

# 配置并且排除故障安全模式的多维数据集SIP线路侧电话代理

## 目录

[简介](#)

[先决条件](#)

[要求](#)

[使用的组件](#)

[网络图](#)

[与多维数据集电话代理部署的已知问题](#)

[配置](#)

[常见配置](#)

[配置Cisco IOS版本15.3](#)

[完成Cisco IOS版本的15.3工作配置](#)

[配置Cisco IOS版本15.4](#)

[完成Cisco IOS版本的15.4工作配置](#)

[故障排除](#)

[其他故障排除笔记](#)

[正在修改CTL文件](#)

[IP地址0.0.0.0](#)

[CUCM投掷错误405](#)

[相关的思科支持社区讨论](#)

## 简介

本文描述如何配置Cisco Unified Border Element (多维数据集), 电话代理, 因此电话能注册对Cisco Unified Communications Manager (CUCM)从公共网络。电话和多维数据集之间的通信是安全在此部署。

## 先决条件

### 要求

Cisco 建议您了解以下主题：

- 在CUCM和多维数据集的证书管理

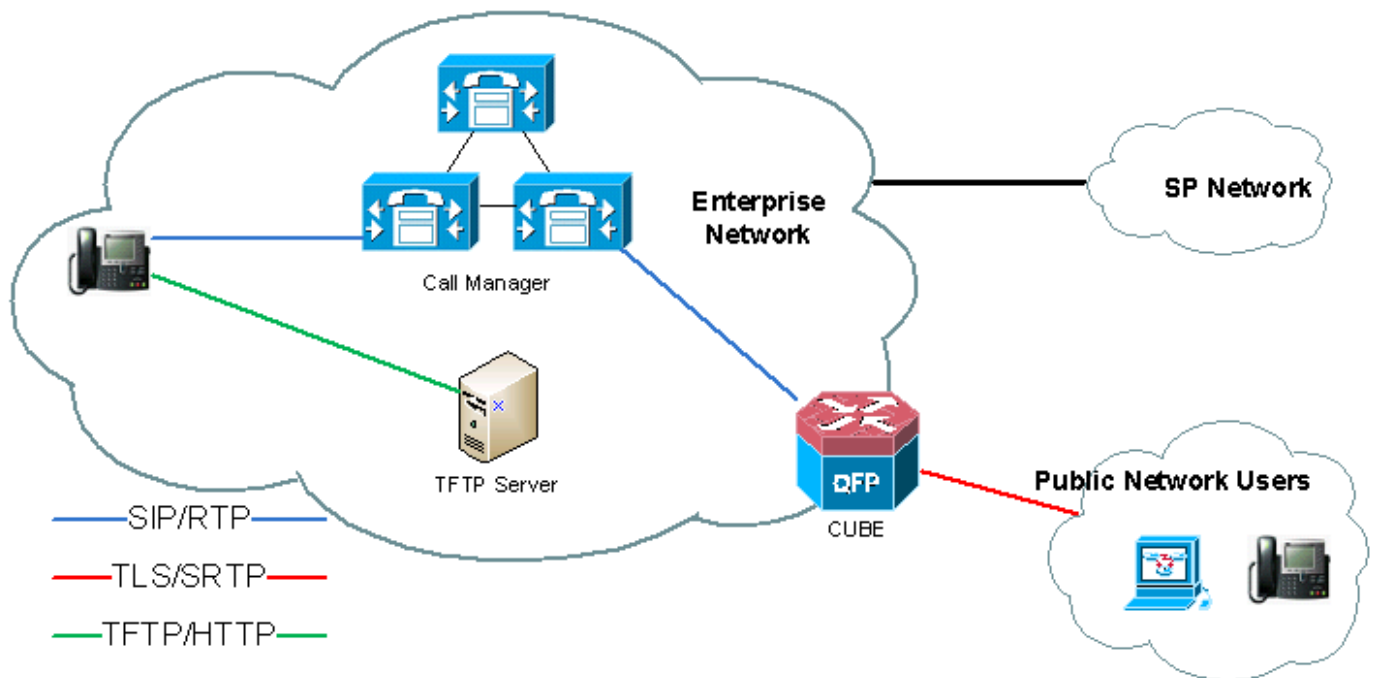
### 使用的组件

- 多维数据集运行Cisco IOS版本15.3或15.4
- CUCM
- 在公共网络的IP电话

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原

始（默认）配置。如果您使用的是真实网络，请确保您已经了解所有命令的潜在影响。

## 网络图



图例：

电话------(DP1)多维数据集(DP2)-----CUCM  
ACCESS-CUBE-IP-ADDR CORE-CUBE-IP-ADDR CUCM-IP-ADDR

DP1 -面对互联网/公共网络的Dial-peer 1

DP2 -面对内部网络的Dial-peer 2，即CUCM

用于本文的IP地址：

ACCESS-CUBE-IP-ADDR - 172.18.110.120 (远程IP电话将连接对)的接口

CORE-CUBE-IP-ADDR - 10.50.209.100 (内部地址多维数据集用途连接到CUCM)

CUCM-IP-ADDR - 10.50.209.215 (CUCM服务器IP地址)

## 与多维数据集电话代理部署的已知问题

- [CSCup83118](#)：KPML正在拨号为CUCM Lineside SIP电话失效。

解决方案：这在Cisco IOS版本15.3(3)M6、15.4(3)M1和15.4(3)S1修复。

- [CSCup85001](#)：CUCM Lineside以需要支持CUCM集群的主机名为特色。

解决方案：这在Cisco IOS版本15.4(3)M1和15.4(3)S1修复。

- [CSCun86062](#)：TS:SS:XE3.13：多维数据集电话代理不跟随PKCS1表CTL签名

