



**6920 Communications Client for  
Windows 95, 98, or NT**

# **USER'S GUIDE**



**P/N: 961-055-002**  
*Revision A*  
*December 1999*

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# Section 1

## Introduction



The “Client Configuration Utility” for Windows 95, 98, or NT, by Norand Mobile Systems Division of Intermecc Technologies Corporation, works in conjunction with the “Norand<sup>®</sup> 6920 Communications Server,” also of Norand Mobile Systems Division. The “6920 Communications Server” waits for a connection request from the “Client Configuration Utility.”

The “Client Configuration Utility” is a TCP/IP communications application using the NRInet communication protocol that functions on a customer’s TCP/IP network.

The “Client Configuration Utility” is supported as a separate installation program or in a 6110 Image on the 6110 Toolkit CD-ROM.

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## System Requirements

These are required for interaction between the “Client Configuration Utility” and the “6920 Communications Server:”

- ▶ “Norand 6920 Communications Server” version 2.0 or later
- ▶ Windows 95, Windows 98, or Windows NT  
*If you are using a Remote Access Server (RAS) dialup, Windows NT Server or Workstation*
- ▶ Microsoft Windows Socket (WinSock) 2.0

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## Client Configuration Utility Components

The “Client Configuration Utility” interface consists of four components:

### ***NRINET.INI***

An INI file containing the necessary settings:

- ▶ Communications (RAS Dial Entry)
- ▶ User Information
- ▶ Host to Contact
- ▶ Default directory paths
- ▶ Upload files
- ▶ Download Request files

You can configure the INI using the ***CCU32.EXE*** application defined below. The customer may create the INI file with their application.

### ***NCS32.EXE***

The Client Configuration Utility Shell that does all communications based on the INI file configuration. ***NCS32*** contacts the host, sends and receives files and brings down the session (including the dialup networking if used).

### ***CCU32.EXE***

This application configures the INI file used by the ***NCS32.EXE*** (Client Configuration Utility Shell) and ***NRINET.DLL*** applications.

This application also offers a method to launch ***NCS32.EXE*** (which is what actually does the communications based upon NRInet settings, such as dialup phone-book entry, or already connected). ***CCU32.EXE*** also provides a method to view the log file created from the session.



## **NRINET.DLL**

A DLL file handling the NRInet protocol and file send-and-receive functions. This DLL could be used directly by other C++ applications, calling the functions directly.

- **NOTE:** *The interface for using the DLL directly is not yet released. It may be released as a COM Object in the future. Applications needing to communicate should create the **NRINET.INI** file, then call the **NCS32.EXE** communication shell to start the transfer.*

The application should use the Log file to determine communications success or failure.

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## **Customer Applications**

Most customers will develop applications to create the INI file and call the “Client Configuration Utility” shell (**NCS32.EXE**) to communicate.

Communication success should be determined by the customer application. A detailed session log is in the Log file.

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## **About this Publication**

Read this User’s Guide thoroughly before you install the “Client Configuration Utility” software for the first time. This guide consists of the following:

- **Section 1, Introduction**  
Introduces the “Client Configuration Utility” application and provides system requirements.
- **Section 2, Server and Client Setup**  
Instructs how to configure the “6920 Communications Server” for communication with the “Client Configuration Utility.”

- ▶ **Section 3, Using the Client**  
Explains how to configure the “Client Configuration Utility” and do a TCOM session.
- ▶ **Section 4, Dial-Up Networking for Windows 95**  
Includes instructions to add a dial-up adapter or TCP/IP to your existing network components, configure TCP/IP, and set up dial-up properties.
- ▶ **Appendix A, NRINET.INI Control File**  
Describes the *NRINET.INI* control file options.
- ▶ **Appendix B, Error Codes**  
A list of error codes, symptoms, and their solutions.

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## ***Related Publications***

- ▶ *Norand*<sup>®</sup> *6920 Communications Server User’s Guide* (P/N: 961-021-014) Describes how to set up, install, configure, and use the “6920 Communications Server.”
- ▶ *Norand*<sup>®</sup> *6920 Communications Server Reference Manual* (P/N: 977-021-001) Provides detailed descriptions and formats of the “6920 Communications Server” operation. Other parts of the system are *not* described. Contact an account representative for details.

## **Customer Support**

Customer Support's on-going objective is to provide quality support to all of our customers worldwide.

### **Customer Response Center**

The Customer Response Center (technical support) telephone number is 800-755-5505 (U.S.A. or Canada) or 425-356-1799. The facsimile number is 425-356-1688. Email is *support@intermec.com*.

If you email or fax a problem or question include the following information in your message: your name, your company name and address, phone number and email to respond to, and problem description or question (the more specific, the better). If the equipment was purchased through a Value-Added Reseller please include that information.

### **Web Site**

The Customer Support File Libraries, including Hot Tips and Product Awareness Bulletins, are available on the Internet. New users start at the Intemec web site: *http://www.intermec.com*. Choose "Support," then "Product Support," then "Conference Area." Look on the main page for a link to register new customers.

A PDF version of this manual will be available at this address *http://www.intermec.com/manuals/english.htm* or choose "Products" → "Manuals" → "English" from the home page.

## **Bulletin Board Service**

The Customer Support Bulletin Board (BBS), maintained by the Norand Mobile Systems Division of Intermecc Technologies Corporation, provides software and documentation:

- ▶ **Phone number:** 319-369-3515 (14.4 Kbps modem)  
319-369-3516 (28.8 Kbps modem)
- ▶ **Protocol:** Full duplex, ANSI or ANSI-BBS; 300 to 28,800 bps; v.32bis; 8 bits, no parity, 1 stop bit. *For high-speed modems, disable XON/XOFF and enable RTS/CTS.*

This is the same location available via the web site. If your web access uses high-speed phone lines, the web interface provides a faster response.

## Section 2

# Server and Client Setup



You must have the “Norand<sup>®</sup> 6920 Communications Server” version 2.0 or later set up on your PC to interact with the “Client Configuration Utility.”

If not, contact your Value-Add Reseller (VAR) or Systems Engineer about software updates.

► **NOTE:**

See the Norand<sup>®</sup> 6920 Communications Server User’s Guide (P/N: 961-021-014) for full details about configuring this server.

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## Configure the Server

Assuming you have Version 2.0 or later on your PC, configure the “6920 Communications Server” for proper interaction with the “Client Configuration Utility.”

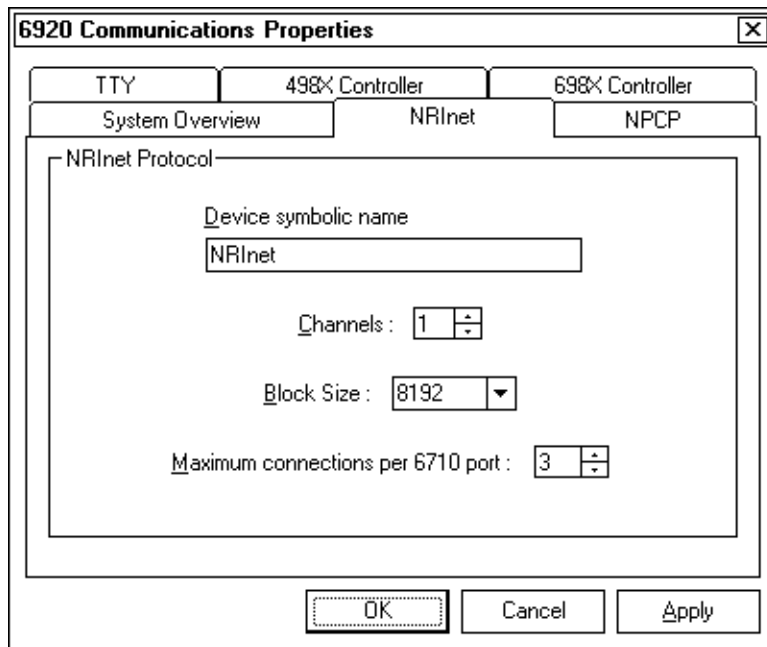
### Communications Properties

The “Communications Properties” window configures the NRInet protocol and other protocols.



1. From the “6920 Communications Server” menu, click the red **Communications Properties** tool, or select **Setup** → **Communications Properties** to access the “Communications Properties” window.

- Click the **NRInet** tab to access the “NRInet” page to set the system up for the NRInet protocol.



- Enter the channel name on which the protocol is set in the **Device symbolic name** field, such as “NRInet.”
- In the **Channels** field, select the applicable number of channels to support this protocol:
  - ▶ Windows 95 1 or 2 channels
  - ▶ Windows 98 1 or 2 channels
  - ▶ Windows NT Workstation 1–10 channels
  - ▶ Windows NT Server 1–16 channels
- Set the **Block Size** field to “8192” to set the size of each block of data.

► **NOTE:** *If you are using Windows CE-based clients, set the **Block Size** field to 256.*

6. If you are working with a 6710 Mobile Bridge port, use the **Maximum connections per 6710 port** field to set the maximum number of simultaneous client connections allowed per 6710 Mobile Bridge port.

This feature works well for low bandwidth wide area connections. The recommended setting is “3” but the setting can be increased or decreased to suit your WAN speed and traffic.

7. Click the **Apply** button to save these changes, then click **OK** to exit “Communications Properties.”

These configurations are not effective until the next time communications are started or restarted with the “6920 Communications Server.”

See the *Norand 6920 Communications Server User’s Guide* for more information about “Communications Properties.”

## System Properties

The “System Properties” window has six pages, which address end sessions, user setup, importing and exporting data, starting processes, and logging properties.

Use the “User Setup” page to set up properties for all the hand-held computers at a given site.

See the *Norand<sup>®</sup> 6920 Communications Server Reference Manual* (P/N: 977-021-001) to set up Initial Download (IDL) files, to download to computers, and to set up methods to download files for version, password, or flash checking.



1. From the “6920 Communications Server” menu, click the yellow **System Properties** tool, or select **Setup** → **System Properties** to bring up the “System Properties” window.
2. Click the **User Setup** tab.

3. Enter the pertinent information in the fields as defined on the next three pages. *Note: the fields in this illustration contain default start positions for the "Client Configuration Utility."*

The screenshot shows the "6920 System Properties" dialog box with the "Log Setup" tab selected and the "User Setup" sub-tab active. The dialog contains several configuration fields:

- Terminal ID Position:** 41
- Terminal ID Length:** 6
- Enable Version Checking**
  - Version Information Position:** 88
  - Version Information Length:** 10
- Enable IDL Checking**
  - IDL Flag Position:** 40
  - Multiple Application Support**
- Enable Password Checking**
  - Password Position:** 0
  - Password Length:** 0
- Enable Flash Checking**
  - Flash Information Position:** 69
  - Flash Information Length:** 10

At the bottom of the dialog are three buttons: "OK", "Cancel", and "Apply".



## Terminal ID

The terminal ID is application-specific and must be uploaded in the first 256 characters of data.

- ▶ **Terminal ID Position (Default Start Position: 41)**  
(Terminal application dependent) Click the scroll buttons to select the position in the first upload record (1–256) to start reading the terminal ID.
- ▶ **Terminal ID Length (Default: 6)**  
(Customer business dependent) Click the spin buttons to select the number of bytes (1–16) the system is to read for the terminal ID information.

## Application Version Information

The version information is application-specific and must be uploaded in the first 128 characters of data. If enabled, the system compares the hand-held computer's application version with the scheduled application version. If there is a difference, the system automatically downloads the scheduled application version to the hand-held computers.

- ▶ **Enable Version Checking**  
Check this box to enable the system to search the first record for the application version.
- ▶ **Version Information Position (Default Start Position: 88)**  
(Application dependent) If version checking is enabled, click the spin buttons to select the start position (1–128) where the system is to read the version information.
- ▶ **Version Information Length (Default: 10)**  
(Application dependent) If version checking is enabled, click the spin buttons to select the number of bytes (1–10) the system is to read for the version information.

## **IDL Flag**

If IDL Checking is enabled, the system searches the first record for the IDL flag. If the flag is raised by the application, the system sends down files that are scheduled for IDL. This normally only occurs when a hand-held computer is initially (newly) booted.

- ▶ **Enable IDL Checking**  
Check this box to enable the system to search for the IDL flag.
- ▶ **IDL Flag Position (*Default Start Position: 40*)**  
(*Application dependent*) — If IDL checking is enabled, click the spin buttons to select the number that dictates the position of the IDL flag (1–256). Below are the flags, with meanings, recognized by the system:
  - ▶ 0 Regular downloads
  - ▶ 1 Send files scheduled for IDLs
  - ▶ 5 Special files, such as presales
- ▶ **Multiple Application Support**  
This field is not supported for the “Client Configuration Utility.” See the *Norand<sup>®</sup> 6920 Communications Server User’s Guide* for information on multiple application support, if you want to use this feature.

## **Password Checking**

Password checking is not supported for the “Client Configuration Utility.” See the *Norand<sup>®</sup> 6920 Communications Server User’s Guide* for information on password checking, if you want to use this feature.

## **Flash Version Information**

The flash version is application-specific and must be uploaded in the first 128 characters of data. If enabled, the system searches the first record for the flash version information.

▶ **Enable Flash Checking**

Check this box to enable the system to search for the flash version information.

▶ **Flash Information Position (Default Start Position: 69)**

If flash checking is enabled, click the spin buttons to select the starting position (1–128) where the system is to read the flash information.

▶ **Flash Information Length (Default: 10)**

If flash checking is enabled, click the spin buttons to select the number of bytes (1–10) the system is to read for the flash information.

Click the **Apply** button to save these changes. Click the **OK** button to exit “System Properties.”

See the *Norand 6920 Communications Server User’s Guide* for more information about “System Properties.”

