

DVBAnalyzer

DVBAnalyzer enables powerful analyzing of all aspects of DVB/ATSC/ISDB Transport Streams. This can be done with high level summary overviews, down to bit interpretation.

By quickly identifying different fields of interest, DVBAnalyzer helps developers, broadcasters, system integrators and field engineers during maintenance, development and testing of equipment, network and services.

Features

- PID structures
- Service structures
- SI/PSI/PSIP structures
- ETR-290 compliance
- Timing
- Bitrate measurement
- Teletext
- Subtitling
- Layout Manager
- Thumb overview
- Media Viewer
- UDP Multicast output
- Video Quality
- Logical Channel
- Private Data
- Object/Data Carousels
- GOP structures
- PTS-DTS Timing
- Buffer behaviour
- Audio measurement
- Loudness measurement
- DVB-H analysing
- 3D
- AIT-Viewer
- DVB-T2 Viewer
- Table overview
- Descriptor overview
- Bitrate Distribution
- Hex Viewer
- Burst Viewer
- PCR Timing
- IP Traffic
- Logging
- Filtering
- Plugins
- Preferences
- EPG
- Multiple views
- SCTE-35 Viewer
- MPEG-2 / AVC (H.264) / HEVC (H.265) video
- MPEG / AAC / Dolby® Digital / Dolby® Digital + / Dolby® E audio



Input Support

File, ASI, DVB-C, DVB-T/T2, DVB-S/S2, DVB-H, Unicast, Multicast and OTT.



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DVBControl.com: DVBAAnalyzer - GOP Viewer

File View Tools Device Window Help

DVB Mode: Timeslice: Mid Term (1000ms/1sec)

Input: UDP/Multicast Source

Services on Transport Stream ID: 1079

- Program 28006 - ZDF (6.3 Mbps)
- Program 28007 - 3sat (8.4 Mbps)
- Program 28011 - ZDFinfokanal (4.4 Mbps)
- Program 28012 - DKULTUR (266.2 kbps)
- Program 28013 - DLF (266.2 kbps)
- Program 28014 - zdf_neo (4.1 Mbps)
- Program 28016 - zdf.kultur (6.2 Mbps)
- Program 28017 - DRadio Wissen (266.2 kbps)

Services:

- ZDF (ServiceID: 28006, TSD: 1079, OnetworkID: 1)
- 3sat (ServiceID: 28007, TSD: 1079, OnetworkID: 1)
- KiKa (ServiceID: 28008, TSD: 1079, OnetworkID: 1)
- ZDFinfokanal (ServiceID: 28011, TSD: 1079, OnetworkID: 1)

EPG Viewer

EIT PIDs: 0018 Transponders: 1079 (Actual) Type: All Lang:

17:00 heute - Wetter (17:00) (15 min)

17:15 ZDF heute - Wetter (17:00) (15 min)

17:30 ZDF ZDFinfokanal (17:30) (15 min)

17:00 3sat Gsetttin (16:55) (45 min)

17:00 KiKa fit_aktiv (17:02) (15 min)

17:15 ZDFinfokanal ZDFinfokanal (17:15) (15 min)

GOP Viewer

Services: ZDF (MPEG)

Size

150 KB

100 KB

50 KB

PTS: 06:30:23.753 (480ms)

PTS: 06:30:24.233 (480ms)

PTS: 06:30:24.713 (480ms)

Teletext Viewer

Teletext PIDs: ZDF

DVB500 100 ZDFtex

Rätselraten: Wo Sarkozy lädt Re 660.000 Rentner GFK: Jeder sche

Bayern mit Top-Elf gegen Zürich .. 210

Hockey-Herren besiegen Spanien .. 213

Streik in Spanien: keine Einigung 226

17.00 heute - Wetter

17.15 ZDFinfokanal ZDFinfokanal (17:15) (15 min)

365

Spielfilm-Highlights im ZDF .. 388

Welche Worte: Das Zeit des Tages .. 550

LOTTO am Samstag: Gewinnquoten ... 556

Graph Type: Repetition Use Table: Duration: 1000ms Analyze

EIT Now/Next

Channel	Start	Duration	State	Description
DRadio Wissen	17:00:00	08:00:00	Running	Hirn will Arbeit
DRadio Wissen	01:00:00	08:00:00	Next	Hirn will Arbeit
ZDFinfokanal	17:02:00	00:13:00	Running	fit & aktiv
ZDFinfokanal	17:15:00	00:15:00	Next	qaren & genießen

