FAQ RTCP

In the DExxx phones it is possible to obtain statistical information on packets from the phone during a call. With the RTCP support the phone will send standard RTCP Sender Reports periodically. They contain the relevant call information including packet loss, fraction lost, jitter, timestamps info. and other information.

The **RTP Control Protocol** (**RTCP**) is a sister protocol of the Real-time Transport Protocol (RTP). Its basic functionality and packet structure is defined in the RTP specification RFC 3550,[1] superseding its original standardization in 1996 (RFC 1889).

RTCP provides out-of-band statistics and control information for an RTP flow. It partners RTP in the delivery and packaging of multimedia data, but does not transport any media streams itself. Typically RTP will be sent on an even-numbered UDP port, with RTCP messages being sent over the next higher odd-numbered port.[2] The primary function of RTCP is to provide feedback on the quality of service (QoS) in media distribution by periodically sending statistics information to participants in a streaming multimedia session.

RTCP gathers statistics for a media connection and information such as transmitted octet and packet counts, lost packet counts, jitter, and round-trip delay time. An application may use this information to control quality of service parameters, perhaps by limiting flow, or using a different codec.

RTCP itself does not provide any flow encryption or authentication methods. Such mechanisms may be implemented, for example, with the Secure Real-time Transport Protocol (SRTP) defined in RFC 3711...Wikipedia...

⊞ Frame 634: 110 bytes on wire (880 bits), 110 bytes captured (880 bits)
⊞ Ethernet II, Src: GigasetC_08:13:fc (7c:2f:80:08:13:fc), Dst: AsrockIn_0c:07:2b (00:25:22:0c:07:2b)
⊞ Internet Protocol Version 4, Src: 10.202.103.11 (10.202.103.11), Dst: 10.202.100.11 (10.202.100.11)
⊟ User Datagram Protocol, Src Port: avt-profile-2 (5005), Dst Port: 14191 (14191)
    Source port: avt-profile-2 (5005)
    Destination port: 14191 (14191)
    Length: 76
  ⊟ Checksum: 0xe107 [validation disabled]
      [Good Checksum: False]
      [Bad Checksum: False]
⊟ Real-time Transport Control Protocol (Sender Report)
  ⊟ [Stream setup by SDP (frame 128)]
      [Setup frame: 128]
      [Setup Method: SDP]
    10.. .... = Version: RFC 1889 Version (2)
    ..0. .... = Padding: False
    ...0 0001 = Reception report count: 1
    Packet type: Sender Report (200)
    Length: 12 (52 bytes)
    Sender SSRC: 0x40f187eb (1089570795)
    Timestamp, MSW: 3553925000 (0xd3d49788)
    Timestamp, LSW: 366154551 (0x15d31337)
    [MSW and LSW as NTP timestamp: Aug 14, 2012 09:23:20.085251000 UTC]
    RTP timestamp: 35840
    Sender's packet count: 223
    Sender's octet count: 34768
  ⊟ Source 1
      Identifier: 0x20d52059 (550838361)
    ⊟ SSRC contents
        Fraction lost: 36 / 256
        Cumulative number of packets lost: 32
    ⊟ Extended highest sequence number received: 34148
        Sequence number cycles count: 0
        Highest sequence number received: 34148
      Interarrival jitter: 0
      Last SR timestamp: 0 (0x00000000)
      Delay since last SR timestamp: 0 (0 milliseconds)
⊟ Real-time Transport Control Protocol (Source description)
  ⊟ [Stream setup by SDP (frame 128)]
      [Setup frame: 128]
      [Setup Method: SDP]
    10.. .... = Version: RFC 1889 Version (2)
    ..0. .... = Padding: False
    ...0 0001 = Source count: 1
    Packet type: Source description (202)
    Length: 3 (16 bytes)
  ⊟ Chunk 1, SSRC/CSRC 0x40F187EB
      Identifier: 0x40f187eb (1089570795)
    ⊟ SDES items
        Type: CNAME (user and domain) (1)
        Length: 5
        Text: DE900
        Type: END (0)
  [RTCP frame length check: OK - 68 bytes]

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0010  00 60 00 00 40 00 40 11   59 2b 0a ca 67 0b 0a ca   .`..@.@. Y+..g...
0020  64 0b 13 8d 37 6f 00 4c   e1 07 81 c8 00 0c 40 f1   d...7o.L ......@.
0030  87 eb d3 d4 97 88 15 d3   13 37 00 00 8c 00 00 00   ........ .7......
0040  00 df 00 00 87 d0 20 d5   20 59 24 00 00 20 00 00   ...... .  Y$.. ..
0050  85 64 00 00 00 00 00 00   00 00 00 00 00 00 81 ca   .d...... ........
0060  00 03 40 f1 87 eb 01 05   44 45 39 30 30 00         ..@..... DE900.
```