

Uso de Puente medio PPP para conectar redes enrutadas y con conexión en puente.

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Introducción

Este documento proporciona una configuración de muestra para usar el mitad-bridging PPP para conectar ruteado y los Bridged Network.

prerrequisitos

Requisitos

No hay requisitos específicos para este documento.

Componentes Utilizados

La información que contiene este documento se basa en las siguientes versiones de software y hardware.

- Software Release 12.2(7b) de Cisco IOS®.

- Dos Cisco 2500 Series Router. Cada uno tiene por lo menos una interfaz del ISDN BRI.

La información que contiene este documento se creó a partir de los dispositivos en un ambiente de laboratorio específico. Todos los dispositivos que se utilizan en este documento se pusieron en funcionamiento con una configuración verificada (predeterminada). Si la red está funcionando, asegúrese de haber comprendido el impacto que puede tener cualquier comando.

[Productos Relacionados](#)

Esta configuración también se puede utilizar con las siguientes versiones de hardware y software:

- Cualquier interfaz serial, tal como serial, Basic Rate Interface (BRI), interfaz de la velocidad primaria (PRI), y así sucesivamente.
- Cisco IOS Software Release 11.2.
- Cualquier Cisco IOS Software corriente del router como se mencionó anteriormente, y por lo menos un puerto ISDN-BRI. Sin embargo, la función half-bridge se puede utilizar en un router con una interfaz serial.

[Convenciones](#)

Para obtener más información sobre las convenciones del documento, consulte [Convenciones de Consejos Técnicos de Cisco](#).

[Antecedentes](#)

El puente envía paquetes de puente al medio puente PPP que los convierte en paquetes enrutados y los reenvía a otros procesos del router. Asimismo, el semipuerto PPP convierte los paquetes ruteados a los paquetes de puente de Ethernet, y los envía al Bridge en la misma subred Ethernet.

Note: Esta configuración no cubre un Bridge completo en los ambos lados. Para tal configuración refiera al documento del [Bridging Across ISDN](#).

Sea consciente que el interligar en una conexión ISDN tiende a mantener la conexión activa por mismo los períodos prolongados, si no permanentemente. Si la compañía telefónica carga para el ISDN basado el tiempo de conexión, ésta puede dar lugar a una cuenta muy grande. Por lo tanto, este escenario se recomienda para los que tengan líneas ISDN de uso ilimitado.

Note: Una interfaz no puede funcionar como un semipuerto y un Bridge. El Cisco IOS Software soporta no más que un semipuerto PPP por la subred Ethernet.

[Configurar](#)

En esta sección encontrará la información para configurar las funciones descritas en este documento.

Note: Para obtener información adicional sobre los comandos que se utilizan en este documento, use la Command Lookup Tool (solo para clientes [registrados](#)).

[Diagrama de la red](#)

En este documento, se utiliza esta configuración de red:

Configuraciones

En este documento, se utilizan estas configuraciones:

- **Venus**Configuran a este router como Bridge completo con el Routing IP inhabilitado. Los diales del dispositivo cuando llega cualquier tráfico Bridged.
- **Saturn**Han configurado a este router como Half-Bridge. Observe que no configuran a los **comandos dialer string, dialer group, y dialer list** en este lado. Este router nunca marcará tan, pero validará las llamadas entrantes. Esto evita que el router marque al router remoto. Hemos girado el Routing IP aquí. El Bridging Software lleno no se configura en este router. El Half-Bridge PPP se está ejecutando en la interfaz BRI, así que los comandos como la **demonstración interligan** y el **atravesar-árbol de la demostración** no rinde ninguna salida en este router.

```
Venus
Venus#show running-config
!
version 12.2
!
hostname Venus
!
username Saturn password 0 same
!---- Required for PPP CHAP authentication during dialup
ip subnet-zero no ip routing !---- Turn off routing no ip
domain-lookup ! isdn switch-type basic-5ess !---- The
ISDN switchtype for this circuit. Obtain this
information from the !---- Telco. This ISDN switch type
is USA specific and could be changed !---- depending on
the country and TELCO requirements ! interface Ethernet0
ip address 10.1.1.2 255.0.0.0 !---- This is for
management purpose only no ip route-cache no ip mroute-
cache bridge-group 1 !---- Assign this interface to
Bridge Group 1 !---- Frames are bridged only among
interfaces in the same group !---- Note: the dialer1
interface is also in this bridge-group 1 interface BRI0
no ip address no ip route-cache no ip mroute-cache
dialer pool-member 1 !---- Dialer profiles configured
with same dialer pool # !---- (in this case, dialer1)
will bind to this interface isdn switch-type basic-5ess
!---- Check with your Telco for the correct values !
interface Dialer1 !---- Configure the Dialer profile
description ISDN to Saturn ip address 10.1.1.2 255.0.0.0
encapsulation ppp dialer pool 1 !---- Use physical
interfaces configured with same pool # !---- (in this
case, bri0) during dialup dialer remote-name Saturn !----
Specifies remote CHAP name dialer string 5552000 !----
Specifies the number to dial when interesting traffic
arrives dialer-group 1 !---- Defines the interesting
traffic as configured in the dialer-list ppp
authentication chap !---- Use CHAP as the authentication
method bridge-group 1 !---- Assign this interface to
Bridge Group 1. !---- Frames are bridged only among
interfaces in the same group. !---- Note: the Ethernet
interface 0 is also in this bridge-group 1 ip default-
gateway 10.1.1.3 !---- All default traffic from Venus
should go through Saturn dialer-list 1 protocol bridge
```

```
permit !--- Defines the interesting traffic. In this
case, all bridged traffic bridge 1 protocol ieee !---
Define the type of Spanning-Tree Protocol used for the
interface in !--- bridge-group 1. Here we use the IEEE
spanning tree protocol. The IEEE 802.1D !--- Spanning-
Tree Protocol is the preferred way of running the
bridge. !
```

Saturn

```
Saturn#show running-config
!
version 12.2
!
hostname Saturn
!
username Venus password 0 same
!--- Required for PPP CHAP authentication during dialup
ip subnet-zero no ip domain-lookup ! isdn switch-type
basic-5ess !--- The ISDN switchtype for this circuit.
Obtain this information from the !--- Telco. This ISDN
switch type is USA specific and could be changed !---
depending on the country and Telco requirements !
interface Ethernet0 ip address 192.168.1.1 255.255.0.0 !
interface BRI0 no ip address no ip mroute-cache dialer
pool-member 1 !--- Dialer profiles configured with same
dialer pool # !--- (in this case, dialer1) will bind to
this interface isdn switch-type basic-5ess ! interface
Dialer1 !--- Configure the Dialer profile description
ISDN to Venus ip address 10.1.1.3 255.0.0.0 !--- IP
address is required to route the bridged traffic from
Venus !--- This ip address MUST be in the same subnet as
the remote bridge network encapsulation ppp dialer pool
1 !--- Use physical interfaces configured with same pool
# !--- (in this case, bri0) during dialup dialer remote-
name Venus pulse-time 0 ppp bridge ip !--- Configures
half bridge ppp authentication chap !--- Use CHAP as the
authentication method !
```

Verificación

En esta sección encontrará información que puede utilizar para confirmar que su configuración esté funcionando correctamente.

La herramienta [Output Interpreter](#) (sólo para clientes [registrados](#)) permite utilizar algunos comandos “show” y ver un análisis del resultado de estos comandos.

- **isdn status de la demostración** — visualiza el estatus L1, L2, y L3 de las interfaces de ISDN.
- **marcador de la demostración** — visualiza el estatus del marcador, y el estado individual de los canales ISDN.
- **Bridge de la demostración** — clases de las visualizaciones de entradas en el Bridge Forwarding Database, en el modo EXEC privilegiado.
- **interfaz de la demostración** — visualiza el estatus de las diversas interfaces, incluyendo el serial y las interfaces BRI.
- **la demostración arp** — marca la asignación ARP. El ARP es un protocolo usado para asociar el direccionamiento de la capa 2 (dirección MAC) a un direccionamiento de la capa 3 (dirección IP).

- **atravesar-árbol de la demostración** — visualiza la topología del árbol de expansión sabida al router.

