



# **Generic Windows/ Generic Windows CE Client**

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<http://207.241.78.223/isoxpert/calltrak.nsf/WebTracking?OpenForm>

**Notice:** In order to run the generic Windows/Windows CE client, you must have a Windows NT, XP, or 2000 operating system.

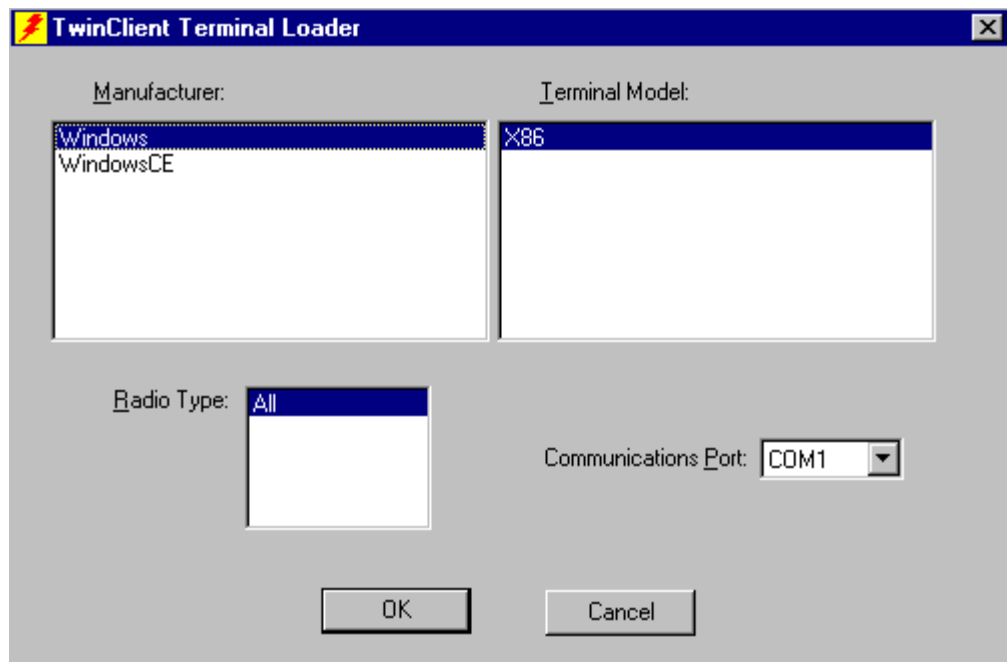
## Generic Windows Client Installation

To install the generic Windows client software, perform the following instructions after installation of the Twin Client Manager.

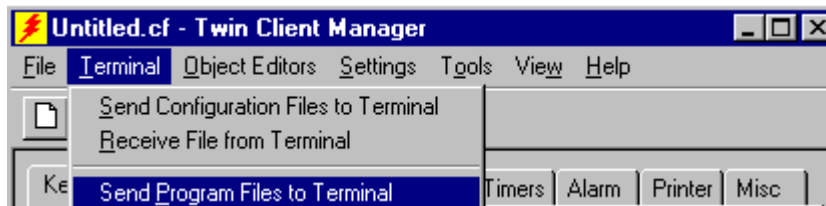
1. Choose **Options** from under the **Settings** menu.



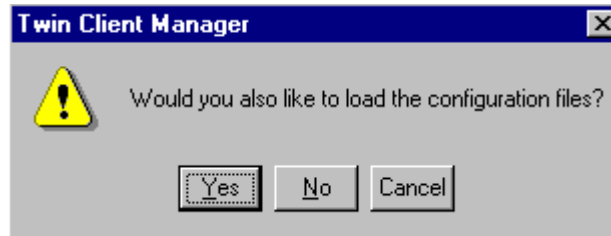
The TwinClient Terminal Loader screen appears.



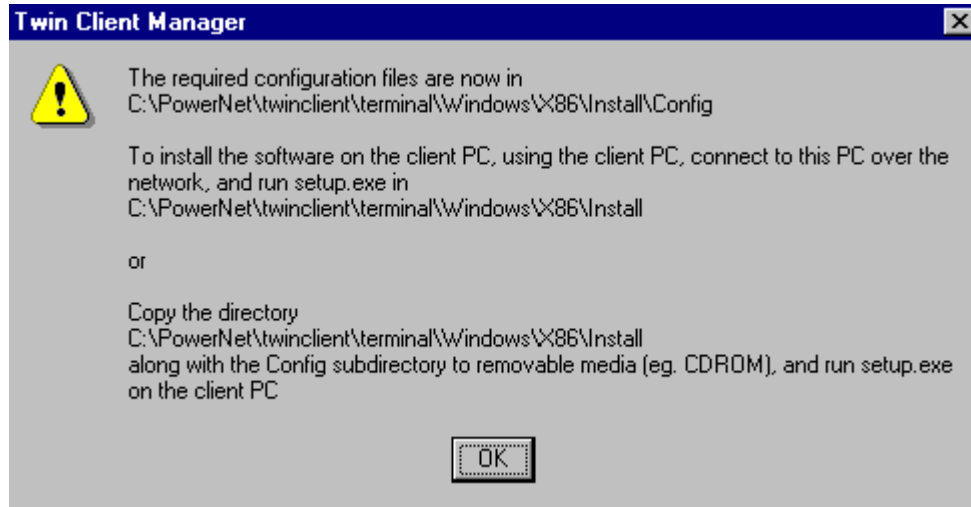
2. Select **Windows** and click on **OK**.



