

瞭解CVP錯誤呼叫流程的工作原理

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簡介

本檔案介紹思科客戶語音入口網站(CVP)錯誤通話流程的工作方式。

必要條件

需求

思科建議您瞭解以下主題：

- CVP伺服器
- 思科整合智慧客服管理(ICM)
- Cisco Unified Contact Center Enterprise(UCCE)

採用元件

本檔案中的資訊是根據以下軟體版本：

- CVP伺服器11.5
- 思科虛擬語音瀏覽器(CVVB)11.5
- 思科統一邊界元素(CUBE)
- 思科語音可延伸標籤語言(VXML)閘道
- 思科整合通話管理員(CUCM)11.0
- 作業階段啟始通訊協定(SIP)

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除 (預設) 的組態來啟動。如果您的網路運作中，請確保您瞭解任何指令可能造成的影響。

背景資訊

當CUBE或輸入網關中未啟用Survivability服務時，CVP錯誤流將呼叫在輸入網關/CUBE或VXML網關/CVVB中配置的cvperror.tcl。在SIP 302 Moved Temporary或SIP REFER消息中，當CVP生成的92929292標籤傳送到入口網關/CUBE時，觸發此工具命令語言(TCL)。

SIP REFER僅在CVP已應答呼叫時執行。CVP在未應答呼叫時執行重定向。在這種情況下，它會將302 Moved Temporally傳送到呼叫的發起方 (入口網關/CUBE)，該發起方在聯絡報頭中包含重定向目標。

無論SIP REFER或302 Moved Temporary消息如何，cvperror.tcl指令碼的主要任務是播放儲存在入口網關/CUBE或VXML網關/CVVB上的快閃記憶體中的關鍵錯誤消息。

CVP錯誤呼叫流程 — 302暫時移動

呼叫流：

公共交換電話網路(PSTN)

電話400898041-----PSTN(CUCM)-----SIP-----CVP-----ICM----- (ICM已關閉)

CUBE中未啟用生存能力

案例 1:網關中配置的CVP錯誤TCL

CVP中的配置

在CVP撥號計畫中929292CVP標籤指向CUBE，如圖所示。

<input type="checkbox"/>	9292>	Error label	
<input type="checkbox"/>	* Local Static Route	IP Address/Hostname/Server Group Name:	10.201.198.21

CUBE中的相關配置

多維資料集IP地址 : 10.201.198.21

CVVB IP地址 : 10.201.198.26

```
voice service voip
no ip address trusted authenticate
allow-connections sip to sip
no supplementary-service sip refer
supplementary-service media-renegotiate
redirect ip2ip
signaling forward unconditional
sip
bind control source-interface GigabitEthernet0/0
bind media source-interface GigabitEthernet0/0
rellxx disable
min-se 360 session-expires 360
header-passing
asymmetric payload full
midcall-signaling passthru
no call service stop

.....
application
service new-call flash:bootstrap.vxml
!
service survivability flash:survivability.tcl
paramspace callfeature med-inact-det enable
param ccb id:10.201.198.21;loc:CALO;trunks:2
!
service CVPSelfService flash:CVPSelfServiceBootstrap.vxml
!
service ringtone flash:ringtone.tcl
!
service cvperror flash:cvperror.tcl
paramspace english index 0
paramspace english language en
paramspace english location flash
paramspace english prefix en
.....
dial-peer voice 929292 voip
description CVP SIP error dial-peer
service cvperror
session protocol sipv2
session target ipv4:10.201.198.26
session transport tcp
incoming called-number 9292T
voice-class sip rellxx disable
dtmf-relay rtp-nte h245-signal h245-alphanumeric
codec g711ulaw
no vad
```

日誌片段

在網關中啟用的調試 : **debug ccsip message**和**debug voip ccapi inout**

--- After the error is identified on CVP, CVP sends a 302 Moved Temporarily to CUBE/Gateway

2444742: *May 2 19:30:45.956: //1575870/67C371000000/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 302 Moved Temporarily

Via: SIP/2.0/UDP 10.201.198.21:5060;branch=z9hG4bK496B721A7
To: <sip:8041@10.201.198.7>;tag=dsa401be35
From: <sip:4008@10.201.198.18>;tag=21E92674-46A
Call-ID: AC32BE77-4D9711E8-91BCBF90-16BB0040@10.201.198.21
CSeq: 101 INVITE
Content-Length: 0
Cisco-Guid: 1740861696-0000065536-0000000041-0315017482
Contact: <sip:92929292@10.201.198.21>
Cisco-Gucid: 67C37100000100000000002912C6C90A
Session-ID: 00000000000000000000000000000000;remote=232199a11000016357f53ee8f467d218

