

# Xerox 4850/4890 HighLight Color Laser Printing Systems Command Reference

Xerox Corporation  
701 S. Aviation Boulevard  
El Segundo, CA 90245

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Printed in the United States of America

Publication number: 720P93600

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Changes are periodically made to this document. Changes, technical inaccuracies, and typographic errors will be corrected in subsequent editions.

This document was created on the Xerox 6085 Professional Computer System using VP software. The typefaces used are Optima, Terminal, and Monospace.

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**Glossary**

GLOSSARY-1

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The *Xerox 4850/4890 HighLight Color Laser Printing System Command Reference* provides a description of all the available commands, including the logon levels, syntax, parameters, examples, and restrictions, if any.

This reference is intended for users who have some experience using Xerox Laser Printing Systems (LPS).

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## Conventions

---

This reference uses the following conventions:

<>	Angle brackets are used for keys on the system controller keyboard.
[ ]	Square brackets are used for optional command characters.
...	Ellipses indicate that you can repeat a parameter or list a series of parameters.
	Vertical bars are used to separate parameters in a series. The vertical bar stands for "or."
{ }	Curly brackets are used for required choices.
<i>italics</i>	Italics is used for variable information.
TERMINAL FONT	Terminal or monospace font is used to display system responses.
<u>underline</u>	System default parameters are underlined.
UPPERCASE	Uppercase letters are used for command names.

**CAUTION:** Cautions alert you to an action that could damage hardware or software.

**WARNING:** Warnings alert you to conditions that may affect the safety of people.



# 1.

# System commands

This section describes the system commands available for the Xerox 4850 and 4890 Highlight Color Laser Printing Systems (LPS).

## Command summary

Table 1-1 provides a summary of the system commands. It includes printer status requirements and the lowest logon level (by system default) from which a command is functional.

- An asterisk (\*) means the command is not functional when HIP or SDI is running.
- "NR" in the "Lowest logon level" column means you cannot restrict the command using the RCU command.

Table 1-1. **System commands**

Command	Function	Printer		Lowest logon level
		Offline	Online	
ABORT	Aborts current job, report activity, queue entries, or processes.	•	•	1/NR
ABORT ENTRY	Aborts entries in the queue	•	•	1/NR
ACCOUNT	Creates and updates accounting file.	•		1
ALIGN	Aligns laser image with paper.	•	•	1
B	Boots the operating system.			
BC, BD, BF, BT, BX	Boots the SAFES system.			
BLADE	Protects the LPS and prevents edge smearing.			1
CANCEL	Same as the ABORT command.	•	•	1/NR
CANCEL ENTRY	Same as the ABORT ENTRY command.	•	•	1/NR
CLEAR QUEUE	Erases all entries in the print queue database.	•	•	2
CLP	Assigns preferred trays to a cluster.	•	•	1
CLUSTER	Assigns current trays to a cluster.	•	•	1
COMPRESS*	Compresses file directories and disk files.	•		2
CONTINUE	Resumes input/output activities.	•	•	1/NR
COPY	Copies files from one device to another.	•		1
DARKNESS	Adjusts the contrast of black and color inks.			1
DCU	Controls and processes logging activity.			1
DELETE	Deletes files from the system disk.	•		1
DRAIN	Prints all completed online pages.		•	1

Table 1-1. System commands (continued)

Command	Function	Printer		Lowest logon level
		Offline	Online	
DSR*	Saves/restores disks.	•		2
EDIT	Begins an editing session.		•	1
ENDJOB	Print all unimaged online pages.		•	1
FCG	Loads third-party communications profile.	•		2
FCHECK	Displays data about disk file allocations.	•		3
FCU	Converts files to monochrome color format.	•		1
FEDIT	Invokes the font editor.			1
FEED	Selects the active paper tray.	•	•	1
FEX	Generates a test case using Xerox or third-party devices	•		2
FID	Creates a prototype command file.	•		1
FILE	Lists file directories on the LPS display.	•		1
FIX	Modifies fonts and logos.			1
FLF	Invokes non-file-specific floppy commands	•		1
FLOPPY	Invokes floppy commands at the system or editor level.	•		1
FONTS	Sets the maximum number of active fonts.	•		1
FORMS	Sets the maximum number of active forms.	•		1
GRAPHIC	Sets the maximum number of active graphics.	•		1
HARDCOPY	Prints a hardcopy of identified graphics.	•		1
HIP	Initiates host interface processor commands.	•	•	1
HOSTCOPY	Accepts/stores files transmitted from the host computer.		•	1
IFU	Invokes the Interpress font utility commands.	•		1
IMAGE	Displays, fixes, or prints the content of IMG files.	•		1
INITIALIZE QUEUE	Initializes and sets up a new print queue database.	•		2
JOBS	Displays job status information.	•	•	1/NR
LIGHT	Enables and disables the attention light.			2
LIST	Prints a hardcopy list of file directories.	•		1
LOGON	Determines access privileges.			1/NR
MOVE	Positions tape by blocks or files.	•		1
MOVE #	Reorders documents for printing.			1
OCS	Displays key version numbers.		•	1
OFFLINE	Sets the LPS offline.	•		1
ONLINE	Sets the LPS online.	•		1
PQA	Prepares the loaded inks for printing.	•	•	1
PROBLEM	Logs problem information for the site representative.			1
PSC	Prepares ESS hardware for printing.	•		2
PSTATUS	Displays the status of the printer.			1

Table 1-1. System commands (continued)

Command	Function	Printer		Lowest logon level
		Offline	Online	
PURGE*	Clears data in unused disk sectors of the print file.	•		2
RCU	Restricts command usage.	•		NR
REALLOCATE	Sets the size of the print file on the system disk.	•		5
REPORT	Reports customer billing, system activity, user accounting.	•		1
RESET	Forces all system activities to cease.	•	•	1
REVIEW	Reviews file directories with optional delete.	•		1
REWIND	Rewinds tape.	•		1
RNAME	Renames a file from one filename to another.	•		1
SAMPLE	Prints samples and test patterns.	•	•	1
SCALE	Converts files from 300 spi to 600 spi.	•		1
SCHEDULE	Checks or switches the QM modes.			1
SECURE	Secures a file against unauthorized access.	•		5
SELECT	Selects an active output tray.	•	•	1
SEPARATE	Sends an output report to the other output bin.			1
SET QUEUE DISPLAY	Sets the information in the print queue display.	•	•	1
SETTIME	Sets the current date and time.	•		2
@SETTMO	Changes the maximum period the system waits before sending the DEVICE END status to the host.	•		2
SFC	Converts the QUE.SYS data file to STAFIL.SYS.	•		1
SFS	Converts the print queue database.	•		1
SFT	Transfers a single file from a DSR tape to a disk drive.	•		2
SHOW QUEUE STATUS	Displays the status of the queue.	•	•	1
SPACE	Positions tape by logical reports.	•		1
SST	Creates a system software tape or cartridge.	•		4
START	Initiates a print job or prints a tape dump.	•	•	x
STITCH	Staples a printed document.			1
STOP	Suspends input and output activities.	•	•	NR
SUBSTITUTE DEVICE	Identifies the tape or cartridge drive.	•	•	1
SUBSTITUTE INK	Replaces ink for a job with a similar ink.	•	•	1
TAPE  CARTRIDGE	Manipulates an LPS-labeled tape or cartridge.	•		1
TIME	Displays the current time and status.			1
TYPE	Displays a source file.	•		1
XPS	Reset XPSM accounting.	•		5

## Entering commands

---

You can enter all system commands and options from the keyboard. The system accepts commands whenever the following prompt displays:

READY FOR COMMANDS

To enter a command:

1. Enter the command in the format specified.
2. Press <ENTER>.

The <ENTER> and the <RETURN> references are interchangeable.

The command syntax is made up of two elements: the keyword and the parameters. All commands begin with a keyword, for example, SAMPLE (some commands have more than one keyword, for example, SUBSTITUTE INK). You may abbreviate the keyword using three or more characters, for example, SAM, SAMP or SAMPL for the SAMPLE command, or SUB INK, SUBS INK, etc. for the SUBSTITUTE INK command.

Parameters follow the keyword. Parameters are either required or optional. Follow these guidelines when entering parameters:

- Separate parameters by commas.
- Do not use spaces around the commas.
- Enter the parameters in the order specified.
- If you want to omit an optional parameter, you must enter a comma in its place in the command string, for example, POA CONTINUE,,S.

If you encounter an error message after entering a command, verify the syntax or refer to the *Xerox 4850/4890 Highlight Color LPS Message Guide*.

---

## Commands

---

The following system commands are available for the 4850 and 4890 Highlight Color LPS.

### ABORT

---

Use this command to accomplish the following:

- Abort operation of nonprint utilities
- Remove jobs from the queue
- Discontinue input or output system processing.

The system handles the ABORT command differently, depending on the task currently in process:

- If the system is running a nonprint utility (such as DCU, FDL, or IFU), the ABORT command terminates operation of the utility, if the task can properly handle an ABORT command.
- If you issue an ABORT command while a nonprint utility is active, the system ignores any parameters you enter.
- If you issue an ABORT command while no utility is active, the system aborts the print processing.

Use this command to stop processing of a specific job or report. You can specify input or output processing.

**Logon level** Levels 1 through 5.

**Syntax** ABORT [*job-id*|I|O]

**Parameters** *job-id*

Stops processing of the job identified by the job identification number.

I

Aborts input print processing.

O

Aborts the report currently printing. When output processing resumes, it begins with the next complete report.

The system handles job aborts as follows:

- A job received and queued for report preparation is stopped after the next data read and is removed from the queue, but data from previously processed jobs is printed.
- An offline job in the print queue is deleted. An online job in the print queue has been partially prepared for printing and every page prepared for printing is printed.
- A job being printed is truncated, but remaining jobs in the queue are printed.
- A job is not deleted if it has one report in the input queue and other reports in the output queue: only the report in the input queue is deleted when the next print job starts.

**Restrictions** If you abort a tape or cartridge job, the system does not rewind the tape or cartridge. Issue REWIND before entering the next START command.

Entering ABORT O to abort a short report (20 pages or less) may not prevent the report from printing, and in some cases, if

entered late enough in the printing of the report, may abort the following report instead of the report intended.

To abort SAMPLE printing of files specified by a mask, enter ABORT *job-id* to abort the job completely.

If two jobs have been started, one after the other, and you want to stop the first while it is being prepared for printing, enter ABORT I. After the following message appears for the first job:

```
OS1020 Job jid has completed input phase
```

Enter ABORT *job-id*. Or you can enter ABORT I and allow output processing to finish processing what it received of the first job before input processing aborted. Processing of the second job continues as expected.

### Examples

```
ABORT 5
QM0900 JOB 5 ABORTED
ABORT
OSO950 TASK ABORTED
```

The system accounting file is updated for the aborted job. User accounting pages print if output has been initiated for the job. They are delivered for each report that input has read. If output has not been initiated, no accounting page is delivered.

## ABORT ENTRY

---

Use this command to abort entries in the queue. This command is the same as the CANCEL ENTRY command.

### Syntax

ABORT ENTRY [ALL|*resource attribute*|#*entry-string*]

### Parameters

ALL

Aborts all entries in the queue.

*resource attributes*

PRIMARY COLOR

Aborts reports that contain the specified primary color.

STITCH

Aborts reports that require stitching.

You can combine attributes using and (&) and or (!) operators in the command. Refer to the examples below.

#*entry-string*

Aborts information on specified entries in the queue which are specified by the #*n*, #*n-m*, or #( *n-m,o,p-r*) format.

#*n*

Specifies a single entry (integer between 1 and 65,535).

#*n-m*

Specifies one set of multiple entries (integers between 1 and 65,535).

#( *n-m,o,p-r*)

Specifies multiple sets of entries. *n*, *m*, *o*, *p*, and *r* must be integers between 1 and 65535. All entries *n* through *m* inclusive, *o*, and *p* through *r* inclusive are passed to output. Parenthesis are required around the string. Commas without spaces are required between elements.



**Example:** ABORT ENTRY #65,#78,#81  
ABORT ENTRY #(65-71)  
ABORT ENTRY RED  
All entries requiring red dry ink.  
ABORT ENTRY BLUE&-STITCH  
All entries requiring blue dry ink and not requiring stitching.  
ABORT ENTRY MAGENTA!STITCH  
All entries requiring magenta dry ink or stitching.  
ABORT ENTRY (GREEN&CYAN)!-RED  
All entries requiring green and cyan dry ink or not requiring red dry ink.

---

## ACCOUNT

---

Use both the PDL ACCT command and this command to create and update the list of user (usually department) names for which accounting information is maintained. Refer to your *Xerox 4850/4890 Highlight Color LPS Print Description Language Reference* for information on the PDL ACCT command. You can also invoke the ACCOUNT command from an editor command file.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	ACCOUNT [ADD DELETE],[ <i>department</i> ][LIST WRITE] [ <u>EBCDIC</u>  ASCII] [ <u>1600</u>  6250][,CLEAR]
<b>Parameters</b>	<p><b>ADD</b> Adds a department name to the list of departments under which accounting information is maintained.</p> <p><b>DELETE</b> Removes a department name from the list of department names.</p> <p><i>department</i> One to 31 alphanumeric characters (A to Z, 0 to 9, :), specifying the department. Must be the name specified in the DEPT command of the PDL ACCT command.</p> <p><b>LIST</b> Displays all the current departments.</p> <p><b>WRITE</b> Copies the user and system activity data printed by the REPORT command to an unlabeled tape. The 80-byte, unblocked record file starts at BOT and is terminated by two EOFs.</p> <p><u>EBCDIC</u> ASCII Specifies the data format as EBCDIC or ASCII.</p> <p><u>1600</u> 6250 Specifies the tape recording density in bits per inch.</p> <p><b>CLEAR</b> Erases the accounting data after copying it to tape.</p>
<b>Restrictions</b>	<p>A department name cannot be deleted if data associated with the department exists in the SFS file.</p> <p>You can copy the ACCOUNT data only to an unlabeled tape.</p>

---

### **Tape format of data written by ACCOUNT**

---

The system usage accounting data copied to unlabeled tape consists of 80-byte records. Each record is identified in its first two bytes by a value indicating the information contained in that record. These 2-byte identifiers are 10, 11, 12, 13, 16, 17, and 18. Records with identifier 14 are written to tape but contain no currently useful information.

The first four records are record types 10, 11, 12, and 13, which have the format structure shown in Tables 1-2 through 1-5. You can print the information using the REPORT ACTIVITY command.

Table 1-2. **First ACCOUNT record**

Bytes	Record contents
0-1	Identifier (10)
2-10	Date in format DD-MM-YY
13-20	Time in format HH:MM:SS
21-79	Unused

Table 1-3. **Second ACCOUNT record**

Bytes	Record contents
0-1	Identifier (11)
2-39	Unused
40-49	Pages
50-59	Reports
60-69	Files
70-79	Jobs

Table 1-4. **Third ACCOUNT record**

Bytes	Record contents
0-1	Identifier (12)
2-6	Hours (input)
7-11	Minutes (input)
12-21	Unused
22-26	Hours (output)
27-31	Minutes (output)
32-43	Unused
44-49	Mounts
50-59	Blocks read
60-69	Blocks skipped
70-79	Paper path holes

Table 1-5. **Fourth ACCOUNT record**

Bytes	Record contents
0-1	Identifier (13)
2-26	Unused
27-31	Number of blocks with CRC error
32-41	Blocks received
42-79	Unused

The remaining records on the tape are sets of type 16, type 17, and type 18 records. Each set records the data for a department-name/JDL entry in the accounting log. You can print information in the sixth through eighth records using the REPORT USER command. These records have the format structure shown in Tables 1-6 through 1-9.

