

CHAPTER

7

Defining Printers and Forms

<i>Printing from the SAS System</i>	141
<i>Setting Up Host Printing</i>	142
<i>Turning Host Printing On and Off</i>	142
<i>Setting Up Your Own Printer Devices</i>	143
<i>Removing a Printer from the Selection List</i>	145
<i>Changing Printer Device Properties (Fonts, Margins, Other Options)</i>	145
<i>Setting Printer Options</i>	146
<i>Changing Printer Fonts</i>	147
<i>Specifying Your Default Printer Device</i>	147
<i>Setting Up Printers for All Users at Your Site</i>	148
<i>Adding New XPRINTER Devices</i>	148
<i>Defining Forms</i>	149
<i>Creating or Editing a Form</i>	149
<i>Printer Selection</i>	150
<i>Text Body and Margin Information</i>	150
<i>Carriage Control Information</i>	151
<i>UNIX Print File Parameters</i>	152
<i>Font Control Information</i>	153
<i>Printer Control Language</i>	154
<i>Specifying Your Default Form</i>	155
<i>Changing the Default Print Command</i>	156
<i>Changing the Default Destination</i>	156

Printing from the SAS System

Before you can use forms, you must have at least one form defined. Before you can use host printing, you must have at least one printer device defined. The SAS System is shipped with default forms and printer devices already defined, but your SAS Installation Representative may have changed these defaults or defined additional forms or printer devices.

“Setting Up Host Printing” on page 142 and “Defining Forms” on page 149 describe how to define printer devices and forms. “Producing Output with SAS Software” on page 125 describes how to send the contents of windows and the output from your applications to a printer or a file using these printer devices and forms.

Note: Host printing is not supported on MIPS ABI and Intel ABI. Δ

Setting Up Host Printing

If you choose to use host printing, you must first turn on host printing and set up your printer devices. You can set up a printer device to send output to a printer or to a file that is compatible with a specific Postscript or PCL printer. After you set up a printer, you can change options such as fonts, margins, orientation, and page size.

Note: Printer device definitions are stored in your SASUSER.PROFILE catalog. You cannot use profile catalogs from previous releases of SAS. If you have been running a previous release of SAS, rename the PROFILE.SCT01 file located in your SASUSER directory before you start your SAS session. \triangle

Turning Host Printing On and Off

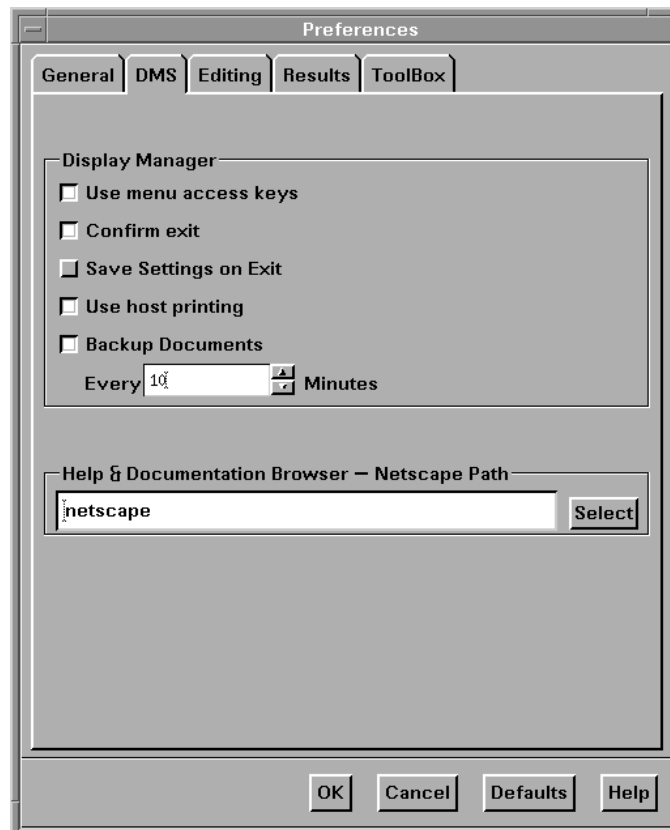
Host printing is not available by default, so you must turn host printing on before you will be able to access the host printing menus. Host printing can be turned on

- by issuing the DLGPRTMODE HOST command.
- through the Preferences dialog box. To open the Preferences dialog box, you can either issue the DLGPREF command or select

Tools ► Options ► Preferences...

In the Preferences dialog box, select the **DMS** tab.

Display 7.1 DMS Tab in The Preferences Dialog Box



Select **Use host printing**, and then select **OK** to close the Preferences dialog box.

After you turn host printing on, the **Print Utilities** selection in the File pull-down menu is replaced with two new selections:

Print preview...

enables you to view text and graphics on the screen before you send it to a printer.

