Modem−Pooling With DNIS

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Introduction

This configuration is an example of how modem−pooling works on an access server. A customer dials 5551234 and connects to a modem in the pool range of 3 to 5. Lines 3 to 5 have been configured to **autocommand telnet** the user to a specific IP address after the login user ID and password have been entered at the router prompt (>).

Note: If a call comes in for 5552323, it goes to the default modem−pool. Modems not configured for the pool defined above go to the default modem−pool.

Caution: When you configure the called−number feature and do not enter the **max−conn** number, the router defaults the **max−conn** to the number of members in the pool. In this case, modems 3 to 5 are in the pool, so the Cisco IOS® software puts in **max−conn 3** at the end of the **called−number** command. If you change the number of modems in the pool, you have to manually change the max−conn number.

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 IOS Software Release 11.3(1.1)T or later.
- PRI provisioned from Telco for Digital Number Identification Service (DNIS) support.

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

For more information on document conventions, refer to Cisco Technical Tips Conventions.

Configure

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

Note: To find additional information on the commands used in this document, use the Command Lookup Tool (registered customers only) .

Network Diagram

This document uses this network setup:

Configurations

This document uses this configuration:

Router 1

```
!
Current configuration:
!
version 11.3
!
service timestamps debug datetime msec
hostname isdn2-2
!
boot system flash
boot system flash bootflash:
aaa new-model
enable secret 5 xxxxxxxxxx
enable password 7 xxxxxxxx
!
username cisco password 7 xxxxxxxxx
!
modem-pool test
 pool-range 3-5
 called-number 5551234 max-conn 3
!
isdn switch-type primary-5ess
!
controller T1 0
 framing esf
 clock source line primary
 linecode b8zs
 pri-group timeslots 1-24
 description 5551234 pri
!
controller T1 1
 framing esf
```

```
 clock source line secondary
 linecode b8zs
!
interface Loopback0
 ip address 192.168.10.1 255.255.255.0
!
interface Ethernet0
 ip address 10.10.10.1 255.0.0.0
!
interface Serial0
 no ip address
 shutdown
!
interface Serial1
 no ip address
 shutdown
!
interface Serial0:23
 no ip address
 no ip mroute-cache
 isdn incoming-voice modem
 no cdp enable
!
interface Group-Async1
 ip unnumbered loopback0
 encapsulation ppp
 async mode interactive
 peer default ip address pool dialup
 no cdp enable
 ppp authentication chap
 group-range 1 24
!
ip local pool dialup 192.168.10.2 192.168.10.254
!
ip route 0.0.0.0 0.0.0.0 x.x.x.x
!
line con 0
 exec-timeout 0 0
line 1 2
 login local
 autoselect during-login
 autoselect ppp
 modem InOut
 transport input all
line 3 5
 modem InOut
 autocommand telnet 10.10.10.2
line 6 24
 login local
 autoselect during-login
 autoselect ppp
 modem InOut
 transport input all
line aux 0
line vty 0 4
 password 7 xxxxx
!
end

isdn2-2#
```

Verify

There is currently no verification procedure available for this configuration.

Troubleshoot

This section provides information you can use to troubleshoot your configuration.

Troubleshooting Commands

Certain **show** commands are supported by the Output Interpreter Tool (registered customers only) , which allows you to view an analysis of **show** command output.

Note: Before issuing **debug** commands, refer to Important Information on Debug Commands.

- **debug ppp negotiation** shows whether a client is passing Point−to−Point Protocol (PPP) negotiation. At this point you also check for address negotiation.
- **debug ppp authentication** shows whether a client is passing authentication. Use this command if you are running Cisco IOS Release 11.2 or later.
- **debug ppp chap** shows whether a client is passing authentication. Use this command if you are running a release of Cisco IOS earlier than Release 11.2.
- **debug ppp error** displays protocol errors and error statistics associated with PPP connection negotiation and operation.
- **debug modem** shows modem line activity on the router.
- **debug isdn q931** shows ISDN Q.931 events and debugs.

Related Information

- **Dial Technology Support Pages**
- **Technical Support − Cisco Systems**

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