

# VoIP con PPP su linee concesse a larghezza di banda elevata e LLQ

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## [Introduzione](#)

In questo documento vengono fornite configurazioni di esempio per due router Cisco 3640. Le configurazioni consentono ai router di comunicare con il protocollo VoIP con il protocollo PPP su una linea assegnata a larghezza di banda elevata con LLQ (Low Latency Queuing). Per ulteriori informazioni su LLQ, consultare il documento [VoIP over PPP Links with Quality of Service \(LLQ / IP RTP Priority, LFI, cRTP\)](#).

**Nota:** quando in questo documento si parla di larghezza di banda elevata in termini di VoIP e QoS, per larghezza di banda elevata si intende una larghezza di banda superiore a 768 kbps.

## [Prerequisiti](#)

### [Requisiti](#)

Nessun requisito specifico previsto per questo documento.

## [Componenti usati](#)

Le informazioni fornite in questo documento si basano sulle seguenti versioni software e hardware:

- Software Cisco IOS® versione 12.2(19a) IP Plus o qualsiasi altro software Cisco IOS versione 12.2, 12.2T, 12.3 o 12.3T
- Due router Cisco 3640 con almeno 48 DRAM e 16 MB di memoria flash
- Due moduli di rete slot per scheda di interfaccia voce/fax Cisco NM-2V più due schede di interfaccia VIC-2FXS
- Due interfacce seriali in questo esempio, le due interfacce seriali sono NM-1E2Ws, ciascuna con una scheda di interfaccia WAN WIC-1T.
- Telefoni analogici per collegamento a porte Foreign Exchange Station (FXS) per chiamate vocali

**Nota:** i moduli di rete NM-1E2W, NM-1E1R2W e NM-2E2W non dispongono di una potenza sufficiente per supportare WIC-2T. La mancanza di supporto è dovuta a limitazioni hardware.

Le informazioni discusse in questo documento fanno riferimento a dispositivi usati in uno specifico ambiente di emulazione. Su tutti i dispositivi menzionati nel documento la configurazione è stata ripristinata ai valori predefiniti. Se la rete è operativa, valutare attentamente eventuali conseguenze derivanti dall'uso dei comandi.

## Convenzioni

Per ulteriori informazioni sulle convenzioni usate, consultare il documento [Cisco sulle convenzioni nei suggerimenti tecnici](#).

## Premesse

Se il tempo necessario per inviare un pacchetto da 1500 byte sul cavo è superiore a 10 ms, è necessario frammentare i pacchetti. Questo documento presenta una configurazione senza frammentazione. La configurazione è per un collegamento a 1544 kilobit con un ritardo di trasmissione inferiore a 10 ms per un pacchetto da 1500 byte.

**Nota:** in alcuni casi in cui si dispone di una connessione T1 completa e dedicata, una funzionalità di frammentazione può non essere necessaria. Ma c'è ancora bisogno di un meccanismo QoS. In questo caso, utilizzare LLQ. Se il tempo necessario per inviare un pacchetto da 1500 byte sul cavo è inferiore a 10 ms, non è necessario frammentare i pacchetti. L'intera T1 offre una larghezza di banda sufficiente per consentire ai pacchetti voce di entrare e uscire dalla coda senza problemi di ritardo.

**Nota:** se è stata abilitata la frammentazione sul router, il meccanismo di coda è abilitato il 100% delle volte. Se è stato configurato LLQ, il valore configurato limita il traffico per la coda di priorità. Quando non è abilitata la frammentazione, il router applica il criterio QoS solo in caso di congestione.

Inoltre, nel caso di velocità di linea superiori a 768 kbps, il protocollo cRTP (Real-Time Transport Protocol) compresso può non essere necessario. Fare riferimento al documento [VoIP over PPP Links with Quality of Service \[LLQ / IP RTP Priority, LFI, cRTP\]](#). L'uso di cRTP aiuta a risparmiare larghezza di banda perché cRTP comprime le intestazioni IP RTP. Nella sezione [Configurazioni](#) di questo documento, non è necessario abilitare il protocollo cRTP. Il T1 consente una larghezza di banda sufficiente per lo streaming dei pacchetti voce, senza compressione, sul cavo senza problemi.

**Attenzione:** se si decide di utilizzare cRTP, tenere presente che cRTP utilizza risorse CPU. Il

cRTP può sovraccaricare un router che ha un carico pesante di traffico vocale.

**Nota:** in questa configurazione, i due router si connettono back-to-back su una linea leasing. Tuttavia, nella maggior parte delle topologie, i router con abilitazione della voce possono esistere ovunque. In genere, i router voce si connettono con la connettività LAN ad altri router che si connettono alla WAN. Se i router vocali non si connettono tramite PPP su una linea in leasing, è necessario configurare tutti i comandi di configurazione della connettività WAN sui router che si connettono alla WAN; non è necessario configurare i comandi sui router voce mostrati nelle [configurazioni](#) di questo documento.

**Nota:** questa configurazione può essere utilizzata per i router Cisco serie 1700, [2600](#), [3600](#) e [3700](#).

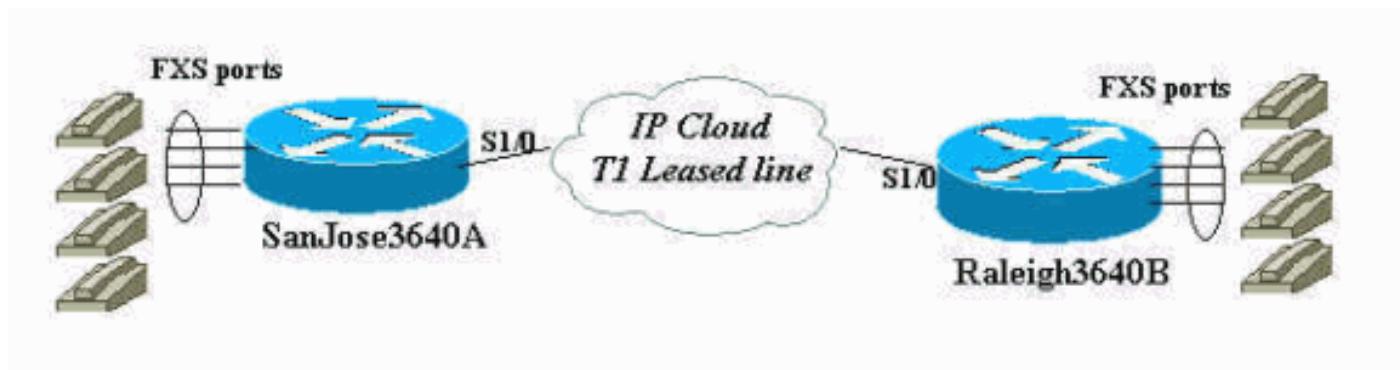
## Configurazione

In questa sezione vengono presentate le informazioni necessarie per configurare le funzionalità descritte più avanti nel documento.

**Nota:** per ulteriori informazioni sui comandi menzionati in questo documento, usare lo [strumento di ricerca dei comandi](#) (solo utenti [registrati](#)).

### Esempio di rete

Nel documento viene usata questa impostazione di rete:



### Configurazioni

Nel documento vengono usate queste configurazioni:

- [San Jose](#)
- [Raleigh](#)

<b>San Jose</b>
<pre>SanJose3640A# show run Building configuration...  Current configuration : 1425 bytes ! version 12.2 service timestamps debug datetime msec</pre>

```

service timestamps log datetime msec
no service password-encryption
!
hostname SanJose3640A
!
logging buffered 50000 debugging
!
ip subnet-zero
!
!
no ip domain-lookup
!
call rsvp-sync
!
!
!
!
!
!
!
class-map match-all voice-signaling
  match access-group 103
class-map match-all voice-traffic
  match access-group 102
!
!
policy-map voice-policy
  class voice-traffic
    priority 51

!--- These are two uncompressed G729 VoIP calls at 24 kpbs each !--- that have voice activity detection (VAD) disablement. You also need !--- to consider the Layer 2 (L2) overhead. class voice-signaling bandwidth 16 !--- This assigns a queue for voice signaling traffic that ensures 8 kbps. !--- Note: This action is optional and has nothing to do with good voice !--- quality. This queue assignment is a way to secure signaling.

class class-default
  fair-queue
!--- The class-default class classifies traffic that does !--- not fall into one of the class definitions.
The fair-queue command !--- associates the default class weighted fair queuing (WFQ).

!
!
!
interface Ethernet1/0
  ip address 10.89.251.158 255.255.255.192
  half-duplex
!
interface Serial1/0
  bandwidth 1544
  ip address 192.168.1.1 255.255.255.0
  service-policy output voice-policy
  encapsulation ppp
  load-interval 30
  clockrate 2000000
!
  ip classless

```

```
ip route 0.0.0.0 0.0.0.0 10.89.251.129
no ip http server
!
access-list 102 permit udp any any range 16384 32767
access-list 103 permit tcp any eq 1720 any
access-list 103 permit tcp any any eq 1720
!
voice-port 3/0/0
!
voice-port 3/0/1
!
voice-port 3/1/0
!
voice-port 3/1/1
!
dial-peer cor custom
!
!
!
dial-peer voice 1 voip
    incoming called-number .
    destination-pattern 2...
    session target ipv4:192.168.1.2
    dtmf-relay h245-alphanumeric
    no vad
!
dial-peer voice 2 pots
    destination-pattern 1001
    port 3/0/0
!
dial-peer voice 3 pots
    destination-pattern 1002
    port 3/0/1
!
!
line con 0
line aux 0
line vty 0 4
password cisco
login
!
end

SanJose3640A#  
  
SanJose3640A# show version
Cisco Internetwork Operating System Software
IOS (tm) 3600 Software (C3640-IS-M), Version 12.2(19a),
RELEASE SOFTWARE (fc2)
Copyright (c) 1986-2003 by cisco Systems, Inc.
Compiled Mon 29-Sep-03 23:45 by pwade
Image text-base: 0x60008930, data-base: 0x61134000

ROM: System Bootstrap, Version 11.1(20)AA2, EARLY
DEPLOYMENT RELEASE SOFTWARE (fc1)

SanJose3640A uptime is 5 minutes
System returned to ROM by reload
System image file is "flash:c3640-is-mz.122-19a.bin"

cisco 3640 (R4700) processor (revision 0x00) with
126976K/4096K bytes of memory.
Processor board ID 15636516
```

```
R4700 CPU at 100Mhz, Implementation 33, Rev 1.0  
Bridging software.  
X.25 software, Version 3.0.0.  
SuperLAT software (copyright 1990 by Meridian Technology  
Corp).  
1 Ethernet/IEEE 802.3 interface(s)  
1 Serial network interface(s)  
2 Voice FXO interface(s)  
2 Voice FXS interface(s)  
DRAM configuration is 64 bits wide with parity disabled.  
125K bytes of non-volatile configuration memory.  
32768K bytes of processor board System flash  
(Read/Write)  
16384K bytes of processor board PCMCIA Slot1 flash  
(Read/Write)
```

```
Configuration register is 0x2102
```

```
SanJose3640A#
```

