

Executando uma discagem de AS5300 com ISDN/Async (DDR externo)

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[Introdução](#)

Esta configuração tem um AS5300 com quatro relações da taxa principal (PRI) e apoio para 96 chamadas de modem ou um grande número chamadas ISDN. É configurada com quatro PRI para permitir Assíncrono e conexões de saída de ISDN. Os Mapas de discagem estáticos são configurados no lado de discagem para cada conexão ISDN/Async. As rotas IP estático são usadas no ambas as extremidades da conexão para evitar a carga adicional desnecessária de um protocolo de roteamento dinâmico. Adicionar uma posição remota exigiria a adição de um mapa de discadores, de username, e de uma rota estática para o destino novo no lado de discagem. Todos os nós remotos têm endereços IP fixos.

[Antes de Começar](#)

[Convenções](#)

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

[Pré-requisitos](#)

Etapa 1 - Configurar e verifique que os clientes de discagem setup corretamente.

Configurações de dialout - Dispositivo a que este AS5300 disca para fora:

- PRI: Configurando um servidor de acesso com os PRI para Assíncrono que parte e chamadas ISDN - use a configuração do roteador do AS5300 Series da instalação central (hostname AS5300) fornecida no documento.
- BRI para receber a chamada recebida do AS5300: Configurando o Dial-on-Demand Routing (DDR) ISDN com Perfis de discagem - Use a configuração do Cisco 2503 Router da site de cliente (hostname remotelSDN01) fornecida no documento.
- Assíncrono para receber a chamada recebida do AS5300: Configurando o grupo assíncrono da relação com Perfis de discagem - Use a configuração do Cisco 2511 Router da site de cliente (hostname remoteAsync01) fornecida no documento

Etapa 2 – Verifique se os circuitos Telco estão funcionando adequadamente. Você pode usar o **comando show isdn status** verificar que o circuito BRI ou PRI está funcionando corretamente. Consulte o documento [Utilizando o Comando show isdn status para o Troubleshooting de BRI](#) para obter mais informações. Você também deve ativar o circuito T1/E1 PRI para chamadas realizadas. Entre em contato com a Telco para verificar essas informações.

Componentes Utilizados

As informações neste documento são baseadas nas versões de software e hardware abaixo.

- Cisco AS5300, Cisco 2511 e Cisco 2503
- Liberação do Cisco IOS® Software 12.2(10b)
- Um modem assíncrono externo

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 você estiver trabalhando em uma rede ativa, certifique-se de que entende o impacto potencial de qualquer comando antes de utilizá-lo.

Material de Suporte

Em algumas situações, pode ser necessário usar os circuitos PRI de Conexões de discagem T1/E1. Isto ajuda a assegurar o cliente ou o escritório filial a que o circuito T1/E1 PRI disca para fora é uma identificação fixada, em vez de um usuário desconhecido que disca dentro com o nome de usuário e senha duplicado à rede.

Produtos Relacionados

Essa configuração pode ser utilizada com qualquer roteador que possua placas T1 ou PRI. Por essa razão, qualquer roteador do AS5xxx Series com uma placa T1 ou PRI pode usar essa configuração. Os Cisco 2600 e 3600 Series Router podem igualmente ser configurados para discar para fora chamadas ISDN com um WAN Interface Card T1/PRI (WIC) ou módulo de rede.

Essa configuração pode também ser modificada para ser usada com portas E1 ou PRI. Configure o controlador E1 com a codificação de linha, enquadramento e outras características físicas suportadas pela Telco. A configuração de canal D (interface serial x:15 para E1s) é similar àquela mostrada aqui.

Configurar

Nesta seção, você encontrará informações para configurar os recursos descritos neste documento. Para esta rede, você precisa o seguinte:

- O tipo de switch PRI, codificação de linha e framing.
- Os nomes de usuário e as senhas de todos os nós remotos que você estará discando em. Mesmo se você está indo adicionar o TACACS+ ou o RAIO mais tarde, adicionar alguns nomes ao roteador para testar as linhas.
- O esquema de endereçamento de IP.

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 instalação de rede mostrada no diagrama abaixo.

Configurações

Este documento utiliza as configurações mostradas abaixo.

- [AS5300](#)
- [remoteAsync01](#)
- [remoteISDN01](#)

```
AS5300
!
version 12.2
service timestamps debug datetime msec
service timestamps log datetime msec
!
hostname AS5300
!
!
username remoteISDN01 password 0 xxxx
username remoteAsync01 password 0 xxxx
!--- Usernames for local authentication of the call. !---
!--- The client presents the username/password !--- and the
AS5300 authenticates the peer. !--- This local database
of usernames and passwords are !--- compared when chap
PPP authentication is negotiated !--- between the AS5300
and remoteISDN01, remoteAsync01 routers. ! isdn switch-
type primary-5ess !--- Switch-type for this AS5300.
Obtain this information from the Telco. chat-script
kelly "" "atdt\T" TIMEOUT 60 CONNECT \c !--- A chat
script is a string of text that defines the handshaking
!--- that occurs between the router and the modem to
sucessfully !--- handshake with the destination. !--- In
this chat-script, "kelly" is the chat-script name. !---
The expect string "" is the null from the destination.
!--- And the send string "ATDT\T" is to instruct the
modem !--- to dial the telephone number in the dialer
string command, !--- which is 9996200 in the Interface
dialer 1 !--- TIMEOUT 60 CONNECT \C - waits up to 60
```