Comandos show en Venus luego realizar la llamada a Saturno

Venus#**show isdn status**

```
Global ISDN Switchtype = basic-5ess
ISDN BRI0 interface
    dsl 0, interface ISDN Switchtype = basic-5ess
Layer 1 Status:
    ACTIVE
Layer 2 Status:
    TEI = 107, Ces = 1, SAPI = 0, State = MULTIPLE_FRAME_ESTABLISHED
Layer 3 Status:
    1 Active Layer 3 Call(s)
    CCB:callid=800E, sapi=0, ces=1, B-chan=2, calltype=DATA
Active dsl 0 CCBs = 1
    The Free Channel Mask:
    0x80000001
    Number of L2 Discards = 0, L2 Session ID = 17
    Total Allocated ISDN CCBs = 1
```

Venus#**show dialer**

```
BRI0 - dialer type = ISDN

Dial String Successes Failures Last DNIS Last status
    0 incoming call(s) have been screened.
    0 incoming call(s) rejected for callback.

BRI0:1 - dialer type = ISDN
    Idle timer (120 secs), Fast idle timer (20 secs)
    Wait for carrier (30 secs), Re-enable (15 secs)
    Dialer state is idle

BRI0:2 - dialer type = ISDN
    Idle timer (120 secs), Fast idle timer (20 secs)
    Wait for carrier (30 secs), Re-enable (15 secs)
    Dialer state is data link layer up
    Dial reason: bridge (0x0800)
    Interface bound to profile Di1
    Time until disconnect 90 secs
    Current call connected 00:00:31

Di1 - dialer type = DIALER PROFILE
    Idle timer (120 secs), Fast idle timer (20 secs)
    Wait for carrier (30 secs), Re-enable (15 secs)
    Dialer state is data link layer up
    Number of active calls = 1
    Dial String Successes Failures Last DNIS Last status
    5552000 5 1 00:00:34 Successful Default
```

Venus#**show interface bri0:2**

```
BRI0:2 is up, line protocol is up
Hardware is BRI
MTU 1500 bytes, BW 64 Kbit, DLY 20000 usec,
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation PPP, loopback not set
Keepalive set (10 sec)
```

```
Time to interface disconnect: idle 00:01:18
Interface is bound to Dil (Encapsulation PPP)
LCP Open
Closed: IPCP
Open: BRIDGECP, CDPCP
```

```
!--- Bridge Control Protocol is open Last input 00:00:42, output 00:00:00, output hang never
Last clearing of "show interface" counters never Input queue: 0/75/0/0 (size/max/drops/flushes);
Total output drops: 0 Queueing strategy: fifo Output queue :0/40 (size/max) 5 minute input rate
0 bits/sec, 0 packets/sec 5 minute output rate 0 bits/sec, 0 packets/sec 161 packets input, 9796
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 328 packets output, 16659 bytes, 0 underruns 0 output
errors, 0 collisions, 7 interface resets 0 output buffer failures, 0 output buffers swapped out
16 carrier transitions
```

```
Venus#show bridge
```

```
Total of 300 station blocks, 298 free
Codes: P - permanent, S - self
```

```
Bridge Group 1:
```

```
Address Action Interface Age RX count TX count
00d0.58ad.ae13 forward Ethernet0 0 74 58
0060.5cf4.a955 forward Dialer1 0 58 72
```

```
Venus#show arp
```

```
Protocol Address Age (min) Hardware Addr Type Interface
Internet 10.1.1.2 - 0060.5cf4.a9a8 ARPA Ethernet0
Internet 10.1.1.3 0 0060.5cf4.a955 ARPA Dialer1
```

```
Venus#show spanning-tree
```

```
Bridge group 1 is executing the ieee compatible Spanning Tree protocol
Bridge Identifier has priority 32768, address 0060.5cf4.a9a8
Configured hello time 2, max age 20, forward delay 15
Current root has priority 32768, address 0009.7c2e.ba00
Root port is 2 (Ethernet0), cost of root path is 100
Topology change flag not set, detected flag not set
Number of topology changes 1 last change occurred 22:09:28 ago
from Ethernet0
Times: hold 1, topology change 35, notification 2
hello 2, max age 20, forward delay 15
Timers: hello 0, topology change 0, notification 0, aging 300
```

```
Port 2 (Ethernet0) of Bridge group 1 is forwarding
```

```
Port path cost 100, Port priority 128, Port Identifier 128.2.
Designated root has priority 32768, address 0009.7c2e.ba00
Designated bridge has priority 32768, address 0009.7c2e.ba00
Designated port id is 128.13, designated path cost 0
Timers: message age 2, forward delay 0, hold 0
Number of transitions to forwarding state: 1
BPDU: sent 1, received 39911
```

```
Port 8 (Dialer1) of Bridge group 1 is forwarding
```

```
Port path cost 17857, Port priority 128, Port Identifier 128.8.
Designated root has priority 32768, address 0009.7c2e.ba00
Designated bridge has priority 32768, address 0060.5cf4.a9a8
Designated port id is 128.8, designated path cost 100
Timers: message age 0, forward delay 0, hold 0
Number of transitions to forwarding state: 1
BPDU: sent 39879, received 0
```