Print setup...

enables you to define host printer devices (which can be a printer or a file) and select one of these devices as your default printer device.

Host printing will remain active until you turn it off. You can turn host printing off by issuing the DLGPRTMODE GRAPH command or by deselecting **Use host printing** in the Preferences dialog box.

Setting Up Your Own Printer Devices

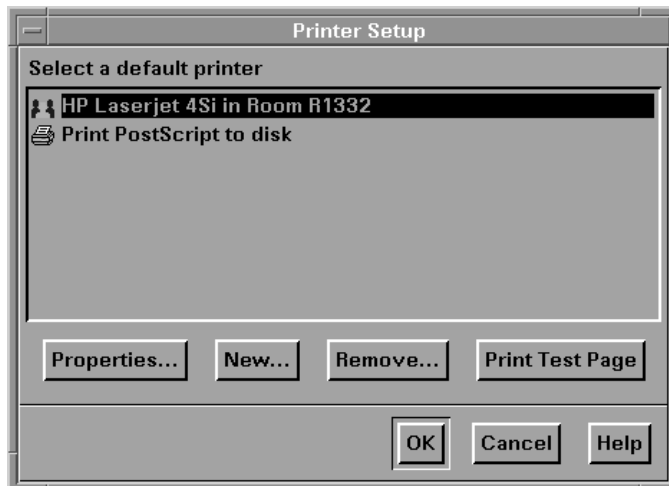
Note: If you are a system administrator and you are creating printer device definitions for use by all of the users at your site, see “Setting Up Printers for All Users at Your Site” on page 148. △

To set up your own printer devices, open the Printer Setup dialog box either by issuing the DLGPRTSETUP command or by selecting

File ► **Print Setup...**

(This pull-down menu selection appears only after you have turned on host printing.) This dialog box lists the printer devices that your SAS Installation Representative has defined for your site, and it lists each of the printer devices that you have defined. Printers that are defined by your Installation Representative are shown with a printer icon, and devices that you have defined are shown with an icon denoting a person.

Display 7.2 Printer Setup Dialog Box



SAS automatically defines one printer device for you: **Print PostScript to disk**. This device formats output in generic Postscript using Courier font with no margins and prints the output to a file named **prn.ps** in the current directory. Your SAS Installation Representative might have also defined other devices for your site. Your

default printer device is highlighted. To change your default printer device to another device that is already defined, simply select the new default device and select **OK**.

For each new printer device that you want to define, follow these steps:

- 1 Select **New...** SAS builds a list of the printer types available at your site and prompts you for the name you want to assign to the device you are creating.

Note: At any point during this set-up process, you can select **<-Previous** to return to the previous step. \triangle

- 2 Type the name that you want to use to identify the printer device and press **Enter** or select **Next->**. You can enter up to 99 characters in the name. Use a name that distinguishes this device from the others that you define such as "Apple printer with one-inch margins." SAS then prompts you to enter which type of printer device that you are defining.

- 3 Select the printer type from the list. If your specific printer type is not in the list, try one of the generic drivers, such as Generic Postscript. If the generic driver does not work, try a driver for a related printer. Often, printers made by the same manufacturer have similar specifications. Also, your printer may emulate one of the printers on the list. For example, many laser printers emulate Hewlett-Packard LaserJet printers. If you cannot determine which printer type to choose from the list, contact your SAS system administrator.

After you select a printer type, press **Enter** or select **Next->** to select an output destination.

- 4 To send output directly to the printer, select **Printer** and type the command necessary to route output to the printer that you are defining. Include the full pathname of the command.

To send output compatible with the selected printer to a file, select **File** and type the filename to which you want to send output.

Note: If you are using a LaserJet printer in PCL or HPGL mode, you will probably want to create two printer device definitions: one for text and one for graphics. When you are printing graphics in PCL or HPGL mode, you may need to add the **-oraw** option to your **lp** or **lpr** command. If the **-oraw** option is not available on your system, contact SAS system administrator for additional information.

PostScript printer devices can be used for printing text or graphics. \triangle

Press **Enter** or select **Next->** to finish the process of defining the printer device.

- 5 Select **Finish** to return to the Printer Setup dialog box.

At this point, you can do any of the following:

- Select the printer device from the list that you want to be your default device.
- Select **Print Test Page** to check if you have set up this device correctly. The test page contains the SAS startup logo, the printer device definition, and the list of fonts and paper sizes available on the selected printer. Any messages that are issued will appear in the window from which the SAS session was started, not in the SAS Log window.
- Select **Properties...** to change any of the properties associated with this device including the device name, printer type, output destination, and options such as font, margins, paper size, and orientation. See "Changing Printer Device Properties (Fonts, Margins, Other Options)" on page 145 for more information.
- Select **New...** to define additional printer devices.

