

# Sample of Debug MGCP Packets

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## Introduction

This document contains **debug mgcp packets** captures of various Media Gateway Control Protocol (MGCP) call sequences. Each sequence is displayed chronologically in a table. The tables contain message (**MSG**) and **DECODE** fields. The **MSG** fields contain the actual **debug** output, and the **DECODE** fields explain the preceding **debug** message. Currently, there are **debug** sequences showing:

- A handset goes off-hook and user dials digits
- A handset receives a busy tone
- A complete on-net voice call that shows originating and terminating sides
- A complete call waiting sequence between three parties

**This document is Part 5 of a six-document set.**

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## Prerequisites

## Requirements

There are no specific requirements for this document.

## Components Used

This configuration was tested with Cisco CallManager 3.0, 3.1, and 3.2 and various versions of Cisco IOS® Software Release 12.2 images. The screen shots and Cisco IOS configuration were captured using the software, hardware, and other equipment listed below.

- 1 \* Cisco VG200 / 2 X FXS / 2 X FXO / 1 FastEthernet 10/100 port; Cisco IOS Software Release 12.1(5)T
- 1 \* Cisco CallManager 3.0(5a) running on an MCS7835
- 2 \* Analog handsets
- 2 \* Cisco 7960 IP Phones

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

For recommended compatibility software versions between Cisco CallManager and the Cisco IOS gateway, refer to the Cisco CallManager Software Version Comparison.

**Note:** Cisco IOS Software Release 12.2(11)T or later is recommended based on the **ccm-manager** command enhancements. The **ccm-manager** command requires Cisco IOS Software Release 12.1(5)XM or later on all routers (Cisco 2600 and 3600) and the Cisco Voice Gateway 200 (VG200).

Cisco 2600 and 3600 routers support MGCP if they are running Cisco IOS Software Release 12.1(3)T or later. The release and version that you require are based on the features that you need to enable. The Cisco CallManager server must be running version 3.0(5)a or later. The router configuration is the same for all types of routers. The Cisco CallManager configuration is also the same for all types of routers.

The VG200 is supported by Cisco IOS Software Release 12.1(5)XM1 and later releases. The release and version that you require are based on the features that you need to enable. Although the VG200 is supported in earlier releases of Cisco CallManager, version 3.0(5)a or later is recommended.

## Conventions

For more information on document conventions, refer to the Cisco Technical Tips Conventions.

## Debug Sequence for When a Handset Goes Off-Hook and User Dials Digits

The **MSG** fields in the table shown below are captures of the **debug mgcp packets** command output when a telephone goes *off-hook* and the user dials digits. The **DECODE** fields provide an interpretation of the MGCP messages produced by the **debug** command.

<b>MSG</b>	<pre>21:50:26: send_mgcp_msg, MGCP Packet sent ---&gt; NTFY 41 aaln/S1/SU0/1@c26001.at10.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.at10.cisco.com:2427 X: 50 O: L/hd</pre>
<b>DECODE</b>	<pre>NTFY 41  !--- This is the notify (NTFY) message sent to the call agent to report !--- an observed event. The number 41 is the notify sequence number.  aaln/S1/SU0/1@c26001.at10.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.</pre>

	<pre>N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination !--- User Datagram Protocol (UDP) port number.  X: 50  !--- The request ID is 50.  O: L/hd  !--- The observed event (O) off-hook (hd) is detected !--- with use of line package (L).</pre>
<b>MSG</b>	<pre>21:50:26: MGCP Packet received &lt;--- 200 41 OK</pre>
<b>DECODE</b>	<pre>200 41 OK  !--- This receive acknowledgement states that NTFY sequence !--- 41 was executed normally.</pre>
<b>MSG</b>	<pre>21:50:26: MGCP Packet received &lt;--- RQNT 1825 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 R: L/hu(N),D/[0-9!--*T](D) S: L/dls</pre>
<b>DECODE</b>	<pre>RQNT 1825  !--- This is the notification request (RQNT) message sent to the call !--- agent to report the observed event. The sequence number is 1825.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination UDP port number.  X: 50  !--- The request ID is 50.  R: L/hu(N),  !--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) condition exists.  D/[0-9!--*T](D)  !--- Additionally, the call agent requests that this !--- residential gateway collect digits 0 9 plus and * until !--- the interdigit timeout (T) expires.  S: L/dl  !--- The call agent sends a signaling request (S) to have this !--- gateway use the line (L) package</pre>

	<i>!--- and play dial tone (dl) for 16 seconds.</i>
<b>MSG</b>	21:50:26: send_mgcp_msg, MGCP Packet sent ---> 200 1825 OK
<b>DECODE</b>	200 1825 OK <i>!--- This sent acknowledgement states that RQNT sequence !--- 1825 was executed normally.</i>
<b>MSG</b>	21:50:41: send_mgcp_msg, MGCP Packet sent ---> NTFY 42 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 O: D/16783201735
<b>DECODE</b>	NTFY 42 <i>!--- The notify message is sent to the call agent to report the observed !--- event. The notify sequence number is 42.</i>  aaln/S1/SU0/1@c26001.atl0.cisco.com <i>!--- MGCP endpoint ID. MGCP 0.1</i>  <i>!--- The MGCP version is 0.1.</i> N: mgcp.aSCT1CA.atl0.cisco.com:2427  <i>!--- This is the notified entity ID with destination port number.</i>  X: 50 <i>!--- Request ID is 50.</i> O: D/16783201735  <i>!--- This residential gateway sends an observed event message !--- that states that it collected the digits (16783201735) which conformed !--- to the digit map.</i>
<b>MSG</b>	21:50:41: MGCP Packet received <--- 200 42 OK
<b>DECODE</b>	200 42 OK <i>!--- This receive acknowledgement states that NTFY sequence !--- 42 was executed normally.</i>
<b>MSG</b>	21:50:41: MGCP Packet received <--- RQNT 1828 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 R: L/hu(N)
<b>DECODE</b>	RQNT 1828 <i>!--- This is the notification request message sent to the call agent !--- to report the observed event. The sequence number is 1828.</i>  aaln/S1/SU0/1@c26001.atl0.cisco.com  <i>!--- This is the MGCP endpoint ID.</i>  MGCP 0.1  <i>!--- The MGCP version is 0.1.</i>

	<pre> N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 50 !--- Request ID is 50. R: L/hu(N)  !--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) condition exists. </pre>
<b>MSG</b>	<pre> 21:50:41: MGCP Packet received &lt;--- RQNT 1828 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 R: L/hu(N) </pre>
<b>DECODE</b>	<pre> RQNT 1828  !--- The notification request message is sent to the call agent !--- to report the observed event. The sequence number is 1828.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 50  !--- The request ID is 50.  R: L/hu(N)  !--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) condition exists. </pre>
<b>MSG</b>	<pre> 21:50:41: MGCP Packet received &lt;--- RQNT 1828 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 R: L/hu(N) </pre>
<b>DECODE</b>	<pre> RQNT 1828  !--- The notification request message is sent to the call agent to report !--- the observed event. The sequence number is 1828.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427 </pre>

	<pre>!--- This is the notified entity ID with destination port number. X: 50  !--- The request ID is 50.  R: L/hu(N)  !--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) condition exists.</pre>
<b>MSG</b>	<pre>21:50:41: MGCP Packet received &lt;--- RQNT 1828 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 R: L/hu(N)</pre>
<b>DECODE</b>	<pre>RQNT 1828  !--- The notification request message is sent to the call agent to report !--- the observed event. The sequence number is 1828.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 50  !--- The request ID is 50.  R: L/hu(N)  !--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) condition exists.</pre>
<b>MSG</b>	<pre>21:50:41: send_mgcp_msg, MGCP Packet sent ----&gt; 200 1828 OK</pre>
<b>DECODE</b>	<pre>200 1828 OK  !--- This sent acknowledgement states that RQNT sequence !--- 1828 was executed normally.</pre>

## Debug Sequence for a Handset That Receives a Busy Tone

The **MSG** fields in the table shown below are captures of the **debug mgcp packets** command output when a telephone goes *off-hook*, dials digits, and then receives a busy tone. The **DECODE** fields provide an interpretation of the MGCP messages produced by the **debug** command.

