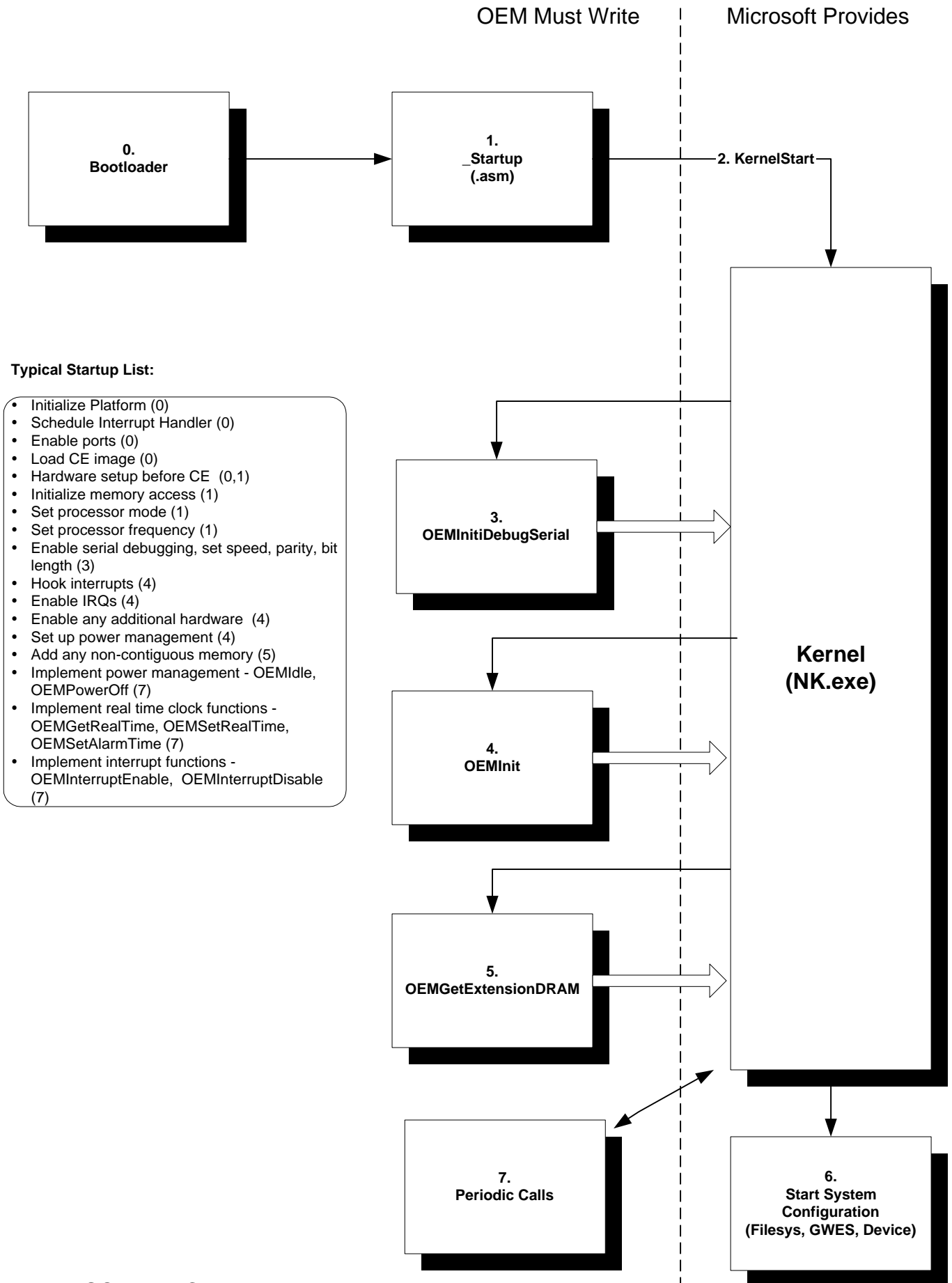


## Quick Reference Contents

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# Windows CE Startup Sequence



# Citrix ICA Windows CE Client

## Quick Reference Card

Version 4.1

This Quick Reference Card describes how to use the Citrix ICA Windows CE Client to connect Windows-based terminals to Citrix servers and published applications. Topics covered include:

- Creating a connection entry
- Connecting to a Citrix server or published application
- Editing connection properties
- Using ICA Client features
  - ICA Windows CE Client hotkeys
  - Accessing local printers
- Closing the ICA connection

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### Creating a Connection Entry

You can create two types of connections: a connection directly to a server or a connection to a published application. A server connection presents you with the desktop of a particular Citrix server. You can then run any application installed on that server. If you typically run only one application, your administrator may have defined a *published application*. When you connect to a published application, you are presented with the application itself and are not able to run any other applications within that ICA session.

