

AUX-to-AUX poortasynchrone back-up configureren met snelkiezer

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Dit document bevat informatie over het configureren van DDR (dial-on-demand routing) back-up voor een seriële, WAN- of huurlijn-link met behulp van de functie dialer watch. De back-uplink gebruikt modems op de AUX-poorten van beide routers. Wanneer de primaire link naar beneden gaat, start dialer watch de back-updialoog met de modem op de AUX-poort.

[Voorwaarden](#)

[Vereisten](#)

Dit document gaat ervan uit dat u een goed begrip hebt van de verschillende problemen die gepaard gaan met modems in de AUX-poorten. Als u meer informatie over deze problemen nodig hebt, raadpleegt u de documenten [met de verbindingsgids](#) van de [modem](#) en [de uitbel configureren met een modem in de AUX-poort](#) voordat u doorgaat met dit document.

[Gebruikte componenten](#)

De informatie in dit document is gebaseerd op de volgende software- en hardware-versies:

- Twee Cisco-apparaten van de 2600 met Amerikaanse robotica-modems aangesloten op de

AUX-poorten. Beide routers maken gebruik van Cisco IOS®-software release 12.1(2). Aanbevolen wordt om Cisco IOS versie 12.1(7) of hoger te gebruiken, die fixes voor IOS-knoppen bevat die het horloge van het dialer beïnvloeden.

De informatie in dit document is gebaseerd op apparaten in een specifieke laboratoriumomgeving. Alle apparaten die in dit document worden beschreven, hadden een opgeschoonde (standaard)configuratie. Als u in een levend netwerk werkt, zorg er dan voor dat u de potentiële impact van om het even welke opdracht begrijpt alvorens het te gebruiken.

Conventies

Raadpleeg [Cisco Technical Tips Conventions](#) (Conventies voor technische tips van Cisco) voor meer informatie over documentconventies.

Achtergrondinformatie

Dit scenario omvat het configureren van dialin en dialout met behulp van modems op de AUX-poorten, en het configureren van DDR-back-up met dialerbewaking. Voor meer informatie over de functie dialer watch, raadpleegt u [Reserve-interfaces, zwevende statische routen en Dialer Watch voor DDR-back-up evalueren](#).

Raadpleeg [DDR-back-up configureren met BRI's en Dialer Watch](#) voor informatie over de configuratie en probleemoplossing van het dialoogvenster dat u wilt controleren. De concepten die bij het kijken van de dialer betrokken zijn, zijn onafhankelijk van de gebruikte media, zodat het document bruikbaar is voor kwesties die het bekijken van de dialer betreffen.

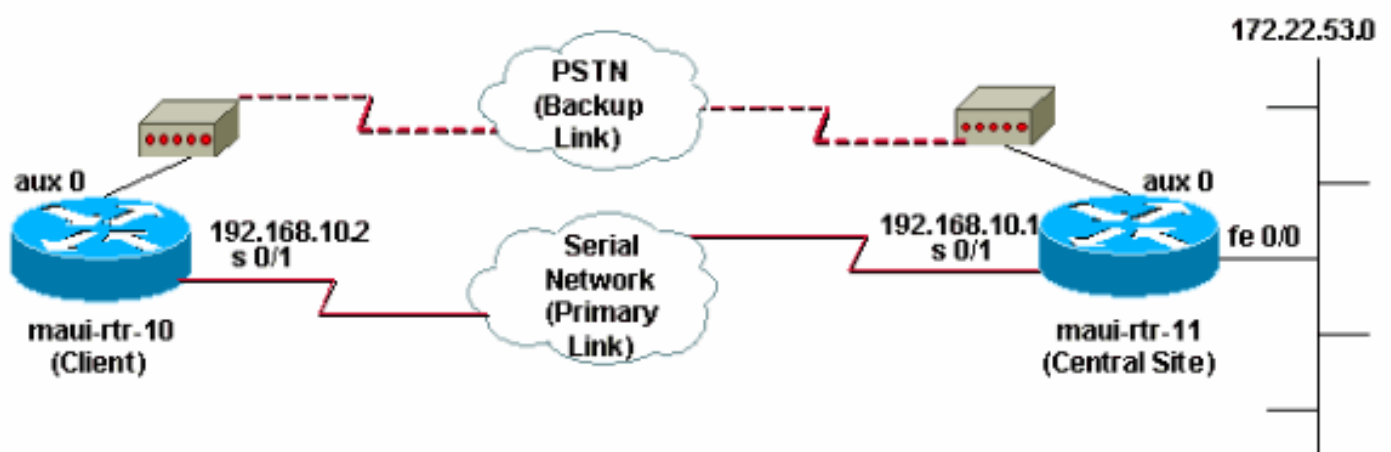
Configureren

Deze sectie bevat informatie over het configureren van de functies die in dit document worden beschreven.

N.B.: Als u aanvullende informatie wilt vinden over de opdrachten in dit document, gebruikt u het [Opdrachtplanningprogramma](#) (alleen [geregistreerd](#) klanten).