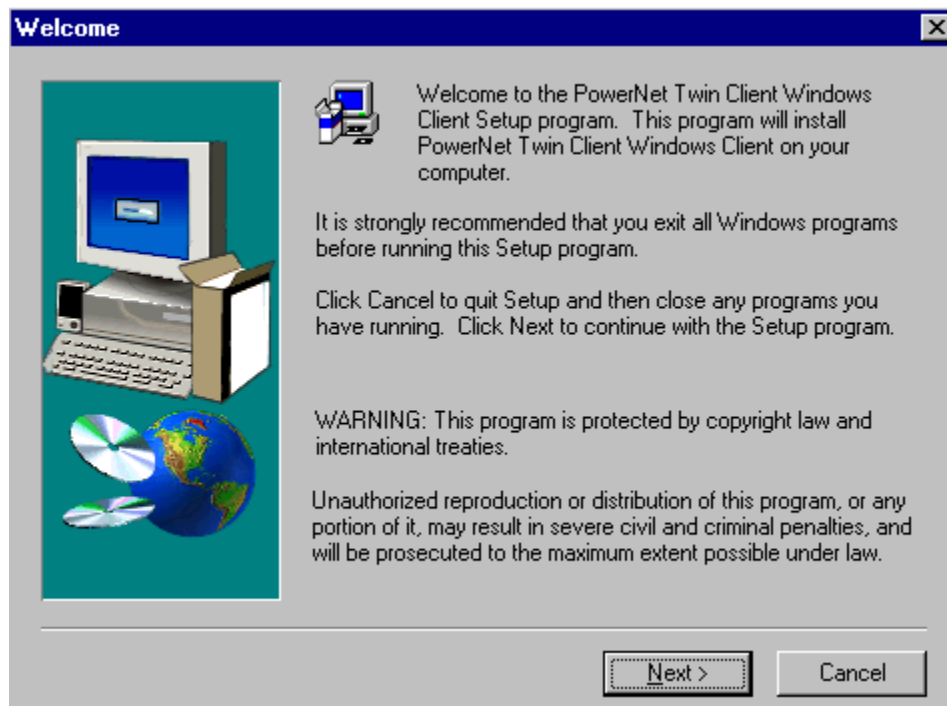
3. Choose **Send Program Files to Terminal** from under the **Terminal** menu.



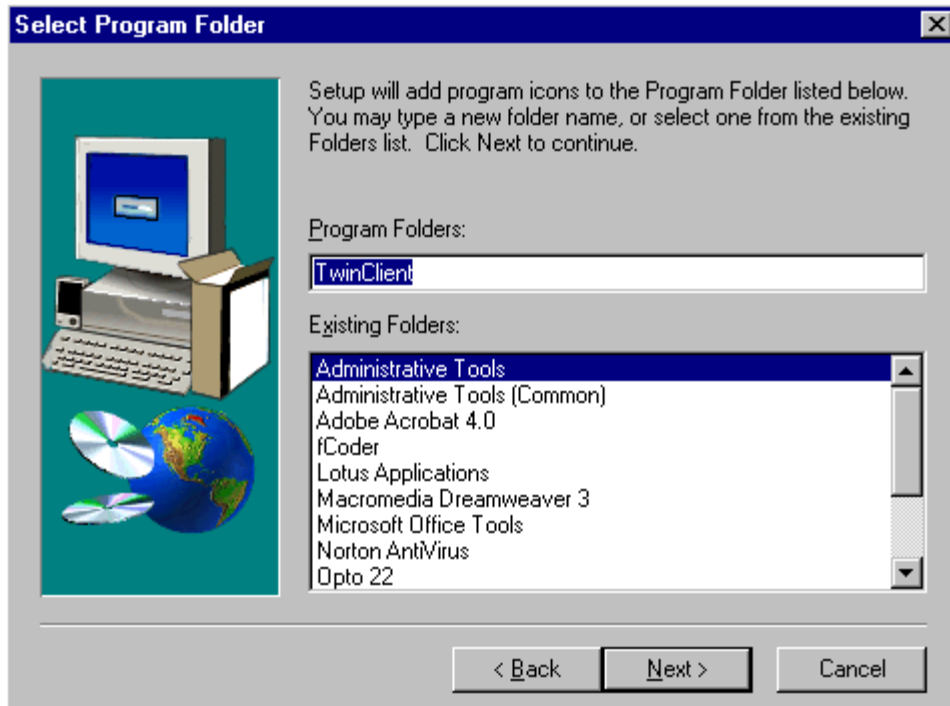
4. Click on **Yes** at the “Would you also like to load the configuration files?” prompt. The following “Twin Client Manager” screen appears.



5. Click on **OK**. Go to C:\PowerNet\twinclient\terminal\Windows\X86\Install. Click on Setup.exe. The following “Welcome” screen appears.



6. Click on **Next**. The following “Select Program Folder” screen appears.



7. Select the folder into which to install the PowerNet Twin Client Windows Client. Click on **Next** to continue. The following “Setup Complete” screen appears.