解决方案：这在Cisco IOS版本15.3(3)M4、15.3(3)S4和15.4(3)M1修复。

**注意：**某些电话类似78XX/88XX电话在不安全的模式(仅TCP只将运转)

**注意：**CUCM不能有指向在多维数据集的核心地址的SIP中继。注册将拒绝与从CUCM的错误代码405，与亚里桑：399个cucm9 SIP中继禁止寄存器。

## 配置

**注意：**配置有所不同在Cisco IOS版本15.3和15.4之间。有每个IOS版本的特定部分。然而，有为两个IOS版本设置的常见配置，首先报道。

### 常见配置

1. 创建在多维数据集的-selfsigned证书。

**注意：**多维数据集电话代理只支持1024位加密。其他加密大小未测试工作。

```
!--- Generate a 1024 rsa key first, add "exportable"  
crypto key generate rsa modulus 1024 label selfsign exportable !--- Configure the trustpoint  
crypto pki trustpoint selfsign enrollment selfsigned subject-name CN=CUBE, O=CISCO revocation-  
check none rsakeypair selfsign !--- Enroll the certificate crypto pki enroll selfsign
```

2. 导入CUCM标识和Manufacturing\_CA证书对多维数据集。

请使用callmanager.pem文件此步骤。

在CUCM，请导航对Cisco Unified OS管理> Security > Certificate Management。复制&粘贴CallManager.pem对记事本。

通过使用终端，在多维数据集，请添加信任点并且导入证书。

```
crypto pki trustpoint ccml  
  enrollment terminal  
  revocation-check none  
crypto pki authenticate ccml
```

```
!--- paste the certificate download from CUCM here and say 'yes' to accept the certificate.
```

3. 执行被阐明的同一个步骤在Cisco\_Manufacturing\_CA证书的步骤2。

## 配置Cisco IOS版本15.3

1. 创建CTL文件。

```
voice-ctl-file ctl_secure  
  record-entry cucm-tftp trustpoint ccml  
  record-entry capf trustpoint Cisco_Manufacturing_CA  
  record-entry selfsigned trustpoint selfsignx  
complete
```