[Comandos show en Saturno luego de que Venus realiza la llamada](#)

Saturn#show dialer

BRI0 - dialer type = ISDN

Dial String Successes Failures Last DNIS Last status
0 incoming call(s) have been screened.

0 incoming call(s) rejected for callback.

BRI0:1 - dialer type = ISDN

Idle timer (120 secs), Fast idle timer (20 secs)
Wait for carrier (30 secs), Re-enable (15 secs)
Dialer state is idle

BRI0:2 - dialer type = ISDN

Idle timer (120 secs), Fast idle timer (20 secs)
Wait for carrier (30 secs), Re-enable (15 secs)
Dialer state is data link layer up
Interface bound to profile Dil
Time until disconnect 45 secs
Connected to <unknown phone number> (Venus)

Dil - dialer type = DIALER PROFILE

Idle timer (120 secs), Fast idle timer (20 secs)
Wait for carrier (30 secs), Re-enable (15 secs)
Dialer state is data link layer up Number of active calls = 1

Dial String Successes Failures Last DNIS Last status

Saturn#show isdn status

Global ISDN Switchtype = basic-5ess
ISDN BRI0 interface
dsl 0, interface ISDN Switchtype = basic-5ess
Layer 1 Status:
ACTIVE
Layer 2 Status:
TEI = 105, Ces = 1, SAPI = 0, State = MULTIPLE_FRAME_ESTABLISHED
I_Queue_Len 0, UI_Queue_Len 0
Layer 3 Status:
1 Active Layer 3 Call(s)
CCB:callid=2B, sapi=0, ces=1, B-chan=2, calltype=DATA
Active dsl 0 CCBS = 1
The Free Channel Mask: 0x80000001
Number of L2 Discards = 0, L2 Session ID = 37
Total Allocated ISDN CCBS = 1

Saturn#show arp

Protocol	Address	Age (min)	Hardware	Addr	Type	Interface
Internet	10.1.1.2	27	0060.5cf4.a9a8	ARPA	Dialer1	
Internet	10.1.1.1	63	00d0.58ad.ae13	ARPA	Dialer1	
Internet	192.168.1.1	-	0060.5cf4.a955	ARPA	Ethernet0	
Internet	192.168.1.2	53	0000.0c76.2882	ARPA	Ethernet0	

Saturn#show spanning-tree

No spanning tree instances exist.

!--- This router does not run full bridge, !--- so spanning tree does not run on this router

