

SmarTerm version 10 for Windows 95/NT  
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# Digital VT, ANSI, and SCO ANSI

Welcome to the *Introducing Digital VT, ANSI, and SCO ANSI* online guide. This guide explains the basics about Digital VT, ANSI, and SCO ANSI and common tasks you do while connected to the host.

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## Digital VT

The Digital VT and Digital VT graphics emulations support communication standards on which Digital Equipment Corporation and compatible makers have based their hardware, and many programmers have based their systems.

## ANSI

SmarTerm's ANSI session type emulates not a particular terminal, but a terminal mode—a set of escape sequences based on the American National Standards Institute rules. Don't use this session type interchangeably with the VT session type. The two are much alike, but some of the escape sequences conflict.

## SCO ANSI

This *terminal emulation* is based on ANSI (American National Standards Institute) standards and the SCO (Santa Cruz Operation) terminal developed for use with SCO UNIX and SCO XENIX.

# Getting more information

This and the other online guides provide emulation-specific overviews. For more information:

## Online help

The online help is the most inclusive form of SmarTerm documentation. (You can even add your own help file; see Properties> Global Options>User Help.)

For procedures or reference material, click the ? button on the toolbar or select Help>SmarTerm Help. Then use the contents, index, or find (keyword search) to reach your topic.

For help on a specific control in a dialog, click the ? button in the upper-right corner of the dialog, then click the control you need help with.

For macro syntax in the macro editor, put the cursor on a language element, press F1, and help for that element appears.

## Online Guides

SmarTerm comes with a variety of online manuals that you read using Adobe Acrobat Reader. If you do not already have Adobe Acrobat Reader installed, you can install it from the CD Browser.

Along with this and the other ***Introducing...*** guides, SmarTerm includes three additional standard online guides:

### Getting Started

This guide explains how to install SmarTerm as a single user or on a server. It also explains how to reuse custom files (such as keyboard maps and SmarTerm buttons) from a previous version with version 9.0. The guide is in English, French, German, or Spanish, depending on the language you choose during installation.

### Macro Guide

This guide explains how to use the macro language and provides documentation on all syntax and error messages.

### What's New Guide

This guide briefly describes the new features in this version of SmarTerm, and provides information that may help you upgrade your installation of SmarTerm.

Once SmarTerm is installed, you access the standard online manuals from the Start>Programs>SmarTerm>Online Manuals folder.

In addition to the four standard online guides, SmarTerm can come with two additional guides, depending on how SmarTerm was installed:

### System Administrator Guide

This guide only gets installed when the system administrator chooses to install the Administrator Toolbox. It contains information about how to set up *profiles* and *profile servers*. You access this guide from the Start>Programs>SmarTerm folder.

## X Server Guide

This guide only gets installed when the X server component is installed. It contains information on how to install X window, run the Control Panel, and customize the X window. You access this guide from the Start>Programs>SmarTerm folder.

## Release notes

This is a special help file that explains any installation changes since the Getting Started guide was produced, how to upgrade, information, and any other matters that need special emphasis (or couldn't be timed to meet the print deadlines). You access this guide from the Start>Programs>SmarTerm folder.

# Establishing a session

## VT emulation

You can use SmarTerm's emulation to connect with Digital VAX/VMS and UNIX hosts. With this terminal support, SmarTerm includes the ISO Latin-1, ISO Latin-2, DEC Multinational and National Replacement character sets, as well as support for host control sequences.

The Digital VT session type emulates Digital Equipment Corporation (DEC) VT series terminals from the VT52 text terminal through the VT420 text terminal. The Digital VT Graphics session type emulates these same terminal types **plus** VT240 and 241, VT340, and Tektronix 4014 graphics terminals. When you start a new VT session, SmarTerm relies on a default terminal type. To change the terminal type, select Connection>Disconnect, and then select Properties>Emulation>Terminal tab, and Terminal Type listbox.

## ANSI emulation

You can use SmarTerm's ANSI session type to connect with online bulletin board services that require ANSI format. You can use SmarTerm's user interface features, including Windows-style menus, SmartMouse, and SmarTerm Buttons, to make your ANSI session easier to use.

## SCO ANSI emulation

You can use SmarTerm's emulation to connect with SCO UNIX and SCO XENIX hosts.

The SCO Console was patterned after the Digital VT102 ANSI mode terminal, extended to support color display cards and larger keyboards, and developed from there with no attempt to follow the VT family extensions and changes. The SCO ANSI session type now represents a consistent, rational set of features and sequences listed in the SCO screen (HW) manual, some VT510 ANSI mode features, and a few Esker extensions.

## To change the terminal type:

1. Select Connection>Disconnect.
2. Select Properties>Emulation>Terminal tab, and Terminal Type listbox.
3. Choose the terminal type that your host expects to communicate and click OK.
4. Reconnect to the host by selecting Connection>Connect.

