

# Novell SecureLogin

6.0

March 24, 2006

CONFIGURATION GUIDE FOR  
TERMINAL EMULATION

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# About This Guide

This book has the following information:

- Chapter 1, “Setting up Terminal Emulation,” on page 9
- Chapter 2, “Emulator Settings,” on page 15
- Chapter 3, “Single Sign-On for Hummingbird HostExplorer 7,” on page 53
- Chapter 4, “Single Sign-On for MS Windows XP Telnet,” on page 67
- Chapter 5, “Single Sign-On for PCXWare,” on page 73
- Chapter 6, “Single Sign-On for SmarTerm for IBM 3270,” on page 75
- Chapter 7, “Single Sign-On for WRQ Reflection v10,” on page 81
- Chapter 8, “Single Sign-On for Reflections 2,” on page 87
- Appendix A, “Error Codes: Terminal Launcher,” on page 91

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## Documentation Updates

For the most recent version of the *Guide for Configuring Terminal Emulation*, visit the [Novell Documentation Web site \(http://www.novell.com/documentation/nsl60/index.html\)](http://www.novell.com/documentation/nsl60/index.html).

## Additional Documentation

This *Configuration guide for Terminal Emulators* is a part of documentation set for SecureLogin 6.0. Other documents include:

- *Novell SecureLogin 6.0 Overview*
- *Novell SecureLogin 6.0 Administration Guide*
- *Novell SecureLogin 6.0 Installation Guide*
- *Novell SecureLogin 6.0 User Guide*
- *Novell SecureLogin 6.0 Application Definition Guide*
- *Novell SecureLogin 6.0 Citrix and Terminal Services Guide*

## Documentation Conventions

In Novell documentation, a greater-than symbol (>) is used to separate actions within a step and items in a cross-reference path.

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When a single pathname can be written with a backslash for some platforms or a forward slash for other platforms, the pathname is presented with a backslash. Users of platforms that require a forward slash, such as Linux or UNIX, should use forward slashes as required by your software.

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# Setting up Terminal Emulation

# 1

Terminal Launcher is a component of Novell® SecureLogin. Terminal Launcher enables you to log in to any type of host that requires you to log in using an emulator (for example, ACF2 or RACF mainframe, a Unix host, or a Cisco router).

You can configure Terminal Launcher to work with several different terminal emulators, navigate to a particular subsystem, or navigate to a menu within an application.

Also, you can save Terminal Launcher application definitions as corporate application definitions, allowing all users access to the application definition.

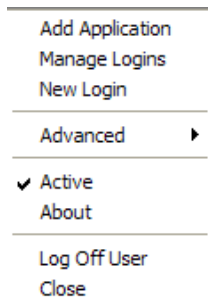
This section provides information on the following:

- [Section 1.1, “Creating a SecureLogin Application Definition,” on page 9](#)
- [Section 1.2, “Terminal Launcher,” on page 11](#)
- [Section 1.3, “Creating a Login for an Emulator,” on page 13](#)

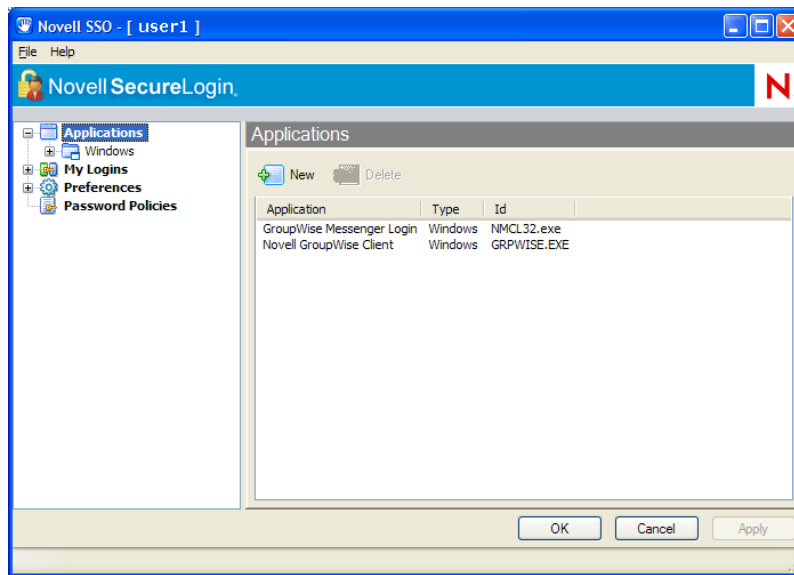
## 1.1 Creating a SecureLogin Application Definition

The following example sets up SecureLogin Terminal Launcher to single sign-on to a session using Jolly Giant QWS3270 Plus.

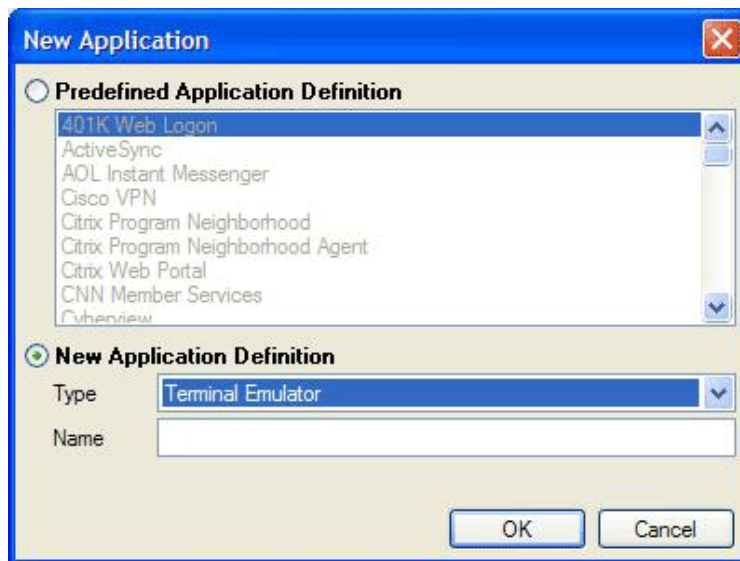
- 1 Right-click the SecureLogin icon on the system tray, then click *Manage Logins*.



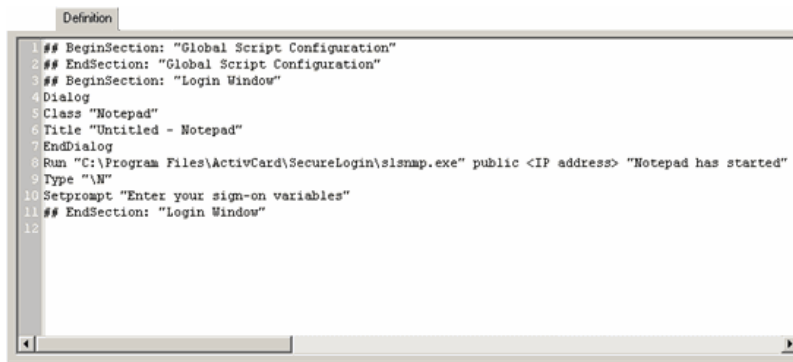
- 2 Click *Applications*, then click *New*.



- 3 Select *New Application Definition*, Specify a name in the *Name* text box, select *Terminal Emulator* as the *Type*, then click *OK*.



#### 4 Click *Definition*.



#### 5 Specify an application definition for the program, then click *Apply*.

For example, type a MessageBox command. By entering one command, you can find out the following:

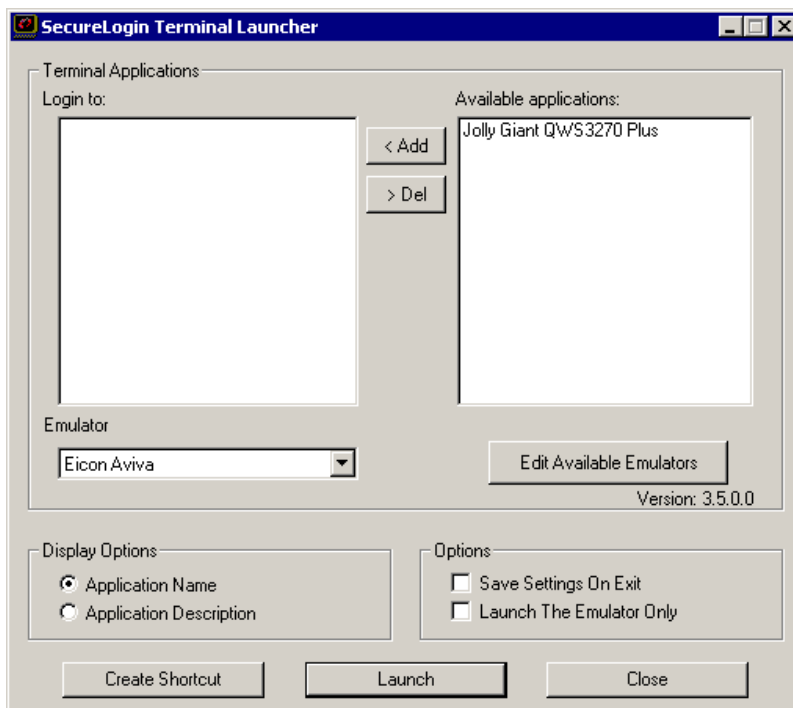
- Terminal Launcher is working as expected.
- The Application Definition is ready for you to enter the appropriate commands.

For Application Definitions on specific emulators, refer to the list of emulators in [Chapter 2, "Emulator Settings,"](#) on page 15.

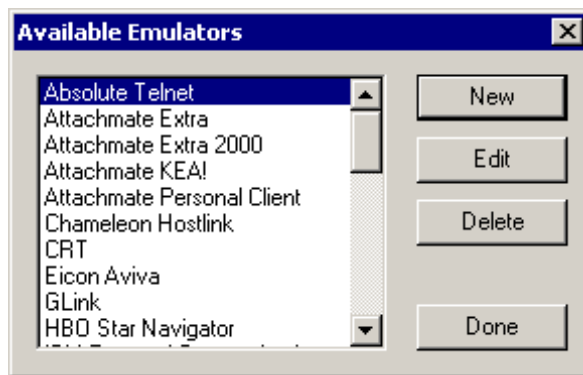
## 1.2 Terminal Launcher

#### 1 Click *Start > Programs > Novell SecureLogin > Terminal Launcher*.

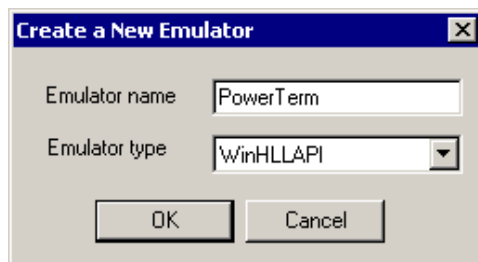
As the following figure illustrates, Terminal Launcher displays emulators that you have created application definitions for:



- 2 Click *Edit Available Emulators > New*.



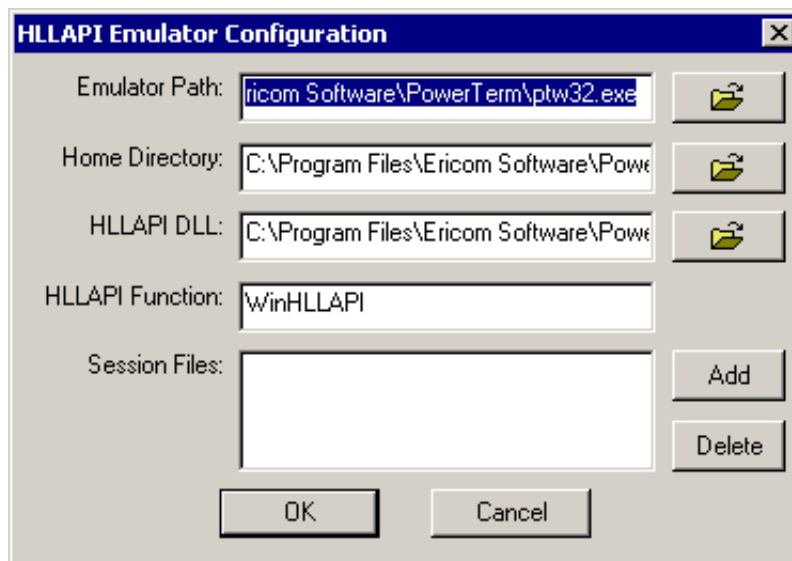
- 3 Specify a name for the emulator, select an emulator type from the drop-down list, then click *OK*.



To find the emulator type, you might have to refer to the documentation for your emulator.

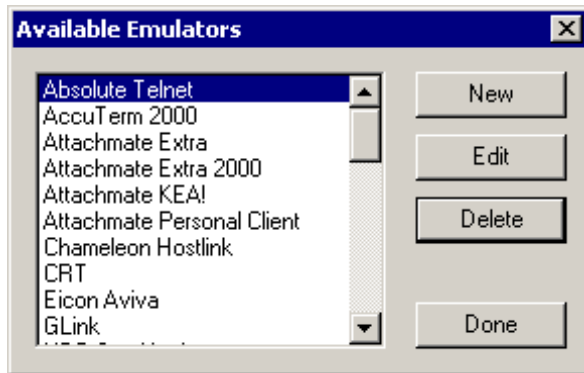
- 4 Specify values, then click *OK*.

The text boxes for the values depend on the type of emulator. The following figure illustrates values for a WinHLLAPI emulator.



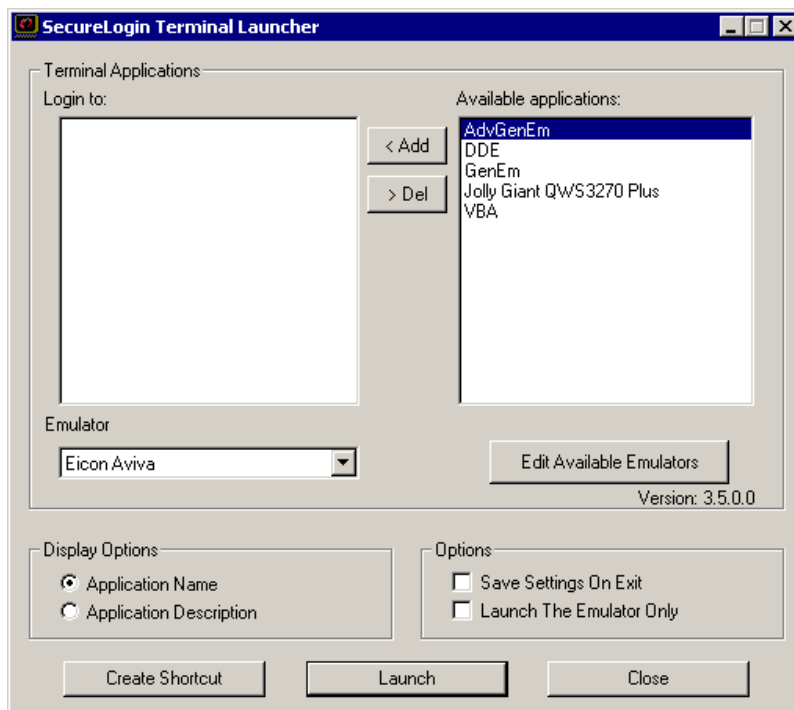
For values on a specific emulator, see the list of emulators in [Chapter 2, “Emulator Settings,” on page 15](#). If an emulator is not listed, see “[Build a Terminal Emulator Application Definition](#)” in the *Novell SecureLogin 6.0 Administration Guide*.

- 5 In the *Available Emulators* dialog box, click *Done*.



## 1.3 Creating a Login for an Emulator

- 1 From the list in the *Available Applications* pane, click the application that you want to log in to, then click *Add*.



- 2 To move an entry from one side to another, you can double-click it.

- 3 Select the emulator from the Emulator drop-down list, then click *Launch*.



The selected application definition runs, using the selected emulator.

The first time the application definition is run, you encounter a prompt to enter your username and password. Enter the required values, then click *OK*. Terminal Launcher launches the emulator, enters your username and password, and logs you in to a session.

# Emulator Settings

# 2

This section provides information on configuring SecureLogin Terminal Launcher to work with your emulator. The information is a guide. If you need to modify the information to suit your environment or a particular version of software, see “[Build a Terminal Emulator Application Definition](#)” in the *Novell® SecureLogin 6.0 Administration Guide*.

- “Absolute Telnet” on page 16
- “AccuTerm 2000” on page 17
- “AniTa 32” on page 18
- “Attachmate Extra 2000 Enterprise” on page 19
- “Attachmate Kea!” on page 20
- “Attachmate Personal Client” on page 21
- “CRT v3.4” on page 24
- “DynaComm” on page 25
- “GLink v6.2” on page 26
- “HBO Star Navigator v2.7” on page 27
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- “WinComm 2000 v5.2” on page 49
- “Window Telnet VT TE v3.10” on page 50
- “WRQ Reflection v7.0 for Unix and Digital” on page 51

Because the following emulators require particular steps or information, see the complete module:

- Chapter 3, “Single Sign-On for Hummingbird HostExplorer 7,” on page 53
- Chapter 4, “Single Sign-On for MS Windows XP Telnet,” on page 67
- Chapter 5, “Single Sign-On for PCXWare,” on page 73
- Chapter 6, “Single Sign-On for SmarTerm for IBM 3270,” on page 85
- Chapter 7, “Single Sign-On for WRQ Reflection v10,” on page 81

## 2.1 Absolute Telnet

### Generic Configuration

- Emulator Path  
The path to the executable file for the emulator.
- Host Name  
The IP address of the host that you want to connect to.
- Output IDs  
119
- Input IDs  
118

### Application Definition

WaitForText "ogin:"

Type \$Username



```
Type @E
```

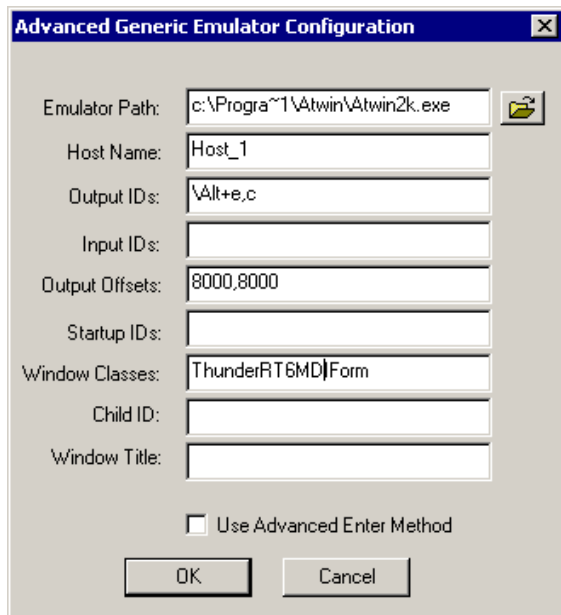
```
WaitForText "assword:"
```

```
Type $Password
```

```
Type @E
```

## 2.2 AccuTerm 2000

### Advanced Generic Configuration



- Emulator Path

The path to the `atwin2k.exe` file. This path must follow the 8.3 filename format (for example, `c:\Progra~1\` instead of `c:\Program Files\`).

- Host Name

The session file of the host that you want to connect to.

- Output IDs

`\Alt+e,c`

- Output Offsets

`8000,8000`

- Window Classes

`ThunderRT6MDIForm`

### Application Definition

```
Delay 7000
```

```
WaitForText "ogin:"
```

```
Type $Username
```

```
Type @E
```

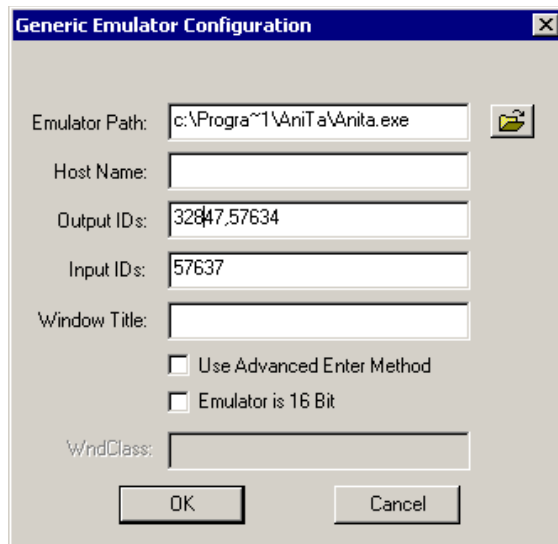
```
WaitForText "assword:"
```

```
Type $Password
```

```
Type @E
```

## 2.3 AniTa 32

### Generic Configuration



- Emulator Path

The path to the `anita.exe` file.

- Output IDs

32847,57634

- Input IDs

57637

### Application Definition

```
WaitForText "ogin:"
```

```
Type $Username
```

```
Type @E
```

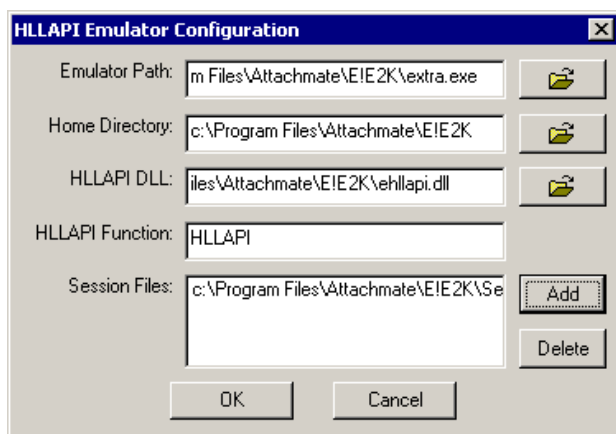
```
WaitForText "assword:"
```

```
Type $Password
```

```
Type @E
```

## 2.4 Attachmate Extra 2000 Enterprise

### HLLAPI Configuration



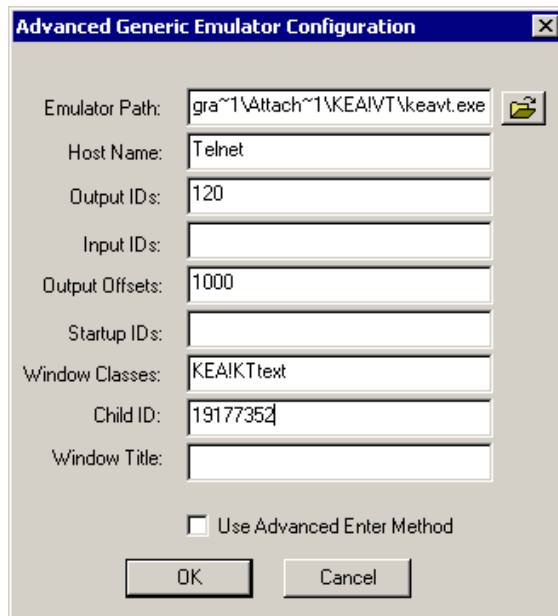
- Emulator Path  
The path to the `extra.exe` file.
- Home Directory  
The home directory of the emulator.
- HLLAPI DLL  
The path to the `ehllapi.dll` file.
- HLLAPI Function  
HLLAPI
- Session Files  
The path to the session file that you want to use.