Saturn#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
C 10.0.0.0/8 is directly connected, Dialer1
C 192.168.0.0/16 is directly connected, Ethernet0
```

Troubleshooting

En esta sección encontrará información que puede utilizar para solucionar problemas de configuración.

Recursos de resolución de problemas

Los procedimientos de Troubleshooting para las llamadas ISDN entrantes y salientes se explican en la [tecnología de marcación manual](#). Documento de las [técnicas de Troubleshooting](#). La información adicional en cómo resolver problemas los problemas de la capa ISDN 1, de la capa 2 y de la capa 3 se da al [usar el comando show isdn status para el Troubleshooting de BRI y resolviendo problemas el ISDN BRI acode 3 usando el comando debug isdn q931](#).

Comandos para resolución de problemas

La herramienta [Output Interpreter](#) (sólo para clientes [registrados](#)) permite utilizar algunos comandos “show” y ver un análisis del resultado de estos comandos.

Note: [Antes de ejecutar un comando de depuración, consulte Información importante sobre comandos de depuración.](#)

- **debug dialer** — indica cuando se ha detectado el tráfico interesante, y cuando se inicia la marca.
- **debug isdn event** — indica la actividad ISDN que ocurre en el lado del usuario de la interfaz de ISDN, y es similar **hacer el debug de ISDN q931**.
- **debug ISDN q931** — proporciona la información sobre la configuración de la llamada y cierre de las conexiones de red ISDN (capa 3), entre el router local (lado del usuario) y la red.
- **el debug isdn q921** — visualiza la capa del link de datos (los procedimientos de acceso de la capa 2) que están ocurriendo en el router en el canal D (LAPD) de su interfaz de ISDN.
- **negociación ppp del debug** — realiza la negociación de opciones PPP y los parámetros del protocolo network control (NCP).
- **autenticación PPP del debug** — permite el intercambio de los paquetes del protocolo challenge authentication (GRIETA) y del protocolo password authentication (PAP).

Comandos Debug en el Venus cuando llega el tráfico interesante

```
Venus#
*Mar 1 22:00:14.838: BR0 DDR: rotor dialout [priority]
*Mar 1 22:00:14.838: BR0 DDR: Dialing cause bridge (0x0800)
*Mar 1 22:00:14.842: BR0 DDR: Attempting to dial 5552000
*Mar 1 22:00:14.846: ISDN BR0: Outgoing call id = 0x8006, dsl 0
*Mar 1 22:00:14.846: ISDN BR0: Event: Call to 5552000 at 64 Kb/s
*Mar 1 22:00:14.850: ISDN BR0: process_bri_call(): call id 0x8006,
called_number 5552000, speed 64, call type DATA
*Mar 1 22:00:14.854: CCBRI_Go Fr Host InPkgInfo (Len=22) :
*Mar 1 22:00:14.858: 1 0 1 80 6 0 4 2 88 90 18 1 83 2C 7 35 35 35 32 30 30 30
```



