SOFIA BACKSTAGE®
DVB TO WI-FI

FEATURES

- Transcode live broadcast TV from DVB transport stream to OTT unicast environment
- Source MPTS/SPTS over multicast/unicast
- OTT live delivery format HLS or MPEG-DASH
- Transcoded videos are made available to any video player supporting HLS, DASH or other video format
- HTML5 video or native players (HLS/DASH/MP4)
- 3rd party video players supported by request
- Source can be live broadcast TV video (using professional or consumer RF receivers with suitable network IP output), VOD assets, or any media content that needs to be made available to customer terminals
- Multiple resolution and frame rate support for variety of terminals (smart phones, tablets, PCs, signage displays, etc.)

SOLUTION EXAMPLE

Sofia Digital has made a solution for Levira in Estonia to make broadcast television channels available on Tallink cruise ships. Television channels are transcoded for display on consumers' terminals, i.e. laptops, tablets and other smart devices, when they are connected into the ship internal Wi-Fi.

The solution ingests unicast or multicast TS-over-IP stream and encodes it to HLS or DASH. The broadcast TV is then available as a live service, transcoded to a format suitable for mobile consumption over Wi-Fi.

This solution can be used to distribute television channels and other content, like VOD assets, through the Wi-Fi network of any closed/managed environment, like ships, trains, buses, hospitals and other public facilities.

VOD libraries can be populated to local cache while the facility is connected to a high-speed network.

Live TV programs can also be recorded by the EPG and media files of the programs cached for later viewing as a VOD asset.
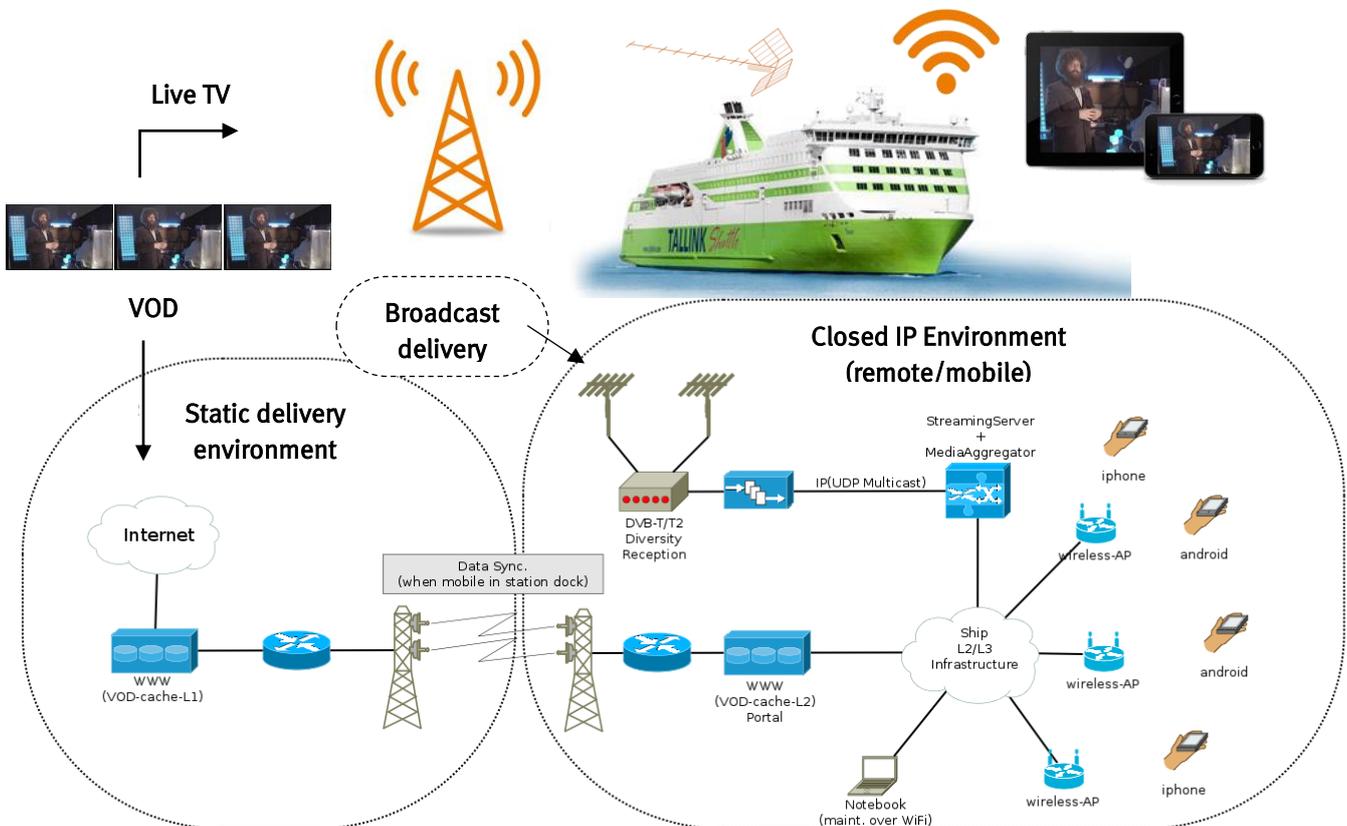
The main benefit of the system is to offer high-quality video content into the high-speed LAN environments where the Internet speed is limited or there are other limitations. Viewers can use their own devices connected into the LAN/Wi-Fi or view the content from other connected screens.

Two main use cases of the system:

1. **Live Broadcast TV transcoding**
   a. Professional IRD receives and deliver the broadcast DVB TS to Sofia Backstage Solution or Sofia Solution is equipped directly with a USB DVB RF- receiver
   b. Optionally: 3rd party multidiversity Professional IRD receives or DVB-decoders for CAS decryption
   c. The input TS is transcoded and segmented and made available through Wi-Fi to client devices
   d. Different profiles, bitrates and resolutions can be offered as needed

2. **VOD assets**
   a. Sofia Backstage® Guide Manager includes a library of VOD assets (acquired from Live TV Recordings, organized based on the EPG data or separately uploaded and transcoded as individual VOD assets)
   b. Client offers the catalogue listing all assets and provides them as per network performance

In the Tallink use case the Sofia Backstage® Guide Manager is installed on-shore in Tallinn and the VOD files are at ERR (Estonian Public Broadcaster) servers. VOD assets are synchronized with the cruise ship servers while the ship is at port.

CASE1: Live DVB to Live OTT streaming

CASE2: VOD repository to VOD Client