SmarTerm makes things easy for the user who's familiar with VT, ANSI, and SCO ANSI terminals. You can also transform an old terminal user interface, using Windows-style menus, SmartMouse, and SmarTerm Buttons, without changing the host application itself. The information below should help you get started customizing SmarTerm sessions and workspaces.

## The session

The SmarTerm session is where all your communication with the host occurs. The SmarTerm session stores the general information about a connection including:

- How to identify and gain access to the host.
- How to connect with the host (via direct serial cable, modem, network, or LAT).
- How the host expects to receive messages (that is, the emulation and the terminal mode).

Much of this information can be gathered automatically, if you check the Record a login macro checkbox when you start a new session.

## Connecting to a host

Follow the steps below to create a session.

1. Select File>New from the SmarTerm menu.
2. Select a session type, and click Next. Select a connection type and click Next.
3. This step depends on which connection type you selected.

Telnet: Enter a host name or IP address (in the format `aaa.bbb.ccc.ddd`, where each group (`aaa`) is a number from 0 to 255), and click OK.

Direct Serial: Change any serial properties necessary and click OK.

Modem: Type a phone number. Click the Modem tab to verify/select your modem. (If no modem appears, go to the Windows 95/NT Control Panel to set up your modem.) Click Dial, and wait until you're connected.

SuperLAT: Select a LAT service and click Connect.

4. Enter any password/account information to login.

## Modifying a session

After you have made a connection to a host, you can modify or customize your SmarTerm session. You can:

- Specify a terminal type
- Change colors to suit your needs
- Choose terminal properties
- Configure [Keyboard "Mapping"](#)
- Set up ["SmartMouse"](#)

For more information, please look in the SmarTerm online help.

## Saving a session

To save a session:

1. Select File>Save Session.
2. Type a filename that describes the host (such as `Accounting`) in the File Name text box.
3. Select an icon to associate with the session. This allows you to start up the particular session by clicking the icon in your Sessions folder.
4. Click Save.

## Disconnecting from a host

Follow the instructions below when you're ready to end a session.

1. Log off the host in your normal way (e.g., by pressing a function key or by typing exit).
2. Select whether you want to close the session, connect to another host, or exit SmarTerm by clicking the radio button, then click OK.



# Managing the SmarTerm workspace

You may open one session at a time, or create a workspace, which is a collection of sessions (any combination of session types) routinely opened at once. Having a workspace of multiple sessions is a convenient way to share data from one host to another.

## What's in a workspace?

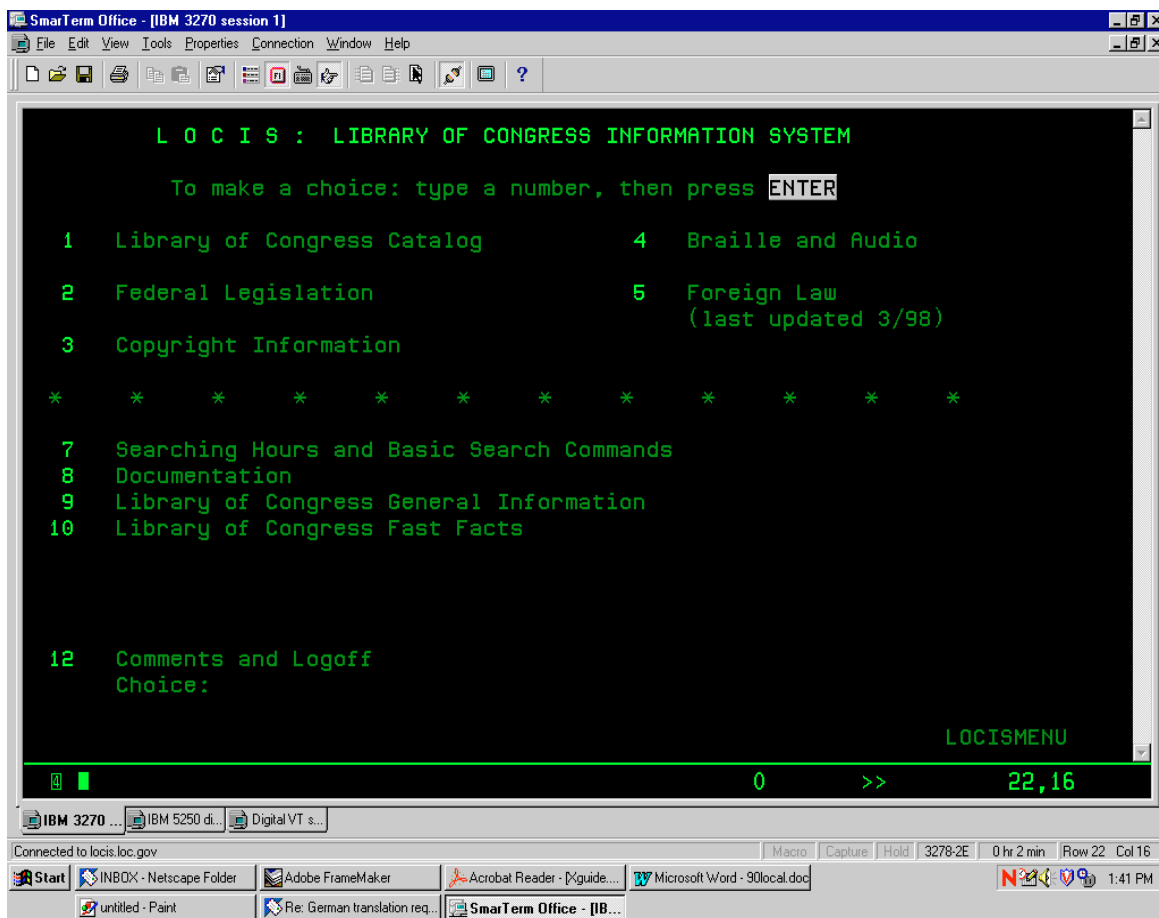
Sessions in a single workspace can use different emulations and terminal types to connect to various hosts or host systems, as well as be in different languages. A workspace file stores:

- Which sessions are currently open (by filename).
- Session window positions, relative to the SmarTerm window.
- Which session appears on top (session that has focus).
- Whether sessions should automatically be connected at workspace startup.

A workspace does **not** store the SmarTerm window position and size, file locations, a global startup macro, or any other global (session-independent) information. A workspace also does not store other associated tools (SmarTerm Buttons, keyboard maps, login macros, etc.), which are stored at the session level.

To have a workspace automatically appear when you start SmarTerm, select Properties>Global Options>Startup tab and browse for the workspace file (.sws).

Below is an example workspace featuring text and form-based terminal sessions running simultaneously.



Notice that you can select each session in the SmarTerm workspace by clicking on the tabs at the bottom of the SmarTerm window. This type of view is called the *workbook view*.

## Creating a workspace

Follow the instructions below to create a workspace:

1. Open a session or create a new one.  
You can customize the session with keyboard maps, [“SmartMouse”](#) settings, [“SmarTerm Buttons”](#), [“Colors”](#) and more.
2. Save your new session.
3. Repeat steps 1 and 2 to open as many sessions as you would like.
4. Select File>Save Workspace As. A standard File Save dialog appears.
5. Type a file name that describes the workspace and select an icon to represent the workspace.
6. Click Save.

## The SmarTerm menus

SmarTerm's main menu, with many common Windows 95/NT elements, shows only those options and features appropriate to the active session type. When a menu item is highlighted, the SmarTerm status bar explains its function.

### File

Provides session file management, with standard New, Open, Close, Save Session, and Save Session As commands, as well as Save Workspace As and Send Mail.

### Edit

Provides text management, with a range of select, copy, paste, and history buffer commands that allow you to move text within and between sessions, applications, files, and computers.

### View

Gives you commands to show and hide the menu bar, status bar, terminal keyboard, the entire SmarTerm window frame, and toolbar. Also, you can enable or disable HotSpots. Through the SmarTerm Buttons command, you can create, change, and delete SmarTerm Buttons.

### Tools

Offers ways to speed up routine functions with predefined or customized keyboard mapping, mouse functions, HotSpots, and macros.

Tools also includes commands for capturing, replaying, and transferring files.

### Properties

Gives you options for customizing SmarTerm. Global Options include startup and shutdown defaults, file locations, hotlink settings, and other choices that affect the entire SmarTerm application.

### Connection

Allows you to change connection-method-specific details, connect or disconnect, suspend the connection to do local work, start or end a trace, send a break, and clear a port.

### Window

Lets you tile, cascade, or switch between sessions.

### Help

Provides information on the SmarTerm product and version, quick tips, and access to the online help system contents.

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**Note:**

If your system administrator has created profiles for you to use, you may see fewer menus and menu items than are described here.

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## Controlling the windows

### Sizing a window

The Windows controls, in the upper-right corner of the SmarTerm and session windows, work as described in Windows help. SmarTerm provides several extra features:

- A minimized session window appears as an icon in the SmarTerm window, which remains the active Windows application. To minimize all sessions and the SmarTerm window, click the SmarTerm window's Minimize button.
- While minimized and still connected, SmarTerm keeps accepting data from the host, so you can start a transfer or host program, minimize SmarTerm, and switch to another session or application.
- While minimized, the SmarTerm icon can flash when the host sends data, such as incoming e-mail or successful file transfers. To choose this, select Properties>Global Options>Other Options.
- SmarTerm has a number of options for handling text sizes and scrollbars when you resize the session window. For example, SmarTerm can automatically size the text to fit the session window's current size. To choose this, select Properties>Emulation>Fonts.
- To make more room for the session window, you can hide the SmarTerm menu bar by selecting View and unchecking Menu Bar. To return the view to normal, just right-click in the SmarTerm title bar and select Show Menu Bar.
- To achieve the largest possible area for a session window, select View>Full Screen. The session window covers the entire screen, including the SmarTerm menu. In Full Screen mode, a small window appears, with a button to take you back to standard view.

