

User's Guide Version 1.3a

YES*tation*Windows Based Terminals (Models 2605, 2610, 2611, 2612, and 2613)

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Windows Based Terminal (Models 2605, 2610, 2611, 2612, and 2613) **User's Guide**

Version 1.3a

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Citrix ICA Client

Citrix ICA Client User's Guide





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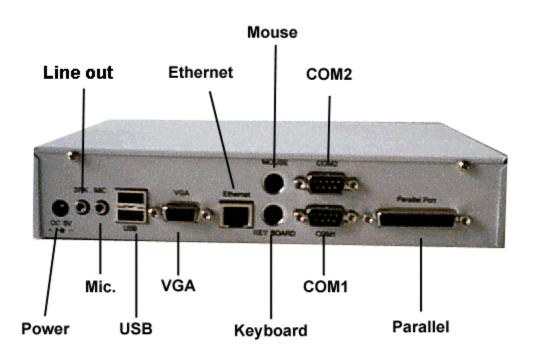
WBT Installation

Connecting the WBT



To connect the WBT to your server, please make all connections to the rear panel before turning on the power. The following figure shows the WBT's rear panel connectors.

WBT Rear Panel Connectors

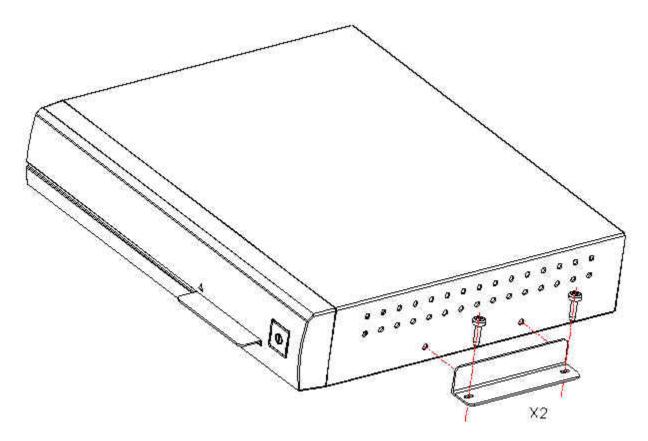


Please follow the procedures below:

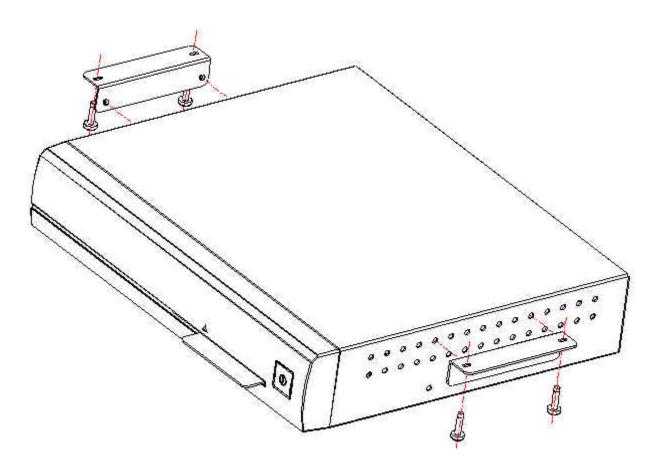
- 1. Connect the monitor to the VGA connector.
- 2. Connect the PS/2 keyboard to the Keyboard connector.
- 3. Connect the PS/2 mouse to the Mouse connector.
- 4. If you are ready to use a network connection, connect a CAT5 UTP cable to the Ethernet connector.
- 5. Connect the power adapter cable to the Power connector.
- 6. Plug the power adapter AC cord into an AC outlet.
- 7. Connect speakers to the Line Out port, if desired.
- 8. You are ready to use the WBT now.

Mounting the WBT

The WBT can be mounted permanently on a desk or under a table or attached to a wall. The following figure shows the WBT mounting procedures.



Mounting the WBT on a desk or a wall



Mounting the WBT under a table

Using the WBT

Turn on the WBT when all rear panel connections have been made.

If the WBT has not been pre-configured, the first dialog box of the Setup Wizard will appear after the WBT's greeting screen. You can refer to the WBT Management Setup Wizard for the WBT's property settings. If some configuration has already been done, the WBT will come up in the Terminal Connections Management screen.





Troubleshooting Your WBT

Troubleshooting Q&A



The following table provides some solutions to common problems that can occur during setting up or using your WBT.

	Problems	Solution
1	The monitor screen is blank	 Make sure the WBT is turned on. Make sure the monitor is plugged into an AC outlet and turned on. Make sure the VGA connector is plugged into the WBT.
2	Your monitor can not display after advancing past the logo screen or after changing the display setting	The display setting may be at a higher resolution or refresh frequency than the monitor will support. Execute one of the following recovery options: • Use a better monitor for display. • Use a better monitor for display while changing the display settings to be compatible with the original monitor. • Ask your MIS or network administrator to reset your WBT to factory default settings through the Remote Management" software, if it is installed at your server site. • Use the following key sequence immediately after your first unreadable screen appears. 1. Press F2. 2. Press the Space bar once. 3. Press the PC Enter key This should reset your WBT to factory defaults, after which you can go through the Setup Wizard again and select an appropriate display resolution and refresh frequency.

3	The mouse does not work	 Make sure the mouse is plugged into the mouse port, not the keyboard port. Test the WBT using a known good PS/2 mouse.
4	The keyboard does not respond	 Make sure the keyboard is plugged into the keyboard port, not the mouse port. Test the WBT using a known good PS/2 keyboard.
5	The network connection does not work	 Check the network connection. (The Link indicator is lit.) Verify the WBT IP address is correct in the Network properties sheet of Terminal Properties. Check the server's IP address. If you are using the WBT default setting of DHCP address assignment, make sure there is a workable DHCP server on your network. If you are using a specified IP address, make sure that there is not another network device with the same IP address.
6	Forgot the password setting and cannot reconfigure the WBT.	 Ask your MIS or network administrator for the "super" password. Ask your MIS or network administrator to reset your WBT to factory default settings through the Remote Management software, if it is installed at your server site.
7	You have created an ICA Dial-up session, but it cannot dial out through an external modem.	Make sure that the Dialing Properties and Dialing Patterns are correct in the <u>Dial-Up Connection</u> dialog box.
8	Your Dial-up session dials out through your external modem, but it cannot make a connection with the server.	 Your modem may not be 100% Hayes-compatible. If not, you will have to specify a special modem initialization string in the <u>Call Options</u> dialog box. Your Login Name or Password may be incorrect.





Firmware Upgrade Utilities

Firmware Upgrade



There are two methods to upgrade your firmware.

1. Upgrade firmware from your local FTP server (Method 1)

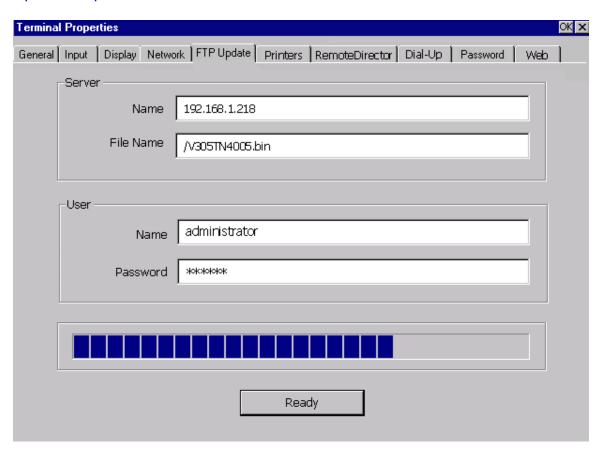
This upgrade method is recommended. This function can only run when the FTP server is available on your Local Area Network (LAN).

- Download the latest-version firmware from the Affirmative Computer Products web site, per the Affirmative Computer Products Technical Support instructions.
- 2. **Unzip the downloaded file**. You will see a .bin file, and you may also see a .rgs file and a .tco file.
- 3. **Save the unzipped .bin and .rgs (if present) files** in your local FTP server with a known path.
- 4. **NOTE that you may lose** all your configuration information during the upgrade. If there is no .rgs file in the new firmware, you will surely lose the configurations. If there is a .rgs file, you may lose your configurations, depending upon the version of your old firmware. So record your configuration information before upgrading.

5. Upgrade Procedure

- Invoke the Terminal Properties dialog box by pressing the [F2] key in the Connection Manager window.
- In the Terminal Properties box, select the FTP Update Tab.

Update Properties Sheet



- Input all proper information in the sub-fields.
 - Server Name

Enter the local FTP server's IP address.

File Name

Enter the <u>latest version firmware</u> .bin file name. Be sure to type the .bin extension in lower case.

User Name

Enter your User Name to access the FTP server.

User Password

Enter your Password to access the FTP server.

Click on the Ready button to start the firmware upgrade.

Important Notes:

DO NOT make any change that may corrupt the upgrade procedure, such as turning off power or disconnecting from the network, after you click the "Ready" button. This may cause serious damage to the flash memory in your WBT.

Your local FTP server should not have Proxy protection.

The Ready button should change text to "Updating..." and an upgrade progress bar will show if you connect to the FTP server successfully. Otherwise an Error Message Box will pop up.

Connection Error Message



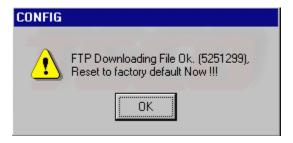
Click on the "OK" button and re-check your upgrade information. The Connection Error will also possibly be caused by incorrect settings in the Network tab.

If you get an error message about a DOC problem, check the file name for accuracy and verify that you have established the correct path information at your FTP server.

After the .bin file has been transferred, you may be asked to transfer the .rgs file. If so, respond with **OK**.

6. Restart your WBT

After the upgrade has finished, a confirm box may pop up to ask you to "Reset to factory default". Click OK to reboot and reset the WBT to factory default so that the new firmware can take effect.



If you do not get a request to "Reset to factory default", you will be asked to reboot. After rebooting, the WBT will come up in the Connection Manager screen. At this time, press F2 to go to Terminal Properties, and then verify the OEM Software Version in the General tab. If this information shows the old WBT firmware version rather than the new one you downloaded, activate the Reset to Factory Defaults option. The new firmware will then take effect after the reset/reboot.

2. Upgrade through Remote Central Management (Method 2)

If your network has installed the t Remote Director and Address Book Service central management software, you can use this method to upgrade your firmware. This method is usually used on large network systems with a large quantity of WBTs. See "Upgrade Device Firmware" in Remote Management.





Remote Central Management Software

Remote Management



Description

The Remote Management Software remotely manages WBTs connected to a TCP/IP network. To implement security and manage the registry and software updates of the WBTs, there is a requirement for agents to be running on the client side (i.e. on WBTs). The product consists of a suite of agents for the devices and remote management software, Remote Director and Address Book Service, to manage these devices. In addition, the Address Book Service helps maintain information about WBT devices that are registered with it and that can be managed by the Remote Director.

Remote Director

Remote Director is installed on an NT/2000 machine and allows the Network Administrator to flash files across the network to the WBTs. The OS Firmware image running on the WBTs can also be changed via this flashing technique, thus allowing dynamic update of the terminal's environment. Other functionality provided by the Remote Director is:

- Easy-to-use interface for adding new device lists or new devices to the existing ones under the local system.
- Device lists can be downloaded from and uploaded to the Address Book Service.
- Creation of Device Terminal Properties as a profile that can be attached to a device list on the Address Book Service. Devices on this list will download this profile on boot-up.
- Creation of a device profile from the "Client-side" profiles that are on the Address Book Service
- Retrieving and updating the Terminal Properties of one or multiple devices.
- Scheduling of devices for image updating.
- Manage control of the management password of the devices.
- Adding or deleting a device list on the local system.

Address Book Service

The Address Book Service should continuously run on a Windows NT/2000 machine, herein called the Address Book Server, and authenticate WBTs connecting to the server and keep track of them. The Address Book Service also provides information about the WBTs to the Remote Director when requested. There may be more than one Address Book Server in a network, but there is only one Remote Director.

The Address Book Service maintains the following information for device lists that are created by the Remote Director:

- Profile files used by devices to dynamically configure themselves at boot time
- Firmware image files used to update devices via a scheduling mechanism invoked by the Remote Director.

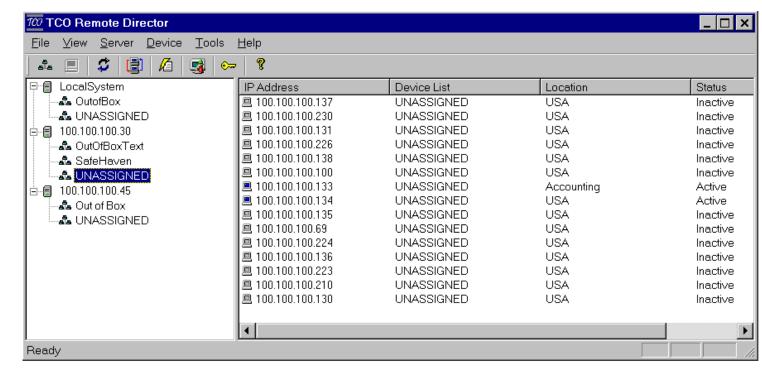
The Address Book Service thus enables WBTs to be configured and added to a network in a plugand-play manner via broadcasting/multicasting. Devices identify the Address Book Server by IP address either using a simple broadcasting mechanism (restricted to a single sub-net) or via IP multicasting (requiring a router). The type of broadcasting can be configured via the Address Book Service control panel and should also be set in the "Remote Director" tab of each terminal's Terminal Properties.

Running the Remote Director

When the user enters the application, the main window is shown. Initially the left pane of the window will show the Local System and the Address Book Servers under which the user view current device lists and can add new device lists. The device lists are shown in an alphabetical order for the user's convenience.

If no Address Book Servers are seen in the main window, execute the Auto-Discover process as described in <u>To Configure the Address Book Servers</u>. Any ABS on the network will be automatically identified by its IP address and shown in the left pane of the main window.

To view the current device lists created in an ABS, connect to the ABS either by double clicking on the ABS IP address or by right clicking on the ABS IP address and selecting the "Connect" option from the drop-down menu.



Add a New Device List

The default device list is "UNASSIGNED". New devices, which are automatically detected at device bootup, will be placed in the "UNASSIGNED" list. For management purposes, it is usually necessary to allocate devices to several different device lists. To create a new list, select File menu and click the New Device List option. A dialog box will pop up where the user is required to enter the Device List Name and the optional Password. This option can also be selected by pressing the hot key 'Ctrl+N', or by clicking the Device List toolbar icon, or by right clicking on the Local System or Server.

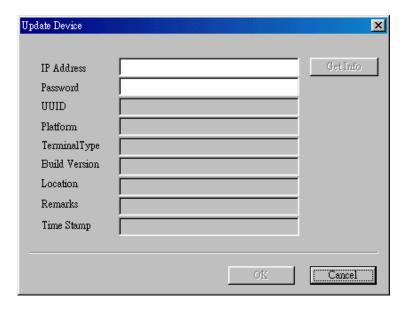


Add a Device to the Device List

When a new WBT is connected to the network, an ABS should automatically see it if the broadcasting method has been correctly configured. But it will not be displayed in the main RD window until the ABS "UNASSIGNED" device list is refreshed. This can be done by one of four methods:

- 1. Highlight the ABS IP address or the "UNASSIGNED" device list and execute View|Refresh from the Menu bar.
- 2. Highlight the ABS IP address or the "UNASSIGNED" device list and use the hot key Ctrl+R.
- 3. Right-click on the ABS IP address or the "UNASSIGNED" device list and select Refresh from the drop-down menu.
- 4. Close and reopen the RD application.

