Benchmark for the setting up of seamless dynamic ad insertion capabilities for their channels. Benchmark set up the ad insertion hardware and software for 47 channels including SD and HD video with different audio capabilities including Dolby and PCM.

The customer operates an extensive fixed business network that

provides a wide range of data, voice and wholesale services. Over the country's fibre-based Next Generation Nationwide Broadband Network, the Cable TV Operator offers a broad range of home and business broadband plans along with a host of advanced media-rich value-added services, such as IPTV for commercial entities.

OBJECTIVE

Provide new HD Ad-insertion channels and include 16 SD channels (also supplied and integrated by Benchmark earlier) into the new system at the monitoring and backup switching level.

Advertisements are typically embedded into the programming at specific intervals and TV feeds that are received from various channels usually contain such ads which are either not relevant to the local viewers or have become outdated. The Customer identified several benefits from being able to insert localized advertisements:

- a. More relevant advertisements with localized content for a better viewer experience
- b. Create monetization opportunities by catering to the advertisement requirements of local businesses
- c. Inserting time critical campaigns or advertisements by replacing obsolete or irrelevant advertisements.
- d. Create a more efficient, automated workflow

The Cable TV Operator has around 200 channels including standard definition (SD) and high definition (HD) channels. Each channel feed comes with embedded advertisements that need to be

replaced by locally inserted ad content. In addition the sound clips of these commercials are in several different formats, which needed to be converted and played out as either PCM or Dolby-D.

Additionally they had SD local commercials which needed to be up-scaled for broadcast on HD channels.

The system design and implementation of the new system had to ensure that the ad insertion was fully integrated in a way that provided seamless, dynamic, ad insertion without manual intervention.

The solution also required single-point monitoring and management for both the HD and SD channels, including auto-processing of commercials to Dolby-D/PCM audio from other formats and retain all formats including native format. Audio played out during commercials had to automatically match the audio format of the program from the source channels. Customer also needed the ability to manually override commercial content in some cases where video streams with embedded commercials were received without cue tones.

EXECUTION

The Cable TV Operator was looking for a comprehensive replacement of their systems as the systems that were supplied and installed several years ago were getting difficult to maintain and upgrade. They wanted the solution to be as close to their existing system in terms of GUI and visual cues.

The commercials that come in could have various audio formats; Dolby-E, PCM Audio, etc. These are converted and stored as PCM & Dolby-D and native formats are also retained. Based on the channel output configuration, the corresponding audio format is tagged along with the video file and played out seamlessly. The system is built for dynamic configuration changes to handle the output format of any specific channel.

The requirement also included an operator dashboard for single point monitoring, making corrections possible, and the ability to replace commercials across one or more channels. The existence of multiple channels spread across multiple servers involved physically replacing the earlier clips with fresh content using their current asset. To address this issue, we provided a tool that was able to replace specific commercials with new ones. This could be done across all channels, several channels or only across specific chan-

nels selected by the user. This helped the Cable TV Operator to increase operator productivity.

Multi-channel monitoring in a single window involved incorporating dynamic visual cues for the status of commercials with respect to the timeline. For instance, where channel information is displayed beyond the active scroll window, automated pop up messages on error status were needed, to give feedback to the operator regarding channels moved to backup and non-performance of specific commercials as per the playlist.

The system is built for channel level redundancy and dynamically switches to the backup port for input signal issued by loading the corresponding playlist, switching the router signals and playout of commercials or live pass-through automatically.

Their earlier practice of having to manually replace the playlist schedule at particular time slots in the previous day imposed constraints on scheduling and playout. Our system overcomes this by way of an automated and dynamic refreshing of scheduling based on full or partial schedules at any time before the commencement of the actual schedule.

SUMMARY

The Ad Insertion project for the Cable TV Operator threw up unique challenges. In addition to matching the legacy tool in terms of usability, we also had to automate several tasks and provide visual cues to the operator manning the Monitoring station in order to have an overall view of the performance of different channels, as

