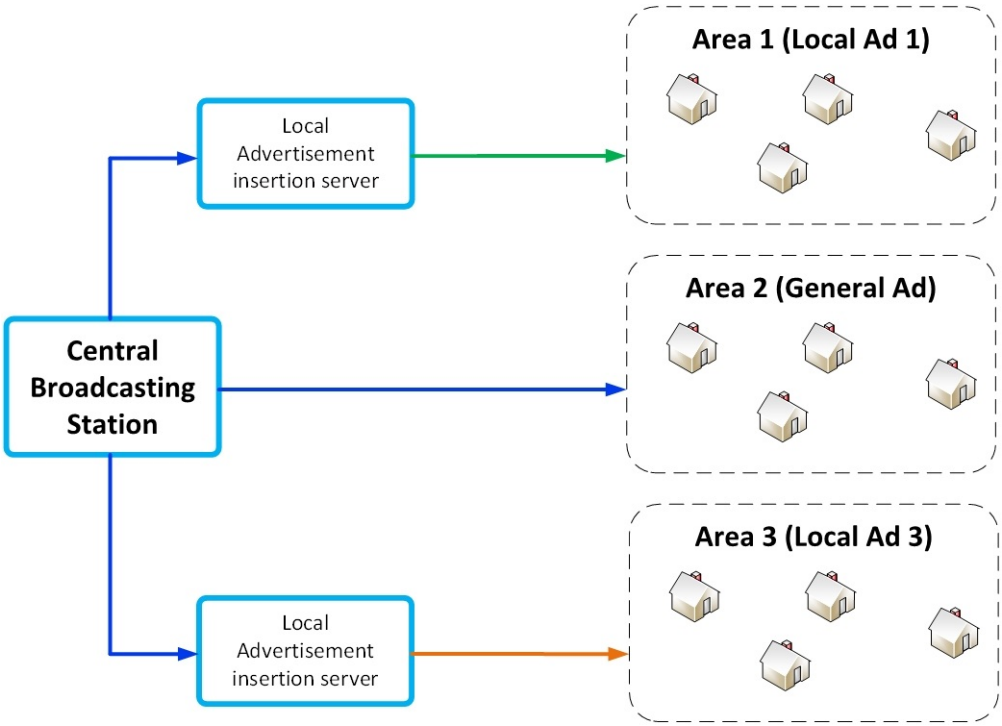
Mediastream 3.0

Local advertisement insertion, content adaptation and replacement for local demands

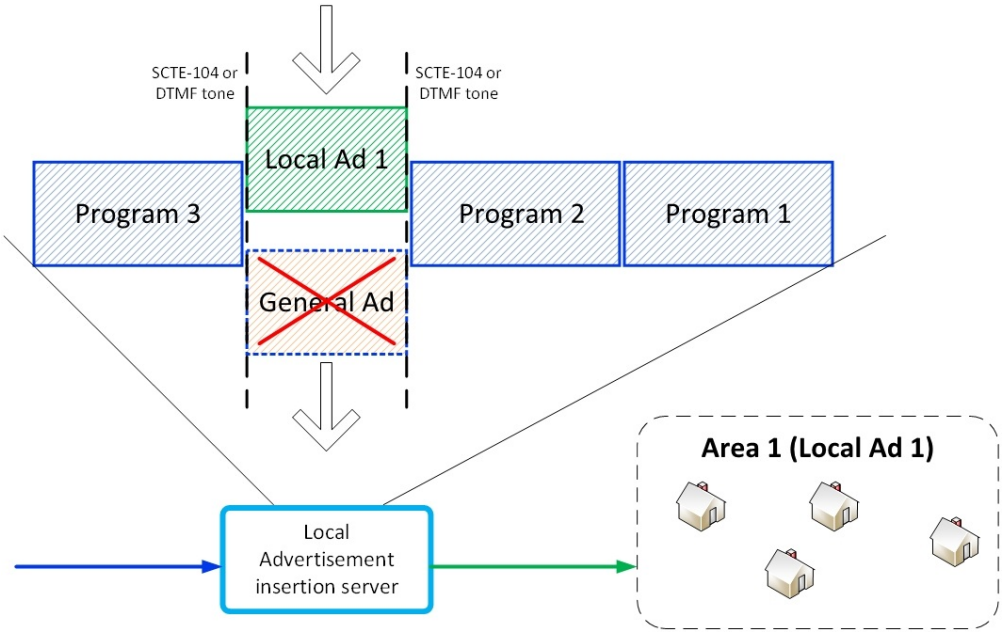
ROKS offers a turnkey software-based solution that allows automatic local content insertion, ticker and animated captions overlaying using DTMF tones, SCTE-104/35 marks in DVB SPTS/MPTS/T2MI or SDI stream, frame recognition, schedule or manual command. DTMF or SCTE-104/35 should be provided by playout on the central station (not included to our system).

