



***YES*Station Extra Linux Based Terminal**

User's Guide

Version 1.00u.00

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Introduction

Welcome to the *YESTation* Linux Based Terminal User's Guide describing the Linux Based Terminal (LBT) desktop environment and configuration. The LBT solution provides a seamless integration of heterogeneous computing environments including Microsoft® Windows® Terminal Services, Citrix® WinFrame® and MetaFrame®, and a multitude of legacy systems. Additionally enhancing the LBT experience are features such as *YESTerm/IP*, the premier 5250E terminal emulation, embedded browser capability including a full complement of plug-ins, crash-proof flash-based operating software, and a robust field upgrade mechanism.

About this manual

This manual is aimed at the end-user and system administrator. It describes the different elements of the desktop environment, usage methods, and basic configuration techniques.

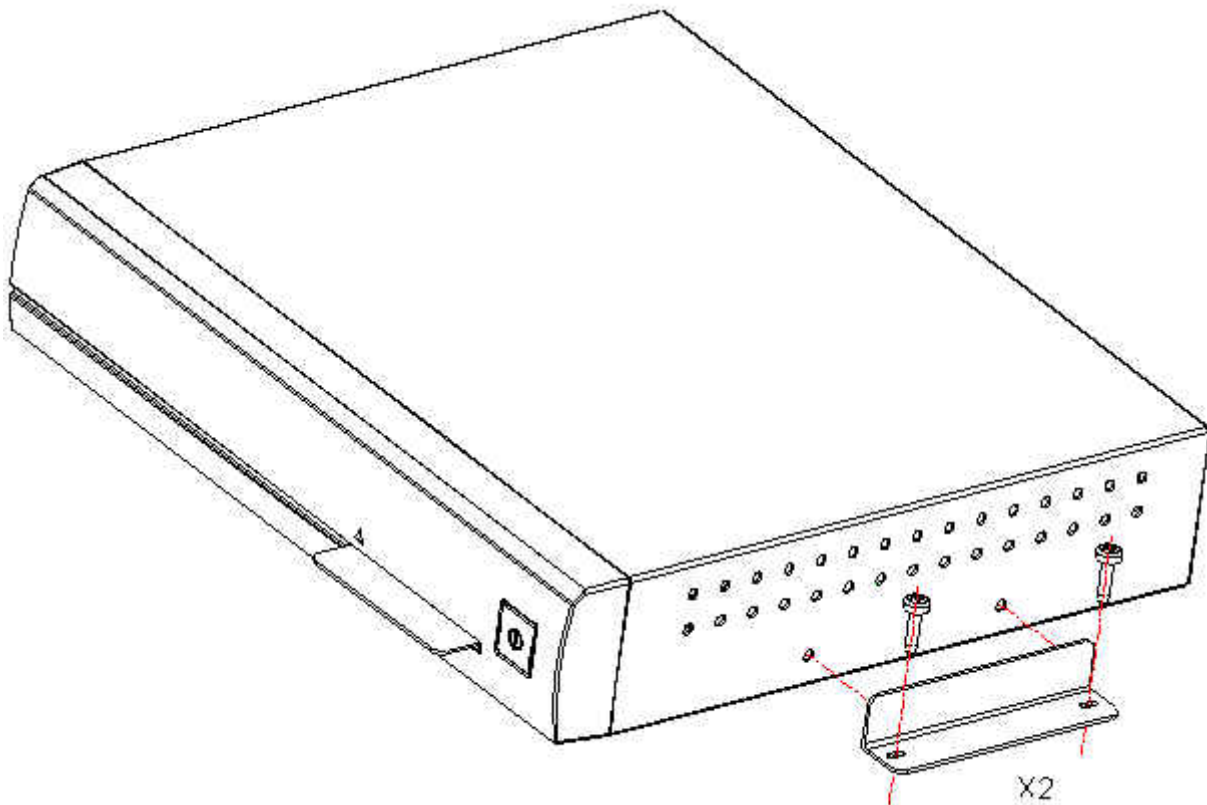


LBT Installation

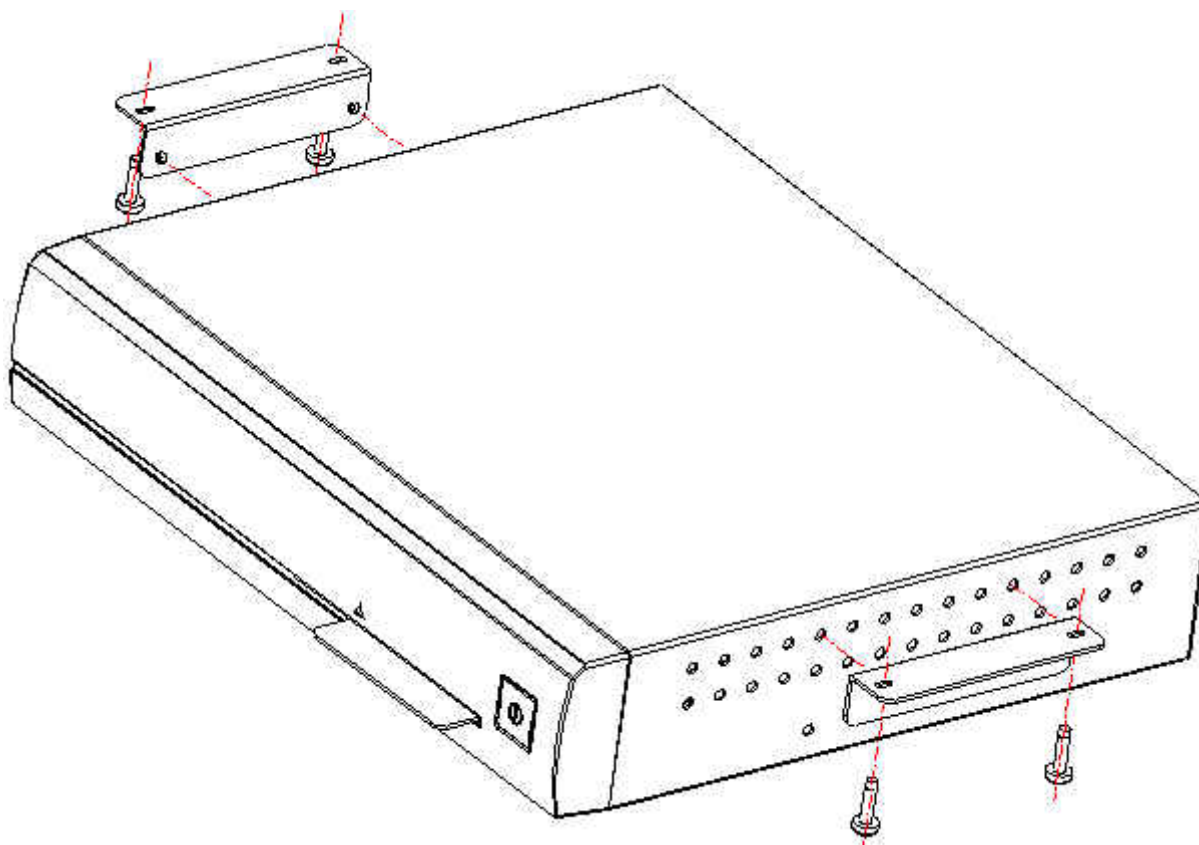
Mounting the LBT

The LBT can be mounted on a desk or under a table or attached to a wall. The LBT has no internal fan, and relies on natural airflow for cooling. When you mount or place the LBT, *make sure to keep as many ventilation holes, as possible, unobstructed*. If the LBT is placed vertically on the desktop, use the provided stand for support and to provide airflow to the bottom set of ventilation holes. If the LBT is placed horizontally on the desktop, use the provided rubber feet to elevate the bottom surface from the desktop, allowing airflow to the bottom of the case.

The following figures show some LBT mounting procedures.



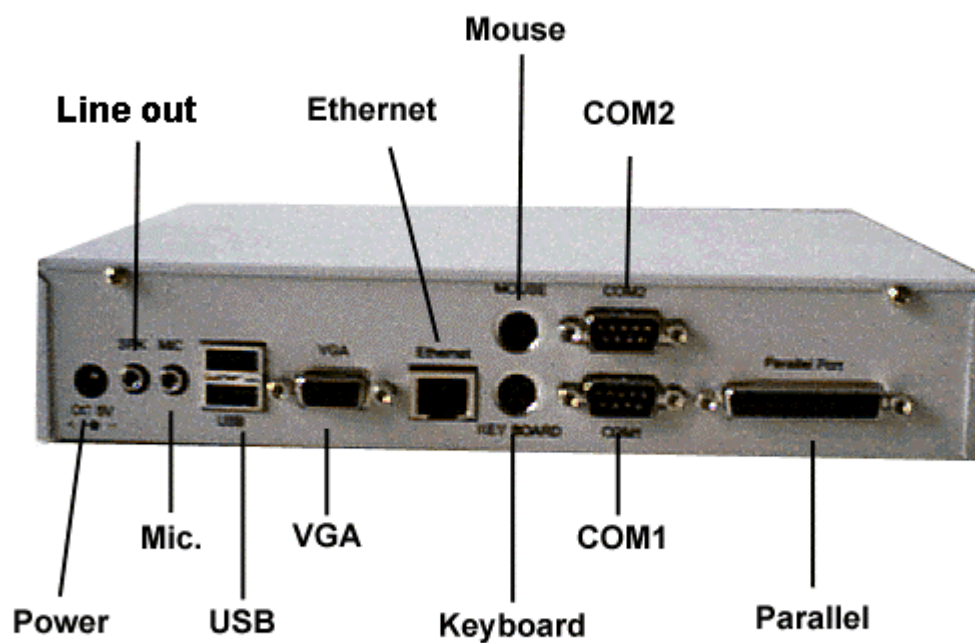
Mounting the LBT on a desk or a wall



Mounting the LBT under a table

Connecting the LBT

To connect the LBT to your server, please make all connections to the rear panel before turning on the power. The following figure shows the LBT's rear panel connectors.



LBT Rear Panel Connectors

Please follow the procedures below:

1. Connect the monitor to the VGA connector.
2. Connect the PS/2 keyboard to the Keyboard connector.
3. Connect the PS/2 mouse to the Mouse connector.
4. If you are ready to use a network connection, connect a CAT5 UTP cable to the Ethernet connector.
5. Connect the power adapter cable to the Power connector.
6. Plug the power adapter AC cord into an AC outlet.
7. Connect speakers to the Line Out port, if desired.

You are ready to use the LBT now.



Power-up and Boot Sequence

When you first switch on the LBT, a splash screen is displayed while the system performs self-test routines and then loads the operating software from the flash memory. When the boot loader takes over the start-up sequence a corresponding message is shown on the screen:

```
TASTE boot loader version 1.2  
Press <ESCAPE> for boot options
```

Boot loader start-up message

Normally, you will have no need to select a boot option, since the default is a Quiet Boot. The following menu appears if you press the Esc key at this time.

```
Quiet boot  
Verbose boot  
Setup boot
```

Boot menu

You can select one of these options from the boot menu:

- Quiet boot. This is the default setting. Quiet boot will bring up the system providing only basic status information during boot phase. After a successful power-up and boot the system will display the LBT desktop as discussed in the next section.
- Verbose boot. In this mode the system will output detailed information and status messages. This option is used for system analysis or error detection. After a successful boot the system will display the LBT desktop as discussed in the next section.
- Setup boot. This mode starts the Setup application in text mode. Use this mode in case of configuration problems when the graphical desktop cannot be started or displayed.

When the boot loader takes over the start-up sequence, a corresponding message is shown on the screen:

```
Uncompressing Linux ... OK, booting the kernel
```

Boot loader start-up message

You can switch off the LBT any time in any stage since the operating software is stored in a flash memory module and thus protected from data-loss. The boot-up process is slow, so please be patient

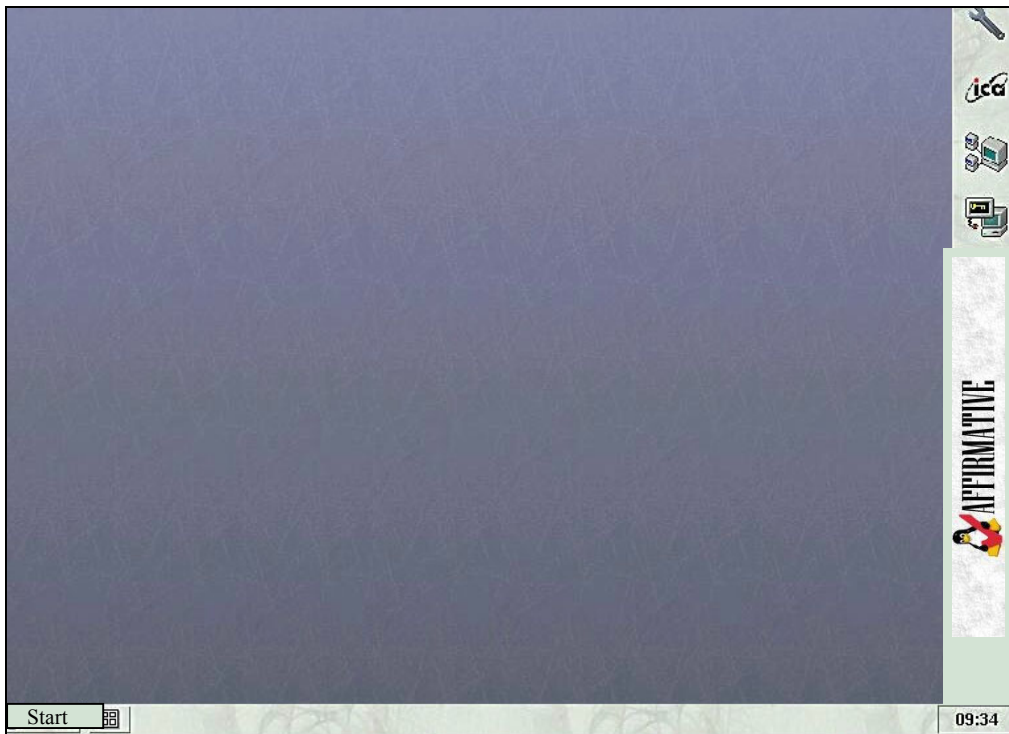


The LBT Desktop

After power-on, the LBT will first go through several boot sequence procedures. When the operating system is successfully loaded from the flash memory, the desktop is displayed and you can start working.

The LBT desktop consists of three areas:

- A panel at the bottom of the screen referred to as the “taskbar”. The taskbar is used to start applications from the Main menu, to switch between running applications, and to toggle between virtual desktops. The Main menu, the main application starter, is the button on the left labeled “Start”. Click on this button to open the Main menu and select an application or Setup. The icon to the right of the Main menu is the virtual desktop window list, if there is more than one virtual desktop. The current system time is shown on the right, if the clock display is enabled (default is no clock display).
- An Application Launcher, which is usually displayed on the right side of the desktop, containing a selection of applications for easy access. You can add items to the Application Launcher or remove items from it. By default, this Launcher bar is hidden, but it can be configured to be always visible.
- The desktop area itself. This area is blank after the initial power-up of the system. Application software will use this space to display client windows. You can also open the Main menu by right clicking anywhere on the desktop.



LBT desktop with taskbar and Application Launcher

As a default setting, the Application Launcher is paged out of the desktop and “hidden” outside the visible display area. This method is referred to as Smart Mode. Hiding the Application Launcher outside the visible screen provides a greater desktop area for the display of application windows. To display the Application Launcher, simply move the mouse pointer towards the appropriate edge of the desktop. After clicking on an item, the selected application is started and the Application Launcher will “hide” again outside the visible section. You can disable Smart Mode in Setup. The Application Launcher will then be displayed within the visible area all the time. The Application Launcher is usually displayed on the right side of the desktop. The position can be changed to top or left side in Setup.

The Taskbar is always displayed at the bottom of the desktop. There is also a Smart Mode parameter for the Taskbar, so you can hide it if you wish. The default here is Smart Mode off.

You can click the right mouse button over an item, such as an icon, an Application Launcher item, or the desktop area, to display a context menu with choices that are applicable to the item you clicked. If you don’t know what to do with an item, clicking the right mouse button on it is an easy way to find out what can be done with the object. The desktop context menu contains the same entries as the Main menu.

Move the mouse pointer over an icon and wait for a short while. A built-in context help text, called “tooltip”, is displayed.

Taskbar

The taskbar contains the Main menu, the virtual desktop window list, the list of active client windows and a clock. Click on **Start** to open the Main menu and select an application from the list.

Click on the window symbol to show a list of virtual desktops and the active windows on these desktops.

The area to the right of the window list is filled with a placeholder as soon a window opens in the desktop area. You can click on one of these placeholders to make the selected window the active window and bring it to the front or right-click to display the window context menu.

Application Launcher

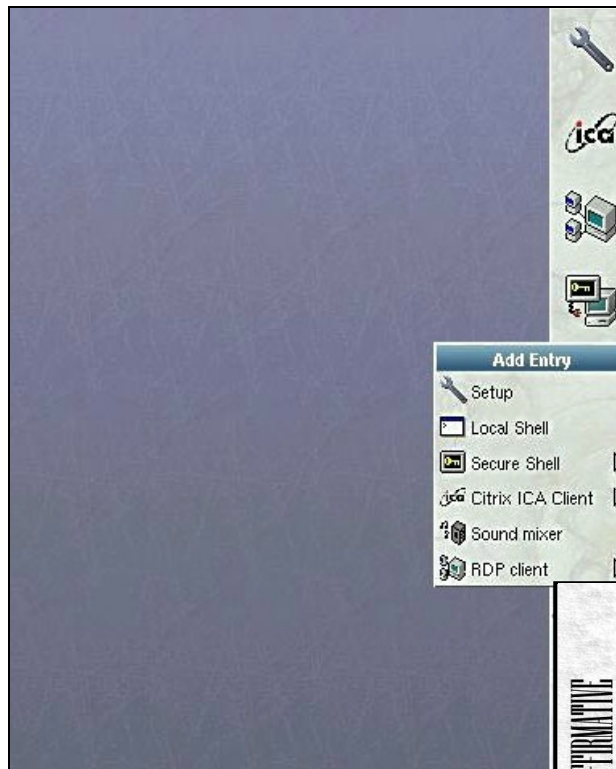
The Application Launcher is used as a quick access to applications that are frequently used. It can be adjusted to your requirements by adding or removing items from it. Simply click on an icon with the left mouse button to start the associated application.

By default, the Application Launcher is in Smart Mode at the right edge of the screen, and thus hidden until you move the mouse pointer towards the edge of the screen. The Application Launcher can be configured to be displayed either on the left side of the desktop, on the right or at the top.