### Application Definition

```
WaitForText "ogin:"  
Type $Username  
Type @E  
WaitForText "assword:"  
Type $Password  
Type @E
```

## 2.5 Attachmate Kea!

### Advanced Generic Configuration



- Emulator Path

The path to the `keavt.exe` file. This path must follow the 8.3 filename format (for example, `c:\Progra~1\` instead of `c:\Program Files\`).

- Host Name

The session file of the host that you want to connect to.

- Output IDs

120

- Output Offsets

1000

- Window Classes

KEA!KText

- Child ID

19177352

### Application Definition

```
WaitForText "ogin:"
```

```
Type $Username
```

```
Type @E
```

```
WaitForText "assword:"
```

```
Type $Password
```

Type @E

## 2.6 Attachmate Personal Client

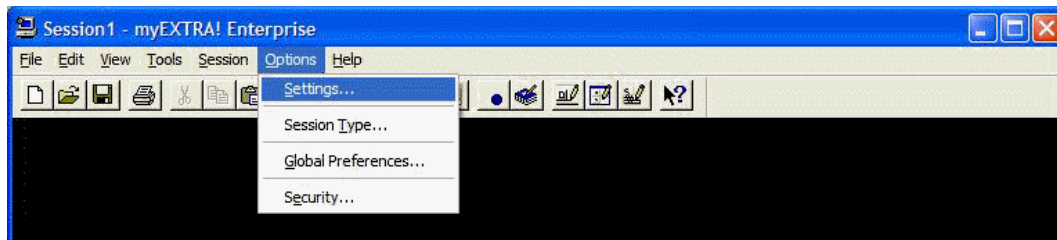
This section shows the specific configuration required for Attachmate Personal Edition to work with SecureLogin. These settings are required for the application definition and communication to work.

- 1 Define a session.

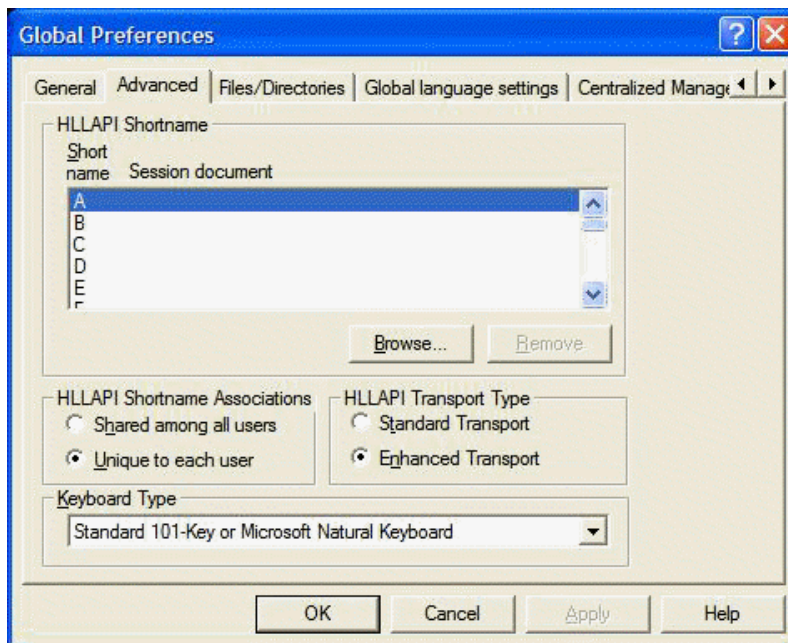
You typically use a wizard to do this. The wizard defines the terminal type and the Host address that will be contacted.

- 2 Save the session as a session file, in this case Session1.

- 3 Within the live Attachmate session, select *Options > Global Preferences*.

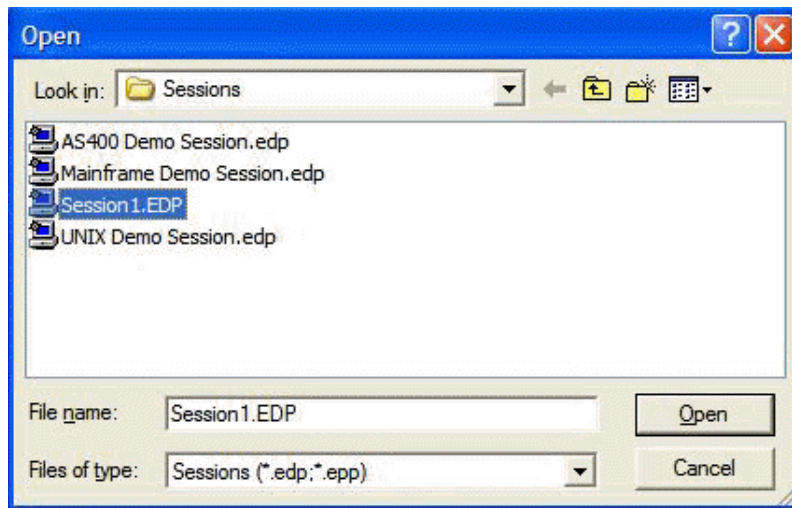


The *Advanced* Tab displays a list of the HLLAPI short names.

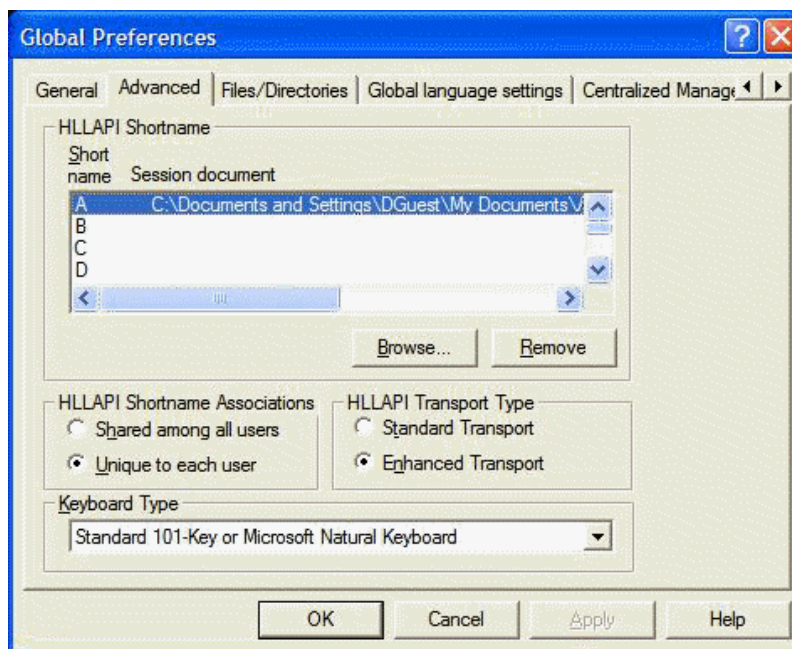


Link the session identifier A with the active session in the emulator. This tells the HLLAPI to insert any commands into the correct session identifier.

- 4 Using *Browse*, identify the session correctly as the current running session, in this case Session1 again.

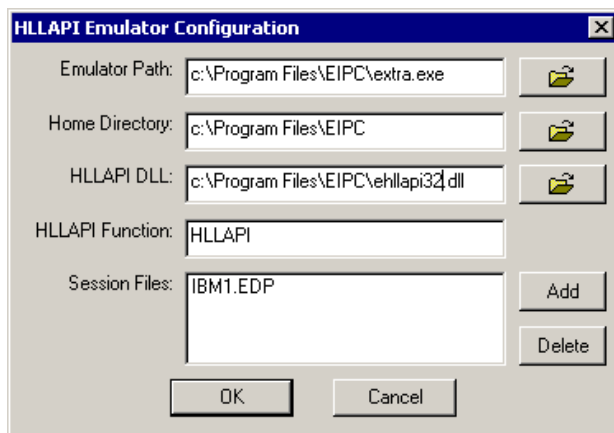


- 5 Verify the session document by using the *Advanced* tab within Global Preferences.



After you save this session file, the Secure Login TLAUNCH system is able to interact with the emulator correctly.

## HLLAPI Configuration



- Emulator Path  
The path to the `extra.exe` file.
- Home Directory  
The home directory of the emulator.
- HLLAPI DLL  
The path to the `ehllapi32.dll` file.
- HLLAPI Function  
HLLAPI
- Session Files  
The path to the session file that you want to use.

## Application Definition

```
WaitForText "ogin:"
```

```
Type $Username
```

```
Type @E
```

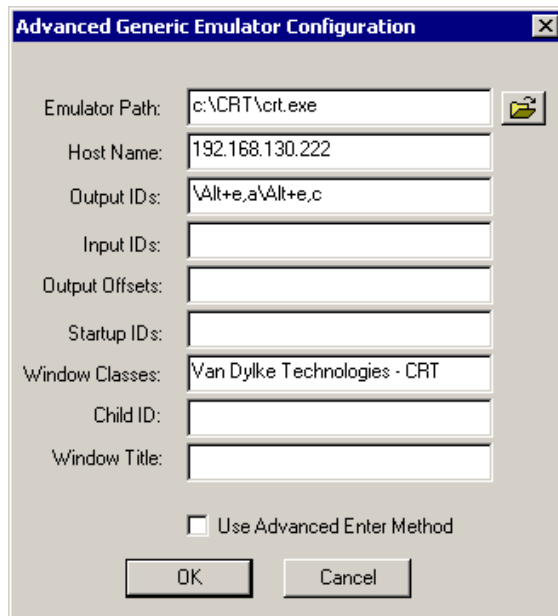
```
WaitForText "assword:"
```

```
Type $Password
```

```
Type @E
```

## 2.7 CRT v3.4

### Advanced Generic Configuration



The screenshot shows a dialog box titled "Advanced Generic Emulator Configuration". It contains several text input fields and a checkbox. The fields are labeled: "Emulator Path:" with the value "c:\CRT\crt.exe" and a folder icon button; "Host Name:" with the value "192.168.130.222"; "Output IDs:" with the value "\Alt+E,a,\Alt+E,c"; "Input IDs:" (empty); "Output Offsets:" (empty); "Startup IDs:" (empty); "Window Classes:" with the value "Van Dylke Technologies - CRT"; "Child ID:" (empty); and "Window Title:" (empty). At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is unchecked, and two buttons labeled "OK" and "Cancel".

- Emulator Path  
The path to the `crt.exe` file.
- Host Name  
The IP address of the host that you want to connect to.
- Output IDs  
\Alt+E,a,\Alt+E,c
- Window Classes  
Van Dylke Technologies - CRT.

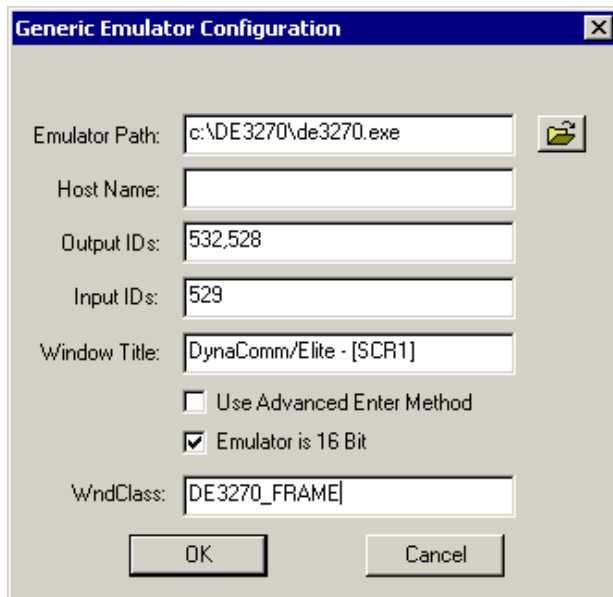
### Application Definition

```
WaitForText "ogin:"  
Type $Username  
Type @E  
WaitForText "assword:"  
Type $Password  
Type @E
```



## 2.8 DynaComm

### Generic Configuration



- Emulator Path

The path to the de3270.exe file.

- Output IDs

532,528

- Input IDs

529

- Window Title

The title that the emulator window displays when the emulator is launched and connected to the host.

- Emulator is 16 Bit

Checked

- WndClass

DE3270\_FRAME

### Application Definition

```
WaitForText "ogin:"
```

```
Type $Username
```

```
Type @E
```

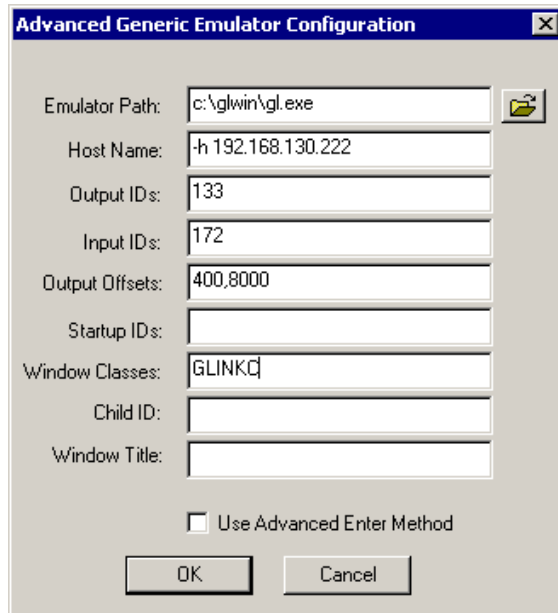
```
WaitForText "assword:"
```

```
Type $Password
```

Type @E

## 2.9 GLink v6.2

### Advanced Generic Configuration



The image shows a Windows-style dialog box titled "Advanced Generic Emulator Configuration". It contains several text input fields and a checkbox. The fields are labeled as follows: "Emulator Path:" with the value "c:\glwin\gl.exe" and a folder icon button; "Host Name:" with the value "-h 192.168.130.222"; "Output IDs:" with the value "133"; "Input IDs:" with the value "172"; "Output Offsets:" with the value "400,8000"; "Startup IDs:" which is empty; "Window Classes:" with the value "GLINKC"; "Child ID:" which is empty; and "Window Title:" which is empty. At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is unchecked, and two buttons labeled "OK" and "Cancel".

Emulator Path:	c:\glwin\gl.exe
Host Name:	-h 192.168.130.222
Output IDs:	133
Input IDs:	172
Output Offsets:	400,8000
Startup IDs:	
Window Classes:	GLINKC
Child ID:	
Window Title:	

☐ Use Advanced Enter Method

OK Cancel

- Emulator Path

The path to the `gl.exe` file.

- Host Name

The IP address of the host that you want to connect to. Type `-h` in front of the address.

- Output IDs

133

- Input IDs

172

- Output Offsets

400,8000

- Window Classes

GLINKC

### Application Definition

```
WaitForText "ogin:"
```

```
Type $Username
```

```
Type @E
```

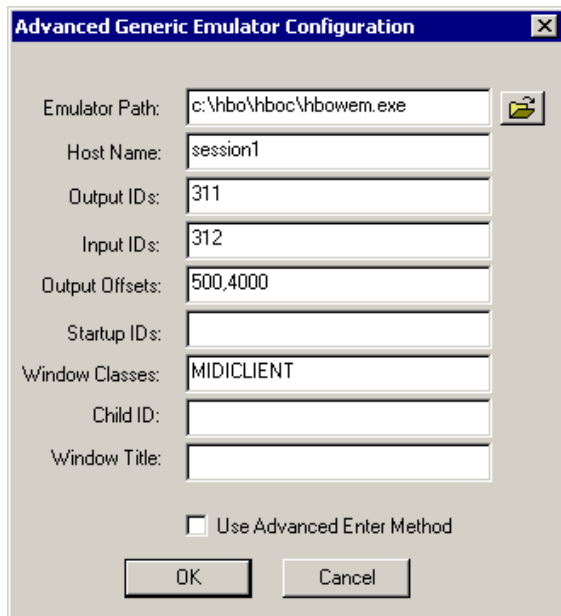
```
WaitForText "assword:"
```

Type \$Password

Type @E

## 2.10 HBO Star Navigator v2.7

### Advanced Generic Configuration



The image shows a Windows-style dialog box titled "Advanced Generic Emulator Configuration". It contains several text input fields and a checkbox. The fields are labeled as follows: "Emulator Path:" with the value "c:\hbo\hbo\hbowem.exe" and a folder icon button; "Host Name:" with the value "session1"; "Output IDs:" with the value "311"; "Input IDs:" with the value "312"; "Output Offsets:" with the value "500,4000"; "Startup IDs:" which is empty; "Window Classes:" with the value "MIDICLIENT"; "Child ID:" which is empty; and "Window Title:" which is empty. At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is currently unchecked. Below the checkbox are two buttons: "OK" and "Cancel".

- Emulator Path  
The path to the hbowem.exe file.
- Host Name  
The session file of the host that you want to connect to.
- Output IDs  
311
- Input IDs  
312
- Output Offsets  
500,4000
- Window Classes  
MIDICLIENT

### Application Definition

WaitForText "ogin:"

Type \$Username

Type @E

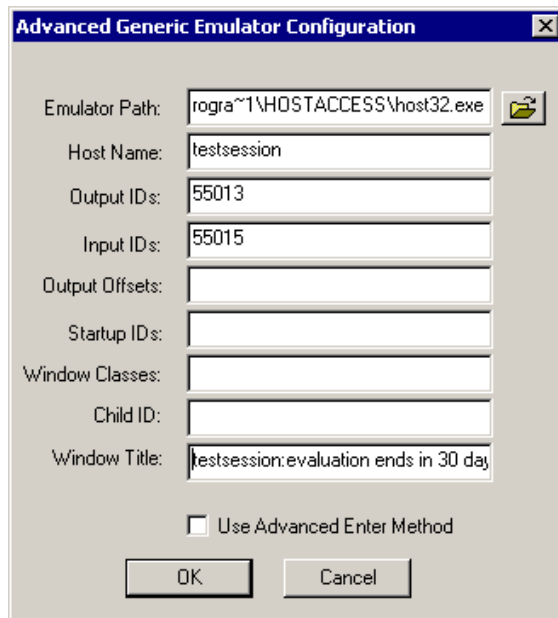
```
WaitForText "assword:"
```

```
Type $Password
```

```
Type @E
```

## 2.11 Host Access v7.2

### Advanced Generic Configuration



- Emulator Path

The path to the `host32.exe` file. The path must follow the 8.3 filename format (for example, `c:\Progra~1\` instead of `c:\Program Files\`).

- Host Name

The name of the session file that you want to use.

- Output IDs

55013

- Input IDs

55015

- Window Title

The title of the emulator window.

### Application Definition

```
WaitForText "ogin:"
```

```
Type $Username
```

```
Type @E
```

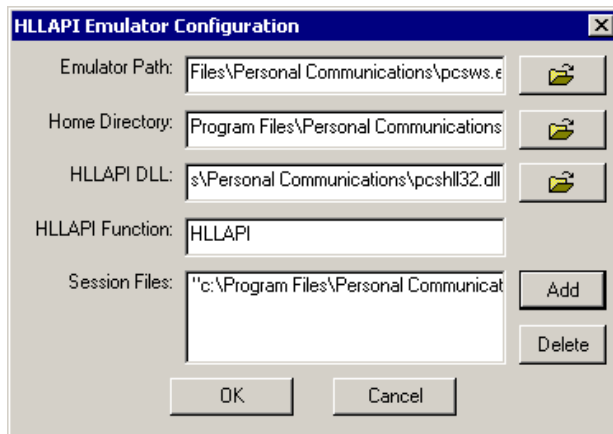
```
WaitForText "assword:"
```

```
Type $Password
```

```
Type @E
```

## 2.12 IBM Personal Client

### HLLAPI Configuration



- Emulator Path  
The path to the `pcsws.exe` file.
- Home Directory  
The home directory of the emulator.
- HLLAPI DLL  
The path to the `pcshl132.dll` file.
- HLLAPI Function  
HLLAPI
- Session Files  
The path to the session file that you want to use.

### Application Definition

```
WaitForText "ogin:"
```

```
Type $Username
```

```
Type @E
```

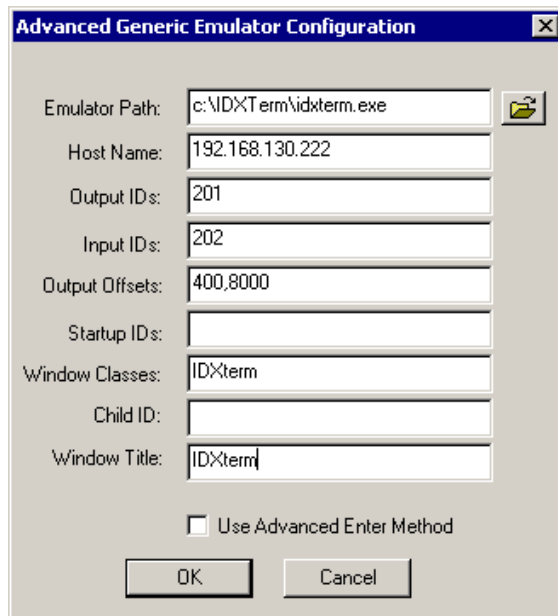
```
WaitForText "assword:"
```

```
Type $Password
```

```
Type @E
```

## 2.13 IDX Term v2.25

### Advanced Generic Configuration



The image shows a Windows-style dialog box titled "Advanced Generic Emulator Configuration". It contains several text input fields and a checkbox. The fields are labeled as follows: "Emulator Path:" with the value "c:\IDXTerm\idxterm.exe" and a browse button; "Host Name:" with the value "192.168.130.222"; "Output IDs:" with the value "201"; "Input IDs:" with the value "202"; "Output Offsets:" with the value "400,8000"; "Startup IDs:" which is empty; "Window Classes:" with the value "IDXterm"; "Child ID:" which is empty; and "Window Title:" with the value "IDXterm". At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is unchecked, and two buttons labeled "OK" and "Cancel".