Table 1-6. **Fifth ACCOUNT record**

Bytes	Record contents
0-1	Identifier (14)
2-79	Unused

Table 1-7. **Sixth ACCOUNT record**

Bytes	Record contents
0-1	Identifier (16)
2-32	Department name
33-34	Unused
35-39	Pages to tray
40-79	Same as in second record

Table 1-8. **Seventh ACCOUNT record**

Bytes	Record contents
0-1	Identifier (17)
2-69	Same as in third record
70-79	Lines

Table 1-9. **Eighth ACCOUNT record**

Bytes	Record contents
0-1	Identifier (18)
2-79	Same as in second record

---

**ALIGN**


---

Use the ALIGN command to align the laser image with the paper. The alignment values for each printer must be set at least once, but they remain relatively constant. The alignment values you enter are retained by the system until you change them.

<b>Logon level</b>	Levels 1 through 6.
<b>Syntax</b>	ALIGN [[/300 /600][ <i>scans</i> ],[ <i>dots</i> ],[TEST]]
<b>Parameters</b>	<p><u>/300</u> Specifies 300 dpi.</p> <p>/600 Specifies 600 dpi printer resolution (does not apply to the 4850 or 4890 Highlight Color LPS).</p> <p><i>scans</i> The number of scan lines across a portrait page or down a landscape page, in dots. The range is 1 to 296 inclusive. The default value is 36.</p> <p><i>dots</i> The number of dots along each scan line (up a portrait page or across a landscape page) in dots. The range is 0 to 11995 inclusive. The default value is 0.</p> <p>TEST Prints a TEST form.</p>
<b>Default</b>	The default alignment is 36 scans and 0 dots.
<b>Examples</b>	<p>ALIGN 80,24,TEST</p> <p>The system responds:</p> <pre>ALIGNMENT IS 80 SCAN LINES AND 24 DOTS</pre> <p>ALIGN</p> <p>The system responds:</p> <pre>ALIGNMENT IS 80 SCAN LINES AND 24 DOTS</pre> <p>ALIGN ,16</p> <p>The system responds:</p> <pre>ALIGNMENT IS 80 SCAN LINES AND 16 DOTS</pre>
<b>Restrictions</b>	<p>Do not use the TEST parameter when the system is online. The system responds with an error message.</p> <p>Do not request an alignment sample when a print job is in progress since the system resets the alignment without printing the test form.</p> <p>Although any scan line increment can be used, the dots increment can only be in steps of 8 dots.</p>

**B**

---

Use this command to boot the operating system.

**Logon level** n/a

**Syntax** B

After powering on, the system delays up to 80 seconds before the `READY$` prompt appears. When the system completes the booting process, it is automatically at logon level 1.

**BC**

---

Use these command to boot your system from a 1/4 inch cartridge after powering on or pressing the Boot button.

**Logon level** n/a

**Syntax** BC

The system delays up to 80 seconds before the `$READY` prompt appears. When the system completes the booting process, it is automatically at logon level 1.

**BD**

---

Use this command to boot your system from the disk after powering on or pressing the Boot button.

**Logon level** n/a

**Syntax** BD

After powering on, the system delays up to 80 seconds before the `READY$` prompt appears. When the system completes the booting process, it is automatically at logon level 1.

**BF**

---

Use this command to boot your SAFES system from a floppy disk after powering on or pressing the Boot button.

**Logon level** n/a

**Syntax** BF

After powering on, the system delays up to 80 seconds before the `READY$` prompt appears. When the system completes the booting process, it is automatically at logon level 1.

**BT**

---

Use this command to boot your SAFES system from an open-reel tape after powering on or pressing the Boot button.

**Logon level** n/a

**Syntax** BT

After powering on, the system delays up to 80 seconds before the `READY$` prompt appears. When the system completes the booting process, it is automatically at logon level 1.

---

**BX**

---

Use this command to boot your SAFES system from a 1/2 inch cartridge tape after powering on or pressing the Boot button.

**Logon level** n/a

**Syntax** BX

After powering on, the system delays up to 80 seconds before the `READY$` prompt appears. When the system completes the booting process, it is automatically at logon level 1.

---

**BLADE**

---

Use this command to enable or disable the printer blade. You can disable the blade to improve edge smearing caused by the blade or to reduce printer wear caused by certain types of paper stock. Your service representative can identify which paper stock to use.

The blade setting remains in effect until changed by command or an LPS service representative. If you do not enter a parameter, the current status of the blade displays.

**Logon level** Levels 1 through 5.

**Syntax** BLADE [ENABLE|DISABLE]

**Parameters** ENABLE

Activates the blade.

DISABLE

Deactivates the blade.

**Restrictions** The system accepts this command when the printer is not running.

---

**CANCEL**

---

Use this command to remove a job from the system, cancel a report, or discontinue certain system processing (input, output, or both).

Ensure correct job status tracking for subsequent jobs by issuing the `RESET` command after canceling a job being printed.

**Logon level** Levels 1 through 5.

**Syntax** CANCEL [*job-id*|I|O]

**Parameters** *job-id*

Stops processing of the job identified by the job identification number.

I

Cancels input print processing.

O

Cancels the report currently being printed. Data processed by output is deleted; data processed only by input or QM is not affected. When output processing resumes, it begins with the next complete report.

This command is the same as the `ABORT` command. Refer to the "ABORT" section earlier in this manual for more information.

## CANCEL ENTRY

---

Use this command to cancel entries in the queue. This command is the same as the ABORT ENTRY command.

**Syntax**

CANCEL ENTRY [ALL]*resource attributes* [#*entry-string*]

**Parameters**

ALL

    Cancels all entries in the queue.

*resource attributes*

    PRIMARY COLOR

        Cancels reports that require the specified primary color.

    STITCH

        Cancels reports that require stitching.

    You can combine attributes using and (&) and or (!) operators in the command. Refer to the examples below.

*#entry-string*

    Cancels specified entries in the queue which are specified by the #*n*, #*n-m*, or #( *n-m,o,p-r*) format.

    #*n*

        Single entry (integer between 1 and 65535).

    #*n-m*

        One set of multiple entries (integers between 1 and 65535), *n* to *m* inclusive.

    #(*n-m,o,p-r*)

        Multiple sets of entries (integers between 1 and 65535), *n* to *m* inclusive, *o*, and *p* to *r* inclusive.

**Example:**

CANCEL ENTRY #65,#78,#81

CANCEL ENTRY #(65-71)

CANCEL ENTRY MAGENTA

    All entries requiring magenta dry ink.

CANCEL ENTRY BLUE&-STITCH

    All entries requiring blue dry ink and not requiring stitching.

CANCEL ENTRY BLUE!STITCH

    All entries requiring blue dry ink or stitching.

CANCEL ENTRY (GREEN&BLUE)!-RED

    All entries requiring green and blue dry ink or not requiring red.



---

## CLEAR QUEUE

---

	Use this command to erase all entries in the print queue database and reset warning and frequency flags by reinitializing the database. Warning flags indicate that the beginning of the file is about to be overwritten. Frequency flags determine how often warning messages display.
<b>Logon level</b>	Levels 2 through 5.
<b>Syntax</b>	CLEAR QUEUE [NOF OWF DWF NWF: <i>n.m</i> ]
<b>Parameters</b>	<p>NOF Deactivates the warning and frequency flags.</p> <p>OWF Activates previous warning and frequency flags.</p> <p>DWF Activates default warning and frequency flags. The default values are: warning flags, 40, frequency flags, 3.</p> <p>NWF:<i>n.m</i> Sets and activates new warning and frequency flags. The <i>n</i> value indicates the threshold at which warnings begin. The <i>m</i> value indicates the frequency of warning message display.</p>
<b>Restriction</b>	CLEAR QUEUE executes only when the system is not active.
<b>Example</b>	If <i>n</i> =25 and <i>m</i> =3, warnings are displayed when 25, 22, 19, 16, etc., entries can be made before the end of the print queue database is reached.

## CLP and CLUSTER

Use CLP to define or delete preferred trays for a cluster, or to display all clusters with all their associated information.

Use CLUSTER to establish or delete current trays for a cluster, or to display all information for all clusters with current trays.

A cluster exists permanently in the database if it has at least one preferred tray. If you delete an active cluster's preferred trays by assigning them to another cluster with the CLP command, you can use the cluster until you delete its current trays by assigning them to another cluster with the CLU command.

Refer to the *Xerox 4850/4890 Highlight Color LPS System Programming and Administration Guide* for more information.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	CLP [ <i>clu-name</i> ]/[ <i>-</i> ]A[+   - ] [[ <i>n</i> ]   [ <i>n</i> <sub>1</sub> ,... <i>n</i> <sub><i>n</i></sub> ]] [SET] [ALL]/[NR] or CLUSTER [ <i>clu-name</i> ] [+   - ] [[ <i>n</i> ]   [ <i>n</i> <sub>1</sub> ,... <i>n</i> <sub><i>n</i></sub> ]] [SET] [ALL]/[NR]
<b>Parameters</b>	No parameters entered Displays tray information (see examples). The command is available whether or not current clusters are defined.
	<i>clu-name</i> Specifies a cluster by name (not tray number). The name must be 1 to 6 alpha characters beginning with a letter.
	/A Sets the autosize flag to True. Available with the CLP command only.
	/ <i>-</i> A Sets the autosize flag to False. Available with the CLP command only.
	<i>n</i> Denotes a feeder tray on the printer by a number within the range 1 to 2 or 1 to 4.
	<i>n</i> <sub>1</sub> ,... <i>n</i> <sub><i>n</i></sub> Denotes feeder trays on the printer by their numbers within the range 1 to 2 or 1 to 4.
	+ Adds trays as specified by the other parameters.
	- Deletes trays as specified by the other parameters.
	SET Assigns current tray status to all the preferred trays in the cluster.
	ALL Specifies all the trays on the printer. Not available with SET.
	/NR Specifies that the assigned current trays are not removed from other clusters.
<b>Examples</b>	CLUSTER Displays all tray information for all clusters with current trays.

- CLP  
Displays all tray information for all clusters.
- CLUSTER *cl-name*  
Displays all tray information for the specified cluster.
- CLUSTER *n*  
Displays all tray information for all clusters which have the specified tray as a current tray.
- CLP *n*  
Displays all tray information for all clusters which have the specified tray as a preferred tray.
- CLUSTER *cl-name n<sub>1</sub>[...n<sub>n</sub>]/[NR]*, CLUSTER *cl-name ALL/[NR]*  
Assigns current trays to the specified cluster. ALL specifies all the trays on the printer. NR (not remove) specifies that the assigned current trays are not deleted from other active clusters. SET assigns current tray status to all the preferred trays in the specified cluster.
- CLP *cl-name/[[-]A]n<sub>1</sub>[...n<sub>n</sub>]*, CLP *cl-name/[[-]A]ALL*  
Replaces the preferred trays of the specified cluster with the specified trays.
- CLUSTER *cl-name + n<sub>1</sub>[...n<sub>n</sub>]/[NR]*  
Adds the specified trays as current trays to the specified cluster. NR specifies that the assigned current trays are not deleted from other active clusters.
- CLP *cl-name/[[-]A] + n<sub>1</sub>[...n<sub>n</sub>]*  
Assigns the specified trays as preferred trays to the specified cluster.
- CLUSTER *cl-name -n<sub>1</sub>[...n<sub>n</sub>]*, CLUSTER *cl-name -ALL*  
Removes the specified current trays from the specified cluster.
- CLP *cl-name/[A] -n<sub>1</sub>[...n<sub>n</sub>]*, CLP *cl-name/[[-]A] -ALL*  
Removes the specified preferred trays from the specified cluster.

## COMPRESS

Use this command to help identify corrupted files, and to compress files and directories. It is more efficient to identify corrupted files with the verification option of COMPRESS, delete the corrupted files, and then compress files.

A file may be corrupted when sectors allocated to it have been allocated to another file or are also "bad block" areas. The V option of COMPRESS generates the CPR000.TMP file to identify the first multi-allocated sectors found.

If the multi-allocated sectors are associated with bad block areas and a file, delete the file. If the sectors are associated with two files, use SAMPLE to print them in order to determine which file has been corrupted.

During the verification process that no sectors have been allocated to multiple files or to a file and a "bad block" area, the system displays the following message:

```
VERIFYING SYSTEM FILES
```

**Logon level** Levels 2 through 5.

**Syntax** COMPRESS [*disk-id*, [*disk-id*,...]][V]

**Parameters** *disk-id*

Specifies the disks (DP0:, DP1:, DP2:, or DP3:) to check for corrupted files or specifies the disks on which files and directories are to be compressed. DP0: is the default.

V

Verifies the integrity of the specified disk without compressing files.

COMPRESS displays the entered command syntax while it is running.

COMPRESS without the V option copies each file into one contiguous area, leaving one large free area. The system displays the following messages during processing.

```
COMPRESSING FILES **CRITICAL OPERATIONS UNDERWAY. DO NOT
DISTURB** **DISK WILL BE UNUSABLE IF PROCESS INTERRUPTED**
```

After files in a directory are compressed, the directory is compressed if possible. During this process phase, the system displays the following message:

```
COMPRESSING DIRECTORY SECTORS
```

**Restrictions** The system must be idle and the host interface processor (HIP) must be unloaded; HIP EXIT or HIP UNLOAD is required.

Do not abort COMPRESS.

If the system was not rebooted after turning Data Capture on after the last system generation, the system may hang during COMPRESS and require a reboot. Prevent this situation by rebooting the system immediately after turning Data Capture on or by turning Data Capture off before running COMPRESS, and by turning Data Capture back on when COMPRESS has completed.

**Example** Figure 1-1 shows a sample disk compress error report.

Figure 1-1. Disk compress error report

DISK COMPRESS ERROR REPORT		12 JUL 89	10:35:14	000010
				000020
FILE IN ERROR	UNIT	START LBN	SIZE	000030
				000040
FDL.TSK	0	2032	178	000050
BAD BLOCK GROUP	0	2189	1388	000060

**CONTINUE**

Use this command to resume input, Queue Management (QM), or output processing suspended by the STOP command or by the system report of an error condition. Since the system controls input, QM, and output activities separately, continuing input allows input data to process and spool to disk even if the QM and output are stopped. Restarting the QM does not affect input.

If you do not enter a parameter, this command resumes input and output processing and QM scheduling.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	CONTINUE [ I O Q]
<b>Parameters</b>	<ul style="list-style-type: none"> <li>I Resumes input processing.</li> <li>O Resumes output processing.</li> <li>Q Restarts QM scheduling.</li> </ul>

---

## COPY

---

Use this commands to copy files from:

- System disk to system disk, floppy disk, cartridge, or tape
- Floppy disk, cartridge, or tape to system disk.

The 4890 Highlight Color LPS may use open-reel magnetic tape, 1/2 inch cartridge or 1/4 inch cartridge tape.

When using the *input-file-id* and *output-file-id* to rename a labeled file, only the RAD50 portion of the tape label changes; the ASCII portion of the label does not change.

The *file-id* is recorded in ASCII in the 128-byte LPS label. The six character ASCII file name begins in byte position 18. The three character ASCII file-type begins in byte position 27.

Although OSS supports multiple volume writes, the editor and IFU tasks do not support them. Do not issue a multiple volume write from EDI or from IFU. It may fail, corrupting the volume by jeopardizing the volume's file integrity and Interpress file and font integrity. Avoid this problem by writing files to a single volume and selectively including files or font families.