The following procedure describes how to create a basic network connection entry. The ICA Windows CE Client offers additional connection configuration options besides those described here. See the *User's Guide* for the ICA Windows CE Client for more information.

#### ➤ To create a network connection

1. In the **Connection Manager** dialog box, click the **Configure** tab.
2. Click **Add**.
3. In the **New Connection** dialog box, click **Citrix ICA Client** in the **type of connection** list. Click **OK**.

4. In the **Specify Connection Type** dialog box, click **Network Connection**. Make sure your client device is connected to the network through a network interface card (NIC) or by a serial PPP connection to a Windows 95 or Windows NT RAS server. Click **Next** to continue.
5. In the **Select a Citrix Server or Published Application** dialog box, click **Citrix Server** or **Published Application**.
6. Scroll through the list and click the desired Citrix server or published application, or type the name of the Citrix server or published application in the box. Click **Next** to continue.
7. The **Select a Title for the ICA Connection** dialog box appears. Enter a name for the connection entry. The name you choose is the name of the entry in the **Current Client Connections** list and appears in the title bar of the ICA session window.
8. Click **Finish**.

### Connecting to a Citrix Server or Published Application

#### ➤ To start a previously defined connection

1. In the **Connection Manager** dialog box, click the **Connections** tab.
2. Select the desired connection name and click **Connect**.

If you specified a valid user name and password in the connection entry, you are logged in as that user.

If no user name and password are present in the entry or the information is incorrect, the server logon dialog box appears. Enter a valid user name and password for the Citrix server and click **OK** to log in.

### Editing Connection Properties

#### ➤ To change the properties of a connection entry

1. In the **Connection Manager** dialog box, click the **Configure** tab.
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. Make the desired changes.
5. Click **OK** to save your changes.

### Using ICA Windows CE Client Features

After you connect to a Citrix server or published application, the ICA Client provides additional features that make server-based computing just like using a desktop computer. The ICA Client provides you with hotkeys and access to local printers.

## ICA Windows CE Client Hotkeys

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 Remote Application	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.
Toggle Title Bar	CTRL+3	Alternately hides and displays the ICA session window title bar. Remove the title bar to maximize your work space.
CTRL-ALT-DEL	CTRL+4	Displays the <b>Windows NT Security</b> dialog box on the Citrix server.
CTRL-ESC	CTRL+5	On MetaFrame servers, the Windows <b>Start</b> menu is displayed. On <i>WINFRAME</i> servers, this hotkey displays the <b>Task List</b> .
ALT-ESC	CTRL+7	This hotkey cycles the focus through the minimized icons and open windows of applications run in your ICA session.
ALT-TAB	CTRL+8	This hotkey 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.

### ➤ To change the default hotkeys

1. Display the **Terminal Properties** dialog box according to the instructions for your Windows-based terminal device.
2. Click the **Apps** tab.

3. Click **ICA Client Settings**. The **Global ICA Client Settings** dialog box appears.
4. Use the lists of keys to customize the default hotkey key sequences.
5. Click **OK** to save your changes.

## Using Local Printers

*Client printer mapping* lets you access printers attached to your client device from an ICA session. When a Citrix server is configured to allow client printer mapping, applications running remotely on the Citrix server can print to local printers. When using an application's print commands, select the local mapped printer from the list of available printers.

### ➤ To view mapped client printers when connected to a MetaFrame server

- While connected to a MetaFrame server, double-click **My Computer** on the remote desktop and then double-click **Printers**. The **Printers** dialog box appears.

The **Printers** dialog box displays the mapped local printers along with any other printers available on the MetaFrame server. The name of the printer is *clientname#port*, where *clientname* is the name you assigned to your ICA Client and *port* is the printer port on your Windows CE device; for example, COM1 or LPT1.

### ➤ To view mapped client printers when connected to a WINFRAME server

- While connected to the *WINFRAME* server, double-click **Print Manager** in the **Main** program group of Program Manager. Print Manager displays the local printers mapped to the ICA session.

The name of the printer is *clientname#port*, where *clientname* is the name you assigned to your Windows CE device and *port* is the printer port on your Windows CE device.