- 6 Select **OK** to exit the Printer Setup dialog box. Your device definitions are saved to SASUSER.PROFILE.PRTINFO.XPRINTER.

Removing a Printer from the Selection List

To remove a printer device from the selection list, open the Printer Setup dialog box by issuing the DLGPRTSETUP command or select

File ► Print Setup...

In the Printer Setup dialog box, select the printer that you want to remove and then select **Remove...**. SAS asks you to confirm your request. Only your system administrator can remove printers that the administrator has defined for your site. If you select a printer that was defined by your system administrator, the **Remove...** button will be shaded.

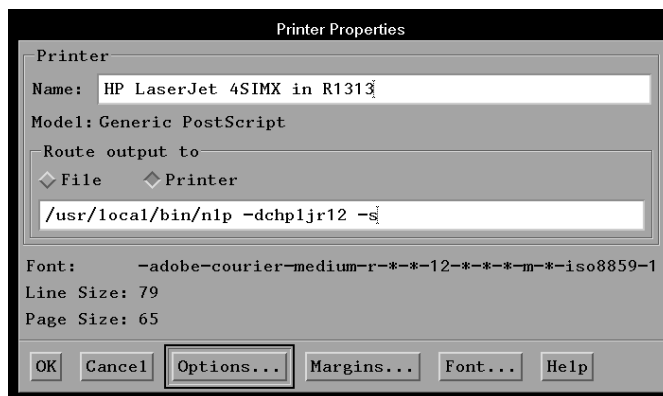
Changing Printer Device Properties (Fonts, Margins, Other Options)

To change the properties for a printer device, issue the DLGPRTSETUP command or select

File ► Printer setup...

Select the printer device for which you want to change properties, and then select **Properties...**. SAS displays the Printer Properties dialog box.

Display 7.3 Printer Properties Dialog Box



Note: The **Font:** field and the **Font...** and **Margins...** buttons will not appear if this dialog box is invoked from a GRAPH window. Fonts and margins set through this dialog box affect only printing from text windows. To change fonts and margins when printing from GRAPH windows, use the GOPTIONS statement. △

Name:

displays the name that you entered for the device when you set it up. You can edit the name.

Model:

displays the vendor and model for the printer you selected for this device. You cannot change this information directly. You can return to the Print Setup dialog box, remove the printer device, and create a new device definition.

Route output to

allows you to select whether the device sends output directly to the named printer or to a file compatible with the named printer. If you select **File**, the text field contains the name of the file. If you select **Printer**, the text field contains the command that is needed to route your output directly to the named printer. You can edit the filename or command as needed.

Font:

displays the current font.

Line Size: and Page Size:

display the line size and page size that SAS has calculated for the current options, margins, and font settings. You cannot set these values directly, but they will change according to the paper size, font, margins, and orientation settings that you specify.

Note: After you have finished defining all of the options for your printer device, check these line size and page size values. Make sure that the LINESIZE and PAGESIZE system options specified for your application are less than or equal to the line size and page size that SAS has calculated for the current printer options.

Δ

Options...

opens the Options dialog box which allows you to change paper size, orientation, resolution, paper tray, and scale. See "Setting Printer Options" on page 146 for more information.

Margins...

opens the Margins dialog box, which allows you to change the top, bottom, left, and right margins for when you print from text windows. You can enter settings directly into each field or change the settings with the up and down arrows to the right of each field. All measurements are in inches. If you enter measurements in centimeters, they will be converted to inches. For example, if you enter **2.54 cm**, the Margins dialog box will display **1.00"** the next time you open the dialog box. Increasing the top or bottom margins will decrease the page size value displayed in the Printer Properties dialog box, and increasing the left or right margins will decrease the line size value.

Select **OK** when you have finished.

When you print from a GRAPH window, you must use a GOPTIONS statement to set the font and margins. Font and margin settings that are entered through the UNIX dialog boxes have no effect when you print from GRAPH windows.

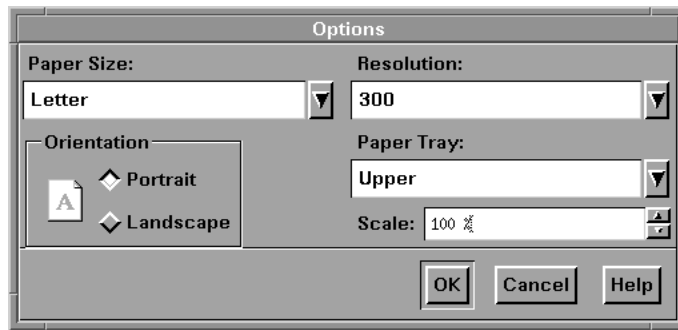
Font...

displays the Host Font dialog box, which allows you to change the font for printing from text windows. Use the GOPTIONS statement to specify the font that will be used for printing from GRAPH windows. See "Changing Printer Fonts" on page 147 for more information.

