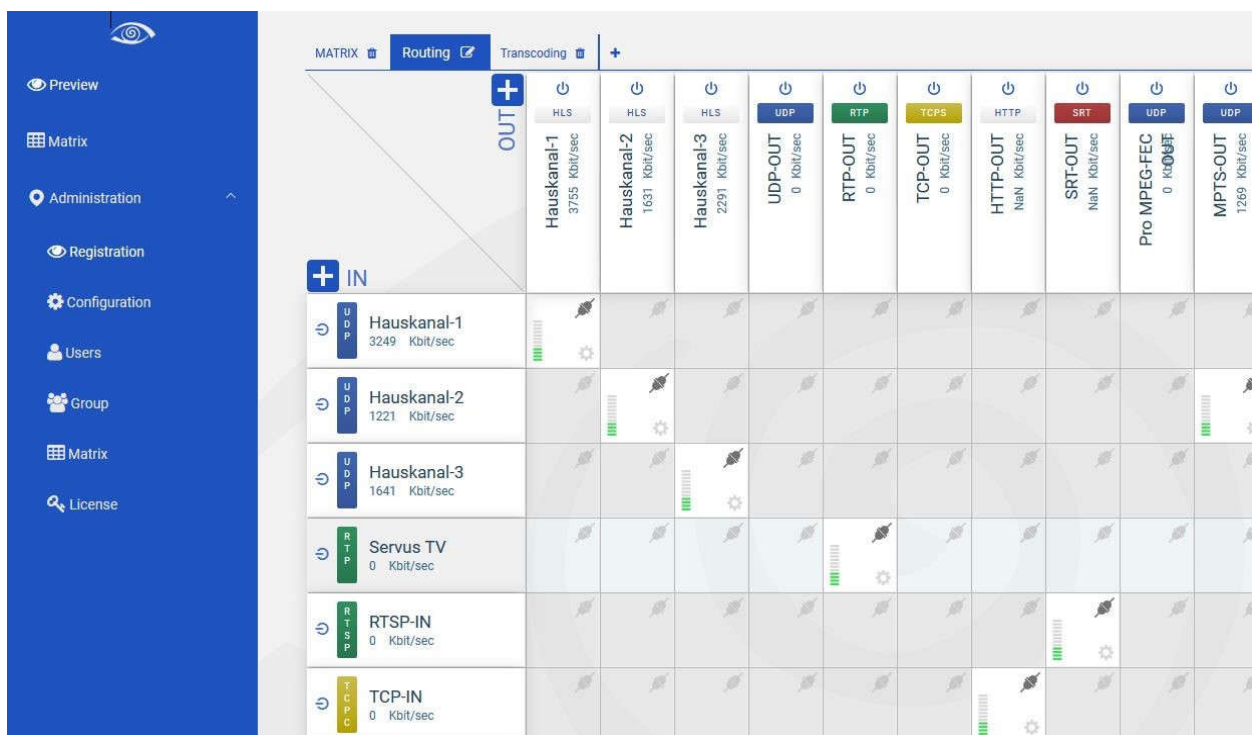


TERACUE APPLICATION CLOUD

INTRODUCTION

The Teracue Application Cloud (TAC) combines the main features of two popular Teracue products, MC-ROUTE and MC-TRANS. The TAC enables to adjust, manage, and control the routing and transcoding of live SD/HD/4K video streams in a single application. The new GUI design is an intuitive matrix which allows an overview of the incoming and outgoing video streams at a first glance. To combine these main features the TAC is equipped with a brand-new Preview section where the core values, such as bitrate, FPS as well as the inputs and outputs for each stream, can be easily validated. By combining the functions of routing and transcoding, the TAC is able to create multiple outputs from a single input, even when transcoding if needed.



