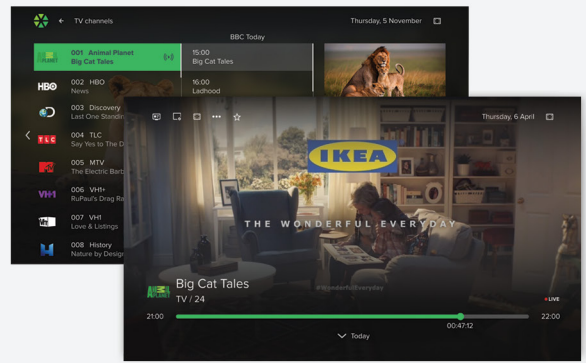


# DAI

## (Dynamic Ad Insertion)

### Datasheet



While TV advertising revenue declines and video content viewing audiences tend to granulate, broadcasters and operators strive to sustain advertising profits by implementing new flexible strategies and cutting-edge technologies. Smartlabs offers an intelligent and agile Ad Insertion Solution, enabling highly accurate ad targeting and placement to drive video content monetization success.

Smartlabs Dynamic Ad Insertion (DAI) solution enables broadcasters and operators to dynamically insert ad units into video content. With our server-side ad insertion technology, operators can add or replace ads in live video streams, pre-recorded, and xVoD content with little-to-no effort. Thanks to built-in VAST protocol support, depending on your needs you can partner with third-parties or configure your own campaigns in Smartlabs DAI and become independent of any external advertising services.

Smartlabs DAI is completely flexible, you can choose a completely comprehensive package or select elements to suit your service needs; for example an advertising decision system or an ad insertion module.



Our ad insertion module automatically converts ad units to make them seamlessly fit a video stream and deliver a TV-like experience for the ad viewer. It takes a seamless transition, no interruptions, and equal image quality to make an ad unit feel like a native part of a video stream. Smartlabs DAI transcodes ad samples to harmonize them with the stream and achieve high engagement levels.

Ad elements can be inserted into Linear transport streams and OTT video streams based on various criteria, including geolocation, type of content, and time frame (for all types of environments), as well as socio-demographic, and device-specific data (for OTT environment only).

Smartlabs DAI is a robust software solution that runs smoothly on generic enterprise hardware servers enabling a significant number of streams handled on a single server. The system is cloud-ready, supporting both private and public cloud deployment. Available in Cable, IPTV, OTT, and Satellite environments.

The Smartlabs DAI system joins features of an ad server to carry the campaigns logic and make the insertion decisions, and SCTE-35 signals decoding and input streams switching capabilities to form a comprehensive and feature-rich media regionalization solution. The very same solution can be efficiently employed for content regionalization or replacement to mitigate content rights and airtime restrictions.

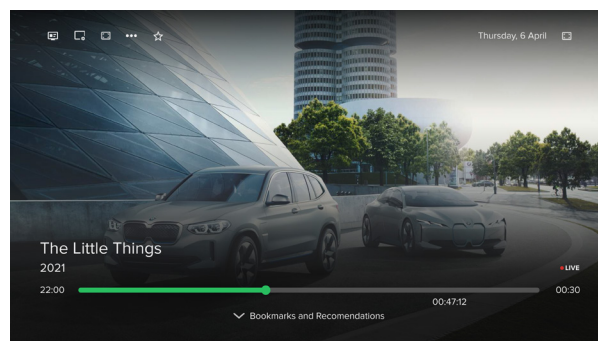
# Key features

- A smart ad placement system as a native SmartTUBE module
- Offers ad server capabilities to manage campaigns and creatives
- Enables region-specific ad targeting for multiple stream destinations
- Maintains video quality of input streams
- Provides accurate switching of an input stream
- Both frame accurate and GOP boundary splicing modes
- Offers minimal propagation delay
- Supports SPTS inputs
- Supports MPEG 2, H264, and HEVC/H265 encoded media
- Provides fully redundant configuration
- A user-friendly GUI for system set-up and configuration
- Delivers monitoring and reporting of the stream and system health status

# How it works

The Smartlabs DAI solution is made up of three key modules. The Advertising Decision System module or ADS is implemented as an element of the SmartTUBE Server. The server-side ad insertion module is implemented as a part of the SmartMEDIA solution. Finally, the client-side ad insertion module can be implemented as a component of the SmartTUBE Apps system.