## Raleigh

```
Raleigh3640A# show run  
Building configuration...  
  
Current configuration : 1406 bytes  
!  
version 12.2  
service timestamps debug datetime msec  
service timestamps log datetime msec  
no service password-encryption  
!  
hostname Raleigh3640A  
!  
logging buffered 50000 debugging  
!  
ip subnet-zero  
!  
!  
no ip domain-lookup  
!  
call rsvp-sync  
!  
!  
!  
!  
!  
!  
!  
!  
!  
class-map match-all voice-signaling  
match access-group 103  
class-map match-all voice-traffic  
match access-group 102  
!  
!  
policy-map voice-policy  
class voice-traffic  
priority 51  
!--- These are two uncompressed G729 VoIP calls at 24  
kbps each !--- that have VAD disablement. You also need  
to consider !--- the L2 overhead. class voice-signaling  
bandwidth 16 !--- This assigns a queue for voice  
signaling traffic that ensures 8 kbps. !--- Note: This
```

```
action is optional and has nothing to do with good voice
!--- quality. This queue assignment is a way to secure
signaling.
```

```
class class-default
  fair-queue
!--- The class-default class classifies traffic that
does !--- not fall into one of the class definitions.
The fair-queue command !--- associates the default class
WFQ.

!
!
!
interface Ethernet1/0
  ip address 10.89.251.159 255.255.255.192
  half-duplex
!
interface Serial1/0
  bandwidth 1544
  ip address 192.168.1.2 255.255.255.0
  service-policy output voice-policy
  encapsulation ppp
  load-interval 30
!
ip classless
ip route 0.0.0.0 0.0.0.0 10.89.251.129
no ip http server
!
access-list 102 permit udp any any range 16384 32767
access-list 103 permit tcp any eq 1720 any
access-list 103 permit tcp any any eq 1720
!
voice-port 3/0/0
!
voice-port 3/0/1
!
voice-port 3/1/0
!
voice-port 3/1/1
!
dial-peer cor custom
!
!
!
dial-peer voice 1 voip
  incoming called-number .
  destination-pattern 1...
  session target ipv4:192.168.1.1
  dtmf-relay h245-alphanumeric
  no vad
!
dial-peer voice 2 pots
  destination-pattern 2001
  port 3/0/0
!
dial-peer voice 3 pots
  destination-pattern 2002
  port 3/0/1
!
!
line con 0
line aux 0
```

```

line vty 0 4
password cisco
login
!
end

Raleigh3640A#
Raleigh3640A#
Raleigh3640A# show version
Cisco Internetwork Operating System Software
IOS (tm) 3600 Software (C3640-IS-M), Version 12.2(19a),
RELEASE SOFTWARE (fc2)
Copyright (c) 1986-2003 by cisco Systems, Inc.
Compiled Mon 29-Sep-03 23:45 by pwade
Image text-base: 0x60008930, data-base: 0x61134000

ROM: System Bootstrap, Version 12.1(17r) [cmong 17r],
RELEASE SOFTWARE (fc1)

Raleigh3640A uptime is 6 minutes
System returned to ROM by reload
System image file is "flash:c3640-is-mz.122-19a.bin"

cisco 3640-A (R4700) processor (revision 0x00) with
94208K/4096K bytes of memory.
Processor board ID 29851759
R4700 CPU at 100Mhz, Implementation 33, Rev 1.0
Bridging software.
X.25 software, Version 3.0.0.
SuperLAT software (copyright 1990 by Meridian Technology
Corp.).
1 Ethernet/IEEE 802.3 interface(s)
1 Serial network interface(s)
2 Voice FXO interface(s)
2 Voice FXS interface(s)
DRAM configuration is 64 bits wide with parity disabled.
123K bytes of non-volatile configuration memory.
32768K bytes of processor board System flash
(Read/Write)
16384K bytes of processor board PCMCIA Slot0 flash
(Read/Write)

Configuration register is 0x2102

Raleigh3640A#

```

## Verifica

Dopo aver immesso queste [configurazioni](#) nei router, verificare che funzionino correttamente. I comandi e i rispettivi output qui riportati dimostrano la corretta implementazione delle configurazioni.

Alcuni comandi **show** sono supportati dallo [strumento Output Interpreter \(solo utenti registrati\); lo strumento permette di visualizzare un'analisi dell'output del comando show](#).

- **show interface serial 1/0** - Consente di controllare lo stato dell'interfaccia seriale.
- **show call active voice brief**: consente di visualizzare le informazioni sulle chiamate durante una chiamata.
- **show call active voice**: consente di visualizzare le informazioni sulla chiamata durante una

chiamata.

- **show policy-map interface**: consente di verificare il criterio QoS utilizzato dall'interfaccia.
- **show access-list 102**: consente di verificare la selezione dei pacchetti in base all'elenco degli accessi per la classe voce. Eseguire il comando una seconda volta dopo alcuni secondi e verificare che il numero di pacchetti sia aumentato. Se necessario, eseguire il comando **clear access-list counters 102**.
- **show voice call summary**: consente di verificare lo stato delle chiamate. Il comando mostra se le chiamate sono connesse.
- **show voice port summary**: consente di verificare lo stato delle porte vocali. Il comando mostra le porte vocali come on-hook o off-hook.
- **show voice dsp**: consente di verificare lo stato del DSP (digital signal processor) e il codec (codec) utilizzato da ciascuna chiamata.

## Verifica per il router San Jose

Prima di eseguire la verifica, controllare le interfacce per assicurarsi di disporre della connettività necessaria per effettuare le chiamate. Utilizzare il comando **show interface serial 1/0** per controllare lo stato dell'interfaccia seriale. Con le [configurazioni](#) descritte in questo documento, verificare che le interfacce seriali e multilink siano in stato `line-up-protocol`. Verificare inoltre che venga visualizzato quanto segue:

- **LCP aperto (LCP Open)**, **multilink aperto (Multilink open)** - Indica la creazione della connessione PPP.
- **Apri: IPCP, CDPBP**: indica che è possibile inviare il traffico IP tramite il collegamento PPP.
- **Strategia di accodamento: weighted fair**: corrisponde all'interfaccia della riga di comando (CLI) di output di service-policy sotto l'interfaccia seriale. La strategia consiste nella configurazione di LLQ per assegnare priorità alla voce rispetto ai dati.

```
SanJose3640A# show interface serial 1/0
Serial1/0 is up, line protocol is up
Hardware is QUICC Serial
Internet address is 192.168.1.1/24
MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec,
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation PPP, loopback not set
Keepalive set (10 sec)
LCP Open
Open: IPCP, CDPBP
Last input 00:00:27, output 00:00:02, output hang never
Last clearing of "show interface" counters 00:00:05
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: weighted fair
Output queue: 0/1000/64/0 (size/max total/threshold/drops)
Conversations 0/1/256 (active/max active/max total)
Reserved Conversations 1/1 (allocated/max allocated)
Available Bandwidth 1091 kilobits/sec
30 second input rate 0 bits/sec, 0 packets/sec
30 second output rate 0 bits/sec, 0 packets/sec
1 packets input, 16 bytes, 0 no buffer
Received 0 broadcasts, 0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
1 packets output, 16 bytes, 0 underruns
0 output errors, 0 collisions, 0 interface resets
0 output buffer failures, 0 output buffers swapped out
```

```
0 carrier transitions
DCD=up DSR=up DTR=up RTS=up CTS=up
```

SanJose3640A#

Questo output mostra la corretta connettività tra i router. Se non si vede il protocollo di linea attivo, verificare la velocità di clock sull'interfaccia DCE. Alcune interfacce seriali non supportano l'alta velocità, come NM-8A/S. Verificare inoltre che i parametri su entrambi i lati corrispondano e, cosa più importante, che l'incapsulamento corrisponda.

L'output del comando **show call active voice brief** mostra due chiamate riuscite. Una chiamata viene dal router Raleigh al router San Jose, l'altra viene da San Jose a Raleigh. Nell'elenco seguente viene illustrato l'output visualizzato in grassetto:

