

使用PPPoA(aal5mux ppp)使用點對點和多點介面 配置Cisco 6400 NRP

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簡介

此示例配置顯示了帶有節點路由處理器(NRP)介面卡的思科6400通用接入集中器(UAC)。提供了點對點和多點NRP配置的示例。兩台配置有非同步傳輸模式點對點協定(PPPoA)(aal5mux ppp)的Cisco 827數字使用者線路(DSL)路由器在Cisco 6400上終止。

還提供了Cisco 6130數字使用者線接入複用器(DSLAM)NI2和Cisco 6400節點交換處理器(NSP)的配置。

開始之前

慣例

如需文件慣例的詳細資訊，請參閱[思科技術提示慣例](#)。

必要條件

本文件沒有特定先決條件。

採用元件

本檔案中的資訊是根據以下軟體和硬體版本。

- 思科827-4V客戶端裝置(CPE)IOS®軟體版本12.1(1)XB

- Cisco 6400 UAC-NRP IOS軟體版本12.0(7)DC
- Cisco 6400 UAC-NSP IOS軟體版本12.0(4)DB
- Cisco 6130 DSLAM-NI2 IOS軟體版本12.1(1)DA

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除 (預設) 的組態來啟動。如果您在即時網路中工作，請確保在使用任何命令之前瞭解其潛在影響。

設定

本節提供用於設定本文件中所述功能的資訊。

注意：要查詢有關本文檔中使用的命令的其他資訊，請使用[命令查詢工具](#)([僅限註冊客戶](#))。

網路圖表

本文檔使用下圖所示的網路設定。

組態

本文檔使用如下所示的配置。

- [思科827路由器\(R1\)](#)
- [思科827路由器\(R2\)](#)
- [Cisco 6130-NI2 DSLAM](#)
- [Cisco 6400 NSP](#)
- [使用點對點介面的Cisco 6400-NRP](#)
- [使用多點介面的Cisco 6400 NRP](#)

思科827路由器(R1)

```
Current configuration:
!
version 12.0
service timestamps debug datetime msec
service timestamps log datetime msec
!
hostname R1
!
ip subnet-zero
!
interface Ethernet0
 no ip address
 no ip directed-broadcast
!
```

```
interface ATM0
  no ip address
  no ip directed-broadcast
  no atm ilmi-keepalive
  pvc 3/100
    encapsulation aal5mux ppp dialer
    dialer pool-member 1
  !
  bundle-enable
  hold-queue 224 in
  !
interface Dialer0
  ip address 172.18.0.1 255.255.0.0
  no ip directed-broadcast
  encapsulation ppp
  dialer pool 1
  dialer-group 1
  ppp authentication chap callin
  ppp chap hostname <hostname1>
  ppp chap password <password1>
  !
ip classless
ip route 0.0.0.0 0.0.0.0 Dialer0
no ip http server
!
dialer-list 1 protocol ip permit
!
voice-port 1
  timing hookflash-in 0
!
voice-port 2
  timing hookflash-in 0
!
voice-port 3
  timing hookflash-in 0
!
voice-port 4
  timing hookflash-in 0
!
end
```

思科827路由器(R2)

```
Current configuration:
!
version 12.0
service timestamps debug datetime msec
service timestamps log datetime msec
!
hostname R2
!
ip subnet-zero
!
interface Ethernet0
  no ip address
  no ip directed-broadcast
  !
```

```

interface ATM0
  no ip address
  no ip directed-broadcast
  no ATM ilmi-keepalive
  PVC 4/100
    encapsulation aal5mux ppp dialer
    dialer pool-member 1
  !
  bundle-enable
  hold-queue 224 in
  !
interface Dialer0
  ip address 172.18.0.2 255.255.0.0
  no ip directed-broadcast
  encapsulation ppp
  dialer pool 1
  dialer-group 1
  ppp authentication chap callin
  ppp chap hostname <hostname2>
  ppp chap password <password2>
  !
ip classless
ip route 0.0.0.0 0.0.0.0 Dialer0
  !
dialer-list 1 protocol ip permit
  !
voice-port 1
  timing hookflash-in 0
  !
voice-port 2
  timing hookflash-in 0
  !
voice-port 3
  timing hookflash-in 0
  !
voice-port 4
  timing hookflash-in 0
  !
end

```

Cisco 6130-NI2 DSLAM

```

ni2#
Current configuration:
!
version 12.1
service timestamps debug datetime msec
service timestamps log datetime msec
!
hostname ni2
!
slot 1 ATUC-1-4DMT
slot 2 ATUC-4FLEXIDMT
slot 13 ATUC-4FLEXIDMT
!
dsl-profile default
  dmt training-mode quick

```

```

ip subnet-zero
!
ATM address 47.0091.8100.0000.0075.2b3f.4d01.0075.2b3f.4d01.00
ATM router pnni
  no aesa embedded-number left-justified
  node 1 level 56 lowest
  redistribute ATM-static
!
interface ATM0/0
  no ip address
  ATM cac service-category abr deny
  ATM maxvp-number 0
  ATM maxvc-number 4096
  ATM maxvci-bits 12
!
interface Ethernet0/0
  no ip route-cache
!
interface ATM0/1
  no ip address
  ATM ilmi-keepalive
!
interface ATM0/2
  no ip address
  no ATM ilmi-keepalive
!
interface ATM1/1
  no ip address
  no ATM ilmi-keepalive
!
interface ATM1/2
  no ip address
  no ATM ilmi-keepalive
!
interface ATM1/3
  no ip address
  no ATM ilmi-keepalive
  ATM PVC 3 100 interface ATM0/1 3 100
!
interface ATM1/4
  no ip address
  no ATM ilmi-keepalive
  ATM PVC 4 100 interface ATM0/1 4 100
!
ip classless
!
end

