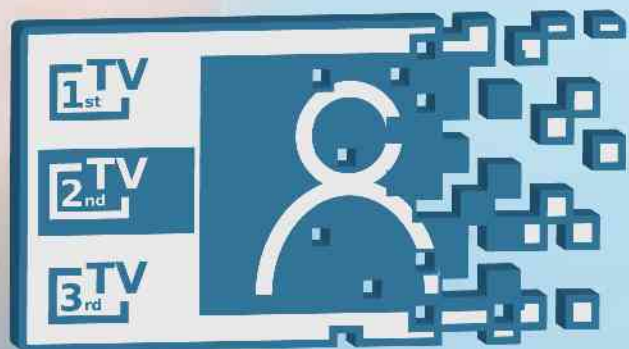


Service Guide Transport



Service Guide Transport

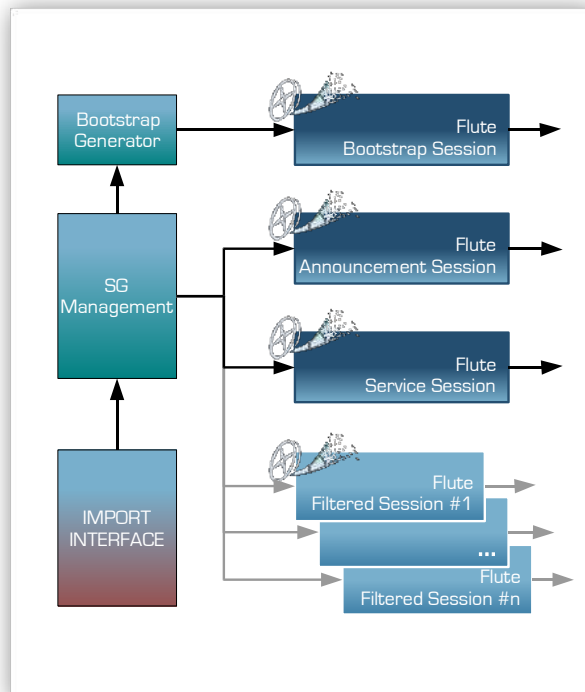
DESCRIPTION

Modern mobile TV platforms based on DVB-H networks do not only allow the transmission of classical TV channels, but also the transmission of advanced and interactive multimedia services. This requires appropriate service announcement mechanisms to evoke the consumers' interest and to provide additional access and meta-informations to handsets and consumers.

For this reason, both common DVB-H standards - DVB IPDC and OMA BCAST - contain the definition of an "Electronic Service Guide" (ESG) mechanism, based on fragmented XML-data and additional binary files. In both worlds, BCAST and IPDC, the transmission of ESG data is performed using binary data containers and relying on the standardised FLUTE protocol.

The GMIT Service Guide Transport (SGT) was designed for the playout of ESG XML fragments and additional auxiliary data. While supporting both standards, DVB IPDC and OMA BCAST, its main focus is the reliable signalisation of updated ESG data and the highly variable assignment of data to a various amount of FLUTE sessions. Performing last-minute updates due to the instant ESG updating functionality, enables you to provide trendsetting interactive services and user-driven content.

All GMIT SGT products are also equipped with an internal redundancy module for a seamless failover switching and recovery in multicast environments, in case that more than one SGT is available.



PRODUCT FEATURES

The GMIT Service Guide Transport can be separated in two main fields of activity: Service Guide management and Service Guide delivery. Both provide the following key functions:

Service Guide Management

- Encapsulation and management of ESG data using DVB IPDC and OMA BCAST compliant container format
- Instant ESG updating: importing, processing and playout of new ESG data within seconds - no additional pre-load time is required
- Interference-free import of ESG data from multiple sources
- Multiple stream mode: delivery of ESG data in various amount of delivery sessions
- Automatic bootstrapping
- Session announcement using SGDDs (OMA BCAST) or session partition declaration (DVB IPDC)
- Support of multiple MNO-operation (service guide grouping)

Service Guide Delivery

- Delivery of ESG data using full DVB IPDC and OMA BCAST compliant FLUTE-protocol
- ESG update signalling on transport layer: increasing TOI values and FDT instance ID triggers client to parse new ESG data
- Easy setup of network playout parameters: destination IP, destination address, UDP port, session data-rate and TSI configurable via user-friendly web-based UI
- High-precision constant bit rate output
- Automatic or manual FDT (File Description Table) generation

GMIT PRODUCTS

GMIT products provide highest service availability and are ready to run 24x7, proved in several commercial deployments.

