# PASSPORT Automation Interface

The PASSPORT Automation Interface Provides Integration of Terminal Emulation with Desktop Applications



The Automation Interface was added to PASSPORT PC TO HOST in version 2004 SP-1 and is a special interface that can be used to integrate terminal emulation inside a master desktop application. The master desktop application would typically be used to manage several host sessions concurrent with other desktop applications.

Using the host application screen display as an API, developers can quickly navigate through TN3270, TN5250, VT100/VT220 and SCO ANSI applications to locate specific screens, fields and text, and cut and paste data to and from the host session.

A lightweight screen scraping API is provided, as well as methods to execute any PASSPORT menu command, action, macro or external program(s). This interface method provides seamless integration with the PASSPORT terminal emulator.

The PASSPORT Automation Interface provides the ability for PASSPORT PC TO HOST to run as an ActiveX Document inside of the Internet Explorer control. The IE control is hidden and then placed within an application. C++ or any programming language that can host the IE control can use this interface. The automation interface can only be used with PASSPORT PC TO HOST and cannot be used with PASSPORT WEB TO HOST.

When to Use the Automation Interface API

The Automation Interface is recommended when a terminal emulator needs to be integrated into a 'master' desktop application which controls host access and execution of other applications.



# TECHNICAL SPECIFICATIONS



#### **GetRows**

#### **DESCRIPTION**

Returns the number of rows in the presentation space.

#### SYNTAX

ret = GetRows ()

#### **PARAMETERS**

ret Integer, output

The number of rows in current screen (either 24, 32, 43 or 27)

#### REMARKS

This function returns the number of rows in the PASSPORT terminal emulator screen. There are four screen sizes supported: model 2, 3, 4 and 5. The screen size determines the number of columns and rows are on the display.

# 3270 SCREEN SIZES

1920 = Model 2 (80 columns x 24 rows)

2560 = Model 3 (80 columns x 32 rows)

3440 = Model 4 (80 columns x 43 rows)

3564 = Model 5 (132 columns x 27 rows)

# **5250 SCREEN SIZES**

1920 = Model 2 (80 columns x 24 rows)

3564 = Model 5 (132 columns x 27 rows)

# **GetCols**

#### **DESCRIPTION**

Returns the number of columns in the presentation space.

# SYNTAX

ret = GetCols ()

# **PARAMETERS**

ret Integer, output

The number of columns in current screen (either 80 or 132)

# REMARKS

This function returns the number of columns in the PASSPORT terminal emulator screen. See remarks for GetRows for more detail.

TECHNICAL SPECIFICATIONS



#### GetCursorRow

#### **DESCRIPTION**

Returns the current row position of the cursor

#### SYNTAX

ret = GetCursorRow ()

#### **PARAMETERS**

ret Integer, output

The row position of the cursor.

#### REMARKS

The row position ranges in value from 1 to 24 for a model 2 screen size, 1 to 32 for a model 3 screen size, 1 to 43 for a model 4 screen size, and 1 to 27 for a model 5 screen size.

# GetCursorCol

#### **DESCRIPTION**

Returns the current column position of the cursor

# SYNTAX

ret = GetCursorCol()

# **PARAMETERS**

ret Integer, output

The column position of the cursor.

#### REMARKS

The column position ranges in value from 1 to 80 for model 2, 3 and 4 screen sizes. The column position ranges in value from 1 to 132 for the wide column model 5 screen size. For VT screen sizes the column position ranges 1 to 80 or 1 to 132.

#### **SetCursor**

# **DESCRIPTION**

Position the cursor at the new position

## SYNTAX

SetCursor (row, column)

# **PARAMETERS**

**row** Integer, input

The new row position of the cursor

# TECHNICAL SPECIFICATIONS

column Integer, input

The new column position of the cursor.

#### **REMARKS**

This function moves the cursor to a new position specified by a row and column position. Row 1 column 1 indicates the home position in the upper left corner of the screen. Care must be taken not to position the cursor off the screen.

GetString

#### **DESCRIPTION**

Returns a string from the PASSPORT terminal emulation screen

#### SYNTAX

ret = GetString (row, column, length)

#### **PARAMETERS**

ret String, output

The string to contain the data read from the PASSPORT screen.

row Integer, input

The starting row position in the PASSPORT screen.

column Integer, input

The starting column position in the PASSPORT screen.

