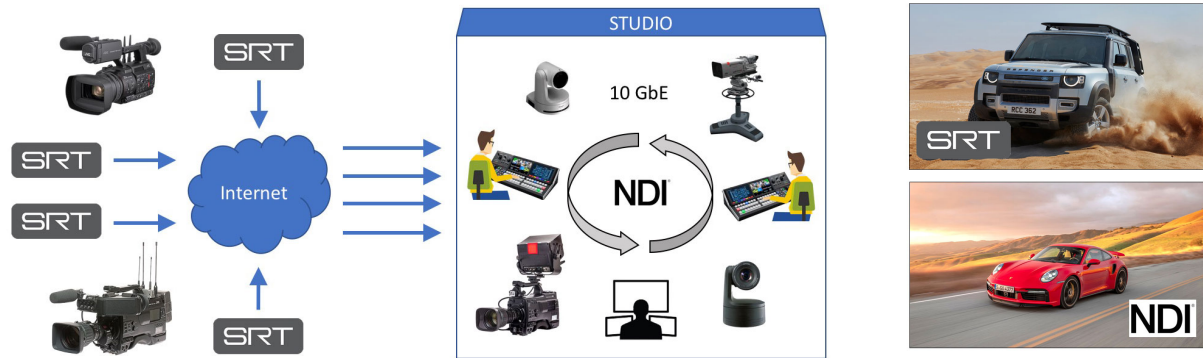


SRT vs. NDI



The common: Both protocols can transport high-quality video over IP networks.

The difference:

SRT protocol is designed to send video over the Internet and is resilient to data loss, high latency, and jitter. **SRT** is equipped with efficient error correction to compensate for rapidly changing network bandwidth, congestion, and intermittent connectivity issues.

SRT replaces satellite, microwave, and dedicated fiber to deliver contribution-quality video from one location to another over the Internet.

NDI relies on high-speed networks and can achieve very low latency comparable with SDI.

A high-bitrate codec is capable of 4:2:2 10-bit intra-frame compression.

The **NDI HX** variant adds H.264 compression for reduced bandwidth.

NDI and SMPTE2110 are replacing the SDI in new studio installations.

Latency:

SRT takes advantage of preset *latency allowance* to recover lost data by sending requests to the encoder to re-send missing packets, and as a result, can recover from up to 30% of data loss.

SRT Latency can be set anywhere from 100 ms to 8 sec depending on the amount of error correction needed for smooth video delivery.

NDI strives to achieve the lowest latency since it competes with SDI.

Fast 10 GbE network is recommended for optimal performance.

The H.264 based **NDI HX** does not require a gigabit network connection at the expense of visible latency.

Summary:

Both **SRT** and **NDI** codecs are capable of delivering contribution-quality video over switched IP networks.

The choice of protocol depends on the application: the SRT is perfect for Remote Production (REMI) workflows like sending video from New York to Miami over the Internet, while NDI - for sharing video sources within the studio.