▶ **NOTE:**

*These properties can be changed at any time, but do not become effective until the next time that process is started or restarted.*

---

## Install the Client

This section tells how to install the “Client Configuration Utility” software. The installation uses a floppy diskette to install the client components onto a fixed disk.

Be sure to read the **README.TXT** file on the floppy diskette before doing the installation. The **README.TXT** file contains any updates made to the application since this publication was released.

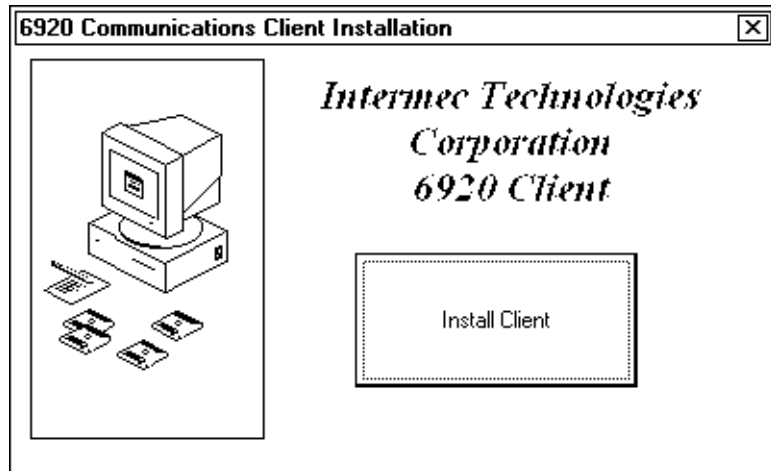
► **NOTE:**

*The Installation program may warn you if you do not have sufficient privileges to install this software. If you receive such a warning, contact your systems administrator for assistance.*

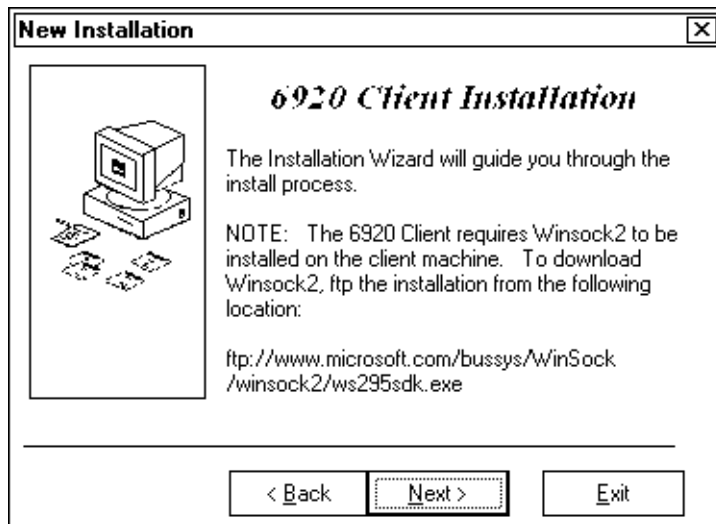
To install the “Client Configuration Utility” application:

1. Insert the floppy diskette into the PC floppy disk drive. For this example, the floppy drive is referred to as the **A:**\ drive.
2. From the Windows desktop, select **Start** → **Run** to access the “Run” window.
3. Type “A:\6920Client.EXE” in the **Open** field, then click the **OK** button to start the installation.

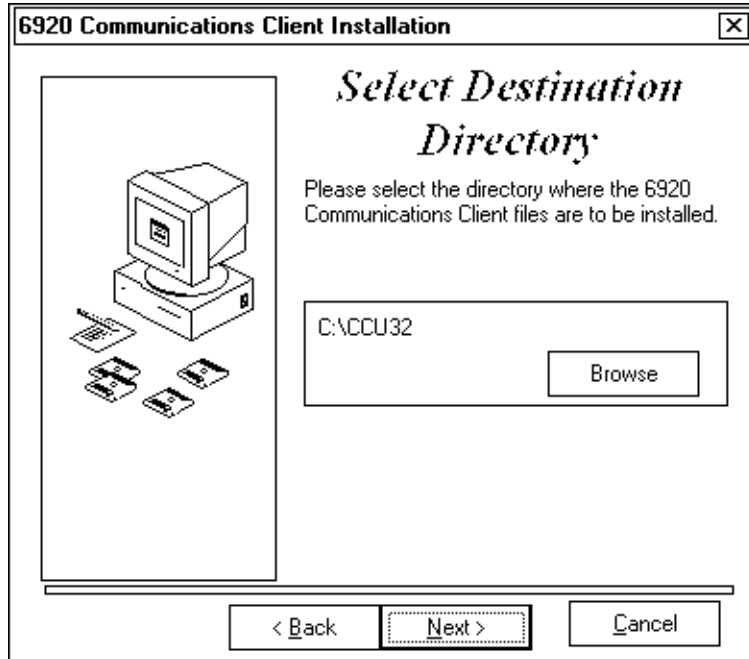
- Click the **Install Client** button to begin the installation.



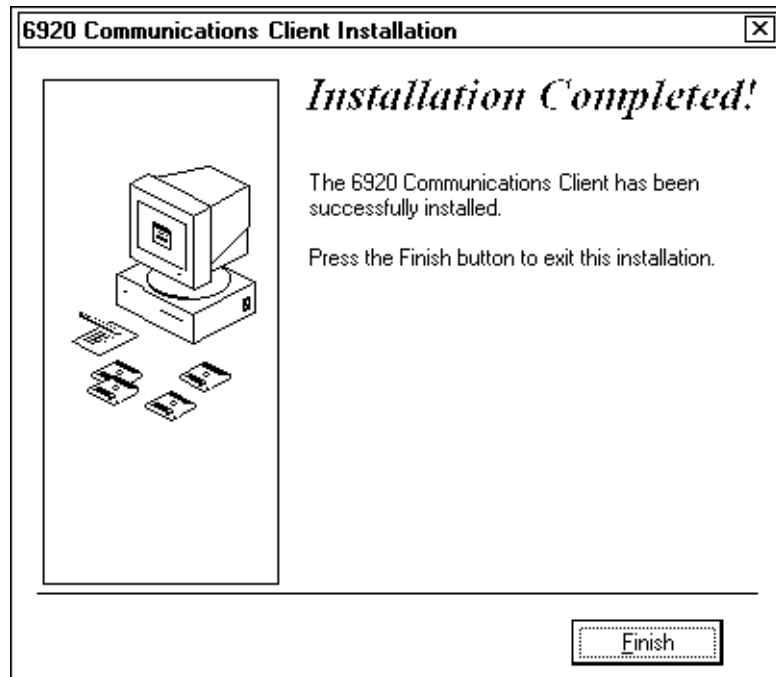
- The following screen contains instructions to include WinSock2 on the client device. Note the location to ftp the installation. Click the **Next** button to continue.



- Click the **Browse** button to set another location for the 6920 Client files, if you do not want to use the default "C:\CCU32" directory. Click the **Next** button to complete the installation.

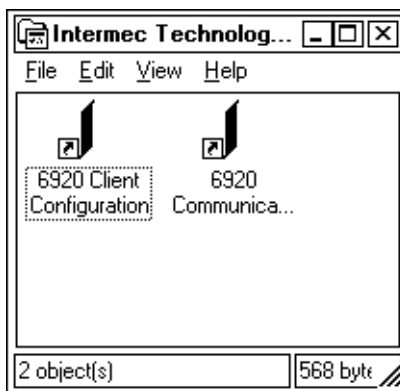


7. A progress window appears to show the progress of the files and time remaining for this installation. If successful, the “Installation Completed” screen finishes the installation. Click the **Finish** button to exit the installation program.



The “Client Configuration Utility” and the “NCS32” program are placed in the following “C:\Intermec Technologies Corporation” directory.

- ▶ Double-click the **6920 Client Configuration** icon to activate the “Client Configuration Utility.”
- ▶ Double-click the **6920 Communications Client** icon to activate the “NCS32” program.



- ▶ **NOTE:** *If you encounter any problems during this installation, contact Customer Support at 800-755-5505 (U.S.A. or Canada) or 425-356-1799 for assistance.*

---

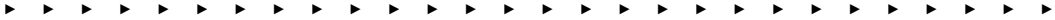
## 6110 Image

The 6110 Toolkit CD-ROM contains an image which has the NRInet loads, Dialup Networking installed, and the NDIS/RS-485 networking configured. See the *6110 Hand-Held Computer Technical Reference* (P/N: 977-054-009) for information.

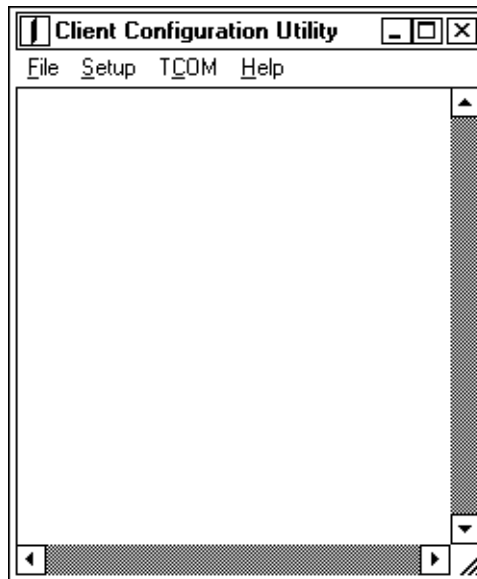


## Section 3

# Using the Client



The “Client Configuration Utility” communicates with the “Norand<sup>®</sup> 6920 Communications Server” using the NRInet communication protocol. From the Windows desktop, either double-click the **6920 Client Configuration** icon (shown left) or select **Start** → **Programs** → **Intermec Technologies Corporation** → **6920 Client Configuration** to activate the “Client Configuration Utility” window.

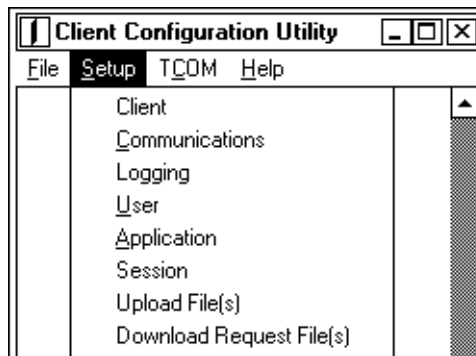


There are four menu options: **File**, **Setup**, **TCOM**, and **Help**. **File** contains the standard **Exit** feature to exit the “Client Configuration Utility” application.

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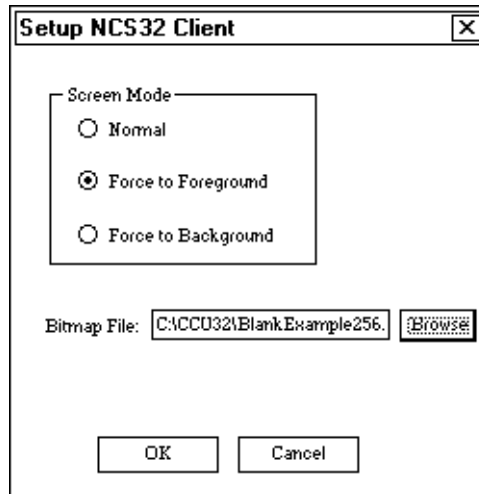
## Configure the Client

The **Setup** menu configures the “Client Configuration Utility” to work with the “6920 Communications Server.”



## Client

Select **Setup** → **Client** to access the “Setup NCS32 Client” window to adjust the screen mode of the “NCS32” screen.



Select any of the three screen **Mode** options to determine how you want the “NCS32” program to behave.

▶ **Normal**

The “NCS32” application acts like a standard Windows application.

▶ **Force to Foreground**

This option sets the Z-order of the “NCS32” application to the front (or top) of all active Windows applications.

▶ **Force to Background**

This sets the Z-order of the “NCS32” application to the back (or bottom) of all active Windows applications.

If you wish to change the appearance of the “NCS32” screen, you can enter an alternate device independent bitmap (DIB) file in the **Bitmap File** field. Either type in the DIB file or use the **Browse** button to locate and assign the DIB file.

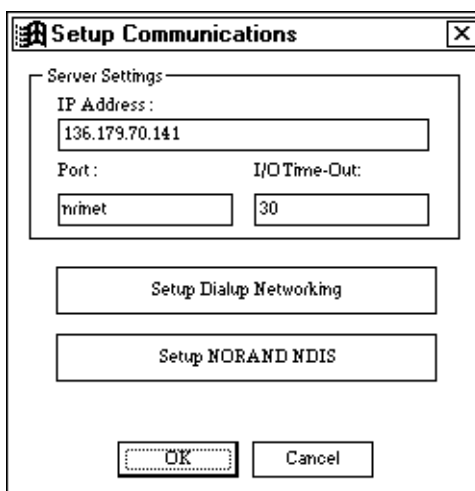
**EXAMPLE:**

To replace the “Intermec Technologies Corporation” logo (sample on page 3-19) in the “NCS32” screen with a blank area, enter “C:\CCU32\BlankExample256.bmp” in the **Bitmap File** field. This file is included in your “CCU32” directory. The next time you do start an “NCS32” screen, you will see a white box where the “Intermec Technologies Corporation” used to appear.

Click the **OK** button to apply your changes to the “NCS32” screen. You will see your changes the next time you start a telecommunication session via “NCS32.”

## Communications

Select **Setup** → **Communications** to configure server and dialup settings in the “Setup Communications” window.



### Server Settings

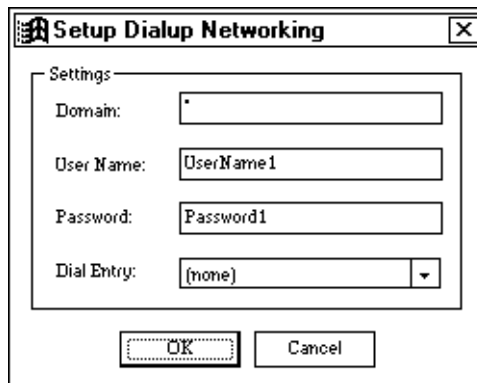
Use **Server Settings** to identify the “6920 Communications Server” with which this client device interacts.