### Setting screen capacity

Many VT and ANSI terminals allow flexibility in the number of lines and columns visible in one screen. You can set the line and column sizes, as well as your choice to auto-wrap text or not, by selecting Properties>Emulation>Display tab.

A SCO session has multiple pages and a screen with 25 lines and either 80 or 132 columns. You can set the column size by selecting Properties>Emulation>Display tab.

Host escape sequences can specify the format of each line as single high single wide (normal), single high double wide, or double high double wide (top and bottom).

You can disable the default autowrapping of text either on the PC side (Properties>Emulation>Display tab) or on the host side (by issuing Digital RM/SM control sequences).

### SmarTerm status bar

To show or hide the status bar at the bottom of the SmarTerm window, select View>Status Bar. The status bar provides this information about the active session:

- Host name
- Macro recorder, pause, run state
- Print mode
- Online, local, capture, or trace mode in effect
- Hold in effect
- Terminal type
- Connect time (select Properties>Emulation>Display tab and mark the Show connect time on status bar)

option)

- Row and column indicator

## Session status line

At the bottom of the active session window, a session status line provides session-specific status information. The status line includes this information:

- Current page
- Cursor position
- Printer status (online or not)

You can suppress the session status line by selecting Properties>Emulation, and choosing None from the Status Line Type listbox.

If you choose Host-writable from that listbox, the status line is visible, and the host can change it at will. Some applications allow (or require) this option to provide you with prompts and status information.

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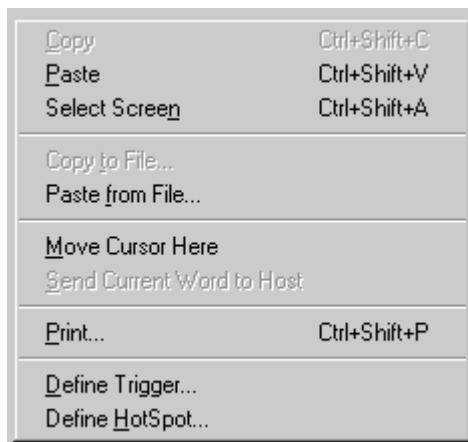
**Note:**

A font type indicator will appear on the SmarTerm status line of the session window if you select Properties>Emulation>Display tab>indicator status line type.

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## Popup menus

When you right-click at certain points in the SmarTerm workspace, you see popup menus that offer common commands relevant to the pointer position. For example, if you right-click on the SmarTerm title bar, the window control commands appear. If you right-click in an open area of the session window, you get text management commands



In addition to the text management options, the last two options on this menu are:

- Define Trigger lets you detect host screens and load automation tools, such as keyboard maps, SmarTerm buttons, and color schemes. (See the online help for more information about Triggers.)
- Define HotSpot lets you create buttons on an emulation screen by defining text on that screen as a hot spot. Once you create a hot spot, you can use your mouse to click on the spot, as though the area were a button. (See the online help for more information about HotSpots.)

## Internet Awareness

SmarTerm is aware of internet and e-mail addresses that appear in your session window. If you have version 3.0 or above of either Netscape Navigator or Microsoft Internet Explorer on your computer, you can turn those addresses into clickable links.

When you click an internet address (x://y), your web browser opens at that site. When you click an e-mail address (x@y), your default e-mail editor opens with that address in the To: box.

By default, internet and e-mail addresses are highlighted. To change this, select Properties>Global Options>Other Options tab.

## HotSpots

HotSpots increase the ease-of-use of existing host applications by creating clickable areas on the screen. These clickable areas, called HotSpots, work the way buttons do in a Windows application: when you click on them with the mouse, the program does one of these things:

- Sends a string to the host
- Runs a macro
- Loads another HotSpots file
- Loads SmarTerm Buttons
- Unloads SmarTerm Buttons

### How to enable or disable HotSpots

To enable or disable the HotSpots feature, Select View>HotSpots.

Each session type has a default HotSpot file when a session opens. You can change or edit the files by selecting Tools>HotSpots. SmarTerm comes with several preconfigured HotSpots files for use with different session types.

## Changing a session's appearance

### Colors

Follow these steps to change the colors with which SmarTerm displays text, the history buffer, and the session window:

1. Select Properties>Emulation>Colors tab.
2. Select an attribute, then change the foreground color (the text color) by clicking a color in the Foreground group boxes.
3. Change the background color (the session window color) by clicking a color displayed in the Background group boxes.
4. Click OK to use the color in your current session.

To save your new color scheme with the session, select File>Save Session.

To reverse the current display colors without changing the active scheme, select Properties>Emulation>Display tab, and refer to the Options box.

In a Digital VT Graphic session type: to change the colors with which ReGIS colors are displayed, select Properties>Emulation>ReGIS tab, then click the ReGIS colors button.

