

VoIP com o PPP sobre a linha alugada da largura de banda elevada e o LLQ

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[Introdução](#)

Este documento fornece configurações de amostra para dois Cisco 3640 Router. As configurações permitem o Roteadores de comunicar-se com VoIP com PPP sobre uma linha alugada da largura de banda elevada com o Low Latency Queuing (LLQ). Para obter mais informações sobre do LLQ, refira o documento [VoIP sobre links de PPP com Qualidade de Serviço \(prioridade RTP LLQ/IP, LFI, cRTP\)](#).

Nota: Quando este documento discute a largura de banda elevada em termos de VoIP e de QoS, a largura de banda elevada é qualquer largura de banda acima de 768 kbps.

[Pré-requisitos](#)

[Requisitos](#)

Não existem requisitos específicos para este documento.

[Componentes Utilizados](#)

As informações neste documento são baseadas nestas versões de software e hardware:

- IP Plus do Software Release 12.2(19a) de Cisco IOS® ou algum outro Cisco IOS Software Release de 12.2, 12.2T, 12.3, ou 12.3T
- Dois Cisco 3640 Router com pelo menos a 48 DRAM e 16 Mb da memória Flash
- Dois módulos de rede de slot da placa de interface de voz/fax de Cisco NM-2V mais duas placas de interface do VIC-2FXS
- Duas interfaces serial Neste exemplo, as duas interfaces serial são NM-1E2W, com um WAN Interface Card cada um WIC-1T.
- Os telefones analógicos para o acessório à estação de câmbio internacional (FXO) movem para chamadas de voz

Nota: Os módulos de rede NM-1E2W, NM-1E1R2W, e NM-2E2W não têm bastante potência do desempenho apoiar o WIC-2T. A falta do apoio é devido às limitações do hardware.

As informações neste documento foram criadas a partir de dispositivos em um ambiente de laboratório específico. Todos os dispositivos utilizados neste documento foram iniciados com uma configuração (padrão) inicial. Se a sua rede estiver ativa, certifique-se de que entende o impacto potencial de qualquer comando.

[Convenções](#)

Para obter mais informações sobre convenções de documento, consulte as [Convenções de dicas técnicas Cisco](#).

[Informações de Apoio](#)

Se o tempo necessário enviar um pacote 1500-byte para fora no fio é maior do que a Senhora 10, você precisa pacotes de fragmento. Este documento apresenta uma configuração sem fragmentação. A configuração é para um link 1544-kilobit para que o retardo de transmissão para um pacote 1500-byte é menos do que a Senhora 10.

Nota: Em alguns casos em quais você tem um dedicado, a conexão T1 completa, uns recursos de fragmentação pode ser desnecessária. Mas, você ainda precisa um mecanismo de QoS. Use o LLQ neste caso. Se a quantidade de tempo necessária enviar um pacote 1500-byte para fora no fio é menos do que a Senhora 10, você não precisa pacotes de fragmento. O T1 completo oferece largura de banda suficiente para permitir que pacotes de voz entrem e saiam da fila sem problemas de retardo.

Nota: Se você permitiu a fragmentação no roteador, há habilitação do mecanismo de filas 100 por cento do tempo. Se você configurou o LLQ, o valor você configurou limites o tráfego para a fila de prioridade. Quando você não permitiu a fragmentação, o roteador aplica somente a política de QoS no caso da congestão.

Também, no caso da linha taxas que é maior de 768 kbps, o protocolo compressed real-time transport (cRTP) pode ser desnecessário. Refira o documento [VoIP sobre links de PPP com o \[LLQ/IP RTP Priority, LFI, cRTP\] de Qualidade de Serviço](#). O uso do cRTP ajuda a salvar a largura de banda porque o cRTP comprime cabeçalhos de IP RTP. Na seção de [configurações](#) deste documento, a habilitação do cRTP é desnecessária. O T1 permite que a largura de banda suficiente para que os pacotes de voz fluam, sem compressão, no fio sem edição.

Cuidado: Se você decide usar o cRTP, esteja ciente que o cRTP usa recursos do CPU. O cRTP pode overtax um roteador que tenha uma carga pesada do tráfego de voz.

Nota: Nesta configuração, os dois Roteadores conectam lado a lado sobre uma linha alugada. Mas, na maioria de topologias, o Roteadores com habilitação da Voz pode existir em qualquer lugar. Geralmente, o Roteadores da Voz conecta com a conectividade de LAN ao outro Roteadores que conecta a WAN. Se seu Roteadores da Voz não conecta através do PPP sobre uma linha alugada, você precisa de configurar todos os comandos configuration da conectividade de WAN naquele Roteadores que conecta a WAN; você não configura os comandos no Roteadores da Voz, que as [configurações](#) neste documento mostram.