---

### COPY-disk to disk

---

Use this command to copy a disk file on the system disk.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	<code>COPY [disk-id]input-file-id [disk-id]output file-id</code>
<b>Parameters</b>	<p><i>disk-id</i> Specifies the disk (DP0:, DP1:, DP2:, or DP3:) that contains the file to be copied and the disk to which disk the file is to be copied.</p> <p><i>file-id</i> Specifies the input or output file identified by <i>filename.file-type</i>. If you do not specify the file-type, it defaults to the file-type of the input file. You cannot use masking.</p>
<b>Restriction</b>	The output file name must be different from the input file name. If the output file name is the name of an existing file, then the contents of the existing file are replaced by the contents of the input file.
<b>Example</b>	<code>COPY FORMA.FSL FORMX</code>

---

### COPY-disk to labeled tape or cartridge

---

Use this command to add new files after the existing files on a tape. If there are no other files, the new files are written starting at BOT.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	<code>COPY [TAPE CARTRIDGE] WRITE[/BF:n] LABEL{input-file-id output-file-id file-id file-type ALL}</code>
<b>Parameters</b>	<p><u>TAPE CARTRIDGE</u> Specifies that the file must be written to the labeled tape or cartridge assigned to the TAPE or CAR keyword using the SUB DEV command.</p>

**/BF:n**

Groups disk blocks into one tape block. The variable *n* can have a value of 1 to 16, and the size of the tape block, in bytes, resides in the tape label. The default blocking factor is 1, and the label indicates the blocking factor.

**file-id**

Name of an input disk file and the name to be given the output tape file, in the form *filename.file-type*. (Masking cannot be used.) If no output *file-id* is specified, the disk *filename* is used for the tape file. (Masking can be used.)

**file-type**

Specifies the directory (CMD, CME, FNT, FRN, FR6, FRM, FSL, ICT, IDR, ISL, IMG, JDL, JSL, LGO, MSC, PDE, TMP, TST, XCS, IPM, LIB, STK, TSK, SYS, PCH, LOG, SAF, OSD, DAT, TPF, IPF, or FIS) whose files are written to tape.

**ALL**

Copies all user files with the file extensions CMD, CME, FNT, FRM, FR6, FN6, FSL, ICT, IDR, ISL, JDL, JSL, LGO, LG6, PDE, TMP, TST, IPM, MSC, IMG, LIB, STK, and IM6 to tape.

**Restrictions**

Do not use COPY TAPE WRITE LABEL ALL to copy user files between printers running different operating system software versions. This may result in incompatible user files on the disk.

When using the *input-file-id* and *output-file-id* to rename a labeled file, only the RAD50 portion of the tape label changes. The ASCII portion of the label does not change.

Do not issue a multiple volume write from EDI or from IFU. It may fail, corrupting the volume by jeopardizing the volume's file integrity and Interpress file and font integrity. Instead write files to a single volume and selectively include files or font families.

**COPY-disk to unlabeled tape or cartridge**

Use this command to copy source files, such as .FSL or .JSL files, to tape. Tape initialization (TAPE VOLINIT) is not necessary for an unlabeled tape.

**Logon level**

Levels 1 through 5.

**Syntax**

COPY [TAPE|CARTRIDGE] WRITE [EBCDIC|ASCII] *file-id*

**Parameters**

TAPE|CARTRIDGE

Specifies that the file must be written to the unlabeled tape or cartridge assigned to the TAPE or CAR keyword using the SUB DEV command.

EBCDIC|ASCII

Specifies the format of the tape to be written.

**file-id**

Specifies the disk file to be copied to tape. (Masking cannot be used.)

**Restrictions**

When you copy files to an unlabeled tape, the system does not check the tape's position checking. The tape write always starts at the current tape position and is terminated by writing two EOFs, backspacing over one of them when another file is written. This results in one EOF between each file, with a double EOF at the end of all the files.

**COPY-labeled tape or cartridge to disk**

---

Use this command to restore tape files to disk.

**Logon level** Levels 1 through 5.

**Syntax** COPY [TAPE|CARTRIDGE] [READ] LABEL [REVIEW] {*input-file-id* [*output file-id*]|*file-id*|NEXT|ALL|*file-type*} [*disk-id*]

**Parameters** TAPE|CARTRIDGE

Specifies that the input files or files come from the labeled tape or cartridge file assigned to the TAPE or CAR keyword using the SUB DEV command.

REVIEW

Prompts the user when the file on the tape would replace an existing file of the same name on the disk and requests whether to replace the file. If the operator responds with Y, the file on tape replaces the disk file. If the response is N, the tape skips to the next file. Entering X aborts the entire copy process.

*file-id*

Specifies the name of the input file to be copied and the name to be given to the output disk file, in the form *filename.file-type*. (Masking cannot be used with this application.) If the *output-file-id* is omitted, the file written to disk has the same name as the file tape. (Masking can be used.)

NEXT

Specifies that the next file on the tape will be copied to disk.

ALL

Specifies copying all the files on the tape or cartridge to disk, including all CMD, CME, FNT, FN6, FRM, FR6, FSL, IMG, IM6, JDL, JSL, LGO, LG6, MSC, PDE, TMP, TST, ICT, IDL, ISL, IPF, IPM, LIB, STK, TSK, SYS, PCH, FIS, LOG, SAF, OSD, DAT, TPF, and XCS files.

*file-type*

Specifies the name of a directory on tape to be written to disk.

**Examples** COPY TAPE LABEL OCRA.FNT

If the file does not exist on the disk, the system displays the following message:

```
CREATING FILE OCRA.FNT
```

If the file does exist on the disk and is being overwritten, the system displays the following message:

```
REPLACING FILE OCRA.FNT
```

The preceding command finds and copies the file OCRA .FNT from the tape to disk.

If another file exists on this tape (after the one just copied), use the command COPY TAPE LABEL NEXT to copy the next file from tape and store it in a *filename.file-type* as specified in the tape label information.

The command COPY TAPE [LABEL] ALL copies all the files from the Xerox-labeled tape, stores them with the same file name as on tape and catalogs them by file-type. After copying the files



from an LPS-labeled file tape to disk, use the TAPE REWIND or TAPE UNLOAD command to rewind the tape.

### **COPY—unlabeled tape or cartridge to disk**

---

Use this command to copy an unlabeled, unblocked, EBCDIC or ASCII, 9-track, and 1600 (or 6250) bpi tape. The maximum record length is 150 characters, although only the first 72 characters of each record are entered into the disk file. A sequence number generates in bytes 75 to 80 of the disk file record. Records shorter than 72 bytes are blank filled to 72 bytes. The largest file that can be created is 5,000 records.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	COPY [TAPE CARTRIDGE] [READ] [EBCDIC ASCII] <i>file-id</i>
<b>Parameters</b>	<p><u>TAPE CARTRIDGE</u> Specifies that the input file or files come from the unlabeled tape or cartridge file assigned to the TAPE or CAR keyword using the SUB DEV command.</p> <p><u>EBCDIC ASCII</u> Specifies the recording format of the input tape. EBCDIC is the default.</p> <p>READ Specifies that READ operation is occurring. If not entered, it defaults to READ.</p> <p><i>file-id</i> Specifies the new filename as <i>filename.file-type</i>. You cannot use masking.</p>
<b>Example</b>	COPY TAPE UNSYS.JSL copies a file from an unblocked, unlabeled tape to disk. The disk file is named UNSYS and cataloged in the JSL file directory.
<b>Restrictions</b>	<p>The maximum record length is 150 characters.</p> <p>The copy operation truncates each record to its first 72 characters.</p> <p>Files with more than 5,000 records are truncated to the first 5,000 records.</p>

---

## DARKNESS

---

Use this command to increase or decrease the contrast of the black and color ink printed on documents. The specified print darkness remains in effect until you change it using the DARKNESS command. Your LPS service personnel can also reset the darkness value.

If you do not enter a parameter, this command displays the current darkness settings for both the black and color inks.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	DARKNESS [ <i>n</i> ,[COLOR BLACK]]
<b>Parameters</b>	<p><i>n</i> Specifies an integer between 1 and 7, inclusive. The lightest print results from setting 1; the darkest print results from setting 7. Default for <i>n</i> is 4.</p> <p>COLOR Changes the default setting for the loaded color housing to the specified <i>n</i> value.</p> <p>BLACK Changes the default setting for the black ink housing to the specified <i>n</i> value.</p>
<b>Restrictions</b>	<p>The LPS accepts new DARKNESS values when the printer is not running.</p> <p>A new DARKNESS value resets the specified color housing to "Not Ready." Thus, POA is required before printing continues.</p> <p>The system retains a DARKNESS setting for each unique color housing. The first time each color ink is loaded (e.g., cyan, red, green, etc.), a print darkness must be established for that color. The print darkness for each color can be changed only when that ink is loaded. The darkness setting does not transfer from one loaded color to a different loaded color (for example, Red to Green), but will transfer between like for like colors if another housing is loaded (for example, Blue to Blue).</p>

---

## DCU

---

The following commands are used with the Data Capture Utility (DCU).

### DCU CAPTURE

---

Use this command to start or stop logging of all LPS console entries and system console messages. This command creates the log file which automatically records all LPS console entries and system console messages for the specified number of days. You can specify that a message display at the selected interval to indicate logging of console entries. You can also display or print the log file you create.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	DCU CAPTURE [CONSOLE] [ON OFF] [FOR [ <i>n</i> ] [days]] [REMINDER [ON OFF  <i>m</i> ]]
<b>Parameters</b>	<p>CONSOLE Records all console activity.</p>

**ON**

Begins logging of console data.

**OFF**

Ends logging of console data. Does not delete the data captured.

**FOR *n* DAYS**

Specifies the number of days to save console data. The variable *n* must be an integer between 0 and 40. The default is 14 days. The default takes effect only after a sysgen, otherwise, the last specified value remains in effect.

- The day ends at midnight. If DCU is turned on at six p.m. and set to log for one day, the system captures only six hours of console activity (until midnight of that day).
- DCU logging is affected by the SETTIME command. Changing the date and time using SETTIME can cause unpredictable results.

**REMINDER ON**

Activates the reminder message. If you specify *m*, you do not have to specify this parameter.

**REMINDER OFF**

Deactivates the reminder message.

***m***

Specifies the length of the interval in minutes between each reminder message. Must be an integer between 1 and 254 (4 hours and 14 minutes). The default is 60 minutes.

**DCU DELETE**

Use this command to delete all data logged in the file or to delete all data through the specified date.

**Logon level**

Levels 1 through 5.

**Syntax**

DCU DELETE [ALL]*ending date*

**Parameters****ALL**

Deletes all data recorded in the log file.

***ending date***

Specifies the ending date in one of these formats: mm/dd/yy, mmm-dd-yy, or dd-mmm-yy. The date delimiter is either a slash (/) or a hyphen (-).

***mm***

Specifies the month with a number between 1 and 12.

***mmm***

Specifies the month with a three character abbreviation.

***dd***

Specifies the day of the month with a one or two digit number.

***yy***

Specifies the last two digits of the year. If you do not specify a number, the default is the current year.

## DCU EXIT

---

Use this command to stop DCU and unload the DCU processing task from the system. This frees up the memory used by DCU. To begin logging console data again, you must recreate the log file using the DCU CAPTURE CONSOLE command.

**Logon level** Levels 1 through 5.

**Syntax** DCU EXIT

## DCU FORMAT DISPLAY

---

Use this command to display the data logged in the file.

**Logon level** Levels 1 through 5.

**Syntax** DCU FORMAT [CONSOLE] [DISPLAY] [*starting date [time]*]|LAST [15]*[n]*] [*ending date [time]*]

**Parameters**

*starting date, ending date*

Specifies the starting and ending dates in one of these formats: mm/dd/yy, mmm-dd-yy, or dd-mmm-yy. The date delimiter is a slash (/) or a hyphen (-).

*mm*

Specifies the month with a number between 1 and 12.

*mmm*

Specifies the month with a three character abbreviation.

*dd*

Specifies the day of the month with a one or two digit number.

*yy*

Specifies the last two digits of the year. If you do not specify a number, the default is the current year.

*time*

Specifies the hours, minutes, and seconds in the format, *hh:mm:ss*.

Time is optional. If specified, it should be separated from the date by a space.

LAST

Specifies the last *n* minutes of captured data to be displayed. You can specify up to 32,767 minutes. The default is 15.

## DCU FORMAT PRINT

---

Use this command to print the data logged in the file.

**Logon level** Levels 1 through 5.

**Syntax** DCU FORMAT [CONSOLE] PRINT [SIMPLE|COMPLEX] [*starting date [time]*]|LAST [15]*[n]*] [*ending date [time]*]

**Parameters**

SIMPLE|COMPLEX

Specifies the detail of the printed report. SIMPLE is the default. COMPLEX is used more by programmers for debugging problems.

*starting date|ending date*

Specifies the starting and ending dates in one of these

formats: mm/dd/yy, mmm-dd-yy, or dd-mmm-yy. The date delimiter is a slash (/) or hyphen (-).

*mm*

Specifies the month with a number between 1 and 12.

*mmm*

Specifies the month with a three character abbreviation.

*dd*

Specifies the day of the month with a one or two digit number.

*yy*

Specifies the last two digits of the year. If you do not specify a number, the default is the current year.

*time*

Specifies the hours, minutes, and seconds in the format, *hh:mm:ss*.

Time is optional. If specified, it should be separated from the date by a space.

LAST

Specifies the last *n* minutes of captured data to be displayed. You can specify up to 32,767 minutes. The default is 15.

#### Examples

To print the log from May 4, 1994, from 1:00pm to 3:30pm:

Fully specified syntax:

```
DCU FORMAT PRINT 05/04/94 13:00:00 05/04/94 15:30
```

Or using alternate date format:

```
DCU FORMAT PRINT 4-May-94 13:00 4-May-94 15:30
```

Minimum valid abbreviated syntax:

```
DCU FOR PRI 5/4 13:00 5/4 15:30
```

#### DCU HELP

---

Use this command to check DCU syntax for the action you want to execute. It displays a list of all DCU commands and parameters.

**Logon level**

Levels 1 through 5.

**Syntax**

DCU HELP

#### DCU REMINDER

---

Use this command to set and display the current setting of the reminder message device and time interval between messages.

**Logon level**

Levels 1 through 5.

**Syntax**

DCU REMINDER [ALL|CONSOLE] [ON|OFF|*n*]

**Parameters**

ALL

Device setting for other than console capture. Currently, this setting selects console only.

CONSOLE

Device name identifying that the captured data message will be for console data.

**ON**

Activates the reminder message.

**OFF**

Deactivates the reminder message.

***n***

Specifies the length of the interval in minutes between each reminder message. You can specify from 1 to 254 minutes (4 hours and 14 minutes). The default is 60 minutes.

---

**DCU RESET**

---

Use this command to delete all the data logged in the file and to stop DCU logging.

**Logon level** Levels 1 through 5.

**Syntax** DCU RESET

---

**DCU SHOW**

---

Use this command to check whether LPS console entries and system console messages are being logged.

**Logon level** Levels 1 through 5.

**Syntax** DCU SHOW [STATUS]|DATES|LOGS|VERSIONS]

**Parameters** STATUS

Displays the on or off status of console logging.

DATES

Displays the time period (to and from) of the captured data.

LOGS

Displays the first data file for every day that is captured.

VERSION

Displays console log version information.

---

**DELETE**

---

Use this command to delete a file from a system disk.

**Logon level** This command can be restricted to logon level 2 and 3, or 3 with the RCU command.

**Syntax** DELETE [*disk-id*]*file-id*[,*file-id*,...]

**Parameters** *disk-id*

Specifies the system disk (DP0:, DP1:, DP2:, or DP3:) which contains the file to be deleted.

*file-id*

Specifies the file as *filename.file-type*.

**Example** DELETE UNIVAC.JSL, FORMX.FSL

The system responds:

```
UNIVAC.JS. DELETED
FORMX.FSL DELETED
```

**Restriction** Never delete system (.SYS) files, in particular PRFIL1SYS.

---

## DRAIN

---

Use this command to print all completed pages without ending the job in progress.