seconds for the input string "CONNECT", !--- and \C is an escape sequence to end the chat-script. !--- Refer to the [Modem-Router Connection Guide](#) and [Chat-script](#) for more information. ! controller T1 0 !--- T1 PRI physical controller configuration. framing esf !--- Framing for this T1 is Extended Super Frame (ESF). !--- Obtain this information from the Telco. clock source line primary !--- T1 0 is the primary clock source for this AS5300. !--- Clock source must be specified for the timing !--- and synchronization of the T1 carrier. linecode b8zs !--- Linecoding for this T1. Obtain this information from the Telco. pri-group timeslots 1-24 !--- For T1 PRI scenarios, all 24 T1 timeslots are assigned !--- as ISDN PRI channels. The router will now automatically create the !--- corresponding D-channel: interface Serial 0:23. ! controller T1 1 framing esf clock source line secondary 1 linecode b8zs pri-group timeslots 1-24 ! controller T1 2 framing esf clock source line secondary linecode b8zs pri-group timeslots 1-24 ! controller T1 3 framing esf clock source line secondary linecode b8zs pri-group timeslots 1-24 ! interface Ethernet0 ip address 171.68.186.54 255.255.255.240 no ip directed-broadcast ! interface Serial0:23 !--- D-channel configuration for T1 0. no ip address no ip directed-broadcast encapsulation ppp dialer rotary-group 2 !--- T1 0 is a member of rotary group 2. !--- The rotary group configuration is in interface Dialer2. !--- This rotary group command enables the Dialin and Dialout for ISDN calls. isdn switch-type primary-5ess isdn incoming-voice modem !--- All incoming ISDN analog modem calls that come in !--- on an ISDN PRI receive signaling information !--- from the ISDN D channel. The D channel is used for !--- circuit-switched data calls and analog modem calls. !--- This enables all incoming ISDN voice calls to access the call !--- switch module and integrated modems. !--- Calls are passed to the modem and the call negotiates the !--- appropriate connection with the far-end modem. no cdp enable ! interface Serial1:23 no ip address no ip directed-broadcast encapsulation ppp dialer rotary-group 2 isdn switch-type primary-5ess isdn incoming-voice modem no cdp enable ! interface Serial2:23 no ip address no ip directed-broadcast encapsulation ppp dialer rotary-group 2 isdn switch-type primary-5ess isdn incoming-voice modem no cdp enable ! interface Serial3:23 no ip address no ip directed-broadcast encapsulation ppp dialer rotary-group 2 isdn switch-type primary-5ess isdn incoming-voice modem no cdp enable ! interface FastEthernet0 no ip address no ip directed-broadcast shutdown ! interface Group-Async1 !--- This interface is configured for Async Dialin and Dialout in the T1 PRI. !--- Without this interface, Async calls cannot be made. no ip address no ip directed-broadcast async mode interactive dialer in-band dialer rotary-group 1 !--- Group-Async 1 is a member of the rotary group. !--- The rotary group configuration is in interface Dialer 1. no cdp enable group-range 1 96 !--- Group-range indicates the asynchronous interfaces !--- which come under the Group-Async interface. ! interface Dialer1 ip address 10.1.1.1 255.255.255.192 no ip directed-broadcast encapsulation ppp dialer in-band dialer idle-timeout 600 !--- Set an idle-timeout to hold the ISDN line. !--- Idle timeout for outgoing calls is 600 seconds (10 minutes). !--- If the ISDN link is idle for more than 600 seconds, it will

```

be dropped. dialer map ip 10.1.1.2 name remoteAsync01
modem-script kelly broadcast 9996200 !--- Dialer map
statements for the remote router remoteAsync01. !--- The
name must match the one used by the remote router to
identify itself. !--- Use the modem chat script "kelly"
for this connection. dialer-group 1 !--- Apply
interesting traffic definition from the dialer-list 1.
ppp authentication chap ! interface Dialer2 !--- The
dialer rotary-group 2 command in Int s0:23 activates the
interface !--- Dialer2 for inbound and outbound ISDN
calls. ip address 10.1.1.65 255.255.255.192 no ip
directed-broadcast encapsulation ppp dialer in-band
dialer idle-timeout 600 dialer map ip 10.1.1.66 name
remoteISDN01 broadcast 9996100 dialer-group 1 ppp
authentication chap ! no ip http server ip classless ip
route 10.1.200.0 255.255.255.0 10.1.1.2 !--- Static
route for the 10.1.200.0/24 network. !--- Interesting
Traffic for that network !--- will be sent to interface
Dialer1 and the router !--- will initiate the outbound
call for Asynchronous connectivity. ip route 10.1.201.0
255.255.255.0 10.1.1.66 !--- Static route for the
10.1.201.0/24 network. !--- Interesting traffic for that
network !--- will be sent to interface Dialer2 and the
router !--- will initiate the outbound call for ISDN BRI
connectivity. ! dialer-list 1 protocol ip permit !---
Interesting traffic is defined by the Protocol IP. !---
This is applied to interface Dialer1 and Dialer2 using
the dialer-group 1 command. !--- The specified dialer-
list number must be the same !--- as the dialer-group
number; in this example, defined to be "1." ! line con 0
transport input none line 1 96 script dialer kelly !---
Enables the chat script kelly configured globally. modem
InOut transport preferred none transport output none
line aux 0 line vty 0 4 login ! end

```

remoteAsync01

```

!
version 12.2
service timestamps debug datetime msec
service timestamps log datetime msec
!
hostname remoteAsync01
!
!
username AS5300 password 0 xxxx
!
modemcap entry default
!--- A modemcap named "default" will be applied !--- to
lines one through eight of Async interfaces. ! interface
Ethernet0 ip address 10.1.200.1 255.255.255.0 no ip
directed-broadcast ! interface Serial0 no ip address no
ip directed-broadcast shutdown ! interface Serial1 no ip
address no ip directed-broadcast shutdown ! interface
Async1 ip address 10.1.1.2 255.255.255.192 no ip
directed-broadcast encapsulation ppp dialer idle-timeout
600 async mode interactive !--- Enables the slip and ppp
EXEC commands. ppp authentication chap ! no ip http
server ip classless ip route 0.0.0.0 0.0.0.0 10.1.1.1 !-
-- Default static route for the outgoing packets. ! line
con 0 transport input none line 1 8 login local modem
InOut modem autoconfigure type default !--- Apply the
modemcap "default" (configured globally) to initialize

```

```
the modem. !--- Refer to the Modem-Router Connection Guide for more information. transport input all
autoselect during-login autoselect ppp speed 38400
flowcontrol hardware line aux 0 line vty 0 4 ! end
```

remoteISDN01

```
!
version 12.2
service timestamps debug datetime msec
service timestamps log datetime msec
!
hostname remoteISDN01
!
!
username AS5300 password 0 xxxx
!--- Usernames for local authentication of the call. !---
- The client presents the username/password !--- and the
AS5300 authenticates the peer. !--- This local database
of usernames and passwords are !--- compared when chap
PPP authentication is negotiated !--- between the AS5300
and remoteISDN01 routers. ! isdn switch-type basic-5ess
!--- Switch-type for this 2503. Obtain this information
from the Telco. . ! interface Ethernet0 ip address
10.1.201.1 255.255.255.0 no ip directed-broadcast !
interface Serial0 no ip address no ip directed-broadcast
shutdown ! interface Serial1 no ip address no ip
directed-broadcast shutdown ! interface BRI0 ip address
10.1.1.66 255.255.255.192 no ip directed-broadcast
encapsulation ppp dialer idle-timeout 600 dialer-group 1
isdn switch-type basic-5ess ppp authentication chap ! no
ip http server ip classless ip route 0.0.0.0 0.0.0.0
10.1.1.65 !--- Default static route for the outgoing
packets. ! dialer-list 1 protocol ip permit ! line con 0
transport input none line aux 0 line vty 0 4 ! end
```

Verificar

Esta seção fornece informações que você pode usar para confirmar se sua configuração está funcionando adequadamente.

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

- **show isdn status** - Garante que o roteador está se comunicando corretamente com o switch ISDN. Na saída, verifique se o status da camada 1 está ATIVO e se o estado de status da camada 2 = MULTIPLE_FRAME_ESTABLISHED é exibido. Esse comando exibe também o número de chamadas ativas.
- **show ppp multilink** – Exibe informações em conjuntos multilink que estão ativos. Este comando deve ser utilizado para verificar a conexão multilink.
- **show dialer [interface type number]** - Exibe informações de diagnóstico geral para interfaces configuradas para DDR. Se o discador surgir adequadamente, o estado do discador é uma mensagem de camada de link de dados que deve ser exibida. Se uma camada física aparecer, então o protocolo de linha será exibido, mas o Protocolo de controle de rede (NCP), não. Os endereços de origem e destino do pacote que iniciou a discagem são mostrados na linha de razão de discagem. Este comando show mostra a configuração do cronômetro e o

tempo antes que a conexão expire.

