

10 Job Management

Introduction

Some printers, such as the HP LaserJet 8100 and 8500 series, provide the capability for storing print jobs on the printer's hard disk. These jobs can be accessed and printed using PJL commands as described in this chapter.

The HP LaserJet 8100 and 8500 series printers differ in the way they support job management. Separate descriptions and examples are given for each printer.

Note

Job retention features are not available in printers that do not have a hard disk. Software should query the printer to determine if these features are available and only send the PJL commands to utilize them if they are available.

HP LaserJet 8100 Printer

Using the SET command and the PJL variables described in this chapter, the application can assign the job a job name and a user name, store specific jobs for later printing, print one proof copy and hold the job until the job is proofed, and add password (HOLDKEY) protection to a held job.

The following variables are used for job management:

- HOLD
- HOLDKEY
- HOLDTYPE
- JOBNAME
- USERNAME

Each variable is described in the following paragraphs. The variable descriptions are followed by a job management example.

HOLD Variable

Specifies the retention classification of the job, indicating whether the job is printed immediately or stored.

Values	Value Description
(OFF)	The job is printed but not retained on the disk after printing. This is the default.
ON	The requested number of copies are printed and the job is temporarily stored on disk. The job is then available for printing additional copies through the control panel and through JetAdmin. The number of jobs that can be stored is limited by disk space. When the limit is exceeded, the oldest job is removed from the disk.
PROOF	One copy of the job is printed and remaining copies are stored on disk. The job is then available to select for printing via the control panel menus or through JetAdmin. The job will be deleted from the disk when the disk space is needed for another Proof and Hold job but only after the additional copies have been printed. It will also be deleted when the user sends down another Proof and Hold job with the same job name, or if the user explicitly deletes the job.
STORE	The job is not printed immediately but is retained on disk. The job is available to select for printing via the control panel (PRIVATE/ STORED JOBS menu) or through JetAdmin. The job will not be deleted from the disk after printing.

HOLDKEY Variable

The HOLDKEY variable acts as a password to protect a held job. It is a four-digit string that is specified in the job stream. A HOLDKEY value must be specified if HOLDTYPE is PRIVATE (otherwise, the job will be considered PUBLIC). The variable value can be any four-digit value from 0000 to 9999. The default value is "".

HOLDTYPE Variable

The HOLDTYPE variable specifies the privacy level of the job. Valid values are PUBLIC and PRIVATE.

Value	Value Description
PUBLIC	The job does not require a HOLDKEY value in order to be released for printing. This is the default value.
PRIVATE	The job requires a HOLDKEY value in order to be released for printing. If the HOLD-TYPE is set to PRIVATE, a HOLDKEY value must be specified. If no HOLDKEY is specified, the job will be considered PUBLIC.

JOBNAME Variable

This variable is the job name that may be generated by the driver or obtained from user input. This value may be used in conjunction with the USERNAME to select a job from the control panel. If the job stream does not contain a JOBNAME, the printer will assume no job name. Each subsequent job that is sent down by the same user will replace the user's last job on disk. The driver is responsible for determining the size of the printer's control panel and sending a string of appropriate length.

Note

To determine the size of the printer's control panel, use the INFO CONFIG command, which is explained in Chapter 7. The returned DISPLAY LINES value indicates the number of lines on the display, and the DISPLAY CHARACTER SIZE value indicates the number of characters that can be displayed.

Value	Value Description
<i>"jobname string"</i>	This string is limited by the size of the printer's control panel display (up to 80 characters).

USERNAME Variable

This variable is the user name that is obtained from user input or by the driver through some internal method. If the job stream does not contain a USERNAME the default value will be "NO USER NAME". The driver is responsible for determining the size of the printer's control panel and sending a string of appropriate length.

Value	Value Description
"username string"	This string is limited by the size of the printer's control panel display. The default value is "NO USER NAME".

