排除分叉从Cisco IP电话的媒体故障到媒体感觉

Contents

简介

本文描述排除分叉从Cisco IP电话的媒体的步骤故障记录在MediaSense服务器的呼叫。

Prerequisites

Requirements

Cisco 建议您了解以下主题：

- Cisco Unified通信管理器(CUCM)
- 思科 MediaSense

Components Used

本文档中的信息基于以下软件和硬件版本：

- CUCM版本10.5.2.10000-5
- Cisco MediaSense 10.0.1.10000-95

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.

背景Infromation

Cisco MediaSense是为在网络的设备提供记录功能的语音和视频媒介使用会话初始化协议(SIP)的一个基于网络平台。充分地集成思科的统一的通信体系结构， MediaSense在是适当地被配置的CUCM的设备自动地捕获并且存储每次VoIP会话。

1. MediaSense接受音频编码解码器以下面的格式：
   - g.711 μLaw和aLaw
   - g.722
   - g.729， g.729a， g.729b
   - 预先的音频编码-低延迟(AAC-LD)亦称MPEG音频Layer4 -低开销MPEG-4音频传输多路(MP4A/LATM)
2. 在H.264编码的MediaSense视频

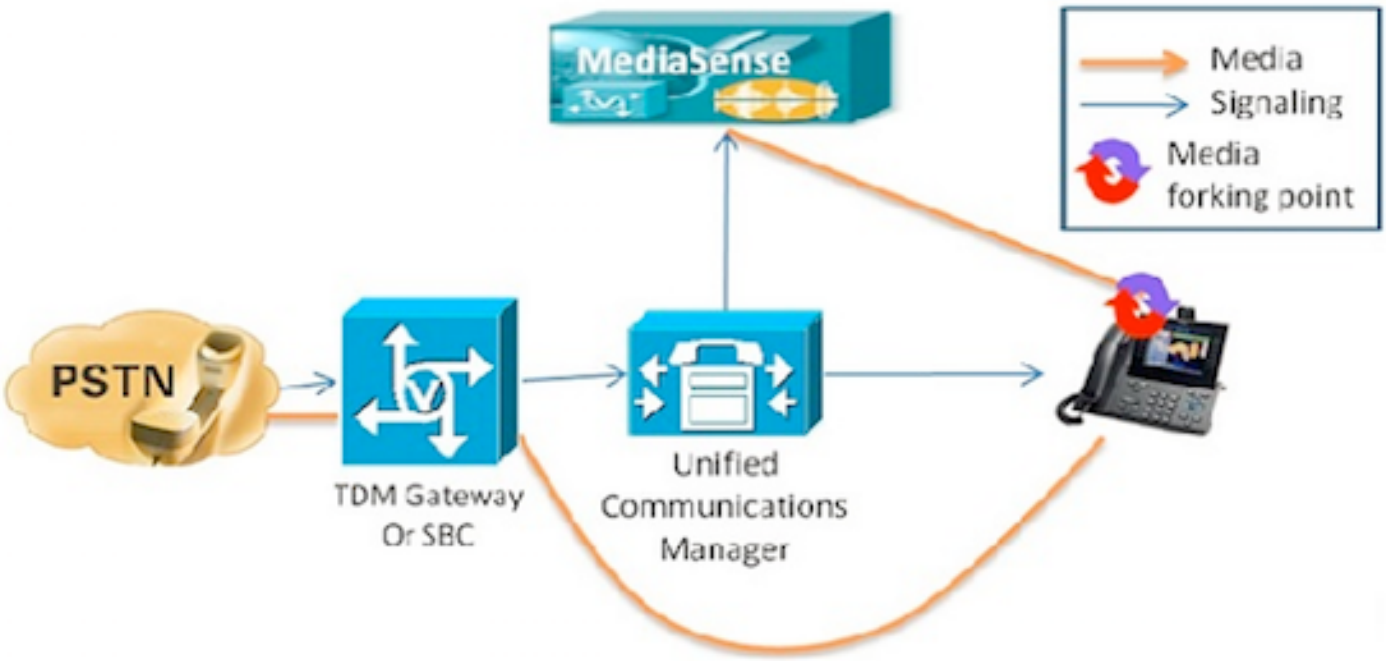
方案

1. 基本的统一的通信管理器配置-内部对外部
2. 基本的统一的通信管理器配置-内部到内部

从MediaSense的角度，实际上没有两个方案之间的区别。

在两种情况下，媒体由电话分叉了被发送到分叉的流是获取的记录设备。因为有在他们的工作情况上的一个重大的区别在解决方案级别，他们区分得这里。

如此镜像所显示，统一的通信内部对外部管理器的配置-。



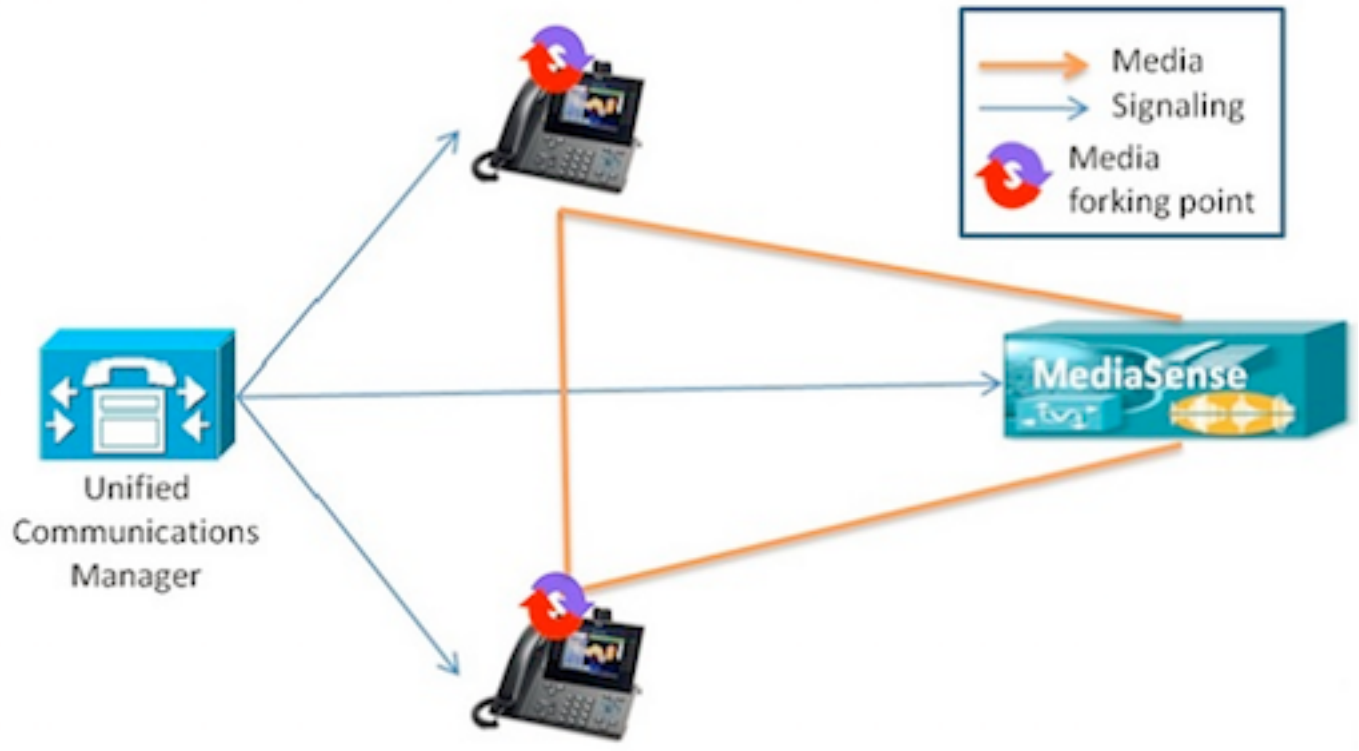
这显示基本的统一的通信管理器配置与一个外部呼叫者的Cisco IP电话呼叫哪里被记录。只要内部的电话配置有一个适当的记录配置文件，这适用于Inbound和Outbound呼叫。