2. 添加多维数据集服务，呼叫流，报头通过和消息处理配置(SIP配置文件)。

```
voice service voip
no ip address trusted authenticate
allow-connections sip to sip
fax protocol t38 version 0 ls-redundancy 0 hs-redundancy 0 fallback none
sip
  header-passing
  registrar server
  nat auto
  pass-thru headers unSUPP
  pass-thru subscribe-notify-events all
  pass-thru content unSUPP
  registration passthrough
```

```
voice class uri 1 sip
  host ipv4:[ACCESS-CUBE-IP-ADDR]
!
```

```
voice class uri 2 sip
  host ipv4:[CORE-CUBE-IP-ADDR]
!
```

```
voice class uri 3 sip
  host ipv4:[CUCM-IP-ADDR]
!
```

```
voice class sip-profiles 11
request INVITE peer-header sip contact copy ">(i.*)" u01
request INVITE peer-header sip SIP-Req-URI copy "sip:([^\s]*@)" u02
response 200 peer-header sip contact copy ">(i.*)" u03
request CANCEL peer-header sip SIP-Req-URI copy "sip:([^\s]*@)" u04
request INVITE sip-header Cisco-Guid remove
request INVITE sip-header Contact modify "(.*)" "\1\u01"
request INVITE sip-header SIP-Req-URI modify ".*" "INVITE sip:\u02[CUCM-IP-ADDR] SIP/2.0"
response 200 sip-header Contact modify "(.*)" "\1\u03"
request CANCEL sip-header SIP-Req-URI modify ".*" "CANCEL sip:\u04[CUCM-IP-ADDR] SIP/2.0"
!
```

```
voice class sip-profiles 10
request INVITE peer-header sip contact copy ">(i.*)" u01
request REGISTER peer-header sip contact copy ">(i.*)" u02
request INVITE sip-header Cisco-Guid remove
request INVITE sip-header Contact modify "(.*)" "\1\u01"
request REGISTER sip-header Contact modify "(.*)" "\1\u02"
!
```

```
voice class sip-hdr-passthru-list 10
passthru-hdr Remote-Party-ID
passthru-hdr Call-Info
passthru-hdr Content-ID
passthru-hdr Allow-Events
passthru-hdr supported
passthru-hdr require
passthru-hdr Referred-By
!
```

```
voice class sip-copy-list 10
sip-header SIP-Req-URI
sip-header contact
!
```

```
voice class sip-copy-list 11
sip-header contact
```

```
dspfarm profile 1 transcode universal security
codec g722-64
codec g711ulaw
codec g711alaw
codec g729ar8
codec g729abr8
```

```
maximum sessions 24
associate application CUBE
```

```
sip-ua
timers connection aging 60
registrar 1 ipv4:[CUCM-IP-ADDR] expires 3600 refresh-ratio 100 tcp
crypto signaling default trustpoint selfsignx
```

### 3. 创建电话代理。

```
voice-phone-proxy phone_proxy
tftp-server address ipv4 [CUCM-IP-ADDR] local-addr ipv4 [CORE-CUBE-IP-ADDR] acc-addr ipv4
[ACCESS-CUBE-IP-ADDR]
ctl-file ctl_secure
access-secure
service-map server-addr ipv4 [CUCM-IP-ADDR] port 8443 acc-addr ipv4 [ACCESS-CUBE-IP-ADDR] port
8443
service-map server-addr ipv4 [CUCM-IP-ADDR] port 8080 acc-addr ipv4 [ACCESS-CUBE-IP-ADDR] port
8080
service-map server-addr ipv4 [CUCM-IP-ADDR] port 3804 acc-addr ipv4 [ACCESS-CUBE-IP-ADDR] port
3804
complete
voice-phone-proxy tftp-address ipv4 [CORE-CUBE-IP-ADDR]
port-range 40000 50000
voice-phone-proxy tftp-address ipv4 [ACCESS-CUBE-IP-ADDR]
port-range 40000 50000
voice-phone-proxy file-buffer size 60
```

