UTS eXpress IT

Table of Contents

Emulation **1**
UTS eXpress IT Control Panel 1
Left Mouse Click 1
Screen Buttons 1
Minimize All 1
Configure 1
Help 1
Exit 1
Right Mouse Click 1
Open Screens 1
Close Screens 1
Close All 1
Minimize All 1
Keep On Top 1
Auto Hide 2
Transport Trace 2
UTS eXpress IT Screen 2
File menu 2
Print Screen (All) Ctrl+P 2
Print Screen (UTS) Ctrl+U 2
Close Print Ctrl+L 2
Printer Assignment… 2
Print Window Image 2
Capture Screen Alt+Shift+Backspace 2
Print Captured Screens 2
Save Captured Screens 2
Clear Captured Screens 2
Send To… 2
Diagnostics 2
Customize 3
Close 3
Edit menu 3
Copy Ctrl+C 3
Cut Ctrl+X 4
Paste Ctrl+V 4
Input Recall Ctrl+Up 4
Block Selection 4
Edit Control Page 4
Change Route Settings 4
View menu 4
Show Keyboard Help Window... Alt+K 4
Show Inactive Page 5
Show Mouse Tracking 5
Show Reference Grid 5
Show Control Characters 5
Macros menu 5
Macros 5
Start Macro Recorder 5
Stop Recorder 5
FCCs menu 5
FCC Locate Ctrl+Alt+F 6
FCC Generate Ctrl+Alt+G 6
FCC Clear Ctrl+Alt+C 6
FCC Enable Ctrl+Alt+E 6
Window menu 6
Resize Screen to Font 6
Next Screen Esc 6
Previous Screen Shift+Esc 6
Help menu 6
Contents 6
This Window 6
About 6
Input Recall window 6
Paste 6

Transmit....6
Remove All....6
Close....7
UTS eXpress IT Keyboard Definition window....7
Stay on Top....7
Keep Active on Show....7
Close....7
Screen Printer Device Assignments....7
Printer Device 1 through Printer Device 3 (DID1 through DID3)....7
Select....7
Clear....7
OK....8
Cancel....8
Help....8
Send To 8
Send Contents of Screen as Text....8
Send Screen Window as JPEG Attachment....8
UTS Control Page....8
XMIT....9
Send....9
Drive....9
File....9
Extension....9
Options....9
Sep Chr (Hex)....9
Prompt (Hex)....9
Blk. Size....9
Example:....9
Recv....9
Drive....10
File....10
Extension....10
Options....10
Sep Chr (Hex)....10
EOF....10
Example:....10
Send Path....11
Recv. Path....11
OK....11
Cancel....11
Help....11
FCC Generate....11
FCC Settings....12
Video Off....12
Low Intensity....12
Reverse Video....12
Blink....12
Tab Stop....12
Emphasis Protect....12
Data Protected....12
Right Justify....12
Data Entry....12
OK....12
Cancel....12
Help....12
UTS eXpress IT Graphics Viewer....12
File menu....12
Open Graphics Script.......12
Save as.......12
Copy to Clipboard as BMP....12
Print.......13
Close....13
Options menu....13
Maintain Aspect Ratio....13
View Graphics Commands....13
Redraw....13

Window menu 13
Show Screen Window 13
Configuration 15
UTS eXpress IT Configuration 15
Screen tabs 15
Terminal Settings tab 15
Connection Route 15
Open Screen on Start Up 15
Reopen on Host Close 16
Enable Input Recall 16
Initial Transmit Type 16
Trace on Start Options 16
Screen Options 16
Screen Printer 17
Other Settings tab 18
Select Screen Appearance Scheme 18
Custom Appearance 18
Select Custom Keyboard Layout 18
Custom Keyboards 18
Macro Manager 18
Screen Double-Click Action 19
Screen Right-Click Action 19
File Transfer... 19
Character Translation 19
Language... 19
Application Scheme 19
Restriction Settings/Configure Settings 19
Restriction Settings dialog 19
Use Configuration Lock Options 20
eXpress User Capabilities at a Glance 21
Settings Location 21
Unlock Configuration 22
Apply 22
OK 22
Cancel 23
Terminal Printer Setup 23
Add Printer 23
Setup Printer 23
Delete Printer 23
OK 23
Cancel 23
Help 23
Printer Device Selection and Setup 24
Printer Selection 24
Local Printer Name 24
Use Local Print Object (LPO) 24
Standard Printing Devices 24
Local Print Object 25
Windows Print Settings 25
Printer Font 25
Page Header Text 25
Passthrough Print Settings 26
Pass-Through Print Options 26
Character Translations 27
Printer Start and End Strings (max 41 chars) 27
Import 28
Export 28
OK 28
Cancel 28
Help 28
eXpress IT Local Print Objects 28
Local Print Object Interface Specifications 28
LPO_Initialize 28
LPO_Open 28
LPO_PrintData 28

LPO_Close 29
LPO_Show 29
eXpress Custom Terminal Screen Appearance 29
Appearance Scheme Name 30
New Scheme 30
Rename Scheme 30
Delete Scheme 30
Screen Color Settings 31
Select Color for Attribute 31
Choose Foreground (text) Color 31
Choose Background Color 31
Use UTS60 Colors 31
Always Use Low Intensity for UTS60 Background 31
Screen Font 31
Font Name 31
Bold 31
Font Size 31
Character Set 31
Automatic Font Scaling 31
None 31
Screen to Font 31
Font to Screen 31
Default 32
Import 32
Export 32
Apply 32
OK 32
Cancel 32
Help 32
eXpress Custom Keyboard Layouts 32
New Keyboard 33
Rename Keyboard 33
Delete Keyboard 33
Graphic Keyboard 33
Key Actions 34
Type a Key Sequence 34
Set Key Assignment 34
Undefine Key 34
Default 34
Import 34
Export 34
Print 34
OK 34
Cancel 34
How to Map or Re-Map a UTS Terminal or a UTS eXpress IT Key 34
Conflicts 35
Add or Redefine Key 35
Help 35
Add 35
Redefine 35
Cancel 35
eXpress IT Macro Manager 35
Graphic Keyboard 36
Available Macros 36
New Macro 37
Edit Macro 37
Delete Macro 37
Show in Menu 37
Type Sequence 37
Set Assignment 37
Clear Assignment 37
How to Assign a Macro Activation Key 37
Conflicts 37
Edit Macro 37
Key Macro Name 38
Macro Function List 38

Add 38
Terminal Key Function 38
Text String 38
Text String Prompt 38
Cursor Position 38
Timed Wait 39
Wait for String 39
Replace 39
Delete 39
Move Up 39
Move Down 39
Revert 39
OK 39
Cancel 39
Edit Prompt for Text 39
Enter User Prompt 39
Password Entry 39
OK 39
Cancel 39
Position Cursor 39
Column 39
Row 40
OK 40
Cancel 40
Select Terminal Key Function 40
Type List Search String 40
OK 40
Cancel 40
Text String 40
Enter a Text String 40
OK 40
Cancel 40
Timed Wait 40
Enter Wait Time in Seconds 40
OK 40
Cancel 40
Wait for String 40
String Value 41
String Location 41
Row 41
Relative to Current Row 41
Column 41
Relative to Current Column 41
Any position in Entire Screen 41
Wait for String To Be 41
Equal = ... 41
Not Equal <> 41
Wait Time (seconds) 41
OK 41
Cancel 41
File Transfer Defaults 41
Send File Path 42
Select 42
Receive File Path 42
Select 42
Override Drive Letter with Drive Selected by Host 42
OK 42
Cancel 42
Help 42
Select Directory 42
UTS Character Translation Configuration 42
Import 43
Export 43
OK 43
Cancel 43
Character Translation Edit 43

OK....44
Cancel....44
Language Type....44
Select Language Type....44
OK....44
Cancel....44
Application Color Scheme Preferences....44
Schemes....45
New Scheme....45
Rename Scheme....45
Delete Scheme....45
Button Effects....45
Select Button Color Effects....45
Select Color....46
Use Standard Windows Look....46
Use 3d Button Effect....46
Form Color Preview....47
Panel Title Text....47
Window Effects....47
Window Color....47
Window Text Color....47
Panel Color....47
Panel Text Color....47
Panel Title Color....47
Panel Title Text Color....47
Set to Defaults....47
Apply....47
OK....47
Cancel....47
Application Color Selector....48
Std. Color Dialog....48
Apply....48
OK....48
Cancel....48
Lock Config Initial Password....48
New Password....48
Reenter New Password to Confirm....48
OK....48
Cancel....49
Unlock Config Password....49
Enter Password....49
New Password....49
Reenter New Password to Confirm....49
OK....49
Cancel....49
UTS eXpress IT Settings....49
Delete Source Settings....50
Set....50
Cancel....50

How to 51

Selecting with the Mouse....51
Running without the Control Panel....51
Configuring UTS Keys....51
Using Mapper "Look and Feel"....52
Applying Colors and Fonts to Specific Screens....52
Changing Screen Dimensions....52
Recall Recent Input....53
Using UTS Function Keys....53
Displaying UTS eXpress IT Keyboard Definitions....53
Assign Printers to Screens....53
Printing....54
Printing to a File....54

Miscellaneous....55

Command Line Options....55
Font Limitations....55

Technical Support 55
Index 57

Emulation

UTS eXpress IT Control Panel

The **UTS eXpress IT Control Panel** initially appears when the **UTS eXpress IT** program/icon is executed from the UTS eXpress IT folder. The control panel contains a series of functions that permit you to establish emulation sessions with the host and control the disposition of the control panel. Additionally, a configuration command is available allowing font and color selection, configurable UTS keys, screen size selection, route selection and other standard UTS controls.

Left Mouse Click

A left mouse click on the following button controls allows you to establish host connections, to configure UTS eXpress IT, etc.:

Screen Buttons

Press any of the grayed numbered buttons to open a dialog with the host.

Initially, the maximum number of screens that may be configured is six. This number may be increased to 24 (see UTS eXpress IT Configuration).

Minimize All

Press this button to minimize the UTS eXpress IT Control Panel and all active screens.

Configure

Press this button to initiate the **UTS eXpress IT Configuration** dialog where the appearance and behavior of UTS eXpress IT may be changed.

Help

Press this button to receiv help for the UTS eXpress IT Control Panel.

Exit

Press this button to close all screens currently opened and terminate UTS eXpress IT.

Right Mouse Click

A right mouse click anywhere within the control panel will present a menu that allows you to control sessions, to position the control panel, etc.:

Open Screens

Move the mouse cursor over this selection to view a menu of configured screens. Only the screens not currently opened will be enabled for selection.

Close Screens

Move the mouse cursor over this selection to view a menu of configured screens. Only the screens currently opened will be enabled for selection.

Close All

Left mouse click this selection to close all screens currently opened and terminate UTS eXpress IT.

Minimize All

Left mouse click this selection to minimize the UTS eXpress IT Control Panel and all active screens.

Keep On Top

Select this option to keep the control panel on top of any other windows displayed.

Auto Hide

When the control panel is docked to an edge of the desktop, selecting this option will cause the control panel to hide when the mouse cursor is away from the edge.

Note: To dock the control panel, drag and drop the control panel with the mouse to any edge (left, right, top or bottom) of the desktop display.

Transport Trace

Use this selection to create a diagnostic trace at the transport level. This selection should only be used if requested by KMSystems support personnel.

UTS eXpress IT Screen

The **UTS eXpress IT** window contains all the necessary Windows controls to manage a host connection. Controls are available to control the size of the font displayed and the spacing between lines. There are also controls to perform print functions, recall previously entered input, execute user-developed scripts, etc.

When multiple screens are open, you may use the **Esc** key to switch between non-minimized screens. Likewise, the **Next Screen** selection from the **Window** menu will switch between non-minimized screens

The following is an explanation of each menu selection or control. When shortcut keys are available, the key combination (e.g., **Ctrl+L**) is shown to the right of the menu selection.

File menu

The **File** menu contains controls to configure the appearance and behavior of UTS eXpress IT and to manage the print environment of UTS eXpress IT.

Print Screen (All) Ctrl+P

Use this selection to print an exact image of the entire screen.

Print Screen (UTS) Ctrl+U

Use this selection to produce the traditional UTS "Print Screen" operation. The selection prints all the text from the previous SOE to the current cursor position.

Close Print Ctrl+L

Use this selection to end the print operation. This selection only appears on the menu as a result of issuing a **Print Screen** command.

Printer Assignment...

Use this selection to assign up to three printers for the screen.

Print Window Image

Use this selection to print the entire window including the screen and the Windows controls surrounding the screen.

Capture Screen Alt+Shift+Backspace

Use this selection to capture the currently selected screen.

Print Captured Screens

Use this selection to print any captured screens.

Save Captured Screens

Use this selection to save any captured screens to a text file.

Clear Captured Screens

Use this selection to clear the captured screen stack.

Send To...

Use this button to send a copy of the screen through your mail system.

Diagnostics

Trace to Window

Use this selection to initiate the UTS eXpress IT trace facility. All communications between UTS eXpress IT and the host will be displayed in a separate window.

Note: A right mouse click in the trace window will reveal a menu containing three selections that control the trace window: **Stay on Top**, **Copy to Clipboard** and **Clear**. **Stay on Top** controls whether the trace window remains on top (the default) of the emulator window during the trace, or remains in the background. **Copy to Clipboard** may be used to copy the contents of the trace window to the Windows clipboard for subsequent pasting into another Windows application (e.g., Notepad, WordPad, etc.). **Clear** may be used to clear the contents of the trace window.

Trace to File

Use this selection to initiate the UTS eXpress IT trace facility. This selection is the same as Trace to Window except that the trace information will be written to a user-named file.

Trace to Both Window and File

Use this selection to initiate the UTS eXpress IT trace facility. This selection is a combination of the two above.

Clear Trace Window

Use this selection to clear the trace window and/or file without terminating the trace. This selection appears after a trace has been initiated.

Close Trace

Use this selection to close the trace window and/or file and terminate the trace.

FCC Map to Trace

Use this selection to display an FCC Map. Use only at the request of KMSystems support personnel.

Control Page

Use this selection to display the contents of the UTS Control Page in the trace window and/or file.

Note: The previous four selections only become visible once the trace has been started.

Customize

Use this selection to customize the appearance and functionality of this screen. Note: All of these settings may also be changed from the configuration program.

Custom Keyboard Layout

Use this selection to modify a keyboard configuration. The initial configuration shown will be for the keyboard assigned to this screen.

Select Keyboard Layout

Use this selection to assign a preconfigured keyboard to this screen.

Screen Appearance

Use this selection to modify a screen appearance scheme. The initial configuration shown will be for the scheme assigned to this screen.

Select Screen Appearance

Use this selection to assign a preconfigured screen appearance to this screen.

Close

Use this selection to break the host connection and terminate this UTS eXpress IT window.

Edit menu

The **Edit** menu contains controls to manage selected text between the screen and the Windows clipboard.

Copy Ctrl+C

Use this selection to copy selected data onto the clipboard. This command is unavailable if there is no data currently selected. Note: Copying data to the clipboard replaces the contents previously stored there.

Data may be selected by placing the mouse cursor at some point on the screen, and holding down the left mouse button, drag the mouse cursor to any other location on the screen. Upon releasing the left mouse button, the data will be selected.

An alternate form of selection is with standard, keyboard key sequences. With the mouse or arrow keys, place the screen text cursor at some point on the screen and use any of the following key sequences to highlight the data being selected:

Shift+Home selects everything from the cursor position through column one of the same row.

Shift+End selects everything from the cursor position through the last column of the same row.

Shift+Right Arrow extends/contracts the selection to the right.

Shift+Down Arrow extends/contracts the selection down the screen.

Shift+Left Arrow extends/contracts the selection to the left.

Shift+UP Arrow extends/contracts the selection up the screen.

Cut Ctrl+X

Use this selection to remove the currently selected data from the document and put it on the clipboard. This command is unavailable if there is no data currently selected.

Cutting data to the clipboard replaces the contents previously stored there.

Paste Ctrl+V

Use this selection to insert a copy of the clipboard contents at the insertion point. This command is unavailable if the clipboard is empty.

Note: Use a right mouse click, anywhere on the screen, to reveal a **Copy/Cut/Paste** popup menu.

Input Recall Ctrl+Up

Use this selection to initiate the Input Recall window. This selection allows previous lines transmitted to the host to be recalled and retransmitted.

Block Selection

Rectangle Block Selection

Set this option (the default) when you want the mouse drag-and-drop action to select a rectangular block of screen positions. This option is useful when cutting and pasting to line number oriented editors such as over existing lines in a full screen editor (e.g., Q/Editor Plus, IPF, etc.).

Linear Block Selection

Set this option when you want the mouse drag-and-drop action to select a linear group of lines. This option is useful when cutting and pasting between the screen and non-line number oriented processors (Word, WordPad, NotePad, etc.).

Edit Control Page

Use this selection to edit the UTS Control Page.

Change Route Settings

Use this selection to change dynamically route settings configured for the currently selected screen. Any setting may be changed except the route name, number of rows and columns. This function is most useful when there is a need to switch to alternate TIP systems without having to configure separate routes in order to supply unique Station Name requirements. Any changes made through this function are only in effect while the screen remains open. Upon reopening the screen, the route settings originally associated with the screen, through the UTS eXpress IT configuration function, will be used.

View menu

The **View** menu contains controls that adjust the appearance and functional state of UTS eXpress IT.

Show Keyboard Help Window... Alt+K

Use this selection to display the Keyboard Help window.

Show Inactive Page

Use this control to toggle the inactive screen page display. When checked along with the screen paging feature enabled, the last screen page will be shown in an inactive screen page window located in the lower half of the screen window. This feature allows you to view the results of a transaction or program in an inactive, read-only, pane of the window while executing another transaction in the active portion of the window. The inactive pane is always shown in black on white.

If there is more than one active screen page configured, clicking the gray separator bar causes the inactive screen page display to scroll to the next inactive screen page (notice that the current active page is never shown in the inactive pane).

When using this option, the screen window may have to be resized manually to accommodate the dual screen display.

Note: The inactive page will not appear until the user does the first Page Down or Page Up.

WARNING: The host is completely unaware of the paging feature. Applications, especially DPS, often check the screen input for specific content; meaning the application, knowing that a certain screen was displayed, expects the returned data to come from that screen. Use of the Page Down and Page Up keys with this feature can leave the screen in a state not expected by the application.

Show Mouse Tracking

Use this selection to toggle between displaying the mouse pointer's row and column and the text cursor's row and column. The display appears on the left side of the status bar at the bottom of the screen. This feature allows the user to determine row and column coordinates of protected fields, which can be handy for scriptwriters.

Show Reference Grid

Use this selection to toggle the display of a reference grid over the screen. The grid is useful when developing scripts. The reference grid makes it easy to find column/row coordinates while a script dialog is displayed. You cannot use mouse tracking once a script dialog is up, but you can see and count lines and columns on the reference grid.

Show Control Characters

Use this selection to toggle the display of control characters (Tab, Form-Feed, Line-Feed, etc.). Checking the **Mapper Look** box on the **Terminal Settings** tab (see UTS eXpress IT Configuration) disables the display of control codes (even though the control character display is enabled). The only exceptions are the Tab and MAPPER Tab characters.

