



NexGenRTP

Portable Realtime Networking Protocols

- Fully written in ANSI C
- Highly optimized
- Reentrant & Romable
- Includes RTP/RTCP/RTSP
- Client side
- Fast and reliable
- Polling or RTOS mode
- No compiler dependencies
- Fully tested
- Source code, royalty-free

BUILT FROM THE GROUND UP

NexGenRTP was designed from the ground up to satisfy both embedded constraints and OEM specificities. It is compact, highly portable and can be easily configured to support various payloads. NexGenRTP can be used over any TCP/IP stack (with BSD socket interface).

ARCHITECTURE

RTP is a protocol for real-time applications streaming data on the internet, such as audio or video. It was designed to be malleable so its specification has to be completed by using an RTP profile.

RTCP is the control protocol for RTP. When sending and receiving data with RTP, and an application must inform other users of its presence in the session and must also give information on network reliability and performance, allowing users to adapt themselves dynamically with the available bandwidth and other network characteristics.

As RTP/RTCP do not provide all the control needed by streaming applications, another protocol, like RTSP, is required to control the sessions. The RTSP protocol is used to connect to multimedia server and control the connexion. It is very similar to the HTTP protocol. NexGenRTP supports the connected mode (TCP).

NexGenRTP does not include any Codecs nor it is configured for particular requirements. NexGenRTP does internally most of session's control but this is the application responsibility to decode the payload data.

NexGenRTP has been tested using FFMPEG library for decoding the MPEG datastream sent by the following servers.

- Darwin Streaming Server, Apple Computer, Inc.,
- LIVE.COM Streaming Media, <http://www.live.com>

PORTABILITY

NexGenRTP can be used either in polling or RTOS mode. All dependencies have been isolated in a porting layer called NexGenOS. By using a such architecture the stack is totally portable in few days.

NexGenOS includes a wrapper of the most popular RTOS including Nucleus, pSOS, VxWorks, Linux, DOS, Win32k, OS20/21, EmBOS, OSE, Neutrino, QNX4, RTC, RTKernel, RTXC, µC/OS, and virtually any others RTOS. There are also numerous Ethernet drivers included.

SUPPORTED PROCESSORS & RTOS

Most of the 16-32 -64 bit processors are supported. x86, SH-series, ARM, 68K, Coldfire, ARC, M16/32C, C166, StrongARM, MIPS, ST20, ST40, DSP, PowerPC, 320C5416. A new port takes a couple of days to develop.

TECHNICAL SUPPORT

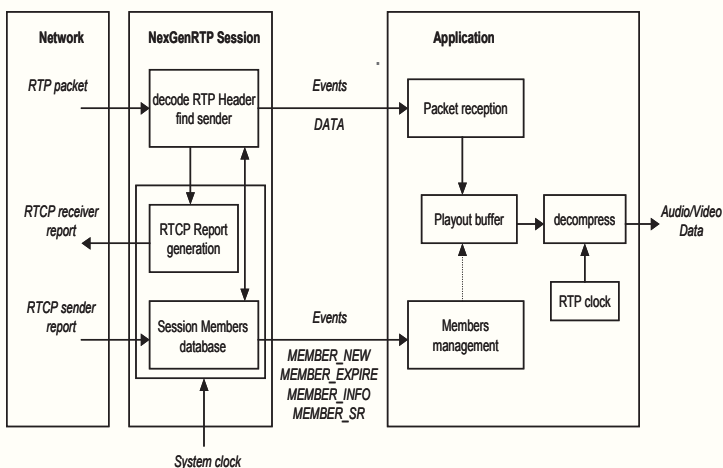
6 months free of charge.
Extended annual support available.
Specific development or porting are possible. Please call us.

LICENSING

Source code, per-projet, royalty-free

Optional protocols:

- NAPT
- SNMP v1/v2/v3
- Dual TCP/IP v4/v6
- POP3/SMTP/IMAP4
- PPPv6
- DHCP server (v4)
- FTP client & server
- SSL
- HTTP client & server



RFC(S)

- RFC1305 – Network Time Protocol (V 3)
- RFC3550 – RTP : A Transport Protocol for Real-Time Applications
- RFC3551 – RTP Profile for Audio and Video Conferences
- RFC2616 – Hypertext Transfer Protocol – HTTP/1.1
- RFC2250 – RTP Payload Format for MPEG1/MPEG2 Video
- RFC2326 – Real Time Streaming Protocol (RTSP)
- RFC2327 – Session Description Protocol (SDP)