**length** Integer, input

The maximum number of characters to read.

## REMARKS

This function reads a string from the PASSPORT terminal emulator screen at the specified position. Row 1 column 1 indicates the home position in the upper left corner of the screen.

**SendString** 

# **DESCRIPTION**

Copies a string into the PASSPORT terminal emulation screen, to later be sent back to the host mainframe.

# SYNTAX

SendString (row, column, string)

# TECHNICAL SPECIFICATIONS

#### **PARAMETERS**

row Integer, Input

The starting row position in the PASSPORT screen.

column Integer, Input

The starting column position in the PASSPORT screen.

string String, Input

The string to copy into the PASSPORT terminal emulation screen.

#### REMARKS

This function copies a string into the PASSPORT terminal emulator screen at the specified row and column position. Row 1 column 1 indicates the home position in the upper left corner of the screen.

Strings should only be copied into unprotected fields. When copied into an unprotected field, the MDT (Modified Data Tag) is set in that field so that the data is transmitted to the host whenever the ENTER key or other inbound AID key is sent.

**SendKeys** 

## **DESCRIPTION**

Sends ANSI characters to the host mainframe

# SYNTAX

SendKeys (string)

# **PARAMETERS**

**string** String, input

This string should include only ANSI characters

#### REMARKS

The string of keys can be any ANSI characters. If you want send AID key, you should use SendAID method.

**SendAID** 

#### **DESCRIPTION**

Sends host key to the presentation space.

# SYNTAX

SendAID (aidKey)

# TECHNICAL SPECIFICATIONS

#### **PARAMETERS**

aidKey Integer, input

Integer value representing the host key

#### **REMARKS**

The key can be either local key(like TAB) or AID key which will transmit data back to the host. See Pass.h for list of local and AID keys.

**GetOIA** 

#### **DESCRIPTION**

Returns the text in the Operator Information Area (OIA)

#### SYNTAX

ret = GetOIA()

#### **PARAMETERS**

ret String, output

The text returned from the OIA.

#### REMARKS

Returns the text in OIA line of presentation space.

# **ExecMenuCmd**

# DESCRIPTION

Sends menu command to PASSPORT program.

#### SYNTAX

ret = ExecMenuCmd (cmdID)

# **PARAMETERS**

ret Boolean, output

True if it is a valid menu command, otherwise False

cmdID Integer, input

Integer value representing PASSPORT menu command

#### REMARKS

Menu command is always in the format of 0x02xx. See Pass.h for list of menu commands.

# RunMacro

# DESCRIPTION

Run the specified macro on PASSPORT application

# TECHNICAL SPECIFICATIONS

Zephyr Development Corporation specializes in advanced IP host access solutions for Microsoft Windows desktops and servers, including Windows 2003, XP and 2000. Using TN3270, TN5250, VT100, VT220, SCO ANSI and FTP standards, we offer PC and web terminal emulation, toolkits and programmatic API modules, allowing our customers to connect and integrate proven legacy applications with other PC, server and .NET or ActiveX applications.

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#### SYNTAX

RunMacro (string)

# **PARAMETERS**

**string** String, input

This string is the full path of the macro

#### **REMARKS**

You should always specify the full path for the macro.

# **ExecCmd**

#### **DESCRIPTION**

Execute command same as Keyboard, Keypad, Toolbar etc. in PASSPORT application

#### SYNTAX

ExecCmd (type, string)

#### **PARAMETERS**

**type** Integer, Input

The type of command can be executed in PASSPORT

string String, Input

The string needed for executing the command

#### REMARKS

The type of command which can be executed in PASSPORT include

type	Type value	string
Text Character	Character value (byte)	Not needed
Text String	0x400	Text string to send to screen
Host Key	0x1xx	Not needed
Dead Key	0x6xx	Not needed
Macro	0x500	Full path of the macro
Menu Command	0x2xx	Not needed
Miscellaneous	0x7xx	May be needed depending on the
		action

See Pass.h for list of Host keys, Dead keys, Menu commands and miscellaneous actions.