Configurazione del backup asincrono della porta AUX-AUX con Dialer Watch

Sommario

Introduzione

Questo documento offre informazioni sulla configurazione del backup DDR (Dial-on-Demand Routing) per un collegamento seriale, WAN o su una linea affittata tramite la funzione di orologio da comporre. Il collegamento di backup utilizza modem sulle porte AUX di entrambi i router. Quando il collegamento principale si interrompe, dialer watch avvia la connessione di backup utilizzando il modem sulla porta AUX.

Prerequisiti

Requisiti

In questo documento si presume che l'utente abbia una buona comprensione dei vari problemi associati ai modem sulle porte AUX. Per ulteriori informazioni su questi problemi, consultare i documenti [Modem-Router Connection Guide](#) (Guida alla [connessione modem-router)](#) e [Configuring Dialout using a Modem on the AUX Port](#) (Configurazione del [dial-out tramite modem sulla porta AUX)](#) prima di continuare con questo documento.

Componenti usati

Le informazioni fornite in questo documento si basano sulle seguenti versioni software e

hardware:

- Due Cisco 2600 con modem robotici USA collegati alle porte AUX. Su entrambi i router è in esecuzione il software Cisco IOS® versione 12.1(2).

Si consiglia di utilizzare Cisco IOS versione 12.1(7) o successive, con le correzioni dei bug di IOS che influiscono sull'orologio da dialer.

Le informazioni discusse in questo documento fanno riferimento a dispositivi usati in uno specifico ambiente di emulazione. Su tutti i dispositivi menzionati nel documento la configurazione è stata ripristinata ai valori predefiniti. Se la rete è operativa, valutare attentamente eventuali conseguenze derivanti dall'uso dei comandi.

Convenzioni

Per ulteriori informazioni sulle convenzioni usate, consultare il documento Cisco sulle convenzioni nei suggerimenti tecnici.

Nozioni di base

Questo scenario implica la configurazione della connessione e della connessione remota utilizzando i modem sulle porte AUX e la configurazione del backup DDR con dialer watch. Per ulteriori informazioni sulla funzione di dialer watch, vedere Valutazione delle interfacce di backup, route statiche mobili e Dialer Watch per il backup DDR.

Per informazioni su come configurare e risolvere i problemi relativi all'orologio dialer, consultare il documento sulla configurazione del backup DDR mediante BRI e Dialer Watch. I concetti relativi a dialer watch sono indipendenti dai supporti utilizzati, pertanto tale documento è utile per i problemi relativi a dialer watch.
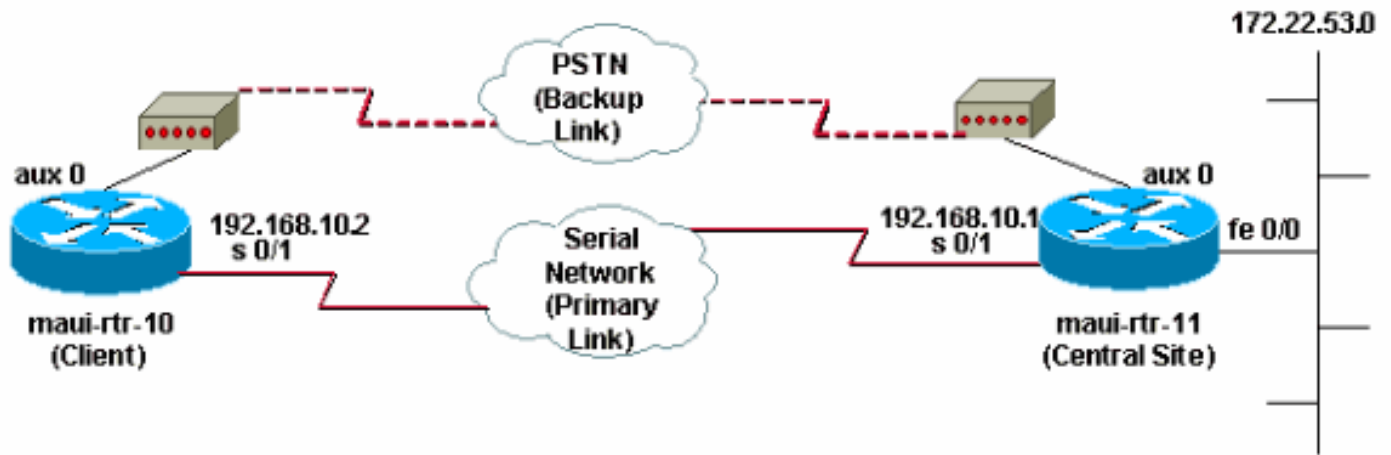
Configurazione

In questa sezione vengono presentate le informazioni necessarie per configurare le funzionalità descritte più avanti nel documento.

Nota: per ulteriori informazioni sui comandi menzionati in questo documento, usare lo strumento di ricerca dei comandi (solo utenti registrati).

