



Multicast Recording

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Overview

All IPICS voice traffic that pertains to interoperability is represented by a channel, radio or VTG, each of which are configured with a multicast address. All voice traffic appears on its respective multicast address, even if a participant has joined via a unicast session (SIP). Furthermore, all voice traffic appears in the form of Real Time Protocol (RTP) packets using G.711 or G.729 codecs.

Voice Recording

A third party voice recording system can be used to record voice traffic on each multicast address. It can either be configured to continuously record, or be triggered to record by the presence of RTP packets. The recording system must manage the timestamp, datestamp, and duration information. Some recording systems are capable of detecting other external events, such as ring, off-hook, and contact closure. These systems should be configured so that activities start when those events happen.

Talker ID

Media originating from IDCs, serially controlled radios and ISSI gateways may be associated with a talker ID. This metadata can be captured by a recording system for each session. For the duration of the call, talker ID packets appear periodically as RTP packets with payload type 110. A talker ID packet is in the following format:

```
TalkerID
UID:<Integer>
DisplayName:<String>
ChannelID:<Integer>
ChannelName:<String>
```

```
SrcId:<SSRC>
UserID:<String>
```

The UserID field is the login ID of the IDC, when the IDC is transmitting. The end of a talk spurt is marked with an “End-TalkerID” packet. Talker ID packets originating from the LMRG or ISSIG are marked with the UserID field only. In this case it will be the ID of the transmitting radio. Note that there is no alias for radio talker ID. Any aliasing must be done by the recording system via a look-up table if necessary.

Radio Metadata

For serial controlled donor radios and ISSI gateways, certain metadata associated with the talk spurt is available during the call. This is represented within a RTP packet of payload type 109. The packet payload is in the following format:

```
RcsMessageConnectionStatusResponse
channelSelector:<String>
callType:[CHANNEL_OR_TALKGROU_CALL|PRIVATE_CALL|GROUP_CALL]
callState:[RX|TX|IDLE]
talkerId:<String>
```

Other data related to the radio or gateway is also present in this packet and is not relevant to the media. The recording system must be configured to gather these radio control packets.

Telephone

Metadata related telephone related talk sessions are available in IPICS/IPPE activity logs and Call Manager logs. The recording system must correlate RTP sessions with these logs. For detailed telephony audio recording capabilities, the recording system can integrate directly with Cisco Unified Communication Manager (CUCM).