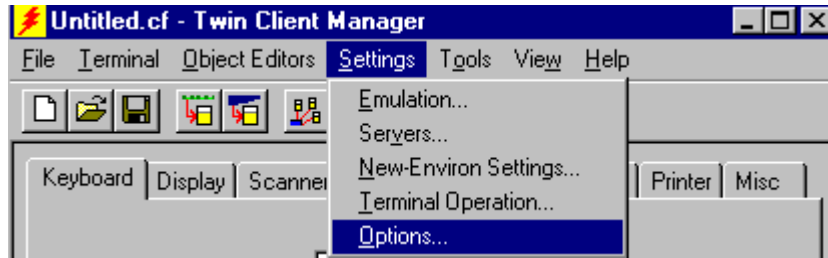


8. Click on **Finish** to complete the setup.

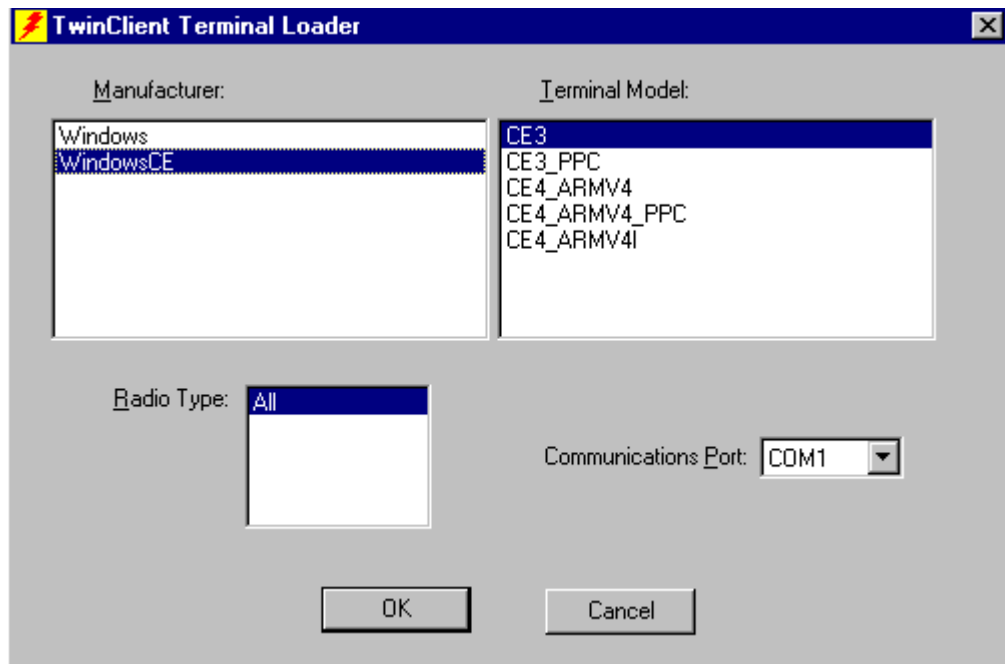
## Generic Windows CE Client Installation

To install the generic Windows CE client software, perform the following instructions after installation of the Twin Client Manager.

1. From under the **Settings** menu of Twin Client Manager, choose **Options**.



The following “TwinClient Terminal Loader” screen appears.



**Note:** The following options are selectable for Windows CE:

- CE3 - Win CE version 3.0
- CE3\_PPC - Win CE version 3.0 Pocket PC / Windows Mobile
- CE4\_ARMV4 - Win CE version 4.x, dependent on processor in device
- CE4\_ARMV4\_PPC - Win CE version 4.x Pocket PC / Windows Mobile
- CE4\_ARMV4I - Win CE version 4.x, dependent on processor in device

If you're unsure about your selection, look under **Start**, **Settings**, **System**, and **About** on your terminal.

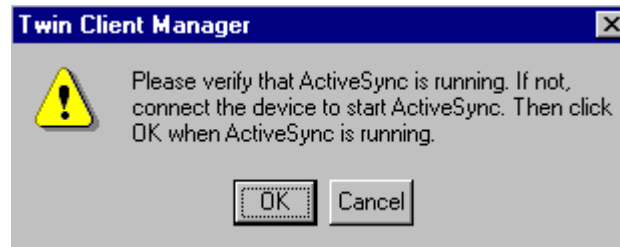
2. Choose the appropriate selection for your terminal.
3. Click on **OK**.
4. Under the **F**ile menu, choose **S**ave **A**s. Name your file and click on **S**ave.



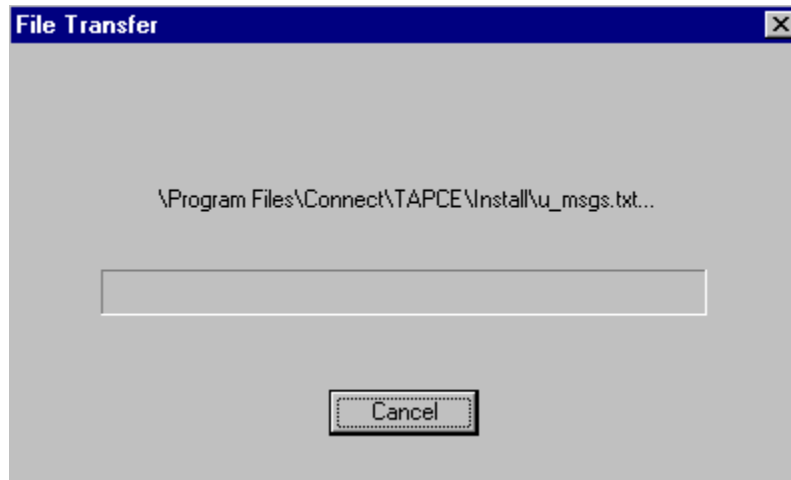
5. Choose **S**end **P**rogram **F**iles to **T**erminal from under the **T**erminal menu.



The following screen appears.



6. Click on **OK**. File transfer begins.

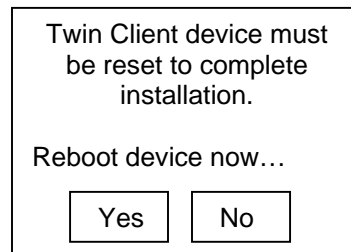


When file transfer is complete, the following appears.



7. Click on **OK** on the PC.

**Note:** The message below will appear on the terminal when the download is performed while the client is already running on the terminal, and files in use cannot be overwritten. Select **Yes**.



Installation is now complete.

**Note:** File storage on terminals with generic Windows and generic Windows CE Twin Client is temporary, being loaded to the RAM in volatile memory. The program will be erased if the terminal is cold booted.



## Flash Loading TwinClient

By default the generic version of TwinClient loads into RAM. This is not permanent and will get lost on a cold boot or battery loss.

Below are the instructions on how to change this, so it will load to a flash disk, if present.

### Instructions

There is a control file titled rfiles.txt you'll find in the:

PowerNet/TwinClient/Terminal directory.