Adding and Removing Application Launcher Entries

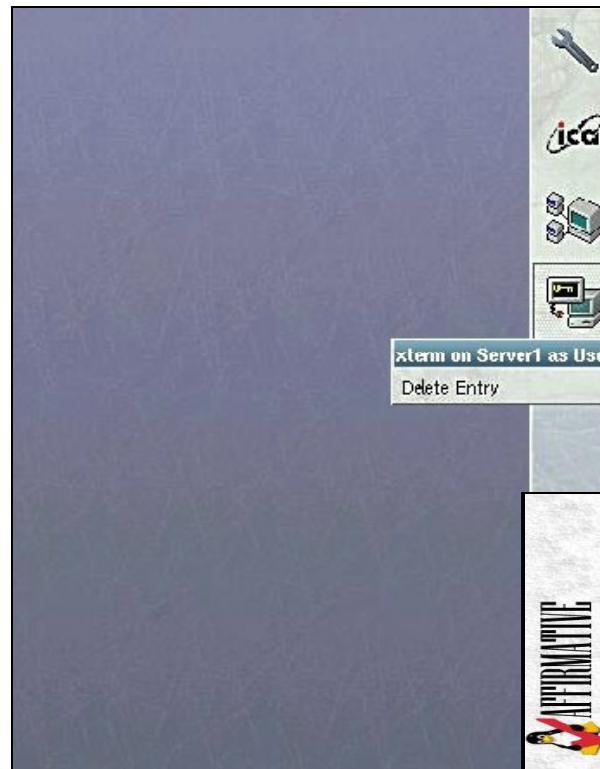
To add or remove entries from the Application Launcher simply do the following:

Right-click within an empty region of the Application Launcher to display the “Add Entry” menu. Select an item from the list to be added to the Application Launcher:



. Adding an Application Launcher entry

Right-click on an Application Launcher item to display its context menu. Select “Delete Entry” to remove the item (and the corresponding icon) from the Application Launcher:



Removing an Application Launcher entry

Main Menu

Click on **Start** in the taskbar or right-click on the desktop area to open the Main menu and select an application from the list.

The Main menu usually contains the following entries (depending on actual system configuration):

- **Setup**. Use this application to configure the LBT device and the LBT desktop.
- **YESterm IP**. Up to four display emulation sessions and three printer emulation sessions can be configured.
- **Citrix ICA Client**. Up to three ICA6 clients can be configured in Setup.
- **Netscape Navigator 4.78**. Open this browser session to connect to remote or local Internet servers.
- **RDP Client**. Up to three RDP clients can be configured in Setup
- **Local Shell**. Open a window containing a bash shell running on the local system. Command line operations are executed from this window.



Main menu

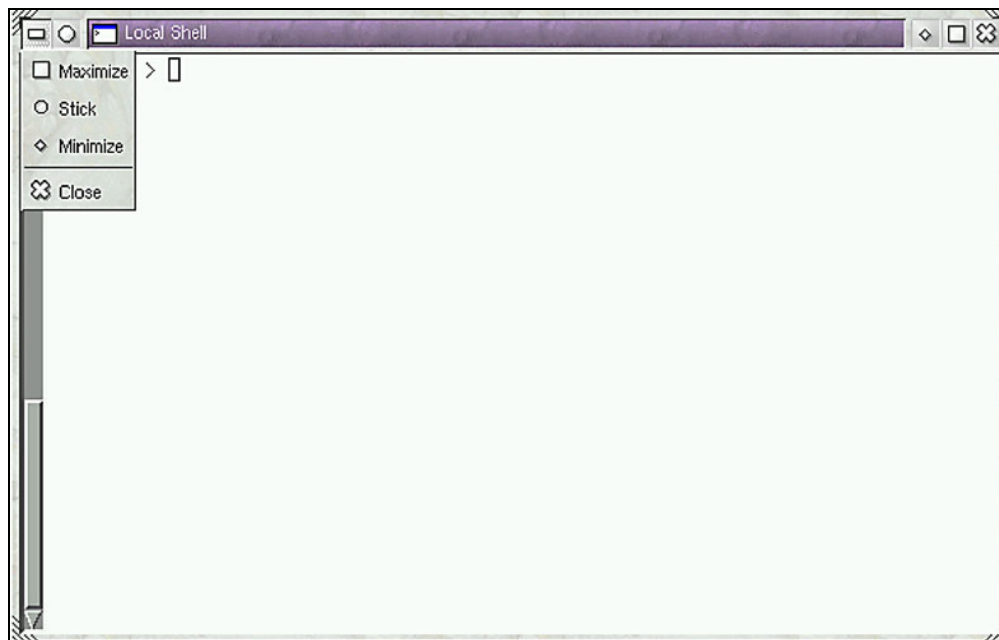
Working with Application Windows

Working with application windows on a Linux desktop is very similar to windows manipulation on a Windows desktop. The major difference is the use of Virtual Desktops in Linux and the Stick option for each window.

To manipulate a window's position and/or size, the following functions are available:

- **Move.** Drag the window's titlebar, i.e. move the mouse pointer over the titlebar, click the left mouse button and hold this button while moving the mouse pointer.
- Alternatively, hold the **Alt** key + left mouse button and drag the window to the desired location.
- **Resize.** Drag the window's borders, i.e. move the mouse pointer over a border or the corner of the window, then hold down the left mouse button while moving the mouse.
- You can also hold down the **Alt** key and the left mouse button while dragging the window.
- **Maximize.** Use this function to maximize the window to fill the screen, or if the window is already maximized, to shrink the window back to its original size. Clicking the maximize button with the middle mouse button will maximize the window vertically; clicking the right mouse button horizontally.
- **Minimize.** Click this entry to hide the window. A placeholder for the window will still be displayed in the taskbar. Click on this placeholder to restore the window to its original size.
- **Stick.** Toggle the sticky state of the window. If sticky is set, the window is displayed on all desktops.
- **Close.** Closes the current window.

The window menu provides the same functions as the titlebar buttons:



Window menu

You can also right-click on the window's titlebar or the placeholder in the taskbar to display the window menu.

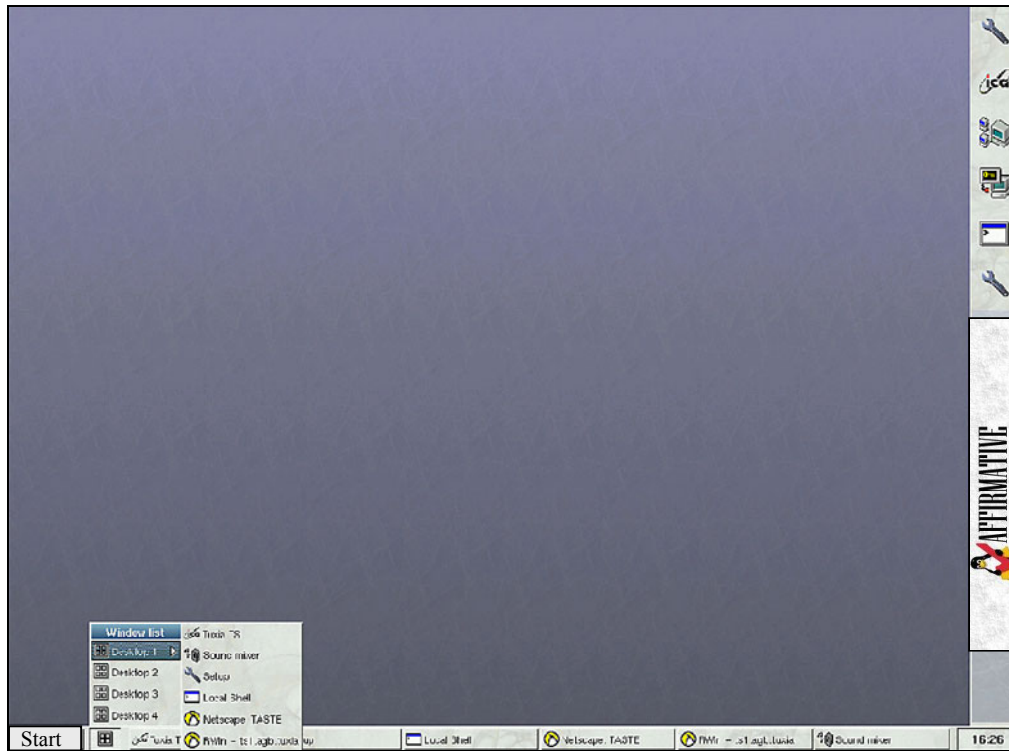
Switching between Windows

You can have several windows open at the same time. To change between these windows simply:

- Press and hold down the **Ctrl** key and then press the **Tab** key to toggle through active windows,
- Use the taskbar: click on the window title for the window to be displayed, i.e. be brought to the front or be restored from an minimized state, or
- Click anywhere on a window to bring it to the front and make it the active window for user input.
- Use **Alt** + **Tab** for task switching in RDP / ICA clients within the Windows environment.

Virtual Desktops

Up to ten desktops can be configured in Setup extending the display area.



Virtual desktops window list

You can easily switch between desktops by clicking on the window list button of the taskbar or press **Ctrl** - **Alt** - **→** to toggle forward or **Ctrl** - **Alt** - **←** to toggle backwards through the desktops one by one, or click on the “Window list” button to display the desktops and the active windows within these desktops. Please note that switching from the last desktop to the first using **Ctrl** - **Alt** and the left/right arrow requires that the progression, i.e. $4 \Rightarrow 3 \Rightarrow 2 \Rightarrow 1$, be followed.

If you want a window to be present on all virtual desktops all the time, simply press the “Stick” button in the window titlebar or select this function from the window menu or window context menu. The window will then be “pinned” to the background and will appear on all desktops in the same position.

How to get started

Here are a few tips to get you up and running:

- To start an application, click on the **Start** button on the taskbar panel and choose an entry from the list or sub-menus.
- Click on an icon in the Application Launcher to start the corresponding application.
- Select “Start Main Menu” > “Local Shell” to open a bash shell (Bourne Again Shell) on the local system and run a built-in Unix command.
- Choose “Start Main Menu” > “Setup” or the Setup icon in the Application Launcher to configure the local system.
- Press `Ctrl` - `Alt` - `→` / `Ctrl` - `Alt` - `←` to switch between virtual desktops or `Ctrl` - `Tab` to toggle between running applications.
- Use the right mouse button to access context menus for the taskbar, the desktop, and the Application Launcher.

Mouse Techniques

Modern operating systems with graphical user interfaces make frequent use of the mouse to start programs, close, minimize, restore or resize windows, etc.

- Left-clicking on the border, the titlebar, or the window content area activates and raises the window to the top.
- Right-clicking on the titlebar displays the window’s menu if the window is active, otherwise right-clicking will activate the window
- Dragging the titlebar moves the window.
- Dragging on corners or edges resizes the window.
- Clicking on the right icon in the window title bar `X` closes the application and the window.
- Clicking on the “Sticky” icon `o` toggles the window’s sticky state.
- Left-clicking on the Maximize button maximizes the window.
- Middle-clicking on the Maximize button maximizes the window vertically.
- Right-clicking on the Maximize button maximizes the window horizontally.



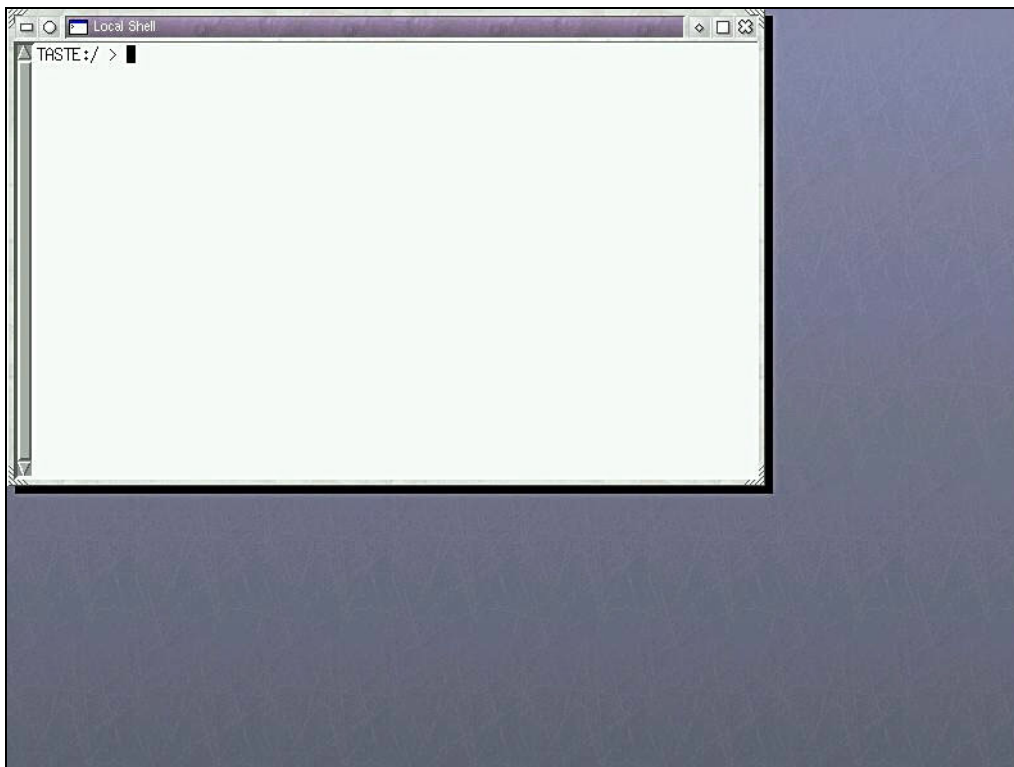
Client Applications

This section describes the built-in client applications on the LBT:

- Local Shell
- Citrix ICA Client
- RDP Client

Local Shell

Select “Local Shell” to open a window providing a bash shell (Bourne Again Shell) on the local host:



Local shell

The following commands are built into the operating system by default and can be used in the local shell:

badblocks	fdelpart	ldd	ping	swapoff
basename	find	ln	pman	swapon
bash	ftool	loadkeys	pppd	sync
cat	ftp	lpc	ps	syslogd
cd	fupdate	lpd	readtrak	tail
cdquery	fversion	lpq	reboot	tail-f
chat	getmyip	lpr	rm	tar
chmod	getsetup	lprm	rmmod	tasteverison
cmp	grep	ls	route	thttpd
confctrl	gzip	lsmod	sed	touch
configd	head	mkdir	seq	tr
cp	hostname	mke2fs	setserial	trak
cut	hwclock	mknod	sh	trakinfo
date	ifconfig	mkswap	sleep	tune2fs
dd	imon	mount	smbd	umount
dhcpcd	init	mv	sort	vi
dirname	insmod	netcat	ssh	vim
e2fsck	ipppd	netstat	ssh-starter	writetra
egrep	isdnctrl	nice	stty	
exit	killall	nmbd	su	

Citrix ICA Client

Select from up to three predefined ICA client sessions. The LBT will then connect to the selected server and initiate the login sequence:



Citrix ICA client user login screen

After you have successfully logged on to a server running Citrix software, the remote session is displayed in the pre-configured window state (full screen or selected window size), and the remote host desktop is shown in the client window.

RDP Client

Select from up to three predefined RDP client sessions. The LBT will then connect to the selected server and initiate the login sequence:



RDP client user logon screen

After a successful log-on to the terminal server, the remote session is started and displayed in the configured window state (full screen or selected window size), and the remote host desktop is displayed in the client window (see example below).



LBT Setup

After bootup, the LBT comes up in Linux desktop mode, with a blank desktop except for the Task Bar at the bottom and the Start button in the lower left corner. If you move the cursor to the far right, a Launch Bar will appear.

Activate the Main menu by left clicking on **Start**, or by right clicking anywhere on the desktop. This menu will provide choices of: Setup, Local shell, and the configured sessions.


Before you activate any of the sessions for the first time, you will have to go into Setup and change, at a minimum, some network and server parameters.

Use the Setup application to configure LBT hardware, client applications, and select desktop settings. Please be careful when changing parameters, since faulty configuration settings, especially in display resolution might render the system inoperative.

Highlight **Setup** and left click or hit PC **Enter**. You will see a menu of choices. You can also see the current firmware version in the upper portion of any Setup screen, shown as TASTE: xx.xxx. As you navigate the menus, you will want to change some parameters. Whenever you first attempt to make a change, you will be faced with a logon sub-window for security purposes. In this sub-window, type **root** for the user name, and leave the password blank. To go back to the next higher menu, press **Left Arrow** or **Right Arrow**, or click on <...>. When you get to a parameter sub-window, navigate with the **Tab** key. To save your changes, you must back up through all the menus to the top-level menu until you are asked if you want to **Apply changes**. *If you exit the menu sub-windows in any other way, you will lose all the changes you have made since your last save.* If you choose to **Apply changes**, the configuration file will be updated in the system's flash memory, and the LBT will either restart the window manager or perform a full system reboot for your changes to take effect. A reboot is visibly obvious; ignore any ominous looking messages that may appear on the screen during this reboot. If the window manager is restarted, your only indication will be the disappearance of the Task Bar at the bottom of the screen. When the Task Bar reappears, you can proceed.

System Information

Click on this and you will see a lot of esoteric information, most of which is of interest only to a Linuxphile. But scroll down to IFCONFIG, using the keyboard arrow keys, and you will see the LBT IP address, the MAC hardware address, the subnet mask, and the Broadcast IP address. You can only look; you can't change anything from here.



The screenshot shows a window titled "TASTE Parameter Manager". At the top, it displays system status: "<Host: 127.0.0.1:55555> <TASTE: 01.00q>" and "<Current user: root> <State: Logged out>". Below this, a section titled "[System information]" is highlighted with a pink border. It contains a "MEMORY INFO:" section with a table of memory statistics. The table has columns for total, used, free, shared, buffers, and cached memory. Below the table, various memory-related metrics are listed in kilobytes (kB), including MemTotal, MemFree, MemShared, Buffers, Cached, Active, Inact_dirty, Inact_clean, Inact_target, HighTotal, HighFree, LowTotal, and LowFree.

```
TASTE Parameter Manager

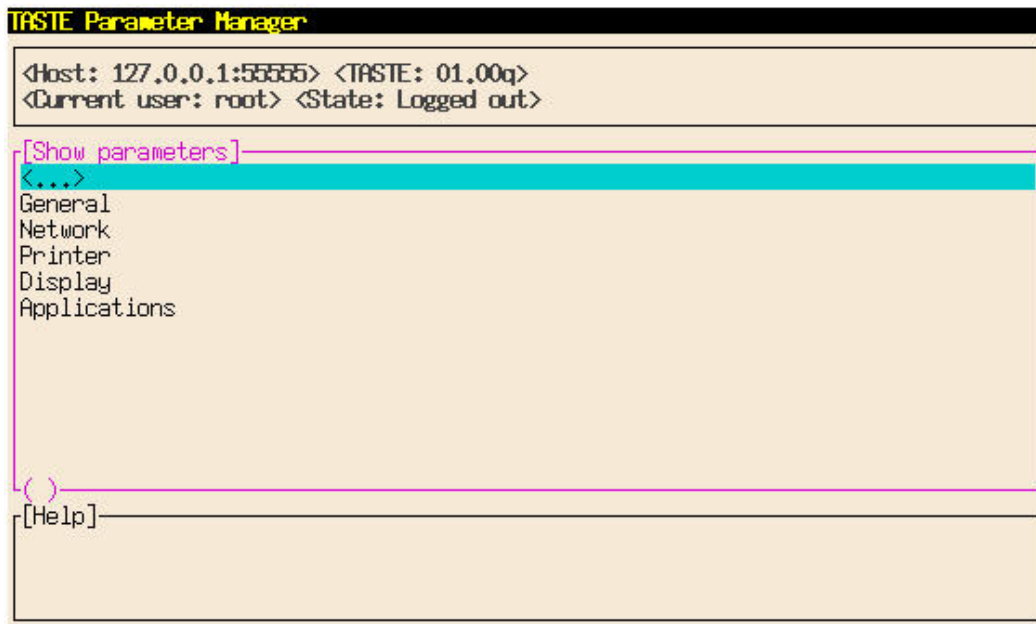
<Host: 127.0.0.1:55555> <TASTE: 01.00q>
<Current user: root> <State: Logged out>

[System information]
MEMORY INFO:
      total:   used:   free:  shared: buffers:  cached:
Mem:  60243968 46100480 14143488      0 25227264  8486912
Swap:      0      0      0
MemTotal:      58832 kB
MemFree:       13812 kB
MemShared:      0 kB
Buffers:       24636 kB
Cached:        8288 kB
Active:        4280 kB
Inact_dirty:   27616 kB
Inact_clean:   1028 kB
Inact_target:    12 kB
HighTotal:      0 kB
HighFree:      0 kB
LowTotal:      58832 kB
LowFree:       13812 kB
```

System Information Window.

