

使用撥號程式配置檔案為ISDN配置DDR備份

目錄

[簡介](#)

[必要條件](#)

[需求](#)

[採用元件](#)

[慣例](#)

[設定](#)

[網路圖表](#)

[組態](#)

[驗證](#)

[疑難排解](#)

[疑難排解步驟](#)

[不使用管理距離時](#)

[使用管理距離時](#)

[疑難排解指令](#)

[相關資訊](#)

簡介

此配置示例說明如何使用ISDN BRI電路備份租用線路、WAN或串列連線。

本檔案使用撥號程式設定檔和備份介面功能。**backup interface**命令將配置的物理或邏輯介面置於備用模式，直到主介面關閉為止。

必要條件

需求

本文件沒有特定需求。

採用元件

此配置使用BRI電路備份串列鏈路。由於該路由器上配置了撥號器字串，因此路由器衝壓正在執行撥出。在此組態中：

- 使用Cisco 2500路由器(RAMSES)，連線到Cisco 2520路由器(sphinx)。兩台路由器都配備了用於備份鏈路的BRI介面。
- 兩台路由器都運行Cisco IOS軟體版本12.0.7T。

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設

) 的組態來啟動。如果您的網路正在作用，請確保您已瞭解任何指令可能造成的影響。

慣例

如需文件慣例的詳細資訊，請參閱[思科技術提示慣例](#)。

設定

本節提供用於設定本文中所述功能的資訊。以下三個步驟完成了此配置：

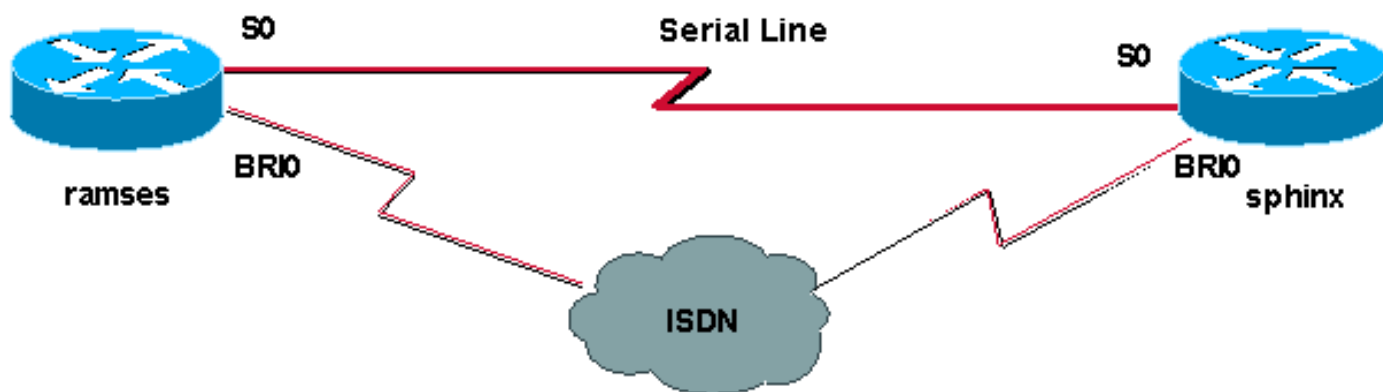
1. 使用傳統DDR或撥號程式配置檔案配置按需撥號路由(DDR)。本文檔中顯示的配置示例使用撥號程式配置檔案。
2. 在主鏈路發生故障時，使用**backup interface**命令觸發撥出呼叫。
3. 定義相關流量。

注意：建議在配置備份介面和備份延遲命令之前，配置DDR連線（使用BRI0的撥號程式1）並驗證其是否正常工作。這允許您在配置備份之前有效地管理和排除撥號程式配置檔案、ISDN、PPP和身份驗證問題。