一旦连接从信令方面被建立，媒体直接地从分叉的电话流到记录服务器。

如果呼叫被转移远离此电话，录制会话结束。呼叫的下个分段将被捕获，只有当占去呼叫的电话为

记录被配置。

如此镜像所显示，统一的通信内部到内部管理器的配置-。



这显示基本的统一的通信管理器配置呼叫哪里在是在企业内的内部用户之间。重要的是一个电话为记录被配置。万一两个电话为记录被配置，然后两次独立的记录会话将是获取的。

Troubleshoot

本部分提供了可用于对配置进行故障排除的信息。

Step 1. MediaSenseCUCM

CUCM

- 控制设备和权限信息在应用程序用户(AXL)。
- 记录的配置文件和目的地地址
- 指向MediaSense的SIP Trunk。
- 路由模式

MediaSense

您能验证基本配置使用**show tech call_control_service** on命令MediaSense line命令在系统安装以后。

此命令显示关于在系统运行的Cisco MediaSense呼叫控制服务的信息。

Cisco MediaSense呼叫控制服务应该运行为了此命令能成功执行。

在输出中获取的系统信息。

```
 admin:show tech call_control_service

<html> <head> <title>mediasense</title> </head> <body> <pre>
--------------------------------


Core: ver=10.0.1

 FCS, op=SHORT
Started at Mon Jul 13 10:55:53 PDT 2015
Report at Tue Jul 21 02:05:26 PDT 2015
Running at mediasense, processors=6, pId=28270
framework: state=In Service; {AMS_ADAPTER=

IN_SERVICE

, SIP_ADAPTER=

IN_SERVICE

, RECORDING_ADAPTER=

IN_SERVICE

}
logLevel=DEBUG, traceMask=0x307, DEBUG traceMask=0x100

System Info:
Memory: used=46.509 MB(13.671 MB), alloc=790.458 MB(0.0 MB)
CPU: avrLoad=0.37, procTime=00:10:18
Threads=176, peakThreads=224
```

记录的会话信息在show tech call_control_service输出中。

```
SessionManagerImpl: size=0
Recording Sessions:

started=17

,

completed=17

 (100.0000%), errors=0, processing=0, maxProcessing=1, meanTime=38.310 sec, stDev=76.242 sec,
maxTime=00:05:16, lastTime=38291 mSec
Recording Setup Time:

started=17

,

completed=17

 (100.0000%), errors=0, processing=0, maxProcessing=1, meanTime=201 mSec, stDev=34 mSec,
maxTime=308 mSec, lastTime=142 mSec
```

SIP适配器信息在show tech call_control_service输出中。

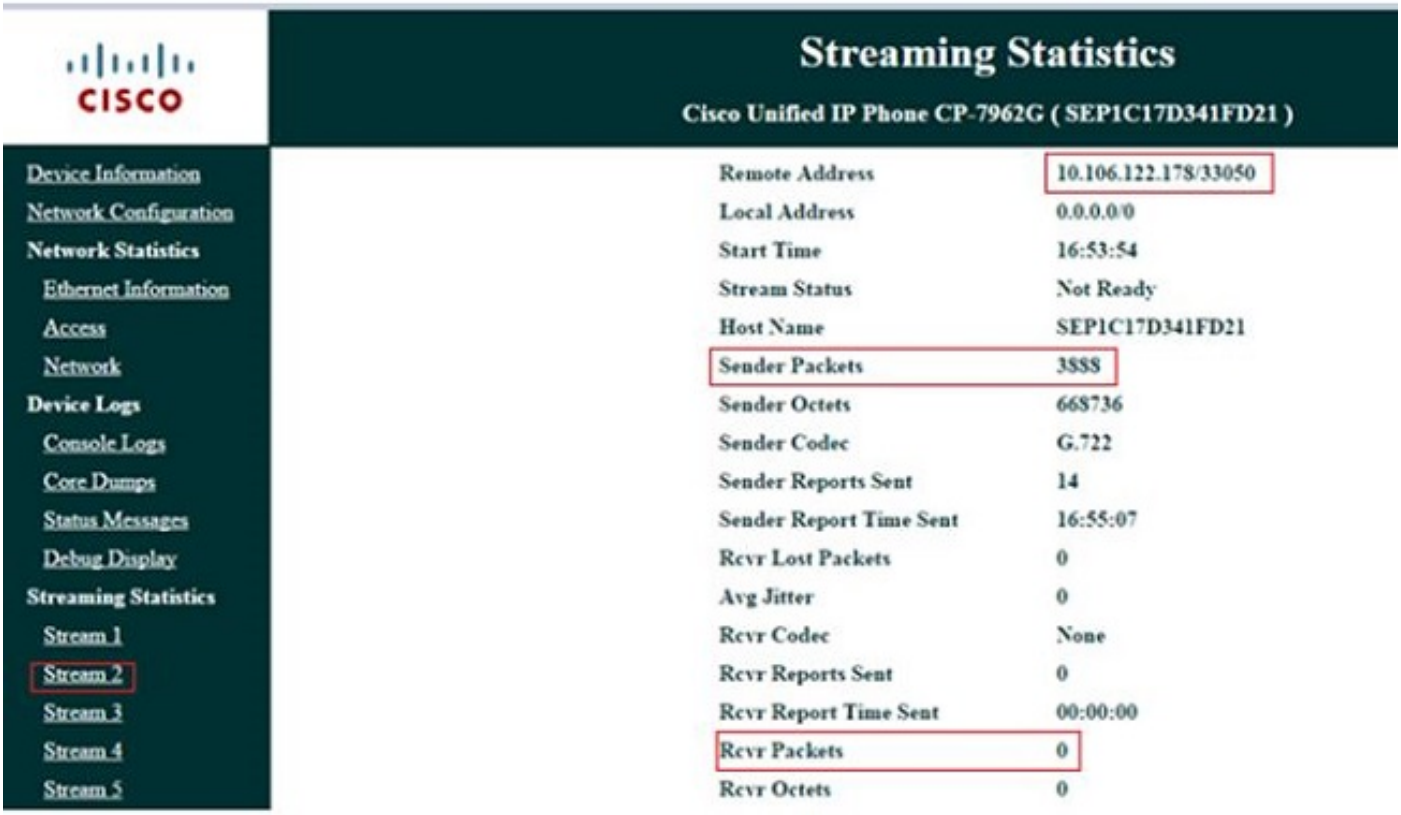
```
Sip Adapter:
LocalAddress=

10.106.122.178

:5060; RemoteAddresses [sip:

10.106.122.174

:

5060

 sip:

10.106.122.175:5060

 ], controlTransport=tcp
based on Cisco Caffeine SIP Stack,

version=3.1.3.502

, nonBlockingTCP=true, closeConnectionOnTimeout=false
state=AcceptCalls, blockingMode=NONE
SdpUtil: m=audio %d RTP/AVP 102 0 8 9 18, m=video %d RTP/AVP 97
Executor: activeCount=0, poolSize=0, largestPoolSize=2, queueSize=0
```