### 4. 创建访问并且挖出果核dialpeer。

```
dial-peer voice 1 voip
phone-proxy phone_proxy signal-addr ipv4 [ACCESS-CUBE-IP-ADDR] cucm ipv4 [CUCM-IP-ADDR]
description *** Dialpeer Facing Outside ***
session protocol sipv2
session target registrar
session transport tcp tls
destination uri 2
incoming uri request 1
voice-class sip call-route url
voice-class sip profiles 10
voice-class sip registration passthrough registrar-index 1
voice-class sip pass-thru headers 10
voice-class sip copy-list 10
dtmf-relay rtp-nte
srtp
codec transparent
!
dial-peer voice 2 voip
description *** Dialpeer Facing CUCM ***
session protocol sipv2
session target ipv4:[CUCM-IP-ADDR]
session transport tcp
destination uri 1
incoming uri via 3
voice-class sip call-route url
voice-class sip profiles 11
voice-class sip pass-thru headers 10
voice-class sip copy-list 11
dtmf-relay rtp-nte
codec transparent
```

**完成Cisco IOS版本的15.3工作配置**

```
crypto pki trustpoint ccml
  enrollment terminal
  revocation-check none
!
crypto pki trustpoint Cisco_Manufacturing_CA
  enrollment terminal
  revocation-check none
!
!
crypto pki trustpoint selfsignx
  enrollment selfsigned
  subject-name cn=3925_pod5
  revocation-check none
  rsakeypair selfsignx

crypto pki certificate chain ccml
  certificate ca 55C2FCBFBAC552B7C6CED497D4AD33F8
  [Certificate data omitted]

crypto pki certificate chain Cisco_Manufacturing_CA
  certificate ca 6A6967B3000000000003
  [Certificate data omitted]

crypto pki certificate chain selfsignx
  certificate self-signed 01
  [Certificate data omitted]

voice service voip
  no ip address trusted authenticate
  allow-connections sip to sip
  fax protocol t38 version 0 ls-redundancy 0 hs-redundancy 0 fallback none
  sip
    header-passing
    registrar server
    nat auto
    pass-thru headers unsupp
    pass-thru subscribe-notify-events all
    pass-thru content unsupp
    registration passthrough
!
!
voice class uri 1 sip
  host ipv4:172.18.110.120
!
voice class uri 2 sip
  host ipv4:10.50.209.100
!
voice class uri 3 sip
  host ipv4:10.50.209.215
!
voice class sip-profiles 11
  request INVITE peer-header sip contact copy ">(;*)" u01
  request INVITE peer-header sip SIP-Req-URI copy "sip:([^\s]*@)" u02
  response 200 peer-header sip contact copy ">(;*)" u03
  request CANCEL peer-header sip SIP-Req-URI copy "sip:([^\s]*@)" u04
  request INVITE sip-header Cisco-Guid remove
  request INVITE sip-header Contact modify "(.*)" "\1\u01"
  request INVITE sip-header SIP-Req-URI modify ".*" "INVITE sip:\u0210.50.209.215 SIP/2.0"
  response 200 sip-header Contact modify "(.*)" "\1\u03"
  request CANCEL sip-header SIP-Req-URI modify ".*" "CANCEL sip:\u0410.50.209.215 SIP/2.0"
```

```
!  
voice class sip-profiles 10  
  request INVITE peer-header sip contact copy ">(;.*)" u01  
  request REGISTER peer-header sip contact copy ">(;.*)" u02  
  request INVITE sip-header Cisco-Guid remove  
  request INVITE sip-header Contact modify "(.*)" "\1\u01"  
  request REGISTER sip-header Contact modify "(.*)" "\1\u02"  
!  
!  
voice class sip-hdr-passthru-list 10  
  passthru-hdr Remote-Party-ID  
  passthru-hdr Call-Info  
  passthru-hdr Content-ID  
  passthru-hdr Allow-Events  
  passthru-hdr supported  
  passthru-hdr require  
  passthru-hdr Referred-By  
!  
voice class sip-copylist 10  
  sip-header SIP-Req-URI  
  sip-header contact  
!  
voice class sip-copylist 11  
  sip-header contact  
!  
!  
interface GigabitEthernet0/0  
  ip address 10.50.209.100 255.255.255.0  
  duplex auto  
  speed auto  
!  
interface GigabitEthernet0/1  
  ip address 172.18.110.120 255.255.255.0  
  duplex auto  
  speed auto  
  
dspfarm profile 1 transcode universal security  
  codec g722-64  
  codec g711ulaw  
  codec g711alaw  
  codec g729ar8  
  codec g729abr8  
  maximum sessions 24  
  associate application CUBE  
  
voice-ctl-file ctl_secure  
  record-entry cucm-tftp trustpoint cm1  
  record-entry capf trustpoint Cisco_Manufacturing_CA  
  record-entry selfsigned trustpoint selfsignx  
  complete  
voice-phone-proxy phone_proxy  
  tftp-server address ipv4 10.50.209.215 local-addr ipv4 10.50.209.100 acc-addr ipv4  
172.18.110.120  
  ctl-file ctl_secure  
  access-secure  
  service-map server-addr ipv4 10.50.209.215 port 8443 acc-addr ipv4 172.18.110.120 port 8443  
  service-map server-addr ipv4 10.50.209.215 port 8080 acc-addr ipv4 172.18.110.120 port 8080  
  service-map server-addr ipv4 10.50.209.215 port 3804 acc-addr ipv4 172.18.110.120 port 3804  
  complete  
voice-phone-proxy tftp-address ipv4 10.50.209.100  
  port-range 40000 50000  
voice-phone-proxy tftp-address ipv4 172.18.110.120  
  port-range 40000 50000
```

```

voice-phone-proxy file-buffer size 60
!
dial-peer voice 1 voip
  phone-proxy phone_proxy signal-addr ipv4 172.18.110.120 cucm ipv4 10.50.209.215
  description *** Dialpeer Facing Outside ***
  session protocol sipv2
  session target registrar
  session transport tcp tls
  destination uri 2
  incoming uri request 1
  voice-class sip call-route url
  voice-class sip profiles 10
  voice-class sip registration passthrough registrar-index 1
  voice-class sip pass-thru headers 10
  voice-class sip copy-list 10
  dtmf-relay rtp-nte
  srtp
  codec transparent
!
dial-peer voice 2 voip
  description *** Dialpeer Facing CUCM ***
  session protocol sipv2
  session target ipv4:10.50.209.215
  session transport tcp
  destination uri 1
  incoming uri via 3
  voice-class sip call-route url
  voice-class sip profiles 11
  voice-class sip pass-thru headers 10
  voice-class sip copy-list 11
  dtmf-relay rtp-nte
  codec transparent
!
!
sip-ua
  timers connection aging 60
  registrar 1 ipv4:10.50.209.215 expires 3600 refresh-ratio 100 tcp
  crypto signaling default trustpoint selfsignx

