AirLoader

Table of Contents

Twin Client Crash When Opening AirLoader Configuration Screen

Introduction

Twin Client crashes when opening the Airloader configuration screen. Users may have a problem with tnconfig in which they cannot bring up the AirLoader screen. They also may have errors trying to run the Wizard, which also accesses AirLoader settings.

Resolution

The issue involves the Microsoft COM dlls somehow becoming out of sync. The following download from Microsoft fixes this.

http://download.microsoft.com/download/msninvestor/Patch/1.0/WIN98/EN-US/mcrepair.EXE

You may view a description of the problem at the link below.

http://support.microsoft.com/default.aspx?scid=kb;en-us;Q321915

Symbol Spectrum 24 Terminal Looking for a New AirLoader PowerNet Server

Introduction

The following describes how to get a Symbol Spectrum 24 terminal to find a new AirLoader PowerNet Server.

Background

In many cases, our resellers have different environments among their customers. They need to transfer control of the AirLoader to the ordered PowerNet product for that site. Often, a good reseller pre-configures the terminals for his customer's environment using the reseller's laptop.

The issue is that once the reseller removes the laptop from the customer's environment, the terminal does not look for a new AirLoader PowerNet Server on the customer's network.

Resolution

To change the AirLoader IP address on the terminal, use the following steps:

1. Reboot the terminal to get to the "Keypress to Continue" Prompt.
2. Use the Shifted "C" key to get to the configuration screen.
3. Select option "2 Terminal Setup".
4. Select "Exit".
5. At the E: prompt, key 'flshctl /w' followed by Enter.
6. Type 'del crfmgr' followed by Enter.
7. Type 'flshctl /ro' followed by Enter.
8. Reboot the terminal.

The terminal will now search for the customers AirLoader PowerNet Server.

Terminal Not Completing an AirLoader Session after Reboot

Introduction

The following technique can be used to determine why Airloader does not complete an AirLoader session after a reboot.

Resolution

Determine what part of the process did not work by reviewing the rfsync.log file found in the x:\Powernet\twinclient directory. The file can be viewed with wordpad or other text file editor.

Example

```
05/25 12:35:15.073    0ms Error: Missing download file - C:\Accounts\United Brass\comtec.ini
05/25 12:35:15.073    0ms Sending request, code [10]
05/25 12:35:15.194  120ms Received response, code [16]
00                            ..
05/25 12:35:15.194    0ms Received incorrect client response
05/25 12:35:15.194    0ms Ending session due to error
05/25 12:35:15.194    0ms Session thread terminating
```

The file "comtec.ini" was specified in the configuration file. However, the user had deleted the file and did not change his configuration file, causing the error.

Timeout Error

The error below can be caused by sluggish IP networks. If this is the case, replace the RFSYNC.exe with the one below. This version has a longer timeout value.

```
02 00 00 00 65 4C 02 00 74 6E 74 35 32 35 30 5C   ....eL..tnt5250\
74 61 70 73 35 32 35 30 2E 65 78 65 00        taps5250.exe.
06/01 114610.461 30790ms Sending request, code [9]
02 00 00 00 0D 09 00 00 74 6E 74 35 32 35 30 5C   ........tnt5250\
72 75 6E 2E 62 61 74 00                 run.bat.
06/01 114620.474 10020ms Error 0 waiting for tftp header <<< 10 second time out
06/01 114620.474    0ms Ending session due to error
06/01 114620.474    0ms Session thread terminating
```

AirLoader Theory of Operation

The airload server (PC) and the airload client (terminal) carry on a dialogue regarding file dates and times. If a file on the airload server has a newer date/time than that on the terminal, the file is airloaded from the server to the terminal. Once the file is airloaded to the terminal, its date/time is updated to be the current time. So, after a file has been airloaded to the terminal, it will have a newer date/time than that on the server and will not be airloaded again, unless the date/time of the file on the server is updated to be newer than that on the terminal.

