

SI/PSI Management System (EIT/SDT/PMT/BAT/NIT/TDT/TOT/AIT)



MIT-*xperts*

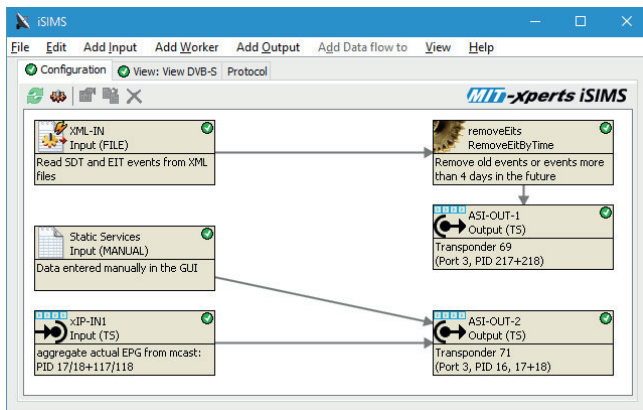
iSIMS

iSIMS SI/PSI Management System

SI Playout Made Easy

Whether you are just remapping input data to new output multiplexes or you are managing a challenging DVB SI/PSI signalling scenario, iSIMS is the right tool for you. It is powerful enough to handle the most complex scenarios, yet simple and easy to use.

Based on our robust iMux Multiplexer, the iSIMS seamlessly integrates into your playout system.



Main configuration view (with sample configuration)

An Intuitive User Interface

The iSIMS has its own specialized user interface for SI table manipulation: The iSIMS GUI allows you to connect inputs to outputs with workers in between. Inputs provide SDT, EIT, PMT, BAT, NIT, and AIT data from external sources (e.g. ASI, IP, or XML). Outputs transmit the data to various destinations (e.g. ASI, IP, or XML). The workers manipulate the data passed through them: correct the data, merge/split events or services, translate service IDs, etc.

When connecting the iSIMS components, you can filter which data (events, services, PMTs, NITs, ...) may pass (or may not pass) through a connection. This allows you to easily design the data flow the way you need it to be.



The screenshot shows the 'Edit element: Output (TS)' dialog box. It has tabs for 'Properties', 'Forwarded data', 'Status', and 'Protocol'. The 'Properties' tab is active, showing fields for 'Name' (IP-out 1) and 'Description' (Region 1). Below is a table for 'Output transponder(s)':

Transponder	SDT PID	SDT only actual	EIT PID	EIT only actual	RST PID	PAT PID
1.1011 [ZDF HD]	317	<input type="checkbox"/>	318	<input type="checkbox"/>		
1.1073 [Sky Cinema, Sky ...]	117	<input checked="" type="checkbox"/>	118	<input checked="" type="checkbox"/>		
1.1101 [Das Erste, Bayeris...]	217	<input checked="" type="checkbox"/>	218	<input checked="" type="checkbox"/>		

Below the table are 'Playout' settings: 'Cycle time in milli seconds' (SDT order), 'EIT Bitrate' (500000 bits/s, auto-adapt bitrate checked), 'Limit EIT other' (days), 'EIT packaging' (DVB standard), 'Playout NIT on PID' (16), 'Network ID' (1, NIT only actual unchecked), and 'auto-adjust BAT/NIT version' checked. 'OK' and 'Cancel' buttons are at the bottom.

Each iSIMS component has properties that determine its behaviour

With the input/output/worker/flow GUI configuration, you always have an easily understandable graphic representation of your current configuration.

The 60+ worker types included in every iSIMS allow virtually any automated data manipulation possible and are a big competitive advantage, as adaptation to new requirements is usually just a few clicks away.

Specific customer requests can easily be implemented using the iSIMS plugin architecture.