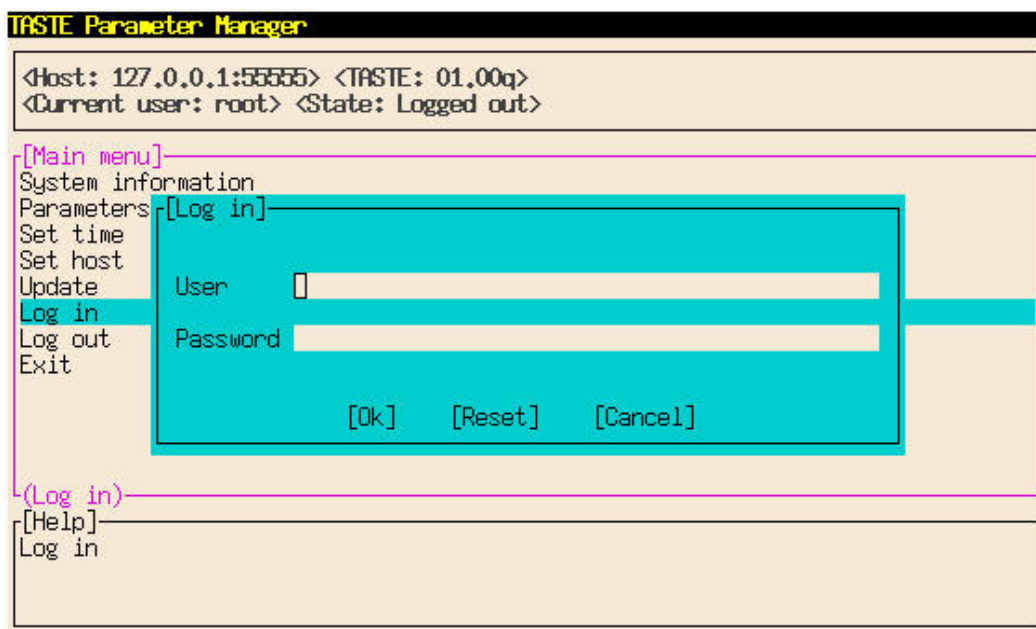
Parameters

Most of the Setup changes you make will be made from this section.



Show Parameters Window.

Initially, you must be logged in as “**root**” to make any changes. If you did not log in previously, a login screen is displayed the first time you select a parameter. Leave the password blank. Later, you can change user name and password if you wish.



User Login Window

To save your changes, you must back up through all the menus until you are asked if you want to **Apply changes**. If you exit the menu sub-windows in any other way, you will lose all the changes you have made since your last save. If you reply **Yes** to the **Apply changes** question, the configuration file will be updated in the system's writeable file system, and the device will either restart the window manager or perform a full system reboot for your changes to take effect.

General

This sub-menu provides entries to change hardware settings (network configuration), select the desktop language, initiate a software update and run remote diagnostic functions.



General Window

Hardware

The only parameters you might want to change from this menu are “Start Sound at startup”, “Monitor horizontal frequency range”, “Monitor horizontal frequency range”, and “Mouse type”.

TASTE Parameter Manager

<Host: 127.0.0.1:55555> <TASTE: 01.00q>
 <Current user: root> <State: Logged out>

[Hardware]

<...>

Current USB HCI	[ohci]
Current ethernet driver	[8139too]
Start Sound at startup	[no]
Current graphics driver	[geode]
Hardware acceleration	[yes]
Monitor horizontal frequency range	[30|60]
Monitor vertical frequency range	[45|60]
Mouse type	[ps2]

[Help]

Hardware Window

Language

The first Language window shows the current selected language.

TASTE Parameter Manager

<Host: 127.0.0.1:55555> <TASTE: 01.00q>
 <Current user: root> <State: Logged out>

[Language]

<...>

Language [en_US]

[Help]

Language Window

If you wish to change the language, you will be given the choices of English, German, or Italian.

TASTE Parameter Manager

<Host: 127.0.0.1:55555> <TASTE: 01.00q>
 <Current user: root> <State: Logged in>

[Language]
☒ en_US
☐ de_DE
☐ sv_SE

[Ok] [Reset] [Cancel]

[Help]
 Please choose the desired language.

Language Choices Window

System Update

If you want to use FTP to update your firmware, you must first enter the FTP server parameters here.

TASTE Parameter Manager

<Host: 127.0.0.1:55555> <TASTE: 01.00q>
 <Current user: root> <State: Logged in>

[System update]
 <...>

FTP Server [192.168.0.253]
 Directory path [img.YES1bt]
 FTP user [update]
 FTP password [update]
 Update proxy []
 Update proxy port [8080]

()

[Help]

System Update Window

- **FTP Server.** Enter the IP address of the FTP server providing the update files.
- **Directory Path.** Your entry here depends upon the specifics of your FTP server software. If the path to the upgrade files is completely defined in the server's FTP software configuration, this field will be left blank. Do not enter any file name here, only path information, if necessary
- **FTP User.** Enter the FTP user name to login at the FTP server.
- **FTP Password.** Enter the FTP password to login at the FTP server. Even if you do not require a password at the server, type something in this field anyway. The Setup software does not like a blank field here.
- **Update Proxy.** If you are using a proxy server, enter the IP address here.
- **Update Proxy Port.** Enter the port to be used on the proxy server.

Security

If you want to establish password security for the administrator and for the user, enter passwords here.

TASTE Parameter Manager

<Host: 127.0.0.1:5555> <TASTE: 01.00q>
 <Current user: root> <State: Logged in>

[Security]
 <...>
 Root password [*****]
 User password [*****]

()
 [Help]

Security Window

- **Root Password.** This password allows the administrator to change Setup parameters.
- **User Password.** This password allows the user to log in.

Autostart

Ignore this parameter

Network

This is used to specify the network parameters for the LBT.

The screenshot shows a terminal window titled "TASTE Parameter Manager". At the top, it displays system information: "<Host: 127.0.0.1:55555> <TASTE: 01.00q>" and "<Current user: root> <State: Logged in>". Below this is a section labeled "[Network]" which contains a cyan-colored bar with "<...>". Underneath the bar, the words "Network" and "Ethernet" are listed. At the bottom of the window, there is a "[Help]" button and a pair of parentheses "()" to the left.

Network Window

Network

Don't let the double use of the term "Network" confuse you. Click on the second **Network** to specify your DNS server IP address and select DHCP. Be sure that Activate is set to **no** in the Ethernet sub-window.

This screenshot shows the same "TASTE Parameter Manager" window as before, but with additional configuration options visible under the "[Network]" section. Below the cyan "<...>" bar, the following settings are displayed: "Default Nameserver []", "Domain searchlist []", and "DHCP [yes]". The rest of the window, including the "[Help]" button and the parentheses "()", remains the same as in the previous screenshot.

Network Window #2

- Default Nameserver. Click here to enter your DNS server IP address. You must have an entry here if you wish to use the Netscape browser with “friendly” URLs. Without a DNS server specification, you could only browse web sites for which you had the actual IP address.
- Domain searchlist. Ignore this parameter.
- DHCP. Select **yes** if you are using DHCP IP address assignment. Be sure to select **no** if you intend to specify an address in the Ethernet sub-window.

Ethernet

Select this if you wish to specify an IP address for your LBT, instead of using DHCP assignment. But be sure that DHCP is set to **no** in Network Window #2.

The screenshot shows a window titled "TASTE Parameter Manager". At the top, it displays system information: "<Host: 127.0.0.1:55555> <TASTE: 01.00q>" and "<Current user: root> <State: Logged in>". Below this is a section labeled "[Ethernet]" which contains a list of parameters with their current values: "Activate" [no], "Hostname" [YESlbt], "IP address" [192.168.0.1], "Netmask" [255.255.255.0], "Gateway" [], and "MTU" [1500]. The "Activate" option is highlighted with a blue bar. At the bottom of the window, there is a "[Help]" button.

Ethernet Window

- Activate. Set this to **yes** if you wish to specify an IP address here. Be sure to set it to **no** if you are going to use DHCP address assignment. Note that use of your Netscape browser will require a specified address unless you use a proxy server for Internet access.
- Hostname. Leave at default.
- IP address. Enter the IP address of the LBT.
- Netmask. Enter the address mask. The default of **255.255.255.0** is typically used.
- Gateway. If you need to access IP addresses outside of your local subnet, such as when using your Netscape browser without a proxy server, you will need to enter your LAN gateway IP address here.
- MTU (Maximum Transmission Unit). Leave this at default unless you are experienced and have a very good reason to change it.

Printer

When using a local printer on the LBT, only LPD/LPR printing on LPT1 is supported. The COM ports are not supported for local printing, except when printing from the YES*term*/IP printer emulator.

The screenshot shows the 'TASTE Parameter Manager' window. At the top, a status bar displays: '<Host: 127.0.0.1:5555> <TASTE: 01.00q>' and '<Current user: root> <State: Logged in>'. Below this, the '[Printer]' tab is selected, showing a cyan bar with '<...>'. Underneath, the text 'Port 9100 daemon' and 'LP Daemon' is visible. At the bottom left, there is a '()' button and a '[Help]' button.

Printer Window

Port 9100 Daemon

Leave the values in this window at default.

The screenshot shows the 'TASTE Parameter Manager' window. At the top, a status bar displays: '<Host: 127.0.0.1:5555> <TASTE: 01.00q>' and '<Current user: root> <State: Logged in>'. Below this, the '[Port 9100 daemon]' tab is selected, showing a cyan bar with '<...>'. Underneath, the text 'Starts p910nd [yes]' and 'Print device [/dev/lp0]' is visible. At the bottom left, there is a '()' button and a '[Help]' button.

Port 9100 Daemon Window

LP Daemon

Leave the values in this window at default.



The screenshot shows a terminal window titled "TASTE Parameter Manager". At the top, it displays system information: "<Host: 127.0.0.1:5555> <TASTE: 01.00q>" and "<Current user: root> <State: Logged in>". Below this is a section titled "[LP Daemon]" which contains a list of configuration options. The first option, "<...>", is highlighted in blue. The other options are "Starts lpd [yes]" and "Print device [/dev/lp0]". At the bottom of the window, there is a "[Help]" button.

LP Daemon Window

To use this local printer, set it up as a local printer on your server. For instance, on a Windows server, you would execute the following steps:

1. Initiate the Add Printer wizard.
2. Select the process for a local printer.
3. Create a TCP/IP port to the IP address of the printer-attached LBT.
4. Assign the new printer to this IP port.
5. Install the appropriate driver for the printer.
6. Name the printer.
7. Enable sharing, if desired.

Display

This configuration path sets the display parameters for the LBT desktop.

The screenshot shows the 'TASTE Parameter Manager' window. At the top, it displays the host information: '<Host: 127.0.0.1:5555> <TASTE: 01.00q>' and '<Current user: root> <State: Logged in>'. Below this, a tree view on the left shows the configuration path: '[Display]' is selected and highlighted in cyan, with its sub-items '<...>', 'General', and 'Resolution' listed below it. At the bottom of the window, there is a '[Help]' button.

Display Window

General

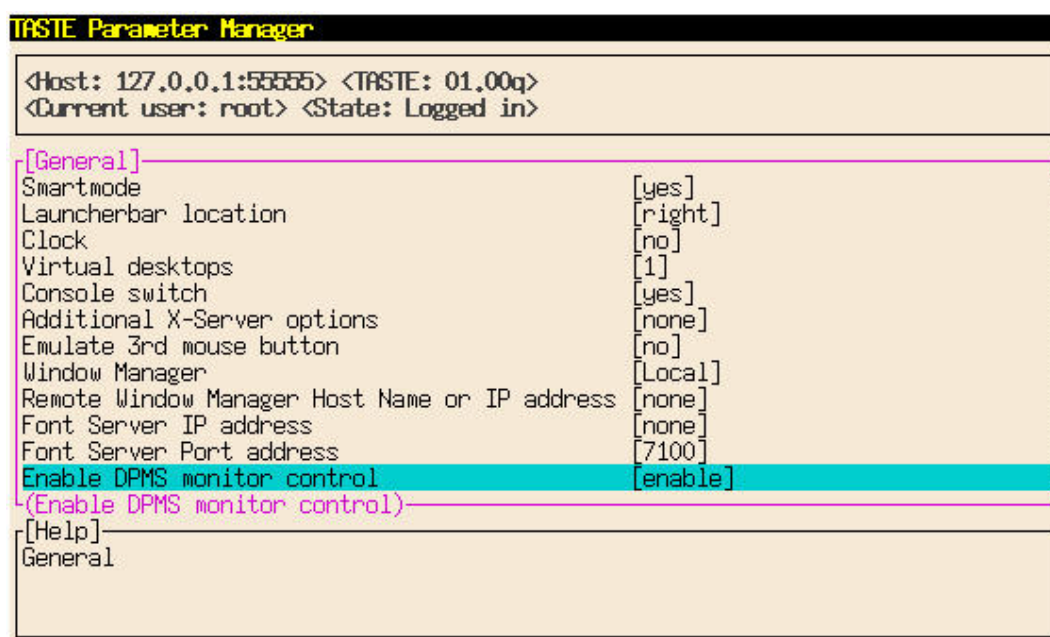
All the display parameters except resolution settings are configured here. We show two windows here because the window must be scrolled to see all the parameters.

The screenshot shows the 'TASTE Parameter Manager' window with the 'General' configuration path selected and highlighted in cyan. The parameters and their values are listed in a table:

<...>	
Smartmode	[no]
Launcherbar	[yes]
Smartmode	[yes]
Launcherbar location	[right]
Clock	[no]
Virtual desktops	[1]
Console switch	[yes]
Additional X-Server options	[none]
Emulate 3rd mouse button	[no]
Window Manager	[Local]
Remote Window Manager Host Name or IP address	[none]

A vertical scrollbar is visible on the right side of the parameter list, indicating that the content is scrollable. At the bottom of the window, there is a '[Help]' button.

General Window (Scrolled Up)



General Window (Scrolled Down)

- Smartmode. Select **Yes** to hide the Task bar off the bottom edge of the desktop.
- Launcherbar. Select **No** if you do not want a Launcherbar.
- Smartmode. Select **No** to hide the Launcherbar off the edge of the desktop.
- Launcherbar location. Select the position of the Launcherbar (if you have one). You can put it at any edge of the desktop except the bottom, which is reserved for the Task bar.
- Clock. Select **Yes** to show a clock at the right corner of the Task bar. Since the LBT does not maintain the clock when power is off, showing a clock is generally of little use.
- Virtual desktops. Enter the number (1-10) of virtual desktops you wish to enable. See [The LBT Desktop/Virtual Desktops](#) for more information.
- Console switch. Leave at the default value.
- Additional X-Server options. Leave at the default value.
- Emulate 3rd mouse button. Select **Yes** to emulate a 3-button mouse with a 2-button mouse. The third button is emulated by pressing both the right and left mouse buttons simultaneously. The third button is not supported in the local Netscape browser. Wheel scrolling and third-button scrolling are supported in ICA sessions to W2000 servers. Third-button scrolling is supported in ICA sessions to NT4.0 servers. Both wheel scrolling and third-button scrolling are supported in RDP sessions to W2000 and NT4.0 servers.
- Window Manager. Leave at the default value.
- Remote Window Manager Host Name. Leave at the default value.
- Font server IP address. Leave at the default value.
- Font Server Port address. Leave at the default value.
- Enable DPMS monitor control. Select **Enable** for monitor power saving..

Resolution

The screenshot shows the 'TASTE Parameter Manager' window. At the top, it displays system information: '<Host: 127.0.0.1:5555> <TASTE: 01.00q>' and '<Current user: root> <State: Logged in>'. Below this is a section titled '[Resolution]' which contains a cyan-colored selection bar with '<...>', followed by 'Color depth [16]' and 'Resolution [800x600]'. At the bottom of the window, there is a '()' button and a '[Help]' button.

Display Resolution Window

- Color depth. Select **8** for 8-bit color or **16** for 16-bit color.
- Resolution. Select one of four resolutions from 640x480 to 1280x1024.

Applications

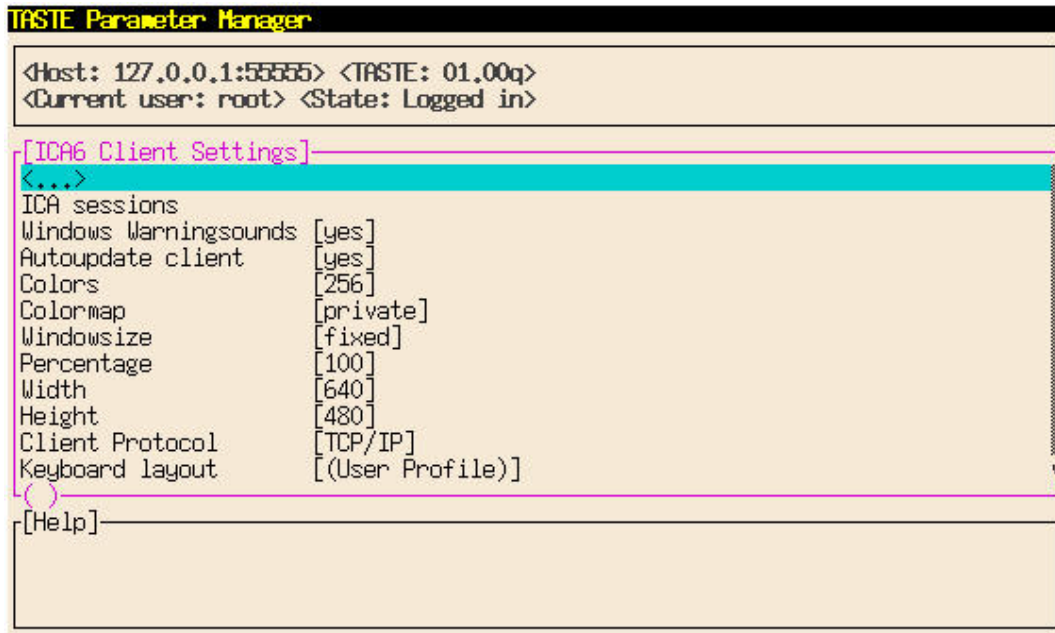
Here you configure parameters for all your Windows sessions. You can have up to three Citrix ICA sessions and/or up to three Microsoft RDP sessions.

The screenshot shows the 'TASTE Parameter Manager' window. At the top, it displays system information: '<Host: 127.0.0.1:5555> <TASTE: 01.00q>' and '<Current user: root> <State: Logged in>'. Below this is a section titled '[Applications]' which contains a cyan-colored selection bar with '<...>', followed by 'ICA6 Client Settings' and 'RWin Client Settings'. At the bottom of the window, there is a '()' button and a '[Help]' button.

