通过拨号程序配置文件实现异步备份

目录

简介

本文描述如何配置远程路由器(Cisco 3640)拨号中心站点使用模拟POTS线路，在帧中继连接断开情况下。Cisco 3640使用拨号配置文件为帧中继链路提供备份接口。并且，一个特定异步接口为备用拨出留出。注意此配置可以展开包括多链路PPP，将极大增加备用连接的带宽联机。请参阅多链路PPP关于DDR -基本配置和验证文档欲知更多信息。

本文显示如何配置与一路由协议运行的一备用连接在异步链路。仔细的考虑在实现作为路由协议使用的带宽可能削减数据传输的带宽联机的这样设计前是需要的。Snapshot路由或静态路由可能在异步链路间使用，而不是路由协议。

开始使用前

规则

有关文档规则的详细信息，请参阅 Cisco 技术提示规则。

先决条件

本文档没有任何特定的前提条件。

使用的组件

本文档中的信息基于以下软件和硬件版本。

- Cisco IOS 软件版本 12.0(7)T
- Cisco 3640
- Cisco AS5200网络接入服务器
- Cisco 7206

本文档中的信息都是基于特定实验室环境中的设备创建的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您是在真实网络上操作，请确保您在使用任何命令前已经了解其潜在影响。

背景理论

它是普通为广域网连接提供冗余路径例如帧中继以按需拨号的电路。异步调制解调器和电路交换的普通旧式电话服务线路定期使用对备用广域网接口。当设计拨号备用方案时，仔细规划是必要的。必须设想要素例如在备份链路的流量，链路计划对支持备用电路的数量易受影响失败和端口容量。

可用三个普通的方法为广域网链路提供备份是：

- 备份接口
- Dialer Watch
- 浮动静态路由

备份接口依然是非激活，直到主链路断开。备份链路然后被激活，重建两个站点之间的连接。当实现帧中继链路的时备份接口，在帧中继链路的点对点子接口是有利的，因为主要或多点接口可能在UP/UP状态依然是，即使主要的虚拟电路(PVC)断开，促成备份接口不激活。配置在您的网络的帧中继端到端保持Cisco IOS软件版本12.05(T)的或以后也是可行的。参考帧中继端到端保持文档欲知更多信息。

Dialer Watch提供可靠的连通性，无需唯一取决于在定义关注数据流触发呼出呼叫在中央路由器。Dialer Watch监控某些特定路由，并且，如果那些网络是不可得到的， Dialer Watch启动辅助链路。参考使用BRI与Dialer Watch配置DDR备份文档关于Dialer Watch的更多信息。

浮动静态路由是管理距离大于动态路由的管理距离的静态路由。管理距离在静态路由可以配置，以便静态路由比动态路由较不理想;因此，静态路由，当动态路由是可用的时，没有使用。然而，如果动态路由丢失，静态路由能接管，并且流量可以通过此备选路由发送。参考帧中继文档的配置的ISDN备份关于怎样的一示例的配置备份用浮动静态路由。