The screenshot shows the 'Edit element: Input (TS)' dialog box. It has tabs for 'Properties', 'Forwarded data', 'Status', and 'Protocol'. The 'Properties' tab is active, showing a table of service configurations:

DVB Triple	Name	Type	P/F	Sched.	SDT	PMT [PID]
[10330]	NDR FS SH HD	AVC HD TV	✓	✓	✓ [P/F]	
[10331]	PHOENIX HD	AVC HD TV	✓	✓	✓ [P/F]	
1.1101 TS 1.1101						
[28106]	Das Erste	TV	✓	✓ [28d]	✓ [P/F, Sched.]	✓ [100]
[28107]	Bayerisches FS Süd	TV	✓	✓ [28d]	✓ [P/F, Sched.]	✓ [200]
[28108]	hr-fernsehen	TV	✓	✓ [28d]	✓ [P/F, Sched.]	✓ [300]
[28110]	Bayerisches FS Nord	TV	✓	✓ [28d]	✓ [P/F, Sched.]	✓ [500]
[28111]	WDR Köln	TV	✓	✓ [28d]	✓ [P/F, Sched.]	✓ [600]
[28113]	SWR Fernsehen BW	TV	✓	✓ [28d]	✓ [P/F, Sched.]	✓ [800]
1.1111 TS 1.1111						
[28534]	WDR Aachen	TV	✓	✓	✓ [P/F]	
[28535]	WDR Wuppertal	TV	✓	✓	✓ [P/F]	
[28536]	WDR Bonn	TV	✓	✓	✓ [P/F]	
[28537]	WDR Duisburg	TV	✓	✓	✓ [P/F]	
[28544]	WDR HD Aachen	AVC HD TV	✓	✓	✓ [P/F]	
[28545]	WDR HD Wuppertal	AVC HD TV	✓	✓	✓ [P/F]	
[28546]	WDR HD Bonn	AVC HD TV	✓	✓	✓ [P/F]	

Legend: = Changed entry, = New entry, = Removed entry. A 'Show EIT overview...' button is at the bottom right. Below the table is another table:

Other table type	ID	Source	Description
BAT Bouquet	4160 (0x1040)	IP-IN	ARD Digital
NIT Network	1 (0x1)	IP-IN	ASTRA 1
NIT Network	3 (0x3)	IP-IN	ASTRA 3

'OK' and 'Cancel' buttons are at the bottom.

The service configuration can be displayed for each component. All changes since the last activation are highlighted automatically.

Key Features and Benefits

Information at Your Fingertips

For each component, you can display all current SDT, EIT, PMT, BAT, NIT, and AIT data. This way, you can analyze your SI data after each step of data manipulation in the flow from input to output.

You can always go into more detail, see all descriptors, and display the complete EIT schedule. Exporting SI table data to XML is also an option for each component.

DVB Triple	Service Name	15:00 Feb 19, 2016	16:00	17:00	18:00	Events
1.1093.28461	SR 1 Europawelle	SR 1 Europawelle - Hallo Saarland				0
1.1093.28462	SR 2 KulturRadio	SR 2 - Der Nachmittag				0
1.1093.28463	SWR 1 BW	Der Nachmittag	Aktuell un funk	Bilanz am Abend	Am Nachmitt	0
1.1093.28468	SWR3	SWR3 Die Nachmittagsshow			BareribudeH	0
1.1093.28470	SWR 4 RP	Am Nachmittag	Am Nachmittag		SWR3 Club	0
1.1093.28471	DASDING	Die DASDING Conso-Show mit Consi		DASDING mit Basti		0
1.1093.28475	ILIVE	ILIVE mit Lisa Kestel und dem Schröder			ILIVE Go	0
1.1093.28476	WDR 2	WDR 2				0
1.1101.28106	Das Erste	Sport1 Sportschau live	Tagesschau live	Tagesschau live	Tagesschau li	1009
1.1101.28107	Bayerisches FS Süd	InsellPolizeinspielW in Bayern	Rundsdorfgeschicht	Abendschau -	Gabendschau	1006
1.1101.28108	Hr-Fernsehen	Ein Straßverzicht nach Meer (70)	hehallo hessen	hessenhallo hessen	hessenanwetten	1133
1.1101.28110	Bayerisches FS Nord	InsellPolizeinspielW in Bayern	Rundsdorfgeschicht	Frankschau	Abendschau	1006
1.1101.28111	WDR Köln	Aberkueu/Todriank durch die MfWDR allstahen + unterwegs	WDR allstah			1029
1.1101.28113	SWR Fernsehen BW	Expedition in die HfGrünzug	Lokkaffee oder Tee		Landesfah	1183
1.1111.28534	WDR Aachen	Todriank durch die MfWDR all				0

