通过拨号程序配置文件实现异步备份

目录

简介

本文档介绍如何配置远程路由器(Cisco 3640)，以在帧中继连接断开时使用模拟POTS线路拨打中心站点。Cisco 3640使用拨号程序配置文件为帧中继链路提供备份接口。此外，还预留了特定的异步接口用于备份拨出。请注意，此配置可以扩展为包括多链路PPP，这将显着增加备份连接的可用带宽。有关详细信息，请参阅DDR的多链路PPP — 基本配置和验证文档。

本文档说明如何使用异步链路上运行的路由协议配置备份连接。在实施此类设计之前，需要仔细考虑，因为路由协议使用的带宽可能会限制用于数据传输的带宽。快照路由或静态路由可以跨异步链路使用，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
- 思科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

通常为WAN连接（如带按需拨号电路的帧中继）提供冗余路径。异步调制解调器和电路交换的普通老式电话服务(POTS)线路经常用于备份广域网接口。设计拨号备份方案时，必须仔细规划。必须考虑诸如备份链路上的流量、易受故障影响的链路数量以及支持备份电路的端口容量规划等因素。

为WAN链路提供备份的三种常用方法是：

- 备份接口
- 拨号器监视
- 浮动静态路由

备份接口在主链路断开之前保持非活动状态。然后激活备份链路，在两个站点之间重新建立连接。在为帧中继链路实施备份接口时，帧中继链路上的点对点子接口非常有利，因为即使主虚电路(PVC)关闭，主接口或多点接口也可能保持up/up状态，导致备份接口未激活。此外，建议在您的网络上为Cisco IOS®软件版本12.05(T)或更高版本配置帧中继端到端Keepalive。有关详细信息，请参阅帧中继端到端保持连接文档。

Dialer Watch提供可靠的连接，而不仅依赖于定义相关流量来触发中央路由器的传出呼叫。Dialer Watch监控某些特定路由，如果这些网络无法访问，Dialer Watch会启动辅助链路。有关拨号器监视的详细信息，请参阅使用BRI和拨号器监视配置DDR备份文档。

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。可以在静态路由上配置管理距离，使静态路由比动态路由更不理想；因此，当动态路由可用时，不使用静态路由。但是，如果动态路由丢失，静态路由可以接管，流量可以通过此备用路由发送。有关如何使用浮动静态路由配置备份的示例，请参阅为帧中继配置ISDN备份文档。
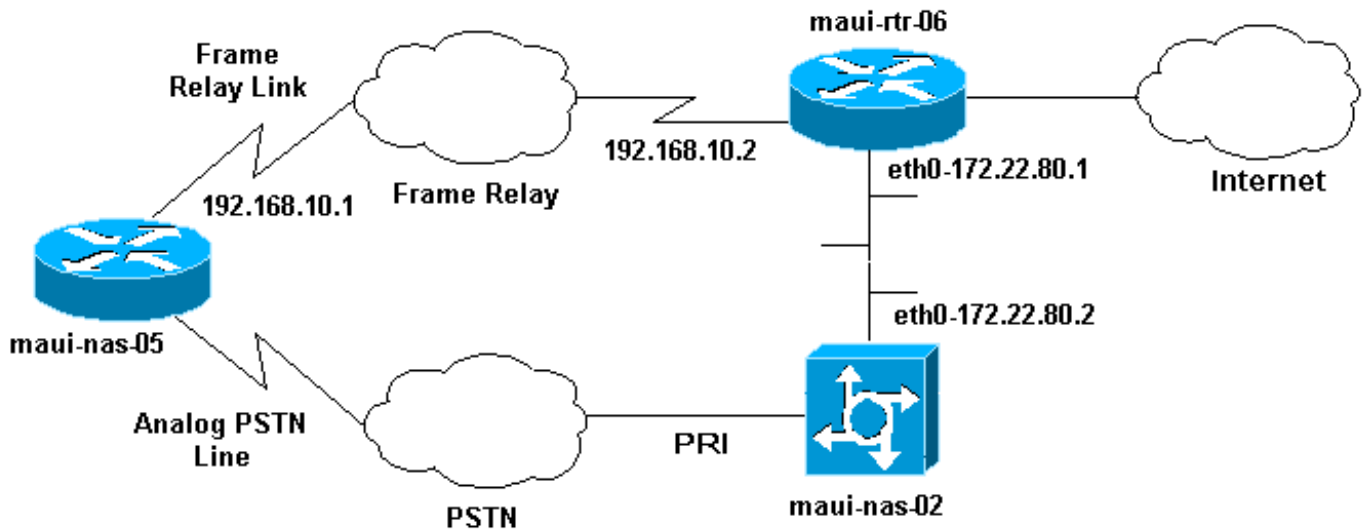
在设计拨号备份方案时，请记住考虑以下因素：备份链路上的流量模式、可能发生故障的链路数量以及在最坏情况下中心站点可用的端口数量。