- **Answer 1001 active**: indica che San Jose è il router da cui ha origine la chiamata.
- **Tele 3/0/0** - Indica che si tratta della coda di chiamata telefonica.
- **Origine 2001 attiva**: indica che un telefono sul lato Raleigh riceve la chiamata.
- **IP 192.168.1.2** - Indica che si tratta del segmento di chiamata IP.
- **Answer 2002 active**: indica che Raleigh è il router a cui invia la chiamata.
- **IP 192.168.1.2** - Indica che si tratta del segmento di chiamata IP.
- **Origine 1002 attiva**: indica che un telefono sul lato San Jose riceve la chiamata.
- **Tele 3/0/1** - Indica che questa è la coda di chiamata telefonica.

```
SanJose3640A# show call active voice brief
<ID>: <start>hs.<index> +<connect> pid:<peer_id> <dir> <addr> <state>
dur hh:mm:ss tx:<packets>/<bytes> rx:<packets>/<bytes>
IP <ip>:<udp> rtt:<time>ms pl:<play>/<gap>ms lost:<lost>/<early>/<late>
delay:<last>/<min>/<max>ms <codec>
MODEMPASS <method> buf:<fills>/<drains> loss <overall%> <multipkt>/<corrected>
last <buf event time>s dur:<Min>/<Max>s
FR <protocol> [int dlci cid] vad:<y/n> dtmf:<y/n> seq:<y/n>
<codec> (payload size)
ATM <protocol> [int vpi/vci cid] vad:<y/n> dtmf:<y/n> seq:<y/n>
<codec> (payload size)
Tele <int>: tx:<tot>/<v>/<fax>ms <codec> noise:<l> acom:<l> i/o:<l>/<l> dBm
Proxy <ip>:<audio udp>,<video udp>,<tcp0>,<tcp1>,<tcp2>,<tcp3> endpt: <type>/<manf>
bw: <req>/<act> codec: <audio>/<video>
tx: <audio pkts>/<audio bytes>,<video pkts>/<video bytes>,<t120 pkts>/<t120 bytes>
rx: <audio pkts>/<audio bytes>,<video pkts>/<video bytes>,<t120 pkts>/<t120 bytes>
```

```
Total call-legs: 4
11E8 : 115599hs.1 +318 pid:2 Answer 1001 active
dur 00:00:29 tx:1545/30900 rx:1544/30880
Tele 3/0/0:20: tx:30890/30890/0ms g729r8 noise:0 acom:2 i/0:-35/-44 dBm
```

```
11E8 : 115823hs.1 +94 pid:1 Originate 2001 active
dur 00:00:31 tx:1556/31120 rx:1602/32040
IP 192.168.1.2:17360 rtt:4ms pl:25590/0ms lost:0/1/0 delay:69/69/70ms g729r8
```

```
11F0 : 116855hs.1 +156 pid:1 Answer 2002 active
dur 00:00:20 tx:1087/21740 rx:1009/20180
IP 192.168.1.2:16772 rtt:2ms pl:17270/0ms lost:0/0/0 delay:69/69/70ms g729r8
```

```
11F0 : 116855hs.2 +156 pid:3 Originate 1002 active
dur 00:00:20 tx:1009/20180 rx:1087/21740
Tele 3/0/1 (23): tx:21740/21740/0ms g729r8 noise:0 acom:5 i/0:-40/-40 dBm
```

Total call-legs: 4

SanJose3640A#

Questo output del comando **show call active voice** fornisce ulteriori dettagli sulla chiamata attiva:

```
SanJose3640A# show call active voice
Total call-legs: 4

GENERIC:
SetupTime=115599 ms
Index=1
PeerAddress=1001
PeerSubAddress=
PeerId=2
PeerIfIndex=9
LogicalIfIndex=4
ConnectTime=115917
CallDuration=00:05:05
CallState=4
CallOrigin=2
ChargedUnits=0
InfoType=2
TransmitPackets=15338
TransmitBytes=306760
ReceivePackets=15337
ReceiveBytes=306740
TELE:
ConnectionId=[0x38D3783F 0x14F111CC 0x801CFDB1 0x2D0CC4A5]
IncomingConnectionId=[0x38D3783F 0x14F111CC 0x801CFDB1 0x2D0CC4A5]
TxDuration=306740 ms
VoiceTxDuration=306740 ms
FaxTxDuration=0 ms
CoderTypeRate=g729r8
NoiseLevel=0
ACOMLevel=5
OutSignalLevel=-43
InSignalLevel=-36
InfoActivity=2
ERLLevel=5
SessionTarget=
ImgPages=0
GENERIC:
SetupTime=115823 ms
Index=1
PeerAddress=2001
PeerSubAddress=
PeerId=1
PeerIfIndex=8
LogicalIfIndex=0
ConnectTime=115917
CallDuration=00:05:07
CallState=4
CallOrigin=1
ChargedUnits=0
InfoType=2
TransmitPackets=15357
TransmitBytes=307140
ReceivePackets=15403
ReceiveBytes=308060
VOIP:
ConnectionId[0x38D3783F 0x14F111CC 0x801CFDB1 0x2D0CC4A5]
IncomingConnectionId[0x38D3783F 0x14F111CC 0x801CFDB1 0x2D0CC4A5]
RemoteIPAddress=192.168.1.2
```

```
RemoteUDPPort=17360
RemoteSignallingIPAddress=192.168.1.2
RemoteSignallingPort=1720
RemoteMediaIPAddress=192.168.1.2
RemoteMediaPort=17360
RoundTripDelay=1 ms
SelectedQoS=best-effort
tx_DtmfRelay=h245-alphanumeric
FastConnect=TRUE

Separate H245 Connection=FALSE

H245 Tunneling=TRUE

SessionProtocol=cisco
SessionTarget=ipv4:192.168.1.2
OnTimeRvPlayout=300810
GapFillWithSilence=0 ms
GapFillWithPrediction=0 ms
GapFillWithInterpolation=0 ms
GapFillWithRedundancy=0 ms
HiWaterPlayoutDelay=70 ms
LoWaterPlayoutDelay=69 ms
ReceiveDelay=69 ms
LostPackets=0
EarlyPackets=2
LatePackets=0
VAD = disabled
CoderTypeRate=g729r8
CodecBytes=20
GENERIC:
SetupTime=116855 ms
Index=1
PeerAddress=2002
PeerSubAddress=
PeerId=1
PeerIfIndex=8
LogicalIfIndex=0
ConnectTime=117011
CallDuration=00:04:56
CallState=4
CallOrigin=2
ChargedUnits=0
InfoType=2
TransmitPackets=14915
TransmitBytes=298300
ReceivePackets=14837
ReceiveBytes=296740
VOIP:
ConnectionId[0x6C135AD4 0x14F311CC 0x8024CE4C 0xAA60AB15]
IncomingConnectionId[0x6C135AD4 0x14F311CC 0x8024CE4C 0xAA60AB15]
RemoteIPAddress=192.168.1.2
RemoteUDPPort=16772
RemoteSignallingIPAddress=192.168.1.2
RemoteSignallingPort=11004
RemoteMediaIPAddress=192.168.1.2
RemoteMediaPort=16772
RoundTripDelay=7 ms
SelectedQoS=best-effort
tx_DtmfRelay=h245-alphanumeric
FastConnect=TRUE

Separate H245 Connection=FALSE
```

```

H245 Tunneling=TRUE

SessionProtocol=cisco
SessionTarget=
OnTimeRvPlayout=295580
GapFillWithSilence=0 ms
GapFillWithPrediction=0 ms
GapFillWithInterpolation=0 ms
GapFillWithRedundancy=0 ms
HiWaterPlayoutDelay=70 ms
LoWaterPlayoutDelay=69 ms
ReceiveDelay=69 ms
LostPackets=0
EarlyPackets=0
LatePackets=0
VAD = disabled
CoderTypeRate=g729r8
CodecBytes=20
GENERIC:
SetupTime=116855 ms
Index=2
PeerAddress=1002
PeerSubAddress=
PeerId=3
PeerIfIndex=10
LogicalIfIndex=5
ConnectTime=117011
CallDuration=00:04:59
CallState=4
CallOrigin=1
ChargedUnits=0
InfoType=2
TransmitPackets=14952
TransmitBytes=299040
ReceivePackets=15030
ReceiveBytes=300600
TELE:
ConnectionId=[0x6C135AD4 0x14F311CC 0x8024CE4C 0xAA60AB15]
IncomingConnectionId=[0x6C135AD4 0x14F311CC 0x8024CE4C 0xAA60AB15]
TxDuration=300600 ms
VoiceTxDuration=300600 ms
FaxTxDuration=0 ms
CoderTypeRate=g729r8
NoiseLevel=0
ACOMLevel=5
OutSignalLevel=-40
InSignalLevel=-41
InfoActivity=2
ERLLevel=5
SessionTarget=
ImgPages=0Total call-legs: 4

SanJose3640A#$

```

Other shows:

L'output del comando **show policy-map interface** include questa istruzione in grassetto:

- **Velocità offerta 30 secondi 51000 bps**: visualizza la larghezza di banda richiesta dalle due chiamate, 51 kbps.

```

SanJose3640A# show policy-map interface
Serial1/0

Service-policy output: voice-policy

Class-map: voice-traffic (match-all)
99403 packets, 6401420 bytes
30 second offered rate 51000 bps, drop rate 0 bps
Match: access-group 102
Queueing
Strict Priority
Output Queue: Conversation 264
Bandwidth 51 (kbps) Burst 1275 (Bytes)
(pkts matched/bytes matched) 407/65676
(total drops/bytes drops) 0/0

Class-map: voice-signaling (match-all)
158 packets, 12926 bytes
30 second offered rate 0 bps, drop rate 0 bps
Match: access-group 103
Queueing
Output Queue: Conversation 265
Bandwidth 16 (kbps) Max Threshold 64 (packets)
(pkts matched/bytes matched) 158/12926
(depth/total drops/no-buffer drops) 0/0/0

Class-map: class-default (match-any)
75 packets, 9221 bytes
30 second offered rate 0 bps, drop rate 0 bps
Match: any
Queueing
Flow Based Fair Queueing
Maximum Number of Hashed Queues 256
(total queued/total drops/no-buffer drops) 0/0/0
SanJose3640A#

```

L'output del comando **show access-lists 102** include questa istruzione in grassetto:

- **corrispondenze 100676**: mostra che la priorità dei pacchetti RTP viene assegnata in quanto i pacchetti raggiungono l'elenco degli accessi 102.

```

SanJose3640A# show access-lists 102
Extended IP access list 102
permit udp any any range 16384 32767 (100676 matches)
SanJose3640A#
SanJose3640A#
SanJose3640A#
SanJose3640A#
SanJose3640A# show access-lists 102
Extended IP access list 102
permit udp any any range 16384 32767 (100930 matches)
SanJose3640A#
SanJose3640A#
SanJose3640A# show access-lists 102
Extended IP access list 102
permit udp any any range 16384 32767 (101076 matches)
SanJose3640A#
SanJose3640A#
SanJose3640A#
SanJose3640A# show access-lists 102
Extended IP access list 102

```

```

permit udp any any range 16384 32767 (101198 matches)
SanJose3640A#
SanJose3640A#
SanJose3640A# show access-lists 102
Extended IP access list 102
permit udp any any range 16384 32767 (101304 matches)
SanJose3640A#
SanJose3640A#


SanJose3640A#
SanJose3640A# show voice call sum
PORT CODEC VAD VTSP STATE VPM STATE
=====
3/0/0 g729r8 n S_CONNECT FXSLS_CONNECT
3/0/1 g729r8 n S_CONNECT FXSLS_CONNECT
3/1/0 - - - FXOLS_ONHOOK
3/1/1 - - - FXOLS_ONHOOK

SanJose3640A#
SanJose3640A#


SanJose3640A#
SanJose3640A# show voice port sum
IN OUT
PORT CH SIG-TYPE ADMIN OPER STATUS STATUS EC
=====
3/0/0 -- fxs-ls up up off-hook idle y
3/0/1 -- fxs-ls up up off-hook idle y
3/1/0 -- fxo-ls up dorm idle on-hook y
3/1/1 -- fxo-ls up dorm idle on-hook y

SanJose3640A#

