

In a world where targeted advertising is the key to generating more revenues in the media value chain, AdsReach™ offers TV operations an elegant approach to localize TV content.

In most architectures, TV operators will duplicate TV content that must be regionalized. They will typically operate several satellite contributions feeds or deliver different live streams to their different regions or cities. This has a massive impact on their transport costs and their environmental impact, which are multiplied by as many streams they are managing. However, regionalized streams are often 90% identical one to another, with only advertising, news, or weather forecasts that differ! AdsReach™ aims at reducing these massive transport costs by mutualized all contribution feeds and adapting the content at the edge of the distribution network, where the advertisers will want to reach their audience.

International content localization

TV operators redistributing international content can leverage new advertising inventory by localizing TV content such as ad breaks, weather forecasts, or news. By allowing new advertisers to buy this newly available slots, operators will generate more viewership engagement on top of generating additional TV revenues. AdsReach $^{\text{TM}}$ will allow them to substitute contents just before delivering it over broadcast, cable, IPTV, or linear OTT networks.

National content regionalization

TV operators addressing large geographical areas often face the difficulty to attract new advertisers. Even with the rise of digital platforms' targeting performances, geo-targeted campaigns remain the main application of targeted advertising. TV operators need to step up and adapt their network to the advertisers' needs. AdsReach™ proposes an elegant approach to enable networkside insertion - which does not depend on receivers' compatibility - to substitute content at the scale of a region or a city. By integrating ad splicers at the scale of audience segments, TV sales houses will attract new advertisers and increase their viewers' engagement by proposing relevant content locally.

A centralized yet modular architecture

AdsReach™ is constituted of two innovative products designed by ENENSYS: AdsEdge™, the fastest ad inserter available on the market, and CampaignManager™, centralizing campaign management and reporting with the definition of market segments. Together, they provide a modular yet centralized architecture to localize TV content at the scale of any advertisers' market, without any dependency on receivers' compatibility.

ENENSYS AdsReach™ enables local content insertion at the final stage of TV delivery.

Applications

- Insertion of any local TV content (Ads, News, Weather) at the scale of a country/region/city
- Targeted TV insertion for linear TV networks (DTT, cable/IP, OTT...)
- Monetize TV content and engage your audience by adapting content locally

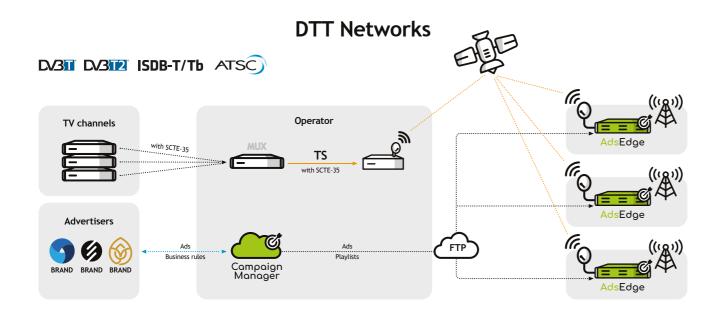
Benefits

- End-to-end campaign definition from segmentation up to reporting
- Seamless network-side insertion, not depending on receivers' compatibility
- SFN compatible for DTT operation
- Standard-based solution (SCTE)
- Automated file delivery to remote sites (ad spots, schedules...)

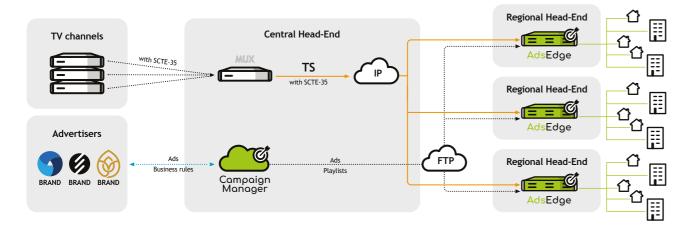


Local content insertion at the final stage of TV delivery

National Content Regionalization



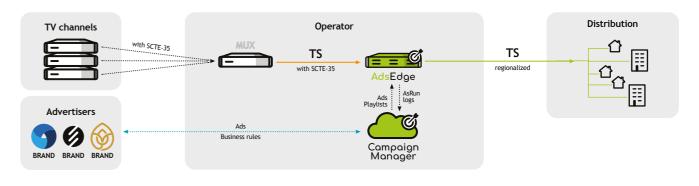
Regional Cable Infrastructure



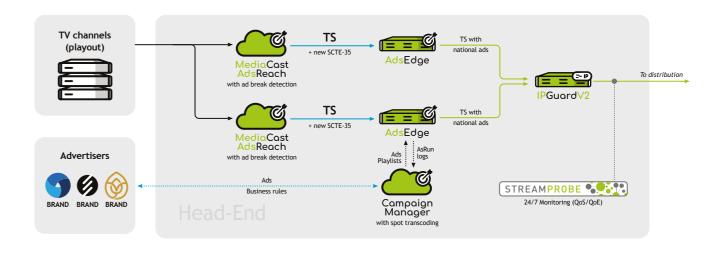
Free Ad Supported TV (FAST) Services

FAST channels are designed to provide free TV channels to consumers over digital platforms. The model looks very much like traditional linear television and the costs are supported by advertising. While it took a while for FAST channels to reach maturity, the monthly active users are growing rapidly for a couple years.

