

MediaCast

Signaling & Delivery server for ATSC 3.0 network



ENENSYS' virtualized software designed to support the delivery of live contents from HEVC encoders or Non Real Time (NRT) content over ATSC3.0 networks using ROUTE and MMTP protocols.

Running inside the core delivery network, the MediaCast operates as a standalone ROUTE or MMTP software, supporting all the required ATSC3.0 specification and using standardized interfaces to control the delivery of broadcast content over an ATSC3.0 network.

Delivery of live HEVC encoders

ATSC3.0 has defined HEVC as the video encoding format. The ATSC3.0 encoders generate either DASH or MPU segments containing all the audiovisual content. Then, MediaCast can interface with multiple encoders and aims at delivering DASH segments over a ROUTE IP stream and MPU segments over a MMTP IP stream.

Non-real time service delivery

Non-real Time (NRT) services are applications generated by data server for delivering Electronic Service Guide (ESG), Emergency Alert Service (EAS), interactive applications or any kind of content to be download into the receiver. The MediaCast is designed to deliver NRT services over ROUTE protocol.

Service signaling

Service Signaling provides service discovery and description information. The Service List Table (SLT) enables the receiver to build a basic service list and bootstrap the discovery of the SLS for each ATSC 3.0 service. The SLT can enable very rapid acquisition of basic service information. The Service Layer Signaling (SLS) enables the receiver to discover and access ATSC 3.0 services and their content components. The MediaCast aims at generating both SLT and SLS and delivering them over ROUTE and MMTP protocols.

Applications

- Linear contents delivery over ROUTE or MMTP
- App-based service delivery over ROUTE
- Electronic Service Guide (ESG) delivery over ROUTE
- Emergency Alert Service (EAS) delivery over ROUTE
- ATSC3.0 signaling tables generation

Benefits

- Central - Heart of the ATSC 3.0 network
- Interoperable - Validated w/all major ATSC3.0 encoders & 3rd party ESG and EAS manufacturers
- Scalable - Virtualized appliance able to handle current & future broadcaster needs
- Intuitive - Easy to setup & to monitor

INPUT

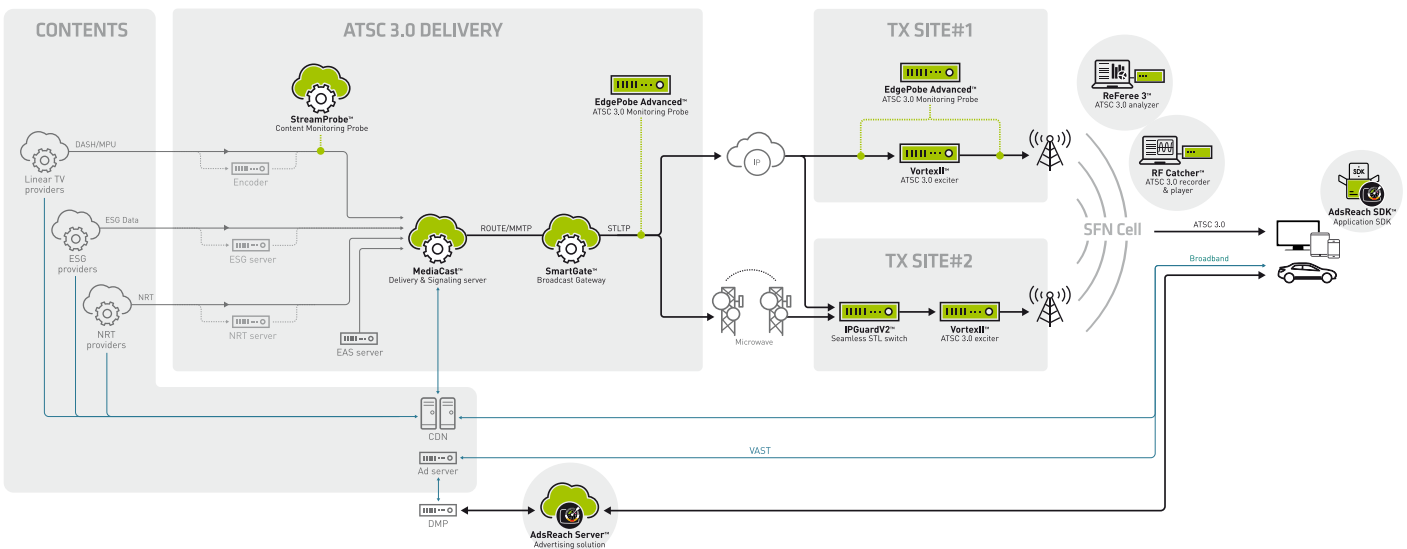
Control SNMP supervision NTP synchronization	1x Virtual Network Interface to access SmartGate GUI, send SNMP traps and synchronize with a PTP or NTP server
DASH or MPU segments ESG metadata EAS contents 3 rd party server	1x Virtual Network Interface to manage all Linear and NRT contents

OUTPUT

ROUTE and MMTP streams	1x Virtual Network Interface for all ROUTE/MMTP output streams
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FEATURING

Linear service delivery	Linear services over ROUTE or MMTP protocol WebDav or HTTP PULL provisioning to interface with encoders Enable Close caption & SHVC services delivery
Electronic Service Guide delivery	ESG delivery over ROUTE protocol ESG metadata managed : OMA-BCAST, PSIP PCMP, ... FTP PUSH or FTP PULL provisioning to interface with ESG servers
Advanced Emergency Application delivery	AEA delivery over ROUTE protocol FTP PUSH provisioning to interface with EAS server
Application based delivery	Delivery of 3 rd party data over ATSC 3.0 over ROUTE protocol HTTP PULL provisioning to interface with 3rd party server
ATSC 3.0 signaling generation	SLT, AEAT and SLS signaling tables generation to enable a perfect decoding on the receiver part
Synchronization	NTP based



ORDERING CODES

MediaCast signaling & delivery server

Delivery & signaling software based server for ATSC 3.0 network, including:

- 5 Linear or NRT App-based services management
- Encapsulation over ROUTE or MMTP
- LLS (SLT) & SLS signaling generation and delivery

MediaCast-10SvcS
MediaCast-20SvcS
MediaCast-ESG
MediaCast -AEA

Management of up to 10 Linear or NRT App-based services
Management of up to 20 Linear or NRT App-based services
Electronic Service Guide delivery over ROUTE
Advanced Emergency Information delivery over ROUTE