使用Dialer Watch配置AUX到AUX埠非同步備份

目錄

簡介

本文提供有關使用撥號器監視功能為串列、WAN或租用線路鏈路配置按需撥號路由(DDR)備份的資訊。備份鏈路在兩個路由器的AUX埠上使用數據機。當主鏈路斷開時，撥號器監視使用AUX埠上的數據機啟動備份撥出。

必要條件

需求

本檔案假設您已充分瞭解AUX連線埠上與資料機相關的各種問題。如果您需要有關這些問題的詳細資訊，請參閱數據機 — 路由器連線指南和在AUX埠上使用數據機配置撥出文檔，然後繼續本文檔。

採用元件

本文中的資訊係根據以下軟體和硬體版本：

- 兩台帶有US Robotics數據機的思科2600連線到AUX埠。兩台路由器都運行Cisco IOS®軟體版本12.1(2)。

建議您使用Cisco IOS版本12.1(7)或更高版本，其中包括對影響撥號器監視的IOS錯誤的修復。

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。如果您在即時網路中工作，請確保在使用任何命令之前瞭解其潛在影響。

慣例

如需文件慣例的詳細資訊，請參閱思科技術提示慣例。

背景理論

此場景涉及在AUX埠上使用數據機配置撥入和撥出，並使用撥號器監視配置DDR備份。有關撥號器監視功能的詳細資訊，請參閱評估備份介面、浮動靜態路由和適用於DDR備份的撥號器監視。

有關如何配置和排除撥號器監視故障的資訊，請參閱使用BRI和Dialer Watch配置DDR備份。撥號器監視涉及的概念與所使用的媒體無關，因此文檔對撥號器監視問題非常有用。

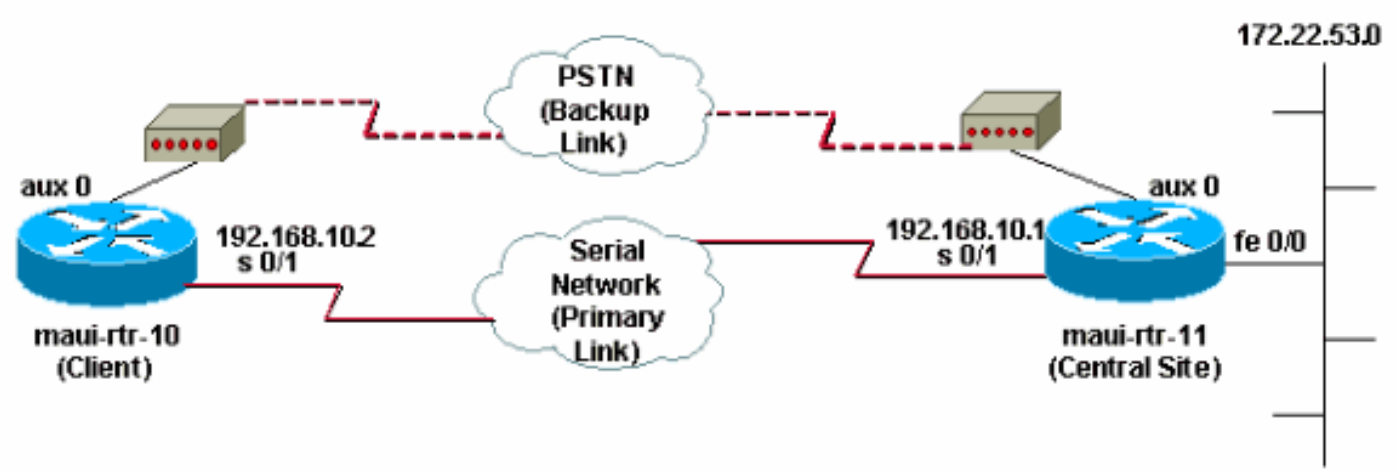
設定

本節提供用於設定本文件中所述功能的資訊。

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

本檔案會使用下圖所示的網路設定：



組態

在此配置中，maui-rtr-10（客戶端）通過串列鏈路連線到maui-rtr-11（中央站點）。 兩台路由器也都有連線到AUX埠並用作備份的外部US Robotics數據機。當主鏈路斷開時，撥號器觀察啟動備用鏈路，maui-rtr-10撥號中央站點路由器，連線、協商PPP，並交換開放最短路徑優先(OSPF)路由資訊。現在，路由器之間的所有流量都使用備份連線。重新建立主鏈路後，路由表會更新，所有流量都會再次使用主鏈路。由於備份鏈路上沒有流量流動，因此空閒超時過期，撥號器監視將斷開備份鏈路。

