SOFTWARE STREAM PROCESSING

MediaFirst Stream Processing provides transport stream processing capabilities to the Ericsson MediaFirst Video Processing end to end software solution.

- IP (UDP or RTP) input and output of MPEG Transport Streams
- RTP re-ordering
- IGMP V3 redundancy
- Input bit-rate monitoring and CC error detection
- Full re-multiplexing support including real-time PSI regeneration, and dynamic rules-based pass-through of descriptors
- PID re-mapping
- SI/PSI generation/re-generation and insertion from external source.
- Statistical multiplexing bit-rate allocation for MediaFirst Video Processing Encoding Live
- SMPTE 2022-1 FEC on input and output

END-TO-END SOFTWARE SOLUTION WITH CENTRALIZED CONFIGURATION

MediaFirst Video Processing provides an end to end system designed to address key industry challenges. Ericsson allows operators to get the best from their IT infrastructure by providing a highly scalable and future-proof video processing solution.

- Faster time to market by leveraging one solution to address all networks and the software microservices based architecture.
- Reduce operational complexity using the Management Controller as a single point of entry for all processing types.
- Optimize OPEX and CAPEX when migrating to full IP, and leverage the latest IT technologies (Containers & Orchestration) to reduce infrastructure costs.
MediaFirst Video Processing Stream Processing

Input

Transport Stream Input
- UDP or RTP encapsulated MPEG transport stream
- Unicast or multicast (IGMP V2, V3)
- Source redundancy (active/active)
- SMPTE 2022-1 FEC
- Input bit-rate monitoring and CC error detection

Stream Processing

Multiplexing
- Full re-multiplexing support including real-time PSI regeneration, and dynamic rules-based pass-through of descriptors
- PID re-mapping
- Data component insertion
- SI/PSI generation, re-generation and insertion from external source

Statistical Multiplex Controller
- Statistical multiplexing bit-rate allocation for MediaFirst Video Processing Encoding Live

Output

Transport Stream Output
- UDP or RTP encapsulated MPEG transport stream
- Unicast or multicast (IGMP V2, V3)
- Dual source redundancy (active/active)
- SMPTE 2022-1 FEC

Scaling

22 x 40 Mbps MPTS outputs
- 880 Mbps data throughput equivalent to 22 x 40 Mbps transponders uses:
  - 40% CPU on X1 type platform (Processor – 1 * Intel® Xeon® E3-1246 v3)

44 x 40 Mbps MPTS outputs
- 1760 Mbps data throughput equivalent to 44 x 40 Mbps transponders uses:
  - 20% CPU on G6 type platform (Processor – 2*Intel® Xeon® E5-2680 v3)

Licensing

Licensed per 1 Mbit/s of output
- FAZ 101 0408/278 - MFSms Video Processing (1 per 1 Mbit/s of output data rate)