提示：请参见为了设置呼叫记录

Step 2. 检查电话是否是流媒体到MediaSense服务器。

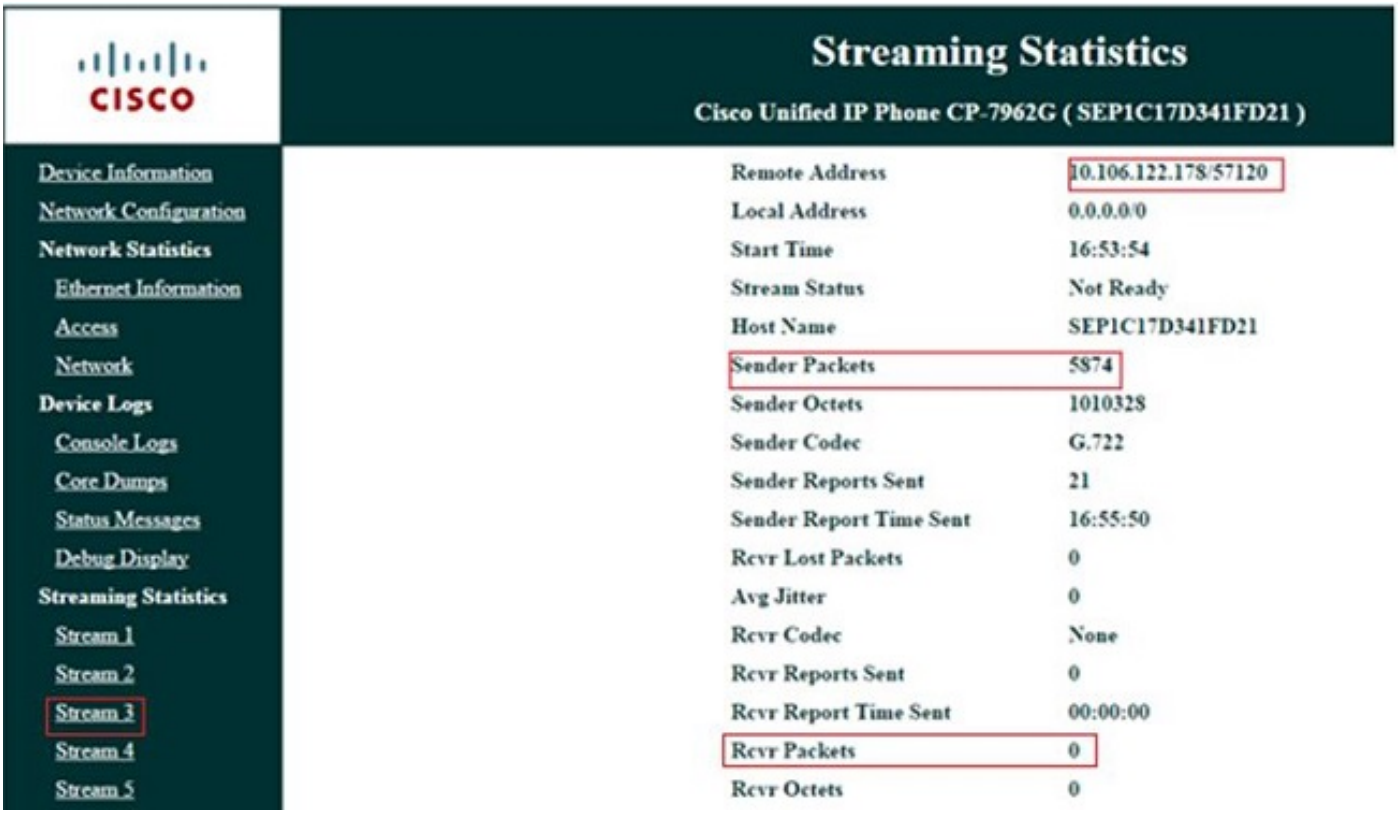
流1将是呼叫给外部呼叫者。流2将包含关于分叉的呼叫的信息到MediaSense服务器。接受器信息包永远将保持零为分叉的呼叫。

如此镜像所显示，近端媒体流出对MediaSense。



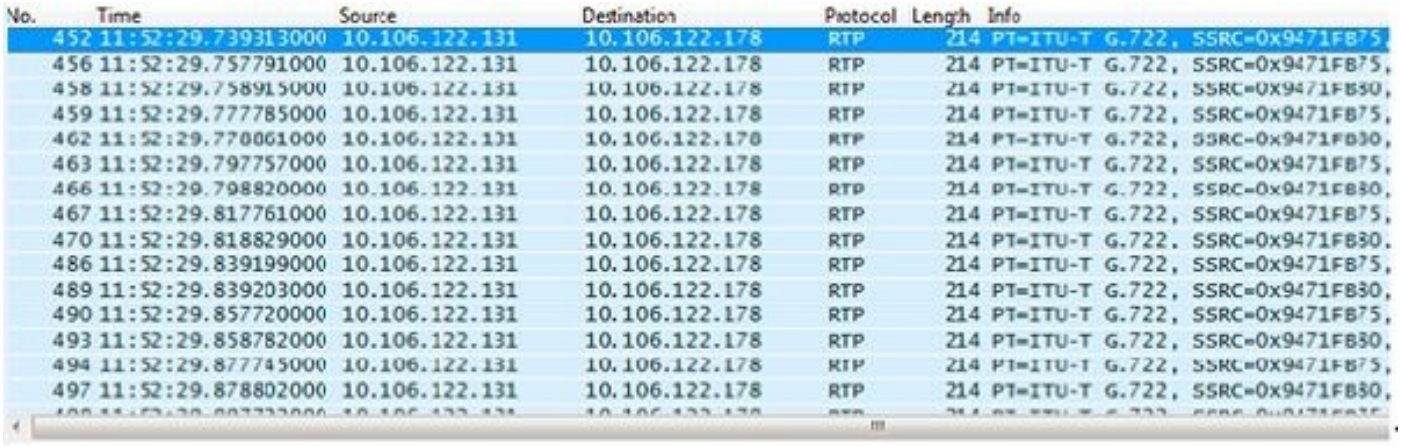
远端媒体流出对MediaSense

如此镜像所显示，放出在流接收的远端的媒体信息1在流3.分叉。



您能通过采取在电话的信息包获取验证它。

如此镜像所显示，电话Pcap。



No.	Time	Source	Destination	Protocol	Length	Info
452	11:52:29.739313000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB75,
456	11:52:29.757791000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB75,
458	11:52:29.758915000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB30,
459	11:52:29.777785000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB75,
462	11:52:29.778061000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB30,
463	11:52:29.797757000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB75,
466	11:52:29.798820000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB30,
467	11:52:29.817761000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB75,
470	11:52:29.818829000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB30,
486	11:52:29.839199000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB75,
489	11:52:29.839203000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB30,
490	11:52:29.857720000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB75,
493	11:52:29.858782000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB30,
494	11:52:29.877745000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB75,
497	11:52:29.878802000	10.106.122.131	10.106.122.178	RTP	214	PT=ITU-T G.722, SSRC=0x9471FB30,

