排除CUBE SP拒绝转发到PSTN号码的内部呼叫故障

目录

简介

本文档介绍当思科统一边界元素（SP版）(CUBE SP)拒绝内部呼叫时如何对其进行故障排除，内部呼叫被配置转发到PSTN号码。

呼叫流: 内部IP电话4002呼叫内部IP电话4001,ip电话4001上的所有呼叫都转发到已配置的PSTN号码。

问题：从IP电话4002到4001的呼叫时主叫方听到快速忙音

主叫方使用IP电话1呼叫另一IP电话2,IP电话2配置为将所有呼叫转发到外部PSTN号码。呼叫无法连接PSTN电话，PSTN电话不振铃，呼叫者听到快速忙音。

解决方案

以下是排除故障的步骤。

步骤1. Cisco Unified Communication Manager(CUCM)日志分析。

从CUCM日志中，可以看到来自CUBE SP的错误消息。

```
SIP/2.0 604 Does Not Exist Anywhere
```

详细信息消息：

```
SIP/2.0 604 Does Not Exist Anywhere from cube SP
 82645958.001 |13:08:46.297 |AppInfo |SIPTcp - wait_SdlSPISignal: Outgoing SIP TCP message to
10.4.15.253 on port 5060 index 18491 [19580587,NET] INVITE sip:+612xxxxxxxx@10.x.x.x:5060
SIP/2.0 Via: SIP/2.0/TCP 10.4.15.5:5060;branch=z9hG4bK3cc7264a831cc4 From:
<sip:+612xxxxxxx@10.x.x.x>;tag=8162255~9cbf8c07-9c9b-758f-e658-bebd74e53d96-40280558 To:
<sip:+614xxxxxxx@10.4.15.253> Date: Fri, 17 Nov 2017 02:08:46 GMT Call-ID: 3cf99080-a0e144ae-
3692cb-50f040a@10.x.x.x Supported: 100rel,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.x.x.x:5060>;method="NOTIFY;Event=telephone-event;Duration=500" Call-Info: <urn:x-cisco-
remotecc:callinfo>;x-cisco-video-traffic-class=VIDEO_UNSPECIFIED Cisco-Guid: 1022988416-
0000065536-0000118822-0084870154 Session-Expires: 1800 Diversion:
```

```
P-Asserted-Identity: x <sip:+612xxxxxxxx@10.x.x.x>
Remote-Party-ID: x <sip:+612xxxxxxxxx@10.x.x.x>;party=calling;screen=yes;privacy=off
```

步骤2. CUBE SP日志分析。

从CUBE SP日志中，您可以看到呼叫未通过源号码分析，因为它与任何条目都不匹配。

内部na-src-prefix-table

转移：**<sip:9180@10.x.x.x>;reason=unknown;privacy=off;screen=yes**

```
Routing fails.
SBC Index = 0X00000001
Config set Index = 0X0000270F
Source Account = CUCM-TL1
Source Adjacency = CUCM-cust01-1
Calling Address Type = 0X00030000
Called Address Type = 0X00030000
Calling Address = 9180
Called Address = +614xxxxxxxx
```

步骤3.根据排除步骤1和2的故障确认其命中错误。

这符合已知的Bug CSCup67940

CUCM需要在转接报头中发送E.164号码，以便**extend&connect**。

https://bst.cloudapps.cisco.com/bugsearch/bug/CSCup67940/?referring_site=bugquickviewredir

解决方法：

除非我们在CUBE中进行修改以接受来自转移报头的邀请，否则此邀请包含电话DN，例如**26708 <sip:26708@58.162.59.181>;reason=unknown;privacy=off;screen=yes**

解决方法

根据解决方法，允许在“转移”报头中输入号码。

这可以在此na-src-prefix-table**中添加新条目**。

```
na-src-prefix-table   xxxxx

     entry  10
     action accept
     match-prefix  9
```

应用解决方法后出现新问题

应用此工作后，呼叫成功连接，但五位分机号码将发送到服务提供商。

使用SIP报头编辑器解决此问题

在实验中测试，当您使用SIP报头编辑器修改CUBE SP中的转接报头时，它会成功连接呼叫并将e164号码发送给服务提供商。

步骤

在实验测试中，IP电话4002呼叫4001，在IP电话4001上呼叫前转到60006009(PSTN)号码。

```
sip header-editor donnietest
    store-rule entry 1
     condition header-name Diversion header-value regex-match "sip:4\(...\)" store-as
diversionuri
    header diversion entry 1
     action replace-value value
"<sip:+888888884${diversionuri}@10.66.75.51>;reason=unconditional;

privacy=off;screen=yes"
      condition header-name Diversion header-value regex-match "sip:4\(...\)@"



 adjacency sip donniecucm
    editor-type editor
    header-editor inbound donnietest
```