Macros menu

The **Macros** menu is used to control the key macro recorder and to provide access to macros placed for selection on the menu.

Macros

Use this selection to drop down a list of user-created key macros.

Use the **Macro Manager** selection (see the **Other Settings** tab after clicking the **Configure UTS eXpress IT** button on the **UTS eXpress IT Control Panel**) to develop and maintain macros and the **Macros** menu.

Start Macro Recorder

Use this selection to begin the Key Macro Recording (Note: A recorder icon will appear in the status line at the bottom of the window signifying that the recorder is active). All keystrokes entered will be collected until the recording is terminated with the **Stop Macro Recorder** selection.

Stop Recorder

Use this selection to terminate the macro recorder. Upon making this selection, the **Save Key Macro** dialog will allow the macro to be named and saved.

FCCs menu

The **FCCs** menu contains selections for manually generating, locating, clearing and enabling Field Control Characters (FCCs) on the screen.

FCC Locate Ctrl+Alt+F

Use this selection to locate the next FCC position on the screen.

FCC Generate Ctrl+Alt+G

Use this selection to generate a new FCC at the current, text cursor position. This selection may also be used to examine or change an existing FCC (use after the **FCC Locate** command, below).

FCC Clear Ctrl+Alt+C

Use this selection to clear the FCC at the current, text cursor position.

FCC Enable Ctrl+Alt+E

Use this selection to enable FCC emulation once FCCs have been manually placed (generated) on the screen.

Window menu

The **Window** menu contains a selection controlling the UTS eXpress IT window size in relationship to the font size.

Resize Screen to Font

Use this selection to resize the UTS eXpress IT window to conform to the selected font size.

Hide Control Panel/Show Control Panel

This toggle hides or displays the UTS eXpress IT Control Panel. Note: If all screens are closed while the Control Panel is hidden, the Control Panel will be automatically displayed. This menu item is disabled if the NCP (No Control Panel) command line parameter is used.

Next Screen Esc

Use this selection to switch between non-minimized screens.

Previous Screen Shift+Esc

Use this selection to switch to the previous non-minimized window.

Help menu

The **Help** menu contains selections that provide complete on-line help and UTS keyboard assistance.

Contents

Use this selection to run Windows Help for UTS eXpress IT and display the **Contents** topic. All on-line help may be reached from this topic.

This Window

Use this selection to run Windows Help for UTS eXpress IT and display this topic.

About

Use this selection to display version and copyright about UTS eXpress IT.

Input Recall window

UTS eXpress IT saves single-line messages sent to the host system when you press the transmit key. A maximum of 200 of the most recent messages is saved. You can display a list of these messages from the **Edit, Input Recall** menu selection, or by pressing the **Input Recall** key (**Ctrl+Up Arrow**).

Paste

When this list is displayed in the **Input Recall** window, you can view the entries and optionally select an entry to be "pasted" onto the current screen when the **Paste** button is pressed.

Transmit

The **Transmit** button performs the same operation as the **Paste** button, but also ends by transmitting to the host (double clicking on the entry also performs the paste-and-transmit operation).

Remove All

Use this selection to empty the recall list.

Close

Use this button to close the **Input Recall** window.

UTS eXpress IT Keyboard Definition window

This window displays all the standard UTS keys and their corresponding keyboard keystrokes. Any UTS key may be issued by double-clicking the left mouse button over the UTS key name. Additionally, the window may remain open as a visual reference when entering UTS key sequences from the keyboard.

Stay on Top

Check this box to force the window to remain visible while working on an emulator screen.

Keep Active on Show

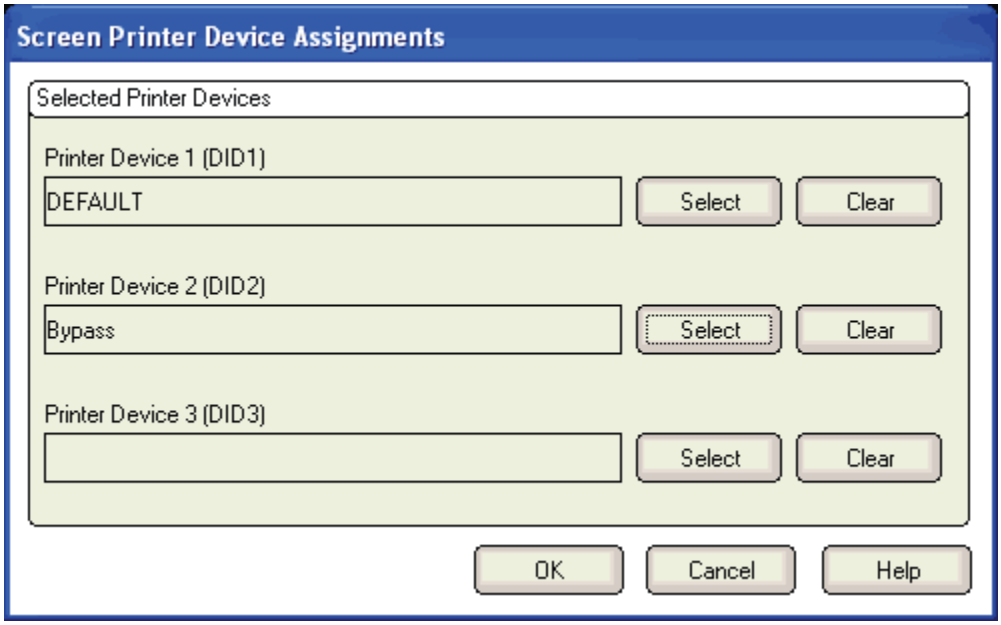
Check this box to keep focus on the **UTS eXpress IT Keyboard Definition** window when the window first comes up. When not checked, focus will immediately return to the main emulator window.

Close

Use this button to close the UTS eXpress IT Keyboard Definition window.

Screen Printer Device Assignments

Use the **Screen Printer Device Assignments** window to assign a locally defined printer to one of three screen DIDs.



Printer Device 1 through Printer Device 3 (DID1 through DID3)

The controls in this group allow you to attach local printer definitions to one of three screen DIDs. The three DIDs correspond to the **AUX DIDs** configured for the route chosen for the screen. You configure the route by pressing the **Configure** button on the **Terminal Settings** tab.

Select

Use this button to initiate the **Terminal Printer Setup** dialog. With this selection, you may assign a previously configured local printer or create a new printer definition from all printers installed on your PC.

Clear

Use this button to detach the local printer definition from the DID.

OK

Clicking the **OK** button saves all changes made in this window and closes the window.

Cancel

Clicking the **Cancel** button closes this window and discards all changes made since it was last opened.

Help

Receive on-line help for this window.

Send To ...

Use this dialog to select the Send option desired.

Send Contents of Screen as Text

Set this option to capture the contents of the screen as text. When the **OK** button is pressed, the text will appear in the message portion of the compose dialog displayed by your mail system.

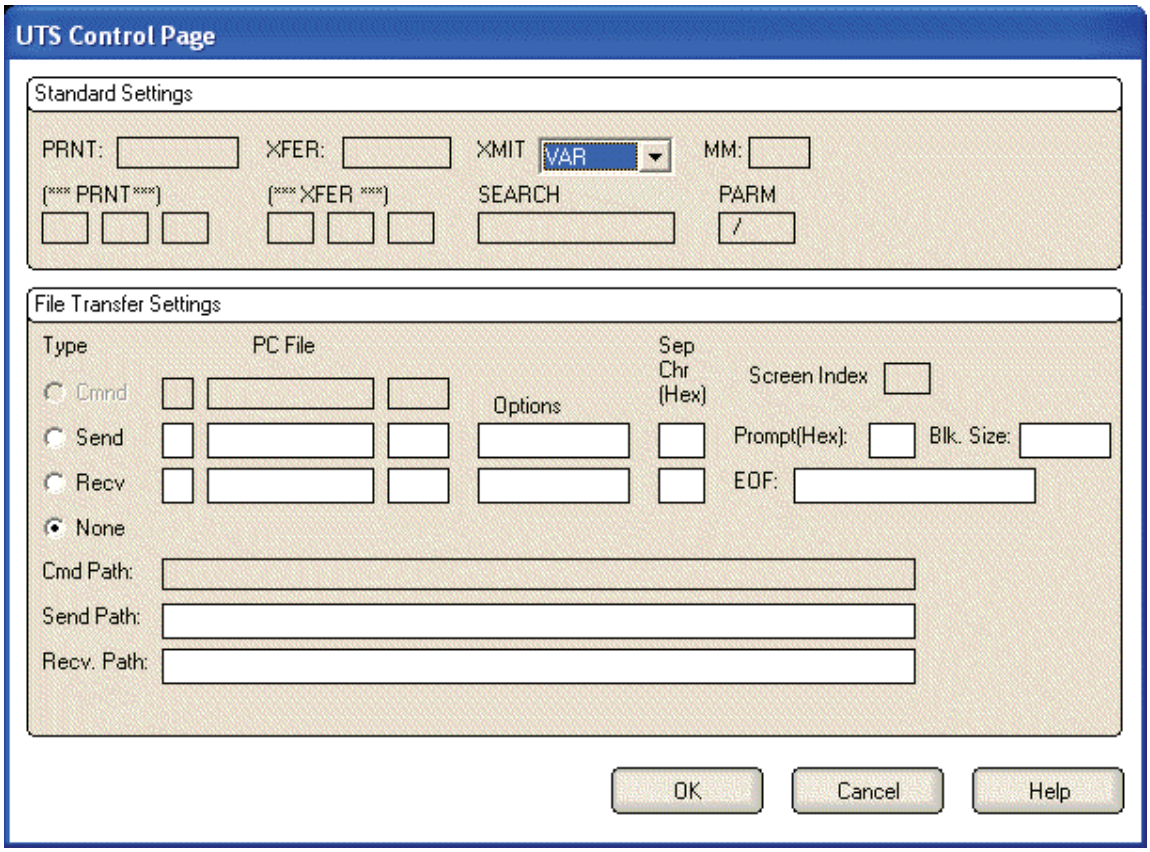
Send Screen Window as JPEG Attachment

Set this option to capture the contents of the screen as a JPEG image. When the **OK** button is pressed, the image will be inserted as an attachment to your mail message.

UTS Control Page

This dialog may be used to edit the UTS Control Page and for performing control page file transfers.

Note: Only the controls that may be set from the PC are enabled (see below):



XMIT

UTS emulation provides three modes of transferring data from the terminal screen to the host processor: **VAR (Variable)**, **ALL**, and **CHAN (Changed)**. The current transmission mode is set in the XMIT() field in the terminal control page. Most host programs expect the terminal to be operated in the VAR transmit mode.

Send

Set this option to upload a PC file to the host. Upon pressing the **OK** button, the send action will begin.

Drive

In this text box, enter the drive containing the file to be uploaded.

File

In this text box, enter the PC file name to be sent to the host.

Extension

In this text box, enter the PC file extension.

Options

In this text box, enter the send options. Valid options are:

B	TCS block format (used by MAPPER file transfer run, QSQTXFR).
C	Clear screen before creating send data block.
L	Limit send data block to 23 lines.
M	Menu-fill mode using tabs to position cursor.
P	Paint send data screen beginning at cursor location.
R	Transmit carriage-returns in data stream to host.
S	Send data in "stream mode".
Tx	Tab codes are replaced with the value of "x". The value of "x" must be a non-numeric character.
Tn	Tab codes are expanded to "n"-wide column boundaries. The value of "n" must be a numeric digit.
X	Binary (hexadecimal) file transfer format.

Sep Chr (Hex)

Used to separate images, for example, enter "0A" for a Line Feed.

Prompt (Hex)

Normally UTS SOE, enter "1E" (ASCII code for SOE).

Blk. Size

Sets maximum data block size sent to host. May not exceed the screen character size (rows * columns).

Example:

Bring up the control page, enter the following, and press the **OK** button:.

C SENDFILE TXT 1E 80

On the host, use

▶@elt,il pf.sendtest

▶ELT 8R2I (940207 1418:00) 1998 May 28 Thu 1546:02

▶

Recv

Set this option to download a host file to the PC. Upon pressing the **OK** button, the receive action will begin.

Drive

In this text box, enter the drive to receive the downloaded file.

File

In this text box, enter the PC file name to receive the host file.

Extension

In this text box, enter the PC file extension.

Options

In this text box, enter the receive options. Valid options are:

A	Acknowledge host after each block.
B	Remove trailing blanks from received images.
C	Exclude final cursor position from captured received data.
D	Delete EOF sentinel from received data.
E	Transfer data from SOE to end of screen to output file.
F	Preserve form feed characters in the received data.
I	Insert a "new line" sequence after each received screen of data.
N	Do not write null (empty) records to the output file.
P	Suppress transfer to printer.
R	Write raw receive data to file (supports DEMAND @@BLCK use).
Tx	Tab codes are replaced with the value of "x". The value of "x" must be a non-numeric character.
Tn	Replace multiple spaces with tab codes at column "n" boundaries. The value of "n" must be a numeric digit.
W	Delete EOF sentinel from received data (just like "D").
X	Binary (hexadecimal) file transfer mode.
Y	Inhibit national language, special character translations.

Sep Chr (Hex)

Used to separate images, for example, enter "0A" for a Line Feed.

EOF

0-16-character string signaling the end of the data transfer (**not** case sensitive), also see the D/W options.

Example:

On the host, edit the file

▶@ed,r mydatafile.
▶READ-ONLY MODE
▶ED 16R1E THU-05/28/98-13:40:31-(0,)
▶EDIT
▶0:▶

Bring up the control page, enter the following, and press the **OK** button:.

C RECVFILE TXT SWI 0A EOF

On the host, enter:

▶0:▶p!

Send Path

In this text box, enter the path (no drive or file name) to the send file. Entering a path here overrides the file transfer defaults set in the UTS eXpress IT configuration.

Recv. Path

In this text box, enter the path (no drive or file name) to the receive file. Entering a path here overrides the file transfer defaults set in the UTS eXpress IT configuration.

OK

Click this button to accept any changes made in this window and close the window.

Cancel

Click this button to discard any changes made and close the window.

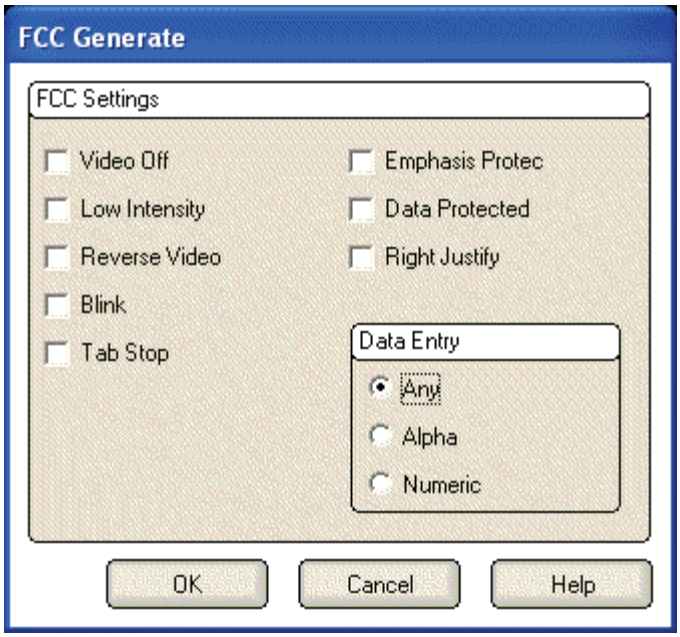
Help

Receive on help for this window.

FCC Generate

Field Control Characters (FCCs) are defined by Unisys and are used to control the function and appearance of areas of the UTS format screen displayed by UTS eXpress IT. You can use the **FCC Generate** window to examine (and possibly create or change) the characteristics associated with a field on the current UTS screen. You should probably **not** modify the FCC characteristics set by your application unless you are responsible for programming that application. Modifying the FCC characteristics of a UTS screen field could cause your application to malfunction.

The **FCC Generate** window displays the characteristics of the current (cursor position) FCC field by setting the appropriate option. For example, a hidden field will have the **Video Off** box checked. Both the compatible and expanded (newer) representation of the UTS FCC is displayed. See the Unisys manual, "Uniscope Protocol Reference", UP-10683 (current revision) for a complete definition of these parameters. In addition, your application (e.g., DPS) programming reference will typically provide information on the proper use of FCC field characteristics.



FCC Settings

The FCC Settings affect the character at the current, text cursor position and all characters up to the next FCC.

Video Off

This option is set if characters have no intensity. The cursor moves but characters do not appear on the screen. If this box is checked, the **Low Intensity**, **Reverse Video** and **Blink** options are disabled.

Low Intensity

This option is set if characters are to appear in half the intensity of normal characters.

Reverse Video

This option is set if the background and foreground are reversed. The foreground color (if any) becomes the background color and visa versa.

Blink

This option is set if the characters are to blink.

Tab Stop

This option is set if the character is a tab stop position.

Emphasis Protect

This option is set if the character is a special emphasis character (column separator, underscore, strikethrough or a character from a loadable character set) and is protected.

Data Protected

This option is set if the characters are protected from data entry by the user. If this box is checked, **Right Justify** and **Data Entry** controls are disabled.

Right Justify

This option is set if the characters are to be entered from the right side of the field and shifted left as each character is entered.

Data Entry

These mutually exclusive option buttons are set if the data being entered is **Any** character, **Alpha** only or **Numeric** only.

OK

Click this button to accept any changes made in this window and close the window.

Cancel

Click this button to discard any changes made and close the window.

Help

Receive on help for this window.

UTS eXpress IT Graphics Viewer

This dialog is displayed by pressing the F1 key from a MAPPER results RID containing graphics primitives received from the host or when the UTS eXpress IT Graphics Viewer is run stand-alone from the icon.

File menu

Open Graphics Script...

Use this selection to open a file (.grs) containing previously saved graphics primitives.

Save as...

Use the selection to save the graphics primitives to a file.

Copy to Clipboard as BMP

Use this selection to copy the chart to the Windows clipboard as a bitmap (.bmp).

Print…

Use this selection to initiate the Windows **Print** dialog for printing.

Close

Use this option to close the dialog.

Options menu

Maintain Aspect Ratio

Check this selection to maintain the height and width of the graph in such a manner that they stay in proportion to one another, regardless of how the Graphics Viewer window is resized.

View Graphics Commands

Use this selection to initiate the **Graphics Command Viewer** dialog where the graphics commands that were used to produce the chart may be viewed and/or printed.

Redraw

Use this selection to redraw the chart.