注意：要查詢有關本文檔中使用的命令的其他資訊，請使用[命令查詢工具](#)([僅限註冊客戶](#))。

網路圖表

本檔案會使用以下網路設定：



組態

本檔案會使用以下設定：

- [ramses \(Cisco 2500路由器 \)](#)
- [sphinx \(思科2520路由器 \)](#)

ramses (Cisco 2500路由器)

```
ramses#show running-config
Building configuration...

Current configuration:
!
```

```
version 12.0
service timestamps debug datetime msec
service timestamps log datetime msec
!
hostname ramses
!
username sphinx password <password>
  !-- password is case sensitive and should be the same
  on both sides ! isdn switch-type basic-net3 ! !
interface Loopback1 ip address 1.1.1.1 255.255.255.255 !
interface Ethernet0 ip address 10.48.74.45 255.255.254.0
! interface Serial0 backup delay 10 30 backup interface
Dialer1 ip address 3.3.3.1 255.255.255.0 no ip directed-
broadcast clockrate 125000 ! interface BRI0 no ip
address no ip directed-broadcast encapsulation ppp
dialer pool-member 2 isdn switch-type basic-net3 no cdp
enable ppp authentication chap callin ! interface
Dialer1 ip unnumbered Loopback1 no ip directed-broadcast
encapsulation ppp dialer remote-name sphinx dialer pool
2 dialer string 5551000 dialer-group 1 ppp
authentication chap callin ! ip classless ip route
2.2.2.1 255.255.255.255 Dialer1 ip route 2.2.2.1
255.255.255.255 Serial0 no ip http server ! dialer-list
1 protocol ip permit ! line con 0 exec-timeout 0 0
transport input none line aux 0 line vty 0 4 exec-
timeout 0 0 password <password> login ! ntp server
10.200.20.134 end
```

sphinx (思科2520路由器)

```
sphinx#show running-config

Building configuration...
Current configuration:
!
version 12.0
service timestamps debug datetime msec
service timestamps log datetime msec
!
hostname sphinx
!
!
username ramses password <password>
  !-- password is case sensitive and should be the same
  on both sides ! isdn switch-type basic-net3 interface
Loopback1 ip address 2.2.2.1 255.255.255.255 ! interface
Serial0 ip address 3.3.3.2 255.255.255.0 ! interface
BRI0 no ip address no ip directed-broadcast
encapsulation ppp dialer pool-member 2 isdn switch-type
basic-net3 no cdp enable ppp authentication chap callin
! interface Dialer1 ip unnumbered Loopback1 no ip
directed-broadcast encapsulation ppp dialer remote-name
ramses dialer pool 2 dialer-group 1 ppp authentication
chap ! ip classless ip route 1.1.1.1 255.255.255.255
Serial0 ip route 1.1.1.1 255.255.255.255 Dialer1 2
dialer-list 1 protocol ip permit ! line con 0 exec-
timeout 0 0 transport input none line aux 0 line vty 0 4
! end
```

驗證

本節提供的資訊可用於確認您的組態是否正常運作。

[輸出直譯器工具](#)(僅供註冊客戶使用)支援某些show命令，此工具可讓您檢視show命令輸出的分析。

- **show isdn status**???顯示所有ISDN介面或特定ISDN介面的狀態。
- **show interface serial** -???示有關串列介面的資訊。
- **show interface dialer** -???示有關撥號器介面的資訊。
- **debug dialer** -???示有關撥號器介面上接收的資料包的DDR資訊。
- **debug isdn q931**???顯示路由器和ISDN交換機之間的ISDN網路連線 (第3層) 的呼叫建立和斷開。
- **debug ppp negotiation**???在協商PPP元件(包括鏈路控制協定(LCP)、身份驗證和NCP時，顯示有關PPP流量和交換的資訊。成功的PPP協商將首先開啟LCP狀態，然後進行身份驗證，最後協商NCP。
- **debug ppp authentication**???顯示PPP身份驗證協定消息，包括質詢身份驗證協定(CHAP)資料包交換和口令身份驗證協定(PAP)交換。如果發現故障，請驗證CHAP使用者名稱和密碼是否配置正確。