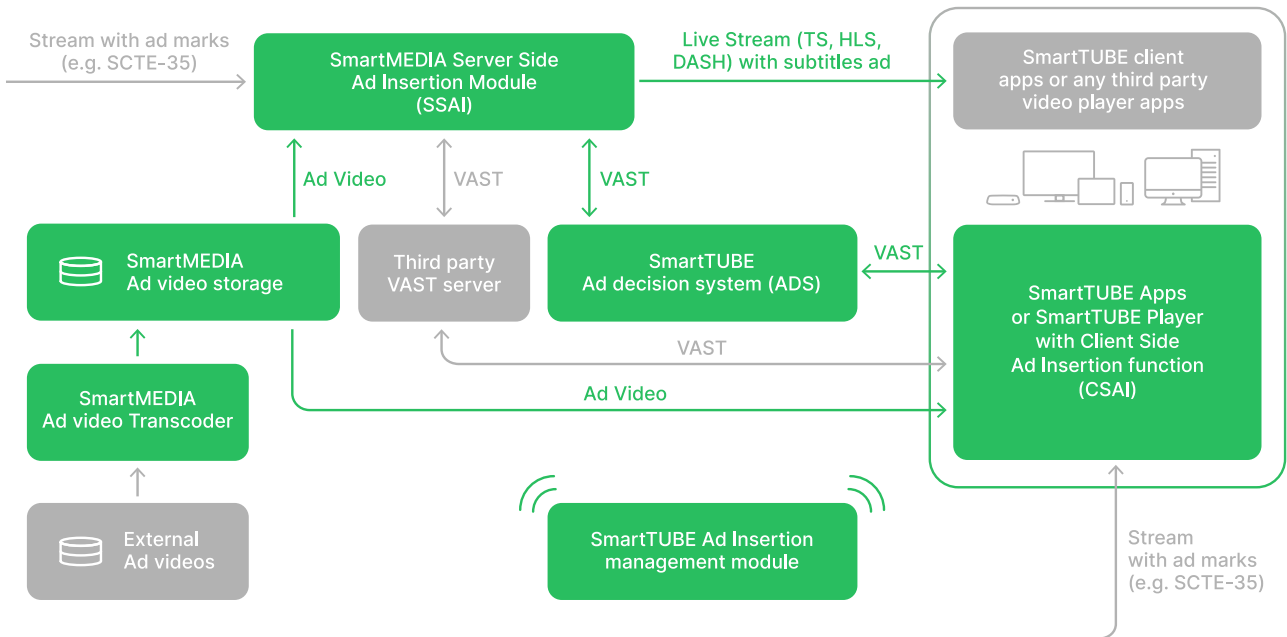
Smartlabs DAI can be rolled out as a comprehensive package or you may choose one or two of its' elements to be deployed and integrated with complementary third-party systems. This unparalleled flexibility allows an operator to employ the configuration that fits their current needs in the best possible way.



ADS is a system that carries information about advertisers, ad campaigns, ad creatives, placement dates and duration, types, target devices, target content, and other parameters. Using this data, an ADS can make a decision which ad fits a specific insertion opportunity.

The ad insertion system requests an ad decision from the ADS via the VAST protocol. The ADS finds a matching set of ads based on the request targeting criteria and responds with a VAST response carrying the data about the ad to be inserted. In this VAST response, beacons information for the specified ads is also provided so that the TS splicer, or OTT player, can confirm insertion back to the ADS system. The ADS also provides campaign performance reports highlighting key metrics.

# General solution diagram



Smartlabs product ■  
 Third-party components seamlessly integrated by Smartlabs ■