<b>MSG</b>	<pre>21:55:40: send_mgcp_msg, MGCP Packet sent ----&gt; NTFY 98 aaln/S1/SU0/0@c26002.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 53 O: D/16783201733</pre>
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<b>DECODE</b>	<pre> NTFY 98  !--- This is the notify message sent to the call agent to report !--- the observed event. The notify sequence number is 98.  aaln/S1/SU0/1@c26002.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination User Datagram Protocol (UDP) !--- port number.  X: 53 !--- Request ID is 53. O: D/16783201733  !--- This residential gateway sends an observed event (O) message !--- that states that it collected the digits (16783201733) which conformed to the !--- digit map. </pre>
<b>MSG</b>	<pre> 21:55:40: MGCP Packet received - 200 98 OK </pre>
<b>DECODE</b>	<pre> 200 98 OK  !--- This received acknowledgement states that NTFY sequence !--- 98 was executed normally. </pre>
<b>MSG</b>	<pre> 21:55:40: MGCP Packet received - RQNT 1845 aaln/S1/SU0/0@c26002.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 53 R: L/hu(N) </pre>
<b>DECODE</b>	<pre> RQNT 1845  !--- This is the notification request message received from !--- the call agent to report the observed event. The sequence number is 1845.  aaln/S1/SU0/1@c26002.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination UDP port number.  X: 53  !--- The request ID is 53.  R: L/hu(N)  !--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) condition exists. </pre>

<b>MSG</b>	21:55:40: send_mgcp_msg, MGCP Packet sent ---> 200 1845 OK
<b>DECODE</b>	200 1845 OK  <i>!--- This sent acknowledgement states that RQNT sequence !--- 1845 was executed normally.</i>
<b>MSG</b>	21:55:40: MGCP Packet received - RQNT 1846 aaln/S1/SU0/0@c26002.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 53 R: L/hu(N) S: L/bz
<b>DECODE</b>	RQNT 1846  <i>!--- This is the notification request message received from the call agent to !--- report the observed event. The sequence number is 1846.</i>  aaln/S1/SU0/1@c26002.atl0.cisco.com  <i>!--- This is the MGCP endpoint ID.</i>  MGCP 0.1  <i>!--- The MGCP version is 0.1.</i>  N: mgcp.aSCT1CA.atl0.cisco.com:2427  <i>!--- This is the notified entity ID with destination port number.</i>  X: 53  <i>!--- The request ID is 53.</i>  R: L/hu(N)  <i>!--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) condition exists.</i>  S: L/bz  <i>!--- The call agent sends a signaling request (S) to have this gateway !--- use the line (L) package and play busy tone (bz) for 30 seconds.</i>
<b>MSG</b>	21:55:40: send_mgcp_msg, MGCP Packet sent ---> 200 1846 OK
<b>DECODE</b>	200 1846 OK  <i>!--- This sent acknowledgement states that RQNT sequence !--- 1846 was executed normally.</i>

## A Complete On-Net Voice Call That Shows Originating and Terminating Sides

The **MSG** fields in the two tables shown below are captures of the **debug mgcp packets** command output when a complete telephone call is made and torn down. The first table shows a call from the perspective of the originating side, while the second table depicts the perspective of the terminating side. The **DECODE** fields

provide an interpretation of the MGCP messages produced by the **debug** command.

## Originating Side

<b>MSG</b>	1d00h: send_mgcp_msg, MGCP Packet sent ---> NTFY 166 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 O: L/hd
<b>DECODE</b>	NTFY 166  <i>!--- The notify message is sent to the call agent to report the !--- observed event. The notify sequence number is 166.</i>  aaln/S1/SU0/1@c26001.atl0.cisco.com  <i>!--- This is the MGCP endpoint ID.</i>  MGCP 0.1  <i>!--- The MGCP version is 0.1.</i>  N: mgcp.aSCT1CA.atl0.cisco.com:2427  <i>!--- This is the notified entity ID with destination port number.</i>  X: 50  <i>!--- The request ID is 50.</i>  O: L/hd  <i>!--- The observed event (O) off-hook (hd) is detected with use of line (L) !--- package.</i>
<b>MSG</b>	1d00h: MGCP Packet received - 200 166 OK
<b>DECODE</b>	200 166 OK  <i>!--- This received acknowledgement states that NTFY sequence !--- 166 was executed normally.</i>
<b>MSG</b>	1d00h: MGCP Packet received - RQNT 2877 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 R: L/hu(N),D/[0-9!---*T](D) S: L/dl
<b>DECODE</b>	RQNT 2877  <i>!--- This is the notification request message received from the call agent to !--- report the observed event. The sequence number 2877.</i>  aaln/S1/SU0/1@c26001.atl0.cisco.com  <i>!--- This is the MGCP endpoint ID.</i>  MGCP 0.1  <i>!--- The MGCP version is 0.1.</i>  N: mgcp.aSCT1CA.atl0.cisco.com:2427

	<pre> !--- This is the notified entity ID with destination port number. X: 50  !--- The request ID (X) is 50.  R: L/hu(N),  !--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) condition exists.  D/[0-9!--*T](D)  !--- Additionally, the call agent requests that this !--- residential gateway collect digits 0-9 plus and * until the !--- interdigit timeout (T) expires.  S: L/dl  !--- The call agent sends a signaling request (S) to have !--- this gateway use the line (L) package and play !--- dial tone (dl) for 16 seconds. </pre>
<b>MSG</b>	<pre> 1d00h: send_mgcp_msg, MGCP Packet sent ---&gt; 200 2877 OK </pre>
<b>DECODE</b>	<pre> 200 2877 OK  !--- This sent acknowledgement states that RQNT sequence !--- 2877 was executed normally. </pre>
<b>MSG</b>	<pre> 1d00h: send_mgcp_msg, MGCP Packet sent ---&gt; NTFY 167 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 O: D/6783201737 </pre>
<b>DECODE</b>	<pre> NTFY 167  !--- This is the notify message sent to the call agent to report !--- the observed event. The notify sequence number is 167.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 50  !--- The request ID is 50.  O: D/16783201737  !--- This residential gateway sends an observed event (O) message !--- that states that it collected the digits (16783201737) which conformed to the !--- digit map. </pre>

<b>MSG</b>	1d00h: MGCP Packet received - 200 167 OK
<b>DECODE</b>	200 167 OK  <i>!--- This received acknowledgement states that NTFY sequence !--- 167 was executed normally.</i>
<b>MSG</b>	1d00h: MGCP Packet received - RQNT 2878 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 R: L/hu(N)
<b>DECODE</b>	RQNT 2878  <i>!--- This notification request message is sent from the call agent !--- to report the observed event. The sequence number is 2878.</i>  aaln/S1/SU0/1@c26001.atl0.cisco.com  <i>!--- This is the MGCP endpoint ID.</i>  MGCP 0.1  <i>!--- The MGCP version is 0.1.</i>  N: mgcp.aSCT1CA.atl0.cisco.com:2427  <i>!--- This is the notified entity ID with destination port number.</i>  X: 50  <i>!--- The request ID (X) is 50.</i>  R: L/hu(N)  <i>!--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) condition exists.</i>
<b>MSG</b>	1d00h: send_mgcp_msg, MGCP Packet sent ---> 200 2878 OK
<b>DECODE</b>	200 2878 OK  <i>!--- This sent acknowledgement states that RQNT sequence !--- 2878 was executed normally.</i>
<b>MSG</b>	1d00h: MGCP Packet received - CRCX 2879 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 C: 64 L: p:20, a:PCMU;PCMA;G726-32, e:on, s:on, t:00 M: recvonly
<b>DECODE</b>	CRCX 2879  <i>!--- This is the create connection (CRCX) message received from the call agent. !--- The sequence number is 2879.</i>  aaln/S1/SU0/1@c26001.atl0.cisco.com  <i>!--- This is the MGCP endpoint ID.</i>  MGCP 0.1

```
!--- The MGCP version is 0.1.
N: mgcp.aSCT1CA.atl0.cisco.com:2427

!--- This is the notified entity ID with destination port number.
C: 64

!--- The call identification number (C) is 64.
!--- Note: This is NOT the callerid.
L: p:20

!--- This local connection option (L) specifies that the packetization
!--- period (p) is 20 milliseconds.

a:PCMU;PCMA;G726-32

!--- The compression algorithm (a) options are: u-law pulse code modulation (PCM),
!--- a-law PCM, or 32 kbps G.726.

e:on, s:on

!--- The call agent has set both echo cancellation (e) and silence
!--- suppression (s), also known as voice activity detection (VAD), to enable.

t:00

!--- The type of service (t) for this call is 0.

M: recvonly

!--- The connection mode (M) is received only at this point, which allows
!--- only ring-back tone.
```

**MSG**

```
1d00h: send_mgcp_msg, MGCP Packet sent --->
200 2879
I: 18
v=0
c=IN IP4 192.168.25.2
m=audio 16386 RTP/AVP 0 8
```

**DECODE**

```
200 2879

!--- This sent acknowledgement states that CRCX sequence
!--- 2879 was executed normally.

I: 18

!--- The connection identification number is 18.

v=0

!--- The session description protocol (SDP) version is 0.

c=IN IP4 192.168.25.2

!--- The connection data (c) field specifies an Internet (IN) IP
!--- version 4 address of 192.168.25.2.

m=audio 16386 RTP/AVP 0 8

!--- The SDP media description (m) specifies a media type of audio,
!--- destination User Datagram Protocol (UDP) port 16386 for voice-bearer traffic,
!--- and Real-Time Transport Protocol (RTP) encapsulation using
!--- audio video profile (AVP) with RTP payload type of 0 or 8.
```

MSG	<pre> 1d00h: MGCP Packet received - MDCX 2881 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 I: 18 C: 64 M: recvonly v=0 c=IN IP4 192.168.25.6 t=0 0 m=audio 16388 RTP/AVP 0 </pre>
DECODE	<pre> MDCX 2881  !--- This is the modify connection (MDCX) message received from the call agent. !--- The sequence number is 2881.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination port number.  I: 18  !--- The connection identification number is 18.  C: 64  !--- The call identification number (C) is 64. !--- <b>Note:</b> This is NOT the callerid.  M: recvonly  !--- The connection mode (M) is received only at this point, which allows !--- only ring-back tone.  v=0  !--- The SDP version is 0.  c=IN IP4 192.168.25.6  !--- The connection data (c) field specifies an Internet (IN) IP !--- version 4 address of 192.168.25.6.  m=audio 16386 RTP/AVP 0  !--- The SDP media description (m) specifies a media type of audio, !--- destination UDP port 16386 for voice-bearer traffic, and RTP !--- encapsulation using AVP with RTP payload type of 0. </pre>
MSG	<pre> 1d00h: send_mgcp_msg, MGCP Packet sent ----&gt; 200 2881 OK </pre>
DECODE	<pre> 200 2881 OK  !--- This sent acknowledgement states that MDCX sequence !--- 2881 was executed normally. </pre>