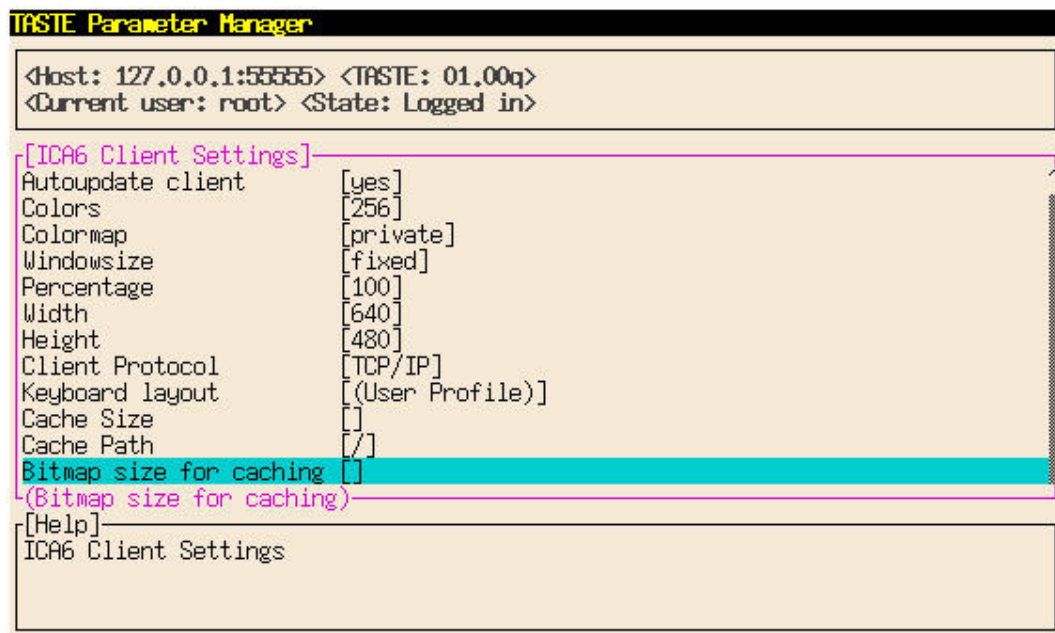
Applications Window

ICA6 Client Settings

In these screens, you set global ICA session parameters as well as individual parameters for each session. You can configure up to three Citrix Independent Computing Architecture (ICA) channels to access servers running Citrix WinFrame or Citrix MetaFrame. These items are displayed in the “Citrix ICA Client” section of the Main menu and the desktop context menu; they may also be added to the Application Launcher.



ICA6 Client Settings Window (Scrolled Up)



ICA6 Client Settings Window (Scrolled Down)

-
- ICA sessions. Select this parameter to add sessions and configure individual parameters for each session. See below for details about these individual windows.
 - Windows Warningsounds. Enable or disable Windows warning sounds.
 - Autoupdate client. Enable or disable automatic update of the ICA client firmware, if your server is set up to do this.
 - Colors. Select from 16, 256, 32K, or 64M (True Color) colors. We recommend no more than 256 colors, since Citrix still has some bugs in its support of higher numbers of colors. Also, more colors require more RAM memory and more network bandwidth.
 - Colormap. Select a local or shared color map.
 - Window size. Select your session window size from full screen, percentage of full screen, for fixed number of pixels.
 - Percentage. If you chose, in Window size, a percentage of full screen, enter the percentage (1-100) here.
 - Width. If you chose, in Window size, a fixed number of pixels enter the number of pixels (640-2048) for the width dimension here.
 - Height. If you chose, in Window size, a fixed number of pixels enter the number of pixels (480-1536) for the height dimension here.
 - Client Protocol. Leave at the default value.
 - Browse Server (not shown above). If you have more than one ICA server, and want to refer to them by name, enter the IP address of the Master Browser server.
 - Keyboard layout. Choose a desired country layout, or leave at the user profile setting.
 - Cache Size. This setting is not applicable in the LBT.
 - Cache Path. This setting is not applicable in the LBT.
 - Bitmap size for caching. Enter the minimum size (0-64KB) for bitmap caching.

ICA Sessions

In the above window, click on **ICA Sessions** to access the individual session parameters.

- Default Session. Select to set the parameters for the default session (Session 1).
- New. Select to add sessions.

Default Session (Session 1)

Some of these parameters have the same name as the global parameters described in ICA6 Client Settings. But if they are set here, they will override the global parameters for this session only.

- Session Name. Enter a descriptive name for the session. This string is used to identify the session in the Main menu and the Application Launcher, if applicable. Please do not use special characters for the descriptive session title.
- Session Type. Leave at **Server**. Applications are not supported at this time
- Session Protocol. Leave at the default value of **TCP/IP**.

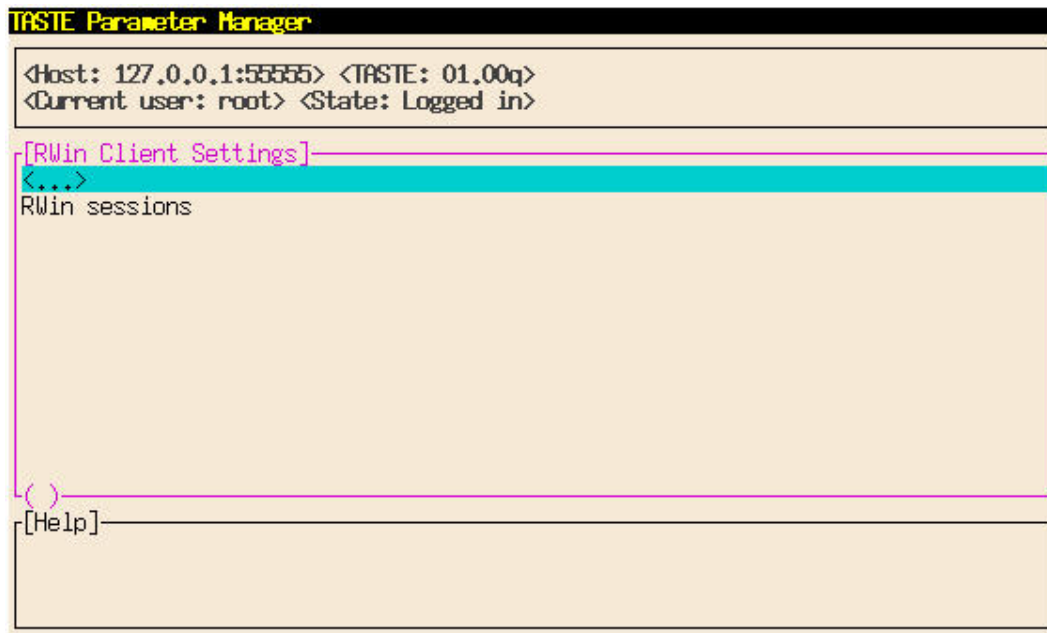
-
- Session Server. If you identified the Master Browser server in [ICA6 Client Settings|Browse Server](#), you can put the name of the desired Citrix server here. If not, enter the IP address of the desired Citrix server.
 - Compression. Activate or deactivate data compression over the network.
 - Bitmap Cache. Activate or deactivate bitmap caching for this session.
 - Sound. Activate or deactivate sound for this session.
 - Sound Quality. If you activated sound above, choose from low, medium, or high-quality sound. Remember that higher quality requires more network bandwidth.
 - Encryption. Select the encryption type, from basic up to 128-bit.
 - Colors. Select from 16, 256, 32K, or 64M (True Color) colors. We recommend no more than 256 colors, since Citrix still has some bugs in its support of higher numbers of colors. Also, more colors require more RAM memory and more network bandwidth.
 - Colormap. Select a local or shared color map.
 - Window size. Select your session window size from full screen, percentage of full screen, or fixed number of pixels.
 - Percentage. If you chose, in Window size, a percentage of full screen, enter the percentage (1-100) here.
 - Width. If you chose, in Window size, a fixed number of pixels, enter the number of pixels (640-2048) for the width dimension here.
 - Height. If you chose, in Window size, a fixed number of pixels, enter the number of pixels (480-1536) for the height dimension here.
 - Launch Application. Not applicable at this time.
 - Application Working Directory. Not applicable at this time.
 - Username. If you wish to automatically log on to the server, enter the Username here.
 - Domain. If you wish to automatically log on to the server, enter the Domain name here.
 - Password. If you wish to automatically log on to the server, enter the Password here.
 - Autostart. If you wish to automatically start the session at bootup, select **Yes** here.
 - Restart. Not applicable at this time.
 - Delete. If you wish to delete the session, highlight here and press **Enter**. *BE CAREFUL*. You will not get the option to confirm this deletion, although, if you exit Setup without saving changes, your apparent deletion will be nullified.

New

Select **New** to add a session. You will be offered the same set of parameters as Session 1 above.

RWin Client Settings (RDP)

Here you set parameters for each RDP session. There are no global RDP parameters. You may configure up to three Remote Display Protocol (RDP) channels to access servers running Microsoft Windows Terminal Services. These items are displayed in the “RDP Client” section of the Main Menu and the desktop context menu; they may also be added to the Application Launcher

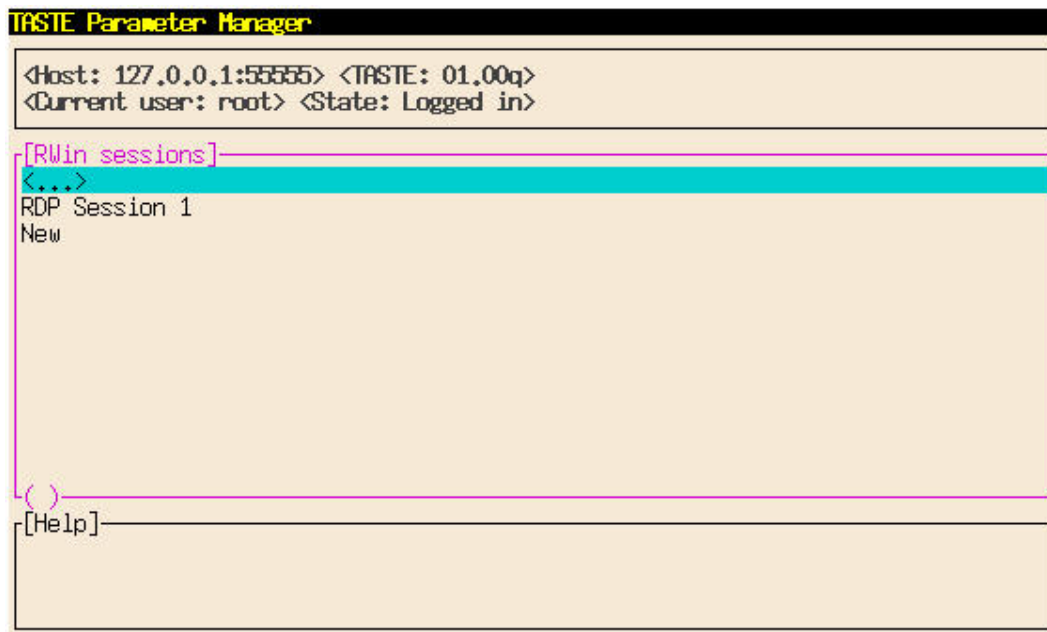


RWin Client Settings Window

- RWin sessions. This is a rather redundant screen. Select the only selection to get to the next screen.

RWin Sessions

Select the RDP session that you wish to configure, or add a new one.



RWin Sessions Window

- RDP Session 1. This is the default session. Make this selection to configure your first RDP session.
- New. Make this selection to configure additional RDP sessions.

RDP Session 1

Configure the default RDP session from this screen.

TASTE Parameter Manager

<Host: 127.0.0.1:55555> <TASTE: 01.00q>
 <Current user: root> <State: Logged in>

[RDP Session 1]

<...>

Session Name	[RDP Session 1]
Server	[192.168.0.1]
Username	[]
Domain	[]
Password	[]
Windows shell	[]
Working Directory	[]
Client hostname	[]
Width	[800]
Height	[600]
Percentage	[100]

()

[Help]

RDP Session 1 Window (Scrolled Up)

TASTE Parameter Manager

<Host: 127.0.0.1:55555> <TASTE: 01.00q>
 <Current user: root> <State: Logged in>

[RDP Session 1]

Password	[]
Windows shell	[]
Working Directory	[]
Client hostname	[]
Width	[800]
Height	[600]
Percentage	[100]
Window size	[Fixed]
Autostart	[no]
Restart	[no]
Keyboard layout	[us]

Delete

(Delete)

[Help]

RDP Session 1

RDP Session 1 Window (Scrolled Down)

-
- Session Name. Enter a descriptive name for the session. This string is used to identify the session in the Main menu and the Application Launcher, if applicable. Please do not use special characters for the descriptive session title.
 - Session Server. Enter the IP address of the desired Terminal Server here.
 - Username. If you wish to automatically log on to the server, enter the Username here.
 - Domain. If you wish to automatically log on to the server, enter the Domain name here.
 - Password. If you wish to automatically log on to the server, enter the Password here.
 - Windows Shell. Not applicable at this time.
 - Working Directory. Not applicable at this time.
 - Client Hostname. Not applicable at this time.
 - Percentage. If you choose, in Window size, a percentage of full screen, enter the percentage (1-100) here.
 - Width. If you choose, in Window size, a fixed number of pixels, enter the number of pixels (640-2048) for the width dimension here.
 - Height. If you choose, in Window size, a fixed number of pixels, enter the number of pixels (480-1536) for the height dimension here.
 - Window size. Select your session window size from full screen, percentage of full screen, or fixed number of pixels.
 - Autostart. If you wish to automatically start the session at bootup, select **Yes** here.
 - Restart. Not applicable at this time.
 - Keyboard Layout. Choose a desired country layout here.
 - Delete. If you wish to delete the session, highlight here and press **Enter**. *BE CAREFUL*. You will not get the option to confirm this deletion, although, if you exit Setup without saving changes, your apparent deletion will be nullified

New

Select **New** to add a session. You will be offered the same set of parameters as RDP Session 1 above.

Set Time

Ignore this parameter. There is no battery in the LBT, so time is not maintained when power is turned off.

Set Host

Select the IP address and port number for a remote system.

The screenshot displays the 'TASTE Parameter Manager' window. At the top, a status bar shows '<Host: 127.0.0.1:55555> <TASTE: 01.00q>' and '<Current user: root> <State: Logged out>'. The main menu on the left lists options: '[Main menu]', 'System informat', 'Parameters', 'Set time', 'Set host' (highlighted in cyan), 'Update', 'Log in', 'Log out', and 'Exit'. A cyan dialog box titled '[Set host]' is open, containing two input fields: 'Host' with the value '127.0.0.1' and 'Port' with the value '55555'. Below these fields are three buttons: '[Ok]', '[Reset]', and '[Cancel]'. At the bottom of the main window, there is a '[Help]' section with the text 'Set host'.

Set Host Window

Update

Initiate a system firmware update using the update server settings configured in [Parameters\System Update](#).

Firmware Upgrade Instructions

The Linux Based Terminal is upgraded using the FTP process. This process requires an FTP server accessible via TCP/IP from the terminal. The upgrade steps are:

1. Download the latest-version firmware from the Affirmative Computer Products web site, per the Affirmative Computer Products Technical Support instructions.
2. Unzip the downloaded file. You will see six files. Five of the files are necessary for the upgrade. The sixth file, with the .txt extension, contains these upgrade instructions.
3. Save the unzipped files in your local FTP server with a known path. You need not save the .txt file.
4. **NOTE that you may lose** all your configuration information, depending upon the gap between old and new firmware versions. So record your configuration information before upgrading.
5. Turn on the terminal.
6. Invoke the Main menu by clicking on the **Start** button in the Task Bar.
7. Click on **Local Shell**.
8. In the resulting command line, verify your connection to the FTP server by pinging it with the **ping** command to the server's IP address.
9. Terminate the ping process by pressing **Ctrl+C**.
10. Exit the local shell by typing "**exit**" and pressing the **Enter** key.
11. Now open the Main menu. If you have already made appropriate entries in [Setup|Parameters|General|System Update](#), jump to step 34.
12. Highlight **Setup** and press **Enter**.
13. Highlight **Parameters** and press **Enter**.
14. Highlight **General** and press **Enter**.
15. Highlight **System update** and press **Enter**.
16. Highlight **FTP Server** and press **Enter**.
17. You will be asked for a user I.D. and password. Type "**root**" for the I.D. and leave the password blank.
18. Tab to **OK** and press **Enter**.
19. Enter the server's IP address.
20. Tab to **OK** and press **Enter**.
21. Highlight **Directory path** and press **Enter**.
22. Your entry here depends upon the specifics of your FTP server software. If the path to the upgrade files is completely defined in the server's FTP software configuration, this field will be left blank. Do not enter any file name here, only path information, if necessary.
23. Tab to **OK** and press **Enter**.
24. Highlight **FTP user** and press **Enter**.
25. Enter your FTP logon I.D.
26. Tab to **OK** and press **Enter**.
27. Highlight **FTP password** and press **Enter**.

-
28. Enter your FTP logon password. Even if you do not require a password at the server, type something in this field anyway. The Setup software does not like a blank field here.
 29. Tab to **OK** and press **Enter**.
 30. Enter proxy information only if you are accessing the FTP server through a proxy server.
 31. Back out of the menu hierarchy by repeatedly pressing **Esc** or **End** until you are asked if you want to save the changes. Respond positively.
 32. There will be a slight delay, and then the terminal will go through a partial reboot. You will see some ominous text on the screen. Ignore it, and after another slight delay, you will return to the desktop screen.
 33. Open the Main menu.
 34. Highlight **Setup** and press **Enter**.
 35. Highlight **Update** and press **Enter**.
 36. You will be asked if you want to commit to the update. Highlight **Yes** and press **Enter**.
 37. You may be asked for a login I.D. and password at this point. If so, enter “**root**” for the I.D. and leave the password blank. Then tab to **OK** and press **Enter**.
 38. It may appear as if nothing is happening, but Linux is working its magic in the background. **DO NOT BECOME IMPATIENT AND REBOOT THE TERMINAL; A REBOOT OR NETWORK DISCONNECTION HERE WILL LIKELY CORRUPT THE FIRMWARE AND MAKE THE TERMINAL INOPERABLE.** To monitor the actual upgrade progress, press **Ctrl+Alt+F5**. If you get tired of monitoring and want to return to the desktop screen, press **Ctrl+Alt+F3**.
 39. The firmware is actually upgraded in six sections. After the first section is upgraded, the terminal automatically reboots. After this reboot, the other five sections are upgraded, and then the terminal automatically reboots again.
 40. After the upgrade is complete and the terminal reboots, you will come back to the desktop screen. **If you were upgrading from v0100o or later**, all your previous configuration information is valid and **you can skip** step 41.
 41. **If you upgraded from an older version**, or if you encounter strange behavior in the Setup screens, it may appear that your old configuration is still valid, *but don't be deceived*. You now have to reset to factory defaults and reconfigure. The reset procedure is:
 - a. Open the Local shell.
 - b. Execute the command “su” at the prompt.
 - c. Switch to the **wfs** directory by executing “cd wfs” at the prompt.
 - d. Delete all the files in the **wfs** directory by executing “rm -rf *” at the prompt. Note that there is a space between m and - and between f and *.
 - e. Reboot the terminal.
 - f. Reconfigure when you see the desktop screen.