The easiest way to add a device to a device list is to drag and drop the device from the "UNASSIGNED" device list to the desired list. But sometimes the user may want to manually add a device. The user can select either the New Device option in the File menu or right click on the device list created. Clicking the Device toolbar icon can also do this. The user is required to enter the password for the device list to which the device is to be added.



As soon as the New Device Dialog box pops up, as shown in the figure above, the user is required to enter the IP Address of the device, and the device list password. The password ensures that only authorized users can manipulate the device.

Next click on **Get Info** button to show the device information, and then click the **OK** button to add the device to the device list.

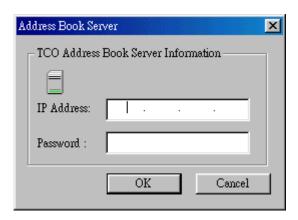
To download device lists from an Address Book Service, the user can connect to it either by double clicking on the IP address for the server or right clicking on the server and selecting the "Connect" option from the drop-down menu.

To Configure the Address Book Servers

Address Book Servers can be configured by selecting the Configure option in the 'Server Menu', or by pressing the Configure Toolbar icon, or by the hotkey option of pressing **Ctrl+A**. The Address Book Servers dialog box pops up as shown.



The user has the options of Adding, Removing, or Modifying an Address Book Server or connecting to an Address Book Server. When adding, the user is required to enter the IP Address and the password of the Address Book Server. The user can also request Remote Director to automatically find all the Address Book Servers on the network by clicking on **Auto-Discover**.



Upgrade Device Firmware

1. Download the latest version firmware to your server. This firmware includes "xxxx.bin", "xxxx.tco" and "xxxx.rgs".

The "xxxx.bin" contains the firmware image. It is same as the .bin file upgraded using the FTP server procedure.

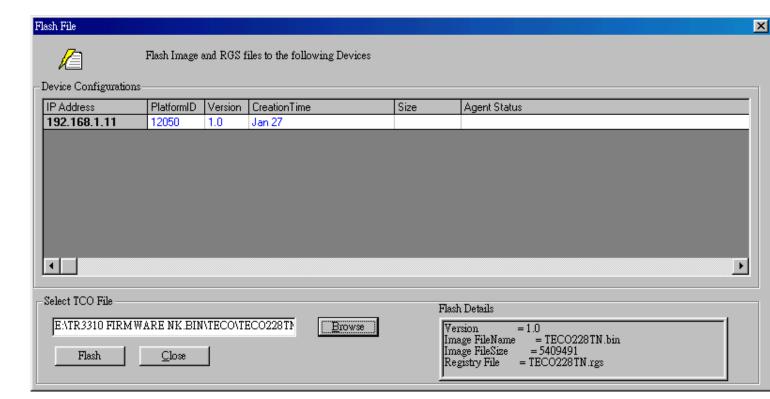
The "xxxx.tco" converts the .bin format to .tco format.

The "xxxx.rgs" contains registry information needed for the upgrade.

It is possible to flash the image without flashing the WBT registry, and vice-versa.

Upgrade Procedure

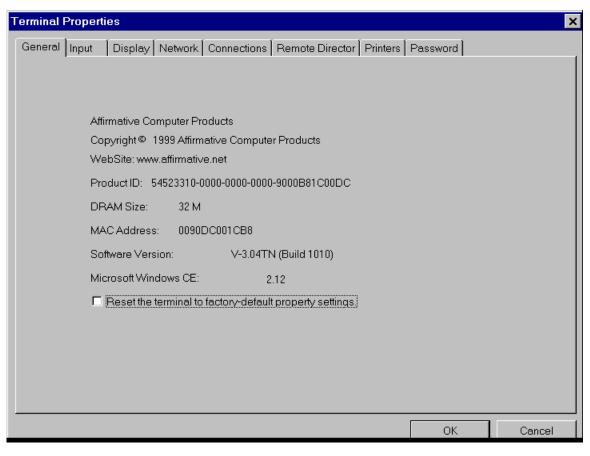
Select the devices to be upgraded on the right pane and then select the option 'Flash File' under the Device menu, or select the Flash Toolbar icon. As soon as the Flash File Dialog Box pops up as shown in the figure, the user selects the .tco file containing firmware image file information or the .rgs file (consisting of registry entries) or both to be flashed to the device. The dialog shows information about the current image on the device. Click on **Flash** to flash the image to the device(s).

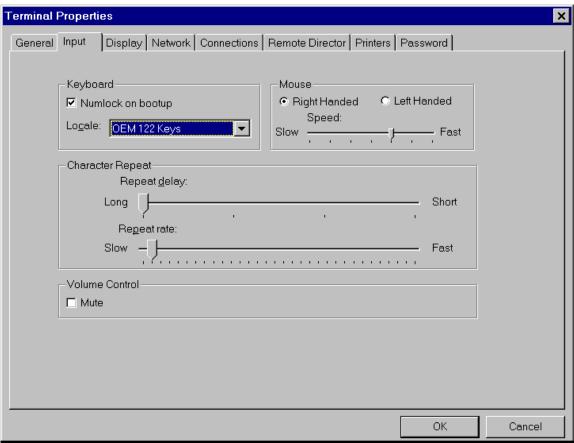


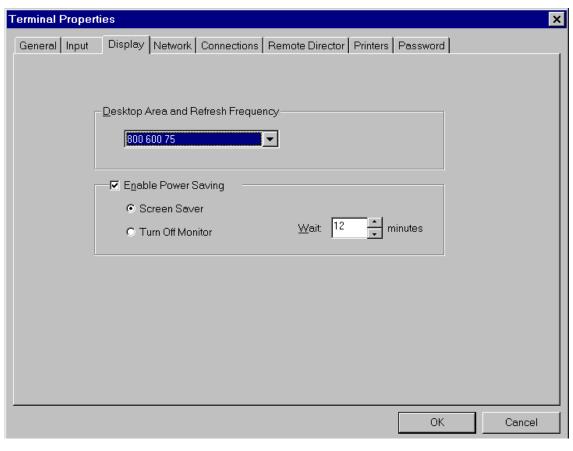
View the Terminal Properties

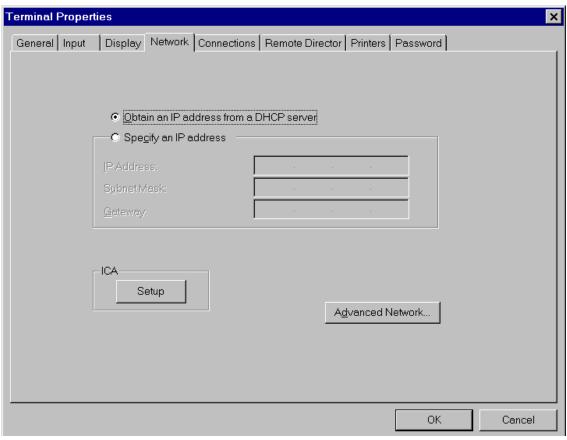
Right click on the selected device. That pops up a tabbed Terminal Properties sub-window showing the WBT properties for a single device. This sub-window is very similar to the Terminal Properties window seen on the WBT itself. But some parameters and controls are irrelevant for remote management, and these are not seen on the Remote Director version of Terminal Properties.

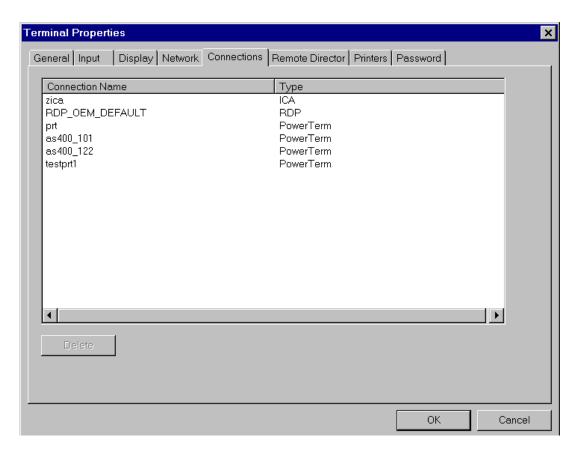
There are eight Terminal Properties sheets. Using these properties sheets, an administrator can remotely change the WBT properties from the server. Controls and buttons work here just like they do on the WBT. However, the changes will not take effect on the WBT until the administrator tells Remote Director to send the changes to the WBT and reboot the WBT. The administrator is given this option after clicking on **OK** of Terminal Properties.



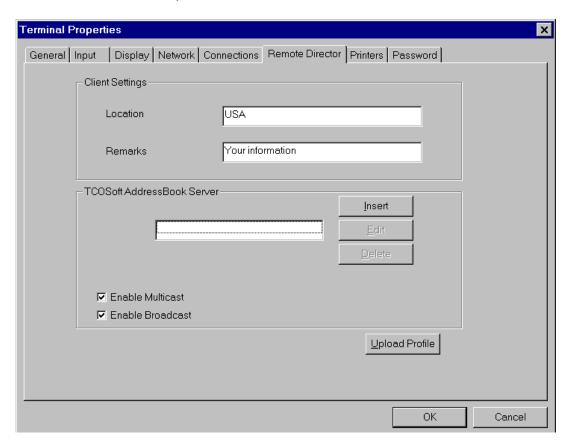


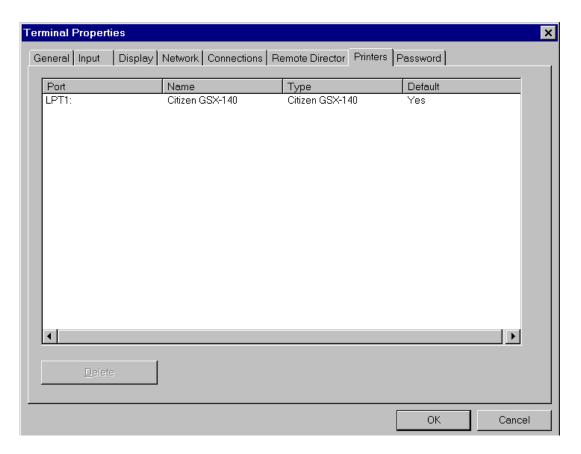




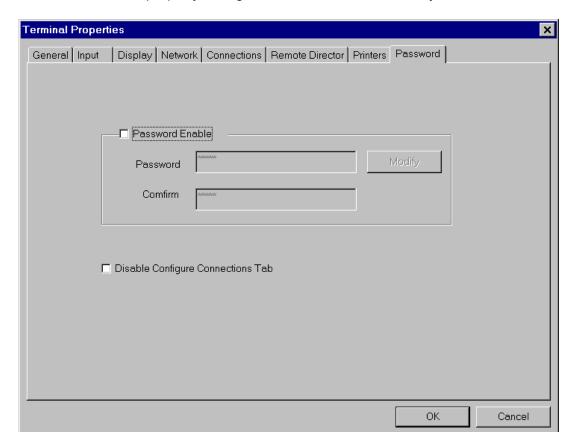


Individual sessions can only be deleted via Remote Director Terminal Properties; they cannot be added. Also, session parameters cannot be edited here.



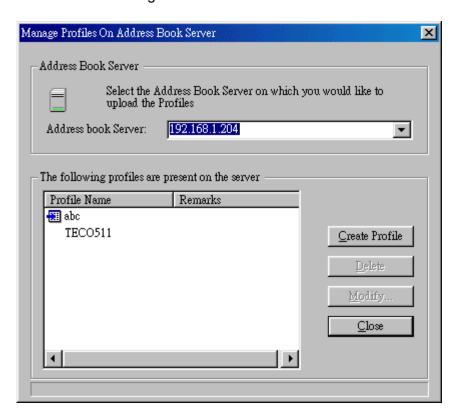


Printer additions or property changes cannot be done here. Only deletions can be made.

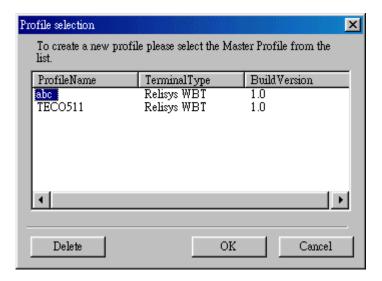


To Create a Profile

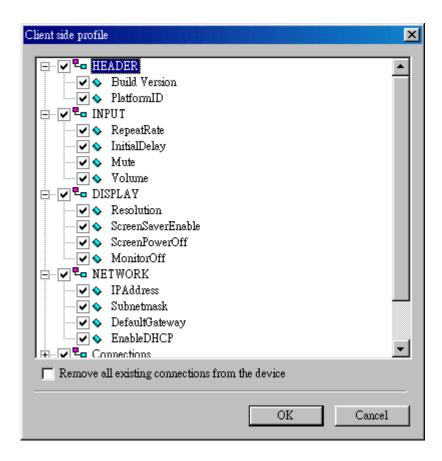
Select "Device Profiles" from the "Server" menu item. This will display the "Manage Profile On Address Book Server" dialog box.



Click on **Create Profile**, and the "Profile selection" dialog box will show available master profiles (i.e. the profiles uploaded from the client WBT).

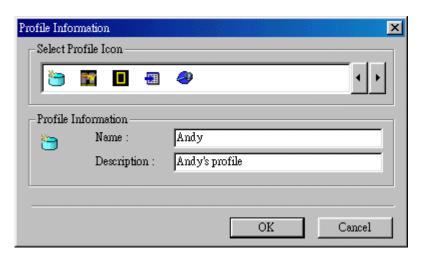


The user can then select the profile of interest and press **OK**. A "Client side profile" dialog box appears.



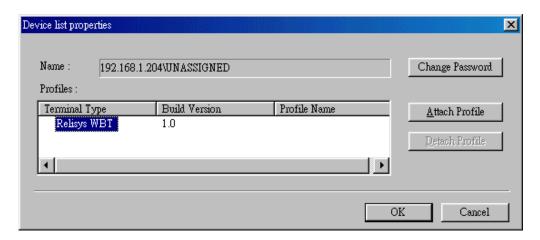
The dialog box displays the properties of the Master profile. The user can then choose which of these properties are to be included in the device profile. *Only those properties that are checked* will be downloaded to the devices; other properties on the devices will be unchanged. Some properties can be edited from this screen. To edit, right click on the property, and then left click on the resulting **Edit** button.

The client-side profile thus created is identified with a name and an icon, selected by the user while naming it. This is provided by the "Profile Information" dialog box shown below after clicking on **OK** in the "Client side profile" dialog box.

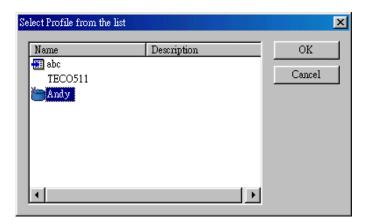


To Attach a Profile to a Device List

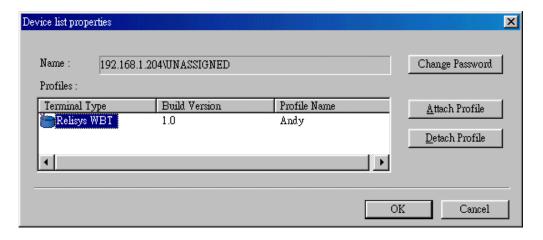
Right-click the device list from the main window to get a pop-up menu, and select the "Profiles" item. The "Device list properties" dialog box appears.