<b>MSG</b>	1d00h: MGCP Packet received - RQNT 2883 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 R: L/hu(N) S: G/rt
<b>DECODE</b>	RQNT 2883  !--- The notification request message is sent from the call agent !--- to report the observed event. The sequence number is 2883.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 50  !--- The request ID (X) is 50.  R: L/hu(N)  !--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) condition exists.  S: G/rt  !--- The call agent sends a signaling request (S) to have this gateway !--- use the generic (G) package and play the ring-back tone (rt).
<b>MSG</b>	1d00h: send_mgcp_msg, MGCP Packet sent ---> 200 2883 OK
<b>DECODE</b>	200 2883 OK  !--- This sent acknowledgement states that RQNT sequence !--- 2883 was executed normally.
<b>MSG</b>	1d00h: MGCP Packet received - MDCX 2885 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 I: 18 C: 64 M: sendrecv
<b>DECODE</b>	MDCX 2885  !--- This is the modify connection (MDCX) message received from the call agent. !--- The sequence number is 2885.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1

	<pre> !--- The MGCP version is 0.1. N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination port number. I: 18  !--- The connection identification number is 18. C: 64  !--- The call identification number (C) is 64. !--- <b>Note:</b> This is NOT the callerid. M: sendrecv  !--- The connection mode (M) is a two-way send and receive at this point, !--- which allows full conversation. </pre>
<b>MSG</b>	<pre> 1d00h: send_mgcp_msg, MGCP Packet sent ---&gt; 200 2885 OK </pre>
<b>DECODE</b>	<pre> 200 2885 OK  !--- This sent acknowledgement states that MDCX sequence !--- 2885 was executed normally. </pre>
<b>MSG</b>	<pre> 1d00h: MGCP Packet received - RQNT 2886 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 R: L/hu(N),L/hf(N) S: </pre>
<b>DECODE</b>	<pre> RQNT 2886  !--- The notification request message is sent from the call agent !--- to report the observed event. The sequence number is 2886.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 50  !--- The request ID (X) is 50.  R: L/hu(N),L/hf(N)  !--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) or hook flash (hf) condition exists.  S:  !--- The call agent sends a signaling request (S) to have this gateway !--- signal nothing, which stops the ployout of the ring-back </pre>

	!--- tone (rt).
<b>MSG</b>	1d00h: send_mgcp_msg, MGCP Packet sent ---> 200 2886 OK
<b>DECODE</b>	200 2886 OK  !--- This sent acknowledgement states that RQNT sequence !--- 2886 was executed normally.
<b>MSG</b>	1d00h: send_mgcp_msg, MGCP Packet sent ---> NTFY 168 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 O: L/hu
<b>DECODE</b>	NTFY 168  !--- The notify (NTFY) message is sent to the call agent to report !--- the observed event. The notify sequence number is 168.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 50  !--- The request ID is 50.  O: L/hu  !--- This residential gateway sends an observed event (O) that the !--- user went on-hook or hung up (hu).
<b>MSG</b>	1d00h: MGCP Packet received - 200 168 OK
<b>DECODE</b>	200 168 OK  !--- This receive acknowledgement states that NTFY sequence !--- 168 was executed normally.
<b>MSG</b>	1d00h: MGCP Packet received - RQNT 2888 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 R: L/hd(N)
<b>DECODE</b>	RQNT 2888  !--- The notification request message is sent from the call agent !--- to report the observed event. The sequence number is 2888.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.

	<p>MGCP 0.1</p> <p><i>!--- The MGCP version is 0.1.</i></p> <p>N: mgcp.aSCT1CA.atl0.cisco.com:2427</p> <p><i>!--- This is the notified entity ID with destination port number.</i></p> <p>X: 50</p> <p><i>!--- The request ID is 50.</i></p> <p>R: L/hd(N)</p> <p><i>!--- The call agent requests (R) to be notified (N) immediately !--- that an off-hook (hd) condition exists.</i></p>
<b>MSG</b>	<p>1d00h: send_mgcp_msg, MGCP Packet sent ---&gt; 200 2888 OK</p>
<b>DECODE</b>	<p>200 2888 OK</p> <p><i>!--- This sent acknowledgement states that RQNT sequence !--- 2888 was executed normally.</i></p>
<b>MSG</b>	<p>1d00h: MGCP Packet received - DLCX 2890 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 I: 18 C: 64</p>
<b>DECODE</b>	<p>DLCX 2890</p> <p><i>!--- The deleted connection (DLCX) message is received from the call agent. !--- The sequence number is 2890.</i></p> <p>aaaln/S1/SU0/1@c26001.atl0.cisco.com</p> <p><i>!--- This is the MGCP endpoint ID.</i></p> <p>MGCP 0.1</p> <p><i>!--- The MGCP version is 0.1.</i></p> <p>I: 18</p> <p><i>!--- The connection identification number is 18.</i></p> <p>C: 64</p> <p><i>!--- The call identification number (C) is 64. !--- <b>Note:</b> This is NOT the callerid.</i></p>
<b>MSG</b>	<p>1d00h: send_mgcp_msg, MGCP Packet sent ---&gt; 250 2890 P: PS=305, OS=47685, PR=501, OR=79722, PL=4, JI=288, LA=3</p>
<b>DECODE</b>	<p>250 2890</p> <p><i>!--- This sent acknowledgement states that the connection was deleted. !--- The DLCX sequence number is 2890.</i></p> <p>P: PS=305,</p> <p><i>!--- The connection parameters (P) give call statistics. !--- The number of packets sent (PS) is 305.</i></p>

```

OS=47685,

!--- The number of octets sent (OS) is 47685.

PR=501,

!--- The number of packets received (PR) is 501.

OR=79722,

!--- The number of octets received (OR) is 79722.

PL=4,

!--- The number of packets lost (PL) is 4.

JI=288,

!--- The jitter (JI) is 288 milliseconds.

LA=3

!--- The latency (LA) is 3 milliseconds.

```

## Terminating Side

<b>MSG</b>	<pre> 1d00h: MGCP Packet received - CRCX 2899 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 C: 65 L: p:20, a:PCMU;PCMA, e:on, s:on, t:00, nt:IN M: sendrecv v=0 c=IN IP4 192.168.25.6 t=0 0 m=audio 16384 RTP/AVP 0 8 </pre>
<b>DECODE</b>	<pre> CRCX 2899  !--- The create connection (CRCX) message is received from the call agent. !--- The sequence number is 2899.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination port number.  C: 65  !--- The call identification number (C) is 65. !--- <b>Note:</b> This is NOT the callerid.  L: p:20  !--- This local connection option (L) specifies that the packetization !--- period (p) is 20 milliseconds. </pre>

```

a:PCMU;PCMA

!--- The compression algorithm (a) options are: u-law pulse code modulation (PCM)
!--- or a-law PCM.

e:on, s:on

!--- The call agent has set both echo cancellation (e) and silence
!--- suppression (s), also known as VAD, to enabled.

t:00

!--- The type of service (t) for this call is 0.

nt:IN

!--- The type of network (nt) is Internet (IN).

M: sendrecv

!--- The connection mode (M) is a two-way send and receive at this point,
!--- which allows full conversation.

v=0

!--- The SDP version is 0.

c=IN IP4 192.168.25.6

!--- The connection data (c) field specifies an Internet (IN) IP version
!--- 4 address of 192.168.25.6.

t=0 0

!--- The (t) represents the start (0) and stop (0) times for this call
!--- instance. When both start and stop are 0, the call is considered permanent.

m=audio 16384 RTP/AVP 0 8

!--- The SDP media description (m) specifies a media type of audio,
!--- destination User Datagram Protocol (UDP) port 16384 for voice-bearer traffic,
!--- and Real-Time Transport Protocol (RTP) encapsulation using
!--- audio video profile (AVP) with RTP payload type of 0 or 8.