疑難排解

本節提供的資訊可用於對組態進行疑難排解。

疑難排解步驟

請按照以下說明對配置進行故障排除：

使用**show isdn status**命令確保路由器與ISDN交換機正確通訊。在輸出中，確認：

- 第1層狀態為ACTIVE
- 第2層狀態狀態= MULTIPLE_FRAME_ESTABLISHED

此命令還顯示活動呼叫的數量。我們來看一個例子：

```
ramses#show isdn status
Global ISDN Switchtype = basic-net3
ISDN BRI0 interface
dsl 0, interface ISDN Switchtype = basic-net3
Layer 1 Status:
ACTIVE
Layer 2 Status:
TEI = 97, Ces = 1, SAPI = 0, State = MULTIPLE_FRAME_ESTABLISHED
Layer 3 Status:
0 Active Layer 3 Call(s)
Activated dsl 0 CCBs = 0
The Free Channel Mask: 0x80000003
Total Allocated ISDN CCBs = 0

ramses#show interface serial 0
Serial0 is up, line protocol is up
Hardware is HD64570
Internet address is 3.3.3.1/24
Backup interface Dialer1, failure delay 10 sec, secondary disable
delay 30 sec
```

```
ramses#show interface dialer 1
```

Dialer1 is standby mode, line protocol is down ! --- *In standby mode*. Hardware is Unknown
由於備份介面處於備用模式，因此在show ip route命令的輸出中看不到此資訊。

使用管理距離(AD)和不使用管理距離時，讓我們看一下輸出中顯示的差異。

不使用管理距離時

如果不使用AD，您將看到以下輸出：

```
sphinx#show interface dialer 1
```

```
Dialer1 is up (spoofing), line protocol is up (spoofing)  
Hardware is Unknown
```

如果沒有在路由器sphinx上使用AD作為撥號程式，則會看到show ip route命令的以下輸出：

```
sphinx(config)#ip route 1.1.1.1 255.255.255.255 dialer1  
! --- No AD used here. sphinx#show ip route 1.1.1.1  
Routing entry for 1.1.1.1/32  
Known via "static", distance 1, metric 0 (connected)  
Routing Descriptor Blocks:  
* directly connected, via Dialer1  
Route metric is 0, traffic share count is 1  
directly connected, via Serial0  
Route metric is 0, traffic share count is 1
```

ping命令顯示的輸出看起來與以下類似，因為它缺少其中一個ping:

```
sphinx#ping 1.1.1.1
```

```
Type escape sequence to abort.  
Sending 5, 100-byte ICMP Echos to 1.1.1.1, timeout is 2 seconds:  
.!.!.
```

使用管理距離時

使用AD時，您將看到以下輸出：

```
sphinx(config)#ip route 1.1.1.1 255.255.255.255 dialer1 2  
! --- The AD used here is two. sphinx#show ip route 1.1.1.1  
Routing entry for 1.1.1.1/32  
Known via "static", distance 1, metric 0 (connected)  
Routing Descriptor Blocks:  
* directly connected, via Serial0  
Route metric is 0, traffic share count is 1
```

```
sphinx#ping 1.1.1.1
```

```
Type escape sequence to abort.  
Sending 5, 100-byte ICMP Echos to 1.1.1.1, timeout is 2 seconds:  
!!!!!
```

配置並驗證DDR連線（撥號器1和BRI0之間）是否工作正常，然後再配置備份接口和備份延遲命令。這樣，您就可以在配置備份之前驗證撥號器配置檔案、ISDN、PPP和身份驗證是否正常工作。