--- Gateway responds with ACK

Sent:

ACK sip:8041@10.201.198.7:5060 SIP/2.0
Via: SIP/2.0/UDP 10.201.198.21:5060;branch=z9hG4bK496B721A7
From: sip:4008@10.201.198.18;tag=21E92674-46A
To: <sip:8041@10.201.198.7>;tag=dsa401be35
Date: Wed, 02 May 2018 23:30:45 GMT
Call-ID: AC32BE77-4D9711E8-91BCBF90-16BB0040@10.201.198.21
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: telephone-event
Content-Length: 0

-- Gateway forwards the Moved Temporarily message to the original party, in this case the PSTN (CUCM in this lab), since the supplementary service is enabled

Sent:

SIP/2.0 302 Moved Temporarily
Via: SIP/2.0/TCP 10.201.198.18:5065;branch=z9hG4bK7d54331a57
From: <sip:4008@10.201.198.18>;tag=88-d18302a7-aed7-454e-85f1-89e6650073de-20554954
To: <sip:98041@10.201.198.21>;tag=21E926A0-192
Date: Wed, 02 May 2018 23:30:45 GMT
Call-ID: 67c37100-aea14613-29-12c6c90a@10.201.198.18
CSeq: 101 INVITE
Allow-Events: telephone-event
Server: Cisco-SIPGateway/IOS-12.x
Diversion: <sip:8041@10.201.198.21>;reason=unconditional;counter=1
Contact: sip:92929292@10.201.198.21:5060
Content-Length: 0

--CUCM ACK the message---

Received:

ACK sip:98041@10.201.198.21:5060 SIP/2.0
Via: SIP/2.0/TCP 10.201.198.18:5065;branch=z9hG4bK7d54331a57
From: <sip:4008@10.201.198.18>;tag=88-d18302a7-aed7-454e-85f1-89e6650073de-20554954
To: <sip:98041@10.201.198.21>;tag=21E926A0-192
Date: Wed, 02 May 2018 23:13:23 GMT
Call-ID: 67c37100-aea14613-29-12c6c90a@10.201.198.18
User-Agent: Cisco-CUCM11.0
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence, kpml
Content-Length: 0

--- Gateway received and Invite from PSTN (CUCM) related to the 929292 Error call flow

Received:

INVITE sip:92929292@10.201.198.21:5060 SIP/2.0

Via: SIP/2.0/UDP 10.201.198.18:5065;branch=z9hG4bK7e6f8e5100
From: <sip:4008@10.201.198.18>;tag=88-d18302a7-aed7-454e-85f1-89e6650073de-20554954
To: <sip:98041@10.201.198.21>
Date: Wed, 02 May 2018 23:13:23 GMT
Call-ID: 67c37100-aea14613-29-12c6c90a@10.201.198.18
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: Cisco-CUCM11.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 102 INVITE
Diversion: <sip:8041@10.201.198.21>;reason=unconditional;counter=1
Expires: 180
Allow-Events: presence, kpml
Supported: X-cisco-srtp-fallback,X-cisco-original-called
Call-Info: <sip:10.201.198.18:5065>;method="NOTIFY;Event=telephone-event;Duration=500"
Call-Info: <urn:x-cisco-remotecc:callinfo>;x-cisco-video-traffic-class=VIDEO_UNSPECIFIED
Session-ID: a8540c82a4e44c2eba3f04ba20554953;remote=00000000000000000000000000000000
Cisco-Guid: 1740861696-0000065536-0000000041-0315017482
Session-Expires: 1800
P-Asserted-Identity: <sip:4008@10.201.198.18>
Remote-Party-ID: <sip:4008@10.201.198.18>;party=calling;screen=yes;privacy=off
Contact: <sip:4008@10.201.198.18:5065;transport=tcp>
Max-Forwards: 70
Content-Length: 0