Window menu

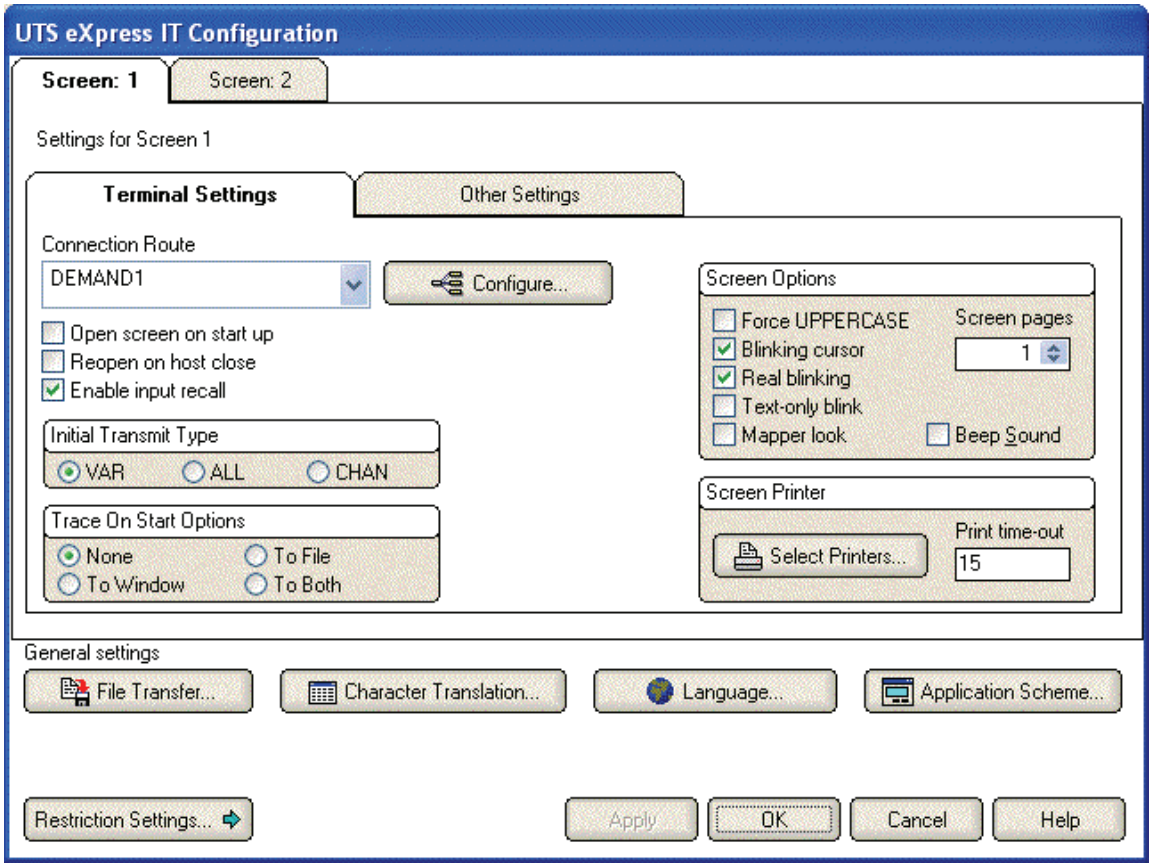
Show Screen Window

Use this selection to switch back to the original screen window used to initiate the chart.

Configuration

UTS eXpress IT Configuration

The **UTS eXpress IT Configuration** dialog contains configuration options that assign the communication route to be used when the screen is opened. The dialog is also used to assign printers to screens and set general screen appearance options. Each screen may also have its own tool bar, keyboard and script menu assigned. In addition, a sign-on script may be assigned to each screen to facilitate connecting to the host.



Screen tabs

Select the screen tab you wish to configure. If you need more than two (2) screens, please visit the KMSystems web site (www.kmsys.com) and look for our UTS eXpress Plus product that allows up to 24 screens.

Terminal Settings tab

The controls in this group link a screen to a particular route and set screen options. .

Connection Route

From this drop-down list box, select a configured route to be used when the screen is opened. If additional routes are required, use the **Configure** button on any screen tab.

Open Screen on Start Up

Check this box to connect automatically to the route when UTS eXpress IT is first started.

Reopen on Host Close

Check this box to automatically attempt to re-establish the session whenever it has been closed by the host.

Enable Input Recall

Check this box to maintain a list of recent input for the opened screen. This feature is enabled by default.

Initial Transmit Type

UTS emulation provides three modes of transferring data from the terminal screen to the host processor: **VAR (Variable)**, **ALL**, and **CHAN (Changed)**. The current transmission mode is set in the XMIT() field in the terminal control page. Most host programs expect the terminal to be operated in the VAR transmit mode. If your application requires an initial mode other than VAR, set it here and UTS eXpress IT will initialize the XMIT() field with that value.

Trace on Start Options

The controls in this group determine what trace activity is to take place, if any, when the screen is first opened.

None

When this option is set, no tracing activity will take place.

To Window

When this option is chosen, a separate trace window will open to display the trace.

To File

This option will cause the **Emulator TraceFile** dialog to open when the screen is opened. In this dialog, enter the text file name for the trace file. The trace file is normally stored in C:\Documents and Settings\<*username*>\Local Settings\Temp directory and will have a .txt extension..

To Both

Select this option to trace to a window and file.

Screen Options

The controls on this tab govern general screen appearance.

Force UPPERCASE Only

Checking this box causes UTS eXpress IT to translate lower case characters that are typed to their uppercase equivalents.

Blinking Cursor

Checking this box causes the current cursor position to blink. If this box is not ch the cursor remains solid.

Real Blinking

Uncheck this box to suppress blinking of the UTS blinking character. The blinking character is used in some applications to designate special conditions. For example, in IPF, the blinking character at the end of a display line signifies that there is additional information beyond the blinking character that cannot be displayed. The blinking default is blinking.

Text-only Blink

Check this box to blink only the text of the UTS blinking character instead of the text and background. The **Real Blinking** checkbox must be checked for this option to work.

Mapper Look

Check this box to set UTS eXpress IT for "Mapper Look and Feel" processing. With **Mapper Look** checked, four of the display characteristics of UTS eXpress IT change:

1) If a line contains an ASCII Tab Code in the first column, that line is considered a "Tab Line". Tab codes are displayed using the graphic vertical bar (|) that produces a visual column separator for your report.

2) The only control characters displayed will be the Start-of-Entry (SOE), the standard Tab Code, and the Mapper Tab Code. Characters such as Form-Feed and Line-Feed are displayed as spaces.

3) A protected field (function key name on the last row of the Mapper screen) can be transmitted by clicking with the mouse. This is compatible with the function key lines produced by Mapper 2200 level 35.

4) UTS eXpress IT will also support special Mapper box drawing sequences sent from the host.

Note: When Mapper Look is used, the Mapper station must be configured as a terminal type of "PCE" with an option of "S" (Mapper Look and Feel), or as a terminal type of "6S".

Beep Sound

Checking this box turns audible message wait beep on. If this box is not checked, no audible sound will be heard.

Screen Pages

In this text box, you may specify from one (default) to nine screen pages for each UTS screen. In conjunction with the paging feature, the PAGE DOWN and PAGE UP UTS keys are mapped to the Page Down and Page Up keyboard keys, respectively.

Paging is most useful where only one screen is available. Paging provides the means to maintain multiple output screen pages for reference while running additional transactions.

WARNING: The host is completely unaware of the paging feature. Applications, especially DPS, often check the screen input for specific content; meaning the application, knowing that a certain screen was displayed, expects the returned data to come from that screen. Use of the Page Down and Page Up keys with this feature can leave the screen in a state not expected by the application.

Also, see Show_Inactive_Page.

Screen Printer

The button in this group allows a configured printer in the printer pool to be assigned to one of three printer DIDs for the screen.

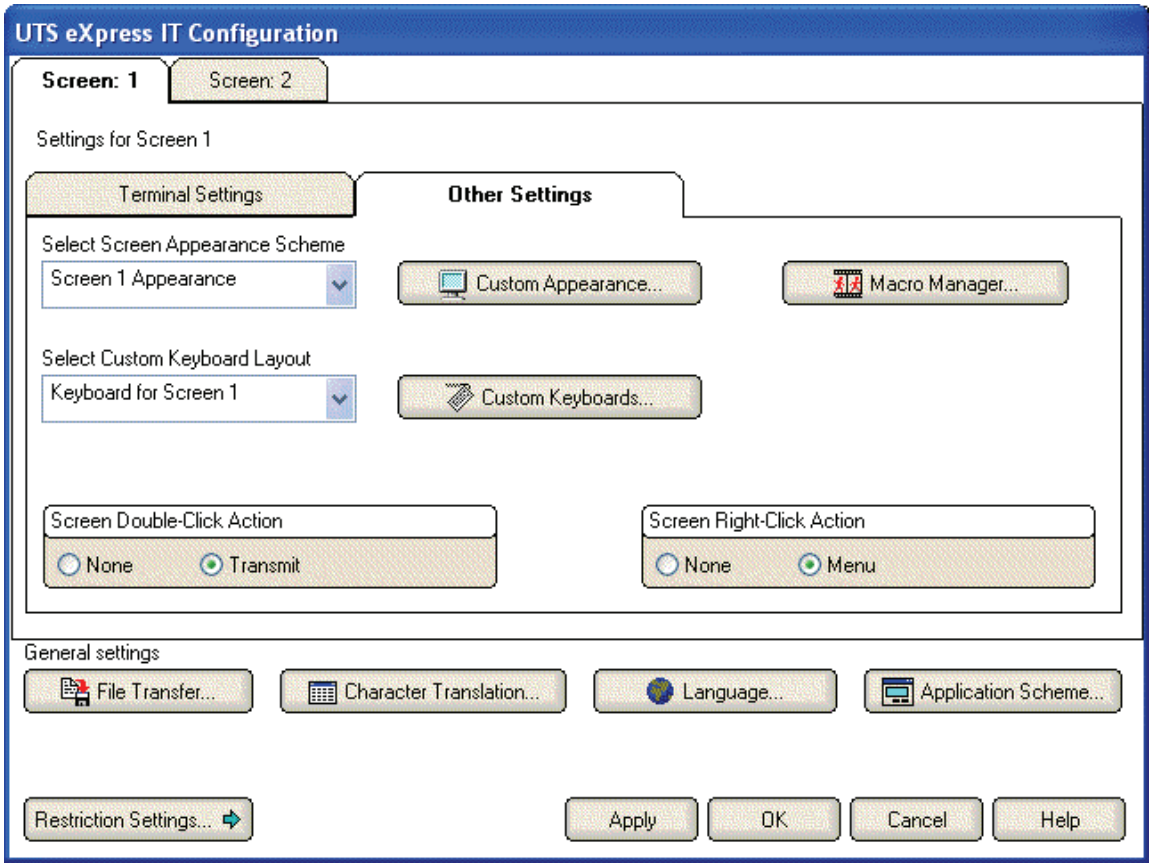
Select Printer(s)

Use this button to assign up to three printers for the screen.

Print Time-out

Use this text box to specify how long the emulator will wait for additional print data before automatically closing the printer. The default is 15 seconds.

-1 (or any negative value) = No timeout,
0 = Timeout immediately after printing,
n (any positive number) = Timeout *n* seconds after printing.



Other Settings tab

The controls on this tab may be used to customize the screen's appearance (color, font, scaling, etc.); configure keys and assign keyboards; and design and assign tool bars.

Select Screen Appearance Scheme

From this list, select a previously configured (see **Custom Appearance**, below) appearance scheme to be applied to this screen. Note: This selection only affects the appearance of the screen portion of the screen window. To alter the appearance of the entire UTS eXpress IT application, use the **Application Scheme** button at the bottom of the eXpress IT Configuration window (see below).

Custom Appearance

Click this button to open the Custom Terminal Screen Appearance window and configure an appearance scheme that may be applied to one or more screens.

Select Custom Keyboard Layout

From this list, select a previously configured (see **Custom Keyboards**, below) keyboard layout to be assigned to this screen.

Custom Keyboards

Click this button to open the Custom Keyboard Layouts window and configure a keyboard layout that may be assigned to one or more screens.

Macro Manager

Use this selection to open the Script Manager dialog. Use the Script Manager to create and maintain scripts and script menus.

Screen Double-Click Action

Select an option button from this group to define the action to be taken when you double click the mouse button on the emulator screen. The **None** option places the text cursor where the mouse cursor was double clicked. **Transmit** places the text cursor where the mouse cursor was double-clicked, but also transmits all information from the cursor position back to the previous SOE.

Screen Right-Click Action

Select an option button from this group to define the action to be taken when you right click the mouse button on the emulator screen. The **None** option disables any right mouse click action. **Menu** (the default) presents a popup menu of common selections.

File Transfer...

Press this button to configure default drive and path for file transfer.

Character Translation...

Press this button to select and edit character translation sets for specific countries.

Language...

Click this button to select a single-byte or multi-byte language character set.

Application Scheme

Click this button to change the appearance of eXpress application (see Application Color Scheme Preferences). Note: This will not affect the screen appearance. The screen appearance can be altered by clicking the **Custom Appearance** button on the **Appearance and Keyboard** tab (see, above).

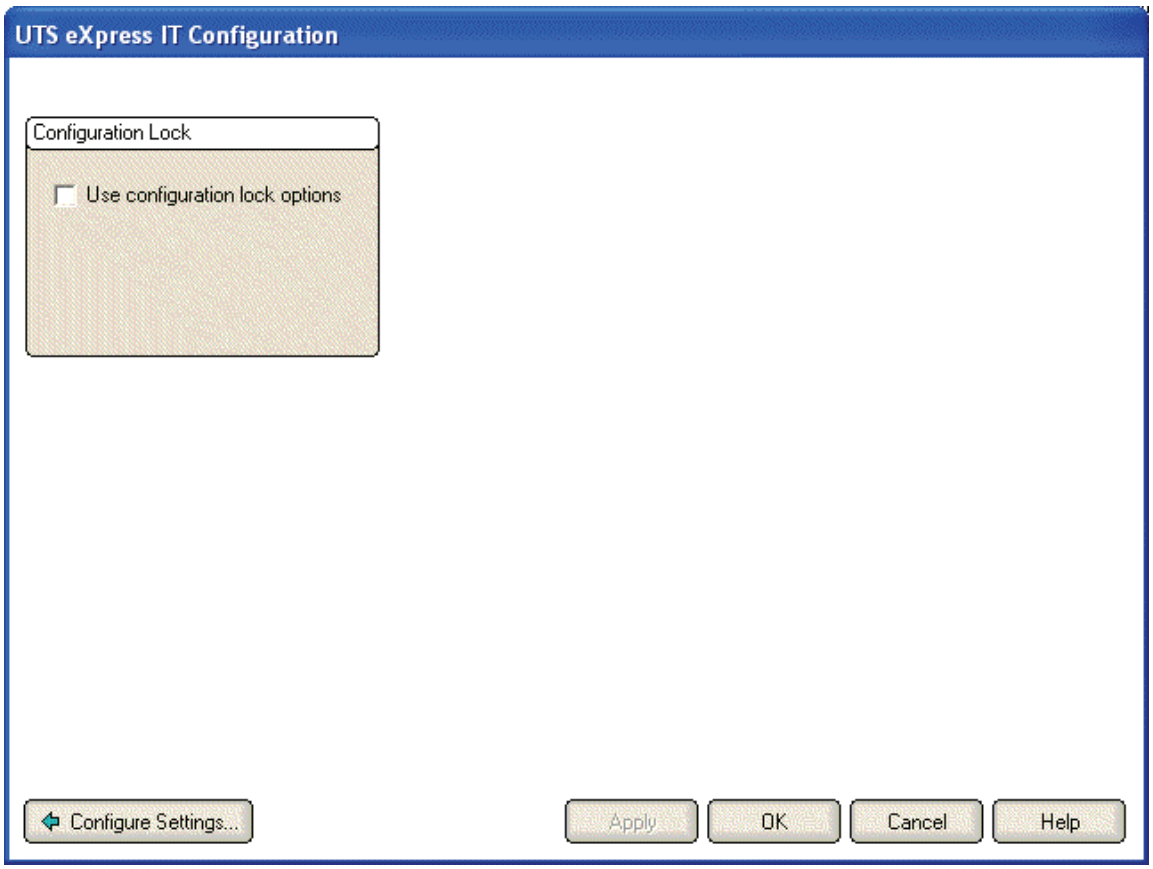
Restriction Settings/Configure Settings

Click this button to toggle to and from the restriction settings dialog.

Restriction Settings dialog

The restriction settings dialog on the **UTS eXpress IT Configuration** window contains configuration controls that may be used to enforce configuration security by assigning a configuration password.

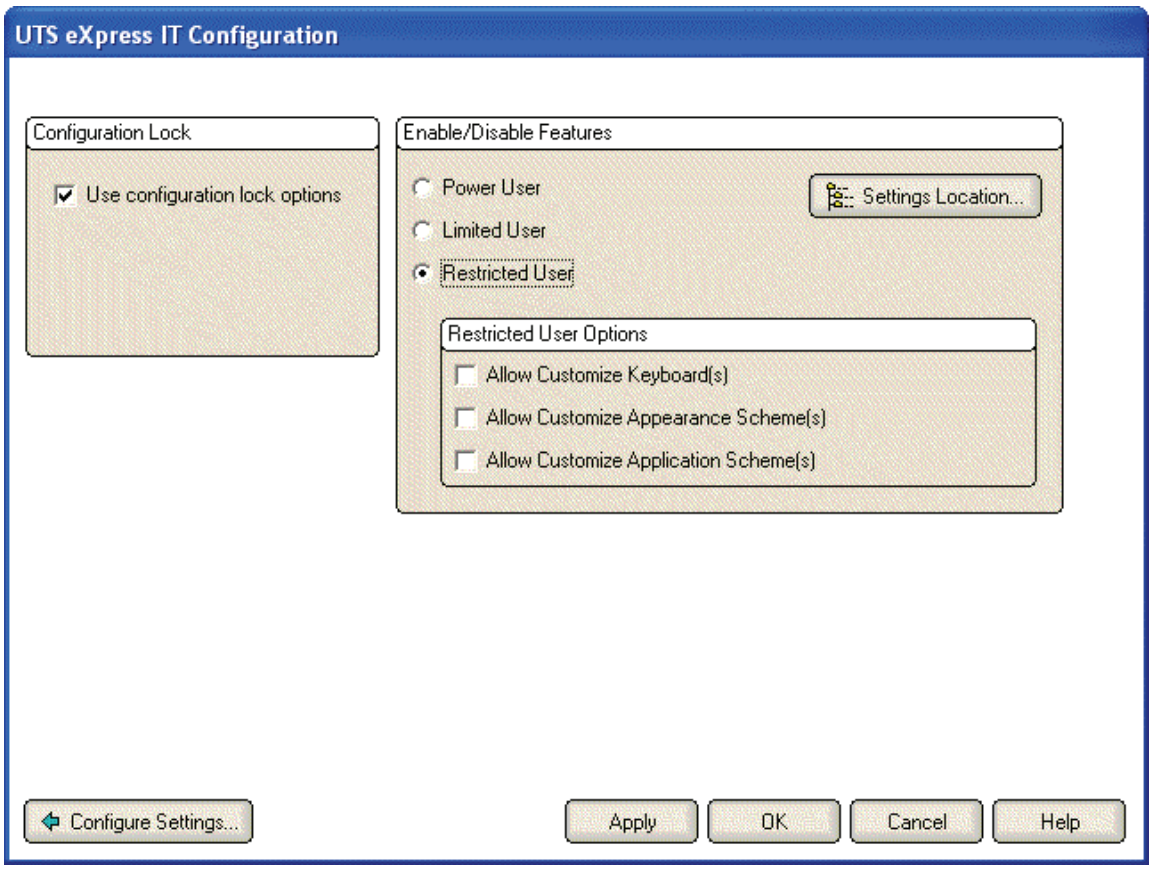
Once the password is assigned, all or selected configuration options may be disabled by checking the appropriate option. Subsequently, to enable an option, you must first unlock the configuration by providing the assigned password.