Log in

Log in as an authorized user. Currently only “root” is authorized to make changes to the system configuration. If no login is performed, the user is defaulted as “nobody” and can only display parameter settings.

The screenshot shows the 'TASTE Parameter Manager' interface. At the top, it displays system information: '<Host: 127.0.0.1:5555> <TASTE: 01.00q>' and '<Current user: root> <State: Logged out>'. Below this is a menu with options: '[Main menu]', 'System information', 'Parameters', 'Set time', 'Set host', 'Update', 'Log in' (highlighted), 'Log out', and 'Exit'. A 'Log in' dialog box is open, featuring a cyan background and a black border. It contains two input fields: 'User' and 'Password'. At the bottom of the dialog are three buttons: '[Ok]', '[Reset]', and '[Cancel]'. Below the dialog, there is a section labeled '(Log in)' with a '[Help]' button and the text 'Log in'.

Log In Window

Log out

Use this function to log out.

Exit

Exit Setup and restart the window manager.

If the desktop cannot be displayed on the monitor attached (e.g. unsupported frequency setting) or the LBT fails to boot properly due to configuration problems, use the Setup boot option in the boot menu to start Setup in text mode.

If the configuration file is updated through remote access you must first re-read the updated configuration before changes can be made. Otherwise, Setup will abort the update sequence and display an error message.



YESterm/IP TN5250E Emulator

AS/400 Requirements

- OS/400 V3R2 with appropriate PTFs or higher

Technical Characteristics

YESterm/IP Emulator is one of the YESterm 5250 TCP/IP solutions developed by Affirmative Computer Products. YESterm/IP is a powerful Telnet TN5250e emulator that provides Windows Based Terminal users with the capability to connect to an AS/400 via the TCP/IP protocol. YESterm/IP provides enhanced emulation functions for a wide range of IBM terminals and a "true" IBM 3812 Printer emulation with the support of all the enhanced features normally available only on very expensive 5250 Printer Interfaces. YESterm/IP can easily support up to 7 concurrent TCP/IP connections with different Hosts. In addition, YESterm/IP supports the "Enhanced Display Auto-Signon and Password Encryption" allowing a secure connection to the AS/400, with no need of any SSL option. The configuration of Telnet sessions is made simple by a Wizard application that guides the user during the configuration process.

Display Session Characteristics

- IBM emulations supported: 5251, 5291, 3196, 3180-2, 3477-FG, 3477-FC.
- Includes numerous resident national keyboard templates and Code Pages.
- Includes enhanced keyboard mapping and customization, using Shift, Caps Lock, Alt, Ctrl, function keys, etc.
- EURO (€) symbol supported.
- Includes enhanced copy and paste options.
- Includes Hotspot, Macros and programmable Keypad.
- Includes tools for keyboard mapping and attributes editing.
- Includes enhanced customizable Hot Spot feature.
- Includes enhanced Record/Playback feature.
- *Supports "Enhanced Display Auto-Signon and Password Encryption" allowing a secure connection to the AS/400.*

Printer Session Characteristics

- IBM Emulation supported: 3812.
- Support for continuous forms, multi drawers, envelope, manual feeders, simplex/duplex, auto page orientation, and COR (Computer Output Reduction).
- Supports CPI, LPI Override and LQ, NLQ.
- Supports Host Transform Feature.
- Supports Hex Pass-Through (HPT) feature, with customizable leading and ending sequences and support of "non-printable characters".
- Supports of EURO symbol (€).

Setup

The LBT is pre-configured with four 5250 display sessions (Display 1-4) and three 5250 printer sessions (Printer 1-3). The first time that you open one of the sessions, you will be faced with a blank 5250 window and a small sub-window asking for the setup password. The default password is no password, so just click on **OK** to open a new sub-window that allows configuration of session properties. You can change the password if you wish.

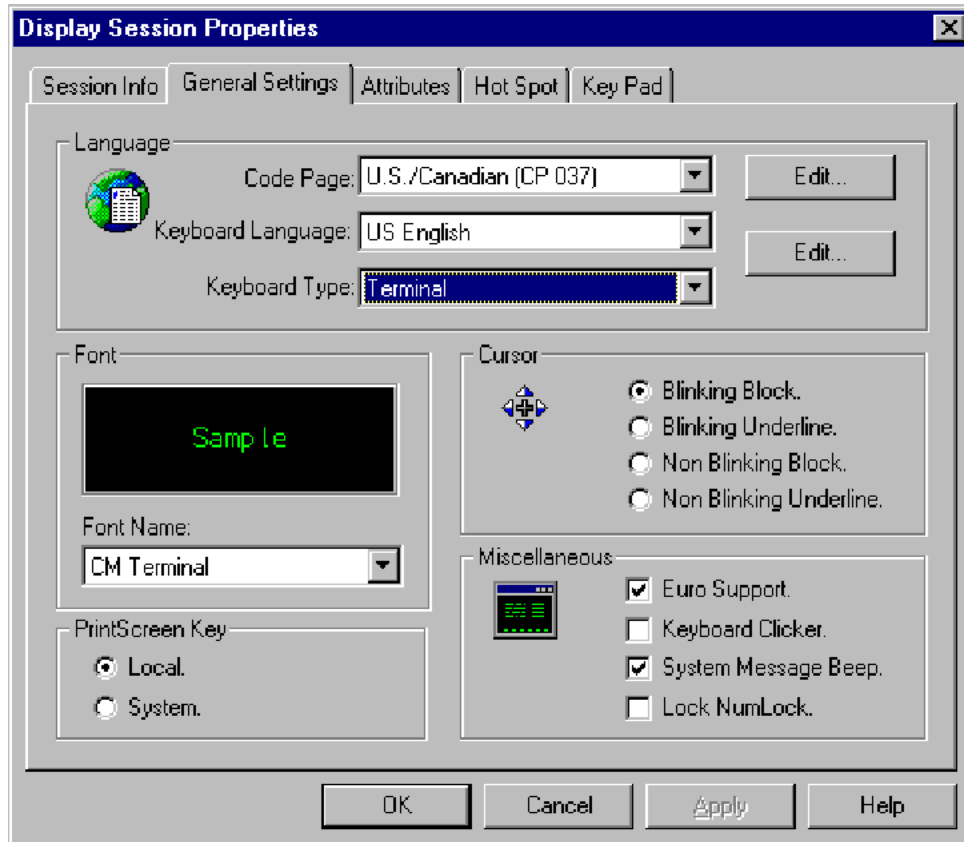
Display Session Properties

In a 5250 display session window, you will see the “Display Session Properties” sub-window showing six tabs. Click on a tab to bring up the corresponding properties sheet. At the bottom of the sub-window are four buttons. Ignore the **Help** button; it won’t help you. After you have entered all of your configuration properties in all six sheets, click on either **OK** or **Apply**; they both do the same thing. If you want to cancel your configuration changes, click on **Cancel** or on the **X** in the upper right corner.

Session Info

- Host Name/IP Address: Type in the IP address of the AS/400 server.
- Port Number: Use the default of **23** unless directed to do otherwise by your AS/400 administrator.
- Local Name: This is the friendly name that will appear in the Title Bar at the top of the emulation window, and on the system Task Bar at the bottom of the screen.
- Device Name: If you are using named sessions, enter the session name here.
- Device Model: Select one from the drop-down list. The default **3477-FC** works well unless you have special needs.
- Session Type. This is an information-only field that tells you what type of device you have chosen in Device Model. It is redundant here since all the types available in a display session are **Video**.
- Device Capabilities. This information-only field tells you whether the chosen Device Model is color or monochrome, and tells you the number of columns displayed in the emulation window.
- Autostart. Check this box if you want the session to start automatically whenever the LBT is booted up.

General Settings



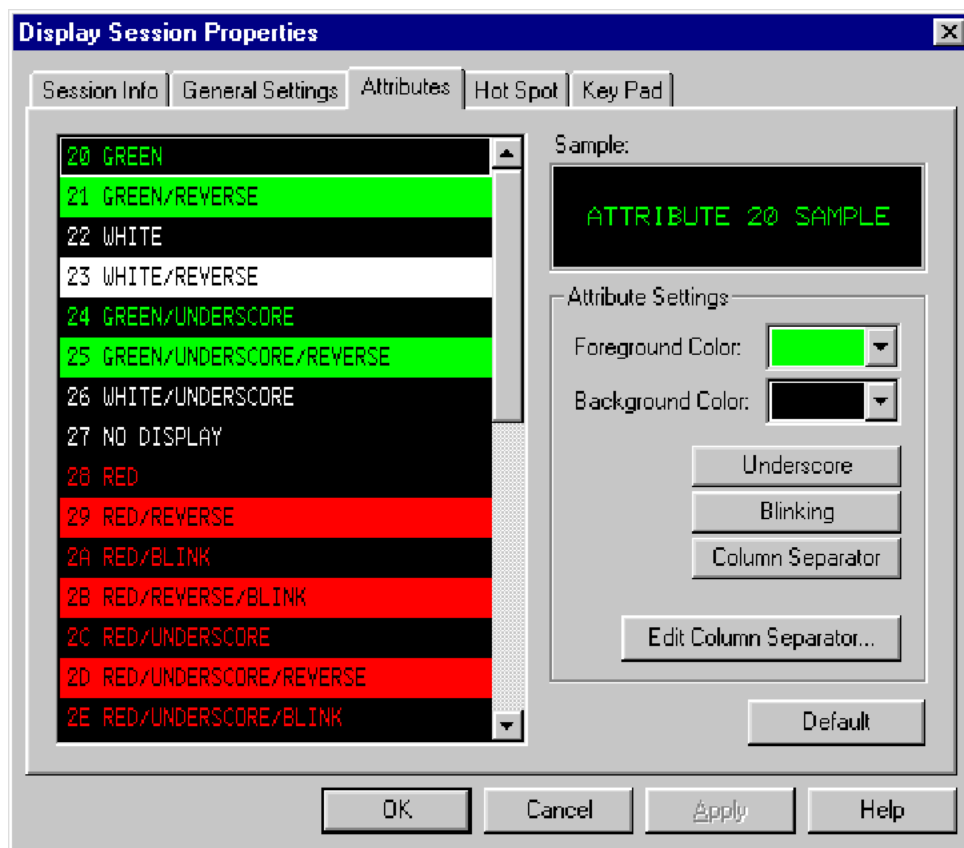
General Settings Sheet

- Code Page. YESterm/IP supports numerous Language Code Pages. The Code Page selected here from the drop-down list should be the same one configured on the AS/400 for this specific device. It is also possible to create a new custom Code Page Table. See [How To...|Create a Custom Language Code Page](#).
- Keyboard Language. U.S. English and several European languages are available for selection in the drop-down list.
- Keyboard Type. YESterm/IP supports 3 different keyboard types. It is also possible to create a new custom Keyboard Map. See: [How To ...|Display Session|Create a Custom Keyboard Map](#).
 - 101 PC. Choose this type if you are using a standard PC keyboard.
 - 101 Terminal. Choose this type if you are using an Affirmative Computer Products 101-key 5250/PC keyboard.
 - 122 Keys. Choose this type if you are using an Affirmative Computer Products 122-key 5250/PC keyboard.
- Font. Select the font style to be used as the default font for the display session.
- Print Screen Options. Select if the Print Screen function is to be performed on a local printer (one attached to the terminal) or on a system printer accessed through the AS/400 or is to be disabled. The Print Screen function be can activated from the:
 - Emulator Tool bar.
 - Emulator Menu bar (Tool|Print Screen)

- Keyboard in accordance with the keyboard map, typically the **Print** (not **PrtSc**) key.
- Key Pad, if it contains a corresponding button.
- Cursor. Select the type of cursor you want to use.
- Euro Support. When this option is enabled, you can display the Euro symbol when you press **Alt+E**.
- Keyboard Clicker. When this option is enabled, you should hear a "click" every time you press a key on the keyboard.
- System Message Beep. When this option is enabled, you should hear a "beep" when a message is received from the Host.

Attributes

Changes made in this property sheet affect all sessions. There is only one Attributes configuration per emulator, not one per session.



Attribute Sheet

Attribute Settings

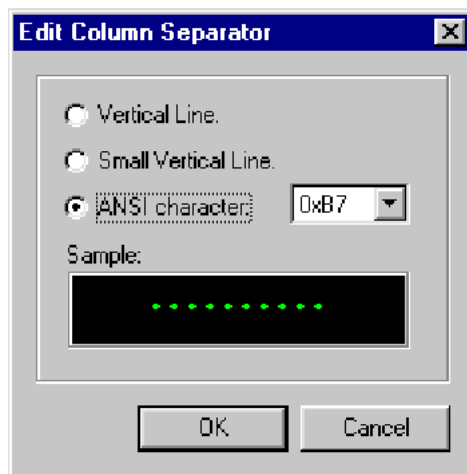
On the left half of this sub-window, you will see a list of all the display attributes that can be used in a 5250 display screen field, along with their default foreground (the color of the characters) and background colors. For each attribute, you can make five choices to set how the attribute font

appears on the screen. You will see a preview of the “new look” in the Sample field. Be careful with the colors you choose; a wrong choice can cause text or fields to be invisible on the screen because of lack of color contrast.

- **Foreground Color.** Select a color for the field characters from this drop-down list.
- **Background Color.** Select a color for the field background from this drop-down list.
- **Underscore.** Check this box if you want the field characters to be underscored.
- **Blinking.** Check this box if you want the field characters to blink repeatedly.
- **Column Separator.** Check this box if you want a separation mark for each column in the field.
- **Default.** Click on this button to reset *all* the attributes to their default settings.

Edit Column Separator

If you chose to use column separators with any of the attributes, you can choose the type of separator here. Click on this button and the following dialog box will appear:

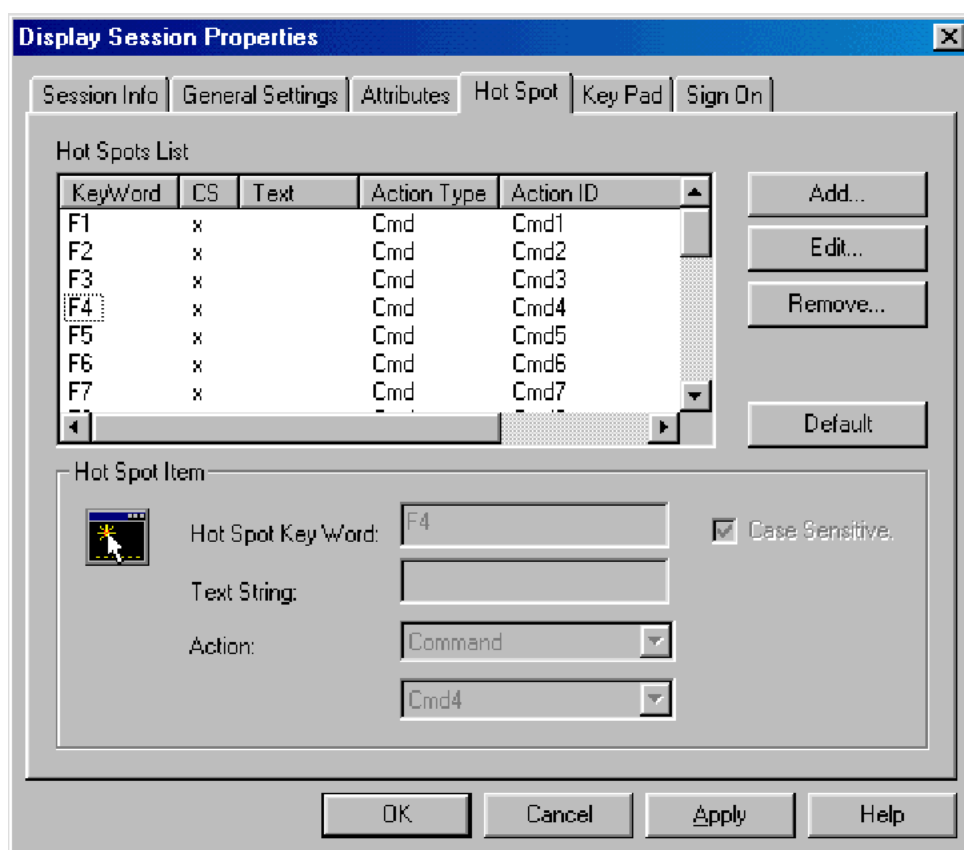


Edit Column Separator Dialog Box

Make your choice and view it in the Sample field. When you **OK** out, you will also see this edit applied to the Sample window in the Attributes sheet. Note that the same column separator type will be applied to all of the attributes that you have selected to have column separators.

Hot Spot

Changes made in this property sheet affect all sessions. There is only one Hot Spot configuration per emulator, not one per session. Select the Hot Spot tab, and something similar to the following properties sheet will appear.



Hot Spot Sheet

A Hot Spot is an area of the session window on which you can double-click the left mouse button to execute a command or function. Actually, a Hot Spot is the result of a text search by the emulator for the specified Keyword on the screen. The Function Key and Numeric fields (from 1 to 99 followed by a "period" or "space") Hot Spots are active by default, but you can add other Hot Spot keys and/or edit/remove them. You must use a mouse for Hot Spots - they really provide a way of performing functions with a mouse rather than with keys.

A Hot Spot can be used to:

- Simulate a function key.
- Execute a Recorded Sequence that has the same name as the word that you select on the screen.
- Execute a command that you select.

To Edit a Hot Spot:

1. Select the Hot Spot you want to modify.
2. Click on **Edit**.
3. If you want to send a Text String to the host every time you click on the Hot Spot, type it into the Text String field.
4. Select the Action from the drop-down list
5. From the lower drop-down list, select the command or the Recorded Key Sequence that you want to associate to the Hot Spot key.
6. In c.80, specify where, in an 80-column screen, the text search engine should start looking for the specified Keyword. For example, the default start for the word "More" is column 68. So if

there is a word “More” to the left of that column, it will not be defined as a Keyword or Hot Spot.

7. In c.132, specify where, in a 132-column screen, the text search engine should start looking for the specified Keyword.
8. Click on **Accept**.
9. When you have made all your configuration changes, click on **Apply** or **OK**.

To Remove a pre-defined Hot Spot:

1. Select the Function Key.
2. Click on **Remove**.
3. When you have made all your configuration changes, click on **Apply** or **OK**.

