SmartCARE

Datasheet

SmartCARE is a solution for video stream QoE monitoring in IPTV and OTT networks

- **Service quality monitoring**

The quality of video delivered to a TV is directly related to the quality of the network between an operator's headend and the customer's screen. IP packet loss and video stream instability may cause multiple artifacts to appear causing image scattering, freezing or jitter on screen that may have a huge impact on customer satisfaction. Using SmartCARE an operator may continuously analyse the quality of the delivered content in order to proactively identify quality issues.

- **Easy to use operational tools**

SmartCARE is designed to simplify IPTV and OTT service operation. It provides irreplaceable interfaces for HelpDesk, ServiceDesk and Management that help to identify issues which need to be addressed in order to ensure the highest quality of service.

How it works

The SmartCARE is built around the client-server architecture. The system consists of SmartCARE agents that are embedded in the operator's IPTV or OTT platform and end-user devices and the SmartCARE Server.

SmartCARE agents report data to the SmartCARE Server for processing. Service affecting issues, that may cause complete image failure or scattering, image jitter or freezing, are identified by the SmartCARE Server and bespoke reports are created.

SmartCARE dashboard

SmartCARE has a dashboard, that allows users to:

View detailed statistics for eachsubscriber or in groups of geolocation, IPS, user agent, content source,connection type etc. for any timeperiod - from 1 minute to months.

Receive alarms when service impairing issues occur with additional detailsof the possible impact.

Create your own dashboard for online service quality monitoring

SmartCARE delivery options

SmartCARE can be delivered as a standalone solution and as a component of the SmartTUBE platform for the provision of interactive television services.

The standalone SmartCARE can be integrated in the operator's existing infrastructure; access to reports is provided through the SmartCARE web interface:
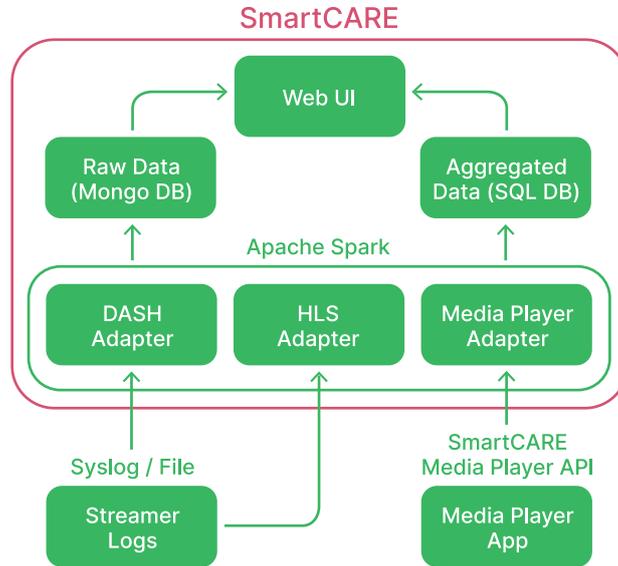
As a component of SmartTUBE solution, SmartCARE collects data on its clients, resources and streaming; access to reports is provided through the SmartTUBE administration web interface:
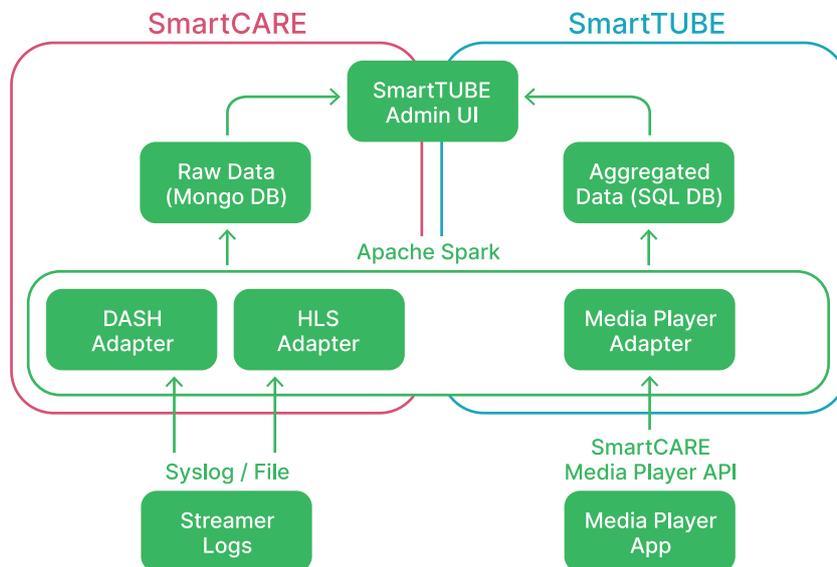
Supported devices

SmartCARE can analyze data collected from the following devices:

Devices with SmartTUBE UI

- SmartLabs STB
- Android / iOS phones and tablets
- SmartTV
- PC / M AC

Other devices

Any third-party STB or a third-party application on a devicethat sends data using SmartCARE statistics API.

Licensing

SmartCARE has two feature-set options: Light and Extended.

Light*	Extended	Feature
+	+	TV channel rating based on views count or viewing time
+	+	Number of devices that received a TV channel within a certain period
+	+	Number of unique subscribers who watched a TV channel within a certain period
+	+	Total duration in minutes of viewing a TV channel within a certain period
+	+	EPG rating - top 10 most viewed programs within period
	+	Streaming quality on clients; percentage of time spent on delivery at the peak bitrate
	+	Switch bitrate count on clients within the specified interval
	+	Count of sessions that are active at a given moment
	+	Count of session switches (playing other content) on clients within the specified interval
	+	Metadata error count on clients, i.e. number of playlist loading errors within the specified interval
	+	Count of chunk loading errors on clients within the specified interval
	+	Average user bitrate, i.e. average speed of loading content on user devices
	+	Average bitrates of input/output streams on the server's network interface within the specified interval
	+	Interface utilization, i.e. average load on the interface (%) when processing the inboundor outbound traffic
	+	Average IOWait value of CPU within the specified interval
	+	Count of errors (facts) in the incoming stream
	+	Average stream bitrate of a TV channel, i.e. average amount of transferred traffic per unit of time

*The Light feature set of SmartCARE is included in SmartTUBE for free.