Setting Printer Options

When you select **Options...** from the Printer Properties dialog box, SAS displays the Printer Options dialog box.

Display 7.4 Printer Options Dialog Box



To change the paper size, resolution (in dots per inch), or paper tray, select the down arrow to the right of the field and select the value you want. The resolution is listed in dots per inch (dpi). Most printers are either 300 or 600 dpi. Higher dpi values produce sharper text and graphics. To change the orientation, select **Portrait** or **Landscape**.

The value in the **Scale:** field tells the printer device how large the output should be. To enlarge your document, enter a number greater than 100. To reduce your document, enter a number less than 100. For example, a scaling factor of 50% will print your document at half of its original size, and a scaling factor of 200% will print your document at twice its original size. To change the scale, either type a new number in the **Scale:** field or select the arrows to the right of the field. If you increase the scale value, the line size and page size values shown in the Printer Properties dialog box will decrease. If you decrease the scale value, the line size and page size values will increase.

When you have finished making changes, select **OK**.

Changing Printer Fonts

The Host Fonts dialog box allows you to change the windowing environment font and the printer fonts that will be used when you print from text windows.

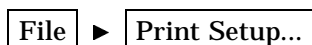
To change printer fonts, you must access the Host Fonts dialog box through the Printer Properties dialog box by selecting **Font...**. Changing the font for a printer device will change the line size and page size values shown in the Printer Properties dialog box for that printer. For a complete description of the Host Fonts dialog box, see “Customizing Fonts” on page 63.

The default printer font for PostScript printers is Courier, and the default font for PCL printers is HP Lineprinter. (The Host Fonts dialog box for printers does not have a **Default** button.)

Note: SAS output is formatted for a monospace font (each character is the same width) such as Courier, Lineprinter, or Letter Gothic. Using a proportional-space font (the width of the characters vary) such as Helvetica or Times produces an improperly formatted report. If you select a proportional font, SAS will display a message that warns of unpredictable results and column misalignment in your output. △

Specifying Your Default Printer Device

To change the default printer device, open the Printer Setup dialog box either by issuing the DLGPRTSETUP command or by selecting



Select the new default device and select **OK**.

The SAS System looks for default printer definitions in

- 1 the value of the XPRINTNM system option. The value that you specify for this option must match exactly the printer name specified through the Printer Setup dialog box. For example:

```
OPTIONS XPRINTNM='HP LaserJet in Room 123';
```

If you misspell the name or use the wrong case (uppercase or lowercase), SAS will display an error message stating that it cannot find the printer. See “XPRINTNM” on page 306 for more information.

Note: If you change the default printer using the XPRINTNM system option, this change is reflected in the Printer Setup dialog box. However, if you change your default printer through the Printer Setup dialog box, this change is not reflected in the value of the XPRINTNM system option. \triangle

- 2 SASUSER.PROFILE.PRTINFO.XPRINTER. This entry contains the printer device definitions that you entered through the Printer Setup dialog box. See “Setting Up Your Own Printer Devices” on page 143 for more information.
- 3 SASUSER.XPRINT.PRTINFO.XPRINTER. This entry contains the printer device definitions that your system administrator has defined for your site. Your system administrator may have specified a default printer device for your site. See “Setting Up Printers for All Users at Your Site” on page 148 for more information.

Setting Up Printers for All Users at Your Site

If you are the SAS Installation Representative for your site, you can set up a catalog that contains printer definitions available on the system and make this catalog available to all users at your site. As part of this process, you choose a default printer.

- 1 Make sure you have write access to the `$SASROOT/sashelp` directory. Write access to this directory may require root access. See your system administrator for details.
- 2 Make sure that no one is using the SAS System.
- 3 Check your SASUSER.PROFILE for an entry named PRTINFO.XPRINTER. If this entry exists, delete it.
- 4 Issue the command `DLGPRTSETUP SASHELP.XPRINT.PRTINFO`. This command displays the Printer Setup dialog box.
- 5 For each printer needed by the users at your site, follow the instructions listed in “Setting Up Your Own Printer Devices” on page 143. After you have defined the list of printer devices that are available at your site, you can select the device that you want to be the default device for your users, and then select **OK** to exit the Printer Setup dialog box. The list of printer devices is saved to `SASHELP.XPRINT.PRTINFO.XPRINTER`.
- 6 Exit from your SAS session.

After you set up the printers for your site, when users invoke the Printer Setup dialog box, they will be able to choose any of the printers that you have defined as their default printer.