- ▶ **IP Address** Using up to 128 characters, enter the IP address or host name of the “6920 Communications Server” with which the client device is to interact.

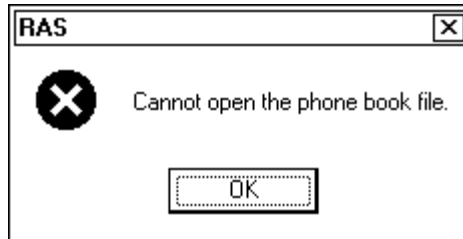
- ▶ **Port** Enter the TCP/IP port number on which the “6920 Communications Server” is configured. The default value is 44965. Note: Size depends on the maximum port number available to TCP/IP (up to 64 characters).
- ▶ **I/O Time-Out** Set an amount of time (in minutes) in which the client device is to wait for activity from the “6920 Communications Server.” The default is 30 minutes.

## Dialup Networking

If you are using a Windows NT dialup PPP Remote Access Server (RAS), click the **Setup Dialup Networking** button to access the “Dialup” window:



- **NOTE:** *If your system does not have a default RAS Phone Book configured, the following message will appear. See the Setting up Dialup Networking section for more details.*



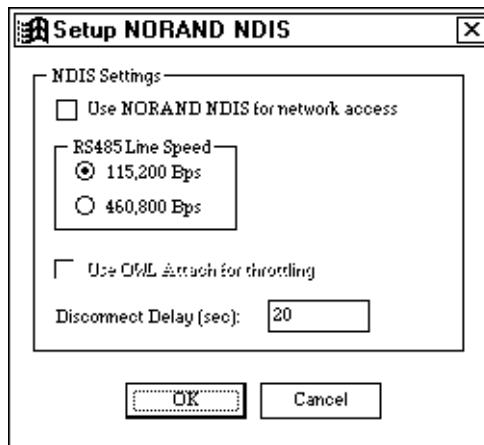
- **Domain** Enter the Windows NT Domain name to be provided to the dialup PPP server (up to 32 characters for Windows 95, 15 characters for Windows NT). An asterisk (\*) defines any local domain.
- **User Name** Enter a user name with which the dialup PPP server is to connect (up to 32 characters for Windows 95, 20 characters for Windows NT).
- **Password** Enter the password with which the dialup PPP server is to connect (up to 32 characters for Windows 95; 14 characters for Windows NT).
- **Dial Entry** Click the scroll button to select the RAS Phone Book Entry used by *NCS32.EXE* for dialup PPP connections.

## NORAND NDIS

► **NOTE:**

Instructions for installing the RS-485 serial card and RS-485 NDIS driver are in the Norand 6920 Communications Server User's Guide (P/N: 961-021-014).

If you are using an RS-485 serial card and RS-485 NDIS driver for communications, click the **Setup NORAND NDIS** button to access the "Setup NORAND NDIS" window, then:



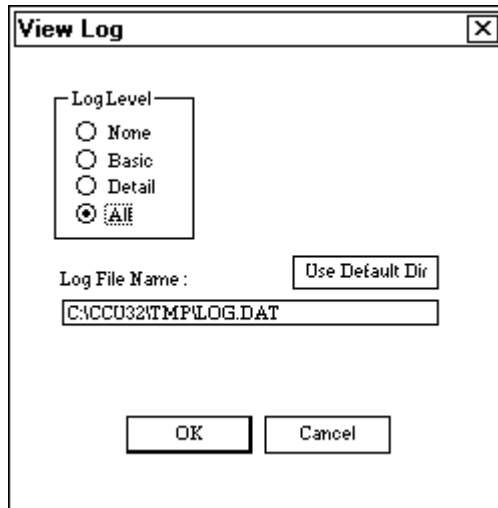
- **Use NORAND NDIS for network access** *This is required for the 6110 Hand-Held computer.* Check this box for the 6110 Computer to activate the **LAN2COM.VXD** file, which shares the COM1 port between the standard serial operations and the RS-485 NDIS communication driver and to use the RS-485 serial card for Local Area Network (LAN) connections.
- **RS485 Line Speed** Select either option to set the line speed at either 115,200 bits per second (bps) or 460,800 bps. 115,200 bps is the default.

- ▶ **Use OWL Attach for throttling** *Not available on Windows CE-based clients.* Required for the 6710 Access Point. When checked, the “6920 Communications Client” is connected through a 6710 Access Point and throttles the active number of connections to a “6920 Communications Server” (in software versions 2.50 or greater) per RS-485 connection.
- ▶ **Disconnect Delay (sec)** This sets the time to wait for network activity to finish before disabling the NNDIS driver. Default is 20 seconds.



## Logging

Select **Setup** → **Logging** to access the “View Log” window and set log message types and name the file in which each “NCS32” telecommunications session (page 3-18) with the “6920 Communications Server” is recorded. If left blank, the default directory assigned in “Setup Session” is used.

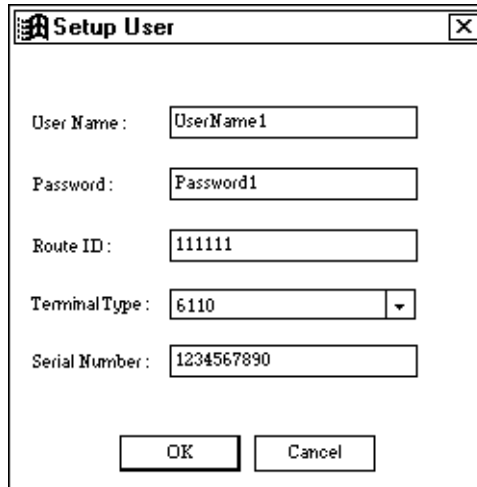


Select one of four **Log Level** options to state what messages are logged into the file named in the **Log File Name** field. Each option measures the detail of each log message, “Basic” lists the transfer files, “Detail” includes start and stop messages, “All” and “None” are self-explanatory.

If the default directory listed in the “Setup Session” window is suitable for logging messages, leave the **Log File Name** field blank or click the **Use Default Dir** button to assign the default directory to this field. You can enter a different directory to which to store log messages in this field.

## User

Select **Setup** → **User** to access the “Setup User” window to enter the **User Name**, **Password**, **Route ID**, and hardware **Serial Number** assigned to the client. Click the **Terminal Types** scroll button to identify this client device:



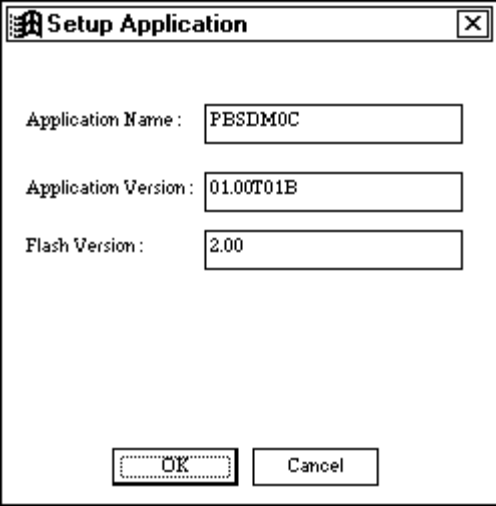
The image shows a "Setup User" dialog box with the following fields and values:

Field	Value
User Name	UserName1
Password	Password1
Route ID	111111
Terminal Type	6110
Serial Number	1234567890

Buttons: OK, Cancel

## Application

Select **Setup** → **Application** to enter the information about the application stored in the client device in the “Setup Application” window. This is important when an installation uses hand-held computer application version checking, which allows for automatic downloading of new application versions.



The image shows a dialog box titled "Setup Application". It has a standard Windows-style title bar with a close button (X) in the top right corner. The dialog contains three text input fields, each with a label to its left:

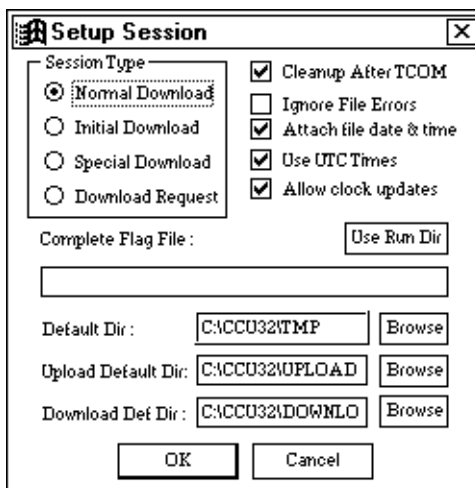
- Application Name :** The input field contains the text "FBSDMOC".
- Application Version :** The input field contains the text "01.00T01B".
- Flash Version :** The input field contains the text "2.00".

At the bottom of the dialog, there are two buttons: "OK" and "Cancel". The "OK" button is highlighted with a dashed border, indicating it is the default action.

Enter a description of the application that is on the client device (**Application Name** field — up to 30 characters), which version of the application is in the client device (**Application Version** field — up to 10 characters), and what flash version is in the client device (**Flash Version** field — up to 10 characters).

## Session

Select **Setup** → **Session** to dictate the type of downloads, to assign the log file name, and to modify directory names and how they are to be processed in the “Setup Session” window.



### Session Type

Select the download type to be performed with the “6920 Communications Server.”

- ▶ **Normal Download** Identifies a normal daily transaction.
- ▶ **Initial Download (IDL)** Downloads a new set of data, usually performed after downloading a new application.
- ▶ **Special Download** Applies to midday or extraordinary transactions, such as presales.
- ▶ **Download Request** Requests specific files from the “6920 Communications Server.” This primarily downloads applications to a new client.

## File Customization

- ▶ **Cleanup after TCOM** Check this box to delete all temporary files from the default directory after each telecommunications session. Remove the check mark if you want to keep the temporary files in the default directory.
- ▶ **Ignore File Errors** Generally, errors caused by missing files are reported to the “6920 Communications Server” as “GOOD TCOM.” Click this box to *not* report these errors.
- ▶ **Attach file date & time** Check this box to send date and time information with each file uploaded to the “6920 Communications Server.”
- ▶ **Use UTC Times** This option is available in “6920 Communications Server” versions 2.62 or greater. The default time sent to the “6920 Communications Server” is the local time when the file is created. Check this box if the files in UTC (Universal Time Coordinated) are to reflect the time from the server’s zone rather than the local zone.
- ▶ **Allow clock updates** The default is for the “6920 Communications Server” to update the system clock and the clients to set their system time based on the UTC system time of the server.

▶ **NOTE:**

*Both the “6920 Communications Server” and the clients must have the correct time zone information for accurate transactions.*

## Directories

Enter the appropriate directories for telecommunications storage or click the **Use Run Dir** button to automatically enter the current directories being used.

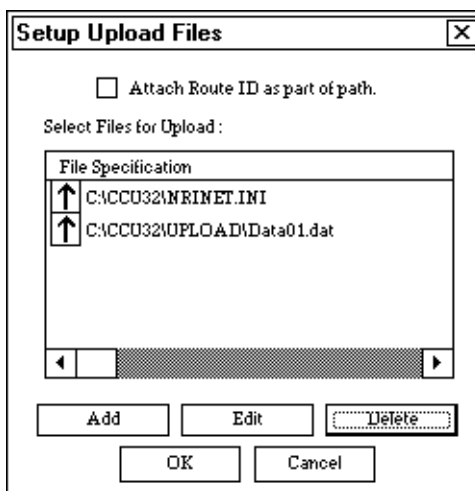
- ▶ **Complete Flag File** Use up to 255 characters to name a flag file to be created when a telecommunications session is completed.

► **NOTE:** If no directory is specified, the “Client Configuration Utility” uses the respective **Default Dir** entry (described below) as the default directory. The log file is overwritten each time a telecommunications session is performed.

- **Default Dir** Use up to 255 characters to change the directory on which the “Client Configuration Utility” is to store temporary files and log files. If no entry, the “Client Configuration Utility” uses the current directory as the default.

## Upload File(s)

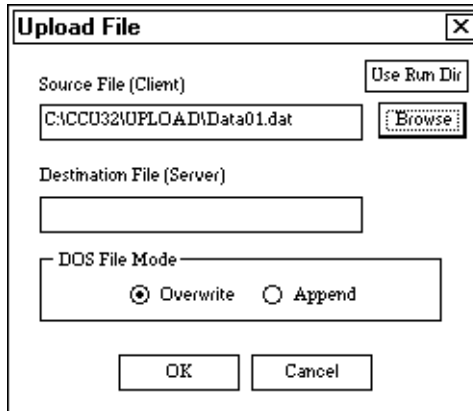
Select **Setup** → **Upload File(s)** to select files to be uploaded upon connection with the “6920 Communications Server” via the “Setup Upload Files” window.



- **Attach Route ID as part of path** Check this box to include the route ID with the path of the file sent to the server. If a file has a destination path (defined in the “Upload File” window below), the route ID is *not* included in the path.

## Add or Edit Upload Files

Click the **Add** button to select source files for upload or the **Edit** button to modify existing files.

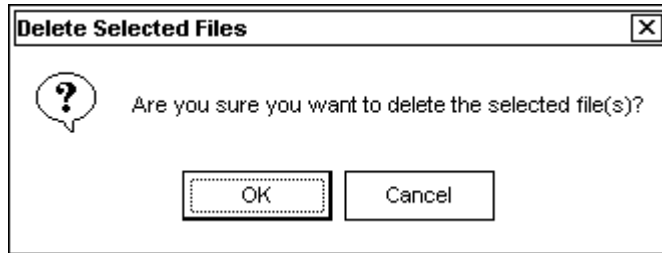


- ▶ **Source File (Client)** Specify the directory to which the source files are stored (up to 255 characters) or click the **Use Run Dir** button to automatically enter the current directory being used. If no entry, the **Default Dir** directory (page 3-14) is used as the default.
- ▶ **Destination File (Server)** Enter the directory on the “6920 Communications Server” where upload files are to be stored (255 characters).
- ▶ **DOS File Mode** Select either **Overwrite** to have the latest upload files overwrite older upload files or **Append** to retain all upload files as they occur.