```

*Mar 1 22:00:14.866:
*Mar 1 22:00:14.870: CC_CHAN_GetIdleChanbri: dsl 0
*Mar 1 22:00:14.870: Found idle channel B1
*Mar 1 22:00:14.886: ISDN BR0: TX -> INFOc sapi=0 tei=106 ns=0 nr=0
i=0x08010605040288901801832C0735353532303030
*Mar 1 22:00:14.906: SETUP pd = 8 callref = 0x06
*Mar 1 22:00:14.914: Bearer Capability i = 0x8890
*Mar 1 22:00:14.918: Channel ID i = 0x83
*Mar 1 22:00:14.92Venus#6: Keypad Facility i = '5552000'
*Mar 1 22:00:15.190: ISDN BR0: RX <- INFOc sapi=0 tei=106 ns=0 nr=1
i=0x0801860218018A
*Mar 1 22:00:15.198: CALL_PROC pd = 8 callref = 0x86
*Mar 1 22:00:15.206: Channel ID i = 0x8A
*Mar 1 22:00:15.222: ISDN BR0: TX -> RRr sapi=0 tei=106 nr=1
*Mar 1 22:00:15.230: CCBRI_Go Fr L3 pkt (Len=7) :
*Mar 1 22:00:15.230: 2 1 6 98 18 1 8A
*Mar 1 22:00:15.234:
*Mar 1 22:00:15.238: ISDN BR0: LIF_EVENT: ces/callid 1/0x8006
HOST_PROCEEDING
*Mar 1 22:00:15.238: ISDN BR0: HOST_PROCEEDING
*Mar 1 22:00:15.242: ISDN BR0: HOST_MORE_INFO
*Mar 1 22:00:15.658: ISDN BR0: RX <- INFOc sapi=0 tei=106 ns=1
nr=1 i=0x08018607
*Mar 1 22:00:15.666: CONNECT pd = 8 callref = 0x86
*Mar 1 22:00:15.678: ISDN BR0: TX -> RRr sapi=0 tei=106 nr=2
*Mar 1 22:00:15.686: CCBRI_Go Fr L3 pkt (Len=4) :
*Mar 1 22:00:15.690: 7 1 6 91
*Mar 1 22:00:15.690:
*Mar 1 22:00:15.694: ISDN BR0: LIF_EVENT: ces/callid 1/0x8006 HOST_CONNECT
22:00:15: %LINK-3-UPDOWN: Interface BRI0:2, changed state to up
*Mar 1 22:00:15.702: BR0:2 PPP: Phase is DOWN, Setup [0 sess, 0 load]
*Mar 1 22:00:15.706: BR0:2 PPP: No remote authentication for call-out
*Mar 1 22:00:15.710: BR0:2 PPP: Phase is ESTABLISHING [0 sess, 0 load]
*Mar 1 22:00:15.710: BR0:2 PPP: Treating connection as a callout
*Mar 1 22:00:15.714: BR0:2 PPP: No remote authentication for call-out
*Mar 1 22:00:15.718: BR0:2 LCP: O CONFREQ [Closed] id 1 len 10
*Mar 1 22:00:15.722: BR0:2 LCP: MagicNumber 0x6515B12A (0x05066515B12A)
*Mar 1 22:00:15.722: BR0:2: interface must be fifo queue, force fifo
22:00:15: %DIALER-6-BIND: Interface BR0:2 bound to profile D11
*Mar 1 22:00:15.742: ISDN: get_isdn_service_state(): idb 0x1A2DBC bchan 3
is_isdn 1 Not a Pri
*Mar 1 22:00:15.746: BR0:2 PPP: Treating connection as a callout
*Mar 1 22:00:15.746: ISDN BR0: Event: Connected to 5552000 on B2 at 64 Kb/s
*Mar 1 22:00:15.762: ISDN BR0: TX -> INFOc sapi=0 tei=106 ns=1 nr=2 i=0x0801060F
*Mar 1 22:00:15.766: CONNECT_ACK pd = 8 callref = 0x06
*Mar 1 22:00:15.774: BR0:2 LCP: I CONFREQ [REQsent] id 1 len 15
*Mar 1 22:00:15.778: BR0:2 LCP: AuthProto CHAP (0x0305C22305)
*Mar 1 22:00:15.782: BR0:2 LCP: MagicNumber 0x788C6F8F (0x0506788C6F8F)
*Mar 1 22:00:15.786: BR0:2 LCP: O CONFACK [REQsent] id 1 len 15
*Mar 1 22:00:15.790: BR0:2 LCP: AuthProto CHAP (0x0305C22305)
*Mar 1 22:00:15.790: BR0:2 LCP: MagicNumber 0x788C6F8F (0x0506788C6F8F)
*Mar 1 22:00:15.798: BR0:2 LCP: I CONFACK [ACKsent] id 1 len 10
*Mar 1 22:00:15.798: BR0:2 LCP: MagicNumber 0x6515B12A (0x05066515B12A)
*Mar 1 22:00:15.802: BR0:2 LCP: State is Open
*Mar 1 22:00:15.806: BR0:2 PPP: Phase is AUTHENTICATING, by the peer
[0 sess, 1 load]
*Mar 1 22:00:15.870: ISDN BR0: RX <- RRr sapi=0 tei=106 nr=2
*Mar 1 22:00:15.882: BR0:2 CHAP: I CHALLENGE id 31 len 27 from "Saturn"
*Mar 1 22:00:15.890: BR0:2 CHAP: O RESPONSE id 31 len 26 from "Venus"
*Mar 1 22:00:15.914: BR0:2 CHAP: I SUCCESS id 31 len 4
*Mar 1 22:00:15.918: BR0:2 PPP: Phase is UP [0 sess, 1 load]
*Mar 1 22:00:15.922: BR0:2 BNCP: O CONFREQ [Closed] id 1 len 4
*Mar 1 22:00:15.926: BR0:2 IPCP: O CONFREQ [Closed] id 1 len 10
*Mar 1 22:00:15.930: BR0:2 IPCP: Address 10.1.1.2 (0x03060A010102)

```