- **show caller user username detail** - Mostra parâmetros para o usuário particular, como endereço IP designado, PPP, parâmetros de pacote PPP, etc. Se sua versão de Cisco IOS Software não apoia este comando, use o comando **show user**.
- **show dialer map** – Exibe os mapas configurados de discador dinâmicos e estáticos. Este comando pode ser utilizado para ver se um mapa de discador dinâmico foi criado. Sem um mapa de discadores, você não pode encaminhar pacotes.
- **mostre o serviço isdn** - Para verificar o estado dos canais B. (Este comando é somente para os servidores de acesso que apoiam os controladores PRI/T1.)
- **usuário da mostra** - Para indicar os usuários do async/sincronização conectados atualmente.

Abaixo há algumas saídas de comandos show para chamadas bem-sucedidas. Preste atenção às seções em negrito e comentários fornecidos nas saídas. Compare a saída que você obtém com o resultado mostrado abaixo.

A seguinte saída é obtida antes de estabelecer a conexão com o Roteadores remotelSDN01 e remoteAsync01.

```
AS5300#show ip route Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP D
- EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area N1 - OSPF NSSA external type 1, N2
- OSPF NSSA external type 2 E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP i
- IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area * - candidate default, U -
per-user static route, o - ODR P - periodic downloaded static route Gateway of last resort is
not set 171.68.0.0/28 is subnetted, 1 subnets C 171.68.186.48 is directly connected, Ethernet0
10.0.0.0/8 is variably subnetted, 4 subnets, 2 masks C 10.1.1.0/26 is directly connected,
Dialer1 C 10.1.1.64/26 is directly connected, Dialer2 S 10.1.201.0/24 [1/0] via 10.1.1.66 S
10.1.200.0/24 [1/0] via 10.1.1.2
```

A seguinte saída é obtida após ter estabelecido a conexão com o Roteadores remotelSDN01 e remoteAsync01.

```
AS5300#show ip route Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP D
- EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area N1 - OSPF NSSA external type 1, N2
- OSPF NSSA external type 2 E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP i
- IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area * - candidate default, U -
per-user static route, o - ODR P - periodic downloaded static route Gateway of last resort is
not set 171.68.0.0/28 is subnetted, 1 subnets C 171.68.186.48 is directly connected, Ethernet0
10.0.0.0/8 is variably subnetted, 6 subnets, 3 masks C 10.1.1.2/32 is directly connected,
Dialer1 C 10.1.1.0/26 is directly connected, Dialer1 C 10.1.1.66/32 is directly connected,
Dialer2 C 10.1.1.64/26 is directly connected, Dialer2 S 10.1.201.0/24 [1/0] via 10.1.1.66 S
10.1.200.0/24 [1/0] via 10.1.1.2 AS5300#show ip route connected 171.68.0.0/28 is subnetted, 1
subnets C 171.68.186.48 is directly connected, Ethernet0 10.0.0.0/8 is variably subnetted, 6
subnets, 3 masks C 10.1.1.2/32 is directly connected, Dialer1 C 10.1.1.0/26 is directly
connected, Dialer1 C 10.1.1.66/32 is directly connected, Dialer2 C 10.1.1.64/26 is directly
connected, Dialer2 AS5300#show controllers t1 0 T1 0 is up. Applique type is Channelized T1
Cablelength is long gain36 Odb No alarms detected. alarm-trigger is not set Version info of slot
0: HW: 4, PLD Rev: 0 Manufacture Cookie Info: EEPROM Type 0x0001, EEPROM Version 0x01, Board ID
0x42, Board Hardware Version 1.32, Item Number 800-2540-02, Board Revision A0, Serial Number
11493161, PLD/ISP Version 0.0, Manufacture Date 12-Dec-1998. Framing is ESF, Line Code is B8ZS,
Clock Source is Line Primary. Data in current interval (197 seconds elapsed): 0 Line Code
Violations, 0 Path Code Violations 0 Slip Secs, 0 Fr Loss Secs, 0 Line Err Secs, 0 Degraded Mins
0 Errored Secs, 0 Bursty Err Secs, 0 Severely Err Secs, 0 Unavail Secs !--- Output suppressed.
AS5300#show int s0:23 Serial0:23 is up, line protocol is up (spoofing) Hardware is DSX1 MTU 1500
bytes, BW 64 Kbit, DLY 20000 usec, reliability 255/255, txload 1/255, rxload 1/255 Encapsulation
PPP, loopback not set DTR is pulsed for 1 seconds on reset Last input 00:00:06, output 00:00:06,
output hang never Last clearing of "show interface" counters 11:43:21 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 0/1/16 (active/max active/max total)
Reserved Conversations 0/0 (allocated/max allocated) Available Bandwidth 48 kilobits/sec 5
minute input rate 0 bits/sec, 0 packets/sec 5 minute output rate 0 bits/sec, 0 packets/sec 5075
```

```

packets input, 25767 bytes, 0 no buffer Received 0 broadcasts, 0 runts, 0 giants, 0 throttles 2
input errors, 0 CRC, 1 frame, 0 overrun, 0 ignored, 1 abort 5073 packets output, 25904 bytes, 0
underruns 0 output errors, 0 collisions, 13 interface resets 0 output buffer failures, 0 output
buffers swapped out 2 carrier transitions Timeslot(s) Used:24, Transmitter delay is 0 flags
AS5300#show users Line User Host(s) Idle Location * 0 con 0 idle 00:00:00 11 tty 11 remoteAsyn
Async interface 00:05:40 PPP: 10.1.1.2 Interface User Mode Idle Peer Address Se0:21 remoteISDN
Sync PPP 00:06:12 PPP: 10.1.1.66 remoteAsync01#show users Line User Host(s) Idle Location * 0
con 0 idle 00:00:00 1 tty 1 AS5300 Async interface 00:07:27 PPP: 10.1.1.1 2 tty 2 Modem
Autoconfigure 00:00:00 3 tty 3 Modem Autoconfigure 00:00:00 4 tty 4 Modem Autoconfigure 00:00:01
5 tty 5 Modem Autoconfigure 00:00:00 6 tty 6 Modem Autoconfigure 00:00:00 7 tty 7 Modem
Autoconfigure 00:00:00 Interface User Mode Idle Peer Address remoteISDN01#show users Line User
Host(s) Idle Location * 0 con 0 idle 00:00:00 Interface User Mode Idle Peer Address BR0:1 AS5300
Sync PPP 00:09:09 PPP: 10.1.1.65 AS5300#show isdn history -----
----- ISDN CALL HISTORY -----
----- Call History contains all active calls, and a
maximum of 100 inactive calls. Inactive call data will be retained for a maximum of 15 minutes.
----- Call Calling
Called Remote Seconds Seconds Seconds Charges Type Number Number Name Used Left Idle
Units/Currency -----
Out ---N/A--- 9996200 +oteAsync01 187 0 Out ---N/A--- 9996200 +oteAsync01 56 0 Out ---N/A---
9996200 +oteAsync01 469 305 294 0 Out ---N/A--- 9996100 +moteISDN01 105 509 90 0 -----
----- AS5300#show isdn active -----
----- ISDN ACTIVE CALLS -----
----- Call Calling
Called Remote Seconds Seconds Seconds Charges Type Number Number Name Used Left Idle
Units/Currency -----
Out ---N/A--- 9996100 +moteISDN01 152 449 150 0 Out ---N/A--- 9996200 +oteAsync01 133 491 108 0
----- AS5300#show
isdn status Global ISDN Switchtype = primary-5ess ISDN Serial0:23 interface dsl 0, interface
ISDN Switchtype = primary-5ess Layer 1 Status: ACTIVE Layer 2 Status: TEI = 0, Ces = 1, SAPI =
0, State = MULTIPLE_FRAME_ESTABLISHED Layer 3 Status: 2 Active Layer 3 Call(s) CCB:callid=809E,
sapi=0, ces=0, B-chan=23, calltype=VOICE CCB:callid=809F, sapi=0, ces=0, B-chan=22,
calltype=DATA Active dsl 0 CCBs = 2 The Free Channel Mask: 0x801FFFFFF Number of L2 Discards = 1,
L2 Session ID = 10 !--- Output suppressed. AS5300#Ping 10.1.201.1 Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.1.201.1, timeout is 2 seconds: !!!!! Success rate is 100
percent (5/5), round-trip min/avg/max = 32/33/36 ms AS5300#Ping 10.1.200.1 Type escape sequence
to abort. Sending 5, 100-byte ICMP Echos to 10.1.200.1, timeout is 2 seconds: !!!!! Success rate
is 100 percent (5/5), round-trip min/avg/max = 128/141/148 ms AS5300#show isdn service PRI
Channel Statistics: ISDN Se0:23, Channel [1-24] Configured Isdn Interface (dsl) 0 Channel State
(0=Idle 1=Proposed 2=Busy 3=Reserved 4=Restart 5=Maint_Pend) Channel : 1 2 3 4 5 6 7 8 9 0 1 2 3
4 5 6 7 8 9 0 1 2 3 4 State : 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 2 3 Service State
(0=Inservice 1=Maint 2=Outofservice) Channel : 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4
State : 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 !--- Output suppressed. AS5300#show
modem Codes: * - Modem has an active call C - Call in setup T - Back-to-Back test in progress R
- Modem is being Reset p - Download request is pending and modem cannot be used for taking calls
D - Download in progress B - Modem is marked bad and cannot be used for taking calls b - Modem
is either busied out or shut-down d - DSP software download is required for achieving K56flex
connections ! - Upgrade request is pending Avg Hold Inc calls Out calls Busied Failed No Succ
Mdm Time Succ Fail Succ Fail Out Dial Answer Pct. 1/0 00:00:00 0 0 0 0 0 0 0 0 0% 1/1 00:00:00 0 0
0 0 0 0 0 0 0 0 0% 1/2 00:00:00 0 0 0 0 0 0 0 0 0% 1/3 00:00:00 0 0 0 0 0 0 0 0 0% 1/4 00:00:00 0 0 0 0 0
0 0 0 0 0 0 0% 1/5 00:00:00 0 0 0 0 0 0 0 0 0% 1/6 00:00:00 0 0 0 0 0 0 0 0 0% 1/7 00:00:00 0 0 0 0 0 0 0 0
0% 1/8 00:00:00 0 0 0 0 0 0 0 0 0% 1/9 00:00:00 0 0 0 0 0 0 0 0 0% * 1/10 00:02:21 0 0 5 5 0 0 0 50%
1/11 00:03:11 0 0 23 6 0 0 0 79% 1/12 00:00:00 0 0 0 0 0 0 0 0 0% 1/13 00:00:00 0 0 0 0 0 0 0 0 0%
1/14 00:00:00 0 0 0 0 0 0 0 0 0% !--- Output suppressed.