提示：参考收集信息包获取从IP电话

步骤3.验证在CUCM和MediaSense的呼叫信令。

采取的示例这里包含从SIP电话的IP呼叫有扩展名的4011到有扩展名的4009 SCCP电话。记录目的地编号是7878。

CUCM日志分析

邀请发送从SIP电话到CUCM。

```
 06053008.002 |08:39:47.013 |AppInfo  |SIPTcp - wait_SdlReadRsp: Incoming SIP TCP message from
10.106.122.153 on port 53979 index 44 with 2126 bytes:
[50171,NET]
INVITE sip:4009@10.106.122.174;user=phone SIP/2.0
Via: SIP/2.0/TCP 10.106.122.153:53979;branch=z9hG4bK22e1618f
From: "4011" <sip:4011@10.106.122.174>;tag=203a0782d99f04115d77007a-7abfc08c
To: <sip:4009@10.106.122.174>
Call-ID: 203a0782-d99f000c-57711fea-6ba95503@10.106.122.153
Max-Forwards: 70
Date: Thu, 16 Jul 2015 15:39:46 GMT
CSeq: 101 INVITE


User-Agent: Cisco-CP8945/9.4.2


Contact: <sip:48a499a0-f78e-4baa-a287-5c6eeb0f2fe7@10.106.122.153:53979;transport=tcp>;video
Expires: 180
Accept: application/sdp
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE,SUBSCRIBE,INFO
Remote-Party-ID: "4011" <sip:4011@10.106.122.174>;party=calling;id-
type=subscriber;privacy=off;screen=yes
Supported: replaces,join,sdp-anat,norefersub,resource-priority,extended-refer,X-cisco-
callinfo,X-cisco-serviceuri,X-cisco-escapecodes,X-cisco-service-control,X-cisco-srtp-fallback,X-
cisco-monrec,X-cisco-config,X-cisco-sis-7.0.0,X-cisco-xsi-8.5.1
Allow-Events: kpml,dialog
Recv-Info: conference
Recv-Info: x-cisco-conference
Content-Length: 986
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 15743 0 IN IP4 10.106.122.153
s=SIP Call
b=AS:2000
t=0 0
m=audio

16420

 RTP/AVP 102 9 0 8 116 18 101
c=IN IP4

10.106.122.153


a=trafficclass:conversational.audio.avconf.aq:admitted
a=rtpmap:102 L16/16000
a=rtpmap:9 G722/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:116 iLBC/8000
a=fmtp:116 mode=20
a=rtpmap:18 G729/8000
a=fmtp:18 annexb=no
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

UserAgent是Cisco 8945 IP电话发送至于CUCM。

CUCM发送ACK到SIP电话，当SCCP电话应答呼叫时，并且会话被设立。

```
06053236.001 |08:39:49.777 |AppInfo  |SIPTcp - wait_SdlSPISignal: Outgoing SIP TCP message to
10.106.122.153 on port 53979 index 44
[50174,NET]
SIP/2.0 200 OK
Via: SIP/2.0/TCP 10.106.122.153:53979;branch=z9hG4bK22e1618f
From: "4011" <sip:4011@10.106.122.174>;tag=203a0782d99f04115d77007a-7abfc08c
To: <sip:4009@10.106.122.174>;tag=16789~78868996-a8aa-4784-b765-86098b176d95-32833193
Date: Thu, 16 Jul 2015 15:39:47 GMT
Call-ID: 203a0782-d99f000c-57711fea-6ba95503@10.106.122.153
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Supported: replaces
Server: Cisco-CUCM10.5
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; gci= 1-
7171; isVoip; call-instance= 1
Send-Info: conference, x-cisco-conference
Remote-Party-ID: <sip:4009@10.106.122.174>;party=called;screen=yes;privacy=off
Remote-Party-ID: <sip:4009@10.106.122.174;user=phone>;party=x-cisco-original-called;privacy=off
Contact: <sip:4009@10.106.122.174:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 435

v=0
o=CiscoSystemsCCM-SIP 16789 1 IN IP4 10.106.122.174
s=SIP Call
c=IN IP4
```

```
10.106.122.131


b=AS:64
t=0 0
m=audio

18840

 RTP/AVP 9 101
a=ptime:20
a=rtpmap:9 G722/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=trafficclass:conversational.audio.aq:admitted
```

电话按表明的记录软键用户调用记录功能。

```
06053271.001 |08:39:52.681 |AppInfo  |StationInit: (0000045) SoftKeyEvent

softKeyEvent=74(Record)

 lineInstance=1 callReference=32833194.
```

为记录锁定的编码获得。

```
06053274.002 |08:39:52.681 |AppInfo  | StationCdpc: star_MediaExchangeAgenaQueryCapability -
Device SEP1C17D341FD21, codec locked due to recording,

codecType=6
```

内置的网桥(围嘴)资源得到分配。

```
06053309.000 |08:39:52.682 |SdlSig   |AllocateBibResourceRes
|resource_rsvp                  |MediaResourceCdpc(1,100,139,52)
|BuiltInBridgeControl(1,100,239,6) |1,100,14,269032.3452^10.106.122.131^SEP1C17D341FD21 |[R:N-
H:0,N:0,L:0,V:0,Z:0,D:0]  CI=32833195 BridgeDn=

b00123906001

 Pid=100,1,63,45 SsType=16777245 SsKey=43 deviceCap=0
```

CUCM在围嘴资源拨号。

```
06053318.008 |08:39:52.683 |AppInfo  ||PretransformCallingPartyNumber=
|CallingPartyNumber=
|DialingPartition=
|DialingPattern=

b00123906001


|FullyQualifiedCalledPartyNumber=

b00123906001
```

围嘴然后拨号对MediaSense记录编号7878。

```
06053358.013 |08:39:52.686 |AppInfo  ||PretransformCallingPartyNumber=b00123906001
|CallingPartyNumber=

b00123906001


|DialingPartition=
|DialingPattern=

7878


|FullyQualifiedCalledPartyNumber=

7878
```

邀请被发送到MediaSense。

```
06053416.001 |08:39:52.690 |AppInfo  |SIPTcp - wait_SdlSPISignal: Outgoing SIP TCP message to
10.106.122.178 on port 5060 index 71
[50176,NET]
INVITE sip:7878@10.106.122.178:5060 SIP/2.0
Via: SIP/2.0/TCP 10.106.122.174:5060;branch=z9hG4bK14432e0a687
From: <sip:

4009

@10.106.122.174;x-nearend;x-refci=32833194;x-nearendclusterid=StandAloneCluster;x-
nearenddevice=SEP1C17D341FD21;x-nearendaddr=4009;x-farendrefci=32833193;x-
farendclusterid=StandAloneCluster;x-farenddevice=SEP203A0782D99F;x-
farendaddr=4011>;tag=16791~78868996-a8aa-4784-b765-86098b176d95-32833198
To: <sip:7878@10.106.122.178>
Date: Thu, 16 Jul 2015 15:39:52 GMT
Call-ID: e4fb9980-5a71d048-b0-ae7a6a0a@10.106.122.174
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: Cisco-CUCM10.5
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Expires: 180
Allow-Events: presence, kpml
Supported: X-cisco-srtp-fallback
Supported: Geolocation
Call-Info: <sip:10.106.122.174:5060>;method="NOTIFY;Event=telephone-event;Duration=500"
Cisco-Guid: 3841694080-0000065536-0000000071-2927258122
Session-Expires: 1800
P-Asserted-Identity: <sip:4009@10.106.122.174>
Remote-Party-ID: <sip:4009@10.106.122.174>;party=calling;screen=yes;privacy=off
Contact: <sip:4009@10.106.122.174:5060;transport=tcp>;isFocus
Max-Forwards: 70
Content-Length: 0
```

200从MediaSense的OK，当记录呼叫建立。