```
*Mar 1 22:00:15.934: BR0:2 CDPCP: O CONFREQ [Closed] id 1 len 4
*Mar 1 22:00:15.942: BR0:2 BNCP: I CONFREQ [REQsent] id 1 len 4
*Mar 1 22:00:15.946: BR0:2 BNCP: O CONFACK [REQsent] id 1 len 4
*Mar 1 22:00:15.950: BR0:2 CDPCP: I CONFREQ [REQsent] id 1 len 4
*Mar 1 22:00:15.954: BR0:2 CDPCP: O CONFACK [REQsent] id 1 len 4
*Mar 1 22:00:15.958: BR0:2 BNCP: I CONFACK [ACKsent] id 1 len 4
*Mar 1 22:00:15.958: BR0:2 BNCP: State is Open
*Mar 1 22:00:15.966: BR0:2 LCP: I PROTREJ [Open] id 2 len 16 protocol IPCP
(0x80210101000A03060A010102)
*Mar 1 22:00:15.970: BR0:2 IPCP: State is Closed
*Mar 1 22:00:15.974: BR0:2 CDPCP: I CONFACK [ACKsent] id 1 len 4
*Mar 1 22:00:15.978: BR0:2 CDPCP: State is Open
*Mar 1 22:00:15.978: BR0:2 DDR: dialer protocol up
22:00:16: %LINEPROTO-5-UPDOWN: Line protocol on Interface BRI0:2,
changed state to up
22:00:21: %ISDN-6-CONNECT: Interface BRI0:2 is now connected to 5552000
Venus#
```

Saturn#

```
4d16h: ISDN BR0: RX <- UI c/r=1 sapi=0 tei=127
i=0x080141050402889018018A7008C135353532303030
4d16h:      SETUP pd = 8  callref = 0x41
4d16h:      Bearer Capability i = 0x8890
4d16h:      Channel ID i = 0x8A
4d16h:      Called Party Number i = 0xC1, '5552000', Plan:ISDN,
Type:Subscriber(local)
4d16h: CCBRI_Go Fr L3 pkt (Len=21) :
4d16h: 5 1 C1 90 4 2 88 90 18 1 8A 70 8 C1 35 35 35 32 30 30 30
4d16h:
4d16h: ISDN BR0: Incoming call id = 0x002B, dsl 0
4d16h: ISDN BR0: LIF_EVENT: ces/callid 1/0x2B HOST_INCOMING_CALL
4d16h: ISDN BR0: HOST_INCOMING_CALL: (non-POTS) DATA
4d16h: ISDN BR0: HOST_INCOMING_CALL: (1) call_type = DATA
4d16h: ISDN BR0: HOST_INCOMING_CALL: voice_answer_data = FALSE call type is DATA
4d16h: ISDN BR0: Event: Received a DATA call from <unknown> on B2 at 64 Kb/s
4d16h: ISDN BR0: Event: Accepting the call id 0x2B
4d16h: BR0:2 PPP: Phase is DOWN, Setup [0 sess, 1 load]
4d16h: BR0:2 PPP: Phase is ESTABLISHING [0 sess, 1 load]
4d16h: BR0:2: inteSarface must be fifo queue, force fifo
4d16h: %DIALER-6-BIND: Interface BR0:2 bound to profile Di1
4d16h: ISDN BR0: RM returned call_type 0 resource type 0 response 1
4d16h: CCBRI_Go Fr Host InPkgInfo (Len=9) :
4d16h: 7 0 1 0 2B 3 18 1 8A
4d16h:
4d16h: ISDN BR0: isdn_send_connect(): msg 4, call id 0x2B, ces 1 bchan 1, c
all type DATA
4d16h: %LINK-3-UPDOWN: Interface BRI0:2, changed state to up
4d16h: ISDN: get_isdn_service_state(): idb 0x1A2EAC bchan 3 is_isdn 1 Not a Pri
4d16h: BR0:2 PPP: Treating connection as a callin
4d16h: BR0:2 LCP: State is Listen
4d16h: CCBRI_Go Fr Host InPkgInfo (Len=6) :
4d16h: 4 0 1 0 2B 0
4d16h:
4d16h: ISDN BR0: TX -> INFOc sapi=0 tei=105 ns=7 nr=5 i=0x0801C10218018A
4d16h:      CALL_PROC pd = 8  callref = 0xC1
4d16h:      Channel ID i = 0x8A
4d16h: ISDN BR0: RX <- RRr sapi=0 tei=105 nr=8
4d16h: ISDN BR0: TX -> INFOc sapi=0 tei=105 ns=8 nr=5 i=0x0801C107
4d16h:      CONNECT pd = 8  callref = 0xC1
4d16h: ISDN BR0: RX <- INFOc sapi=0 tei=105 ns=5 nr=9 i=0x0801410F
4d16h:      CONNECT_ACK pd = 8  callref = 0x41
4d16h: ISDN BR0: TX -> RRr sapi=0 tei=105 nr=6
```