```

[Troubleshooting](#)

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

[Troubleshooting de Recursos](#)

- [Troubleshooting da chamada de ISDN recebido](#) - Use para a falha de chamada de ISDN que troubleshooting.
- [Chamada PRI ISDN](#) - Contém a informação adicional em falhas de chamada de ISDN do Troubleshooting.
- [Fluxograma de Troubleshooting de T1 - Use este fluxograma se suspeitar que o circuito T1 não está funcionando de forma adequada.](#)
- [Troubleshooting de T1 PRI](#) - Procedimento de Troubleshooting para circuitos ISDN PRI
- [Testes de loopback para linhas T1/56K](#) - Uso a fim verificar que a porta T1 no roteador está funcionando corretamente.
- [Uso do comando show isdn status para Troubleshooting de BRI – Use este documento para Troubleshooting de BRI.](#)
- [Pesquisar defeitos o ISDN BRI mergulham 3 usando o comando debug isdn q931](#) - use este documento para o Troubleshooting da camada de ISDN 3.

[Comandos para Troubleshooting](#)

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 debug**, consulte [Informações importantes sobre comandos debug](#).

- **debug dialer** - Quando o DDR for permitido na relação, esta informação dos indicadores do comando a respeito da causa de algum atendimento (chamado a causa de discagem).
- **debugar o q931 de ISDN** - Para verificar as conexões ISDN como chamadas externas são iniciadas.
- **debugar a negociação ppp** - Para ver se um cliente está passando a negociação de PPP. Um alto número de negociações de PPP simultâneas pode oprimir o CPU de roteador.
- **debug ppp authentication** - Para ver se um cliente foi aprovado na autenticação. Se você está usando uma versão antes do Cisco IOS Release 11.2, use o comando debug ppp chap pelo contrário.
- **debug ppp error** – Para exibir erros do protocolo e estatísticas de erros associados à negociação e operação da conexão PPP

[Comandos de Troubleshooting do modem](#)

- **debugar o bate-papo** - Para ver chat script a execução do quando um atendimento for iniciado.
- **debug modem** – Para ver se um roteador está recebendo os sinais corretos do modem.
- **debug modem csm** - Para permitir o Modem Management Call Switching Module (CS) debugar o modo.

[Troubleshooting de Saídas](#)

Abaixo há saídas de depuração para uma chamada de saída bem-sucedida. Preste atenção às seções em negrito e comentários fornecidos nas saídas. Compare a saída que você obtém com o resultado mostrado abaixo.