```

**MSG**

```

1d00h: send_mgcp_msg, MGCP Packet sent --->
200 2899
I: 19
v=0
c=IN IP4 192.168.25.2
m=audio 16386 RTP/AVP 0

```

**DECODE**

```

200 2899

!--- This sent acknowledgement states that CRCX sequence
!--- 2899 was executed normally.

I: 19

!--- The connection identification number is 19.

v=0

!--- The session description protocol (SDP) version is 0.

c=IN IP4 192.168.25.2

```

	<pre> !--- The connection data (c) field specifies an Internet (IN) IP !--- version 4 address of 192.168.25.2.  m=audio 16386 RTP/AVP 0  !--- The SDP media description (m) specifies a media type of audio, !--- destination UDP port 16386 for voice-bearer traffic, and RTP !--- encapsulation using AVP with RTP payload type of 0. </pre>
<b>MSG</b>	<pre> 1d00h: MGCP Packet received - RQNT 2901 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 R: L/hd(N) S: L/rg </pre>
<b>DECODE</b>	<pre> RQNT 2901  !--- This is the notification request message sent from the call agent to report !--- the observed event. The sequence number is 2901.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 50  !--- The request ID is 50.  R: L/hd(N)  !--- The call agent requests (R) to be notified (N) immediately !--- that an off-hook (hd) condition exists.  S: L/rg  !--- The call agent sends a signaling request (S) to have this gateway !--- use the generic (L) package and generate a ringing tone (rg). </pre>
<b>MSG</b>	<pre> 1d00h: send_mgcp_msg, MGCP Packet sent ----&gt; 200 2901 OK </pre>
<b>DECODE</b>	<pre> 200 2901 OK  !--- This sent acknowledgement states that RQNT sequence !--- 2901 was executed normally. </pre>
<b>MSG</b>	<pre> 1d00h: send_mgcp_msg, MGCP Packet sent ----&gt; NTFY 169 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 O: L/hd </pre>
<b>DECODE</b>	<pre> NTFY 169  !--- This is the notify message sent to the call agent to report </pre>

	<pre> !--- the observed event. The notify sequence number is 169. aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 50  !--- The request ID is 50.  O: L/hd  !--- Observed event (O) off-hook (hd) is detected with use of !--- line (L) package. </pre>
<b>MSG</b>	<pre> 1d00h: MGCP Packet received - 200 169 OK </pre>
<b>DECODE</b>	<pre> 200 169 OK  !--- This received acknowledgement states that NTFY sequence !--- 169 was executed normally. </pre>
<b>MSG</b>	<pre> 1d00h: MGCP Packet received - RQNT 2903 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 N: mgcp.aSCT1CA.atl0.cisco.com:2427 X: 50 R: L/hu(N),L/hf(N) </pre>
<b>DECODE</b>	<pre> RQNT 2903  !--- This is the notification request message sent from the call agent to report !--- the observed event. The sequence number is 2886.  aaln/S1/SU0/1@c26001.atl0.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.aSCT1CA.atl0.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 50  !--- The request ID (X) is 50.  R: L/hu(N),L/hf(N)  !--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) or hook flash (hf) condition exists. </pre>
<b>MSG</b>	<pre> 1d00h: send_mgcp_msg, MGCP Packet sent ---&gt; 200 2903 OK </pre>

<b>DECODE</b>	<p>200 2903 OK</p> <p><i>!--- This sent acknowledgement states that RQNT sequence !--- 2903 was executed normally.</i></p>
<b>MSG</b>	<p>1d00h: send_mgcp_msg, MGCP Packet sent ---&gt;  NTFY 170 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1  N: mgcp.aSCT1CA.atl0.cisco.com:2427  X: 50  O: L/hu</p>
<b>DECODE</b>	<p>NTFY 170</p> <p><i>!--- The notify message is sent to the call agent to report the observed !--- event. The notify sequence number is 170.</i></p> <p>aaln/S1/SU0/1@c26001.atl0.cisco.com</p> <p><i>!--- This is the MGCP endpoint ID.</i></p> <p>MGCP 0.1</p> <p><i>!--- The MGCP version is 0.1.</i></p> <p>N: mgcp.aSCT1CA.atl0.cisco.com:2427</p> <p><i>!--- This is the notified entity ID with destination port number.</i></p> <p>X: 50</p> <p><i>!--- The request ID is 50.</i></p> <p>O: L/hu</p> <p><i>!--- This residential gateway sends an observed event (O) that the !--- user went on-hook or hung up (hu).</i></p>
<b>MSG</b>	<p>1d00h: MGCP Packet received - 200 170 OK</p>
<b>DECODE</b>	<p>200 170 OK</p> <p><i>!--- This received acknowledgement states that NTFY sequence !--- 170 was executed normally.</i></p>
<b>MSG</b>	<p>1d00h: MGCP Packet received -  RQNT 2906 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1  N: mgcp.aSCT1CA.atl0.cisco.com:2427  X: 50  R: L/hd(N)</p>
<b>DECODE</b>	<p>RQNT 2906</p> <p><i>!--- The notification request message is sent from the call agent to !--- report the observed event. The sequence number is 2906.</i></p> <p>aaln/S1/SU0/1@c26001.atl0.cisco.com</p> <p><i>!--- This is the MGCP endpoint ID.</i></p> <p>MGCP 0.1</p> <p><i>!--- The MGCP version is 0.1.</i></p> <p>N: mgcp.aSCT1CA.atl0.cisco.com:2427</p>

	<p><i>!--- This is the notified entity ID with destination port number.</i></p> <p>X: 50</p> <p><i>!--- The request ID is 50.</i></p> <p>R: L/hd(N)</p> <p><i>!--- The call agent requests (R) to be notified (N) !--- immediately that an off-hook (hd) condition exists.</i></p>
<b>MSG</b>	<p>1d00h: send_mgcp_msg, MGCP Packet sent ---&gt; 200 2906 OK</p>
<b>DECODE</b>	<p>200 2906 OK</p> <p><i>!--- This sent acknowledgement states that RQNT sequence !--- 2906 was executed normally.</i></p>
<b>MSG</b>	<p>1d00h: MGCP Packet received - DLCX 2907 aaln/S1/SU0/1@c26001.atl0.cisco.com MGCP 0.1 I: 19 C: 65</p>
<b>DECODE</b>	<p>DLCX 2907</p> <p><i>!--- The delete connection (DLCX) message is received from the call agent. !--- The sequence number is 2907.</i></p> <p>aaaln/S1/SU0/1@c26001.atl0.cisco.com</p> <p><i>!--- This is the MGCP endpoint ID.</i></p> <p>MGCP 0.1</p> <p><i>!--- The MGCP version is 0.1.</i></p> <p>I: 19</p> <p><i>!--- The connection identification number is 19.</i></p> <p>C: 65</p> <p><i>!--- The call identification number (C) is 65. !--- <b>Note:</b> This is NOT the callerid.</i></p>
<b>MSG</b>	<p>1d00h: send_mgcp_msg, MGCP Packet sent ---&gt; 250 2907 P: PS=334, OS=52843, PR=293, OR=46601, PL=0, JI=512, LA=3</p>
<b>DECODE</b>	<p>250 2907</p> <p><i>!--- This sent acknowledgement states that the connection was deleted. !--- The DLCX sequence number is 2907.</i></p> <p>P: PS=334,</p> <p><i>!--- The connection parameters (P) provide call statistics. !--- The packets sent (PS) is 334.</i></p> <p>OS=52843,</p> <p><i>!--- The octets sent (OS) is 52843.</i></p>

```

PR=293,

!--- The packets received (PR) is 293.

OR=46601,

!--- The octets received (OR) is 46601.

PL=0,

!--- The packets lost (PL) is 0.

JI=512,

!--- The jitter (JI) is 512 milliseconds.

LA=3

!--- The latency (LA) is 3 milliseconds.

```

## A Complete Call Waiting Sequence Between Three Parties

The **MSG** fields in the two tables shown below are captures of the **debug mgcp packets** command output when call waiting is signaled to one gateway endpoint by a call agent. The first table shows endpoint `aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com` make a phone call to 472-0002, which terminates on the same residential gateway, and receive a call waiting indication during the call. The second table shows endpoint `aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com`, located on another residential gateway, placing the call that initiates the call waiting indication to `aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com`. The **DECODE** fields provide an interpretation of the MGCP messages produced by the **debug** command.

<b>MSG</b>	<pre> send_mgcp_msg, MGCP Packet sent ---&gt; NTFY 171 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 5 O: L/hd </pre>
<b>DECODE</b>	<pre> NTFY 171  !--- This is the notify message sent to the call agent to report the observed event. !--- The notify sequence number is 171.  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 5  !--- The request ID is 5.  O: L/hd  !--- The observed event (O) off-hook (hd) is detected with use of </pre>

	<i>!--- line (L) package.</i>
<b>MSG</b>	MGCP Packet received - 200 171 OK
<b>DECODE</b>	200 171 OK <i>!--- The received acknowledgement states that NTFY sequence !--- 171 was executed normally.</i>
<b>MSG</b>	MGCP Packet received - RQNT 23 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 5 R: L/hu(N),D/[0-9!--*T](D) S: L/dl
<b>DECODE</b>	RQNT 23 <i>!--- The notification request message is sent from the call agent to !--- report the observed event. The sequence number is 23.</i>  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com <i>!--- This is the MGCP endpoint ID.</i>  MGCP 0.1 <i>!--- The MGCP version is 0.1.</i>  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 <i>!--- This is the notified entity ID with destination port number.</i>  X: 5 <i>!--- The request ID is 5.</i>  R: L/hu(N),D/[0-9!--*T](D) <i>!--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) condition exits and evaluates the digits received !--- with use of the digit map ((D)) and the dual tone multifrequency (DTMF) (D/ !--- package.</i>  S: L/dl <i>!--- The call agent sends a signaling request (S) to have this !--- gateway use the line (L) package and play dial tone (dl) !--- for 16 seconds to endpoint aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com.</i>
<b>MSG</b>	send_mgcp_msg, MGCP Packet sent ---> 200 23 OK
<b>DECODE</b>	200 2906 OK <i>!--- This sent acknowledgement states that RQNT sequence !--- 2906 was executed normally.</i>
<b>MSG</b>	send_mgcp_msg, MGCP Packet sent ---> NTFY 172 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 5 O: D/4720002