The software is Windows-based and intended for last generations Intel processors. It works in real time, captures input digital signal, analyses it and does the local content incut without recoding it. It fully replaces the signal filling in case of local content insertion and partially recodes the original signal in case of captions overlaying.

Variant MediaStream 3.0 enables local advertisement insertion, content adaptation and replacement for local demands. You can replace any general content with dedicated for some localities only - local ads, local shows, local law restrictions etc.



MediaStream 3.0 uses different triggers (commands) from Head-End or operator for content insertion. After trigger recognition the system makes insertion with seamless transition - without any noticable artifacts.



Key features:

- Operator presence is not required. The system is fully automatic;
- Frame-by-frame content insertion accuracy;
- Fully compliant with DVB standards;
- DVB IP Multicast/Unicast UDP/RTP, DVB ASI, DVB-S/S2/T/T2/C, SDI input;
- DVB SPTS/MPTS/T2MI input stream;
- Supports MPEG-2 (ISO 13818-2, MP@ML) / H.264 (ISO/IEC 14496-10) video and MPEG-1 (ISO 11172-3, Layer I and II) audio;
- SD and HD video support;
- 264 to MPEG-2 and vice-versa real-time transcoding support;
- Content insertion is performed on: manual/external command, and/or sound-saver and DTMF-tone, picture-saver, static logo disappearance, SCTE-104/35.
- For MPEG-2 and/or in transcoding mode insertion is possible at any random moment with frame-by-frame accuracy;
- For H.264 without transcoding insertion is possible in IDR points;
- Supported clip formats for incut: Transport Stream (SPTS)/ Program Stream without recoding;
- Artefact-free incut and vbv-model accordance are guaranteed;
- Non-processable input programs are passed-through “as is” without recoding;
- Fixed tract delay is less than 4 sec (in modes without transcoding);
- Known SI tables are able to be passed-through or generated by the software;
- Automatic search in corresponding watch-dog folders with “hot” replacement possibility for: everyday schedule for ad replacement, schedule for ticker blocks out, schedule for animated captions and clips out ;
- Extra functions available: stuffing, PID/Pgm filtering, PID remapping, PSI/SI tables generation;
- 9% uptime. UDP-IP/RS-232 heartbeat generation for external emergency bypass device;
- Minutes/seconds signal delay possibility for insertion before the mark (DTMF, SCTE, etc.) appearance;
- BISS descrambling;
- Fully automatic output sound level control without recoding;
- Continuous measurement of DVB and SDI (independent) signal quality and sending this information to external recipients in real time;
- Web browser-based control;

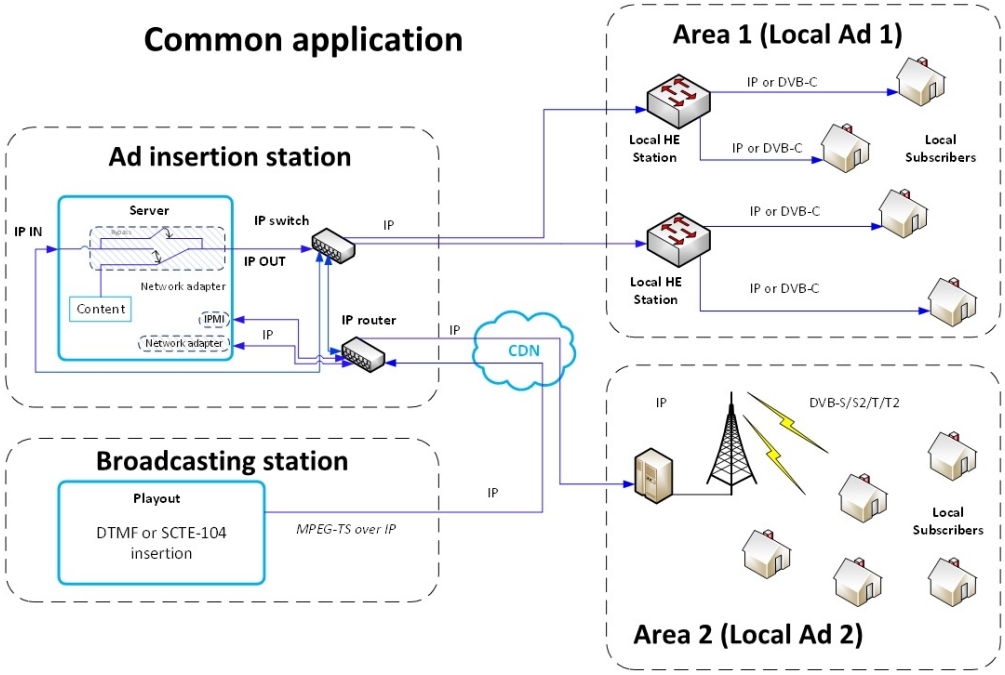
Restrictions:

- Clips bitrate should not exceed main program bitrate in non-transcoding mode;
- GUI, remote control and configuring via .conf (.ini) files are under development;
- Continuous measurement of DVB and SDI (independent) signal quality and sending this information to external recipients in real time;

Extras:

- For DVB-IP streams we recommend Intel-based network interfaces, particularly Silicom. These network cards include harware relay bypass and WD-timer, so signal will be able to pass-through even if: the server is broken, power failure, software issue, etc;
- For DVB-ASI streams DekTec DTA-2145 or StreamLabs MSP2 (incl. hardware relay bypass and WD-timer) are required;
- For DVB-S/S2/C/T/T2 any BDA-architecture interface is required;
- Parallel uncompressed (analog/SDI) signal delivery is possible. Blackmagic Decklink/Intensity or Streamlabs MSP2/Alpha+ are required.
- System requirements: Intel Xeon E3/Core i7 Sandy Bridge, 8 GB RAM for 5-15 programs, depending on transcoding necessity and/or ticker overlaying.

Specification:



Supported Inputs	
ASI	DVB ASI
RF	DVB-S/S2/T/T2/C
IP	DVB IP Multicast/Unicast UDP/RTP
Video	SDI, Analog
Input Streams	DVB SPTS/MPTS/T2MI
Supported Video and Audio standards	
Video standards	MPEG-2 (ISO 13818-2, MP@ML) / H.264 (ISO/IEC 14496-10), SD/HD
Audio standards	MPEG-1 (ISO 11172-3, Layer I and II)
Video transcoding	MPEG-2 to H.264 any-to-any
Insertion parameters	
DTMF	+
SCTE-104/35	+
Static logo disappearance	+
Picture-saver	+
Manual/external command	+

Sound-saver	+
X31 (teletext)	+
Clip format	Transport Stream (SPTS)/ Program Stream without recoding
Supported and recommended Interface Cards	
DVB IP	Silicom (recommended)
DVB ASI	DekTec DTA-2145 or StreamLabs MSP2
DVB-S/S2/C/T/T2	any BDA-architecture interface
Analog/SDI	Blackmagic Decklink/Intensity or Streamlabs MSP2/Alpha+
Reliability	
Uptime	99.9%
Full tract delay	< 4 sec (without transcoding)
Heartbeat generation	UDP-IP/RS-232
Quality monitoring	DVB/SDI
Management	
Web-browser	+
GUI	- (under development)
System requirements	
Processor	Intel Xeon E3/Core i7 Sandy Bridge
RAM	8 GB
Storage	500 MB
Extra functions	
PSI/SI processing	Stuffing, PID/Pgm filtering, PID remapping, PSI/SI tables generation;
Descrambling	BISS descrambling
Automation	Automatic search in corresponding watch-dog folders
Insertion before mark	Minutes/seconds signal delay possibility
Audio processing	Fully automatic output sound level control without recoding

Taking into consideration that we (ROKS PrJSC) are developer and system integrator, also do not stop on our technical growth and improvement, know that view of all our devices and equipment including their technical parameters may be different from pictures presented on website and parameters listed on each device webpage.
***Note!** All details customer has to confirm in advance during ordering and before payment. Those parameters that were not specified and / or were not agreed while ordering will be implemented as basic at the discretion of the manufacturer. Each our customer has 1.5 year warranty and 7 year aftersales support for whole range of our products.*