Edit this file and find this section:

**Note:** For non-generic releases, find the section that applies to your device.

```
[WindowsCE;CE4_ARMV4!;*;*]
```

```
TERMSUB=~CE4_ARMV4I  
TERMSIZES=VARIABLE  
DNCMD=send %s  
UPCMD=recv %s  
ce=true  
PRINTERS=FILE:terminal\WindowsCE\printers.txt  
TAPConsole.dll
```

Change the line in blue from true (which means use RAM disk) to the path of the flash disk.

### Examples

```
ce=\FlashDisk\TwinClient  
ce=\Application\TwinClient  
ce=\IPSM\TwinClient
```

The second part of making TwinClient auto start is to get the PowerNet CESTartup.exe application to start after a reset.

This is done by using the "auto start" feature built into most CE devices. This method is device and manufacturer dependent. Documented below is the method that a manufacturer's devices use. Please refer to the terminal documentation to determine the method for your device.

### One Manufacturer's Method

A particular manufacturer's devices look for \*.cpy files in a particular directory and will use these to copy files where directed. Twin Client Manager installs a TwinClient.cpy file to insure that the application CESTartp.exe gets re-installed.

TwinClient.cpy contents

```
Application\TwinClient\CEStartup.exe > \Windows\StartUp\CEStartup.exe
```

The RFFILES entries that make this happen are:

```
TwinClient.cpy  
COMMAND=copy \Application\TwinClient\TwinClient.cpy  
\Application\TwinClient.cpy
```

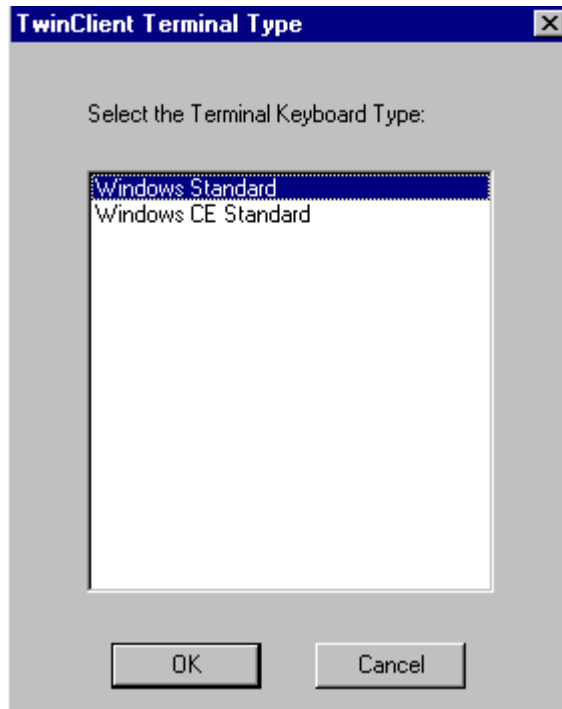
Once the changes are made to the RFFILES.TXT file, reload TwinClient the normal way. The process CEStartup.exe will be set to run on reboot and it will copy from Flash to RAM.

This will make the load AND configuration permanent, and it will survive complete battery loss. The load process, through Active Sync, will also set the registry values.

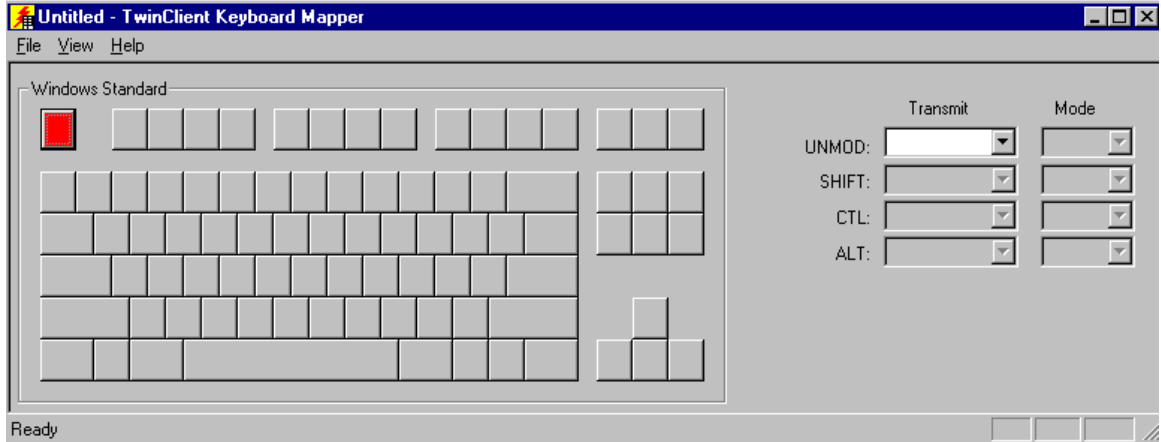
## Object Editors Features

The Object Editors screens distinctive to generic Windows and generic Windows CE Twin Client are documented below.