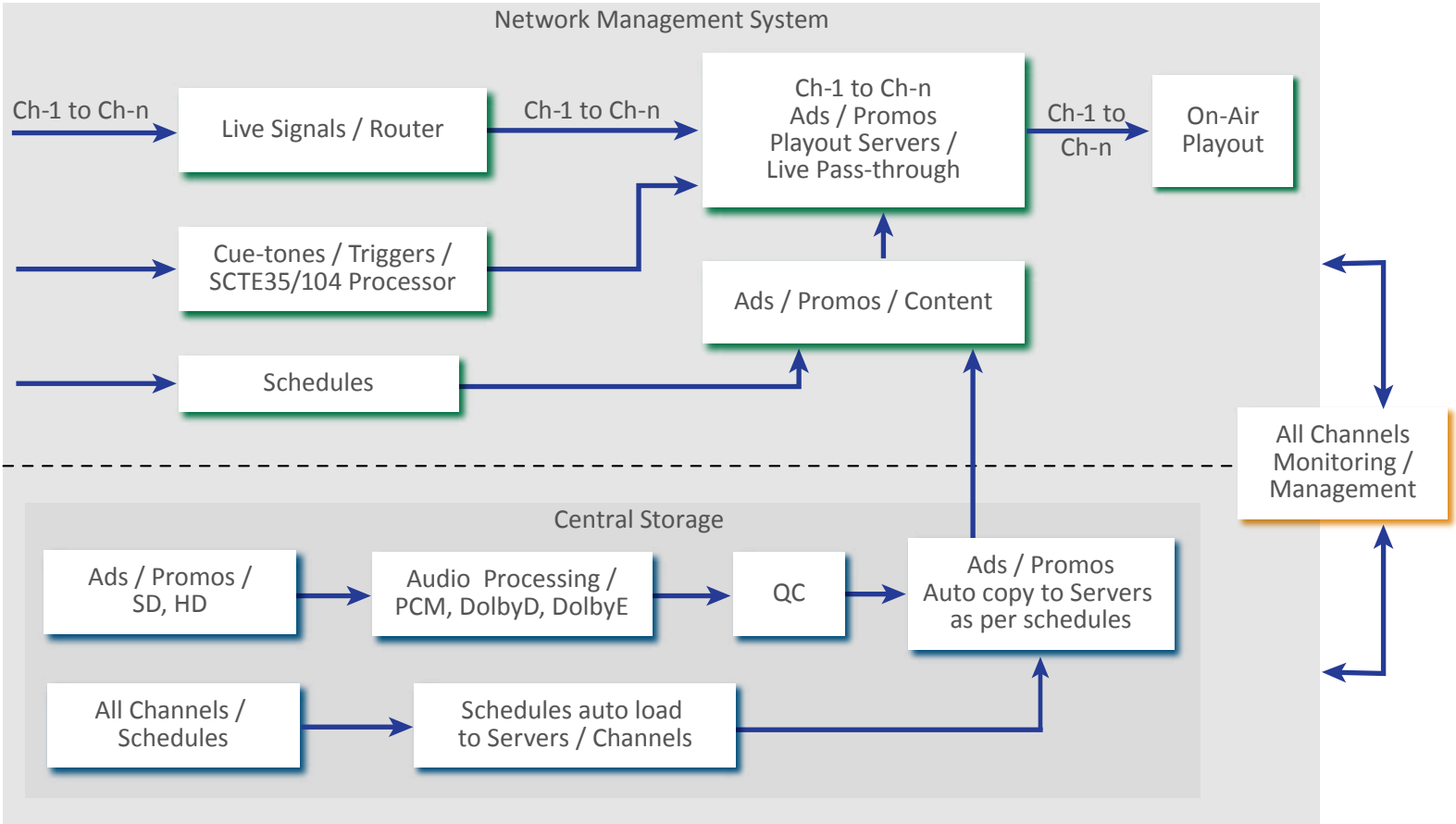
well as provide feedback on the exceptions and errors as and when they happened.

The automation of the playlist flow at the Operator level gave them better control of its ad insertion flow and gave them the ability to have dynamic change, control and error reporting capabilities.

BENCHMARK

Seamless Dynamic Ad Insertion – a case study

BENCHMARK Ad-insertion Workflow



ABOUT BENCHMARK

Benchmark Broadcast Systems, is a consultant and technology partner for media and broadcast companies in Asia. Headquartered in Singapore, the Company has offices in Bangkok, Chennai, Delhi, Dhaka, Kuala Lumpur and Manila. Its on-site engineering, software programming, software & systems integration, testing and support services are highly specialised. It operates in network mode with senior managers functioning out of Singapore, Chennai, Delhi and Manila.

Benchmark focuses on providing complete solutions for broadcast

and post production applications. The spectrum starts from simple modules to complete turnkey systems integration services for setting up a totally new TV station or upgrading/modernising existing ones. The Company also provides a complete range of services from pre-sale consultancy, through to systems design and integration, installation, user training, support and even to managed services. Benchmark Broadcast's capabilities extend to configuration of comprehensive enterprise-wide solutions, application support, systems installation and customer training and, importantly, to development of customised solutions.

CONTACT

S Ramesh Babu

Chief Technology Officer

Mobile: +65 9151 4088

Email: rameshbabu.s@benchmarkbroadcast.com

When you absolutely, positively have to be on-air 24/7

BENCHMARK
BROADCAST SYSTEMS

Benchmark Broadcast Systems (S) Pte Ltd
12 Tannery Road #09-05/06/07 HB Centre I
Singapore 347722
Phone: +65 6749 3372
Fax: +65 6749 3326