Emulator Path:	c:\IDXTerm\idxterm.exe
Host Name:	192.168.130.222
Output IDs:	201
Input IDs:	202
Output Offsets:	400,8000
Startup IDs:	
Window Classes:	IDXterm
Child ID:	
Window Title:	IDXterm

☐ Use Advanced Enter Method

OK Cancel

- Emulator Path  
The path to the idxterm.exe file.
- Host Name  
The IP address of the host that you want to connect to.
- Output IDs  
201
- Input IDs  
202
- Output Offsets  
400,8000
- Window Classes  
IDXterm
- Window Title  
IDXterm

### Application Definition

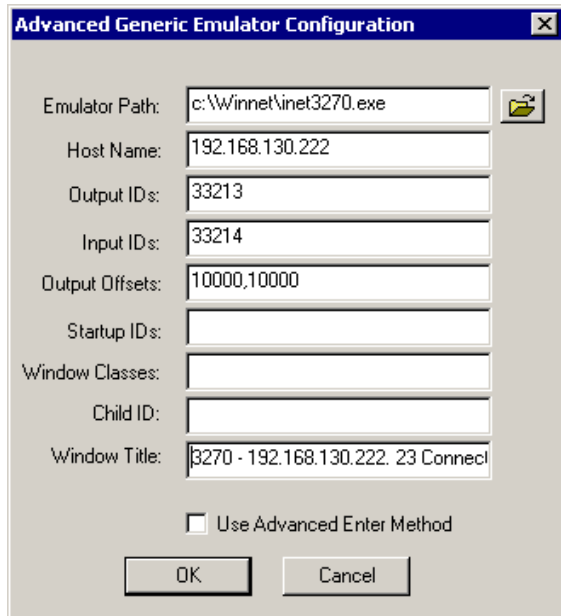
```
WaitForText "ogin:"  
  
Type $Username  
  
Type @E  
  
WaitForText "assword:"
```

Type \$Password

Type @E

## 2.14 Inet 3270

### Advanced Generic Configuration



The image shows a Windows-style dialog box titled "Advanced Generic Emulator Configuration". It contains several text input fields and a checkbox. The fields are labeled as follows: "Emulator Path:" with the value "c:\Winnet\inet3270.exe" and a folder icon button; "Host Name:" with the value "192.168.130.222"; "Output IDs:" with the value "33213"; "Input IDs:" with the value "33214"; "Output Offsets:" with the value "10000,10000"; "Startup IDs:" which is empty; "Window Classes:" which is empty; "Child ID:" which is empty; and "Window Title:" with the value "3270 - 192.168.130.222. 23 Connect". At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is unchecked. Below the checkbox are two buttons: "OK" and "Cancel".

Emulator Path:	c:\Winnet\inet3270.exe
Host Name:	192.168.130.222
Output IDs:	33213
Input IDs:	33214
Output Offsets:	10000,10000
Startup IDs:	
Window Classes:	
Child ID:	
Window Title:	3270 - 192.168.130.222. 23 Connect

☐ Use Advanced Enter Method

OK Cancel

- Host Name

The IP address of the host that you want to connect to.

- Output IDs

33213

- Input IDs

33214

- Output Offsets

10000,10000

- Window Classes

IDXterm

- Window Title

The title that the emulator window displays when the emulator is launched and connected to the host.

### Application Definition

WaitForText "ogin:"

Type \$Username

```
Type @E
```

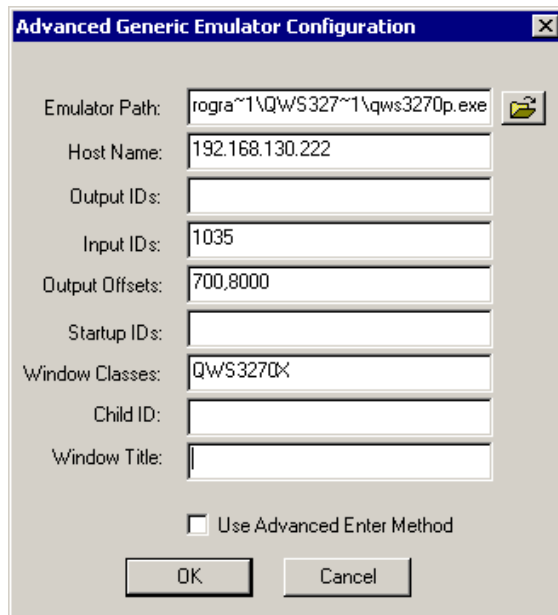
```
WaitForText "assword:"
```

```
Type $Password
```

```
Type @E
```

## 2.15 Jolly Giant QWS3270 Plus v3.6

### Advanced Generic Configuration

The image shows a Windows-style dialog box titled "Advanced Generic Emulator Configuration". It contains several text input fields and a checkbox. The fields are labeled: "Emulator Path:" with the value "rogra~1\Q\WS327~1\qws3270p.exe" and a folder icon; "Host Name:" with the value "192.168.130.222"; "Output IDs:" which is empty; "Input IDs:" with the value "1035"; "Output Offsets:" with the value "700,8000"; "Startup IDs:" which is empty; "Window Classes:" with the value "Q\WS3270X"; "Child ID:" which is empty; and "Window Title:" which is empty. At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is unchecked, and two buttons labeled "OK" and "Cancel".

Emulator Path:	rogra~1\Q\WS327~1\qws3270p.exe
Host Name:	192.168.130.222
Output IDs:	
Input IDs:	1035
Output Offsets:	700,8000
Startup IDs:	
Window Classes:	Q\WS3270X
Child ID:	
Window Title:	

☐ Use Advanced Enter Method

OK Cancel

- Emulator Path

The path to the qws3270p.exe file. The path must follow the 8.3 filename format (for example, c:\Progra~1\ instead of c:\Program Files\).

- Host Name

The IP address of the host that you want to connect to.

- Input IDs

1035

- Output Offsets

700,8000

- Window Classes

QWS3270X

### Application Definition

```
Delay 2000
```

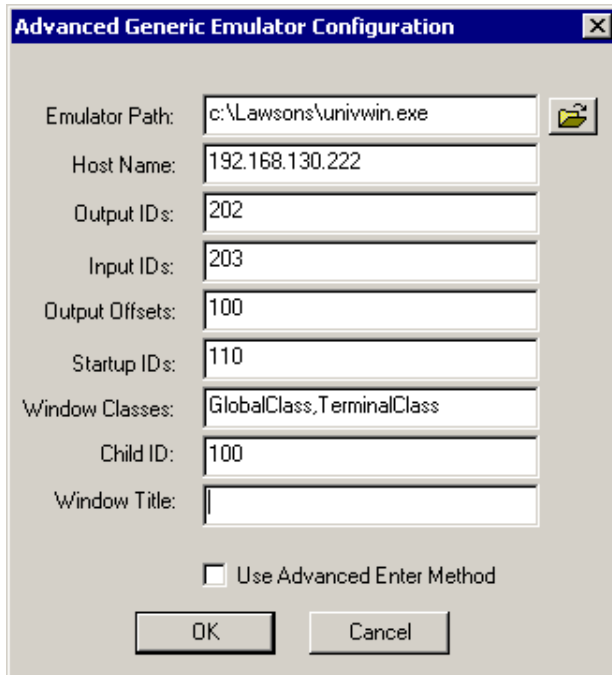
```
Type $Username
```



```
Type @E@E
Delay 1000
Type $Password
Type @E@E
```

## 2.16 Lawsons

### Advanced Generic Configuration

A screenshot of the 'Advanced Generic Emulator Configuration' dialog box. The dialog has a title bar with the text 'Advanced Generic Emulator Configuration' and a close button. It contains several text input fields: 'Emulator Path' with the value 'c:\Lawsons\univwin.exe' and a folder icon button; 'Host Name' with the value '192.168.130.222'; 'Output IDs' with the value '202'; 'Input IDs' with the value '203'; 'Output Offsets' with the value '100'; 'Startup IDs' with the value '110'; 'Window Classes' with the value 'GlobalClass,TerminalClass'; 'Child ID' with the value '100'; and 'Window Title' which is empty. At the bottom, there is a checkbox labeled 'Use Advanced Enter Method' which is unchecked, and two buttons labeled 'OK' and 'Cancel'.

- Emulator Path  
The path to the `univwin.exe` file.
- Host Name  
The IP address of the host that you want to connect to.
- Output IDs  
202
- Input IDs  
203
- Output Offsets  
100
- Startup IDs  
110
- Window Classes

GlobalClass,TerminalClass

- Child ID

100

### Application Definition

WaitForText "ogin:"

Type \$Username

Type \N

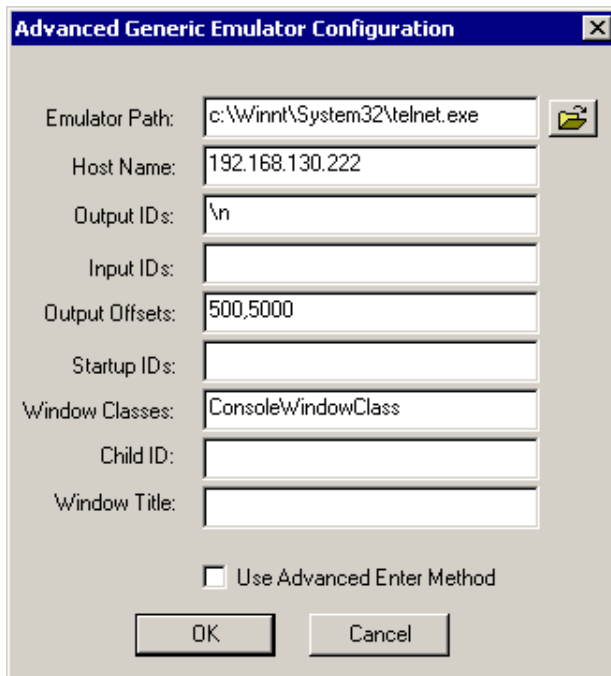
WaitForText "assword"

Type \$Password

Type \N

## 2.17 Microsoft Windows 2000 Telnet

### Advanced Generic Configuration



The image shows a Windows-style dialog box titled "Advanced Generic Emulator Configuration". It contains several text input fields and a checkbox. The fields are labeled as follows: "Emulator Path:" with the value "c:\Winnt\System32\telnet.exe" and a browse button; "Host Name:" with the value "192.168.130.222"; "Output IDs:" with the value "\n"; "Input IDs:" which is empty; "Output Offsets:" with the value "500,5000"; "Startup IDs:" which is empty; "Window Classes:" with the value "ConsoleWindowClass"; "Child ID:" which is empty; and "Window Title:" which is empty. At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is unchecked, and two buttons labeled "OK" and "Cancel".

Emulator Path:	c:\Winnt\System32\telnet.exe
Host Name:	192.168.130.222
Output IDs:	\n
Input IDs:	
Output Offsets:	500,5000
Startup IDs:	
Window Classes:	ConsoleWindowClass
Child ID:	
Window Title:	

☐ Use Advanced Enter Method

OK Cancel

- Emulator Path

The path to the `telnet.exe` file.

- Host Name

The name or IP address of the host that you want to connect to.

- Output IDs

\n

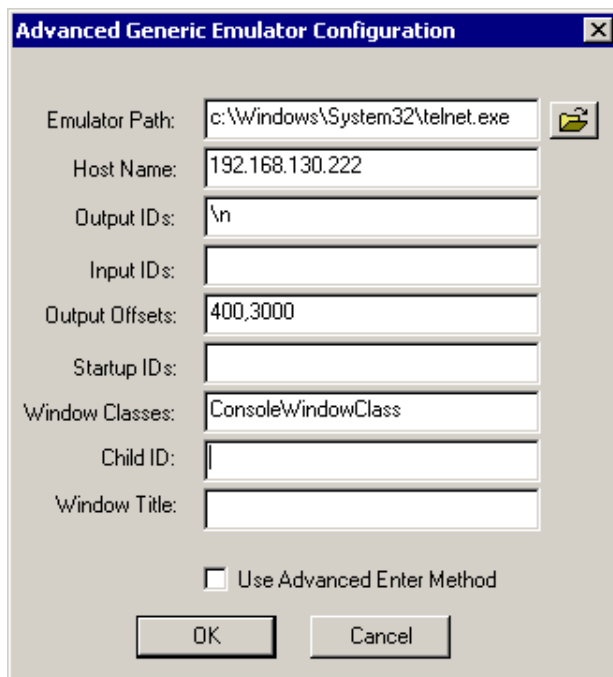
- Output Offsets  
500,5000
- Startup IDs  
110
- Window Classes  
ConsoleWindowClass

### Application Definition

```
WaitForText "ogin:"
Type $Username
Type @E
WaitForText "assword:"
Type $Password
Type @E
```

## 2.18 Microsoft Windows XP Telnet

### Advanced Generic Configuration



Advanced Generic Emulator Configuration

Emulator Path: c:\Windows\System32\telnet.exe

Host Name: 192.168.130.222

Output IDs: \n

Input IDs:

Output Offsets: 400,3000

Startup IDs:

Window Classes: ConsoleWindowClass

Child ID:

Window Title:

☐ Use Advanced Enter Method

OK Cancel

- Emulator Path  
The path to the telnet.exe file.
- Host Name

The IP address, host name, or session file of the host that you want to connect to.

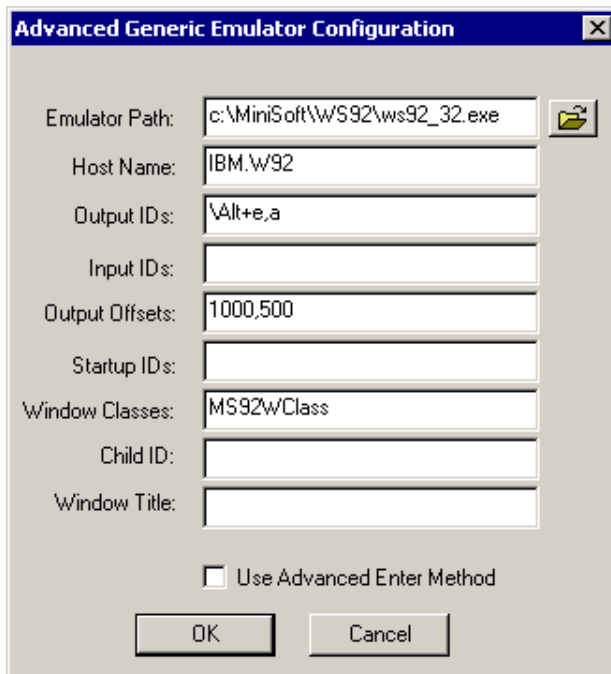
- Output IDs  
\\n
- Output Offsets  
400,3000
- Window Classes  
ConsoleWindowClass

### Application Definition

```
WaitForText "ogin:"  
Type $Username  
Type @E  
WaitForText "assword:"  
Type $Password  
Type @E
```

## 2.19 MiniSoft WS92

### Advanced Generic Configuration



The image shows a Windows-style dialog box titled "Advanced Generic Emulator Configuration". It contains several input fields for configuring an emulator. The fields are: "Emulator Path:" with the value "c:\MiniSoft\WS92\ws92\_32.exe" and a folder icon button; "Host Name:" with the value "IBM.W92"; "Output IDs:" with the value "\Alt+e,a"; "Input IDs:" which is empty; "Output Offsets:" with the value "1000,500"; "Startup IDs:" which is empty; "Window Classes:" with the value "MS92wClass"; "Child ID:" which is empty; and "Window Title:" which is empty. At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is currently unchecked. Below the checkbox are two buttons: "OK" and "Cancel".

Emulator Path:	c:\MiniSoft\WS92\ws92_32.exe
Host Name:	IBM.W92
Output IDs:	\Alt+e,a
Input IDs:	
Output Offsets:	1000,500
Startup IDs:	
Window Classes:	MS92wClass
Child ID:	
Window Title:	

☐ Use Advanced Enter Method

OK Cancel

- Emulator Path  
The path to the ws92\_32.exe file.

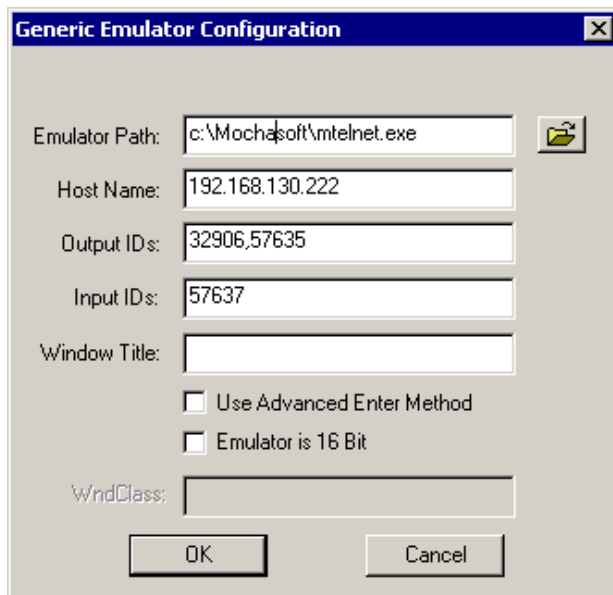
- Host Name  
The session file of the host that you want to connect to.
- Output IDs  
\Alt+e,a
- Output Offsets  
1000,500
- Window Classes  
MS92WClass

### Application Definition

```
WaitForText "ACF82003 ACF2, ENTER LOGON ID -"
Type $Username
Type \N
WaitForText "ACF82004 ACF2, ENTER PASSWORD -"
Type $Password
Type \N
WaitForText "HIT ENTER TO CONTINUE"
Type \N
```

## 2.20 Mocha W32 Telnet v4.1

### Generic Configuration



- Emulator Path

The path to the `mtelnet.exe` file.

- Host Name

The name or IP address of the host that you want to connect to.

- Output IDs

32906,57634

- Input IDs

57637

## Application Definition

```
WaitForText "ogin:"
```

```
Type $Username
```

```
Type @E
```

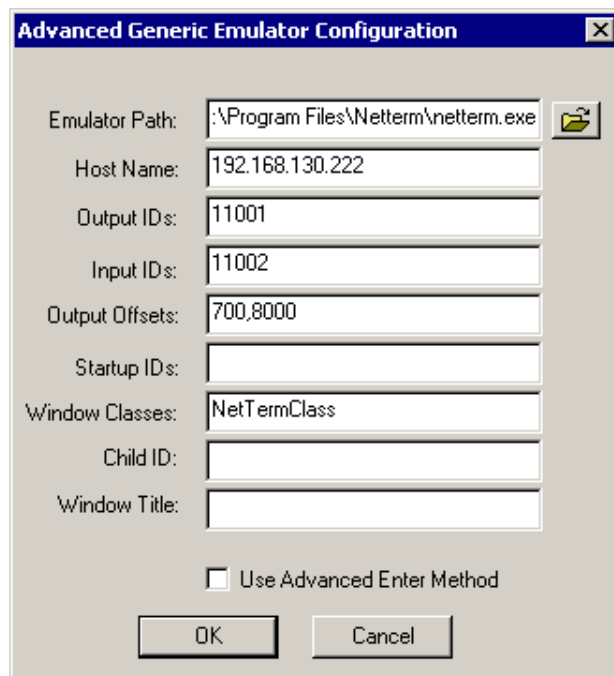
```
WaitForText "assword:"
```

```
Type $Password
```

```
Type @E
```

## 2.21 NetTerm v4.2 32bit

### Advanced Generic Configuration



The image shows a Windows-style dialog box titled "Advanced Generic Emulator Configuration". It contains several input fields for configuring an emulator. The fields are: "Emulator Path:" with the value ":\Program Files\Netterm\netterm.exe" and a folder icon button; "Host Name:" with the value "192.168.130.222"; "Output IDs:" with the value "11001"; "Input IDs:" with the value "11002"; "Output Offsets:" with the value "700,8000"; "Startup IDs:" which is empty; "Window Classes:" with the value "NetTermClass"; "Child ID:" which is empty; and "Window Title:" which is empty. At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is unchecked. Below the checkbox are "OK" and "Cancel" buttons.

Emulator Path:	:\Program Files\Netterm\netterm.exe
Host Name:	192.168.130.222
Output IDs:	11001
Input IDs:	11002
Output Offsets:	700,8000
Startup IDs:	
Window Classes:	NetTermClass
Child ID:	
Window Title:	

☐ Use Advanced Enter Method

OK Cancel

- Emulator Path

The path to the `netterm.exe` file.