Select a profile to be attached to the device list by pressing the Attach Profile button.



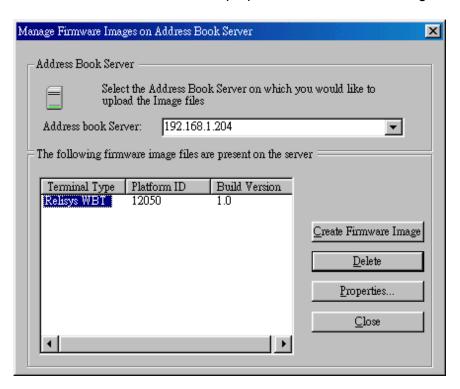
The "Select Profile from the list" dialog box is downloaded from the Address Book Service, from which the user can select the profile to be attached to the device list. Only one profile can be attached to a device list, so attaching a new profile automatically detaches the old profile.



A profile can also be detached from the device list by pressing the **Detach Profile** button.

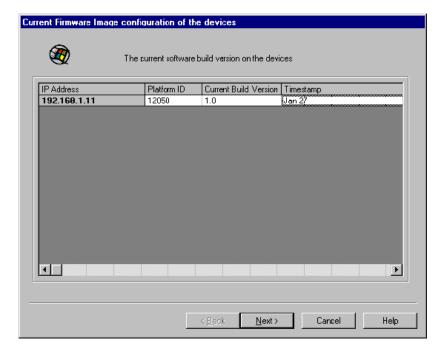
To Upload Firmware Images to the Address Book Server

Select "Server/Firmware Images" from the menu bar to display the following dialog box. Click on **Create Firmware Image**, and the File Open Dialog box will be displayed to enter or browse for the "xxx.tco" file containing the image information. The firmware image and the registry files that are specified in the .tco file are uploaded on to the Address Book Server. The **Delete** and **Properties** buttons are used to delete and view the properties of the selected image.

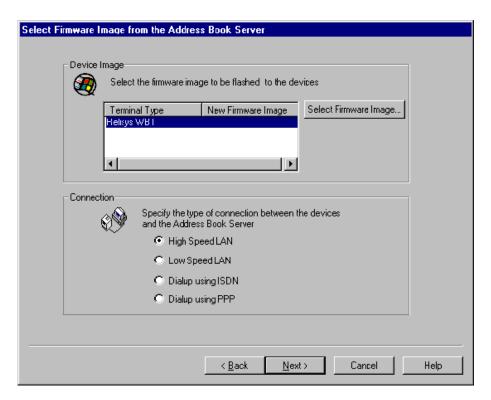


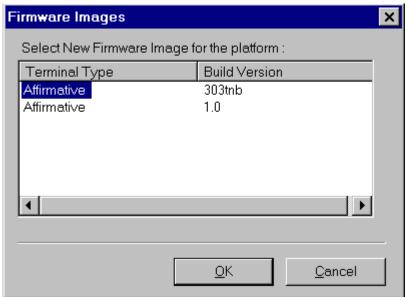
To Schedule a Firmware Image Update

Select the "Device/Schedule Firmware Image Download" menu item to invoke a Scheduling Wizard.

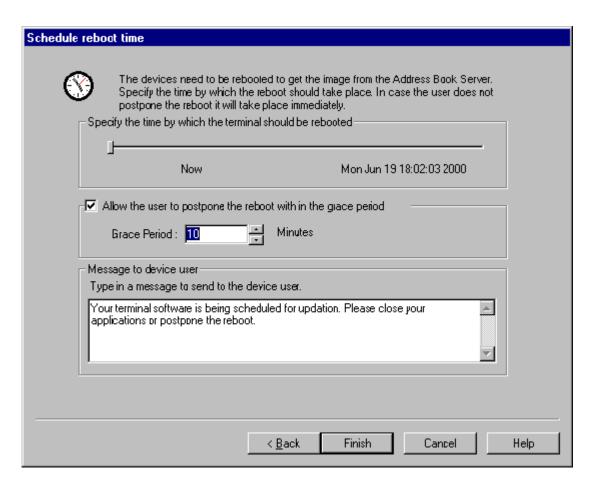


The initial screen displays the devices' current Build Versions. The next screen allows the user to select the new image from the Address Book Server. It also allows specifying the type of connection between the Address Book Server and the device to balance the load on the Address Book Server.

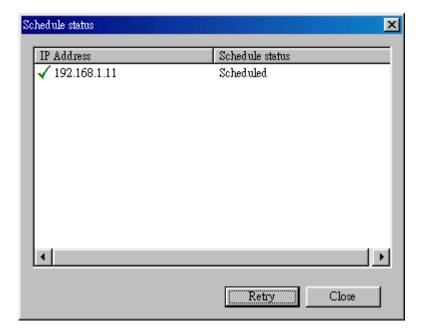




The next screen schedules the reflash/reboot operation for devices. The slider control schedules the operation in five-minute increments up to twenty-four hours from "now". There is also provision to allow the target devices a grace period, set in five-minute increments, within which a user can postpone the reflash. A message to be displayed on user devices can also be entered here.

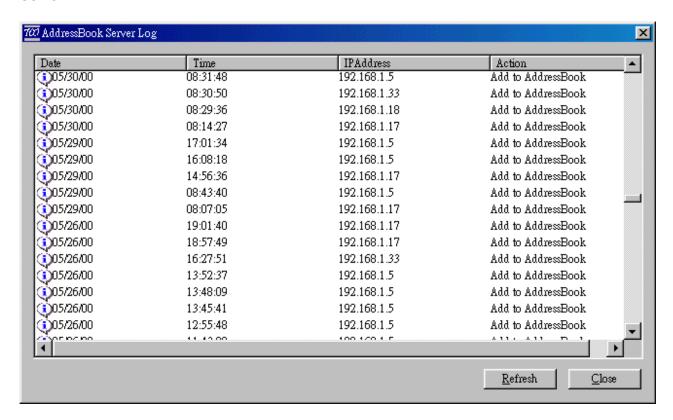


Clicking **Finish** will display the 'Schedule status' box that indicates if the WBTs have received the schedule information. Click on **Retry** to resend the schedule information to the devices that did not receive it in the last attempt.



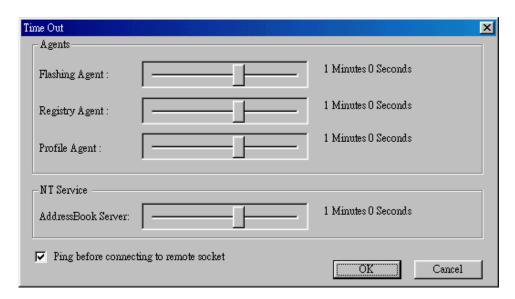
Log Viewer

The user can check the status of different operations carried out by the Address Book Server in the Log Viewer. To view the log, select the "Log Viewer" menu item by right clicking on the Address Book Server.



Timeout

The user can specify individual connection timeouts for the various WBT agents and the Address Book Server. He can also specify whether to use the ping mechanism before connecting to WBTs or Address Book Servers. This might be especially useful if there are remote devices connected over a Wide Area Network. To specify timeouts, select the "Time Out" menu item under the "Tools/Options" menu. Timeouts are available in five-second increments up to five minutes.



Jumpstart Guide for Distributing Sessions on Multiple WBT

- 1. To configure multiple WBTs with a common set of ICA/RDP or emulation sessions, you first must create a master client-side profile on a WBT and upload it to the Address Book Server.
- 2. After you have configured a benchmark WBT with the desired sessions and WBT properties, go into 'Terminal Properties" by pressing F2 from the Connection Manager screen on the WBT. Select the "Remote Director" tab, click on Upload Profile and follow the dialogs to upload that master profile to the server (note: the master profile can not be directly copied to any other WBT; you first must create a device profile from the master). After following the dialog box, you should get a message that the profile was successfully uploaded. It may take a minute to get this message, with no feedback in the interim; be patient. You can also do this remotely from the RD by right-clicking on the IP address of the benchmark WBT, selecting "Terminal Properties", and then selecting the "Remote Director" tab.
- 3. With a master profile on the Address Book Server, you may create a device profile that is derived from that master (see <u>To Create a Profile</u>). Select Device Profiles from the Server menu and follow the dialogs to create your device profile from the uploaded master profile list. When the tree-like menu comes up, be sure to select which connections you want to use from the connections subtree near the bottom of the tree. (By checking connections, you will copy all ICA/RDP and emulation settings, but you may select which exact sessions you want to copy by expanding the connection tree section and checking the box next to each connection/session desired). You may ignore the other sections in the tree, and leave them unchecked, if you only want to distribute sessions/connections.
- 4. Now that your device profile is created and named, you can distribute that profile to all WBTs in a device list. To do this, attach the profile to the desired list (see <u>To Attach a Profile to a Device List</u>). Then force/schedule all WBTs in that list to reboot and to download your new profile after rebooting.

UUID Error Troubleshooting

Users of the remote management software may run into error messages involving UUIDs. Each of our Windows-Based Terminals has a unique Product ID, which can be seen on the General tab of Terminal Properties. When a WBT is booted up, the WBT automatically sends basic information about itself to the Address Book Service (ABS). The ABS stores this information, which includes the IP address and the Product ID. This Product ID is called the UUID in the central management software. The Remote Director (RD) will, upon manager request, display the IP addresses of each WBT cataloged by each ABS under its direction. Newfound WBTs are displayed in the UNASSIGNED device list until the manager moves them to other device lists

"INVALID UUID"

The Invalid UUID situation is frequently seen in a DHCP environment. The first time a WBT is booted up, it gets an IP address from the DHCP server, and this IP address, along with the WBT UUID, is cataloged by an ABS. Upon request from the RD, all the IP addresses cataloged by an ABS will be shown in the RD screen. The manager can then request Terminal Properties for any active device in any of the device lists. Those device lists are only updated if Refresh is chosen for a specific ABS, or if the RD is exited and then re-entered. Let us say that, for some reason, a WBT loses its DHCP lease and another WBT is assigned that same IP address. Now if a manager requests the RD to get the Terminal Properties of that IP address, and the device list has not been updated since the original IP assignment, the RD immediately sees that the UUID for that IP address is not the one originally cataloged. So it says "Invalid UUID". Of course, this can happen any time that an IP address is reassigned to a different WBT; the reassignment doesn't have to be done by a DHCP server.

The error can be corrected as follows:

- 1. Do a Refresh on the device list containing the problem IP.
- 2. After the refresh, you will see the problem IP listed twice, and one of the listings will have a red x by it and the status "Invalid IP Address". This is the old IP/UUID pair.
- 3. Delete the one with the red x; the remaining instance of that IP address should have the correct UUID for the new assignment.

If your ABS is not on, for some reason, when the second WBT is booted up and assigned the preused IP address, this second instance of the IP address will not be cataloged by the ABS. Then a subsequent Refresh on the device list will not show the second instance and the above correction procedure will not work. In this case, do a reboot of the second WBT while the ABS is on. This allows the ABS to catalog this instance. Now repeat steps 1-3 above.

If it is inconvenient to reboot the second WBT, this instance can be entered manually as a new device. Then the old instance will show up with the red x, and you can delete it.

"A DEVICE WITH SAME UUID ALREADY EXISTS"

This is the converse of the "Invalid UUID" situation. Here two IP addresses have been assigned to the same WBT. Assume that the first instance is already cataloged in the ABS, and is displayed in a device list. Now manually enter the second instance as a New Device to any device list. The WBT must be active in order for manual entry to work. When you **Get Info**, you will see the correct UUID for that IP address. But when you **OK** out of that screen, you will get the error message "Add new device failed. A Device with same UUID already exists in the device list". You will have to **Cancel** the New Device process.

This error is corrected as follows:

- 1. Do a Refresh on the ABS or any device list.
- 2. The new IP assignment will now be shown as an Active device in the same device list that contained the original instance. The original instance is deleted.

Or

1. Don't do a manual entry. Just do a Refresh on the ABS or any device list.

Remember that one of the virtues of this remote management software is that new devices on the network are automatically detected. If the device is remote (i.e. on the other side of a router or gateway from the ABS), Multicasting must be enabled both on the WBT Remote Director tab and on the ABS. If the device is local, Broadcasting or Multicasting must be enabled at the WBT and the ABS. So you shouldn't have to encounter the "Same UUID..." error.

If your remote WBTs are not automatically found by the ABS, there is probably a multicasting breakdown somewhere in the network path, such as router, gateway, or firewall. Enabling multicasting may be a configuration parameter in one or all of these network elements.





WBT Setup Wizard

WBT Setup Wizard



The WBT Setup Wizard is used for the WBT initial setup. The wizard runs when:

- In the Terminal Properties dialog box, you select "Reset the terminal to factory-default" to restart the WBT
- A WBT is first booted up after being received from the factory.

You can use the WBT Setup Wizard to set the basic WBT network configuration and display parameters. Any parameters set in the WBT Setup Wizard can be changed later by using the Terminal Properties dialog box. You can launch this dialog box by pressing the [F2] key at any time from the Connection Manager window. Please refer to Configure Terminal Properties.

When proceeding through the WBT Setup Wizard process:

Click the Next or Accept buttons

To display the next dialog box in the sequence.

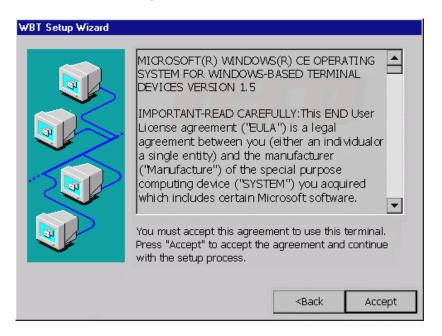
Click the Back button

To return to the previous dialog box.

Click the Cancel button

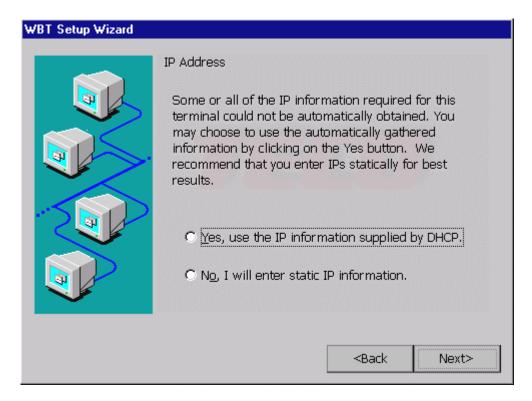
To quit and display the WBT's Connections Manager.

EULA (End User License Agreement)



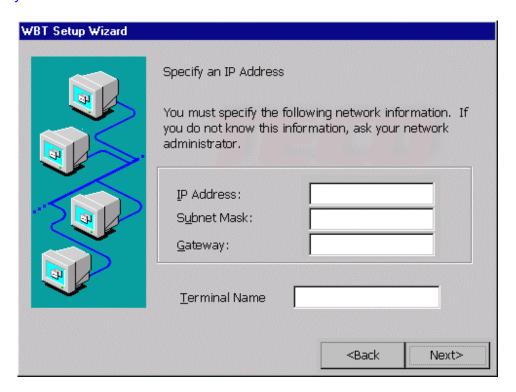
Please read the license agreement carefully.