## Characters

You can change the character set SmarTerm uses when emulating a VT terminal or when in ANSI terminal mode. Select Properties>Emulation>Terminal tab, and review the Character set box.

In Multinational mode, SmarTerm provides the ASCII character set and your choice of DEC Multinational, ISO Latin-1, or ISO Latin-2. In National mode, SmarTerm provides you with the National Replacement Character set (NRCs) of your choice. If you choose National mode, use the NRC Set listbox to select the NRC set you want.

Your computer and the host may not recognize the same international characters. You can determine how SmarTerm handles such characters on your computer during pastes and captures and during file transfers. Select Properties>Session Options>Character Conversion tab.

SmarTerm also supports the euro character, which you can use with Digital VT emulations. To display the euro character, select the Properties>Emulation>Terminal tab, then select ISO-Latin 9 from the User-preferred supplemental set listbox.

## Fonts

### Printer

To specify the font, size and style of text sent from SmarTerm to your Windows printer, select Properties>Emulation>Printer tab, and review the Printer Fonts box. If you're satisfied with the defaults for 80- and 132-column printing, leave the Use Default Font box checked. Otherwise, click Set Font.

### Display

SmarTerm uses its own special set of TrueType fonts for display. (You can't use other TrueType fonts that may be on your system; they don't have the characters required for precise emulation.) Though you can't change the font style, you can change the font width and height. Select Properties>Emulation>Fonts tab.

To change the font size, alter the Width and Height measurements in the Font Size box. Increasing character height and not width creates a taller, narrower character; check the effect in the preview box. When you're satisfied, click OK.

You can also alter how SmarTerm handles fonts as the window size changes. You can set a font size, and make SmarTerm accommodate it with the right size window, or you can specify that the font should be sized in proportion to the window. The latter choice could make for small type that is unreadable, so you can set a minimum width and height.

## Tabs

By default, tabs are set every eight characters (a common interval in many host applications).

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**Note:**

Some host software may alter these settings.

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To review location of tab stops, select Properties>Emulation>Tabs tab. To change the interval, specify the number of spaces and click Set Tabs. To assign each tab location yourself, you can click the appropriate spots on the ruler image on the tab.

## Cursor

SmarTerm offers several choices of cursor format (visible or not, block or underline). You can also specify how cursor coupling should work (that is, whether you want the cursor to stay visible as the host moves the display area horizontally, vertically, or to the other text display pages).

To review the settings, select Properties>Emulation>Display tab.



# Sending and storing keystrokes

## Accelerator keys

SmarTerm follows the Microsoft Office and Windows 95/NT accelerator key assignments, except where the host is likely to misinterpret the keystrokes; then SmarTerm just adds a Shift in front of the Windows Ctrl key where necessary. If your application doesn't rely on the terminal meanings of these Ctrl key combinations, you can choose to use the Windows accelerator keys throughout. Just select Properties>Emulation>Keyboard tab, and in the Function, Alt and Ctrl Keys Act As box mark Windows keys.

If you choose Windows Keys, even remapping with the Keyboard Map Editor doesn't override the Windows/Office function of the accelerators. The Ctrl key form of the accelerators appears on the menu, but both the Ctrl and Ctrl+Shift forms continue to work as accelerators.

## Mapping

The Keyboard Map Editor gives you control over the effect PC keystrokes have when they're sent to a host. You can map a PC key or key combination to:

- Send a terminal key or a character string.
- Run a macro.
- Activate a different keyboard map.
- Disable a PC key.
- Toggle Num Lock.

The editor provides convenient entry for these different functions, including a two-keyboard layout for mapping PC keys to terminal keys. To open the editor, select Tools>Keyboard Maps; select a map and click Edit or click New. (See online help for more information.)

SmarTerm is delivered with various PC keyboard layouts, and a default keyboard map for each session type which you can easily customize.

## How to view current keyboard mapping

To view key assignments for the active map:

1. Select Tools>Keyboard Maps. The active map appears highlighted.
2. Select a map and click Edit.
3. Select File>View Summary.
4. To print the list for review, click Print Map.

To view a picture of the active terminal keyboard:

1. Select View>Terminal Keyboard. The keyboard popup appears.
2. Move the pointer across a terminal key to see its PC equivalent listed on the popup's bottom line.
3. Click a key to send a keystroke to the host.

## How to apply a different map to a session

To switch from one stored keyboard map to another:

1. Select Tools>Keyboard Maps.

2. Select the map you want and click OK. You're back in your active session, with a new map in effect.

To look for a map in a different folder:

1. Click Locations. The Global Options dialog appears.
2. Type or browse for the path and folder name you want, and click OK. SmarTerm will look there for existing keyboard map files and store new keyboard maps there until you change the location again.