- Host Name  
The name or IP address of the host that you want to connect to.
- Output IDs  
11001
- Input IDs  
11002
- Output Offsets  
700,8000
- Window Classes  
NetTermClass

### Application Definition

Type \$Username

Type @E

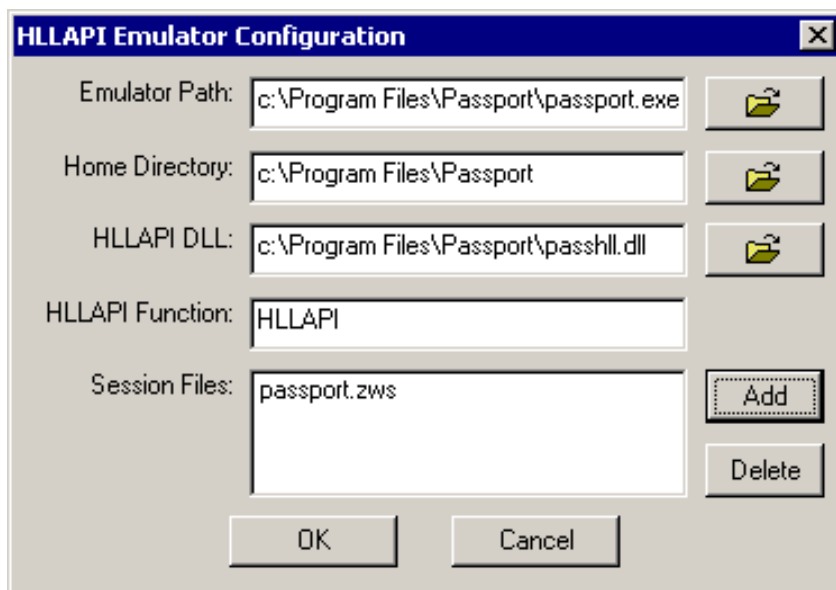
WaitforText "assword:"

Type \$Password

Type @E

## 2.22 Passport TN 3270E v7.0

### HLLAPI Configuration



- Emulator Path  
The path to the `passport.exe` file.

- Home Directory  
The home directory of the emulator.
- HLLAPI DLL  
The path to the `passhll.dll` file.
- HLLAPI Function  
HLLAPI
- Session Files  
The path to the session file that you want to use.

### Application Definition

WaitForText "ogin:"

Type \$Username

Type @E

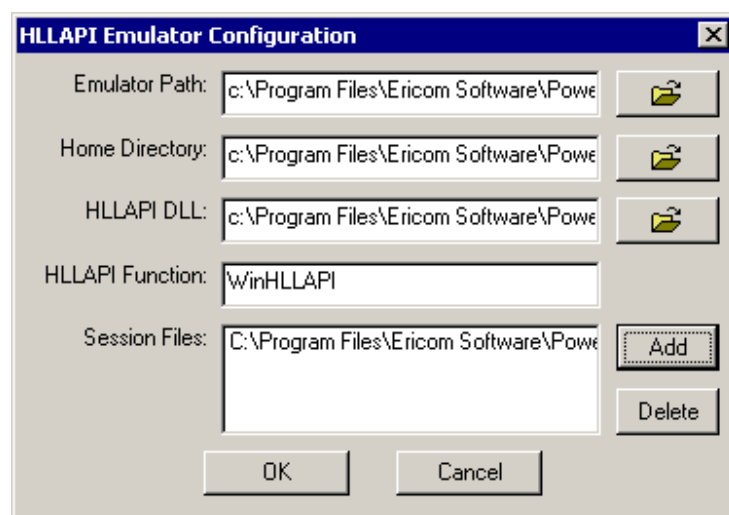
WaitForText "assword:"

Type \$Password

Type @E

## 2.23 PowerTerm v6.34

### WinHLLAPI Configuration



- Emulator Path  
The path to the `ptw32.exe` file.
- Home Directory  
The home directory of the emulator.
- HLLAPI DLL



The path to the `hllapi32.dll` file.

- HLLAPI Function

WinHLLAPI

- Session Files

The path to the session file that you want to use.

## Application Definition

```
WaitForText "ogin:"
```

```
Type $Username
```

```
Type @E
```

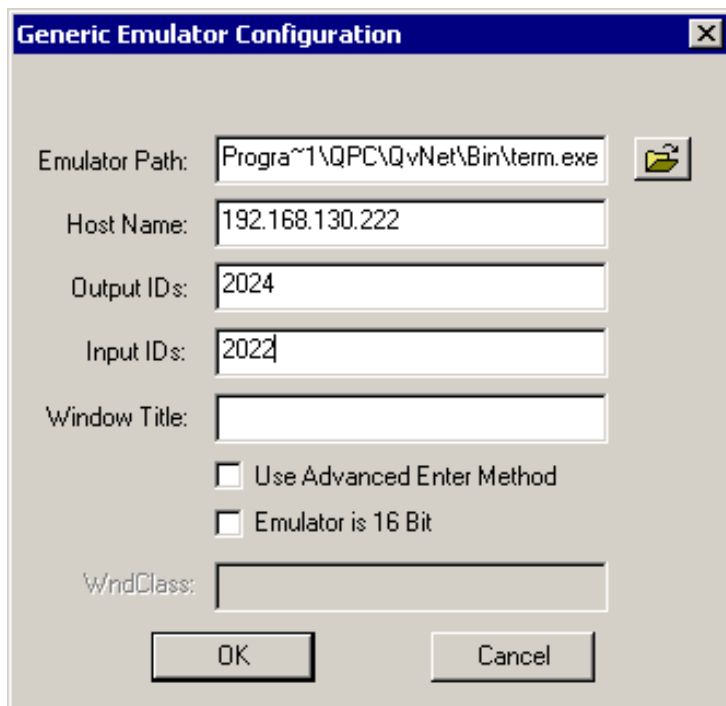
```
WaitForText "assword:"
```

```
Type $Password
```

```
Type @E
```

## 2.24 QVT Term v4.1

### Generic Configuration



The screenshot shows a dialog box titled "Generic Emulator Configuration". It contains several input fields and checkboxes. The "Emulator Path" field is set to "Progra~1\QPC\QvNet\Bin\term.exe" with a folder icon to its right. The "Host Name" field is set to "192.168.130.222". The "Output IDs" field is set to "2024". The "Input IDs" field is set to "2022". The "Window Title" field is empty. There are two checkboxes: "Use Advanced Enter Method" and "Emulator is 16 Bit", both of which are unchecked. The "WndClass" field is empty. At the bottom, there are "OK" and "Cancel" buttons.

Emulator Path:	Progra~1\QPC\QvNet\Bin\term.exe
Host Name:	192.168.130.222
Output IDs:	2024
Input IDs:	2022
Window Title:	
<input type="checkbox"/> Use Advanced Enter Method	
<input type="checkbox"/> Emulator is 16 Bit	
WndClass:	

- Emulator Path

The path to the `term.exe` file.

- Host Name

The name or IP address of the server that you want to connect to.

- Output IDs  
2024
- Input IDs  
2022

### Application Definition

WaitForText "ogin:"

Type \$Username

Type @E

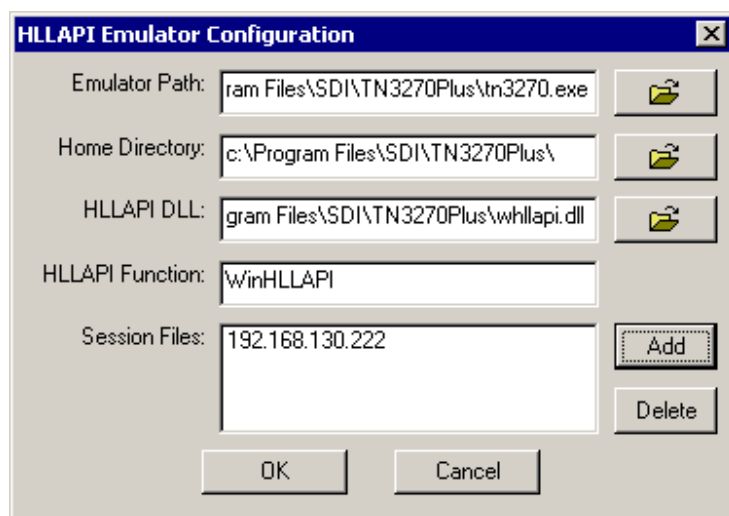
WaitForText "assword:"

Type \$Password

Type @E

## 2.25 SDI TN3270 Plus

### WinHLLAPI Configuration



- Emulator Path  
The path to the tn3270.exe file.
- Home Directory  
The home directory of the emulator.
- HLLAPI DLL  
The path to the WHLLAPI.DLL file.
- HLLAPI Function  
WinHLLAPI
- Session Files

The IP address of the host that you want to connect to.

### Application Definition

```
WaitForText "ogin:"
```

```
Type $Username
```

```
Type @E
```

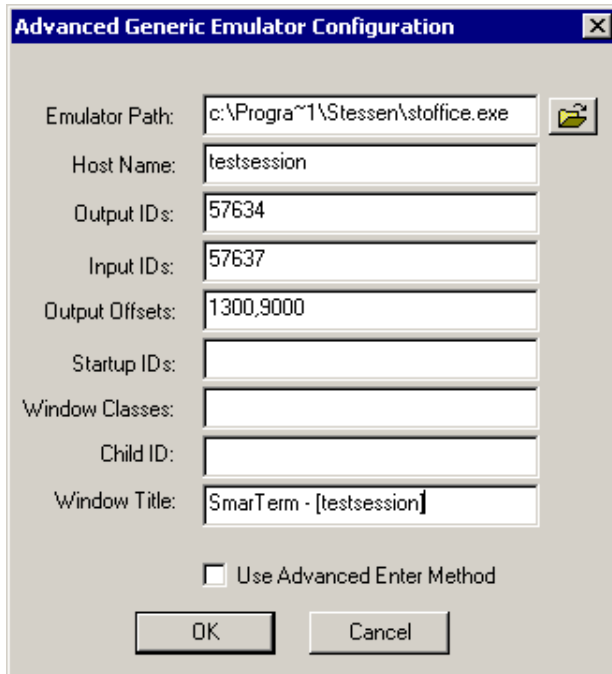
```
WaitForText "assword:"
```

```
Type $Password
```

```
Type @E
```

## 2.26 SmarTerm v10 for Digital VT

### Advanced Generic Configuration



The image shows a Windows-style dialog box titled "Advanced Generic Emulator Configuration". It contains several text input fields and a checkbox. The fields are labeled as follows: "Emulator Path:" with the value "c:\Progra~1\Stessen\stoffice.exe" and a folder icon button; "Host Name:" with the value "testsession"; "Output IDs:" with the value "57634"; "Input IDs:" with the value "57637"; "Output Offsets:" with the value "1300,9000"; "Startup IDs:" (empty); "Window Classes:" (empty); "Child ID:" (empty); and "Window Title:" with the value "SmarTerm - [testsession]". At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is currently unchecked. Below the checkbox are two buttons: "OK" and "Cancel".

- Emulator Path

The path to the `stoffice.exe` file. This path must follow the 8.3 filename format (for example, `c:\Progra~1\` instead of `c:\Program Files\`).

- Host Name

The session file of the host that you want to connect to.

- Output IDs

57634

- Input IDs

57637

- Output Offsets  
1300,9000
- Window Title  
SmarTerm - [session name]

### Application Definition

Type \$Username

Type @E

WaitForText "assword:"

Type \$Password

Type @E

## 2.27 Tandem 6530

### Generic Configuration

Generic Emulator Configuration

Emulator Path: c:\Cttw32\cttw32.exe

Host Name: c:\Cttw32\session1.ctt

Output IDs: 299,121

Input IDs: 122

Window Title: CTT/Windows 32 - (C:\CTTW32\

☐ Use Advanced Enter Method

☐ Emulator is 16 Bit

WndClass:

OK Cancel

- Emulator Path  
The path to the cttw32.exe.
- Host Name  
The session file of the host that you want to connect to.
- Output IDs  
299,121
- Input IDs  
122

- Window Title

The title that the emulator window displays when the emulator is launched and connected to the host.

## Application Definition

```
WaitForText "ogin:"
```

```
Type $Username
```

```
Type \N
```

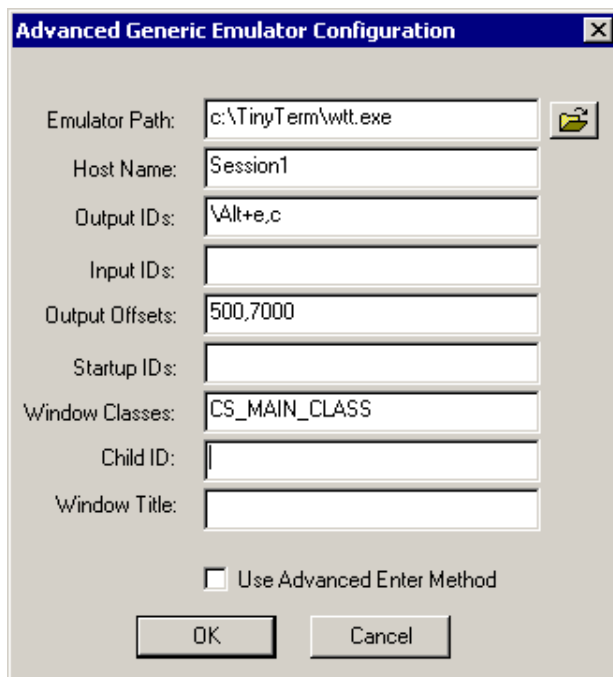
```
WaitForText "assword:"
```

```
Type $Password
```

```
Type \N
```

## 2.28 TinyTerm v2.0.7

### Advanced Generic Configuration



- Emulator Path

The path to the `wtt.exe` file.

- Host Name

The name of the emulator session that you want to connect to.

- Output IDs

\Alt+e,c

- Output Offsets

500,7000

- Window Class

CS\_MAIN\_CLASS

### Application Definition

WaitForText "ogin"

Type \$Username

Type \N

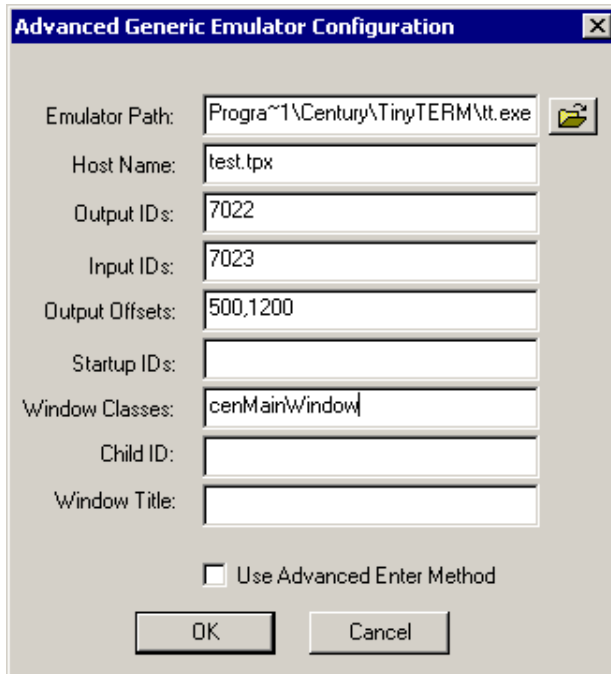
WaitForText "assword"

Type \$Password

Type \N

## 2.29 TinyTerm 4.21

### Advanced Generic Configuration



The image shows a Windows-style dialog box titled "Advanced Generic Emulator Configuration". It contains several text input fields and a checkbox. The fields are labeled as follows: "Emulator Path:" with the value "Progra~1\Century\TinyTERM\Tt.exe" and a folder icon button; "Host Name:" with the value "test.tpx"; "Output IDs:" with the value "7022"; "Input IDs:" with the value "7023"; "Output Offsets:" with the value "500,1200"; "Startup IDs:" which is empty; "Window Classes:" with the value "cenMainWindow"; "Child ID:" which is empty; and "Window Title:" which is empty. At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is unchecked. Below the checkbox are two buttons: "OK" and "Cancel".

Emulator Path:	Progra~1\Century\TinyTERM\Tt.exe
Host Name:	test.tpx
Output IDs:	7022
Input IDs:	7023
Output Offsets:	500,1200
Startup IDs:	
Window Classes:	cenMainWindow
Child ID:	
Window Title:	

☐ Use Advanced Enter Method

OK Cancel

- Emulator Path

The path to the `tt.exe` file. This path must follow the 8.3 filename format (for example, `c:\Progra~1\` instead of `c:\Program Files\`).

- Host Name

The session file of the host that you want to connect to.

- Output IDs

7022

- Input IDs  
7023
- Output Offsets  
500,12000
- Window Classes  
cenMainWindow

### Application Definition

WaitForText "ogin"

Type \$Username

Type @E

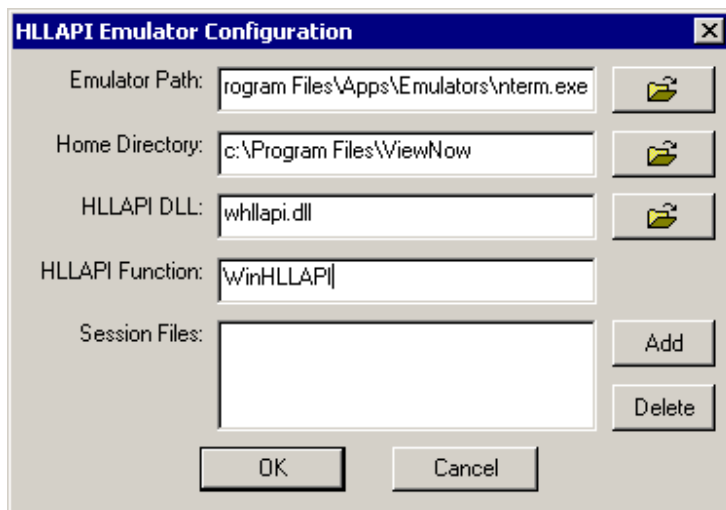
WaitForText "assword"

Type \$Password

Type @E

## 2.30 ViewNow v8.0

### WinHLLAPI Configuration



- Emulator Path  
The path to the `nterm.exe` file.
- Home Directory  
The home directory of the emulator.
- HLLAPI DLL  
The path to the `whllapi.dll` file.
- HLLAPI Function

## WinHLLAPI

### Application Definition

WaitForText "ogin:"

Type \$Username

Type @E

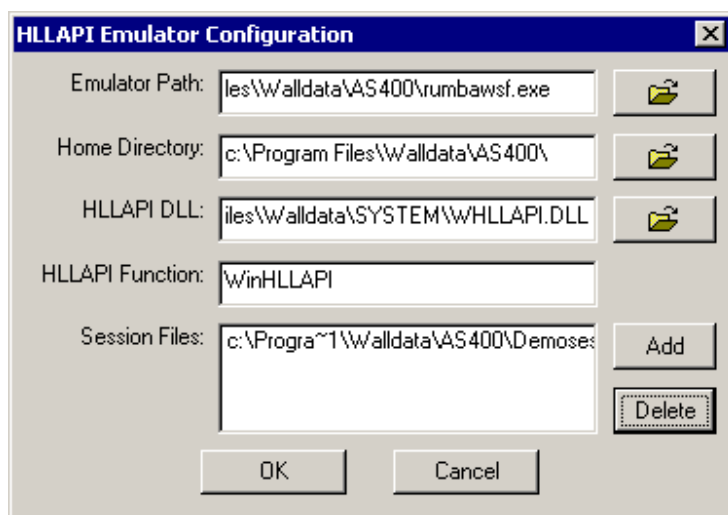
WaitForText "assword:"

Type \$Password

Type @E

## 2.31 Walldata Rumba 2000 v6.0

### WinHLLAPI Configuration



- Emulator Path  
The path to the `rumbawsf.exe` file.
- Home Directory  
The home directory of the emulator.
- HLLAPI DLL  
The path to the `WHLLAPI.DLL` file.
- HLLAPI Function  
WinHLLAPI
- Session Files  
The path to the session file you want to use.



## Application Definition

WaitForText "ogin:"

Type \$Username

Type @E

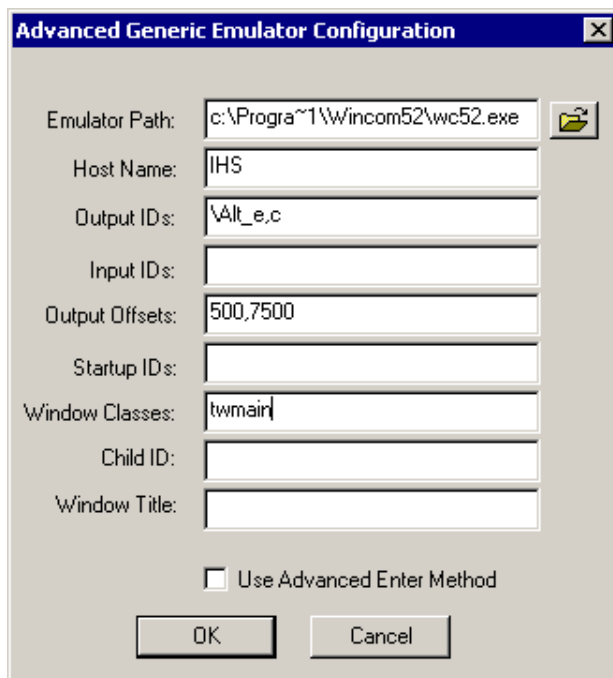
WaitForText "assword:"

Type \$Password

Type @E

## 2.32 WinComm 2000 v5.2

### Advanced Generic Configuration



The image shows a dialog box titled "Advanced Generic Emulator Configuration". It contains several text input fields and a checkbox. The fields are labeled as follows: "Emulator Path:" with the value "c:\Progra~1\Wincom52\wc52.exe" and a folder icon; "Host Name:" with the value "IHS"; "Output IDs:" with the value "\Alt\_e,c"; "Input IDs:" which is empty; "Output Offsets:" with the value "500,7500"; "Startup IDs:" which is empty; "Window Classes:" with the value "twmain"; "Child ID:" which is empty; and "Window Title:" which is empty. At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is unchecked. Below the checkbox are two buttons: "OK" and "Cancel".