1. A request code [8] is the airload server (PC) asking the airload client (terminal, loadtaps.exe on Symbol) for a specific files date and time stamp. The "Sending request, code [8]" from the server, should be followed-up with a "Received response, code[8]" from the terminal. For example, here the airload server is asking for the date/time stamp of 6140-35M.cfk

07/11 114644.500 2830ms Sending request, code [8]
36 31 34 30 2D 33 35 4D 2E 63 66 6B 00   6140-35M.cfk.

If the airload client comes back with zeroes for the date/time stamp, like this

07/11 114653.406 8900ms Received response, code [8]
30 30 30 30 30 30 30 30 30 30 30 30 00 30 00   000000000000.0.
07/11 114653.406   0ms terminal date = 1/1/1970 111, pc date = 1/29/2001 141024

it means that the file does not exist on the terminal. The airload client indicates this by sending back zeroes as the date/time, which then get converted to the date 1/1/1970.

If the airload client comes back with a valid date that seems a little older, like this

07/11 114655.921   880ms Received response, code [8]
31 30 33 35 30 36 30 33 33 30 30 31 00 31 36 36   103506033001.166
34 37 00   47.
07/11 114655.921   0ms terminal date = 3/30/2001 10356, pc date = 5/14/2001 134748

it probably means that this is the first airload, and that the date/time you are seeing is the date/time stamp of the file in this particular release of the airload hex file.

If the airload client comes back with a date/time stamp that is fairly new, yet still older than that on the PC, it probably means that the file has been airloaded to the terminal earlier, but there has been a more recent update to the file on the PC.

If the airload client comes back with a date/time stamp that is newer than that on the PC, it means that the file has been previously airloaded to the terminal and the file has not since been updated on the server.

2. A request code [9] is the airload server initiating a file download with the PC. When you see this, a file download is being attempted. This will happen when the target file either does not exist on the terminal or the terminal's file is older than that on the airload server (PC).

For example, here it is sending tntvt\run.bat

07/11 115523.046   0ms Sending request, code [9]
02 00 00 00 CC 0B 00 00 74 6E 74 76 74 5C 72 75   ....tntvt\ru
6E 2E 62 61 74 00   n.bat.

AirLoader Session Not Completed, Terminal Drops to E: Prompt after Reboot

Introduction

An issue has been identified in which the terminal does not complete an AirLoader session after a reboot and the terminal drops to the E: prompt.

Resolution

Make sure that the following items are correct (checked) in Twin Client Manager under Settings / Auto-config:

- The terminal is automatically configured via RF.

- The active setting is selected under the advanced button.

- A group or groups is selected with the corresponding configuration files.

- The terminal is cold booted to get the correct load.

- Force reload is used for replacing the current config file with an older version of a config file.

AirLoader Cannot Find NIC Adapter

Problem Description

AirLoader uses an NDIS driver to find the NIC adapter on Windows systems.

NDIS INFORMATION LINK
http://www.microsoft.com/whdc/archive/ndis5.mspx

A lot of other manufacturers also use this same driver. A problem can arise if a software package installs an older version of this driver. It may work correctly for the software that installed this old version, but it usually breaks other programs that use this driver.