## SmartMouse

Most host applications are not designed with a mouse in mind. SmarTerm's SmartMouse feature enables you to compensate for the lack of mouse support in host applications by defining mouse actions that trigger specific *actions*, such as:

- Moving the cursor around the screen.
- Invoking commands presented in a menu.
- Sending the selected word and a carriage return.
- Executing pre-defined macros.

For example, you may have a host application that presents a menu listing commands. You can set up SmarTerm to run a particular command when you double-click it.

SmarTerm is delivered with a set of mouse gestures in effect. Select Tools>SmartMouse to view and change them. In online help, see Tools>SmartMouse for more information.

## How to have SmartMouse move the cursor around the screen

To move the cursor around the screen:

1. Select Tools>SmartMouse.
2. Select the mouse event (for example Left Double Click) that will trigger the mouse action from the Mouse Event list.
3. Select Move Cursor from the Mouse Action list.
4. Click OK to save and close the SmartMouse dialog.

See the online help for more information on all of the things you can do with SmartMouse.

## Macro

A macro is a set of commands and other statements, named and stored for re-use. The Macro Language is similar to Visual Basic, but tailored to the needs of the SmarTerm user. You can:

- Record a login macro by simply checking the Record a login macro checkbox on the New Session dialog.
- Record any other macro by selecting Tools>Macros, naming the macro, and clicking Record.
- Use the macro editor to update an existing macro or fine-tune one you've recorded. As you work, you can move the cursor to any SML element and press F1 to get syntax help for it.
- Use the dialog editor to create custom dialogs for your macro.
- Debug your macro, tracing by single step or procedure step; setting and removing breakpoints and watch variables, and modifying variables.
- Save the macro to the default user macros file, or another file of your choice. (Multiple macros are stored in a file, so they can easily call each other.)

## How to create a new macro

To create a new macro (statement by statement, rather than recording):

1. Select Tools>Macros.
2. Select the macro file where you want to store the new macro.
3. Click Create.
4. Type the macro name and click OK.

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### Note:

The first character of the name must be an alphabetical character. Only alphanumeric characters can be used in a macro name, except for an underscore, which must be used in place of blank spaces.

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5. Type the macro in the Macro Editor.
6. Save the macro.

See the online help for more information on all of the things you can do with the macro language.

## SmarTerm Buttons

SmarTerm Buttons are user-definable buttons associated with a session. SmarTerm Buttons differ from the application-wide toolbar that appears under the SmarTerm menu (see the Toolbar chapter in the User Guide).

SmarTerm comes with palettes that support common software. Select Tools>SmarTerm Buttons to see the list and open a palette. To show or hide an open palette, select View>SmarTerm Buttons.

## Making SmarTerm Buttons

You can use an existing palette, modify it, or create a new one, tailoring each button's function and format. To create a new palette, select Tools>SmarTerm Buttons and type a new palette name; to work from an existing palette, select it. Then click Create/Edit. The SmarTerm Buttons Editor appears, so you can tailor each button's function and format.

Possible button functions are:

- Entering text.
- Running or stopping a macro.
- Displaying another SmarTerm Buttons palette (allowing you to jump from one palette to another by clicking a button).

Button format can be any combination of tooltip/text, picture, and DIL (dynamic information line) description; text color; background color; and font. Click Palette Options to decide how the button elements appear. The *User Guide* and Help give specific instructions. As you add or change the buttons in the editor, they also change in the palette.

### How to open a palette

1. Select Tools>SmarTerm Buttons.
2. Click the palette you want (or scroll to a different folder to find it).
3. Click Open.

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**Note:**

If you save the session with a palette showing, that palette appears the next time the session opens.

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## How to create a new palette

1. Select Tools>SmarTerm Buttons.
2. Type a new name in File Name.
3. Click Create/Edit.
4. Add text, pictures, and functionality to the first button using the Buttons Editor. Click Add to add new buttons and functionality to your button palette until you are through.
5. When you have finished, click Save to save the palette.

## How to assign a string to a button

1. Select Tools>SmarTerm Buttons, select the palette where you want the button to appear, and click Create/Edit.
2. In Button Action, select Send String.
3. In the String to Send to Host box, type the string you want to send, along with any non-printing characters required.
4. Define the button's content and format.
5. Save the palette.

# Managing text

## Capturing text from the host

You can capture text from the host, as it's displayed in the session window, into a file on your computer. For example, you might want a record of an electronic mail exchange or a listing of files on a host. If you're receiving an entire file, it's usually better to use one of the file transfer methods rather than text capture.

SmarTerm lets you define how you want to capture text from the host. By selecting Properties>Session Options>Capture tab (or by clicking Properties on the Start Capture dialog), you can change:

- Whether all incoming data is captured, or only text.
- Whether incoming material is appended to existing text in the file you've specified, or overwrites that text.
- How End of line is handled.
- What default name is used for the receiving file.

To capture text from the host in the active session:

1. Select Tools>Start Capture.
2. Accept the default filename to receive the text, or provide another name. Change capture properties if necessary.
3. Give the host the necessary command to send the text.