maui-rtr-10（客戶端）

```
maui-rtr-10#show running-config
Building configuration...

Current configuration:
!
version 12.1
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname maui-rtr-10
!
aaa new-model
aaa authentication login default local
aaa authentication login NO_AUTHEN none
aaa authentication ppp default local
!--- This is the basic AAA configuration for PPP calls.
enable secret 5 <deleted> ! username admin password 0
<deleted> username maui-rtr-11 password 0 cisco !---
Username for remote router (maui-rtr-11) and shared
secret !--- password. Shared secret (used for Challenge
Handshake Authentication !--- Protocol [CHAP]
authentication) must be the same on both sides. ! ip
subnet-zero ! chat-script Dialout ABORT ERROR ABORT BUSY
"" "AT" OK "ATDT \T" TIMEOUT 45 CONNECT \c !--- Chat
script named "Dialout" is used for the backup dialout.
modemcap entry MY_USR_MODEM:MSC=&F1S0;=1 !--- Modemcap
named "MY_USR_MODEM" will be applied to the AUX !---
port line interface. This modemcap was created with the
!--- modemcap edit MY_USR_MODEM miscellaneous &F1S0;=1
command !--- Refer to the Modem-Router Connection Guide
for more information. ! interface Loopback0 ip address
172.17.1.1 255.255.255.0 ! interface Ethernet0/0 ip
address 172.16.1.1 255.255.255.0 no keepalive !
interface Serial0/0 no ip address shutdown no fair-queue
! interface Serial0/1 !--- This is the primary link. ip
address 192.168.10.2 255.255.255.252 encapsulation ppp
clockrate 64000 ppp authentication chap ! interface
Async65 !--- Async interface corresponding to the AUX
Port (backup link). !--- This was determined using the
show line command.

 ip unnumbered Loopback0
!--- This assigns the Loopback 0 IP address to this
interface. !--- The central router will have a dialer
map to this loopback address. encapsulation ppp dialer
in-band !--- Allow DDR on this interface. dialer idle-
timeout 30 !--- Idle timeout (in seconds) for this link.
!--- Dialer watch checks the status of the primary link
!--- every time the idle-timeout expires. dialer watch-
disable 15 !--- Delays disconnection of the backup
interface (for 15 seconds) after !--- the primary
interface is found to be up. dialer map ip 172.22.1.1
name maui-rtr-11 broadcast 84007 !--- Dialer map for the
AUX Port interface of the central router. !--- Remember
that the central router's AUX port is unnumbered to its
Loopback 0. dialer map ip 172.22.53.0 name maui-rtr-11
broadcast 84007 !--- Map statement for the route or
network being watched. !--- Address must exactly match
the network configured with !--- the dialer watch-list
command. !--- Dials the phone number specified when the
watched route disappears.

 dialer watch-group 8
```

```
!--- Enable dialer watch on this backup interface. !---
Watch the route specified with dialer watch-list 8.

 dialer-group 1
!--- Apply interesting traffic defined in dialer-list 1.
async default routing !--- Permit routing over the async
interface. !--- This is required for a routing protocol
to run across the async link. async mode interactive ppp
authentication chap ! router ospf 5 network 172.16.1.0
0.0.0.255 area 0 network 172.17.1.0 0.0.0.255 area 0
network 192.168.10.0 0.0.0.3 area 0 ! ip classless no ip
http server ! access-list 101 remark Define Interesting
Traffic access-list 101 deny ospf any any !--- Mark OSPF
as uninteresting. !--- This prevents OSPF hellos from
keeping the link up. access-list 101 permit ip any any !
dialer watch-list 8 ip 172.22.53.0 255.255.255.0 !---
Define the route to be watched. !--- This exact route
(including subnet mask) must exist in the routing table.
dialer-list 1 protocol ip list 101 !--- Interesting
traffic is defined by access-list 101. !--- This is
applied to BRI0 using dialer-group 1.

!
line con 0
 login authentication NO_AUTHEN
 transport input none
line Aux 0
!--- Line configuration for the AUX port. exec-timeout 0
0 !--- Disable exec timeout on the interface. autoselect
ppp script dialer Dialout !--- Use the chat script named
"Dialout" for outgoing calls. modem InOut !--- Enable
incoming and outgoing calls. modem autoconfigure type
MY_USR_MODEM !--- Apply the modemcap MY_USR_MODEM
(configured previously) !--- to initialize the modem.
transport input all stopbits 1 !--- Improve throughput
by reducing async framing overhead. speed 115200 !---
AUX port on the 2600 supports a speed of 115200. !---
Note: If you are routing through the AUX port, each
character generates a !--- processor interrupt. This is
an abnormally high load on the CPU, which can be !---
resolved by using a lower AUX port speed. flowcontrol
hardware !--- This configures Ready To Send/Clear To
Send (RTS/CTS) flow control. line vty 0 4 ! no scheduler
allocate end
```