Click the **OK** button to save the changes and return to the “Setup Upload Files” window.

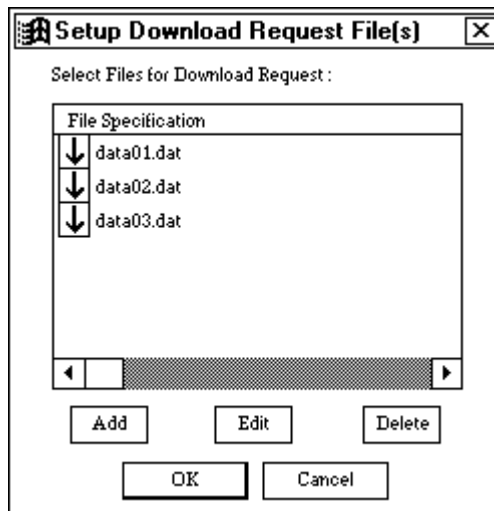
## Delete Upload Files

Use the **Delete** button to remove any upload files from the list of files for upload. Click the **Ok** button to confirm.



## Download Request File(s)

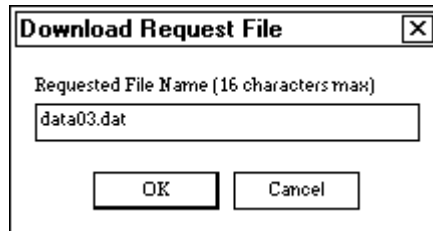
Select **Setup** → **Download Request File(s)** to specify the names of any files that the client wants to request to be downloaded from the server (i.e., not already part of the standard list of download files) via the "Setup Download Request File(s)" window.





### **Add or Edit Download Files**

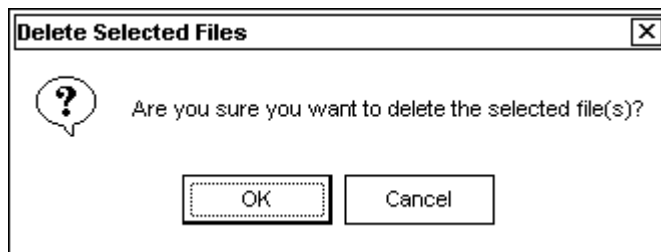
Click the **Add** button to select source files for download or the **Edit** button to modify existing files.



Enter the filename, using up to 16 characters, then press **OK** to include this information in the **Select Files for Download Request** list.

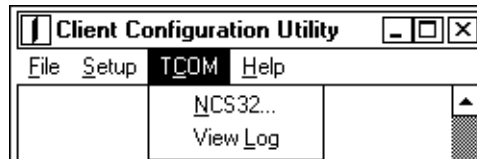
### **Delete Download Files**

Select a file that you want removed from the **Select Files for Download Request** list, then click the **Delete** button. A verification window appears, click **OK** to confirm.



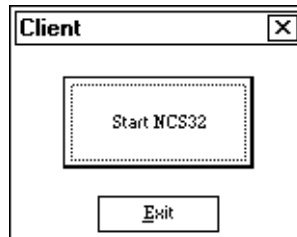
## Telecommunications Sessions

Use the **TCOM** menu for telecommunications sessions with the “6920 Communications Server.”

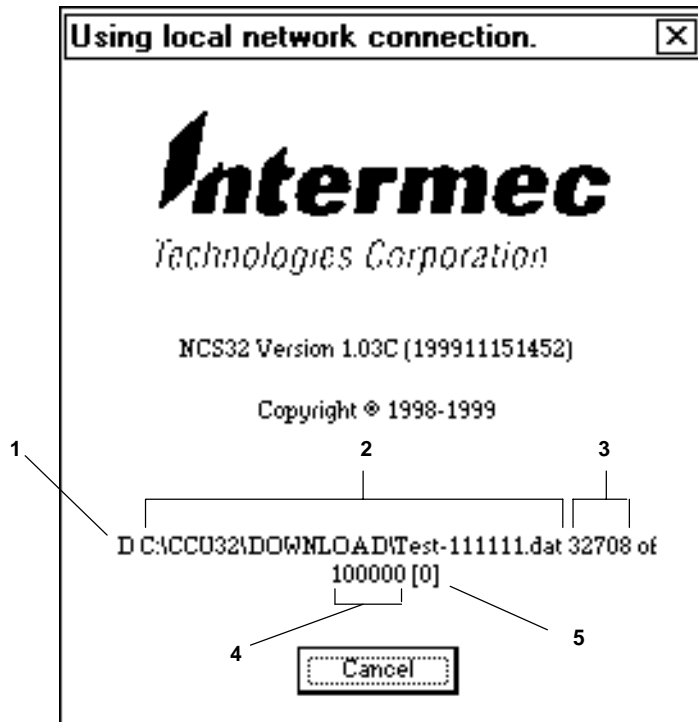


### NCS32

Select **TCOM** → **NCS32** to access the “Client” window, then click the **Start NCS32** button to activate a telecommunications session with the “6920 Communications Server.”



During each telecommunication session with the server, file information is displayed. Use Figure 3-1 as a guide to interpret the telecommunications session status information:



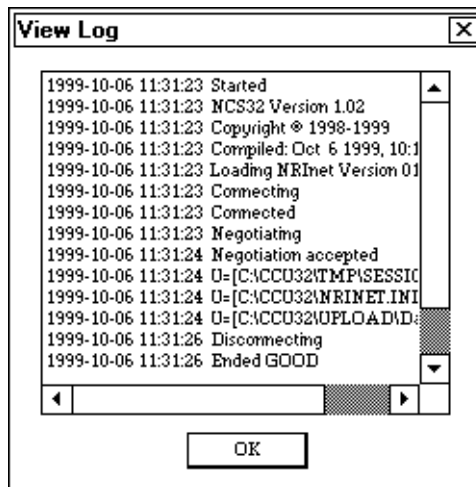
1. "U" Uploading or "D" Downloading
2. File being loaded
3. Current bytes transferred
4. Total file size
5. Error flag

*Figure 3-1*  
**TCOM Session Status Information**

► **NOTE:** For a list of errors, meanings, and solutions, see Appendix B.

## View Log

The results of each launch are recorded in a log as dictated by the “View Log” window on page 3-9. This log is rewritten with each launch. Select **TCOM** → **View Log** to see the contents of the “View Log” window. Below is a sample “View Log” when “Log Level” (via “View Log” window, page 3-9) is set to “Detail:”



► **NOTE:**

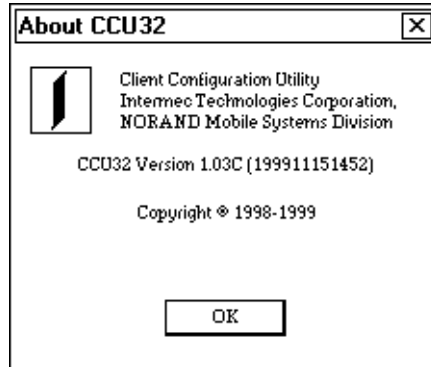
You can activate the “NCS32” program outside the “Client Configuration Utility.” From the Windows desktop, either double-click the **6920 Communications Client** icon (shown below) or select **Start** → **Programs** → **Intermec Technologies Corporation** → **6920 Communications Client** to activate the “NCS32” program.



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## About CCU32

**Help** contains an **About** feature that defines the current version of this application. Select **Help** → **About** to see the following “About CCU32” information window:





## Section 4

# Dial-Up Networking for Windows 95



Information for this section is based on information from Steve Jenkins, webmaster of a CNET, Inc service. Further information about setting up dial-up networking may be available via this URL: *<http://www.winfiles.com>*

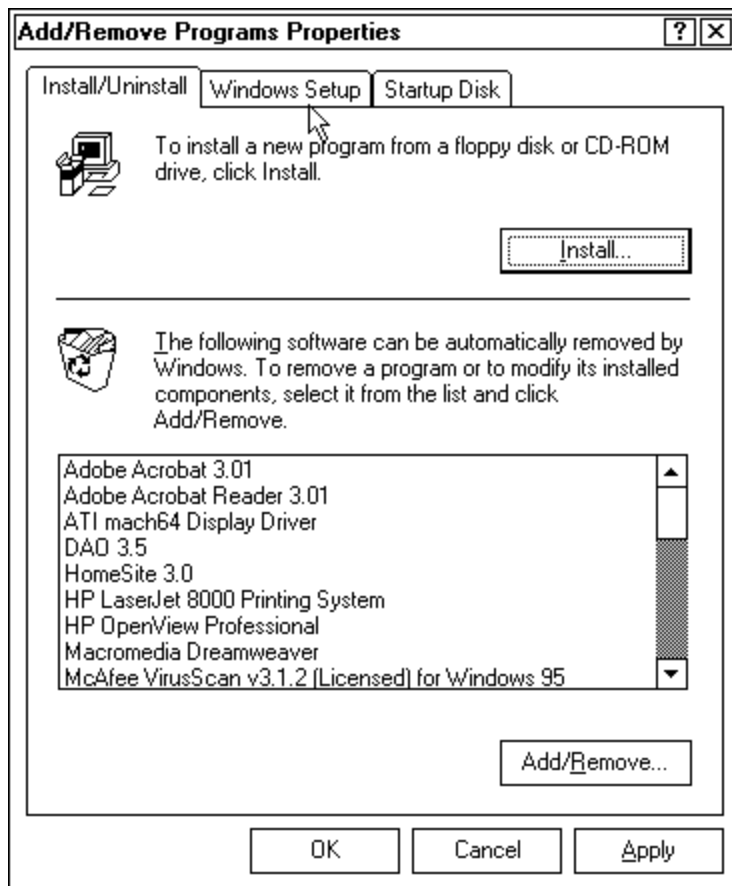
Gather the following information before you set up the dial-up networking:

- ▶ Your PPP user name and password.
- ▶ Whether you have a static (dedicated) or a dynamic (variable) IP address
- ▶ The telephone number of the PPP dial-up server
- ▶ The addresses of your ISP's primary and secondary DNS servers (unless they support automatic DNS server assignment)

## Verify Dial-Up Networking Installation

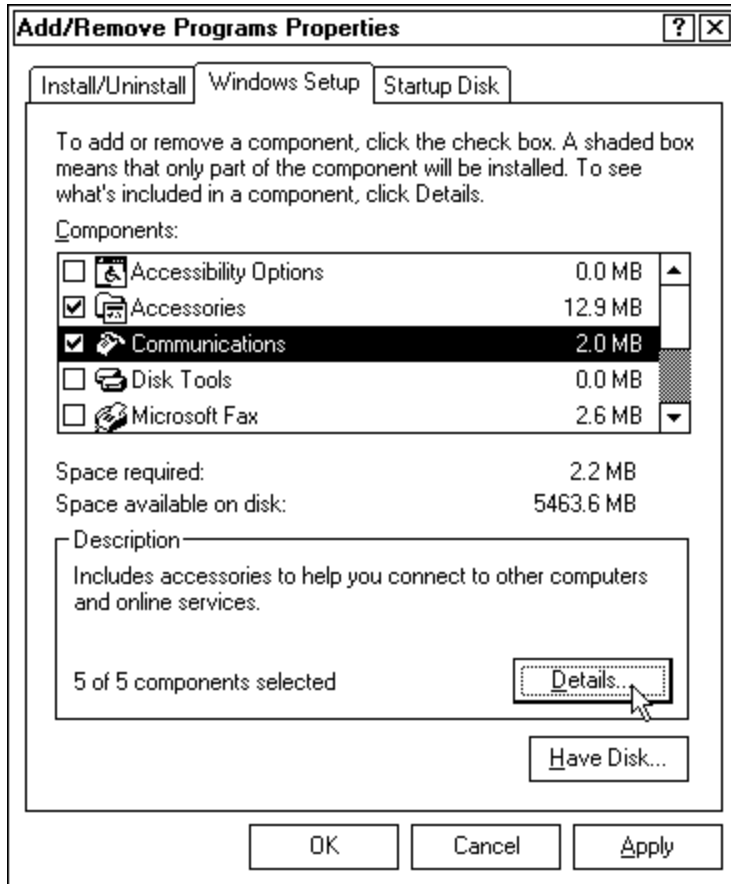
Verify if dial-up networking has been installed on your PC:

1. From the Windows desktop, select **Start** → **Settings** → **Control Panel** for the “Control Panel” options.
2. Double-click the **Add/Remove Programs** icon (shown left) for the “Add/Remove Programs Properties” window.