For example, tell the host to type a file or display a directory listing. As the text appears on the screen, SmarTerm captures it into a file on your computer.

4. Select Tools>Stop Capture to close the file on your computer and end the capture process.

## Pasting text to the host

Text you want to paste from your computer to the host must be in a text file. You can create the file with any program that produces ASCII text files, including Windows Notepad. You don't have to modify the file to match the host text conventions (such as terminating a line with just a Linefeed character), because SmarTerm does this for you.

To review the way SmarTerm sends the text to the host, select Properties>Session Options>Paste tab (or by clicking Properties on the Paste from File dialog). There you can change:

- The wait or pause time after a character is sent.
- The wait or pause time after a line is sent.
- The handling of blank lines and End of lines.

To paste text to the host, follow these steps:

1. Start SmarTerm and log on to the host.

Give the host the appropriate command to receive the transmitted text. This varies from host to host.

2. Select Edit>Paste from File.

Highlight the file(s) to send to the host, and click OK to begin pasting the file(s). If you like, switch to another Windows application during file transfer.

## Using the Windows clipboard

As with any Windows application, SmarTerm provides support for moving data between the Windows Clipboard and the session window (and then the host).

You can copy to the Windows Clipboard only if you have selected something in the session window. You can paste whenever you have an item in the Windows Clipboard.

If you want to capture screen shots of SmarTerm that include features such as the menu bar, toolbar, and so forth, use the standard Windows screen-shot commands Print Scrn (shoot entire screen) and Alt+Print Scrn (shoot just the active window).

## Selecting text

Selection	Action
Entire session window	Edit> Select Screen
Session window and history buffer	Edit> Select Screen+History
Sequence of characters or words	Click character, drag cursor to other end of sequence of characters or words, and release mouse button.
Sequence of words	Select first word as above, drag cursor to other end of sequence, and release mouse button.
Line	Move the mouse pointer to the left margin of session window. Click the left mouse button and drag the mouse down to select the line(s) you want.
Sequence of lines	Select first line as above, drag pointer to other end of sequence, and release mouse button.
Rectangular region	Hold down Ctrl while you click and drag.

## Copying text

SmarTerm offers several copy commands in the Edit menu:

### Copy

The basic Windows copy command, putting the selected text in the Clipboard.

### Copy Table

Turns multiple spaces into tab characters as it puts text in the Clipboard. Use Copy Table when you want to use the Clipboard to transfer spreadsheet or other tabular data from a host application to a Windows application.

## Copy to File

Works like Copy, except that selected text goes into the ASCII text file of your choice rather than into the Clipboard.

## Copy Screen to History

A special feature to allow you to deal with hosts that clear the screen before sending new text. You can save a screen with this command, or automate the practice by checking the Copy Screen Before Clearing checkbox in Properties>Emulation>Display tab>History box.

## Pasting text

SmarTerm provides two Paste commands on the Edit menu:

### Paste

In local mode, simply types the current Clipboard text at the current cursor location. If you are online, the text goes to the host.

### Paste From File

Works just like Paste to host, except that the text comes from an ASCII text file rather than the Windows Clipboard.

## Moving text between applications

Text dragged to another application is sent there, following OLE techniques. Text dragged into SmarTerm is always dropped at the cursor location and treated as if you typed it there.

## Using the history buffer

### Scrolling back

The history buffer allows SmarTerm to record your session with the host, and lets you scroll backward through the session. Information that has scrolled off the top of the screen is not gone; you simply use the vertical scrollbar on the right side of the session window to back up and review your session. (If you click the scrollbar above or below the thumb-tab, you move by pages instead of lines.)

You can highlight information as you back up and copy it to the Clipboard, or copy the selected text directly to a file or printer. You can then paste it into another application. When you scroll backward:

- The background of the buffer is a different color than the background of the text page.
- If you scroll up to view the buffer, the word **Hold** becomes bold in the status bar, signaling that SmarTerm has temporarily paused communication with the host. When you scroll forward to the active text page or press a key, the hold is released.

### Disabling or resizing the history buffer

Select Properties>Emulation>Display tab>History box. The buffer can range from 4K to 1024K, but 64K (about thirty 25x80 pages) is usually enough. The buffer saves space with automatic compression. Its memory comes from Windows system memory; so in most cases you won't experience slower performance with a larger buffer.

## Printing

Most aspects of printing are handled by Windows. For normal text printing from the SmarTerm window or history buffer, select File>Print. Then to review Windows print settings click Properties.

SmarTerm also allows host applications to print via Windows, and provides a way to change the established Windows settings accordingly. Select Properties>Emulation>Printer tab to review these settings:

- Printer fonts for 80- and 132-column text.
- Form feed handling.
- Whether to emulate the Digital LA210 printer.
- How much SmarTerm sends to the printer after receiving a print command: the entire text page or just what's in the scroll margins currently defined by the host.
- Printer controller mode handling, defining what initiates printing, how much is sent to print, and if a Windows printer driver is used.

