GStreamer Case Study

Leading German automotive OEM overcomes platform and media player fragmentation with Ittiam GStreamer plugins





SUMMARY

Customer ProfileTier 1 Automotive OEM

Region Germany

Industry Auto

Solution

 GStreamer plugins for audio and video codecs and parsers

Challenges

- Media player and platform fragmentation
- Faster time-to-market with a robust GStreamer framework
- Higher performance

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CUSTOMER

Market leader in providing Connected Car and Auto Infotainment solutions to world's prominent automakers.

ENGAGEMENT BACKGROUND

The customer made a strategic decision to consolidate all media players using GStreamer open source framework. They were already leveraging Ittiam's high performance software IPs across several platforms and media player implementations. Therefore, they chose us as their natural partner for the implementation, based on our differentiated performance and proven expertise in developing GStreamer plugins.

KEY CHALLENGES

The customer operated across different platforms (32bit/64bit) with varying configurations, and multiple OS versions (Linux variants). Their main challenge was to deploy a GStreamer framework that was optimized for all the platforms, with aggressive time-to-market requirements.

SOLUTION OVERVIEW

We provided robust GStreamer plugins for the following media components:

- Complete suite of software audio and video codecs
- Platform-specific hardware video decoders
- A plethora of subtitle and container parsers
- We extensively validated the component plugins for all the target platforms.
- Customized our GStreamer plugins for each platform (i.MX6, TI-Jacinto, Apollo Lake etc.) that needed its own hardware video codecs and corresponding, platform-centric interfaces.
- Simulated different combinations of parsers and codecs to support all the test use cases for container formats.
- Performed thorough analysis and customizations to manage tool chain dependency across multiple platforms.

IMPACT

We enabled faster time-to-market, delivered high performance as opposed to open source components, and significantly reduced maintenance and development costs across the customer's product family. Our extensive support during the pre-production phase also ensured effective validation of different media content.

About Ittiam

Ittiam Systems is a trusted solutions provider to world leaders in multimedia, enabling next generation video experiences through its complete suite of intelligent video technologies, systems and solutions. Backed by its proven video expertise and insights, Ittiam's products deliver real intelligence to solve its customers' most complex technology challenges, empowering them to deliver high performance, efficient and reliable video products in rapid time. Ittiam's solutions are at the heart of millions of lifestyle products that drive mobility, content access, networking and sharing.