IP Address



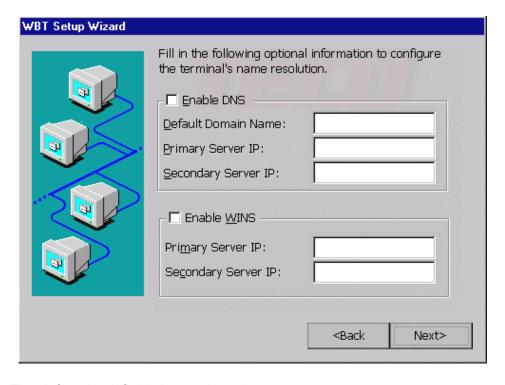
- Click Yes to use the IP address information supplied by the DHCP server. Then the Optional Information dialog box will display.
- Click No to use static IP address information. Then the Specify an IP Address and Optional Information dialog boxes will display.

Specify a Static IP Address



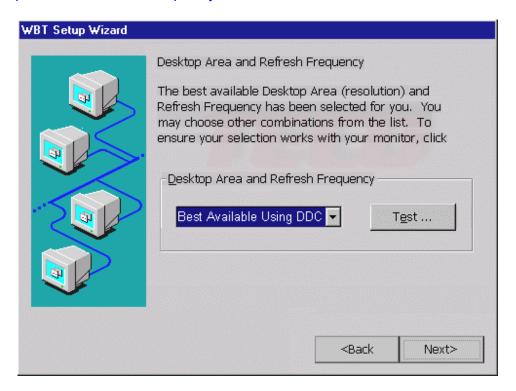
If you wish to use static information, ask your network administrator for the IP addresses to enter here. The Terminal Name is limited to seven characters, and is used in various server administrative utility screens to uniquely identify different WBTs. Ask your server administrator for a name to enter here.

Optional Information



Note: The default in all fields is unselected.

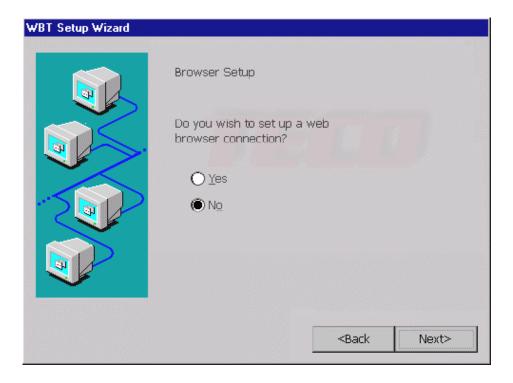
Desktop Area and Refresh Frequency



Note: The default setting is 800 x 600 @ 75Hz, not "Best Available Using DDC" as shown in the screen shot.

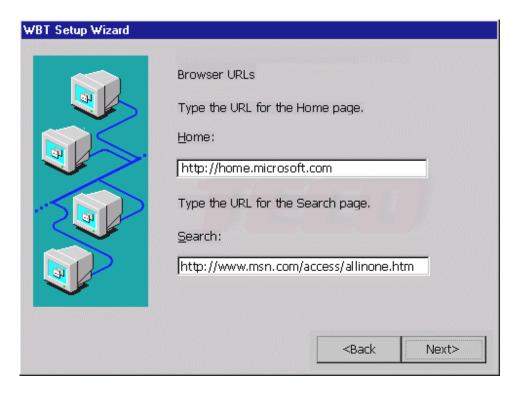
You can select a different setting from the drop down list, but please be sure to use the Test button before proceeding. If you enter a setting that your monitor cannot support, you will be faced with an unusable screen the first time you reboot the WBT. See Troubleshooting Q&A if this occurs.

Browser Setup

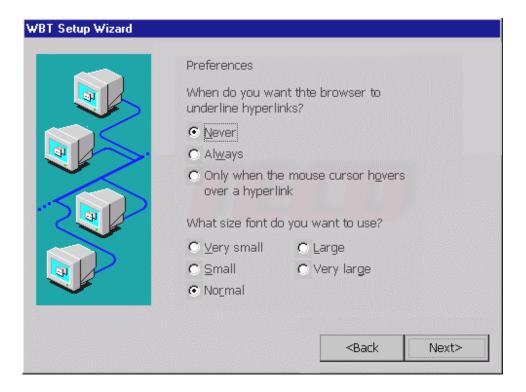


If you have a Model 2612 or 2613 terminal, you will see the above screen. If you select Yes, you will then be faced with several more browser setup screens which provide you with some of the usual Internet Explorer browser options.

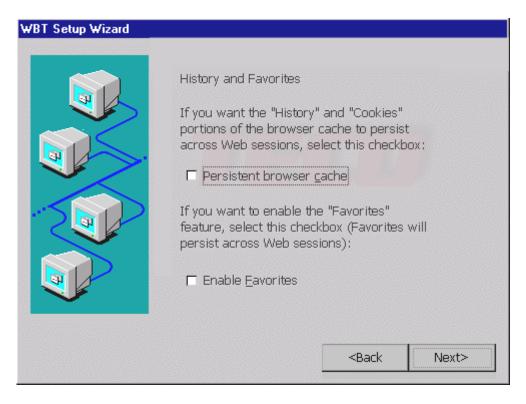
Browser URLs



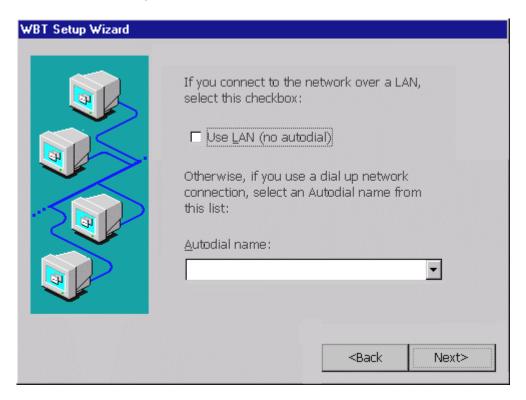
Browser Preferences



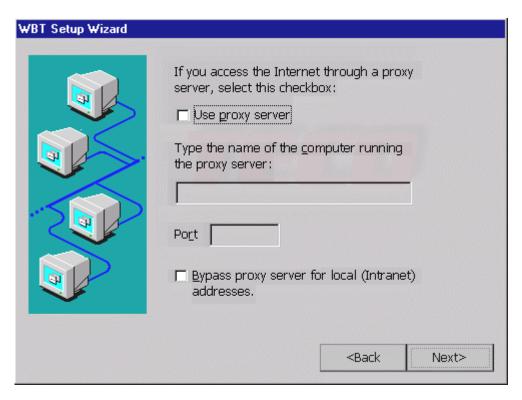
Browser History and Favorites



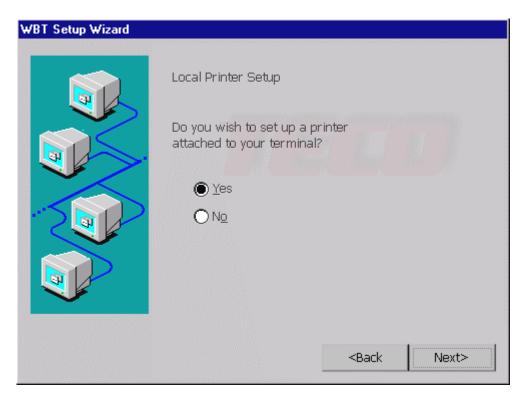
Browser Connection Setting



Browser Proxy Setting



Local Printer Setup



If you select **Yes** here, you will be faced with several more screens used to configure printer properties. Note that you should only answer **Yes** if you wish to use a local attached printer in ICA or RDP sessions. If you only want to use a local printer for text emulation sessions, you answer **No** here, and printer setup is done within the text emulation setup.

Select Printer Port

In this screen, not shown here, you must select a printer port. You can have more than one local printer, but each one must be assigned to a different printer port.

Select the Printer Model

In this screen, not shown here, you select a printer manufacturer from the manufacturer drop-down list. After you select the manufacturer, the right-hand drop-down list will provide a list of models for that manufacturer. If your model is not shown here, try to find a compatible printer in the list. It may be that your printer is compatible with a model from a different manufacturer. If that is the case, go back, change the manufacturer selection, and then choose the compatible model from that drop-down list.

Name Your Printer

In this screen, not shown here, you must provide a "friendly" name for your printer. This name will identify your printer in the Printers settings screen on your server. The default name is the model name that you selected in the previous screen.

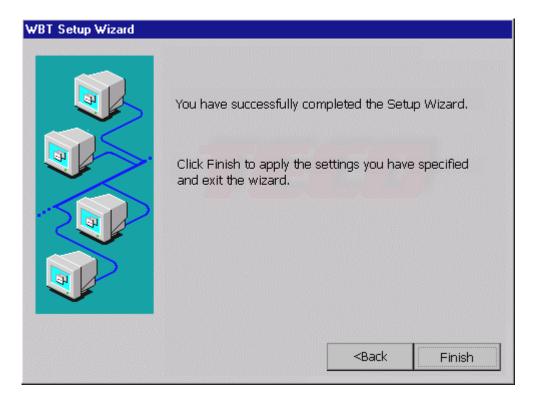
Set Default Printer

In this screen, not shown here, you select whether or not you want this local printer to be the default printer for your Windows (ICA and RDP session) applications.

Select Another Printer

In this screen, not shown here, you are given the opportunity to begin the configuration of another printer. If you select **Yes**, you will repeat the above screens for that printer. If you select **No**, you will go on to the Finish screen.

Finish



This dialog box is informational.

- Click **Finish** to apply your selections and quit the WBT Setup Wizard.
- Click **Back** to return to the previous dialog box.
- Click **Cancel** to forget the whole thing. If you do this, you will be faced with the Setup Wizard again the next time you restart the WBT.





Connection Management

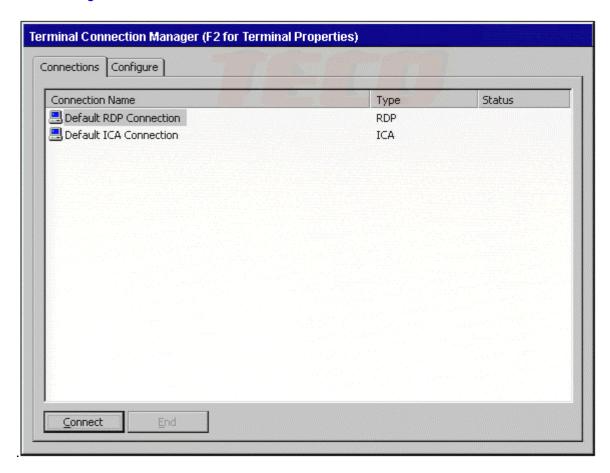
Connection Management



In the Terminal Connection Manager dialog box, you can select either Connections or Configure to manage your WBT's network connections.

Using the Connections Dialog Box

Connections Dialog Box



The functions of the Connections dialog box are used to make a network connection with the server.

• Connect:

Click on the **Connect** button to make a network connection. You can also double-click on a selected connection in the Connection Name window to make a network connection.

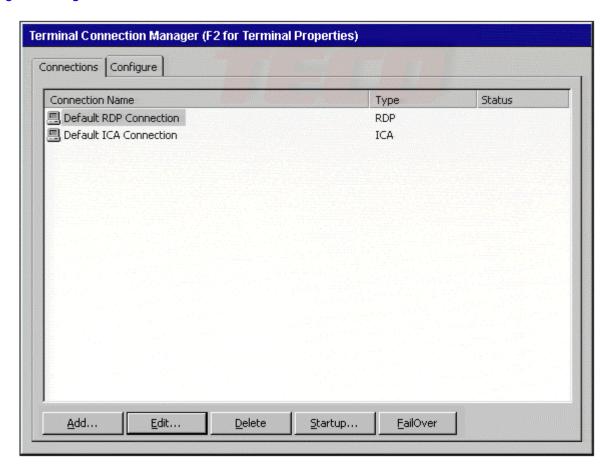
End:

The **End** button will be enabled when you press [Ctrl] + [Alt] + [End] from a working session. You can click on the **End** button to end any active connection process listed in the status field. The **End** button is disabled in the default.

Using the Configure Dialog Box

The functions of the Configure dialog box are used to add, modify, delete, and configure connections.

Configure Dialog Box

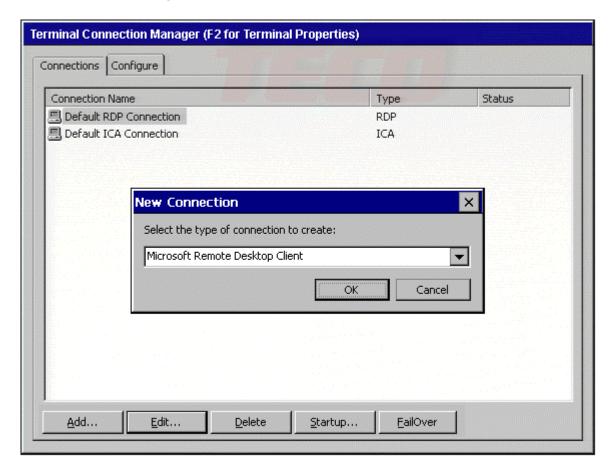


The Configure properties sheet contains five basic functions.

Add

Click on the **Add** button to create a new connection. A New Connection dialog box displays when this button is pressed.

New Connection Dialog Box



Please refer to the <u>Creating A New Connection</u> section for more information about adding a new connection.

Edit

Click on the **Edit** button to edit the properties of a selected connection. Please refer to the <u>Editing A Connection</u> section for more information about editing a connection.

Delete

Click on the **Delete** button to delete a connection. When you click this button, a Confirmation dialog box displays. Click on the **Yes** button to complete the deletion. Click on **No** to cancel the deletion.

Startup

Click on the **Startup** button to specify the connection option when the WBT starts up. The Connection Startup dialog box displays after the Startup button is pressed. Using the

Connection Startup dialog box, your WBT can be set to automatically connect to a server when the WBT is turned on. Any or all sessions can be configured for automatic startup.

Connection Startup Dialog Box



Make the selected connection your default connection.

Enable this function to use the selected connection as the default connection. This connection will be highlighted in Connection Manager when the WBT is powered up.

Automatically start the selected connection at startup.

Enable this function to automatically start the selected connection when the WBT starts up.

OK

Click on **OK** to quit the dialog box and save the changes.

Cancel

Click on **Cance**l to quit the dialog box without any change.

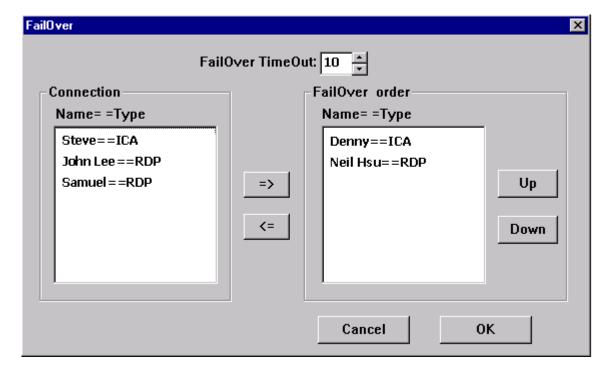
FailOver

FailOver provides backup connections if any of the sessions that are configured for Autostart fail to start. FailOver operates as follows:

- 1. FailOver operation is activated, if any of the autostart sessions fail to connect to its server when the WBT is powered on..
- 2. FailOver pings the first connection from the FailOver list. If the ping is successful, then the backup connection is made.
- 3. If ping is not successful, then FailOver pings next connection from the FailOver list, and so on.
- 4. If no connection is made, FailOver stops and displays an error message

Click on **FailOver** to display the FailOver dialog box.