Debugando a conexão dialout do T1 PRI AS5300 ao roteador remoteAsync01

```
AS5300#debug isdn q931 ISDN Q931 packets debugging is on AS5300#debug chat Chat scripts activity
debugging is on AS5300#debug dialer events Dial on demand events debugging is on AS5300#show
debug Dial on demand: Dial on demand events debugging is on PPP: PPP protocol negotiation
debugging is on ISDN: ISDN Q931 packets debugging is on ISDN Q931 packets debug DSLs. (On/Off/No
DSL:1/0/-) DSL 0 --> 7 1 1 1 1 - - - - Chat Scripts: Chat scripts activity debugging is on
AS5300#ping 10.1.200.1 Type escape sequence to abort. Sending 5, 100-byte ICMP Echos to
10.1.200.1, timeout is 2 seconds: Dec 30 17:59:16.675: As12 DDR: rotor dialout [priority] Dec 30
17:59:16.675: As12 DDR: Dialing cause ip (s=10.1.1.1, d=10.1.200.1) !--- The dialing cause is a
ping for 10.1.200.1. !--- ICMP is tagged as interesting. Dec 30 17:59:16.675: As12 DDR:
Attempting to dial 9996200 Dec 30 17:59:16.675: CHAT12: Attempting async line dialer script Dec
30 17:59:16.675: CHAT12: Dialing using Modem script: kelly & System script: none !--- Uses the
Chat script kelly to Dialout. Dec 30 17:59:16.675: CHAT12: process started Dec 30 17:59:16.675:
CHAT12: Asserting DTR Dec 30 17:59:16.675: CHAT12: Chat script kelly started Dec 30
17:59:16.675: CHAT12: Sending string: atdt\T<9996200> !--- The Chat script kelly uses the
Telephone no in Interface Dialer 1 to Dialout. Dec 30 17:59:16.675: CHAT12: Expecting string:
CONNECT Dec 30 17:59:16.755: ISDN Se0:23: TX -> SETUP pd = 8 callref = 0x00B1 !--- Outgoing ISDN
Q.931 SETUP message. Dec 30 17:59:16.755: Bearer Capability i = 0x8090A2 Dec 30 17:59:16.755:
Channel ID i = 0xA98397 Dec 30 17:59:16.759: Called Party Number i = 0xA1, '9996200', Plan:ISDN,
Type:National Dec 30 17:59:16.823: ISDN Se0:23: RX <- CALL_PROC pd = 8 callref = 0x80B1 Dec 30
17:59:16.823: Channel ID i = 0xA98397 Dec 30 17:59:17.023: ISDN Se0:23: RX <- ALERTING pd = 8
callref = 0x80B1.... Success rate is 0 percent (0/5) AS5300# Dec 30 17:59:26.115: ISDN Se0:23:
RX <- CONNECT pd = 8 callref = 0x80B1 !--- Received Q.931 CONNECT message. Dec 30 17:59:26.119:
ISDN Se0:23: TX -> CONNECT_ACK pd = 8 callref = 0x00B1 Dec 30 17:59:32.119: %ISDN-6-CONNECT:
Interface Serial0:22 is now connected to 9996200 Dec 30 17:59:49.347: CHAT12: Completed match
for expect: CONNECT Dec 30 17:59:49.347: CHAT12: Sending string: \c Dec 30 17:59:49.347: CHAT12:
Chat script kelly finished, status = Success Dec 30 17:59:49.351: Di1 IPCP: Install route to
10.1.1.2 !--- A route to the peer is installed. Dec 30 17:59:51.351: %LINK-3-UPDOWN: Interface
Async12, changed state to up Dec 30 17:59:51.351: As12 DDR: Dialer statechange to up Dec 30
17:59:51.351: As12 DDR: Dialer call has been placed Dec 30 17:59:51.351: As12 PPP: Treating
connection as a callout Dec 30 17:59:51.351: As12 PPP: Phase is ESTABLISHING, Active Open [0
sess, 1 load] Dec 30 17:59:51.351: As12 LCP: O CONFREQ [Closed] id 149 len 25 Dec 30
17:59:51.351: As12 LCP: ACCM 0x000A0000 (0x0206000A0000) Dec 30 17:59:51.351: As12 LCP:
AuthProto CHAP (0x0305C22305) Dec 30 17:59:51.351: As12 LCP: MagicNumber 0x4A997A3A
(0x05064A997A3A) Dec 30 17:59:51.351: As12 LCP: PFC (0x0702) Dec 30 17:59:51.351: As12 LCP: ACFC
(0x0802) Dec 30 17:59:53.351: As12 LCP: TIMEOUT: State REQsent Dec 30 17:59:53.351: As12 LCP: O
CONFREQ [REQsent] id 150 len 25 Dec 30 17:59:53.351: As12 LCP: ACCM 0x000A0000 (0x0206000A0000)
Dec 30 17:59:53.351: As12 LCP: AuthProto CHAP (0x0305C22305) Dec 30 17:59:53.351: As12 LCP:
MagicNumber 0x4A997A3A (0x05064A997A3A) Dec 30 17:59:53.351: As12 LCP: PFC (0x0702) Dec 30
17:59:53.351: As12 LCP: ACFC (0x0802) Dec 30 17:59:53.511: As12 LCP: I CONFREQ [REQsent] id 53
len 25 Dec 30 17:59:53.511: As12 LCP: ACCM 0x000A0000 (0x0206000A0000) Dec 30 17:59:53.511: As12
LCP: AuthProto CHAP (0x0305C22305) Dec 30 17:59:53.511: As12 LCP: MagicNumber 0x67B12AE8
(0x050667B12AE8) Dec 30 17:59:53.511: As12 LCP: PFC (0x0702) Dec 30 17:59:53.511: As12 LCP: ACFC
(0x0802) Dec 30 17:59:53.511: As12 LCP: O CONFACK [REQsent] id 53 len 25 Dec 30 17:59:53.511:
As12 LCP: ACCM 0x000A0000 (0x0206000A0000) Dec 30 17:59:53.511: As12 LCP: AuthProto CHAP
(0x0305C22305) Dec 30 17:59:53.511: As12 LCP: MagicNumber 0x67B12AE8 (0x050667B12AE8) Dec 30
17:59:53.511: As12 LCP: PFC (0x0702) Dec 30 17:59:53.511: As12 LCP: ACFC (0x0802) Dec 30
17:59:53.543: As12 LCP: I CONFACK [ACKsent] id 150 len 25 Dec 30 17:59:53.543: As12 LCP: ACCM
0x000A0000 (0x0206000A0000) Dec 30 17:59:53.543: As12 LCP: AuthProto CHAP (0x0305C22305) Dec 30
17:59:53.543: As12 LCP: MagicNumber 0x4A997A3A (0x05064A997A3A) Dec 30 17:59:53.543: As12 LCP:
PFC (0x0702) Dec 30 17:59:53.543: As12 LCP: ACFC (0x0802) Dec 30 17:59:53.543: As12 LCP: State
is Open !--- LCP negotiation is complete. Dec 30 17:59:53.543: As12 PPP: Phase is AUTHENTICATING,
by both [0 sess, 1 load] Dec 30 17:59:53.543: As12 CHAP: O CHALLENGE id 25 len 27 from "AS5300"
Dec 30 17:59:53.655: As12 CHAP: I CHALLENGE id 27 len 34 from "remoteAsync01" Dec 30
17:59:53.655: As12 CHAP: O RESPONSE id 27 len 27 from "AS5300" Dec 30 17:59:53.671: As12 CHAP: I
RESPONSE id 25 len 34 from "remoteAsync01" Dec 30 17:59:53.671: As12 CHAP: O SUCCESS id 25 len 4
Dec 30 17:59:53.783: As12 CHAP: I SUCCESS id 27 len 4 !--- Two-way CHAP authentication is
successful. Dec 30 17:59:53.783: As12 PPP: Phase is UP [0 sess, 1 load] Dec 30 17:59:53.783:
As12 IPCP: O CONFREQ [Closed] id 25 len 10 Dec 30 17:59:53.783: As12 IPCP: Address 10.1.1.1
(0x03060A010101) Dec 30 17:59:53.783: As12 CDPCP: O CONFREQ [Closed] id 25 len 4 Dec 30
17:59:53.783: As12 IPCP: I CONFREQ [REQsent] id 27 len 10 Dec 30 17:59:53.783: As12 IPCP:
Address 10.1.1.2 (0x03060A010102) Dec 30 17:59:53.783: As12 IPCP: O CONFACK [REQsent] id 27 len
```

```
10 Dec 30 17:59:53.783: As12 IPCP: Address 10.1.1.2 (0x03060A010102) Dec 30 17:59:53.911: As12
IPCP: I CONFACK [ACKsent] id 25 len 10 Dec 30 17:59:53.911: As12 IPCP: Address 10.1.1.1
(0x03060A010101) Dec 30 17:59:53.911: As12 IPCP: State is Open Dec 30 17:59:53.911: As12 DDR:
dialer protocol up Dec 30 17:59:53.927: As12 LCP: I PROTREJ [Open] id 54 len 10 protocol CDPCP
(0x820701190004) Dec 30 17:59:53.927: As12 CDPCP: State is Closed Dec 30 17:59:54.783:
%LINEPROTO-5-UPDOWN: Line protocol on Interface Async12, changed state to up Dec 30
17:59:54.783: As12 PPP: Outbound cdp packet dropped, CDPCP is Closed [starting negotiations] Dec
30 17:59:54.783: As12 CDPCP: State is Closed Dec 30 17:59:54.783: As12 PPP: Outbound cdp packet
dropped, CDPCP is Closed [starting negotiations] Dec 30 17:59:54.783: As12 CDPCP: State is
Closed Dec 30 17:59:54.783: As12 PPP: Outbound cdp packet dropped, CDPCP is Closed [starting
negotiations] Dec 30 17:59:54.783: As12 CDPCP: State is Closed Dec 30 17:59:54.787: As12 CDPCP:
TIMEout: State Closed Dec 30 17:59:54.787: As12 CDPCP: State is Listen remoteAsync01#debug ppp
negotiation PPP protocol negotiation debugging is on remoteAsync01# Dec 30 17:58:54: As1 LCP: I
CONFREQ [Closed] id 150 len 25 Dec 30 17:58:54: As1 LCP: ACCM 0x000A0000 (0x0206000A0000) Dec 30
17:58:54: As1 LCP: AuthProto CHAP (0x0305C22305) Dec 30 17:58:54: As1 LCP: MagicNumber
0x4A997A3A (0x05064A997A3A) Dec 30 17:58:54: As1 LCP: PFC (0x0702) Dec 30 17:58:54: As1 LCP:
ACFC (0x0802) Dec 30 17:58:54: As1 LCP: Lower layer not up, Fast Starting Dec 30 17:58:54: As1
PPP: Treating connection as a dedicated line Dec 30 17:58:54: As1 PPP: Phase is ESTABLISHING,
Active Open [0 sess, 0 load] Dec 30 17:58:54: As1 LCP: O CONFREQ [Closed] id 53 len 25 Dec 30
17:58:54: As1 LCP: ACCM 0x000A0000 (0x0206000A0000) Dec 30 17:58:54: As1 LCP: AuthProto CHAP
(0x0305C22305) Dec 30 17:58:54: As1 LCP: MagicNumber 0x67B12AE8 (0x050667B12AE8) Dec 30
17:58:54: As1 LCP: PFC (0x0702) Dec 30 17:58:54: As1 LCP: ACFC (0x0802) Dec 30 17:58:54: As1
LCP: O CONFACK [REQsent] id 150 len 25 Dec 30 17:58:54: As1 LCP: ACCM 0x000A0000
(0x0206000A0000) Dec 30 17:58:54: As1 LCP: AuthProto CHAP (0x0305C22305) Dec 30 17:58:54: As1
LCP: MagicNumber 0x4A997A3A (0x05064A997A3A) Dec 30 17:58:54: As1 LCP: PFC (0x0702) Dec 30
17:58:54: As1 LCP: ACFC (0x0802) Dec 30 17:58:54: %LINK-3-UPDOWN: Interface Async1, changed
state to up Dec 30 17:58:55: As1 LCP: I CONFACK [ACKsent] id 53 len 25 Dec 30 17:58:55: As1 LCP:
ACCM 0x000A0000 (0x0206000A0000) Dec 30 17:58:55: As1 LCP: AuthProto CHAP (0x0305C22305) Dec 30
17:58:55: As1 LCP: MagicNumber 0x67B12AE8 (0x050667B12AE8) Dec 30 17:58:55: As1 LCP: PFC
(0x0702) Dec 30 17:58:55: As1 LCP: ACFC (0x0802) Dec 30 17:58:55: As1 LCP: State is Open !---
LCP negotiation is complete. Dec 30 17:58:55: As1 PPP: Phase is AUTHENTICATING, by both [0 sess,
0 load] Dec 30 17:58:55: As1 CHAP: O CHALLENGE id 27 len 34 from "remoteAsync01" Dec 30
17:58:55: As1 CHAP: I CHALLENGE id 25 len 27 from "AS5300" Dec 30 17:58:55: As1 CHAP: O RESPONSE
id 25 len 34 from "remoteAsync01" Dec 30 17:58:55: As1 CHAP: I RESPONSE id 27 len 27 from
"AS5300" Dec 30 17:58:55: As1 CHAP: I SUCCESS id 25 len 4 Dec 30 17:58:55: As1 CHAP: O SUCCESS
id 27 len 4 !--- Two-way CHAP authentication is successful. Dec 30 17:58:55: As1 PPP: Phase is
UP [0 sess, 1 load] Dec 30 17:58:55: As1 IPCP: O CONFREQ [Closed] id 27 len 10 Dec 30 17:58:55:
As1 IPCP: Address 10.1.1.2 (0x03060A010102) Dec 30 17:58:55: As1 IPCP: I CONFREQ [REQsent] id 25
len 10 Dec 30 17:58:55: As1 IPCP: Address 10.1.1.1 (0x03060A010101) Dec 30 17:58:55: As1 IPCP: O
CONFACK [REQsent] id 25 len 10 Dec 30 17:58:55: As1 IPCP: Address 10.1.1.1 (0x03060A010101) Dec
30 17:58:55: As1 CDPCP: I CONFREQ [Not negotiated] id 25 len 4 Dec 30 17:58:55: As1 LCP: O
PROTREJ [Open] id 54 len 10 protocol CDPCP (0x820701190004) Dec 30 17:58:55: As1 IPCP: I CONFACK
[ACKsent] id 27 len 10 Dec 30 17:58:55: As1 IPCP: Address 10.1.1.2 (0x03060A010102) Dec 30
17:58:55: As1 IPCP: State is Open Dec 30 17:58:55: As1 IPCP: Install route to 10.1.1.1 !--- A
route to the peer is installed. Dec 30 17:58:56: %LINEPROTO-5-UPDOWN: Line protocol on Interface
Async1, changedstate to up
```