```
06053554.002 |08:39:52.831 |AppInfo  |SIPTcp - wait_SdlReadRsp: Incoming SIP TCP message from
10.106.122.178 on port 5060 index 71 with 1013 bytes:
[50181,NET]
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 10.106.122.174:5060;branch=z9hG4bK14432e0a687
To: <sip:7878@10.106.122.178>;tag=ds606d34cb
From: <sip:4009@10.106.122.174;x-nearend;x-refci=32833194;x-
nearendclusterid=StandAloneCluster;x-nearenddevice=SEP1C17D341FD21;x-nearendaddr=4009;x-
farendrefci=32833193;x-farendclusterid=StandAloneCluster;x-farenddevice=SEP203A0782D99F;x-
farendaddr=4011>;tag=16791~78868996-a8aa-4784-b765-86098b176d95-32833198
Call-ID: e4fb9980-5a71d048-b0-ae7a6a0a@10.106.122.174
CSeq: 101 INVITE
Content-Length: 313
Contact: <sip:7878@10.106.122.178:5060;transport=tcp>
Content-Type: application/sdp
Allow: INVITE, BYE, CANCEL, ACK, NOTIFY, INFO, UPDATE
Server: MediaSense/10.x

v=0
o=CiscoORA 3197 1 IN IP4 10.106.122.178
s=SIP Call
c=IN IP4

10.106.122.178


t=0 0
m=audio

42120

 RTP/AVP 102 0 8 9 18
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:9 G722/8000
a=rtpmap:18 G729/8000
a=

recvonly
```

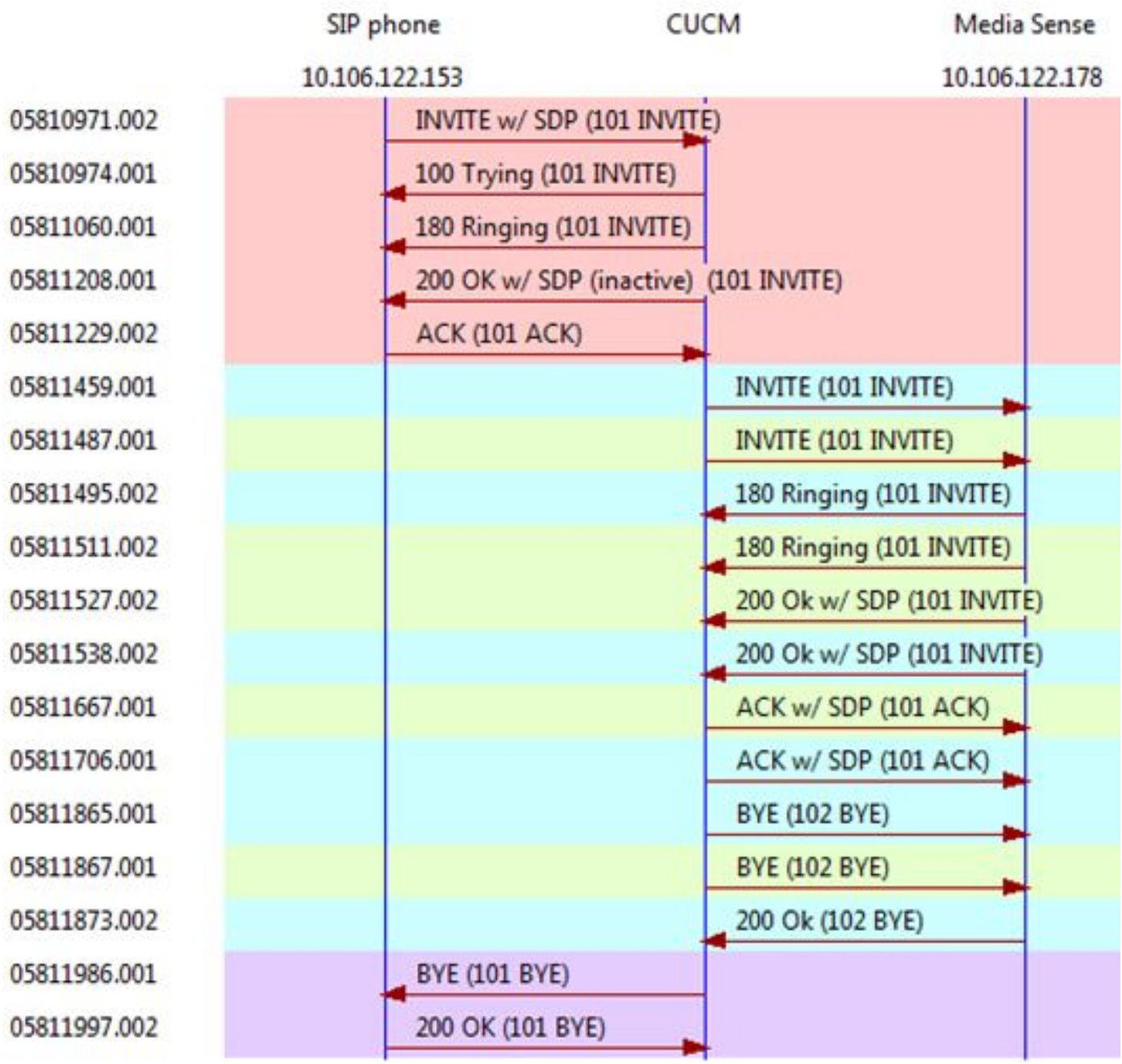
对MediaSense的ACK。

```
 06053719.001 |08:39:52.842 |AppInfo  |SIPTcp - wait_SdlSPISignal: Outgoing SIP TCP message to
10.106.122.178 on port 5060 index 71
[50183,NET]
ACK sip:7878@10.106.122.178:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 10.106.122.174:5060;branch=z9hG4bK147605d100d
From: <sip:4009@10.106.122.174;x-nearend;x-refci=32833194;x-
nearendclusterid=StandAloneCluster;x-nearenddevice=SEP1C17D341FD21;x-nearendaddr=4009;x-
farendrefci=32833193;x-farendclusterid=StandAloneCluster;x-farenddevice=SEP203A0782D99F;x-
farendaddr=4011>;tag=16791~78868996-a8aa-4784-b765-86098b176d95-32833198
To: <sip:7878@10.106.122.178>;tag=ds606d34cb
Date: Thu, 16 Jul 2015 15:39:52 GMT
```