Use Configuration Lock Options

Check this box to initiate password protection on configuration options. Checking this box will cause the **Lock Config. Initial Password** dialog to be displayed. After entering and confirming the new password, additional security features will become visible (see below).

Note: For the configuration lock to take effect, both the configuration and the emulator must be exited and restarted.



With this level of eXpress, users may be restricted to one of three levels: the Power User, the Limited User and the Restricted User.

A Power User may configure all options including connections to the host, thus a Power User has no configuration restrictions.

A Limited User is only limited to configuring non-communications options.

A Restricted User may be denied any configuration capabilities or limited to only those involving application/screen appearance and keyboards.

eXpress User Capabilities at a Glance

	Allowed Capabilities					
User Level	**Configure Connections**	**Terminal and printer**	**Macro Development**	**Screen Appearance**	**Customize Keyboards**	**Application Scheme**
Power User	Yes	Yes	Yes	Yes	Yes	Yes
Limited User	No	Yes	Yes	Yes	Yes	Yes
Restricted User	No	No	No	Optional	Optional	Optional

Settings Location

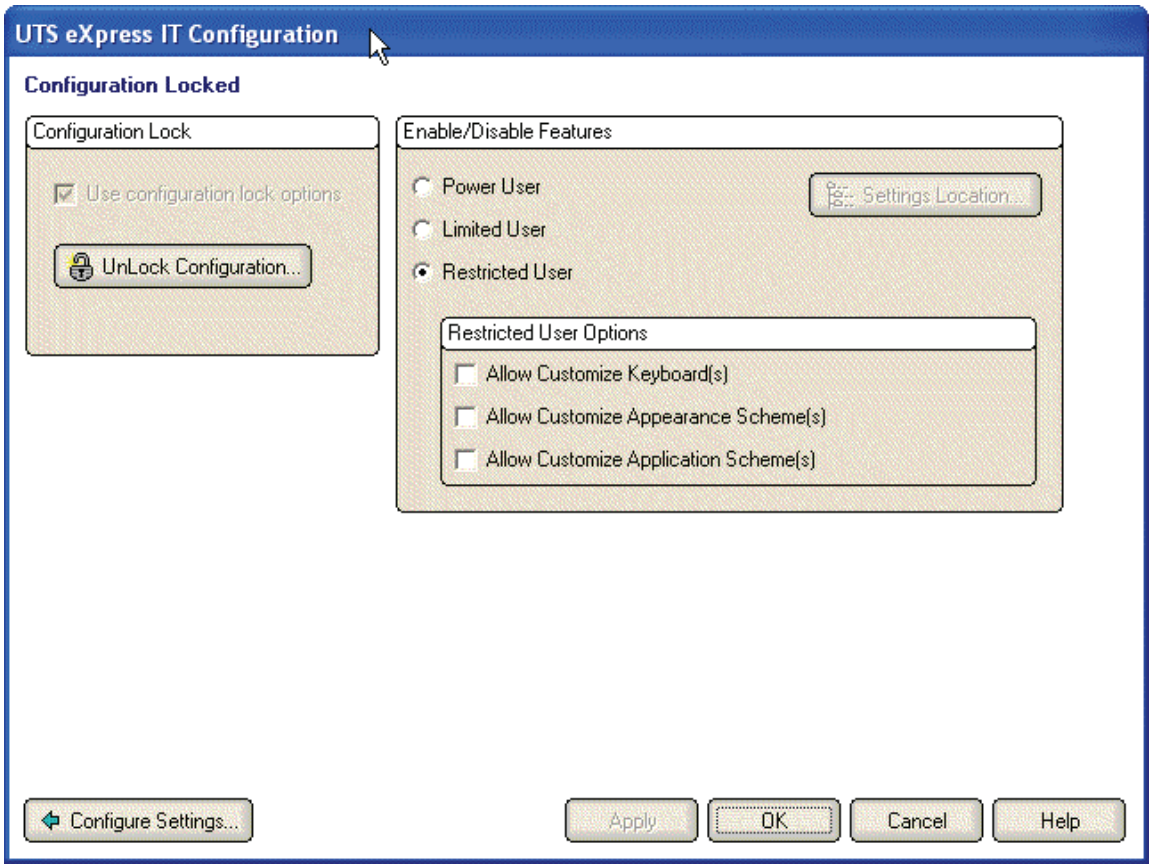
The purpose of this feature is to allow all users of a single machine (Windows system) to use the same configuration settings for UTS eXpress IT terminal emulator and/or eXpress Connect host connections. By default, all emulator settings are saved in files for the current user (C:\Documents and Settings\<<USER>>\Application Data\KMSystems\UTS_EXPRESS_IT_4.0\CONFIGURATION) which allows multiple users on the same machine to have their own individual settings.

In some cases, it may be desirable to have one set of configuration settings used by all users of the machine. One reason for common settings is so that the configuration settings can be done once for all users, instead of for each individual user; however, users should **NOT** be allowed to make configuration

changes once they are set. There should only be one allowed to maintain the configuration. If common configuration settings are desired, the emulator settings will be stored in common files (C:\Documents and Settings\All Users\Application Data\KMSystems\UTS_EXPRESS_IT_4.0\CONFIGURATION) and removed from current user.

The mechanism for creating common configuration settings in the UTS eXpress IT terminal emulator is accessed from this dialog of the **UTS eXpress IT Configuration** window. It is accessed from the **Edit** menu in the **eXpress Connect Visual Configuration** window. Both the emulator and eXpress Connect transport settings are made common or by user, independent of one another. For example, eXpress Connect transport settings may be made common, while emulator settings remain by user.

The **Settings Location** feature is only available when **Use configuration lock options** is checked. Again, individual users should **NOT** be allowed to changes settings when the configuration settings are common to all users of the same machine.



Unlock Configuration

This button may be used to display the **Unlock Config. Password** dialog where the proper password may be entered to enable the controls on the restrictions dialog. This button is only visible if the **Use Configuration Lock Options** check box has been set and a password entered.

Apply

Click this button to apply the settings immediately without exiting the configuration window. If you have entered the configuration window from the emulator, you will see any changes take effect in the emulator immediately.

OK

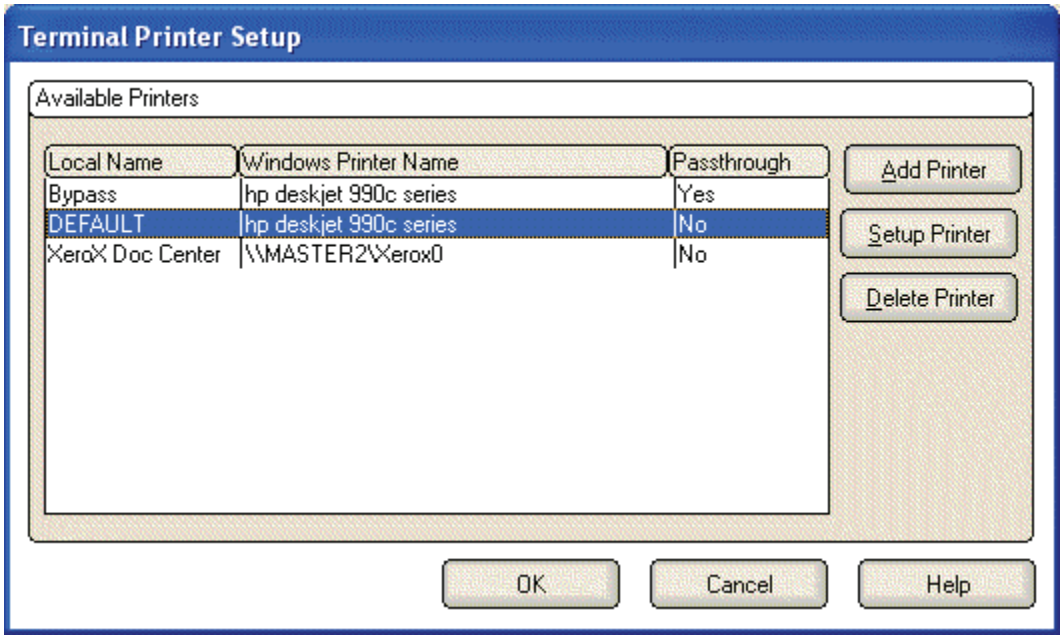
Click this button to accept any changes made in this window and close the window.

Cancel

Click this button to discard any changes made and close the window.

Terminal Printer Setup

Use the **Terminal Printer Setup** window to maintain local printer definitions. In UTS eXpress IT you can configure a pool of printers that can be used by UTS eXpress IT screens. Printers can be configured more than once (one for normal Windows printing, one using passthrough printing, one to use a different font, one to use a different page orientation, etc.). You then assign configured printers to each screen's printer DIDs as needed. If no printer is assigned, the Windows default printer will be used.



Add Printer

Use this button to add a new local printer name and definition. The name may be any meaningful name that uniquely identifies the local printer.

Setup Printer

After selecting an existing name from the **Available Terminal Printers** list box, use this button to edit the definition.

Delete Printer

After selecting an existing name from the **Available Terminal Printers** list box, use this button to delete the definition.

OK

Clicking the **OK** button saves all changes made in this window and closes the window.

Cancel

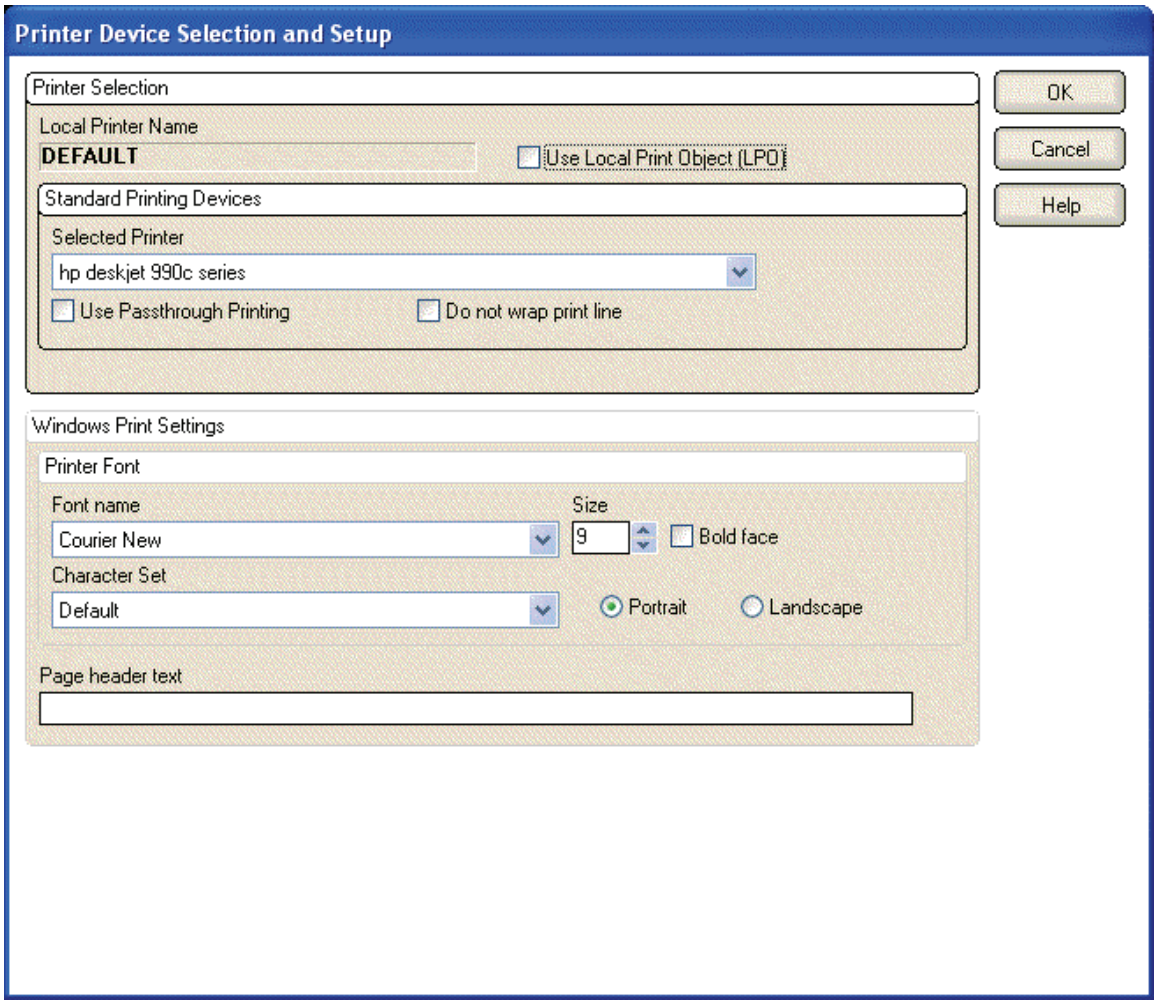
Clicking the **Cancel** button closes this window and discards all changes made since it was last opened.

Help

Receive on-line help for this window.

Printer Device Selection and Setup

The **Printer Device Selection and Setup** dialog contains controls to equate an installed printer on the PC to a local printer name, use of a local print object, set special UTS print characteristics such as passthrough printing or assign Windows print settings.



Printer Selection

Controls in this group are used to assign a printer or text file and optionally assign a local print object, specify passthrough printing and the print line wrap option.

Local Printer Name

The read-only box contains the name of the local printer.

Use Local Print Object (LPO)

Check this box to use a user-developed LPO to receive print data instead of standard UTS eXpress IT32 print handling. If this box is checked, the controls in the **Standard Printing** group will be replaced with those in the **Local Print Object** group.

See eXpress IT Local Print Objects for the list of methods that may be referenced in the LPO.

Standard Printing Devices

The controls in this group will be displayed when the **Use Local Print Object** check box remains unchecked.

Selected Printer

Select a printer from this drop-down list box. This box contains a list of all printers installed through Windows on your PC plus a selection (<text file>) for directing printing to a text file on your PC.

Use Passthrough Printing

Check this box if the local printer is to be used for passthrough printing (see Passthrough Print Settings, below).

Do Not Wrap Print Lines

Check this box if long print lines are to be truncated rather than wrapped to the next line. The number of characters that will be truncated or wrapped depends upon the font, font style and font size selected for the printer and the page width chosen.

Local Print Object

The controls in this group will be visible when the **Local Print Object** check box is checked.

Local Print Object Class Name

In this text box, enter the class name of the registered LPO or press the **Browse** button to search through all OLE Automation Servers registered with Windows.

User Option

In this text box, enter any required user options.

Windows Print Settings

The controls in this group are available for standard Windows printing (i.e., when the **Use Passthrough Printing** checkbox is not checked).

Printer Font

Use these controls to select the font, character set and orientation for standard windows printing.

Font Name

From this drop-down list box, select an installed font for printing.

Size

With this spin box, choose the appropriate font size.

Bold Face

Check this box if the print font is to be in boldface type.

Character Set

From this drop-down list box, select the desired character set.

Portrait

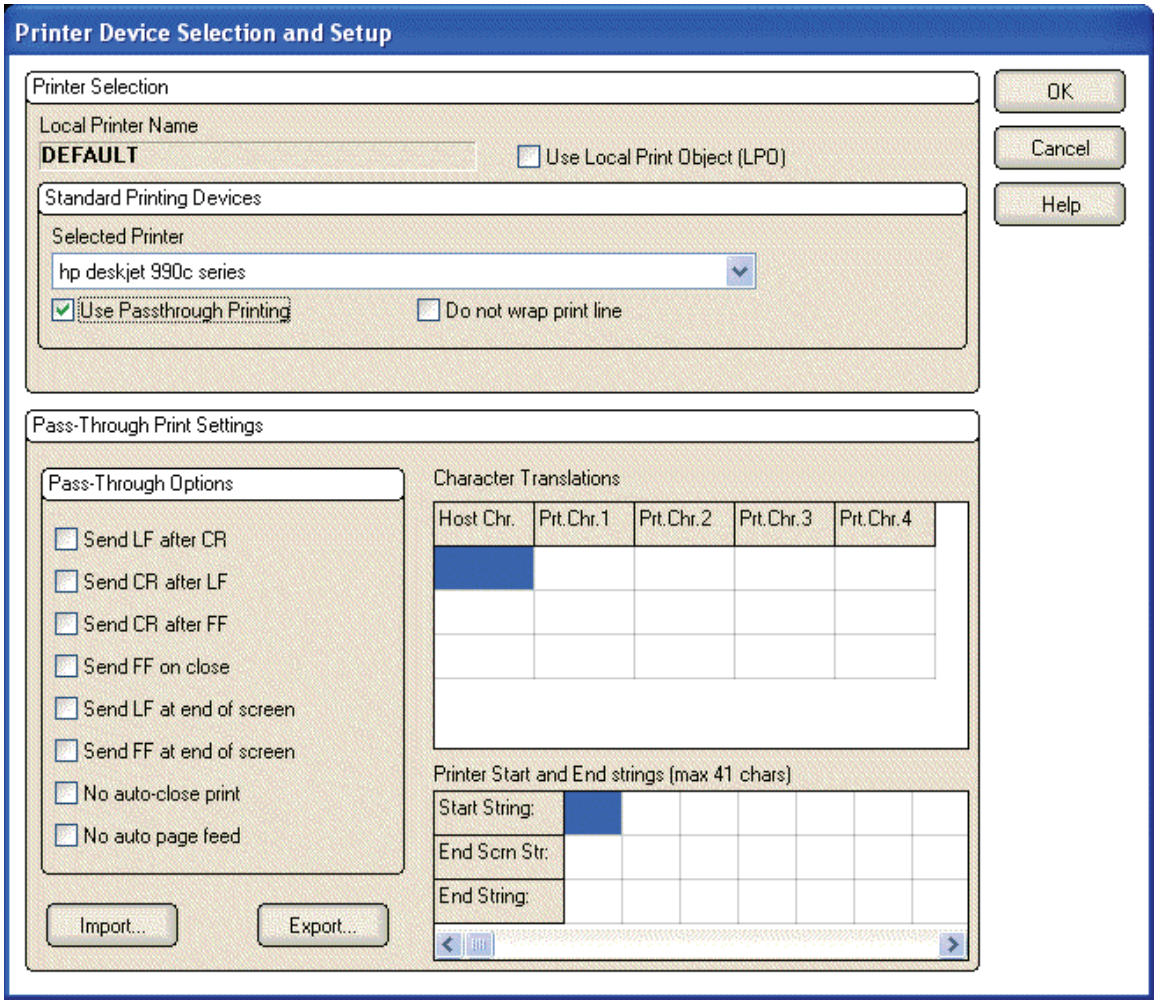
Choose this option to print so that the short edge is the top of the page.

Landscape

Choose this option to print so that the long edge is the top of the page.

Page Header Text

For normal printing (not passthrough), an option page header can be added. The heading line will only print if text is present.