---Match dial-peer 929292

2444797: *May 2 19:30:45.988: //-1/67C371000000/CCAPI/cc_api_call_setup_ind_common:
Interface=0x4A3A8D84, Call Info(
Calling Number=sip:4008@10.201.198.18, (Calling Name=) (TON=Unknown, NPI=Unknown,
Screening=User, Passed, Presentation=Allowed),
Called Number=sip:92929292@10.201.198.21:5060 (TON=Unknown, NPI=Unknown),
Calling Translated=FALSE, Subscriber Type Str=Unknown, FinalDestinationFlag=TRUE,
Incoming Dial-peer=929292, Progress Indication=NULL(0), Calling IE Present=TRUE,
Source Trkgrp Route Label=, Target Trkgrp Route Label=, CLID Transparent=FALSE), Call
Id=1575871

....
....

-- Run cvperror.tcl

2444810: *May 2 19:30:45.992: //1575871/67C371000000/CCAPI/cc_process_call_setup_ind:
>>>>CCAPI handed cid 1575871 with tag 929292 to app "**_ManagedAppProcess_cvperror**"

-- Sent Trying and session progress to PSTN

Sent:
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 10.201.198.18:5065;branch=z9hG4bK7e6f8e5100
From: <sip:4008@10.201.198.18>;tag=88-d18302a7-aed7-454e-85f1-89e6650073de-20554954
To: <sip:98041@10.201.198.21>
Date: Wed, 02 May 2018 23:30:45 GMT
Call-ID: 67c37100-aea14613-29-12c6c90a@10.201.198.18
CSeq: 102 INVITE
Allow-Events: telephone-event
Server: Cisco-SIPGateway/IOS-12.x
Content-Length: 0

2444819: *May 2 19:30:46.000: //1575871/67C371000000/SIP/Msg/ccsipDisplayMsg:

Sent:

SIP/2.0 183 Session Progress

Via: SIP/2.0/UDP 10.201.198.18:5065;branch=z9hG4bK7e6f8e5100

From: <sip:4008@10.201.198.18>;tag=88-d18302a7-aed7-454e-85f1-89e6650073de-20554954

To: <sip:98041@10.201.198.21>;tag=21E926C0-EDA

Date: Wed, 02 May 2018 23:30:45 GMT

Call-ID: 67c37100-aea14613-29-12c6c90a@10.201.198.18

CSeq: 102 INVITE

Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO, REGISTER

Allow-Events: telephone-event

Contact: <sip:92929292@10.201.198.21:5060;transport=tcp>

Server: Cisco-SIPGateway/IOS-12.x

Content-Length: 0

--Sent 200 OK

2444820: *May 2 19:30:46.000: //1575871/67C371000000/SIP/Msg/ccsipDisplayMsg:

Sent:

SIP/2.0 200 OK

Via: SIP/2.0/UDP 10.201.198.18:5065;branch=z9hG4bK7e6f8e5100

From: <sip:4008@10.201.198.18>;tag=88-d18302a7-aed7-454e-85f1-89e6650073de-20554954

To: <sip:98041@10.201.198.21>;tag=21E926C0-EDA

Date: Wed, 02 May 2018 23:30:45 GMT

Call-ID: 67c37100-aea14613-29-12c6c90a@10.201.198.18

CSeq: 102 INVITE

Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO, REGISTER

Allow-Events: telephone-event

Contact: <sip:92929292@10.201.198.21:5060;transport=tcp>

Supported: replaces

Supported: sdp-anat

Server: Cisco-SIPGateway/IOS-12.x

Require: timer

Session-Expires: 1800;refresher=uac

Supported: timer

Content-Type: application/sdp

Content-Disposition: session;handling=required

Content-Length: 250

v=0

o=CiscoSystemsSIP-GW-UserAgent 7410 4830 IN IP4 10.201.198.21

s=SIP Call

c=IN IP4 10.201.198.21

t=0 0

m=audio 16526 RTP/AVP 0 101

c=IN IP4 10.201.198.21

a=rtpmap:0 PCMU/8000

a=rtpmap:101 telephone-event/8000

a=fmtp:101 0-16

a=ptime:20

--Received ACK of the 200 OK message

2444823: *May 2 19:30:46.176: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

ACK sip:92929292@10.201.198.21:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 10.201.198.18:5065;branch=z9hG4bK7f4b18782f

From: <sip:4008@10.201.198.18>;tag=88-d18302a7-aed7-454e-85f1-89e6650073de-20554954