```

```

SanJose3640A# show voice dsp

DSP DSP DSPWARE CURR BOOT PAK TX/RX
TYPE NUM CH CODEC VERSION STATE STATE RST AI VOICEPORT TS ABORT PACK COUNT
=====
C542 001 01 g729r8 3.4.55 busy idle 0 0 3/0/0 NA 0 62487/61902
C542 002 01 g729r8 3.4.55 busy idle 0 0 3/0/1 NA 0 44362/44194
C542 003 01 g711ulaw 3.4.55 IDLE idle 0 0 3/1/0 NA 0 541/546
C542 004 01 g711ulaw 3.4.55 IDLE idle 0 0 3/1/1 NA 0 535/532

```

SanJose3640A#

## Verifica per il router Raleigh

La procedura di verifica per il router Raleigh è simile a quella per il router San Jose.

```

Raleigh3640A# show interface serial 1/0
Serial1/0 is up, line protocol is up
Hardware is QUICC Serial
Internet address is 192.168.1.2/24
MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec,
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation PPP, loopback not set
Keepalive set (10 sec)
LCP Open
Open: IPCP, CDPCP

```

```

Last input 00:00:15, output 00:00:00, output hang never
Last clearing of "show interface" counters 00:12:33
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: weighted fair
Output queue: 0/1000/64/0 (size/max total/threshold/drops)
Conversations 0/1/256 (active/max active/max total)
Reserved Conversations 1/1 (allocated/max allocated)
Available Bandwidth 1091 kilobits/sec
30 second input rate 0 bits/sec, 0 packets/sec
30 second output rate 0 bits/sec, 0 packets/sec
167 packets input, 6849 bytes, 0 no buffer
Received 0 broadcasts, 0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
169 packets output, 6907 bytes, 0 underruns
0 output errors, 0 collisions, 0 interface resets
0 output buffer failures, 0 output buffers swapped out
11 carrier transitions
DCD=up DSR=up DTR=up RTS=up CTS=up

Raleigh3640A# 

Raleigh3640A#
Raleigh3640A#
Raleigh3640A#
Raleigh3640A# show call active voice
Total call-legs: 4

GENERIC:
SetupTime=209451 ms
Index=1
PeerAddress=1001
PeerSubAddress=
PeerId=1
PeerIfIndex=8
LogicalIfIndex=0
ConnectTime=209543
CallDuration=00:08:20
CallState=4
CallOrigin=2
ChargedUnits=0
InfoType=2
TransmitPackets=25054
TransmitBytes=501080
ReceivePackets=25008
ReceiveBytes=500160
VOIP:
ConnectionId[0x38D3783F 0x14F111CC 0x801CFDB1 0x2D0CC4A5]
IncomingConnectionId[0x38D3783F 0x14F111CC 0x801CFDB1 0x2D0CC4A5]
RemoteIPAddress=192.168.1.1
RemoteUDPPort=17210
RemoteSignallingIPAddress=192.168.1.1
RemoteSignallingPort=11006
RemoteMediaIPAddress=192.168.1.1
RemoteMediaPort=17210
RoundTripDelay=3 ms
SelectedQoS=best-effort
tx_DtmfRelay=h245-alphanumeric
FastConnect=TRUE

Separate H245 Connection=FALSE

H245 Tunneling=TRUE

SessionProtocol=cisco

```

SessionTarget=  
OnTimeRvLayout=497610  
GapFillWithSilence=0 ms  
GapFillWithPrediction=0 ms  
GapFillWithInterpolation=0 ms  
GapFillWithRedundancy=0 ms  
HiWaterPlayoutDelay=70 ms  
LoWaterPlayoutDelay=69 ms  
ReceiveDelay=69 ms  
LostPackets=0  
EarlyPackets=1  
LatePackets=0  
**VAD = disabled**  
**CoderTypeRate=g729r8**  
CodecBytes=20  
GENERIC:  
SetupTime=209451 ms  
Index=2  
**PeerAddress=2001**  
PeerSubAddress=  
PeerId=2  
PeerIfIndex=9  
LogicalIfIndex=4  
ConnectTime=209543  
**CallDuration=00:08:21**  
CallState=4  
CallOrigin=1  
ChargedUnits=0  
InfoType=2  
TransmitPackets=25074  
TransmitBytes=501480  
ReceivePackets=25120  
ReceiveBytes=502400  
TELE:  
ConnectionId=[0x38D3783F 0x14F111CC 0x801CFDB1 0x2D0CC4A5]  
IncomingConnectionId=[0x38D3783F 0x14F111CC 0x801CFDB1 0x2D0CC4A5]  
TxDuration=502410 ms  
VoiceTxDuration=502410 ms  
FaxTxDuration=0 ms  
CoderTypeRate=g729r8  
NoiseLevel=0  
ACOMLevel=1  
OutSignalLevel=-41  
InSignalLevel=-37  
InfoActivity=2  
ERLLevel=1  
SessionTarget=  
ImgPages=0  
GENERIC:  
SetupTime=210097 ms  
Index=1  
PeerAddress=2002  
PeerSubAddress=  
PeerId=3  
PeerIfIndex=10  
LogicalIfIndex=5  
ConnectTime=210638  
**CallDuration=00:08:10**  
CallState=4  
CallOrigin=2  
ChargedUnits=0  
InfoType=2  
TransmitPackets=24606  
TransmitBytes=492120

ReceivePackets=24605  
ReceiveBytes=492100  
TELE:  
ConnectionId=[0x6C135AD4 0x14F311CC 0x8024CE4C 0xAA60AB15]  
IncomingConnectionId=[0x6C135AD4 0x14F311CC 0x8024CE4C 0xAA60AB15]  
TxDuration=492110 ms  
VoiceTxDuration=492110 ms  
FaxTxDuration=0 ms  
CoderTypeRate=g729r8  
NoiseLevel=0  
ACOMLevel=0  
OutSignalLevel=-46  
InSignalLevel=-33  
InfoActivity=2  
ERLLevel=0  
SessionTarget=  
ImgPages=0  
GENERIC:  
SetupTime=210480 ms  
Index=1  
**PeerAddress=1002**  
PeerSubAddress=  
PeerId=1  
PeerIfIndex=8  
LogicalIfIndex=0  
ConnectTime=210638  
**CallDuration=00:08:11**  
CallState=4  
CallOrigin=1  
ChargedUnits=0  
InfoType=2  
TransmitPackets=24587  
TransmitBytes=491740  
ReceivePackets=24664  
ReceiveBytes=493280  
VOIP:  
ConnectionId[0x6C135AD4 0x14F311CC 0x8024CE4C 0xAA60AB15]  
IncomingConnectionId[0x6C135AD4 0x14F311CC 0x8024CE4C 0xAA60AB15]  
RemoteIPAddress=192.168.1.1  
RemoteUDPPort=18884  
RemoteSignallingIPAddress=192.168.1.1  
RemoteSignallingPort=1720  
RemoteMediaIPAddress=192.168.1.1  
RemoteMediaPort=18884  
**RoundTripDelay=4 ms**  
SelectedQoS=best-effort  
tx\_DtmfRelay=h245-alphanumeric  
FastConnect=TRUE  
  
Separate H245 Connection=FALSE  
  
H245 Tunneling=TRUE  
  
SessionProtocol=cisco  
SessionTarget=ipv4:192.168.1.1  
OnTimeRvPlayout=487570  
GapFillWithSilence=0 ms  
GapFillWithPrediction=0 ms  
GapFillWithInterpolation=0 ms  
GapFillWithRedundancy=0 ms  
HiWaterPlayoutDelay=70 ms  
LoWaterPlayoutDelay=69 ms  
ReceiveDelay=69 ms  
**LostPackets=0**

```
EarlyPackets=1
LatePackets=0
VAD = disabled
CoderTypeRate=g729r8
CodecBytes=20Total call-legs: 4

Raleigh3640A#
Raleigh3640A#

Raleigh3640A# show policy interface
Serial1/0

Service-policy output: voice-policy

Class-map: voice-traffic (match-all)
113186 packets, 7289624 bytes
30 second offered rate 51000 bps, drop rate 0 bps
Match: access-group 102
Queueing
Strict Priority
Output Queue: Conversation 264
Bandwidth 51 (kbps) Burst 1275 (Bytes)
(pkts matched/bytes matched) 471/75864
(total drops/bytes drops) 0/0

Class-map: voice-signaling (match-all)
162 packets, 13339 bytes
30 second offered rate 0 bps, drop rate 0 bps
Match: access-group 103
Queueing
Output Queue: Conversation 265
Bandwidth 16 (kbps) Max Threshold 64 (packets)
(pkts matched/bytes matched) 162/13339
(depth/total drops/no-buffer drops) 0/0/0

Class-map: class-default (match-any)
194 packets, 16761 bytes
30 second offered rate 0 bps, drop rate 0 bps
Match: any
Queueing
Flow Based Fair Queueing
Maximum Number of Hashed Queues 256
(total queued/total drops/no-buffer drops) 0/0/0
Raleigh3640A#  
  
Raleigh3640A# show access-lists 102
Extended IP access list 102
permit udp any any range 16384 32767 (113963 matches)
Raleigh3640A#
Raleigh3640A#
Raleigh3640A# show access-lists 102
Extended IP access list 102
permit udp any any range 16384 32767 (114093 matches)
Raleigh3640A#
Raleigh3640A#
Raleigh3640A# show access-lists 102
Extended IP access list 102
permit udp any any range 16384 32767 (114188 matches)
Raleigh3640A#
Raleigh3640A#
Raleigh3640A# show access-lists 102
Extended IP access list 102
permit udp any any range 16384 32767 (114404 matches)
```

```
Raleigh3640A#
Raleigh3640A#
```

```
Raleigh3640A#
Raleigh3640A# show voice call sum
PORT CODEC VAD VTSP STATE VPM STATE
=====
3/0/0 g729r8 n S_CONNECT FXSLS_CONNECT
3/0/1 g729r8 n S_CONNECT FXSLS_CONNECT
3/1/0 - - - FXOLS_ONHOOK
3/1/1 - - - FXOLS_ONHOOK
```

```
Raleigh3640A#
```

```
Raleigh3640A# show voice port sum
IN OUT
PORT CH SIG-TYPE ADMIN OPER STATUS STATUS EC
=====
3/0/0 -- fxs-ls up up off-hook idle y
3/0/1 -- fxs-ls up up off-hook idle y
3/1/0 -- fxo-ls up dorm idle on-hook y
3/1/1 -- fxo-ls up dorm idle on-hook y
```

```
Raleigh3640A#
```

```
Raleigh3640A#
Raleigh3640A# show voice dsp
```

```
DSP DSP DSPWARE CURR BOOT PAK TX/RX
TYPE NUM CH CODEC VERSION STATE STATE RST AI VOICEPORT TS ABORT PACK COUNT
=====
C542 001 01 g729r8 3.4.55 busy idle 0 0 3/0/0 NA 0 69615/68771
C542 002 01 g729r8 3.4.55 busy idle 0 0 3/0/1 NA 0 51511/51520
C542 003 01 g711ulaw 3.4.55 IDLE idle 0 0 3/1/0 NA 0 541/546
C542 004 01 g711ulaw 3.4.55 IDLE idle 0 0 3/1/1 NA 0 535/532
```

```
Raleigh3640A#
```

