SCILLA C2300 PUSH-VOD SERVER

Data Sheet

OVERVIEW

The C2300 Push-VOD Server is a system for distributing file based content to PVR set top boxes equipped with a hard disk drive.

MAIN FEATURES

Main feature

- Delivery of full length Full-HD movie files
- Automatic generation of PSI/SI and filecast availability tables based on externally defined scheduling information
- Optimized large block application level FEC
- Scheduling of output bit rate
- Provides data carousel streams to one or more multiplexes
- ADI import and export interfaces

Transport layer

Files are delivered to the client using a standard two-layer DSM-CC data carousel. Files are divided to carousel groups that can be scheduled and configured separately.

The server also support HbbTV File Delivery Protocol (FDP), where files are delivered in FDP messages, broadcasted directly in the payload of MPEG-2 TS packets.

Forward Error Correction (FEC)

DSM-CC carousel can use Low Density Parity Check (LDPC) error correction. Error correction is implemented in such a way that FEC ignorant receivers can receive the stream in a fully backwards-compatible way.

PSI/SI Generation

The C2300 Push-VOD Server has a built-in PSI/SI generator for generation of PAT, PMT, NIT, SDT, TDT and BAT tables

All mandatory, optional as well as private descriptors can be added using an PSI/SI Editor. SI tables can also be imported and exported as XML data.

File Notification Table

File Notification Table (FNT) is a proprietary table based on the Update Notification Table (UNT) used in DVB-SSU enhanced profile. It announces the availability and location of push VOD carousel groups and files. FNT scheduling mechanism makes it possible to distribute "time slots" for individual service providers and each of their uniquely identified content e.g. a certain push-VOD movie by a certain pay-TV operator.

Bit Rate Scheduling

Bit rate of each push-VOD carousel can be scheduled to use the maximum bandwidth available. Groups within the carousel can also be scheduled.

Multiple push-VOD carousels can be combined to a Transport Stream channel to use a shared bandwidth.

FILE UPLOAD

Pre-encrypted movie files, custom EPG data and transport streams can be uploaded using FTP or SFTP.
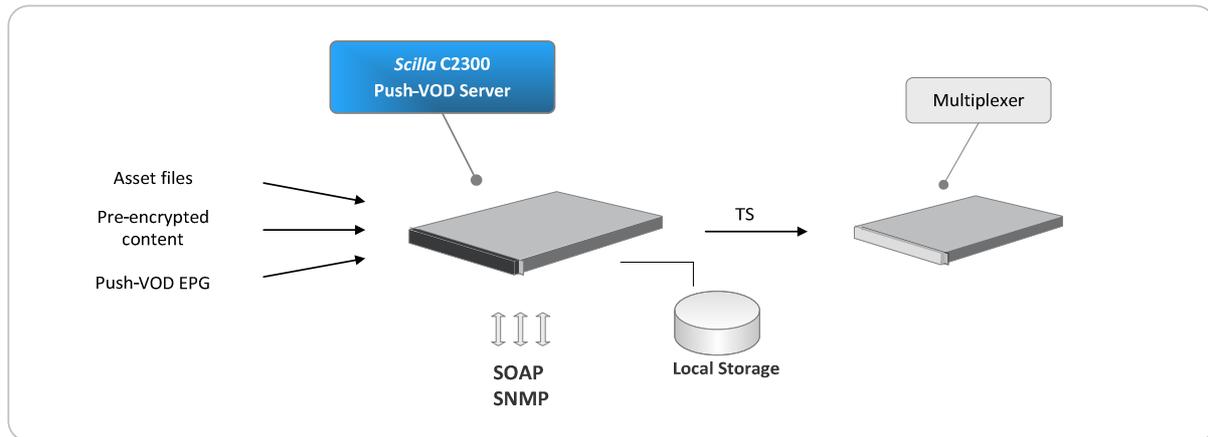
MANAGEMENT

Scilla C2300 Push-VOD Server provides an SNMP Agent and secure Web-interface for managing and monitoring the stream processor. A Network Management System (NMS) can be used to manage and control the complete playout chain.

MIB files provide configuration information for controlling the stream processor.

Additionally user selected log information can be sent to as SNMP traps, to a Syslog service or as emails using SMTP.

OUTPUT

- Multiprogram Transport Stream (MPTS)
- GigE and ASI interface
- TS over IP (RTP or raw UDP)
- Unicast and multicast

OPERATING SYSTEM

Scilla carousel servers can be installed on the following Linux distributions:

- Red Hat Enterprise Linux 7
- CentOS 7

HARDWARE REQUIREMENTS

Single unit server recommendations:

- HP ProLiant DL380 G9-G10

Please consult your local supplier for suitable support service and maintenance agreements ServicePack (IBM) and Care Packs (HP).

CONFORMANCE TO STANDARDS

File delivery mechanism

- HbbTV 2.0 File Delivery Protocol (FDP)
- Scilla Blue Book 1 — Filecast in DVB systems

DVB-DATA

- EN 301 192 V1.6.1: Specification for data broadcasting
- TR 101 202 V1.2.1: Specification for data broadcasting; Guidelines for the use of EN 301 192

DVB-SI

- ETSI EN 300 468 v1.15.1 Specification for Service Information (SI) in DVB systems
- ETSI TR 101 211 v1.12.1 Guidelines on implementation and usage of Service Information (SI)

MPEG-2

- ISO/IEC 13818-6:1998:MPEG-2 Part 6: Extensions for DSM-CC

HbbTV

- ETSI EN 102 796 v1.4.1 Hybrid Broadcast Broadband TV

FEC

- RFC 5170 Low Density Parity Check (LDPC) Staircase and Triangle Forward Error Correction (FEC) Schemes