To: <sip:98041@10.201.198.21>;tag=21E926C0-EDA

Date: Wed, 02 May 2018 23:13:23 GMT

Call-ID: 67c37100-aea14613-29-12c6c90a@10.201.198.18

```
User-Agent: Cisco-CUCM11.0
Max-Forwards: 70
CSeq: 102 ACK
Allow-Events: presence, kpml
Session-ID: a8540c82a4e44c2eba3f04ba20554953;remote=4c37a896d7446e294d24d877668cab88
Content-Type: application/sdp
Content-Length: 244
```

```
v=0
o=CiscoSystemsCCM-SIP 88 1 IN IP4 10.201.198.18
s=SIP Call
c=IN IP4 10.152.234.20
b=TIAS:64000
b=CT:64
b=AS:64
t=0 0
m=audio 23062 RTP/AVP 0 101
a=ptime:20
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

---Play critical error audio file located in flash on CUBE

解釋案例1

在此情況中，由於預設情況下啟用臨時移動的附加服務sip，因此網關會將呼叫轉發給發起方，在本例中為PSTN（在實驗室中，為CUCM）。

案例 2:網關中配置的CVP錯誤TCL，無補充服務

CVP中的配置

在CVP撥號計畫中929292CVP標籤指向CUBE，如圖所示。

<input type="checkbox"/> 929292	Error label
<input type="checkbox"/> Local Static Route	IP Address/Hostname/Server Group Name: 10.201.198.21

CUBE中的相關配置

多維資料集IP地址：10.201.198.21

CVVB IP地址：10.201.198.26

```
voice service voip
 no ip address trusted authenticate
 allow-connections sip to sip
no supplementary-service sip moved-temporarily
no supplementary-service sip refer
 supplementary-service media-renegotiate
 redirect ip2ip
 signaling forward unconditional
 sip
```

```

bind control source-interface GigabitEthernet0/0
bind media source-interface GigabitEthernet0/0
rellxx disable
min-se 360 session-expires 360
header-passing
asymmetric payload full
midcall-signaling passthru
no call service stop

.....
application
service new-call flash:bootstrap.vxml
!
service survivability flash:survivability.tcl
paramspace callfeature med-inact-det enable
param ccb id:10.201.198.21;loc:CALO;trunks:2
!
service CVPSelfService flash:CVPSelfServiceBootstrap.vxml
!
service ringtone flash:ringtone.tcl
!
service cvperror flash:cvperror.tcl
paramspace english index 0
paramspace english language en
paramspace english location flash
paramspace english prefix en
.....
dial-peer voice 929292 voip
description CVP SIP error dial-peer
service cvperror
session protocol sipv2
session target ipv4:10.201.198.26
session transport tcp
incoming called-number 9292T
voice-class sip rellxx disable
dtmf-relay rtp-nte h245-signal h245-alphanumeric
codec g711ulaw
no vad

```

日誌片段

在網關中啟用的調試：**debug ccsip message**和**debug voip ccapi inout**。

--- After the error is identified on CVP, CVP sends a 302 Moved Temporarily to CUBE/Gateway