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To Add a Hot Spot:

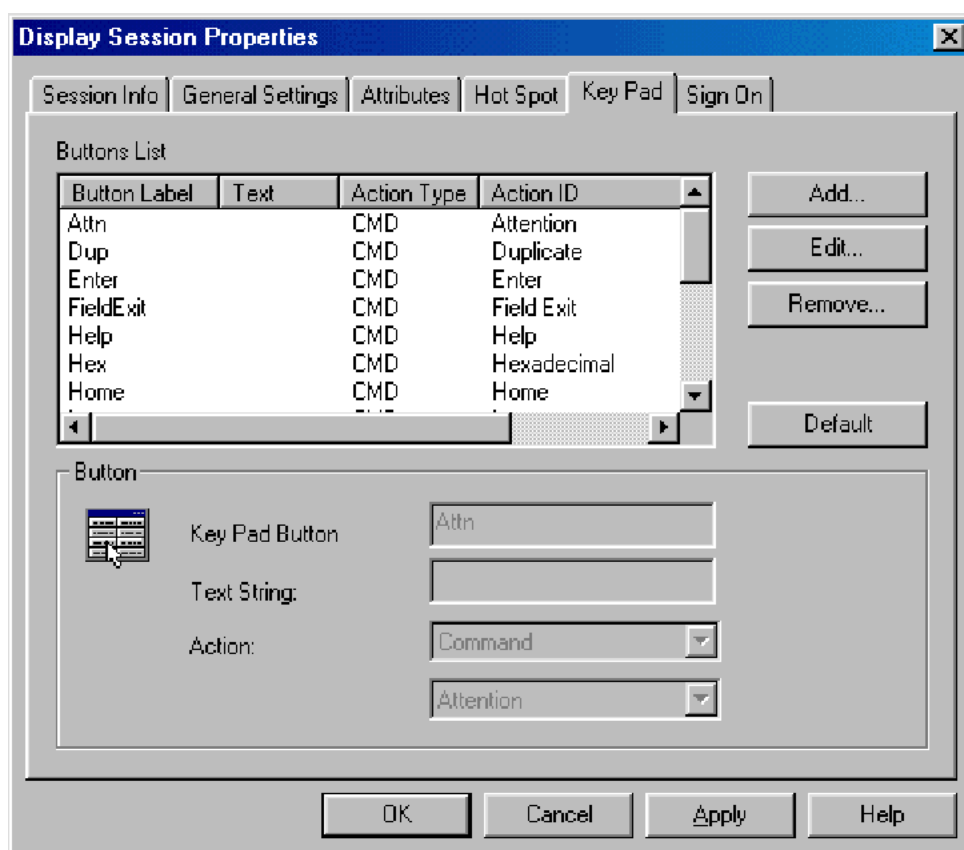
1. Click on **Add**.
2. Type the Hot Spot Key Word you want to detect.
3. If you want to send a Text String to the host, type it into the Text String field.
4. Select the Action from the drop-down list
5. From the lower drop-down list, select the command or the Recorded Key Sequence that you want to associate to the Hot Spot.
6. Specify the text search start columns in c.80 and c.132.
7. Click on **Accept**.
8. When you have made all your configuration changes, click on **Apply** or **OK**.

NOTE: If you click on the **Default** button, you will lose all changes and added Hot Spots that you have previously made.

Key Pad

A Key Pad is a small window with several customizable push buttons, each having an assigned function. You can make it visible on the screen by clicking on the button on the Tool Bar, or selecting **View/Key Pad** from the menu bar. You can choose a function from the Key Pad instead of typing the equivalent command, pressing a key, or running a Recorded Sequence.

The Key Pad tab allows you to change the characteristics of the pop-up Key Pad. Changes made in this property sheet affect all sessions. There is only one Key Pad configuration per emulator, not one per session.



Key Pad Sheet

To Edit a Key Pad button:

1. Select the button you want to modify.
2. Click on **Edit**.
3. If you want to send a Text String to the host every time you click on the Hot Spot, type it into the Text String field.
4. Select the Action from the drop-down list
5. From the lower drop-down list, select the command or the Recorded Key Sequence that you want to associate to the button.
6. Click on **Accept**.
7. When you have made all your configuration changes, click on **Apply** or **OK**.

To Remove a pre-defined Key Pad button:

1. Select the button.
2. Click on **Remove**.
3. When you have made all your configuration changes, click on **Apply** or **OK**.

To Add a Key Pad button:

9. Click on **Add**.
10. Type the button label you want to see on the Key Pad.
11. If you want to send a Text String to the host, type it into the Text String field.
12. Select the Action from the drop-down list
13. From the lower drop-down list, select the command or the Recorded Key Sequence that you want to associate to the button..

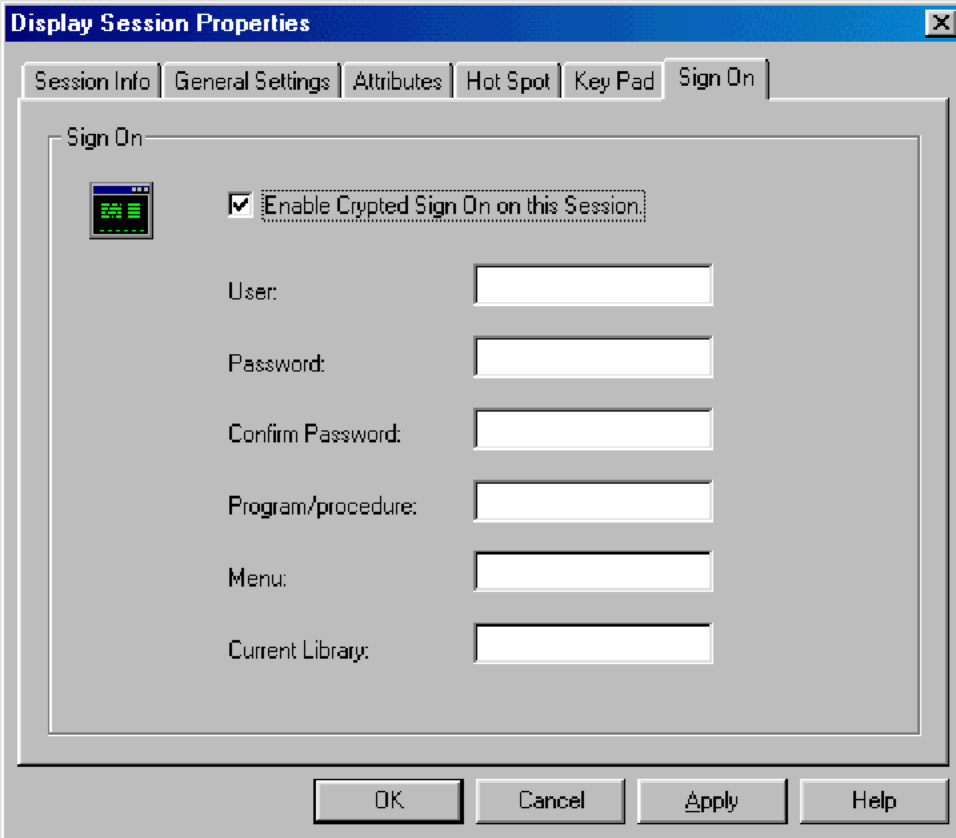
14. Click on **Accept**.

15. When you have made all your configuration changes, click on **Apply** or **OK**.

NOTE: If you click on the **Default** button, you will lose all changes and added buttons that you have previously made.

Sign On

The Sign On feature of the emulator uses the "Enhanced Display Auto-Signon and Password Encryption" feature of the AS/400 to allow a secure connection to the AS/400 without using SSL.



Display Session Properties

Session Info | General Settings | Attributes | Hot Spot | Key Pad | **Sign On**

Sign On

☒ Enable Crypted Sign On on this Session.

User:

Password:

Confirm Password:

Program/procedure:

Menu:

Current Library:

OK Cancel Apply Help

Sign On Sheet

For this feature to work to your benefit, the "Remote Signon" parameter of the AS/400 configuration should be enabled. To verify if this parameter is enabled, use the WRKSYSVAL command. To enable this parameter, you may use the following command:
CHGSYSVAL SYSVAL(QRMTSIGN) VALUE(*VERIFY)

Printer Session Properties

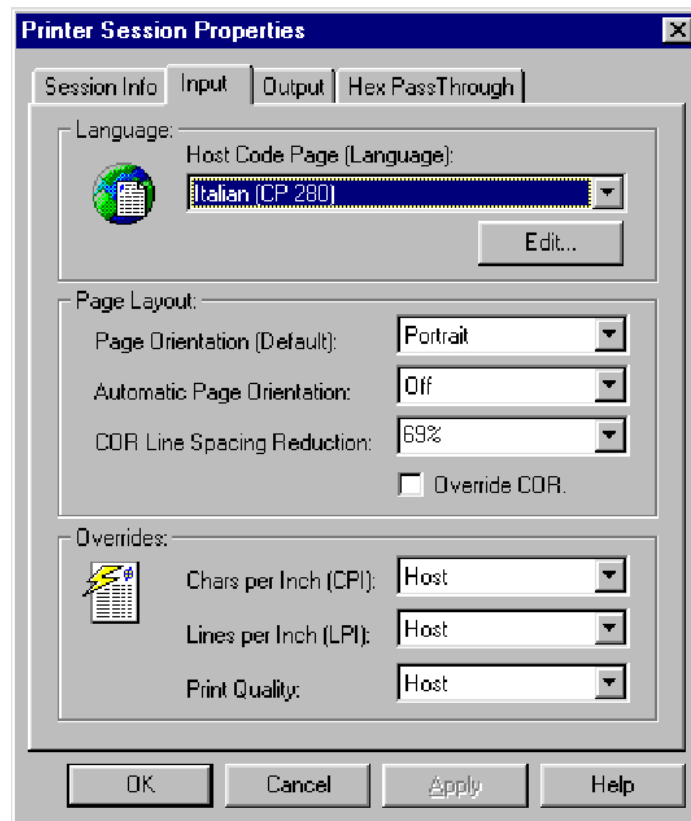
In a 5250 printer session window, you will see the “Printer Session Properties” sub-window showing five tabs. Click on a tab to bring up the corresponding properties sheet. At the bottom of the sub-window are four buttons. Ignore the **Help** button; it won’t help you. After you have entered all of your configuration properties in all six sheets, click on either **OK** or **Apply**; they both do the same thing. If you want to cancel your configuration changes, click on **Cancel** or on the **X** in the upper right corner.

Session Info

- Host Name/IP Address: Type in the IP address of the AS/400 server.
- Port Number: Use the default of **23** unless directed to do otherwise by your AS/400 administrator.
- Local Name: This is the friendly name that will appear in the Title Bar at the top of the emulation window, and on the system Task Bar at the bottom of the screen.
- Device Name: If you are using named sessions, enter the session name here.
- Device Model: Only **3812** is available for TCP/IP devices.
- Session Type. This is an information-only field that tells you what type of device you have chosen in Device Model. It is redundant here since the only type available in a printer session is **Printer..**
- Device Capabilities. Not applicable for a printer session.
- Autostart. Check this box if you want the session to start automatically whenever the LBT is booted up.

Input

The Input Tab allows you to define specific parameters that will modify the printer data stream from the host to affect the appearance of the printed page.



Input Sheet

Language

- Host Code Page. YESterm/IP supports numerous Language Code Pages. The Code Page selected here from the drop-down list should be the same one configured on the AS/400 for this specific device. It is also possible to create a new custom Code Page Table. See [How To...|Create a Custom Language Code Page](#).

Page Layout

Set the Default Page layout. Parameters are:

- Page Orientation. Select from Vertical (portrait), Horizontal (landscape), and COR (Computer Output Reduction).
- Automatic Page Orientation. This option is enabled by default.
- COR Line Spacing Reduction. This feature solves the problem of nonprintable margin area on the printer.
- COR Override. This function corresponds to the IBM 3812 configuration parameter and defines that a job with draft quality is printed in COR.

Overrides

If you wish to override the host system output settings, you can do so here.

Output

The parameters in this sheet control the data stream from the LBT to the local printer.

Time Out

This parameter defines a timer (in seconds) that starts to count down every time, during a printing job, the host system stops sending data. If no more data are received within the timeout value selected, the Printer Session will assume that the print job is finished, and a Form Feed command is sent to the printer.

Printer Driver

The typical Windows Graphic Printer Driver generates a graphic data stream. This means that everything is sent to the printer in graphic mode, requiring a large amount of data to be sent. Furthermore, depending upon the type of printer you are using, the performance can dramatically slow down.

The Passthrough Drivers used here, specifically developed by Affirmative, generate a standard text data stream. This means that everything is sent to the printer in text mode allowing better control of the printer and better performance. The data stream is generated by the *YESterm/IP* application and sent to the printer through the Windows Printer Spooler

YESterm/IP provides a list of pre-configured Printer Profiles for your selection and use. Even if your printer is not on this list, it probably emulates one of the listed printers.. If you wish, you can modify parameters of a listed driver. For more information on how to customize or create a new Passthrough Printer Driver, refer to: [How To...\[Printer Session\]Modify the Passthrough Driver.](#)

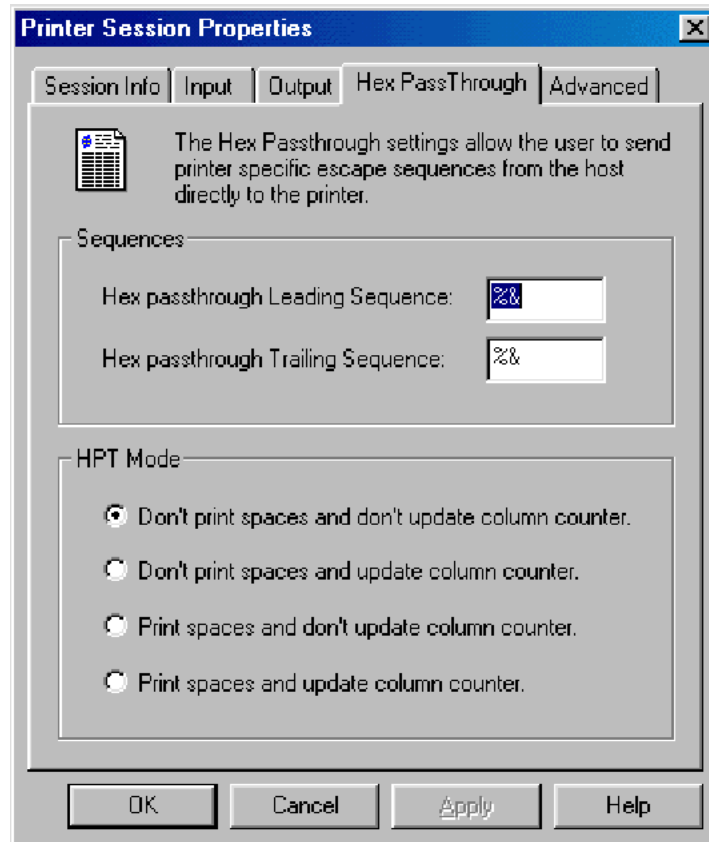
Printer Port

Choose the printer port used by your local printer. You can have multiple local printers. If you select a COM port. you can display and edit its parameters by clicking on the **Settings** button. These parameters are common to both COM ports.

If you wish to print to a network printer, use the Pipe Unix field to designate your LPD printer on the network.

Hex Pass Through (HPT)

Hex Pass Through allows portions of a data stream to be sent directly from the host to the printer. There is no modification done to these portions by the emulator driver. In order for the emulator to recognize these inviolate data stream portions, they must be identified at the beginning and end by escape sequences – a combination of special characters that the emulator can identify.

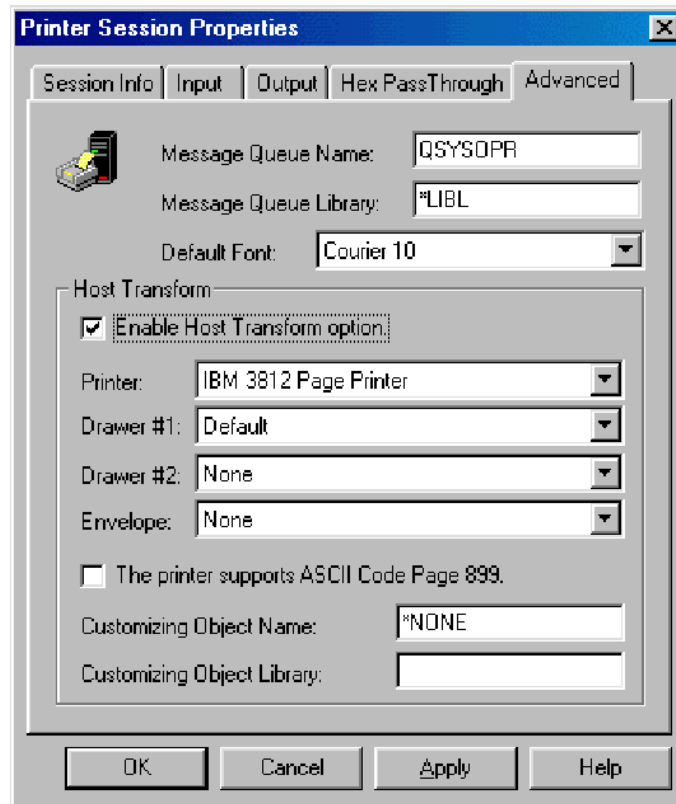


Hex Pass Through Sheet

- Sequences. Enter the Leading Sequence and the Trailing Sequence you want to use. The Default sequences are %&, %&. You can enter up to 4 characters for each sequence.
- HPT Mode. Select one of four modes to define if HPT prints spaces and if it updates the column counter.

Advanced

The Advanced Tab allows you to set default message parameters and enable the Host Transform feature.



Advanced Sheet

Default Message Parameters

You can set the following Default options:

- Message Queue Name. Default is **QSYSOPR**.
- Message Queue Library. Default is ***LIBL**.
- Default Font. Default is **011**.

Host Print Transform

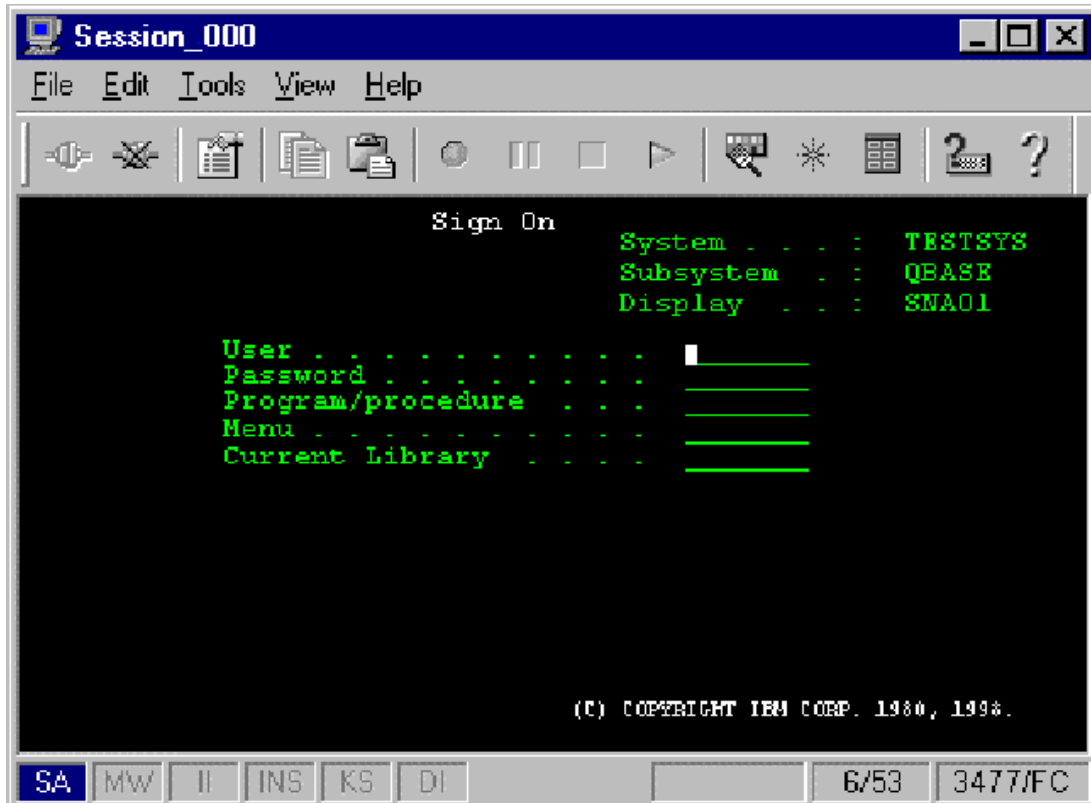
When Host Print Transform is enabled, the host does the EBCDIC-to-ASCII conversion of the print stream, and the local Passthrough Driver is not used. The following parameters are available for configuration:

- Printer. You must choose a compatible model from the drop-down list
- Drawer # 1. Choose an input print media size if applicable.
- Drawer # 2. Choose an input print media size if applicable.
- Envelope. Choose an envelope size if applicable.
- ASCII Code Page 899. If you have enabled Host Print Transform, you can enable this code page.