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：本文档中的配置基于在Cisco 3640和AS5200网络接入服务器上运行的Cisco IOS软件版本12.0(7)T。Cisco 3640具有NM-8AM模拟调制解调器网络模块卡，允许路由器在不使用外部调制解调器的情况下发出最多八个传出模拟呼叫。

AS5200已配置为常规接入服务器，可同时支持ISDN和异步拨号用户以及备份连接。

maui-rtr-06(Cisco 7206)的配置与拨号备份方案无关。Cisco 7206仅用于终止传入的WAN链路。演示异步备份时无需配置。

- 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
^CCCCCCCC!!! 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 — 显示链路控制协议(LCP)协商的详细参数。**注意：**在版本
  11.3(5)AA中，show caller命令已添加到Cisco IOS软件。如果软件版本不支持show caller命令
  ，请使用show user命令。
- show dialer — 确定是否进行了物理呼叫。

- show ip route — 显示路由表中的所有路由。
- show ip ospf database — 显示与特定设备的开放最短路径优先(OSPF)数据库相关的信息列表。
- show ip ospf interface [*interface-name*] — 显示与OSPF相关的接口信息。有关详细信息，请参阅show ip ospf interface**命令显示什么？**的下界。
- show ip ospf neighbor [*interface-name*] [*neighbor-id*] detail — 按接口显示OSPF邻居信息。有关详细信息，请参阅show ip ospf neighbor**命令显示的**内容？的下界。
- show ip protocols — 显示活动路由协议进程的参数和当前状态。有关详细信息，请参阅IP Routing Protocol-Independent Commands文档中的show ip protocols信息。

show 输出示例

以下输出显示帧中继链路处于打开状态时maui-nas-05的路由表。请注意，OSPF路由在串行子接口上可见。

```
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，备用链路会启动，路由表会收敛。请注意，OSPF路由在拨号器接口上。

```
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
```

以下输出显示特定于用户maui-nas-02（中心站点访问服务器）的详细信息。

```
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** — 显示有关拨号程序接口上接收的数据包的调试信息。在接口上启用按需拨号路由(DDR)时，还会显示有关任何呼叫原因（称为拨号原因）的信息。有关详细信息，请参阅Debug Commands文档中的debug dialer事件信息。
- **debug dialer packets** — 显示有关拨号器接口上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。有关详细信息，请参阅Debug Commands文档中的debug dialer packets信息。
- **debug ppp** — 显示实施PPP的网际网络中的流量和交换信息。该命令前面加上 no 表示禁止调试输出。**[no] debug ppp {packet |协商 |错误 |身份验证**有关详细信息，请参阅Debug

Commands文档中的[debug ppp](#)信息。

- **debug isdn event** — 显示在ISDN接口的用户端（路由器上）发生的ISDN事件。显示Q.931 ISDN事件（呼叫建立和ISDN网络连接断开）。 该命令前面加上 no 表示禁止调试输出。
- **debug isdn q931** — 显示有关本地路由器（用户端）和网络之间ISDN网络连接（第3层）的呼叫建立和拆卸的信息。该命令前面加上 no 表示禁止调试输出。有关详细信息，请参阅**调试命令**文档中的[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

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