

# 配置Cisco 6400 NRP使用点对点与多点接口用PPPoA (aal5mux ppp)

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## [Introduction](#)

此配置示例显示Cisco 6400通用接入集中器(UAC)用节点路由处理器适配器。提供点到点和多点NRP配置示例。与点对点协议的两Cisco 827数字用户线(DSL)配置的路由器在异步传输模式(PPPoA) (aal5mux ppp)在Cisco 6400终止。

也提供Cisco 6130数字用户线路访问多路复用器NI2和Cisco 6400 node交换机处理器(NSP)的配置。

## [开始使用前](#)

### [Conventions](#)

有关文档规则的详细信息，请参阅 [Cisco 技术提示规则](#)。

### [Prerequisites](#)

本文档没有任何特定的前提条件。

### [Components Used](#)

本文档中的信息基于以下软件和硬件版本。

- Cisco 827-4V客户端前置设备(CPE) IOS® Software Release 12.1(1)XB
- Cisco 6400 UAC-NRP IOS软件版本12.0(7)DC

- Cisco 6400 UAC-NSP IOS软件版本12.0(4)DB
- Cisco 6130 DSLAM-NI2 IOS软件版本12.1(1)DA

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。All of the devices used in this document started with a cleared (default) configuration.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。

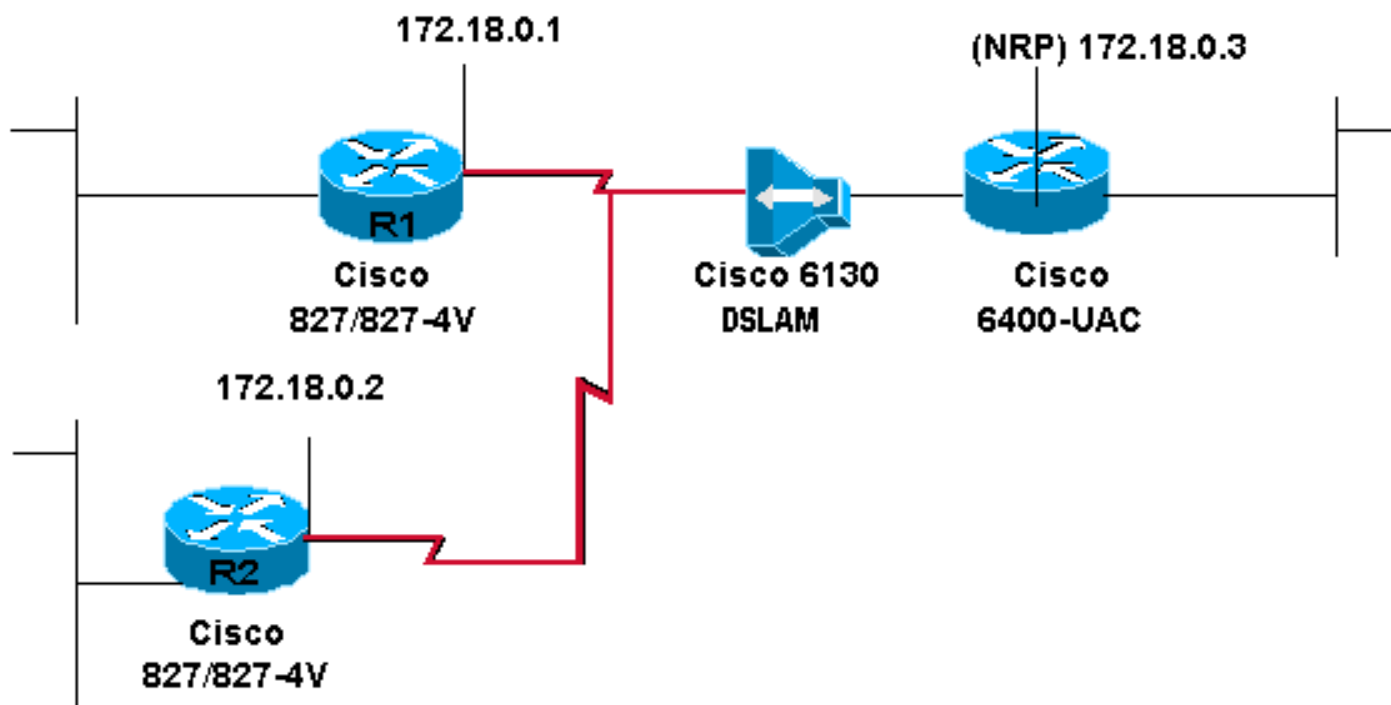
## Configure

本部分提供有关如何配置本文档所述功能的信息。

**Note:** 要查找本文档所用命令的其他信息，请使用[命令查找工具](#)（[仅限注册用户](#)）。

## Network Diagram

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。

- [Cisco 827 Router \(R1\)](#)
- [Cisco 827 Router \(R2\)](#)
- [Cisco 6130-NI2 DSLAM](#)
- [Cisco 6400 NSP](#)
- [Cisco 6400-NRP使用一个点到点接口](#)
- [Cisco 6400 NRP使用一个多点接口](#)

### Cisco 827 Router (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

```

## Cisco 827 Router (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
```

### Cisco 6400-NRP使用一个点到点接口

```
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-Templatel ! !
interface ATM0/0/0.4 point-to-point no ip directed-
broadcast pvc 4/100 encapsulation aal5mux ppp Virtual-
Templatel ! 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-Templatel ip unnumbered Loopback0 no ip
directed-broadcast no peer default ip address ppp
authentication chap ! ip classless end
```

### Cisco 6400 NRP使用一个多点接口

```
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-Templatel ! pvc 4/100
encapsulation aal5mux ppp Virtual-Templatel ! 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-
```

```
Templatel ip unnumbered Loopback0 no ip directed-  
broadcast no peer default ip address ppp authentication  
chap ! ip classless ! end
```

## [Verify](#)

当前没有可用于此配置的验证过程。

## [Troubleshoot](#)

目前没有针对此配置的故障排除信息。

## [Related Information](#)

- [配置Cisco 827 Router](#)
- [Cisco 6400软件设置指南](#)
- [Cisco DSL技术支持信息](#)
- [产品技术支持- Cisco系统](#)
- [Technical Support - Cisco Systems](#)