Passthrough Print Settings

The controls in this group are only available when the **Use Passthrough Printing** checkbox is checked.

Passthrough printing prints directly to a printer and may be useful in situations where the page oriented nature of Windows print management conflicts with the non-page orientation of some older TIP applications.

Whenever possible, you should print using standard Windows print management (the default). Windows controls all page formatting based on property settings for a configured print driver on your PC. In this instance, the host application ***must not*** send any page control commands (i.e., form feeds) to the printer.

When you bypass Windows print management and print directly to a printer, the host application program must supply all page control. UTS eXpress IT simply passes all information directly through to a configured printer.

Pass-Through Print Options

The options in this group control special line and form advancement.

Send LF after CR

Check this box to tell UTS eXpress IT to use CR LF at the end of a line.

Send CR after LF

Check this box to tell UTS eXpress IT to use LF CR at the end of a line.

Send CR after FF

Check this box to tell UTS eXpress IT to use FF CR at the end of a line.

Send FF on Close

Check this box to tell UTS eXpress IT to insert a FF at the close of the print.

Send LF at End of Screen

Check this box to tell UTS eXpress IT to add an LF at the end of each screen.

Note: This box should not be checked when using MAPPER AUX because MAPPER includes an LF at the end of the screen (you would get one more line). **Send LF at End of Screen** is for transactions that do not put in an LF, thus causing the next screen's data to print starting at the end of the last line.

Send FF at End of Screen

Check this box to tell UTS eXpress IT to add a FF at the end of each screen.

Note: This will send a Form Feed at the end of each screen or block from the host. If the host message does not include an EOMI status, this action is not taken, allowing data from multiple screens to be printed without the form feed.

No Auto-close Print

Check this box to tell UTS eXpress IT to keep the print open at the end of a print operation.

No Auto Page Feed

Check this box to tell UTS eXpress IT not to perform a page eject after printing.

Character Translations

The entries in this table may be used to specify the ASCII characters that UTS eXpress IT is to substitute when receiving special ASCII characters from the host.

Host Char.

In this column, enter the decimal representation of the anticipated ASCII host character.

Print Char. 1 through Print Char. 4

In these columns, enter the decimal representation of the ASCII replacement character(s) to be sent to the printer.

Example of translating the tilde (~) to the Esc character:

Host	Print
Char	Char 1
126	27

Note: If additional rows are needed for translation, press the right mouse button over the table and select **Add Row** from the drop-down menu with the left mouse button. The new row will be inserted at the bottom of the table. The **Delete Row** item on the drop-down menu may be used to delete a selected row.

Printer Start and End Strings (max 41 chars)

The entries in this box can be used to provide special starting and ending strings to be sent to certain printer devices. Up to 41 characters may be supplied for each string.

Start String

In this row, enter the decimal representations of the ASCII characters to be sent to the printer as a beginning string.

End Scrn Str

In this row, enter the decimal representation of the ASCII characters to be sent to the printer as an ending string at the end of each screen (when no EOMI present). If the End Screen string is present, the Send LF at end of screen and Send FF at end of screen are ignored.

End String

In this row, enter the decimal representations of the ASCII characters to be sent to the printer as an ending string.

Import

Click this button to import an existing passthrough print settings file.

Export

Click this button to export the passthrough settings to a file.

OK

Clicking the **OK** button saves all changes made in this window and closes the window.

Cancel

Clicking the **Cancel** button closes this window and discards all changes made since it was last opened.

Help

Receive on-line help for this window.

eXpress IT Local Print Objects

Local Print Objects (LPOs) are user-written OLE Automation Servers used in place of standard UTS eXpress IT32 terminal print handling to provide custom printing capability. LPOs may be developed in any language that supports the development of OLE Automation Servers (e.g., C++, Delphi, etc.).

LPOs may be developed whenever it is necessary to interpret screen print data in a manner other than it is presented on the terminal screen or sent from the host program.

Local Print Object Interface Specifications

Local Print Objects must adhere to the following interface specifications:

LPO_Initialize

LPO_Initialize is called once just before the first call to LPO_Open. This method is provided to allow the LPO to perform any one-time initialization.

Format:

Function LPO_Initialize (*Options* as Integer) as Integer

Options is the contents of the User Options entry on the printer device setup configuration. The LPO developer defines the content and use of this parameter. The emulator does not use or modify it in any way.

The LPO_Initialize function must return the Window Handle of the LPO's main window if successful, or a zero if not successful. A Windows WM_Close message is posted to the LPO's main window using this handle when the UTS screen is closed. This action is done to close the LPO automatically when its client UTS screen is closed.

LPO_Open

LPO_Open is called whenever the emulator opens the printer.

Format:

Function LPO_Open (*ScreenRows* as Integer, *ScreenColumns* as Integer) as Integer

The emulator passes the screen size of the current screen in the *ScreenRows* and *ScreenColumns* parameters.

The return value must be a 1 or 0 indicating success or failure, respectively.

LPO_PrintData

LPO_PrintData is called whenever the emulator receives a screen print command. The command can come from the host or the keyboard.

Format:

Function LPO_PrintData (*ScreenData* as WideString, *ScreenAttributes* as WideString, *CursorRow* as Integer, *CursorColumn* as Integer, *Flags* as Integer

ScreenData and *ScreenAttributes* are passed as WideStrings, but are used as arrays of word (unsigned 16-bit integers).

The *ScreenData* array contains ALL characters in the screen. Double-byte characters are ORed with 100 hex for the lead byte and 200 hex for the trailing byte.

ScreenAttributes contains the attribute flags associated with the corresponding screen character. Attributes are defined as follows:

The *Flags* parameter indicates the type of terminal print function requested. For UTS eXpress IT *Flags* are defined as follows: 0 = Print, 1 = Print Form, 2 = Print Transparent, 4 = Print Screen All.

The return value must be a 1 or 0 indicating success or failure, respectively.

LPO_Close

LPO_Close is called whenever the emulator closed the current print operation.

Format:

Function LPO_Close as Integer

The return value must be a 1 or 0 indicating success or failure, respectively.

LPO_Show

The emulator does not currently call LPO_Show.

Format:

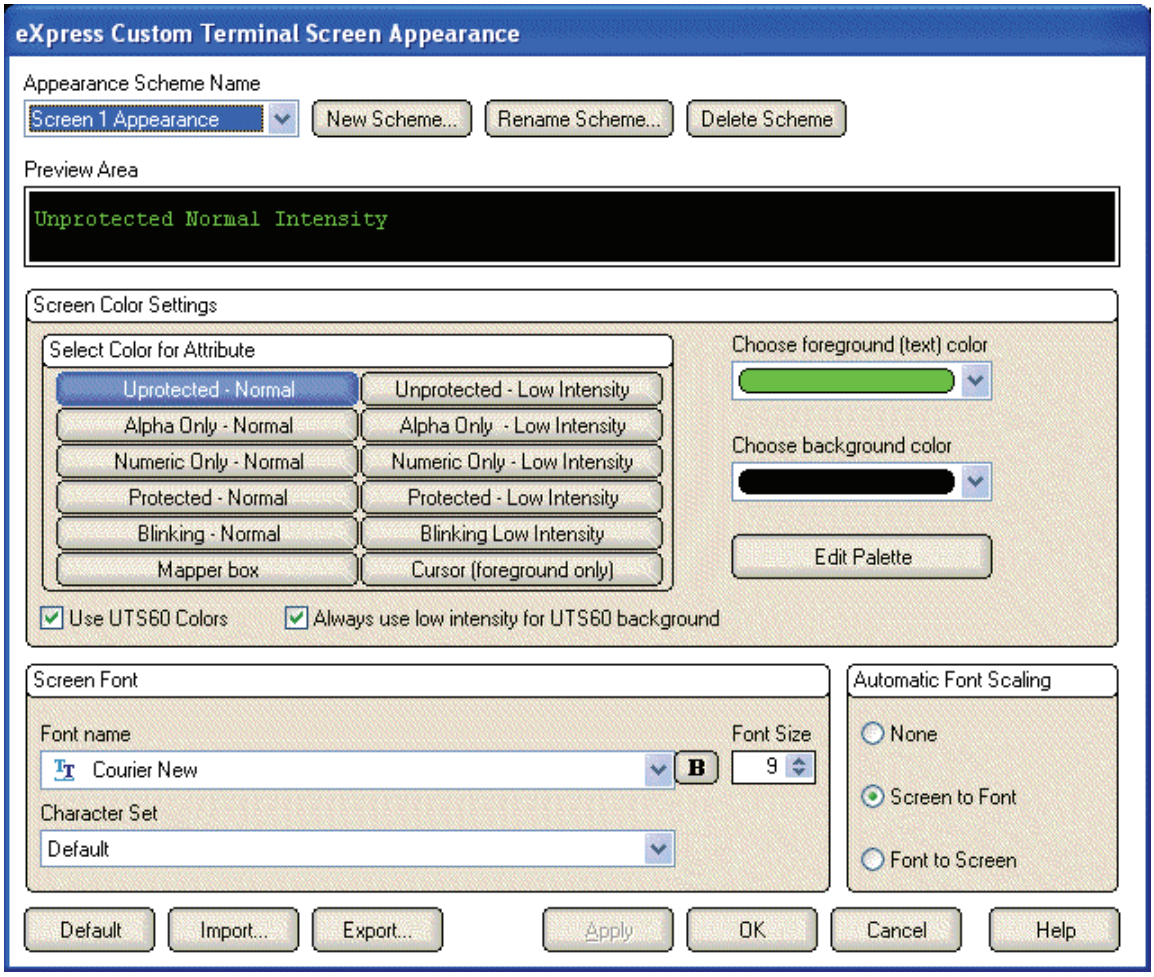
Function Show (*Options* as Integer) as Integer

The *Option* parameter is not yet defined.

The return value must be a 1 or 0 indicating success or failure, respectively.

eXpress Custom Terminal Screen Appearance

The **eXpress Custom Terminal Screen Appearance window** contains configuration controls to change screen fonts and to apply colors to specific areas of the display.



Appearance Scheme Name

From this drop-down list box, select the **Color Scheme Name** to be altered. Initially, one color scheme, **Default**, is delivered with UTS eXpress IT. From the **Default** color scheme, others may be created using the **Save As** button.

New Scheme

Use this button to create a new appearance scheme based on the UTS eXpress IT defaults. By this means, each screen can have its own appearance scheme or screens may share an appearance scheme. To attach an appearance scheme to a screen, see UTS eXpress IT Configuration.

Note: The scheme named "Default" may be changed but cannot be deleted. When a new scheme is created or an existing scheme **Set to Default** (see below), the default values are acquired from constants internal to UTS eXpress IT, not from the "Default" scheme mentioned here.

Rename Scheme

Click this button to rename an existing appearance scheme.

Delete Scheme

Click this button to remove the selected appearance scheme. Caution: Any screen attached to the deleted scheme will revert to the UTS eXpress IT default scheme.

Screen Color Settings

The **Screen Color Settings** group contains controls that may be used to change the foreground and background color of various UTS screen attributes.

Select Color for Attribute

From this group, select an attribute option button whose color is to be changed. When an attribute's colors are changed, those colors will be applied to all areas of the screen having that specific attribute. An attribute's colors consist of a foreground (text) color and a background color.

Choose Foreground (text) Color

To change the text color of an attribute, first select the attribute from the **Select Color for Attribute** option group. Next, select a color from this drop-down list box. If you do not wish to use one of the standard Windows colors, select **Custom** at the bottom of the list and configure the desired color with the standard Windows **Color** dialog.

Choose Background Color

To change the background color of an attribute, first select the attribute from the **Select Color for Attribute** option group. Next, select a color from this drop-down list box. If you do not wish to use one of the standard Windows colors, select **Custom** at the bottom of the list and configure the desired color with the standard Windows **Color** dialog.

Use UTS60 Colors

Check this box to use UTS60 colors as set by the host program. Only valid if the **Terminal Type** selected is UTS60 (select the **Terminal Settings** tab, press the **Configure** button and edit a route to change the terminal type).

Always Use Low Intensity for UTS60 Background

For better contrast, check this box to use low intensity color for UTS60 background color.

Screen Font

Use the controls in this group to change the screen font, intensity, size and character set.

Font Name

From this drop-down list box, choose the desired font.

Bold

Click this button toggle to increase or decrease the intensity of the selected font.

Font Size

Use this spin box to increase or decrease the size of the selected font.

Character Set

Use this drop-down list box to change the character set.

Automatic Font Scaling

These three options control how the emulator will behave when you size a station window or change the screen font.

None

When the **None** option is set, no screen or font scaling will be performed when the screen window is resized.

Screen to Font

The **Screen to Font** option causes the screen window size to be changed automatically when the screen font size is changed. Consequently, the station window size may be changed without altering the size of the font. If the size of the window is made larger than that necessary to accommodate the screen size, a dotted line will show the physical limits of the screen. If the window size is reduced below the physical screen size, scroll bars appear allowing access to those parts of the screen not currently visible.

Font to Screen

The **Font to Screen** option causes the font size to change automatically whenever the window size of the station is altered. For example, if a window is enlarged or made smaller, the font

will increase or decrease in size, accordingly. The **Font to Screen** option will only work when using a scalable font (e.g., Courier New, Lucida Sans Typewriter, etc.).

Default

Use this button to change the selected color scheme to the UTS eXpress IT defaults.

Import

Click this button to import an existing appearance settings file.

Export

Click this button to export the appearance settings to a file.

Apply

Apply the settings immediately without exiting the configuration window. If you have entered the configuration window from the emulator, you will see any changes take effect in the emulator immediately.

OK

Click this button to accept any changes made in this window and close the window.

Cancel

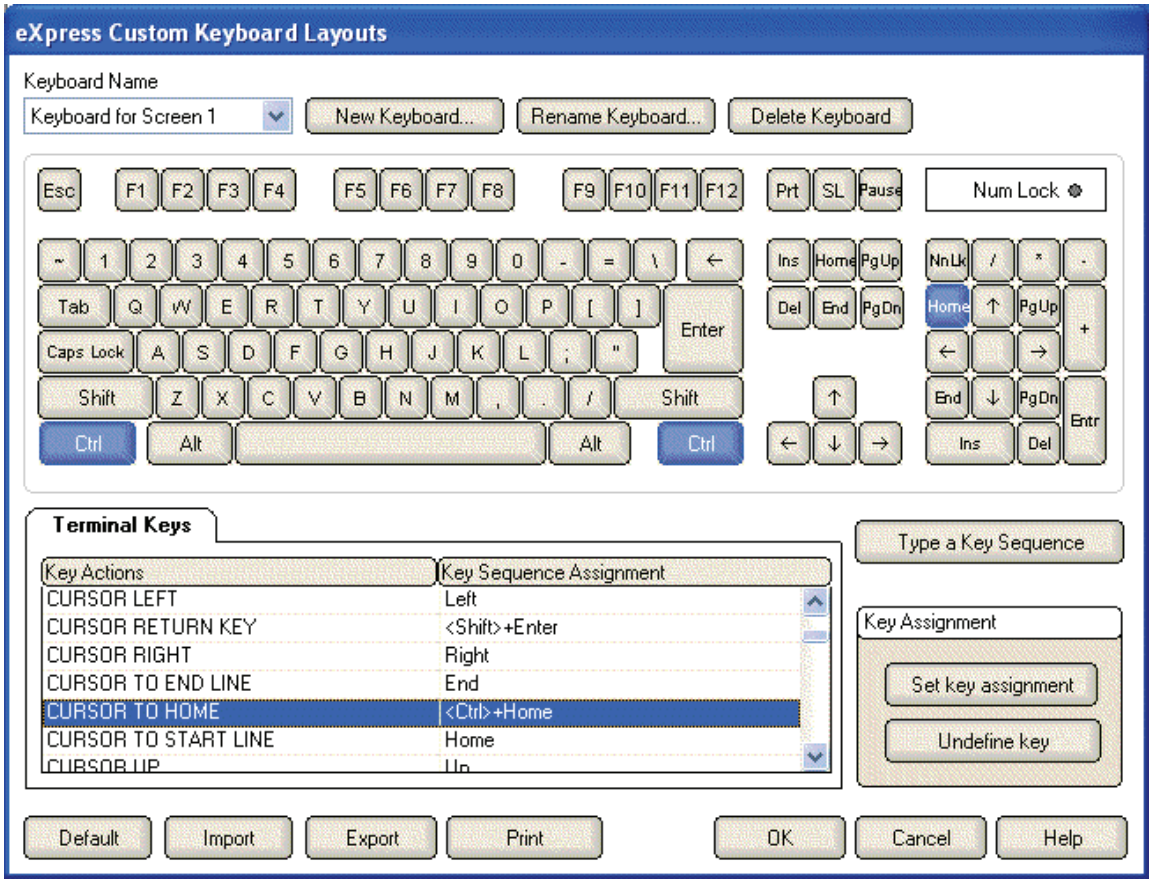
Click this button to discard any changes made and close the window.

Help

Receive on-line help for this window.

eXpress Custom Keyboard Layouts

This window is used to define which Windows keyboard key or key combination will be used to initiate a UTS terminal or UTS eXpress IT emulation specific action or execute an eXpress IT script. Use this window to customize the keyboard to meet your specific needs.



New Keyboard

Click this button to name a new keyboard layout.

Rename Keyboard

Click this button to rename an existing keyboard layout.

Delete Keyboard

Click this button to delete the selected keyboard layout.

Graphic Keyboard

The graphic keyboard display illustrates the configured key or key combinations associated with a terminal key. Note: The location and arrangement of the keys on the graphic keyboard may not match the exact layout of your keyboard; however, most keys on your keyboard should have its corresponding key represented on the graphic keyboard. After selecting a key name from the **Key Actions and Key Sequence Assignment** list, the configured key or key combinations will appear as if they have been pressed. You may change (redefine) or add additional key combinations by pressing the key(s) on the graphic keyboard with a left mouse click. Valid key combinations are any single key, or a single key plus a combination of one or more of the optional, **Shift**, **Alt** and **Ctrl** keys. When the desired key combinations have been selected, press the **Set Key Assignment** button to assign the key.

Note: Pressing the **Num Lock** key on the ***actual*** keyboard will cause the **Num Lock** display on the graphic keyboard to toggle (ON/OFF) and the captions on the faces of the numeric keypad keys to change accordingly.

The extended keys (see below) are not mapped to any key in the **Key Actions** list for the default keyboard layout file. They may, however, be mapped by the user to any key or script in the **Key Actions** list. If they are ***not*** mapped, their behavior will be the same as their counterparts on the numeric keypad and main keyboard.

For enhanced 101- and 102-key keyboards, extended keys are the **Ins**, **Del**, **Home**, **End**, **Page Up**, **Page Down** and arrow keys in the clusters to the left of the numeric keypad; and the divide (**/**) and **Enter** keys in the numeric keypad. The location and arrangement of extended keys may vary from one keyboard to another and may not match the graphic keyboard display.

Key Actions

This list box contains the names of all keys and scripts used to control UTS terminal activities or activities specific to UTS eXpress IT terminal emulation. These keys can be mapped to keys pressed on the graphic keyboard or via the **Type a Key Sequence** button.