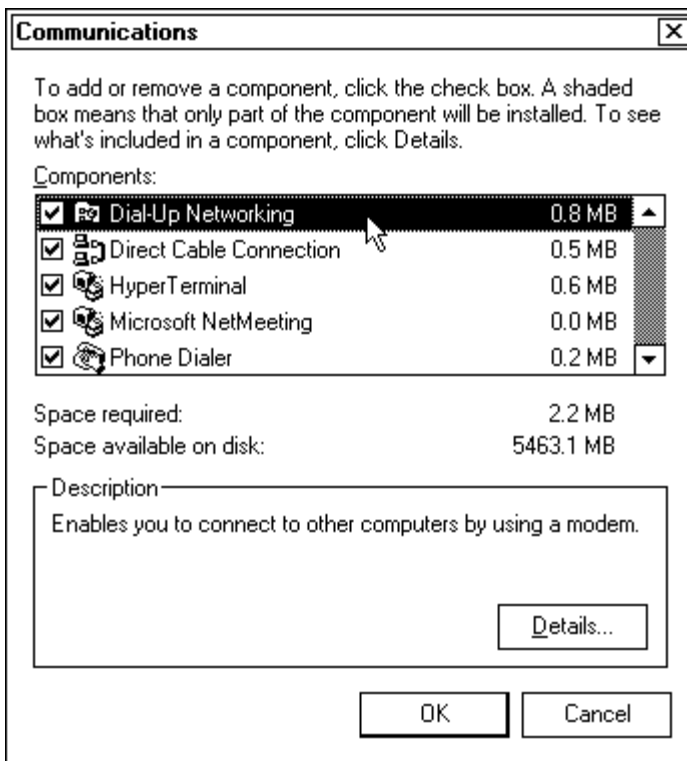




3. Click the **Windows Setup** tab, select the “Communications” option, then click the **Details** button.



4. Ensure the “Dial-up Networking” option is checked. If it is, verify the installation of the dial-up adapter and TCP/IP protocol on page 4-5.



If “Dial-up Networking” is not checked, Add a check mark, then click the **OK** button. Windows 95 will attempt to install the needed drivers, so make sure you have your installation disks or CD-ROM. Once “Dial-up Networking” is installed, you can proceed to the next page.

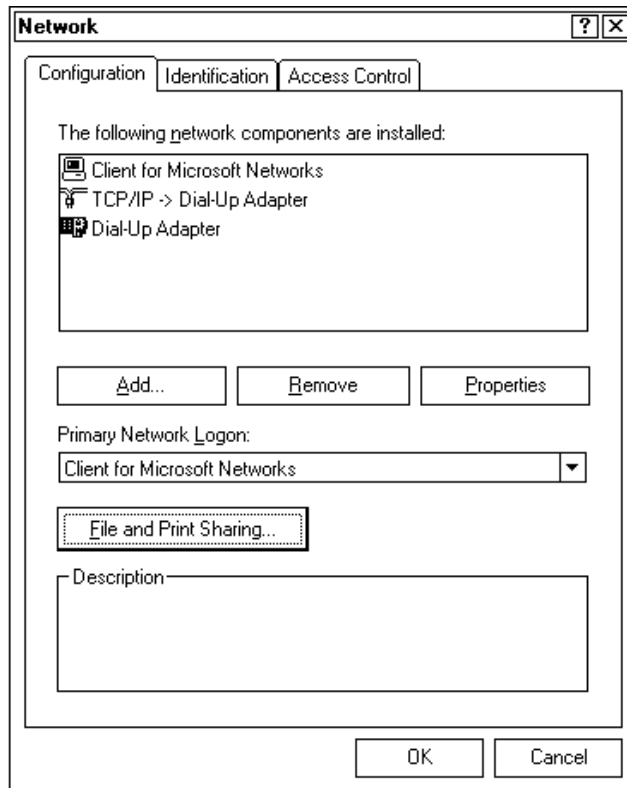
## Verify Network Component Installations

Verify that a client for Microsoft Networks, a dial-up adapter, and TCP/IP are installed on your PC. From the Windows desktop, select **Start** → **Settings** → **Control Panel** for the “Control Panel” options.

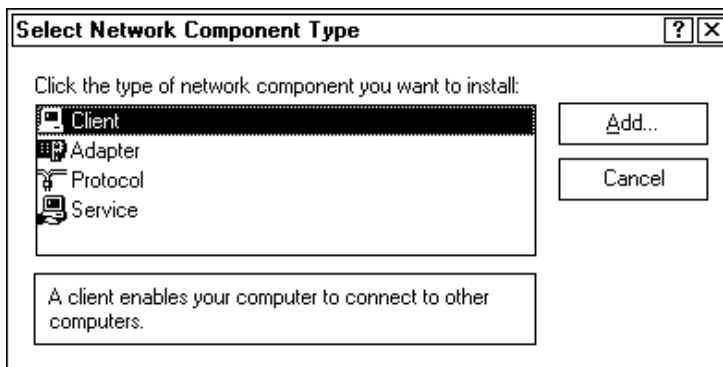


1. Double-click the **Network** icon (shown left) for the “Network” window. All of the components listed above should be listed as network components. If so, go to step 3 on page 4-9.

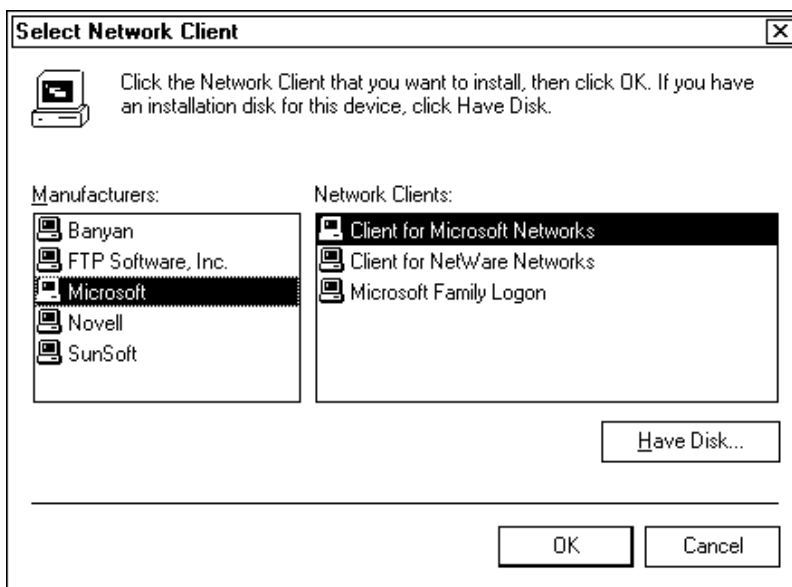
If not, go to page 4-6 (client), page 4-7 (adapter), or page 4-8 (TCP/IP) to add the respective component.



- **If there is no client for Microsoft Networks:**  
Click the **Add** button for the “Select Network Component Type” window.

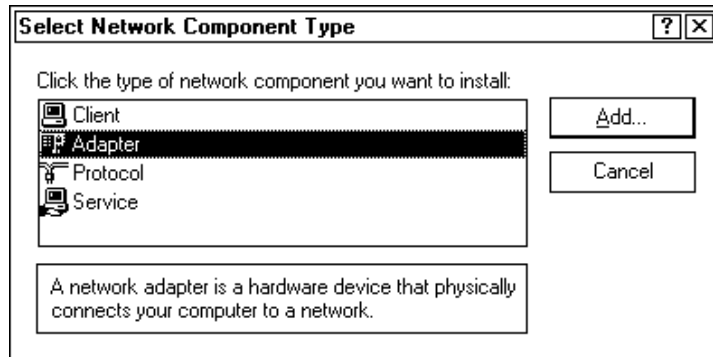


Double-click the “Client” component for the “Select Network Client” window.

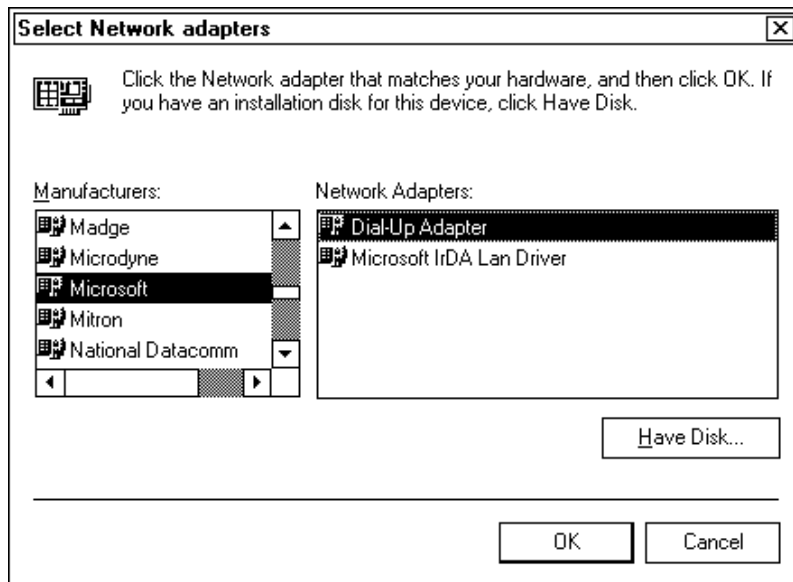


Select “Microsoft” from the **Manufacturers** box, then select “Client for Microsoft Networks” from the **Network Clients** box. Click **OK** to add the client.

- ▶ **If there is no dial-up adapter:**  
Click the **Add** button for the “Select Network Component Type” window.

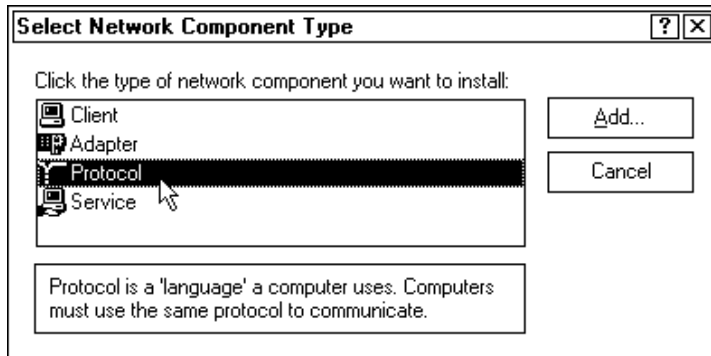


Double-click the “Adapter” component for the “Select Network adapters” window.

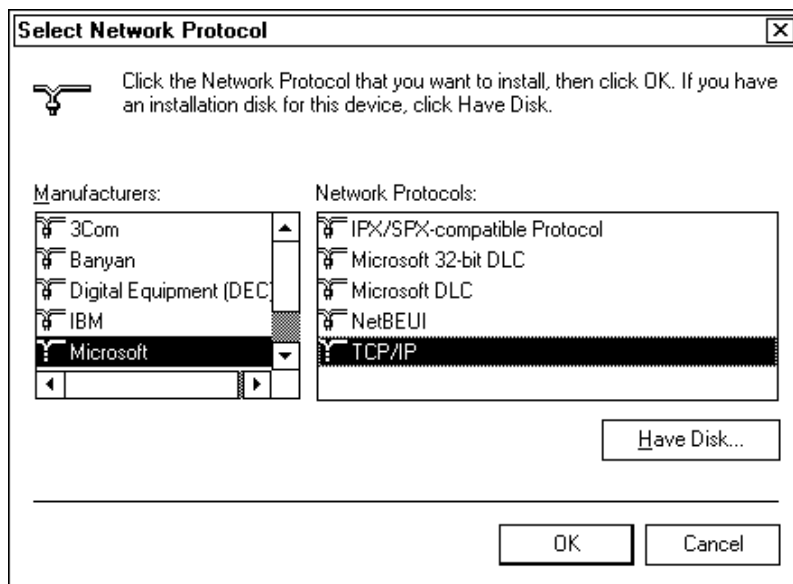


Select “Microsoft” from the **Manufacturers** box, then select “Dial-Up Adapter” from the **Network Adapters** box. Click **OK** to add the adapter.

- ▶ **If TCP/IP is not listed**, click the **Add** button for the “Select Network Component Type” window.

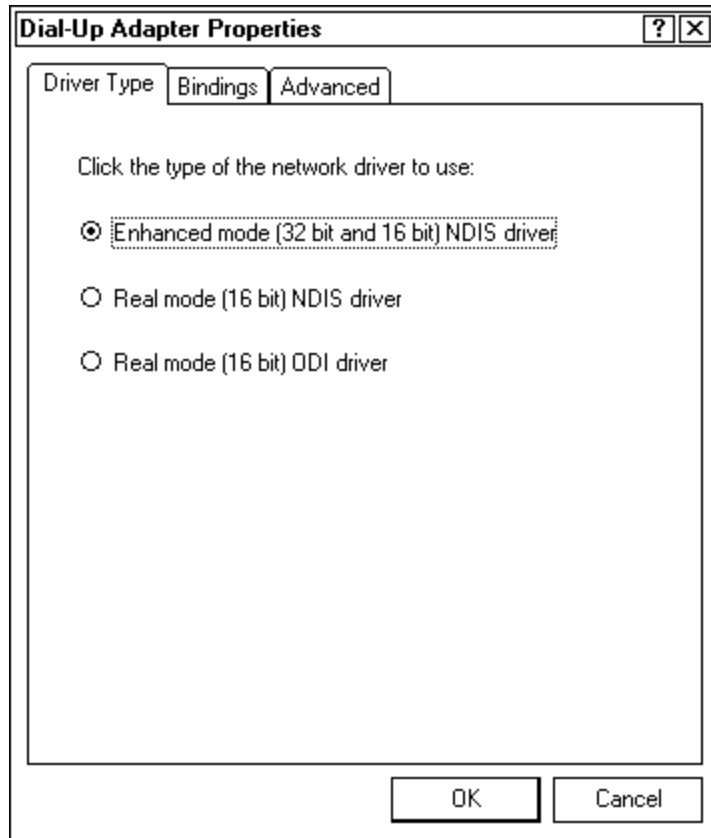


Double-click the “Protocol” component for the “Select Network Protocol” window.