驗證DDR連線正常工作後，可以繼續執行以下備份故障排除步驟：

1. 關閉主鏈路。**注意：**請勿在配置了**backup interface**命令的路由器上使用**shutdown**命令。這不會導致Cisco IOS撥打備份鏈路。您可以在沒有**backup interface**命令的路由器上關閉主介面，以啟用備份。**註：**在我們的方案中，**backup interface**命令是在ramses (Cisco 2500路由器) 上配置的。因此，對sphinx (思科2520路由器) 的主介面執行**shutdown**命令會啟用備用鏈路。**注意：**您可以通過拔下電纜或使用某種等效的方法來物理關閉主連線，以便啟動備用介面。
2. 您應該會看到一條控制檯消息，指示備用介面(interface dialer 1)已啟動。此消息僅在由**backup delay**命令指定的時間間隔過期後顯示。在此配置中，備份啟用延遲為10秒。如果未看到此控制檯消息，請檢查備份延遲計時器。

```
*Mar 1 03:54:00.451: %LINEPROTO-5-UPDOWN: Line protocol on Interface
Serial0, changed state to down
```

```
*Mar 1 03:54:11.467: %LINK-3-UPDOWN: Interface Dialer1, changed state to up
```

3. 使用**show ip route**命令檢視主鏈路關閉的路由表。您應該觀察到Dialer 1的直連路由。
4. Ping遠端路由器環回介面的IP地址。如果連結沒有撥號，請確認您的相關流量定義允許ICMP流量(ping)。**注意：**在我們的示例中，路由器斯芬克斯中的路由使用2的AD (這可以是除1之外的任何數字)。

```
ip route 1.1.1.1 255.255.255.255 Dialer1 2
```

注意：出現這種情況的原因是，如果主鏈路處於開啟狀態，則ping操作會有一半丟失。由於dialer 1和serial 0介面均已啟用，因此該路由已同時安裝用於這兩個介面。但是，由於BRI介面未啟動，撥號器介面無法傳送資料包。

疑難排解指令

使用本節顯示的命令對配置進行故障排除。

[輸出直譯器工具](#)(僅供註冊客戶使用)支援某些**show**命令，此工具可讓您檢視**show**命令輸出的分析。

注意：發出**debug**命令之前，請參閱[有關Debug命令的重要資訊](#)。

嘗試ping 2.2.2.1以建立相關流量：

```
ramses#ping 2.2.2.1
*Mar 1 04:53:26.574: %LINK-3-UPDOWN: Interface Serial0, changed state
to down
*Mar 1 04:53:27.574: %LINEPROTO-5-UPDOWN: Line protocol on Interface
Serial0, changed state to down
*Mar 1 04:53:38.590: %LINK-3-UPDOWN: Interface Dialer1, changed state
to up
*Mar 1 04:53:38.606: Dil LCP: Not allowed on a Dialer Profile.
*Mar 1 04:53:40.058: BRI0 DDR: rotor dialout [priority]
*Mar 1 04:53:40.062: BRI0 DDR: Dialing cause ip (s=1.1.1.1, d=2.2.2.1)
*Mar 1 04:53:40.066: BRI0 DDR: Attempting to dial 5551000
*Mar 1 04:53:40.078: ISDN BR0: TX -> SETUP pd = 8 callref = 0x0A
*Mar 1 04:53:40.078: Bearer Capability i = 0x8890
*Mar 1 04:53:40.082: Channel ID i = 0x83
*Mar 1 04:53:40.086: Called Party Number i = 0x80, '5551000'
*Mar 1 04:53:40.342: ISDN BR0: RX <- CALL_PROC pd = 8 callref = 0x8A
*Mar 1 04:53:40.346: Channel ID i = 0x89
*Mar 1 04:53:40.834: ISDN BR0: RX <- CONNECT pd = 8 callref = 0x8A
*Mar 1 04:53:40.846: ISDN BR0: TX -> CONNECT_ACK pd = 8 callref =
0x0A
```

