Connecting a Windows 95 Client to a Windows NT Server through a Cisco Router

Introduction

This document describes the problem and solution related to dialing in from a Windows 95 machine using the built-in dialup adapter. There is no problem connecting to the router but when you try to log on to the Windows NT server, this error message is displayed:

Unable to validate password, domain not found...

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on the Windows 95 Operating System.

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 the Cisco Technical Tips Conventions.

Problem

Since there is no problem connecting via Ethernet, you can conclude this is a Cisco problem. Reports show that this issue appears on Shiva LanRovers, as well as other Remote Access Servers. It is actually a Microsoft issue.
There are several causes for this problem:

- The workstation may be configured incorrectly. The minimum configuration in the Network control panel should have these:
  - Client for Microsoft Networks
  - Dial-Up adapter
  - TCP/IP – Dial-Up adapter
- On the Windows NT server, the administrator must have these configured properly on the network:
  - Windows Internet Naming Service (WINS)
  - Windows NT Primary Domain Controller (PDC)

Note: The PDC must be registered with the WINS. These components can coexist on the same server, or on two different machines. The two sections that follow provide a brief description of each component.

**Windows NT PDC**

An individual server is configured to be the PDC. The PDC contains the domain's user account information and all changes to the user account information occur on the PDC. Other servers in the domain can be configured as backup domain controllers (BDC), or, servers. BDCs contain copies of the user account information and are available to authenticate users when they log on to the domain. BDCs also provide authentication fault tolerance. If the PDC is down for any reason, BDCs are available to authenticate users and guarantee their access to network resources. When changes are made to the user account information on the PDC, those changes are replicated to each of the BDCs.

**Windows NT WINS**

WINS is designed to address the problem of locating network resources in a TCP/IP–based Microsoft network by automatically configuring and maintaining the computer name and IP address mapping tables, while serving basic functions such as preventing duplicate network names. WINS is a complementary service to Dynamic Host Configuration Protocol (DHCP) and has a complete, centralized tool for administration on the WINS servers, static name tables, and replication information.

If these components are properly configured on your network, there are a few things to do on your Windows 95 client.

**Solution**

**Configure the Dial–Up Networking Profile**

Complete these steps to configure your dial up networking profile correctly:

1. Highlight the connection profile you have configured for your WindowsNT logon, click on your right mouse button, and select Properties.
2. From the Properties window, select Server Type.
3. In the Type of Dial–Up Server field, make sure you have PPP Windows95, Windows NT 3.5 Internet selected.
4. Make sure you have at least TCP/IP selected in the Allowed network protocols section and click TCP/IP Settings to advance to the next window.
5. In the TCP/IP Settings window, you can choose from these options:
Server assigned IP address – This is used if the server provides your workstation the dial-in IP address. (DHCP)

Specify an IP address – You have a static IP address already predefined on your workstation.

Server assigned name server address – This is used if the server provides your workstation the IP addresses for your primary and secondary DNS and WINS servers.

Specify name server addresses – This is used to define which DNS/WINS server you want to connect to upon dial-up.

6. Make the appropriate entries, and click OK.
7. Go to your Network control panel.
8. In your Network window, select the Identification tab.
9. Enter a Computer name, Workgroup name, and Computer Description, then click OK.

Note: For the Workgroup name, if you have domains on your network, put the name of the domain you are part of in this field. If you have only have workgroups, put the name of the workgroup you are part of in this field. This field is used interchangeably for Workgroup or Domain.

10. From the Network window, double-click on the Client for Microsoft Networks icon. In the Properties window, select Log on to Windows NT domain, and enter the Windows NT domain name here. Click OK when done.
11. Reboot the machine and dial in. When you connect, logon and/or browse for domains through your Network Neighborhood on the Windows 95 Client.

Related Information

- Dial and Access Technology Support
- Technical Support & Documentation – Cisco Systems