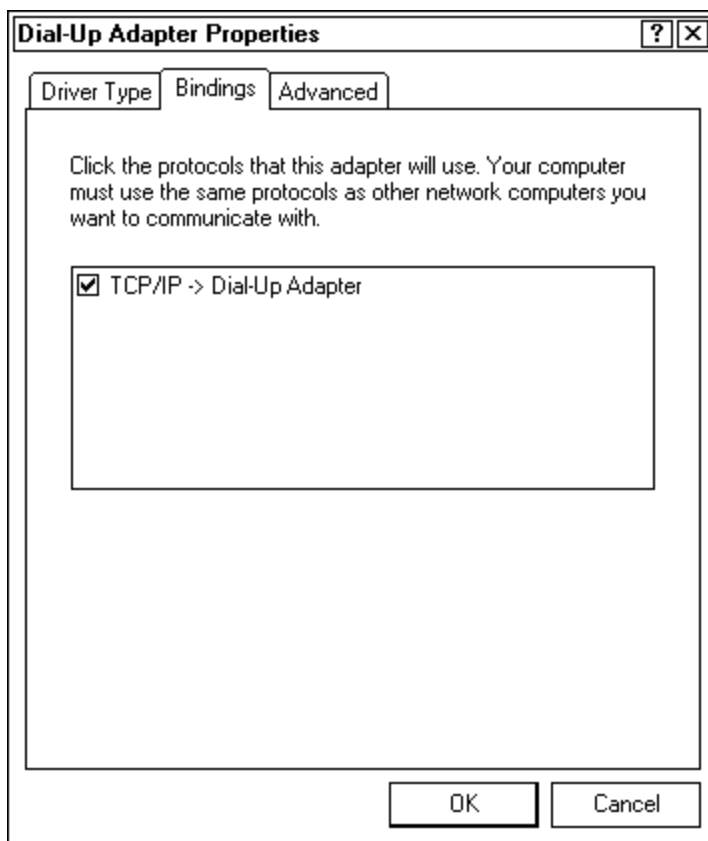


Select “Microsoft” from the **Manufacturers** box, then select “TCP/IP” from the **Network Protocols** box. Click **OK** to add the protocol.

- From the “Configurations” page, select the dial-up adapter, then click the **Properties** button for the “Dial-Up Adapter Properties” window.



3. Click the **Bindings** tab to access the following page and ensure the box for the “TCP/IP → Dial-Up Adapter” protocol is checked. If not, check the box.



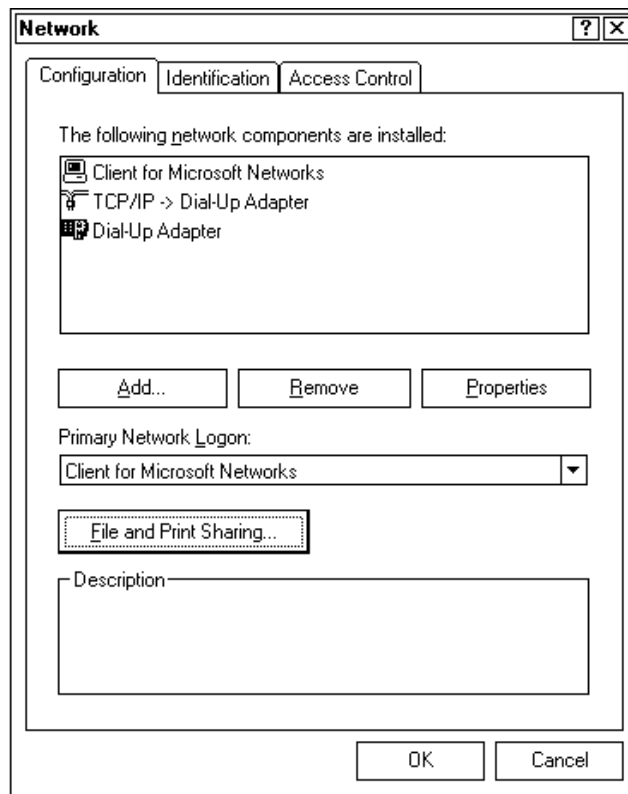
Click the **OK** button to return to the “Network” window and go to the next page to configure TCP/IP.



## Configure TCP/IP

Determine if your IP address is static (stays the same every time) or dynamic (changes with each log on) before you configure TCP/IP.

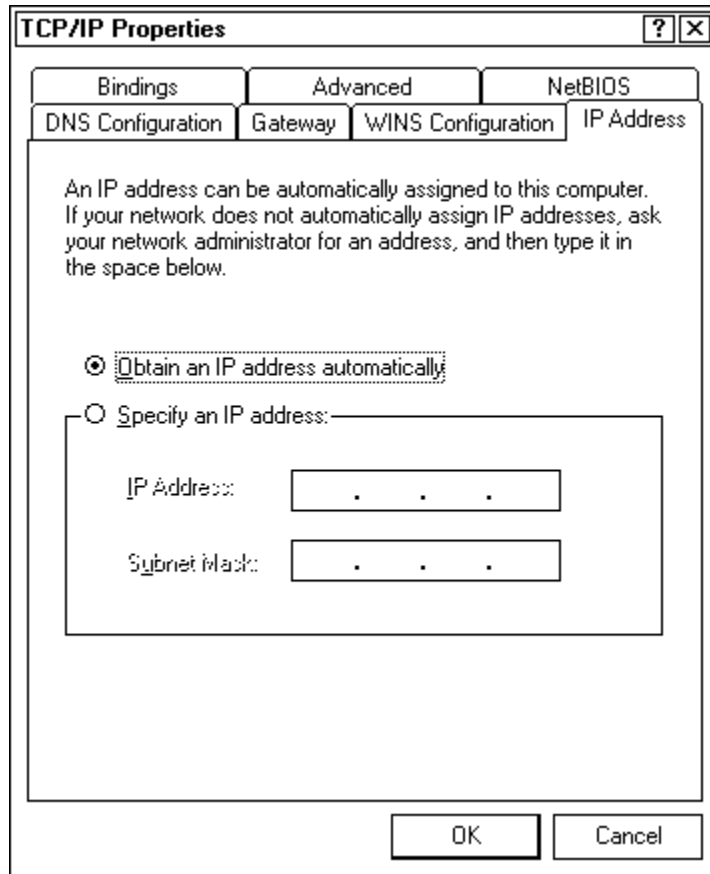
From the “Configurations” page, select the “TCP/IP → Dial-Up Adapter” component, then click the **Properties** button to access the “TCP/IP Properties” window.



There are six pages in the “TCP/IP Properties” window, you will be making changes to four of them. ***Make your changes to the following pages in the order that they appear.***

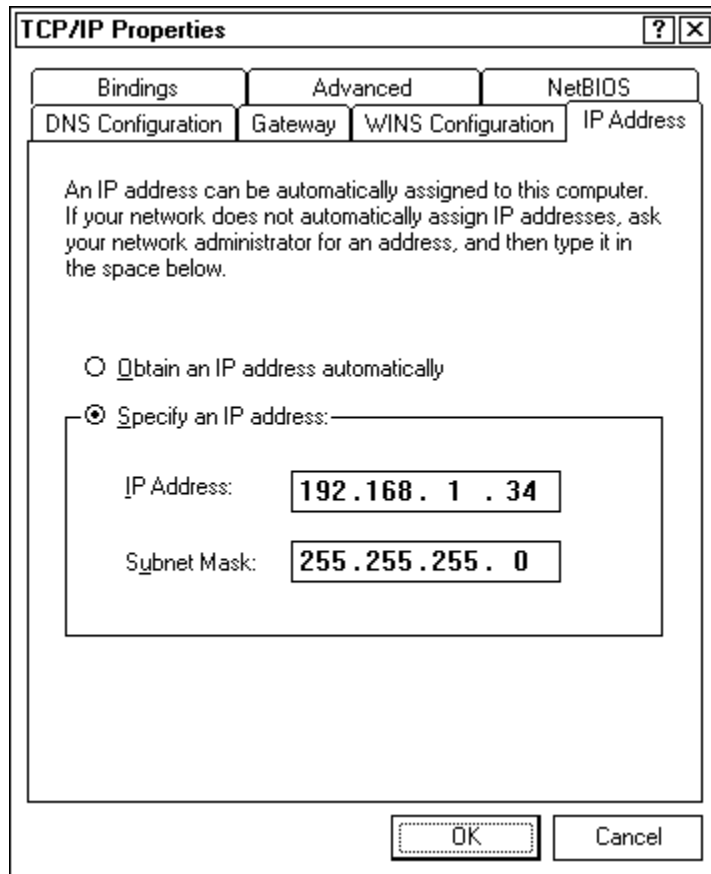
## IP Address

Click the **IP Address** tab to access this page. If you have a dynamic IP address, click the **Obtain an IP address automatically** option.



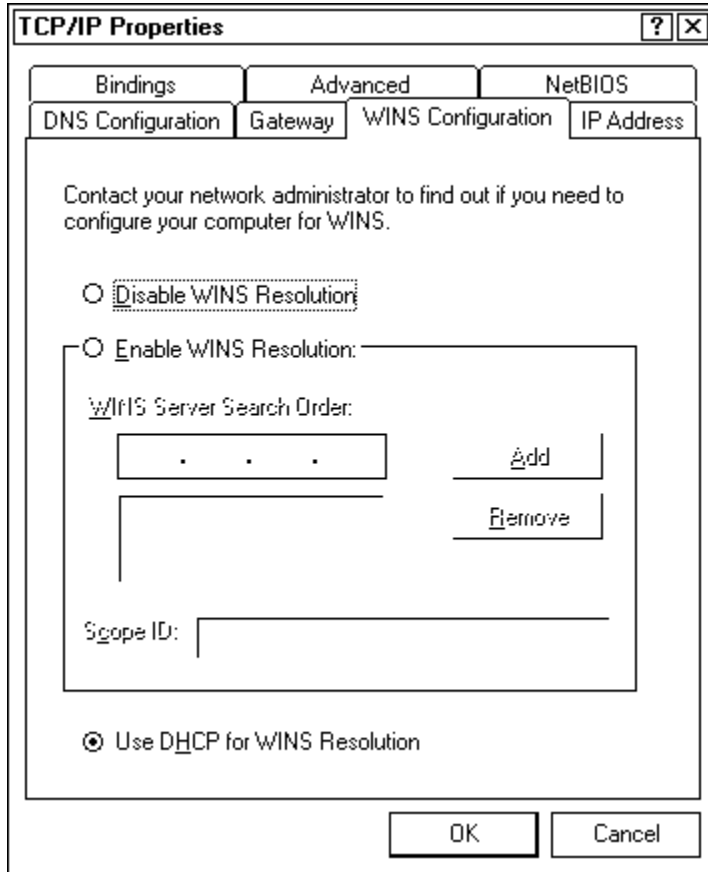
If you have a static IP address, select the **Specify an IP address** option, then:

- ▶ Type the IP address in the **IP Address** field, such as “192.168.1.34.”
- ▶ Fill in the **Subnet Mask** (formerly “Netmask”) field. This will probably be “255.255.255.0.”



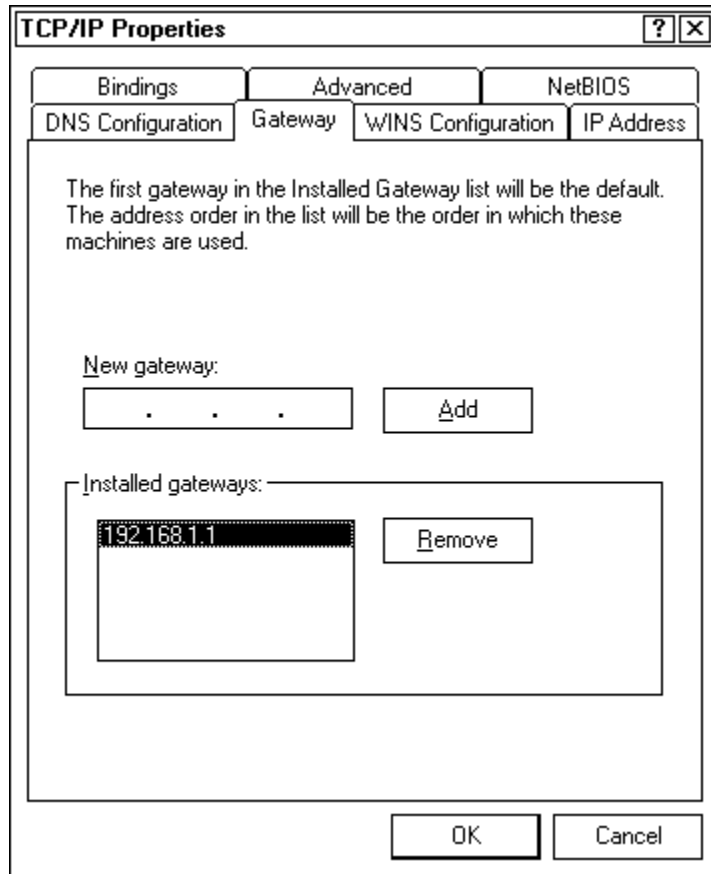
## WINS Configuration

Click the **WINS Configuration** tab for this page. Select the **Disable WINS Resolution** option. You can enable this option later when you want to run “Peer-to-Peer Networking.”



## Gateway

Click the **Gateway** tab to access this page. Type the gateway for your access provider in the **Gateway** field, then click the **Add** button.



If you do not know this value, use “0.0.0.0.” If that does not work, get the number from your systems administrator.

## DNS Configuration

Click the **DNS Configuration** tab to access this page. Use this page to troubleshoot any connection problems.

The screenshot shows the 'TCP/IP Properties' dialog box with the 'DNS Configuration' tab selected. The 'Enable DNS' radio button is checked. The 'Host' field contains 'name' and the 'Domain' field contains 'netprovider.com'. Under 'DNS Server Search Order', there is an empty field with an 'Add' button and a field containing '192.168.1.10' with a 'Remove' button. Under 'Domain Suffix Search Order', there is an empty field with an 'Add' button and a field containing 'netprovider.com' with a 'Remove' button. 'OK' and 'Cancel' buttons are at the bottom.

1. Select the **Enable DNS** option (DNS stands for Domain Name Service).
2. Enter your user name in the **Host** field.
3. In the **Domain** field, enter the provider name, such as “msn.com” or “att.net.”