This command has an Automatic Drain feature that initiates the drain process after 5 minutes of inactivity on the online channel. To change the time interval, use the @DRAIN command.

**Logon level** Levels 1 through 5.

**Syntax** DRAIN

**Restriction** If the print file has 5 or fewer pages, these pages may not print.

When entering this command, you may receive a message indicating that there are no pages waiting to be drained. This indicates that all the data received by the system has been formatted for output. Any pages formatted previous to the DRAIN command are printed. This message may appear without entering the command if the autodrain feature is enabled.

There are situations where the customer looks at the system and sees that there are pages in the output queue, but the system says there are no pages waiting to be drained. The DRAIN processing logic is performed from the INPUT point of view. The job has completed the INPUT phase, but the output queue may not yet have realized that there is data yet available. AUTODRAIN will 'wake up' and drain the system after a specific interval.

### @DRAIN

---

@DRAIN is the filename for a command file. Use this command file to change the timeout interval for the Automatic Drain feature for online printing. If you need to change the timeout interval, contact your site representative.

**Logon level** Levels 3 and 4.

**Syntax** @DRAIN

Once the command file has been started, a prompt will display asking for the new time, in minutes (between 1 and 255). Once the new time has been entered, the system will apply the time and return to the "READY FOR COMMANDS" message.

---

## DSR

---

Use the DSR (Disk Save and Restore) command after system generation (sysgen) and software updates to back up the entire system on tape or cartridge. The DSR command is the save portion of the Disk Save and Restore (DSR) utility.

**Logon level** Level 2.

**Syntax** DSR [CARTRIDGE|TAPE][1600][,disk-id[,disk-id,...]][,L]

**Parameters** CARTRIDGE

Device assigned to the CAR keyword using SUB DEV.

**TAPE**

Device assigned to the TAPE keyword using SUB DEV.

**1600**

Specifies a tape recording density of 1600 bpi. The default is always 6250 bpi, even though the tape has been initialized at 1600 with the TAPE VOLINIT command.

**disk-id**

Indicates the disk (DP0:, DP1:, DP2:, or DP3:) whose contents are written to tape. If a DPn: is omitted, all disks are backed up.

**L**

Lists file information on the display as the system files are copied to tape. When several disks are backed up, this list can be extensive. No list is the default.

**Restrictions**

You can run the DSR command only when no print jobs are in the queue.

You cannot run DRS if HIP is loaded.

DSR command can save all files on any disk drive or any combination of the disk drives, but cannot save individual files.

DSR preserves the machine-specific file (MCHID\$.SYS) to prevent billing problems when you move files between systems.

Make sure that the destination tape or cartridge drive is online before you enter the DSR command.

Refer to the *Xerox 4850/4890 Highlight Color LPS System Programming and Administration Guide* for more information about the DSR utility.

---

**EDIT**

---

Use the EDIT command to create a source file, access a source file, or execute a file. When you invoke the editor, it prompts you by displaying `EDIT>`. If you do not enter a parameter, this command creates an empty source file ready for input.

**Logon level**

Levels 1 through 5.

**Syntax**

`EDIT [disk-id][filename.file-type | @filename[file-type]]`

**Parameters****disk-id**

Refers to the system disk (DP0:, DP1:, DP2:, or DP3:) on which the file resides.

**filename**

Identifies a one- to six-character disk file.

**file-type**

Specifies the file directory under which the filename is cataloged.

**@filename**

Specifies that the editor is to retrieve commands from an editor command file. If no file type is entered, the system defaults to CMD.

You specify the filename (without the @) if the file is put into working storage.

**Example**

```
OS1000 READY FOR COMMANDS (TIME) HH:MM:
```

Operator keys in



---

```
EDIT SYSPDL.JSL
```

```
System prompt
```

```
EDIT>
```

## ENDJOB

---

Use this command to free the system to execute a START command. ENDJOB marks the current LPS job as terminated and prints all the remaining pages in the print file. The ENDJOB command allows you to:

- Print a trailer banner to mark the end of a report.
- Print a second trailer banner when the first is incompletely sent.
- Work around multicopy disk saturation.
- Respond to a MOUNT FORM message from an IBM host terminal.
- Print the job's accounting sheet.

**Logon level** Levels 1 through 5.

**Syntax** ENDJOB

## FCG

---

Use this command to load the personality profile (text file FCG.LIB) into printer memory. The LPS uses the personality profile to communicate with the third party finishing device being configured. Once you create this file, it is preserved across sysgens.

**Logon level** Levels 1 through 5.

**Syntax** FCG [*profile-label*|SHOW]

**Parameter** No parameters entered  
Displays the profile labels in FCG.LIB.

*profile-label*

Specifies the entry in the FCG.LIB file to be recorded in the printer NVM (nonvolatile memory)

SHOW

Displays the current device settings (derived from the values currently in IOT NVM).

**Restriction** Each of the parameter values coded in the FCG.LIB file must be within the range specified for that parameter. Refer to the *Xerox 4850/4890 Highlight Color LPS System Programming and Administration Guide* for more information.

## FCHECK

---

Use this command to display or print data about file fragmentation on a disk. It lists unusable sectors identified by the sector check process during a full system generation. When bad sectors and fragmented files accumulate, you should purge and then compress the disk.

**Logon level** Level 3.

<b>Syntax</b>	FCHECK [/PR] [/EXP /EXG] [ <i>disk-id</i> ]
<b>Parameters</b>	<p><b>/PR</b> Prints the information.</p> <p><b>/EXP</b> Displays the primary defect list (PList). Service representatives use /EXP for disk diagnostic purposes only.</p> <p><b>/EXG</b> Displays the grown defect list (GList). Service representatives use /EXG for disk diagnostic purposes only.</p> <p><b><i>disk-id</i></b> Specifies the individual disk drive (DP0:, DP1:, DP2:, or DP3:). DP0: is the default.</p>

## FCU

---

Use the FCU (file conversion utility) command to easily convert form, logo, and image (.FRM, .LGO, .IMG) files not in color format to monochrome color format. For example, if you specify 'XEROX.PICTORIAL.MODERATE BLUE' in the FCU command, the file prints in solid saturated blue instead of in a light blue tint.

When FCU converts files, the ink catalog and palette default to XEROX.SIMPLE.

When the defined ink is a shade, the file converted with FCU prints monochrome in black if the percentage of black in the defined ink is higher than the percentage of the other color. If the percentage of the other color is higher, then the file converted with FCU prints monochrome in the other color (e.g., magenta, cyan, red, green, or blue). For example, if you specify 'XEROX.PICTORIAL.PALE BLUE' in the FCU command, the file prints in solid black instead of in solid blue.

As a precaution, you can use the IMAGE command to verify the integrity of the image file before converting it.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	FCU <i>file-id.file-type</i> , ' <i>ink-name</i> ' [,NOSUBSTITUTION]
<b>Parameters</b>	<p><b><i>file-id</i></b> Specifies the file to be converted.</p> <p><b><i>file-type</i></b> Specifies the file-type of the file to be converted. Must be .FRM, .LGO, or .IMG.</p> <p><b><i>'ink-name'</i></b> Specifies the defined ink to be used to print the form, logo, or image. Must be specified within single quotes. May consist of the ink catalog name, palette name, and ink name. The default ink catalog and palette are XEROX.SIMPLE.</p> <p><b>NOSUBSTITUTION</b> Specifies that FSL, JSL, DJDE, and SAMPLE ink overrides are ignored. The file can be printed only with the specified defined ink as rendered in monochrome.</p> <p>The NOSUBSTITUTION option does not change how the SUBSTITUTE INK operator command functions. When you specify NOSUBSTITUTION, you can use the SUBSTITUTE INK command to change the specified color if the programmer has permitted operator ink substitution in the PDL ABNORMAL</p>

command ISUBSTITUTE parameter coding. Operator ink substitution options are explained in the ABNORMAL command ISUBSTITUTE section of the *Xerox 4850/4890 HighLight Color LPS Print Description Language Reference*.

### Restrictions

You cannot abort FCU. FCU terminates only when it has finished converting all the specified files. If you need to keep image and logo files in the original no-color format for printing on other printers, back them up before converting them to color format.

FCU is unable to convert forms created under some older versions (pre-V10, specifically) of the LPS operating system software. If FCU returns an error message, you may need to recompile the form prior to converting it.

XEROX.SIMPLE is required for .IMG files and recommended for .LGO and .FRM files.

You can use the wildcard character \* only in the *file-id* and only without other characters. For example, the command string FCU KOALA\*.IMG,'RED' is invalid. The wildcard indicates that all files of the specified *file-type* are converted to color format using the specified *ink-name*. You cannot abort the wildcard option using the ABORT command.

Converting all the form files, image files, or logo files can be time consuming if many files are converted.

The system may override the color you specified when you converted the file. The bullets below and table 1-10 describe the hierarchy of ink overrides.

- The form or logo does not print in the defined ink. It prints in monochrome using the color which is used in highest percentage to create the defined ink.
- The image or logo files in a job print in their own internally defined color (rather than in the form's color), unless the FSL, JSL, or DJDE statement invoking the image or logo file includes an ink override, and the defined inks are specified in the .IMG or .LGO file without the NOSUB parameter.
- The SAMPLE command with the INK parameter does not print an .FRM or .LGO file in the specified ink unless the file is already in color format. (The SAMPLE command with the INK parameter always prints an .IMG file in color regardless of whether it is in color format.)
- If the .FSL file codes ink overrides for the .LGO or .IMG files it calls, then the SAMPLE command also overrides the internally specified inks for the logos and images in the form, provided that the defined inks are specified without the NOSUB parameter.
- Conversely, if the .FSL file does not code ink overrides for the .LGO or .IMG files it calls, then the SAMPLE command does not override the internally specified inks for the logos and images in the form. Table 1-10 shows the ink override hierarchy for color format files.

Table 1-10. Ink override hierarchy for color format files

Without NOSUB specified	Result
DJDE IDFAULT	Overrides all else
IDFAULT of PDL OUTPUT	DJDE overrides
DJDE ILIST (first ink)	IDFAULT overrides
PDL IDR (first ink in ILIST)	DJDE ILIST overrides
.JSL files	DJDE overrides
.FSL files, .IMG files	DJDE overrides
.LGO files called by an .FSL file	.FSL file overrides
.IMG files called by an .FSL file	.FSL file overrides
With NOSUB specified	Result
No overrides of .LGO files	Prints as specified internally or aborts job
No overrides of .IMG files	Prints as specified internally or aborts job
No overrides of .FRM files	Prints as specified internally or aborts job

## FEDIT

Use this command to invoke the font editor. For information about the available font editor commands, refer to the "Font editor commands" chapter in this manual.

**Logon level** Levels 1 through 5.  
**Syntax** FEDIT

## FEED

Use this command to select the input paper trays or make selection automatic. The command options specify how the four input paper trays will feed stock to the job. FEED controls the primary source of paper.

If you do not select parameters, this command has no effect unless the current mode is FEED MAIN or FEED AUX. If the current mode is set to one of these, it switches to the other mode (such as FEED MAIN becomes FEED AUX, and FEED AUX becomes FEED MAIN).

**Logon level** Levels 1 through 5.  
**Syntax** FEED [MAIN|AUX|AUTO|*tray-number*|*cluster-name*]  
**Parameters**  
**MAIN**  
Assigns control over the source of the paper to the input data. Ensures that all sheets designated with a stock name will be fed from the cluster associated with page.  
**AUX**  
Feeds all the following sheets from the AUX cluster. This command overrides any job-specified feed source.  
**AUTO**  
The AUTO cluster is predefined to be all trays physically

present in the printer. You can redefine AUTO as any tray on the printer.

*tray-number*

Feeds all the following sheets from the specified tray, regardless of the stock specifications in the FEED= JDL/DJDE options. This command overrides any job-specified feed source.

*cluster-name*

Feeds all the sheets from the specified cluster, regardless of the stock specifications in the FEED= JDL/DJDE options. This command overrides any job-specified feed source.

**Override sequence**

FEED commands override each other as shown below:

FEED MAIN

Gives the application control and feeds from the MAIN cluster unless the application overrides this command. This is the normal operating mode.

FEED *n*

Overrides all application FEED instructions and feeds from the tray number specified, for example, FEED 1 or FEED 2.

FEED AUX

Overrides all application FEED instructions. All sheets feed from the trays in the AUX cluster. If the AUX cluster definition is not modified, this command is equivalent to FEED 2.

FEED *cluster-name*

Overrides all the application's FEED instructions except pages to be fed from the AUX cluster. These pages are fed from the AUX cluster specified by the application.

FEED AUTO

Same as FEED *cluster-name*. AUTO is a predefined cluster.

**Restrictions**

The MAIN cluster is predefined as tray 1 and the AUX cluster is predefined as tray 2. One or both of these clusters may be redefined by the user.

FEED 1 and FEED MAIN are not the same, even if the MAIN cluster consists of only tray 1. FEED 2 and FEED AUX are synonymous if the AUX cluster consists of only tray 2.

Under certain circumstances, the automatic switching between two current FEED CLUSTER trays (for example, FEED MAIN, where MAIN =1,2) may not take place. Specifically, if one tray feeds empty and lowers at the same time as the other is being readied to feed, the printer may cycle down and display the following message:

```
OS2050 ALL APPROPRIATE TRAYS ARE EMPTY.
```

Load one of the trays to correct this condition.

If your system does not use English, you must rename the MAIN, AUX, and AUTO clusters.

The cluster options now available change the execution of the local language commands for FEED MAIN, FEED AUX, and FEED AUTO.

FEED AUX or FEED *cluster-name* affects paper feeding in jobs. Only the English command "FEED MAIN" is overridden by the job's .JSL file or DJDE records.

You may set up clusters using the local language keywords for MAIN, AUX, and AUTO so that the system processes print jobs with the same results as produced by OSS version 2 and earlier versions.

## FEX

---

	Use this command to generate multiple data set test cases through a third-party finishing device connected to the printer.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	FEX
<b>Restrictions</b>	FEX cannot run during a print job.

## FID

---

	Use this command to generate a command file listing all disk files with the specified file-type. It contains one record for each file of the specified file-type.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	FID [ <i>disk-id</i> ] <i>file-id file-type</i>
<b>Parameters</b>	<i>disk-id</i> Refers to the system disk (DP0:, DP1:, DP2:, or DP3:) on which the file resides. <i>file-id</i> Names the file to be created. Specifies the file as <i>filename.file-type</i> . The filename must be specified. The default extension is .CMD. <i>file-type</i> Specifies the file directory type to be recorded into the created command file. DO NOT PRECEDE THE <i>file-type</i> WITH A PERIOD (.).

Each record of the command file consists of a semicolon, a file name, a file-type, and an asterisk (for example, ;GBAR.FSL\*). Then you can edit these records to produce a command file that manipulates a subset of a file-type (for example, deleting a subset of the current fonts in the FNT directory).

Example:

```
FID DP0: TEMP TMP
```

This command generates a command file named TEMP.CMD which will contain a record for each file in DP0 having a file-type of TMP.

## FILE

Use this command to display the filenames in the specified disk file directory. You can display specific *file-ids* within the disk file directory or groups of files, such as all of a specific file-type. You can also specify a file into which the displayed information, defined by *file-id*, can be stored.

**Logon level** Levels 1 through 5.

**Syntax** FILE [*disk-id*] [*file-id*][/*filename*.[*file-type*],[*leading string*],[*trailing string*]]

**Parameters** *disk-id*

Identifies which system disk (DP0:, DP1:, DP2:, or DP3:) contains the *file-ids* to be printed.