Adding New XPRINTER Devices

If your site acquires a new printer or plotter model, you might need to add the new device to the list of XPRINTER devices that the user can select. To add new printer or plotter devices, follow these steps:

- 1 Obtain a Postscript Printer Description (PPD) file from the printer manufacturer. These files are often shipped on a disk with the printer or plotter. The filename extension is usually `.ppd`.
- 2 Change the filename extension to `.ps`.
- 3 Copy the file into the `$SASROOT/x11/xprinter/ppds` directory.

You can add your own Postscript, PCL4, or PCL5 device drivers to the list of device drivers that SAS Institute distributes. However, SAS Institute is not able to provide support or fixes for your own device drivers.

Defining Forms

The FORMS subsystem for UNIX consists of six frames:

- Printer Selection
- Text Body and Margin Information
- Carriage Control Information
- UNIX Print File Parameters
- Font Control Information
- Printer Control Language.

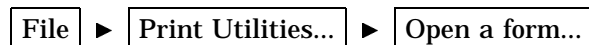
These frames are referred to as the FORM window. You use the FORM window to define a form for each printer that is available to you at your site. You can also define multiple forms for the same printer. Your SAS Support Consultant can give you information about your default form and about any other forms that have been defined at your site.

Note: Forms are available only if you have turned off host printing. See “Turning Host Printing On and Off” on page 142 for more information. △

Creating or Editing a Form

You can create or edit a form through the FORM window or with the FSFORM command.

To open the FORM window, select



SAS prompts you to enter the library, catalog, and form name. You can also select whether you want this form to be your default form. (You can change your default form at any time using the methods described in “Specifying Your Default Form” on page 155.)

You can also create or edit a form by entering the FSFORM command:

FSFORM *<catalog-name.>form-name*

If you do not specify a catalog-name, SAS uses the SASUSER.PROFILE catalog. If the form name that you specify does not exist, SAS creates a new form.

If you are creating a new form, SAS displays the Printer Selection frame. If you are editing an existing form, SAS displays the Text Body and Margin Information frame.

To move between the FORMS frames, you can

- issue the NEXTSCR command to scroll to the next frame and the PREVSCR command to scroll to the previous frame.
- enter `=` and the number of the frame that you want to go to. For example, `=1` displays the Text Body and Margin Information frame, and `=2` displays the Carriage Control Information frame.

- select the name of the frame from the **Tools** pull-down menu.
- select **Next Screen** or **Previous Screen** from the **Tools** pull-down menu.

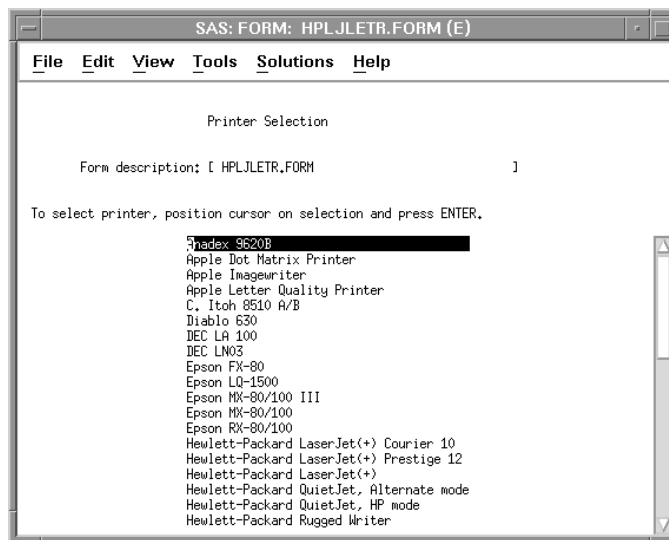
You can move between fields on a frame with the TAB key.

After you have finished defining or editing your form, issue the END command to save your changes and exit the FORM window.

Printer Selection

If you are defining a new form, SAS displays the Printer Selection frame. The following display shows the frame that is opened if you enter the command **fsforms hpljletr**.

Display 7.5 FORMS Printer Selection Frame



The **Form description** field contains the name that you specified when you invoked the FORM window. You can change this description to be more descriptive.

The default Printer Selection frame contains a list of all of the types of printers that are available with the FORMS subsystem under UNIX. However, your system administrator might have modified this list to include only the printers that are available at your site. Select the type of printer for which you are defining this form. If the list does not contain the specific printer type that you want, choose a similar type. For example, if you are defining a form for a Hewlett Packard Laserjet IVsi, select Hewlett Packard Laserjet (+). Your selection is used only to define the control and escape sequences in the Font Control Information frame. If you have to choose a similar printer, you can still take advantage of any additional features that are provided with your printer through the Printer Control Language frame.