- Emulator Path  
The path to the `wc52.exe` file.
- Host Name  
The name of the emulator session that you want to connect to.
- Output IDs  
\Alt+e,c
- Output Offsets  
500,7500
- Window Classes  
twmain

## Application Definition

WaitForText "ogin"

Type \$Username

Type @E

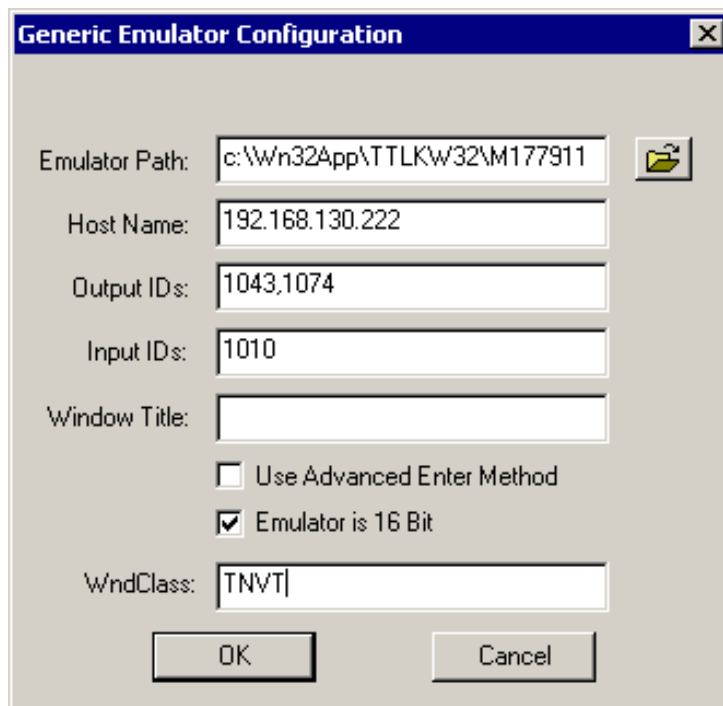
WaitForText "assword"

Type \$Password

Type @E

## 2.33 Window Telnet VT TE v3.10

### Generic Configuration



The screenshot shows a Windows-style dialog box titled "Generic Emulator Configuration". It contains several input fields and checkboxes. The "Emulator Path" field is set to "c:\Wn32App\TTLKW32\M177911" and has a folder icon to its right. The "Host Name" field is set to "192.168.130.222". The "Output IDs" field is set to "1043,1074". The "Input IDs" field is set to "1010". The "Window Title" field is empty. There are two checkboxes: "Use Advanced Enter Method" (unchecked) and "Emulator is 16 Bit" (checked). The "WndClass" field is set to "TNVT". At the bottom are "OK" and "Cancel" buttons.

Emulator Path:	c:\Wn32App\TTLKW32\M177911
Host Name:	192.168.130.222
Output IDs:	1043,1074
Input IDs:	1010
Window Title:	
<input type="checkbox"/> Use Advanced Enter Method	
<input checked="" type="checkbox"/> Emulator is 16 Bit	
WndClass:	TNVT

- Emulator Path  
The path to the emulator's executable file.
- Host Name  
The IP address of the host that you want to connect to.
- Output IDs  
1043,1074
- Output Offsets  
1010
- Emulator is 16 Bit

Checked

- WndClass

TNVT

## Application Definition

WaitForText "ogin"

Type \$Username

Type @E

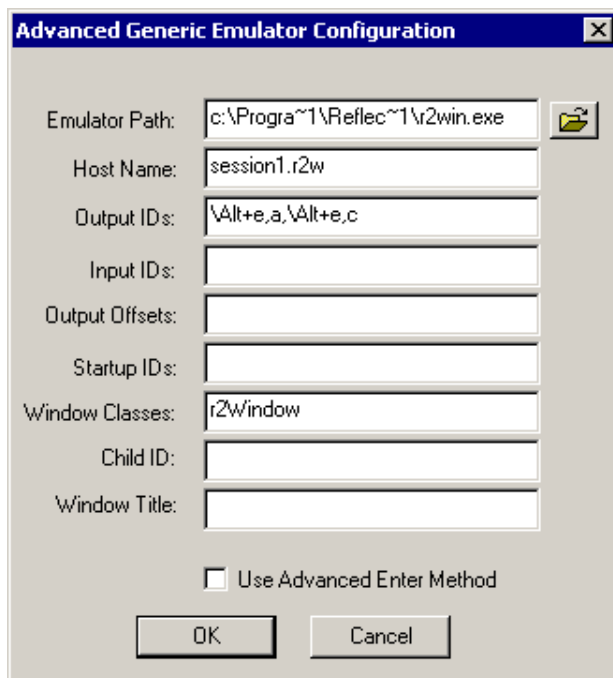
WaitForText "assword"

Type \$Password

Type @E

## 2.34 WRQ Reflection v7.0 for Unix and Digital

### Advanced Generic Configuration



The image shows a dialog box titled "Advanced Generic Emulator Configuration". It contains several text input fields and a checkbox. The fields are labeled: "Emulator Path:" with the value "c:\Progra~1\Reflec~1\r2win.exe" and a folder icon button; "Host Name:" with the value "session1.r2w"; "Output IDs:" with the value "\Alt+e,a,\Alt+e,c"; "Input IDs:" (empty); "Output Offsets:" (empty); "Startup IDs:" (empty); "Window Classes:" with the value "r2Window"; "Child ID:" (empty); and "Window Title:" (empty). At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is unchecked. Below the checkbox are two buttons: "OK" and "Cancel".

- Emulator Path

The path to the r2win.exe file. This path must follow the 8.3 filename format (for example, c:\Progra~1\ instead of c:\Program Files\).

- Host Name

The session file of the host that you want to connect to.

- Output IDs

\Alt+e,a,\Alt+e,c

- Window Classes  
r2Window

### **Application Definition**

Delay 1000

WaitForText "ogin"

Type \$Username

Type \N

WaitForText "assword"

Type \$Password

Type \N

# Single Sign-On for Hummingbird HostExplorer 7

# 3

This section can help you enable Hummingbird HostExplorer\* 7 for single sign-on through Novell® SecureLogin.

Hummingbird HostExplorer 7 is not a standard Terminal Launcher configuration. It does not use Terminal Launcher at all. This example uses internal macro capabilities of the HostExplorer to trigger SecureLogin actions.

## 3.1 Setting Up Hummingbird HostExplorer 7

This section provides information on the following:

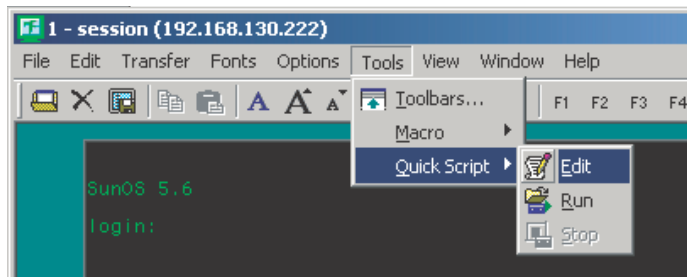
- Section 3.1.1, “Creating the Emulator Macro Script,” on page 53
- Section 3.1.2, “Configuring Hummingbird HostExplorer for Usernames,” on page 55
- Section 3.1.3, “Configuring Hummingbird HostExplorer for Passwords,” on page 57
- Section 3.1.4, “Configuring the Emulator Session,” on page 59
- Section 3.1.5, “Creating a SecureLogin Application Definition,” on page 61
- Section 3.1.6, “Enabling Hummingbird HostExplorer for Single Sign-On,” on page 64
- Section 3.1.7, “Testing the Configuration,” on page 65

### 3.1.1 Creating the Emulator Macro Script

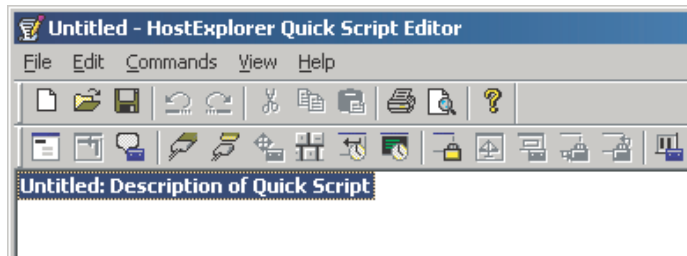
- 1 Create and configure a session in the emulator for your environment, then open the session.



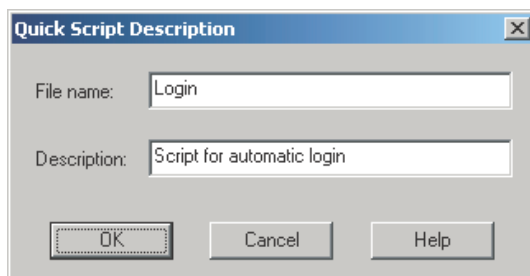
- 2 Click *Tools > Quick Script > Edit*.



- 3 Double-click *Untitled: Description of Quick Script*.

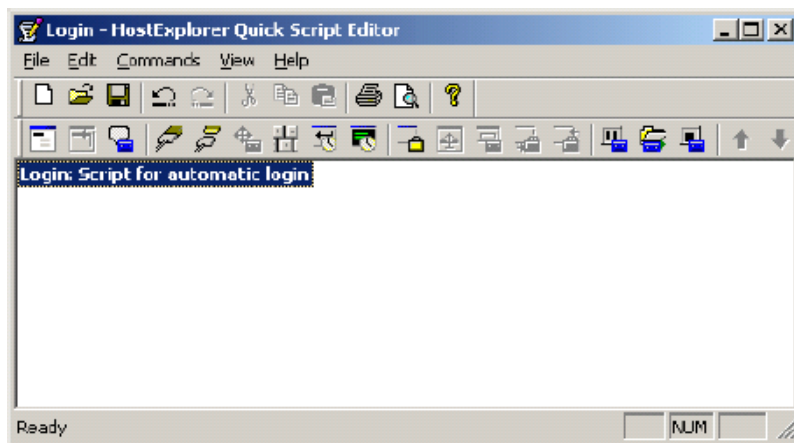


- 4 Specify a filename and description for the Quick Script, then click *OK*.  
Ensure that the filename is only one word (no spaces).



### 3.1.2 Configuring Hummingbird HostExplorer for Usernames

- 1 In the Login dialog box, click *Commands > Wait For Text*.

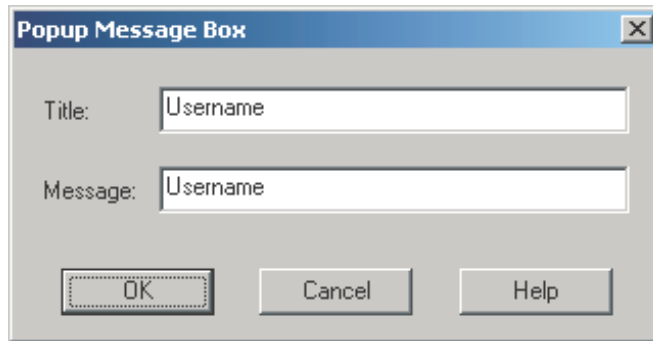


- 2 Configure the Wait For Text dialog box for username prompts, then click *OK*.

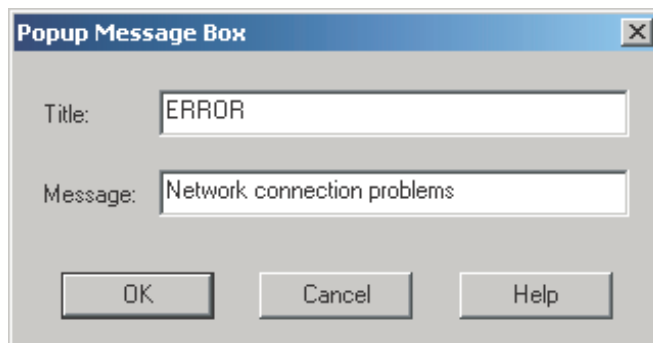


- In the *Text* field, specify the text that the server displays when it prompts for a username.
- Check the *Anywhere* check box.
- Specify a timeout period.  
We recommend a setting of five seconds.

- From the *If Found* drop-down list, select *Pop Up a Message*.
- From the *Otherwise* drop-down list, select *Pop Up a Message*.
- In the *If Found* pane, click *Properties*, configure the Popup Message Box window, then click *OK*.



- Specify the username in the *Title* field.
- Specify the username in the *Message* field.
- In the *Otherwise* pane, click *Properties*, configure the error box, then click *OK*.



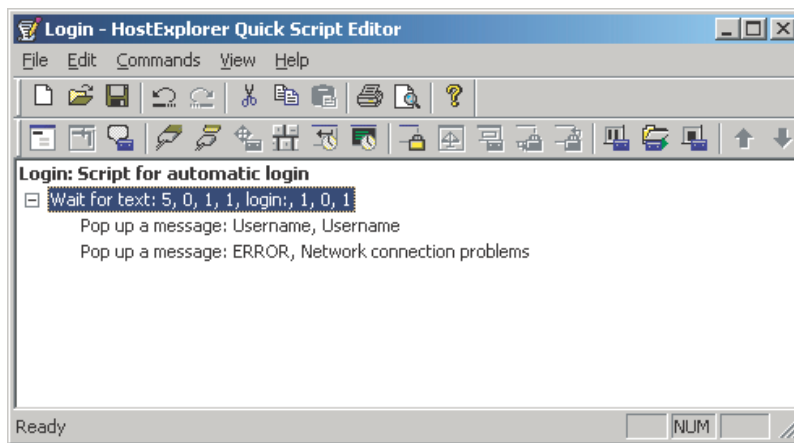
This is the message that is displayed if the prompt text is not found within the set timeout period.

- In the *Title* field, specify a title for the error dialog box.
- Specify a message in the *Message* text box.



### 3.1.3 Configuring Hummingbird HostExplorer for Passwords

- 1 In the Login dialog box, click *Commands > Wait For Text*.

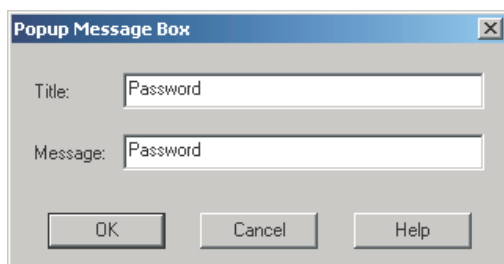


- 2 Configure the Wait For Text dialog box for password prompts, then click *OK*.

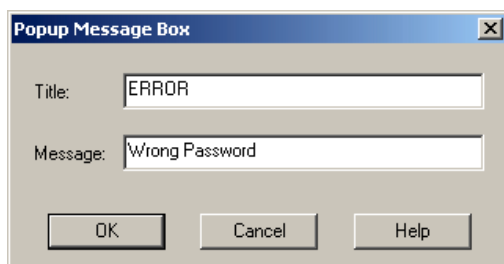


- In the *Text* field, type the text that the server displays when it prompts for the password.
- Check the *Anywhere* check box.
- Specify a timeout period.  
We recommend a setting of five seconds.
- In the If Found pane, select *Pop Up a Message* from the drop-down list.
- In the Otherwise pane, select *Pop Up a Message* from the drop-down list.

- In the *If Found* pane, click *Properties*, configure the Popup Message Box dialog box, then click *OK*.



- Specify *Password* as the title.
- Specify *Password* as the message.
- In the *Otherwise* pane, click *Properties*, configure the error box, then click *OK*.

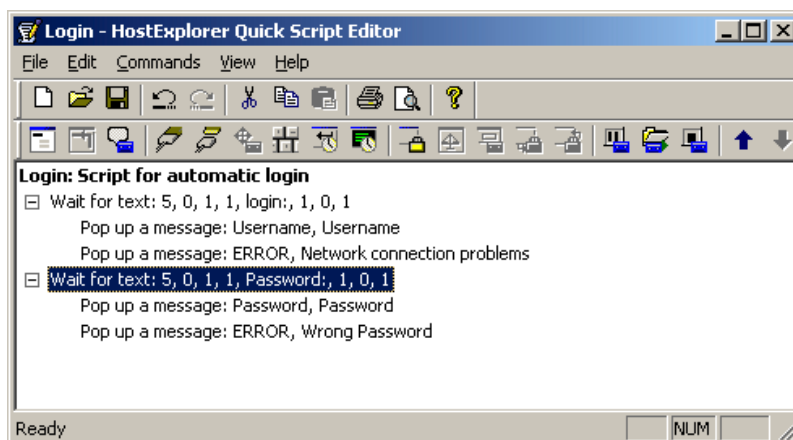


This is the message that is displayed if the prompt text is not found within the set timeout period.

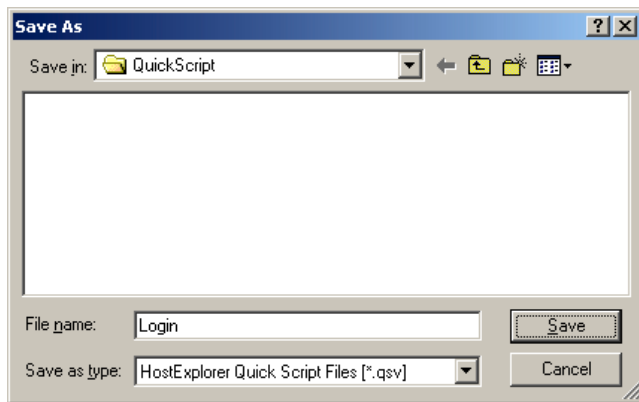
In the *Title* text box, specify a title for the error dialog box.

Specify a message in the *Message* text box.

- 3 At the Login dialog box, click *File > Save As*.



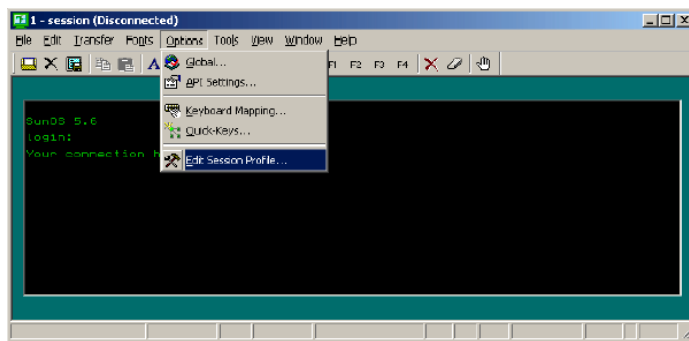
- 4 Specify Login as the filename, click *Save*, then close the Quick Script editor.



The macro is now complete.

### 3.1.4 Configuring the Emulator Session

- 1 Click *Options > Edit Session Profile*.



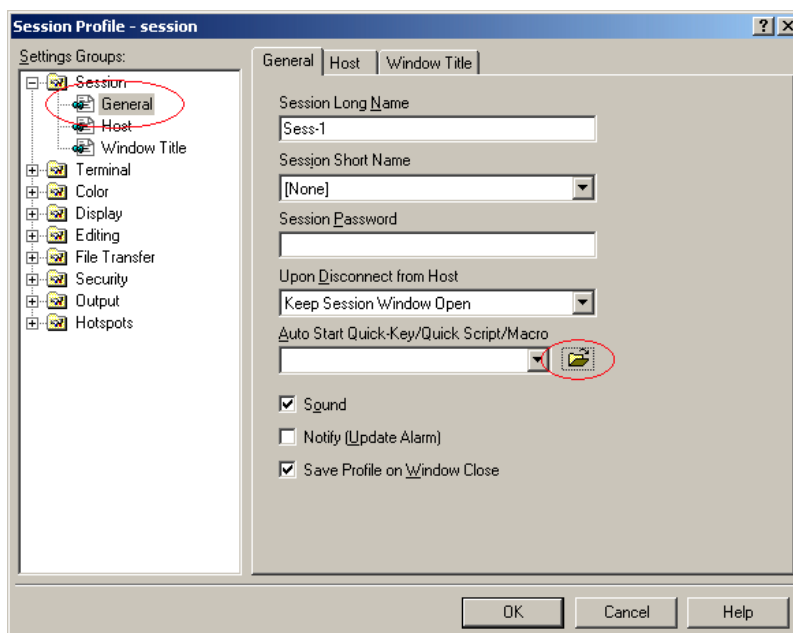
- 2 (Conditional) Select not to use the SecureLogin wizard at this time.

If SecureLogin prompts you to run the SecureLogin wizard, check the *Don't Prompt Me In the Future* check box, then click *No*.



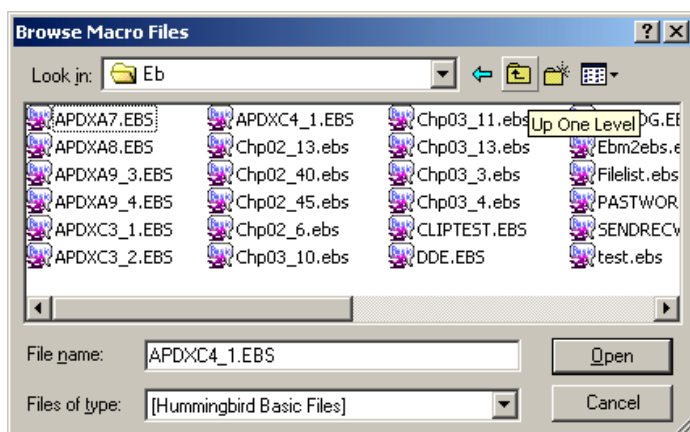
- 3 Expand the *session* in the *Settings Groups* panel.

Click *General* in the *Settings Groups* panel, then click the *Browse* button next to the Auto Start Quick-Key drop-down list.



- 4 Browse to where you saved the Quick Script macro file, then click *Open*.

The default path is `c:\Documents and Settings\All Users\Application Data \Hummingbird\Connectivity \7.10\HostEx\QuickScript\Login.qsv`.



- 5 Click *OK*, then close the emulator.

- 6 Open the session again.

You can use the shortcuts on the Start menu, then follow the prompts, or create a shortcut directly to the session.