Bitrate

40 Mbps

30 Mbps

20 Mbps

10 Mbps

Transport Bandwidth (38.91 Mbps)

Transport Payload (35.76 Mbps)

Transport Stuffing (2.25 Mbps)

Scale: 2px: 1sec (duration: 00:00:02)

UDR-MC: 239.10.10.101:1234 (7.0 pkts/MTU) 5% 38.014.900 bps / 94.2% PCR 188 DVB 22/08/2011 17:09:39

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UDR-MC: 239.10.10.101:1234 (7.0 pkts/MTU) 5% 38.014.900 bps / 94.2% PCR 188 DVB 22/08/2011 17:09:39

PID	Type	Bitrate	Current	%	Min	Max	C-errors	Crypto Code	Dir	Crypto Even	Dir	Details	PCR TS Bitrate
0000	SEC -> PAT		14.0 kbps	0.84%	13.6 kbps	16.4 kbps	0	n.a.	n.a.				
0001	SEC -> CAT		14.0 kbps	0.84%	14.7 kbps	15.3 kbps	0	n.a.	n.a.				
0016	SEC -> NT Actual		0.0 kbps	0.00%	0.0 kbps	0.2 kbps	0	n.a.	n.a.				
0027	SEC -> SDT_BAT		3.0 kbps	0.81%	3.0 kbps	3.2 kbps	0	n.a.	n.a.				
0018	SEC -> BT-Schedule Actual, EIT Other, EIT Actual		723.3 kbps	1.30%	693.3 kbps	810.7 kbps	0	n.a.	n.a.				
0020	SEC -> TOT, TDT		0.0 kbps	0.00%	0.0 kbps	3.1 kbps	0	n.a.	n.a.				
0084	TS -> Private PES		4.5 kbps	0.01%	2.9 kbps	4.6 kbps	0	n.a.	n.a.				
0200	SEC -> PMT		14.0 kbps	0.84%	13.6 kbps	16.4 kbps	0	n.a.	n.a.				
0110	PES -> Video MPEG-2		5.9 Mbps	15.44%	3.3 Mbps	5.9 Mbps	0	n.a.	n.a.	720x576, Aspect: 16:9, 4:2:0		38.214-934 kbps	
0120	PES -> Audio MPEG-1		263.4 kbps	0.69%	261.7 kbps	265.3 kbps	0	n.a.	n.a.	192.0 kbps, freq: 48000 Hz, Layer: 2			
0121	PES -> Audio MPEG-1		200.0 kbps	0.53%	198.3 kbps	201.9 kbps	0	n.a.	n.a.	192.0 kbps, freq: 48000 Hz, Layer: 2			
0122	PES -> Audio MPEG-1		209.6 kbps	0.53%	198.7 kbps	202.1 kbps	0	n.a.	n.a.	192.0 kbps, freq: 48000 Hz, Layer: 2			
0123	PES -> Private PES, Audio AC3		459.8 kbps	1.21%	456.5 kbps	462.5 kbps	0	n.a.	n.a.	448 kbps, freq: 48000 Hz, 2:0 - LR			
0130	TS -> Private PES, Teletext		302.6 kbps	0.79%	294.5 kbps	306.1 kbps	0	n.a.	n.a.				
0131	TS -> Private PES, Subtitle		4.5 kbps	0.01%	3.0 kbps	21.5 kbps	0	n.a.	n.a.				
0300	SEC -> PMT		14.0 kbps	0.84%	13.7 kbps	16.4 kbps	0	n.a.	n.a.				
0210	PES -> Video MPEG-2		4.5 Mbps	11.82%	4.5 Mbps	7.9 Mbps	0	n.a.	n.a.	720x576, Aspect: 4:3, 4:2:0		38.214-934 kbps	