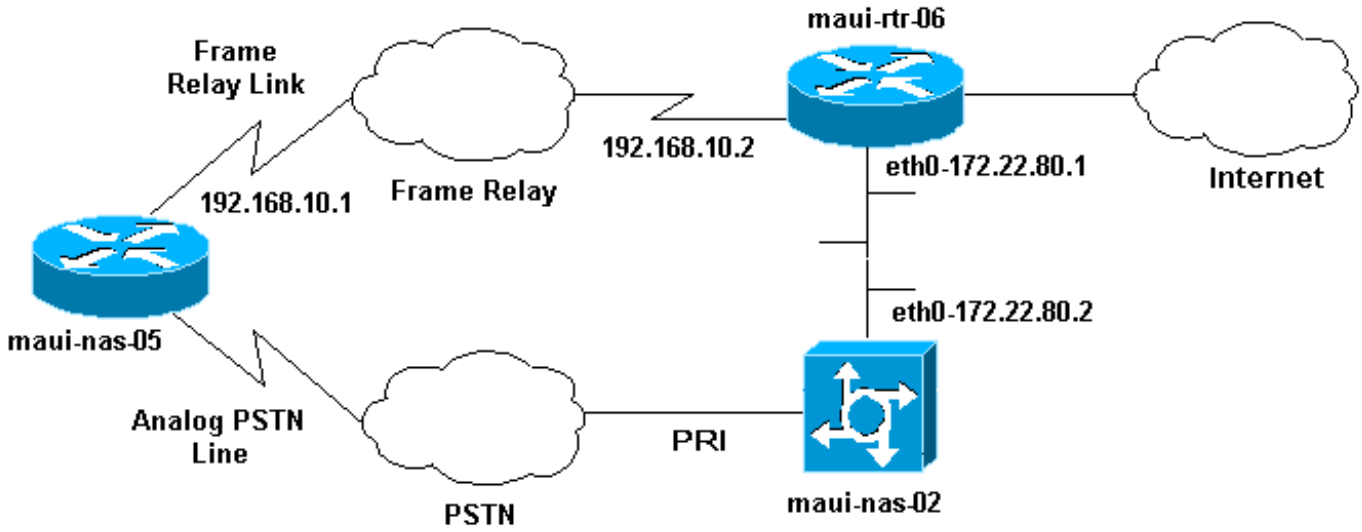
当设计拨号备用方案时，请切记设想要素例如在备份链路的流量模式，也许发生故障链路的数量和端口数量可用在中心站点在一个最坏的情况。

配置

本部分提供有关如何配置本文档所述功能的信息。

网络图

本文档使用下图所示的网络设置。



配置

本文档使用如下所示的配置。

注意： 在本文的配置根据运行在Cisco 3640和AS5200网络接入服务器的Cisco IOS软件版本12.0(7)T。Cisco 3640有NM-8AM模拟调制解调器网络模块允许路由器发出八次流出的模拟呼叫，无需使用外置调制解调器的卡德。

AS5200配置作为常规接入服务器能够支持ISDN和异步拨号用户以及备用连接。

maui-rtr-06 (Cisco 7206)的配置与拨号备用方案是毫不相关的。Cisco 7206只用于终止流入广域网链路。配置不是必要展示异步备份。

- maui-nas-05 (Cisco 3640)
- maui-nas-02 (Cisco AS5200)

maui-nas-05 (Cisco 3640)

```
Current configuration:
!
version 12.1
service timestamps debug datetime msec localtime show-
timezone
service timestamps log datetime msec localtime show-
timezone
service password-encryption
!
hostname maui-nas-05
!
enable secret <deleted>
!
username maui-nas-02 password <deleted>
 !--- username and password of the remote router for !--
- Challenge Handshake Authentication Protocol (CHAP)
authenticationip subnet-zero no ip domain-lookup !
interface Loopback0 ip address 172.22.63.5
255.255.255.255 ! interface Loopback1 ip address
172.22.69.254 255.255.255.0 ! interface Ethernet0/0 no
ip address shutdown ! interface Ethernet0/1 ip address
172.22.95.1 255.255.255.0 ! interface Serial3/0 !---
Frame Relay interface no ip address encapsulation frame-
relay frame-relay lmi-type cisco ! interface Serial3/0.1
```

```
point-to-point !--- Frame Relay subinterface backup
delay 5 10 !--- Enable backup interface 5 seconds after
subinterface is down !--- Disable dialer interface 10
seconds after subinterface comes back up backup
interface Dialer1 !--- Assigns dialer 1 as backup
interface ip address 192.168.10.1 255.255.255.252 frame-
relay interface-dlci 46 ! interface Async33 !--- Async
Interface set aside for dial backup no ip address
encapsulation ppp !--- Set PPP as encapsulation
mechanism for interface dialer in-band !--- Enable DDR
on interface dialer pool-member 2 !--- Assign async
interface to dialer pool 2 async default routing !---
Allows interface to pass routing updates over an async
line no fair-queue no cdp enable ! interface Dialer1 ip
unnumbered Loopback1 !--- Use IP address of Loopback 1
interface for Dialer Interface encapsulation ppp !---
Set PPP as encapsulation mechanism for interface dialer
pool 2 !--- Assign dialer interface to dialer pool 2
dialer idle-timeout 300 !--- Set idle time in seconds
before call is disconnected dialer string 10001 !---
Specify telephone number to be dialed (PRI on maui-nas-
03) dialer hold-queue 50 !--- Number of interesting
packets to hold in queue until !--- modem connection is
established dialer-group 1 !--- Assign dialer interface
to use dialer-list 1 to !--- determine interesting
traffic no peer default ip address !--- Disable peer
default IP address assignment to dialer interface no cdp
enable ppp authentication chap !--- Enforce CHAP
authentication on dialer interface ppp chap hostname
maui-backup !--- Use maui-backup for CHAP hostname
instead of maui-nas-05 !--- This username and password
must be configured on the AS5200 ppp chap password
<deleted> !--- Create CHAP password for user Maui-backup
! router ospf 1 network 172.22.0.0 0.0.255.255 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 !---
Permit IP on dialer group 1 as interesting packets !
line con 0 transport input none line 33 !--- Physical
interface to be used for dialing !--- Matches with
interface Async 33 configured above script dialer mica.*
!--- Assign default chat script for mica modems to line
modem InOut transport input all line 34 40 modem InOut
transport input all line aux 0 line vty 0 4 login ! end
```