## Closing the ICA Connection

To close your ICA connection, you can log off or disconnect. *Logging off* logs you off the Citrix server and ends the ICA session. *Disconnecting* closes the ICA connection but leaves the session running on the server. You can reconnect to a disconnected session and resume any tasks left executing on the server. For example, you can connect to a Citrix server and run an application that requires an extended period of time to complete a task. After starting the task, you can disconnect the session. You can reconnect to the session at a later time to retrieve the results of the operation.

➤ **To log off from a Citrix server**

- To log off from a *WINFRAME* server, click **File** in Program Manager and then click **Logoff**. When the confirmation dialog box appears, click **OK**.

-or-

To log off from a MetaFrame server, click **Start** and then click **Logoff**. When the confirmation dialog box appears, click **OK**.

➤ **To disconnect from a Citrix server**

- To disconnect from a *WINFRAME* server, click **File** in Program Manager and then click **Disconnect**. When the confirmation dialog box appears, click **OK**.

-or-

To disconnect from a MetaFrame server, click **Start** and then click **Disconnect**. When the confirmation dialog box appears, click **OK**.



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## **Windows Based Terminals (WBT) Frequently Asked Questions and Answers from Citrix**

### **1. What is a Windows Based Terminal and does it have to be a Windows CE device?**

A Windows Based Terminal is any device that displays Windows applications remotely where the application is run on the server, not on the local device. The operating systems used on these types of devices can (and already do) vary widely (for example, DOS, Linux, WinCE, etc.).

If you elect to implement a WBT device using Windows CE and choose to pursue a Microsoft WBT certification for this device, you must adhere to various design criteria. Some of those limitations include no local storage and a specific Microsoft-supplied User Interface (UI), among others. More information about this is included in the questions and answers below.

If you choose one of the numerous other operating systems supported by ICA to create a WBT device, you will have more flexibility and choices regarding user interface, disk drives, other local applications, features, and other items from Citrix.

### **2. How do you get the Citrix ICA Windows CE Client to work on a Microsoft WBT?**

The Citrix ICA Client for Windows CE is packaged with Microsoft's Windows Based Terminal Kit (WBT kit). When you receive this package and elect to include the Citrix ICA

Client in your device, you must contact Citrix to sign a required licensing agreement. We will provide you all updates made to the ICA Client at that time, along with other helpful documentation.

The Citrix ICA Client for Windows CE is designed to work properly with the Microsoft WBT user interface. It is loaded by using the registry switch settings similar to RDP. It does not contain Remote Application Manager because Microsoft provides a predefined user interface.

### **3. How do I get the Citrix ICA Windows CE Client to work in the Microsoft User Interface?**

The Citrix ICA Client for Windows CE works in the Microsoft WBT through registry settings. The following settings allow the Citrix Client to run in the Microsoft User Interface:

```
[HKEY_LOCAL_MACHINE\Software\Microsoft\WBT\Clients\Registration\ICA]
"Description"="Citrix ICA Client"
"Type"="ICA"
"NewExe"="Ceicamgr.exe"
"NewCmdLineArgs"="/N"
```

(These settings must be entered exactly as shown – they **are** case sensitive.)

### **4. What is the Microsoft User Interface?**

The Microsoft user interface is a predefined shell provided by Microsoft specifically for WBT devices using Windows CE. It does not contain the standard Windows CE shell common on standard CE-based HPC or Jupiter devices. It allows you to create new connections to servers using ICA, RDP, or a terminal emulation program loaded on the device. Once the connection is created, it allows you to connect to a server. It also allows one connection to be set up instantly during startup of the device.

### **5. Can I change the Microsoft User Interface?**

The Microsoft User Interface for the WBT kit is written and controlled by Microsoft. Please contact Microsoft to determine what changes are allowable.

### **6. What is the Citrix User Interface?**

The standard Citrix User Interface, called Remote Application Manager, is not fully visible in the Citrix ICA Client for Microsoft's WBT CE version. Its wizards, used to create and edit a connection, are both linked into the Microsoft User Interface and set using the registry settings listed above.

### **7. Where is the Citrix Remote Application Manager?**

The Remote Application Manager is not used in the Citrix ICA Client for Microsoft's WBT CE version. The Microsoft WBT kit guidelines do not allow local clients to have their own User Interface. Instead, the local client must integrate with the WBT kit interface.

