使用 PPP 半桥接连接路由和桥接网络

目录

简介

本文提供一配置示例为使用PPP半桥接连接已路由和桥接网络。

先决条件

要求

本文档没有任何特定的要求。

使用的组件

本文档中的信息基于以下软件和硬件版本：

- Cisco IOS软件版本12.2(7b)。
- 两思科2500系列路由器。其中每一有至少一ISDN BRI接口。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您使用的是真实网络，请确保您已经了解所有命令的潜在影响。

相关产品

此配置也可用于以下硬件和软件版本：

- 任何serial interfaces，例如序列，基本速率接口(BRI)，主速率接口，等等。
- Cisco IOS软件版本11.2。
- 如上所述任何路由器运行Cisco IOS软件和至少一个ISDN-BRI端口。然而，半网桥功能在路由器可以使用与serial interfaces。

规则

有关文档规则的详细信息，请参阅 Cisco 技术提示规则。

背景信息

转换他们到路由信息包并且转发他们对其他路由器进程的网桥发送网桥信息包对half-bridge PPP。同样， PPP half-bridge转换路由信息包到以太网网桥数据包，并且发送他们到在同一个以太网子网络的网桥。

注意： 此配置不包括在两边的一个完整网桥。参考ISDN上的桥接文档的这样配置。

注意桥接在ISDN连接倾向于保持连接活动在非常长时间，如果不永久。如果Telco对根据连接时间的ISDN收费，这能导致一张非常高额账单。结果，此方案为有无限使用的ISDN线路的那些人推荐。

注意： 接口不能功能作为half-bridge和网桥。Cisco IOS软件软件支持不大于half-bridge一个PPP每个以太网子网络。

配置

本部分提供有关如何配置本文档所述功能的信息。

注意： 要查找本文档所用命令的其他信息，请使用命令查找工具（仅限注册用户）。

网络图

本文档使用以下网络设置：

配置

本文档使用以下配置：

- Venus此路由器配置作为有禁用的IP路由的一个完整网桥。设备拨号，当所有桥接流量到达。
- Saturn此路由器配置作为半网桥。注意**dialer string**、**拨号组**和**拨号器列表**命令在此侧没有配置。因此此路由器不会拨通，但是接受呼入呼叫。这防止路由器拨号远程路由器。我们打开IP路由此处。全双工桥接软件在此路由器没有配置。PPP半网桥在BRI接口运行，因此命令类似**show bridge**和**show spanning-tree**不产生在此路由器的任何输出。

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 !
```

验证

本部分所提供的信息可用于确认您的配置是否正常工作。

命令输出解释程序工具（仅限注册用户）支持某些 **show** 命令，使用此工具可以查看对 show 命令输出的分析。

- **show isdn status** —显示ISDN接口的L1、L2和L3状况。
- **show dialer** —显示拨号程序的状态和ISDN信道的单个状况。
- **show bridge** —显示条目类在网桥转发数据库的，在特权EXEC模式。
- **show interface** —显示多种接口状况，包括序列和BRI接口。
- **show arp** —检查ARP映射。ARP是用于的协议映射第2层地址(MAC地址)到第3层地址(IP地址)。
- **show spanning-tree** —显示生成树拓扑为路由器所知。

拨入 Saturn 后 Venus 的 Show 命令

```
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 Di1 (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

Venus 拨入后 Saturn 上的 Show 命令

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 Di1 Time until disconnect 45 secs **Connected to <unknown phone number> (Venus)** 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 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

故障排除

本部分提供的信息可用于对配置进行故障排除。

故障排除资源

流入和流出的ISDN呼叫的故障排除程序在拨号技术里解释：故障排除技术文档。使用debug isdn q931命令，关于如何的其他信息排除故障ISDN第1层，第2层和第3层问题在使用show isdn status命令BRI故障排除和排除故障给ISDN BRI第3层。

故障排除命令

命令输出解释程序工具（仅限注册用户）支持某些 **show** 命令，使用此工具可以查看对 show 命令输出的分析。

注意： 在发出 **debug** 命令之前，请参阅有关 Debug 命令的重要信息。

- **debug dialer** —指示，当关注数据流检测时，并且，当拨号启动时。
- **debug isdn event** —指示发生在ISDN接口的用户端的ISDN活动，并且类似于**debug isdn**

q931。

- **debug isdn q931** —关于呼叫建立及拆线的提供信息ISDN网络连接(在本地路由器(用户端)和网络之间的层3)。
- **debug isdn q921** —显示数据链路层(在D-channel的层2)接入过程(LAPD)的路由器发生其ISDN接口。
- **debug ppp协商**—执行PPP选项和网络控制协议(NCP)参数的协商。
- **debug ppp authentication** —允许质询验证协议(CHAP)和密码认证协议数据包交换。

调试On命令Venus，当关注数据流到达

```
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 Di1 *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=0x08014105040288901801 8A7008C135353532303030
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#

相关信息

- 关于拨号备份命令的更多信息

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