The current EIT data can be displayed for each iSIMS component

Start	End	ID	Name	Duration
Present/Following events:				
Last update: Feb 19, 2016 3:19:26 PM				
Feb 19, 2016 3:10:00 PM	4:30:00 PM	45980	Sportschau live	01:20
Feb 19, 2016 4:30:00 PM	4:35:00 PM	45981	Tagesschau	00:05
Scheduled events:				
Last update: Feb 19, 2016 3:19:26 PM				
Feb 19, 2016 1:05:00 PM	3:05:00 PM	45978	Sportschau live	02:00
Feb 19, 2016 3:10:00 PM	3:10:00 PM	45979	Tagesschau	00:05
Feb 19, 2016 3:10:00 PM	4:30:00 PM	45980	Sportschau live	01:20
Feb 19, 2016 4:30:00 PM	4:35:00 PM	45981	Tagesschau	00:05

Event ID	Event start	Event end	Event status	Event name	Event text	Extended description
45533 (0xb1dd)	Feb 19, 2016 11:30:00 PM	Feb 20, 2016 1:00:00 AM	undefined	[deu]: Mankells Wallander - Das Erbe	[deu]: Fernsehfilm Schweden / Deutschland 2010 (Arvet)	[deu]: Nach dem Mord an einem reichen Cidre-Produzenten steht Kurt Wallander vor einem Rätsel. Der Verdacht fällt zunächst auf die Familie des Opfers und die Obstpflicker der Plantage.

Descriptor
short_event_descriptor
ISO_639_language_code = deu
event_name = Mankells Wallander - Das Erbe
text = Fernsehfilm Schweden / Deutschland 2010 (Arvet)
extended_event_descriptor
descriptor_number = 0
last_descriptor_number = 2
ISO_639_language_code = deu
text = Nach dem Mord an einem reichen Cidre-Produzenten steht Kurt Wallander vor einem
extended_event_descriptor

You can open the EIT schedule for each service, inspect event details and export them to XML

iSIMS Networking

iSIMS supports multiple client connections at the same time from different workstations. Read/write permissions, combined with passwords, also allow restricting access for inexperienced staff members. LDAP integration is possible. The client can be started from your local web browser.

iSIMS provides:

- SDT, EIT, PAT, PMT, BAT, NIT, TDT, TOT, RST management
- AIT for HbbTV/MHP interactive TV
- automatic generation of all SI/PSI tables
- support multiple multiplexes on a single ASI/IP output or splitting on multiple IP outputs
- extraordinary and intuitive GUI allowing graphical data modelling and data visualization
- extremely comprehensive range of features
- extensible by use of plugins (workers)
- efficient section packaging saves up to 20% EIT bitrate
- status reporting / config change via SNMP agent

Input features:

- IP and ASI live input
- XML input in various XML formats (incl. TV-Anytime)
- EIT present / following event triggering via XML
- Manual input (enter data in GUI), includes EIT schedules

Output features:

- IP or ASI output
- XML output in various XML formats (incl. TV-Anytime)
- DVB-I output
- Direct sections output (from files)
- Report output (for automatic report generation)

Manipulation features (workers):

- EIT auto-correction (fix gaps and overlapping events)
- remove past and/or future EIT events (for saving bitrate)
- remove/add descriptors from/to EIT, SDT, PMT, BAT, NIT
- service ID translation in SDT, EIT, PMT, BAT, NIT
- service / event renaming and parameter modification
- service / event / PMT / BAT / NIT filtering
- service linkage creation
- change character sets
- PMT / elementary stream PID translation
- NIT + EIT merging, creation, and migration
- ... and many more + additional options via plugins

Additional options:

- Excel Importer for EPG schedules

Technical Data

- 1U 19" server, redundancy by adding backup servers
- Up to 8 physical IP ethernet ports
- Up to 6 physical ASI ports
- Max. 200 logical inputs (ASI and/or IP)
- Output licensed either by output transponders or by output services (max. 150 transponders or 600 services)
- Robust server (redundant power supplies + hard disks)



ORDERING INFORMATION

Please contact us for further details on different available options.



MIT-xperts GmbH
Pocistr. 13
80336 Munich
Germany

phone: +49 (89) 76756380
fax: +49 (89) 76756381
sales@mit-xperts.com
www.mit-xperts.com