*file-id*

Specifies the file as *filename.file-type*. If you do not specify one, the default is all the files in the directory. You can use masking.

*/filename*.[*file-type*]

Specifies a disk file into which is stored a record for each file listed in the following order: *leading string*, *file-id*, *trailing string*. The default *file-type* is .TMP.

*leading string*

Character string (except commas) that is added before each file name in the list that is created. No more than 50 leading characters can be appended.

*trailing string*

Character string (except commas) appended to each file name in the list that is created. No more than 50 trailing characters can be appended.

Using the */filename*.[*file-type*], *leading string*, and *trailing string* parameters, will display the specified *file-id* and will also store it in the file specified by the */filename*.[*file-type*]. If no file exists which matches the *filename*.[*file-type*], a file of that name will be created. If it does exist, it will be written over.

File data can be stored and displayed without the *leading string* and *trailing string*.

To display only the specified *file-id*, enter the *disk-id* and *file-id* parameters.

**Example** FILE DP0: \*.CMD

This command will display all .CMD *file-types* in DP0:.

**Example** FILE DP0: \*.CMD/ED.CMD

This command will display all .CMD *file-types* and will store those in a file named ED.CMD.

File data can be stored and displayed with the *leading string* and *trailing string*.

**Example** FILE DP0: \*.CMD/ED.CMD,...,///

This command will display all .CMD *file-types* and will store those in a file named ED.CMD. Each displayed file will be preceded with "...", as specified by the *leading string* parameter. Also, each displayed file will be followed by "///", as specified by the *trailing string* parameter.

**FILE/EX**

Use this command to display an extended list of all the file characteristics of a given *file-id*.

**Syntax** FILE/EX [*disk-id*][*file-id*][*file-id*,...]

**Parameters**

*disk-id*

Identifies which system disk (DP0:, DP1:, DP2:, or DP3:) contains the *file-ids* to be displayed.

*file-id*

Specifies the file as *filename.file-type*. If you do not specify one, the default is all the files in the directory. You can use masking.

The display format includes a title line identifying the information in each column. The leading and trailing strings do not display. If you do not enter the /EX option, only the *file-ids* display. Refer to figure 1-2.

**Example** Figure 1-2 shows a sample screen display when you enter /EX.

Figure 1-2. /EX parameter sample display

FILE NAME	UNIT	FSIZE	RSIZE	FFBY	EOF	DISK ADDR
XR.X.IMG	2	6	512	512	6	472522
KI1.IMG	2	8	512	0	8	472530
KI2.IMG	2	21	512	0	21	472540

**FILE NAME**

A one- to ten-character entry specifying the filename and type.

**UNIT**

System disk unit number (DP0:, DP1:, DP2:, DP3:) on which the file resides.

**FSIZE**

A one- to ten-character decimal entry indicating the number of blocks allocated to the file.

**RSIZE**

A one- to six-character decimal entry indicating the number of bytes in a record.

**FFBY**

A one- to six-character decimal entry indicating the first free byte in the last block of the file.

**EOF**

A one- to ten-character decimal entry indicating the end of file block number.

**DISK ADDR**

A one- to ten-character octal entry indicating the starting address of the file on the disk.

The total number of files displayed, as well as the total number of disk sectors used by these files, is accumulated and displayed by file-type.

*n*

Sum of the FSIZE field for all the files of a *file-type* requested by a parameter of the FILE command.



*m*

Decimal number that represents the total number of files requested by a parameter of the FILE command.

If, during the search of the system file directories, file catalogs are found to contain no files, this information is saved until all the parameters of the FILE command have been completed.

**Restriction** You cannot display /EX file information for licensed fonts, logos, or secured files.

---

### FILE /SORT

---

Use this command to sort a list of files by file-type to print or display. Sorts up to 3,600 filenames. On large disk volumes, sort files by their file-type.

**Syntax** FILE [*disk-id*][*file-id*]/SORT, *filename*[.*file-type*]

**Parameters***disk-id*

Identifies which system disk (DP0:, DP1:, DP2:, or DP3:) contains the *file-id*(s) to be displayed.

*file-id*

Specifies the file as *filename.file-type*. If you do not specify one, the default is all the files in the directory. You can use masking.

*filename*[.*file-type*]

Specifies a disk file which contains the alphabetically sorted list of files. The default *file-type* is .TMP.

**Example**

FILE DP0: \*.SYS/SORT, SYSFIL.TMP

This command creates a file called "SYSFIL.TMP" on the DP0: disk. The filenames in SYSFIL.TMP are sorted in alphabetical order, and SYSFIL.TMP is displayed on the screen. If the screen display of the sorted records is interrupted, then the file SYSFIL.TMP lists only the displayed filenames.

---

## FIX

---

Use this command to modify licensed and standard fonts and logos, and to format the font or logo matrix so it can be printed by your printer's IG version.

**Logon level**

Levels 1 through 5.

**Syntax**FIX [*file-type*|*file-id*[,*file-id*,...]]**Parameters***file-type*

Specifies the file directory. Must be .FNT or .LGO.

*file-id*

Specifies particular files as *filename.file-type*. Must include the file type which must be .FNT or .LGO.

**Restriction**

Do not fix two color logo files because they cannot be printed correctly if processed by FIX.

## FLF

---

Use the FLF commands to perform floppy disk related functions at non-print time. You can perform these functions at either high density (1.2 MB) or low density (720 KB).

Printers without the SCSI disk subsystem support floppy disks formatted to LOW density only. When compatibility with non-SCSI disk controllers is important, the default, LOW, density format option must be used. The 4850 only supports the LOW density. The 4890 is the only current system with the new SCSI disk subsystem.

You can invoke the FLF task by entering FLF. The system then displays the FLF> prompt. Once you are in the FLF task, you can enter multiple commands at the FLF> prompt. When you have finished entering FLF commands in the FLF task, you must enter FLF END to return to the system prompt:

```
OS1000 READY FOR COMMANDS
```

If you are entering FLF commands from within the FLF task, do not precede the keyword with FLF. For example:

```
FLF>CLEAR
```

You can also enter a single FLF command at the system prompt. If you enter an FLF command at the system prompt, FLF must precede the command, for example:

```
FLF CLEAR
```

### **FLF CLEAR or ERASE**

---

Use one of these commands to erase all files on a floppy disk (except \$\$ files). You can also change the floppy disk label.

**Syntax**    FLF CLEAR | ERASE

---

**FLF CREATE**

---

Use this command to create a bootable floppy. This command formats and initializes (if necessary) and copies the mini-loader and .SAF files to one floppy disk. If the floppy disk was previously unformatted or formatted at the incorrect density, the DENSITY and SECTORCHECK switches are applied using the same definition as in the FORMAT command.

If the floppy disk is formatted and contains data, a warning message displays.

**Logon level** Levels 3, 4, and 7.

**Syntax** FLF CREATE [[DENSITY=LOW|HIGH]  
[, SECTORCHECK=YES|NO]]

**Parameters** DENSITY = LOW|HIGH  
Specifies the density of the diskette being formatted.

LOW  
Double density, double-sided. Formats a 5.25-inch floppy disk to 720KB.

HIGH  
High density. Formats a 5.25-inch, high density floppy disk to 1.2MB.

SECTORCHECK = YES|NO  
Select the option to check the floppy disk for integrity. Floppy disks formatted using this option may be more reliable but the process requires more time.

---

**FLF DUPLICATE or FLD**

---

Use one of these commands to duplicate a bootable or non-bootable floppy disk. This command automatically formats and initializes the target floppy disk to the same density as the source floppy disk (if required).

**Syntax** FLF DUPLICATE|FLD

---

**FLF END**

---

Use this command to terminate an FLF session.

**Syntax** FLF END

---

**FLF FLB or SSF**

---

Use this command to build a System Software Floppy set from a System Software Tape.

**Logon level** Levels 1 through 5.

**Syntax** FLF {FLB|SSF} [[DENSITY=LOW|HIGH][,PRINT|  
NOPRINT][,UNLOAD]]

**Parameters** LOW  
Specifies double density, double-sided. Formats a 5-1/4 inch floppy disk to 720K.

HIGH

Specifies high density. Formats a 5.25-inch high density floppy disk to 1.2MB.

**PRINT**

Spools a listing of each floppy disk to the printer.

**NO PRINT**

Does not spool a listing of each floppy disk to the printer.

**UNLOAD**

Dismounts the SST when the task is complete.

**FLF FORMAT**

Use this command to format and initialize a floppy disk for your LPS. You must format and initialize a floppy disk the first time you use it.

**CAUTION:** You must specify the correct density for your floppy disk; otherwise, you may cause unrecoverable bad block errors resulting in an unusable floppy disk.

Table 1-11 shows the correct floppy disk configuration.

Table 1-11. **Floppy disk configuration**

Components	Low density	High density
Sectors per track	9	15
Tracks per cylinder	2	2
Cylinders per floppy	78	78
Sectors per floppy (One sector = 512 bytes)	1,404	2,340

**Logon level**

Levels 1 through 5.

**Syntax**

FLF FORMAT  
[[DENSITY=LOW|HIGH][,SECTORCHECK=YES|NO]]

**Parameters**

DENSITY = LOW|HIGH

Specifies the density of the diskette being formatted.

**LOW**

Double density, double-sided. Formats a 5.25-inch floppy disk to 720KB.

**HIGH**

High density. Formats a 5.25-inch, high density floppy disk to 1.2MB.

SECTORCHECK = YES|NO

Select the option to check the diskette for integrity. Floppy diskettes formatted using this option may be more reliable but the process requires more time.

**FLF HELP or FLF ?**

Use this command to display a summary of the console commands.

**Syntax** FLF HELP

**Example** The FLF HELP display is shown in figure 1-3.

Figure 1-3. **FLF HELP display**

```

FLF: Floppy Utility Help
Available Commands:
CREATE [DENSITY=LOW|HIGH][,SECTORCHECK=YES|NO]
    Create a bootable floppy
DUPLICATE or FLD
    Duplicate a floppy
END
    Exit to operating system
ERASE or CLEAR
    Clear all user files from a floppy
FLB or SSF [DENSITY=LOW|HIGH][,PRINT|NOPRINT][,UNLOAD]
    Build a System Software Floppy set from a System Software
Tape
FORMAT [DENSITY=LOW|HIGH][,SECTORCHECK=YES|NO]
    Format and initialize a floppy
HELP or ?
    This screen
LABEL ["NEW LABEL"]
    Label or relabel a floppy

```

**FLF LABEL**

Use this command to change the volume label on a floppy disk.

**Syntax** FLF LABEL [*label name*]

**Parameter** *label name*

Specifies the name of the floppy disk. The system truncates all characters over 30.

**FLOPPY**

You can initiate FLOPPY commands at the system level or from the editor. Unless otherwise noted, you can copy user files to the floppy disk from any of the following directories on the system disks: CMD, CME, FNT, FN6, FRM, FR6, FSL, IMG, IM6, JDL, JSL, LGO, LG6, MSC, PCH, PDE, TMP, TST, XCS, LOG, ICT, IDR, IPF, IPM, ISL, FIS, TPF, DAT, OSD, SAF, LIB, STK, SYS, and TSK.

The floppy disk drives can format, read, and write to low density floppy disks (720 KB: double-sided, 80 tracks, 9 sectors per track) and high density floppy disks (1.2 MB: double-sided, 80 tracks, 15 sectors per track).

The system default is set to low density but changes to high density when:

- The LPS formats a floppy disk at high density.
- The LPS reads a file from, or copies a file to, a loaded high-density floppy disk.

---

### FLOPPY CLEAR

---

Use this command to delete all files (except `.$Y$` files) from the floppy disk.

**Logon level** Levels 1 through 5.

**Syntax** FLOPPY CLEAR

**Restriction** FLOPPY CLEAR functions correctly only if the LPS has initialized the floppy disk.

---

### FLOPPY DELETE

---

Use this command to erase a file on the floppy disk.

**Logon level** Levels 1 through 5.

**Syntax** FLOPPY DELETE *file-id*

**Parameters** *file-id*  
Specifies the file to be erased. Masking is permitted.

---

### FLOPPY FCHECK

---

Use this command to determine the number of unusable sectors on the floppy disk. You can check:

- The number of sectors available for each group of contiguous, available sectors.
- The number of available sectors on the floppy disk. This is the total amount of floppy disk space available for files.
- The largest available space on the floppy disk. This is the size of the largest file that can currently be copied to the floppy disk.
- A list of the sectors that were logged as bad by the sector check process during initialization of the floppy disk.

**Logon level** Level 3.

**Syntax** FLOPPY FCHECK

---

### FLOPPY FILE

---

Use this command to display a list of the files on the floppy disk. You can display all the files or a specific file-type. If you do not specify a file-type, a list of all the files in each directory displays. You can use masking.

**Logon level** Levels 1 through 5.

**Syntax** FLOPPY FILE [*file-type*]

**Parameters** *file-type*  
Checks whether any of these files are on the floppy disk.

## FLOPPY FORMAT

Use this command to format and initialize a floppy disk. You must format and initialize a floppy disk the first time you use it. The functionality is the same as the FLF FORMAT command

**CAUTION:** You must specify the correct density for your floppy disk; otherwise, you may cause unrecoverable bad block errors resulting in an unusable floppy disk.

Table 1-12 shows the floppy configuration.

Table 1-12. Floppy configuration

Components	Low density	High density
Sectors per track	9	N/A
Tracks per cylinder	2	N/A
Cylinders per floppy	78	N/A
Sectors per floppy (One sector = 512 bytes)	1404	N/A

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	FLOPPY FORMAT [[DENSITY= <u>LOW</u>  HIGH]][,SECTORCHECK= <u>YES</u>  NO]]
<b>Parameters</b>	DENSITY= <u>LOW</u>  HIGH Specifies the density to which the floppy disk will be formatted.  SECTORCHECK= <u>YES</u>  NO Specifies whether a SECTORCHECK will occur.

## FLOPPY LIST

Use this command to print a list of the files in each directory. It also provides file-related information. If you do not enter a parameter, this command lists all the files in each directory. You can use masking for this application.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	FLOPPY LIST [ <i>file-id</i> ]
<b>Parameters</b>	<i>file-id</i> Specifies the file as <i>filename.file-type</i> .

The total number of files listed and the total number of disk sectors used by these files is accumulated and listed by file-type.

The following message appears as each parameter on the FILE command is processed:

TOTAL of *n* SECTORS IN *m* FILES

- *n* represents the sum of the FSIZE field for all the files of a file-type requested by a parameter on the FILE command.
- *m* represents a decimal number that represents the number of files for the given file-type.

The following message appears when all parameters on the FILE command are satisfied:

```
GRAND TOTAL n SECTORS IN m FILES
```

- *n* represents the sum total of the FSIZE field for all the files requested by the parameter string of the FILE command.
- *m* represents a decimal number that represents the total number of files requested by the parameter string of the FILE command.

If, during the search of the system file directories, file catalogs are found to contain no files, this information is saved until all the parameters on the FILE command have been completed. The system prints the following message on the output page:

```
NO FILES IN TYPE file-types
```

---

## FLOPPY RESTORE

Use this command to copy files from the floppy disk to a system disk.