```

2452782: *May  2 21:02:46.120: //1580163/41F099000000/SIP/Msg/ccsipDisplayMsg:
Received:
SIP/2.0 302 Moved Temporarily
Via: SIP/2.0/UDP 10.201.198.21:5060;branch=z9hG4bK4980BDED
To: <sip:8041@10.201.198.7>;tag=ds8369f9d4
From: <sip:4008@10.201.198.18>;tag=223D6198-B66
Call-ID: 8678DF8F-4DA411E8-A286BF90-16BB0040@10.201.198.21
CSeq: 101 INVITE
Content-Length: 0
Cisco-Guid: 1106286848-0000065536-0000000042-0315017482
Contact: <sip:92929292@10.201.198.21>
Cisco-Gucid: 41F0990000010000000002A12C6C90A
Session-ID: 00000000000000000000000000000000;remote=2375d4ec100001634a4a6be49573f76d

```


--- Gateway responds with ACK

Sent:

ACK sip:8041@10.201.198.7:5060 SIP/2.0
Via: SIP/2.0/UDP 10.201.198.21:5060;branch=z9hG4bK4980BDED
From: sip:4008@10.201.198.18;tag=223D6198-B66
To: <sip:8041@10.201.198.7>;tag=ds8369f9d4
Date: Thu, 03 May 2018 01:02:46 GMT
Call-ID: 8678DF8F-4DA411E8-A286BF90-16BB0040@10.201.198.21
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: telephone-event
Content-Length: 0

2452813: *May 2 21:02:46.128: //1580163/41F099000000/CCAPI/cc_api_call_disconnect_done:
Disposition=0, Interface=0x4A3A8D84, Tag=0x0, Call Id=1580163,
Call Entry(Disconnect Cause=16, Voice Class Cause Code=0, Retry Count=0)
2452814: *May 2 21:02:46.128: //1580163/41F099000000/CCAPI/cc_api_call_disconnect_done:
Call Disconnect Event Sent
2452815: *May 2 21:02:46.128: //-1/xxxxxxxxxxxx/CCAPI/cc_free_feature_vsa:

2452816: *May 2 21:02:46.128: :cc_free_feature_vsa freeing 4C79B7F8
2452817: *May 2 21:02:46.128: //-1/xxxxxxxxxxxx/CCAPI/cc_free_feature_vsa:

2452818: *May 2 21:02:46.128: vsacount in free is 2
2452819: *May 2 21:02:46.132: //1580162/41F099000000/CCAPI/ccCallDisconnect:
Cause Value=16, Tag=0x0, Call Entry(Previous Disconnect Cause=0, Disconnect Cause=0)
2452820: *May 2 21:02:46.132: //1580162/41F099000000/CCAPI/ccCallDisconnect:
Cause Value=16, Call Entry(Responded=TRUE, Cause Value=16)
2452821: *May 2 21:02:46.132: //-1/xxxxxxxxxxxx/CCAPI/ccMemPoolTDFreeHelper:
data = 4D0F39A4
2452822: *May 2 21:02:46.132: ccMemPoolTDFreeHelper:mem_mgr_mempool_free:
mem_refcnt(4C6D2C38)=0 - mempool cleanup
2452823: *May 2 21:02:46.132: //1580162/41F099000000/SIP/Msg/ccsipDisplayMsg:

--Since Moved Supplementary Service is disabled, Gateway reports an error and the call is disconnected:

Sent:

SIP/2.0 500 Internal Server Error

Via: SIP/2.0/TCP 10.201.198.18:5065;branch=z9hG4bK817c2f8cee
From: <sip:4008@10.201.198.18>;tag=90~d18302a7-aed7-454e-85f1-89e6650073de-20554956
To: <sip:98041@10.201.198.21>;tag=223D61C8-24D1
Date: Thu, 03 May 2018 01:02:46 GMT
Call-ID: 41f09900-aea15ba3-2a-12c6c90a@10.201.198.18
CSeq: 101 INVITE
Allow-Events: telephone-event
Server: Cisco-SIPGateway/IOS-12.x
Reason: Q.850;cause=16
Content-Length: 0

解釋案例2

在此情況中，由於網關中禁用了supplementary-service sip moved-temporary，因此不支援302 Moved Temporary消息，網關向CVP報告內部錯誤。

案例 3:在VXML網關/CVVB中配置CVP錯誤TCL且無補充服務

CVP中的配置

在CVP撥號方案中929292CVP標籤指向CVVB，如下圖所示。

929292>	Error label
Local Static Route	IP Address/Hostname/Server Group Name: 10.201.198.26

CUBE中的相關配置

多維資料集IP地址：10.201.198.21

CVVB IP地址：10.201.198.26

```
voice service voip
  no ip address trusted authenticate
  allow-connections sip to sip
no supplementary-service sip moved-temporarily
no supplementary-service sip refer
supplementary-service media-renegotiate
redirect ip2ip
signaling forward unconditional
sip
bind control source-interface GigabitEthernet0/0
bind media source-interface GigabitEthernet0/0
rellxx disable
min-se 360 session-expires 360
header-passing
asymmetric payload full
midcall-signaling passthru
no call service stop