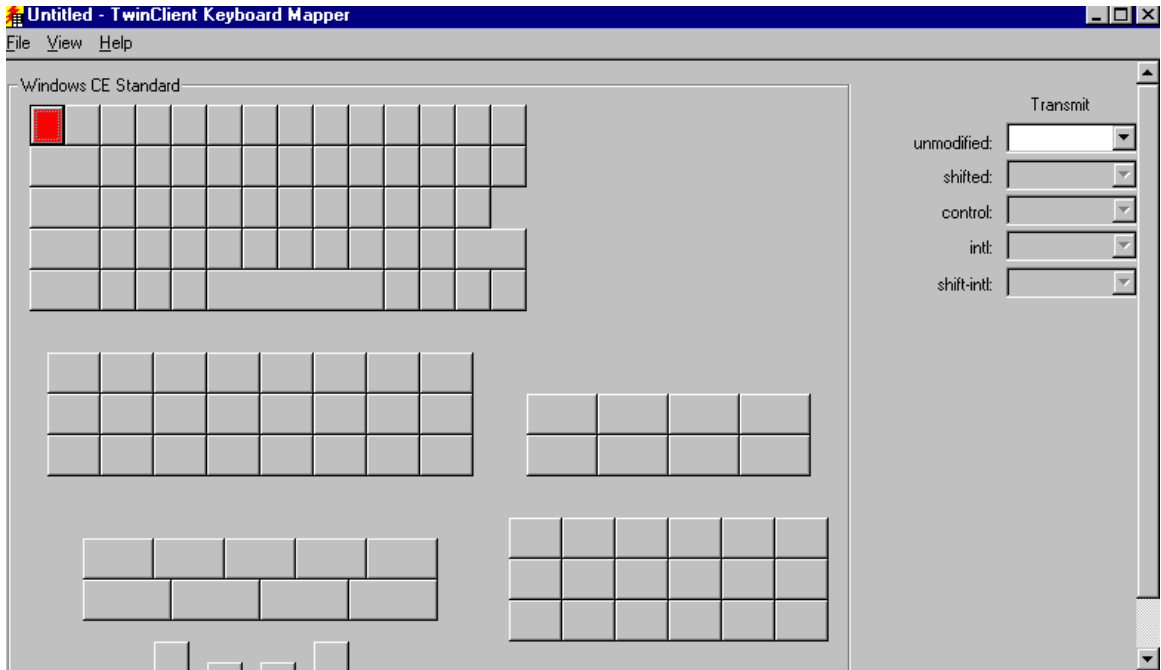
Under the **Object Editors** menu, selecting the **Keyboard/Mapping** feature brings up the following screen.



Below is the Windows Standard screen.



Below is the Windows CE Standard screen.



**Keyboard Macros** - This feature is not different for generic Windows and generic Windows CE.

**Scanner/Data Mapping** - This feature is unsupported.

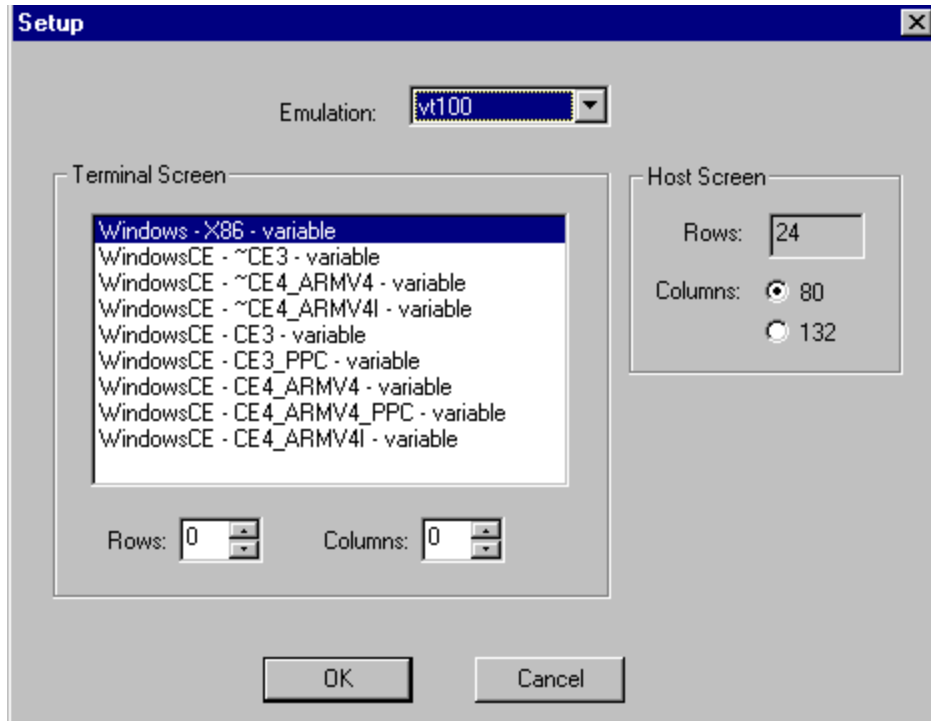
**Scanner/Data Editing** - This feature is unsupported.

**Scanner/Decoder Control** - This feature is unsupported.

**Note:** The features on the Scanner tab in Advanced view are also unsupported.

**Display/Mapping** - This feature is not different for generic Windows and generic Windows CE.

Under the **Object Editors** menu, selecting the **Display/Formatting** feature brings up the following screen.



Choose an option and click on **OK**.