0220	PES -> Audio MPEG-1		263.4 kbps	0.69%	261.8 kbps	264.8 kbps	0	n.a.	n.a.	192.0 kbps, freq: 48000 Hz, Layer: 2			
0221	PES -> Audio MPEG-1		200.0 kbps	0.53%	195.4 kbps	203.9 kbps	0	n.a.	n.a.	192.0 kbps, freq: 48000 Hz, Layer: 2			
0222	PES -> Audio MPEG-1		198.4 kbps	0.52%	190.1 kbps	202.1 kbps	0	n.a.	n.a.	192.0 kbps, freq: 48000 Hz, Layer: 2			
0223	PES -> Private PES, Audio AC3		459.8 kbps	1.21%	459.0 kbps	462.5 kbps	0	n.a.	n.a.	448 kbps, freq: 48000 Hz, 2:0 - LR			
0230	TS -> Private PES, Teletext		302.6 kbps	0.79%	296.8 kbps	302.2 kbps	0	n.a.	n.a.				
0231	TS -> Private PES, Subtitle		3.0 kbps	0.01%	2.0 kbps	4.6 kbps	0	n.a.	n.a.				
0300	SEC -> PMT		14.0 kbps	0.84%	14.7 kbps	15.3 kbps	0	n.a.	n.a.				
0101	PES -> Video MPEG-2		1.5 Mbps	9.21%	1.0 Mbps	6.1 Mbps	0	n.a.	n.a.	720x576, Aspect: 4:3, 4:2:0		38.214-934 kbps	
0120	PES -> Audio MPEG-1		263.4 kbps	0.69%	258.0 kbps	268.0 kbps	0	n.a.	n.a.	256.0 kbps, freq: 48000 Hz, Layer: 2			
0123	PES -> Private PES, Audio AC3		461.3 kbps	1.21%	457.6 kbps	463.9 kbps	0	n.a.	n.a.	448 kbps, freq: 48000 Hz, 2:0 - LR			
0300	SEC -> PMT		300.6 kbps	0.79%	299.0 kbps	302.2 kbps	0	n.a.	n.a.				
0420	PES -> Audio MPEG-1		296.3 kbps	0.79%	294.7 kbps	299.0 kbps	0	n.a.	n.a.	256.0 kbps, freq: 48000 Hz, Layer: 2		38.211-439 kbps	
0411	SEC -> PMT		14.0 kbps	0.84%	14.7 kbps	15.3 kbps	0	n.a.	n.a.				
0800	SEC -> PMT		14.0 kbps	0.84%	13.6 kbps	16.5 kbps	0	n.a.	n.a.				
0610	PES -> Video MPEG-2		1.0 Mbps	9.45%	1.5 Mbps	5.8 Mbps	0	n.a.	n.a.	720x576, Aspect: 4:3, 4:2:0		38.211-936 kbps	
0620	PES -> Audio MPEG-1		263.4 kbps	0.69%	260.4 kbps	265.1 kbps	0	n.a.	n.a.	256.0 kbps, freq: 48000 Hz, Layer: 2			
0621	PES -> Audio MPEG-1		200.0 kbps	0.53%	198.3 kbps	202.9 kbps	0	n.a.	n.a.	192.0 kbps, freq: 48000 Hz, Layer: 2			
0622	PES -> Audio MPEG-1		200.0 kbps	0.53%	199.1 kbps	202.1 kbps	0	n.a.	n.a.	192.0 kbps, freq: 48000 Hz, Layer: 2			
0623	PES -> Private PES, Audio AC3		459.8 kbps	1.21%	457.5 kbps	462.9 kbps	0	n.a.	n.a.	448 kbps, freq: 48000 Hz, 2:0 - LR			
0800	TS -> Private PES, Teletext		300.6 kbps	0.79%	294.5 kbps	313.7 kbps	0	n.a.	n.a.				
0800	SEC -> PMT		14.0 kbps	0.84%	14.7 kbps	15.3 kbps	0	n.a.	n.a.				

