

Carousel management for software downloads

Most of the functionality of modern set-top boxes (STBs) is handled by the system software. It is therefore vital to keep the system software up-to-date to ensure problem-free operation. Software updates also let you offer exciting new features for your customers without having to replace their STB.

For Digital Video Broadcasts (DVB), the DVB system software update specification mandates that updates are broadcast using data carousels. GYRIS gives you a simple way to broadcast system software updates to any set-top box in the field. It consists of an easy-to-use graphical user interface (GUI) and a data carousel component. These let you control the assembly of individual carousels and provide a transport mechanism for the CASIS server to deliver the data to a decoder.

Inside the carousel, data is organised into distinct modules. Each module is further divided up to form the payload of one or more download data messages defined using the DSM-CC DownloadDataBlock syntax. The modules in a carousel are broadcast in a cyclically repeating fashion. If a decoder needs to access a particular module in the carousel, it simply waits for the next

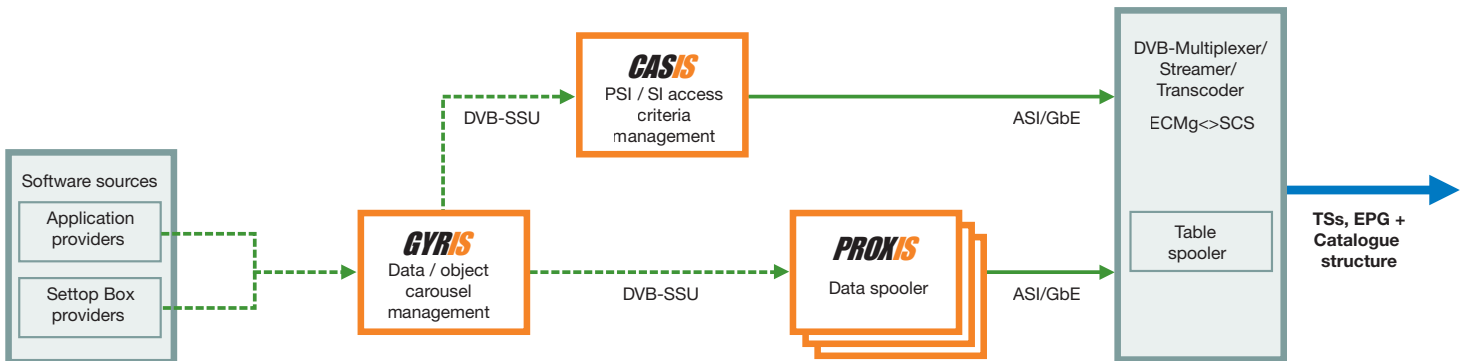
time that data is broadcast. The GUI and carousel component can operate independently, allowing you to configure GYRIS remotely.

Key features

- Easy-to-use graphical user interface
- Built-in DataCycler for ASI output
- Fully integrated with eventIS CASIS and PROXIS components

Technical specification and standards compliance

- Complies with ISO/IEC 13818-6-compliant DSM-CC data carousel
- Complies with ETSI EN 301 192-compliant data carousel
- Complies with ETSI TR 101 202 and DVB-SSU (ETSI TS 102 106) simple profile



Flexible download management made easy

The GYRIS framework provides a flexible user interface for controlling the assembly of individual carousels and MPEG / DVB-compliant output files. These files can then be played out using the CASIS Datafile Manager or PROXIS.

GYRIS works closely with the CASIS Datafile Manager, which is capable of playing out private data files (such as software download images) at any PID and cycle time or bit rate within a transport stream. The Datafile Manager supports the distribution of one or more MPEG section files, each containing one or more MPEG sections.

The MPEG section format is defined in ISO/ IEC 13818-1. Each section can be a maximum of 4 Kbytes including a 3-byte header.

To ensure file integrity, the Datafile Manager checks the section length fields before play out.

As CASIS implements signalling in the NIT/BAT and / or PMT tables, it also effectively implements software download functionality in accordance with DVB-SSU (ETSI TS 102 106).

In addition to managing software downloads via CASIS, GYRIS can also deliver data carousels for software downloads to PROXIS units for optimal regionalisation or segmentation of the content.

Services

Our comprehensive first-class after-sales service ranges from product training courses to 24/7 hotline support. Check out our Services leaflet, for more information.