maui-rtr-11（中央站點）

```
maui-rtr-11#show running-config
Building configuration...

Current configuration:
!
version 12.1
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname maui-rtr-11
!
aaa new-model
aaa authentication login default local
aaa authentication login NO_AUTHEN none
aaa authentication ppp default local
```

```
!--- This is the basic AAA configuration for PPP calls.
enable secret 5 <deleted> ! username admin password 0
<deleted> username maui-rtr-10 password 0 cisco !---
Username for remote router (maui-rtr-10) and shared
secret. !--- Shared secret (used for CHAP
authentication) must be the same on both sides. !
memory-size iomem 30 ! ip subnet-zero ! modemcap entry
MY_USR_MODEM:MSC=&F1S0;=1 !--- Modemcap (MY_USR_MODEM)
will be applied to the AUX port line interface. !---
This modemcap was created with the command !--- modemcap
edit MY_USR_MODEM miscellaneous &F1S0;=1 !--- Refer to
the Modem-Router Connection Guide for more information.
! interface Loopback0 ip address 172.22.1.1
255.255.255.0 ! interface FastEthernet0/0 !--- Interface
to corporate network. ip address 172.22.53.105
255.255.255.0 no keepalive duplex auto speed auto ! !---
Irrelevant output removed here. ! interface Serial0/1 !-
-- This is the primary link. ip address 192.168.10.1
255.255.255.252 encapsulation ppp ppp authentication
chap ! interface Serial0/2 no ip address shutdown !
interface Async65 !--- Async interface corresponding to
the AUX Port (backup link). !--- This was determined
using the show line command.

 ip unnumbered Loopback0
!--- Use Loopback 0 address for this interface. !--- The
remote router will have a dialer map to this loopback
address. encapsulation ppp dialer in-band dialer idle-
timeout 900 dialer map ip 172.17.1.1 name maui-rtr-10
broadcast !--- Dialer map for the AUX Port interface of
the remote router. !--- Remember that the remote router
AUX port is unnumbered to its Loopback 0. dialer-group 1
!--- Apply interesting traffic defined in dialer-list 1.
async default routing !--- Permit routing over the async
interface. !--- This is required for a routing protocol
to run across the async link. async mode interactive !--
- Requires autoselect PPP under the line configuration
PPP to be negotiated. !--- This command may be replaced
with async mode dedicated.

 no peer default ip address
!--- Do not assign the peer an IP address. ppp
authentication chap ! router ospf 5 network 172.22.1.0
0.0.0.255 area 0 network 172.22.53.0 0.0.0.255 area 0
network 192.168.10.0 0.0.0.3 area 0 ! ip classless no ip
http server ! dialer-list 1 protocol ip permit !--- Mark
all IP traffic as interesting. !--- This interesting
traffic definition is applied to BRI0 !--- using dialer-
group 1.

!
!
line con 0
 login authentication NO_AUTHEN
 transport input none
line aux 0
!--- AUX Port line configuration. autoselect ppp !---
Launch PPP negotiation when PPP packets are received. !-
-- If the Async Interface has async mode dedicated, !---
this command is not needed.

 modem InOut
!--- Enable incoming and outgoing calls. modem
autoconfigure type MY_USR_MODEM !--- Apply the modemcap
```

```
MY_USR_MODEM that was configured previously. transport
input all stopbits 1 !--- Improve throughput by reducing
async framing overhead. speed 115200 !--- AUX port on
the 2600 supports a speed of 115200. flowcontrol
hardware !--- Configures RTS/CTS flow control. line vty
0 4 ! no scheduler allocate 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。

Output Interpreter(僅供註冊客戶使用)工具支援某些**show**命令，此工具可讓您檢視show命令輸出的分析。

show輸出示例

主鏈路正常運行的客戶端(maui-rtr-10)的路由表如下所示：

