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DIGITAL TELEVISION



# DVB Playout Server

Stand-alone PC-based playout system for DVB transport streams and IPTV

The IRT DVB Playout Server creates and multiplexes various MPEG-2 transport streams of the DVB standard family. It is employed wherever transport streams have to be played out, e.g. at broadcasting organisations, in playout facilities, and at cable head ends.

Using this software tool, several transport streams with DVB contents for HDTV, HbbTV (or MHP) and IPTV are re-multiplexed in real-time for DVB-S, DVB-C, DVB-T and IPTV and broadcasted along with all required programme and service information. The source data can dynamically be modified, completed or replaced on the fly as well. The server supports the simultaneous play-out of DVB MPEG-2 transport streams, „private sections“ (available as binary coded files) and internally created DVB service information. By means of the integrated DSMCC object carousel generator, HbbTV (or MHP) and services can be keyed in and synchronised.

The Software, running under Windows on standard PCs, controls directly modulators for satellite, cable and terrestrial transmitters, or various DVB-ASI output cards. For IPTV, the transport data are also broadcasted via UDP and RTP (Ethernet), for which no further PC card is required.

Both SDTV (standard definition television) and HDTV can be distributed using either the conventional compression method MPEG-2, or MPEG4/AVC (also referred to as H.264).

## Application ranges

- Stand-alone playout system for on-air playout, and for test, trial, and demo purposes
- Playout of HbbTV (or MHP) applications
- Re-multiplexing and transport stream insertion in head ends

## Key features

- Software solution for Windows® platforms, easy to install
- For ASI output mode, an ASI output card is required for live streaming. Currently, the following cards are supported: Dektec (including DVB-C, DVB-S, DVB-T PCI modulator cards and USB devices), DELTA-ASI cards of Deltacast, and the USB DVB-S/S2-modulator from Alitronika.
- For UDP and RTP output mode (optional), no further hardware is required
- Real-time multiplexing of multiple SPTS or MPTS DVB TS-files containing SD/HD-TV (including re-mapping and filtering of PIDs and services, recreation of PSI, user-configurable reassembly of components and services, generation of services, creation of NIT/SDT/TDT)
- Multiple instances can be run on one PC for simultaneous playout of up to three transport streams
- Real-time DSMCC object carousel generator for HbbTV (or MHP) with the following key features:
  - intuitive GUI and easy adjustment of default settings
  - simple configuration of module-assignment and caching modes
  - support of multi-PID object carousels
  - live-update of whole carousels or modules
  - update and configuration can be controlled and initiated remotely
  - low-delay insertion of do-it-now stream events via UDP interface
  - multiple carousels per service and output stream, multiple remote users
  - easy association of A/V-streams for testing and development of applications

- Real-time multiplexing of multiple section-files on one PID (e.g. for creation of advanced EIT content)
- Variable adjustment of the repetition rate of SI-tables
- Outputs: ASI-stream, UDP-stream, RTP-stream, recorded (M/S)PTS, RF-outputs via supported modulators
- Inputs: Automatic analysis of TS input files, ASI input stream recording (optional)
- UNT download
- Re-multiplexing of programme information (EITs)
- Live Stream Inputs: re-multiplexing of real-time ASI inputs (Dektec ASI input devices supported). TS IP input via Ethernet (details on request)

## System requirements

- Windows® XP, Vista, 7, Server 2003, Server 2008
- ≥ dual core processor, 2 GHz (x86-based)
- ≥ 2 GB RAM

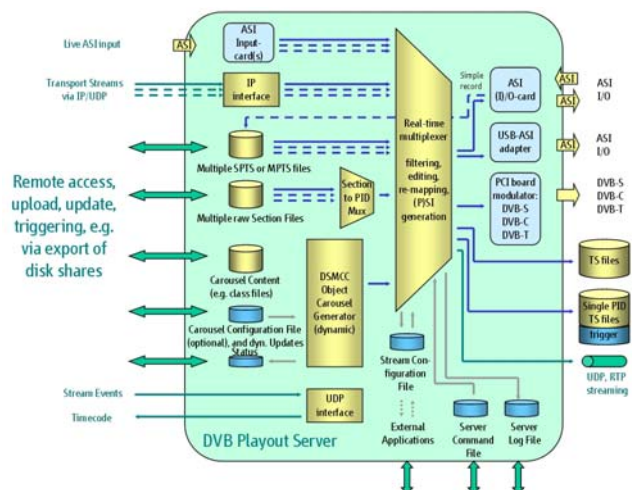


Fig. 1: Block diagram

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