## Managing graphics

To take advantage of host graphics, you must start a session using the Digital VT graphics session type. This session type emulates the same terminal types as the Digital VT session type **plus** the following Digital and Tektronix graphics terminals:

- Digital VT340, VT240, VT241
- Tektronix 4010/4014

## Creating graphics

A ReGIS image is stored as an ASCII text file containing ReGIS commands. You can create a ReGIS image with a host program that outputs ReGIS, or you can create a text file containing ReGIS commands. You can even embed ReGIS commands in a host command file (such as a VAX DCL command file) to add graphics to your batch processes and front-end menus.

Sixel graphics are bitmaps following a format described in *VT 330/340 Programmer Reference Manual Volume 2: Graphics Programming*, Order Number EK-VT3XX-GP-002 from Digital. It is extremely unlikely that you would ever need (or want) to create sixel graphics by hand.

Tektronix graphics are vector (line) graphics using a much smaller set of commands than ReGIS uses.

For more information on all of these formats, see the online help.

## Displaying graphics

There are three ways to display ReGIS, sixel, and Tektronix graphics in SmarTerm:

- Set SmarTerm to emulate the appropriate terminal and create the graphics either locally or while connected to a host.
- Display existing files stored on the host.
- Display existing files stored on your PC using the Replay Captured File command on the Tools menu.

The history buffer is reserved for text. When you are displaying a ReGIS, sixel, or Tektronix image, SmarTerm temporarily turns off the History buffer, and does not turn it back on until the screen clears or the image scrolls off the top of the session window.



**Note:**

SmarTerm always scales Tektronix images to fit into the session window. For this reason, there are no scroll bars when you are in Tektronix mode.

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Follow these steps to display graphics files stored on your PC:

1. Make sure the terminal type is set to Tektronix if you want to display a Tektronix file. Then select Tools>Replay Captured File.
2. Select the type of file to display.
3. Find the file you want to display, select it and click Open. SmarTerm then displays the file in the session window.

Once you have displayed the file, you can do the following:

- If it is a ReGIS file, you can change the colors with Properties>Emulation>ReGIS tab, ReGIS Colors button.
- If it is a Tektronix 4014 graphics file, you can change the colors using the Properties>Emulation>Colors.
- You can select part or all of the image and copy it to the clipboard.
- You can print the image.

## Printing graphics

Printing graphics with SmarTerm is very similar to printing text: when displaying graphics, use the Print command on the File menu to send the image to the current graphics printer. However, keep in mind that you must use a graphics printer to print graphics.

## Using host graphics in Windows

SmarTerm allows you to use ReGIS, sixel and Tektronix images in other Windows applications via the Windows Clipboard. Follow these steps:

1. Display the image that you want to use.
2. Select the portion of the image that you want to use in the other Windows application.
3. Select Edit>Copy. This puts a copy of the image into the Windows Clipboard.

Switch to the application and document that you want to use the image in and select Edit>Paste.



# Contacting Esker

Esker provides thorough documentation. If you encounter a problem, look there first for troubleshooting hints. If your problems persist, contact Technical Support at:

United States (608) 273-6000

Fax (608) 273-8227

Email [support@esker.com](mailto:support@esker.com)

France (European HQ): (33) 472 83 46 46

Fax (33) 472 83 46 40

Email [support@esker.fr](mailto:support@esker.fr)

United Kingdom/Benelux/Northern Europe: (44) 1332 799 622

Fax (44) 1332 799 633

Email [support@esker.co.uk](mailto:support@esker.co.uk)

Italy: (39) 2 89 20 03 03

Fax (39) 2 57 51 18 96

Email [support@esker.it](mailto:support@esker.it)

Germany/Eastern Europe: (49) 201 8 21 57 0

Fax (49) 201 8 21 57 14

Email [support@esker.de](mailto:support@esker.de)

Australia/Asia/Pacific: +61.(0)2 95 65 56 88

Fax +61.(0)2 95 65 58 77

Email [support@esker.com.au](mailto:support@esker.com.au)

Spain/Portugal: (34) 91 552 92 65

Fax (34) 91 433 55 41

Email [support@esker.es](mailto:support@esker.es)

## Reporting a problem

Technical Support can help you fastest and best when you call us with the information and equipment in front of you. Before you call for technical support:

1. Know your license (serial) number. It's on the Registration card that accompanied the software.
2. Be aware that we may need detailed information about your computer. A working knowledge of Windows 95/NT, the setup of your PC, and the way you are using SmarTerm may be necessary.
3. Isolate the problem as much as possible.

Does the problem occur every time you enter a certain sequence of keystrokes, or do you have to do something else first? Writing down a short description of the steps it takes to repeat the problem will help both of us to isolate the problem.

4. Seat yourself at the PC that is giving you trouble and call us from there. We may need to have you run one or more diagnostic tests, and these must be done on the computer with the problem.