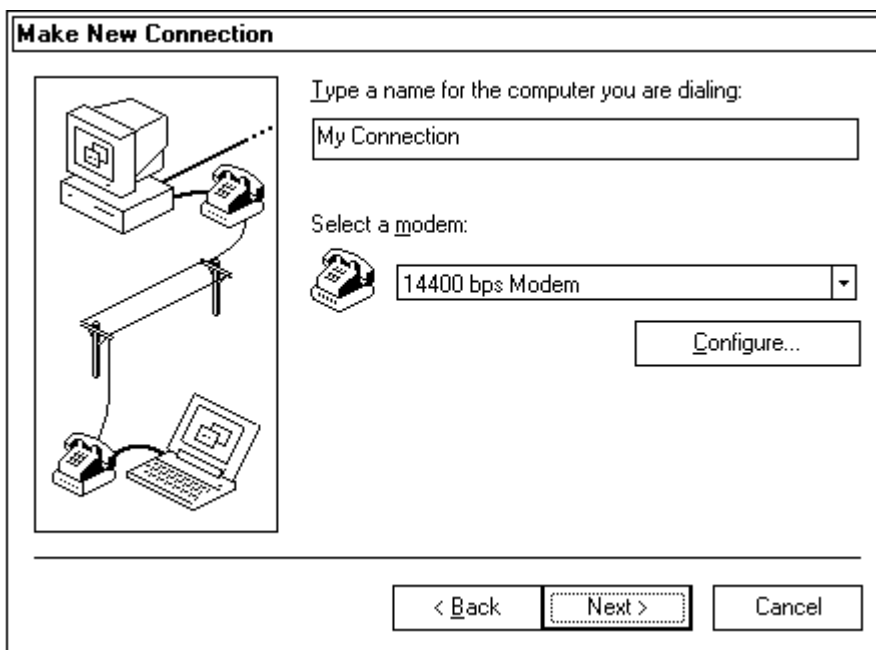
4. In the **DNS Server Search Order** area, enter the IP address of your provider's name server, then press the **Add** button. To find this number, contact your systems administrator for the DNS address.
5. In the **Domain Suffix Search Order** area, type in the domain suffix (usually the same as the domain), then press the **Add** button.
6. Click the **OK** button to exit the "TCP/IP Properties" window. Then, click the **OK** button to exit the "Network" window.

You will be prompted to reboot the system. Click the **Yes** button to continue.

## Set Up a Connection Entry

Create a new connection to your provider:

1. From the Windows desktop, double-click the **My Computer** icon, then double-click the **Dial-Up Networking** icon.
2. Double-click the **Make New Connection** icon to initiate the “Make New Connection” wizard.



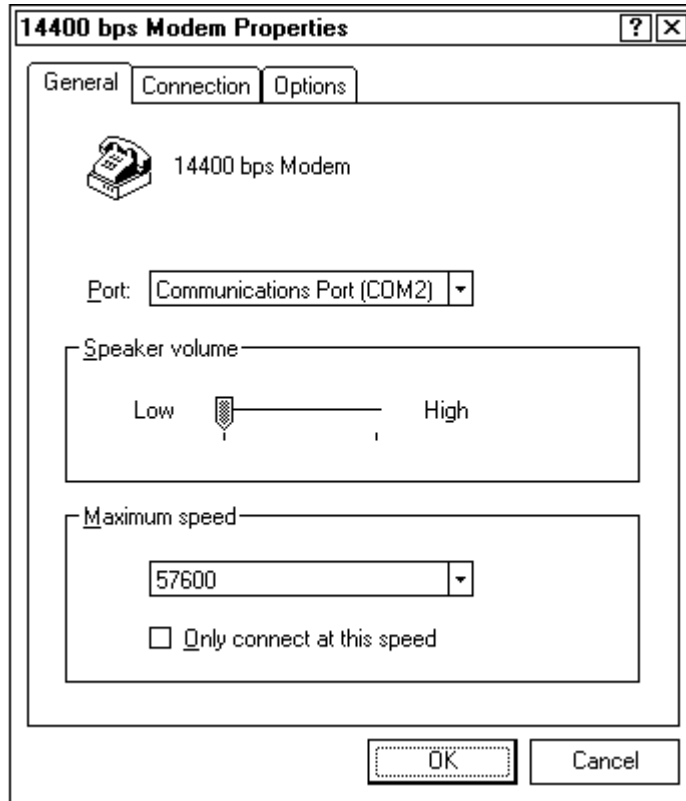
3. Type in “PPP Internet Access” or “Internet Connection” or another name for the icon you are about to create. This icon will connect you to your provider. The title does not affect the type of connection.

The **Select a modem** field displays your current modem. Press the **Configure** button to access the “Modem Properties” page.



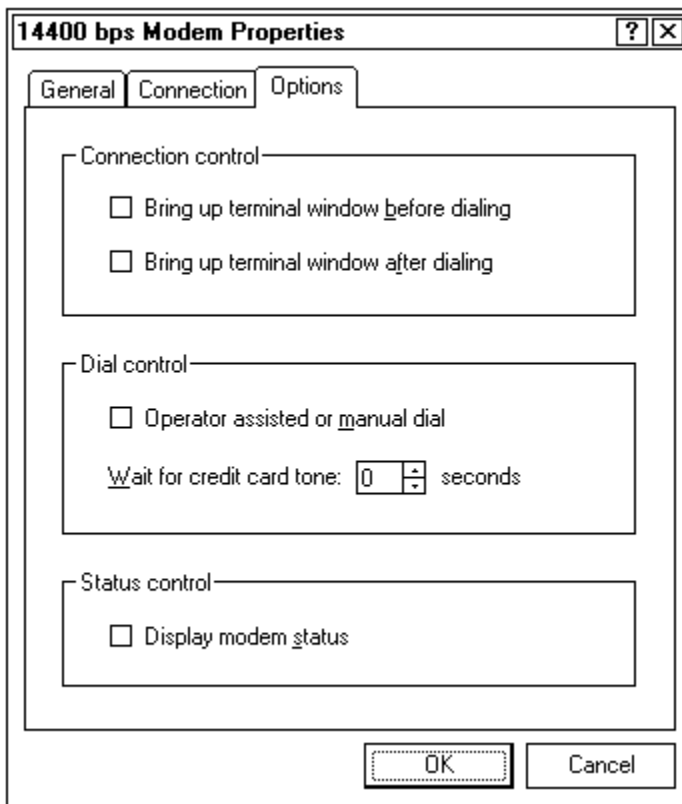
4. In the **Maximum Speed** area, select the fastest speed supported by the modem (CPU to COM port rate) from the drop-down list

Leave the **Only connect at this speed** check box blank to let your modem adjust as needed by the connection.



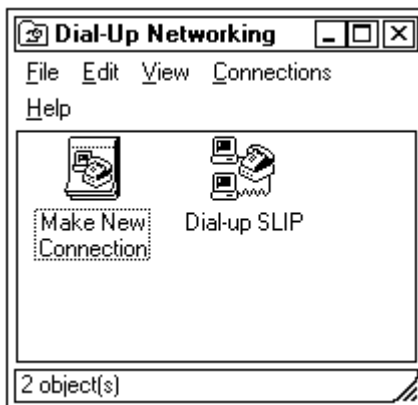
5. Click the **Options** tab for that page. Depending on how your provider logs you in, there are a couple of ways to configure this page. In most cases, leave all check boxes blank.

If connection problems do occur, check the **Bring up terminal window after dialing** box.



6. Click the **OK** button to return to the "Make New Connection" wizard, then click the **Next** button.
7. Enter the phone number of your Internet provider. An area code is not needed if the phone number is a local call.

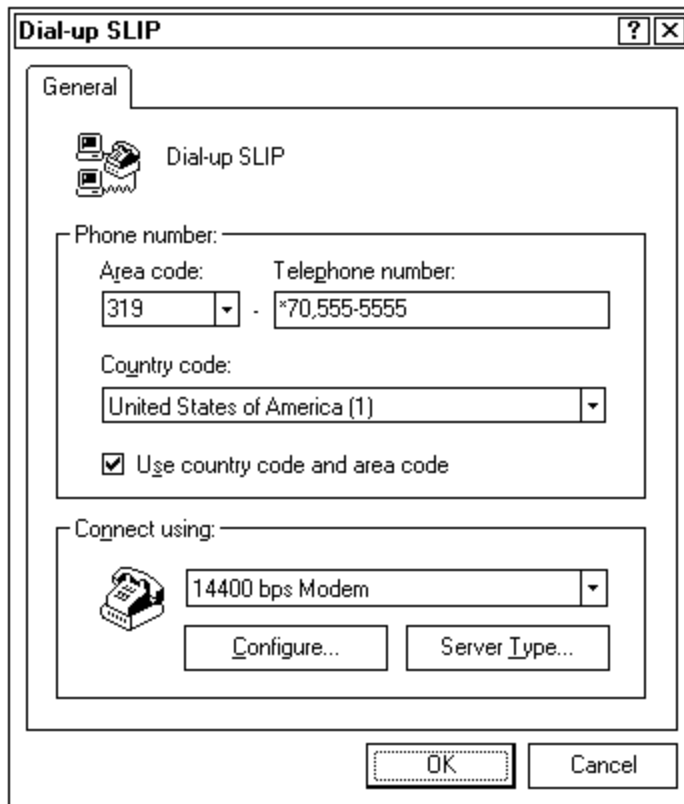
- Click the **Finish** button to create the icon. Your **Dial-Up Networking** folder should appear on the desktop, similar to the following illustration:



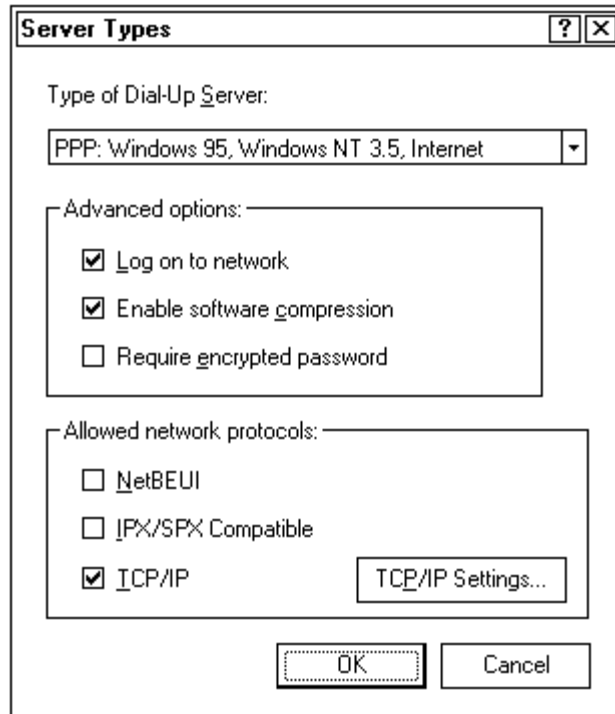
## Set the Dial-Up Properties

Configure the dial-up networking properties to work with your system:

1. Select your newly-created connection icon, then press your right mouse button for a pop-up menu.
2. Select **Properties** to access a window similar to the following:



3. Click the **Server Type** button to access the “Server Types” window.



4. In the **Type of Dial-Up Server** area at the top, select a server type from the down-down list.



► **NOTE:** “PPP” is usually the default entry.

5. In the **Advanced options** area, ensure the **Log on to network** check box is blank. This makes an easier initial installation.

You can check this box when you want to try some of the more advanced Peer-to-Peer capabilities of Windows 95.

6. Also make sure the **TCP/IP** box is checked in the **Allowed network protocols** area.

Check the **OK** button to exit the “Server Types” window, then click the **OK** button to exit the “Properties” window. Your dial-up capabilities are now set.

# Appendix A

## ***NRINET.INI Control File***



This appendix includes definitions of all of the ***NRINET.INI*** control file options and a sample ***NRINET.INI*** control file.

---

### ***IDL and Route ID Positions***

Based on whether two [**Session**] section keys and one [**Upload Files**] key are enabled, the following calculations can locate the Initial Download (IDL) and Route ID positions for the NCS32.EXE executable.

To find the IDL position:

1. Start with a base of 40.
2. If the [**Session**] **DateTime** key is enabled, add 18 to the total.
3. If the [**Session**] **UseUTC** key is enabled, add 3 to the total.
4. If the [**Upload Files**] **RouteId2Path** key is enabled, add the number of digits that your Route ID has plus 1 to the total.

**EXAMPLE:**

If all three keys mentioned in steps 2 through 4 are enabled, and your Route ID is "123456" (6 digits), then do this calculation:

$$40 + 18 + 3 + (6 + 1) = 68$$

To find the Route ID position, add one to the total IDL position, for example:  $68 + 1 = 69$ .

---

## INI Section Options

► **NOTE:** *All fields are left-justified and not pre- or post-padded.*

### **[RAS]**

Below are fields as they appear under the **[RAS]** section of the *NRINET.INI* file. These provide information for a dial-up PPP server.

► **NOTE:** *Size is dependent on server size limitations for all of these fields.*

#### **DialEntry**

Size: 64 characters maximum  
Required? No  
Default Value: None  
Description: Provides the Remote Access Server (RAS) Phone Book Entry used by *NCS32.EXE* for dialup PPP connections. Required for dialup PPP only.

► **NOTE:** *Predefine this entry in the Phone Book. CCU32 and NCS32 do not configure it.*

#### **Domain**

Size: 15 characters maximum for Windows NT  
32 characters maximum for Windows 95  
Required? No  
Default Value: "\*" (asterisk)  
Description: Provides the dialup PPP server with a Windows NT Domain name. "\*" defines any local domain.

