

ENEAA[®] RTP-BRICKS



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RTP/RTCP Media transport protocol for NGN

Enea[®] RTP-Bricks is a scalable, portable stack implementing the Real-time Transport Protocol (RTP) and its QoS companion protocol, the Real-time Control Protocol (RTCP), for Next-Generation Network applications.

RTP is the IETF protocol used in VoIP systems for streaming audio and video packets across an IP network. RTP typically uses the UDP transport layer to transmit real-time data over unicast or multicast IP networks, but it can also be used over reliable TCP/SCTP transport layer for unicast networks.

Enea[®] RTP-Bricks is fully compliant with the most recent standards:

- RFC 3550: RTP: A Transport Protocol for Real Time Applications
- RFC 3711: The Secure Real-time Transport Protocol – future release

Enea RTP-Bricks is also compatible with RFC 3551, which enables it to support third-party audio and video codecs/profiles.

Enea RTP-Bricks use a customizable architecture that enables it to be linked to the application through a message-based or function-based interface. Enea RTP-Bricks supports UDP, TCP or SCTP through BSD-like sockets. Integrated jitter buffer management protects the

application against IP network impairments such as out-of-order packets, lost packets, and jitter. Enea RTP-Bricks can also be seamlessly combined with other Enea[®] Netbricks signaling stacks, including Enea[®] Megaco-Bricks, Enea[®] MGCP-Bricks, Enea[®] SIP-Bricks, Enea[®] 3G-H.324M-Bricks and Enea[®] T.38 IAF-Bricks.

Enea RTP-BricksS supports most commercial RTOSES, including Linux, VxWorks[®], Solaris[®], PSOS, Enea[®] OSE and Windows. Enea offers custom implementations of Enea RTP-Bricks for OEMs who require an application-specific solution.

Enea RTP-Bricks Features

- Integrated generation of RTP and RTCP packets
- Integrated jitter buffer management
- SSRC generation and collision detection
- CSRC support to list all the contributing sources
- Support for RTP mixers

- Support for IPV4 and IPV6
- Dynamic payload support
- Support for all third-party audio and video codecs/profiles
- Network performance statistics
- Portable architecture
- Support for multi-thread and multi-process applications
- Procedural or message-based API
- Suitable for low-footprint terminals and high-performance servers

Enea RTP-Bricks Software Architecture

- **System Management:**
SM
- **TCP/UDP/SCTP:**
Used through the BSD sockets adaptation layer (non-blocking mode). The Enea[®] SCTP-Bricks layer can be provided by Enea if required.
- **RTP:**
RTP and RTCP for Voice and Video over IP applications

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