```
Call-ID: e4fb9980-5a71d048-b0-ae7a6a0a@10.106.122.174
User-Agent: Cisco-CUCM10.5
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence, kpml
Content-Type: application/sdp
Content-Length: 260

v=0
o=CiscoSystemsCCM-SIP 16791 1 IN IP4 10.106.122.174
s=SIP Call
c=IN IP4

10.106.122.131


b=TIAS:64000
b=CT:64
b=AS:64
t=0 0
m=audio

4000

 RTP/AVP 9 101
a=ptime:20
a=rtpmap:9 G722/8000
a=

sendonly


a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

同样进程为远端的流被重复。CUCM在围嘴拨号，围嘴将拨打记录编号，并且SIP会话将建立在CUCM和MediaSense之间。

如此镜像所显示，信令图表。



MediaSense日志分析

从CUCM邀请设立近端的呼叫记录(音频从SIP IP电话)

```
0000010803: 10.106.122.178: Jul 16 2015 08:39:52.694 -0700: %CCBU_CALL_CONTROL-6-BORDER_MESSAGE:
{Thrd=Pool-sip-thread-25} %[message_string=process new Invitation: SipCall-25,
INBOUND_RECORDING, null, State=ALERTED: , processing=1
INVITE sip:7878@10.106.122.178:5060 SIP/2.0
Via: SIP/2.0/TCP 10.106.122.174:5060;branch=z9hG4bK14432e0a687
Max-Forwards: 69
To: <sip:7878@10.106.122.178>
From: <sip:4009@10.106.122.174;x-nearend;x-refci=32833194;x-
nearendclusterid=StandAloneCluster;x-nearenddevice=SEP1C17D341FD21;x-nearendaddr=4009;x-
farendrefci=32833193;x-farendclusterid=StandAloneCluster;x-farenddevice=SEP203A0782D99F;x-
farendaddr=4011>;tag=16791~78868996-a8aa-4784-b765-86098b176d95-32833198
Call-ID: e4fb9980-5a71d048-b0-ae7a6a0a@10.106.122.174
CSeq: 101 INVITE
Content-Length: 0
```

```
Date: Thu, 16 Jul 2015 15:39:52 GMT
Supported: timer,resource-priority,replaces
Supported: X-cisco-srtp-fallback
Supported: Geolocation
Min-SE: 1800
User-Agent: Cisco-CUCM10.5
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Expires: 180
Allow-Events: presence, kpml
Call-Info: <sip:10.106.122.174:5060>;method="NOTIFY;Event=telephone-event;Duration=500"
Cisco-Guid: 3841694080-0000065536-0000000071-2927258122
Session-Expires: 1800
P-Asserted-Identity: <sip:4009@10.106.122.174>
Remote-Party-ID: <sip:4009@10.106.122.174>;party=calling;screen=yes;privacy=off
Contact: <sip:4009@10.106.122.174:5060;transport=tcp>;isfocus


 ]: Border Message
0000010804: 10.106.122.178: Jul 16 2015 08:39:52.694 -0700: %CCBU_CALL_CONTROL-7-TRACE:
{Thrd=Pool-sip-thread-25} -preProcessInvitation SipCall-25, INBOUND_RECORDING, null,
State=ALERTED: ciscoGuidHeader=Cisco-Guid: 3841694080-0000065536-0000000071-2927258122

0000010808: 10.106.122.178: Jul 16 2015 08:39:52.695 -0700: %CCBU_CALL_CONTROL-7-TRACE:
{Thrd=Pool-sip-thread-25} -postProcessInvitation SipCall-25, INBOUND_RECORDING, NEAR_END,
State=ALERTED: from=4009, displayName=null, xRefci=32833194,

endPointType=NEAR_END

, xNearDevice=SEP1C17D341FD21, ucmCiscoGuid=null, nearEndClusterId=StandAloneCluster, and
farEndClusterId=StandAloneCluster


0000010809: 10.106.122.178: Jul 16 2015 08:39:52.695 -0700: %CCBU_CALL_CONTROL-7-TRACE:
{Thrd=Pool-sip-thread-25} -postProcessInvitation SipCall-25, INBOUND_RECORDING, NEAR_END,
State=ALERTED: created MediaResources: [AUDIO-MediaResource-25: SipCall-25, INBOUND_RECORDING,
NEAR_END, State=ALERTED, weight=1, ip=

10.106.122.174

]
```

从CUCM邀请设立远端的呼叫记录(音频从SCCP IP电话)。

```
 0000010818: 10.106.122.178: Jul 16 2015 08:39:52.700 -0700: %CCBU_CALL_CONTROL-6-
BORDER_MESSAGE: {Thrd=Pool-sip-thread-26} %[message_string=process new Invitation: SipCall-26,
INBOUND_RECORDING, null, State=ALERTED: , processing=2
INVITE sip:7878@10.106.122.178:5060 SIP/2.0
Via: SIP/2.0/TCP 10.106.122.174:5060;branch=z9hG4bK14578497f79
Max-Forwards: 69
To: <sip:7878@10.106.122.178>
From: <sip:4009@10.106.122.174;x-farend;x-refci=32833194;x-nearendclusterid=StandAloneCluster;x-
nearenddevice=SEP1C17D341FD21;x-nearendaddr=4009;x-farendrefci=32833193;x-
farendclusterid=StandAloneCluster;x-farenddevice=SEP203A0782D99F;x-
farendaddr=4011>;tag=16792~78868996-a8aa-4784-b765-86098b176d95-32833201
Call-ID: e4fb9980-5a71d048-b1-ae7a6a0a@10.106.122.174
CSeq: 101 INVITE
Content-Length: 0
Date: Thu, 16 Jul 2015 15:39:52 GMT
Supported: timer,resource-priority,replaces
Supported: X-cisco-srtp-fallback
```

```
Supported: Geolocation
Min-SE: 1800
User-Agent: Cisco-CUCM10.5
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Expires: 180
Allow-Events: presence, kpml
Call-Info: <sip:10.106.122.174:5060>;method="NOTIFY;Event=telephone-event;Duration=500"
Cisco-Guid: 3841694080-0000065536-0000000072-2927258122
Session-Expires: 1800
P-Asserted-Identity: <sip:4009@10.106.122.174>
Remote-Party-ID: <sip:4009@10.106.122.174>;party=calling;screen=yes;privacy=off
Contact: <sip:4009@10.106.122.174:5060;transport=tcp>;isfocus


 ]: Border Message
0000010819: 10.106.122.178: Jul 16 2015 08:39:52.700 -0700: %CCBU_CALL_CONTROL-7-TRACE:
{Thrd=Pool-sip-thread-26} -preProcessInvitation SipCall-26, INBOUND_RECORDING, null,
State=ALERTED: ciscoGuidHeader=Cisco-Guid: 3841694080-0000065536-0000000072-2927258122

0000010823: 10.106.122.178: Jul 16 2015 08:39:52.701 -0700: %CCBU_CALL_CONTROL-7-TRACE:
{Thrd=Pool-sip-thread-26} -postProcessInvitation SipCall-26, INBOUND_RECORDING, NEAR_END,
State=ALERTED: from=4009, displayName=null, xRefci=32833194,

endPointType=FAR_END

, xNearDevice=null, ucmCiscoGuid=null, nearEndClusterId=StandAloneCluster, and
farEndClusterId=StandAloneCluster

0000010824: 10.106.122.178: Jul 16 2015 08:39:52.701 -0700: %CCBU_CALL_CONTROL-7-TRACE:
{Thrd=Pool-sip-thread-26} -postProcessInvitation SipCall-26, INBOUND_RECORDING, NEAR_END,
State=ALERTED: created MediaResources: [AUDIO-MediaResource-26: SipCall-26, INBOUND_RECORDING,
FAR_END, State=ALERTED, weight=1, ip=

10.106.122.174
```

为呼叫创建的会话ID，一旦近端的SIP段和远端的记录信息在MediaSense被获取。

```
 0000010830: 10.106.122.178: Jul 16 2015 08:39:52.703 -0700: %CCBU_CALL_CONTROL-7-TRACE:
{Thrd=Pool-sip-thread-26} -Core: dispatch StartRecordingRequestEvent: SipRequestContextImpl-76,
type=Sip, Session:

d14e97859bff1

, INITIALIZING, call=SipCall-26, INBOUND_RECORDING, FAR_END, State=ALERTED, firstCall=SipCall-
25, INBOUND_RECORDING, NEAR_END, State=ALERTED, requestedAudioPorts=2, requestedVideoPorts=0,
append=false, audioSdp=null to Recording Adapter
```