6 inputs result in 10 outputs with TACs routing and transcoding functionalities

PRODUCT HIGHLIGHTS

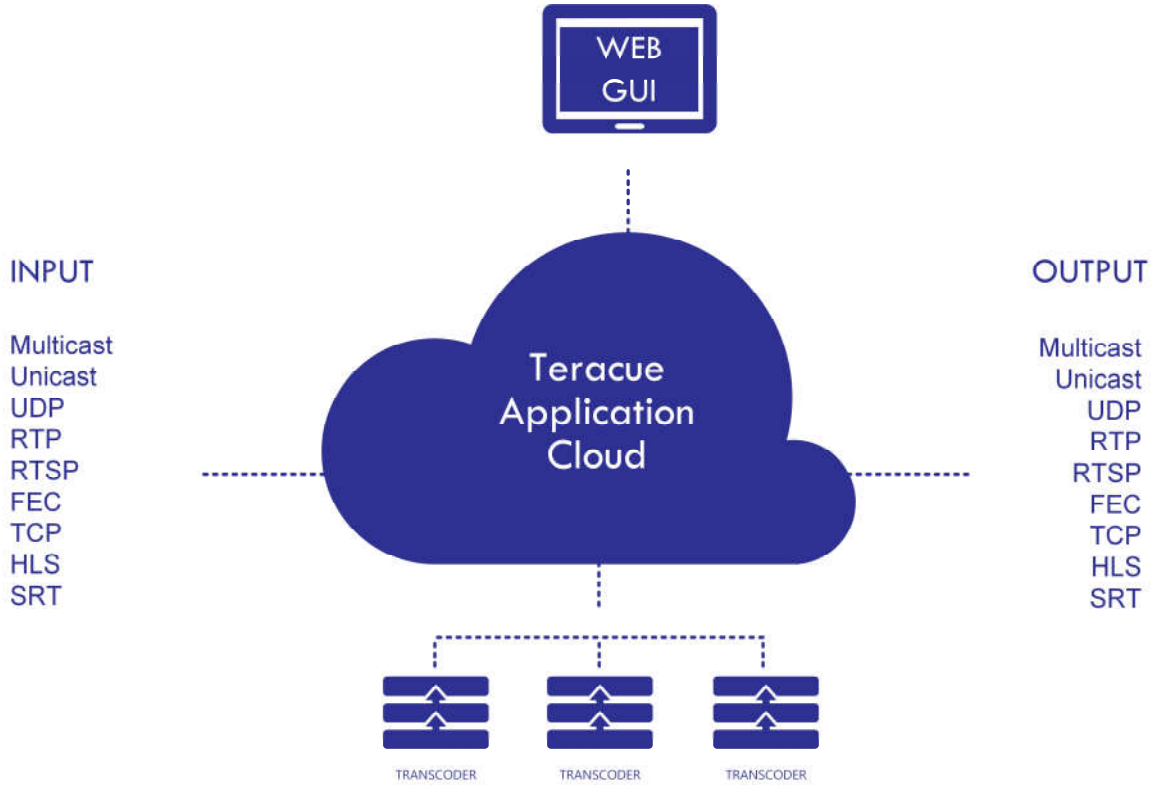
- Supported Protocols for in- and output: UDP, RTP, RTSP, TCP (Client / Server), HLS, HTTP, SRT, FEC, MPEG-DASH, RTMP, HSS (more to come)
- Unicast, Multicast input & output, SAP support*
- H.265, H.264, MPEG2, all profiles and resolutions supported (4K/HD/SD)
- Stream duplication, multiple formats & destinations
- User and Role management
- Easy input/output matrix set up with Individual tabs for different users and roles
- AES encryption/decryption*
- Fail-over input configuration*
- Server - Client setup for maximum fail safety
- Web Interface for configuration and administration
- Configurable presets
- Embedded HLS portal for iOS, Android & GoogleTV
- Dynamic RTSP-streaming on demand
- Dynamic HLS-streaming on demand*
- Live feedback for active streams including snapshot, bitrate and FPS
- Load balancing for optimized usage of available hardware resources

APPLICATION

- IPTV & OTT solutions
- AV over IP streaming
- Broadcast contribution
- Digital routing matrix
- Live transcoding and streaming
- Distributed video processing
- Redundancy and back up systems
- Surveillance and control rooms

*Note: Some features to be introduced with upcoming upgrades

WORKFLOW



TAC enables to design, adjust and run a system according to the requirements. It brings the convenience of an all in one stream router and transcoder with an unlimited size for future system upgrades and adjustments while straighten the workflow.

FEATURES

multiple tabs

distributed processing

dynamic HLS on demand

SRT and FEC support

digital routing matrix

4K and H.265 support

central configuration

user and role management

customizable presets

adaptive HLS for mobile devices

dynamic RTSP on demand

central administration

streamlined workflow

rolling restart for all instances

TECHNICAL SPECIFICATIONS

Stream protocol input:	MPEG-TS: UDP, RTP, RTSP/RTP, TCP (Client), HLS, HTTP, Pro-MPEG FEC, MPEG-DASH, SRT
Stream protocol output:	MPEG-TS: UDP, RTP, RTSP/TS, TCP (Server), HLS, HTTP, Pro-MPEG FEC, MPEG-DASH, SRT, RTMP, HSS
Input video codec:	MPEG-2, MPEG-4, H.264 AVC, H.265 HEVC
Input audio codec:	MPEG-1 Layer II, AAC, AC3
Output video codec:	MPEG-2, MPEG-4, H.264 AVC, H.265 HEVC
Output audio codec:	MPEG-1 Layer II, AAC, AC3
Video encoding:	MPEG-2 (ISO/IEC 13818-2), main profile, high profile H.264 (MPEG-4 AVC Part 10; ISO/IEC 14496-10) Baseline, main-, high profile H.265 (MPEG-H HEVC Part 2; ISO/IEC 23008-2) Baseline, main-, high profile
Video encoding bitrates:	250Kb/s – 40Mb/s, CBR/VBR
Video resolutions:	320x240 (QVGA) – 3840x2160 (UHD)
Audio encoding:	MPEG-1 Layer II; ISO/IEC 11172-3, ISO/IEC 13818-3; Data rate 64 – 384 kbit/s AAC; ISO/IEC 13818-7, ISO/IEC 14496-3; Data rate 6 – 256 kbit/s AC3, Data rate 32 – 640 kbit/s Sample rates: 48 kHz, 16Bit
Remux:	Selectable Audio PID (1x) Selectable Video PID (1x)
Multiplex format:	ISO/IEC 13818-1 Systems ISO/IEC 14496-10 NAL (Network Abstraction Layer)
Scaling:	Up- and downscaling from 320x240 to 1920x1080 Algorithms: Gaussian, Lanczos, nearest neighbour
Frame rate:	Free adjustable: 5-60 fps
Stream control:	RTSP server and client RTSP on demand HLS on demand*
IP protocols:	HTTP, UDP, RTP, TCP, RTSP, SRT, FEC, IGMP, SAP*, unicast/multicast, DHCP
Error correction:	PRO-MPEG FEC (forward error correction) SRT (Secure Reliable Transport)
Encryption/decryption:	AES-256
Jitter buffer:	Adjustable size 1-15 sec
Management:	Web browser, SOAP*

SYSTEM REQUIREMENTS

Web server:	IIS 6
CPU:	Intel Core i3 and higher
RAM:	4 GB
Network interfaces:	1GbE
Operating system:	Microsoft Windows 7/8.1/10/ Server 2008/2012/2016 The following Windows OS, components are needed: Internet Information Services v7.0 or higher with version 6.0 compatibility .NET Framework v3.5 or higher .NET Framework v4.5

*Note: Some features to be introduced with upcoming upgrades