OTA broadcasters are now facing a new type of competition from the VOD players and need to adapt their traditional content with geo-targeted advertising. AdsReach $^{\text{TM}}$ can be implemented as an "all-in-one" solution at the TV station or head-end to localize content easily and reach audiences locally.



Secured Delivery with Redundancy & Monitoring



CampaignManager™

Centralized campaign definition & reporting

- Audience segmentation
- Content management & delivery
- Playlist/Schedule definition
- Reporting centralization

AdsEdge™

The fastest ad inserter on the market

- Low-latency & deterministic
- Up to 48 TV services in 1RU
- Ad server & splicer in one box
- Content insertion for hours
- IP/ASI/Satellite inputs

MediaCast AdsReach™

Targeted ads signaling server

- Automatic ad break detection
- SCTE-35 triggers insertion
- · Enables new ad inventory creation

IPGuardV2™

Seamless redundancy switch

- Secure stream delivery with redundancy
- Secure stream detivery with redunda
- Intelligent stream analysisSeamless switching
- Failsafe bypass

StreamProbe™

Video QoS/QoE monitoring

- QoS & QoE monitoring
- On-error alarming & recording
- Specific monitoring for SCTE-35

Advertising solution for linear TV

REGIONAL AD SPLICER

AdsEdge™

Output interfaces

Input interfaces 1Gb RJ45 for TS or T2-MI streams

up to 2x ASI inputs (BNC)

up to 2x DVB-S/S2 RF inputs (F-type)
1Gb RJ45 for TS or T2-MI streams

2x mirrored ASI outputs (ASI)

Availability ASI bypass (option) to passthru incoming streams

over ASI

Standards ETSI TS 102 773 V1.3.1

SCTE-35 and SCTE-118-3 MPEG-2 and MPEG-4 AVC/HEVC

TV content insertion Regional insertion of file-based content into a live

TS/T2-MI

Upon SCTE-35 trigger reception or manual

trigger command

Report generation for ad agencies/sales houses

Up to 8 simultaneous insertions

Storage 128GB internal memory available (ad spots,

schedules, reports)

Flexible files delivery (FTP/HTTP)

SFN compliancy Deterministic local ad insertion to enable SFN

broadcasting

No external reference needed

VBR insertion Variable bitrate insertion for STATMUX streams

Automatic detection of the available bitrate Selection of the corresponding video chunk

Monitoring & Supervision Easy-to-use HTML5 web interface

User management

TARGETED CAMPAIGNS CENTRALIZATION

CampaignManager™

Standards SCTE-118-3 for schedules and AsRun logs

Provisioning MPEG-2 TS files

SCTE-118-3 and CSV playlists

Content Checking Check playlist compliancy with SCTE standards,

codecs, and content files format

Playlist Management Enables creating, updating, and duplicating

regional playlists

From GUI or manual file upload

Files Delivery Out-of-band file delivery over FTP (Push/Pull)

In-band file delivery using FDP

SFN Management Automatic or manual splicing control per SFN

area to guarantee SFN broadcasting Automatic fetch of AsRun logs

AsRun logs Automatic fetch of AsRun logs

Analysis for ad insertion monitoring Available for traffic systems

Monitoring Easy-to-use HTML5 web interface

At-a-glance dashboard to monitor the entire

operational system

Monitoring of AdsEdge™ status, contents,

service, and region levels

User Management Separate and secured users access between

administrators and providers

Each provider can only access their own files
Redundancy 1+1 redundancy based on active/standby mode

Hypervisor VMWare ESXi 6.5+

TARGETED AD SIGNALING SERVER

MediaCast AdsReach"

Configurable PIDs for in-band markers Insertion of in-band SCTE-35 markers

Automated detection of ad breaks or ad spots, based on known reference

Monitoring At-a-glance dashboard to monitor the full system with input details

SEAMLESS IP REDUNDANCY SWITCH

IPGuardV2™

Targeted ads signaling

Seamless switch Guarantee seamless switchover in

SFN and MFN when combined with SmartGate Seamless switching on RTP & STLTP conditions Re-alignment of identical but delayed streams

Inputs resynchronization Multiple IP inputs and outputs

Interfaces Passive and advanced passthrough (hardware

bypass

Availability Redundant power supply

24/7 MONITORING (QoS/QoE)

StreamProbe[™]

Input interfaces
Licensing

terfaces 1Gb or 10Gb RJ45 for DASH over IP input

Bitrate capacity to monitor

Formats DASH, HEVC, 4K, H264, MPEG-2 A/V, MPEG-1 A
QoS ABR Manifest, Profile, Chunk integrity check
QoE Audio/Video content check for each profile

Live Thumbnail Mosaic