```

## 配置Cisco IOS版本15.4

**注意：**配置根据运行在多维数据集的Cisco IOS的版本是不同的。在IOS 15.3，SIP配置文件必须配置，并且在IOS版本15.4，分机cucm命令必须被输入。此命令自动地建立多维数据集的SIP配置文件，不用有他们在运行的配置。

### 1. 创建CTL文件。

```

voice-ctl-file ctl_secure
  record-entry capf trustpoint Cisco_Manufacturing_CA
  record-entry selfsigned trustpoint selfsignx
  record-entry cucm-tftp trustpoint cmml
  complete

```

### 2. 添加多维数据集服务、呼叫流和消息处理配置。

```

voice service voip
  no ip address trusted authenticate
  allow-connections sip to sip
  fax protocol t38 version 0 ls-redundancy 0 hs-redundancy 0 fallback none
  sip
    session transport tcp

```



```

header-passing
registrar server
nat auto
pass-thru headers unsupp
pass-thru subscribe-notify-events all
pass-thru content unsupp
registration passthrough
extension cucm
!
!
voice class uri 1 sip
host ipv4:[ACCESS-CUBE-IP-ADDR]
!
voice class uri 2 sip
host ipv4:[CORE-CUBE-IP-ADDR]
!
voice class uri 3 sip
host ipv4:[CUCM-IP-ADDR] !

dspfarm profile 1 transcode universal security
codec g722-64
codec g711ulaw
codec g711alaw
codec g729ar8
codec g729abr8
maximum sessions 24
associate application CUBE

sip-ua
timers connection aging 60
registrar 1 ipv4:[CUCM-IP-ADDR] expires 3600 refresh-ratio 100 tcp
crypto signaling default trustpoint selfsignx