**Printer/Init** - This feature is not different for generic Windows and generic Windows CE.

**Dialog** - This feature is not different for generic Windows and generic Windows CE.

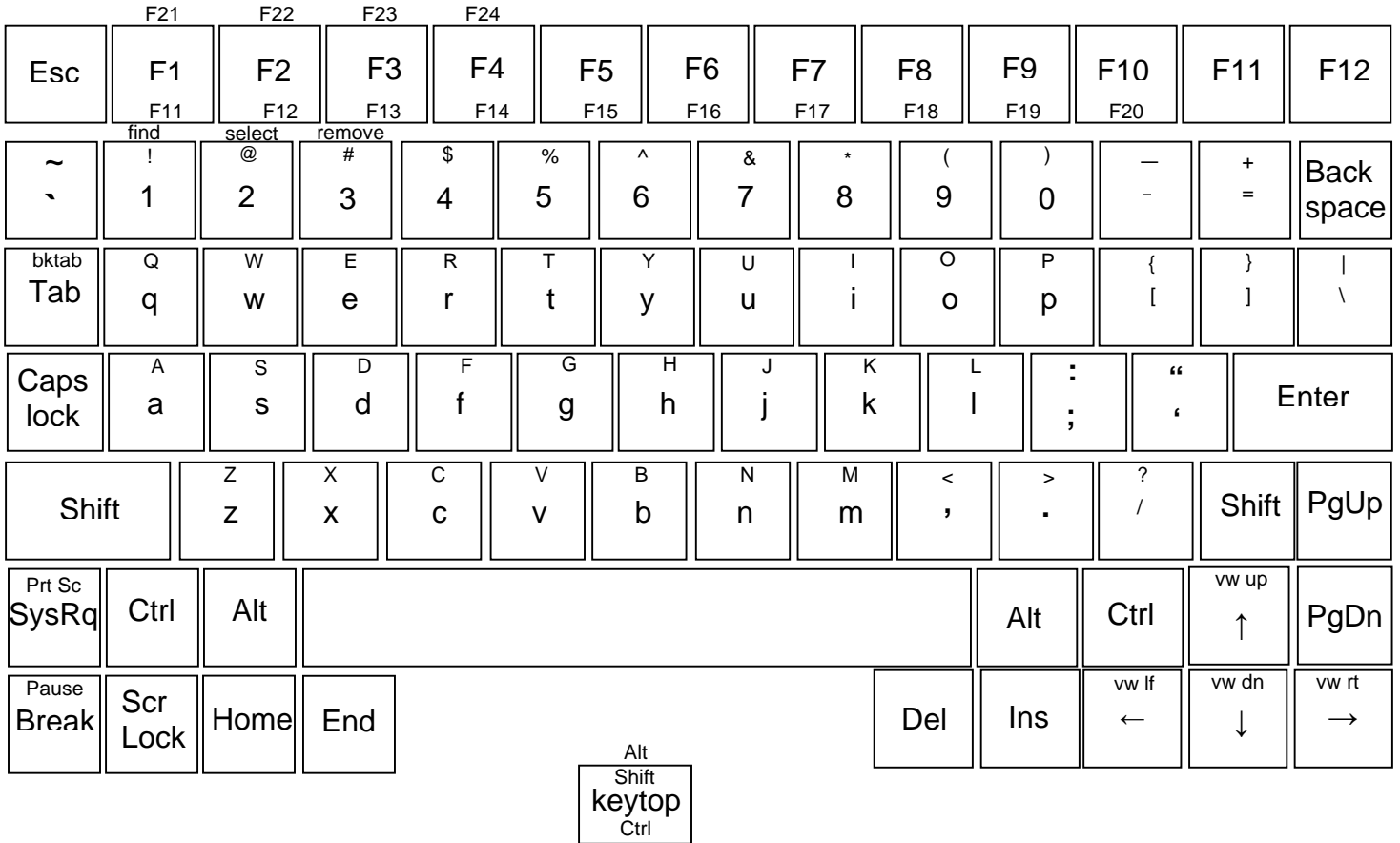
**Screen Capture** - This feature is not different for generic Windows and generic Windows CE.

**Note:** See the PowerNet Twin Client manual for instructions on using all other features of this software at <http://www.connectrf.com/Documents/r6tn.pdf>.

## Diagrams

The following is documentation of the keyboard sequences for the vt, 3270, and 5250 emulations for generic Windows and generic Windows CE client.