FailOver Dialog Box



FailOver TimeOut

You can set the connection timeout (by seconds) before a session is considered as having "failed".

• =>

Add the selected connection to the FailOver list.

• <=

Move the selected connection out of the FailOver list.

Up

Increase the selected connection's FailOver priority.

Down

Decrease the selected connection's FailOver priority.

• OK

Quit the dialog box and save the changes.

Cancel

Quit the dialog box without any change.





Creating a New Connection

Creating A New Connection



The New Connection dialog box allows the user to create new network connections. Each connection can be to a unique server, if desired. The total number of concurrent active connections is limited by the amount of RAM in your WBT, the type of emulator in your WBT, and whether or not your WBT has browser capability. Model 2610 WBTs allow the highest number of concurrent connections, while Model 2613 allows the least. Standard RAM is 32MB and typically allows 2 – 4 concurrent sessions. With the optional 64MB RAM, there is seldom any practical limitation, except that Models 2611 and 2613 are software-limited to four emulator sessions.

New Connection Dialog Box



Choosing a Connection Protocol

From the pull-down list bar in the dialog box, select the type of connection protocol you want to use to connect to a server. There are three or six selections available on the list, depending upon the model number of your WBT. Click on the OK button after you have made your selection.

Microsoft Remote Desktop Client

Uses RDP (Remote Desktop Protocol) protocol to connect to a Windows NT Terminal Server Edition or Windows 2000 Terminal Services server. If you selected the RDP client, the Connection Wizard displays. Using the wizard, you can create an RDP connection. Please refer to Create an RDP Connection for more information.

Citrix ICA Client for Windows CE

Uses ICA (Independent Computing Architecture) protocol to connect to a Citrix ICA WinFrame or MetaFrame server. If you selected Citrix ICA Client for Windows CE, the Specify Connection Type dialog box displays. Using the sequence of dialog boxes, you

can create an ICA connection. Please refer to <u>Create an ICA Connection</u> for more information.

Text Terminal Emulation

In the Models 2610 and 2612, you will see a "Terminal Emulation" selection in the drop-down list, Select this, and the Connection Properties dialog box displays. Using the dialog box, you can create a specific terminal emulator. Please refer to the 2610/2612 Quick Start card for configuration information.

In the Model 2611and 2613, you will see four emulation choices in the drop-down list. Please refer to the 2611/2613 Quick Start card for configuration information.

Create an RDP Connection

You use the WTS Connection Wizard to create a new RDP connection. When you are finished, a new connection will be added to the Connection Name list in the Terminal Connection Manager.

Click the **Next** button

To display the next dialog box in the sequence.

Click the Back button

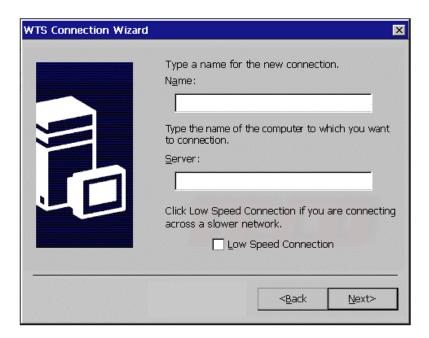
To return to the previous dialog box.

Click the Cancel button

To quit this dialog box at any time.

There are four dialog boxes for the WTS Connection Wizard process.

WTS Connection Wizard Dialog Boxes



Name

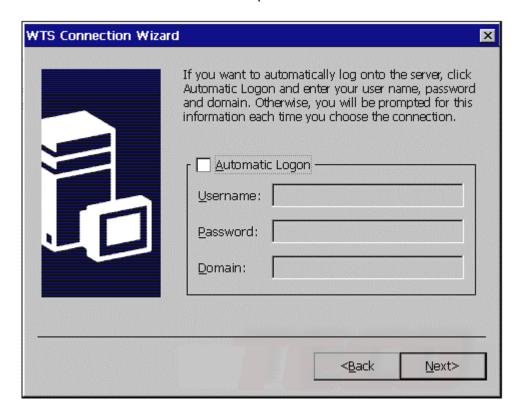
Enter the connection name to be listed in the Connection Manager screen.

Server

If you have a local DNS or WINS server, enter the network name of the selected server. Otherwise, enter the IP address of the selected server.

Low Speed Connection

Click on this button to facilitate low-speed connections



Automatic Logon:

Check this box to enable automatic logon. The Username, Password and Domain fields will be enabled when the Automatic Logon is enabled.

Username

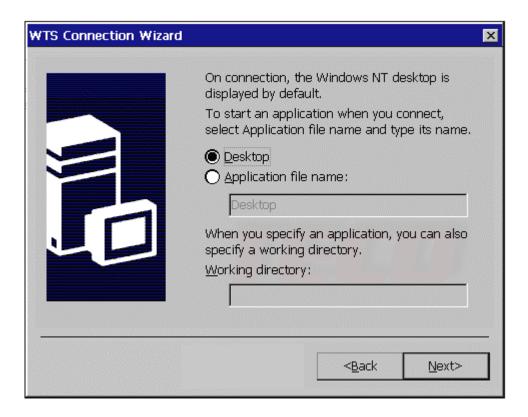
Enter your user name for Automatic Logon check at the Terminal Server.

Password

Enter your password for Automatic Logon check at the Terminal Server.

Domain

Enter your domain for Automatic Logon check at the Terminal Server.



Desktop

Click on the **Desktop** button to start the session with the server desktop.

File Name

Click on the **Application file name** button to start the session in an application.

In the Command Line field, enter the path and name of an application to run on the server once the logon to the server is successful. Leave this field blank to run a Windows NT/2000 desktop from the server. Working Directory lets you associate a directory with the application specified in the Command Line field. Enter the drive and path of the working directory in the Working Directory field.

For example, if the application Notepad.exe is in the C:\WTSRV directory on the server, type C:\WTSRV\Notepad.exe in the Command Line field. If you use Notepad to work on documents in the C:\My Documents directory, type C:\My Documents in the Working Directory field. When you log on to the server, Notepad begins. In Notepad, if you click the File menu, the directory C:\My Documents is displayed. Click **Next** to continue.



Note: Microsoft Corporation has acknowledged three not-so-obvious RDP connection issues with Windows 2000 Terminal Services & Windows NT 4.0 Terminal Server.

Issue #1. Microsoft has acknowledged licensing issues when Thin Clients like the Affirmative YES*tation* connect to a Windows 2000 Terminal Services server. Microsoft strongly recommends applying the Terminal Services Licensing Enhancement Update, which can be found by accessing Microsoft's Knowledge Base Article: **Q287687**. Duplicate client licenses, inability for a thin client to connect, and other unknown repercussions could result if this update is not applied.

Issue #2. If your organization connects to a Windows 2000 or Windows NT 4.0 Terminal Server with a host name, the RDP Server parameter in the YEStation requires a fully qualified name. For example, if your Windows 2000 Terminal Service host name is: SERVER1 and the DNS Default Domain is: COMPANY.COM, then the fully qualified name is: SERVER1.COMPANY.COM

Issue #3. If your organization connects to a Windows 2000 or Windows NT 4.0 Terminal Server using the RDP Protocol and you use DNS entries in your Thin Client setup, Microsoft requires a local DNS Server to resolve the server IP address or fully qualified name. Users who do not specify DNS entries in the YES*tation* Network setup will not need a DNS server to resolve the server's IP address.

Create an ICA Connection

You can configure and run two types of ICA sessions: Citrix server connections and published applications.

- Citrix server connections allow you to connect to the Windows desktop of a specific Citrix server; you can run any applications available on the desktop, in any order.
- *Published applications* are specific applications set up by an administrator for use by remote users. When connected, you are presented with the application itself.

Note This section provides basic introduction regarding how to create an ICA connection for both network and dial-in. If you want to know more detail information about ICA operation and features, please refer to **Citrix ICA Client Administrator's Guide**.

To create a new connection entry

- 1. In the Connection Manager dialog box, click the Configure tab.
- 2. Click Add.
- 3. In the New Connection dialog box, select Citrix ICA Client in the drop-down list. Click OK.
- 4. A Setup Wizard dialog will begin. There are eight dialog boxes for the Setup Wizard process. In each box,
 - Click the Next button

To display the next dialog box in the sequence.

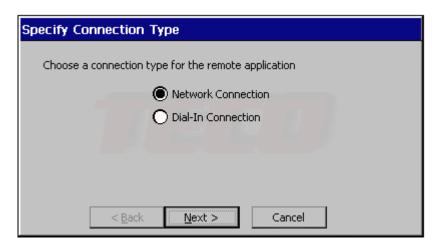
Click the Back button

To return to the previous dialog box.

Click the Cancel button

To quit this dialog box at any time.

Specify Connection Type Dialog Box



Click **Network Connection** to make an Ethernet network connection. Make sure your WBT is connected to the network through the Ethernet connector. Click **Next** to continue.

Click **Dial-In Connection** to make a dial-in connection. Make sure your modem is installed and properly configured. Click **Next** to continue.

Network Connection

The following procedure describes how to create a network connection to a Citrix server.

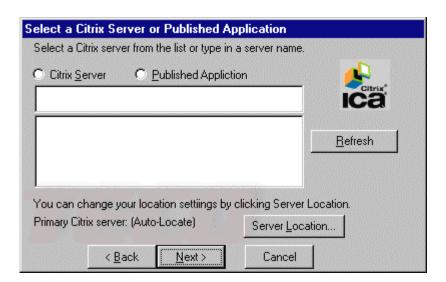
1. Click on this radio button to create a network connection that requires a direct line to the network, such as Ethernet.

If you choose Network Connection and click on **Next**, a message displays:



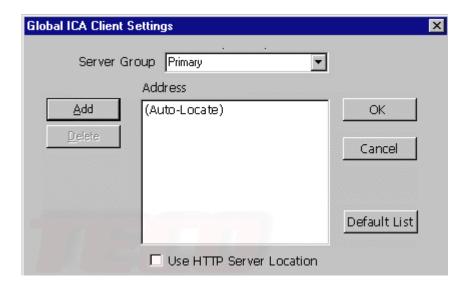
If one or more Citrix servers are found on your local network, the "Select a Citrix Server or Published Application" dialog box appears. If no Citrix server is found, you will get an error message at the end of the search. Click on **OK**, and you will see the "Select a Citrix Server or Published Application" dialog box.

Select a Citrix Server or Published Application Dialog Box



If your WBT is not on the same network as the Citrix server you want to connect to (for example, if you are on the other side of a router, across the Internet, or using RAS to connect to a remote network containing Citrix servers), the Server and Published Application lists will not contain that server. In this case, click **Server Location** and go to the Server Location screen to add or delete a Server Location.

Server Location Dialog Box



The information entered in this dialog box is used to help locate available Citrix servers and published applications.

If:

- You are on another network (for example, if you are on the other side of a router, across the Internet, or connected by RAS), click Add to enter the IP address or DNS name of a Citrix server on the network that contains the Citrix server you would like to connect to. The Windows CE client uses this server to locate the list of available Citrix servers on the network.
- Your network configuration cannot propagate UDP traffic (for example, if your firewall restricts UDP broadcasts), click **Use HTTP Server location**. Make sure that the list contains the IP address or name of a Citrix server on the network that contains the Citrix server you would like to connect to. The Windows CE client uses this server to locate the list of available Citrix servers on the network.

Note When you first select **Use HTTP Server location**, the convention used for the default server name is ica. *domainname* where *domainname* is your TCP/IP domain name. You can change this to a specific server name/IP address or leave the default setting and map the name of a server to ica. *domainname*. Note that TCP/IP+HTTP server location uses a TCP connection so does not support the **(Auto-Locate)** function.

Click OK.

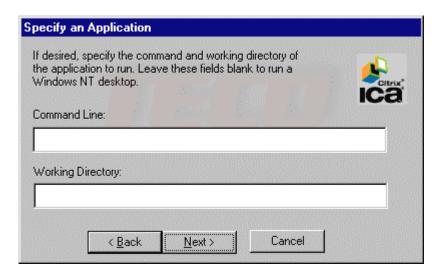
Then, back at the "Select a Citrix Server or Published Application" box, scroll through the list and select the Citrix server or published application or type the name or IP address of the Citrix server or published application in the edit field. Click **Next** to continue.

2. The "Select a Title for the ICA Connection" screen appears:



By default, the Citrix server or published application name appears in the edit field. You can accept this name or enter another. The name you choose will be the name of the entry in the Current Client Connections list and will appear in the title bar of the ICA session window. Click **Finish**. Click **OK** to the confirmation message.

3. The Specify an Application screen appears (this screen does not appear when configuring a published application connection):



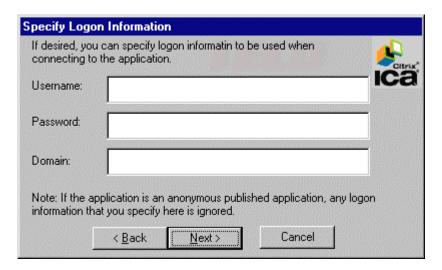
In the Command Line field, enter the path and name of an application to run on the server once the logon to the Citrix server is successful. Leave this field blank to run a Windows desktop from the Citrix server. Working Directory lets you associate a directory with the application specified in the Command Line field. Enter the drive and path of the working directory in the Working Directory field.

For example, if the application Notepad.exe is in the C:\WTSRV directory on the Citrix server, type C:\WTSRV\Notepad.exe in the Command Line field. If you use Notepad to work on documents in the C:\My Documents directory, type C:\My Documents in the

Working Directory field. When you log on to the Citrix server, Notepad begins. In Notepad, if you click the File menu, the directory C:\My Documents is displayed.

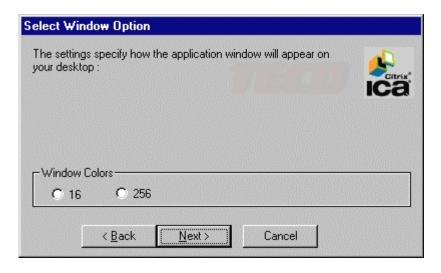
Click Next to continue.

4. The Specify Logon Information screen appears:



Type a valid user name, domain, and password. If you leave these fields blank, you are prompted for your user name, domain, and password whenever the ICA Windows CE Client connects to the Citrix server. Click **Next** to continue.

5. The Select Window Options screen appears:



In the Window Colors field, select 16 or 256 colors: in newer versions you will also see a Thousands option. The default 16 is recommended if your WBT has 32MB of RAM, since 256 or Thousands colors uses more RAM in the WBT and reduces the number of sessions that can be simultaneously active. Click **Next** to continue.

6. The "Compression, Encryption, and Sound" screen) appears:

Compression, Encription and Sound					
☐ Use Printer Configuration Utility					
Compress Data Stream					
☐ Enable Sound					
Sound Quality:					
Speed Screen:					
Encription Level:					
Cancel < <u>Back Next</u> > Finish					

Click **Use Printer Configuration Utility** to enable printer auto-configuration.

Click **Compress Data Stream** to reduce the amount of data transferred between the ICA Windows CE Client and the Citrix server hosting the session. (If your connection is bandwidth-limited, enabling compression may increase performance. If your WBT is on a high-speed LAN, you may not need compression.)