## Risoluzione dei problemi

Le informazioni contenute in questa sezione permettono di risolvere i problemi relativi alla configurazione.

### Comandi per la risoluzione dei problemi

Alcuni comandi **show** sono supportati dallo [strumento Output Interpreter \(solo utenti registrati\)](#); lo [strumento permette di visualizzare un'analisi dell'output del comando show](#).

**Nota:** prima di usare i comandi di **debug**, consultare le [informazioni importanti sui comandi di debug](#).

- **debug voip ccapi inout**: traccia il percorso di esecuzione attraverso l'API di controllo delle chiamate.
- **debug vpm all**: abilita il debug su tutte le aree VPM (virtual voice port module).
- **show log**: visualizza l'output dei debug abilitati.

Poiché i lati Raleigh e San Jose sono molto simili in configurazione e configurazione, questo documento mostra i **capi inout di debug voip** e **debug vpm** tutti i comandi per il solo router San Jose.

Se la determinazione della chiamata è un problema, usare i comandi di **debug** elencati in questa sezione. Confrontare l'output con le informazioni qui. È possibile utilizzare un software, quale Confronta o Non confrontare, per confrontare i due file di testo e individuare le differenze. L'output qui riportato funge da riferimento per una chiamata riuscita.

Innanzitutto, determinare cosa succede nel router durante la chiamata. Eseguire il comando **debug voip capi inout** e il comando **debug vpm all**. L'output del comando **show debug**, come mostrato di seguito, mostra l'abilitazione del comando **debug vpm all** sul router San Jose. È possibile determinare l'abilitazione del comando **debug vpm all** perché l'output mostra quattro comandi di debug abilitati, oltre al comando **debug voip ccapi inout**. Questi quattro comandi sono abilitati automaticamente quando si usa il comando **debug vpm all**.