<b>DECODE</b>	<pre> NTFY 172  !--- This is the notify message sent to the call agent to report !--- the observed event. The notify sequence number is 172.  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 5  !--- The request ID is 5.  O: D/4720002  !--- The observed event (O) dialed digits (472-0002) is detected !--- with use of the DTMF (D) package. </pre>
<b>MSG</b>	<pre> MGCP Packet received - 200 172 OK </pre>
<b>DECODE</b>	<pre> 200 172 OK  !--- This received acknowledgement states that NTFY sequence !--- 172 was executed normally. </pre>
<b>MSG</b>	<pre> MGCP Packet received - RQNT 24 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 5 R: L/hu(N) </pre>
<b>DECODE</b>	<pre> RQNT 24  !--- This is the notification request message sent from the call agent to !--- report the observed event. The sequence number is 24.  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 5  !--- The request ID is 5.  R: L/hu(N)  !--- The call agent requests (R) to be notified (N) !--- immediately that an on-hook (hu) event occurs. </pre>

<b>MSG</b>	send_mgcp_msg, MGCP Packet sent ---> 200 24 OK
<b>DECODE</b>	200 24 OK  <i>!--- This sent acknowledgement states that RQNT sequence !--- 24 was executed normally.</i>
<b>MSG</b>	MGCP Packet received - CRCX 25 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 C: 2 L: p:10-20, a:PCMU;PCMA;G726-32, e:off, s:off, t:a0 M: recvonly
<b>DECODE</b>	CRCX 25  <i>!--- This is the create connection (CRCX) message received from the call agent. !--- The sequence number is 25.</i>  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  <i>!--- This is the MGCP endpoint ID. !--- Note: This is the calling party.</i>  MGCP 0.1  <i>!--- The MGCP version is 0.1.</i>  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  <i>!--- This is the notified entity ID with destination port number.</i>  C: 2  <i>!--- The call identification number (C) is 2. !--- Note: This is NOT the callerid.</i>  L: p:10-20  <i>!--- This local connection option (L) requests a packetization !--- period (p) of 10 or 20 milliseconds.</i>  a:PCMU;PCMA;G726-32,  <i>!--- The compression algorithm (a) options are: u-law pulse code modulation (PCM), !--- a-law PCM, or 32 kbps G.726.</i>  e:off, s:off,  <i>!--- The call agent has set both echo cancellation (e) and !--- silence suppression (s), also known as voice activity detection (VAD), !--- to disabled.</i>  t:a0  <i>!--- The IP header type of service (t) byte for this call is !--- hexadecimal a0, which indicates IP precedence of 5 and minimized delay.</i>  M: recvonly  <i>!--- The connection mode (M) is a one-way receive at this !--- point until the called party answers.</i>

MSG	<pre> send_mgcp_msg, MGCP Packet sent ---&gt; 200 25 I: 1D v=0 o=- 2 0 IN IP4 13.200.2.6 s=Cisco SDP 0 c=IN IP4 13.200.2.6 t=0 0 m=audio 16386 RTP/AVP 0 8 </pre>
DECODE	<pre> 200 25  !--- This sent acknowledgement states that CRCX sequence !--- 25 was executed normally.  I: 1D  !--- The connection identification number is 1D. !--- <b>Note:</b> This is for the calling leg.  v=0  !--- The SDP version is 0.  o=- 2 0 IN IP4 13.200.2.6  !--- The origin (o) field indicates that no user IDs are used via (-). !--- The session ID is 2 and the version of this announcement is 0. !--- An Internet (IN) IP version 4 source address of 13.200.2.6 !--- is also specified.  s=Cisco SDP 0  !--- The session name (s) is "Cisco SDP 0".  c=IN IP4 13.200.2.6  !--- The connection data (c) field specifies an Internet (IN) IP !--- version 4 source address of 13.200.2.6.  t=0 0  !--- The (t) represents the start (0) and stop (0) times !--- for this call instance. !--- When both start and stop are 0, the call is considered permanent.  m=audio 16386 RTP/AVP 0 8  !--- This SDP media description (m) specifies a media type of audio, !--- destination User Datagram Protocol (UDP) port 16386 for voice-bearer traffic, !--- and Real-Time Transport Protocol (RTP) encapsulation using !--- audio video profile (AVP) with RTP payload type of 0 or 8. </pre>
MSG	<pre> MGCP Packet received - CRCX 26 aaln/S1/SU0/1@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 C: 2 L: p:10-20, a:PCMU;PCMA, e:off, s:off, t:a0, nt:IN M: sendrecv v=0 o=- 2 0 IN IP4 13.200.2.6 s=Cisco SDP 0 c=IN IP4 13.200.2.6 t=0 0 m=audio 16386 RTP/AVP 0 8 </pre>

**DECODE**

CRCX 26

*!--- The create connection (CRCX) message is received from the call agent.  
!--- The sequence number is 26.*

aaln/S1/SU0/1@opt0-2611-1.ss.cisco.com

*!--- This is the MGCP endpoint ID.  
!--- **Note:** This is the called party.*

MGCP 0.1

*!--- The MGCP version is 0.1.*

N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427

*!--- This is the notified entity ID with destination port number.*

C: 2

*!--- The call identification number (C) is 2.  
!--- **Note:** This is NOT the callerid.*

L: p:10-20

*!--- This local connection option (L) requests a packetization  
!--- period (p) of 10 or 20 milliseconds.*

a:PCMU;PCMA,

*!--- The compression algorithm (a) options are: u-law PCM or a-law PCM.*

e:off, s:off,

*!--- The call agent has set both echo cancellation (e) and  
!--- silence suppression (s), also known as VAD, to disabled.*

t:a0

*!--- The IP header type of service (t) byte for this call  
!--- is hexadecimal a0, which indicates IP precedence  
!--- of 5 and minimized delay.*

M: sendrecv

*!--- The connection mode (M) is a two-way send and receive at  
!--- this point, which allows full conversation.*

v=0

*!--- The SDP version is 0.*

o=- 2 0 IN IP4 13.200.2.6

*!--- The origin (o) field indicates that no user IDs are used via (-).  
!--- The session ID is 2 and the version of this announcement is 0.  
!--- The Internet (IN) IP version 4 source address of 13.200.2.6  
!--- is also specified.*

s=Cisco SDP 0

*!--- The session name (s) is "Cisco SDP 0".*

c=IN IP4 13.200.2.6

	<pre> !--- The connection data (c) field specifies an Internet (IN) !--- IP version 4 source address of 13.200.2.6.  t=0 0  !--- The (t) represents the start (0) and stop (0) times !--- for this call instance. When both start and stop are 0, !--- the call is considered permanent.  m=audio 16386 RTP/AVP 0 8  !--- The SDP media description (m) specifies a media type !--- of audio, destination UDP port 16386 for voice-bearer !--- traffic, and RTP encapsulation using AVP with !--- RTP payload type of 0 or 8. </pre>
MSG	<pre> send_mgcp_msg, MGCP Packet sent ---&gt; 200 26 I: 1E v=0 o=- 2 0 IN IP4 13.200.2.6 s=Cisco SDP 0 c=IN IP4 13.200.2.6 t=0 0 m=audio 16388 RTP/AVP 0 </pre>
DECODE	<pre> 200 26  !--- This sent acknowledgement states that CRCX sequence !--- 26 was executed normally.  I: 1E  !--- The connection identification number is 1E. !--- <b>Note:</b> This is for the called leg.  v=0  !--- The SDP version is 0.  o=- 2 0 IN IP4 13.200.2.6  !--- The origin (o) field indicates that no user IDs are used via (-). !--- The session ID is 2 and the version of this announcement is 0. !--- An Internet (IN) IP version 4 source address of 13.200.2.6 !--- is also specified.  s=Cisco SDP 0  !--- The session name (s) is "Cisco SDP 0".  c=IN IP4 13.200.2.6  !--- The connection data (c) field specifies an Internet (IN) IP version !--- 4 source address of 13.200.2.6.  t=0 0  !--- The (t) represents the start (0) and stop (0) times for !--- this call instance. When both start and stop are 0, !--- the call is considered permanent.  m=audio 16388 RTP/AVP 0 8  !--- The SDP media description (m) specifies a media </pre>

	<pre>!--- type of audio, destination UDP port 16388 for !--- voice-bearer traffic, and RTP encapsulation using !--- AVP with RTP payload type of 0 or 8.</pre>
MSG	<pre>MGCP Packet received - MDCX 27 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 I: 1D C: 2 M: recvonly v=0 o=- 2 0 IN IP4 13.200.2.6 s=Cisco SDP 0 c=IN IP4 13.200.2.6 t=0 0 m=audio 16388 RTP/AVP 0</pre>
DECODE	<pre>MDCX 27  !--- This is the modify connection (MDCX) message received from the call agent. !--- The sequence number is 27.  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID. !--- <b>Note:</b> This is the called party.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  I: 1D  !--- The connection identification number is 1D. !--- <b>Note:</b> This is for the calling leg.  C: 2  !--- The call identification number (C) is 2. !--- <b>Note:</b> This is NOT the callerid.  M: recvonly  !--- The connection mode (M) is a one-way receive at this point until !--- the called party answers.  v=0  !--- The SDP version is 0.  o=- 2 0 IN IP4 13.200.2.6  !--- The origin (o) field indicates that no user IDs are used via (-). !--- The session ID is 2 and the version of this announcement is 0. !--- An Internet (IN) IP version 4 destination address of 13.200.2.6 !--- is also specified.  s=Cisco SDP 0  !--- The session name (s) is "Cisco SDP 0".  c=IN IP4 13.200.2.6</pre>

