*Rq SDK™* is a high-performance SDK product implementing the RaptorQ erasure code with fast encoding and decoding speeds. It has a simple and flexible API, with a thread-safe portable implementation. Rq SDK empowers our products and is available for integration into partner solutions, such as those supporting mobile broadcast and streaming media.

# HIGH PERFORMING IMPLEMENTATION OF RAPTORQ

## PRODUCT HIGHLIGHTS

**Standards-based -** Fully compliant with RaptorQ erasure code specified in IETF RFC 6330
**Fast** – Enables high performance linear time encoding and decoding
**Portable** to all standard platforms with an easy to use C/C++ API
**Unlimited** – can generate as much data as needed from an object, where any portion of the data equal in size to the object is sufficient to fully recover the object

## EXAMPLE APPLICATIONS

Mobile Broadcast

Streaming Media

## FEATURES

| PROPERTIES | DESCRIPTION |
| --- | --- |
| Linear time encoding and decoding | 5+ Gbps on a single core of x86-64 @3.4 GHz |
| | 800+ Mbps on a single core of Qualcomm MSM632 |
| Number of source symbols | Supports up to 56,403 |
| Number of repair symbols | Supports up to 2 billion |
| Software library size | ~75 KB |
| API | Same API for encoding, decoding and transcoding |
| OS | Linux & MacOS are standard, negotiable custom OS builds |
| Packaging | Available as SDK binary compiled for target platform |

Contact us at sales@bitripple.com for more information

## ➔ USE CASE: Live transmission
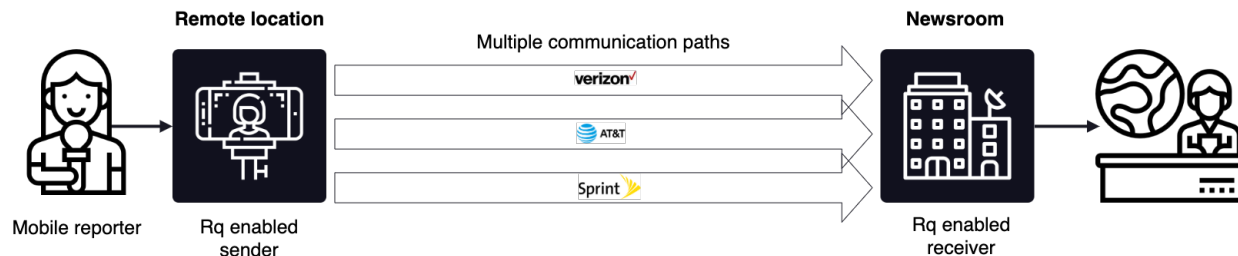


Enables bandwidth anywhere: Rq SDK enables aggregation of multiple data paths - cellular 3G/4G/5G LTE, Wi-Fi, Ka-band and Ku-band satellite. It combats packet loss to achieve transmissions with minimal latency, even in a moving vehicle or live 4K/HDR transmission.

## ➔ USE CASE: Broadcast Internet
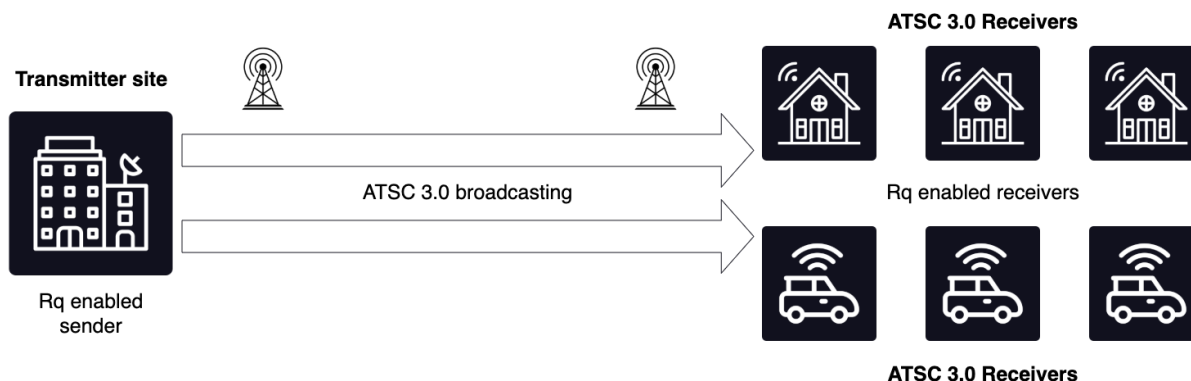


Enables one-to-many Non-Real-Time (NRT) reliable data delivery over broadcast channels: households can efficiently pre-cache popular TV shows. Automobiles can reliably and efficiently receive data such as software updates, infotainment, map updates, etc. Rq SDK provides bandwidth compression, i.e., reduced data transmission for reliable delivery.

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