Cisco DSL Router Configuration and Troubleshooting Guide – Cisco DSL Router: PC Acting as a PPPoE Client

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Introduction

In this implementation, your Cisco Digital Subscriber Line (DSL) Router is unable to provide value−added services and acts as a simple Asymetric Digital Subscriber Line (ADSL) to Ethernet bridge. Therefore, you must load Point−to−Point−Protocol over Ethernet (PPPoE) client software on each PC on the LAN that requires access to the Internet.

Tip: If you are not familiar with configuring Cisco devices and would like to follow a step−by−step configuration, refer to Step−by−Step Configuration of a PC Acting as a PPPoE Client.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

This document is not restricted to specific software and hardware versions.

Conventions

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

Tasks to Perform

- Configure the ATM interface (the ADSL interface) of the Cisco DSL Router with an ATM permanent virtual circuit (PVC) and encapsulation.
- Configure bridging on your Cisco DSL Router.

- Disable IP routing on your Cisco DSL Router.
- Load PPPoE client software on each PPPoE client PC.
- Configure each PPPoE client per instructions from the software vendor or Internet Service Provider (ISP); for example, domain name, username, and password).

Configure

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

Note: Use the Command Lookup Tool (registered customers only) to find more information on the commands used in this document.

Configuration

Tip: If you are not familiar with configuring Cisco devices and would like to follow a step−by−step configuration, refer to Step−by−Step Configuration of a PC Acting as a PPPoE Client.

This document uses this configuration:

Cisco DSL Router with a PC Acting as a PPPoE Client

```
!--- Comments contain explanations and additional information.


service timestamps debug datetime msec
service timestamps log datetime msec
!
no ip routing
!
interface ethernet0
 no shut
 no ip address
 no ip directed-broadcast
 bridge-group 1
!
interface atm0
 no shut
 no ip address
 no ip directed-broadcast
 no atm ilmi-keepalive
 pvc <vpi/vci>
  encapsulation aal5snap

!--- Common PVC values supported by ISPs are 0/35 or 8/35.
 !--- Confirm your PVC values with your ISP.

 !
 bridge-group 1
!
bridge 1 protocol ieee
!
end
```

Verify

There is currently no verification procedure available for this configuration.

Troubleshoot

If your ADSL service is not working properly, refer to Troubleshooting a PPPoE PC Client.

Related Information

- **Cisco DSL Router Configuration and Troubleshooting Guide – PPPoE Implementation Options**
- **Cisco DSL Router Configuration and Troubleshooting Guide**
- **Technical Support & Documentation – Cisco Systems**

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