Type a Key Sequence

If this button is clicked, a **Type a Key Sequence** window will pop up. In this window, you may type the key sequence you desire to map to the currently selected name in the **Key Actions** list. On your acceptance of the typed key sequence, the key will automatically be mapped.

Set Key Assignment

This button sets the mapping of the currently selected **Key Action** to the selected graphic keyboard keys.

Undefine Key

This button is used to remove the mapping of a key. You may remove a mapped key by first selecting the key in the **Key Actions** list followed by a click of this button.

Default

This button loads the default keyboard layout as distributed by KMSystems, Inc.

Import

Use this button to import an existing keyboard definition file (.KEY).

Export

Use this button to save the current keyboard layout to a file.

Print

Click this button to print a list of all key actions and key action assignments. Note: The list will include any key sequences assigned to scripts.

OK

Clicking the **OK** button saves all changes made in this window and closes the window.

Cancel

Clicking the **Cancel** button closes this window and discards all changes made since it was last opened.

How to Map or Re-Map a UTS Terminal or a UTS eXpress IT Key

The following describes the procedure for re-mapping UTS terminal or UTS eXpress IT keys:

1) Select the key to be re-mapped from the **Key Actions** list box.
2) There are two methods of defining which key or key combination to map to the selected name in the Terminal Keyboard Key Names list:
   a) Click the **Type Key Sequence** button, then type the desired key sequence directly on your keyboard. When you accept the key sequence, the key mapping will automatically be set.
   b) Select the desired key from the graphic keyboard using a left mouse click over the face of the key. Next, select the desired **Shift**, **Alt** and **Ctrl** keys, if any, by clicking them with the mouse. Finally, to set the keys selected, click the **Set Key Assignment** button.

These steps may be repeated until all desired key mappings are completed.

Conflicts

If a selected key sequence is already mapped to another key, a message box will appear naming the mapped **Key Actions**. You may then re-map or "undefine" the **Key Actions** in conflict or choose a different key sequence.

If you map a **Key Actions** that already has a key sequence assigned to it, a window will appear allowing you to **Add** an alternate key sequence, **Redefine** (replace) the existing key sequence with the new key sequence or **Cancel** the key assignment operation altogether.

Add or Redefine Key

The **Add or Redefine Key** window appears when a conflict is discovered while attempting to assign a keystroke or keystroke combination to a keyboard function.

Help

Click this button to receive on help for this window.

Add

Click this button to add an alternate key sequence. This choice is useful when you want more than one keyboard key to perform the same function (e.g., the two **Enter** keys).

Redefine

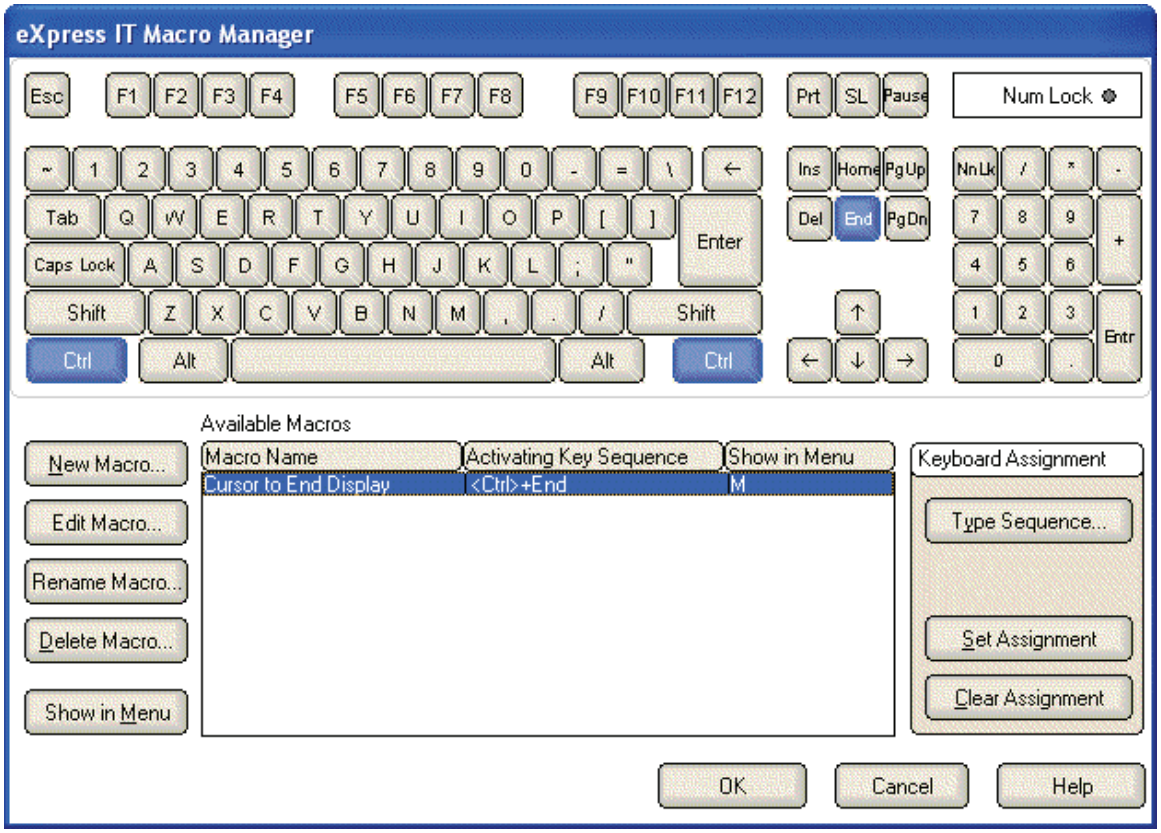
Redefine or replace the existing key sequence.

Cancel

Clicking the **Cancel** button closes this window without assigning the key.

eXpress IT Macro Manager

This tab is used to maintain key macros. Key macros may consist of any UTS key function, standard Windows cut/copy/paste, text strings, text strings with user prompts, timed waits and conditional waits for strings. Macros may be created initially within the macro editor or with the macro recorder from any open screen.



Graphic Keyboard

The graphic keyboard display illustrates the configured key or key combinations assigned to activate a macro. Note: The location and arrangement of the keys on the graphic keyboard may not match the exact layout of your keyboard; however, most keys on your keyboard should have its corresponding key represented on the graphic keyboard. After selecting a macro name from the **Available Macros** list, the configured key or key combinations will appear as if they have been pressed (light gray). You may change (redefine) or add additional key combinations by pressing the key(s) on the graphic keyboard with a left mouse click. Valid key combinations are any single key plus one or more of the optional, **Shift**, **Alt** and **Ctrl** keys. When the desired key combinations have been selected, press the **Set Assignment** button to assign the key.

Note: Pressing the **Num Lock** key on the ***actual*** keyboard will cause the **Num Lock** display on the graphic keyboard to toggle (ON/OFF) and the captions on the faces of the numeric keypad keys to change accordingly.

For enhanced 101- and 102-key keyboards, extended keys are the **Ins**, **Del**, **Home**, **End**, **Page Up**, **Page Down** and arrow keys in the clusters to the left of the numeric keypad; and the divide (**/**) and **Enter** keys in the numeric keypad. The location and arrangement of extended keys may vary from one keyboard to another and may not match the graphic keyboard display.

The extended keys may be mapped to any macro in the **Available Macros** list. If they are ***not*** mapped, their behavior will be the same as their counterparts on the numeric keypad and main keyboard.

Available Macros

This list box contains the names of all configured key macros. Each macro can have an activation key(s) assigned by pressing the keys on the graphic keyboard, followed by the **Set Assignment** button, or via the **Type Sequence** button.

New Macro

Click this button to create a new macro. Hint: You can easily create a new macro by using the macro recorder on the UTS eXpress IT emulator window. See the **Start Recorder** selection on the **Macros** menu.

Edit Macro

After selecting a macro from the **Available Macros** list, click this button to edit or view the macro with the **Edit Macro** dialog.

Delete Macro

After selecting a macro from the **Available Macros** list, click this button to delete the macro.

Show in Menu

Use this button to toggle between placing the selected macro on the **Macros** menu and removing it from view.

Type Sequence

If this button is clicked, a **Type a Key Sequence** window will pop up. In this window, you may type the key sequence you desire to map to the currently selected name in the **Available Macros** list. On your acceptance of the typed key sequence, the key will automatically be mapped.

Set Assignment

This button sets the mapping of the currently selected **Available Macros** to the selected graphic keyboard keys.

Clear Assignment

This button is used to remove a key mapping. You may remove a mapped key by first selecting the key in the **Available Macros** list followed by a click of this button.

How to Assign a Macro Activation Key

The following describes the procedure for assigning macro activation keys:

1) Select the key to be remapped from the **Available Macros** list box.
2) There are two methods of defining which key or key combination to map to the selected name in the **Available Macros** list:
   a) Click the **Type Sequence** button, then type the desired key sequence directly on your keyboard. When you accept the key sequence, the key mapping will automatically be set.
   b) Select the desired key from the graphic keyboard using a left mouse click over the face of the key. Next, select the desired **Shift**, **Alt** and **Ctrl** keys, if any, by clicking them with the mouse. Finally, to set the keys selected, click the **Set Assignment** button.

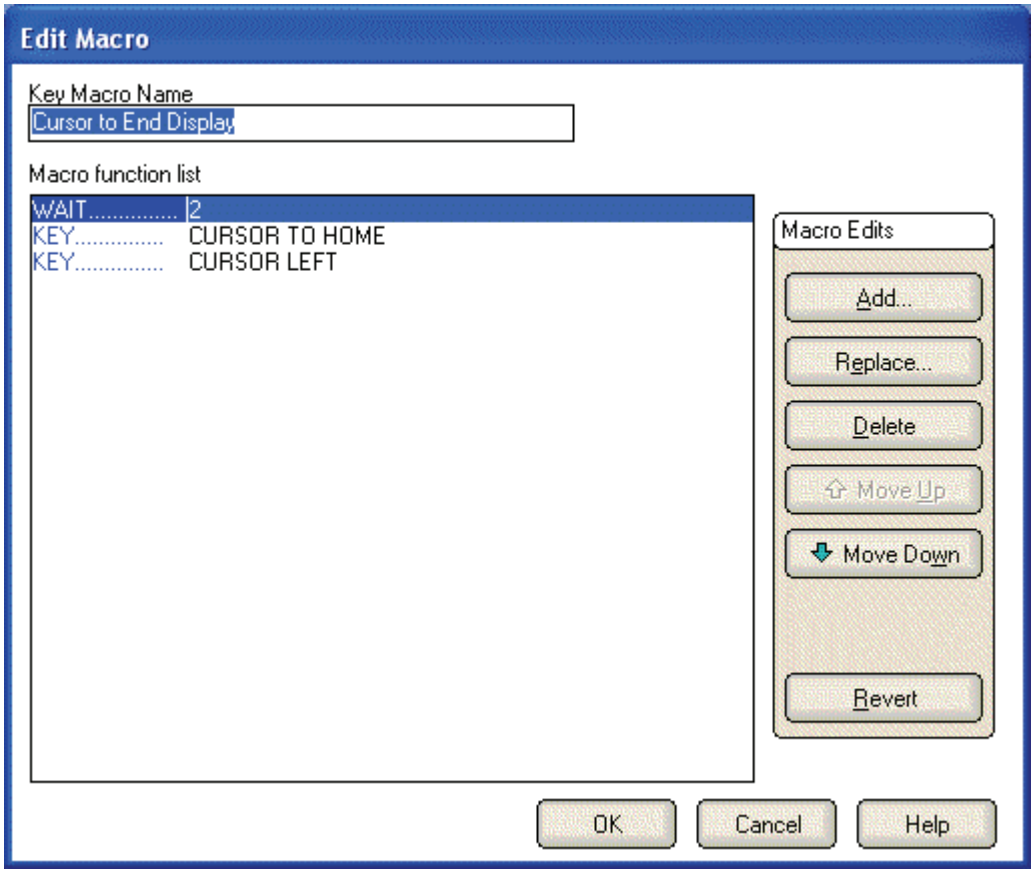
These steps may be repeated until all desired activation keys have been assigned.

Conflicts

If a selected key sequence is already mapped to another key (macro activation key or terminal function), a message box will appear naming the mapped macro or terminal function. You may then re-map or remove the **Available Macros** in conflict or choose a different key sequence.

Edit Macro

The **Edit Macro** window is used to create and edit a string of successive keystrokes, waits and conditions that can comprise a macro.



Key Macro Name

In this text box, enter the name of the macro as it will appear on the **Macros** menu or macro bar.

Macro Function List

This list box contains a serial list of keystrokes, timed waits, prompts and wait conditions that can be included in a key macro. Select from this list when replacing, deleting or moving a function in the list.

Add

Click this button to reveal a drop-down menu containing six different types of functions that may be included in the macro.

Terminal Key Function

Make this selection to bring up the Select Terminal Key Function window where a single UTS or UTS eXpress IT terminal keystroke (e.g., SOE, XMIT, CLIPBOARD_COPY, etc.) may be selected.

Text String

Make this selection to initiate the Text String dialog used to enter a string of text in the macro.

Text String Prompt

Use this selection to place a user prompt dialog in the macro. The selection displays the Edit Prompt for Text window where a user prompt string may be entered. When the macro is run, the dialog will be displayed with the user prompt, querying the user to enter a text string.

Cursor Position

Use this selection to place the cursor at a particular row and column. This selection displays the Position Cursor dialog where the row and column may be entered.

Timed Wait

Make this selection to specify that the macro should wait for a period of time. The selection displays the Timed Wait window where the pause time is specified in seconds.

Wait for String

Select this item to insert a conditional wait in the macro. The ensuing Wait for String dialog allows you to specify a search string, the location of the search string on the screen, an equal or not equal operator and a timed wait value.

Replace

After selecting a function from the **Macro Function List** box, click this button to replace the function with a different function, or edit the selected function. This button drops down the same selection menu as described for the **Add** button (see above).

Delete

After selecting a function from the **Macro Function List** box, click this button to delete the function from the macro.

Move Up

Press this button to move the selected function up in the macro.

Move Down

Press this button to move the selected function down in the macro.

Revert

Clicking this button will revert any changes to the macro since the dialog was opened.

OK

Click this button to accept the changes to the macro and close the window.

Cancel

Click this button to discard any changes and close the window.

Edit Prompt for Text

This window allows a user prompt to be entered and placed in the macro.

Enter User Prompt

In this text box, enter the prompt to be displayed when the user is asked to enter a text string.

Password Entry

Check this box to password protect the text entered by the user. Password protection causes asterisks (*) to be displayed in the text box as the user enters the text string.

OK

Click this button to accept the entries and close the window.

Cancel

Click this button to discard the entries and close the window.

Position Cursor

This window allows you to position the cursor to a location on the screen.

Column

In this text box, enter the column to place the cursor.

Row

In this text box, enter the row to place the cursor.

OK

Click this button to accept the entries and close the window.

Cancel

Click this button to discard the entries and close the window.

Select Terminal Key Function

This window allows the entry of single UTS terminal key or UTS eXpress IT key functions into the script.

Type List Search String

In this text box, enter a partial or full terminal key function name. Type only enough of the name to highlight the desired key function in the key function list box below this list box.

OK

Click this button to select the highlighted key function.

Cancel

Click this button to cancel the selection process.

Text String

This window allows the macro developer to enter a string of text in the macro.

Enter a Text String

In this text box enter the text string. The string of text will be inserted at the current cursor position on the screen.

OK

Click this button to accept the text entry and close the window.

Cancel

Click this button to discard the entry and close the window.

Timed Wait

This window allows the entry of a pause in the execution of the macro. The timed wait is useful when communications is slow and a large amount of processing from the host occurs before returning control to the terminal screen.

Enter Wait Time in Seconds

In this text box, enter the number of seconds the macro is to wait before resuming processing of the next macro function.

OK

Click this button to accept the entry and close the window.

Cancel

Click this button to discard the entry and close the window.

Wait for String

This window allows a conditional wait to be placed in the macro. The macro will wait for the presence or absence of a string returned from the host.

String Value

In this text box, enter the string to look for on the screen. The value entered is case insensitive.

String Location

This group allows the location on the screen of the anticipated text string.

When choosing the location on the screen to test for a string, you should be aware of the sequence of events that occurs, before the macro gets control to do the testing. For example, in DEMAND mode, most output received from the host is painted on the next to last line of the terminal display. Before control is returned to the macro, a CURSOR TO HOME and DELETE LINE is issued, thus moving the output to two lines from the bottom of the display. Thus, on a 24-line display, testing should be performed on row 22, not row 23.

Row

In this text box, specify the row where the beginning of the string is expected.

Relative to Current Row

If this box is checked, the value entered in the **Row** text box is relative to the current row of the cursor.

Column

In this text box, specify the column where the beginning of the string is expected.

Relative to Current Column

If this box is checked, the value entered in the **Column** text box is relative to the current column of the cursor.

Any position in Entire Screen

Check this box to look for the string beginning at any position on the screen.

Wait for String To Be

This option group is used to specify if the condition checked for is true or false.

Equal =

Select this option to check for an equal condition.

Not Equal <>

Select this option to check for a not equal condition.

Wait Time (seconds)

In this text box, enter the number of seconds to wait before failing the test. In other words, this is the interval of time to wait for the presence (=) or absence (<>) of the anticipated string. When this time is exceeded, a time-out message box will appear during macro execution.

OK

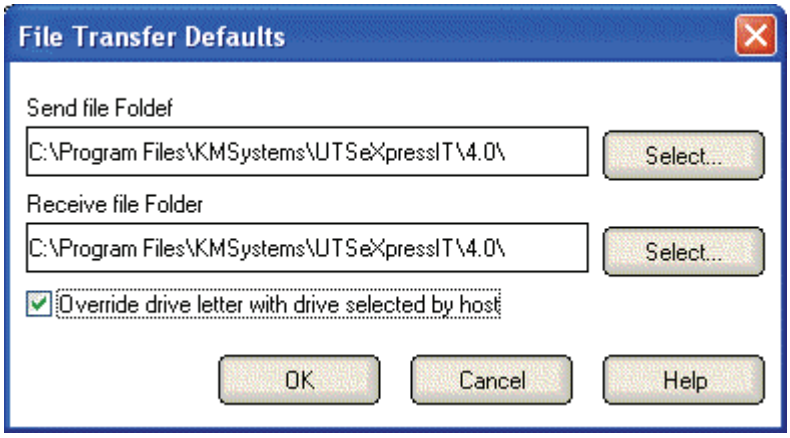
Click this button to accept the entries and close the window.

Cancel

Click this button to discard the entries and close the window.

File Transfer Defaults

The **File Transfer Defaults** window contains controls allowing the selection of default PC paths to be used when performing host/PC-initiated file transfers to or from the host.



See also, Line Input # Statement for an upload example and GetScreenLine Function for a PC-initiated download example.

Send File Path

This information box contains the default drive and path for PC files to be transferred to the host. Use the **Select** button to the right of this box to change the default drive and path.

Select

Click this button to initiate the **Select Directory** dialog where the **Send File Path** may be changed.

