sencore

VIDEO DISTRIBUTION PLATFORM

gateway ▶▶▶▶ better video delivery

- Receive, transmit, convert SRT, RIST, Zixi, HLS and MPEG/IP for optimized video distribution
- Intuitive, easy-to-use interface and advanced REST API
- Deploy in cloud and on-premise for full end-to-end solution

Centra Gateway

VIDEO DISTRIBUTION PLATFORM

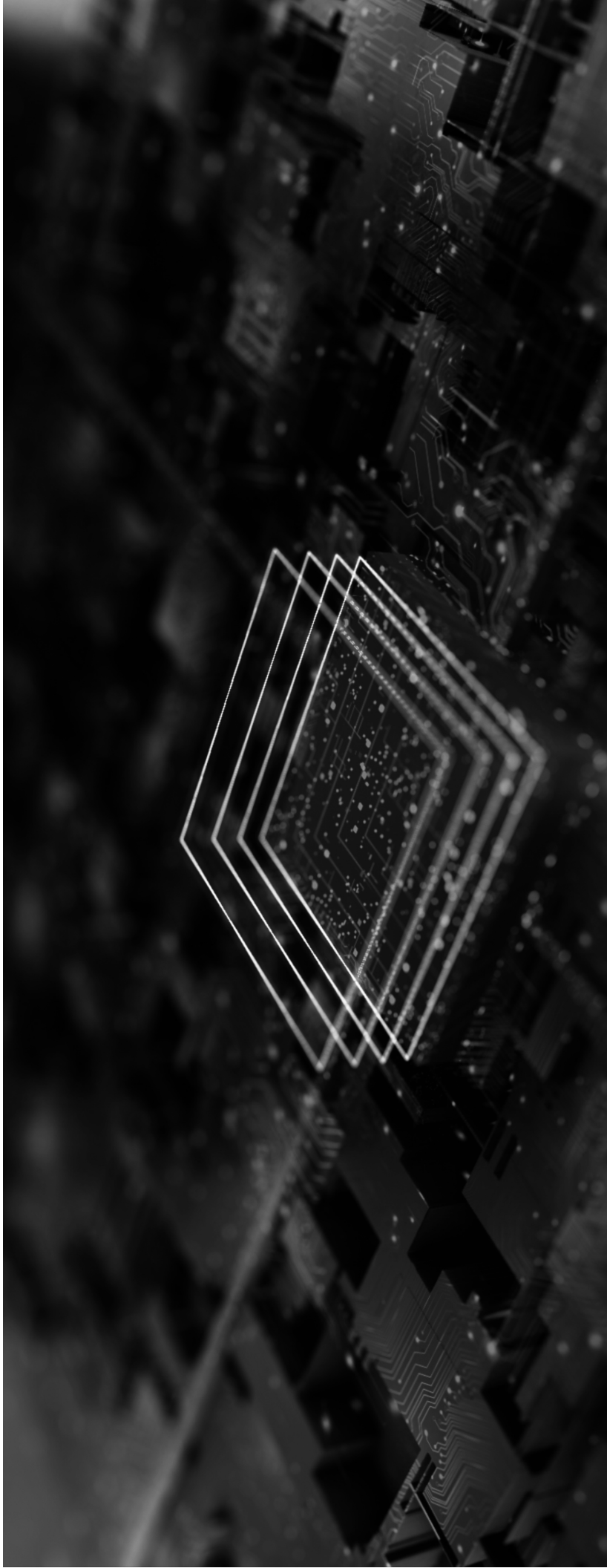
Centra Gateway is the core functionality of Sencore's new Centra software platform; namely, the reception, transmission and conversion of internet protocols for optimized distribution of video. Protocols supported will include RIST, SRT, Zixi, and HLS, along with MPEG over IP. With the aim to take advantage of the benefits associated with RIST and SRT protocols in terms of reliability, low latency, packet-drop compensation and forward error correction.

