

Starfish Encoding Solutions

Starfish has been delivering encoders to major national and international broadcasters for over 12 years. These are not designed to compete directly with boxed-product generic encoders – instead, we focus on adding additional capabilities into the box/solution that would otherwise require more complex and expensive external architectures. Examples include:

- Large scale systems with dynamic resource allocation, automatic failover, asynchronous main-standby configurations and a sophisticated management and monitoring layer. These are sometimes used as straightforward mezzanine or multi-format encoders, and sometimes with extra features as described below. We integrate with 3rd party routers, TS monitoring systems and other relevant providers. We believe this architecture combines the best of bare-metal and on-premise cloud-based advantages. Bare-metal systems allow for custom hardware (SDI cards and high-performance NICs) and efficient multicast. On-premise cloud allows dynamic resource allocation. We have combined both.
- DVB subtitle generation from Teletext/OP-47/SMPTE-2031 on the incoming SDI. One or more DVB subtitle elementary streams (usually one per language) can be included in the output TS.
- Multi-format encoding. Each SDI input can be processed to deliver a range of output encodings (different formats/bitrates etc). We can also down convert from HD to SD as part of this process so a single HD-SDI input can be encoded as a range of HD and SD output formats.
- Local content insertion. This is the first stage at which we insert local content (commercials, local news/weather or region-specific long-form content). This can be triggered by the main playout automation, or SCTE-104 commands in the incoming SDI. Local content media can be up-scaled or downscaled as required. Local content-specific logos and other graphics are supported.
- Basic graphics. We support addition of basic graphics – including logo and clock. This can be controlled by automation or local content playlists.
- Plus N outputs. Each real-time encoded output can also be captured to file and played out one or more times to cover different time-zones. The Plus N outputs can have different logos to the main channel.

Encode and Insert server with Delay