### VT emulation

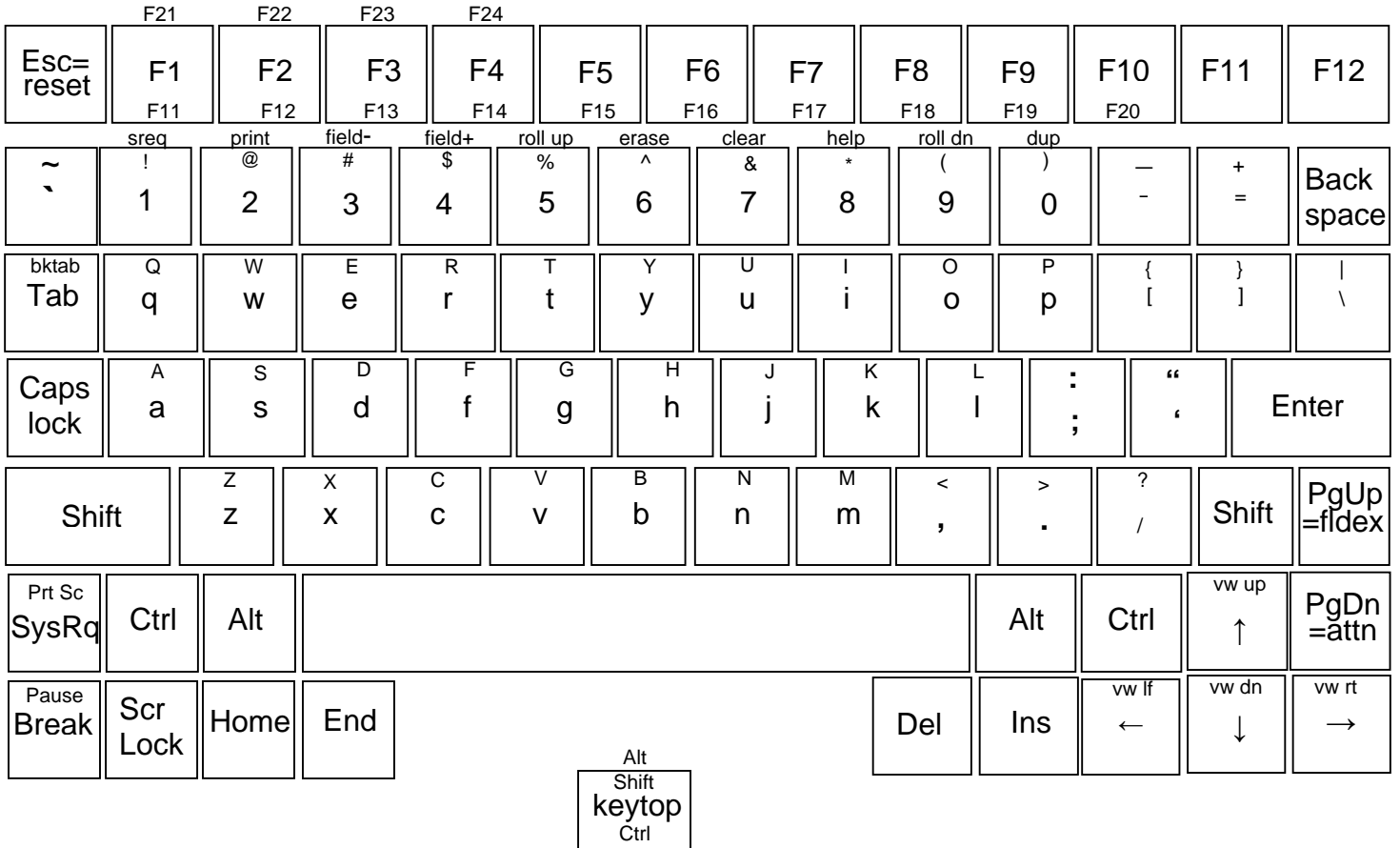


3270 emulation

	F21	F22	F23	F24										
Esc=reset	F1 F11	F2 F12	F3 F13	F4 F14	F5 F15	F6 F16	F7 F17	F8 F18	F9 F19	F10 F20	F11	F12		
~ ,	sreq !	@	#	\$	%	eof ^	clear &	pa1 *	pa2 (	)	-	+ =	Back space	
bktab Tab	Q q	W w	E e	R r	T t	Y y	U u	I i	O o	P p	{ [	} ]	 \	
Caps lock	A a	S s	D d	F f	G g	H h	J j	K k	L l	: ;	" ,	Enter		
Shift	Z z	X x	C c	V v	B b	N n	M m	< ,	> .	? /	Shift	PgUp		
Prt Sc SysRq	Ctrl	Alt							Alt	Ctrl	vw up ↑	PgDn		
Pause Break	Scr Lock	Home	End					Del	Ins	vw lf ←	vw dn ↓	vw rt →		

Alt  
Shift  
keytop  
Ctrl

5250 emulation



**Table**

Key	VT	3270	5250
a	<a>	<a>	<a>
b	<b>	<b>	<b>
c	<c>	<c>	<c>
d	<d>	<d>	<d>
e	<e>	<e>	<e>
f	<f>	<f>	<f>
g	<g>	<g>	<g>
h	<h>	<h>	<h>
i	<i>	<i>	<i>
j	<j>	<j>	<j>
k	<k>	<k>	<k>
l	<l>	<l>	<l>
m	<m>	<m>	<m>
n	<n>	<n>	<n>
o	<o>	<o>	<o>
p	<p>	<p>	<p>
q	<q>	<q>	<q>
r	<r>	<r>	<r>
s	<s>	<s>	<s>
t	<t>	<t>	<t>
u	<u>	<u>	<u>
v	<v>	<v>	<v>
w	<w>	<w>	<w>
x	<x>	<x>	<x>
y	<y>	<y>	<y>
z	<z>	<z>	<z>
A	<Shift><a>	<Shift><a>	<Shift><a>
B	<Shift><b>	<Shift><b>	<Shift><b>
C	<Shift><c>	<Shift><c>	<Shift><c>
D	<Shift><d>	<Shift><d>	<Shift><d>
E	<Shift><e>	<Shift><e>	<Shift><e>
F	<Shift><f>	<Shift><f>	<Shift><f>
G	<Shift><g>	<Shift><g>	<Shift><g>
H	<Shift><h>	<Shift><h>	<Shift><h>
I	<Shift><i>	<Shift><i>	<Shift><i>
J	<Shift><j>	<Shift><j>	<Shift><j>
K	<Shift><k>	<Shift><k>	<Shift><k>
L	<Shift><l>	<Shift><l>	<Shift><l>
M	<Shift><m>	<Shift><m>	<Shift><m>
N	<Shift><n>	<Shift><n>	<Shift><n>
O	<Shift><o>	<Shift><o>	<Shift><o>
P	<Shift><p>	<Shift><p>	<Shift><p>
Q	<Shift><q>	<Shift><q>	<Shift><q>
R	<Shift><r>	<Shift><r>	<Shift><r>
S	<Shift><s>	<Shift><s>	<Shift><s>
T	<Shift><t>	<Shift><t>	<Shift><t>
U	<Shift><u>	<Shift><u>	<Shift><u>
V	<Shift><v>	<Shift><v>	<Shift><v>
W	<Shift><w>	<Shift><w>	<Shift><w>
X	<Shift><x>	<Shift><x>	<Shift><x>
Y	<Shift><y>	<Shift><y>	<Shift><y>
Z	<Shift><z>	<Shift><z>	<Shift><z>
1	<1>	<1>	<1>
2	<2>	<2>	<2>
3	<3>	<3>	<3>
4	<4>	<4>	<4>
5	<5>	<5>	<5>
6	<6>	<6>	<6>
7	<7>	<7>	<7>
8	<8>	<8>	<8>
9	<9>	<9>	<9>