```
maui-rtr-10#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

     192.168.10.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.10.0/30 is directly connected, Serial0/1
C       192.168.10.1/32 is directly connected, Serial0/1
     172.17.0.0/24 is subnetted, 1 subnets
C       172.17.1.0 is directly connected, Loopback0
     172.16.0.0/24 is subnetted, 1 subnets
C       172.16.1.0 is directly connected, Ethernet0/0
     172.22.0.0/16 is variably subnetted, 2 subnets, 2 masks
O       172.22.53.0/24 [110/65] via 192.168.10.1, 00:00:57, Serial0/1
O       172.22.1.1/32 [110/65] via 192.168.10.1, 00:00:59, Serial0/1
```

上面顯示的**show ip route**命令輸出顯示了使用主鏈路(serial 0/1)從對等體獲知的OSPF路由。 請注意，路由表中存在要監控的路由（172.22.53.0，掩碼為255.255.255.0）。必須驗證這一點，撥號器監視才能正常工作。

現在，主鏈路關閉，撥號器監視程式啟用備用鏈路。

啟用備份鏈路後，將交換OSPF表並安裝使用備份鏈路的新路由。流量現在通過備份鏈路。示例如下：

```
maui-rtr-10#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

     172.17.0.0/24 is subnetted, 1 subnets
C       172.17.1.0 is directly connected, Loopback0
     172.16.0.0/24 is subnetted, 1 subnets
C       172.16.1.0 is directly connected, Ethernet0/0
     172.22.0.0/16 is variably subnetted, 2 subnets, 2 masks
O       172.22.53.0/24 [110/870] via 172.22.1.1, 00:00:11, Async65
C       172.22.1.1/32 is directly connected, Async65
```

上面的輸出顯示，路由表已更新，並且受監控網路的所有流量現在都使用備份鏈路（非同步65）。

疑難排解

本節提供的資訊可用於對組態進行疑難排解。

疑難排解指令

Output Interpreter(僅供註冊客戶使用)工具支援某些**show**命令，此工具可讓您檢視show命令輸出的分析。

注意：發出debug指令之前，請參閱有關Debug指令的重要資訊**。**

- **debug dialer** — 顯示有關撥號器介面上接收的資料包的調試資訊。在介面上啟用DDR時，還會顯示有關任何呼叫原因（稱為撥號原因）的資訊。如需詳細資訊，請參閱Debug指令檔案中的**debug dialer**資訊。
- **debug modem** — 顯示路由器上的數據機線路活動、數據機控制和進程啟用消息。
- **debug chat** — 在啟動非同步/POTS撥號時監控聊天指令碼的執行。請參閱撥號技術：疑難排解技術，瞭解詳細資訊。
- **debug ppp negotiation** — 在協商PPP元件(包括鏈路控制協定(LCP)、身份驗證和網路控制協定(NCP))時顯示有關PPP流量和交換的資訊。成功的PPP協商首先開啟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

調試輸出示例

以下調試輸出顯示主鏈路發生故障，撥號器監視程式識別丟失的路由。然後路由器啟動備用鏈路。撥號器idle-timeout過期後，路由器將檢查主鏈路是否關閉。當重新建立主鏈路時，撥號器監視會在禁用計時器過期後斷開備份鏈路。檢視調試時，請注意每條消息中的時間戳，因為它們可以提供有關處於活動狀態的各種計時器和空閒超時的資訊。

```
maui-rtr-10#debug dialer
Dial on demand events debugging is on
maui-rtr-10#debug chat
Chat scripts activity debugging is on
maui-rtr-10#debug modem
Modem control/process activation debugging is on
maui-rtr-10#debug ppp negotiation
PPP protocol negotiation debugging is on
maui-rtr-10#debug ppp authentication
```