200最近的终止呼叫的好和ACK。

```
 0000010846: 10.106.122.178: Jul 16 2015 08:39:52.829 -0700: %CCBU_CALL_CONTROL-6-
BORDER_MESSAGE: {Thrd=Pool-capture-thread-38} %[message_string=SipCall-25, INBOUND_RECORDING,
NEAR_END, State=ALERTED send 200 Ok:
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 10.106.122.174:5060;branch=z9hG4bK14432e0a687
To: <sip:7878@10.106.122.178>;tag=ds606d34cb
From: <sip:4009@10.106.122.174;x-nearend;x-refci=32833194;x-
nearendclusterid=StandAloneCluster;x-nearenddevice=SEP1C17D341FD21;x-nearendaddr=4009;x-
```

```
farendrefci=32833193;x-farendclusterid=StandAloneCluster;x-farenddevice=SEP203A0782D99F;x-
farendaddr=4011>;tag=16791~78868996-a8aa-4784-b765-86098b176d95-32833198
Call-ID: e4fb9980-5a71d048-b0-ae7a6a0a@10.106.122.174
CSeq: 101 INVITE
Content-Length: 313
Contact: <sip:7878@10.106.122.178:5060;transport=tcp>
Content-Type: application/sdp
Allow: INVITE, BYE, CANCEL, ACK, NOTIFY, INFO, UPDATE
Server: MediaSense/10.x

v=0
o=CiscoORA 3197 1 IN IP4 10.106.122.178
s=SIP Call
c=IN IP4

10.106.122.178


t=0 0
m=audio

42120

 RTP/AVP 102 0 8 9 18
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:9 G722/8000
a=rtpmap:18 G729/8000
a=

recvonly




 ACK sip:7878@10.106.122.178:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 10.106.122.174:5060;branch=z9hG4bK147605d100d
Max-Forwards: 69
To: <sip:7878@10.106.122.178>;tag=ds606d34cb
From: <sip:4009@10.106.122.174;x-nearend;x-refci=32833194;x-
nearendclusterid=StandAloneCluster;x-nearenddevice=SEP1C17D341FD21;x-nearendaddr=4009;x-
farendrefci=32833193;x-farendclusterid=StandAloneCluster;x-farenddevice=SEP203A0782D99F;x-
farendaddr=4011>;tag=16791~78868996-a8aa-4784-b765-86098b176d95-32833198
Call-ID: e4fb9980-5a71d048-b0-ae7a6a0a@10.106.122.174
CSeq: 101 ACK
Content-Length: 260
Date: Thu, 16 Jul 2015 15:39:52 GMT
User-Agent: Cisco-CUCM10.5
Allow-Events: presence, kpml
Content-Type: application/sdp

v=0
o=CiscoSystemsCCM-SIP 16791 1 IN IP4 10.106.122.174
s=SIP Call
c=IN IP4

10.106.122.131


b=TIAS:64000
```

b=CT:64
b=AS:64
t=0 0
m=audio

4000

RTP/AVP 9 101
a=ptime:20
a=rtpmap:9 G722/8000
a=

sendonly

a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

一旦媒体感觉应答呼叫，相似的事件将是获取的。注意被发送的ACK包含端口4000并且指示sendonly。

在设立的两个SIP对话以后的会话信息。


```
{"sessionData": {
"callControllerIP": "10.106.122.174",
"callControllerType": "Cisco-CUCM",
"endPoints": [
{
"clusterid": "StandAloneCluster",
"conference": false,
"device": "
```

SEP1C17D341FD21

```
",
"dn": "
```

4009

```
",
"startDate": 1437061192882,
"tracks": [{
"codec": "
```

G722

```
",
"location": "/common",
"mediaState": "
```

ACTIVE

```
",
"startDate": 1437061192882,
"track": 0,
"type": "AUDIO"
}],
"type": "
```

NEAR_END

",
"xRefci": "32833194"
},
{
"clusterid": "StandAloneCluster",
"conference": false,
"device": "

SEP203A0782D99F

",
"dn": "

4011

",
"startDate": 1437061192882,
"tracks": [{
"codec": "G722",
"location": "/common",
"mediaState": "ACTIVE",
"startDate": 1437061192882,
"track": 1,
"type": "AUDIO"
}],
"type": "

FAR_END

",
"xRefci": "32833193"
}
],
"operationType": "

ADD

",
"recordingServer": "10.106.122.178",
"rtspUrl": "rtsp://10.106.122.178/d14e97859bff1",
"sessionName": "

d14e97859bff1

",
"sipServer": "10.106.122.178",
"startDate": 1437061192882,
"state": "

ACTIVE

",
"version": 7

当呼叫是断开的时电话停止记录。

```
 0000010897: 10.106.122.178: Jul 16 2015 08:40:01.525 -0700: %CCBU_CALL_CONTROL-7-TRACE:
{Thrd=DIALOG_CALLBACK.7} -Core: dispatch

StopRecordingRequestEvent

: SipRequestContextImpl-78, type=Sip, Session:

d14e97859bff1

, ACTIVE, call=SipCall-26, INBOUND_RECORDING, FAR_END, State=DISCONNECTED, firstCall=null to
Recording Adapter
0000009368: 10.106.122.178: Jul 16 2015 08:40:01.762 -0700: %CCBU_COMMON-6-VSMS HTTP Info:
{Thrd=Pool-capture-thread-39} %[HTTP Response Body=<Session>
<diskusage>
<recording name="

d14e97859bff1

-TRACK0"

size="1"

 repository="/common" />
<recording name="

d14e97859bff1

-TRACK1"

size="1"

 repository="/common" />
</diskusage>
<rtsplink>/archive/

d14e97859bff1

</rtsplink>
```

Note:在此区域中，您注意有在记录属性的大小。此示例显示该size="1"，意味着MediaSense从CUCM接受了音频。如果注意size="0"，意味着MediaSense从CUCM没有接受音频。

最终会话关闭。

```
 {"sessionData": {
"callControllerIP": "10.106.122.174",
"callControllerType": "Cisco-CUCM",
"endDate": 1437061201522,
"endPoints": [
{
"clusterid": "StandAloneCluster",
"conference": false,
"device": "
```

```
SEP1C17D341FD21

",
"dn": "

4009

",
"startDate": 1437061192882,
"tracks": [{
"codec": "G722",
"location": "/common",
"mediaState": "ACTIVE",
"size": 1,
"startDate": 1437061192882,
"track": 0,
"type": "AUDIO"
}],
"type": "

NEAR_END

",
"xRefci": "32833194"
},
{
"clusterid": "StandAloneCluster",
"conference": false,
"device": "

SEP203A0782D99F

",
"dn": "

4011

",
"startDate": 1437061192882,
"tracks": [{
"codec": "G722",
"location": "/common",
"mediaState": "ACTIVE",
"size": 1,
"startDate": 1437061192882,
"track": 1,
"type": "AUDIO"
}],
"type": "

FAR_END

",
"xRefci": "32833193"
}
],
"operationType": "EXISTING",
"recordingServer": "10.106.122.178",
"rtspUrl": "rtsp://10.106.122.178/archive/d14e97859bff1",
"sessionName": "
```

```
d14e97859bff1

",
"sipServer": "10.106.122.178",
"startDate": 1437061192882,
"state": "

CLOSED

",
"version": 11
```