Nota: Esta configuração pode trabalhar para o Cisco 1700, os [2600, os 3600, e os 3700 Series Router](#).

Configurar

Nesta seção, você encontrará informações para configurar os recursos descritos neste documento.

Nota: Para localizar informações adicionais sobre os comandos usados neste documento, utilize a Ferramenta Command Lookup (somente clientes [registrados](#)).

Diagrama de Rede

Este documento utiliza a seguinte configuração de rede:

Configurações

Este documento utiliza as seguintes configurações:

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

San Jose

```
SanJose3640A# show run Building configuration... Current
configuration : 1425 bytes ! version 12.2 service
timestamps debug datetime msec 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# 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#
```

Verificar

Depois que você incorpora estas [configurações em](#) seu Roteadores, verifique que trabalham corretamente. Os comandos e a saída respectiva aqui demonstram uma implementação bem sucedida das configurações.

A [Output Interpreter Tool](#) ([somente clientes registrados](#)) oferece suporte a determinados comandos show, o que permite exibir uma análise da saída do comando show.

- **mostre a série 1/0 da relação** — Permite que você verifique o estado de sua interface serial.
- **show call active voice brief** — Permite que você ver a informação de chamada durante um atendimento.
- **mostre a voz ativa do atendimento** — Permite que você ver a informação de chamada durante um atendimento.
- **mostre a relação do mapa de política** — Permite que você verifique a política de QoS que a relação usa.
- **mostre a lista de acesso 102** — Permite que você verifique a seleção de pacote pela lista de acessos para a classe da Voz. Emita o comando um a segunda vez depois que alguns segundos e verifique que há um aumento no contagem de pacote de informação. Emita o **comando clear access-list counters 102**, caso necessário.
- **mostre o sumário da chamada de voz** — Permite que você verifique o estado dos

atendimentos. O comando mostra-lhe se os atendimentos têm a conexão.

- **mostre o sumário da porta de voz** — Permite que você verifique o estado das portas de voz. O comando mostra as portas de voz como o em-gancho ou o fora-gancho.
- **DSP de voz da mostra** — Permite que você verifique o status do processador de sinal digital (DSP) e o codificador-decodificador (codec) que cada atendimento usa.

Verificação do roteador San Jose

Antes que você execute a verificação, verifique as relações para assegurar-se de que você tenha a Conectividade necessária colocar atendimentos. Emita o **comando show interface serial 1/0** verificar o estado de sua interface serial. Com as [configurações](#) neste documento, seja certo que suas série e interfaces multilink estão em um protocolo de linha acima do estado. Igualmente seja certo que você vê este:

- **LCP aberto, multilink aberto** — Indica o estabelecimento da conexão PPP.
- **Abra: IPCP, CDPCP** — Diz-lhe que a emissão do tráfego IP é possível através do link de PPP.
- **Estratégia de enfileiramento: feira tornada mais pesada** — Corresponde ao comando `line interface(cli)` da saída da serviço-política sob a interface serial. A estratégia é para a configuração do LLQ para dar a prioridade à Voz sobre dados.

```
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, CDPCP 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#
```

Esta saída mostra a Conectividade bem sucedida entre o Roteadores. Se você não vê que o protocolo de linha está acima, verifique o Clock Rate que está na relação DCE. Algumas interfaces serial não apoiam a alta velocidade, tal como o NM-8A/S. Também, verifique que os parâmetros em ambos os lados combinam e, o mais importante, que o encapsulamento combina.

A saída do **comando show call active voice brief** aqui mostra duas chamadas bem sucedidas. Um atendimento é do roteador Raleigh ao roteador san jose, e o outro é de SÃO JOSÉ a Raleigh. Esta lista explica a saída que aparece no negrito:

- **Active da resposta 1001** — Significa que SÃO JOSÉ é o roteador de que o atendimento origina.
- **3/0/0 Tele** — Significa que este é o trecho da chamada telefônica.
- **Origine o active 2001** — Significa que um telefone no lado de Raleigh recebe o atendimento.
- **IP 192.168.1.2** — Significa que este é o trecho de chamada IP.
- **Active da resposta 2002** — Significa que Raleigh é o roteador a que o atendimento envia.
- **IP 192.168.1.2** — Significa que este é o trecho de chamada IP.
- **Origine o active 1002** — Significa que um telefone no lado de SÃO JOSÉ recebe o atendimento.
- **3/0/1 Tele** — Significa que este é o trecho da chamada telefônica.

```
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/o:-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/o:-40/-40 dBm Total call-legs: 4 SanJose3640A#
```

Esta saída do comando **show call active voice** fornece mais detalhe sobre a chamada ativa:

```
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:
```