[Debugando a discagem do AS5300 ao roteador remotoISDN01](#)

```
AS5300#show debug Dial on demand: Dial on demand events debugging is on PPP: PPP protocol
negotiation debugging is on ISDN: ISDN Q931 packets debugging is on ISDN Q931 packets debug
DSLs. (On/Off/No DSL:1/0/-) DSL 0 --> 7 1 1 1 1 - - - - Chat Scripts: Chat scripts activity
debugging is on AS5300#ping 10.1.201.1 Type escape sequence to abort. Sending 5, 100-byte ICMP
Echos to 10.1.201.1, timeout is 2 seconds: Dec 30 18:12:42.811: Se0:23 DDR: rotor dialout
[priority] Dec 30 18:12:42.815: Se0:23 DDR: Dialing cause ip (s=10.1.1.65, d=10.1.201.1) !---
The dialing cause is a ping for 10.1.201.1. !--- ICMP is tagged as interesting. Dec 30
18:12:42.815: Se0:23 DDR: Attempting to dial 9996100 Dec 30 18:12:42.815: ISDN Se0:23: TX -
>SETUP pd = 8 callref = 0x00B2 !--- Outgoing ISDN Q.931 SETUP message. Dec 30 18:12:42.815:
Bearer Capability i = 0x8890 Dec 30 18:12:42.815: Channel ID i = 0xA98396 Dec 30 18:12:42.819:
Called Party Number i = 0xA1, '9996100', Plan:ISDN, Type:National Dec 30 18:12:42.867: ISDN
Se0:23: RX <- CALL_PROC pd = 8 callref = 0x80B2 Dec 30 18:12:42.867: Channel ID i = 0xA98396 Dec
30 18:12:43.127: ISDN Se0:23: RX <- CONNECT pd = 8 callref = 0x80B2 !--- Received Q.931 CONNECT
message. Dec 30 18:12:43.135: %LINK-3-UPDOWN: Interface Serial0:21, changed state to up Dec 30
18:12:43.135: Se0:21 PPP: Treating connection as a callout Dec 30 18:12:43.135: Se0:21 PPP:
```