**Attenzione:** disabilitare questi comandi di **debug** dopo aver generato l'output necessario. Disabilitare i comandi **debug** usando il comando **undebbug all**. Se si lascia la funzione di debug abilitata, si potrebbero verificare problemi di prestazioni del router. I comandi di debug attivati consumano risorse della CPU.

```
SanJose3640A# show debug
voip:
voip ccAPI function enter/exit debugging is on
Voice Port Module session debugging is on
Voice Port Module DSP message debugging is on
Voice Port Module error debugging is on
Voice Port Module signaling debugging is on
Voice Port Module voaal2 debugging is on
Voice Port Module trunk conditioning is on
SanJose3640A#
SanJose3640A#
SanJose3640A#
SanJose3640A#
SanJose3640A#! Call from 1001 to 2001
SanJose3640A#
SanJose3640A#
SanJose3640A#
SanJose3640A#
*Mar 1 00:05:07.675: htsp_dsp_message: SEND/RESP_SIG_STATUS: state=0xC timestamp=33146
    systime=30767
*Mar 1 00:05:07.679: htsp_process_event: [3/0/0, FXSLS_ONHOOK, E_DSP_SIG_
    1100] fxsls_onhook_offhook htsp_setup_ind
*Mar 1 00:05:07.679: [3/0/0] get_local_station_id calling num= calling name= calling
    time=00/00 00:00
*Mar 1 00:05:07.679: cc_api_call_setup_ind (vdbPtr=0x6217C270, callInfo={called=,called_
    oct3=0x81,calling=,calling_oct3=0x0,calling_oct3a=0x0,calling_xlated=false,
    subscriber_type_str=RegularLine,fdest=0,peer_tag=2, prog_ind=3,callingIE_present 0},
    callID=0x61DAB4F4)
*Mar 1 00:05:07.679: cc_api_call_setup_ind calling number is null, answer addr dest
    pattern 1001 e164_ans_addr 0 e164_dest_pattern 1
*Mar 1 00:05:07.679: cc_api_call_setup_ind valid dest pattern, copying 1001 to calling
    number
*Mar 1 00:05:07.679: cc_api_call_setup_ind type 3 , prot 0
*Mar 1 00:05:07.683: cc_process_call_setup_ind (event=0x62107860)
*Mar 1 00:05:07.683: >>>CCAPI handed cid 5 with tag 2 to app "DEFAULT"
*Mar 1 00:05:07.683: sess_appl: ev(24=CC_EV_CALL_SETUP_IND), cid(5), disp(0)
*Mar 1 00:05:07.683: sess_appl: ev(SSA_EV_CALL_SETUP_IND), cid(5), disp(0)
```

```
*Mar 1 00:05:07.683: ssaCallSetupInd
*Mar 1 00:05:07.683: ccCallSetContext (callID=0x5, context=0x620005E8)
*Mar 1 00:05:07.683: ssaCallSetupInd cid(5), st(SSA_CS_MAPPING),oldst(0),
ev(24)ev->e.evCallSetupInd.nCallInfo.finalDestFlag = 0
*Mar 1 00:05:07.683: ccCallSetupAck (callID=0x5)
*Mar 1 00:05:07.683: ccCallReportDigits (callID=0x5, enable=0x1)
*Mar 1 00:05:07.683: cc_api_call_report_digits_done (vdbPtr=0x6217C270, callID=0x5,
disp=0)
*Mar 1 00:05:07.683: sess_appl: ev(53=CC_EV_CALL_REPORT_DIGITS_DONE), cid(5), disp(0)
*Mar 1 00:05:07.683: cid(5)st(SSA_CS_MAPPING) ev(SSA_EV_CALL_REPORT_DIGITS_DONE)
oldst(SSA_CS_MAPPING)cfid(-1)csize(0)in(1)fDest(0)
*Mar 1 00:05:07.683: ssaReportDigitsDone cid(5) peer list: (empty)
*Mar 1 00:05:07.683: ssaReportDigitsDone callid=5 Enable succeeded
*Mar 1 00:05:07.687: ccGenerateTone (callID=0x5 tone=8)
*Mar 1 00:05:07.687: dsp_digit_collect_on: [3/0/0] packet_len=20 channel_id=128 packet_id=
35 min_inter_delay=240 max_inter_delay=9760 mim_make_time=10 max_make_time=100
min_brake_time=10 max_brake_time=100
*Mar 1 00:05:07.687: dsp_soutput: [3/0/0]
*Mar 1 00:05:07.687: dsp_digit_collect_on: [3/0/0] packet_len=20 channel_id=128 packet_id=
35 min_inter_delay=240 max_inter_delay=9760 mim_make_time=10 max_make_time=100
min_brake_time=10 max_brake_time=100
*Mar 1 00:05:07.687: dsp_soutput: [3/0/0]
*Mar 1 00:05:07.687: htsp_process_event: [3/0/0, FXSLS_WAIT_SETUP_ACK, E_HTSR_SETUP_ACK]
*Mar 1 00:05:09.455: cc_api_call_digit_begin (dstVdbPtr=0x0, dstCallId=0xFFFFFFFF,
srcCallId=0x5, digit=2, digit_begin_flags=0x1, rtp_timestamp=0xEB32A6E0
rtp_expiration=0x0, dest_mask=0x1)
*Mar 1 00:05:09.455: sess_appl: ev(10=CC_EV_CALL_DIGIT_BEGIN), cid(5), disp(0)
*Mar 1 00:05:09.455: cid(5)st(SSA_CS_MAPPING) ev(SSA_EV_DIGIT_BEGIN)
oldst(SSA_CS_MAPPING)cfid(-1)csize(0)in(1)fDest(0)
*Mar 1 00:05:09.455: ssaIgnore cid(5), st(SSA_CS_MAPPING),oldst(0), ev(10)
*Mar 1 00:05:09.515: cc_api_call_digit_end (dstVdbPtr=0x0, dstCallId=0xFFFFFFFF,
srcCallId=0x5,digit=2,duration=95,xruleCallingTag=0,xruleCalledTag=0, dest_mask=0x1),
digit_tone_mode=0
*Mar 1 00:05:09.515: sess_appl: ev(9=CC_EV_CALL_DIGIT_END), cid(5), disp(0)
*Mar 1 00:05:09.515: cid(5)st(SSA_CS_MAPPING) ev(SSA_EV_CALL_DIGIT)
oldst(SSA_CS_MAPPING)cfid(-1)csize(0)in(1)fDest(0)
*Mar 1 00:05:09.515: ssaDigit
*Mar 1 00:05:09.515: ssaDigit, 0. sct->digit , sct->digit len 0, usrDigit 2,
digit_tone_mode=0
*Mar 1 00:05:09.515: ssaDigit,1. callinfo.called , digit 2, callinfo.calling 1001,
xrulecallingtag 0, xrulecalledtag 0
*Mar 1 00:05:09.515: ssaDigit, 7. callinfo.calling 1001, sct->digit 2, result 1
*Mar 1 00:05:09.635: cc_api_call_digit_begin (dstVdbPtr=0x0, dstCallId=0xFFFFFFFF,
srcCallId=0x5, digit=0, digit_begin_flags=0x1, rtp_timestamp=0xEB32A6E0
rtp_expiration=0x0, dest_mask=0x1)
*Mar 1 00:05:09.635: sess_appl: ev(10=CC_EV_CALL_DIGIT_BEGIN), cid(5), disp(0)
*Mar 1 00:05:09.635: cid(5)st(SSA_CS_MAPPING) ev(SSA_EV_DIGIT_BEGIN)
oldst(SSA_CS_MAPPING)cfid(-1)csize(0)in(1)fDest(0)
*Mar 1 00:05:09.635: ssaIgnore cid(5), st(SSA_CS_MAPPING),oldst(0), ev(10)
*Mar 1 00:05:09.695: cc_api_call_digit_end (dstVdbPtr=0x0, dstCallId=0xFFFFFFFF,
srcCallId=0x5,digit=0,duration=95,xruleCallingTag=0,xruleCalledTag=0, dest_mask=0x1),
digit_tone_mode=0
*Mar 1 00:05:09.695: sess_appl: ev(9=CC_EV_CALL_DIGIT_END), cid(5), disp(0)
*Mar 1 00:05:09.695: cid(5)st(SSA_CS_MAPPING) ev(SSA_EV_CALL_DIGIT)
oldst(SSA_CS_MAPPING)cfid(-1)csize(0)in(1)fDest(0)
*Mar 1 00:05:09.695: ssaDigit
*Mar 1 00:05:09.695: ssaDigit, 0. sct->digit 2, sct->digit len 1, usrDigit 0,
digit_tone_mode=0
*Mar 1 00:05:09.695: ssaDigit,1. callinfo.called , digit 20, callinfo.calling 1001,
xrulecallingtag 0, xrulecalledtag 0
*Mar 1 00:05:09.695: ssaDigit, 7. callinfo.calling 1001, sct->digit 20, result 1
*Mar 1 00:05:09.815: cc_api_call_digit_begin (dstVdbPtr=0x0, dstCallId=0xFFFFFFFF,
srcCallId=0x5, digit=0, digit_begin_flags=0x1, rtp_timestamp=0xEB32A6E0
rtp_expiration=0x0, dest_mask=0x1)
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*Mar 1 00:05:09.815: sess_appl: ev(10=CC_EV_CALL_DIGIT_BEGIN), cid(5), disp(0)
*Mar 1 00:05:09.815: cid(5)st(SSA_CS_MAPPING)ev(SSA_EV_DIGIT_BEGIN)
oldst(SSA_CS_MAPPING)cfid(-1)csize(0)in(1)fDest(0)
*Mar 1 00:05:09.815: ssaIgnore cid(5), st(SSA_CS_MAPPING),oldst(0), ev(10)
*Mar 1 00:05:09.875: cc_api_call_digit_end (dstVdbPtr=0x0, dstCallId=0xFFFFFFFF,
srcCallId=0x5,digit=0,duration=95,xruleCallingTag=0,xruleCalledTag=0, dest_mask=0x1),
digit_tone_mode=0
*Mar 1 00:05:09.875: sess_appl: ev(9=CC_EV_CALL_DIGIT_END), cid(5), disp(0)
*Mar 1 00:05:09.875: cid(5)st(SSA_CS_MAPPING)ev(SSA_EV_CALL_DIGIT)
oldst(SSA_CS_MAPPING)cfid(-1)csize(0)in(1)fDest(0)
*Mar 1 00:05:09.875: ssaDigit
*Mar 1 00:05:09.875: ssaDigit, 0. sct->digit 20, sct->digit len 2, usrDigit 0,
digit_tone_mode=0
*Mar 1 00:05:09.875: ssaDigit,1. callinfo.called , digit 200, callinfo.calling 1001,
xrulecallingtag 0, xrulecalledtag 0
*Mar 1 00:05:09.875: ssaDigit, 7. callinfo.calling 1001, sct->digit 200, result 1
*Mar 1 00:05:09.995: cc_api_call_digit_begin (dstVdbPtr=0x0, dstCallId=0xFFFFFFFF,
srcCallId=0x5, digit=1, digit_begin_flags=0x1, rtp_timestamp=0xEB32A6E0
rtp_expiration=0x0, dest_mask=0x1)
*Mar 1 00:05:09.995: sess_appl: ev(10=CC_EV_CALL_DIGIT_BEGIN), cid(5), disp(0)
*Mar 1 00:05:09.995: cid(5)st(SSA_CS_MAPPING)ev(SSA_EV_DIGIT_BEGIN)
oldst(SSA_CS_MAPPING)cfid(-1)csize(0)in(1)fDest(0)
*Mar 1 00:05:09.995: ssaIgnore cid(5), st(SSA_CS_MAPPING),oldst(0), ev(10)
*Mar 1 00:05:10.055: cc_api_call_digit_end (dstVdbPtr=0x0, dstCallId=0xFFFFFFFF,
srcCallId=0x5,digit=1,duration=95,xruleCallingTag=0,xruleCalledTag=0, dest_mask=0x1),
digit_tone_mode=0
*Mar 1 00:05:10.055: sess_appl: ev(9=CC_EV_CALL_DIGIT_END), cid(5), disp(0)
*Mar 1 00:05:10.055: cid(5)st(SSA_CS_MAPPING)ev(SSA_EV_CALL_DIGIT)
oldst(SSA_CS_MAPPING)cfid(-1)csize(0)in(1)fDest(0)
*Mar 1 00:05:10.055: ssaDigit
*Mar 1 00:05:10.055: ssaDigit, 0. sct->digit 200, sct->digit len 3, usrDigit 1,
digit_tone_mode=0
*Mar 1 00:05:10.055: ssaDigit,1. callinfo.called , digit 2001, callinfo.calling 1001,
xrulecallingtag 0, xrulecalledtag 0
*Mar 1 00:05:10.055: ssaDigit, 7. callinfo.calling 1001, sct->digit 2001, result 0
*Mar 1 00:05:10.055: ccCallReportDigits (callID=0x5, enable=0x0)
*Mar 1 00:05:10.055: cc_api_call_report_digits_done (vdbPtr=0x6217C270, callID=0x5,
disp=0)
*Mar 1 00:05:10.055: ssaSetupPeer cid(5) peer list: tag(1) called number (2001)
*Mar 1 00:05:10.055: ssaSetupPeer cid(5), destPat(2001), matched(1), prefix(),
peer(622FB888), peer->encapType (2)
*Mar 1 00:05:10.055: ccCallProceeding (callID=0x5, prog_ind=0x0)
*Mar 1 00:05:10.059: ccCallSetupRequest (Inbound call = 0x5, outbound peer =1, dest=,
params=0x621129C8 mode=0, *callID=0x6
2112D38, prog_ind = 3) callingIE_present 0
*Mar 1 00:05:10.059: ccCallSetupRequest numbering_type 0x81
*Mar 1 00:05:10.059: ccCallSetupRequest encapType 2 clid_restrict_disable 1 null_orig_clg
1 clid_transparent 0 callingNumber 1001
*Mar 1 00:05:10.059: dest pattern 2..., called 2001, digit_strip 0
*Mar 1 00:05:10.059: callingNumber=1001, calledNumber=2001, redirectNumber= display_info=
calling_oct3a=0
*Mar 1 00:05:10.059: accountNumber=, finalDestFlag=0,
guid=3f30.bbbe.14ef.11cc.8008.fdb1.2d0c.c4a5
*Mar 1 00:05:10.059: peer_tag=1
*Mar 1 00:05:10.059: ccIFCallSetupRequestPrivate: (vdbPtr=0x620BCAF0, dest=,
callParams={called=2001,called_oct3=0x81, calling=1001,calling_oct3=0x0, calling_xlated=
false, subscriber_type_str=RegularLine, fdest=0, voice_peer_tag=1},mode=0x0) vdbP
tr type = 1
*Mar 1 00:05:10.059: ccIFCallSetupRequestPrivate: (vdbPtr=0x620BCAF0, dest=, callParams=
{called=2001, called_oct3 0x81, calling=1001,calling_oct3 0x0, calling_xlated=false,
fdest=0, voice_peer_tag=1}, mode=0x0, xltrc=-5)
*Mar 1 00:05:10.059: ccSaveDialpeerTag (callID=0x5, dialpeer_tag=0x1)
*Mar 1 00:05:10.059: ccCallSetContext (callID=0x6, context=0x61DAD8A0)
*Mar 1 00:05:10.059: sess_appl: ev(53=CC_EV_CALL_REPORT_DIGITS_DONE), cid(5), disp(0)

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*Mar 1 00:05:10.059: cid(5)st(SSA_CS_CALL_SETTING)ev(SSA_EV_CALL_REPORT_DIGITS_DONE)
  oldst(SSA_CS_MAPPING)cfid(-1)csize(0)in(1)fDest(0)
*Mar 1 00:05:10.059: -cid2(6)st2(SSA_CS_CALL_SETTING)oldst2(SSA_CS_MAPPING)
*Mar 1 00:05:10.059: ssaReportDigitsDone cid(5) peer list: (empty)
*Mar 1 00:05:10.059: ssaReportDigitsDone callid=5 Reporting disabled.
*Mar 1 00:05:10.063: dsp_digit_collect_off: [3/0/0] packet_len=8 channel_id=128 packet_id=
  36
*Mar 1 00:05:10.063: dsp_soutput: [3/0/0]
*Mar 1 00:05:10.063: htsp_process_event: [3/0/0, FXSLS_OFFHOOK, E_HTSP_PROCEEDING]
*Mar 1 00:05:10.095: cc_api_call_proceeding(vdbPtr=0x620BCAF0, callID=0x6,
  prog_ind=0x0)
*Mar 1 00:05:10.099: sess_appl: ev(21=CC_EV_CALL_PROCEEDING), cid(6), disp(0)
*Mar 1 00:05:10.099: cid(6)st(SSA_CS_CALL_SETTING)ev(SSA_EV_CALL_PROCEEDING)
  oldst(SSA_CS_MAPPING)cfid(-1)csize(0)in(0)fDest(0)
*Mar 1 00:05:10.099: -cid2(5)st2(SSA_CS_CALL_SETTING)oldst2(SSA_CS_CALL_SETTING)
*Mar 1 00:05:10.099: ssaCallProc
*Mar 1 00:05:10.099: ccGetDialpeerTag (callID=0x5)
