Configuración de respaldo asíncrono de puertos AUX a AUX con vigilancia de programas de marcado

Contenido

Introducción

Este documento proporciona información sobre cómo configurar la copia de seguridad de Dial-on-Demand Routing (DDR) para un enlace de línea serial, WAN o arrendado mediante la función de vigilancia del marcador. El link de respaldo utiliza módems en los puertos AUX de ambos routers. Cuando el link primario se desactiva, el monitoreo del marcador inicia el marcado de salida de respaldo usando el módem en el puerto AUX.

Prerequisites

Requirements

Este documento asume que usted posee un buen conocimiento básico de diversos problemas asociados con módems en puertos AUX. Si necesita más información sobre estos problemas, consulte los documentos [Guía de Conexión del Módem-Router](#) y [Configuración de Marcación de Salida con un Módem en el Puerto AUX](#) antes de continuar con este documento.

Componentes Utilizados

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

- Dos Cisco 2600 con módems robóticos estadounidenses conectados a los puertos AUX. Ambos routers ejecutan la versión 12.1(2) del software del IOS® de Cisco.

Se recomienda que utilice la versión 12.1(7) o posterior del IOS de Cisco, que incluye correcciones para errores de IOS que afectan a la vigilancia del marcador.

La información que se presenta en este documento se originó a partir de dispositivos dentro de un ambiente de laboratorio específico. All of the devices used in this document started with a cleared (default) configuration. Si la red está funcionando, asegúrese de haber comprendido el impacto que puede tener un comando antes de ejecutarlo.

Convenciones

For more information on document conventions, refer to the [Cisco Technical Tips Conventions](#).

Teoría Precedente

Esta situación implica configurar el marcado de entrada y el marcado de salida usando módems en los puertos AUX, y configurar el respaldo DDR con monitoreo de marcado. Para obtener más información sobre la función de vigilancia del marcador, consulte [Evaluación de interfaces de respaldo, rutas estáticas flotantes y vigilancia del marcador para respaldo DDR](#).

Consulte [Configuración de Respaldo DDR con BRI y monitoreo de marcador](#) para obtener información sobre cómo configurar y resolver problemas de monitoreo de marcador. Los conceptos involucrados para la vigilancia del marcador son independientes de los medios utilizados, por lo que el documento es útil para los problemas de vigilancia del marcador.
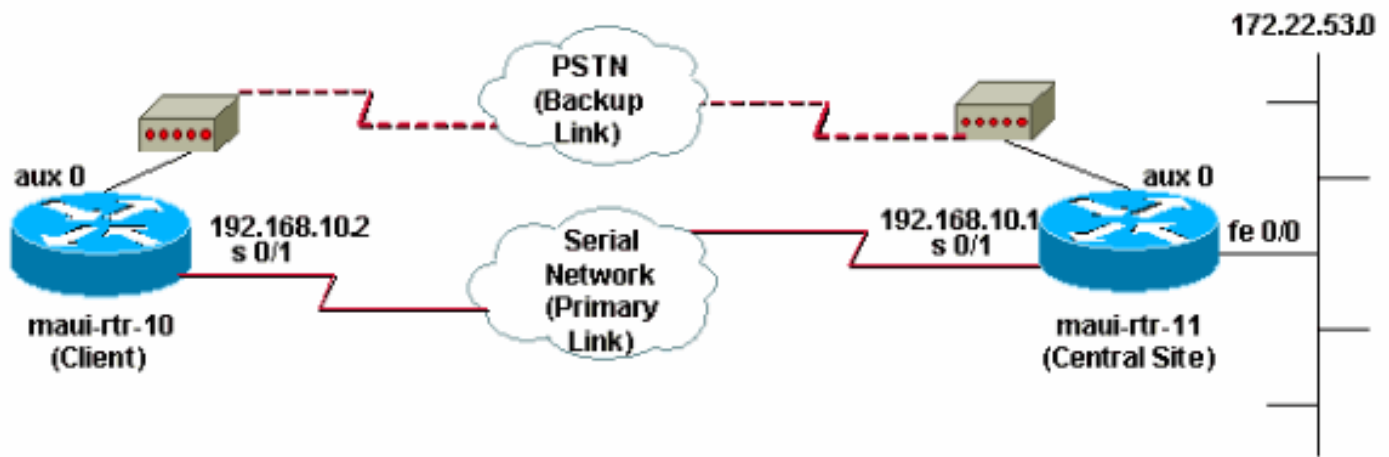
Configurar

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

Nota: Para encontrar información adicional sobre los comandos usados en este documento, utilice la [Command Lookup Tool](#) ([sólo](#) clientes registrados) .