*Mar 1 04:53:40.854: %LINK-3-UPDOWN: Interface BRI0:1, changed state to up
*Mar 1 04:53:40.870: BRI0:1: interface must be fifo queue, force fifo
*Mar 1 04:53:40.874: %DIALER-6-BIND: Interface BRI0:1 bound to profile Dialer1
*Mar 1 04:53:40.882: %ISDN-6-CONNECT: Interface BRI0:1 is now connected to 5551000
*Mar 1 04:53:40.890: BR0:1 PPP: Treating connection as a callout
*Mar 1 04:53:40.890: BR0:1 PPP: Phase is ESTABLISHING, Active Open
*Mar 1 04:53:40.894: BR0:1 PPP: No remote authentication for call-out
*Mar 1 04:53:40.898: BR0:1 LCP: O CONFREQ [Closed] id 18 len 10
*Mar 1 04:53:40.902: BR0:1 LCP: MagicNumber 0xE1BD38B8 (0x0506E1BD38B8)
*Mar 1 04:53:40.930: BR0:1 LCP: I CONFREQ [REQsent] id 22 len 15
*Mar 1 04:53:40.934: BR0:1 LCP: AuthProto CHAP (0x0305C22305)
*Mar 1 04:53:40.938: BR0:1 LCP: MagicNumber 0xEEBCFA2D (0x0506EEBCFA2D)
*Mar 1 04:53:40.942: BR0:1 LCP: O CONFACK [REQsent] id 22 len 15
*Mar 1 04:53:40.946: BR0:1 LCP: AuthProto CHAP (0x0305C22305)
*Mar 1 04:53:40.950: BR0:1 LCP: MagicNumber 0xEEBCFA2D (0x0506EEBCFA2D)
*Mar 1 04:53:40.954: BR0:1 LCP: I CONFACK [ACKsent] id 18 len 10
*Mar 1 04:53:40.954: BR0:1 LCP: MagicNumber 0xE1BD38B8 (0x0506E1BD38B8)
*Mar 1 04:53:40.958: BR0:1 LCP: State is Open
*Mar 1 04:53:40.962: BR0:1 PPP: Phase is AUTHENTICATING, by the peer
*Mar 1 04:53:40.982: BR0:1 CHAP: I CHALLENGE id 9 len 27 from "sphinx"
*Mar 1 04:53:40.986: BR0:1 CHAP: O RESPONSE id 9 len 27 from "ramses"
*Mar 1 04:53:41.046: BR0:1 CHAP: I SUCCESS id 9 len 4
*Mar 1 04:53:41.050: BR0:1 PPP: Phase is UP
*Mar 1 04:53:41.054: BR0:1 IPCP: O CONFREQ [Not negotiated] id 9 len 10
*Mar 1 04:53:41.058: BR0:1 IPCP: Address 1.1.1.1 (0x030601010101)
*Mar 1 04:53:41.062: BR0:1 CDPCP: O CONFREQ [Not negotiated] id 9 len 4
*Mar 1 04:53:41.066: BR0:1 IPCP: I CONFREQ [REQsent] id 6 len 10
*Mar 1 04:53:41.070: BR0:1 IPCP: Address 2.2.2.1 (0x030602020201)
*Mar 1 04:53:41.074: BR0:1 IPCP: O CONFACK [REQsent] id 6 len 10
*Mar 1 04:53:41.078: BR0:1 IPCP: Address 2.2.2.1 (0x030602020201)
*Mar 1 04:53:41.082: BR0:1 CDPCP: I CONFREQ [REQsent] id 9 len 4
*Mar 1 04:53:41.086: BR0:1 CDPCP: O CONFACK [REQsent] id 9 len 4
*Mar 1 04:53:41.110: BR0:1 IPCP: I CONFACK [ACKsent] id 9 len 10
*Mar 1 04:53:41.110: BR0:1 IPCP: Address 1.1.1.1 (0x030601010101)
*Mar 1 04:53:41.114: BR0:1 IPCP: State is Open
*Mar 1 04:53:41.122: BR0:1 CDPCP: I CONFACK [ACKsent] id 9 len 4
*Mar 1 04:53:41.126: BR0:1 CDPCP: State is Open
*Mar 1 04:53:41.126: BRI0:1 DDR: dialer protocol up
*Mar 1 04:53:41.134: Dil IPCP: Install route to 2.2.2.1
*Mar 1 04:53:42.086: %LINEPROTO-5-UPDOWN: Line protocol on Interface BRI0:1, changed state to up
*Mar 1 04:53:46.886: %ISDN-6-CONNECT: Interface BRI0:1 is now connected to 5551000 5551000