*Mar 1 00:05:10.099: ssaIgnore cid(6), st(SSA_CS_CALL_SETTING),oldst(1), ev(21)
*Mar 1 00:05:10.103: cc_api_call_cut_progress(vdbPtr=0x620BCAF0, callID=0x6, prog_ind=0x8,
  sig_ind=0x1)
*Mar 1 00:05:10.103: sess_appl: ev(22=CC_EV_CALL_PROGRESS), cid(6), disp(0)
*Mar 1 00:05:10.107: cid(6)st(SSA_CS_CALL_SETTING)ev(SSA_EV_CALL_PROGRESS)
  oldst(SSA_CS_CALL_SETTING)cfid(-1)csize(0)in(0)fDest(0)
*Mar 1 00:05:10.107: -cid2(5)st2(SSA_CS_CALL_SETTING)oldst2(SSA_CS_CALL_SETTING)
*Mar 1 00:05:10.107: ssaCutProgress
*Mar 1 00:05:10.107: ccGetDialpeerTag (callID=0x5)
*Mar 1 00:05:10.107: ccCallCutProgress (callID=0x5, prog_ind=0x8, sig_ind=0x1)
*Mar 1 00:05:10.107: ccConferenceCreate (confID=0x6211310C, callID1=0x5,
  callID2=0x6, tag=0x0)
*Mar 1 00:05:10.107: cc_api_bridge_done (confID=0x3, srcIF=0x620BCAF0, srcCallID=0x6,
  dstCallID=0x5, disposition=0, tag=0x0)htsp_alert_notify
*Mar 1 00:05:10.107: cc_api_bridge_done (confID=0x3, srcIF=0x6217C270, srcCallID=0x5,
  dstCallID=0x6, disposition=0, tag=0x0)
*Mar 1 00:05:10.107: cc_api_caps_ind (dstVdbPtr=0x620BCAF0, dstCallId=0x6, srcCallId=0x5,
  caps={codec=0x2EBFB, fax_rate=0x7F, vad=0x3, modem=0x2 codec_bytes=0, signal_type=3})
*Mar 1 00:05:10.107: cc_api_caps_ind (Playout: mode 1, initial 60,min 40, max 200)
*Mar 1 00:05:10.111: cc_api_caps_ind (dstVdbPtr=0x6217C270, dstCallId=0x5, srcCallId=0x6,
  caps={codec=0x4, fax_rate=0x2, vad=0x1, modem=0x0 codec_bytes=20, signal_type=2})
*Mar 1 00:05:10.111: cc_api_caps_ind (Playout: mode 1, initial 60,min 40, max 200)
*Mar 1 00:05:10.111: cc_api_caps_ack (dstVdbPtr=0x6217C270, dstCallId=0x5, srcCallId=0x6,
  caps={codec=0x4, fax_rate=0x2, vad=0x1, modem=0x0 codec_bytes=20, signal_type=2,
  seq_num_start=9062})
*Mar 1 00:05:10.111: cc_api_caps_ack (dstVdbPtr=0x620BCAF0, dstCallId=0x6, srcCallId=0x5,
  caps={codec=0x4, fax_rate=0x2, vad=0x1, modem=0x0 codec_bytes=20, signal_type=2,
  seq_num_start=9062})
*Mar 1 00:05:10.111: cc_api_voice_mode_event , callID=0x5
*Mar 1 00:05:10.111: Call Pointer =620005E8
*Mar 1 00:05:10.115: cc_api_caps_ind (dstVdbPtr=0x6217C270, dstCallId=0x5, srcCallId=0x6,
  caps={codec=0x4, fax_rate=0x2, vad=0x1, modem=0x0 codec_bytes=20, signal_type=2})
*Mar 1 00:05:10.115: cc_api_caps_ind (Playout: mode 1, initial 60,min 40, max 200)
*Mar 1 00:05:10.115: cc_api_caps_ack (dstVdbPtr=0x6217C270, dstCallId=0x5, srcCallId=0x6,
  caps={codec=0x4, fax_rate=0x2, vad=0x1, modem=0x0 codec_bytes=20, signal_type=2,
  seq_num_start=9062})
*Mar 1 00:05:10.123: cc_api_caps_ack (dstVdbPtr=0x620BCAF0, dstCallId=0x6, srcCallId=0x5,
  caps={codec=0x4, fax_rate=0x2, vad=0x1, modem=0x0 codec_bytes=20, signal_type=2,
  seq_num_start=9062})
*Mar 1 00:05:10.123: cc_api_voice_mode_event , callID=0x5
*Mar 1 00:05:10.123: Call Pointer =620005E8
*Mar 1 00:05:10.123: htsp_process_event: [3/0/0, FXSLS_OFFHOOK, E_HTSP_VOICE_CUT_THROUGH]
*Mar 1 00:05:10.123: htsp_process_event: [3/0/0, FXSLS_OFFHOOK, E_HTSP_VOICE_CUT_THROUGH]
*Mar 1 00:05:10.123: sess_appl: ev(29=CC_EV_CONF_CREATE_DONE), cid(5), disp(0)
*Mar 1 00:05:10.123: cid(5)st(SSA_CS_CONFERENCING_PROGRESS)ev(SSA_EV_CONF_CREATE_DONE)
  oldst(SSA_CS_CALL_SETTING)cfid(3)csize(0)in(1)fDest(0)
*Mar 1 00:05:10.127: -cid2(6)st2(SSA_CS_CONFERENCING_PROGRESS)oldst2(SSA_CS_CALL_SETTING)

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*Mar 1 00:05:10.127: ssaConfCreateDoneAlert
*Mar 1 00:05:10.127: sess_appl: ev(51=CC_EV_VOICE_MODE_DONE), cid(5), disp(0)
*Mar 1 00:05:10.127: cid(5)st(SSA_CS_CONFERENCED_ALERT)ev(SSA_EV_VOICE_MODE_DONE)
oldst(SSA_CS_CONFERENCING_PROGRESS)cfid(3)csize(0)in(1)fDest(0)
*Mar 1 00:05:10.127: -cid2(6)st2(SSA_CS_CONFERENCED_ALERT)oldst2(SSA_CS_CALL_SETTING)
*Mar 1 00:05:10.127: ssaIgnore cid(5), st(SSA_CS_CONFERENCED_ALERT),oldst(4), ev(51)
*Mar 1 00:05:10.127: sess_appl: ev(51=CC_EV_VOICE_MODE_DONE), cid(5), disp(2)
*Mar 1 00:05:10.127: cid(5)st(SSA_CS_CONFERENCED_ALERT)ev(SSA_EV_VOICE_MODE_DONE)
oldst(SSA_CS_CONFERENCED_ALERT)cfid(3)csize(0)in(1)fDest(0)
*Mar 1 00:05:10.127: -cid2(6)st2(SSA_CS_CONFERENCED_ALERT)oldst2(SSA_CS_CALL_SETTING)
*Mar 1 00:05:10.127: ssaIgnore cid(5), st(SSA_CS_CONFERENCED_ALERT),oldst(4), ev(51)
*Mar 1 00:05:10.127: cc_process_notify_bridge_done (event=0x6210BDB8)
*Mar 1 00:05:10.131: cc_api_caps_ind (dstVdbPtr=0x6217C270, dstCallId=0x5, srcCallId=0x6,
caps={codec=0x4, fax_rate=0x2, vad=0x1, modem=0x0 codec_bytes=20, signal_type=2})
*Mar 1 00:05:10.131: cc_api_caps_ind (Playout: mode 1, initial 60,min 40, max 200)
*Mar 1 00:05:10.131: cc_api_caps_ack (dstVdbPtr=0x6217C270, dstCallId=0x5, srcCallId=0x6,
caps={codec=0x4, fax_rate=0x2, vad=0x1, modem=0x0 codec_bytes=20, signal_type=2,
seq_num_start=9063})
*Mar 1 00:05:10.131: cc_api_caps_ind (dstVdbPtr=0x6217C270, dstCallId=0x5, srcCallId=0x6,
caps={codec=0x4, fax_rate=0x2, vad=0x1, modem=0x0 codec_bytes=20, signal_type=2})
*Mar 1 00:05:10.131: cc_api_caps_ind (Playout: mode 1, initial 60,min 40, max 200)
*Mar 1 00:05:10.131: cc_api_caps_ack (dstVdbPtr=0x6217C270, dstCallId=0x5, srcCallId=0x6,
caps={codec=0x4, fax_rate=0x2, vad=0x1, modem=0x0 codec_bytes=20, signal_type=2,
seq_num_start=9063})
*Mar 1 00:05:10.135: cc_api_caps_ack (dstVdbPtr=0x620BCAF0, dstCallId=0x6, srcCallId=0x5,
caps={codec=0x4, fax_rate=0x2, vad=0x1, modem=0x0 codec_bytes=20, signal_type=2,
seq_num_start=9063})
*Mar 1 00:05:10.135: cc_api_voice_mode_event , callID=0x5
*Mar 1 00:05:10.135: Call Pointer =620005E8
*Mar 1 00:05:10.135: cc_api_caps_ack (dstVdbPtr=0x620BCAF0, dstCallId=0x6,
srcCallId=0x5, caps={codec=0x4, fax_rate=0x2, vad=0x1, modem=0x0 codec_bytes=20,
signal_type=2, seq_num_start=9063})
*Mar 1 00:05:10.135: cc_api_voice_mode_event , callID=0x5
*Mar 1 00:05:10.135: Call Pointer =620005E8
*Mar 1 00:05:10.135: htsp_process_event: [3/0/0, FXSLS_OFFHOOK, E_HTSP_VOICE_CUT_THROUGH]
*Mar 1 00:05:10.135: htsp_process_event: [3/0/0, FXSLS_OFFHOOK, E_HTSP_VOICE_CUT_THROUGH]
*Mar 1 00:05:10.135: sess_appl: ev(51=CC_EV_VOICE_MODE_DONE), cid(5), disp(0)
*Mar 1 00:05:10.135: cid(5)st(SSA_CS_CONFERENCED_ALERT)ev(SSA_EV_VOICE_MODE_DONE)
oldst(SSA_CS_CONFERENCED_ALERT)cfid(3)csize(0)in(1)fDest(0)
*Mar 1 00:05:10.135: -cid2(6)st2(SSA_CS_CONFERENCED_ALERT)oldst2(SSA_CS_CALL_SETTING)
*Mar 1 00:05:10.135: ssaIgnore cid(5), st(SSA_CS_CONFERENCED_ALERT),oldst(4), ev(51)
*Mar 1 00:05:10.135: sess_appl: ev(51=CC_EV_VOICE_MODE_DONE), cid(5), disp(0)
*Mar 1 00:05:10.135: cid(5)st(SSA_CS_CONFERENCED_ALERT)ev(SSA_EV_VOICE_MODE_DONE)
oldst(SSA_CS_CONFERENCED_ALERT)cfid(3)csize(0)in(1)fDest(0)
*Mar 1 00:05:10.139: -cid2(6)st2(SSA_CS_CONFERENCED_ALERT)oldst2(SSA_CS_CALL_SETTING)
*Mar 1 00:05:10.139: ssaIgnore cid(5), st(SSA_CS_CONFERENCED_ALERT),oldst(4), ev(51)
*Mar 1 00:05:18.303: cc_api_call_connected(vdbPtr=0x620BCAF0, callID=0x6), prog_ind =
2cc_api_call_connected: setting callEntry->connected to TRUE

*Mar 1 00:05:18.303: sess_appl: ev(8=CC_EV_CALL_CONNECTED), cid(6), disp(0)
*Mar 1 00:05:18.303: cid(6)st(SSA_CS_CONFERENCED_ALERT)ev(SSA_EV_CALL_CONNECTED)
oldst(SSA_CS_CALL_SETTING)cfid(3)csize(0)in(0)fDest(0)
*Mar 1 00:05:18.307: -cid2(5)st2(SSA_CS_CONFERENCED_ALERT)oldst2(SSA_CS_CONFERENCED_ALERT)
*Mar 1 00:05:18.307: ssaConnectAlert
*Mar 1 00:05:18.307: ccGetDialpeerTag (callID=0x5)
*Mar 1 00:05:18.307: ccCallConnect (callID=0x5), prog_ind = 2ccCallConnect:
setting callEntry->connected to TRUE

*Mar 1 00:05:18.307: ssaFlushPeerTagQueue cid(5) peer list: (empty)htsp_connect: no_
offhook 0
*Mar 1 00:05:18.307: htsp_process_event: [3/0/0, FXSLS_OFFHOOK, E_HTSP_CONNECT]fxsls_
offhook_connect
*Mar 1 00:05:18.307: [3/0/0] set signal state = 0x6 timestamp = 0
*Mar 1 00:05:18.307: dsp_set_sig_state: [3/0/0] packet_len=12 channel_id=128 packet_id=39

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state=0x6 timestamp=0x0
*Mar 1 00:05:18.307: dsp_soutput: [3/0/0]
SanJose3640A#
SanJose3640A#
SanJose3640A#
SanJose3640A#! call connected
SanJose3640A#
SanJose3640A#
SanJose3640A#
SanJose3640A#
SanJose3640A#
SanJose3640A#! 1001 disconnecting the call
SanJose3640A#
SanJose3640A#
SanJose3640A#
SanJose3640A#
SanJose3640A#
SanJose3640A#
*Mar 1 00:05:57.019: htsp_dsp_message: SEND/RESP_SIG_STATUS: state=0x4 timestamp=16952
    systime=35702
*Mar 1 00:05:57.019: htsp_process_event: [3/0/0, FXSLS_CONNECT, E_DSP_SIG_0100]fxs1s_
    offhook_onhook, HF duration=500
*Mar 1 00:05:57.023: htsp_timer - 500 msec
*Mar 1 00:05:57.523: htsp_process_event: [3/0/0, FXSLS_CONNECT, E_HTSP_EVENT_TIMER]fxs1s_
    connect_wait_release_req
*Mar 1 00:05:57.523: htsp_timer_stop
*Mar 1 00:05:57.523: cc_api_call_disconnected(vdbPtr=0x6217C270, callID=0x5, cause=0x10)
*Mar 1 00:05:57.523: sess_appl: ev(11=CC_EV_CALL_DISCONNECTED), cid(5), disp(0)
*Mar 1 00:05:57.523: cid(5)st(SSA_CS_ACTIVE)ev(SSA_EV_CALL_DISCONNECTED)
    oldst(SSA_CS_CONFERENCED_ALERT)cfid(3)csize(0)in(1)fDest(0)
*Mar 1 00:05:57.523: -cid2(6)st2(SSA_CS_ACTIVE)oldst2(SSA_CS_CONFERENCED_ALERT)
*Mar 1 00:05:57.523: ssa: Disconnected cid(5) state(5) cause(0x10)
*Mar 1 00:05:57.523: ccConferenceDestroy (confID=0x3, tag=0x0)
*Mar 1 00:05:57.523: cc_api_bridge_drop_done (confID=0x3, srcIF=0x620BCAF0, srcCallID=0x6,
    dstCallID=0x5, disposition=0 tag=0x0)
*Mar 1 00:05:57.523: cc_api_bridge_drop_done (confID=0x3, srcIF=0x6217C270, srcCallID=0x5,
    dstCallID=0x6, disposition=0 tag=0x0)
*Mar 1 00:05:57.523: sess_appl: ev(30=CC_EV_CONF_DESTROY_DONE), cid(5), disp(0)
*Mar 1 00:05:57.523: cid(5)st(SSA_CS_CONF_DESTROYING)ev(SSA_EV_CONF_DESTROY_DONE)
    oldst(SSA_CS_ACTIVE)cfid(-1)csize(0)in(1)fDest(0)
*Mar 1 00:05:57.527: -cid2(6)st2(SSA_CS_CONF_DESTROYING)oldst2(SSA_CS_CONFERENCED_ALERT)
*Mar 1 00:05:57.527: ssaConfDestroyDone
*Mar 1 00:05:57.527: ccCallDisconnect (callID=0x5, cause=0x10 tag=0x0)
*Mar 1 00:05:57.527: ccCallDisconnect: existing_cause = 0x0, new_cause = 0x10
*Mar 1 00:05:57.527: ccCallDisconnect (callID=0x6, cause=0x10 tag=0x0)
*Mar 1 00:05:57.527: ccCallDisconnect: existing_cause = 0x0, new_cause = 0x10htsp_release_
    req: cause 16, no_onhook 0
*Mar 1 00:05:57.531: htsp_process_event: [3/0/0, FXSLS_WAIT_RELEASE_REQ,
    E_HTSP_RELEASE_REQ] fxs1s_waitrls_req_rls
*Mar 1 00:05:57.531: [3/0/0] set signal state = 0x4 timestamp = 0
*Mar 1 00:05:57.531: dsp_set_sig_state: [3/0/0] packet_len=12 channel_id=128 packet_id=39
    state=0x4 timestamp=0x0
*Mar 1 00:05:57.531: dsp_soutput: [3/0/0]htsp_report_onhook_sig
*Mar 1 00:05:57.531: cc_api_call_feature: (vdbPtr=0x6217C270, callID=0x5,
    feature_ind.type=5

*Mar 1 00:05:57.535: cc_api_call_disconnect_done(vdbPtr=0x6217C270, callID=0x5, disp=0,
    tag=0x0)
*Mar 1 00:05:57.535: hdsprom_close_cleanup
*Mar 1 00:05:57.535: sess_appl: ev(28=CC_EV_CALL_FEATURE), cid(5), disp(0)
*Mar 1 00:05:57.535: cid(5)st(SSA_CS_DISCONNECTING)ev(SSA_EV_CALL_FEATURE)
    oldst(SSA_CS_CONF_DESTROYING)cfid(-1)csize(0)in(1)fDest(0)
*Mar 1 00:05:57.535: -cid2(6)st2(SSA_CS_DISCONNECTING)oldst2(SSA_CS_CONFERENCED_ALERT)
*Mar 1 00:05:57.535: ssaIgnore cid(5), st(SSA_CS_DISCONNECTING),oldst(7), ev(28)
*Mar 1 00:05:57.539: sess_appl: ev(12=CC_EV_CALL_DISCONNECT_DONE), cid(5), disp(0)
*Mar 1 00:05:57.539: cid(5)st(SSA_CS_DISCONNECTING)ev(SSA_EV_CALL_DISCONNECT_DONE)