Emulator Operation

Display Session

Here is a typical display session Sign-On screen. The Menu bar, Tool bar, and Status bar will be identical for all display session screens.



Display Session Sign-On Screen

Menu Bar

Menu bar commands of the Display Session window consist of commands and functions that are unique for each window (session).



Display Session Menu Bar

File



File Drop-Down Menu

- Administrator. This selection is not used in the LBT.
- Connect. A display session typically comes up in the connected state. But if, for some reason, the session is not connected, this command will attempt to connect the Display Session to the host.
- Disconnect. This command disconnects the Display Session from the host. It is recommended that you disconnect only from the Sign-On screen.
- Properties.... This command allows you to edit/modify the Properties of the Display Session in use. For more information on this function, please refer to [Setup|Display Session Properties](#). When you change properties here, the changes are effective immediately.
- Close All. This selection is not available in the LBT.
- Close. This command closes the Display Session in use.

Edit

- Copy. This command copies, into the clipboard, data contained in the selected area without removing (clearing) it from the display.
 - **Note:** Copy does not duplicate host attributes such as color and intensity.
- Copy All. This command allows you to Copy All the display session data into the clipboard without removing (clearing) it from the display.
- Paste. This command pastes the current contents of the clipboard onto the session window, starting at the current cursor position.
 - **Note:** If the contents of the clipboard are larger than the space available in the presentation space (screen), they are clipped. Paste does not overlay the clipboard contents onto areas that are protected by the host application.

Tools

Tools commands allow you to work with the Record/Playback function. If you regularly do the same things when you work with a host system, it is convenient to record the keystrokes you make and have YESTerm/IP play them back when you want to do the same job again.

Record/Playback allows you to do this. All your keystrokes can be saved in a file; when you play the file back (Playback), everything that happened will be reproduced exactly. For more information on how to work with Record/Playback, refer to: [How To...|Display Session|Record a Keystrokes Sequence](#).



Tools Drop-Down Menu

- Start Recording. This command starts the Keystroke Recording process. It has the same effect as pressing the **Recrd** button on the keyboard.
- Stop Recording. This command stops the Keystroke Recording process. It has the same effect as pressing the **Recrd** button on the keyboard, since the **Recrd** button has a toggle action.
 - **Note:** When you Stop the Recording, a dialog box will be displayed allowing you to save the recorded keystrokes into a named file for subsequent playback.
- Pause Recording. Including a Pause Recording command into a recorded sequence will cause the Playback operation to pause at this point in the sequence. This pause is typically used to enter variable data during Playback. It has the same effect as **Pause** on the keyboard. Click on Pause Recording a second time to terminate the pause.
- Playback. Click on this command to display a list of your recorded sequences. To play a sequence, just click on the file name. This command has the same effect as pressing the **Play** button on the keyboard.
- Remove Macro. Click on this command to bring up a dialog box showing a list of all your sequences. Highlight the one you want to remove and click on **OK**.
- Print Screen. Click on this command to print the screen contents to the printer designated in [Setup|Display Session Properties|General Settings](#). This command has the same effect as pressing the **Print** button on the keyboard.

View

Commands in the View menu are used to manipulate the display emulator window.



View Drop-Down Menu

- **Toolbar.** This toggle command hides or displays the Toolbar near the top of the screen, just below the Menu bar. When the command is checked, the Toolbar is displayed.
- **Status Bar.** This toggle command hides or displays the Status bar at the bottom of the screen. When the command is checked, the Status bar is displayed
- **Ruler.** This toggle command hides or displays the crosshairs Ruler. When the command is checked, the Ruler is displayed.
- **Attributes.** This toggle command hides or displays the 5250 attribute fields.
- **HotSpot.** This command allows you to hide or display all the fields associated with Hot Spots. For more information on the Hot Spot feature, refer to [Setup|Display Session Settings|Hot Spot](#).
- **Keypad.** This toggle command hides or displays the Key Pad. For more information on the Key Pad feature, refer to [Setup|Display Session Sesttings|Key Pad](#).

Help



Help Drop-Down Menu

- **Contents.** This command is not used.
- **Keyboard Help....** This command displays the keyboard map in use. You can see the mapping, but you cannot edit it from this screen. This display can be used in two ways:
 - If you click on a key to which a command has been mapped, you will see that command highlighted in the List Box.
 - If you highlight a command in the List Box, the key or key combination that executes that command will be highlighted on the keyboard graphic. Some commands can be executed from several different key combinations. In that case, you will see the notation (x of y), which indicates that this is the xth sequence out of y possibilities. To cycle through the combinations for that command, click on **Next Sequence**.
- **About....** This command displays detailed information on the YESterm/IP firmware such as version, copyrights, and other useful information.

Toolbar

The Toolbar is displayed across the top of the application window just below the Menu bar. The Toolbar provides quick access to commands you use on a regular basis, but if you do not need it, you can hide it and the Menu bar to increase the size of your display window. When the Toolbar is displayed, a check mark appears next to the Toolbar command on the View menu.

Place the cursor over a Toolbar button to see its command equivalent. From left to right, the command/button definitions are:

- Connect Session. Duplicates the function of the Menu bar [File|Connect](#) command.
- Disconnect Session. Duplicates the function of the Menu bar [File|Disconnect](#) command.
- Local Prints. Duplicates the function of the Menu bar [Tools|Print Screen](#) command.
- Properties. Duplicates the function of the Menu bar [File|Properties](#) command.
- Copy. Duplicates the function of the Menu bar [Edit|Copy](#) command.
- Paste. Duplicates the function of the Menu bar [Edit|Paste](#) command.
- Record. Duplicates the function of the Menu bar [Tools|Start Recording](#) command. In fact, if you use the menu version, you will see that this button is also depressed.
- Pause. Duplicates the function of the Menu bar [Tools|Pause](#) command. If you use the menu version, you will see that this button is also depressed.
- Stop. Duplicates the function of the Menu bar [Tools|Stop Recording](#) command.
- Play. Duplicates the function of the Menu bar [Tools|Playback](#) command.
- Show/Hide Ruler. Duplicates the function of the Menu bar [View|Ruler](#) command.
- Show/Hide Attributes. Duplicates the function of the Menu bar [View|Attributes](#) command.
- Show/Hide HotSpot. Duplicates the function of the Menu bar [View|HotSpot](#) command.
- Show/Hide Keypad. Duplicates the function of the Menu bar [View|Keypad](#) command.
- Keyboard Help. Duplicates the function of the menu bar [Help|Keyboard Help](#) command.
- ?. This command is not used.

Printer Session

Menu Bar

Menu bar commands of the Printer Session window consist of commands and functions that are unique for each printer window (session).

A screenshot of a menu bar with four items: 'File', 'Tools', 'View', and 'Help'. Each item has a small underlined letter below it: 'F' for File, 'T' for Tools, 'V' for View, and 'H' for Help. The menu bar is set against a light gray background.

File Tools View Help

Printer Session Menu Bar

File

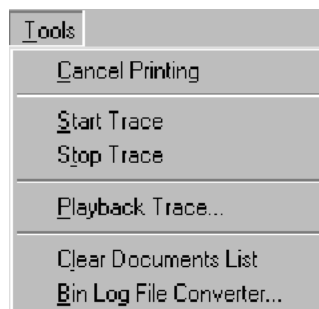


File Drop-Down Menu

- Administrator. Not used in the LBT.
- Connect. A printer session typically comes up in the connected state. But if, for some reason, the session is not connected, this command will attempt to connect the Printer Session to the host.
- Disconnect. This command disconnects the Printer Session from the host
- Properties.... This command allows you to edit/modify the Properties of the Printer Session in use. For more information on this function, please refer to [Setup|Printer Session Properties](#). When you change properties here, the changes are effective immediately.
- Close All. Not used in the LBT.
- Close. This command closes the Printer Session in use

Tools

The Tools menu allows you to create and use a trace for diagnostic purposes.



Tools Drop-Down Menu

- Cancel Printing. This command cancels the print job in process.
- Start Trace. This command allows you to print a specific print job to a file instead of to a Printer.
 - **Note:** This command is for diagnostic purpose only.
- Stop Trace. This command allows you to stop recording the trace.
 - **Note:** This command is for diagnostic purpose only.

-
- Playback Trace. This command allows you to play a pre-recorded trace.
 - **Note:** This command is for diagnostic purpose only.
 - Clear Document List. This command will clear the Document List. The Document List contains a history of all printed documents.
 - BinLog File Converter. Not used in the LBT.

View

Commands in the View menu are used to manipulate the printer session window.



View Drop-Down Menu

- Toolbar. This toggle command hides or displays the Toolbar near the top of the screen, just below the Menu bar. When the command is checked, the Toolbar is displayed.
- Status Bar. This toggle command hides or displays the Status bar at the bottom of the screen. When the command is checked, the Status bar is displayed

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Help



Help Drop-Down Menu

- Contents. Not used in the LBT.
- About.... This command displays detailed information on the YESterm/IP program such as version, copyrights, and other useful information.

Toolbar

The Toolbar is displayed across the top of the printer application window below the Menu bar. The Toolbar provides quick access to commands you use on a regular basis.



Printer Session Toolbar

Place the cursor over a Toolbar button to see its command equivalent. From left to right, the command/button definitions are:

- Connect. Duplicates the function of the Menu bar [File|Connect](#) command.
- Disconnect. Duplicates the function of the Menu bar [File|Disconnect](#) command.
- Properties. Duplicates the function of the Menu bar [File|Properties](#) command.
- Record. Duplicates the function of the Menu bar [Tools|Start Trace](#) command.
- Stop. Duplicates the function of the Menu bar [Tools|Stop Trace](#) command.
- Play. Duplicates the function of the Menu bar [Tools|Playback Trace](#) command.
- ?. Not used in the LBT

How To

This section provides detailed instructions for executing the custom configuration options that are available for the YESterm/IP emulator sessions.

Create a Custom Language Code Page

This procedure is the same for either a display or a printer session. To do this, select one of the available Code Pages (the one that comes closest to the one you want to create) and click on **Edit**. Assuming that your base Code Page is International 5, the following screen should appear:

International 5 (CP 500)

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
10	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
20	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
30	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
40	20	20	E2	E4	E0	E1	E3	E5	E7	F1	5B	2E	3C	28	2B	21
50	28	E9	EA	EB	E8	ED	EE	EF	EC	DF	5D	24	2A	29	3B	5E
60	2D	2F	C2	C4	C0	C1	C3	C5	C7	D1	A8	2C	25	5F	3E	3F
70	F8	C9	CA	CB	C8	CD	CE	CF	CC	60	3A	23	40	27	3D	22
80	D8	61	62	63	64	65	66	67	68	69	AB	BB	F0	FD	FE	B1
90	B0	6A	6B	6C	6D	6E	6F	70	71	72	AA	BA	E6	B8	C6	A4
A0	B5	7E	73	74	75	76	77	78	79	7A	A1	BF	D0	DD	DE	AE
B0	A2	A3	A5	B7	A9	A7	B6	BC	BD	BE	AC	7C	AF	A8	B4	D7
C0	7B	41	42	43	44	45	46	47	48	49	2D	F4	F6	F2	F3	F5
D0	7D	4A	4B	4C	4D	4E	4F	50	51	52	B9	FB	FC	F9	FA	FF
E0	5C	F7	53	54	55	56	57	58	59	5A	B2	D4	D6	D2	D3	D5
F0	30	31	32	33	34	35	36	37	38	39	B3	DB	DC	D9	DA	00

Double-click over any value you want to modify.

OK
Cancel
Help
Default

International 5 Code Page Table

To read the table, use the left column for the first hex character of the EBCDIC code, and the top row for the second hex character of the EBCDIC code. For example, the standard EBCDIC code for A is C1; the standard ASCII code for A is 41. Look at the table above and you see that the cell corresponding to EBCDIC C1 has the value 41 in it.

Double-click the cells you want to change and enter the new values. To assist you in your customization, the standard code tables for EBCDIC and ASCII are shown here.

HEX DIGITS 1ST → 2ND ↓	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0	(SP) SP010000	& SM030000	- SP100000	ø LO610000	Ø LO620000	° SM190000	μ SM170000	^ SD150000	{ SM110000	}	\ SM070000	0 ND100000
-1	(RSP) SP300000	é LE110000	/ SP120000	É LE120000	a LA010000	j LJ010000	~ SD190000	£ SC020000	A LA020000	J LJ020000	÷ SA060000	1 ND010000
-2	â LA150000	ê LE150000	Â LA160000	Ê LE160000	b LB010000	k LK010000	s LS010000	¥ SC050000	B LB020000	K LK020000	S LS020000	2 ND020000
-3	ä LA170000	ë LE170000	Ä LA180000	Ë LE180000	c LC010000	l LL010000	t LT010000	· SD630000	C LC020000	L LL020000	T LT020000	3 ND030000
-4	à LA130000	è LE130000	À LA140000	È LE140000	d LD010000	m LM010000	u LU010000	© SM520000	D LD020000	M LM020000	U LU020000	4 ND040000
-5	á LA110000	í LI110000	Á LA120000	Í LI120000	e LE010000	n LN010000	v LV010000	§ SM240000	E LE020000	N LN020000	V LV020000	5 ND050000
-6	ã LA190000	î LI150000	Ã LA200000	Î LI160000	f LF010000	o LO010000	w LW010000	¶ SM250000	F LF020000	O LO020000	W LW020000	6 ND060000
-7	å LA270000	ï LI170000	Å LA280000	Ï LI180000	g LG010000	p LP010000	x LX010000	¼ NF040000	G LG020000	P LP020000	X LX020000	7 ND070000
-8	ç LC410000	ì LI130000	Ç LC420000	Ì LI140000	h LH010000	q LQ010000	y LY010000	½ NF010000	H LH020000	Q LQ020000	Y LY020000	8 ND080000
-9	ñ LN190000	ß LS610000	Ñ LN200000	` SD130000	i LI010000	r LR010000	z LZ010000	¾ NF050000	I LI020000	R LR020000	Z LZ020000	9 ND090000
-A	¢ SC040000	! SP020000	¡ SM650000	: SP130000	« SP170000	ª SM210000	ï SP030000	[SM060000	(SHY) SP320000	1 ND011000	2 ND021000	3 ND031000
-B	· SP110000	\$ SC030000	, SP080000	# SM010000	» SP180000	º SM200000	¿ SP160000	] SM080000	ô LO150000	û LU150000	Ô LO160000	Û LU160000
-C	< SA030000	* SM040000	% SM020000	@ SM050000	ð LD630000	æ LA510000	Ð LD620000	– SM150000	ö LO170000	ü LU170000	Ö LO180000	Ü LU180000
-D	(SP060000	) SP070000	— SP090000	' SP050000	ý LY110000	¸ SD410000	Ý LY120000	¨ SD170000	ò LO130000	ù LU130000	Ò LO140000	Ù LU140000
-E	+ SA010000	; SP140000	> SA050000	= SA040000	þ LT630000	Æ LA520000	Þ LT640000	' SD110000	ó LO110000	ú LU110000	Ó LO120000	Ú LU120000
-F	| SM130000	¬ SM660000	? SP150000	" SP040000	± SA020000	☒ SC010000	® SM530000	× SA070000	õ LO190000	ÿ LY170000	Õ LO200000	(EO) (EO)

Code Page 00037

EBCDIC Code Page

HEX DIGITS	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
1ST →	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
2ND ↓																
-0		► (SP)	0	@	P	`	p	Ç	É	á	■	▤	▥	α	≡	
		SM590000	SP010000	ND100000	SM050000	LP020000	SD130000	LP010000	LC420000	LE120000	LA110000	SF140000	SF020000	SF460000	GA010000	SA480000
-1	☺	◄	!	1	A	Q	a	q	ü	æ	í	■	▤	▥	β	±
	SS000000	SM630000	SP020000	ND010000	LA020000	LQ020000	LA010000	LQ010000	LU170000	LA510000	LI110000	SF150000	SF070000	SF470000	LS610000	SA020000
-2	☹	↕	"	2	B	R	b	r	é	Æ	ó	■	▤	▥	Γ	≥
	SS010000	SM760000	SP040000	ND020000	LB020000	LR020000	LB010000	LR010000	LE110000	LA520000	LO110000	SF160000	SF060000	SF480000	GG020000	SA530000
-3	♥	!!	#	3	C	S	c	s	â	ô	ú	▤	▥	▦	π	≤
	SS020000	SP330000	SM010000	ND030000	LC020000	LS020000	LC010000	LS010000	LA150000	LO150000	LU110000	SF110000	SF080000	SF490000	GP010000	SA520000
-4	♦	¶	\$	4	D	T	d	t	ä	ö	ñ	▤	▥	▦	Σ	ƒ
	SS030000	SM250000	SC030000	ND040000	LD020000	LT020000	LD010000	LT010000	LA170000	LO170000	LN190000	SF090000	SF100000	SF500000	GS020000	SS260000
-5	♣	§	%	5	E	U	e	u	à	ò	Ñ	▤	▥	▦	σ	J
	SS040000	SM240000	SM020000	ND050000	LE020000	LU020000	LE010000	LU010000	LA130000	LO130000	LN200000	SF190000	SF050000	SF510000	GS010000	SS270000
-6	♠	—	&	6	F	V	f	v	å	û	ª	▤	▥	▦	μ	÷
	SS050000	SM700000	SM030000	ND060000	LF020000	LV020000	LF010000	LV010000	LA270000	LU150000	SM210000	SF200000	SF360000	SF520000	GM010000	SA060000
-7	●	↕	'	7	G	W	g	w	ç	ù	º	▤	▥	▦	τ	≈
	SM570000	SM770000	SP050000	ND070000	LG020000	LW020000	LG010000	LW010000	LC410000	LU130000	SM200000	SF210000	SF370000	SF530000	GT010000	SA700000
-8	■	↑	(	8	H	X	h	x	ê	ÿ	¿	▤	▥	▦	Φ	°
	SM570001	SM320000	SP060000	ND080000	LH020000	LX020000	LH010000	LX010000	LE150000	LY170000	SP160000	SF220000	SF380000	SF540000	GF020000	SM190000
-9	○	↓	)	9	I	Y	i	y	ë	Ö	¬	▤	▥	▦	Θ	•
	SM750000	SM330000	SP070000	ND090000	LI020000	LY020000	LI010000	LY010000	LE170000	LO180000	SM680000	SF230000	SF390000	SF040000	GT620000	SA790000
-A	●	→	*	:	J	Z	j	z	è	Ü	¬	▤	▥	▦	Ω	•
	SM750002	SM310000	SM040000	SP130000	LJ020000	LZ020000	LJ010000	LZ010000	LE130000	LU180000	SM660000	SF240000	SF400000	SF010000	GO320000	SD630000
-B	♂	←	+	;	K	[	k	{	ï	¢	½	▤	▥	▦	δ	√
	SM280000	SM300000	SA010000	SP140000	LK020000	SM060000	LK010000	SM110000	LI170000	SC040000	NF010000	SF250000	SF410000	SF610000	GD010000	SA800000
-C	♀	└	,	<	L	\	l	|	î	£	¼	▤	▥	▦	∞	ⁿ
	SM290000	SA420000	SP080000	SA030000	LL020000	SM070000	LL010000	SM130000	LI150000	SC020000	NF040000	SF260000	SF420000	SF570000	SA450000	LN011000
-D	♪	↔	-	=	M	]	m	}	ì	¥	¡	▤	▥	▦	φ	²
	SM930000	SM780000	SP100000	SA040000	LM020000	SM080000	LM010000	SM140000	LI130000	SC050000	SP030000	SF270000	SF430000	SF580000	GF010001	ND021000
-E	♪	▲	.	>	N	^	n	~	Ä	Þ	«	▤	▥	▦	ε	■
	SM910000	SM600000	SP110000	SA050000	LN020000	SD150000	LN010000	SD190000	LA180000	SC060000	SP170000	SF280000	SF440000	SF590000	GE010000	SM470000
-F	☀	▼	/	?	O	_	o	◊	Å	f	»	▤	▥	▦	∩	(RSP)
	SM690000	SV040000	SP120000	SP150000	LO020000	SP090000	LO010000	SM790000	LA280000	SC070000	SP180000	SF030000	SF450000	SF600000	SA380000	SP300000

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ASCII Code Page for Terminal Font

Display Session

This section provides detailed instructions for executing the custom configuration options that are unique to the YETerm/IP display emulator sessions

Record a Keystroke Sequence (Macro)

If you regularly do the same things when you work with a host system, it is convenient to record the keystrokes you make and have YETerm/IP play them back when you want to do the same job again. Record/Playback allows you to do this. All your keystrokes can be saved in a file; when you play the file back (Playback), all your keystrokes will be reproduced

In order to create a Keystroke sequence, you have to:

1. Open a display session.
2. Place the cursor in the field where you wish to start the sequence.
3. Click on **Tools|Start Recording** or on the **Start Recording** button in the Toolbar, or press the **Recrd** button.
4. Type the data and cursor movements that you want to record.
5. If you want variable data to be entered during execution of the macro, use **Pause** from the menu, Toolbar, or keyboard.
6. Stop the Recording by clicking on **Tools|Stop Recording** or on the **Stop Recording** button in the Toolbar, or press the **Recrd** button again.
7. Name the recorded Keystroke sequence in the pop-up window. There are no naming restrictions.