maui-nas-02 (Cisco AS5200)

```
Current configuration:
!
version 12.0
service timestamps debug datetime msec localtime show-
timezone
service timestamps log datetime msec localtime show-
timezone
service password-encryption
!
hostname maui-nas-02
!
no logging console guaranteed
enable secret <deleted>
!
username maui-backup password <password>
 !--- username and password used by dialin client !---
(configured on interface dialer 1 on the Cisco 3640)spe
2/0 2/3 firmware location
system:/ucode/mica_port_firmware ! resource-pool disable
```

```
! ip subnet-zero no ip domain-lookup ! isdn switch-type
primary-ni ! controller T1 0 !--- PRI used for dialin
users framing esf clock source line primary linecode
b8zs pri-group timeslots 1-24 description "NAS Phone
Number:10001" ! controller T1 1 clock source line
secondary ! ! interface Loopback0 ip address 172.22.87.2
255.255.255.255 no ip directed-broadcast ! interface
Loopback1 !--- Loopback 1 summarizes addresses in the ip
address pool !--- Note that Loopback 1 and the address
pool are in the same subnet ip address 172.22.83.254
255.255.255.0 no ip directed-broadcast ! interface
Ethernet0 ip address 172.22.80.2 255.255.255.0 no ip
directed-broadcast ! interface Serial0:23 !--- D channel
for T1 0 no ip address no ip directed-broadcast isdn
switch-type primary-ni isdn incoming-voice modem !---
This command is required to accept analog calls on the
PRI fair-queue 64 256 0 no cdp enable ! interface Group-
Async1 !--- Group-Async Interface for all dialin
connections !--- Note that this interface does not
distinguish between !--- a backup connection or a
regular dialup connection ip unnumbered Loopback1 !---
Use IP address of Loopback 1 interface for Dialer
Interface no ip directed-broadcast encapsulation ppp !--
- Set PPP as encapsulation mechanism for interface ip
tcp header-compression passive async default routing !--
- Allows interface to pass routing updates over an async
line async mode interactive !--- Enable interactive mode
on async interface peer default ip address pool default
!--- Assign IP addresses for incoming calls from default
address pool no fair-queue no cdp enable ppp max-bad-
auth 3 ppp authentication chap !--- Use CHAP
authentication group-range 1 24 ! router ospf 1 network
172.22.0.0 0.0.255.255 area 0 ! ip local pool default
172.22.83.2 172.22.83.254 !--- IP address pool for
dialin connection ip default-gateway 172.22.80.1 ip http
server ip classless ! ! line con 0 transport input none
line 1 24 exec-timeout 0 0 autoselect during-login
autoselect ppp absolute-timeout 240 refuse-message
^CCCCCCC!!! All lines are busy, try again later ###^C
modem InOut international transport preferred none
transport input telnet transport output telnet line aux
0 line vty 0 4 password <deleted> login ! ntp clock-
period 17180069 ntp server 172.22.255.1 scheduler
interval 3000 end
```