► **NOTE:** *Only needed when the dialup PPP server is a Windows NT machine. When using other dialup PPP servers, **[RAS] Domain** is not used.*



### ***UserName***

Size: 20 characters maximum for Windows NT  
32 characters maximum for Windows 95

Required? No

Default Value: None

Description: Provides dialup PPP server with “UserName” required to connect.

### ***Password***

Size: 14 characters maximum for Windows NT  
32 characters maximum for Windows 95

Required? No

Default Value: None

Description: Provides the dialup PPP server with “Password” required to connect.

## ***[NNDIS]***

Below are fields as they appear under the **[NNDIS]** section of the *NRINET.INI* file. These provide information for a communications connection.

### ***Active***

Size: 1 character

Required? Yes, on the 6110 Hand-Held Computer

Default Value: “N”

Description: When set to “Y,” uses RS-485 for local LAN connections and allows the 6110 Hand-Held Computer to activate the *LAN2COM.VXD* file, which shares COM1 between standard serial operations and the RS-485 NDIS driver.

## ***LineSpeed***

Size: 6 characters  
Required? No  
Default Value: "115200"  
Description: RS-485 line speed used for communications. "115200" and "460800" are valid values for this option. All other values will result in using the default (115200).

► **NOTE:** *[NNDIS] LineSpeed is not available on Windows CE clients.*

## ***OwlAttach***

Size: 1 character  
Required? Yes, for the 6710 Access Point  
Default Value: "N"  
Description: Connects through a 6710 Access Point and throttles the active number of connections to a "Norand<sup>®</sup> 6920 Communications Server" (version 2.50 or greater) per RS-485 connection and requires an OWL Attach server such as a 6710 Access Point. This requires **[NNDIS] Active** to be set to "Y."

► **NOTE:** *[NNDIS] OwlAttach is not available on Windows CE clients.*

## ***DisconnectDelay***

Size: N/A  
Required? No  
Default Value: "20"  
Description: Sets the time to wait for network activity to finish before disabling the NNDIS driver.

## **[Logging]**

The **[Logging]** section of the *NRINET.INI* file is active *only* when the **[Session] Log** field is set to “Yes.”

**[Logging]** stores TCOM information for each session.

### **LogLevel**

Size:	1 character
Required?	No
Default Value:	“3”
Description:	Indicates the amount of detail to place in a log file defined in the <b>[Logging] LogFile</b> field. “0” — NO LOGGING “1” — Basic details only “2” — Include more details “3” — All available details

► **NOTE:** *If the **[Logging] LogLevel** key is set to zero, the log file will not be created or recreated. This removes any chance of determining what happens during a TCOM.*

### **LogFile**

Size:	255 characters
Required?	No
Default Value:	None
Description:	Name of file in which to log TCOM activity.

► **NOTE:** *If no directory is specified, the “Client Configuration Utility” uses the directory specified in the **[Session] DefaultDir** field as the default. The log file is overwritten each time a TCOM is performed by the “Client Configuration Utility.” If the **[Logging] LogLevel** key is set to zero, the log file will not be created or recreated.*

## [Client]

These [Client] fields appear in the *NRINET.INI* control file and control the appearance of the “NCS32” screen.

### Mode

Size: 1 character  
Required? No  
Default Value: Zero  
Description: Indicates how to display the “NCS32” screen:  
“0” Normal  
“1” Force to background  
“2” Force to foreground

### Bitmap

Size: 255 characters  
Required? No  
Default Value: None  
Description: Specifies a Device Independent Bitmap (DIB) file to replace the Intermec bitmap displayed on the “NCS32” screen.

► **NOTE:** *Maximum bitmap size is 240 pixels wide by 80 pixels high, up to 256 colors.*

## [Session]

The following fields as they appear in the [Session] section of the *NRINET.INI* control file provides “Client Configuration Utility” and “6920 Communications Server” information and connects to the “6920 Communications Server.”

► **NOTE:** *All [Session] fields are left-justified and not pre- or post-padded.*

### Application

Size: 30 characters  
Required? No  
Default Value: None  
Description: Indicates the name of the application on the client device.

### ***ApplicationVersion***

Size: 10 characters  
Required? No  
Default Value: None  
Description: Indicates the version of the application on the client device.

### ***FlashVersion***

Size: 10 characters  
Required? No  
Default Value: None  
Description: Indicates the version of flash on the client device.

### ***Routeld***

Size: 16 characters  
Required? Yes  
Default Value: None  
Description: Indicates the Route ID of the client and connects to the “6920 Communications Server.”

### ***UserName***

Size: 16 characters  
Required? No  
Default Value: None  
Description: Indicates the User Name of the client and connects to the “6920 Communications Server.”

► **NOTE:** *[Session] UserName* is implemented for future use and is currently not supported on the “6920 Communications Server.”

### ***Password***

Size: 16 characters  
Required? No  
Default Value: None  
Description: Indicates the Password of the client and connects to the “6920 Communications Server.”

► **NOTE:** *[Session] Password* is implemented for future use and is currently not supported on the “6920 Communications Server.”

### ***TermType***

Size: 16 characters  
Required? No  
Default Value: None  
Description: Indicates the Terminal Type of the client device.

### ***SerialNo***

Size: 16 characters  
Required? No  
Default Value: None  
Description: Indicates the hardware Serial Number of the client device.

### ***SessionType***

Size: 1 character  
Required? Yes  
Default Value: "N"  
Description: Indicates the type of TCOM session that performs with the "6920 Communications Server:"

#### ***D — Download Request***

Downloads applications to a fresh client device. Can also request specific files from the server.

#### ***I — Initial Download***

Downloads a fresh set of data. Usually performed only after downloading a fresh application.

#### ***N — Normal Session***

Normal daily TCOM.

#### ***S — Special Session***

Usually for midday or extraordinary TCOMs.

### ***ServerAddress***

Size: 128 characters  
Required? Yes  
Default Value: None  
Description: IP address or host name of the "6920 Communications Server" to which client device is to connect.

## **ServerPort**

Size: 64 characters  
Required? No  
Default Value: "44965"  
Description: TCP/IP port number, or the service entry name in the services file, on which "6920 Communications Server" is configured.

► **NOTE:** *The [Session] ServerPort size depends on the maximum number of ports available to TCP/IP.*

## **IOTimeOut**

Size: N/A  
Required: No  
Default Value: 30 minutes  
Description: Sets the time to wait for activity from the "6920 Communications Server" before declaring a server timeout error.

## **DefaultDir**

Size: 255 characters  
Required: No  
Default Value: None  
Description: Assigns a directory to hold temporary and log files

► **NOTE:** *If no directory is specified, the "Client Configuration Utility" uses the current directory as the default.*

## **Cleanup**

Size: 1 character  
Required? No  
Default Value: "Y"  
Description: Indicates whether all temporary files should be deleted when TCOM is complete.

## **OverrideFileError**

Size: 1 character  
Required? No  
Default Value: "N"  
Description: Indicates whether errors caused by missing files should be reported to the "6920 Communications Server" as a GOOD TCOM. Use "Y" to override file errors.

## **DateTime**

Size: 1 character  
Required? No  
Default Value: "N"  
Description: Flag determines if the last write time of a file should be placed on a transferred file:  
"Y" Keep the source last write time  
"N" Use the transfer time

► **NOTE:** *By default, the time sent to the "6920 Communications Server" is in local time. If you want time zone conversion, enable the [Session] UseUTC entry (described below). Available on "6920 Communications Server" Versions 2.62 or greater.*

## **UseUTC**

Size: 1 character  
Required? No  
Default Value: "N"  
Description: Flag determines if the date and time used on a file should be in Universal Time Coordinated (UTC) *formerly known as Greenwich Mean Time.*

► **NOTE:** *Available on "6920 Communications Server" Versions 2.62 or greater.*



## ***AllowClock***

Size: 1 character  
Required? No  
Default Value: "Y"  
Description: Allows "6920 Communications Server" to update the system clock. If set to "Y," the client device will set the clients' system time based on the UTC system time of the "6920 Communications Server." It is important that both the "6920 Communications Server" and the client have the correct appropriated time zone information.

► **NOTE:** *Available on "6920 Communications Server" Versions 2.62 or greater.*

## ***CompleteFile***

Size: 255 characters  
Required? No  
Default Value: None  
Description: Name of flag file to create once TCOM is complete. Checks log file to determine TCOM status.

## ***[Upload Files]***

The **[Upload Files]** fields for the *NRINET.INI* file contain information about the upload files that are sent to the "6920 Communications Server."

### ***DefaultDir***

Size: 255 characters  
Required? No  
Default Value: None  
Description: Default directory to search for Upload files if a path is not provided in the **[Upload Files] File\_n** field.

► **NOTE:** *If no directory is specified, the "Client Configuration Utility" uses the current directory as the default.*

## **Routeld2Path**

Size: 1 character  
Required? No  
Default Value: "N"  
Description: Indicates if the NRInet protocol includes "Route ID" in the filename path sent to the "6920 Communications Server."

► **NOTE:** *If the [Upload Files] File\_n field has a Destination Path, this operation does not occur.*

## **FileCount**

Size: N/A  
Required? Yes  
Default Value: Zero  
Description: Number of [Upload Files] File\_n entries defined to upload to the "6920 Communications Server."

## **File\_n**

Size: 255 characters  
Required? No  
Default Value: None

► **NOTE:** *If no directory is specified, the "Client Configuration Utility" uses the directory specified by the [Download Files] DefaultDir field.*

## **[Download Files]**

The [Download Files] section of the *NRINET.INI* file names the default directory that stores download files.

## **DefaultDir**

Size: 255 characters  
Required? No  
Default Value: None  
Description: Default directory to store download files if one is not provided in the DOSFIL header.

► **NOTE:** *If no directory is specified, the "Client Configuration Utility" uses the current directory as the default.*

## ***[Download Request Files]***

The **[Download Request Files]** section of the **NRINET.INI** file monitors the number of entries to be requested from the “6920 Communications Server.”

### ***FileCount***

Size: N/A  
Required? Yes  
Default Value: Zero  
Description: Number of **[Download Request] File\_n** entries defined to request in the Download Request from the “6920 Communications Server.”

### ***File\_n***

Size: 255 characters  
Required? No  
Default Value: None

---

## ***Example NRINET.INI***

```
[RAS]
DialEntry=PPPServer
Domain=*
UserName=UserName1
Password>Password1
```

```
[NNDIS]
Active=N
LineSpeed=115200
OwlAttach=N
DisconnectDelay=25
```

```
[Logging]
LogLevel=3
LogFile=C:\CCU32\TMP\LOG.DAT
```

```
[Client]
Mode=2
Bitmap=

[Session]
Application=
ApplicationVersion=
FlashVersion=
RouteId=111111
UserName=
Password=
TermType=6110
SerialNo=
SessionType=N
ServerAddress=6920server
ServerPort=nrinet
IOTimeOut=30
DefaultDir=C:\CCU32\TMP
Cleanup=Y
OverrideFileError=N
DateTime=Y
UseUTC=Y
AllowClock=N
CompleteFile=

[Upload Files]
DefaultDir=C:\CCU32\UPLOAD
RouteId2Path=N

FileCount=1

File_1=C:\CCU32\NRINET.INI

[Download Files]
DefaultDir=C:\CCU32\DOWNLOAD

[Download Request Files]
FileCount=3

File_1=data01.dat
File_2=data02.dat
File_3=data03.dat
```

# Appendix B

## Error Codes



The following error codes are for *NRInet.DLL* and *NCS32.EXE*. If you have any questions regarding these errors, contact Customer Response Center at 800-755-5505 (U.S.A. or Canada) or 425-356-1799.

*Table B-1*  
***NRInet.DLL and NCS32.EXE Error Codes***

<b>Error Code</b>	<b>Meaning</b>
<b>000</b>	No error
<b>001–199</b>	Reserved for normal status codes
<b>200–499</b>	Reserved for error status codes
<b>201</b>	Missing INI file
<b>202</b>	Missing INI data
<b>221</b>	Error creating temporary file (SESSION.CTL or DWNLREQ.DAT)
<b>222</b>	Bad name provided by INI file
<b>223</b>	Unable to open upload file
<b>224</b>	Unable to open download file
<b>225</b>	Unable to create path
<b>249</b>	Incomplete, likely “6920 Communications Server” rejected connect
<b>250</b>	Unable to set Keep Alive

*Table B-1 (Continued)*  
**NRInet.DLL and NCS32.EXE Error Codes**

<b>Error Code</b>	<b>Meaning</b>
<b>251</b>	Server reports busy, try later
<b>252</b>	Error using nRecv()
<b>253</b>	Error using nSend()
<b>254</b>	Error using nDoRecv()
<b>255</b>	Error using nDoSend()
<b>256</b>	Error encoding negotiation block
<b>257</b>	Error decoding negotiation block <i><b>Note:</b> NRInet for Windows CE only supports 256- and 512-byte block sizes.</i>
<b>258</b>	Error posting message to application
<b>259</b>	Error getting upload data
<b>260</b>	Error processing download data
<b>261</b>	No I/O for “x” time, see ProcessTimerEvent()
<b>400</b>	Winsock reported an FD_CONNECT error
<b>401</b>	Winsock reported an FD_READ error
<b>402</b>	Winsock reported an FD_WRITE error
<b>403</b>	Winsock reported an FD_CLOSE error
<b>404</b>	Winsock reported an unknown error
<b>500–999</b>	Reserved for application error codes

*Table B-1 (Continued)*  
***NRInet.DLL and NCS32.EXE Error Codes***

<b>Error Code</b>	<b>Meaning</b>
<b>500</b>	Base number for application error codes. All application error codes should be based on this number. Defined as TSC_APPBASE in NRLError.H.
<b>999</b>	Largest error code available for application usage. Defined as TSC_MAXERROR in NRLError.H. If a number larger than TSC_MAXERROR is used to nDisconnect(), it is replaced by TSC_MAXERROR.





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