You cannot move to the remaining frames until you choose a printer type, and after you have chosen a printer type, you cannot return to this frame and change it. The only way to change the printer type is by deleting the form and redefining it with the new printer type.

Text Body and Margin Information

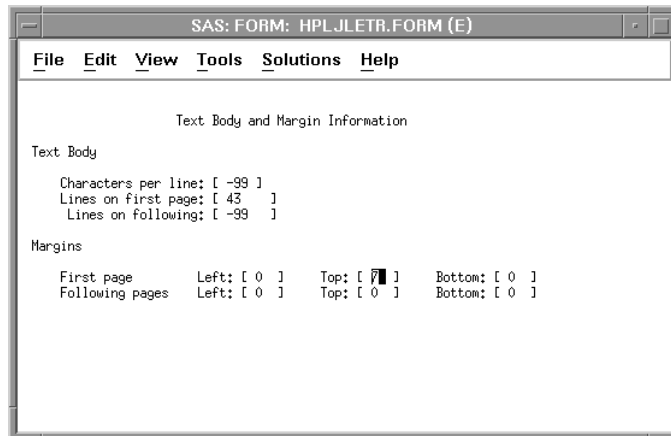
The Text Body and Margin Information frame allows you to change the defaults for lines per page, columns per line, top and bottom margins, and so on. The values that

you specify in this frame for **Characters per line** will override the value that is specified with the **LINESIZE** system option, and **Lines on first page** and **Lines of following** will override the value that is specified with the **PAGESIZE** system option.

Note: If you specify -99 for a value in this frame, then the form will use the values that are specified with the corresponding system option. It is recommended that you use -99 for the **Characters per line**, **Lines of first page**, and **Lines of following** whenever possible. △

In the example shown in Display 7.6 on page 151, the settings have been set for using letterhead paper.

Display 7.6 FORMS Text Body and Margin Information Frame

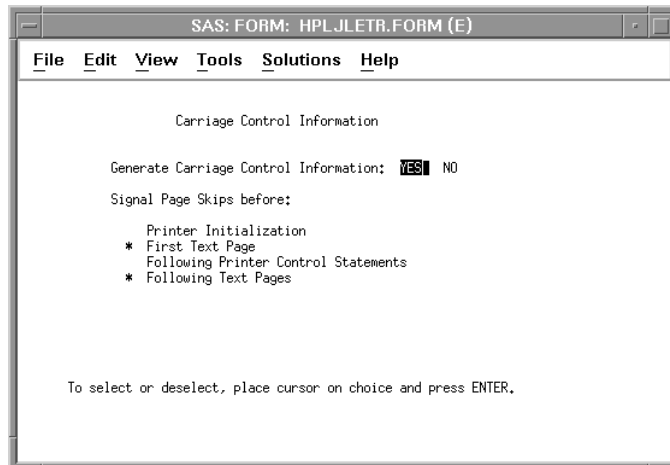


If you need to set these values to a specific setting (rather than -99), then the values that you specify should be less than the corresponding system option. If your **LINESIZE** and **PAGESIZE** settings are greater than the values that you have specified in this frame, then you may have extra page breaks (blank pages) in the middle of your output.

Carriage Control Information

In this frame, you can select where you want page eject instructions to be entered in the output. An asterisk (*) indicates that the option is selected.

If you enter any escape sequences for this form (through the Printer Control Language frame), then you should select **First Text Page** in this frame. Blank lines containing the printer control language are printed at the top of the first page, and if **First Text Page** is not selected, then each page of your output will wrap across multiple pages.

Display 7.7 FORMS Carriage Control Information Frame

It is recommended that you leave the default values turned on in this frame. The default values generate a page break before the first text page and following each text page.

UNIX Print File Parameters

This frame enables you to enter the number of copies that you need and the destination (name of the printer) where you want the output to be printed.

Note: You can also specify default destinations with the `SYSPRINT` option and in the `$LPDEST` environment variable. If you specify several forms that use the same destination, you may need to modify these forms if your site acquires a new printer. See “Changing the Default Destination” on page 156 for more information. Δ

This frame also allows you to specify other options for the print command that you use. For example, if you use the `lp` command to print, you can add a title by using the `-t` option:

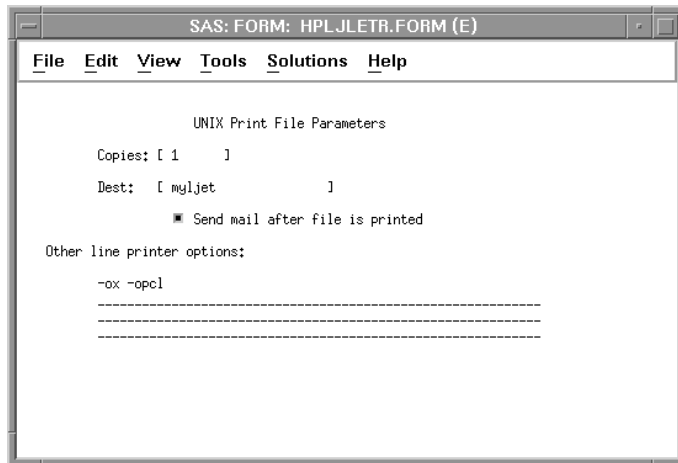
```
-t "Report Log"
```

Note: Enclose any strings in your option specifications in double quotation marks(""), not single quotation marks. Δ

If you select **Send mail after file is printed**, then `lp` uses the `-m` option to send you notification of any problems.