验证

本部分所提供的信息可用于确认您的配置是否正常工作。

输出解释器工具支持某些 **show** 命令（只限于注册用户），通过它可以查看 show 命令输出的分析。

- **show caller userid detailed** -显示详细的链路控制协议(LCP) -经过协商的参数。**注意： show caller命令**被添加了到在版本11.3(5)AA的Cisco IOS软件。如果您的软件版本不支持**show caller命令**，请使用**show user命令**。
- **show dialer** -确定一物理呼叫是否被做了。
- **show ip route** -显示所有路由在路由表里。
- **show ip ospf database** -显示列表相关的信息到一个特定设备的开放最短路径优先(OSPF)数据

库。

- **show ip ospf interface [interface-name]** -显示OSPF相关的接口信息。欲知更多信息，请参阅什么执行show ip ospf interface命令显示？文档。
- **show ip ospf neighbor [interface-name] [neighbor-id] detail** -显示关于一个单个接口的基本类型的OSPF邻居信息。欲知更多信息，请参阅什么执行show ip ospf neighbor命令显示？文档。
- **show ip protocols** -显示激活的路由协议进程的参数和当前状态。欲知更多信息，请参阅在IP路由协议独立命令文档的**show ip protocols**信息。

show 输出示例

当帧中继链路是UP时，以下表示maui-nas-05路由表。注意OSPF路由在串行子接口被看到。

```
maui-nas-05#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 - ISIS level-1, L2 - ISIS level-2, ia - ISIS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     192.168.10.0/30 is subnetted, 1 subnets
C       192.168.10.0 is directly connected, Serial3/0.1
     172.22.0.0/16 is variably subnetted, 7 subnets, 2 masks
O       172.22.83.254/32 [110/50] via 192.168.10.2, 00:04:40, Serial3/0.1
O       172.22.255.6/32 [110/49] via 192.168.10.2, 00:04:40, Serial3/0.1
C       172.22.63.5/32 is directly connected, Loopback0
C       172.22.95.0/24 is directly connected, Ethernet0/1
O       172.22.80.0/24 [110/49] via 192.168.10.2, 00:04:40, Serial3/0.1
O       172.22.87.2/32 [110/50] via 192.168.10.2, 00:04:42, Serial3/0.1
C       172.22.69.0/24 is directly connected, Loopback1
```

当主链路发生故障时，备份链路启动，并且路由表聚合。注意OSPF路由在拨号接口。

```
maui-nas-05#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 - ISIS, L1 - ISIS level-1, L2 - ISIS level-2, IA - ISIS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     172.22.0.0/16 is variably subnetted, 7 subnets, 2 masks
C       172.22.83.254/32 is directly connected, Dialer1
O       172.22.255.6/32 [110/1796] via 172.22.83.254, 00:00:48, Dialer1
C       172.22.63.5/32 is directly connected, Loopback0
C       172.22.95.0/24 is directly connected, Ethernet0/1
O       172.22.80.0/24 [110/1795] via 172.22.83.254, 00:00:48, Dialer1
O       172.22.87.2/32 [110/1786] via 172.22.83.254, 00:00:48, Dialer1
C       172.22.69.0/24 is directly connected, Loopback1
```