Netwerkdigram

Dit document gebruikt de netwerkinstellingen die in dit diagram worden weergegeven:



Configuratie

Bij deze configuratie wordt maui-rtr-10 (client) aangesloten door een seriële link naar maui-rtr-11 (Central Site). Beide routers hebben ook externe Amerikaanse robotica-modems die op de AUX-poorten zijn aangesloten en als back-up worden gebruikt. Wanneer de primaire verbinding daalt, leidt dialer watch de back-uplink in en maui-rtr-10 voert de centrale router van de site aan, verbindt, onderhandelt PPP, en uitwisselt Open Shortest Path First (OSPF) routing informatie. Al het verkeer tussen de routers gebruikt nu de back-upverbinding. Wanneer de primaire verbinding opnieuw wordt gevestigd, wordt de routingtabel bijgewerkt en al verkeer opnieuw gebruikt de primaire verbinding. Aangezien er geen verkeersstromen via de back-uplink zijn, verloopt de ingebruikname van de software-out verloopt en kijkt de dialer naar de back-uplink.

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 (centrale site)

```

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

```

Verifiëren

Deze sectie verschaft informatie die u kunt gebruiken om te bevestigen dat uw configuratie correct werkt.

Bepaalde **show** opdrachten worden ondersteund door het gereedschap [Uitvoertolk](#) ([alleen geregistreerde](#) klanten), waarmee u een analyse van **show**-opdrachtoutput kunt bekijken.

Uitvoer voorbeeld

De routingtabel van de client (maui-rtr-10) met de primaire link die functioneert, wordt hier weergegeven:

```

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
```

De hierboven getoonde **ip route** uitvoer van **route** toont de OSPF routes die van de peers geleerd zijn die de primaire verbinding (serie 0/1) gebruiken. Merk op dat de route die wordt bekeken (172.22.53.0 met masker 255.255.255.0) in de routingtabel bestaat. Dit moet worden geverifieerd om te controleren of de dialer correct functioneert.

Nu wordt de primaire verbinding naar beneden gebracht en het dialer horloge activeert de back-uplink.

Nadat de back-uplink is geactiveerd, wordt de OSPF-tabel uitgewisseld en wordt de nieuwe route via de back-uplink geïnstalleerd. Het verkeer gaat nu over de back-uplink. Hier is een voorbeeld van:

```
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
```

De bovenstaande uitvoer toont dat de routingtabel is bijgewerkt en dat al het verkeer voor het bekeken netwerk nu de back-uplink gebruikt (Async 65).

[Problemen oplossen](#)

Deze sectie bevat informatie waarmee u problemen met de configuratie kunt oplossen.

[Opdrachten voor troubleshooting](#)

Bepaalde **show** opdrachten worden ondersteund door het gereedschap [Uitvoertolk](#) (alleen [geregistreerde](#) klanten), waarmee u een analyse van **show**-opdrachtoutput kunt bekijken.

Opmerking: Voordat u **debug**-opdrachten afgeeft, raadpleegt u [Belangrijke informatie over debug-opdrachten](#).

- **bug dialer-om** zuiverende informatie over de pakketten die op een dialerinterface worden ontvangen te tonen. Wanneer DDR op de interface is ingeschakeld, wordt ook informatie over de oorzaak van een vraag (de genaamd Dialing Cause) weergegeven. Zie **Dialoginformatie** in de documentatie [Debug Commands voor meer informatie](#).
- **bug van modem:** om de activiteit van de modemijs, modemcontrole en procesactiveringsberichten op de router weer te geven.
- **debug chat**-om de uitvoering van het chat script te controleren wanneer async/POTS het

draaien wordt gestart. Raadpleeg [Dialup-technologie: Technieken voor probleemoplossing](#) voor meer informatie.

- **debug van PPP onderhandeling**-informatie over PPP-verkeer en -uitwisselingen tijdens het onderhandelen van de PPP-componenten zoals Link Control Protocol (LCP), Verificatie en Network Control Protocol (NCP). Een succesvolle PPP-onderhandeling opent eerst de LCP-staat, dan Verifieert en tenslotte onderhandelt NCP.
- **debug van PPP-verificatie**—Hier worden de PPP-verificatieprotocolberichten weergegeven, inclusief Challenge Verification Protocol (CHAP)-pakketuitwisselingen en PAP-uitwisselingen (Password Authentication Protocol)

Voorbeeld van output van foutopsporing

De debug uitvoer hieronder toont de primaire verbinding die faalt en dialer die de verloren route herkent. De router start vervolgens de back-upkoppeling. Nadat de inactiviteitstimer van dialer verloopt, controleert de router of de primaire link is neergezet. Wanneer de primaire verbinding wordt hersteld, sluit dialer watch de back-uplink af nadat de timer voor uitschakelen is verlopen. Wanneer het kijken naar de debugs, let dan op de tijdstempel in elk bericht aangezien ze informatie kunnen geven over de verschillende timers en ongebruikte tijden die actief zijn.

```
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

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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
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- [Ondersteuning van kiestechnologie](#)
- [Technische ondersteuning - Cisco-systemen](#)