```

```
oldst(SSA_CS_DISCONNECTING)cfid(-1)csize(0)in(1)fDest(0)
*Mar 1 00:05:57.539: -cid2(6)st2(SSA_CS_DISCONNECTING)oldst2(SSA_CS_CONFERENCED_ALERT)
*Mar 1 00:05:57.539: ssaDisconnectDone
*Mar 1 00:05:57.543: cc_api_icpif: expect factor = 0
*Mar 1 00:05:57.543: g113_calculate_impairment (delay=101,loss=0), Io=0 Iq=0 Idte=0 Idde=0
Ie=9 Itot=9
*Mar 1 00:05:57.543: cc_api_call_disconnect_done(vdbPtr=0x620BCAF0, callID=0x6, disp=0,
tag=0x0)
*Mar 1 00:05:57.547: sess_appl: ev(12=CC_EV_CALL_DISCONNECT_DONE), cid(6), disp(0)
*Mar 1 00:05:57.547: cid(6)st(SSA_CS_DISCONNECTING)ev(SSA_EV_CALL_DISCONNECT_DONE)
oldst(SSA_CS_CONFERENCED_ALERT)cfid(-1)csize(1)in(0)fDest(0)
*Mar 1 00:05:57.547: ssaDisconnectDone
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```

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## Informazioni correlate

- [Collegamenti VoIP over PPP con Quality of Service \(priorità LLQ / IP RTP, LFI, cRTP\)](#)
- [VoIP over Frame Relay con qualità del servizio \(frammentazione, Traffic Shaping, priorità LLQ / IP RTP\)](#)
- [QoS VoIP per Frame Relay su ATM Interworking con LLQ, PPP LFI e cRTP](#)
- [Informazioni sui peer di chiamata e sui segmenti di chiamata sulle piattaforme Cisco IOS](#)
- [Nozioni di base sulla risoluzione dei problemi e il debug delle chiamate VoIP](#)
- [Supporto alla tecnologia vocale](#)
- [Supporto dei prodotti per le comunicazioni voce e IP](#)
- [Risoluzione dei problemi di Cisco IP Telephony](#)
- [Documentazione e supporto tecnico](#)