```

### 3. 创建电话代理。

```

voice-phone-proxy phone_proxy
tftp-server address ipv4 [CUCM-IP-ADDR] local-addr ipv4 [CORE-CUBE-IP-ADDR] acc-addr ipv4
[ACCESS-CUBE-IP-ADDR]
ctl-file ctl_secure
access-secure
service-map server-addr ipv4 [CUCM-IP-ADDR] port 8443 acc-addr ipv4 [ACCESS-CUBE-IP-ADDR] port
8443
service-map server-addr ipv4 [CUCM-IP-ADDR] port 8080 acc-addr ipv4 [ACCESS-CUBE-IP-ADDR] port
8080
service-map server-addr ipv4 [CUCM-IP-ADDR] port 3804 acc-addr ipv4 [ACCESS-CUBE-IP-ADDR] port
3804
complete
voice-phone-proxy tftp-address ipv4 [CORE-CUBE-IP-ADDR]
port-range 40000 50000
voice-phone-proxy tftp-address ipv4 [ACCESS-CUBE-IP-ADDR]
port-range 40000 50000
voice-phone-proxy file-buffer size 60

```

### 4. 创建访问并且挖出果核dialpeer。

```

dial-peer voice 1 voip
phone-proxy phone_proxy signal-addr ipv4 [ACCESS-CUBE-IP-ADDR] cucm ipv4 [CUCM-IP-ADDR]
description *** Access Dialpeer Facing Outside ***
session protocol sipv2
session target registrar
session transport tcp tls
destination uri 2
incoming uri request 1
voice-class sip extension cucm

```

```

voice-class sip conn-reuse
voice-class sip call-route url
voice-class sip registration passthrough registrar-index 1
dtmf-relay rtp-nte
srtp
codec transparent
!
dial-peer voice 2 voip
description *** Core Dialpeer Facing CUCM ***
session protocol sipv2
session target ipv4:[CUCM-IP-ADDR]
session transport tcp
destination uri 1
incoming uri via 3
voice-class sip call-route url
dtmf-relay rtp-nte
codec transparent

```

## 完成Cisco IOS版本的15.4工作配置

```

crypto pki trustpoint ccml
  enrollment terminal
  revocation-check none
!
crypto pki trustpoint Cisco_Manufacturing_CA
  enrollment terminal
  revocation-check none
!
!
crypto pki trustpoint selfsignx
  enrollment selfsigned
  subject-name cn=3925_pod5
  revocation-check none
  rsakeypair selfsignx

crypto pki certificate chain ccml
  certificate ca 55C2FCBFBAC552B7C6CED497D4AD33F8
  [Certificate data omitted]

crypto pki certificate chain Cisco_Manufacturing_CA
  certificate ca 6A6967B3000000000003
  [Certificate data omitted]

crypto pki certificate chain selfsignx
  certificate self-signed 01
  [Certificate data omitted]

!
voice service voip
  no ip address trusted authenticate
  allow-connections sip to sip
  fax protocol t38 version 0 ls-redundancy 0 hs-redundancy 0 fallback none
  sip
  session transport tcp
  header-passing
  registrar server
  nat auto
  pass-thru headers unsupp
  pass-thru subscribe-notify-events all
  pass-thru content unsupp
  registration passthrough
  extension cucm
!