```

Cisco 6400 NSP

```

Current configuration:
!
version 12.0
service timestamps debug datetime msec
service timestamps log datetime msec
!
hostname NSP

```

```

!
ip subnet-zero
!
atm address 47.0091.8100.0000.0030.8027.7501.0030.8027.7501.00
atm router pnni
  no aesa embedded-number left-justified
  node 1 level 56 lowest
  redistribute atm-static
!
interface ATM0/0/0
  no ip address
  no ip directed-broadcast
  atm maxvp-number 0
!
interface Ethernet0/0/0
  no ip directed-broadcast
!
interface ATM1/0/0
  no ip address
  no ip directed-broadcast
no atm ilmi-keepalive
!
interface ATM2/0/0
  no ip address
  no ip directed-broadcast
  no atm ilmi-keepalive
!
interface ATM8/0/0
  no ip address
  no ip directed-broadcast
  no atm ilmi-keepalive
!
interface ATM8/0/1
  no ip address
  no ip directed-broadcast
  no atm ilmi-keepalive
  atm pvc 3 100 interface ATM1/0/0 3 100
  atm pvc 4 100 interface ATM1/0/0 4 100
!
ip classless
!
end

```

使用點對點介面的Cisco 6400-NRP

Current configuration:

```

!
version 12.0
service timestamps debug datetime msec
service timestamps log datetime msec
!
hostname NRP
!
username <username1> password <password1>
username <username2> password <password2>
!
redundancy

```

```

main-cpu
  no auto-sync standard
  no secondary console enable
ip subnet-zero
!
interface Loopback0
  ip address 172.18.0.3 255.255.0.0
  no ip directed-broadcast
!
interface ATM0/0/0
  no ip address
  no ip directed-broadcast
  no ip route-cache
  no atm ilmi-keepalive
!
interface ATM0/0/0.3 point-to-point
  no ip directed-broadcast
  pvc 3/100
    encapsulation aal5mux ppp Virtual-Template1
!
!
interface ATM0/0/0.4 point-to-point
  no ip directed-broadcast
  pvc 4/100
    encapsulation aal5mux ppp Virtual-Template1
!
interface Ethernet0/0/1
  no ip address
  no ip directed-broadcast
!
interface Ethernet0/0/0
  no ip directed-broadcast
!
interface FastEthernet0/0/0
  no ip address
  no ip directed-broadcast
  full-duplex
!
interface Virtual-Template1
  ip unnumbered Loopback0
  no ip directed-broadcast
  no peer default ip address
  ppp authentication chap
!
ip classless
end

```

使用多點介面的Cisco 6400 NRP

```

NRP#
Current configuration:
!
version 12.0
service timestamps debug datetime msec
service timestamps log datetime msec
!
hostname NRP

```

```
!  
username <username1> password <password1>  
username <username2> password <password2>  
!  
redundancy  
  main-cpu  
    no auto-sync standard  
    no secondary console enable  
ip subnet-zero  
!  
interface Loopback0  
  ip address 172.18.0.3 255.255.0.0  
  no ip directed-broadcast  
!  
interface ATM0/0/0  
  no ip address  
  no ip directed-broadcast  
  no ip route-cache  
  no atm ilmi-keepalive  
!  
interface ATM0/0/0.9 multipoint  
  no ip directed-broadcast  
  pvc 3/100  
    encapsulation aal5mux ppp Virtual-Template1  
  !  
  pvc 4/100  
    encapsulation aal5mux ppp Virtual-Template1  
  !  
interface Ethernet0/0/1  
  no ip address  
  no ip directed-broadcast  
!  
interface Ethernet0/0/0  
  no ip directed-broadcast  
!  
interface FastEthernet0/0/0  
  no ip address  
  no ip directed-broadcast  
  full-duplex  
!  
interface Virtual-Template1  
  ip unnumbered Loopback0  
  no ip directed-broadcast  
  no peer default ip address  
  ppp authentication chap  
!  
ip classless  
!  
end
```

驗證

目前沒有適用於此組態的驗證程序。

疑難排解

目前尚無適用於此組態的具體疑難排解資訊。

相關資訊

- [配置Cisco 827路由器](#)
- [思科6400軟體安裝指南](#)
- [Cisco DSL技術支援資訊](#)
- [產品支援 — Cisco Systems](#)
- [技術支援 - Cisco Systems](#)

關於此翻譯

思科已使用電腦和人工技術翻譯本文件，讓全世界的使用者能夠以自己的語言理解支援內容。請注意，即使是最佳機器翻譯，也不如專業譯者翻譯的內容準確。Cisco Systems, Inc. 對這些翻譯的準確度概不負責，並建議一律查看原始英文文件（提供連結）。