

PANDORA - HbbTV / MPEG2-TS Analyser

The Pandora **software** enables to **analyze and monitor MPEG 2 Transport Streams in real time**. Analysis can be performed on a full multiplex (**MPTS**) or on one single stream (**SPTS**) coming from live sources, local/remote files or Dektec professional cards (ASI, antenna).

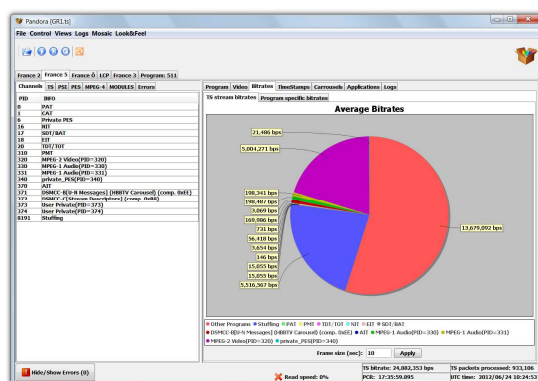
Pandora unique features

- Full extraction, inspection and analysis of HbbTV contents
- Decoding process robust to reception errors
- Flexible configuration and extension capabilities: User-definable DVB/DSM-CC/DMB descriptors (XML)
- Reporting: Decoding errors reporting, headless mode with web real-time reporting

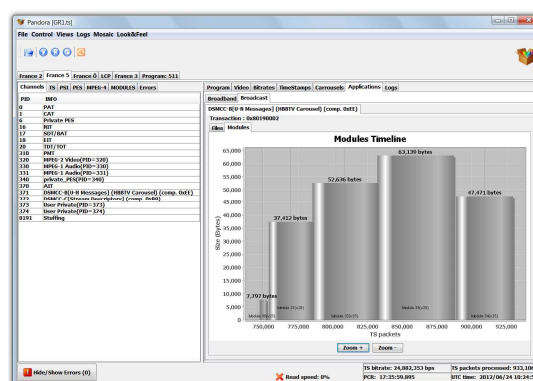
 User-friendly graphical interface

The Pandora analyzer offers many graphical views of multiplexes and single programs:

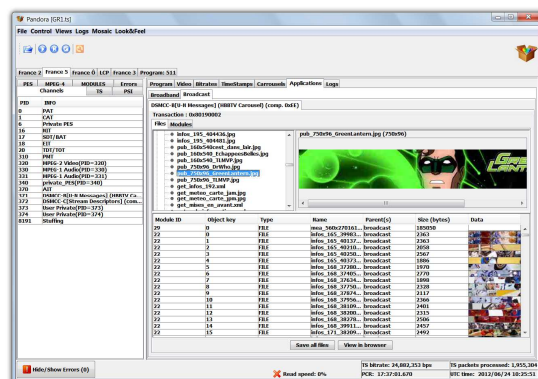
- o Bitrates, periods, weights and stuffing charts
- o TS / PES / SL(DMB) timestamps
- o Single program video preview, multiplex mosaic preview
- o Service Information presentation (EIT / SDT / AIT)
- o HbbTV broadcast data views (DSMCC modules timeline, HBBTV broadcasted files)
- o PID filtering options for chart views



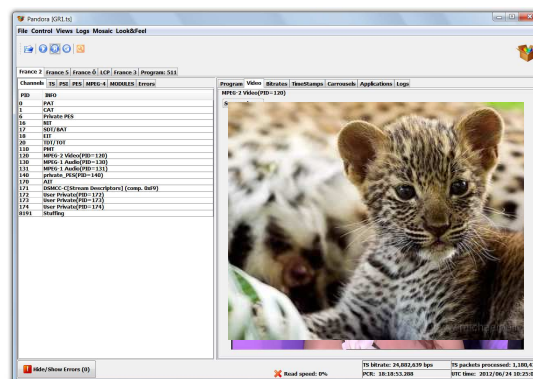
Bitrate charts



DSM-CC modules timeline



HBBTV contents overview



Video snapshots

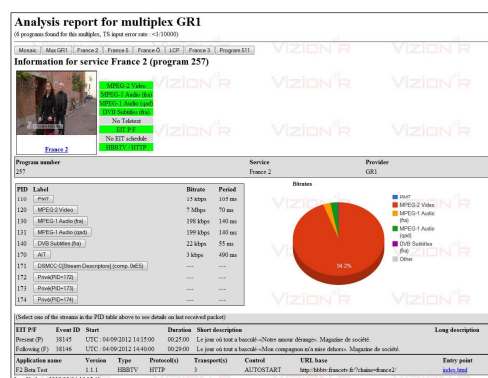
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Web monitoring customisation

The Pandora analyzer also proposes a headless mode that allows to publish real-time analysis report on a front-end HTTP server. The published data presentations can be customized on demand to meet monitoring and look&feel needs.



Mosaic webview



Service information webview

Specifications

Inputs	TS-188 streams with several input modes: - Local TS files, UDP unicast /multicast - HTTP remote files /shoutcast / Apple HLS - Dektec cards (ASI, DVB-T, C, S)
MPEG-2 TS	- Common PSI tables (PAT / CAT / PMT / NIT / ...) - TS descriptors (+user defined XML descriptors) - PES data
DVB - SI	- DVB tables (SDT / BAT / AIT / EIT / ...) - DVB descriptors (+user defined XML descriptors)
DSM-CC	- DSM-CC Type B/C (U-N messages, stream events) - DSM-CC descriptors (+user defined XML descriptors) - Data / Object carousels
HBBTV	- Broadband (remote HTTP service) - Broadcast (BIOP modules, broadcasted filesystem restitution) - Stream events
DMB	- MPEG-4 SL Audio / Video / Image / BIFS - MPEG-4 Scene and Object Descriptors (XMT-A view)
Os compatibility	- Windows, Mac OS ,Unix - Hardware packaging on different servers (tower, 1U, 2U)