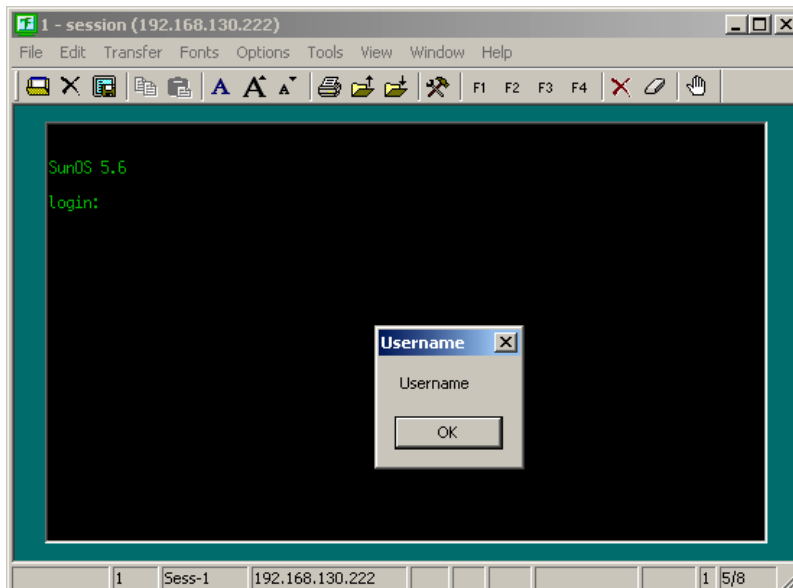
To create a shortcut directly to the session, use the following format:

"Path to hostex32.exe" -P Session name

For example, type

"C:\Progra~1\Hummingbird\hostex32.exe" -P Session1

The emulator connects and displays the following dialog box.



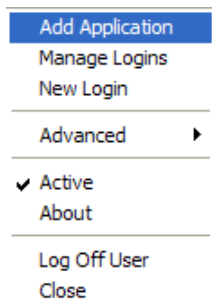
---

**IMPORTANT:** Don't click *OK*.

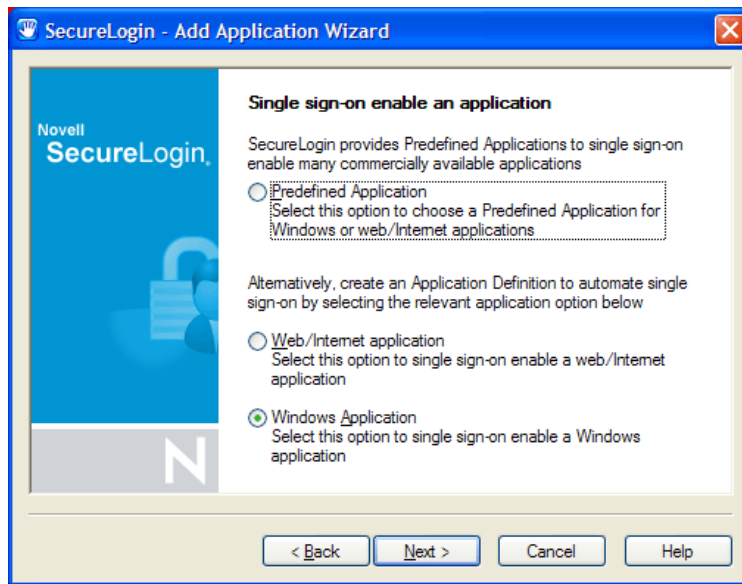
---

### 3.1.5 Creating a SecureLogin Application Definition

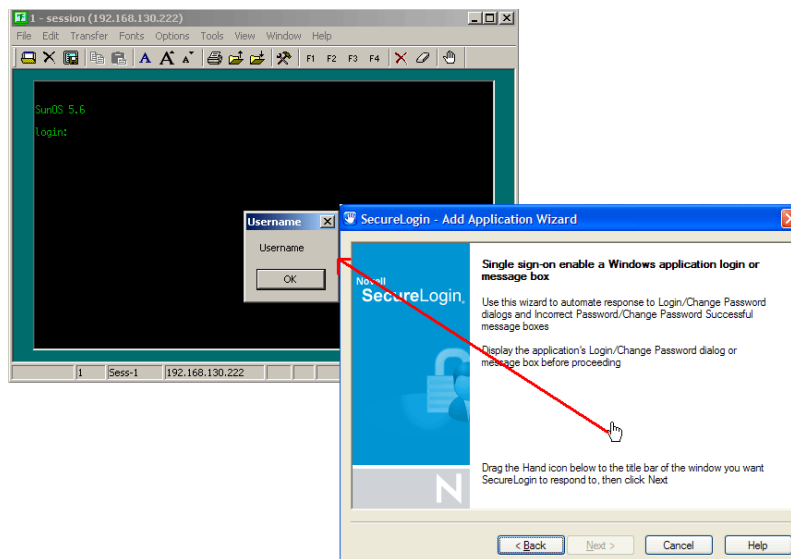
- 1 Right-click the SecureLogin icon on the system tray, then click *Add Applications*.



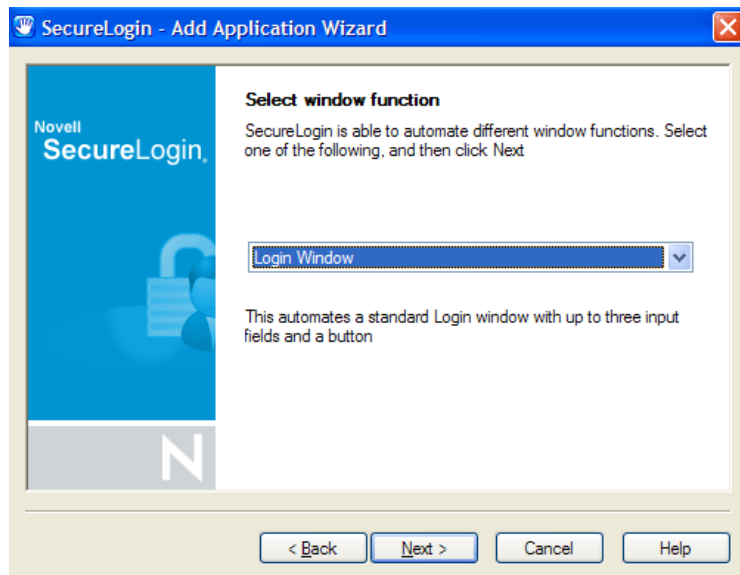
- 2 Click next until you reach the Select a Web Site or Application dialog box.



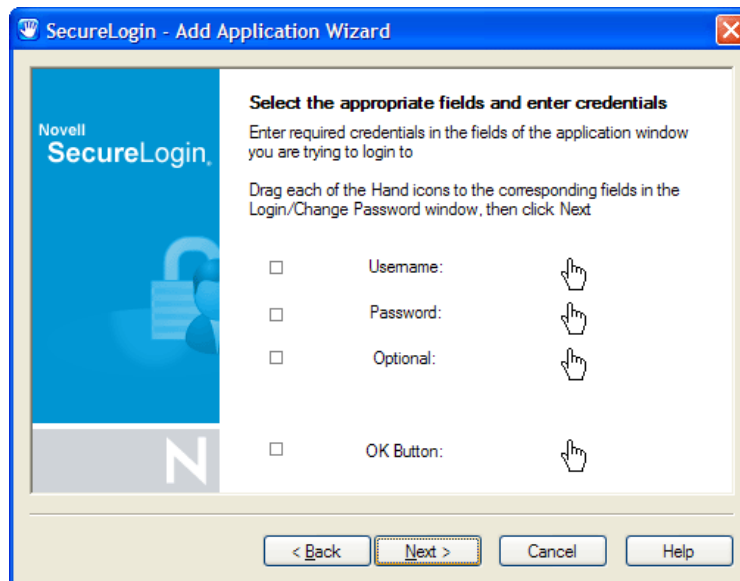
- 3 Select *Windows Application*, then click *Next*.
- 4 Drag the hand icon and drop it onto the title bar of the Username dialog box.



- 5 In the Select Window Function dialog box, select *Login Window* from the drop-down list, then click *Next*.



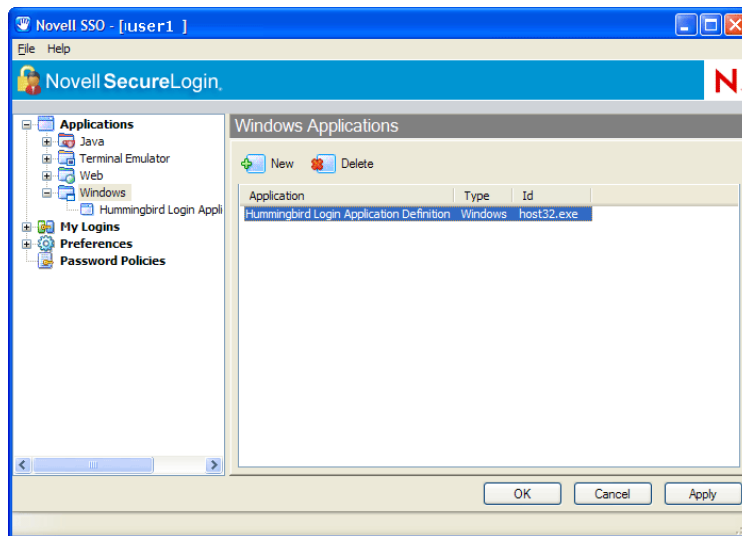
- 6 Select the login fields.



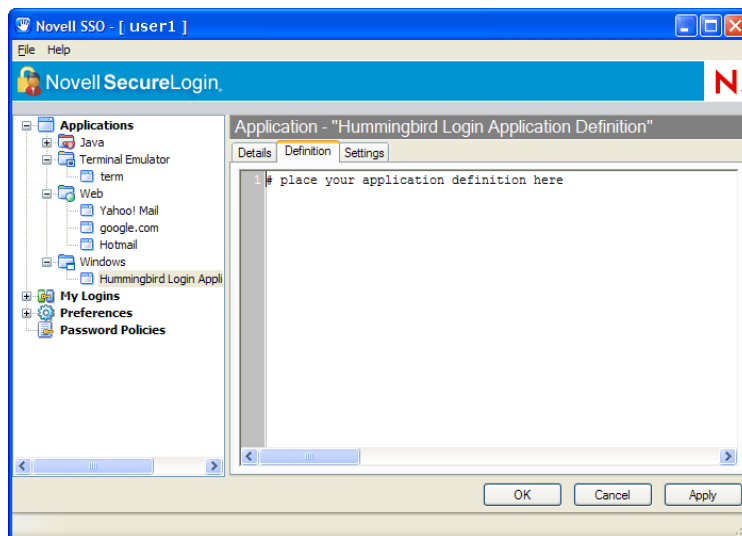
- 6a Drag the hand icons and drop them onto the *Username*, *Password*, and (if appropriate) *Optional* fields.
- 6b Drag the hand icon for the *OK Button* and drop it onto the login button (for example *OK*, *Next*, or *Continue*).
- 7 Click *Next*, confirm login details, then click *Next* again.
- 8 In the Name the Application Definition dialog box, specify a name, then click *Finish*.

### 3.1.6 Enabling Hummingbird HostExplorer for Single Sign-On

- 1 Right-click the SecureLogin icon on the system tray, then click *Manage Logins*.
- 2 Select `hostex32.exe` from the *My Logins* list, then click *Edit*.



- 3 Click *Definition*, then edit the application definition.



Place the following application definition:

```
Dialog
Class #32770
Title "Username"
EndDialog
Click #2
Delay 50
Type -raw $Username
Type -raw \N
```

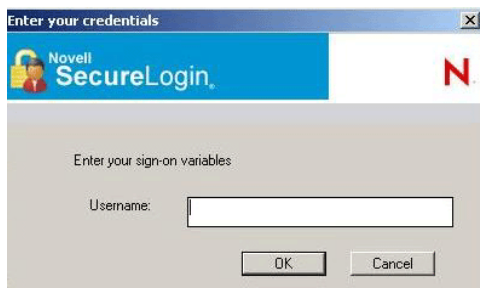


```
Dialog
  Class #32770
  Title "Password"
EndDialog
Click #2
Delay 50
Type -raw $Password
Type -raw \N
```

- 4 Click OK twice, then close SecureLogin.

### 3.1.7 Testing the Configuration

- 1 Start the emulator session, specify your username, then click *OK*.



- 2 (Conditional) Respond to error messages.

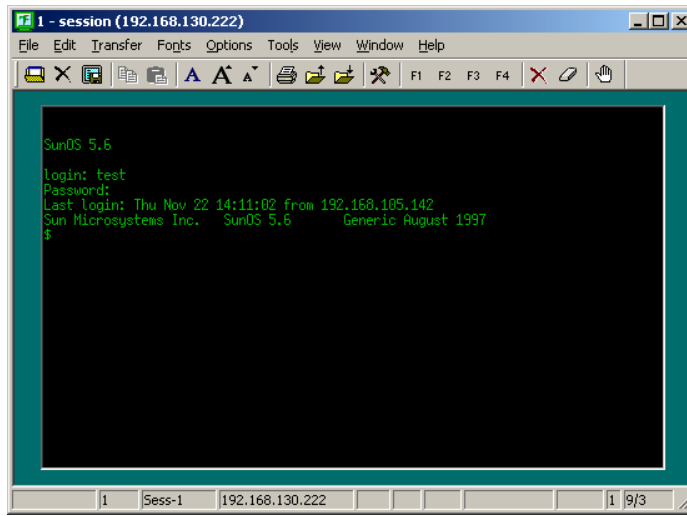
Depending on the values that you entered for the Timeouts in the emulator macro, the error message might be displayed after you click *OK*.

If the error message is displayed, click *OK* to close the session, then restart the session. This might happen twice. To avoid the problem, raise the timeout value in the Macro settings, or enter the username and password more quickly.

- 3 Specify the password, then click *OK*.



SecureLogin launches the emulator, enters your username and password, and logs you in to the session.



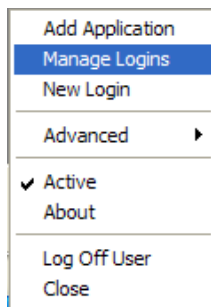
# Single Sign-On for MS Windows XP Telnet

# 4

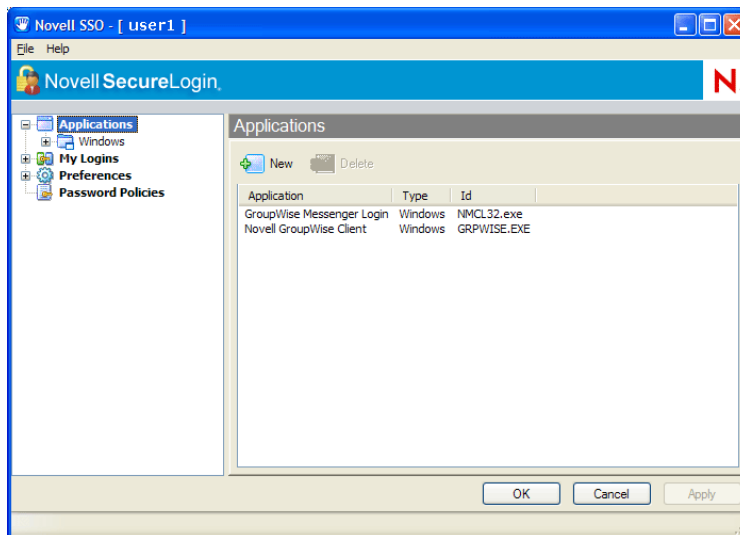
This section helps you enable MS Windows\* XP Telnet for single sign-on through Novell® SecureLogin.

## 4.1 Creating a SecureLogin Application Definition

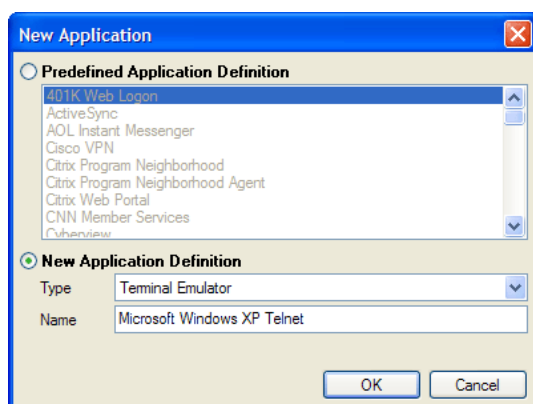
- 1 Right-click the SecureLogin icon on the system tray, then click *Manage Logins*.



- 2 Click *Applications > New*.



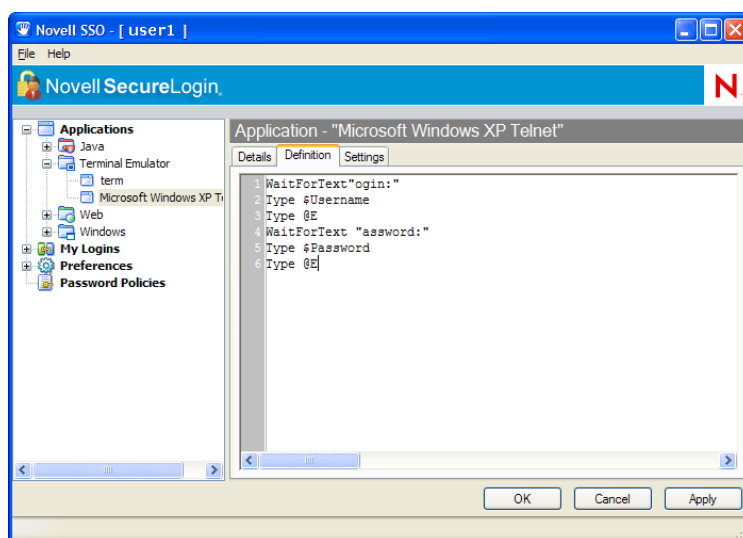
- 3 Click *New Application Definition*, then specify the information in the text boxes.



Specify a name in the *Name* text box.

Select *Terminal Emulator* from the *Type* drop-down list.

- 4 Click *OK*.
- 5 Click the *Definition* tab, then specify the following application definition:



Parts of the SecureLogin application definition are case sensitive. Omitting the "L" in "login" and the "P" in "password" allows the script to work regardless of whether the "L" and the "P" are displayed in uppercase or lowercase type. The application definition waits for the text "login". After the application definition detects the text "ogin", it enters the value of the variable \$Username.

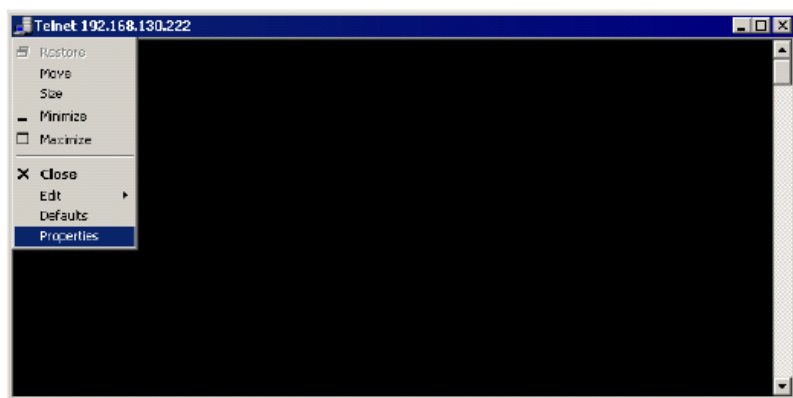
- 6 Click *OK* twice, then close SecureLogin.

## 4.2 Putting Telnet in Quick-Edit Mode

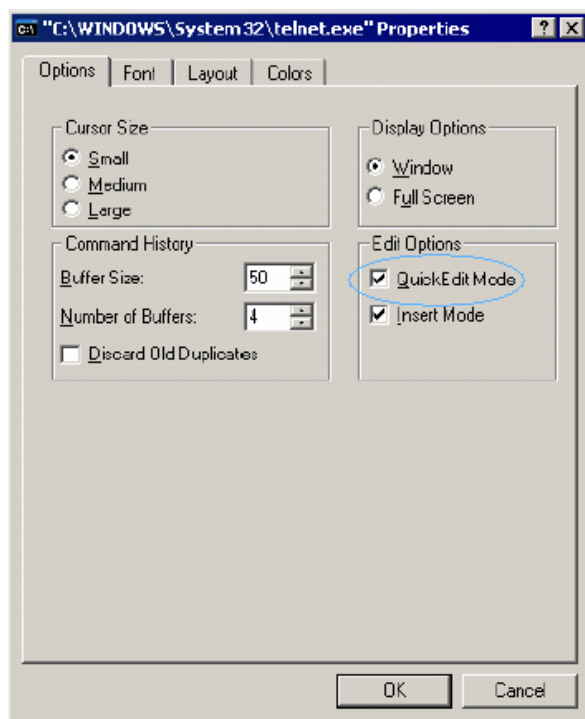
For SecureLogin to work with Microsoft Windows XP Telnet, the Telnet program must be in Quick Edit mode.

- 1 Start Microsoft Windows Telnet XP.

- 2 Click the Telnet icon at the top of the Telnet window, then select *Properties*.

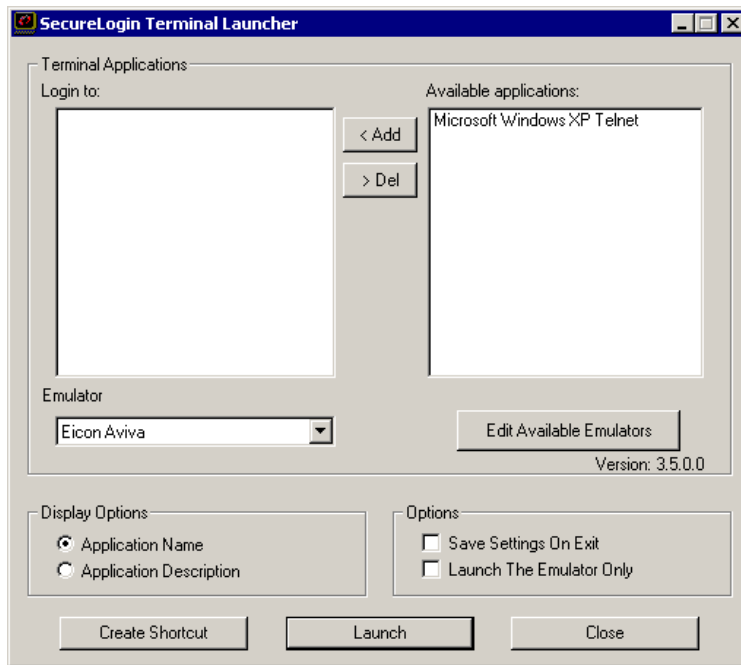


- 3 Check the *Quick Edit Mode* check box, then click *OK*.