```
PPP authentication debugging is on
maui-rtr-10#
maui-rtr-10#
maui-rtr-10#
maui-rtr-10#
maui-rtr-10#
*Mar  3 17:00:28.136: %LINK-3-UPDOWN: Interface Serial0/1,
changed state to down
!--- Primary link is brought down. *Mar 3 17:00:28.140: Se0/1 IPCP: State is Closed *Mar 3
17:00:28.140: Se0/1 CDPCP: State is Closed *Mar 3 17:00:28.140: Se0/1 PPP: Phase is TERMINATING
*Mar 3 17:00:28.140: Se0/1 LCP: State is Closed *Mar 3 17:00:28.140: Se0/1 PPP: Phase is DOWN
*Mar 3 17:00:28.144: Se0/1 IPCP: Remove route to 192.168.10.1 *Mar 3 17:00:28.252: DDR: Dialer
Watch: watch-group = 8
!--- Use dialer watch-group 8. *Mar 3 17:00:28.252: DDR: network 172.22.53.0/255.255.255.0 DOWN,
*Mar 3 17:00:28.252: DDR: primary DOWN
!--- The primary network is down. *Mar 3 17:00:28.252: DDR: Dialer Watch: Dial Reason: Primary
of group 8 DOWN
!--- Dial reason is that the primary route is down. *Mar 3 17:00:28.252: DDR: Dialer Watch:
watch-group = 8, *Mar 3 17:00:28.252: DDR: dialing secondary by dialer map 172.22.53.0 on As65
!--- Indicates which dialer map statement is used for the dialout. !--- Dialout will occur on AS
65 (the AUX Port). *Mar 3 17:00:28.252: As65 DDR: Attempting to dial 84007
!--- Number being dialed for the backup link. *Mar 3 17:00:28.252: CHAT65: Attempting async line
dialer script *Mar 3 17:00:28.256: CHAT65: Dialing using Modem script: Dialout
 & System script: none
 !--- Using chat script "Dialout". *Mar 3 17:00:28.268: CHAT65: process started *Mar 3
17:00:28.273: CHAT65: Asserting DTR *Mar 3 17:00:28.273: TTY65: Set DTR to 1 *Mar 3
17:00:28.273: CHAT65: Chat script Dialout started
!--- Chat script "Dialout" starts. *Mar 3 17:00:28.273: CHAT65: Sending string: AT *Mar 3
17:00:28.273: CHAT65: Expecting string: OK *Mar 3 17:00:28.433: CHAT65: Completed match for
expect: OK *Mar 3 17:00:28.433: CHAT65: Sending string: ATDT \T<84007> *Mar 3 17:00:28.433:
CHAT65: Expecting string: CONNECT *Mar 3 17:00:29.138: %LINEPROTO-5-UPDOWN: Line protocol on
Interface Serial0/1, changed state to down *Mar 3 17:00:42.560: CHAT65: Completed match for
expect: CONNECT *Mar 3 17:00:42.560: CHAT65: Sending string: \c *Mar 3 17:00:42.560: CHAT65:
Chat script
Dialout finished, status = Success
!--- Chat script is successful. !--- Notice the Expect/Send Attributes and the time elapsed.
*Mar 3 17:00:42.564: TTY65: destroy timer type 1 *Mar 3 17:00:42.564: TTY65: destroy timer type
0 *Mar 3 17:00:42.568: As65 IPCP: Install route to 172.22.53.0 *Mar 3 17:00:44.567: %LINK-3-
UPDOWN: Interface Async65, changed state to up Dialer statechange to up Async65 *Mar 3
17:00:44.571: As65 DDR: Dialer Watch: resetting call in progress Dialer call has been placed
Async65 *Mar 3 17:00:44.571: As65 PPP: Treating connection as a callout !--- PPP negotiation
begins. *Mar 3 17:00:44.571: As65 PPP: Phase is ESTABLISHING, Active Open *Mar 3 17:00:44.571:
As65 LCP: O CONFREQ [Closed] id 11 len 25 *Mar 3 17:00:44.571: As65 LCP: ACCM 0x000A0000
(0x0206000A0000) *Mar 3 17:00:44.575: As65 LCP: AuthProto CHAP (0x0305C22305) *Mar 3
17:00:44.575: As65 LCP: MagicNumber 0x103EC1ED (0x0506103EC1ED) *Mar 3 17:00:44.575: As65 LCP:
PFC (0x0702) *Mar 3 17:00:44.575: As65 LCP: ACFC (0x0802) *Mar 3 17:00:46.575: As65 LCP:
TIMEout: State REQsent *Mar 3 17:00:46.575: As65 LCP: O CONFREQ [REQsent] id 12 Len 25 *Mar 3
17:00:46.575: As65 LCP: ACCM 0x000A0000 (0x0206000A0000) *Mar 3 17:00:46.575: As65 LCP:
AuthProto CHAP (0x0305C22305) *Mar 3 17:00:46.575: As65 LCP: MagicNumber 0x103EC1ED
(0x0506103EC1ED) *Mar 3 17:00:46.575: As65 LCP: PFC (0x0702) *Mar 3 17:00:46.575: As65 LCP: ACFC
(0x0802) *Mar 3 17:00:46.703: As65 LCP: I CONFACK [REQsent] id 12 Len 25 *Mar 3 17:00:46.707:
As65 LCP: ACCM 0x000A0000 (0x0206000A0000) *Mar 3 17:00:46.707: As65 LCP: AuthProto CHAP
(0x0305C22305) *Mar 3 17:00:46.707: As65 LCP: MagicNumber 0x103EC1ED (0x0506103EC1ED) *Mar 3
17:00:46.707: As65 LCP: PFC (0x0702) *Mar 3 17:00:46.707: As65 LCP: ACFC (0x0802) *Mar 3
17:00:46.715: As65 LCP: I CONFREQ [ACKrcvd] id 21 Len 25 *Mar 3 17:00:46.715: As65 LCP: ACCM
0x000A0000 (0x0206000A0000) *Mar 3 17:00:46.715: As65 LCP: AuthProto CHAP (0x0305C22305) *Mar 3
17:00:46.719: As65 LCP: MagicNumber 0x30CB092E (0x050630CB092E) *Mar 3 17:00:46.719: As65 LCP:
PFC (0x0702) *Mar 3 17:00:46.719: As65 LCP: ACFC (0x0802) *Mar 3 17:00:46.719: As65 LCP: O
CONFACK [ACKrcvd] id 21 Len 25 *Mar 3 17:00:46.719: As65 LCP: ACCM 0x000A0000 (0x0206000A0000)
*Mar 3 17:00:46.719: As65 LCP: AuthProto CHAP (0x0305C22305) *Mar 3 17:00:46.723: As65 LCP:
MagicNumber 0x30CB092E (0x050630CB092E) *Mar 3 17:00:46.723: As65 LCP: PFC (0x0702) *Mar 3
17:00:46.723: As65 LCP: ACFC (0x0802) *Mar 3 17:00:46.723: As65 LCP: State is Open *Mar 3
17:00:46.723: As65 PPP: Phase is AUTHENTICATING, by both
!--- Two-way PPP CHAP authentication begins. *Mar 3 17:00:46.723: As65 CHAP: O CHALLENGE id 7
```

Len 32 from "maui-rtr-10" *Mar 3 17:00:46.847: As65 CHAP: I CHALLENGE id 7 Len 32 from "maui-rtr-11" *Mar 3 17:00:46.851: As65 CHAP: O RESPONSE id 7 Len 32 from "maui-rtr-10" *Mar 3 17:00:46.967: As65 **CHAP: I SUCCESS** id 7 Len 4
*Mar 3 17:00:46.971: As65 CHAP: I RESPONSE id 7 Len 32 from "maui-rtr-11"
*Mar 3 17:00:46.975: As65 **CHAP: O SUCCESS** id 7 Len 4
!--- Incoming and Outgoing CHAP authentication are successful. *Mar 3 17:00:46.975: As65 PPP: Phase is UP *Mar 3 17:00:46.979: As65 IPCP: O CONFREQ [Closed] id 8 Len 10 *!--- IP Control Protocol (IPCP) negotiation begins.* *Mar 3 17:00:46.979: As65 IPCP: Address 172.17.1.1 (0x0306AC110101) *Mar 3 17:00:46.979: As65 CDPCP: O CONFREQ [Closed] id 7 Len 4 *Mar 3 17:00:47.087: As65 IPCP: I CONFREQ [REQsent] id 7 Len 10 *Mar 3 17:00:47.091: As65 IPCP: Address 172.22.1.1 (0x0306AC160101) *Mar 3 17:00:47.091: As65 IPCP: O CONFACK [REQsent] id 7 Len 10 *Mar 3 17:00:47.091: As65 IPCP: Address 172.22.1.1 (0x0306AC160101) *Mar 3 17:00:47.095: As65 CDPCP: I CONFREQ [REQsent] id 7 Len 4 *Mar 3 17:00:47.095: As65 CDPCP: O CONFACK [REQsent] id 7 Len 4 *Mar 3 17:00:47.099: As65 IPCP: I CONFACK [ACKsent] id 8 Len 10 *Mar 3 17:00:47.099: As65 IPCP: Address 172.17.1.1 (0x0306AC110101) *Mar 3 17:00:47.099: As65 IPCP: State is Open *Mar 3 17:00:47.103: As65 DDR: dialer protocol up *Mar 3 17:00:47.103: As65 IPCP: Remove route to 172.22.53.0 *Mar 3 17:00:47.103: As65 CDPCP: I CONFACK [ACKsent] id 7 Len 4 *Mar 3 17:00:47.107: As65 CDPCP: State is Open *Mar 3 17:00:47.107: As65 IPCP: Install route to 172.22.1.1 *Mar 3 17:00:47.708: %LINEPROTO-5-UPDOWN: **Line protocol on Interface Async65, changed state to up**