<b>Logon level</b>	1 through 5.
<b>Syntax</b>	FLOPPY RESTORE [REVIEW] [ <i>disk-id</i> ] { <i>input-file-id</i>   <i>output-file-id</i>   <i>file-id</i>   <i>file-type</i>  ALL}
<b>Parameters</b>	<p>REVIEW Prompts you to confirm or stop restoration of a floppy file that will overwrite a disk file.</p> <p><i>disk-id</i> Identifies to which system disk (DP0:, DP1:, DP2:, or DP3:) the file is copied.</p> <p><i>file-id, input-file-id, output-file-id</i> Copies the specified file. Filename and extension can be specified. (Masking can be used when the output filename will be the same as the input filename.)</p> <p><i>file-type</i> Copies all files with the specified file extension.</p> <p>ALL Copies to the system disk all files with these file extensions: CMD, CME, FNT, FN6, FRM, FR6, FSL, ICT, IDR, ISL, IMG, IM6, JDL, JSL, LGO, LG6, MSC, PCH, PDE, TMP, TST, XCS, SYS, TSK, LOG, IPM, FIS, IPF, TPF, DAT, OSD, SAF, LIB, and STK.</p>

---

## FLOPPY SAVE

Use this command to copy one or more files from the system disk to the floppy disk.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	FLOPPY SAVE [REVIEW] [ <i>disk-id</i> ] { <i>input-file-id</i>   <i>output-file-id</i>   <i>file-id</i>   <i>file-type</i>  ALL}
<b>Parameters</b>	<p>REVIEW Prompts you to confirm overwriting a floppy file by a system file. Disk is overwritten. If you enter N, the specified process skips to the next file on the system disk.</p>



*disk-id*

Identifies which system disk (DP0:, DP1:, DP2:, or DP3:) contains the files to save. If you do not specify a *disk-id*, all disks are searched.

*file-id, input-file-id, output-file-id*

Specifies the file as filename.file-type. You can use masking if different *file-ids* are not specified for input and output.

*file-type*

Specifies one of the following: CMD, CME, FNT, FN6, FRM, FR6, FSL, ICT, IDR, ISL, IMG, IM6, JDL, JSL, LGO, LG6, MSC, PDE, TMP, XCS, SYS, TSK, LOG, IPM, FIS, IPF, TPF, DAT, OSD, SAF, LIB, STK, PCH, or TST.

## ALL

Saves all user files on the floppy disk: CMD, CME, FNT, FN6, FRM, FR6, FSL, ICT, IDR, ISL, IMG, IM6, JDL, JSL, LGO, LG6, MSC, PDE, TMP, TST, LIB, and STK.

**Restriction**

Backing up files may exceed the storage capacity of a single floppy disk.

---

## FONTS

Use the FONTS command to optimize the reallocation of task memory by specifying the maximum number of fonts the system keeps resident in memory during a print job. This value can have a significant impact on system performance for some jobs. The FONTS value remains in effect until you reissue the command or regenerate a new operating system.

**Logon level**

Levels 1 through 5.

**Syntax**

FONTS [*number*]

**Parameters**

No parameters entered

Displays how many fonts are available on the LPS.

*number*

Number between 1 and 128, inclusive. It sets the maximum number of active fonts per print job. Must include all fonts, logos, and inks used on the forms and variable data. The default is 32.

**Recommendation**

Specify more fonts than will be used on a single page to allow font changes on a page-to-page basis without throughput degradation if all the fonts can be loaded into memory.

**Restrictions**

A print job may actually use more than the specified number of fonts as long as no more than this number of fonts is called for on a single page.

If the current FONTS value is exceeded while processing a page, the system displays the following message:

```
OS2885 MAX NUMBER OF FONTS EXCEEDED.
```

The system automatically increases the font space to accommodate up to the system limit of fonts per page (256).

---

## FORMS

Use this command to optimize the allocation of task memory by specifying the maximum number of forms the system keeps resident in memory during a print job. This value can have a

	significant impact on system performance for some jobs. The FORMS value remains in effect until you reissue the command or a new operating system is generated.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	FORMS [ <i>number</i> ]
<b>Parameters</b>	<i>number</i> Sets the maximum number of active forms per print job (1 to 64 inclusive). The default is 12.
<b>Recommendations</b>	When sampling, or printing multiple forms, changing FORMS to 2 will help prevent memory errors.  Specify more forms than will be used on a single page to allow form changes on a page-to-page basis without throughput degradation if all the forms can be loaded into memory.  If a form uses many inks, decrease the number of specified FORMS to increase the memory available for processing.

## GRAPHIC

---

	Use the GRAPHIC command to optimize the allocation of task memory by specifying the maximum number of graphics the system attempts to keep resident in memory during a print job. This value can have a significant impact on system performance for some jobs. The GRAPHIC value remains in effect until you reissue the command or a new operating system is generated.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	GRAPHIC [ <i>number</i> ]
<b>Parameters</b>	No parameters entered Displays the current setting.  <i>number</i> Specifies the maximum number of active graphics per print job. The number must be an integer between 32 and 128.  No single page printed can invoke more than 32 graphics. Must include all graphics used on a form for this page if a form is used. For the increased graphics feature, the software can handle up to 32 images, however, it depends on the complexity of the images.

## HARDCOPY

Use this command to sample graphic image files.

This command differs from SAMPLE only in the content and format of the descriptor page. The hardcopy descriptor page reports all the information in a graphic file header block. The information on a sample descriptor page contains less information. Descriptor pages are numbered evenly, and any errors entered on the Interpress exception page are referenced to the page number on the descriptor page.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	HARDCOPY { <i>filename</i>   <i>mask</i> }.IMG [,D][, <i>copies</i> ][,( <i>vpos</i> [ <i>in</i> / <i>cm</i> / <i>dots</i> ]),( <i>hpos</i> [ <i>in</i> / <i>cm</i> / <i>dots</i> ])[[,L],P][, <i>n</i> / <i>d</i> ]]])
<b>Parameters</b>	<p><i>filename</i> Identifies the graphic to print. If you omit the <i>filename</i>, the system prints all image files.</p> <p>If you specify any other file-type, the command is executed as if it were a SAMPLE command with a corresponding descriptor page, and the graphic is positioned by using default rather than specified positioning parameters.</p> <p>D Prints the statistical information about the graphic (the descriptive data page) on the back of the sheet and the graphic image on the front. The default is simplex.</p> <p><i>copies</i> Specifies the number of copies desired. The default is 1.</p> <p><i>vpos</i> Specifies the vertical position of the top edge of the graphic, relative to the physical page origin in dots, centimeters, or inches (inches are assumed), specified as a decimal number with up to three digits to the right of the decimal point. The default is two-thirds up the page and centered in the given orientation. Not supported for RES files.</p> <p><i>hpos</i> Specifies the horizontal position of the left edge of the graphic relative to the physical page origin. The form of this specification (<i>cm</i>, <i>in</i>, <i>dots</i>) is the same as for <i>vpos</i>. The default is two-thirds up the page and centered in the given orientation. Not supported for RES files.</p> <p>L, P Specifies a reference orientation (landscape or portrait) for positioning the graphic. The orientation may be specified in the image file image header, otherwise, the default is portrait.</p> <p><i>n/d</i> Specifies the reference scale factor. Each parameter, <i>n</i> and <i>d</i>, must be an integer between 1 and 8 inclusive, resulting in a reference scale factor between 1/8 and 8 inclusive. The reference allowing a reference scale factor is multiplied with that specified at the time the graphic was digitized, and the product is rounded to the nearest integer in the range 1 to 8. That integer becomes the effective scale factor with which the graphic is imaged. If the reference scale factor specified in the HARDCOPY command is too large (so that the graphic exceeds the page size), the specified reference scale factor is flagged with an asterisk on the descriptor page and a</p>

	reference scale factor of 1 is used. Not supported for RES files.
<b>Restrictions</b>	Your system must be equipped with the GVG2 graphics processor and RIP hardware options to HARDCOPY graphics files.  Position and scaling options (vpos, hpos, and n/d) are not available for RES files.  Hardcopy print is not allowed if the image is protected by a security command of the ABNORMAL statement (such as ABNORMAL SECURITY=YES).  Do not use the syntax: HARDCOPY *.IMG

## HIP

---

	The following commands are used with the HIP interface of the LPS.
	<b>HIP</b>
	Use this command to invoke both the HIP ONLINE and the HIP START commands. It also loads the HIP processor for the last host loaded.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	HIP
	<b>HIP ABORT</b>
	Use this command to remove all jobs or the specified jobs from the HIP internal queue.  If the operator enters the OSS RESET command, the system automatically executes HIP STOP and also aborts all HIP jobs (jobs being transmitted and all QUEUED, ACTIVE, OQUEUED, and PRINTING jobs).
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	HIP ABORT [SEND] [ <i>jid</i> [,...]] ALL]
<b>Parameters</b>	SEND Aborts a HIP to host file transmission.  (no SEND) parameter Aborts a host to HIP file transmission.  ALL Aborts all host to HIP file transmissions.  <i>jid</i> Specifies the name of the file to abort.
<b>Restrictions</b>	You cannot abort queued and active jobs. You can only abort jobs being received or pending.  If listed <i>jid</i> is not eligible, it is listed in an error message.

---

## HIP CHANGE

---

Use this command to store a HIP spooled data file as a standard printer file on disk to print it later.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	HIP CHANGE <i>jidname</i> TO <i>filename</i> [ <i>.file-type</i> ]
<b>Parameters</b>	<p><i>jidname</i> Specifies the name of the file to store on the disk.</p> <p><i>filename</i> Renames the file you are storing on the disk.</p> <p><i>file-type</i> Specifies the file type.</p>
<b>Restrictions</b>	<p>You can only process one HIP CHANGE command at a time.</p> <p>Only <i>file-types</i> listed in the ACCEPT command defined in HIP.LIB can be made standard disk files.</p> <p>The input HIP data file must be completely received and in the PENDING state with HIP in the STOP state.</p> <p>The output file name must be unique on the disk.</p>

---

## HIP ECHO

---

Use this command to enable HIP to start or stop the XNS echo test. This command also displays echo server information you need to start the echo test.

An echo test allows the HIP to determine if the ethernet communication subsystem is operational. The printer performs an echo test by transmitting echo packets to the server and receiving responses from the server. At the end of the echo test, the console displays the number of requests transmitted and the number of responses received by the printer.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	HIP ECHO {START <i>server-name</i>  STOP}
<b>Parameters</b>	<p>START Enables the XNS echo test.</p> <p><i>server-name</i> An alphanumeric name that specifies the echo server to use.</p> <p>STOP Disables the XNS echo test.</p>

## HIP END

---

Use this command to terminate HIP processing at the earliest opportune moment. This command is irreversible once issued. HIP may not be brought online until the system completes the HIP END process and displays the following message:

```
HP0020 Host Interface Processor Unloaded
```

It executes a HIP STOP followed by OFFLINE. When the current files being received or transmitted and printed (if any) are completed, the internal job queue is saved on the system disk for later restart.

**Logon level** Levels 1 through 5.

**Syntax** HIP END

## HIP EXIT

---

This command is identical to the HIP END command. You can use HIP EXIT and HIP END interchangeably to terminate HIP processing in an orderly manner.

## HIP HOST

---

Use this command to select a HIP communication mode: 871-CM, the Xerox Network Services (XNS), DMR, or Xerox Printer Access Facility (XPAF) when your LPS configuration has more than one host. On systems with only one host, HIP automatically selects the host each time HIP is loaded if the HOST default in HIP.LIB is the configured host.

**Logon level** Levels 1 through 5.

**Syntax** HIP HOST {871|DMR|XNS|XPF|XPS}

**Parameters**

871

Enables communication between a host and the LPS in an SNA/SDLC or BSC environment.

XNS

Enables communication between devices (such as workstations and graphic stations) on a shared or unshared, but accessible, network and the LPS. Ethernet is the physical connection for the network. Interpress is the page description language used to package files for transmission over the network to the LPS.

DMR

Receives input directly from a VAX/VMS system. This permits data transmission to the LPS in a digital data communication message protocol (DDCMP) environment. All UNIBUS-, VAX-B1-, or Q-BUS-based digital processors are supported.

XPF

Enables communication between a host and the LPS in an IBM MVS/XA environment.

XPS

Identifies Xerox Print Services (XPS) Manager as the printer front end to other hosts.

**Restrictions** HIP must be offline and idle in order to switch from one host to another.

You can go online to XNS, DMR or 871-CM (HIP ONLINE) and still run IBM channel jobs.

If the host you specify does not exist on the system, this command is ignored.

If the system is not offline or idle, the command is rejected and one or more of the messages displays:

```
HP2020 SELECTED HOST NOT PRESENT ON SYSTEM
HP2400 HIP INTERFACE MUST BE OFFLINE. ENTER 'HIP OFFLINE'.
HP7100 CANNOT CHANGE HOSTS WHILE JOBS ARE PENDING OR ACTIVE.
```

---

## HIP JOBS

This command is identical to the HIP SHOW JOBS command. You can use HIP JOBS and HIP SHOW JOBS interchangeably to check the status of jobs in the queue.

---

## HIP LOG

Use this command to check the XNS log filing.

**Logon level** Levels 1 through 5. HIP LOG without parameters can be run at levels 1 through 5. All others with parameters can be run at levels 2 through 5.

**Syntax** HIP LOG [RESET|START|STOP]

**Parameters** No parameters entered  
Shows the status of the HIP LOG.

### RESET

Resets the log file to zero and displays the message:  
HP0130 Log file reset

### START

Initiates the logging of remote procedure calls and displays the message:  
HP0030 Logging enabled

### STOP

Prevents logging of remote procedure calls and displays the message:  
HP0031 Logging disabled

**Restrictions** These commands are only valid when XNS is the selected host.

### HIP OFFLINE

---

Use this command to go offline from a host and stop accepting jobs. The system completes the transmission of any jobs that are in the process of being sent before executing this command.

**Logon level** Levels 1 through 5.

**Syntax** HIP OFFLINE [IMMEDIATE]

**Parameters** IMMEDIATE

Enables the system to go offline without waiting for the end of transmission from the host. This option should only be used when the host has crashed during the transmission of a job and no other means can be used to reestablish or terminate communications.

This option is only valid when online to an XPAF or XPS host.

### HIP ONLINE

---

Use this command to start the HIP task with the default specified host as defined in HIP.LIB. During HIP processing, the ONLINE command is not available. Enter HIP alone to invoke both the HIP ONLINE and the HIP START commands.

**Logon level** Levels 1 through 5.

**Syntax** HIP ONLINE [ALL]

ALL

Specifies that both print and nonprint files are accepted.

### HIP RESET

---

Use this command to clear the HIP queue.

**Logon level** Levels 1 through 5

**Syntax** HIP RESET

**Restrictions**

The system does not execute the command unless the HIP queue has no jobs in the PENDING, QUEUED, ACTIVE, OQUEUED or PRINTING states. If you enter the command with jobs in the queue in any of these states, the system displays a message indicating that the queue cannot be cleared.

The system accepts this command only when HIP is offline.

### HIP SEND

---

Use this command to send files from the 4850 or 4980 to the host through the host interface processor.

**Logon level** Levels 1 through 5.

**Syntax** HIP SEND [*filename.*]type

**Parameters** [*filename.*]type

The name and extension of the file to send. You may use the masking specification (\* or ?) to send multiple files of a specific type.



- Restrictions** The ability to send files to the host depends on the host:
- The 871-CM does not support this capability.
  - You may initiate file transfers to a DMR host either at the host or at the LPS. Both the host and the LPS must be online and in an idle state (no files being transferred).
  - You must initiate file transfers to an XNS or XPAF host from the host, not using the HIP SEND command.

---

### HIP SHOW BUFFER

Use this command to display a message on the system controller display showing the current status of the HIP spooling buffer.

**Logon level** Levels 1 through 5.

**Syntax** HIP SHOW BUFFER

---

### HIP SHOW ECHOSERVERS

Use this command to display a list of the echo servers that are available to run an XNS echo test. The listing shows the user-defined name and the ethernet address of each echo server. This information is defined in the HIP.LIB configuration file.

