

Configuring a Cisco 1700/2600/3600 ADSL WIC With RFC1483 Routing Using AAL5SNAP Protocol IP

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Introduction

The Cisco 1700, 2600, and 3600 Series Routers support the Asymmetric Digital Subscriber Line (ADSL) WAN Interface Card (WIC). All three platforms are configured essentially the same, but there are differences in hardware and in the Cisco IOS® Software release required for each one. Throughout this document, the Cisco 1700/2600/3600 will be called the Cisco ADSL WIC.

This document provides a sample configuration that shows a Cisco ADSL WIC that has been configured with AAL5SNAP and routes IP to a Cisco 6400 Universal Access Concentrator (UAC).

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on these software and hardware versions:

- Cisco 6400 UAC–NRP IOS Software Release 12.1(3)DC1
- Cisco 6400 UAC–NSP IOS Software Release 12.1(3)DB
- Cisco 6130 DSLAM–NI2 IOS Software Release 12.1(5)DA

Hardware Requirements

In order to support the ADSL WIC on the Cisco 2600/3600, this hardware is required:

For the 2600:

- Chassis WIC slots

- NM-2W

For the 3600:

- NM-1FE1R2W
- NM-1FE2W
- NM-2FE2W
- NM-2W

Note: For the Cisco 3600, these do not support the ADSL WIC:

- NM-1E1R2W
- NM-1E2W
- NM-2E2W

Software Requirements

In order to support the ADSL WIC, these minimum Cisco IOS Software releases are required:

- Cisco IOS Software Release 12.1(5)YB (Plus versions only) on the Cisco 2600/3600.
- Cisco IOS Software Release IOS 12.1(3)XJ or later (Plus versions or ADSL feature set only) on the Cisco 1700. The ADSL feature set is identified by "y7" in the image name; for example, c1700-sy7-mz.121-3.XJ.bin.

When you download the image for the Cisco 1700, make sure you select the image name of 1700. Do not download a 1720 or a 1750 image. The features will not support the ADSL WIC.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Conventions

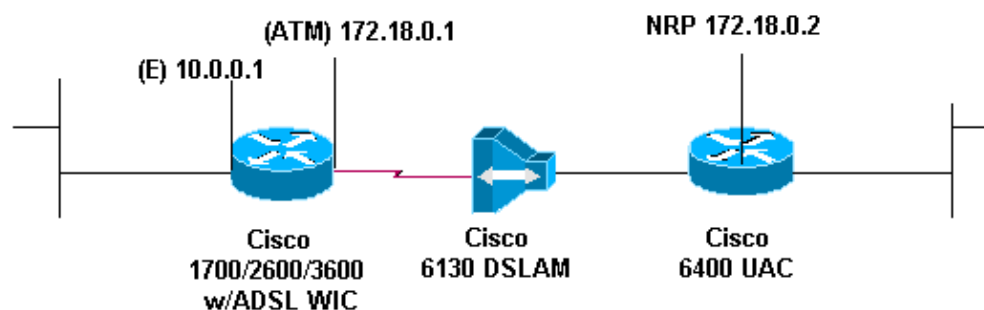
Refer to Cisco Technical Tips Conventions for more information on document conventions.

Configure

In this section, you are presented with the information to configure the features described in this document.

Network Diagram

This document uses this network setup:



Configurations

This document uses these configurations:

Cisco ADSL WIC

```
Current configuration:
!
version 12.1
no service pad
service timestamps debug datetime msec
service timestamps log datetime msec
!
hostname R1
!
ip subnet-zero
!
interface FastEthernet0
 ip address 10.0.0.1 255.0.0.0
 no ip directed-broadcast
 no ip mroute-cache
!
interface ATM0
 ip address 172.18.0.1 255.255.0.0
 no ip directed-broadcast
 no ip mroute-cache
 no atm ilmi-keepalive
 pvc 4/100
  protocol ip 172.18.0.2
  encapsulation aal5snap
!
 bundle-enable
 hold-queue 224 in
!
ip classless
ip route 0.0.0.0 0.0.0.0 172.18.0.2
no ip http server
!
!
end
```

Cisco 6400-NRP

```
Current configuration:
!
version 12.0
no service pad
service timestamps debug datetime msec
service timestamps log datetime msec
hostname NRP
!
redundancy
 main-cpu
  no auto-sync standard
 no secondary console enable
ip subnet-zero
interface ATM0/0/0
 no ip address
 no ip directed-broadcast
 no ip mroute-cache
 no ATM ilmi-keepalive
!
interface ATM0/0/0.4 point-to-point
 ip address 172.18.0.2 255.255.0.0
```

```
no ip directed-broadcast
no ip mroute-cache
PVC 4/100
  protocol ip 172.18.0.1
  encapsulation aal5snap
!
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
!
ip classless
ip route 10.0.0.1 255.255.255.255 172.18.0.1
!
end
```

Verify

There is currently no verification procedure available for this configuration.

Troubleshoot

There is currently no specific troubleshooting information available for this configuration.

Related Information

- [Cisco 6400 Software Setup Guide](#)
- [Cisco 6400 Feature Guide](#)
- [Cisco 6400 Command Reference](#)
- [Asymmetric Digital Subscriber Line \(ADSL\) Support Page](#)
- [Technical Support & Documentation – Cisco Systems](#)

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