Esempio di rete

Nel documento viene usata l'impostazione di rete mostrata nel diagramma:

Configurazioni

In questa configurazione, il maui-rtr-10 (client) è collegato tramite un collegamento seriale al maui-rtr-11 (sito centrale). Entrambi i router dispongono inoltre di modem US Robotics esterni collegati alle porte AUX e utilizzati come dispositivi di backup. Quando il collegamento principale si interrompe, dialer watch avvia il collegamento di backup e maui-rtr-10 compone il router del sito centrale, si connette, negozia il PPP e scambia le informazioni di routing OSPF (Open Shortest Path First). Tutto il traffico tra i router ora utilizza la connessione di backup. Quando il collegamento principale viene ristabilito, la tabella di routing viene aggiornata e tutto il traffico utilizza nuovamente il collegamento principale. Poiché il traffico sul collegamento di backup non scorre, scade il timeout di inattività e il dialer watch interrompe il collegamento di backup.

maui-rtr-10 (client)

```
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 (sito centrale)

```
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
```

Verifica

Le informazioni contenute in questa sezione permettono di verificare che la configurazione funzioni correttamente.

Alcuni comandi **show** sono supportati dallo strumento Output Interpreter (solo utenti registrati); lo strumento permette di visualizzare un'analisi dell'output del comando **show**.

Output di esempio

La tabella di routing del client (maui-rtr-10) con il collegamento primario funzionante è mostrata di seguito:

```
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
```

L'output del comando **show ip route** mostrato sopra visualizza le route OSPF apprese dai peer tramite il collegamento primario (seriale 0/1). Si noti che la route da controllare (172.22.53.0 con maschera 255.255.255.0) è presente nella tabella di routing. È necessario verificare che l'orologio dialer funzioni correttamente.

Ora il collegamento principale viene disattivato e dialer watch attiva il collegamento di backup.

Dopo l'attivazione del collegamento di backup, la tabella OSPF viene scambiata e viene installata la nuova route che utilizza il collegamento di backup. Il traffico ora passa attraverso il collegamento di backup. Di seguito è riportato un esempio:

```
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
```

L'output precedente mostra che la tabella di routing è stata aggiornata e tutto il traffico per la rete monitorata ora utilizza il collegamento di backup (Async 65).

Risoluzione dei problemi

Le informazioni contenute in questa sezione permettono di risolvere i problemi relativi alla configurazione.

Comandi per la risoluzione dei problemi

Alcuni comandi **show** sono supportati dallo strumento [Output Interpreter](#) (solo utenti [registrati](#)); lo strumento permette di visualizzare un'analisi dell'output del comando **show**.

Nota: prima di usare i comandi di **debug**, consultare le [informazioni importanti sui comandi di debug](#).

- **debug dialer**: per visualizzare le informazioni di debug sui pacchetti ricevuti su un'interfaccia dialer. Quando sull'interfaccia è abilitato il DDR, vengono visualizzate anche le informazioni relative alla causa di qualsiasi chiamata (chiamata causa di composizione). Per ulteriori informazioni, vedere le informazioni sul **debug dialer** nella documentazione sui [comandi di debug](#).
- **debug modem**: per visualizzare l'attività della linea del modem, controllare il modem ed elaborare i messaggi di attivazione sul router.
- **debug chat**: per monitorare l'esecuzione dello script di chat quando viene avviata la composizione asincrona/POTS. Per ulteriori informazioni, fare riferimento al documento sulla [tecnologia di accesso remoto: Tecniche di risoluzione dei problemi](#) per ulteriori informazioni.
- **debug ppp negotiation**: visualizza le informazioni sul traffico e gli scambi PPP durante la negoziazione dei componenti PPP, inclusi il protocollo LCP (Link Control Protocol), l'autenticazione e il protocollo NCP (Network Control Protocol). Una negoziazione PPP riuscita apre innanzitutto lo stato LCP, quindi autentica e infine negozia NCP.
- **debug ppp authentication**: visualizza i messaggi del protocollo di autenticazione PPP, inclusi gli scambi di pacchetti Challenge Authentication Protocol (CHAP) e gli scambi del protocollo PAP (Password Authentication Protocol).

Output di esempio del comando debug

L'output del comando debug riportato di seguito mostra il collegamento primario in errore e l'orologio dialer che riconosce la route persa. Il router avvia quindi il collegamento di backup. Dopo la scadenza del timeout di inattività del dialer, il router controlla se il collegamento primario è inattivo. Quando il collegamento principale viene ristabilito, dialer watch disconnette il collegamento di backup dopo la scadenza del timer di disattivazione. Quando si analizzano i debug, prestare attenzione all'indicatore orario in ogni messaggio, in quanto possono fornire informazioni sui vari timer e timeout di inattività attivi.

```
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**

Informazioni correlate

- Guida alla connessione modem-router
- Pagina di supporto per la tecnologia di composizione
- Supporto tecnico – Cisco Systems