0		<0>	<0>	<0>
Esc		<Esc>	<Esc>	<Esc>
Print Screen		<Pr Scr>	<Pr Scr>	<Pr Scr>
Pause		<Pause>	<Pause>	<Pause>
Scroll Lock		<Scr Lock>	<Scr Lock>	<Scr Lock>
Caps Lock		<Caps Lock>	<Caps Lock>	<Caps Lock>
Shift		<Shift>	<Shift>	<Shift>
Enter		<Enter>	<Enter>	<Enter>
Alt		<Alt>	<Alt>	<Alt>
Tab		<Tab>	<Tab>	<Tab>
Ctrl		<Ctrl>	<Ctrl>	<Ctrl>
Ins		<Ins>	<Ins>	<Ins>
Del		<Del>	<Del>	<Del>
Home		<Home>	<Home>	<Home>
Pg Up		<PgUp>	<PgUp>	<PgUp>
Pg Dn		<PgDn>	<PgDn>	<PgDn>
End		<End>	<End>	<End>
Backspace		<Backspace>	<Backspace>	<Backspace>
Up arrow		<↑>	<↑>	<↑>
Left arrow		<↓>	<↓>	<↓>
Right arrow		<→>	<→>	<→>
Down arrow		<←>	<←>	<←>
;	semicolon	<:>	<:>	<:>
=	equal sign	<=>	<=>	<=>
-	hyphen	<->	<->	<->
[	left bracket	<[>	<[>	<[>
]	right bracket	<]>	<]>	<]>
\	backward slash	<\>	<\>	<\>
/	forward slash	</>	</>	</>
'	apostrophe	<'>	<'>	<'>
,	comma	<,>	<,>	<,>
.	period	<.>	<.>	<.>
`	accent	<`>	<`>	<`>
	broken vertical bar	<Shift>< >	<Shift>< >	<Shift>< >
"	quotation	<Shift><'>	<Shift><'>	<Shift><'>
<	less-than sign	<Shift><,>	<Shift><,>	<Shift><,>
>	greater-than sign	<Shift><.>	<Shift><.>	<Shift><.>
?	question mark	<Shift></>	<Shift></>	<Shift></>
~	tilde	<Shift><`>	<Shift><`>	<Shift><`>
:	colon	<Shift><:>	<Shift><:>	<Shift><:>
+	addition sign	<Shift><=>	<Shift><=>	<Shift><=>
_	underscore	<Shift><->	<Shift><->	<Shift><->
{	left brace	Shift><[>	Shift><[>	Shift><[>
}	right brace	<Shift><]>	<Shift><]>	<Shift><]>
!	exclamation	<Shift><1>	<Shift><1>	<Shift><1>
@	"at" sign	<Shift><2>	<Shift><2>	<Shift><2>
#	pound	<Shift><3>	<Shift><3>	<Shift><3>
\$	dollar	<Shift><4>	<Shift><4>	<Shift><4>
%	percent	<Shift><5>	<Shift><5>	<Shift><5>
^	carat	<Shift><6>	<Shift><6>	<Shift><6>
&	ampersand	<Shift><7>	<Shift><7>	<Shift><7>
*	asterisk	<Shift><8>	<Shift><8>	<Shift><8>
(	left parenthesis	<Shift><9>	<Shift><9>	<Shift><9>
)	right parenthesis	<Shift><0>	<Shift><0>	<Shift><0>
Break		<Shift><Pause>	<Shift><Pause>	<Shift><Pause>
Sys rq		<Shift><Prt Sc>	<Shift><Prt Sc>	<Shift><Prt Sc>
F1		<F1>	<F1>	<F1>
F2		<F2>	<F2>	<F2>
F3		<F3>	<F3>	<F3>
F4		<F4>	<F4>	<F4>
F5		<F5>	<F5>	<F5>
F6		<F6>	<F6>	<F6>
F7		<F7>	<F7>	<F7>
F8		<F8>	<F8>	<F8>
F9		<F9>	<F9>	<F9>
F10		<F10>	<F10>	<F10>

F11	<Ctrl><F1>	<Ctrl><F1>	<Ctrl><F1>
F12	<Ctrl><F2>	<Ctrl><F2>	<Ctrl><F2>
F13	<Ctrl><F3>	<Ctrl><F3>	<Ctrl><F3>
F14	<Ctrl><F4>	<Ctrl><F4>	<Ctrl><F4>
F15	<Ctrl><F5>	<Ctrl><F5>	<Ctrl><F5>
F16	<Ctrl><F6>	<Ctrl><F6>	<Ctrl><F6>
F17	<Ctrl><F7>	<Ctrl><F7>	<Ctrl><F7>
F18	<Ctrl><F8>	<Ctrl><F8>	<Ctrl><F8>
F19	<Ctrl><F9>	<Ctrl><F9>	<Ctrl><F9>
F20	<Ctrl><F10>	<Ctrl><F10>	<Ctrl><F10>
F21	<Alt><F1>	<Alt><F1>	<Alt><F1>
F22	<Alt><F2>	<Alt><F2>	<Alt><F2>
F23	<Alt><F3>	<Alt><F3>	<Alt><F3>
F24	<Alt><F4>	<Alt><F4>	<Alt><F4>
Attn	---	---	<Pg Dn>
Bktab	<Shift><Tab>	<Shift><Tab>	<Shift><Tab>
Clear	---	<Alt><7>	<Alt><7>
Dup	---	---	<Alt><0>
Eeof	---	<Alt><6>	---
Erase	---	---	<Alt><6>
Field exit	---	---	<Pg Up>
Field minus	---	---	<Alt><3>
Field plus	---	---	<Alt><4>
Find	<Alt><1>	---	---
Help	---	---	<Alt><8>
PA1	---	<Alt><8>	---
PA2	---	<Alt><9>	---
PA3	---	<Alt><0>	---
Page up	<Pg Up>	---	---
Page down	<Pg Dn>	---	---
Print	---	---	<Alt><2>
Remove	<Alt><3>	---	---
Reset	---	<Esc>	<Esc>
Roll up	---	---	<Alt><5>
Roll down	---	---	<Alt><9>
Select	<Alt><2>	---	---
Sreq	---	<Alt><1>	<Alt><1>
View up	<Shift><↑>	<Shift><↑>	<Shift><↑>
View down	<Shift><↓>	<Shift><↓>	<Shift><↓>
View left	<Shift><←>	<Shift><←>	<Shift><←>
View right	<Shift><→>	<Shift><→>	<Shift><→>