Example: Job Management HP LaserJet 8100

The following PJP example demonstrates job management. It creates a secure Proof and Hold job that will print one copy and then be held until the user selects it for printing via the control panel or JetAdmin.

```
<ESC>%-12345X@PJP <CR><LF>
@PJP COMMENT **Give job a name** <CR><LF>
@PJP SET JOBNAME = "Job_12345" <CR><LF>
@PJP COMMENT **Specify a user name**<CR><LF>
@PJP SET USERNAME = "Slim_Jim" <CR><LF>
@PJP COMMENT **Set Quantity to Print**<CR><LF>
@PJP SET QTY = 4 <CR><LF>
@PJP COMMENT **Specify Proof & Hold**<CR><LF>
@PJP SET HOLD = PROOF<CR><LF>
@PJP COMMENT **Specify private job**<CR><LF>
@PJP SET HOLDTYPE = PRIVATE<CR><LF>
@PJP SET HOLDKEY = "0246"<CR><LF>
@PJP ENTER LANGUAGE = POSTSCRIPT <CR><LF>
%!PS-ADOBE . . . PostScript print job . . . ^D
^Z<ESC>%-12345X
```

HP LaserJet 8500 Printer

The HP LaserJet 8500 printer implements job management in a different way than the HP LaserJet 8100 printer. For this printer, only the HOLD = JOB option is supported for the HOLD command. The HOLDTYPE and HOLDKEY variables are not supported. (See the descriptions of the HOLD, JOBNAME and USERNAME variables for more information about their limitations.)

The printer's Proof and Print feature allows the user a fast and easy way to proof one copy of the job, then quickly print any remaining copies without waiting for data transmission or processing time for the subsequent copies. Using the printer's control panel buttons, selecting the PROOF AND PRINT menu item displays the JOB NAME and USER NAME on the control panel display. The ITEM keys can then be used to scroll through the list of printable jobs currently on the disk. The VALUE keys can be used to change the number of copies selected. Choosing SELECT launches the job. Once the job is launched, the number of copies cannot be changed.

When all copies of the job have been completely printed, the file is removed from the disk. Pressing CANCEL JOB while the job is printing or when the JOBNAME is displayed on the control panel cancels printing and deletes the file from the disk.

Turning the printer power off or the occurrence of non-correctable errors causes the printer to save the file on the printer's disk. The number of copies completed will not be updated from the original number if the job does not complete without error. If all copies of the Proof and Print files have not been printed, the job will remain on the disk indefinitely until the user specifically deletes the job. The user can delete the job using the control panel by selecting the job and setting the number of copies to zero. Alternatively they can select the job and press the Job Cancel key.

HOLD Variable

Specifies the retention classification of the job, indicating whether the job is printed immediately or stored.

Values	Value Description
JOB	Notifies printer to hold the job until all copies have been printed.

JOBNAME Variable

This variable is the job name that may be generated by the driver or obtained from user input. This value may be used in conjunction with the USERNAME to select a job from the control panel. If the job stream does not contain a JOBNAME, the printer will assume no job name. Each subsequent job that is sent down by the same user will replace the user's last job on disk. The driver is responsible for determining the size of the printer's control panel and sending a string of appropriate length.

Value	Value Description
<i>"jobname string"</i>	For the HP LaserJet 8500, the string is limited to 16 characters of 7-bit ASCII text [uppercase A – Z, plus the period (.), underscore (_), hyphen (-), and asterisk (*)]. The default value is "".

USERNAME Variable

This variable is the user name that is obtained from user input or by the driver through some internal method. If the job stream does not contain a USERNAME the default value will be "NO USER NAME". The driver is responsible for determining the size of the printer's control panel and sending a string of appropriate length.

Value	Value Description
<i>"username string"</i>	For the HP LaserJet 8500, the string is limited to 16 characters of 7-bit ASCII text [uppercase A – Z, plus the period (.), underscore (_), hyphen (-), and asterisk (*)]. The default value is "NO USER NAME".

Example: Job Management HP LaserJet 8500

The following PDL example demonstrates job management for the HP LaserJet 8500 printer. It creates a secure Proof and Print job that prints one copy and then is held until the user selects it for printing via the control panel.

```
<ESC>%-12345X@PDL <CR><LF>
@PDL COMMENT **Give job a name** <CR><LF>
@PDL SET JOBNAME = "Job_876543" <CR><LF>
@PDL COMMENT **Specify a user name**<CR><LF>
@PDL SET USERNAME = "Mary_Smith" <CR><LF>
@PDL COMMENT **Set Quantity to Print**<CR><LF>
@PDL SET QTY = 15 <CR><LF>
@PDL COMMENT Specify Proof & Print Job<CR><LF>
@PDL SET HOLD = JOB<CR><LF>
@PDL ENTER LANGUAGE = PDL <CR><LF>
<ESC E> . . . PDL print job . . . <ESC E>
↵<ESC>%-12345X
```

