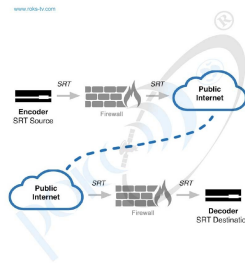




## Mediastream reliable transport



Mediastream Reliable Transport is an end-to-end solution for real-time UDP/RTP streams delivery over the usual Internet.

**Mediastream Reliable Transport** is based on SRT (Secure Reliable Transport) protocol. SRT is an open source transport technology that optimizes streaming performance across unpredictable networks, such as the Internet.

As audio/video packets are streamed from a source to a destination device, SRT detects and adapts to the real-time network conditions between the two endpoints. SRT helps to compensate for jitter and bandwidth fluctuations due to congestion over noisy networks, such as the Internet. Its error recovery mechanism minimizes the packet loss typical of Internet connections. And SRT supports AES encryption for end-to-end security, keeping your streams safe.

Low latency video transmission across IP based networks typically takes the form of MPEG-TS unicast or multicast streams using the UDP protocol. This solution is perfect for protected networks, where any packet loss can be mitigated by enabling forward error correction (FEC). Achieving the same low latency between sites in different cities, countries or even continents is more challenging. While it is possible with satellite links or dedicated MPLS networks, these are expensive solutions. The use of cheaper public Internet connectivity, while less expensive, imposes significant bandwidth overhead to achieve the necessary level of packet loss recovery.

Based on SRT, Mediastream Reliable Transport combines all the benefits of IP delivery (flexibility, simplicity, no limit for streams number and bitrate, wide support among different devices, *etc.*) and doesn't have the drawbacks of dedicated switched (L2) connections (problems with IX connection, high OPEX and CAPEX, requires a top-grade QoS, *etc.*) or satellite.

It can be used by small companies as well as large ones due to simplicity, low price, and high reliability.

### Key features:

- No need for dedicated L2 connections for streaming. Just usual Internet
- Built-in error correction mechanism with packet re-transmission and FEC
- A/V synchronization inside the stream
- Jitter, bandwidth, short interruptions compensation
- Stream security is provided by AES 128/256 scrambling
- SRT stream goes easily through firewalls – no need for network special settings
- The parameters of the recovered UDP/RTP stream on the receiving side (IAT, jitter, MLR, ETR, bitrate, *etc.*) are identical to that on the transmitting side
- Client-server architecture. It allows Multicast SPTS, MPTS delivery from Server to Client and backwards. No limit for Clients connections to Server
- Adjustable 120-8000 ms buffer allows to adjust the service according to channel quality to compensate interruptions and packet loss
- No limits of processed/transmitted streams number. The only limit is channel bandwidth or server network interface
- Simple configuration and setting. Works under Windows 7 and higher
- Automatic servers/streams redundancy
- Automatic re-connect in case of connection failure

### Applications:

- Communication channel backup

Satellite and/or terrestrial communication channel backup. Combined with L2 channel allows to minimize the packet loss for critical services – satellite station or live studio. It can significantly improve the quality of live transmissions, temporal connections, on-line streams, *etc.*

- Improving the quality of the provided content and service

This technology does not have the limits for the number of transmitted services/channels, bitrate unlike satellite channels. Service provider can easily migrate from SD to HD or 4K.

- Extension of the content delivery network inside the country and abroad

The simplicity of the content receiving allows the small content customers to buy it.

- The solution for “Last mile”

It does not require the dedicated lines – just usual stable Internet connection.

- Developing the own content distribution/TV signal delivery network

Small studios or content distributors can easily launch their own content delivery to/from big broadcasters, other studios, head-ends, TV service providers, etc. Furthermore, Mediastream Reliable Transport allows two-sides communication and the distribution network can be used for contribution as well.

*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.