验证

无转移报头修改

如果不修改任何转移报头，您可以看到CUCM的邀请，转移报头位于下方

```
Diversion: <sip:4001@10.66.75.51>;reason=unconditional;privacy=off;screen=yes
INVITE sip:60006099@10.66.75.33:5068 SIP/2.0
Via: SIP/2.0/TCP 10.66.75.51:5060;branch=z9hG4bK1ef607cac8bd6
```

```
From: "agent2-4002" <sip:4002@10.66.75.51>;tag=194346~4c742393-721f-476b-82c3-bc13f8a9c6cd-
22765770
To: <sip:60006099@10.66.75.33>
Date: Sun, 19 Nov 2017 23:39:16 GMT
Call-ID: d9ad6f80-a1211624-1eee8-334b420a@10.66.75.51
Supported: timer,resource-priority,replaces
Min-SE:  1800
User-Agent: Cisco-CUCM11.5
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:10.66.75.51:5060>;method="NOTIFY;Event=telephone-event;Duration=500"
Call-Info: <urn:x-cisco-remotecc:callinfo>;x-cisco-video-traffic-class=DESKTOP
Session-ID: 223cb8ec818c0c0dd669d19baa194344;remote=00000000000000000000000000000000
Cisco-Guid: 3652022144-0000065536-0000000027-0860570122
Session-Expires:  1800
Diversion: <sip:4001@10.66.75.51>;reason=unconditional;privacy=off;screen=yes
P-Asserted-Identity: "agent2-4002" <sip:4002@10.66.75.51>
Remote-Party-ID: "agent2-4002" <sip:4002@10.66.75.51>;party=calling;screen=yes;privacy=off
Contact: <sip:4002@10.66.75.51:5060;transport=tcp>
Max-Forwards: 69
Content-Length: 0
```

SIP听筒编辑器匹配转移报头

SIP报头编辑器将Divsion Header Start与**sip:4xxx@匹**配，然后使其+E164格式

在sip报头编辑器后可以看到它。在转移报头中，4001已修改为+888888884001

转移：<sip:+888888884001@10.66.75.51>;reason=unconditional;privacy=off;screen=yes

味精 — 6401-0027-69FECA-0747于2017年11月01:48:38日(491542613毫秒
): 0X01000E2059EBD60A

模块在编辑后返回消息。
编辑器名称= donnietest
编辑器配置集= 0X00000000
这是编辑后的消息。

```
INVITE sip:60006099@10.66.75.33:5068 SIP/2.0
Supported: X-cisco-srtp-fallback
Via: SIP/2.0/TCP 10.66.75.51:5060;branch=z9hG4bK1f11c18671c97
From: "agent2-4002" <sip:4002@10.66.75.51>;tag=194931~4c742393-721f-476b-82c3-bc13f8a9c6cd-
22765859
To: <sip:60006099@10.66.75.33>
Date: Mon, 20 Nov 2017 02:13:12 GMT
Call-ID: 5ac33180-a1213a38-1f045-334b420a@10.66.75.51
Min-SE: 1800
User-Agent: Cisco-CUCM11.5
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Expires: 180
```

```
Allow-Events: presence, kpml
Call-Info: <sip:10.66.75.51:5060>;method="NOTIFY;Event=telephone-event;Duration=500"
Call-Info: <urn:x-cisco-remotecc:callinfo>;x-cisco-video-traffic-class=DESKTOP
Session-ID: 223cb8ec818c0c0dd669d19baa194929;remote=00000000000000000000000000000000
Cisco-Guid: 1522741632-0000065536-0000000050-0860570122
Session-Expires: 1800
Diversion: <sip:+888888884001@10.66.75.51>;reason=unconditional;privacy=off;screen=yes
P-Asserted-Identity: "agent2-4002" <sip:4002@10.66.75.51>

Remote-Party-ID: "agent2-4002" <sip:4002@10.66.75.51>;party=calling;screen=yes;privacy=off
Contact: <sip:4002@10.66.75.51:5060;transport=tcp>
Max-Forwards: 69
Content-Length: 0
```

味精 — 6401-0028-69FECA-0885于2017年11月01:48:38日(491542613毫秒
): 0X01000E2059EBD60A

对邮件进行编辑。

这是编辑后的消息

```
INVITE sip:60006099@10.66.75.33:5068 SIP/2.0
Supported: X-cisco-srtp-fallback
Via: SIP/2.0/TCP 10.66.75.51:5060;branch=z9hG4bK1f11c18671c97
From: "agent2-4002" <sip:4002@10.66.75.51>;tag=194931~4c742393-721f-476b-82c3-bc13f8a9c6cd-
22765859
To: <sip:60006099@10.66.75.33>
Date: Mon, 20 Nov 2017 02:13:12 GMT
Call-ID: 5ac33180-a1213a38-1f045-334b420a@10.66.75.51
Min-SE: 1800
User-Agent: Cisco-CUCM11.5
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Expires: 180
Allow-Events: presence, kpml
Call-Info: <sip:10.66.75.51:5060>;method="NOTIFY;Event=telephone-event;Duration=500"
Call-Info: <urn:x-cisco-remotecc:callinfo>;x-cisco-video-traffic-class=DESKTOP
Session-ID: 223cb8ec818c0c0dd669d19baa194929;remote=00000000000000000000000000000000
Cisco-Guid: 1522741632-0000065536-0000000050-0860570122
Session-Expires: 1800
Diversion: <sip:+888888884001@10.66.75.51>;reason=unconditional;privacy=off;screen=yes
P-Asserted-Identity: "agent2-4002" <sip:4002@10.66.75.51>
Remote-Party-ID: "agent2-4002" <sip:4002@10.66.75.51>;party=calling;screen=yes;privacy=off
Contact: <sip:4002@10.66.75.51:5060;transport=tcp>
Max-Forwards: 69
Content-Length: 0
```