To test if you might have this problem, try changing the NIC adapter in the AirLoader setup. If you get a "No Adapter Found" error, you may have this problem.
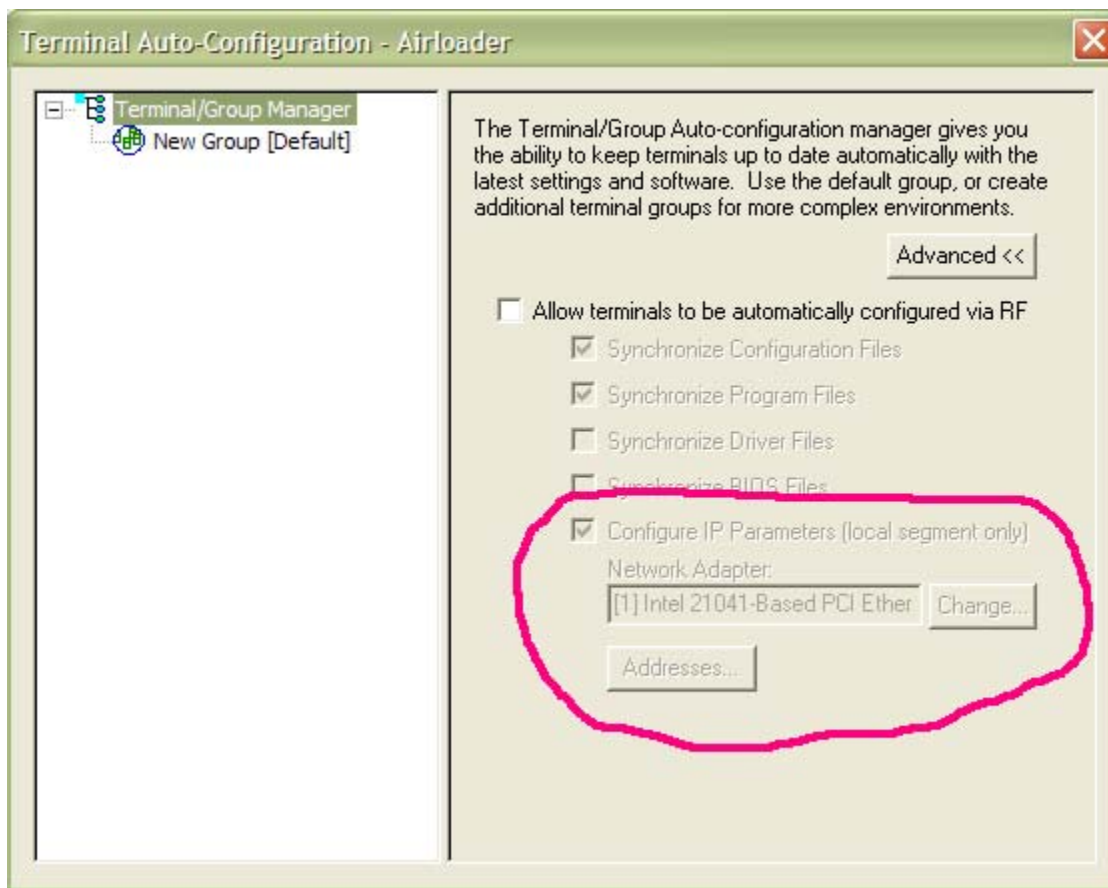
You can also check the trace file adapter.log and you will see entries like the ones below:

06/03 08:44:02.446   0ms [1656] Adapter control created
06/03 08:44:02.446   0ms [1656] In GetAddrMask
06/03 08:44:02.476   30ms [1656] Could Not Open Adapter; Error 0x00000002

06/03 08:44:02.476   0ms [1656] Error obtaining MAC address for adapter: \Device\{7EE74145-C28C-45F5-91C4-BD221E659E7F}

06/03 08:44:05.580 3110ms [1656] Adapter control created
06/03 08:44:05.580   0ms [1656] In GetAddrMask
06/03 08:44:05.610   30ms [1656] Could Not Open Adapter; Error 0x00000002

Resolution

You need to edit the registry to point back to the one AirLoader uses. Doing a re-install of TwinClient will not fix this. The TwinClient install will not change the driver if one is already present.

Perform the steps listed below after an install of WaveLink's Mobile Manager. This software deletes the references to any previously installed NDIS drivers, then places an old outdated version in their program directory and changes the registry to point to this version.

Instructions

1. Using regedit, find the key titled: HKLM\SYSTEM\CurrentControlSet\Services\PCANDIS5

2. Find the value titled "ImagePath". You will probably find it set like this:
   \??\C:\PROGRA~1\Wavelink\MM\Program\PCANDIS5.SYS

Note: The path values in this step may vary depending on what software package installed the driver. The sample above appears after an install of Mobile Manager.

3. Edit the ImagePath value to: \??\C:\WINDOWS\System32\PCANDIS5.SYS

Note: Adjust the C:\WINDOWS part to reflect where you have Windows installed.

4. Once this is done, reboot and test.

About This Document

This document is based on the following Technical Documents in our Notes Database that have been made obsolete: A1073, A1101, T1134, T1172, and T1174.

Please let us know about any errors in this document at:
http://207.241.78.223/isoxpert/calltrak.nsf/WebTracking?OpenForm.