## **8. Can I run an application on the WBT device?**

The current Microsoft WBT kit design guidelines do not allow any local processing of applications on the WBT device except for the following:

- Microsoft user interface
- Windows Emulation Programs – ICA or RDP
- Terminal Emulation

## **9. Can I run html help files on the WBT device?**

The current WBT kit guidelines do not allow for a local browser to be placed on the WBT device. Therefore, no html help files are allowed on the device.

## **10. Can I run ICA and RDP connections simultaneously? If so, how?**

The WBT kit allows users to run ICA and RDP connections simultaneously. The Microsoft User Interface allows for a control-key sequence to leave a connection and return to the main user interface. From there, a new connection can be created. Check with the Microsoft user interface document on this feature.

## **11. How do I get the global ICA settings dialog box to work on my WBT?**

Citrix has a global ICA settings dialog box that allows the user to change the hotkey settings, alter the client name field, and adjust the settings for all ICA connections. The current Microsoft User Interface has no way of bringing up this dialog box. A global configuration button does not exist.

Citrix recommends that you create a separate button on your user interface to solve this problem. Run Ceicamgr.exe without command line switches to access the global settings dialog box.

## **12. What does the global ICA settings dialog box contain?**

The dialog box allows you to change the hotkey settings, alter the client name field, and adjust the settings for all ICA connections.

## **13. How do I edit an ICA connection already created?**

The edit button on the Microsoft User Interface allows you to edit an ICA connection. The wizard takes you through all of the major feature selections of the connection.

This release of the Citrix ICA Client makes this edit wizard into a single page, similar to the RDP edit panel.

## **14. What ICA features are present in a WBT client?**



The following features are commonly found in Citrix ICA Clients and are included in the latest version of the Microsoft WBT Windows CE kit:

- Audio
- Audio Compression
- Client Drive Mapping (This is an ICA Client feature in our CE version, but please refer to Q.15 below)
- COM Port Mapping
- Client Clipboard Support
- Printer Port Mapping
- 16/256 Color Support (Variable Palette)
- Basic Encryption
- Load Balancing Support
- Application Publishing Support
- Data Compression
- Mouse Support
- Transports : TCP/IP, Serial, Modem
- Languages: English, German, Spanish, French, Japanese
- Processors: MIPS, SH3, SH4, Intel x86, ARM, PowerPC

#### **15. Can I use Client Drive Mapping?**

OEMs electing to use the Microsoft WBT Windows CE kit are not permitted to add local storage devices of any kind to the device.

#### **16. What is the Microsoft Windows CE shell? Where is the Windows CE shell?**

The Windows CE version provided by Microsoft in the WBT kit is drastically different from the CE version you would normally see on something like a handheld PC. That is because the standard Windows CE shell is not present on a WBT version in the WBT kit. Instead of the standard CE shell most users associate with the likeness of a Windows 95/NT desktop (for example, a Start button and a screen with application icons), the WBT version was developed to specifically limit the devices function as a terminal.

#### **17. How do I certify the Microsoft WBT device?**

Contact Microsoft for this requirement.

#### **18. How do I certify the Citrix ICA Client on my device?**

The Citrix ICA testing program is a new feature for our ICA Licensees designed as a benefit for our alliances and customers. This program extends the ability of our ICA Licensees to work with Citrix in creating quality Citrix ICA devices to support the server based computing market. This program also ensures that our customers are using a reliable, tested Citrix ICA device.

The compatibility program is conducted in cooperation with a third party testing center, ZDTag, the ZD Testing and Analysis Group. ZDTag ([www.zdtag.com](http://www.zdtag.com)) is a leading independent testing facility for computer, Internet, and networking products. Citrix chose them for their experience in compatibility testing and familiarity with the industry.

For further information please go to the following URL:  
<http://www.zdtag.com/citrix/ctxsica.html>

### **19. Do I have to send two units to the Citrix test labs? Why?**

The OEM contract that you sign with Citrix requires that you send two devices to our test labs. These devices are used in our labs for ICA Client testing. We also use these devices for problems you report during debugging.

### **20. I just received the WBT kit from Microsoft with an ICA Client, why should I contact Citrix?**

Citrix continues to develop new features and improve the ICA Client for the WBT kit. The latest version of our client is always available directly from Citrix. In order to ship a device containing ICA, you must first obtain an OEM license agreement from Citrix.