```
4d16h: CCBRI_Go Fr L3 pkt (Len=4) :
4d16h: F 1 C1 92
4d16h:
4d16h: ISDN BR0: LIF_EVENT: ces/callid 1/0x2B HOST_CONNECT
4d16h: ISDN BR0: Event: Connected to <unknown> on B2 at 64 Kb/s
4d16h: BR0:2 LCP: I CONFREQ [Listen] id 1 len 10
4d16h: BR0:2 LCP: MagicNumber 0x6515B12A (0x05066515B12A)
4d16h: BR0:2 LCP: O CONFREQ [Listen] id 1 len 15
4d16h: BR0:2 LCP: AuthProto CHAP (0x0305C22305)
4d16h: BR0:2 LCP: MagicNumber 0x788C6F8F (0x0506788C6F8F)
4d16h: BR0:2 LCP: O CONFACK [Listen] id 1 len 10
4d16h: BR0:2 LCP: MagicNumber 0x6515B12A (0x05066515B12A)
4d16h: BR0:2 LCP: I CONFACK [ACKsent] id 1 len 15
4d16h: BR0:2 LCP: AuthProto CHAP (0x0305C22305)
4d16h: BR0:2 LCP: MagicNumber 0x788C6F8F (0x0506788C6F8F)
4d16h: BR0:2 LCP: State is Open
4d16h: BR0:2 PPP: Phase is AUTHENTICATING, by this end [0 sess, 0 load]
4d16h: BR0:2 CHAP: O CHALLENGE id 31 len 27 from "Saturn"
4d16h: BR0:2 CHAP: I RESPONSE id 31 len 26 from "Venus"
4d16h: BR0:2 CHAP: O SUCCESS id 31 len 4
4d16h: BR0:2 PPP: Phase is UP [0 sess, 0 load]
4d16h: BR0:2 BNCP: O CONFREQ [Closed] id 1 len 4
4d16h: BR0:2 CDPCP: O CONFREQ [Closed] id 1 len 4
4d16h: BR0:2 BNCP: I CONFREQ [REQsent] id 1 len 4
4d16h: BR0:2 BNCP: O CONFACK [REQsent] id 1 len 4: BR0:2 IPCP: I CONFREQ
[Not negotiated] id 1 len 10
4d16h: BR0:2 IPCP: Address 10.1.1.2 (0x03060A010102)
4d16h: BR0:2 LCP: O PROTREJ [Open] id 2 len 16 protocol IPCP
(0x80210101000A03060A010102)
4d16h: BR0:2 CDPCP: I
4d16h CONFREQ [REQsent] id 1 len 4
4d16h: BR0:2 CDPCP: O CONFACK [REQsent] id 1 len 4
4d16h: BR0:2 BNCP: I CONFACK [ACKsent] id 1 len 4
4d16h: BR0:2 BNCP: State is Open
4d16h: BR0:2 CDPCP: I CONFACK [ACKsent] id 1 len 4
4d16h: BR0:2 CDPCP: State is Open
4d16h: BR0:2 DDR: dialer protocol up
4d16h: %LINEPROTO-5-UPDOWN: Line protocol on Interface BRI0:2, changed state to up
4d16h: %ISDN-6-CONNECT: Interface BRI0:2 is now connected to
<unknown phone number> Venus
!--- Unknown phone number because of no dialer string on Saturn Saturn#
```

[Información Relacionada](#)

- [Más información sobre los comandos de dial-backup](#)
- [Soporte de tecnología de Cisco – Marcar](#)
- [Soporte Técnico - Cisco Systems](#)