Far more than a mere tool for protocol translation Centra Gateway is meant for collecting, converting, aggregating, orchestrating and distributing as required. Constant metrics assessing latency across network links will allow for Centra to optimize transport according to resources and need.

Centra Gateway has the capability to monitor and analyze the entire network which provide insight into every mile of video transport, flagging a significant range of potential error types, as well as providing historical analytics for more strategic assessment of network performance over time. Through monitoring by exception Centra will notify and provide users with a streamlined path to rectification, linking to the correct department, site, engineer or solution required.

Thanks to the latest software and API tools, Centra Gateway is fully scalable to the needs of the broadcaster, at a range of bitrates depending on the appliance model or the capacity of the cloud platform selected. Future iterations of the Centra platform will integrate an increasing number of third-party devices, protocols and services through REST API, acting as a single point of coordination through which broadcasters can access all of the components needed for effective, efficient network management.

Centra Gateway aims to achieve this in a way that is accessible, intuitive and highly usable, even to those without a technical or engineering background. The key point of differentiation is the low learning curve associated with its use. Through the creation of an easily-understood GUI, logical and clear workflows, and the deployment of automation, prompts and wizards where required, Centra Gateway allows broadcasters to put eyes - and hands - on all components of their network, quickly and easily.



VIDEO DISTRIBUTION NETWORK

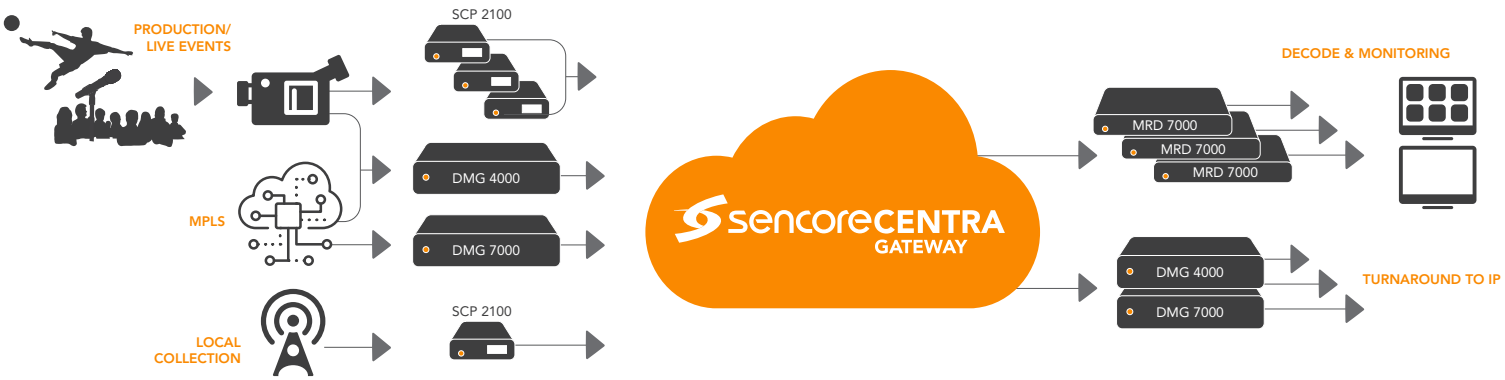
A COMPLETE VIDEO DISTRIBUTION NETWORK OVER PUBLIC INTERNET WITH THE RELIABLY BROADCASTERS EXPECT

Save costs and extend your networks reach using standard internet connections for point to point distribution for small or medium sized networks, or cloud hosted point to multipoint distribution for large networks. Combine Centra Gateway with other Sencore devices such as encoders, transcoders and decoders for a true end to end solution to build your distribution network.