```

```
!  
voice class uri 1 sip  
  host ipv4:172.18.110.120  
!  
voice class uri 2 sip  
  host ipv4:10.50.209.100  
!  
voice class uri 3 sip  
  host ipv4:10.50.209.215  
!  
!  
  
interface GigabitEthernet0/0  
  ip address 10.50.209.100 255.255.255.0  
  duplex auto  
  speed auto  
!  
interface GigabitEthernet0/1  
  ip address 172.18.110.120 255.255.255.0  
  duplex auto  
  speed auto  
!  
!  
!  
dspfarm profile 1 transcode universal security  
  codec g722-64  
  codec g711ulaw  
  codec g711alaw  
  codec g729ar8  
  codec g729abr8  
  maximum sessions 24  
  associate application CUBE  
  
voice-ctl-file ctl_secure  
  record-entry capf trustpoint Cisco_Manufacturing_CA  
  record-entry selfsigned trustpoint selfsignx  
  record-entry cucm-tftp trustpoint cmml  
  complete  
  
voice-phone-proxy phone_proxy  
  tftp-server address ipv4 10.50.209.215 local-addr ipv4 10.50.209.100 acc-addr ipv4  
172.18.110.120  
  ctl-file ctl_secure  
  access-secure  
  service-map server-addr ipv4 10.50.209.215 port 8443 acc-addr ipv4 172.18.110.120 port 8443  
  service-map server-addr ipv4 10.50.209.215 port 8080 acc-addr ipv4 172.18.110.120 port 8080  
  service-map server-addr ipv4 10.50.209.215 port 3804 acc-addr ipv4 172.18.110.120 port 3804  
  complete  
  
voice-phone-proxy tftp-address ipv4 10.50.209.100  
  port-range 40000 50000  
voice-phone-proxy tftp-address ipv4 172.18.110.120  
  port-range 40000 50000  
voice-phone-proxy file-buffer size 60  
!  
dial-peer voice 1 voip  
  phone-proxy phone_proxy signal-addr ipv4 172.18.110.120 cucm ipv4 10.50.209.215  
  description *** Access Dialpeer Facing Outside ***  
  session protocol sipv2  
  session target registrar  
  session transport tcp tls  
  destination uri 2  
  incoming uri request 1
```

```
voice-class sip extension cucm
voice-class sip conn-reuse
voice-class sip call-route url
voice-class sip registration passthrough registrar-index 1
dtmf-relay rtp-nte
srtp
codec transparent
!
dial-peer voice 2 voip
description *** Core Dialpeer Facing CUCM ***
session protocol sipv2
session target ipv4:10.50.209.215
session transport tcp
destination uri 1
incoming uri via 3
voice-class sip call-route url
dtmf-relay rtp-nte
codec transparent
!
!
sip-ua
timers connection aging 60
registrar 1 ipv4:10.50.209.215 expires 3600 refresh-ratio 100 tcp
crypto signaling default trustpoint selfsignx !
```

## 故障排除

**要求的调试：**

**电话代理**

调试语音电话代理详细信息

调试语音电话代理全部

**SIP**

调试ccsip消息

**证书问题的crypto和SSL调试**

**警告：**当路由器有通过它时的很多流量请勿启用TCP调试。

```
debug ip tcp packet
debug ip tcp transactions
```

```
调试ssl openssl错误
调试ssl openssl信息
调试ssl openssl ext>
调试ssl openssl状态
```

```
debug crypto pki api
debug crypto pki回拨
debug crypto pki messages
debug crypto pki scep
debug crypto pki server
```

debug crypto pki transactions  
debug crypto pki验证

## 显示命令

### 显示sip注册转接状态

Example of a working show passthrough command.

```
3925_pod5#show sip registration passthrough status
```

CallId	DirectoryNum	peer	mode	In-Exp	reg-I	Out-Exp	survival
9	5554420	1	p2p	98 /120	1	120	normal
26	5554418	1	p2p	45 /120	1	120	normal

## 其他故障排除笔记

### 正在修改CTL文件

为了做对CTL文件的变动，首先请解开电话代理功能。

```
dial-peer voice 1 voip  
no phone-proxy phone_proxy signal-addr ipv4 172.18.110.120 cucm ipv4 10.50.209.215  
  
voice-phone-proxy phone_proxy  
no complete  
no ctl-file ctl_file  
  
voice-ctl-file ctl_file  
no complete
```