以下表示详细信息特定对用户maui-nas-02 (中心站点接入服务器)。

```
maui-nas-05#show caller user maui-nas-02 detail
```

```
  User: maui-nas-02, line tty 33, service Async
        Idle time 00:00:09
  Timeouts:            Absolute  Idle      Idle
                                 Session   Exec
      Limits:          -         -         00:10:00
      Disconnect in:   -         -         -
  TTY: Line 33, running PPP on As33
  Location: PPP: 172.22.83.254

  Line: Baud rate (TX/RX) is 9600/9600, no parity, 2 stopbits, 8 databits
  Status: Ready, Active, No Exit Banner, Async Interface Active
          HW PPP Support Active
  Capabilities: Modem Callout, Modem RI is CD, Integrated Modem
  Modem State: Ready

  User: maui-nas-02, line As33, service PPP
        Active time 00:00:35, Idle time 00:00:05
  Timeouts:            Absolute  Idle
      Limits:          -         00:05:00
      Disconnect in:   -         00:04:54
  PPP: LCP Open, CHAP (local <--> local), IPCP
  LCP: -> peer, ACCM, AuthProto, MagicNumber, PCompression, ACCompression
       <- peer, ACCM, AuthProto, MagicNumber, PCompression, ACCompression
 !--- LCP Parameters negotiated NCP: Open IPCP IPCP: <- peer -> peer, Address !--- IPCP
Parameters negotiated Dialer: Connected 00:01:07 to 10001, outbound Idle timer 300 secs, idle 7
secs Type is IN-BAND ASYNC, group Dialer1 Cause: ip (s=172.22.63.5, d=224.0.0.5) !--- Reason for
Dialout IP: Local 172.22.63.5, remote 172.22.83.254 Counts: 23 packets input, 1204 bytes, 0 no
buffer 0 input errors, 0 CRC, 0 frame, 0 overrun 27 packets output, 1498 bytes, 0 underruns 0
output errors, 0 collisions, 0 interface resets
```

故障排除

本部分提供的信息可用于对配置进行故障排除。

故障排除命令

输出解释器工具支持某些 **show** 命令（只限于注册用户），通过它可以查看 show 命令输出的分析。

注意： 在发出 **debug** 命令之前，请参阅有关 Debug 命令的重要信息。

- **debug dialer events** -显示关于在拨号接口接收的数据包的调试信息。当按需拨号路由(DDR)在接口时启用，信息关于所有呼叫的原因(呼叫拨号原因)也显示。欲知更多信息，请参阅在调试指令文档的**debug dialer event**信息。
- **debug dialer packets** -显示关于在拨号接口接收的数据包的调试信息。该命令前面加上 no 表示禁止调试输出。欲知更多信息，请参阅在调试指令文档的**debug dialer packets**信息。
- **debug ppp** -显示关于流量的信息和交换在实现PPP的互联网络里。该命令前面加上 no 表示禁止调试输出。**[no] debug ppp {数据包|协商|错误|验证}**欲知更多信息，请参阅在调试指令文档的**debug ppp**信息。
- **debug isdn event** -显示发生在用户端的ISDN事件(在路由器) ISDN接口。Q.931 ISDN事件显示(ISDN网络连接呼叫建立及拆线)。该命令前面加上 no 表示禁止调试输出。
- **debug isdn q931** -显示关于呼叫建立及拆线的信息ISDN网络连接(在本地路由器(用户端)和网络之间的层3)。该命令前面加上 no 表示禁止调试输出。欲知更多信息，请参阅在调试指令文档的**debug isdn q931**信息。