.....
application
  service new-call flash:bootstrap.vxml
  !
  service survivability flash:survivability.tcl
  paramspace callfeature med-inact-det enable
  param ccb id:10.201.198.21;loc:CALO;trunks:2
  !
  service CVPSelfService flash:CVPSelfServiceBootstrap.vxml
  !
  service ringtone flash:ringtone.tcl
  !
  service cvperror flash:cvperror.tcl
  paramspace english index 0
  paramspace english language en
  paramspace english location flash
  paramspace english prefix en
.....
dial-peer voice 929292 voip
  description CVP SIP error dial-peer
  service cvperror
  session protocol sipv2
  session target ipv4:10.201.198.26
  session transport tcp
  incoming called-number 9292T
  voice-class sip rellxx disable
  dtmf-relay rtp-nte h245-signal h245-alphanumeric
```

codec g711ulaw
no vad

日誌片段

在網關中啟用的調試：**debug ccsip message**和**debug voip ccapi inout**。

Same behavior as Scenario 2

Received:

SIP/2.0 302 Moved Temporarily
Via: SIP/2.0/UDP 10.201.198.21:5060;branch=z9hG4bK4984515FB
To: <sip:8041@10.201.198.7>;tag=ds8848a4c6
From: <sip:4008@10.201.198.18>;tag=224B0C80-11DA
Call-ID: 9C5C461D-4DA611E8-A550BF90-16BB0040@10.201.198.21
CSeq: 101 INVITE
Content-Length: 0
Cisco-Guid: 1476352256-0000065536-0000000044-0315017482
Contact: <sip:92929292@10.201.198.26>
Cisco-Gucid: 57FF5900000100000000002C12C6C90A
Session-ID: 00000000000000000000000000000000;remote=23837fd11000016394e369cb85ba7fea

Sent:

ACK sip:8041@10.201.198.7:5060 SIP/2.0
Via: SIP/2.0/UDP 10.201.198.21:5060;branch=z9hG4bK4984515FB
From: sip:4008@10.201.198.18;tag=224B0C80-11DA
To: <sip:8041@10.201.198.7>;tag=ds8848a4c6
Date: Thu, 03 May 2018 01:17:41 GMT
Call-ID: 9C5C461D-4DA611E8-A550BF90-16BB0040@10.201.198.21
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: telephone-event
Content-Length: 0

Sent:

SIP/2.0 500 Internal Server Error
Via: SIP/2.0/TCP 10.201.198.18:5065;branch=z9hG4bK83447b6e69
From: <sip:4008@10.201.198.18>;tag=92~d18302a7-aed7-454e-85f1-89e6650073de-20554960
To: <sip:98041@10.201.198.21>;tag=224B0CA0-E15
Date: Thu, 03 May 2018 01:17:41 GMT
Call-ID: 57ff5900-aea15f23-2c-12c6c90a@10.201.198.18
CSeq: 101 INVITE
Allow-Events: telephone-event
Server: Cisco-SIPGateway/IOS-12.x
Reason: Q.850;cause=16
Content-Length: 0

解釋案例3

與方案2的行為相同，因為在網關中禁用了臨時移動的補充服務sip，不支援「臨時移動302」消息，並且網關向CVP報告內部錯誤。

案例 4:在VXML網關/CVVB中配置的CVP錯誤TCL

CVP中的配置

在CVP撥號方案中929292CVP標籤指向CVVB，如下圖所示。

929292>		Error label
Local Static Route	IP Address/Hostname/Server Group Name:	10.201.198.26

CUBE中的相關配置

多維資料集IP地址：10.201.198.21

CVVB IP地址：10.201.198.26

```
voice service voip
  no ip address trusted authenticate
  allow-connections sip to sip
no supplementary-service sip refer
  supplementary-service media-renegotiate
  redirect ip2ip
  signaling forward unconditional
  sip
  bind control source-interface GigabitEthernet0/0
  bind media source-interface GigabitEthernet0/0
  rel1xx disable
  min-se 360 session-expires 360
  header-passing
  asymmetric payload full
  midcall-signaling passthru
  no call service stop

.....
application
  service new-call flash:bootstrap.vxml
  !
  service survivability flash:survivability.tcl
  paramspace callfeature med-inact-det enable
  param ccb id:10.201.198.21;loc:CALO;trunks:2
  !
  service CVPSelfService flash:CVPSelfServiceBootstrap.vxml
  !
  service ringtone flash:ringtone.tcl
  !
  service cvperror flash:cvperror.tcl
  paramspace english index 0
  paramspace english language en
  paramspace english location flash
  paramspace english prefix en
.....
dial-peer voice 929292 voip
  description CVP SIP error dial-peer
  service cvperror
```