!--- Async 65 (AUX Port) is UP. *Mar 3 17:01:14.572: **As65 DDR: idle timeout**
!--- Idle timeout expires. !--- The router will check to see if the primary link has come up.
*Mar 3 17:01:14.572: DDR: Dialer Watch: watch-group = 8 *Mar 3 17:01:14.572: DDR: **network 172.22.53.0/255.255.255.0 UP,**
!--- A route for the watched network exists (due to the active backup link). *Mar 3 17:01:14.572: DDR: **primary DOWN**
!--- The primary network is down. *Mar 3 17:02:05.191: **As65 DDR: idle timeout**
!--- Idle Timeout expires. !--- The router will check to see if the primary link has come up.
*Mar 3 17:02:05.191: DDR: Dialer Watch: watch-group = 8 *Mar 3 17:02:05.191: DDR: network 172.22.53.0/255.255.255.0 UP, *Mar 3 17:02:05.191: DDR: **primary DOWN**
!--- The primary network is still down. *Mar 3 17:02:50.982: %LINK-3-UPDOWN: **Interface Serial0/1, changed state to up**
!--- Primary link is reestablished. *Mar 3 17:02:50.986: Se0/1 PPP: Treating connection as a dedicated line *Mar 3 17:02:50.986: Se0/1 PPP: Phase is ESTABLISHING, Active Open ... ... *!--- Primary link PPP negotiation output omitted.* ... *Mar 3 17:02:51.039: Se0/1 IPCP: **Install route to 192.168.10.1**
*Mar 3 17:02:52.020: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1, changed state to up
*Mar 3 17:03:05.194: As65 DDR: idle timeout
!--- Next Idle Timeout expires. !--- The router will check to see if the primary link has come up. *Mar 3 17:03:05.194: DDR: Dialer Watch: watch-group = 8 *Mar 3 17:03:05.194: DDR: network 172.22.53.0/255.255.255.0 UP, *Mar 3 **17:03:05**.194: DDR: **primary DOWN**
!--- Dialer watch considers the primary network still down. !--- Even though the primary link is "up," the OSPF table has not yet been exchanged. !--- The primary link is not considered up until the route is installed. *Mar 3 **17:03:35.**195: **As65 DDR: idle timeout**
!--- Next idle timeout (30 seconds) expires. !--- The router will check to see if the primary link has come up. *Mar 3 17:03:35.195: DDR: Dialer Watch: watch-group = 8 *Mar 3 17:03:35.195: DDR: network 172.22.53.0/255.255.255.0 UP, *!--- A route for the watched network exists.* *Mar 3 17:03:35.195: DDR: **primary UP**
!--- The primary network is up. !--- Dialer watch will initiate a disconnect of the backup link.
*Mar 3 **17:03:35**.195: As65 DDR: **starting watch disable timer**
!--- Delays disconnecting the backup interface after the primary !--- interface recovers. This timer is 15 seconds as configured !--- with the command **dialer watch-disable 15**.

*Mar 3 **17:03:50**.196: As65 DDR: **watch disable timeout**
!--- The 15 second disconnect delay expires. !--- The link will be immediately brought down.
*Mar 3 17:03:50.196: **As65 DDR: disconnecting call**
!--- Call on Async 65 (AUX Port) is disconnected. *Mar 3 17:03:50.196: TTY65: Async Int reset: Dropping DTR ... ... *!--- Link tear-down messages omitted here.* ... *Mar 3 17:03:57.203: %LINK-3-UPDOWN: **Interface Async65, changed state to down**

相關資訊

- 數據機路由器連線指南
- 撥號技術支援頁面
- 技術支援 - Cisco Systems