**注意：**每当修改CTL文件，必须删除CTL文件以前安装对所有电话。

### IP地址0.0.0.0

很可能，电话代理调试显示地址重写添加0.0.0.0。如果这发生，请检查CUCM集群确保，使用IP地址而不是主机名。

### 非工作的片断：

```
001952: Jul 9 14:22:05.571: PP: Complete configuration file received from Call Manager TFTP  
server, beginning config file modification process.  
001953: Jul 9 14:22:05.571: PP: Config Modify: rewriting addr to 10.50.209.215  
001954: Jul 9 14:22:05.571: PP: Config Modify: rewriting addr to 0.0.0.0  
001955: Jul 9 14:22:05.571: PP: CM Name Config Modify : detected Call Manager Name.  
001956: Jul 9 14:22:05.571: PP: Config Modify: rewriting addr to 10.50.209.215  
001957: Jul 9 14:22:05.571: PP: Config Modify: rewriting addr to 0.0.0.0 !--- incorrect here  
001958: Jul 9 14:22:05.571: PP: CM Name Config Modify : detected Call Manager Name.  
001959: Jul 9 14:22:05.571: PP: Config Modify: rewriting port 5060 to 5060  
001960: Jul 9 14:22:05.571: PP: Config Modify: rewriting port 5061 to 5061  
001961: Jul 9 14:22:05.571: PP: Config Modify: rewriting addr to 10.50.209.215  
001962: Jul 9 14:22:05.571: PP: Config Modify: rewriting addr to 0.0.0.0 !--- incorrect here
```

### 工作片断：

```
000144: *Jul 22 20:41:07.015: PP: Complete configuration file received from Call Manager TFTP
```

```
server, beginning config file modification process.
000145: *Jul 22 20:41:07.015: PP: Config Modify: rewriting addr to 10.50.209.215
000146: *Jul 22 20:41:07.015: PP: Config Modify: rewriting addr to 0.0.0.0
000147: *Jul 22 20:41:07.015: PP: CM Name Config Modify : detected Call Manager Name.
000148: *Jul 22 20:41:07.015: PP: Config Modify: rewriting addr to 10.50.209.215
000149: *Jul 22 20:41:07.015: PP: Config Modify: rewriting addr to 172.18.110.120
000150: *Jul 22 20:41:07.015: PP: CM Name Config Modify : detected Call Manager Name.
000151: *Jul 22 20:41:07.015: PP: Config Modify: rewriting port 5060 to 5060
000152: *Jul 22 20:41:07.015: PP: Config Modify: rewriting port 5061 to 5061
000153: *Jul 22 20:41:07.015: PP: Config Modify: rewriting addr to 10.50.209.215
000154: *Jul 22 20:41:07.015: PP: Config Modify: rewriting addr to 172.18.110.120
000155: *Jul 22 20:41:07.015: PP: CM Config Modify : detected Call Manager Node Name.
000156: *Jul 22 20:41:07.015: PP: Config Modify : deviceSecurityMode set to 1 (unencrypted),
modifying deviceSecurityMode to 3 (encrypted).
```

## CUCM投掷错误405

当调试SIP注册时，CUCM能拒绝与以下错误的电话注册：

```
006050: *Jul 18 17:00:34.819: //128/000000000000/SIP/Msg/ccsipDisplayMsg:
Received:
SIP/2.0 405 Method Not Allowed
Via: SIP/2.0/TCP 10.50.209.100:5060;branch=z9hG4bK3C1DDE
From: <sip:5554414@10.50.209.215>;tag=3BB270-125
To: <sip:5554414@10.50.209.215>;tag=279884435
Date: Fri, 18 Jul 2014 17:02:01 GMT
Call-ID: DE60F64D-DD311E4-809886CE-D6EFE1FB
Server: Cisco-CUCM9.1
CSeq: 2 REGISTER
Warning: 399 cucm9 "SIP trunk disallows REGISTER" !--- See this warning here
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Content-Length: 0
```

问题是注册尝试使用CUCM分配到SIP中继的IP地址。要解决问题请删除在CUCM的SIP中继或更改用于多维数据集呼叫路由的IP地址那在CUCM的SIP中继。