```
session protocol sipv2
session target ipv4:10.201.198.26
session transport tcp
incoming called-number 9292T
voice-class sip rellxx disable
dtmf-relay rtp-nte h245-signal h245-alphanumeric
codec g711ulaw
no vad
```

日誌片段

在網關中啟用的調試：**debug ccsip message**和**debug voip ccapi inout**

--- After the error is identified on CVP, CVP sends a 302 Moved Temporarily to CUBE/Gateway

```
2455061: *May  2 21:25:10.904: //1581217/639F4F800000/SIP/Msg/ccsipDisplayMsg:
Received:
SIP/2.0 302 Moved Temporarily
Via: SIP/2.0/UDP 10.201.198.21:5060;branch=z9hG4bK4986321AD
To: <sip:8041@10.201.198.7>;tag=ds2cb7f0a
From: <sip:4008@10.201.198.18>;tag=2251E6B8-26BC
Call-ID: A8087055-4DA711E8-A6C0BF90-16BB0040@10.201.198.21
CSeq: 101 INVITE
Content-Length: 0
Cisco-Guid: 1671384960-0000065536-0000000046-0315017482
Contact: <sip:92929292@10.201.198.26>
Cisco-Gucid: 639F4F80000100000000002E12C6C90A
Session-ID: 00000000000000000000000000000000;remote=238a5a0d100001633384b476d5df07da
```

--- Gateway responds with ACK

```
Sent:
ACK sip:8041@10.201.198.7:5060 SIP/2.0
Via: SIP/2.0/UDP 10.201.198.21:5060;branch=z9hG4bK4986321AD
From: sip:4008@10.201.198.18;tag=2251E6B8-26BC
To: <sip:8041@10.201.198.7>;tag=ds2cb7f0a
Date: Thu, 03 May 2018 01:25:10 GMT
Call-ID: A8087055-4DA711E8-A6C0BF90-16BB0040@10.201.198.21
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: telephone-event
Content-Length: 0
```

-- Gateway forward the Moved Temporarily message to the original party, in this case the PSTN (CUCM in this lab), since the supplementary service is enabled

```
Sent:
SIP/2.0 302 Moved Temporarily
Via: SIP/2.0/TCP 10.201.198.18:5065;branch=z9hG4bK852a31e4f8
From: <sip:4008@10.201.198.18>;tag=94-d18302a7-aed7-454e-85f1-89e6650073de-20554964
To: <sip:98041@10.201.198.21>;tag=2251E6D4-23B1
Date: Thu, 03 May 2018 01:25:10 GMT
Call-ID: 639f4f80-aea160e4-2e-12c6c90a@10.201.198.18
CSeq: 101 INVITE
Allow-Events: telephone-event
Server: Cisco-SIPGateway/IOS-12.x
Diversion: <sip:8041@10.201.198.21>;reason=unconditional;counter=1
Contact: sip:92929292@10.201.198.26:5060
Content-Length: 0
```

---Received ACK form PSTN

Received:

ACK sip:98041@10.201.198.21:5060 SIP/2.0

Via: SIP/2.0/TCP 10.201.198.18:5065;branch=z9hG4bK852a31e4f8

From: <sip:4008@10.201.198.18>;tag=94-d18302a7-aed7-454e-85f1-89e6650073de-20554964

To: <sip:98041@10.201.198.21>;tag=2251E6D4-23B1

Date: Thu, 03 May 2018 01:07:48 GMT

Call-ID: 639f4f80-aea160e4-2e-12c6c90a@10.201.198.18

User-Agent: Cisco-CUCM11.0

Max-Forwards: 70

CSeq: 101 ACK

Allow-Events: presence, kpml

Content-Length: 0

At this moment the PSTN must sent a SIP Invite to the CVVB, since there is no SIP trunk between the PSTN and the CVVB, the critical error message is not played and the call disconnects.

說明案例4

在此情況中，由於預設情況下啟用臨時移動的附加服務sip，因此網關會將呼叫轉發給發起方，在本例中為PSTN（在實驗室中，為CUCM）。但是，由於PSTN沒有通往CVVB的SIP中繼，因此不會播放嚴重錯誤消息並且呼叫斷開。

總之，TCP錯929292標籤必須由網關配置和控制。這與您在網關/CUBE中929292 Inbound撥號對等體上的會話目標中配置的內容無關，因為此撥號對等體不用於任何出站呼叫分支。