**Logon level** Levels 1 through 5.

**Syntax** HIP SHOW ECHOSERVERS

---

### HIP SHOW HOSTS

Use this command to display a message on the system controller display listing the currently available hosts. The message also indicates the currently selected host using an arrow as shown in the following example:

```
HP 1340 Known and current HOSTs are:
      871  DMR  XNS  XPF  XPS  NONE <--
```

The system displays NONE only if there are multiple hosts available and no host has been selected, or if a system error has occurred, causing the system to deselect all hosts.

**Logon level** Levels 1 through 5.

**Syntax** HIP SHOW HOSTS

## HIP SHOW JOBS

---

Use this command to display the current state of the HIP task and a selected list of jobs in the internal queues. The operator control console has about 20 lines available for displaying job status information on the screen. This is one page of display information.

If there are more than 20 jobs in the selected state, use the HIP SHOW JOBS CONTINUE command to continue the display.

<b>Syntax</b>	HIP SHOW JOBS [ <i>parameters</i> ]
<b>Parameters</b>	<b>ABORTED</b> Specifies all jobs aborted with the HIP ABORT command.
	<b>ACTIVE</b> Specifies jobs in the active state: QUEUED, ACTIVE, OQUEUED, and PRINTING.
	<b>ALL</b> Specifies all jobs in the queues.
	<b>CANCELED</b> Specifies all jobs canceled by a host restart.
	<b>COMPLETED</b> Specifies jobs in the completed state: PRINTED or ABORTED.
	<b>CONTINUE</b> Continues a previously requested display if all jobs in the queue were not displayed.
	<b>PAGE [<i>n</i>]</b> Specifies a particular page of job information. The page number <i>n</i> is from 1 to 6 specifying the number of pages. If you do not specify <i>n</i> or if <i>n</i> =0, the default is the 20 jobs starting with the last COMPLETED job.
	<b>PENDING</b> Specifies all jobs waiting to be sent from the host (PENDING and RECEIVING).
	<b>PRINTED</b> Specifies all jobs in the printed state (PRINTED and TRUNCATED).
	<b>SUMMARY</b> Specifies the summary display format (refer to figure 1-5).

**Examples** Figure 1-4 shows a sample of the complete display format.

Figure 1-4. **HIP SHOW JOBS command display**

```
HOST:hst:linemode      HIP:runmode      FILEMODE:filemode
JID# HOSTNAME          RECEIVED        STATUS   JOB#   TIME
nnnn hostname         hh:mm:ss        status   0000   hh:mm:ss
HP1110 END OF JOB DISPLAY
```

Figure 1-5 shows a sample of the summary display format.

Figure 1-5. **Summary display**

```
HOST:hst:linemode      HIP:runmode      FILEMODE:      filemode
JID# HOST NAME        RECEIVED        STATUS         JOB#         TIME
nnnn<host name>      hh:mm:ss        COMPLETED     0000         hh:mm:ss
.                    .                COMPLETED     .            .
.                    .                COMPLETED     .            .
.                    .                COMPLETED     .            .
...                    and n more COMPLETED jobs.
.                    .                PRINTING       .            .
.                    .                QUEUED        .            .
.                    .                QUEUED        .            .
.                    .                QUEUED        .            .
...                    and n more QQUEUED jobs.
.                    .                ACTIVE         .            .
.                    .                PENDING       .            .
.                    .                PENDING       .            .
.                    .                PENDING       .            .
...                    and n more PENDING jobs.
.                    .                RECEIVE       .            .
HP1110 END OF JOB DISPLAY
```

The following information is included in the summary report:

*hst*

Specifies one of the possible hosts (871, XNS, DEC, and so forth).

*linemode*

Specifies the status of the host interface (OFFLINE, ONLINE, PEND, READY, RECEIVING, SENDING, or SUSPENDED).

*runmode*

Specifies the run mode of the job (STARTED, STOPPED, or DUMP).

*filemode*

Specifies the acceptable file-types (ALL JOBS or PRINT JOBS).

*nnnn*

Specifies the internal job identification number (JID) for HIP.

*hostname*

Indicates the host name on the file label. An asterisk (\*) following this name indicates that the job is an 871 job received from the punch port. Refer to the *Xerox 871 Communication Module System Guide* for a description of the punch port.

0000

Specifies the job number (JN) assigned by OCS when the job is submitted for printing. It is 0000 for nonprint and pending jobs.

hh:mm:ss

Specifies the time a job was received and when its status was last changed.

A maximum of 5 lines list jobs in the COMPLETED state, 8 lines list jobs in the ACTIVE state, and 7 lines list the jobs in PENDING stage.

### Restrictions

Depending on the state of HIP's XNS services and job queue, HIP may defer the processing of OFFLINE and END commands.

If HIP is communicating with a networked workstation at the time HIP OFFLINE is entered, processing is deferred until the workstation session terminates, either through initiation by the workstation or through timeout. If deferred, HIP displays the message:

```
HP1200 OFFLINE PENDING END OF CURRENT ACTIVE XNS SESSION.
```

When the session concludes and the Ethernet is brought offline, HIP displays the message:

```
HP1230 HOST OFFLINE.
```

The HIP END command effects an automatic STOP and OFFLINE prior to the task exit. STOP is honored immediately; OFFLINE may be deferred, as described above. ENDing of HIP is deferred until the OFFLINE command is processed and, if any jobs are active on HIP's print queue, the END command is further deferred until all active jobs are completed.

HIP honors an END command with jobs on the receive queue in a pending state. When HIP is reloaded, those pending jobs remain in HIP's job queue.

### HIP SHOW LOG

---

Use this command to display the current state of the HIP task and a list of all the log entries. This command is only applicable when XNS is selected as the host. If you do not specify a parameter, the contents of the entire log file displays.

#### Syntax

HIP SHOW LOG [*parameters*]

#### Parameter

CONTINUE

Prevents the file service connection from terminating due to inactivity.

DELETED

Lists deleted files.

LGF

Lists log-off entries for the printer file service.

LGN

Lists log-on entries for the printer file service.

LIST

Lists files in the specified directory.

PAGE [*n*]

Specifies a full screen of job information. *n* is a number from

1 to 6 specifying the number of pages. The default is the 20 jobs starting with the last COMPLETED job.

**PRINTED**

Displays all jobs in the printed state.

**PRN**

Prints the contents of the log file.

**RETRIEVED**

Displays all files that have been retrieved.

**STORED**

Displays all files that have been stored.

**Display format**

Figure 1-6 shows the format of the HIP SHOW LOG XNS display.

Figure 1-6. **HIP SHOW LOG XNS display information**

host logging	log status	optype		
USER ID	FILE	BEGIN	END	OPERATION
hst id	filename	date/time	time	opertn

*host*

Identifies the current host interface: XNS.

*log status*

Specifies the status of the log: Store, Retrieve, or Deleted.

*optype*

Specifies the operations configured for logging, including:

*hst*

Specifies the host interface.

*id*

Specifies the user name in 1 to 15 characters. A user id over 15 characters is truncated.

*filename*

Specifies the filename as *filename*[*.file-type*].

*date/time*

Specifies the date and time of the operation call. The date format is *MM/DD/YY*. The time format is *HH:MM:SS*.

*time*

Specifies the time the operation was completed. The time format is *HH:MM:SS*.

*opertn*

Specifies the operation performed on the file: ALL, CLOSE, CONTINUE, DELETE, LIST, LOGOFF, LOGON, OPEN, PRINT, RETRIEVE, or STORE.

**Restrictions**

This command is only valid when XNS is the selected host.

**HIP SHOW VERSION**

Use this command to check the HIP processing version.

**Syntax**

HIP SHOW VERSION

**HIP SJC**

---

Use this command to abbreviate the HIP SHOW JOBS CONTINUE command, which continues the HIP job status display.

**Syntax** HIP SJC

**HIP SLC**

---

Use this command to abbreviate the HIP SHOW LOG CONTINUE command, which continues the XNS log display.

**Syntax** HIP SLC

**HIP START**

---

Use this command to start or restart processing of jobs in the HIP queue.

The XPF host may submit jobs in a pass-through mode, where the job passes directly to the LPS processing. Although HIP is not involved in receiving the job, you must start HIP in order for pass-through jobs to be processed. If a message appears indicating that a pass-through job is pending, enter the HIP START command. While the pass-through job is processing, HIP is in a suspended state. After the pass-through job has finished, HIP returns to the start state.

HIP remains in START mode until you enter a HIP STOP command except in the following situations:

- If you enter the START command with a job-id, HIP exits START mode after submitting the last job-id.
- If you enter the START command with the DUMP parameter, HIP exits START mode after submitting one job.
- If you abort a HIP job during Input or Output processing, or using the ABORT command, HIP exits the START mode.
- If you enter the RESET command, HIP exits the START mode.

**Logon level** Levels 1 through 5.

**Syntax** HIP START [DUMP][*job-id*[,...]]

**Parameters** No parameters entered

When you enter the HIP START command with no parameters, HIP submits all jobs in the queue in the order received (or the order set in previous HIP START commands).

**DUMP**

If you specify this parameter, the system processes the next job in the queue (or the job specified in the command string if you have specified one) using the START command parameters defined in the DUMPJOB = field of the HIP.LIB file. Only one job is submitted (either the first job in the queue or the first job-id specified in the command string). After the specified job is processed, HIP issues a STOP command.

*job-id*

Use this parameter to start only specified jobs within the HIP queue. After HIP has submitted the last job in the job-id list, HIP issues a STOP command.

**HIP STOP**

Use this command to stop submitting HIP jobs to print processing. Jobs already being prepared for printing or being printed complete processing.

If the operator enters the OSS RESET command, the system automatically executes HIP STOP and also aborts all HIP jobs (jobs being transmitted and all QUEUED, ACTIVE, OQUEUED, and PRINTING jobs).

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	HIP STOP
<b>Restriction</b>	If the LPS is online, HIP continues to receive jobs until the storage space for the LPS HIP queue is filled.

**HOSTCOPY**

Use this command on online systems to accept files transmitted from the host computer and store them on the LPS system disk. Files in two different formats may be transmitted:

1. User-created card-image files
2. LPS-labeled files (such as font, logo, and patch tapes).

Files loaded onto the system via the HOSTCOPY command must be retrieved by the editor MERGE command prior to editing in order to insert valid sequence numbers.

Certain destination file-types are not accepted for either LPS-labeled or card-image files. These are file-types OSD, SAF, SYS, \$Y\$, and TSK. In addition, card-image format files are restricted to destination file-types: CMD, FSL, JSL, MSC, PCH, TMP, and TPF.

<b>Logon level</b>	Level 1
<b>Syntax</b>	HOSTCOPY
<b>Restrictions</b>	<b>Card-image format files.</b> Files may be transmitted to the LPS in 80-character EBCDIC records. A group of records stored as a data file is called a <i>packet</i> . These packets contain the EBCDIC hex code 5B as a control character. On many keyboards, for example, UK English, hex 5B is represented by a £ sign. In this section, the hex 5B character is represented by the \$. You should verify with your system administrator which key on your keyboard generates this character.

Each packet must be preceded by a control record, which specifies the name of the file. This control record has the following format starting in column 1:

```
$$$START filename.file-type
```

*Filename* is a 2-to 6-character name and *file-type* is one of the valid file-type designations listed previously. A period or a comma is acceptable as the separator between the *filename* and the *file-type*.

One or more EBCDIC packets may be transmitted at one time. Each packet should be preceded by the \$\$\$START record. After the last packet, the transmission must be ended by another control record. The format for this record, starting in column 1 is:

\$\$\$END

Each packet transmitted may not exceed 3,072 records. Exceeding this limit results in truncation of the file to 3,072 records.

If any problem is found with the \$\$\$START record, one of the following messages is displayed with the \$\$\$START record displayed on the next line.

```
INVALID FILE TYPE
INVALID CHARACTER IN FILE NAME OR FILE TYPE
MISSING "." OR "," IN $$$START RECORD
```

If any of the above errors are encountered, the file is not created on the disk, and the user is given the opportunity to continue or abort HOSTCOPY. Any file names greater than six characters are truncated to six characters. If a \$\$\$START record is immediately followed by a \$\$\$END record, the message `FILE SIZE EQUALS ZERO`, is displayed. The file is not created on the disk, and the user is given the opportunity to continue or abort HOSTCOPY.

**Font and logo tape file format.** Font and logo tapes are LPS-labeled tapes issued by Xerox. They have been structured for use with online systems as well as offline systems. The last physical file on these tapes is a concatenation of all previous files on the tape. It is the last file which is in a format that can be transmitted across the host I/O channel to the printing system. A host utility must be used to advance the tape to the beginning of the last file. Font and logo files have 128-byte blocks, followed by blocks of multiples of 512 bytes, from 512 bytes to 8,192 bytes. The files must be deblocked to 128-byte records before transmission to the LPS.

Some operating systems may require that an FCB and UCSB be transmitted with the job. These are accepted, but they are ignored by HOSTCOPY.

The program (for example, IEBGENER) that transmits files to the LPS must not add page numbers or reformat the data. In particular, no additional records may be added between the files.

**Example** Figure 1-7 shows a sample JCL using the IEBGENER host utility to send a concatenated file to the LPS. In the example, "01E" is the device address of the printing system. For illustration purposes, the tape to be transmitted contains 246 individual system files. Appended to these 246 files are a dummy ENDFIL file and a concatenated file containing the preceding 247 files. Thus, the first parameter after the LABEL= is the file number of the file to be transmitted (in this case, file number 248).



Figure 1-7. Sample JCL

//LOADXERX	EXEC	PGM=IEBGENER,REGION=80K
//SYSPRINT	DD	SYSOUT=A
//SYSIN	DD	DUMMY
//SYSUT2	DD	UNIT=01E,DCB=(RECFM=FB,LRECL=128,BLKSIZE=128)
//SYSUT1	DD	UNIT=TAPE,DCB=(RECFM=FB,LRECL=128,BLKSIZE=8192),DSN=XEROX,
//		DISP=OLD,LABEL=(248,NL,EXPDT=98000),VOL=SER=XEROXO

If EBCDIC files are transmitted, the final `CREATING FILE xxxxxx.yyy` message is displayed after response to the message:

```
END OF TAPE FOUND. IS ANOTHER TAPE TO BE SENT? Y OR N
```

## IFU

Use this command to invoke the Interpress font utility (IFU). IFU allows you to create fonts from an Interpress master suitable for print jobs in an Interpress or data center environment.

You can communicate with the IFU using the keyboard or display. You can key in one or more IFU commands in the command line and then enter IFU to execute them all; or you can invoke IFU first, then enter each IFU command.

You can invoke IFU when the LPS is idle. IFU is a co-process with the Interpress decomposer (IPD).

IFU provides the following functional features:

- Performs traditional file management functions on Interpress font files resident on the system, including addition, duplication (from disk to/from tape and disk to/from floppy), deletion, and listing by Interpress font names
- Changes the substitution priority for a particular Interpress font
- Compiles old IPFNTS.JSL source mapping files to new LPS Interpress linked structures
- Compresses LPS Interpress mapping to enhance font management performance and delete unreferenced Interpress font files
- Prints a sample statistics page of a generated font.

You can invoke IFU in single command mode only. IFU accepts any single command, executes it, and returns to the system prompt. Then you can enter another single command. IFU also returns to the system prompt if it encounters an error that it cannot ignore.

You can specify an Interpress font by its font family or its font name characteristics. An Interpress font family name is a three-part name composed of a naming authority, character code, and typeface name. An Interpress font name is a six-part name composed of a naming authority, character code, typeface name, point size, orientation, and resolution. If you specify only the Interpress font family name, all the font families (such as orientations, point sizes, and resolutions) are processed as if they were wild carded. You can insert a wild card (\*) in place of any family name component, except in `DEFAULT` and `SUBSTITUTION` commands which require a single Interpress font family name.