The macro will be saved for that session only. If you want to execute the same macro in another display session, you will have to create it again in that session.

Example:

Assume you want to record the CL command to display the description of a specific device. The command is WRKDEVD PRTXXXX, where PRTXXXX identifies a specific Printer. So, the procedure is:

1. Place the cursor.
2. Click on **Start the Recording**.
3. Type WRKDEVD
4. Click on **Pause**.
5. Type PRTXXXX (the name of the device) and press **Enter**.
6. Click on **Stop the Recording**. When you stop, you will be prompted to save the recorded keystrokes to a file.

Note: The Pause function will automatically end when you press the Enter key.

Play a Recorded Keystroke Sequence (Macro)

In order to play a recorded keystroke sequence, you have to:

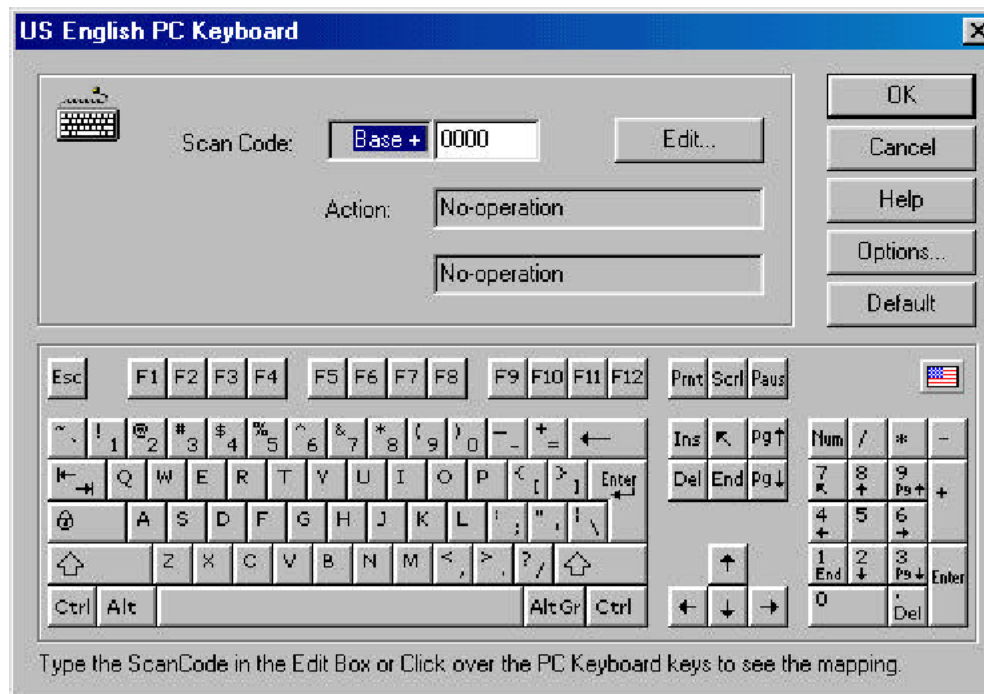
1. Place the cursor on the screen where you want to play the sequence.
2. Click on **Tools** from the Menu bar, or the **Play** icon, or the **Play** button on the keyboard
3. Select the sequence from the prompted list of stored sequences. The sequence will be executed.

If you have assigned a sequence to a key, you can also play the sequence as follows:

1. Place the cursor on the screen where you want to play the sequence.
2. Press the designated key. The sequence will be executed.

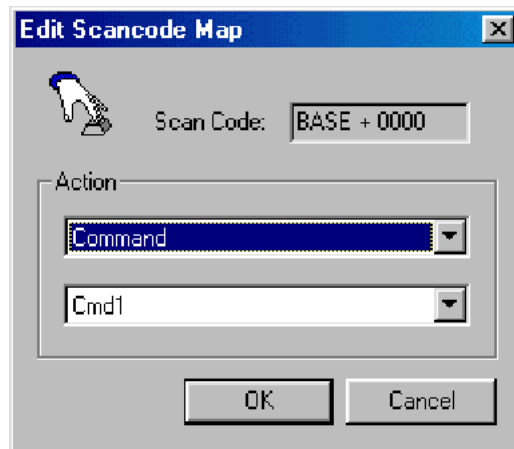
Create a Custom Keyboard Map

To do this, select, in **Display Session Properties|General**, one of the available Keyboard Layouts (the one that best matches the one you want to create) and click on **Edit**. Assuming that you chose the 101 PC keyboard for U.S. English, the following screen will appear



Keyboard Map Screen

Select the key, or key plus modifier (**Ctrl**, **Alt**, **Shift**) to which you want to associate a specific action. On the upper half of the window, you can see the keyboard Scan-Code and the associated default action. To modify the action, click on **Edit**. The following dialog box will appear:



Edit Scancode Map Dialog Box

You can select the action you want to associate to the selected key from among the following options:

- **No operation.** No action will be performed when you press the key.
- **Command.** Choose the desired 5250 command function from the drop-down list.
- **Recorded Sequence.** If you have previously recorded one or more key sequences, you will see their names in the drop-down list. Choose the desired Recorded Sequence from this drop-down list.
- **EBCDIC Characters Sequence.** Enter the Scan-Code sequence you want to associate to the key. Although you can use this to enter multiple characters, like a Recorded Sequence, this option is typically used to access some special character not normally seen on a keyboard. See [How To...|Create a Custom Language Code Page](#) for a standard code page for EBCDIC.

Printer Session

This section provides detailed instructions for executing the custom configuration options that are unique to the YESterm/IP printer emulator sessions.

Modify the Passthrough Driver

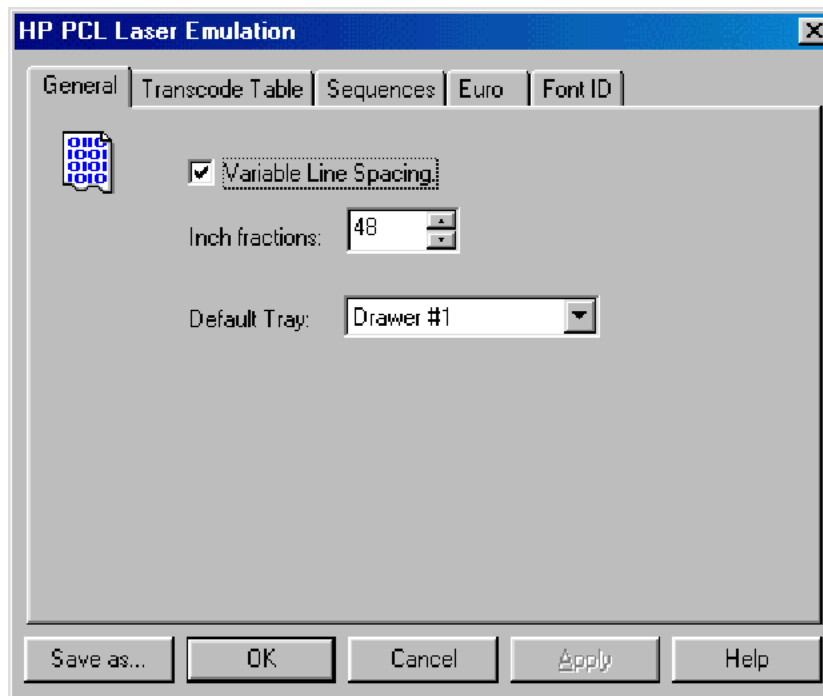
Any Passthrough Driver in the drop-down list can be customized, and it is also possible to create a new Driver. To edit an existing Passthrough Driver, do the following:

1. Highlight the connection name in the Configure tab of Connection Manager and click on **Edit**.
2. Select the Driver from the drop-down list and click on **Driver Configuration** in the Output.

You will see a screen with five tabs.

General

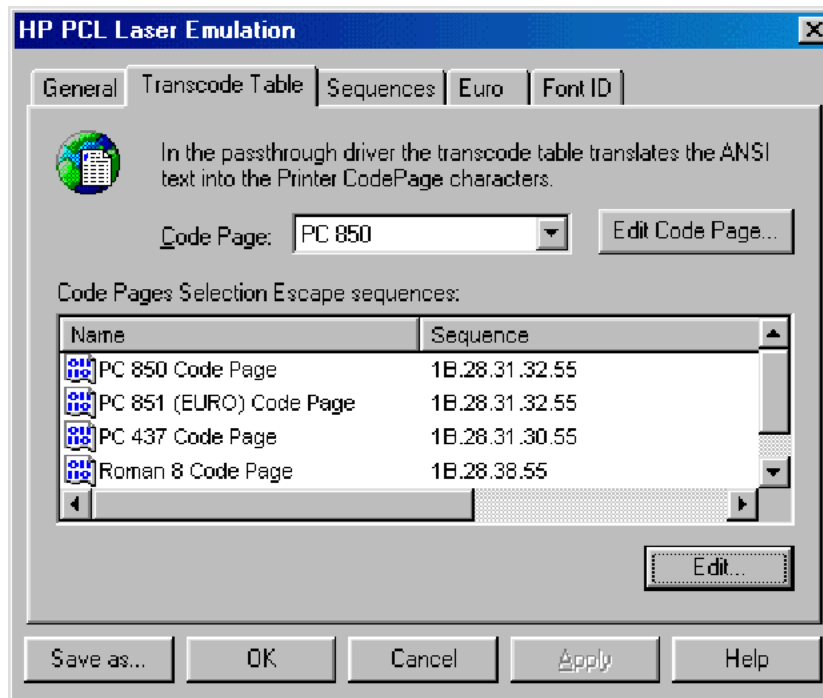
Assuming you are starting from the HP PCL Laser driver, something similar to the following screen appears for General settings.



General Sheet

- Variable Line Spacing. If you enable this function you must enter the Inch fractions.
- Default Tray. Select the paper source tray from the drop-down list.
- New Driver Name. This name will appear in the Passthrough Driver drop-down list *if* you check **Permanent Save**. The default new name is **User-** in front of the selected driver name. But you can enter a completely new name if you wish.

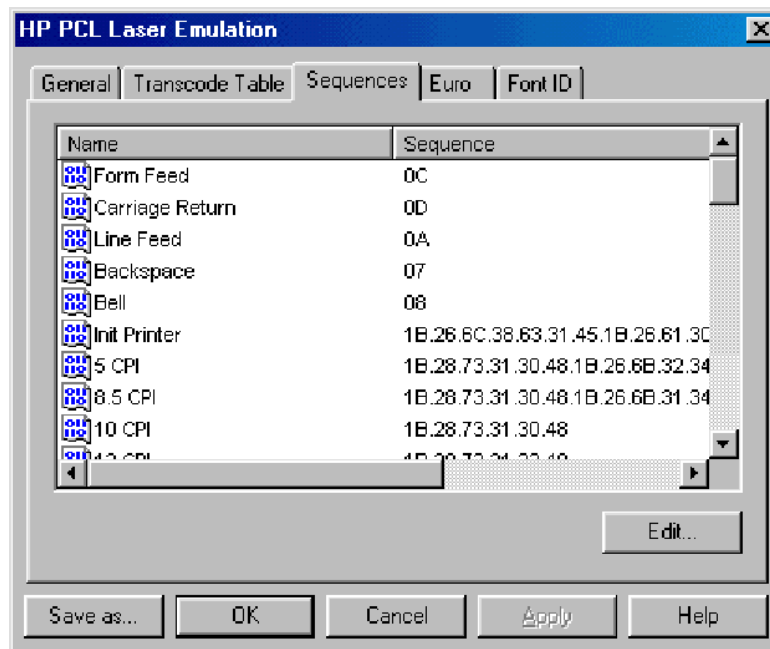
Transcode Table



Transcode Table Sheet

- Code Page. Select a code page from the drop-down list.
- Edit Code Page. If you want, you can also edit the Code Page by clicking on **Edit Code Page**. See [How To...|Create a Custom Language Code Page](#) for the procedure.
- Customize the Escape sequence used to call the Code Page. Select the Code Page from the Code Page Selection Escape Sequences list, click on **Edit**, and a Code Page Sequence Edit screen will appear where you can enter the new values.

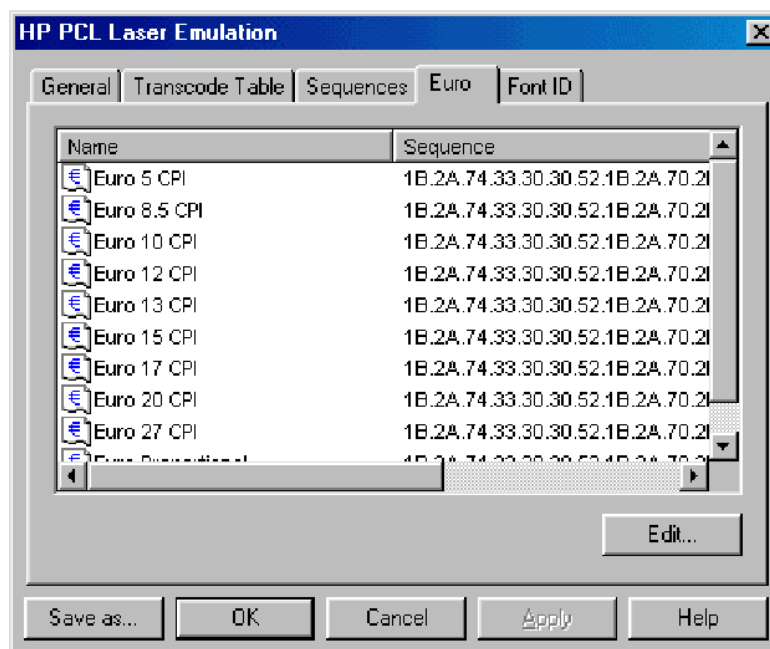
Escape Sequences



Escape Sequences Sheet

This tab allows you to customize all the Escape commands used to perform specific functions. Select a function, click on **Edit**, and an Escape Sequence Edit sub-window will appear. Make your changes there.

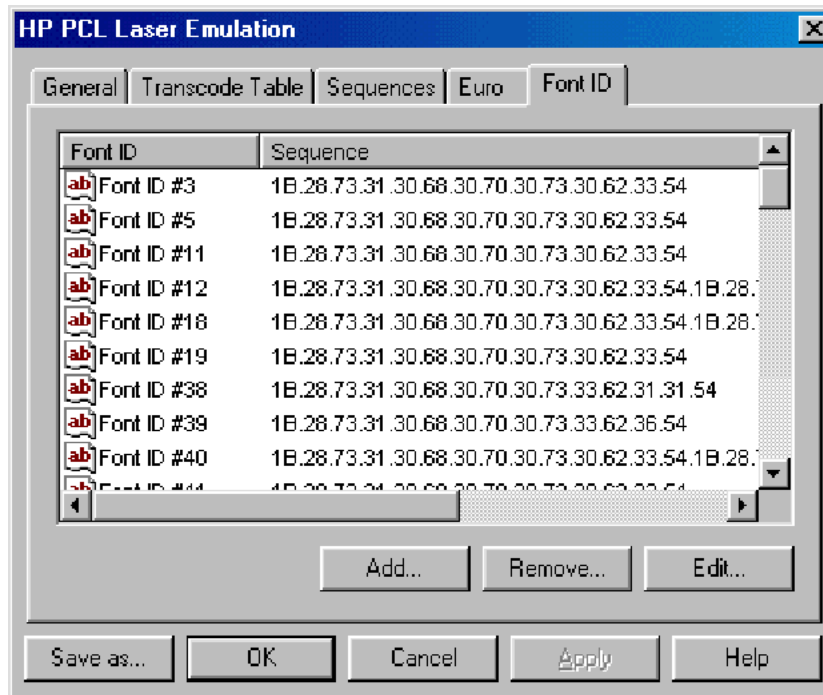
Euro



Euro Sheet

This tab allows you to customize the Escape sequence used to print the Euro symbol. This special function allows you to print the Euro symbol even on those printers that are not Euro ready. Select the symbol you wish to customize, then click on **Edit**, and a Euro Sequence Edit screen will appear where you can enter the new values.

Font ID



Font ID Sheet

This tab allows you to customize the Escape commands used to call a Printer Font that has been associated with a Host System Font ID. To edit a Font ID, select the item, click on **Edit**, and an Edit Font ID and Sequence screen will appear where you can enter the new value.

You can also remove a font or add a new font to the list. If you click on **Add**, an Edit Font ID and Sequence screen will appear where you can enter the new values.



Support

Affirmative Computer Products offers Technical Support services for all the Affirmative products. You can access Affirmative Technical Support in one of the following ways:

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