ramses#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 data link layer up

Dial reason: ip (s=1.1.1.1, d=2.2.2.1)

```
! --- we see dial reason, this is the calling router
Interface bound to profile Dialer1
Time until disconnect 105 secs
Current call connected 00:00:16
Connected to 5551000 (5551000)
```

```
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 idle
```

```
Dialer1 - 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
Number of active circuit switched calls = 0
```

```
Dial String Successes Failures Last DNIS Last status
5551000 5 0 00:00:19 successful
Default
```

```
Dialer2 - dialer type = NONE
Idle timer (120 secs), Fast idle timer (20 secs)
Wait for carrier (30 secs), Re-enable (15 secs)
Number of active calls = 0
```

```
Dial String Successes Failures Last DNIS Last status
```

```
ramses#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
```

```
1.0.0.0/32 is subnetted, 1 subnets
C 1.1.1.1 is directly connected, Loopback1
2.0.0.0/32 is subnetted, 1 subnets
C 2.2.2.1 is directly connected, Dialer1
10.0.0.0/23 is subnetted, 1 subnets
C 10.48.74.0 is directly connected, Ethernet0
```

```
sphinx(config)#interface serial 0
```

```
sphinx(config-if)#shutdown
```

```
sphinx(config-if)#
```

```
*Mar 3 20:07:40.603: %LINK-5-CHANGED: Interface Serial0, changed state
to administratively down
```

```
*Mar 3 20:07:41.603: %LINEPROTO-5-UPDOWN: Line protocol on Interface
Serial0, changed state to down
```

```
*Mar 3 20:07:54.331: ISDN BR0: RX <- SETUP pd = 8 callref = 0x14
```

```
*Mar 3 20:07:54.335: Bearer Capability i = 0x8890
```

```
*Mar 3 20:07:54.339: Channel ID i = 0x89
```

```
*Mar 3 20:07:54.343: Called Party Number i = 0xC1, '5551000'
```

```
*Mar 3 20:07:54.355: ISDN BR0: Event: Received a DATA call from
<unknown> on B1 at 64 Kb/s
```

```
*Mar 3 20:07:54.355: BRI0:1: interface must be fifo queue, force fifo
```

```
*Mar 3 20:07:54.363: %DIALER-6-BIND: Interface BRI0:1 bound to profile
```