Phase is ESTABLISHING, Active Open [0 sess, 1 load] Dec 30 18:12:43.135: Se0:21 LCP: O CONFREQ [Closed] id 25 len 15 Dec 30 18:12:43.139: Se0:21 LCP: AuthProto CHAP (0x0305C22305) Dec 30 18:12:43.139: Se0:21 LCP: MagicNumber 0x4AA54104 (0x05064AA54104) Dec 30 18:12:43.139: ISDN Se0:23: TX -> CONNECT_ACK pd = 8 callref = 0x00B2 Dec 30 18:12:43.167: Se0:21 LCP: I CONFREQ [REQsent] id 55 len 15 Dec 30 18:12:43.167: Se0:21 LCP: AuthProto CHAP (0x0305C22305) Dec 30 18:12:43.167: Se0:21 LCP: MagicNumber 0x575DC27D (0x0506575DC27D) Dec 30 18:12:43.167: Se0:21 LCP: O CONFACK [REQsent] id 55 len 15 Dec 30 18:12:43.167: Se0:21 LCP: AuthProto CHAP (0x0305C22305) Dec 30 18:12:43.167: Se0:21 LCP: MagicNumber 0x575DC27D (0x0506575DC27D) Dec 30 18:12:43.175: Se0:21 LCP: I CONFACK [ACKsent] id 25 len 15 Dec 30 18:12:43.175: Se0:21 LCP: AuthProto CHAP (0x0305C22305) Dec 30 18:12:43.175: Se0:21 LCP: MagicNumber 0x4AA54104 (0x05064AA54104) Dec 30 18:12:43.179: Se0:21 **LCP: State is Open !--- LCP negotiation is complete.** Dec 30 18:12:43.179: Se0:21 PPP: Phase is AUTHENTICATING, by both [0 sess, 1!!!! Success rate is 80 percent (4/5), round-trip min/avg/max = 32/33/36 msAS5300# load] Dec 30 18:12:43.179: Se0:21 CHAP: O CHALLENGE id 13 len 27 from "AS5300" Dec 30 18:12:43.227: Se0:21 CHAP: I CHALLENGE id 36 len 33 from "remoteISDN01" Dec 30 18:12:43.227: Se0:21 CHAP: O RESPONSE id 36 len 27 from "AS5300" Dec 30 18:12:43.251: Se0:21 CHAP: I SUCCESS id 36 len 4 Dec 30 18:12:43.263: Se0:21 CHAP: I RESPONSE id 13 len 33 from "remoteISDN01" Dec 30 18:12:43.263: Se0:21 **CHAP: O SUCCESS id 13 len 4 !--- Two-way CHAP authentication is successful.** Dec 30 18:12:43.263: Se0:21 PPP: Phase is UP [0 sess, 1 load] Dec 30 18:12:43.263: Se0:21 IPCP: O CONFREQ [Closed] id 13 len 10 Dec 30 18:12:43.267: Se0:21 IPCP: Address 10.1.1.65 (0x03060A010141) Dec 30 18:12:43.287: Se0:21 IPCP: I CONFREQ [REQsent] id 36 len 10 Dec 30 18:12:43.287: Se0:21 IPCP: Address 10.1.1.66 (0x03060A010142) Dec 30 18:12:43.287: Se0:21 IPCP: O CONFACK [REQsent] id 36 len 10 Dec 30 18:12:43.287: Se0:21 IPCP: Address 10.1.1.66 (0x03060A010142) Dec 30 18:12:43.287: Se0:21 CDPCP: I CONFREQ [Not negotiated] id 36 len 4 Dec 30 18:12:43.291: Se0:21 LCP: O PROTREJ [Open] id 26 len 10 protocol CDPCP (0x820701240004) Dec 30 18:12:43.307: Se0:21 IPCP: I CONFACK [ACKsent] id 13 len 10 Dec 30 18:12:43.307: Se0:21 IPCP: Address 10.1.1.65 (0x03060A010141) Dec 30 18:12:43.307: Se0:21 IPCP: State is Open Dec 30 18:12:43.307: Se0:21 DDR: dialer protocol up Dec 30 18:12:43.307: Di2 **IPCP: Install route to 10.1.1.66 !--- A route to the peer is installed.** Dec 30 18:12:44.263: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0:21, changed state to up Dec 30 18:12:49.135: %ISDN-6-CONNECT: **Interface Serial0:21 is now connected to 9996100 remoteISDN01 remoteISDN01#debug ppp negotiation** PPP protocol negotiation debugging is on remoteISDN01#debug isdn q931 ISDN Q931 packets debugging is on remoteISDN01#show debug PPP: PPP protocol negotiation debugging is on ISDN: ISDN Q931 packets debugging is on remoteISDN01# Dec 30 18:13:04: ISDN BR0: RX <- SETUP pd = 8 callref = 0x1B Dec 30 18:13:04: Bearer Capability i = 0x8890 Dec 30 18:13:04: Channel ID i = 0x89 Dec 30 18:13:04: Signal i = 0x40 - Alerting on - pattern 0 Dec 30 18:13:04: Called Party Number i = 0xA1, '2019996100', Plan:ISDN, Type:National Dec 30 18:13:04: ISDN BR0: Event: Received a DATA call from <unknown> on B1 at 64 Kb/s Dec 30 18:13:04: ISDN BR0: Event: Accepting the call id 0x2D Dec 30 18:13:04: %LINK-3-UPDOWN: Interface BRI0:1, changed state to up Dec 30 18:13:04: BR0:1 PPP: Treating connection as a callin Dec 30 18:13:04: BR0:1 PPP: Phase is ESTABLISHING, Passive Open [0 sess, 1 load] Dec 30 18:13:04: BR0:1 LCP: State is Listen Dec 30 18:13:04: **ISDN BR0: TX -> CALL_PROC pd = 8 callref = 0x9B !--- Outgoing ISDN Q.931 SETUP message.** Dec 30 18:13:04: Channel ID i = 0x89 Dec 30 18:13:04: ISDN BR0: TX -> CONNECT pd = 8 callref = 0x9B Dec 30 18:13:05: BR0:1 LCP: I CONFREQ [Listen] id 25 len 15 Dec 30 18:13:05: BR0:1 LCP: AuthProto CHAP (0x0305C22305) Dec 30 18:13:05: BR0:1 LCP: MagicNumber 0x4AA54104 (0x05064AA54104) Dec 30 18:13:05: BR0:1 LCP: O CONFREQ [Listen] id 55 len 15 Dec 30 18:13:05: BR0:1 LCP: AuthProto CHAP (0x0305C22305) Dec 30 18:13:05: BR0:1 LCP: MagicNumber 0x575DC27D (0x0506575DC27D) Dec 30 18:13:05: BR0:1 LCP: O CONFACK [Listen] id 25 len 15 Dec 30 18:13:05: BR0:1 LCP: AuthProto CHAP (0x0305C22305) Dec 30 18:13:05: BR0:1 LCP: MagicNumber 0x4AA54104 (0x05064AA54104) Dec 30 18:13:05: ISDN BR0: RX <- CONNECT_ACK pd = 8 callref = 0x1B **!--- Received Q.931 CONNECT message.** Dec 30 18:13:05: Signal i = 0x4F - Alerting off Dec 30 18:13:05: BR0:1 LCP: I CONFACK [ACKsent] id 55 len 15 Dec 30 18:13:05: BR0:1 LCP: AuthProto CHAP (0x0305C22305) Dec 30 18:13:05: BR0:1 LCP: MagicNumber 0x575DC27D (0x0506575DC27D) Dec 30 18:13:05: BR0:1 LCP: State is Open Dec 30 18:13:05: BR0:1 PPP: Phase is AUTHENTICATING, by both [0 sess, 1 load] Dec 30 18:13:05: BR0:1 CHAP: O CHALLENGE id 36 len 33 from "remoteISDN01" Dec 30 18:13:05: BR0:1 CHAP: I CHALLENGE id 13 len 27 from "AS5300" Dec 30 18:13:05: BR0:1 CHAP: Waiting for peer to authenticate first Dec 30 18:13:05: BR0:1 CHAP: I RESPONSE id 36 len 27 from "AS5300" Dec 30 18:13:05: BR0:1 CHAP: O SUCCESS id 36 len 4 Dec 30 18:13:05: BR0:1 CHAP: Processing saved Challenge, id 13 Dec 30 18:13:05: BR0:1 CHAP: O RESPONSE id 13 len 33 from "remoteISDN01" Dec 30 18:13:05: BR0:1 CHAP: I SUCCESS id 13 len 4 **!--- Two-way CHAP authentication is successful.** Dec 30 18:13:05: BR0:1 PPP: Phase is UP [0 sess, 0 load] Dec 30 18:13:05: BR0:1 IPCP: O CONFREQ [Closed] id 36 len 10 Dec 30 18:13:05: BR0:1 IPCP: Address 10.1.1.66 (0x03060A010142) Dec 30 18:13:05: BR0:1 CDPCP: O CONFREQ [Closed] id 36 len 4 Dec 30 18:13:05: BR0:1 IPCP: I CONFREQ [REQsent] id 13 len 10 Dec 30 18:13:05: BR0:1 IPCP: Address 10.1.1.65 (0x03060A010141) Dec 30 18:13:05: BR0:1 IPCP: O CONFACK