### **21. How can I disable client drive mapping, or other features?**

Add a Module.ini file containing the following information to your device:

```
[ICA 3.0]
VirtualDriver=Thinwire3.0, ClientDrive, ClientComm, ClientManagement, ClientPrinter,
ClientPrinter1.5, ClientAudio, Clipboard, LicenseHandler
```

This is the standard feature list including all 4.10 features. Individual features can be disabled by removing their drivers (e.g. ClientDrive for drive mapping) from this list. Note that this list is longer than the 4.0 equivalent, so 4.0 module.ini files should be updated with extra features to avoid disabling them.

The Module.ini file must be in the same directory as the Ceicamgr.exe file.

### **22. How can I reduce the amount of memory a client accesses during execution?**

Add a Module.ini file containing the following information to your device:

```
[Thinwire3.0]
WindowsCache=400
```

This sets the amount of cache taken up by the connection to 400 (1MB). The possible ranges are from 0 to 2000 (8MB). Obviously, there is a speed benefit to larger cache sizes, depending heavily on what application/benchmark you run but, in general, diminishing returns apply.

The Module.ini file must be in the same directory as the Ceicamgr.exe file.

### **23. How and why do I patch my OEM-ID into the client?**

The OEM ID is a two byte identifier assigned to every ICA Client licensee by Citrix. It covers both binary and source licensees. All OEMs are required by contract to set the ICA Client Product ID to their unique OEM ID in the clients they distribute. Citrix assigns OEM IDs to ICA Client licensees. If you do not know your OEM ID, contact Citrix OEM Support.

The OEM ID is used to identify the client as being distributed by a Citrix ICA Client OEM. The OEM ID must be set correctly for the client to be able to connect to WINFRAME for Terminals, MetaFrame for Terminals, or Citrix Device Services servers. For more information on these products, contact your Citrix OEM Business Manager.

The Product ID (set to OEM ID) is stored in the client engine. The Product ID is sent to the server during connection and during client update. This release includes an NT program (setoemid.exe) to set the OEM ID in the client engine by patching the binary executable file.

You can set the OEM ID only on the clients supplied with this CD-ROM.

To change the OEM ID in the client:

1. Change to the directory where the client is installed.
2. Run the SetOemId.exe program, found in the top level directory of the CD-ROM, passing it the name of the file to patch (wficaCE.exe) and the OEM ID in hexadecimal.

To verify the OEM ID of an ICA Client

1. Use the ICA Client to connect to a Citrix server.
2. Run Citrix Server Administration.
3. Expand the list of servers and sessions until you find the client session and then select it.
4. On the right-hand side of the window, select the Information tab.
5. The Client Product ID box displays the OEM ID as a decimal value. Convert the decimal value to hexadecimal to verify your OEM ID.

# DynaComm Connectivity Series<sup>®</sup>

## for Windows-based Terminals

DynaComm Connectivity Series<sup>®</sup> for Windows-based Terminal Standard Edition 1.5 (DCS/WBT) provides multiple host connectivity for the IBM Network Station Windows-based Terminal. DCS/WBT combines robust functionality and access to major host systems to bring enterprise application access to these thin client devices.

### Windows-based Terminal Standard Edition 1.5

DCS/WBT enables IBM Network Station WBT users to make direct host connections— independent of the server— for enterprise application access while simultaneously utilizing server-based applications. DCS/WBT creates, in effect, a universal low-cost terminal that provides connectivity to a wide variety of host systems—to reduce the enterprise's capital investment.

### Supported Emulations

DCS/WBT comprises the broadest emulation offering in the market and offers extensive flexibility to administrators and users alike. It includes support for the following emulations:

- ❖ TN3270 (includes TN3270E with print)
- ❖ TN5250 (includes TN5250E with print)
- ❖ Digital VT-Series (VT-52, 100/102, 220, 320 and 420)
- ❖ ANSI-BBS (with SCO ANSI extensions)
- ❖ Wyse 50/60

### Network Connectivity

Network support for a variety of connectors is included in DCS/WBT. Connections can be made with virtually any communications device or network interface utilizing the following network connectors:

- ❖ Telnet (TCP/IP)
- ❖ Direct Serial

### Key Features

- ❖ Automated logon/scripting functionality
- ❖ Keyboard mapping
- ❖ Attribute mapping
- ❖ Full screen mode option
- ❖ Printing functionality (including 3270, 5250 and raw pass-through)
- ❖ NetPrint printing capability
- ❖ Hotspots across all emulations
- ❖ User definable keymaps and toolbar buttons
- ❖ Small footprint
- ❖ History buffer
- ❖ Character table translation editor