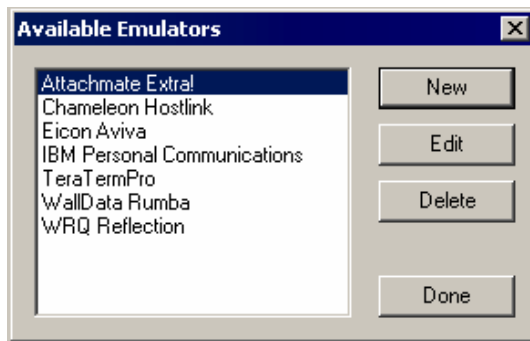


## 4.3 Configuring Terminal Launcher

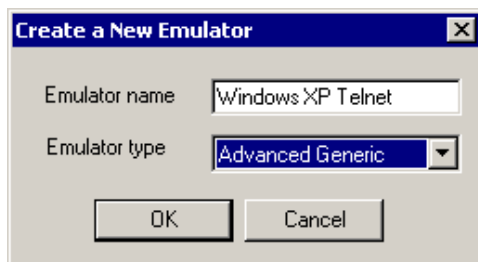
- 1 Run SecureLogin Terminal Launcher, then click *Edit Available Emulators*.



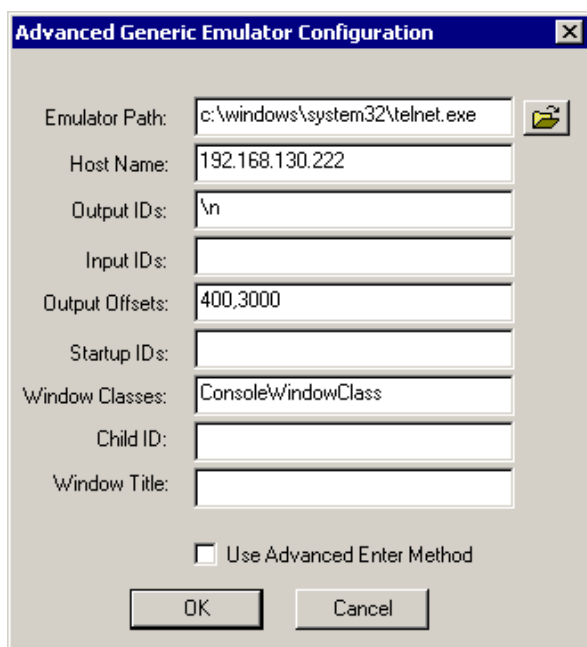
- 2 Click *New*.



- 3 Specify a name for the emulator, select *Advanced Generic* as the emulator type, then click *OK*.



**4** Configure the emulator:



The image shows a Windows-style dialog box titled "Advanced Generic Emulator Configuration". It contains several text input fields and a checkbox. The fields are labeled as follows: "Emulator Path:" with the value "c:\windows\system32\telnet.exe" and a folder icon button; "Host Name:" with the value "192.168.130.222"; "Output IDs:" with the value "\n"; "Input IDs:" which is empty; "Output Offsets:" with the value "400,3000"; "Startup IDs:" which is empty; "Window Classes:" with the value "ConsoleWindowClass"; "Child ID:" which is empty; and "Window Title:" which is empty. At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is unchecked. Below the checkbox are two buttons: "OK" and "Cancel".

Emulator Path:	c:\windows\system32\telnet.exe
Host Name:	192.168.130.222
Output IDs:	\n
Input IDs:	
Output Offsets:	400,3000
Startup IDs:	
Window Classes:	ConsoleWindowClass
Child ID:	
Window Title:	

☐ Use Advanced Enter Method

OK Cancel

- Emulator Path  
This is the path to the `telnet.exe` file.
- Host Name  
This is the IP address, host name, or session file of the host that you want to connect to.
- Output IDs  
\n
- Output Offsets  
400,3000
- Windows Classes  
ConsoleWindowClass

**5** Click *OK*, then click *Done*.

## 4.4 Testing the Configuration

- 1 Double-click Windows XP Telnet in the Available Applications pane, select *Windows XP Telnet* from the *Emulator* drop-down list, then click *Launch*.



- 2 Enter login data.

The first time that the application definition is run, SecureLogin prompts you to specify a username and password, then click *OK*.

After you click *OK*, the emulator launches and you are logged in to the session.



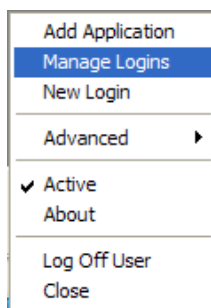
# Single Sign-On for PCXWare

# 5

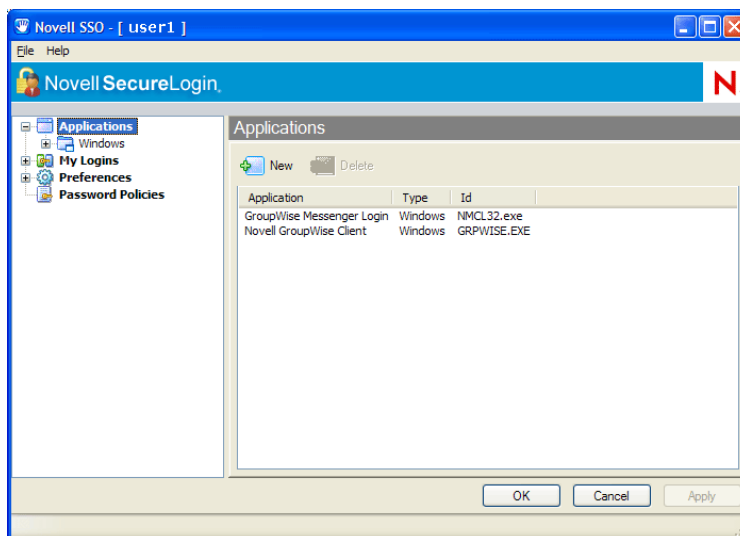
PCXWare is not a standard emulator configuration. It does not use Terminal Launcher at all. This configuration relies on SecureLogin to detect when the emulator is launched and then send information to it. Therefore, do not use `WaitForText` commands in the application definition. Instead, use `Delay` commands.

## 5.1 Creating a SecureLogin Application Definition

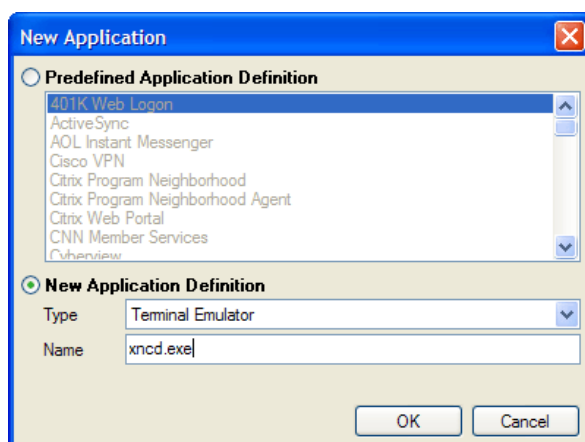
- 1 Right-click the SecureLogin icon on the system tray, then click *Manage Logins*.



- 2 Click *Applications > New*.



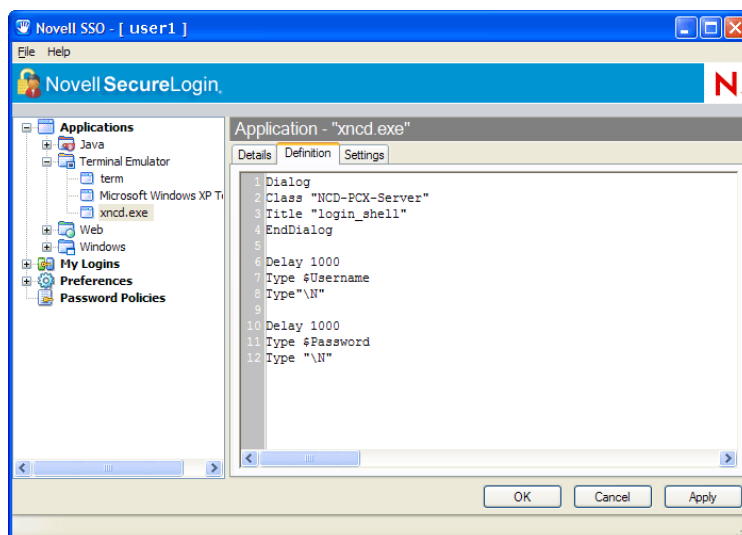
- 3 Click *New Application Definition*, then specify the information in the text boxes.



Specify `xncd.exe` in the *Name* text box.

Select *Windows* from the *Type* drop-down list.

- 4 Click *OK*.
- 5 Click the *Definition* tab, then type the following script:



The `Delay` commands are dependent on how long it takes PCXWare to load or connect to your UNIX\*/SUN\* server. The parameter 1000 is equal to 1 second. You can increase or decrease the number.

- 6 Click *OK* twice, then close SecureLogin.

## 5.2 Running the Emulator

The first time that the application definition is run, SecureLogin prompts you to specify a username and password, then click *OK*.

After you click *OK*, the emulator launches and you are logged in to the session.

# Single Sign-On for SmarTerm for IBM 3270

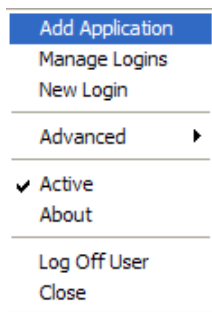
# 6

This section helps you enable the SmarTerm for IBM\* 3270 emulator for single sign-on through Novell® SecureLogin.

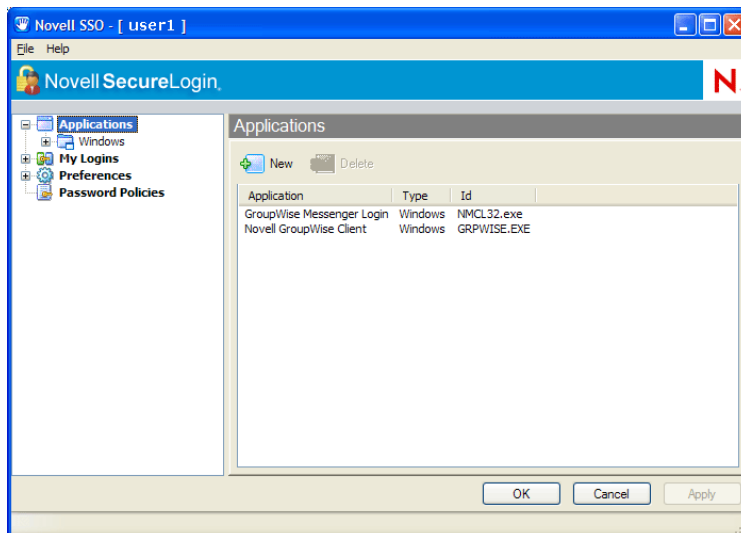
The configuration described in this section works only with SecureLogin v3.0.3 or later.

## 6.1 Creating a SecureLogin Application Definition

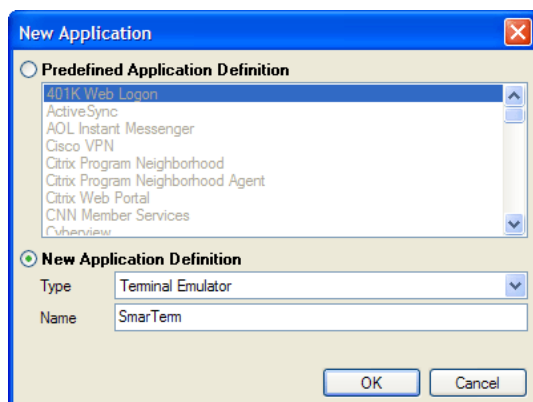
- 1 Right-click the SecureLogin icon on the system tray, then click *Manage Logins*.



- 2 Click *Applications > New*.



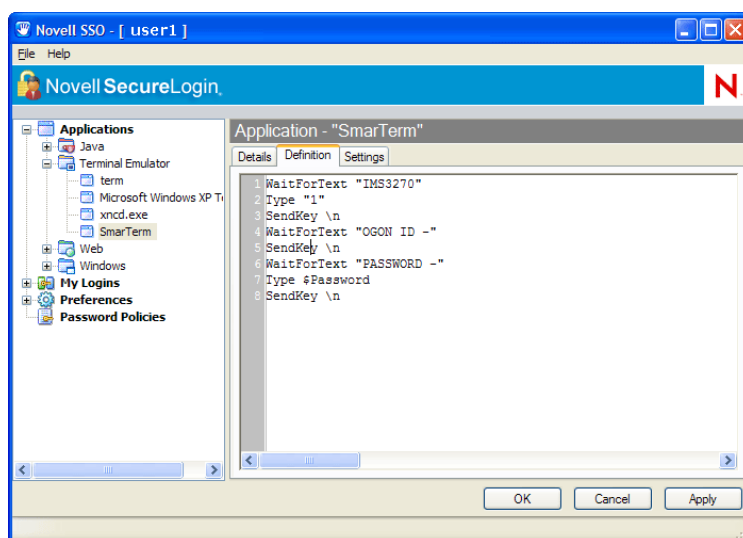
- 3 Click *New Application Definition*, then specify information in the text boxes.



Specify a name in the *Name* text boxes.

Select *Terminal Emulator* from the *Type* drop-down list.

- 4 Click *OK*.
- 5 Click the *Definition* tab, then specify the following application definition:

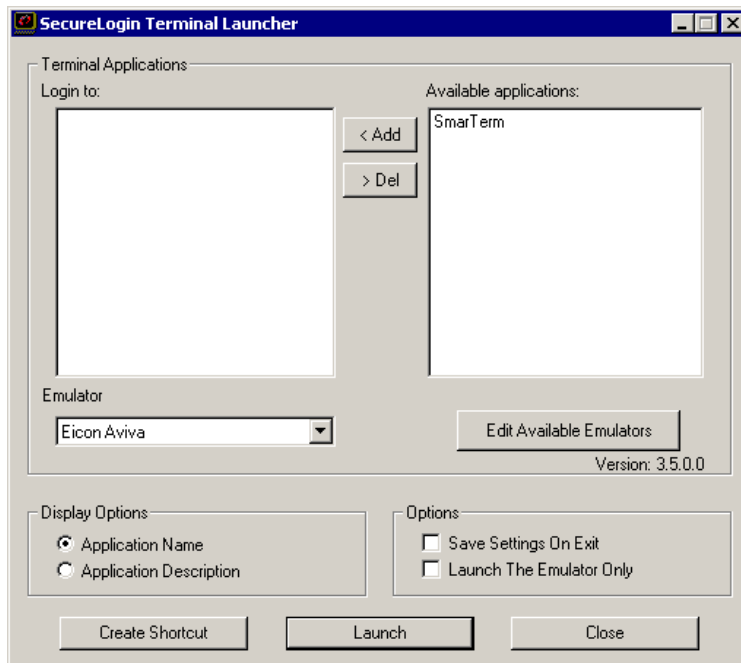


Parts of the SecureLogin scripting language are case sensitive. Omitting the "L" in "login" and the "P" in "password" allows the application definition to work regardless of whether the "L" and the "P" are displayed in uppercase or lowercase type. The application definition waits for the text "ogin". The application definition detects the text "ogin", then enters the value of the variable \$Username.

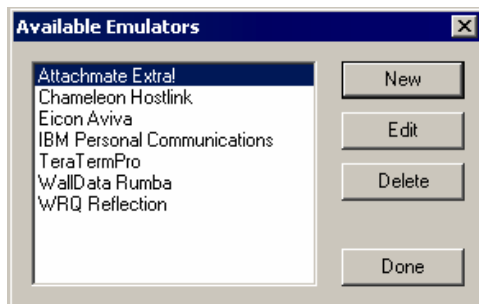
- 6 Click *OK* twice, then close SecureLogin.

## 6.2 Configuring Terminal Launcher

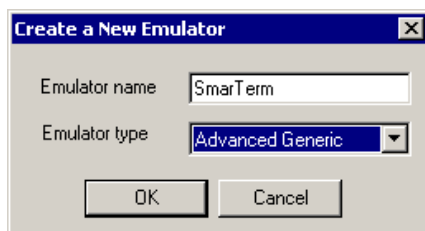
- 1 Run SecureLogin Terminal Launcher, then click *Edit Available Emulators*.



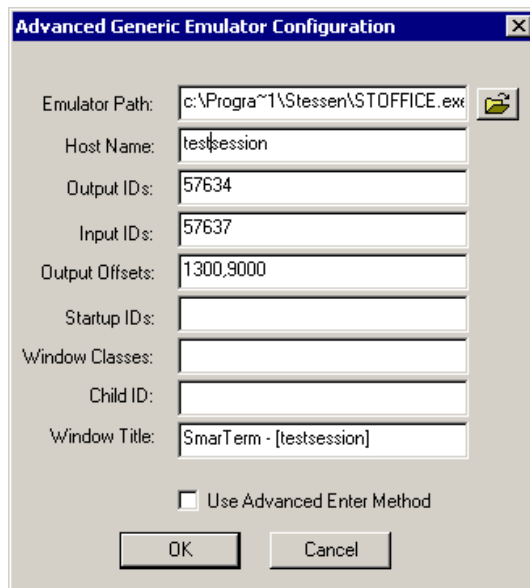
- 2 Click *New*.



- 3 Specify a name for the emulator, select *Advanced Generic* as the emulator type, then click *OK*.



#### 4 Configure the emulator:



The image shows a Windows-style dialog box titled "Advanced Generic Emulator Configuration". It contains several text input fields and a checkbox. The fields are labeled as follows: "Emulator Path:" with the value "c:\Progra~1\Stessen\STOFFICE.exe" and a folder icon button; "Host Name:" with the value "testsession"; "Output IDs:" with the value "57634"; "Input IDs:" with the value "57637"; "Output Offsets:" with the value "1300,9000"; "Startup IDs:" which is empty; "Window Classes:" which is empty; "Child ID:" which is empty; and "Window Title:" with the value "SmarTerm - [testsession]". At the bottom, there is a checkbox labeled "Use Advanced Enter Method" which is unchecked, and two buttons labeled "OK" and "Cancel".

- Emulator Path

This is the path to the stoffice.exe file. This path must follow the 8.3 filename format (for example, c:\Progra~1\ instead of c:\Program Files\).

- Host Name

This is the session file of the host that you want to connect to.

- Output IDs

57634

- Input IDs

57637

- Output Offsets

1300,9000

- Windows Title

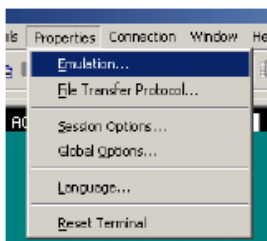
SmarTerm - [session name]

#### 5 Click *OK*, then click *Done*.

## 6.3 Configure the Emulator Settings

#### 1 Start the emulator.

**2** Select *Properties > Emulation*.



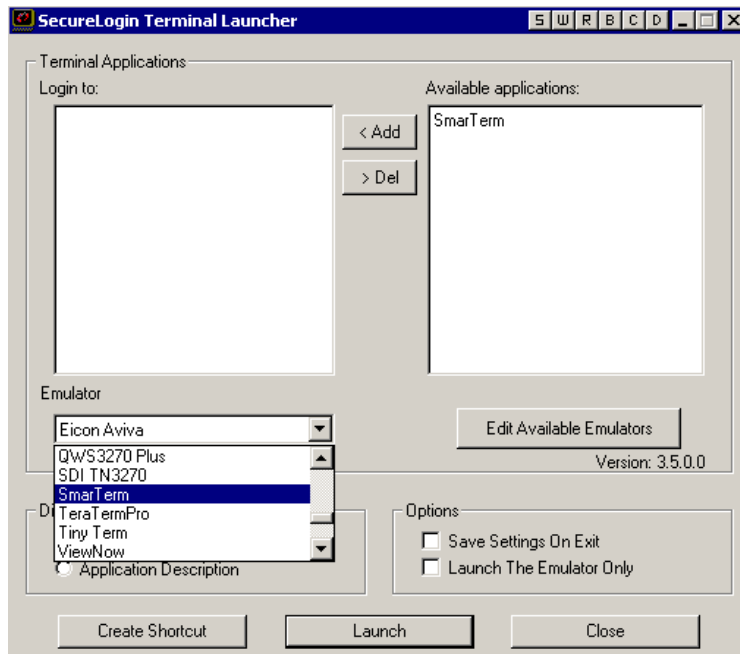
**3** In the *Function, Alt and Ctrl Keys Act As* pane, select the *Windows Keys* option.



**4** Click *OK*, then close the emulator.

## 6.4 Testing the Configuration

- 1 Double-click *SmarTerm* in the *Available Applications* pane, select *SmarTerm* from the *Emulator* drop-down list, then click *Launch*.



- 2 Enter login data.

The first time that the application definition is run, SecureLogin prompts you to specify a username and password, then click *OK*.

After you click *OK*, the emulator launches and you are logged in to the session.



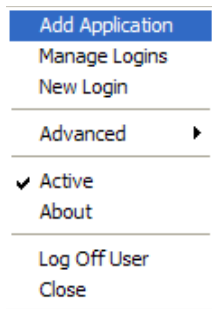
# Single Sign-On for WRQ Reflection v10

# 7

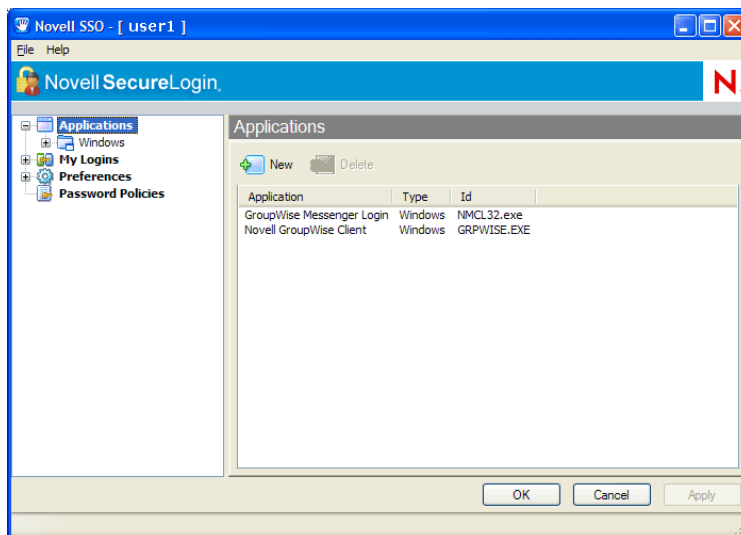
This section helps you enable WRQ Reflection\* v10 for single sign-on through Novell® SecureLogin.