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[REQsent] id 13 len 10 Dec 30 18:13:05: BR0:1 IPCP: Address 10.1.1.65 (0x03060A010141) Dec 30
18:13:05: BR0:1 IPCP: I CONFACK [ACKsent] id 36 len 10 Dec 30 18:13:05: BR0:1 IPCP: Address
10.1.1.66 (0x03060A010142) Dec 30 18:13:05: BR0:1 IPCP: State is Open Dec 30 18:13:05: BR0:1
LCP: I PROTREJ [Open] id 26 len 10 protocol CDPCP (0x8207 01240004) Dec 30 18:13:05: BR0:1
CDPCP: State is Closed Dec 30 18:13:05: BR0 IPCP: Install route to 10.1.1.65 !--- A route to the
peer is installed. Dec 30 18:13:06: %LINEPROTO-5-UPDOWN: Line protocol on Interface BRI0:1,
changed state to up Dec 30 18:13:06: BR0:1 PPP: Outbound cdp packet dropped, CDPCP is Closed
[starting negotiations] Dec 30 18:13:06: BR0:1 CDPCP: State is Closed Dec 30 18:13:06: BR0:1
PPP: Outbound cdp packet dropped, CDPCP is Closed [starting negotiations] Dec 30 18:13:06: BR0:1
CDPCP: State is Closed Dec 30 18:13:06: BR0:1 PPP: Outbound cdp packet dropped, CDPCP is Closed
[starting negotiations] Dec 30 18:13:06: BR0:1 CDPCP: State is Closed Dec 30 18:13:06: BR0:1
CDPCP: TIMEOUT: State Closed Dec 30 18:13:06: BR0:1 CDPCP: State is Listen Dec 30 18:13:10:
%ISDN-6-CONNECT: Interface BRI0:1 is now connected to AS5300
```

[Informações Relacionadas](#)

- [Configurando um servidor de acesso com PRIs para chamadas Asyn e ISDN recebidas](#)
- [Configurando Dialin e Dialout nos mesmos circuitos T1/E1 PRI](#)
- [Configuração do NAS para Acesso de Discagem Básico](#)
- [Manual de configuração das soluções do seletor](#)
- [Entendendo códigos de causa de desconexão debug isdn q931](#)
- [Tecnologia dialup: Técnicas para Troubleshooting](#)
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