Diagrama de la red

Este documento utiliza la configuración de red que se muestra en este diagrama:

Configuraciones

En esta configuración, maui-rtr-10 (Cliente) se conecta mediante un link serial al maui-rtr-11 (Sitio central). Ambos routers también tienen módems US Robotics externos conectados a los puertos AUX y usados como respaldo. Cuando el link principal se desactiva, dialer watch inicia el link de respaldo y maui-rtr-10 marca el router del sitio central, conecta, negocia PPP e intercambia información de ruteo Open Shortest Path First (OSPF). Todo el tráfico entre los routers ahora utiliza la conexión de respaldo. Cuando se restablece el link primario, se actualiza la tabla de ruteo y todo el tráfico de nuevo utiliza el link primario. Dado que no fluye tráfico en el link de respaldo, el tiempo de espera inactivo caduca y el monitoreo del marcador desgarra el link de respaldo.

maui-rtr-10 (Cliente)

```
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 (sitio central)

```
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
```

Verificación

En esta sección encontrará información que puede utilizar para comprobar que su configuración funcione correctamente.

Algunos **comandos show** son soportados por la herramienta Output Interpreter (sólo para clientes registrados), que le permite ver un análisis del resultado del comando show.

Ejemplo de resultado del comando show

La tabla de ruteo del cliente (maui-rtr-10) con el funcionamiento del link principal se muestra aquí:

```
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
```

El resultado del comando **show ip route** que se muestra arriba muestra las rutas OSPF aprendidas de los peers usando el link primario (serial 0/1). Observe que la ruta que se observa (172.22.53.0 con la máscara 255.255.255.0) existe en la tabla de ruteo. Esto debe verificarse para que el monitoreo del marcador funcione correctamente.

Ahora el link principal se desactiva y dialer watch activa el link de respaldo.

Después de activar el link de respaldo, se intercambia la tabla OSPF y se instala la nueva ruta mediante el link de respaldo. El tráfico ahora pasa a través del link de respaldo. Aquí se muestra un ejemplo de esto:

```
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
```

El resultado anterior muestra que la tabla de ruteo se ha actualizado y todo el tráfico de la red vigilada ahora utiliza el link de respaldo (Async 65).

Troubleshoot

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

Comandos para resolución de problemas

Algunos **comandos show** son soportados por la herramienta Output Interpreter (sólo para clientes

registrados), que le permite ver un análisis del resultado del comando [show](#).

Nota: Antes de ejecutar **comandos debug**, consulte [Información Importante sobre Comandos Debug](#).

- **debug dialer**: para mostrar información de depuración sobre los paquetes recibidos en una interfaz de marcador. Cuando DDR está habilitado en la interfaz, también se muestra la información relativa a la causa de cualquier llamada (denominada la causa de marcación). Si desea obtener más información, consulte los datos sobre depuración de dialer en la documentación de comandos de depuración.
- **debug modem** — Para mostrar la actividad de línea del módem, el control del módem y los mensajes de activación del proceso en el router.
- **debug chat** — Para supervisar la ejecución de la secuencia de comandos de conversación cuando se inicia la marcación asincrónica/POTS. Consulte [Tecnología de marcado: Técnicas de resolución de problemas para obtener más información.](#)
- **debug ppp negotiation**—Muestra información sobre el tráfico PPP y los intercambios mientras se negocian los componentes del PPP que incluyen el LCP (Protocolo de control de link), la autenticación y el NCP (Protocolo de control de red). Una negociación PPP exitosa abre primero el estado LCP, luego realiza la autenticación y por último negocia el NCP.
- **debug ppp authentication**: muestra los mensajes del protocolo de autenticación PPP, incluidos los intercambios de paquetes del protocolo de autenticación por desafío mutuo (CHAP) y los intercambios del protocolo de autenticación por contraseña (PAP)

Ejemplo de resultado del comando debug

El resultado de debug a continuación muestra el link primario fallando y el monitoreo del marcador reconociendo la ruta perdida. Luego, el router inicia el link de respaldo. Después de que caduque el tiempo de espera inactivo del marcador, el router verifica si el link primario está inactivo. Cuando se restablece el link principal, el monitoreo del marcador desconecta el link de respaldo después de que caduque el temporizador de inhabilitación. Al observar las depuraciones, preste atención a la marca de tiempo de cada mensaje, ya que pueden proporcionar información sobre los distintos temporizadores y tiempos de espera inactivos que están activos.

```
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**

Información Relacionada

- [Guía para la conexión del módem-router](#)
- [Páginas de soporte de la tecnología de marcación](#)
- [Soporte Técnico - Cisco Systems](#)