从MediaSense的日志集

步骤1. Enable (event)呼叫控制调试的服务跟踪级别在MediaSense维护性。

如此镜像所显示， MediaSense Serviceabilty。

步骤2. Enable (event)在MediaSense的信息包获取。

请运行**utils网络捕捉eth0文件信息包计数100000大小全部**为了enable (event)在MediaSense的信息包获取。

如此镜像所显示，在MediaSense的信息包获取。

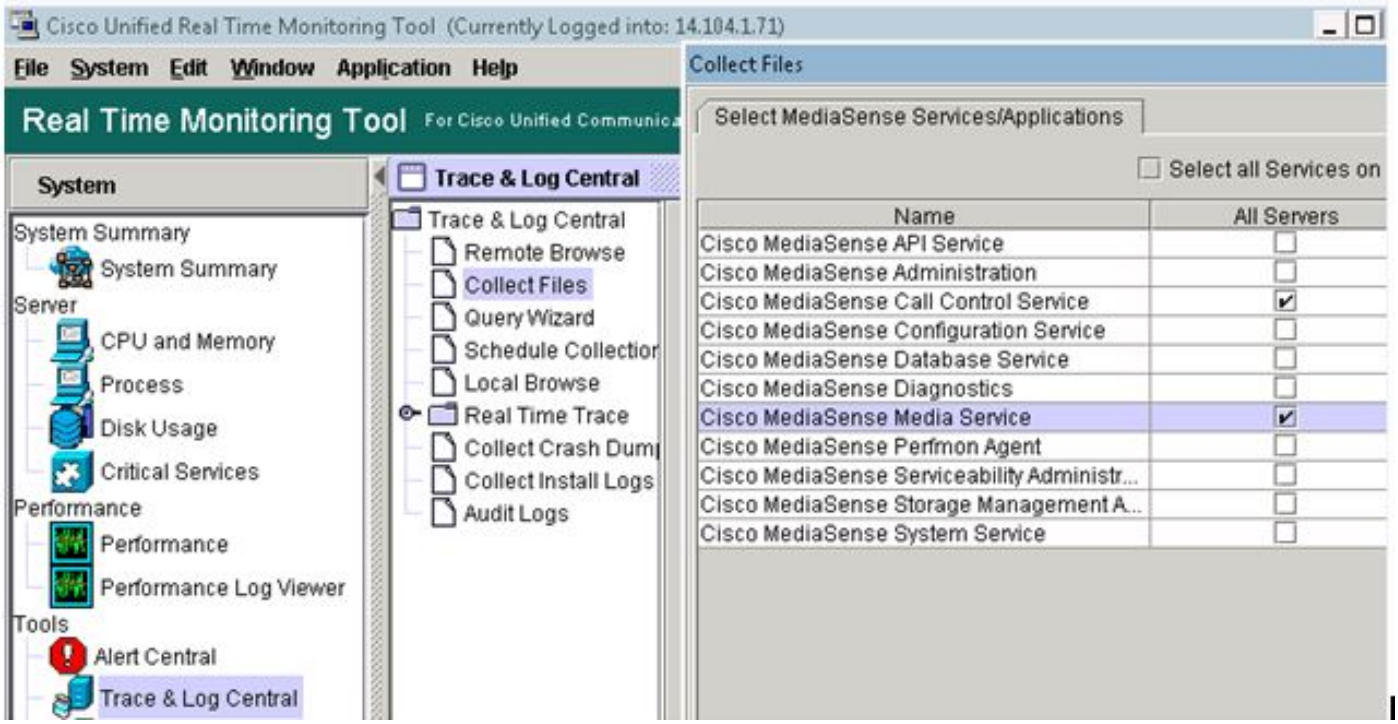
```
admin:utils network capture eth0 file packets count 100000 size all
Executing command with options:
 size=ALL                count=100000          interface=eth0
 src=                    dest=                 port=
 ip=

Control-C pressed

admin:
```

步骤3.收集日志使用实时监视工具(RTMT)

使用RTMT，连接到MediaSense服务器。

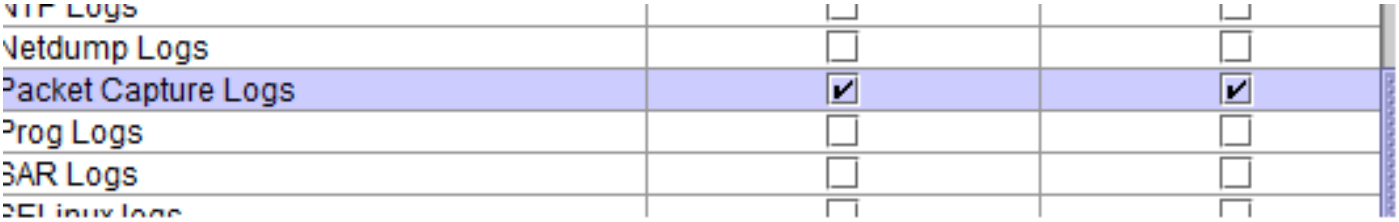
连接**跟踪&日志中央>收集文件**

如此镜像所显示，实时监视工具。



其次点击并且选择**信息包获取**

如此镜像所显示，实时监视工具。



相应地选择时间。

一些有用的命令：

1. **utils媒体recording_sessions**

file filename命令**utils媒体的recording_sessions**生成此Cisco MediaSense服务器与最后100次记录的会话的详细清单的一个HTML文件处理的。确认Cisco MediaSense呼叫控制服务运行，在您执行此命令前。文件被保存到平台/cli/文件夹，并且可以下载使用文件获得activelog平台/cli/filename命令。

命令：**utils媒体recording_sessions**文件文件名

详细资料：

- **文件**是输出信息到文件的一个必选参数。
- **文件名**是定义了.html文件的名字的一个必选参数。
- 当您发出此命令时，您得到以下回应：Cisco MediaSense呼叫控制服务记录会话保存了到平台/cli/<filename>.html。您能当前下载它使用：文件上activelog平台/您能从该目录然后检索文件和保存它到您的选择的位置的cli/<filename>.html。

示例：

- **utils媒体recording_sessions**文件sessions.html Cisco MediaSense。呼叫控制服务记录会话被保存对平台/cli/sessions.html。您能当前下载它使用：文件获得activelog平台/cli/sessions.html

2. **utils系统维护**

命令**utils系统维护**操作enable (event)或功能失效维护模式在Cisco MediaSense或者显示Cisco MediaSense维护模式状态。当它在维护模式下时， Cisco MediaSense不能处理任何记录请求或API请求。

Cisco MediaSense重新启动，当它输入维护模式。所有放出的活动突然结束。所有活动记录在CLOSED_ERROR状态结束。Cisco MediaSense再重新启动，当维护模式是失效的时，并且重新输入正常模式。

命令：**utils系统维护**操作

详细资料：操作指定什么命令。

有效操作包括：

- enable (event)
- 功能失效
- 状态

示例：

- utils系统维护enable (event)
- utils系统维护功能失效
- utils系统维护状态

一些基本问题

MediaSense文档维基

已知缺陷

CSCup24364 ：C所有记录不工作没有呼叫方ID的呼叫的收到错误信息。

CSCui13760 ： MediaSense不支持节点删除从簇。

CSCtn45420 ： MediaSense呼叫记录失效与Camelot SIP终端。

CSCut09446 ： MediaSense UI不填充CUCM配置& API用户设置。

CSCuo95309 ： MediaSense从其他节点没填充的搜索和作用记录。

CSCuq20108 ： 从报头到获得削，当曾经退出的字符时。