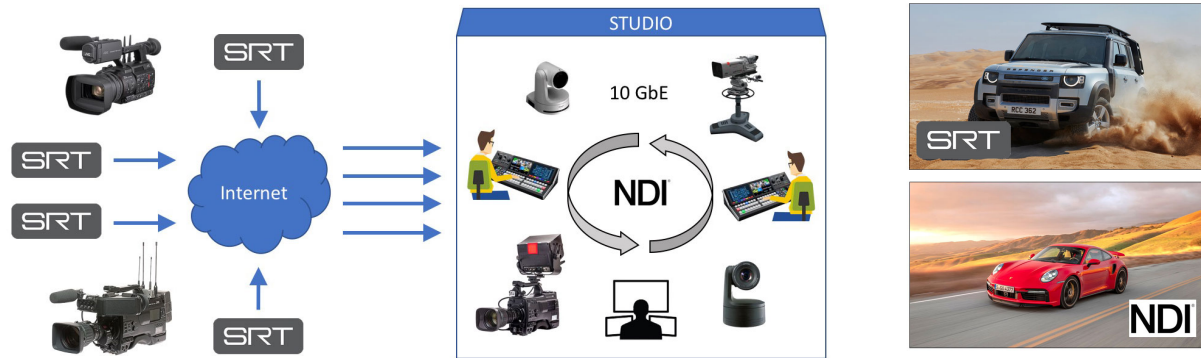


## SRT vs. NDI



**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.