

Case Study: Implementation of DTMF Cue Tone Detection

Background:

Saurabhi Media collaborated with the GV Australia team to address a specific challenge in broadcasting automation. The objective was to implement a solution that could detect Dual-tone Multi-frequency (DTMF) cue tones within an audio stream to automate certain actions in a clip list player, such as "Take Next" or "Take Live" commands.

Challenge:

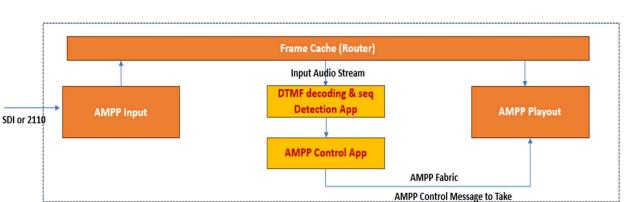
In live broadcasting environments, particularly those involving the seamless playout of media clips, timing and precision are critical. Broadcasters often rely on DTMF tones embedded within the audio stream to trigger specific actions automatically. However, detecting these tones accurately in real-time and triggering the appropriate actions within a broadcast automation system required a robust and reliable solution.

Solution:

Saurabhi Media developed a DTMF decoding and sequence detection application tailored to this need. The solution involved the following components:

- Real-Time Detection: The application continuously listens to a designated audio channel, decoding DTMF sequences in real-time.
- Automated Actions: Upon detecting a pre-configured DTMF sequence, the
 application triggers predefined actions within the AMPP (Advanced Media Processing
 Platform) control app. This could include commands like "Take Next" or "Take Live."
- Integration with AMPP: The application was integrated into the existing AMPP infrastructure, allowing for seamless control and automation based on detected DTMF tones.





Outcome:

The proof of concept (POC) demonstrated the effectiveness of this implementation in a live broadcasting environment. The DTMF cue tone detection appreliably detected the required tones and triggered the appropriate actions without delay, ensuring smooth transitions during broadcasts.

Impact:

This implementation provided broadcasters with a powerful tool to automate clip list player actions based on audio cue tones, enhancing operational efficiency and reducing the likelihood of human error during live broadcasts.

This case study highlights Saurabhi Media's capability in delivering customized solutions for complex broadcasting needs, leveraging their expertise in media management and automation technologies.