The example shown in Display 7.8 on page 153 uses two additional options:

- `-ox` prints in simplex mode.
- `-opc1` indicates that the print file contains special control characters.

Display 7.8 FORMS UNIX Print File Parameters Frame

Other options that you may want to consider are

- ascii** specifies that the print file contains ASCII text.
- pn** sets the priority of your print job to *n*, where *n* is a number from 0 to 7, inclusive. The highest priority is 7.
- oh** suppresses the printing of the header page.
- otext** specifies that the print file contains only text and no PCL statements.

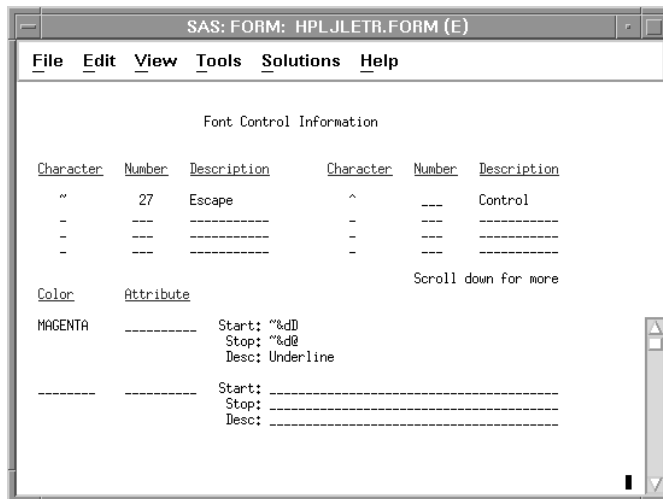
Refer to the man page for your print command for a complete list of the options that you can specify in this frame.

If you get the message **unrecognized file type** when you try to print, then you might be trying to send PCL statements to the printer but have not specified the correct options. You may need to tell the printer that your file contains a mixture of ASCII and PCL sequences. You may need to specify the **-opcl** or **-oraw** options.

See also “Changing the Default Print Command” on page 156.

Font Control Information

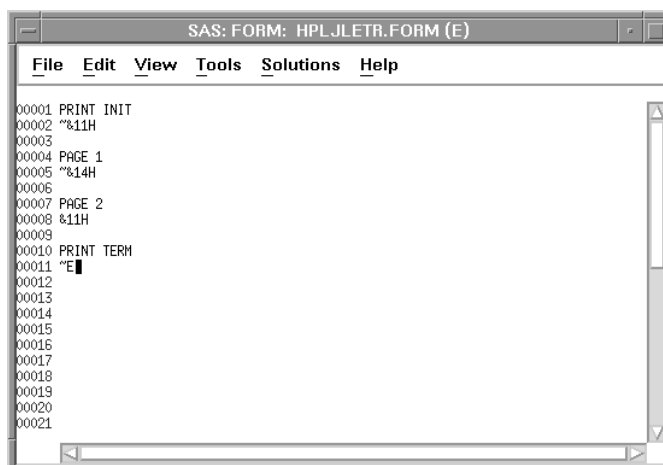
The attributes, such as underline and highlight, that you can define in this frame are determined by the printer that you selected in the Printer Selection frame. For example, some printers do not support certain attributes such as highlight. Normally, you will not need to modify or add to the information shown in this frame.

Display 7.9 FORMS Font Control Information Frame

If you need to customize the font control information, use the top of this frame to define up to eight special characters that represent printer control characters. You can then use these characters in the bottom of the frame to define text attributes such as underline, bold, subscripts, and so on. Font control information is specific to each printer or output device and can be found in the documentation for your printer or device.

Printer Control Language

This frame allows you to enter sequences of printer control language (PCL) that you want sent to the printer with your print job stream. With PCL, you can control fonts, orientation, paper drawer, and so on. For a complete list of the control sequences that you can enter on your form, refer to the documentation for your print device.