A saída do comando **show policy-map interface** inclui esta instrução em negrito:

- 30 segundos taxas oferecida 51000 bps — Mostra a largura de banda que os dois atendimentos exigem, 51 kpbs.

```
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#
```

A saída do comando `show access-lists 102` inclui esta instrução em negrito:

- 100676 fósforos — Mostra que a prioridade dos pacotes RTP ocorre porque os pacotes alcançam a lista de acessos 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 =====
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#
```

[Verificação do roteador Raleigh](#)

O procedimento de verificação para o roteador Raleigh é similar ao procedimento para o roteador 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= OnTimeRvPayout=497610 GapFillWithSilence=0
ms GapFillWithPrediction=0 ms GapFillWithInterpolation=0 ms GapFillWithRedundancy=0 ms
HiWaterPayoutDelay=70 ms LoWaterPayoutDelay=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 OnTimeRvPayout=487570
GapFillWithSilence=0 ms GapFillWithPrediction=0 ms GapFillWithInterpolation=0 ms
GapFillWithRedundancy=0 ms HiWaterPayoutDelay=70 ms LoWaterPayoutDelay=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
==== == == =====
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

Troubleshooting

Esta seção fornece informações que podem ser usadas para o troubleshooting da sua configuração.

Comandos de solução de problemas

A [Output Interpreter Tool \(somente clientes registrados\)](#) oferece suporte a determinados comandos show, o que permite exibir uma análise da saída do comando show.

Nota: [Antes de emitir comandos de depuração, consulte Informações Importantes sobre Comandos de Depuração.](#)

- **debugar o inout do ccapi do voip** — Segue o trajeto da execução através do interface de programação de aplicativo de controle de chamadas (API).
- **debugar o vpm todo** — Permite a eliminação de erros em todas as áreas virtuais do módulo da porta de voz (VPM).
- **log da mostra** — A saída das mostras do permitido debuga.

Desde que os lados de Raleigh e de SÃO JOSÉ são muito similares na configuração e setup, este documento mostra os **comandos debug voip ccapi inout e debug vpm all** para somente o roteador san jose.

Se o estabelecimento de chamada é um problema, emita os **comandos debug** lista dessa esta seção. Compare a saída com a informação aqui. Você pode usar o software, como compara-o ou compara-o além, para comparar os dois arquivos de texto e para encontrar as diferenças. A saída aqui serve como uma referência para uma chamada bem sucedida.

Primeiramente, determine o que ocorre no roteador durante o atendimento. Emita o **inout do ccapi do voip debugar** e os **comandos debug vpm all**. A saída da introdução do **comando show debug**, como aparece aqui, mostra a habilitação do **comando debug vpm all no** roteador san jose. Você pode determinar a habilitação do **comando debug vpm all** porque a saída mostra quatro comandos debug permitidos, além do **comando debug voip ccapi inout**. Estes quatro comandos têm a habilitação automática quando você emite o **comando debug vpm all**.

Cuidado: Você deve desabilitar estes **comandos debug** depois que você gerencie a saída que você precisa. Desabilite os **comandos debug** com a introdução do **comando undebug all**. Se você licença debuga a habilitação, você pode experimentar problemas de desempenho de roteador. Os comandos Debug com habilitação consomem recursos do 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)csz(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_HTSP_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)csz(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)csz(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)csz(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)csz(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) *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)csz(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)csz(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)csz(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)csz(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.bb8e.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) *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)csz(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)csz(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)csz(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)csz(0)in(1)fDest(0) *Mar 1 00:05:10.127: - cid2(6)st2(SSA_CS_CONFERENCING_PROGRESS)oldst2(SSA_CS_CALL_SETTING) *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)csz(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)csz(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)csz(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)csz(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)csz(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 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#! 1001 disconnecting the call 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]fxspls_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]fxspls_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)csz(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)csz(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]
fxspls_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: hdsprm_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)csz(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)csz(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 Idd=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)csz(1)in(0)fDest(0) *Mar 1 00:05:57.547:
ssaDisconnectDone SanJose3640A# SanJose3640A#
```

[Informações Relacionadas](#)

- [Links de VoIP por PPP com qualidade de serviço \(LLQ / prioridade IP RTP, LFI, cRTP\)](#)
- [VoIP por Frame Relay com qualidade de serviço \(fragmentação, modelagem de tráfego, prioridade LLQ/IP RTP\)](#)
- [VoIP QoS para Frame Relay para Entrelaçamento de ATM com LLQ, PPP LFI e cRTP](#)
- [Entendendo os paridade de discagem e segmentos de chamada em plataformas Cisco IOS](#)
- [Conceitos Básicos de Troubleshooting e Depuração de Chamadas VoIP](#)
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