Click **Enable Sound** to enable sound support. Remote applications will be able to play sounds on your client. From the pull-down list, select a sound presentation quality level. High provides the greatest audio quality but should only be used when bandwidth consumption is not a concern. Medium results in less bandwidth consumption than when using High. Compression of sound data provides greater bandwidth efficiency but reduces sound quality somewhat. This value is recommended for most LAN-based connections. Low offers the most efficient use of bandwidth but also decreases sound quality severely. This value is recommended for low-bandwidth connections, including most modem connections.

Speed Screen latency reduction improves responsiveness over high latency connections by providing feedback to the user in response to typed data or mouse clicks.

Note Speed Screen will only work if the server-side Speed Screen feature is available and has been enabled on the Citrix server to which you are connecting.

In the "Speed Screen" field, select the setting (On, Off or Auto) you need.

- For slower connections (for example, if you are connecting over a WAN or a dial-in connection), set mode to **On** to decrease the delay between user input and screen display.
- For faster connections (for example, if you are connecting over a LAN), set mode to Off.
- If you are not certain of the connection speed, set the mode to Auto to turn Speed Screen latency reduction on or off automatically depending on the latency of the connection.

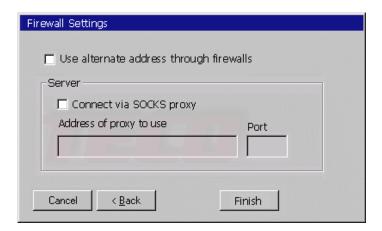
Encryption increases the security of your ICA connection. By default, basic encryption is enabled on all connections. If the Citrix server you are connecting to supports advanced encryption (e.g., Secure ICA services), you can use it to improve security. Click **Encryption** and select the level of encryption you want to use. Select **RC5 128-bit Login Only** to use encryption only during authentication.

The Citrix server must be configured to allow the selected encryption level or greater. For example, if the Citrix server is configured to allow RC5 128-bit connections, the ICA client can connect with RC5 56 or 128-bit encryption.

Note To use advanced encryption, you need to install Secure ICA on your Citrix server. The Citrix server must also be configured to allow the selected encryption level or greater.

Click **Next** to continue.

7. Firewall Settings.



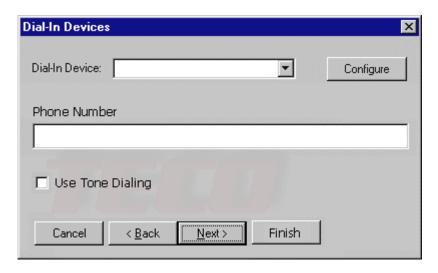
If your network has a firewall, enter the parameters here. You can configure the client to use a SOCKS proxy and alternate address re-mapping.

Click **Finish** to save the entry or Cancel to exit the new connection entry dialog box without saving the entry. Once you have created a connection entry, the name appears in the list of connections in Connection Manager.

Dial-In Connection:

For added security, Citrix servers can be configured to use modem callback. When using modem callback, the server hangs up on Dial-In connections at logon and then dials a specified number to reconnect to the user attempting to logon. Because Windows CE contains no mechanism to answer the return call, the ICA Windows CE Client does not support modem callback for Dial-In connections.

If you choose **Network Connection** in the "Specify Connection Type" dialog box, and click on the Next button, the Dial-In Devices dialog box displays.



- 1. From the Dial-In Device pull-down list, select your modem. In the Area, Phone Number, and Country fields, type the area code, phone number, and country code of the Citrix server.
- 2. Click on **Configure** and enter the appropriate Port Settings and Call Options.
- 3. Click **Next** to continue.

The remaining steps of Dial-In Connection setup are the same as Network Connection setup. Please refer to steps 2 through 7 of Network Connection setup.

Create a Text Terminal Emulation Connection

Please refer to your WBT Quick Start card for instructions on creating Text Terminal Emulation connections. If you have a Model 2611 or 2613 WBT, you can also refer to your "YES*term*/IP 5250 TCP/IP Emulation for Windows CE User Guide" for details.





Editing a Connection

Editing A Connection

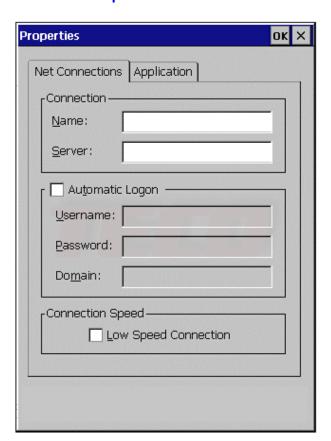


The Edit button on the Configure Dialog Box allows the user to edit or modify the properties of a selected connection.

Editing an RDP Connection

There are two properties sheets on the Edit Connections dialog box. They show the current properties of the selected RDP connection. Make your changes as appropriate and click on **OK** when you are through making changes. Click on **X** if you want to exit the dialog box without making any changes.

Net Connections Properties Sheet



Name

This field displays the connection name listed in the Terminal Connection Manager.

Server

This field displays the IP address or server name of the selected server.

Automatic Logon:

Click this toggle button to enable/disable automatic logon. The Username, Password and Domain fields will be enabled when the Automatic Logon is enabled.

Username

Enter your user name for Automatic Logon check.

Password

Enter your password for Automatic Logon check.

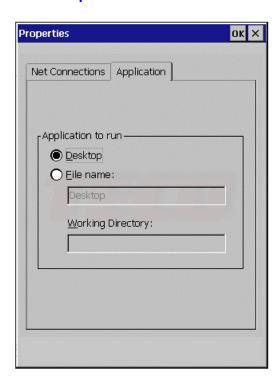
Domain

Enter your domain for Automatic Logon check.

Low Speed Connection

Click on this button to facilitate low-speed connections.

Application Properties Sheet



You can designate an application program on the server to run automatically when the connection is made.

Desktop

Click on the Desktop button to give this connection access to the server desktop.

File Name

Click on the File name button to enable a specific application to run when this connection is made. Enter the path and file name of the application in the field provided.

Working Directory

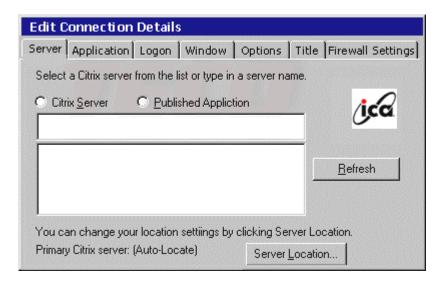
Enter the working directory path for the application specified in File Name.

Editing an ICA Connection

When editing an ICA connection, the WBT will automatically search for all available Citrix servers after you click on **Edit.** You will see the Searching... splash screen. .



After the search, the Edit Connection Details dialog box displays.



There are seven property sheets that can be selected during the editing process. These property sheets are the same as the dialog boxes in the <u>Create an ICA Connection</u> section of Creating a New Connection, although in a different order. Make your changes as appropriate and click on **OK** when you are through making changes. Click on **X** if you want to exit the dialog box without making any changes.

Editing a Text Terminal Emulation Connection

Please refer to your terminal Quick Start card for instructions on editing Text Terminal Emulation connections.





Multiple Sessions

Multiple Sessions



To start multiple sessions:

You can configure any or all sessions to start automatically at WBT boot-up, as described in <u>Connections Management</u>. If you choose not to do this, you can invoke the Terminal Connection Manager from any working session by pressing [Ctrl] + [Alt] + [End]. Then, in the Connections tab, click on another connection to start a new session.

To toggle between sessions:

- Press [Ctrl] + [Alt] + [down arrow], or [Right Alt] + [down arrow], to proceed to the next session.
- Press [Ctrl] + [Alt] + [up arrow], or [Right Alt] + [up arrow], to proceed to the previous session.
- Some Text Terminal Emulation sessions also have the capability to toggle between multiple Text Terminal Emulation sessions without using the above methods. See your WBT Quick Start card for details.





Configure WBT Properties

Configure WBT Properties



Using the Terminal Properties dialog box, you can change the WBT properties. Invoke this dialog box by pressing the [F2] key in the Connection Manager window. The Terminal Properties dialog box consists of ten property sheets that can be invoked by clicking on their individual tabs.

OK

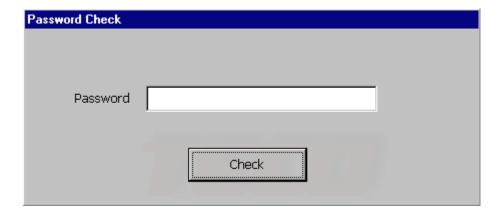
Click on **OK** to save changes and quit Terminal Properties *after* you have set desired properties in *all* the property sheets.

Cancel

Click on X to quit Terminal Properties without saving any changes

If a password has been enabled for this WBT, you will see the Password Check dialog box when you press [F2].

Password Check Dialog Box



Type in your password and click on Check.

General Properties

Product ID

This is a unique product identification code. The last 12 positions are used as the "UUID" by the Remote Management software.

DRAM Size

This shows the amount of DRAM in the WBT. DRAM is used for working storage. The standard amount is 32MB; 64MB are optional and recommended if you wish to have more than three sessions connected concurrently.

ROM Size

This shows the amount of DiskOnChip Read-Only-Memory in the WBT. ROM holds the Windows CE operating system, connection software, and WBT configuration parameters. Models 2605, 2610, and 2611 use 8MB of ROM; Models 2612 and 2613 use 16MB.

MAC Address

This is a unique address assigned to the network communications hardware of the WBT. It is used in TCP/IP communication to uniquely identify all hardware on a network. Your sharp eye may detect that the MAC address is rearranged and used as the UUID portion of the Product ID.

OEM Software Version

This is the version of firmware installed in the WBT. If the firmware is upgraded, the new version will be shown here after the upgrade process.

Microsoft Windows CE

This is the version of the Windows CE operating system that is installed in the WBT. The operating system can only be upgraded as part of a general firmware upgrade; it cannot be upgraded by itself.

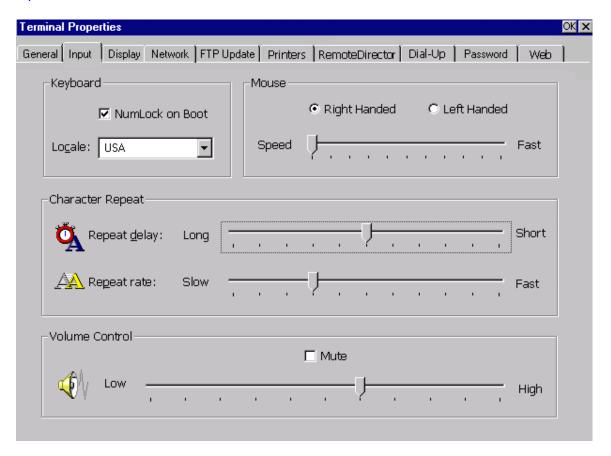
Reset the WBT to factory-default property settings

Click on this check box to reset the WBT to its factory default settings.

Input Properties

Use the Input properties sheet to configure your WBT's keyboard and mouse properties.

Input Properties Sheet



NumLock on Boot

Check to force Numeric Pad NumLock when the WBT starts up.

Locale

Use the scroll list to select a language and number of keys for the keyboard. Default is **OEM 122 USA**. If "122" is not shown, the number of keys is assumed to be 101.

Mouse

Use the ratio buttons to select "Right Handed" or "Left Handed" for your convenience.

Use the slider control to specify how fast the cursor moves on the screen as you move the mouse.

Character Repeat

Use the Repeat Delay slider control to define how long a character key must be held down before that character will start to repeat on the screen.

Use the Repeat Rate slider control to define how often a character will repeat when that character key is held down.

Volume Control:

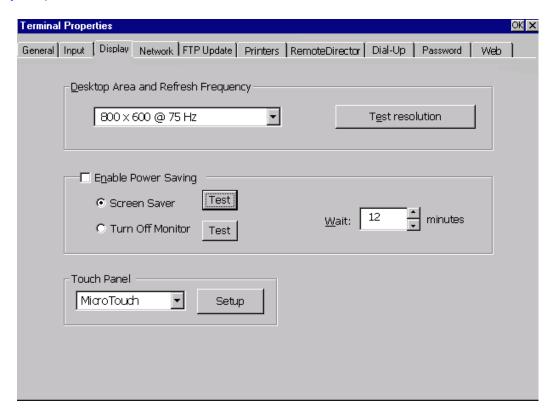
Use this slider control to adjust the volume of the audio.

Use the "Mute" check box to disable the audio of the WBT.

Display Properties

Use the Display properties sheet to configure the WBT's display screen.

Display Properties Sheet



Desktop Area and Refresh Frequency

Use the scroll list to select the WBT display resolution. The default resolution is 800x600 @ 75 Hz. The WBT will support resolutions from 600x480x60 up to1024x768x85 if the monitor will support them. Another available setting is "Best Available Using DDC", which will automatically choose the best available monitor resolution if that monitor is DDC-compatible.

Test Resolution

Use this button to preview the resolution and frequency selected on the scroll list. Testing is recommended before locking in this setting; if the monitor will not support your selection, you will be faced with an unreadable screen after boot-up. See <u>Troubleshooting Your WBT</u> if this situation occurs.

Screen Saver

Click on this radio button to enable the screen saver. By default this function is activated. Use the Wait box to adjust the amount of idle time before the screen saver is activated.

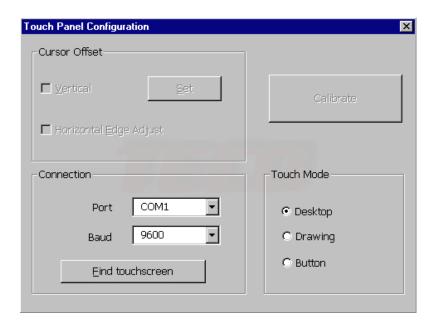
Turn Off Monitor

Click on this radio button to turn-off the monitor sync driver after an idle period. By default this function is inactivated. Use the Wait box to adjust the amount of idle time before the turn-off is activated.

Touch Panel Setup

Click on the Setup button to display the Touch Panel Configuration dialog box.

Touch Panel Configuration Dialog Box



Calibrate

The touch panel must be calibrated when it is first installed or if it is out of scale for some reason.

Vertical offset

After you calibrate the touch panel, the mouse cursor should be located directly underneath your finger when you touch the center of the screen. However, you may prefer to offset the cursor slightly above your touch so you can point more easily and precisely.

The Vertical Offset option lets you define the distance between your touch and the position of the cursor on the screen. Offsetting the cursor is helpful when selecting small items, such as single letters in word processing, check boxes, or radio buttons.

Horizontal Offset

There may be times when the screen image extends completely to the left and right edges of the screen (that is, beyond the edge of the monitor bezel). In these cases, it may be difficult to touch items at the left and right edges of the screen.

If you activate the horizontal offset, the horizontal position of the cursor is automatically offset near the left and right edges. You can now easily reach the edges of the screen image. This adjustment is only made at the left and right edges of the screen, and you cannot define the offset amount.

Connection

Select the COM port to which your touch panel is connected.

Select the connection speed of the COM port.

Click on **Find touchscreen** to search for the touch panel per your connection settings.

