

sip_dtmf_raw_inband.pcapng

SIP INVITE

| | |
|------------------|---|
| Via | SIP/2.0/UDP 10.180.110.58:5060;branch=z9hG4bK2AB2255 |
| Call-ID | 44FAF172-6DC611E9-9A13E3AD-C1443EBC@10.180.110.58 |
| UA | Cisco-SIPGateway/IOS-16.9.2 |
| CSeq | 101 INVITE |
| Max-Fwd | 70 |
| Contact | <sip:10.180.110.58:5060> |
| Owner | CiscoSystemsSIP-GW-UserAgent 9998 4081 IN IP4 10.180.110.58 |
| Session Name (s) | SIP Call |
| Connection | IN IP4 10.180.110.58 |
| Media | audio 8520 RTP/AVP 0 19 |
| Connection | IN IP4 10.180.110.58 |
| Attr | rtpmap:0 PCMU/8000 |
| Attr | rtpmap:19 CN/8000 |
| Attr | ptime:20 |

💡 SIP INVITE initiates a call – carries SDP offer with codec/media proposals; callee responds with 180 Ringing, then 200 OK with SDP answer

SIP 100 Trying

SIP 180 Ringing

SIP PRACK

| | |
|---------|---|
| Call-ID | 44FAF172-6DC611E9-9A13E3AD-C1443EBC@10.180.110.58 |
| CSeq | 102 PRACK |
| RAck | 9674 101 INVITE |

💡 100 Trying – proxy accepted the request and is searching for the callee; stops retransmission timer; no end-to-end significance

💡 180 Ringing – callee's phone is alerting; caller hears locally generated ringback; 183 with SDP offers early media (in-band ringback) instead

Frame 4 | 2019-05-04T17:09:54.019987Z

SIP 200 OK

SIP 200 OK

| | |
|------------|-----------------------------|
| Contact | <sip:911@10.10.244.63:5060> |
| Connection | IN IP4 10.10.244.63 |
| Media | audio 16694 RTP/AVP 0 19 |
| Connection | IN IP4 10.10.244.63 |
| Attr | rtpmap:0 PCMU/8000 |
| Attr | rtpmap:19 CN/8000 |
| Attr | ptime:20 |

💡 200 OK – call answered (for INVITE) or registration accepted (for REGISTER); SDP answer completes codec negotiation; caller must send ACK to complete 3-way handshake

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SIP ACK

| | |
|---------|---|
| Call-ID | 44FAF172-6DC611E9-9A13E3AD-C1443EBC@10.180.110.58 |
| CSeq | 101 ACK |

Frame 7 | 2019-05-04T17:09:56.208988Z

RTP

| | |
|-----------------|----------------------|
| Setup frame | 1 |
| Marker | True |
| Codec | ITU-T G.711 PCMU (0) |
| Sequence number | 2845 |
| Timestamp | 970005094 |
| SSRC | 0x000079ea (31210) |

Frame 8 | 2019-05-04T17:09:56.245974Z

RTP

| | |
|-----------------|-------------------------|
| Setup frame | 1 |
| Marker | False |
| Codec | Comfort noise (13) |
| Sequence number | 13312 |
| Timestamp | 1613845561 |
| SSRC | 0xfcda91da (4242182618) |

Frame 10 | 2019-05-04T17:09:56.277985Z

SIP BYE

| | |
|---------|---|
| Call-ID | 44FAF172-6DC611E9-9A13E3AD-C1443EBC@10.180.110.58 |
| CSeq | 103 BYE |

💡 SIP BYE terminates an established dialog – both sides send BYE to release media resources; Reason header explains why (e.g., user hangup)

SIP Proxy

SIP Recorder B

Reason Q.850;cause=16

✓ SIP 200 OK

💡 200 OK – call answered (for INVITE) or registration accepted (for REGISTER); SDP answer completes codec negotiation; caller must send ACK to complete 3-way handshake