Ripple

One-stop software solution to manage all your in-robot communication interfaces

FOR

- OEM AUV vendors
- AUV module vendors
- AUV sensor package vendors
- OEM modem vendors

Single Interface

Single software interface to all the communication devices on your underwater vehicle.

End-End Connectivity

Hardware agnostic end-end connectivity from user to vehicle over IP networks.

Payload Prioritization

Easily configurable policies to define link and data priority per packet to provide quality of service.

Smart Codecs

Content-aware encoders for navigational data, sensor payloads, image and video streams.

Relay & Routing

Transparent relaying, routing and remote configuration capabilities.

DTN, Link Tuning

Packet level Delay Tolerance (DTN) and reliable delivery. Optional support for link tuning and security modules.

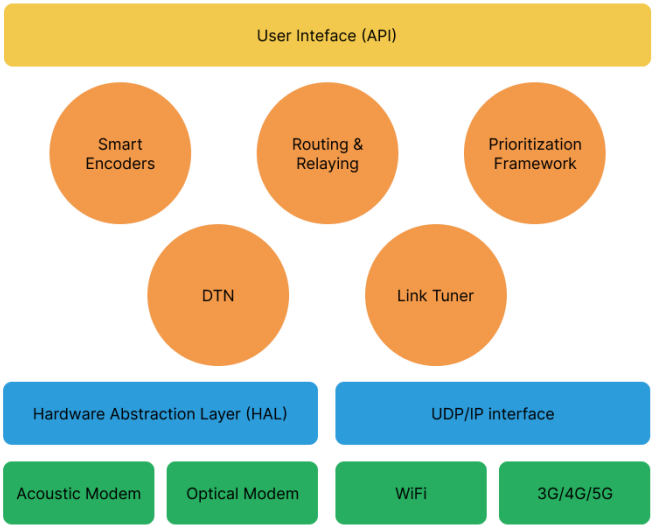
www.subnero.com
sales@subnero.com
+65 9819 9552
@Subnero

SUBNERO

Subnero Pte. Ltd.
1003 Bukit Merah Central
#04-05
Singapore 159836

RIPPLE

Ripple is a software package that provides a single software interface to all the communication devices in your underwater vehicle, be it wireless or wired. It provides features such as payload and link prioritization based on policies set by the user. Ripple provides API support to specify "capabilities" such as priority or compression at a packet level.



Example

```
> transport << new DatagramReq(to: 31, data: nav[64], priority: high)
AGREE
```

CAPABILITIES

PRIORITY	Per packet priority
TTL	Delay tolerance
COMPRESSION	Content-aware compression
FRAGMENTATION	Fragmentation and reassembly
RELIABILITY	Reliable payload delivery
PROGRESS	Progress notification

Smart encoders are available for various data types such as navigational data, sensor payloads, images, and video. It abstracts out the encoding considerations for various underlying communication interfaces from the user.

Ripple also provides hardware-agnostic end-to-end connectivity from the user all the way to the underwater vehicle. It can transparently manage routing and relaying between underwater nodes (both mobile as well as static) from terrestrial networks to reach the destination.

Delay tolerance (DTN), fragmentation & reassembly, etc. are automatically handled in the background while switching between various interfaces with different constraints. Users can also choose to go with the adaptive link tuning option where Ripple will learn and adapt the performance of various links to meet the user's needs.

REQUEST A DEMO

info@subnero.com

www.subnero.com
sales@subnero.com
+65 9819 9552
@Subnero

SUBNERO

Subnero Pte. Ltd.
1003 Bukit Merah Central
#04-05
Singapore 159836