调试输出示例

```
maui-nas-05#debug ppp negotiation
PPP protocol negotiation debugging is on
maui-nas-05#debug ppp chap
PPP authentication debugging is on
maui-nas-05#debug modem
Modem control/process activation debugging is on
maui-nas-05#debug backup
Backup events debugging is on
maui-nas-05#debug dialer
Dial on demand events debugging is on
maui-nas-05#show debug
General OS:
  Modem control/process activation debugging is on
Dial on demand:
  Dial on demand events debugging is on
Backup:
  Backup events debugging is on
PPP:
  PPP authentication debugging is on
  PPP protocol negotiation debugging is on
maui-nas-05#
*Mar  1 00:03:49.927 UTC: BACKUP(Serial3/0.1): event = primary went down
*Mar  1 00:03:49.927 UTC: BACKUP(Serial3/0.1): changed state to "waiting to back up"
*Mar  1 00:03:51.859 UTC: %LINK-3-UPDOWN: Interface Serial3/0, changed state to down
*Mar  1 00:03:52.863 UTC: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed
state to down
!--- Primary Link is down *Mar 1 00:03:54.927 UTC: BACKUP(Serial3/0.1): event = timer expired
*Mar 1 00:03:54.927 UTC: BACKUP(Serial3/0.1): secondary interface (Dialer1) made active *Mar 1
00:03:54.927 UTC: BACKUP(Serial3/0.1): changed state to "backup mode" *Mar 1 00:03:55.663 UTC:
As33 DDR: rotor dialout [priority] *Mar 1 00:03:55.663 UTC: As33 DDR: Dialing cause ip
(s=172.22.63.5, d=224.0.0.5) !--- interesting traffic causes dialout *Mar 1 00:03:55.663 UTC:
As33 DDR: Attempting to dial 10001
!--- Number to be dialed (PRI on maui-nas-02) *Mar 1 00:03:55.663 UTC: CHAT33: Attempting async
line dialer script *Mar 1 00:03:55.663 UTC: CHAT33: no matching chat script found for 10001 *Mar
1 00:03:55.663 UTC: CHAT33: Dialing using Modem script: d0efault-d0ials0cript & System script:
none !--- using default modem chat script *Mar 1 00:03:55.663 UTC: CHAT33: process started *Mar
1 00:03:55.663 UTC: CHAT33: Asserting DTR *Mar 1 00:03:55.663 UTC: CHAT33: Chat script d0efault-
d0ials0cript started *Mar 1 00:03:56.927 UTC: %LINK-3-UPDOWN: Interface Dialer1, changed state
to up
!--- Dialer interface is brought up *Mar 1 00:03:56.927 UTC: Di1 LCP: Not allowed on a Dialer
Profile *Mar 1 00:03:56.927 UTC: BACKUP(Dialer1): event = primary came up *Mar 1 00:03:57.271
UTC: Modem 1/0 Mcom: in modem state 'Dialing/Answering' *Mar 1 00:04:06.671 UTC: Modem 1/0 Mcom:
in modem state 'Waiting for Carrier' *Mar 1 00:04:18.135 UTC: Modem 1/0 Mcom: in modem state
'Connected' *Mar 1 00:04:18.543 UTC: Modem 1/0 Mcom: CONNECT at 31200/33600(Tx/Rx), V34, LAPM,
V42bis, Originate *Mar 1 00:04:18.599 UTC: CHAT33: Chat script d0efault-d0ials0cript finished,
status = Success *Mar 1 00:04:18.599 UTC: Modem 1/0 Mcom: switching to PPP mode *Mar 1
00:04:18.599 UTC: TTY33: no timer type 1 to destroy *Mar 1 00:04:18.599 UTC: TTY33: no timer
type 0 to destroy *Mar 1 00:04:20.599 UTC: %LINK-3-UPDOWN: Interface Async33, changed state to
up Dialer statechange to up Async33 !--- Interface Async 33 is changed to state Up *Mar 1
00:04:20.599 UTC: %DIALER-6-BIND: Interface As33 bound to profile Di1 Dialer call has been
placed Async33 *Mar 1 00:04:20.599 UTC: As33 PPP: Treating connection as a callout *Mar 1
00:04:20.599 UTC: As33 PPP: Phase is ESTABLISHING, Active Open *Mar 1 00:04:20.599 UTC: Modem
1/0 Mcom: PPP escape map: TX map = FFFFFFFF, Rx map = 0 !--- LCP Negotiation begins *Mar 1
00:04:20.599 UTC: As33 LCP: O CONFREQ [Closed] id 1 len 25 ... *Mar 1 00:04:22.599 UTC: As33
LCP: O CONFREQ [REQsent] id 2 Len 25 *... *Mar 1 00:04:22.743 UTC: As33 LCP: I CONFACK [REQsent]
id 2 Len 25 ... *Mar 1 00:04:24.599 UTC: As33 LCP: O CONFREQ [ACKrcvd] id 3 Len 25 ... *Mar 1
00:04:24.787 UTC: As33 LCP: I CONFACK [REQsent] id 3 Len 25 ... *Mar 1 00:04:24.795 UTC: As33
LCP: I CONFREQ [ACKrcvd] id 4 Len 25 ... *Mar 1 00:04:24.795 UTC: As33 LCP: O CONFACK [ACKrcvd]
id 4 Len 25 ... *Mar 1 00:04:24.795 UTC: As33 LCP: State is Open !--- LCP negotiation complete
*Mar 1 00:04:24.795 UTC: Modem 1/0 Mcom: PPP escape map: TX map = A0000, Rx map= 0 *Mar 1
00:04:24.799 UTC: As33 PPP: Phase is AUTHENTICATING, by both *Mar 1 00:04:24.799 UTC: As33 CHAP:
```