CONTRIBUTION AND REMOTE PRODUCTION

GATHERING UNIQUE LIVE AND LOCAL CONTENT FROM ANYWHERE, AT THE TIP OF YOUR FINGERS

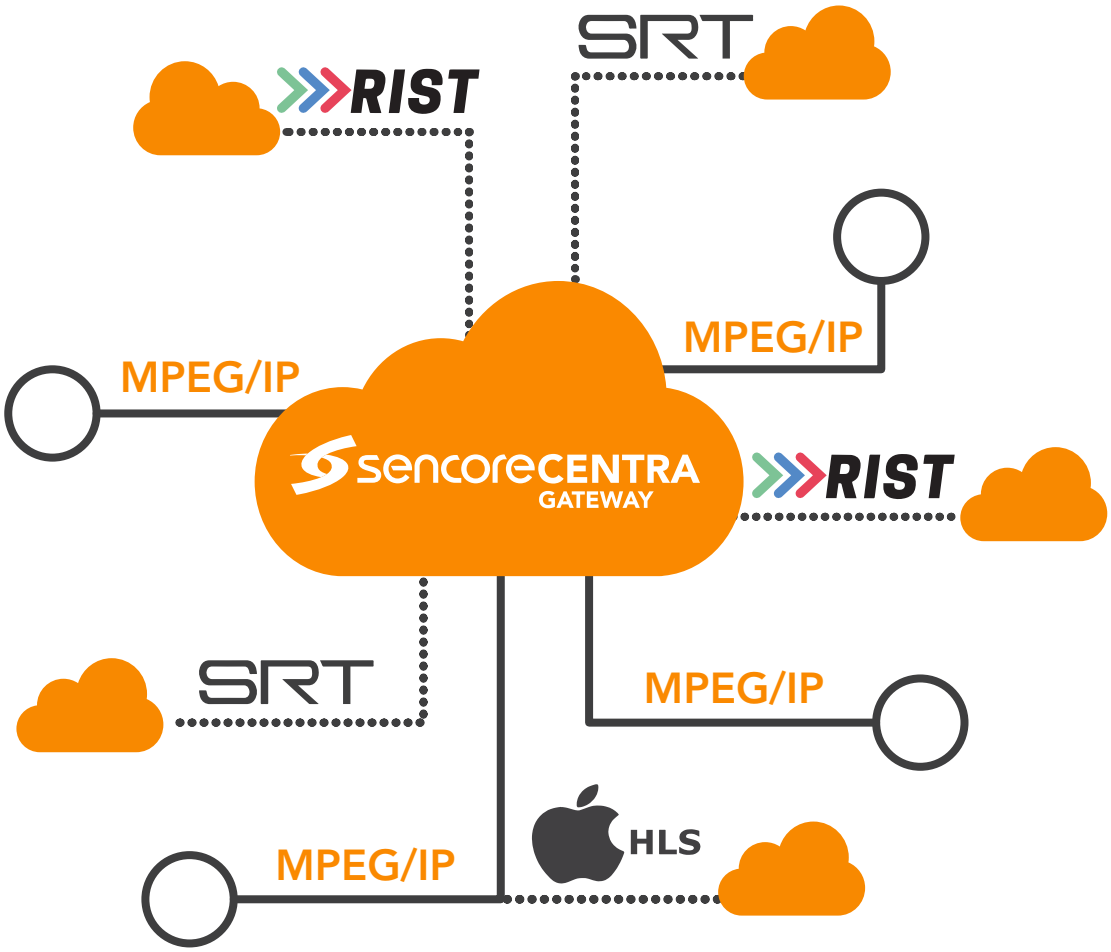
Quickly and easily deploy contribution systems for news gathering, sporting events or anywhere unique content can be acquired. Centra Gateway can help you realize lower costs and quicker deployments allowing you to gather unique live and local content to fuel your network.



STREAM AGGREGATION

DON'T GET OVERWHELMED WITH INTERNET DELIVERY, MAKE IT SIMPLE AND INTUITIVE WITH CENTRA GATEWAY

Many broadcasters are using internet protocols like RIST and SRT for reception and transmission of content from all over the world. Collecting, converting, aggregating, orchestrating and distributing these streams can get complicated and messy. Sencore's Centra Gateway can empower your network by providing a one-stop-shop for all internet protocol reception and transmission in a fully scalable platform for any sized network.