Receive File Path

This information box contains the default drive and path for PC files to be transferred from the host. Use the **Select** button to the right of this box to change the default drive and path.

Select

Click this button to initiate the **Select Directory** dialog where the **Receive File Path** may be changed.

Override Drive Letter with Drive Selected by Host

Check this box if the host program will be allowed to change a default drive specification.

OK

Clicking the **OK** button saves all changes made in this window and closes the window.

Cancel

Clicking the **Cancel** button closes this window and discards all changes made since it was last opened.

Help

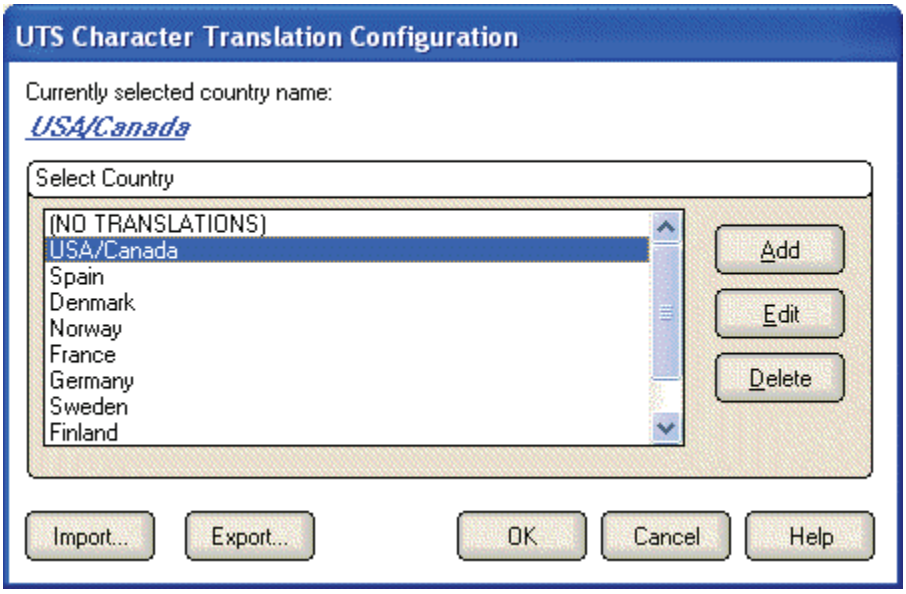
Receive on-line help for this window.

Select Directory

Use this dialog to select the default drive from the **Drives** drop-down list box and the default directory or directories from the **Directories** list box.

UTS Character Translation Configuration

The **UTS Character Translation Configuration** window provides the ability to select and edit character translation sets for specific countries.



Select the translation set (the default is NO TRANSLATION) for your locality.

To add a translation set, click the **Add** button. A second window will appear where you may enter a country name that will correspond to the translation set.

To change one or more characters in a translation set, highlight a country name using the left mouse button or the up/down arrow keys and click the Edit button.

To delete a translation set, highlight a country name using the left mouse button or the up/down arrow keys and click the **Delete** button.

Import

Use this button to import an existing character translation file (.ini).

Export

Use this button to save the current character translation to a file.

OK

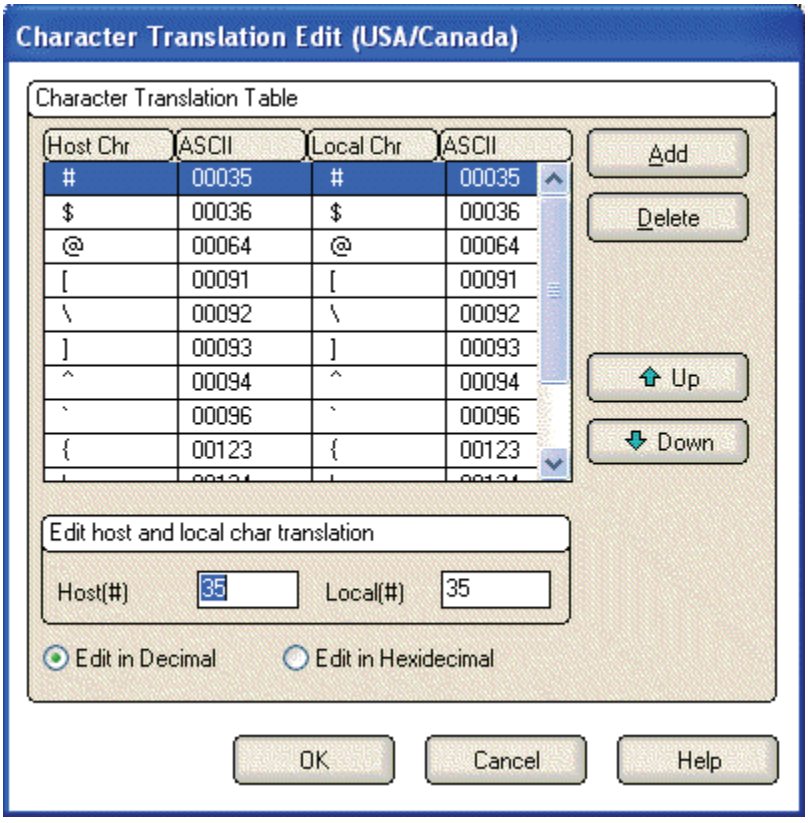
Clicking the **OK** button saves all changes made in this window and closes the window.

Cancel

Clicking the **Cancel** button closes this window and discards all changes made since it was last opened.

Character Translation Edit

This window allows you to specify host character and local character pairs for translation on all data received from, or sent to, the host during a **UTS eXpress IT session**. All characters are specified in ASCII numeric notation.



Select an existing character in the translation table using the scroll bar, mouse and/or up/down arrow keys. Type any changes into the two text boxes (**Host** and **Local**) at the bottom of the window.

To add a new character, select each of the two text boxes (**Host** and **Local**) at the bottom of the window, enter the new values and click the **Add** button.

To delete an existing character, select a character in the translation table using the scroll bar, mouse and/or up/down arrow keys and click the **Delete** button.

OK

Clicking the **OK** button saves all changes made in this window and closes the window.

Cancel

Clicking the **Cancel** button closes this window and discards all changes made since it was last opened.

Language Type

This window allows you to select a single-byte or multi-byte language type.

Select Language Type

From this drop-down list box, select from Latin (default) or other multi-byte language types.

OK

Clicking the **OK** button saves all changes made in this window and closes the window.

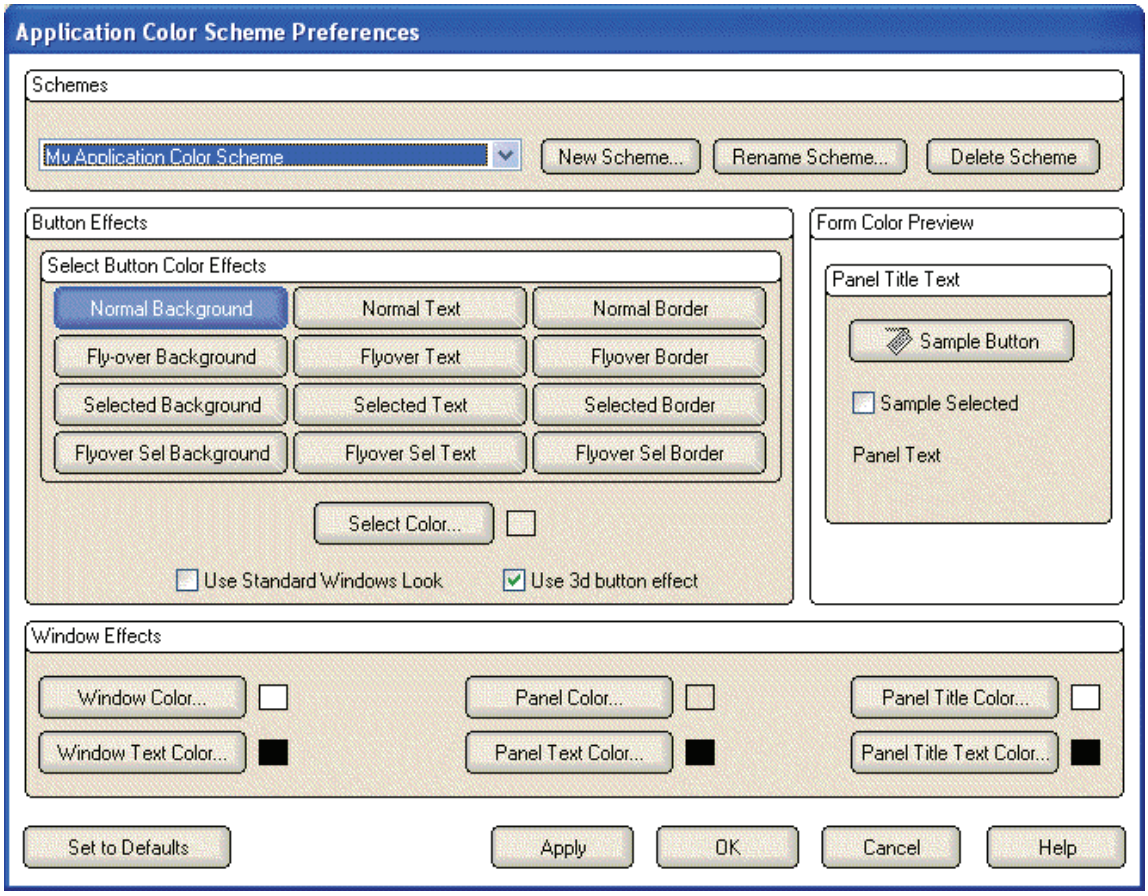
Cancel

Clicking the **Cancel** button closes this window and discards all changes made since it was last opened.

Application Color Scheme Preferences

The **Application Color Scheme Preferences** window contains controls that affect the appearance of the eXpress application.

Selection on this window does not affect the appearance of the screen portion of an opened session. Unlike color selections set for emulation screens, application colors will be affected by any changes that have been made to the Windows System Colors.



Schemes

From the drop-down list box, select from one of the pre-configured schemes from KMSystems or from a scheme created by you. The pre-configured schemes marked as, "(Preset)", may not be altered but may be selected and become the basis of a new scheme created by you (see the **New Scheme** button.

New Scheme

Click this button to create (name) a new application scheme. Note: Whatever scheme is selected from the drop-down list box will be the basis of the new scheme.

Rename Scheme

Click this button to rename a selected scheme. "(Preset)" schemes may not be renamed.

Delete Scheme

Click this button to delete a selected scheme. "(Preset)" schemes may not be deleted.

Button Effects

The controls in this group determine the appearance of buttons on the eXpress application.

Select Button Color Effects

Use the buttons in this group in conjunction with the **Select Color** button to change the colors of buttons and the colors displayed on mouse flyover.

Normal Background

Click this button followed by the **Select Color** button to change the background color of non-selected buttons.

Normal Text

Click this button followed by the **Select Color** button to change the color of text on non-selected buttons.

Normal Border

Click this button followed by the **Select Color** button to change the color of the border surrounding non-selected buttons.

Flyover Background

Click this button followed by the **Select Color** button to change the background color of buttons when the mouse cursor is moved over the button.

Flyover Text

Click this button followed by the **Select Color** button to change the text color that will appear when the mouse cursor is moved over a button.

Flyover Border

Click this button followed by the **Select Color** button to change the border color that will appear when the mouse cursor is moved over a button.

Selected Background

Click this button followed by the **Select Color** button to change background color of a selected button.

Selected Text

Click this button followed by the **Select Color** button to change the text color of a selected button.

Selected Border

Click this button followed by the **Select Color** button to change the border color of a selected button.

Flyover Sel Background

Click this button followed by the **Select Color** button to change the background color of a selected button when the mouse cursor is moved over the button.

Flyover Sel Text

Click this button followed by the **Select Color** button to change the text color of a selected button when the mouse cursor is moved over the button

Flyover Sel Border

Click this button followed by the **Select Color** button to change the border color of a selected button when the mouse cursor is moved over the button

Select Color

Use this button to change color after selecting a button effect from the **Select Button Color Effects** button group.

Use Standard Windows Look

Standard look will make buttons and panel look like the standard windows controls. If XP themes are in uses, buttons will have themes applied.

Note: When this box is checked, changes made using other color controls on this dialog will not be evident in the eXpress application; i.e., checking this box overrides all other color selections for the application. Screen color selections are unaffected by this option.

Use 3d Button Effect

If this box is checked, all buttons will have a three-dimensional appearance. If the box is not checked, buttons will have a flat appearance.

Form Color Preview

All controls in this group are for preview purposes only.

Panel Title Text

The background and text in this title are affected by selections made with the **Panel Title Color** and **Panel Title Text Color** buttons in the **Window Effects** group at the bottom of this dialog.

Sample Button

The appearance of this button can be altered by any of the controls in the **Button Effects** group to the left of this preview panel.

Sample Selected

When this box is checked, the **Sample Button** will appear as determined by the bottom six buttons in the **Select Button Color Effects**; unchecked, the top six determine the effect.

Panel Text

Panel text and panel background are set using the **Panel Text Color** and **Panel Color** buttons, respectively.

Window Effects

The six buttons in this group let you set the color scheme for the windows, panels and text displayed in the eXpress application. For button colors, see above.

Window Color

This button determines the background color of the eXpress windows.

Window Text Color

This button determines the color of any text appearing on an eXpress window. It does not affect panel or button text.

Panel Color

Use this button to alter the background color of a panel.

Panel Text Color

Use this button to change any text found on a panel.

Panel Title Color

This button may be used to alter the background color of panel titles.

Panel Title Text Color

Use this button to alter the text color of panel titles.

Set to Defaults

This button may be used to reset button and window color defaults according to the way they are defined in Windows.

Apply

Use this button to apply any changes immediately without exiting this window.

OK

Use this button to accept changes and exit the window.

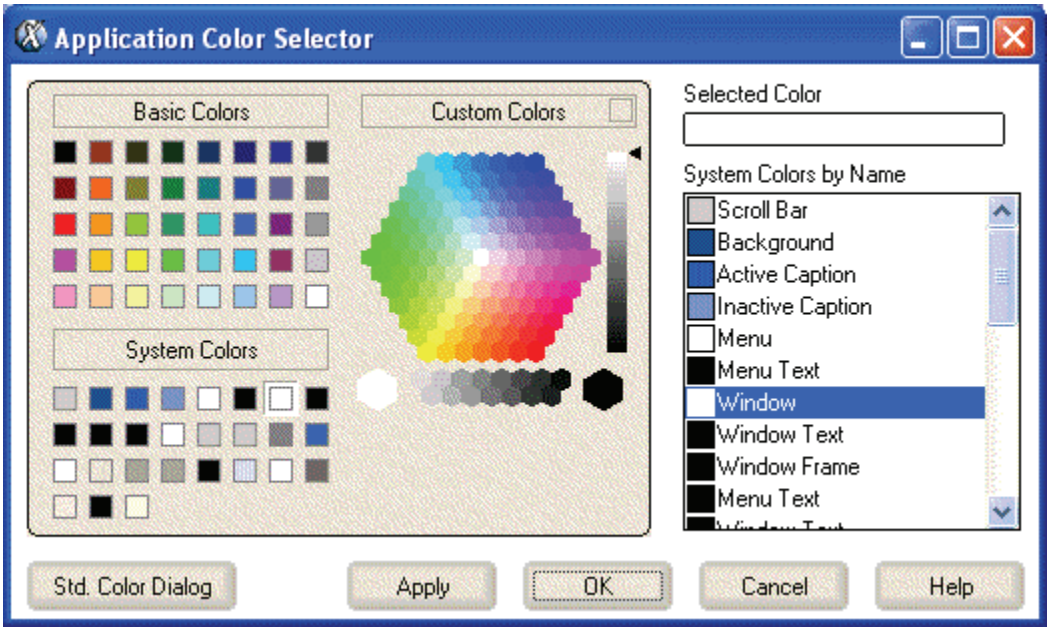
Cancel

Use this button to reject any changes and exit the window.

Application Color Selector

The color selections on this window are divided into three groups: A basic 40-color set, the standard Windows 27 System Colors and a custom color area for gradient color selection. There is also a list box of System Colors by Name for selection.

Note: System Colors changed from the Windows Control Panel will affect the System Colors made available on this window.



Std. Color Dialog

Click this button to use the traditional **Color** dialog for selection.

Apply

Click this button to apply any changes without exiting the selection dialog.

OK

Click this button to accept any changes and exit the window.

Cancel

Click this button to discard any changes and exit the window.

Lock Config Initial Password

This dialog is used to supply an initial password that will be required to access the restriction controls. This dialog appears because of the **Use Configuration Lock** check box being set on the **UTS eXpress IT Configuration** dialog (click the **Restriction Settings** button).

New Password

Enter a 1-8-character password. All keyboard characters are allowed.

Reenter New Password to Confirm

Reenter the same password in order to confirm the entry. This entry is required when the **New Password** entry is specified.

OK

Press this button to accept the entries on this dialog and continue.

Cancel

Press this button to cancel any entries made on this dialog.

Unlock Config Password

This dialog is used to supply the password that will enable the restriction controls. The dialog may also be used to change an existing password.

Enter Password

Enter the password required to unlock (enable) the restriction controls.

New Password

To change the password, enter the new password in this box. This entry is optional.

Reenter New Password to Confirm

Reenter the same password in order to confirm the entry. This entry is required when the **New Password** entry is specified.

OK

Press this button to accept the entries on this dialog and continue.

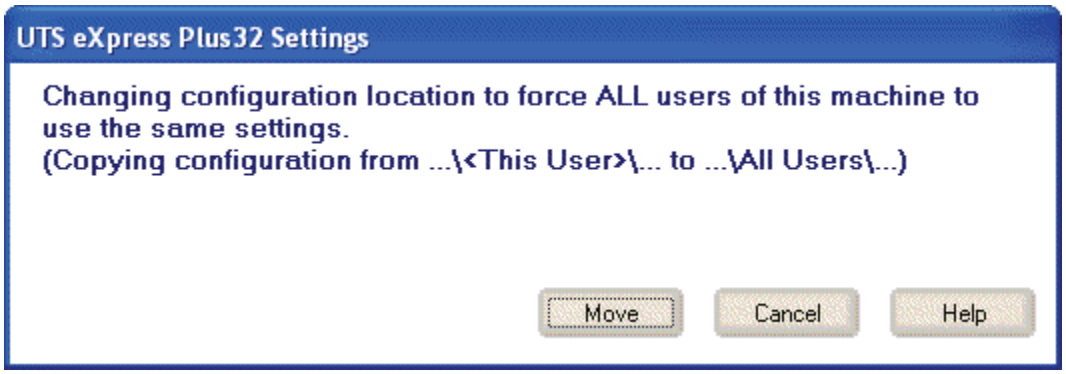
Cancel

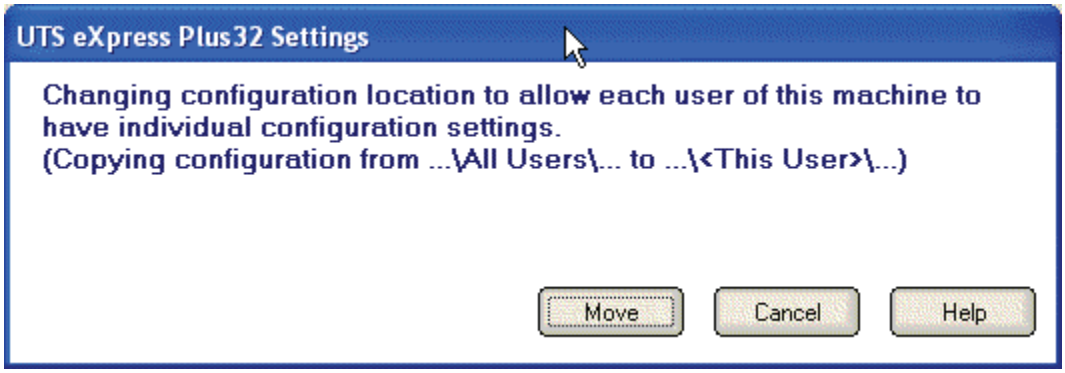
Press this button to cancel any entries made on this dialog.