Using alternate hostname Maui-backup
*Mar 1 00:04:24.799 UTC: As33 CHAP: O CHALLENGE id 1 Len 32 from "Maui-backup"
*Mar 1 00:04:24.799 UTC: As33 AUTH: Started process 0 pid 51
*Mar 1 00:04:24.939 UTC: As33 CHAP: I CHALLENGE id 2 Len 32 from "maui-nas-02"
*Mar 1 00:04:24.939 UTC: As33 CHAP: Using alternate hostname Maui-backup
*Mar 1 00:04:24.939 UTC: As33 CHAP: O RESPONSE id 2 Len 32 from "Maui-backup"
*Mar 1 00:04:24.955 UTC: As33 CHAP: I RESPONSE id 1 Len 32 from "maui-nas-02"
*Mar 1 00:04:24.955 UTC: As33 CHAP: O SUCCESS id 1 Len 4
*Mar 1 00:04:25.079 UTC: As33 **CHAP: I SUCCESS id 2 Len 4**
!--- CHAP Authentication successful *Mar 1 00:04:25.079 UTC: As33 PPP: Phase is UP *!--- IPCP negotiation begins* *Mar 1 00:04:25.079 UTC: As33 IPCP: O CONFREQ [Not negotiated] id 1 Len 10 *Mar 1 00:04:25.079 UTC: As33 IPCP: Address 172.22.63.5 (0x0306AC163F05) *Mar 1 00:04:25.087 UTC: As33 IPCP: I CONFREQ [REQsent] id 3 Len 16 *Mar 1 00:04:25.091 UTC: As33 IPCP: CompressType VJ 15 slots (0x0206002D0F00) *Mar 1 00:04:25.091 UTC: As33 IPCP: Address 172.22.83.254 (0x0306AC1653FE) *Mar 1 00:04:25.091 UTC: As33 IPCP: O CONFREJ [REQsent] id 3 Len 10 *Mar 1 00:04:25.091 UTC: As33 IPCP: CompressType VJ 15 slots (0x0206002D0F00) *Mar 1 00:04:25.215 UTC: As33 IPCP: I CONFNAK [REQsent] id 1 Len 10 *Mar 1 00:04:25.215 UTC: As33 IPCP: **Address 172.22.83.41** (0x0306AC165329)
!--- IP address assigned to the dialin client from the address pool *Mar 1 00:04:25.215 UTC: As33 IPCP: O CONFREQ [REQsent] id 2 Len 4 *Mar 1 00:04:25.219 UTC: As33 IPCP: I CONFREQ [REQsent] id 4 Len 10 *Mar 1 00:04:25.219 UTC: As33 IPCP: Address 172.22.83.254 (0x0306AC1653FE) *Mar 1 00:04:25.219 UTC: As33 IPCP: O CONFACK [REQsent] id 4 Len 10 *Mar 1 00:04:25.223 UTC: As33 IPCP: Address 172.22.83.254 (0x0306AC1653FE) *Mar 1 00:04:25.331 UTC: As33 IPCP: I CONFACK [ACKsent] id 2 Len 4 *Mar 1 00:04:25.331 UTC: **As33 IPCP: State is Open**
*Mar 1 00:04:25.331 UTC: As33 DDR: dialer protocol up
*Mar 1 00:04:25.331 UTC: As33 DDR: Call connected, 3 packets unqueued, 3 transmitted, 0 discarded
*Mar 1 00:04:25.331 UTC: **Di1 IPCP: Install route to 172.22.83.254**
!--- Installing route to loopback address of maui-nas-02 *Mar 1 00:04:26.079 UTC: **%LINEPROTO-5-UPDOWN: Line protocol on Interface Async33, changed state to up**
!--- Async connection is up

相关信息

- 对基本拨号接入进行NAS配置
- 操作
- OSPF 命令
- 配置 OSPF
- 技术支持 - Cisco Systems