SPECIFICATIONS

Input and Output Options

MPEG/IP Receive and Transmit

Receive

Input Type	UDP, RTP and RTP with extension headers Multicast and unicast CBR and VBR streams SMPTE 2022/CoP3 FEC SMPTE 2022-7 hitless switching
Multicast filtering	Filter based on IP address VLAN tagging IDs
Buffer size	1-4000KB or 1-4000ms
Bitrate range	.25-200 Mb/s
Packets/IP frame	1-7 MPEG packets/IP frame
IGMP compatibility	Version 2 and 3

Transmit

Output Format:	UDP and RTP
Bitrate Range:	.25 – 200 Mb/s
Packets/IP Frame:	1-7 MPEG Packets/IP Frame, user configurable

SRT Receive and Transmit

Receive

Protocol and IP Range	UDP, unicast
Negotiation modes	Caller, listener, rendezvous
Latency	20-8000ms, user configurable
Bitrate range	0.25-50 Mb/s per stream
Bandwidth overhead	0-50% of content bitrate
Encryption/Decryption	AES-128, AES-256 10-79 UTF-8 characters
Packets/IP frame	Auto detect, 1-7 MPEG Packets/IP Frame

Transmit

Protocol and IP Range:	UDP, Unicast
Negotiation Modes:	Caller, Listener, Rendezvous
Latency:	20-8000ms, user configurable
Bandwidth Overhead:	0 – 50% of content bitrate
Bitrate Range:	0.25 – 50 Mbps
Encryption:	AES-128, AES-256 10-79 UTF-8 characters
Packets/IP Frame:	1-7 MPEG Packets/IP Frame, user configurable

Zixi Receive and Transmit

Receive

Protocol and IP Range:	UDP, Unicast
Mode:	Connect or pull mode, to Broadcaster Remote ID for receive from AWS MediaConnect
Latency:	30-10000ms, user configurable
Bitrate Range:	1 – 50 Mb/s
FEC Overhead	0 – 50% of content bitrate
Decryption:	AES-128, AES-192, AES-256 10-79 UTF-8 characters
Packets/IP Frame:	Auto detect

Transmit

Protocol and IP Range:	UDP, Unicast
Mode:	Connect or pull mode, to Broadcaster Remote ID for receive from AWS MediaConnect
Latency:	30-10000ms, user configurable
Bandwidth Overhead:	0 – 50% of content bitrate
Bitrate Range:	0.25 – 50 Mbps
Encryption:	AES-128, AES-256 10-79 UTF-8 characters
Packets/IP Frame:	1-7 MPEG Packets/IP Frame, user configurable

RIST Receive and Transmit

Receive

Profile Mode:	Simple, Main (Full Datagram), Main (Reduced Overhead)
Protocol and IP Range:	RTP, Unicast and Multicast
Mode:	Link Bonding, Hitless Switching
Latency:	1-8000ms, user configurable
Bitrate Range:	1 – 50 Mb/s, per stream
Decryption:	DTLS, PSK 1-32 UTF-8 characters
Packets/IP Frame:	Auto detect

Transmit

Profile Mode	Simple, Main (Full Datagram), Main (Reduced Overhead)
Protocol and IP Range:	RTP, Unicast and Multicast
Mode:	Link Bonding, Hitless Switching
Latency:	1-8000ms, user configurable
Bitrate Range:	1 – 50 Mb/s, per stream
Decryption:	DTLS, PSK 1-32 UTF-8 characters
Packets/IP Frame:	1-7 MPEG Packets/IP Frame

HLS Receive

Receive

Protocol and IP Range:	HTTP, HTTPS, TCP, Unicast
Payload:	Chunked transport stream
Modes:	Pull, Push via WebDAV Push Mode supports up to 200GB or content
Profile Reception	Single profile selection
Bitrate Range:	0.25 – 50 Mbps
Decryption	AES-128 10-79 UTF-8 characters
Packets/IP Frame:	1-7 MPEG Packets/IP Frame