	<pre> !--- The connection data (c) field specifies an Internet (IN) IP !--- version 4 destination address of 13.200.2.6.  t=0 0  !--- The (t) represents the start (0) and stop (0) times for !--- this call instance. When both start and stop are 0, !--- the call is considered permanent.  m=audio 16388 RTP/AVP 0  !--- The SDP media description (m) specifies a media type of audio, !--- destination UDP port 16388 for voice-bearer traffic, and !--- RTP encapsulation using AVP with RTP payload type of 0. </pre>
<b>MSG</b>	<pre> send_mgcp_msg, MGCP Packet sent ----&gt; 200 27 OK </pre>
<b>DECODE</b>	<pre> 200 27 OK  !--- This sent acknowledgement states that MDCX sequence !--- 27 was executed normally. </pre>
<b>MSG</b>	<pre> MGCP Packet received - RQNT 28 aaln/S1/SU0/1@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 6 R: L/hd(N) S: L/rg </pre>
<b>DECODE</b>	<pre> RQNT 28  !--- This is the notification request message sent from !--- the call agent to report the observed event. !--- The sequence number is 28.  aaln/S1/SU0/1@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 6  !--- The request ID is 6.  R: L/hd(N)  !--- The call agent requests (R) to be notified (N) !--- immediately that an off-hook (hd) condition exists.  S: L/rg  !--- The call agent sends a signaling request (S) to have this !--- gateway use the line (L) package and generate a ringing tone (rg). </pre>
<b>MSG</b>	<pre> send_mgcp_msg, MGCP Packet sent ----&gt; 200 28 OK </pre>

<b>DECODE</b>	<p>200 28 OK</p> <p><i>!--- This sent acknowledgement states that RQNT sequence !--- 28 was executed normally.</i></p>
<b>MSG</b>	<p>MGCP Packet received - RQNT 29 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 5 R: L/hu(N) S: G/rt</p>
<b>DECODE</b>	<p>RQNT 29</p> <p><i>!--- This is the notification request message sent from the call agent to !--- report the observed event. The sequence number is 29.</i></p> <p>aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com</p> <p><i>!--- This is the MGCP endpoint ID.</i></p> <p>MGCP 0.1</p> <p><i>!--- The MGCP version is 0.1.</i></p> <p>N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427</p> <p><i>!--- This is the notified entity ID with destination port number.</i></p> <p>X: 5</p> <p><i>!--- The request ID is 5.</i></p> <p>R: L/hu(N)</p> <p><i>!--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) condition exists.</i></p> <p>S: G/rt</p> <p><i>!--- The call agent sends a signaling request (S) to have !--- this gateway use the generic (G) package and generate a !--- ring-back tone.</i></p>
<b>MSG</b>	<p>send_mgcp_msg, MGCP Packet sent ---&gt; 200 29 OK</p>
<b>DECODE</b>	<p>200 29 OK</p> <p><i>!--- This sent acknowledgement states that RQNT sequence !--- 29 was executed normally.</i></p>
<b>MSG</b>	<p>send_mgcp_msg, MGCP Packet sent ---&gt; NTFY 173 aaln/S1/SU0/1@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 6 O: L/hd</p>
<b>DECODE</b>	<p>NTFY 173</p> <p><i>!--- This is the notify message sent to the call agent to report !--- the observed event. The notify sequence number is 173.</i></p> <p>aaln/S1/SU0/1@opt0-2611-1.ss.cisco.com</p>

	<pre> !--- This is the MGCP endpoint ID. MGCP 0.1 !--- The MGCP version is 0.1. N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 !--- This is the notified entity ID with destination port number. X: 6 !--- The request ID is 6. O: L/hd !--- The observed (O) event off-hook (hd) is detected with use of !--- line (L) package. </pre>
<b>MSG</b>	<pre> MGCP Packet received - 200 173 OK </pre>
<b>DECODE</b>	<pre> 200 173 OK !--- This received acknowledgement states that NTFY sequence !--- 173 was executed normally. </pre>
<b>MSG</b>	<pre> MGCP Packet received - MDCX 31 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 I: 1D C: 2 M: sendrecv </pre>
<b>DECODE</b>	<pre> MDCX 27 !--- This is the modify connection (MDCX) message received from the call agent. !--- The sequence number is 27. aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com !--- This is the MGCP endpoint ID. !--- <b>Note:</b> This is the calling party. MGCP 0.1 !--- The MGCP version is 0.1. N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 !--- This is the notified entity ID with destination port number. I: 1D !--- The connection identification number is 1D. !--- <b>Note:</b> This is for the calling leg. C: 2 !--- The call identification number (C) is 2. !--- <b>Note:</b> This is NOT the callerid. M: sendrecv !--- The connection mode (M) is a two-way send and receive at this point, </pre>

	<i>!--- which allows full conversation.</i>
<b>MSG</b>	send_mgcp_msg, MGCP Packet sent ---> 200 31 OK
<b>DECODE</b>	200 31 OK  <i>!--- This sent acknowledgement states that MDCX sequence !--- 31 was executed normally.</i>
<b>MSG</b>	MGCP Packet received - RQNT 32 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 5 R: L/hu(N),L/hf(N) S:
<b>DECODE</b>	RQNT 32  <i>!--- This is the notification request message sent from the call agent to !--- report the observed event. The sequence number is 32.</i>  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  <i>!--- This is the MGCP endpoint ID.</i>  MGCP 0.1  <i>!--- The MGCP version is 0.1.</i>  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  <i>!--- This is the notified entity ID with destination port number.</i>  X: 5  <i>!--- The request ID (X) is 5.</i>  R: L/hu(N),L/hf(N)  <i>!--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) or hook flash (hf) condition exists.</i>  S:  <i>!--- The call agent sends a signaling request (S) to have this !--- gateway signal nothing, thereby stopping the !--- playout of the ring-back tone (rt).</i>
<b>MSG</b>	send_mgcp_msg, MGCP Packet sent ---> 200 32 OK
<b>DECODE</b>	200 32 OK  <i>!--- This sent acknowledgement states that RQNT sequence !--- 32 was executed normally.</i>
<b>MSG</b>	MGCP Packet received - CRCX 36 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 C: 3 L: p:10-20, a:PCMU;PCMA, e:off, s:off, t:a0, nt:IN M: inactive v=0 o=- 3 0 IN IP4 13.200.2.7

```
s=Cisco SDP 0
c=IN IP4 13.200.2.7
t=0 0
m=audio 16388 RTP/AVP 0 8
```

## DECODE

```
CRCX 36

!--- The create connection (CRCX) message is received from the call agent.
!--- The sequence number is 26.
!--- This is a new call coming from another endpoint.

aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com

!--- This is the MGCP endpoint ID.
!--- Note: This is the called party.

MGCP 0.1

!--- The MGCP version is 0.1.

N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427

!--- This is the notified entity ID with destination port number.

C: 3

!--- The call identification number (C) is 3.
!--- Note: This is NOT the callerid.

!--- This is a new incoming call.

L: p:10-20

!--- This local connection option (L) requests a packetization
!--- period (p) of 10 or 20 milliseconds.

a:PCMU;PCMA,

!--- The compression algorithm (a) options are: u-law PCM or a-law PCM.

e:off, s:off,

!--- The call agent has set both echo cancellation (e) and
!--- silence suppression (s), also known as VAD, to disabled.

t:a0

!--- The IP header type of service (t) byte for this call is
!--- hexadecimal a0, which indicates IP precedence of 5 and
!--- minimized delay.

M: inactive

!--- The connection mode (M) is inactive, which tells the gateway to
!--- neither send nor receive packets on this connection.

v=0

!--- The SDP version is 0.

o=- 3 0 IN IP4 13.200.2.7

!--- The origin (o) field indicates that no user ids are used via (-).
!--- The session ID is 3 and the version of this announcement is 0.
!--- An Internet (IN) IP version 4 destination address
```

	<pre> !--- of 13.200.2.7 is also specified.  s=Cisco SDP 0  !--- The session name (s) is "Cisco SDP 0".  c=IN IP4 13.200.2.7  !--- The connection data (c) field specifies an Internet (IN) !--- IP version 4 destination address of 13.200.2.7.  t=0 0  !--- The (t) represents the start (0) and stop (0) times for this !--- call instance. When both start and stop are 0, the call !--- is considered permanent.  m=audio 16388 RTP/AVP 0 8  !--- The SDP media description (m) specifies a media type of audio, !--- destination UDP port 16388 for voice-bearer traffic, !--- and RTP encapsulation using AVP !--- with RTP payload type of 0 or 8. </pre>
MSG	<pre> send_mgcp_msg, MGCP Packet sent ----&gt; 200 36 I: 1F v=0 o=- 2 0 IN IP4 13.200.2.6 s=Cisco SDP 0 c=IN IP4 13.200.2.6 t=0 0 m=audio 16390 RTP/AVP 0 </pre>
DECODE	<pre> 200 36  !--- This sent acknowledgement states that CRCX sequence !--- 36 was executed normally.  I: 1F  !--- The connection identification number is 1F. !--- <b>Note:</b> This is for the called leg of the second call.  v=0  !--- The SDP version is 0.  o=- 2 0 IN IP4 13.200.2.6  !--- The origin (o) field indicates that no user IDs are used via (-). !--- The session ID is 2 and the version of this announcement is 0. !--- An Internet (IN) IP version 4 source address of 13.200.2.6 !--- is also specified.  s=Cisco SDP 0  !--- The session name (s) is "Cisco SDP 0".  c=IN IP4 13.200.2.6  !--- The connection data (c) field specifies an Internet (IN) !--- IP version 4 source address of 13.200.2.6.  t=0 0 </pre>