UTS eXpress IT Settings

This dialog is used to switch the location of the UTS eXpress IT configuration settings. The settings may be stored in such a manner as to allow multiple users of a single Windows system to maintain their individual configurations. When individual configurations are to be maintained (the default), the settings are placed under C:\Documents and Settings\<This User>\Application Data. On the other hand, if it is desirable for all users of the system to use the same configuration, an option is available to move those settings to the common location, C:\Documents and Settings\All Users\Application Data.

Note: "<This User>" will be the user-id used to log on to Windows.





The dialog acts as a toggle between <This User> and All Users; i.e., if your settings are currently stored in <This User>, the message will indicate that they be moved to All Users; if they are in All Users, the move would be to <This User>.

Delete Source Settings

Check this box to delete the settings in their former location. If this box is not checked, the settings will remain in their old location but will NOT be used or updated in any way.

Set

After selecting an option above, click this button to complete the move.

Cancel

Press this button to ignore any selections and return to the previous dialog.

How to ...

Selecting with the Mouse

All selections discussed in this section are made with a single click of the left mouse button. For example, the instruction, "select **Print Screen (All)** from the **File** menu," implies that the following actions should be taken:

1. Move the mouse cursor over the word, **File**, on the menu bar.
2. Click the left mouse button once to reveal the menu.
3. Move the mouse cursor over the **Print Screen (All)** selection.
4. Press the left mouse button again to complete the instruction.

Note: Left and right, mouse button actions may be reversed (run the **Mouse** icon/program in the Windows **Control Panel**).

If configured, a right mouse click over any portion of the screen will drop down an edit menu of frequently used commands.

Where appropriate, shortcut keys are shown in parentheses on menu selections.

Running without the Control Panel

You may run UTS eXpress IT without the control panel being visible using the NCP command line option as follows:

"c:\Program Files\KMSystems\UTSPlus32\4.0\UTSPlus32.exe" **NCP**

To run with the NCP option, you must first run without it and configure at least one screen to automatically open at start-up. To configure:

1. Start UTS eXpress IT without the NCP option.
2. Click the **Configure UTS eXpress IT** button on the control panel.
3. Select and configure a screen as desired.
4. Check the **Open Screen on Start-up**
5. Repeat Steps 3 and 4 if additional screens are required.
6. Click the **OK** button.
7. Click the **Exit** button on the control panel.

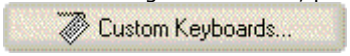
Finally, add the NCP command line option to the **Target** entry of the **UTS eXpress IT** shortcut as follows:

1. Right click on the **UTS eXpress IT** icon. From the Windows Task Bar, this icon is on the **Start** | **Programs** | **UTS eXpress IT** menu selection.
2. Select **Properties**.
3. Change the **Target** entry.

Note: When all screens are closed by the user, UTS eXpress IT will automatically exit.

Configuring UTS Keys

To change a UTS key, follow this procedure:

1. Click the **Configure** button on the UTS eXpress IT Control Panel.
2. After selecting a screen tab, press the **Custom Keyboards** button 

on the **Appearance and Keyboard** tab. The **eXpress Custom Keyboard Layouts** window will appear.
3. Select the keyboard layout you wish to configure from the **Keyboard Name** drop-down list box, or a new layout using the **New Keyboard** button to the right. Note: Layouts are related via a named keyboard and associated with a particular screen on the **Appearance and Keyboards** tab. In this manner, it is possible for each configured screen to have its own unique keyboard layout or share a layout with other screens.

4. Select a key from the **UTS Terminal Keyboard Key Names** list box.
5. Press the desired key or key combination (any key plus **Alt**, **Ctrl** and/or **Shift**) on the visual keyboard.
6. Press the **Set key assignment** button.
7. If a key is already defined, a message window will appear allowing you to replace (**Redefine**) the existing definition or **Add** an additional definition.
8. Press the **OK** button on the **eXpress Custom Keyboard Layouts** window.
9. Repeat steps 2 through 8 for each screen desired.
10. Press the **OK** button on the **UTS eXpress IT Configuration** window.

Using Mapper "Look and Feel"

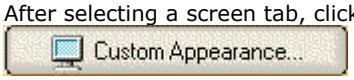
A useful option of UTS eXpress IT is the Mapper "Look and Feel" feature. In general, this feature provides a graphical look to the Mapper user and gives function key capability when using the mouse. The Mapper "Look and Feel" feature was first implemented in Mapper level 35, but is not limited to Mapper users only. The feature may also be useful in any host application that supports the feature (e.g., DPS applications). To use the Mapper "Look and Feel" feature, follow this procedure:

1. Click the **Configure** button on the UTS eXpress IT Control Panel.
2. After selecting the desired screen, set the **Mapper look** check box on the **Terminal Settings** tab.
3. Press the **OK** button.

For more on the display characteristics and restrictions of Mapper "Look and Fe see Mapper Look.

Applying Colors and Fonts to Specific Screens

You may change the appearance of the text displayed on a UTS eXpress IT screen by selecting from a list of screen fonts installed on your system. Colors may be applied based on field attributes displayed on the screen. To change the screen's font and or color, follow this procedure:

1. Click the **Configure** button on the UTS eXpress IT Control Panel.
2. After selecting a screen tab, click the **Custom Appearance** button 

on the **Appearance and Keyboard** tab.
3. Select a scheme name from the **Appearance Scheme Name** drop-down list box or press the **New Scheme** button and name a new scheme. Note: Colors and fonts are related via a scheme name and associated with a particular screen on the **Appearance and Keyboard** tab. In this manner, it is possible for each configured screen to have its own unique font and color scheme or share a scheme with other screens.
4. Select the desired font and font sty with the controls at the bottom of the window in the **Screen Font** group.
5. For color changes, select a field attribute from the option buttons in the **Select Color for Attribute** option group. *Note: If the terminal type chosen is UTS60, the colors may only be set by host application software (e.g., MAPPER, DPS, etc.).*
6. Next, select the foreground (text) and background colors from the two drop-down list boxes provided.
7. Repeat Steps 5 and 6 for each attribute required by your host application.
8. From the **Select Screen Appearance Scheme** drop-down list box, select the custom appearance scheme.
9. Repeat Steps 2 through 8 for each screen desired.
10. Press the **OK** button on the **UTS eXpress IT Configuration** window.

Changing Screen Dimensions

The default dimensions of a UTS eXpress IT screen is 24 rows by 80 columns. If a host application supports a different size (e.g., 49x80, 24x132, etc.), you may change the dimensions with the following procedure:

1. Click the **Configure** button on the UTS eXpress IT Control Panel.
2. After selecting the desired screen tab, click the **Configure Routes** button.
3. On the **eXpress Connect Visual Configuration** window, double-click the selected route.
4. Change the **Rows** and **Columns** as required.
5. Press the **OK** buttons repeatedly to exit the configuration process and return to the emulator.

Note: If a screen is open when the above change is made, it must be closed and reopened for the dimension change to take effect.

Recall Recent Input

On occasion, you may wish to recall or retransmit a line of input to the host, and that line, no longer appears on the screen. From one execution of UTS eXpress IT to another, eXpress retains a list of the 200 most recent lines sent to the host. The following procedure outlines the steps required to use this feature:

1. Position the cursor at the point on the screen where you wish the line to be repainted.
2. Press **Ctrl+Up Arrow** (this key is configurable, see Configuring UTS Keys) or select **Input Recall** from the **Edit** menu.
3. With the mouse, select the desired line from the list box provided.
4. Click the **Transmit** button to paint the line and transmit it to the host (double-clicking the line will also cause a transmit). If you wish to alter the line before transmitting, click on the **Paste** button.

Note: This feature is particularly useful when the recall line is lengthy and you wish to avoid having to retype the entire line.

Using UTS Function Keys

Many host applications support the use of UTS function keys. UTS eXpress IT supports all 22 function keys (**F1** through **F22**) that may be selected traditionally from the keyboard or with the mouse using buttons on a tool bar. To display the default tool bar, select the **Show Tool Bar** toggle on the **View** menu.

Note: A button is also provided for the standard UTS Message Wait (**MsgWait**) and Key Unlock (**Unlock**) functions.

Displaying UTS eXpress IT Keyboard Definitions

At times, you may wish to perform standard UTS terminal functions through the keyboard such as ERASE TO END FIELD, TAB BACK, etc. An easy way to see the keyboard key sequences required to perform these UTS terminal functions is through the display of the **UTS eXpress IT Keyboard Definition** window. To view this window, select **Show Keyboard Help Window** from the **View** menu.

Execute any key (**UTS key** or **Keyboard Key Sequence**) in the window's list box by double clicking on it, or leave the window displayed as a reference to key sequences required from the keyboard.

With the **UTS eXpress IT Keyboard Definition** window displayed, you may reposition the cursor with two left mouse clicks anywhere in a UTS eXpress IT screen.

To keep the **UTS eXpress IT Keyboard Definition** window completely visible while working on a UTS eXpress IT screen, check the **Stay on top** box.

Assign Printers to Screens

UTS eXpress IT allows you to assign printer definitions to individual screens. Here are some of the benefits:

- You can configure the same printer many times with different fonts and/or orientation.
- You can give each configured UTS Printer a meaningful name like "Lexmark 9pt Portrait," "Lexmark Landscape" or "HP Passthru mode".
- Each screen can have different printers. Each DID, for each screen, can be a different printer.
- If a printer is not assigned at run-time, the current Windows default printer is used.

To assign a printer to a screen that is already opened, follow this procedure:

1. Select **Printer Assignment** from the **File** menu and proceed to Step 3, below.

To assign a printer to a screen from the **UTS eXpress IT Configuration** menu:

1. Select the appropriate **Screen** tab.
2. Click on the **Select Printers** button on the **Terminal Settings** tab.
3. Press the **Select** button for the desired DID.
4. If the printer was previously configured, select it from the **Available Terminal Printers** list box, click on the OK button and skip to Step 9.
5. To add a new local printer, press the **Add Printer** button.
6. Enter any meaningful name and click the **OK** button.
7. From the **Selected Printer** drop-down list box, select the installed printer that you want to link to the **Local Printer Name**. Note: If the desired printer is not in the list box, you will need to install it with Windows (**Start**, **Settings**, **Printers** from the Windows active task bar and the **Add Printer** icon).
8. Set other options desired (font, passthrough, etc.) on the three tabs and press the **OK** button to assign the printer.
9. Click the **OK** buttons on each of the successive UTS eXpress IT dialogs to complete the process.

Printing

There are two forms of printing available in UTS eXpress IT: Printing an exact image of the entire screen and UTS screen-printing (printing from the most recent SOE to the cursor).

To print an exact screen image, follow this procedure:

1. Select **Print Screen (All)** from the **File** menu (or **Ctrl+P**) or by using the corresponding button on the tool bar.

To use the UTS screen-printing feature, follow this procedure:

1. Select **Print Screen (UTS)** from the **File** menu (or **Ctrl+U**).
2. Return to the host session and perform any host printing tasks (@@PRNT, MAPPER AUX printing, etc.).

Note: The **Ctrl+P** and **Ctrl+U** are the default key combinations used for printing with UTS eXpress IT; however, both may be reconfigured to other keys or key combinations (see UTS keyboard key settings).

Printing to a File

To print to a file, you need to set up a pseudo-printer that will direct the print output to a file. You may set this pseudo-printer from two places: 1) from the emulator screens' **File**, **Print Assignment** menu selection or 2) by pressing the **Assign Printers** button on the **Terminal Settings** tab of the **UTS eXpress IT Configuration** dialog. Note: In either case, the printer, or in this case file, must always be associated with a particular configured screen.

To assign the print file from the emulator screen, follow these steps:

1) Select **Printer Assignment...** from the **File** menu.
2) Go to Step 5, below.

To assign the print file from the **UTS eXpress IT Configuration** dialog:

3) Click the desired **Screen** tab.
4) Click the **Select Printers** button.
5) Click the **Select** button for one of the three printer devices available on the **Screen Printer Device Assignments** window. Note: If the print output is from selecting one of the **Print Screen** controls from the emulator's **File** menu, then **Printer Device 1 (DID1)** must be used.
6) Click the **Add Printer** button on the **Terminal Printer Setup** dialog and enter a unique local name.
7) On the **Printer Device Selection and Setup** dialog, select "<Text file>" from the **Selected Printer** drop-down list box.
8) Press the **OK** button on all dialogs until you are back to your original starting point.

The print sequence may now be initiated from whichever screen has the print file assigned. When the print action begins, you will be solicited for the file name.

Miscellaneous

Command Line Options

The following are the UTS command line options. They are NOT case sensitive and are separated by spaces:

NL = No Logo (Splash Screen)

NCP = No Control Panel

SMAX = Show Screens Maximized

TRANSTRACE = Transport Trace On Start

MULTI_INST = Allow multiple instances of program

Font Limitations

The ability to increase/decrease font size by a single point only works properly when using scalable fonts like the True Type font, Courier New (installed with Windows). Non-scalable fonts have a fixed number of point sizes available (e.g., 6, 9, 11, 14, etc.) and are missing several point sizes (e.g., 7, 8, 10, 12, 13). Consequently, UTS eXpress IT will be unable to increment/decrement to the missing sizes. To select a different font, follow this procedure:

1. Click on the **Configure** button on the UTS eXpress IT Control Panel.
2. After selecting the desired screen tab, select the **Appearance and Keyboard** tab.
3. Click the **Custom Appearance** button.
4. Select the font and font style desired from the controls in the **Screen Font** group at the bottom of the window.
5. Press the **OK** button.

Note: All of the True Type fonts are scalable.

Technical Support

If you are experiencing difficulties configuring UTS eXpress IT and need assistance, please contact the person responsible for maintaining UTS eXpress IT at your site. If you are having trouble connecting to a host mainframe, please consult the person(s) responsible for maintaining communications at your site. If difficulties persist, you may reach the Technical Support Group at KMSystems, Inc., through one of the following:

Internet E-mail Support – support@kmsys.com
Telephone Support – (770) 635-6363
Web Site – www.kmsys.com
Main Number – (770) 635-6350
Facsimile – (770) 635-6351

Index

A

Add or Redefine Key 32
Add Printer 21
Allow Unique Settings for Each User of the Machine 44
Always Use Low Intensity for UTS60 Background 27
Application Color Scheme Preferences 40
Application Color Selector 43
Applying Colors and Fonts to Specific Screens 48
Assign Printer 2, 13
Assign Printers to Screens 49
Auto Scaling Mode 27

B

Beep Sound 13
Blink 10, 13

C

Changing Screen Dimensions 48
Character Translation Edit 39
Clear Trace Window 2
Close Trace 2
Color Palette 27
Color Scheme 13
Color Scheme Name 27
Color Settings 27
Colors 48
Command Line Options 53
Configuring UTS Keys 47
Control Page 2
Control Panel 1
Copy to Clipboard 2
Cursor 13

D

Data Protected 10
Decrease Vertical Spacing 2
Delete Printer 21
Delete Scheme 27
Displaying UTS eXpress IT Keyboard Definitions 49

E

Edit Control Page 2
Edit Macro 34
Edit Prompt for Text 35
Emphasis Protect 10
eXpress Custom Keyboard Layouts 29
eXpress Custom Terminal Screen Appearance 27
eXpress IT Local Print Objects 26
eXpress IT Macro Manager 32

F

FCC Clear 2
FCC Enable 2
FCC Generate 10
FCC Locate 2
FCC Map 2
FCC Settings 10
FCCs 10
Field Control Characters 10
File Transfer Defaults 37
Font Limitations 53
Fonts 48
Force ALL Users of This Machine to Use Same Settings 44
Force UPPERCASE Only 13
Function LPO_Close 26
Function LPO_Initialize 26
Function LPO_Open 26
Function LPO_PrintData 26
Function Show 26

G

Graphic Keyboard 29
Graphics 12
Graphics Window 2

I

Increase Vertical Spacing 2
Initial Transmit Type 13
Input Recall 2

K

Keep Active on Show 2

L

Language Type 40
Local Print Object 21
Lock Config Initial Password 43
Low Intensity 10
LPO_Close 26
LPO_Initialize 26
LPO_Open 26
LPO_PrintData 26
LPO_Show 26

M

MAPPER Graphics 12
Mapper Look 13
Minimize All 1

N
New Scheme 27
Next Window 2
Not Wrap Print Lines 21
Numeric 10
O
Open Screen on Start Up 13
Open Screens 1
P
Page Down 29
Page Up 29
Passthrough 21
Password 43, 44
Position Cursor 35
Print Time-out 13
Printer Device Selection and Setup 21
Printing 50
Printing to a File 50
R
Real Blink 13
Recall Recent Input 49
Reopen on Host Close 13
Resize Window to Font 2
Reverse Video 10
Right Justify 10
Running without the Control Panel 47
S
Save Settings Now 1
Save Settings on Exit 13, 27
Screen Buttons 1
Screen Connection 13
Screen Options 13
Screen Printer Device Assignments 6
Screens 48
Script Manager 1
Select Automatic Sign-on Script 13
Select Color for Attribute 27
Select Color/Font Scheme 13
Select Connection Route 13
Select Directory 38
Select Sign-On Script 2, 13
Select Terminal Key Function 36
Select Tool Bar 2, 13
Selected Printer 21
Selecting with the Mouse 47
Send To ... 7
Set Key Assignment 29
Setup Printer 21
Show Control Characters 2
Show Graphics Window 2
Show Tool Bar 2, 13
Standard Printing 21
Start Script Recorder 2
T
Tab Stop 10
Technical Support 53
Terminal Keyboard Key Names 29
Terminal Printer Setup 21
Text String 36
Timed Wait 36
Trace 2
Transport Trace 1
Type a Key Sequence 29
U
Undefine Key 29
Unlock Config Password 44
Use Local Print Object 21
Use Passthrough Printing 21
Use UTS60 Colors 27
User-defined Script Name 2
Using Mapper 48
Using UTS Function Keys 49
UTS Character Translation Configuration 38
UTS Control Page 7
UTS eXpress IT Configuration 13
UTS eXpress IT Control Panel 1
UTS eXpress IT Graphics Viewer 12
UTS eXpress IT Screen 2
UTS eXpress IT Settings 44
UTS60 Background 27
V
Video Off 10
W
Wait for String 36