DVBS03 NOS-TT 100 vr 13 jul 17:07:10

TELETEXT

enkele buien, morgen veel buien.. 703
 Boer eert vrouw met hart-weiland 404
 Tyler stopt met American Idol... 410
 Pop- en festival-agenda..... 426-428

nieuws	101	sport	600
rtv	200,250	weer,verkeer	701
omroepen	300	voetbal	800
nos op 3	401	ondertitels	888
financieel	500	disclaimer	393

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 nieuws sport tv gids weer

TSOP: 13/07/2012 17:07:00 studio sport

PID Overview

PID-oriented overview of the analyzed Transport Stream, presenting all component details.

Media Viewer

Watch or listen to TV and Radio Services. Overlaid Teletext, Subtitles and EPG now/next information.

Teletext Viewer

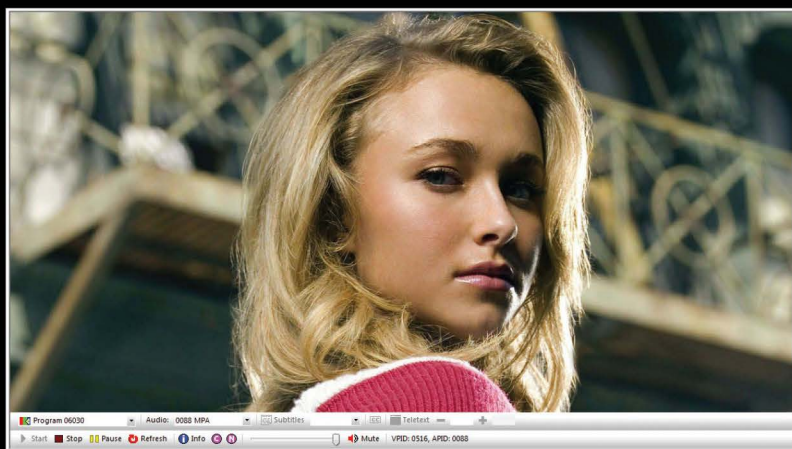
Teletext information available in the analyzed Transport Stream can be shown in different representations:

- Graphics
- Tree
- Grid
- Statistics

Subtitle Viewer

DVB Subtitles and their timing properties can be shown using the Subtitle Viewer window.

- Details
- Log



Subtitle PID(s): Nederland 2 PID:1117 (du)

PCR Start	PCR Stop	PTS Time	Size	Info
12:24:57.097	12:24:57.097	12:24:56.628	31	Page: 002 (Version:01), Clear screen
12:24:58.124	12:24:58.965	12:24:58.768	8191	Page: 002 (Version:02), PixelDepth: 4, Used Segments: PageCompY, RegionCompY, ClutDefY, ObjectDataY, EndOfDisplayY, StuffingN
12:25:03.332	12:25:03.332	12:25:04.978	31	Page: 002 (Version:03), Clear screen
12:25:03.618	12:25:04.495	12:25:05.258	8677	Page: 002 (Version:04), PixelDepth: 4, Used Segments: PageCompY, RegionCompY, ClutDefY, ObjectDataY, EndOfDisplayY, StuffingN
12:25:06.070	12:25:06.070	12:25:07.698	31	Page: 002 (Version:05), Clear screen
12:25:06.387	12:25:06.768	12:25:07.978	4887	Page: 002 (Version:06), PixelDepth: 4, Used Segments: PageCompY, RegionCompY, ClutDefY, ObjectDataY, EndOfDisplayY, StuffingN
12:25:08.898	12:25:08.898	12:25:10.558	31	Page: 002 (Version:07), Clear screen
12:25:09.148	12:25:10.150	12:25:10.838	9775	Page: 002 (Version:08), PixelDepth: 4, Used Segments: PageCompY, RegionCompY, ClutDefY, ObjectDataY, EndOfDisplayY, StuffingN



Bitrate Overview

Visual overview of PID and Service bitrate comparisons are possible in four representations:

- Bar
- Time
- Stacked
- Pie
- Bitrate distribution

EPG

A visual grid representation of EPG events are displayed in the EPG Viewer window. EPG data can be shown in different representations:

- Grid
- Details

Time	Type	Tag	Name	Referer	PID
07/09/2008 11:15:33	Normal	0x02	video_stream_descriptor	PMT (0x02)	0544, 3600
07/09/2008 11:15:33	Normal	0x0A	ISO_639_language_descriptor	PMT (0x02)	0544, 0560, 3600
07/09/2008 11:15:33	Normal	0x13	carousel_identifier_descriptor	PMT (0x02)	0544, 0560
07/09/2008 11:15:41	Normal	0x40	network_name_descriptor	NIT Actual (0x40), NIT Other (0x41)	0016
07/09/2008 11:15:41	Normal	0x41	service_list_descriptor	NIT Actual (0x40), NIT Other (0x41)	0016
07/09/2008 11:15:33	Normal	0x48	service_descriptor	SDT Actual (0x42)	0017
07/09/2008 11:15:41	Normal	0x4A	linkage_descriptor	NIT Actual (0x40)	0016
07/09/2008 11:15:33	Normal	0x52	stream_identifier_descriptor	PMT (0x02)	0544, 0560, 0784, 0785, 3600
07/09/2008 11:15:33	Normal	0x56	teletext_descriptor	PMT (0x02)	0544, 0560, 3600
07/09/2008 11:15:33	Normal	0x58	local_time_offset_descriptor	TOT (0x73)	0020
07/09/2008 11:15:41	Normal	0x5A	terrestrial_delivery_system_descriptor	NIT Actual (0x40), NIT Other (0x41)	0016
07/09/2008 11:15:41	Normal	0x62	frequency_list_descriptor	NIT Other (0x41)	0016
07/09/2008 11:15:33	Normal	0x64	data_broadcast_descriptor	SDT Actual (0x42)	0017
07/09/2008 11:15:33	Normal	0x66	data_broadcast_id_descriptor	PMT (0x02)	0544, 0560, 0784, 0785
07/09/2008 11:15:41	Normal	0x6C	cell_id_descriptor	NIT Actual (0x40), NIT Other (0x41)	0016
07/09/2008 11:15:41	Normal	0x6D	cell_frequency_list_descriptor	NIT Actual (0x40), NIT Other (0x41)	0016
07/09/2008 11:15:33	Normal	0x6F	application_signalling_descriptor	PMT (0x02)	0544, 0560
07/09/2008 11:15:33	Normal	0x77	time_slice_fec_identifier_descriptor	INT (0x4C)	0786
07/09/2008 11:15:33	MHP	0x00	MHP_AIT_application	MHP_AIT (0x74)	0882
07/09/2008 11:15:33	MHP	0x01	MHP_AIT_application_name	MHP_AIT (0x74)	0882
07/09/2008 11:15:33	MHP	0x02	MHP_AIT_transport_protocol	MHP_AIT (0x74)	0882
07/09/2008 11:15:33	MHP	0x03	MHP_AIT_dvb_j_application	MHP_AIT (0x74)	0882
07/09/2008 11:15:33	MHP	0x04	MHP_AIT_dvb_j_application_location	MHP_AIT (0x74)	0882
07/09/2008 11:15:33	DSMCC	0x0C	IP/MAC_platform_name_descriptor	INT (0x4C)	0786
07/09/2008 11:15:33	DSMCC	0x0F	target_IP_slash_descriptor	INT (0x4C)	0786
07/09/2008 11:15:33	DSMCC	0x13	IP/MAC_stream_location_descriptor	INT (0x4C)	0786

ETR-290

ETR-290 compliancy results are shown in two different views:

- ETR-290 Viewer
- ETR-290 History

Thumb Overview

Three different Thumb Overviews can be shown:

- Thumbnails Only
- Brief Details
- Full Details

Service	Start	End	Title	Description
ZDF HD	11:10	11:15	Beute - in Europa (14)	Beute - in Europa (14)
arte HD	11:20	11:30	Zu Tisch in ... Slowenien (14:15)	Mit dem Dromedar durch die Sahara (14:45)
ZDF	11:30	11:45	Beute - in Europa (14)	Beute - in Europa (14)
Sendung	11:35	11:45	Frankenstein Kater (14:20)	Frankenstein Kater (14:20)
Kika	11:40	11:50	Aktion! Schulstreik (13:55)	Aktion! Schulstreik (13:55)
ZDFinfoakt	11:50	12:00	Die Welt der Spielarten	Die Welt der Spielarten
DokuKultur	12:00	12:10	Die Welt der Spielarten	Die Welt der Spielarten





The screenshot shows a hex viewer displaying video packet data. The top section lists various parameters for a PES packet, such as start_code_id, PES_packet_length, and PES_priority. Below this, the raw hex data is shown in columns, with corresponding ASCII characters. The data represents a video packet structure, including sequence header extension and video buffer size extension fields.

Video Quality

Live video quality measurements, using thresholds:

- Blocking
- Blurring
- Ringing
- Waveform Luma/RGB
- Vectorscope
- Histogram Luma/Red/Green/Blue

PCR Viewer

PCR Viewer displays every second a graphical overview of the PCR (Program Clock Reference) frequency and precision.

- PCR Jitter snapshot
- PCR Jitter snapshot
- PCR Interval

Hex Viewer

Hex Viewer enables in-depth analyzing of Bits, Bytes and their interpretations.

Implemented for:

- Sections
- MIP (DVB-T)
- TS-packets

GOP and Buffer Viewer

Graphical presentation of the picture order and buffer behavior in GOP (Group of Pictures) structures of Video components.