	<pre> !--- The (t) represents the start (0) and stop (0) times for this !--- call instance. When both start and stop are 0, the !--- call is considered permanent.  m=audio 16390 RTP/AVP 0  !--- The SDP media description (m) specifies a media type of audio, !--- destination UDP port 16390 for voice-bearer traffic, and RTP !--- encapsulation using AVP with RTP payload type of 0. </pre>
<b>MSG</b>	<pre> MGCP Packet received - RQNT 38 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 5 R: L/hu(N),L/hf(N) S: L/wt </pre>
<b>DECODE</b>	<pre> RQNT 38  !--- The notification request message is sent from the call agent !--- to report the observed event. The sequence number is 38.  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 5  !--- The request ID (X) is 5.  R: L/hu(N),L/hf(N)  !--- The call agent requests (R) to be notified (N) !--- immediately that an on-hook (hu) or hook flash (hf) !--- condition exists.  S: L/wt  !--- The call agent sends a signaling request (S) to have this !--- gateway use the line (L) package and play the call !--- waiting tone (wt). </pre>
<b>MSG</b>	<pre> send_mgcp_msg, MGCP Packet sent ----&gt; 200 38 OK </pre>
<b>DECODE</b>	<pre> 200 38 OK  !--- This sent acknowledgement states that RQNT sequence !--- 38 was executed normally. </pre>
<b>MSG</b>	<pre> send_mgcp_msg, MGCP Packet sent ----&gt; NTFY 174 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 5 O: L/hf </pre>
<b>DECODE</b>	<pre> NTFY 174 </pre>

	<pre> !--- This is the notify message sent to the call agent to report !--- the observed event. The notify sequence number is 174.  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 5  !--- The request ID is 5.  O: L/hf  !--- The observed (O) event hook flash (hf) is detected with use of line (L) !--- package. </pre>
<b>MSG</b>	<pre> MGCP Packet received - 200 174 OK </pre>
<b>DECODE</b>	<pre> 200 174 OK  !--- The received acknowledgement states that NTFY sequence !--- 174 was executed normally. </pre>
<b>MSG</b>	<pre> MGCP Packet received - RQNT 40 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 5 R: L/hu(N),L/hf(N) S: </pre>
<b>DECODE</b>	<pre> RQNT 40  !--- This is the notification request message sent from the call agent !--- to report the observed event. The sequence number is 40.  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 5  !--- The request ID (X) is 5.  R: L/hu(N),L/hf(N)  !--- The call agent requests (R) to be notified (N) !--- immediately that an on-hook (hu) or hook flash (hf) </pre>

	<pre>!--- condition exists.  S:  !--- The call agent sends a signaling request (S) to have this !--- gateway signal nothing, which stops the playout of !--- the call waiting tone (wt).</pre>
<b>MSG</b>	<pre>send_mgcp_msg, MGCP Packet sent ---&gt; 200 40 OK</pre>
<b>DECODE</b>	<pre>200 40 OK  !--- This sent acknowledgement states that RQNT sequence !--- 40 was executed normally.</pre>
<b>MSG</b>	<pre>MGCP Packet received - MDCX 41 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 I: 1D C: 2 M: inactive</pre>
<b>DECODE</b>	<pre>MDCX 41  !--- This is the modify connection (MDCX) message received !--- from the call agent. The sequence number is 41.  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID. !--- <b>Note:</b> This is the calling party.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  I: 1D  !--- The connection identification number is 1D. !--- <b>Note:</b> This is for the calling leg of the first call.  C: 2  !--- The call identification number (C) is 2. !--- <b>Note:</b> This is NOT the callerid.  M: inactive  !--- The connection mode (M) is inactive, which tells the gateway !--- to neither send nor receive packets on this connection.</pre>
<b>MSG</b>	<pre>send_mgcp_msg, MGCP Packet sent ---&gt; 200 41 OK</pre>
<b>DECODE</b>	<pre>200 41 OK  !--- This received acknowledgement states that MDCX sequence !--- 41 was executed normally.</pre>

<b>MSG</b>	<pre> MGCP Packet received - MDCX 42 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 I: 1F C: 3 M: sendrecv </pre>
<b>DECODE</b>	<pre> MDCX 42  !--- The modify connection (MDCX) message is received from the call agent. !--- The sequence number is 42.  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID. !--- <b>Note:</b> This is the second called party.  MGCP 0.1  !--- The MGCP version is 0.1. . N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  I: 1F  !--- The connection identification number is 1F. !--- <b>Note:</b> This is for the called leg of the second call.  C: 3  !--- The call identification number (C) is 3. !--- <b>Note:</b> This is NOT the callerid.  M: sendrecv  !--- The connection mode (M) is a two-way send and receive at this point, !--- which allows full conversation. </pre>
<b>MSG</b>	<pre> send_mgcp_msg, MGCP Packet sent ---&gt; 200 42 OK </pre>
<b>DECODE</b>	<pre> 200 42 OK  !--- This received acknowledgement states that MDCX sequence !--- 42 was executed normally. </pre>
<b>MSG</b>	<pre> send_mgcp_msg, MGCP Packet sent ---&gt; NTFY 175 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 5 O: L/hf </pre>
<b>DECODE</b>	<pre> NTFY 175  !--- The notify message is sent to the call agent to report !--- the observed event. The notify sequence number is 175.  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1. </pre>

	<pre> N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 5  !--- The request ID is 5.  O: L/hf  !--- The observed event (O) hook flash (hf) is detected with use of line (L) !--- package. </pre>
<b>MSG</b>	<pre> MGCP Packet received - 200 175 OK </pre>
<b>DECODE</b>	<pre> 200 175 OK  !--- This received acknowledgement states that NTFY sequence !--- 175 was executed normally. </pre>
<b>MSG</b>	<pre> MGCP Packet received - RQNT 45 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 5 R: L/hu(N),L/hf(N) S: </pre>
<b>DECODE</b>	<pre> RQNT 45  !--- The notification request message is sent from the call agent to !--- report the observed event. The sequence number is 45.  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 5  !--- The request ID (X) is 5.  R: L/hu(N),L/hf(N)  !--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) or hook flash (hf) condition exists.  S:  !--- The call agent sends a signaling request (S) to have this !--- gateway signal nothing to the endpoint. </pre>
<b>MSG</b>	<pre> send_mgcp_msg, MGCP Packet sent ----&gt; 200 45 OK </pre>
<b>DECODE</b>	<pre> 200 45 OK </pre>

	<pre>!--- This sent acknowledgement states that RQNT sequence !--- 45 was executed normally.</pre>
<b>MSG</b>	<pre>MGCP Packet received - MDCX 46 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 I: 1F C: 3 M: inactive</pre>
<b>DECODE</b>	<pre>MDCX 46  !--- The modify connection (MDCX) message is received from the call agent. !--- The sequence number is 46.  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID. !--- <b>Note:</b> This is the called party.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  I: 1F  !--- The connection identification number is 1F. !--- <b>Note:</b> This is for the called leg of the second call.  C: 3  !--- The call identification number (C) is 3. !--- <b>Note:</b> This is NOT the callerid.  M: inactive  !--- The connection mode (M) is inactive, which tells the gateway to neither !--- send nor receive packets on this connection.</pre>
<b>MSG</b>	<pre>send_mgcp_msg, MGCP Packet sent ----&gt; 200 46 OK</pre>
<b>DECODE</b>	<pre>200 46 OK  !--- This received acknowledgement states that MDCX sequence !--- 46 was executed normally.</pre>
<b>MSG</b>	<pre>MGCP Packet received - MDCX 47 aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 I: 1D C: 2 M: sendrecv</pre>
<b>DECODE</b>	<pre>MDCX 47  !--- The modify connection (MDCX) message is received from the call agent. !--- The sequence number is 47.  aaln/S1/SU0/0@opt0-2611-1.ss.cisco.com</pre>

	<pre> !--- This is the MGCP endpoint ID. !--- <b>Note:</b> This is the first calling party.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  I: 1D  !--- The connection identification number is 1D. !--- <b>Note:</b> This is for the calling leg of the first call.  C: 2  !--- The call identification number (C) is 2. !--- <b>Note:</b> This is NOT the callerid.  M: sendrecv  !--- The connection mode (M) is a two-way send and receive at this !--- point, which allows full conversation. </pre>
<b>MSG</b>	<pre> send_mgcp_msg, MGCP Packet sent ---&gt; 200 47 OK </pre>
<b>DECODE</b>	<pre> 200 47 OK  !--- The received acknowledgement states that MDCX sequence !--- 47 was executed normally. </pre>

<b>MSG</b>	<pre> send_mgcp_msg, MGCP Packet sent ---&gt; NTFY 86 aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 8 O: D/4720001 </pre>
<b>DECODE</b>	<pre> NTFY 86  !--- This is the notify message sent to the call agent to report !--- the observed event. The notify sequence number is 86.  aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 8  !--- The request ID is 8.  O: D/4720001  !--- The observed event (O) dialed digits (472-0001) is detected with use of </pre>