Touch mode

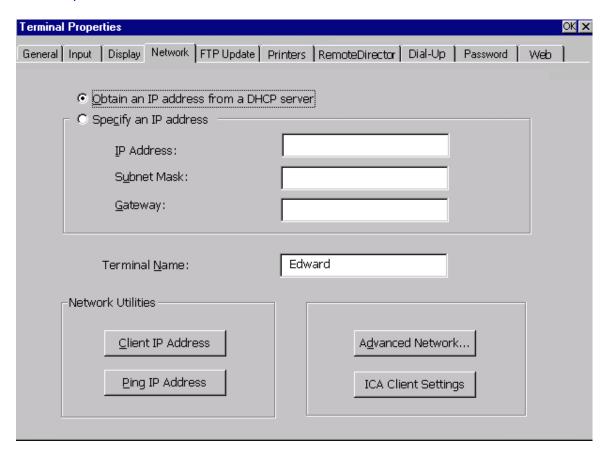
Use the Touch Mode options to specify the touch actions that equate to mouse click, double-click, and drag events. You can select desktop mode, drawing mode, or button mode.

Event	Desktop Mode	Drawing Mode	Button Mode
When the action occurs	A touch positions the cursor. Holding the touch steady is equivalent to pressing and holding the mouse button. Lifting off is equivalent to releasing the mouse button.	A touch is equivalent to pressing and holding down the mouse button. Lifting off is equivalent to releasing the mouse button.	Touching the screen is equivalent to pressing and releasing the mouse button. The action occurs as soon as you touch the screen.
Click	Touch the objectLift off the screen	Same as desktop mode	Touch the object
Double click	Tap the object twice quickly at the same location.	Same as desktop mode	Same as desktop mode
Drag	 Touch the object. Pause momentarily. Drag the object to a new location. Lift off the screen. 	 Touch the object. Drag the object to a new location. Lift off the screen. 	Same as Drawing mode
Select text	 Touch the text. Drag to starting point of your selection. Pause momentarily. Continue to drag to select text. Lift off the screen. 	Not Applicable	Not Applicable

Network Properties

The Network properties sheet lets you enable DHCP addressing or specify an IP address.

Network Properties Sheet



Obtain an IP address from a DHCP Server:

Click on this radio button to enable DHCP addressing.

• Specify an IP address:

Click on this radio button to enable the following three fields for a specific IP address setting.

IP Address

Enter a static IP address in this field.

Subnet Mask

Enter the subnet mask of the IP address.

Gateway

Enter the IP address of a gateway if any server is not on the local sub-net.

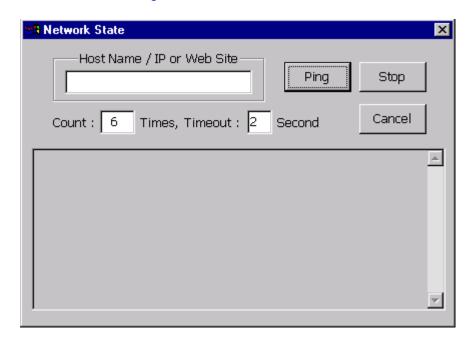
• Client IP Address

Click on this button to see what IP address has been assigned to this WBT.

Ping IP Address

Click on this button to display the Network State dialog box.

Network State Dialog Box



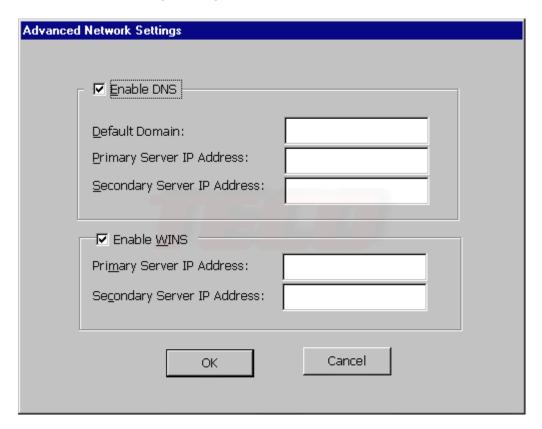
You can ping the name or IP address of a host or any other device connected on the network. You even can ping a web site through a gateway.

You can set how many times you want to ping, default is 6 times. You can set the timeout value to wait for a host response before declaring a ping failure. The default is 2 seconds.

Advanced Network

Click on this button to configure DNS and WINS settings.

Advanced Network Settings Dialog Box



Enable DNS

Click on the check box to enable the following three fields for the DNS setting.

Default Domain

Enter the default domain name in this field.

Primary Server IP Address

Enter the primary DNS server IP address in this field.

Secondary Server IP Address

Enter the secondary DNS server IP address in this field.

Enable WINS

Click on the check box to enable the following two fields for the WINS setting.

Primary Server IP Address

Enter the primary WINS server IP address in this field.

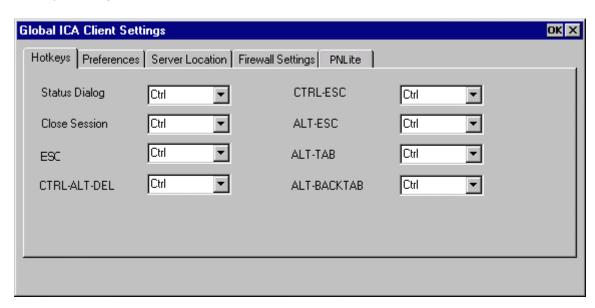
Secondary Server IP Address

Enter the secondary WINS server IP address in this field

ICA Client Settings

Click on **ICA Client Settings** to display the "Global ICA Client Settings" dialog box. The Global ICA Client Settings dialog box lets you define global default setting for all ICA connections set up in this WBT. You can override some of these global settings by choosing new values when creating a new connection or by using the Connection Manager Configure dialog box. There are five settings tabs, beginning with Hotkeys.

Hotkeys Dialog Box



Hotkeys Settings

The ICA Windows CE Client provides users with hotkeys that can be used during ICA sessions to control various functions. Some hotkeys control the behavior of the ICA Windows CE Client itself while others emulate standard Windows hotkeys. When you want to use a Microsoft Windows key combination during a session, use the mapped hotkey instead. The following table lists the default ICA Windows CE Client hotkeys.

Name	Default Value	Description
Status Dialog	CTRL+6	Displays ICA Client connection status.
Close Session	CTRL+2	Disconnects the ICA Windows CE Client from the Citrix server and closes the client window on the local desktop. Using this hotkey leaves the ICA session running in a disconnected state on the Citrix server. If you do not want to leave your session running in a disconnected state, log off instead.

Esc	CTRL+3	Provides the functionality of an ESC key on your terminal.
CTRL-ALT-DEL	CTRL+4	Displays the Windows NT Security dialog box on a MetaFrame for Windows server.
CTRL-ESC	CTRL+5	On MetaFrame for Windows servers, the Windows Start menu is displayed. On WINFRAME servers, this hotkey displays the Task List.
ALT-ESC	CTRL+7	Cycles the focus through the minimized icons and open windows of applications running in your ICA session
ALT-TAB	CTRL+8	Cycles through all applications in the ICA session. A pop- up box appears and displays the programs as you cycle through them. The selected application receives keyboard and mouse focus.
ALT-BACKTAB	CTRL+9	Like the ALT+TAB hotkey, this key sequence cycles through applications that have been opened in the ICA session, but in the opposite direction. The chosen application receives keyboard and mouse focus.

Only **Ctrl + 0-9** can be used as Hotkeys. To change the hotkeys from the defaults, or to disable them, choose the appropriate combinations from the drop-down lists. Take care not to choose the same combination for two different actions.

Preferences Dialog Box

Glot	oal ICA Client Settings					ок х
Но	otkeys Preferences Server	Location Firew	vall Settings Pr	NLite		1
	Serial Number:					
	Default Window Colors:	○ 16 ○ °	Thousands	Client Name:	WBTTECO	
		~				

Preferences Settings

Serial Number

This is the serial number of your ICA Client software. This field is only necessary when you are using the ICA Windows CE Client with a product such as WinFrame Host/Terminal, which requires each client to have a Citrix PC Client Pack serial number in order to connect to the server. If a serial number is required, you must

enter it exactly as it appears on the Serial Number card. MetaFrame servers do not use the Serial Number field.

Default Window Colors

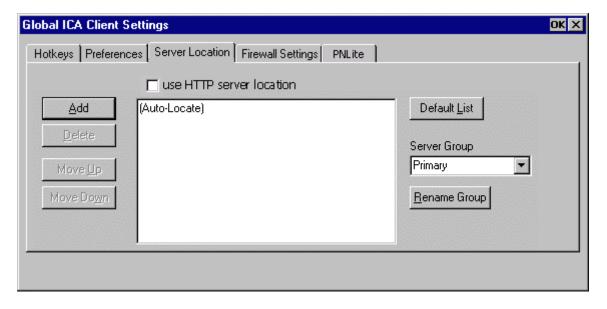
Select 16 or 256 colors. Later firmware versions also provide the Thousands option. When using a PPP connection, 16-color mode may provide better performance. 16-color mode also leaves more local RAM available for other active sessions on the same WBT. If the specified number of colors exceeds the capabilities of the client hardware, the maximum size and color depth supported by the Windows CE device are used instead.

Client Name

This text box allows you to change the client name of your WBT. The Citrix server uses the client name to uniquely identify resources (such as mapped printers) associated with a given WBT. The client name should be unique for each computer running a copy of a Citrix ICA Client.

Note: If you do not use unique client names, device mapping and application publishing may not operate correctly.

Server Location Dialog Box



Server Location Settings

Server Location (also called server browsing) provides a method for a user at a network-connected Citrix ICA client to view a list of all Citrix servers on the network, and a list of all published applications.

Tip: Set a specific server address for the Citrix server that functions as the master ICA Browser when your network configuration uses routers or gateways, or to eliminate broadcasts on your network

The default value entered in the list is Auto-Locate. Auto-Locate automatically searches your network for the Citrix server that maintains the list of available Citrix servers and published applications. To use Auto-Locate, your WBT and the Citrix server or published application you want to connect to must be on the same local network.

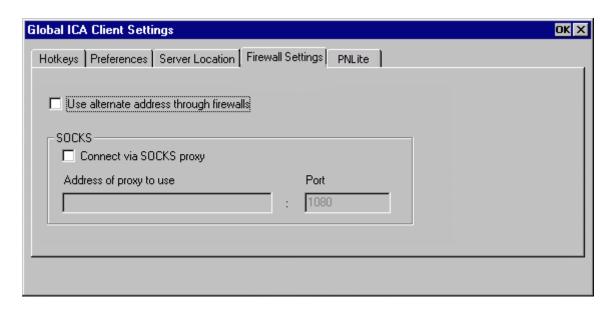
If you are on another network (for example, if you are on the other side of a router, across the internet, or using RAS) you must enter the IP address or DNS name of a Citrix server on the network that contains the Citrix server or published application you want to connect to. The ICA Windows CE Client uses the server to locate the list of available Citrix servers and published applications on the network. Use the Add and Delete buttons to add or delete Citrix servers from the Address list. Use the Move Up and Move Down buttons to order the list of Citrix servers used for server location. The higher the server appears in the list, the higher its priority for the server location.

Because RAS connects you to a remote network across the Internet, you must enter a Citrix server's IP address or DNS name in the Address field when using RAS to connect to a network that contains Citrix servers.

Business Recovery provides consistent connections to published applications in the event of a master ICA Browser server disruption. You can define up to three groups of Citrix servers to which you want to connect: a primary and two backups. Each group can contain from one to five servers. When you specify a server group for your client, the client attempts to contact all the servers within that group simultaneously, and the first server to respond is the one to which you connect. On the ICA Windows CE Client, business recovery settings apply to all connection entries. To set Business Recovery options for all connection entries:

- 1. Select Use HTTP server location if your firewall restricts UDP broadcasts. This setting enables the client to retrieve a list of all Citrix servers on the network directly from this server using TCP. If you do not select Use HTTP server location, the client obtains the list using UDP. If your Citrix server is behind a firewall, you can use this setting to avoid the UDP broadcast.
- 2. In the Server Group field, select the group that you want to configure. The Server Group field lets you create lists of specific servers that you want to designate as primary and backup servers for connecting to published applications. Use this field to designate whether the servers entered in the Address List field belong to your Primary, first backup (Backup 1), or second backup (Backup 2) group.
- 3. Click Add to add a server to the selected group. The Add Server Address dialog box appears.
- 4. Enter the name or address of a Citrix server. If you selected Use HTTP server location in Step 3, you need to enter the server address and the port to use. Click OK.
- 5. Add more servers as necessary. Click OK to save your changes.

Firewall Settings Dialog Box



Firewall Settings

SOCKS Proxy

If you are using a SOCKS proxy server to limit access to your Citrix servers, you must configure a SOCKS proxy server to handle connections between clients and the server. You can place the proxy server on either side of the firewall, or in some situations, on both sides of the firewall.

If your network is using a SOCKS proxy server, you must configure the ICA Client to connect to Citrix servers through it. You can configure a default SOCKS proxy for all connections or a SOCKS proxy with a specific connection entry.

To configure a default SOCKS proxy server, or to configure a SOCKS proxy for a specific connection entry:

- 1. Click Connect via SOCKS proxy.
- In the Address of proxy to use box, enter the SOCKS proxy server's IP address or DNS name.
- 3. In the Port box, enter the proxy server's port number (if different than 1080).
- 4. Click OK to save your changes.

Note: If you configure a default SOCKS proxy, you must specify at least one server in the Server Location tab for server and published application browsing to work. See <u>Server Location Settings</u> earlier in this chapter for more information.

Configuring Alternate Address Translation

If the ICA Client is outside a firewall that uses address re-mapping, you must configure the ICA Client to use the alternate address returned by the master ICA Browser. This is necessary even if you are not using a SOCKS proxy server.

Note: You must also use the ALTADDR utility to manually set the alternate address for each Citrix server. See the Command Reference appendix of either the *MetaFrame Administrator's Guide* or the *WinFrame System Guide* for more information.

- 1. To use alternate address translation for all connection entries:
 - 1. Click on Use alternate address for firewall connection.
 - 2. Click OK to save your changes.

Note: If you set alternate address translation for all connection entries, it cannot be disabled for specific connection entries.

- 2. To use alternate address translation for a specific connection entry:
 - 1. Go to the Edit tab of Terminal Connections Manager.
 - 2. Click the name of the connection entry that you want to change.
 - 3. Click Edit to display the Edit Connection Details dialog box.
 - 4. Click the Firewall Settings tab.
 - 5. Click Use alternate address for firewall connection.
 - 6. Click **OK** to save your changes.

PNLite Settings Dialog Box

Global ICA Client Settings		OK X
Hotkeys Preferences Server Location Firev	wall Settings PNLite	
	User credentials	
☐ Enable PNLite Server——————————————————————————————————	User name:	
Address and port of NFuse server	Password:	
	Domain:	
	☐ Save Password	

PNLite Settings

PNLite is a connection mode that allows you to connect to an Nfuse-enabled Citrix server and obtain a list of published applications that you can connect to. In this mode, you do not have to manually configure each ICA connection, but a list of published applications will be 'pushed' (made available) to your client device. Connect to any published application in that list by double-clicking on an entry.