Dialer1

```
*Mar 3 20:07:54.383: %LINK-3-UPDOWN: Interface BRI0:1, changed state to
up
*Mar 3 20:07:54.403: %ISDN-6-CONNECT: Interface BRI0:1 is now connected
to <unknown phone number>
*Mar 3 20:07:54.411: BR0:1 PPP: Treating connection as a callin
*Mar 3 20:07:54.415: BR0:1 PPP: Phase is ESTABLISHING, Passive Open
*Mar 3 20:07:54.415: BR0:1 LCP: State is Listen
*Mar 3 20:07:54.471: %ISDN-6-LAYER2UP: Layer 2 for Interface BR0, TEI
99 changed to up
*Mar 3 20:07:54.479: ISDN BR0: TX -> CALL_PROC pd = 8 callref = 0x94
*Mar 3 20:07:54.687: ISDN BR0: TX -> CONNECT pd = 8 callref = 0x94
*Mar 3 20:07:54.851: ISDN BR0: RX <- CONNECT_ACK pd = 8 callref =
0x14
*Mar 3 20:07:54.939: BR0:1 LCP: I CONFREQ [Listen] id 18 len 10
*Mar 3 20:07:54.939: BR0:1 LCP: MagicNumber 0xE1BD38B8
(0x0506E1BD38B8)
*Mar 3 20:07:54.943: BR0:1 LCP: O CONFREQ [Listen] id 22 len 15
*Mar 3 20:07:54.947: BR0:1 LCP: AuthProto CHAP (0x0305C22305)
*Mar 3 20:07:54.951: BR0:1 LCP: MagicNumber 0xEEBCFA2D
(0x0506EEBCFA2D)
*Mar 3 20:07:54.955: BR0:1 LCP: O CONFACK [Listen] id 18 len 10
*Mar 3 20:07:54.959: BR0:1 LCP: MagicNumber 0xE1BD38B8
(0x0506E1BD38B8)
*Mar 3 20:07:54.987: BR0:1 LCP: I CONFACK [ACKsent] id 22 len 15
*Mar 3 20:07:54.987: BR0:1 LCP: AuthProto CHAP (0x0305C22305)
*Mar 3 20:07:54.991: BR0:1 LCP: MagicNumber 0xEEBCFA2D
(0x0506EEBCFA2D)
*Mar 3 20:07:54.995: BR0:1 LCP: State is Open
*Mar 3 20:07:54.995: BR0:1 PPP: Phase is AUTHENTICATING, by this end
*Mar 3 20:07:54.999: BR0:1 CHAP: O CHALLENGE id 9 len 27 from "sphinx"
*Mar 3 20:07:55.027: BR0:1 CHAP: I RESPONSE id 9 len 27 from "ramses"
*Mar 3 20:07:55.035: BR0:1 CHAP: O SUCCESS id 9 len 4
*Mar 3 20:07:55.039: BR0:1 PPP: Phase is UP
*Mar 3 20:07:55.043: BR0:1 IPCP: O CONFREQ [Not negotiated] id 6 len 10

*Mar 3 20:07:55.047: BR0:1 IPCP: Address 2.2.2.1 (0x030602020201)
*Mar 3 20:07:55.051: BR0:1 CDPCP: O CONFREQ [Not negotiated] id 9 len 4

*Mar 3 20:07:55.115: BR0:1 IPCP: I CONFREQ [REQsent] id 9 len 10
*Mar 3 20:07:55.119: BR0:1 IPCP: Address 1.1.1.1 (0x030601010101)
*Mar 3 20:07:55.123: BR0:1 IPCP: O CONFACK [REQsent] id 9 len 10
*Mar 3 20:07:55.127: BR0:1 IPCP: Address 1.1.1.1 (0x030601010101)
*Mar 3 20:07:55.131: BR0:1 CDPCP: I CONFREQ [REQsent] id 9 len 4
*Mar 3 20:07:55.135: BR0:1 CDPCP: O CONFACK [REQsent] id 9 len 4
*Mar 3 20:07:55.139: BR0:1 IPCP: I CONFACK [ACKsent] id 6 len 10
*Mar 3 20:07:55.143: BR0:1 IPCP: Address 2.2.2.1 (0x030602020201)
*Mar 3 20:07:55.147: BR0:1 IPCP: State is Open
*Mar 3 20:07:55.151: BR0:1 CDPCP: I CONFACK [ACKsent] id 9 len 4
*Mar 3 20:07:55.155: BR0:1 CDPCP: State is Open
*Mar 3 20:07:55.159: BRI0:1 DDR: dialer protocol up
*Mar 3 20:07:55.167: Dil IPCP: Install route to 1.1.1.1
*Mar 3 20:07:56.039: %LINEPROTO-5-UPDOWN: Line protocol on Interface
BRI0:1, changed state to up
*Mar 3 20:08:00.411: %ISDN-6-CONNECT: Interface BRI0:1 is now connected
to <unknown phone number> ramses
```

sphinx#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 data link layer up
Interface bound to profile Dialer1
Time until disconnect 95 secs
Connected to <unknown phone number> (ramses)
! --- We see ramses. 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 idle Dialer1 - 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 Number of
active circuit switched calls = 0 Dial String Successes Failures Last DNIS Last status
sphinx#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

1.0.0.0/32 is subnetted, 1 subnets
C 1.1.1.1 is directly connected, Dialer1
2.0.0.0/32 is subnetted, 1 subnets
C 2.2.2.1 is directly connected, Loopback1
sphinx#
```

[相關資訊](#)

- [存取技術支援頁面](#)
- [技術支援 - Cisco Systems](#)