They are based on software-only components, which allow the use of regular PC-based server hardware. Even one server can host more than one GMIT product.

Due to its highly flexible software architecture and design, all GMIT products can easily be adapted. Customers are therefore flexible for future enhancements and upcoming standards and well prepared for individual integrations and customizations. This helps to reduce time-to-market, providing advantages compared to other vendors.



TECHNICAL SPECIFICATION

Input

IMPORT INTERFACES

- Java remote client import interface
- XML-RPC import interface

SUPPORTED ESG DATA TYPES (OMA BCAST)

- Supported XML-Fragments: Service, Access, Schedule, Content, PreviewData, PurchaseData, PurchaseItem, PurchaseChannel, InteractivityData
- SDP-files, Images (Logo-files), Interactive Media Documents (IMDs)
- Arbitrary binary files (Auxiliary Data)

SUPPORTED ESG DATA TYPES (DVB IPDC)

- Supported XML-Fragments: Service, ServiceBundle, Content, Schedule, Purchase, PurchaseChannel, Acquisition
- SDP-files, Images (Logo-files)
- Arbitrary binary files (Auxiliary Data)

Output

TRANSPORT LAYER

- IP version 4 unicast or multicast
- UDP (RFC 768 compliant)

SERVICE LAYER

- FLUTE file delivery stream (RFC 3926 compliant)
- ALC file delivery stream (RFC 3450 compliant)

ESG Functionality

ENCAPSULATION

- ESG data encapsulation using SGDU data container (OMA TS BCAST Service Guide compliant)
- ESG data encapsulation using ESG container (ETSI TS 102 471 compliant)
- Inband delivery of binary data using ESG container (ETSI TS 102 471 compliant)

MULTIPLE STREAM DELIVERY

- Arbitrary amount of ESG Delivery sessions
- Multiple stream announcement using SGDD (OMA TS BCAST Service Guide compliant)
- Multiple stream announcement using Session Partition Declaration (ETSI TS 102 471 compliant)

BOOTSTRAPPING

- Generation of OMA BCAST and DVB IPDC compatible bootstrapping data (ProviderDiscovery- and AccessDescriptor)
- Simultaneous or stand-alone bootstrapping on UDP port 9214 and 3937
- Unified bootstrapping for simultaneous transmission of OMA BCAST and DVB IPDC ESG

Additional Functionality

COMPRESSION

- Optional GZIP compression of ESG Container, SGDU and SGDD

MULTIPLE MNO OPERATOR MODE

- SGDD BSMSector support for operator-specific grouping of ESG data (OMA TS BCAST Service Guide compliant)

Redundancy

REDUNDANCY

- Built-in clustered service redundancy for seamless failover in multicast environments (requires 2 x GMIT Service Guide Transport)

Administration and Monitoring

LOCAL

- Control: Console-based UI

REMOTE

- Control: Web-based UI and SNMPv2 Control
- Monitoring: Web-based UI and SNMPv2

Hardware and System Requirements

HARDWARE REQUIREMENTS

- CPU: 1x INTEL XEON Quadcore
- RAM: 4 GByte
- USB: Port for license key (alternative network connection to dedicated license server)

OPERATING SYSTEM

- Ubuntu Linux LTS 8.04 (Hardy) 32 bit Server edition

SUPPORT

- Internet connection (FTP) necessary for easy installation (alternative installation possible)
- SSH connection for additional GMIT support

Contact

GMIT GMBH

Novalisstr. 10
10115 Berlin
Germany

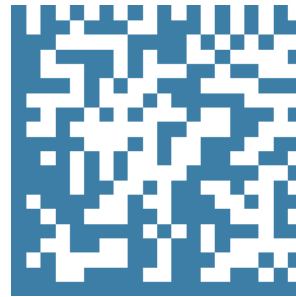
PHONE: +49 30 240 88 23 30

FAX: +49 30 240 88 23 59

WEB: www.gmit-gmbh.de

E-MAIL: info@gmit-gmbh.de

GET MORE INFORMATION



MORE GMIT PRODUCTS

Broadcast Multiscreen Monitor



Video Headend



GMIT is a component supplier providing headend technology and interactivity for digital and mobile broadcast. Our software products for stationary and mobile TV are optimized to satisfy the essential needs for reliability, economy and flexibility.