## 7.1 Creating a SecureLogin Application Definition

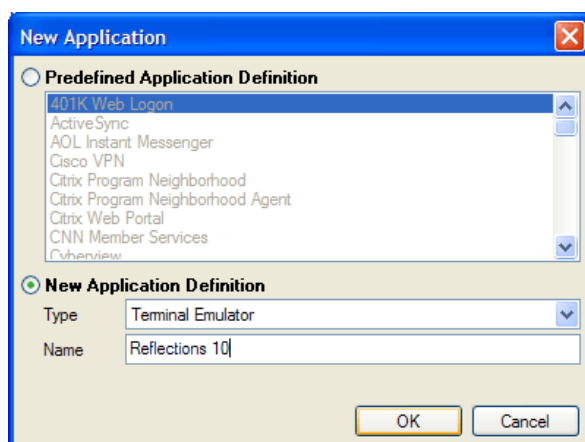
- 1 Right-click the SecureLogin icon on the system tray, then click *Manage Logins*.



- 2 Click *Applications > New*.



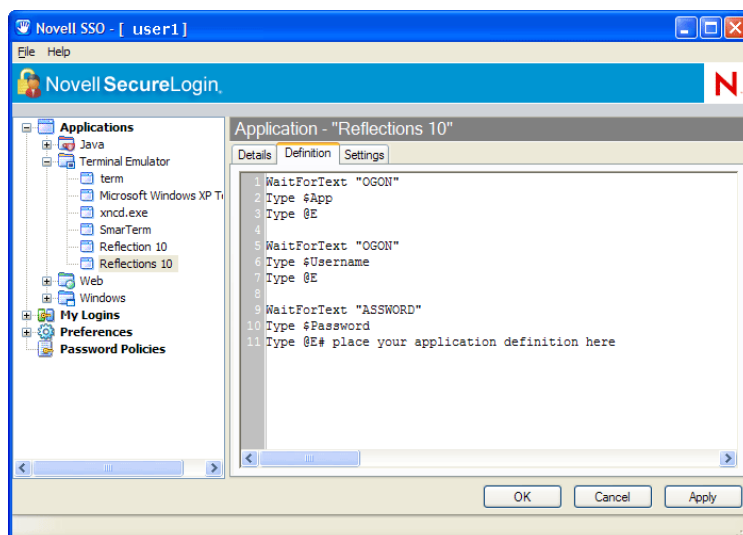
- 3 Select *New Application Definition*, then specify the information in the text boxes.



Specify a name in the *Name* text box.

Select *Terminal Emulator* from the *Type* drop-down list.

- 4 Click *OK*.
- 5 Click the *Definition* tab, then type the following application:



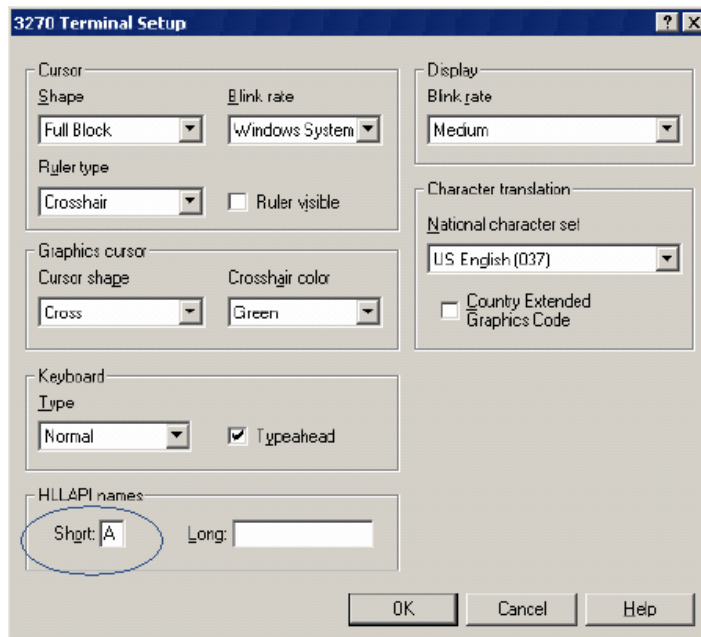
Parts of the SecureLogin application definition are case sensitive. Omitting the "L" in "login" and the "P" in "password" allows the application definition to work regardless of whether the "L" and the "P" are displayed in uppercase or lowercase type. The application definition waits for the text "ogin". The application definition detects the text "ogin", then enters the value of the variable \$Username.

- 6 Click *OK* twice, then close SecureLogin.

## 7.2 Creating and Configuring a Reflection 10 Session File

The session file that you use must be configured to use a HLLAPI short name, so that SecureLogin can hook into Reflection using HLLAPI.

- 1 Open Reflection and either create a new session or open the existing one that you want to use with SecureLogin.
- 2 (Conditional) If the session has not been configured to connect to your host, do this now.
  - 2a Select *Setup*, then select *Terminal*.
  - 2b In the *HLLAPI Names* pane, specify a letter in the *Short* text box.

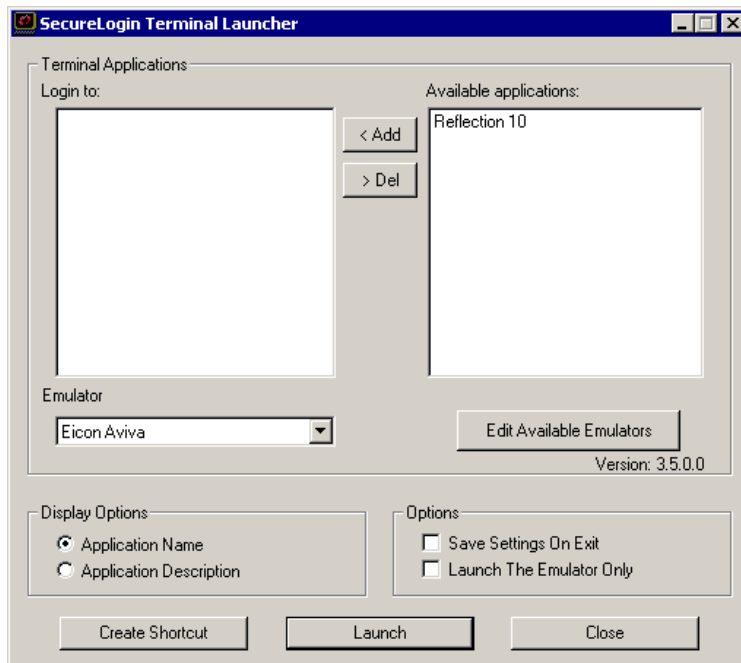


Specify any letter.

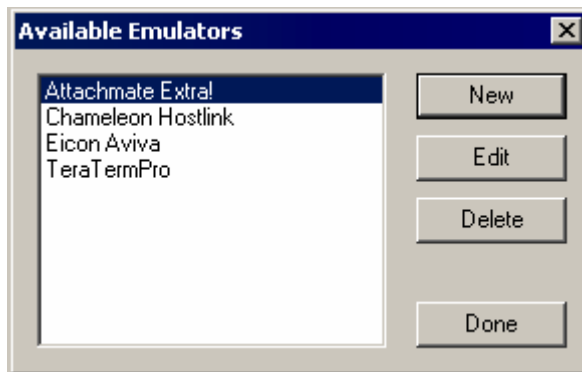
- 2c Click *OK*.
- 2d Save the session in the `c:\Program Files\Reflection` folder.  
Remember the filename of the session.

## 7.3 Configuring Terminal Launcher

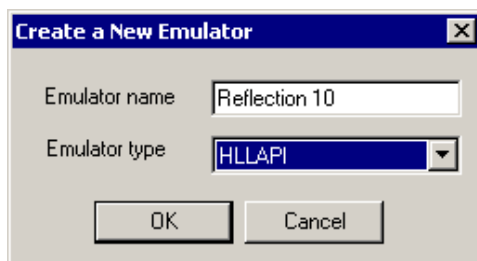
- 1 Run Terminal Launcher, then click *Edit Available Emulators*.



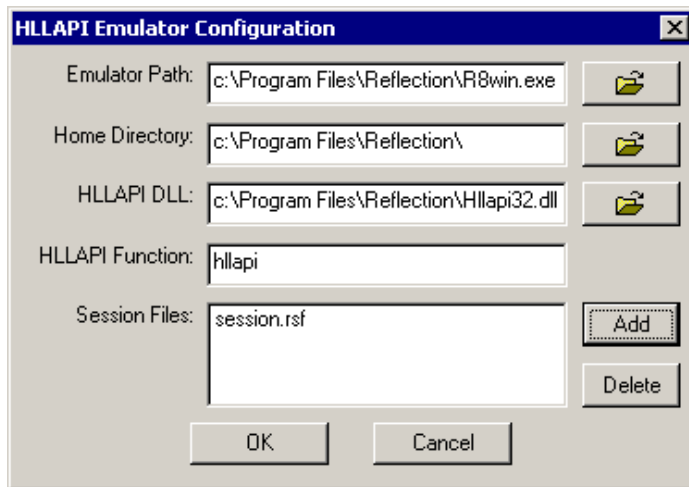
- 2 Click *New*.



- 3 Specify a name for the emulator, select *HLLAPI* as the emulator type, then click *OK*.



#### 4 Configure the emulator:



- Emulator Path  
The path to the `r8win.exe` file.
- Host Name  
The folder that you want Reflection to operate from.
- HLLAPI.DLL  
The path to the `HLLAPI32.DLL` file.
- HLLAPI Function  
`hllapi`
- Session Files  
The name of the session file that you want to use.

#### 5 Click *OK*, then click *Done*.

## 7.4 Creating a Desktop Shortcut for the Emulator

Create a new shortcut on the desktop to the following path:

```
C:\Program Files\Novell\SecureLogin\TLaunch.exe /auto /h{Short name letter} /eReflection 10 /pReflection 10
```

## 7.5 Testing the Configuration

The first time that the script is run, SecureLogin prompts you to type a username and password, then click *OK*.

After you click *OK*, the emulator launches and you are logged in to the session.



# Single Sign-On for Reflections 2

# 8

This section provides information on the following:

- “Before You Begin” on page 87
- “Saving the Reflections Session” on page 87
- “Creating the SecureLogin Enabling Application Definition” on page 88
- “Configuring the Application Shortcut” on page 88

## 8.1 Before You Begin

- 1 Create a terminal emulation session file.

Before enabling any terminal emulator for SecureLogin, you need to create a session file in the terminal emulator. The file must include all the required settings for deployment to end users.

SecureLogin executes this session file when it launches the emulator. Any modifications to the session must be saved to this file. The session file can be saved locally or on the server. You can configure SecureLogin to access the file in the specified location.

- 2 Copy the `sso.rbs` file.

Reflections for Windows 2 version 5.2 requires the `sso.rbs` file. Save this file to the Reflection 2 installation directory (for example, `c:\rwin`). This file is specific to this version of Reflections. It is not required for other emulators.

You can request this file from Novell Technical Services.

## 8.2 Saving the Reflections Session

- 1 Start Reflections for Windows 2 version 5.2.
- 2 Connect to the required host.
- 3 Modify the terminal emulator settings as required.
- 4 Save the session.

For example, save the session as `sso.r2w`. The default is the application's installation directory.

- 5 Select *Disconnect* from the *Connection* menu.

The session file remains loaded but you have disconnected from the host.

- 6 Select *Connection Setup* from the *Connection* menu.
- 7 Click *Connect Script*, then browse to and select the `sso.rbs` file.
- 8 Click *OK*.

To save the changes to the session file:

- 1 Select *Save [session name]* from the *File* menu (for example, `sso.r2w`).
- 2 Quit Reflections for Windows.

## 8.3 Creating the SecureLogin Enabling Application Definition

- 1 Double-click the SecureLogin icon on the system tray.
- 2 Select Applications, then click *New > New Application Definition*.
- 3 In the *Name* field, specify `ntvdm.exe`.
- 4 In the *Description* field, specify a name for the application enabler.  
For example, specify Reflections for Windows.
- 5 From the *Type* drop-down list, select *Windows*.  
For most terminal emulators, you would select *Terminal Emulator*.
- 6 Click *OK*.
- 7 Select *Definition*, then specify the following:

```
## Username dialog
Dialog
  Class "#32770"
  Title "Reflection 2 - Username"
EndDialog

SetPrompt "Username:"
Type $Username #101
Type "\N"

SetPrompt "Enter the following single sign-on variables."

## Password Dialog
Dialog
  Class "#32770"
  Title "Reflection 2 - Password"
EndDialog

SetPrompt "Password:"
Type $Password #101
Type "\N"

SetPrompt "Enter the following single sign-on variables."
```

- 8 Ensure that the *Enabled* check box is checked.
- 9 Save the enabled application by clicking *OK*.  
The application enabler now displays in the Application list.
- 10 Save the data and close the SecureLogin interface by clicking *OK*.

## 8.4 Configuring the Application Shortcut

- 1 Right-click on the desktop, then select *New > Shortcut*.
- 2 Type the file path to the Reflections executable and session.  
For example, type `c:\rwin\sso.r2w`.
- 3 Click *Next*.
- 4 In the *Type a Name for This Shortcut* text box, specify a name, then click *Finish*.



## 8.5 Initially Logging In to Reflections 2 for Windows

**1** Start Reflections by double-clicking the *Reflections* shortcut icon.

**2** In the *Username* text box, specify your username, then click *OK*.

**3** In the *Password* text box, specify your password, then click *OK*.

The Reflection 2 - Password dialog displays a second time so that you can re-enter your password to enable single sign-on.

**4** In the *Password* text box, specify your password, then click *OK*.

Reflections for Windows 2 version 5.2 is now enabled for single sign-on.



# Error Codes: Terminal Launcher

# A

This section contains error codes for Terminal Launcher.

For a full list of SecureLogin error codes, see “**Error Codes**” in the *SecureLogin 6.0 Administration Guide*.

## A.1 Error Codes with Tips

### -102 BROKER\_NO\_SUCH\_ENTRY

**Possible Cause:** You tried to load an application definition or variable that does not exist. For example, you set up Terminal Launcher to run from a shortcut or to run a particular application definition, but the application definition does not exist.

**Action:** Check that the name of the application definition is actually defined in SecureLogin. Verify that the name is the same as specified in the application definition editor.

### -220 BROKER\_HLLAPI\_FUNCTION\_NOT\_FOUND

**Possible Cause:** You used an incorrect function when you defined the emulator. In the Terminal Launcher configuration, you specified a `HLLAPI.DLL` and the name of the function in that DLL. The name of the function cannot be found in the DLL.

**Action:** Using the *Novell SecureLogin Configuration Guide for Terminal Emulators*, check the configuration for the emulator. Make sure that you typed the HLLAPI function correctly.

### -222 BROKER\_HLLAPI\_DLL\_LOAD\_FAILED

**Possible Cause:** Terminal Launcher was unable to load the `HLLAPI.DLL` that you specified.

**Action:** Make sure that the path and file that you entered for the DLL are correct.

The `HLLAPI.DLL` for that emulator is looking for other DLL files that don't exist or haven't been installed for that emulator.

You have probably chosen the wrong `.DLL` file or have specified the wrong HLLAPI function (for example, `HLLAPI` or `WinHLLAPI`). Find the correct `.dll` and function. Check the vendor's documentation for information about that emulator.

You can use Microsoft\* Spy++ to find Input and Output IDs.

### -224 BROKER\_ERROR\_DURING\_WINHLLAPICLEANUP

**Possible Cause:** Terminal Launcher has called the WinHLLAPI cleanup function for a WinHLLAPI emulator.

**Action:** Check the vendor's documentation for information about that emulator.

#### **-225 BROKER\_CANNOT\_FIND\_WINHLLAPISTARTUP\_FUNCTION\_IN\_DLL**

Possible Cause: In the Terminal Launcher configuration, you incorrectly specified that the emulator is a WinHLLAPI emulator.

Action: Using the *Novell SecureLogin Configuration Guide for Terminal Emulators*, check the configuration for the emulator. Specify the correct emulator type.

#### **-226 BROKER\_ERROR\_DURING\_WINHLLAPISTARTUP**

Possible Cause: Check the vendor's documentation for information about that emulator.

#### **-227 BROKER\_CANNOT\_FIND\_WINHLLAPICLEANUP\_FUNCTION\_IN\_DLL**

Possible Cause: In the Terminal Launcher configuration, you incorrectly specified that the emulator is a WinHLLAPI emulator.

Action: Using the *Novell SecureLogin Configuration Guide for Terminal Emulators*, check the configuration for the emulator. Specify the correct emulator type.

#### **-264 BROKER\_DDE\_CONNECT\_FAILED**

Possible Cause: Terminal Launcher could not connect to a specified DDE emulator.

Action: Make sure that the emulator launched correctly and the emulator's DDE support is turned on.

#### **-273 BROKER\_MSTELNET\_OPERATION\_NOT\_SUPPORTED**

Possible Cause: The generic emulator cannot support a particular operation (for example, `SetCursor`).

Action: For generic emulators, don't use the command.

#### **-279 BROKER\_EMULATOR\_LAUNCH\_FAILED**

Possible Cause: In Terminal Launcher, you can configure the path to the executable that will run. However, the specified executable is unable to run.

Action: Make sure that the path to the emulator is correct.

#### **-280 BROKER\_UNABLE\_TO\_CREATE\_EMULATOR**

Possible Cause: You have specified an invalid terminal type in `TLAUNCH.INI` (or the Terminal Launcher configuration).

Action: Specify the correct terminal type.

#### **-281 BROKER\_INVALID\_CHARACTER\_FOUND\_IN\_PASTE\_ID\_LIST**

Possible Cause: A comma does not separate decimal numbers for input and output control IDs.

Action: For generic emulators, you must specify a set of input and output control IDs. Use a comma to separate decimal numbers.

#### **-282 BROKER\_INVALID\_CHARACTER\_FOUND\_IN\_COPY\_ID\_LIST**

Possible Cause: A comma does not separate decimal numbers for copy IDs

Action: For generic emulators, you must specify a set of copy control IDs. Use a comma to separate decimal numbers.

#### **-283 BROKER\_UNABLE\_TO\_READ\_TLAUNCH\_INI**

Possible Cause: SecureLogin is unable to read the tlaunch.ini file because the file has been deleted.

Action: Create a blank tlaunch.ini file.

Create a default tlaunch.ini file by reinstalling SecureLogin.

#### **-284 BROKER\_NO\_TERMINAL\_TYPE\_DEFINED**

Possible Cause: The tlaunch.ini file contains an error. The terminal type for the emulator has not been defined.

Action: Using Terminal Launcher, specify a terminal type for the emulator.

#### **-290 BROKER\_FILE\_LOAD\_FAILED**

Possible Cause: You don't have enough rights to convert an earlier tlaunch.ini file to a later format, read an earlier tlaunch.ini file, or create a new tlaunch.ini file.

Action: The network administrator must assign necessary rights.

#### **-349 BROKER\_UNABLE\_TO\_FIND\_SESSION\_FILE**

Possible Cause: Terminal Launcher could not find a session file for an emulator.

Action: Configure Terminal Launcher to have the correct path to the file for the emulator session.

#### **-356 BROKER\_INVALID\_CHARACTER\_FOUND\_IN\_STARTUP\_ID\_LIST**

Possible Cause: For generic emulators, you specify the startup control ID. A comma must separate a list of numbers. You have used a character other than a comma.

Action: Remove unacceptable characters.

#### **-373 BROKER\_HLLAPI\_CONNECT\_FAILED**

Possible Cause: Terminal Launcher could not find the function name and was therefore unable to connect to the emulator. The function name is probably wrong.

Action: Make sure that the emulator has HLLAPI enabled.

#### **-380 BROKER\_HLLAPI\_NOT\_CONNECTED\_TO\_PS**

Possible Cause: You haven't configured your emulator for an HLLAPI session. Terminal Launcher tried to use a HLLAPI function. However, the HLLAPI DLL is not connected to the emulator presentation space.

Action: Make sure that Terminal Launcher is set up correctly with the emulator.

#### **-381 BROKER\_HLLAPI\_SPECIFYING\_PARAMETERS\_ERROR**

Possible Cause: Incorrect parameters were given to a command that uses a HLLAPI function.

Action: Contact Novell Technical Services.

#### **-382 BROKER\_HLLAPI\_INVALID\_PS\_POSITION**

Possible Cause: Terminal Launcher was able to initialize the emulator but was unable to read the contents of the screen. An attempt was made to move the cursor or read text from an invalid (out of bounds) position on the emulator presentation space.

Action: Correct the positioning parameter in the script.

#### **-383 BROKER\_HLLAPI\_SYSTEM\_ERROR**

Possible Cause: Terminal Launcher is not configured correctly for the emulator.

Action: Make sure that Terminal Launcher is set up correctly with the emulator and that the emulator correctly supports HLLAPI.

#### **-384 BROKER\_HLLAPI\_PS\_BUSY\_ERROR**

Possible Cause: A HLLAPI function is being called while the emulator presentation space is unavailable.

Action: Make sure that the emulator is not being used by other HLLAPI applications.

#### **-385 BROKER\_HLLAPI\_INPUT\_REJECTED**

Possible Cause: The emulator rejected an attempt to input data into the emulator presentation space.

Action: Make sure that the emulator presentation space is not locked.

#### **-386 BROKER\_HLLAPI\_ERROR\_QUERYING\_SESSIONS**

Possible Cause: SecureLogin is unable to query available HLLAPI sessions.

Action: Make sure that Terminal Launcher is set up correctly with the emulator.