To enable PNLite:

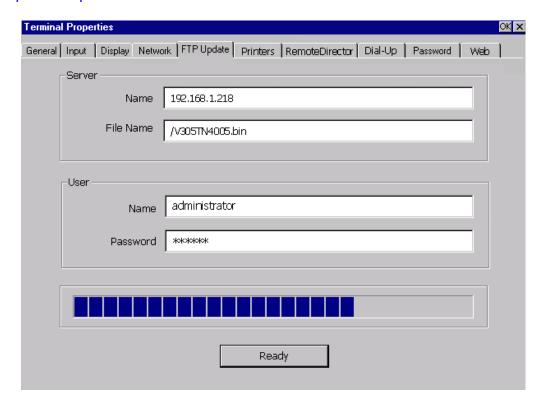
- Check the Enable PNLite checkbox.
- 2. Enter the address and port number of the NFuse server.
- Enter your user name, password, and domain in the appropriate User Credentials edit fields. Check the Save Password box if you want the terminal to remember your password.
- 4. Click **OK** to save your changes.

The list of available applications will now be displayed in the Terminal Connection Manager dialog box.

FTP Update Properties

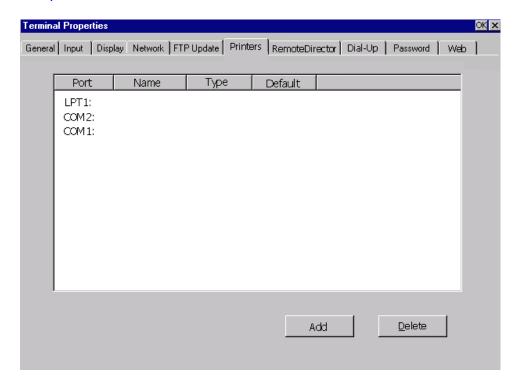
Use the FTP Update sheet If you wish to update your WBT's firmware from a local FTP server. For more information, please refer to the <u>Firmware Upgrade Utilities</u> section.

FTP Update Properties Sheet



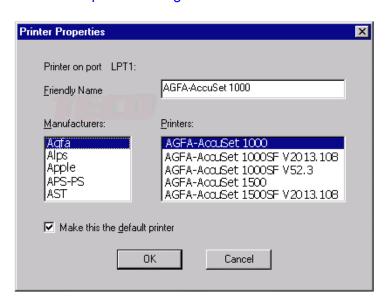
Printers Properties

Printers Properties Sheet



You can attach up to three printers to your WBT, one on each of the LPT1, COM1, and COM2 ports. Printers must be designated here if you wish to use the printers with ICA or RDP sessions. To enter a printer, highlight the appropriate port name, and then click on **Add**. You will see the Printer Properties dialog box.

Printers Properties Dialog Box



- **1.** Select your printer manufacturer from the Manufacturers drop-down list. A list of printer models for that manufacturer will automatically appear in the Printers drop-down list.
- **2.** Select your printer model. If your printer model is not found in the drop-down lists, determine if your printer can emulate one of the other models in the drop-down list, or a model in another manufacturer's list
- **3.** Enter a friendly name or leave the name at the default model name. This friendly name will be used to identify the printer in the server **Printer Settings** panel.
- **4.** Check "Make this the default printer" if you want this printer to be the default printer for your Windows applications.
- 5. Click on OK.

Note: If your local printers are only going to be used with Text Terminal Emulation sessions, you do not need to configure them here. They will be configured in the individual emulation sessions.

Remote Director Properties

Remote Management is optional SNMP remote management software that provides functionality for management of Windows Based Terminals connected to Windows NT servers (TSE) or Windows 2000 Servers. It remotely manages WBTs connected to an Ethernet network. To implement security and manage the registry and software updates of the WBTs, there is a requirement for Agents to be running on the client side (i.e. on WBTs).

The Remote Management consists of a suite of agents (built-in to this WBT's firmware), and Remote Director and Address Book Service.

Remote Director is an application installed on an NT/2000 server. It manages WBTs on the network and provides versatile functionality. For more information, please refer to Remote Management

Address Book Service is an application installed on an NT/2000 server. It maintains information about WBTs that are registered with it. The Remote Director can manage registered WBTs.

Agents, which are included in the WBT firmware, allow the WBT to communicate with Remote Director and Address Book Service applications. The minimal configuration required by these agents is done in the Remote Director properties sheet. Obviously, if you don't have the optional server applications packages, Remote Director and Address Book Server, installed, you can bypass this section

Remote Director Properties Sheet

Terminal Properties	OK
General Input Display Network FTP Update Print	ters RemoteDirector Dial-Up Password Web
The values in this page can b	e set only by an Administrator.
Location :	USA
Remarks :	Your Information
TCOSoft Address Book Servers	
Up	Insert
Down	Edit
✓ Enable Broadcast	Delete
Enable Mullticast	ABS IP Address
	<u>U</u> pload Profile

Client settings

Location and Remarks fields allow you to provide more information to Remote Director software. It can help the administrator identify your WBT from the server side. Both fields are optional.

• Enable Broadcast & Multicast

The Address Book Service enables WBTs to be configured and added to a network in a plug-and-play manner via broadcasting/multicasting. WBTs identify the Address Book Service either using a simple broadcasting mechanism (restricted to a single sub-net) or via IP multicasting (requiring a router). The type of broadcasting must also be configured via the Address Book Service entry in the server Control Panel.

ABS IP Address

If Broadcasting and Multicasting have been enabled correctly on the WBT and on the Address Book Service, an ABS IP address should automatically appear in this field. This is the ABS that will receive an uploaded profile.

Address Book Servers

If an ABS IP address does not appear in the ABS IP Address field, or if you want to upload profiles to a different ABS, you can enter the IP addresses of one or more ABS by clicking on **Insert**.

Arrange the order in which the ABS servers are to be contacted by using the **Up** and **Down** buttons.

Upload Profile

If you wish to use the connections and Terminal Properties of this WBT as a pattern for other WBTs, you can upload the profile, which contains all this information, to an ABS. Click on **Upload Profile** to display the TCOProfiling Agent dialog box.

TCOProfiling Agent Dialog Box

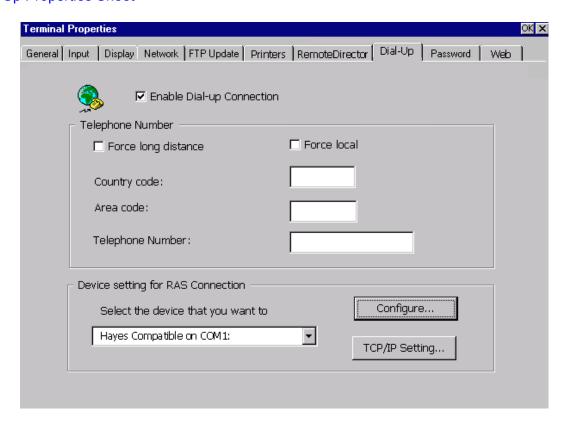


Type the profile name under which the profile will be listed on the ABS. An optional password, used for security at the ABS, can also be entered. Click on **OK** to begin the upload process. This will take at least a minute, and no feedback will be offered to you until you finally get a success or failure message.

Dial-Up Properties

Use the Dial-Up properties sheet to configure your dial-up settings and your COM ports, including any COM ports that you are using for serial printers.

Dial-Up Properties Sheet



Enable Dial-up Connection

Click on the check box to enable the RAS Dial-up session on the Terminal Connection Manager sheet.

If you want to delete the RAS Dial-up session from Connection Manager sheet, just uncheck this box.

Force local/long distance

Leave these boxes unchecked.

Telephone Number

Ignore Country code and Area code. Put the complete phone number of your RAS server in the Telephone Number field.

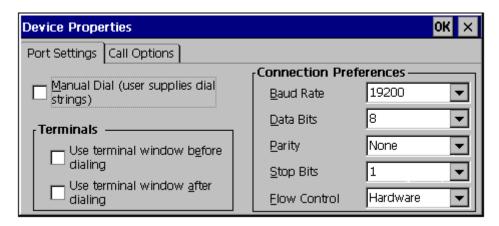
Select the device....

Choose Hayes Compatible on COM 1 or COM 2 if you are configuring for a dial-up modem. Choose Serial Device on COM 1 or COM 2 if you are configuring a serial port for a serial printer.

Configure.

When this button is pressed, the Device Properties dialog box displays.

Port Settings Dialog Box



Port Settings

Manual Dial (user supplies dial strings)

Check this box to use manual dialing.

Terminals

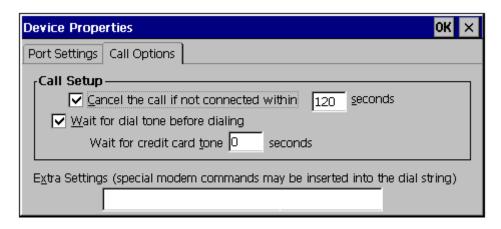
Per your application requirement, you can select "Use terminal window before dialing" or "Use terminal window after dialing". The default setting disables both check boxes and executes an automatic log-on to the server.

• Connection Preferences

Select the modem or serial printer connection preferences from the dropdown lists.

Note: A common problem encountered here is that some "Hayes-compatible" modems, including some from a very popular vendor, are not really 100% Hayes compatible. When that occurs, it can usually be fixed by entering a modem initiation string in the Extra Settings field of Call Options. Talk to your modem vendor for the details of this initiation string.

Call Options Dialog Box



- Call Options
 - Call Setup

Check the appropriate boxes and set the time to wait for connection or dial tone before canceling a call.

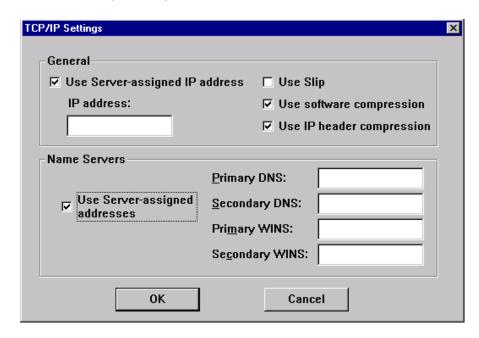
Extra Settings

Enter any necessary modem initialization commands here. If your modem is not 100% Hayes compatible, you will need something here.

TCP/IP Settings

Click on the **TCP/IP Settings** button to set TCP/IP dial-up settings. When this button is pressed, the TCP/IP Settings dialog box displays.

TCP/IP Settings Dialog Box

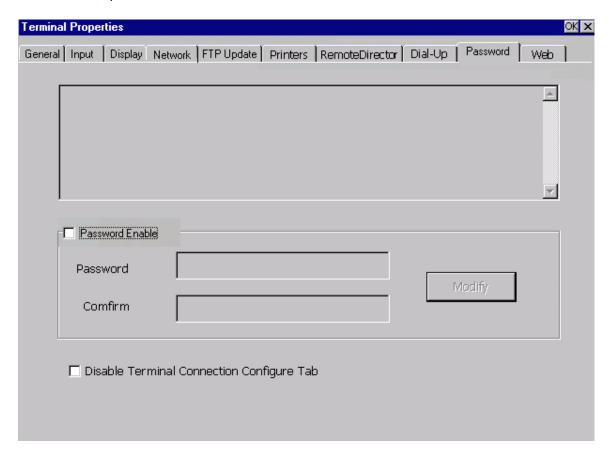


The default settings you see here are commonly used to access a RAS server, and seldom need changing. Your network administrator will give you any changes that are necessary.

Password Properties

Use the Password properties sheet to control access to Terminal Properties and the Connection Manager Configure tab.

Password Properties Sheet



Check "Password Enable" to enable the password setting. The factory default password is "guest". Enter the desired password, confirm it, and then click on **Modify**.

Note: The password is designed to avoid any unreasonable change to the Terminal Properties Settings. Please do NOT change the password unless you are the administrator. If you forget the password, there are only two ways to regain access to Terminal Properties.

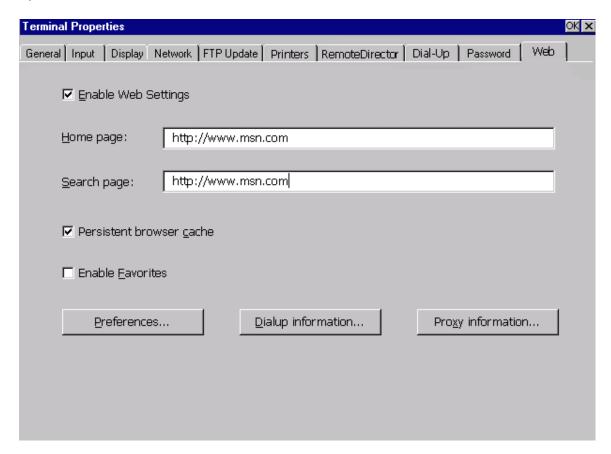
- Contact Affirmative Computer Products to get a "super password" that will work with all WBTs.
- Use the Remote Management software.

Check "Disable Terminal Connection Configure Tab" to hide the Configure Tab on the Connection Manager dialog box.

Web Properties

The Web properties sheet appears in all WBTs, but it is only useful if you have a Model 2612 or 2613, which include browser support. If you have a 2612 or 2613, use this sheet to configure your browser settings.

Web Properties Sheet



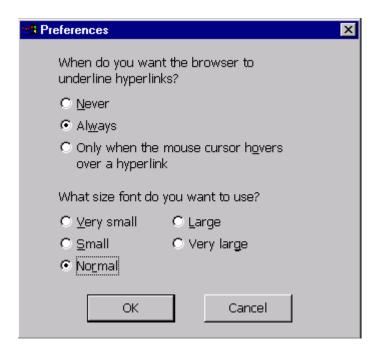
Enable Web Settings

Check this box to establish a Web connection on your Terminal Connection Manager.

Persistent browser cache, Enable Favorites, and Preferences

These are standard browser properties.

Preferences Dialog Box

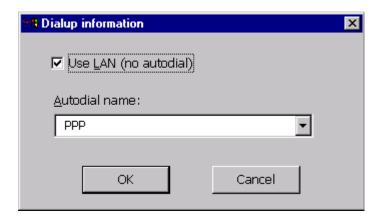


There are three methods of connecting to a Web server:

· Direct dial-up.

This allows you to use an external modem to directly dial a Web server. Click on **Dialup information** and enter your information in the resulting dialog box.

Dialup Information Dialog Box



Use LAN

Make sure this box is **unchecked** if you want to use a dial-up connection to get to the Web.

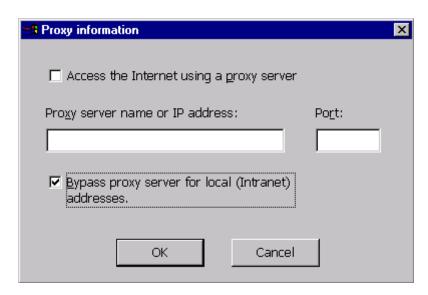
Autodial name

The default name for the dial-up connection you configured in <u>Dial-Up Properties</u> is PPP. There should be no reason to rename it.

Proxy server.

When using a LAN connection to get to an external Web server, Web access is done through a proxy server on the same sub-net as the WBT. Make sure that **Use LAN** is checked in the Dialup Information Dialog box shown above. Then click on **Proxy Information** and enter your proxy information in the resulting dialog box.

Proxy Information Dialog Box



o Access the Internet using a proxy server

Check this box if you are using a proxy server

Proxy server name or IP address

Enter the proxy server network name or IP address here.

o Port

This is the proxy server port that is handling your Web access. The default is 80 and should not be changed unless directed to do so by your network administrator.

Local server.

You may have a Web server on the same sub-net as the WBT. In this case, click on **Access the Internet....** and then check **Bypass proxy server for local address**. Enter that local address in the proxy server address location.