	<i>!--- the DTMF (D) package.</i>
<b>MSG</b>	MGCP Packet received - 200 86 OK
<b>DECODE</b>	200 86 OK <i>!--- This received acknowledgement states that NTFY sequence !--- 86 was executed normally.</i>
<b>MSG</b>	MGCP Packet received - RQNT 34 aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 8 R: L/hu(N)
<b>DECODE</b>	RQNT 34 <i>!--- This is the notification request message sent from the call agent !--- to report the observed event. The sequence number is 34.</i>  aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com <i>!--- This is the MGCP endpoint ID.</i>  MGCP 0.1 <i>!--- The MGCP version is 0.1.</i>  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 <i>!--- This is the notified entity ID with destination port number.</i>  X: 8 <i>!--- The request ID is 8.</i>  R: L/hu(N) <i>!--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) event occurs.</i>
<b>MSG</b>	send_mgcp_msg, MGCP Packet sent ---> 200 34 OK
<b>DECODE</b>	200 34 OK <i>!--- This sent acknowledgement states that RQNT sequence !--- 34 was executed normally.</i>
<b>MSG</b>	MGCP Packet received - CRCX 35 aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 C: 3 L: p:10-20, a:PCM;PCMA;G726-32, e:off, s:off, t:a0 M: recvonly
<b>DECODE</b>	CRCX 35 <i>!--- The create connection (CRCX) message is received from the call agent. !--- The sequence number is 35.</i>  aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com <i>!--- This is the MGCP endpoint ID.</i>

	<pre> !--- Note: This is the calling party. MGCP 0.1  !--- The MGCP version is 0.1. N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number. C: 3  !--- The call identification number (C) is 3. !--- Note: This is NOT the callerid.  L: p:10-20 ! !--- This local connection option (L) requests a packetization !--- period (p) of 10 or 20 milliseconds.  a:PCMU;PCMA;G726-32,  !--- The compression algorithm (a) options are: u-law pulse code modulation (PCM), !--- a-law,PCM, or 32 kbps G.726.  e:off, s:off,  !--- The call agent has set both echo cancellation (e) and silence !--- suppression (s), also known as VAD, to disabled.  t:a0  !--- The IP header type of service (t) byte for this call is !--- hexadecimal a0, which indicates IP precedence of 5 and !--- minimized delay.  M: recvonly  !--- The connection mode (M) is a one-way receive at this point, until !--- the called party answers. </pre>
<b>MSG</b>	<pre> send_mgcp_msg, MGCP Packet sent ----&gt; 200 35 I: 11 v=0 o=- 3 0 IN IP4 13.200.2.7 s=Cisco SDP 0 c=IN IP4 13.200.2.7 t=0 0 m=audio 16388 RTP/AVP 0 8 </pre>
<b>DECODE</b>	<pre> 200 35  !--- This sent acknowledgement states that CRCX sequence !--- 36 was executed normally.  I: 11  !--- The connection identification number is 11.  v=0  !--- The session description protocol (SDP) version is 0.  o=- 3 0 IN IP4 13.200.2.7 </pre>

	<pre> !--- The origin (o) field indicates that no user IDs are used via (-). !--- The session ID is 3 and the version of this announcement is 0. !--- An Internet (IN) IP version 4 source address of !--- 13.200.2.7 is also specified.  s=Cisco SDP 0  !--- The session name (s) is "Cisco SDP 0".  c=IN IP4 13.200.2.7  !--- The connection data (c) field specifies an Internet (IN) !--- IP version 4 source address of 13.200.2.7.  t=0 0  !--- The (t) represents the start (0) and stop (0) times for this !--- call instance. When both start and stop are 0, the call !--- is considered permanent.  m=audio 16388 RTP/AVP 0 8  !--- The SDP media description (m) specifies a media type of audio, !--- destination User Datagram Protocol (UDP) port 16388 for voice-bearer traffic, !--- and Real-Time Transport Protocol (RTP) encapsulation using !--- audio video profile (AVP) with RTP payload type of 0 or 8. </pre>
<b>MSG</b>	<pre> MGCP Packet received - MDCX 37 aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 I: 11 C: 3 M: recvonly v=0 o=- 2 0 IN IP4 13.200.2.6 s=Cisco SDP 0 c=IN IP4 13.200.2.6 t=0 0 m=audio 16390 RTP/AVP 0 </pre>
<b>DECODE</b>	<pre> MDCX 37  !--- This modify connection (MDCX) message is received from the call agent. !--- The sequence number is 37.  aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com  !--- This is the MGCP endpoint ID. !--- <b>Note:</b> This is the calling party.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  I: 11  !--- The connection identification number is 11. !--- <b>Note:</b> This is for the calling leg.  C: 3  !--- The call identification number (C) is 3. </pre>

	<pre> !--- Note: This is the calling party.  M: recvonly  !--- The connection mode (M) is a one-way receive at this point, !--- until the called party answers.  v=0  !--- The SDP version is 0.  o=- 2 0 IN IP4 13.200.2.6  !--- The origin (o) field indicates that no user IDs are used via (-). !--- The session ID is 2 and the version of this announcement is 0. !--- An Internet (IN) IP version 4 destination address of !--- 13.200.2.6 is also specified.  s=Cisco SDP 0  !--- The session name (s) is "Cisco SDP 0".  c=IN IP4 13.200.2.6  !--- The connection data (c) field specifies an Internet (IN) !--- IP version 4 destination address of 13.200.2.6.  t=0 0  !--- The (t) represents the start (0) and stop (0) times for !--- this call instance. When both start and stop are 0, !--- the call is considered permanent.  m=audio 16390 RTP/AVP 0  !--- The SDP media description (m) specifies a media type of audio, !--- destination UDP port 16390 for voice-bearer traffic, and !--- RTP encapsulation using AVP with RTP payload type of 0. </pre>
<b>MSG</b>	<pre> send_mgcp_msg, MGCP Packet sent ---&gt; 200 37 OK </pre>
<b>DECODE</b>	<pre> 200 37 OK  !--- This received acknowledgement states that MDCX sequence !--- 37 was executed normally. </pre>
<b>MSG</b>	<pre> MGCP Packet received - RQNT 39 aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 8 R: L/hu(N) S: G/rt </pre>
<b>DECODE</b>	<pre> RQNT 39  !--- This is the notification request message sent from the call agent !--- to report the observed event. The sequence number is 39.  aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1 </pre>

	<pre> !--- The MGCP version is 0.1. N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number. X: 8  !--- The request ID is 8. R: L/hu(N)  !--- The call agent requests (R) to be notified (N) !--- immediately that an on-hook (hu) condition exists. S: G/rt  !--- The call agent sends a signaling request (S) to have this !--- gateway use the generic (G) package and generate a ring-back tone. </pre>
<b>MSG</b>	<pre> send_mgcp_msg, MGCP Packet sent ---&gt; 200 39 OK </pre>
<b>DECODE</b>	<pre> 200 39 OK  !--- This sent acknowledgement states that RQNT sequence !--- 39 was executed normally. </pre>
<b>MSG</b>	<pre> MGCP Packet received - MDCX 43 aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 I: 11 C: 3 M: sendrecv </pre>
<b>DECODE</b>	<pre> MDCX 43  !--- This modify connection (MDCX) message is received from !--- the call agent. The sequence number is 43.  aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  I: 11  !--- The connection identification number is 11.  C: 3  !--- The call identification number (C) is 3. !--- <b>Note:</b> This is NOT the callerid.  M: sendrecv  !--- The connection mode (M) is a two-way send and receive at this point, !--- which allows full conversation. </pre>

<b>MSG</b>	send_mgcp_msg, MGCP Packet sent ---> 200 43 OK
<b>DECODE</b>	200 43 OK  <i>!--- This received acknowledgement states that MDCX sequence !--- 43 was executed normally.</i>
<b>MSG</b>	MGCP Packet received - RQNT 44 aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 8 R: L/hu(N),L/hf(N) S:
<b>DECODE</b>	RQNT 44  <i>!--- This is the notification request message sent from the call agent to !--- report the observed event. The sequence number is 44.</i>  aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com  <i>!--- This is the MGCP endpoint ID.</i>  MGCP 0.1  <i>!--- The MGCP version is 0.1.</i>  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  <i>!--- This is the notified entity ID with destination port number.</i>  X: 8  <i>!--- This request ID (X) is 8.</i>  R: L/hu(N),L/hf(N)  <i>!--- The call agent requests (R) to be notified (N) immediately !--- that an on-hook (hu) or hook flash (hf) condition exists.</i>  S:  <i>!--- The call agent sends a signaling request (S) to have this !--- gateway signal nothing, which stops the playout of !--- the ring-back tone (rt).</i>
<b>MSG</b>	send_mgcp_msg, MGCP Packet sent ---> 200 44 OK
<b>DECODE</b>	200 44 OK  <i>!--- This sent acknowledgement states that RQNT sequence !--- 44 was executed normally.</i>
<b>MSG</b>	send_mgcp_msg, MGCP Packet sent ---> NTFY 87 aaln/S1/SU0/1@opt0-2611-2.ss.cisco.com MGCP 0.1 N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427 X: 8 O: L/hu
<b>DECODE</b>	NTFY 87  <i>!--- This is the notify message sent to the call agent to report</i>

	<pre> !--- the observed event. The notify sequence number is 87. aaln/S1/SU0/1@opt0-2611-1.ss.cisco.com  !--- This is the MGCP endpoint ID.  MGCP 0.1  !--- The MGCP version is 0.1.  N: mgcp.ss-rtp-opt0CA.ss.cisco.com:2427  !--- This is the notified entity ID with destination port number.  X: 8  !--- The request ID is 8.  O: L/hd  !--- The observed event (O) off-hook (hd) is detected with use of !--- line (L) package. </pre>
<b>MSG</b>	<pre> MGCP Packet received - 200 87 OK </pre>
<b>DECODE</b>	<pre> 200 87 OK  !--- This received acknowledgement states that NTFY sequence !--- 87 was executed normally. </pre>

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