Display 7.10 FORMS Printer Control Language Frame

The example shown in Display 7.10 on page 154 contains several control sequences:

PRINT INIT indicates that the control sequence that follows is to be sent to the printer when the print job starts. The **~&11H** control sequence

	specifies that the first sheet of paper for the print job is pulled from the top drawer. The first sheet is typically a header page.
PAGE 1	indicates that the control sequence that follows is to be sent to the printer before the first page of output is printed. Since our example form is for printing on letterhead paper, the control sequence <code>~&14H</code> specifies that the first page of output is taken from the bottom paper drawer, which contains the letterhead paper. The sequence specified after PAGE 1 will be used for each page until a different sequence is sent to the printer.
PAGE 2	indicates that the control sequence that follows is to be sent to the printer before the second page of output is printed. The <code>~&11H</code> sequence specifies that the paper for the second page is pulled from the top drawer, which contains regular paper. Since no other control sequences are specified for the remaining pages of the print job, paper will be pulled from the top drawer for all of the remaining pages.
PRINT TERM	indicates that the control sequence that follows is to be sent to the printer when the print job terminates. The <code>~E</code> sequence resets the printer to its initial settings.

Other control sequences that you might find useful are

<code>~&110</code>	turns on landscape mode.
<code>~&k2S</code>	turns on compressed mode.

Specifying Your Default Form

SAS is shipped with a default form defined in SASHELP.BASE. If you do not define any other forms or modify the default form, SAS uses SASHELP.BASE.DEFAULT.FORM when you are printing with forms.

You can specify your default form by

- entering the FORMNAME command followed by the name of the form that you want to be your default form. If you do not specify a form name, SAS displays the name of your current default form.

- opening the System Options window by selecting

Tools ► Options ► System...

In this window, select **Environment**, **Display**, and **Forms** and then enter the new form name.

- selecting

File ► Print Utilities ► Set Form Name

Enter the library, catalog, and form name that you want to use.

- specifying the FORMS system option. For example, the following OPTIONS statement changes the default form to SASUSER.MYFORMS.HPLJLETR:

```
options forms=sasuser.myforms.hpljletr;
```

For more information on specifying system options, see “Specifying System Options” on page 14.

Changing the Default Print Command

Under UNIX, the FORM subsystem uses `lp` as the default print command. You can use the `PRINTCMD` system option to specify a different print command. For example, you can change your default print command to `lpr` by entering the following `OPTIONS` statement:

```
options printcmd='lpr';
```

For more information, see “`PRINTCMD`” on page 284.

Alternatively, you can create an alias of your system’s print command. Files will be directed to the command referenced by the alias and will be passed the `lp` print options from the Print File Parameter frame. For example, if your system uses the C shell and a print command called `nlp`, you can add the following to your `.cshrc` file:

```
alias lp 'nlp'
```

From a Bourne or Korn shell, you can create a symbolic link to your system’s print command, as in the following example:

```
ln -s /usr/local/bin/nlp $HOME/bin/lp
```

Changing the Default Destination

When you print a file, SAS looks in the following locations to determine where to send output:

- 1 the destination specified in the form or host printer device that you are using. See “UNIX Print File Parameters” on page 152 and “Specifying Your Default Printer Device” on page 147 for more information.
- 2 the value specified in the `SYSPRINT` system option. You can use the `SYSPRINT` option to set your default print destination. Use the `SYSPRINT` system option to specify the destination option that is used with your print command. For example, if your print command is `lp`, you can set the default destination to the printer named `myljet` by entering the following `OPTIONS` statement:

```
options sysprint='-dmyljet';
```

Note: The setting of the `SYSPRINT` option will be ignored if you print with a form for which any changes have been made to the default Print File Parameters frame. See “UNIX Print File Parameters” on page 152 for more information. Δ

- 3 the value of the `$LPDEST` environment variable. See “Defining Environment Variables” on page 17 for more information.

SAS uses the first destination that it finds. If you specify a destination in all three locations, SAS uses the destination specified in the form that you are using.

The correct bibliographic citation for this manual is as follows: SAS Institute Inc., *SAS® Companion for UNIX Environments, Version 8*, Cary, NC: SAS Institute Inc., 1999.

SAS® Companion for UNIX Environments, Version 8

Copyright © 1999 by SAS Institute Inc., Cary, NC, USA.

ISBN 1-58025-502-7

All rights reserved. Printed in the United States of America. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without the prior written permission of the publisher, SAS Institute Inc.

U.S. Government Restricted Rights Notice. Use, duplication, or disclosure of the software by the government is subject to restrictions as set forth in FAR 52.227-19 Commercial Computer Software-Restricted Rights (June 1987).

SAS Institute Inc., SAS Campus Drive, Cary, North Carolina 27513.

1st printing, October 1999

SAS® and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries.® indicates USA registration.

Other brand and product names are registered trademarks or trademarks of their respective companies.

The Institute is a private company devoted to the support and further development of its software and related services.