Case Study: Transforming SCTE Workflows for Malai Murasu with PIXFIX™ Versa

Overview

Malai Murasu, a prominent regional broadcaster in India, needed a reliable and efficient method to trigger SCTE markers for dynamic ad replacement within their encoded/transcoded SRT feeds. These feeds were delivered to their cloud play-out and distribution provider for FAST TV applications through RiverSilica's PIXFIX™ workflow appliances.

However, the absence of in-band SCTE markers—and their dependence on a ROSS play-out workflow for manual triggering—created operational bottlenecks and hindered a fully automated FAST TV delivery chain.

To solve this, RiverSilica's team executed a seamless integration of Ross Media I/O's VGPIO interface with the PIXFIX™ Versa workflow system. The result: a robust, SCTE-enabled workflow that preserved Malai Murasu's operational familiarity while unlocking new monetization streams.

The Challenge

Malai Murasu relied on ROSS Media I/O to trigger SCTE messages for both scheduled and unscheduled ad breaks across multiple channels. While PIXFIX™ Versa already includes powerful API-based SCTE triggering mechanisms, the customer specifically requested an integration with ROSS Media I/O due to their deep operational familiarity with the tool.
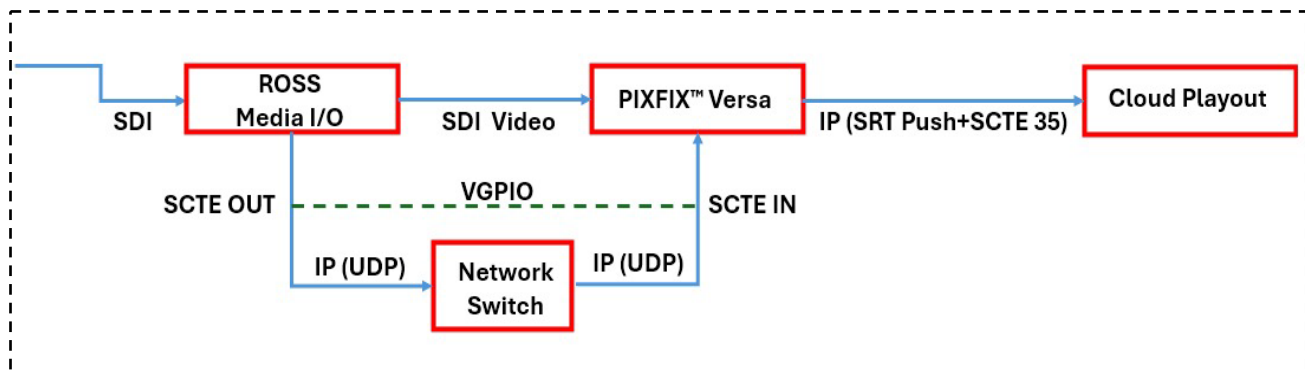
Key challenges included:

- No in-band SCTE markers present in the existing workflow

- Reliance on the ROSS environment for triggering

- Requirement to deliver an SRT feed with SCTE markers to a cloud play-out provider

- Avoiding additional investment in play-out systems capable of generating in-band SCTE

Additionally, ingesting VGPIO triggers from ROSS Media I/O was not straightforward. ROSS communicated via TCP-based virtual GPIO packets, which were to be natively interpreted by PIXFIX™ systems.

The Solution

To meet Malai Murasu's requirements, RiverSilica's engineering team rapidly developed a dedicated SCTE listener module capable of receiving and interpreting Virtual GPIO triggers from ROSS. The accelerated turnaround was made possible by RiverSilica's Hybrid Hb architecture—designed specifically for rapid workflow extensions and advanced media interoperability.

Key capabilities delivered:

- Full SCTE scheduling and control using Malai Murasu's existing ROSS interface

- Accurate SCTE marker insertion into SRT feeds via PIXFIX™ Versa

- Elimination of the need for a separate play-out system for in-band SCTE generation

- Enablement of multiple SCTE-capable streams for FAST TV monetization

Impact

The integrated solution delivered immediate operational and commercial outcomes:

1. Consistent SCTE Operations

Malai Murasu retained their trusted ROSS workflow, minimizing training and ensuring operational consistency.

2. Clean, SCTE-Enabled SRT Delivery

PIXFIX™ Versa now delivers accurate SCTE-marked SRT streams, ensuring seamless downstream ad replacement.

3. New Revenue Channels

SCTE-enabled delivery unlocked teleport-level ad insertions and opened new revenue streams in FAST TV distribution.

4. Reduced Operational Overheads

By avoiding additional play-out systems, Malai Murasu achieved both CAPEX and OPEX savings while simplifying their workflow.

Customer Testimonial

"The integration of ROSS VGPIO into our PIXFIX™ Versa Encoder/Transcoder workflow has been a significant milestone for Malai Murasu. We were able to retain our established SCTE triggering methodology while achieving a fully automated, SCTE-enabled delivery chain. PIXFIX™ adapted seamlessly to our operational environment, enabling a smooth and reliable transition with immediate revenue impact. I would also like to acknowledge the leadership of our **Technical Head, Mr. J. Joyal Augustin**, whose team played a critical role in the successful implementation." - **Mr. AP Sivayogen, CEO, Mali Murasu**.

RiverSilica Technologies Quotes

"This project demonstrates how practical engineering and real-world workflows come together. Rather than forcing a new method, we extended our platform to support what the customer already trusted—ROSS Media I/O. Our Hybrid Architecture allowed us to deliver this rapidly while ensuring long-term scalability for SCTE-driven ad workflows. Once again, PIXFIX™ proves its workflow-first design philosophy."

— Kumara Swamy, COO and Co-Founder

"Working closely with Malai Murasu allowed us to showcase the flexibility and engineering depth of PIXFIX™. Integrating ROSS Media I/O was not just about adding a feature but aligning our technology to the broadcaster's operational DNA. We are proud to support our customers in achieving efficiency, reliability, and monetization with minimal disruption."

— Venkat Venkateshwaran, Chief Marketing Officer

Conclusion

The customized integration of ROSS Virtual GPIO SCTE triggers into PIXFIX™ Versa delivered a powerful, efficient, and monetisable workflow—without requiring major infrastructure changes. RiverSilica enabled Malai Murasu to overcome operational challenges, modernize their delivery chain, and unlock long-term commercial gains with a workflow fully aligned to their operational preferences.