The correct syntax for entering an Interpress font is:

Interpress font family name

'XEROX', 'XC82-0-0', 'HELVETICA' OR

Interpress font name

'XEROX XC82-0-0 HELVETICA 12 P 300'

Font name length will make some IFU commands longer than 78 characters. Enter these commands using the IFU mode. For each long command, first enter "IFU" and press <CR>, then enter the IFU command.

---

## IFU COMPRESS

Use this command to remove unused space from the mapping tables in IPFN.TS.SYS, to delete unreferenced font files, and to consolidate fragmented .IPM files.

**Logon level** Levels 1 through 5.

**Syntax** IFU COMPRESS

---

## IFU COPY

Use this command to copy printer font files and their associated mappings from the LPS internal disk storage to and from external media. This allows easy backup and transport of Interpress fonts.

**Logon level** Levels 1 through 5.

**Syntax** IFU COPY [TAPE|FLOPPY|CARTRIDGE]  
[READ|WRITE] *Interpress-font-name*

**Parameters**

TAPE

Specifies the device assigned to TAPE keyword using SUB DEV. TAPE is the default keyword.

FLOPPY

Specifies the device as floppy.

CARTRIDGE

Specifies the device assigned to CAR keyword using SUB DEV.

READ

Searches for the Interpress font name matching the specified Interpress font mask. If a match is found, copies the font files and their mappings from the file on the tape or cartridge, and replaces or creates the font files in the FNT directory.

WRITE

Copies .FNT font files and the associated Interpress font mappings to the external medium as a single virtual file. Supports multiple volume tapes and cartridges. When the virtual file being written reaches end of volume, the user is prompted for the next volume loaded. Always appends to end of the logical volume.

For the IFU COPY FLOPPY WRITE command, only one write may be performed per floppy. Appending writes on floppy disks is not allowed.

*Interpress-font-name*

The name of the Interpress font.

**Restrictions** Although OSS supports multiple volume writes, the editor and IFU tasks do not support them. Do not issue a multiple volume write from EDI or from IFU. It may fail, corrupting the volume by jeopardizing the volume's file integrity and Interpress file and font integrity. Avoid this problem by writing files to a single volume and selectively including files or font families.

If an Interpress font family is copied to tape, floppy, or cartridge, and then read back, the corresponding LPS font files are assigned new names. Since the comparable Interpress font names map to the same LPS font files, do not copy one Interpress font family without its comparable names. If you do so, and then copy it back to the same LPS, the LPS creates duplicate fonts on the system. The duplicate fonts do not affect the Interpress mapping structure, but they do increase the amount of disk storage space used.

---

### IFU DEFAULT

Use this command to establish the default for the Interpress master font family used to print an Interpress master that does not specify a font name. This name can also be set when the IPFNTS command is used to compile the Interpress fonts .JSL file.

**Logon level** Levels 1 through 5.

**Syntax** IFU DEFAULT *Interpress-font-family-name*

**Restriction** IFU does not check the validity of the default font name. An unrecognized font name generates the Interpress error message:  
 Master Error (page n): Font problem; font "<font name>" unknown. If the font name is too long, the printed message is truncated.

---

### IFU DELETE

Use this command to delete the LPS files associated with an Interpress font or with a family of Interpress fonts.

**Logon level** Levels 1 through 5.

**Syntax** IFU DELETE *Interpress-font-name*

**Parameter** *Interpress-font-name*  
 Specifies the font file or files to be deleted. If you use masking, you are prompted for confirmation. The default is N.

**Restriction** The LPS font files associated with deleted fonts are not deleted, since they can be referenced by other mappings. You must use the COMPRESS command to delete font files which are no longer referenced by any Interpress font file.

---

### IFU FDR

Use this command to recreate the font directory file after upgrading the operating system, if the font directory is corrupted. This process can take up to 30 minutes.

**Logon level** Levels 1 through 5.

**Syntax** IFU FDR

## IFU FILE

---

Use this command to review on screen the names and characteristics of the Interpress fonts that were written to the medium.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	IFU [ <u>DISK</u>  TAPE CARTRIDGE FLOPPY] FILE[/EX { <i>Interpress-font-family name</i>   <i>Interpress-font-name</i> }]
<b>Parameters</b>	<u>DISK</u> Specifies the disk as the source of the generated list.  TAPE Specifies the device assigned to the TAPE keyword using SUB DEV as the source of the generated list.  CARTRIDGE Specifies the device assigned to the CAR keyword using SUB DEV as the source of the generated list.  FLOPPY Specifies the floppy disk as the source of the generated list.  /EX Generates an expanded list of a specified <i>Interpress-font-name</i> .  <i>Interpress-font-name</i> Specifies the font file or files to display.

## IFU IPFNFS

---

Use this command to compile the mapping information in the Interpress fonts JSL file into the Interpress font environment. The Interpress font environment is not replaced completely by this command; information in the input file is merely added to the Interpress font environment.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	IFU IPFNFS [ <u>IPFNFS</u> ] <i>Interpress-fonts-jsl</i> ]  If you do not specify a name, IPFNFS.JSL is the input file.
<b>Restriction</b>	Compiling Interpress fonts .JSL files with large FONTS statements might exceed the IFU IPFNFS limit.

## IFU LIST

---

Use this command to print one to 674 duplex pages reporting the names and characteristics of Interpress fonts that were written to the disk, tape, cartridge, or floppy disk.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	IFU [ <u>DISK</u>  TAPE CARTRIDGE FLOPPY] LIST[/EX { <i>Interpress-font-family name</i>   <i>Interpress-font-name</i> }]
<b>Parameters</b>	<u>DISK</u> Specifies the disk as the source of the generated list.  TAPE Specifies the device assigned to the TAPE keyword using SUB DEV as the source of the generated list.

**CARTRIDGE**

Specifies the device assigned to CAR keyword using SUB DEV as the source of the generated list.

**FLOPPY**

Specifies the floppy disk as the source of the generated list.

**/EX**

Generates an expanded list of a specified *Interpress-font-name*. /EX also lists the font filenames of the specified Interpress font.

***Interpress-font-name***

Specifies the font file or files to be listed.

**Restriction**

If more than 674 pages will be generated, the system displays a warning message before executing the command. You must then enter multiple IFU LIST commands to generate a complete list.

---

**IFU PRINTER**

Use this command to establish the name of the LPS printer in the IPFNTS.SYS file.

**Logon level**

Levels 1 through 5.

**Syntax**

IFU PRINTER *printer-name*

---

**IFU SUBSTITUTION**

Use this command to change the substitution criteria for a single font family.

Substitution criteria are used when an Interpress master calls for a font which is not available on the printer. The imaging software uses the criteria to determine which font to substitute for the desired font.

**Logon level**

Levels 1 through 5.

**Syntax**

IFU SUBSTITUTION *Interpress-font-name, substitution-priority*

**Parameters**

***Interpress-font-name***

Specifies the Interpress font name

***substitution-priority***

Must be NORMAL or NOPOINTSIZ. NORMAL is the default.

---

**IFU [TAPE | CARTRIDGE] MOVE**

Use this command to position a tape or cartridge a specified number of files forward or backward before issuing an IFU COPY READ, LIST, or FILE command.

**Logon level**

Levels 1 through 5.

**Syntax**

IFU [TAPE | CARTRIDGE] MOVE *n* [FILES]

**Parameters**

**TAPE**

Specifies the device assigned to the TAPE keyword using SUB DEV.

**CARTRIDGE**

Specifies the device assigned to CAR keyword using SUB DEV.

*n*

Specifies a decimal value within -32768 and 32767 inclusive. The default is 1.

If *n* is positive, the tape or cartridge advances forward. If *n* is negative, the tape or cartridge rewinds.

The word FILES can be entered following *n*, but is not required.

---

**IFU [TAPE | CARTRIDGE] REWIND**

---

Use this command to rewind the tape or cartridge.

**Logon level** Levels 1 through 5.

**Syntax** IFU [TAPE | CARTRIDGE] REWIND

**Parameters** TAPE

Specifies the device assigned to TAPE keyword using SUB DEV. TAPE is the default keyword.

CARTRIDGE

Specifies the device assigned to CAR keyword using SUB DEV.

---

**IFU [TAPE | CARTRIDGE] UNLOAD**

---

Use this command to unload the tape or cartridge from the drive.

**Logon level** Levels 1 through 5.

**Syntax** IFU [TAPE | CARTRIDGE] UNLOAD

**Parameters** TAPE

Specifies the device assigned to the TAPE keyword using SUB DEV. TAPE is the default keyword.

CARTRIDGE

Specifies the device assigned to the CAR keyword using SUB DEV.

---

**IFU [TAPE | CARTRIDGE] VOLINIT**

---

Use this command to initialize the tape or cartridge in preparation for an IFU COPY WRITE command.

**Logon level** Levels 1 through 5.

**Syntax** IFU [TAPE | CARTRIDGE] VOLINIT [1600|6250]

**Parameters** TAPE

Specifies the device assigned to the TAPE keyword using SUB DEV. TAPE is the default keyword.

CARTRIDGE

Specifies the device assigned to the CAR keyword using SUB DEV.

1600

Specifies the density of the tape as 1600 bpi.

6250

Specifies the density of the tape as 6250 bpi.

**IFU [TAPE | CARTRIDGE] SAMPLE**

Use this command to print sample pages for a single Interpress font.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	IFU [TAPE CARTRIDGE] SAMPLE <i>Interpress-font-name</i>
<b>Restriction</b>	Do not use the IFU SAMPLE command within a system or editor command file.

**IMAGE**

Use this command to display, fix, or print the content of IMG files in compressed and decompressed format. You can fix the format of known bad IMG files which may cause the following types of problems:

- Vertically or horizontally truncated images
- Trailing vertical or horizontal image strips from previous image print.

If you cannot print the image using the SAMPLE command, you may not be able to fix it. After you fix an image file, this command updates the following information:

- Compressed vector length in header and trailer
- x pixel value
- Total number of scan lines in the image
- Converts Interpress 1.0 to Interpress 2.0 format.

This command supports Interpress 1.0 and 2.0 formats, and RES format image files.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	IMAGE {DUMP PRINT FIX} <i>filename.file-type</i> [/EXPAND /VERBOSE /STATISTICS /ALL [( <i>scanline start</i> , <i>scanline end</i> )]]
<b>Parameters</b>	<p><b>DUMP</b> Displays the content of the IMG files you specify.</p> <p><b>PRINT</b> Prints the content of IMG files you specify.</p> <p><b>FIX</b> Fixes the damaged IMG files that you specify.</p> <p><i>filename</i> Specifies one or more files. You can enter up to six characters. The filename can include wildcards (* and ?).</p> <p><i>file-type</i> Specifies the file-type as IMG.</p> <p><b>/EXPAND</b> Displays or prints compressed scan line followed by decompressed scan line. This parameter is used only for PRINT and DUMP.</p> <p><b>/VERBOSE</b> Displays or prints a detailed diagnostic message before and after the compressed image data. The information in the</p>

image header and trailer displays in decimal value. A diagnostic message does not display for RES format files.

#### /STATISTICS

Displays or prints the following statistics:

- Scan line length
- Total number of scan lines in image file
- Total number of ENC, HTN, LIN, and RAW scan lines
- Total number of EOI encountered
- Total number of bad nibbles
- Total number of bad scan lines
- x pixel value
- y pixel value
- Image file size (in bytes)
- Actual compressed vector length
- Compressed vector length in header and trailer.

#### /ALL

Fixes Interpress 1.0 and 2.0 image files, but skips RES image files. If you do not specify this parameter, the command fixes only Interpress 1.0 image files and skips all other IMG files. This parameter is used only for FIX.

#### *scanline start, scanline end*

Specifies a range to display or print the image data. You must separate *scanline start* and *scanline-end* with a comma (,) and enclose them inside parenthesis as shown in the syntax. This parameter is used only for PRINT and DUMP.

---

## INITIALIZE QUEUE

---

Use this command to erase the existing print queue database, create a new print queue database, set its size and its warning and frequency flags, and initialize it.

Warning flags indicate that the beginning of the file is about to be overwritten. Frequency flags determine how often warning messages are displayed.

**Logon level** Levels 2 through 5.

**Syntax** INITIALIZE QUEUE [*n*][NOF|OWF|DWF|NWF:*n.m*]

**Parameters** *n*

Specifies the number of entries in the queue. You can specify a value in the range of 200 to 2000. If the queue file does not exist and you do not specify a value, a report queue of 400 entries is created.

#### NOF

Deactivates the warning and frequency flags. No warnings are displayed.

#### OWF

Activates previous (old) warning and frequency flags and preserves previous flag settings.

#### DWF

Activates the default warning flag (40) and frequency flag (3).

#### NWF:*n.m*

Sets and activates new warning and frequency flags. The *n* value indicates the threshold at which warnings begin. The *m* value indicates the frequency at which warning messages display to the operator.



<b>Example</b>	If $n=25$ and $m=3$ , warnings are displayed when 25, 22, 19, 16, etc., entries can be made before the end of the print queue database is reached.
<b>Recommendation</b>	Back up the existing print queue database before issuing INITIALIZE QUEUE.
<b>Restriction</b>	INITIALIZE QUEUE executes only when the queue is empty.

## JOBS

Use this command or press <JOBS STATUS> to display the status of the system and the documents in the print queue. There will be a delay for a few seconds to process the information. The last item printed appears first in the display.

The JOBS command allows you to temporarily change the format of the information that displays. The SET QUEUE DISPLAY command controls the default display format and allows you to set the format permanently.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	JOBS [ALL QUEUE # <i>entry-string</i>   <i>n</i>   <i>report-attribute</i> ] [CLASSIC  <u>BRIEF</u>  FULL]
<b>Parameters</b>	<p><b>ALL</b> Displays information on all documents in the queue with Queued, Input, IAbort, OAbort, UAbort, Held, Active, In/prntg or Printing status. Also displays status of last 100 documents printed.</p> <p><b>QUEUE</b> Displays information on all documents (entries) in the queue with Held, Queued, Active, or Printing status and the status of last 100 documents printed. May be abbreviated: JOBS Q.</p> <p><b>#<i>entry-string</i></b> Displays information on specified entries in the queue. You specify using the #<i>n</i>, #<i>n-m</i>, or #( <i>n-m,o,p-r</i>) format.</p> <p><b>#<i>n</i></b> Specifies a single entry. <i>n</i> must be an integer between 1 and 65535.</p> <p><b>#<i>n-m</i></b> Specifies one set of multiple entries. <i>n</i> and <i>m</i> must be integers between 1 and 65535. All entries between <i>n</i> and <i>m</i> inclusive are passed to output.</p> <p><b>#(<i>n-m,o,p-r</i>)</b> Specifies multiple sets of entries. Values must be integers between 1 and 65535. All entries <i>n</i> through <i>m</i> inclusive, <i>o</i>, and <i>p</i> through <i>r</i> inclusive, are passed to output. Parenthesis are required around the string. Commas without spaces are required between string elements.</p> <p><b><i>n</i></b> Displays status information for all reports queued for output plus the status of up to <i>n</i> completed reports, where <i>n</i> is 100 or less.</p>

*report-attribute*

Displays entries which use the following specified resources:

**PRIMARY COLOR**

Displays information for all entries that require the specified primary color.

**STITCH**

Displays information for all entries that require stapling.

**ACTIVE**

Displays information for all entries that are in the active queue.

**HELD**

Displays information for all entries that are in a held queue.

**QUEUED**

Displays information for all queued entries. Do not confuse this parameter with JOBS QUEUE or JOBS Q.

**CLUSTERS=xxx**

Displays information for all entries that require the specified cluster.

You can specify up to three resources as follows:

**AND I &**

Displays entries that use all the resources specified, for example:

- RED & GREEN & BLUE
- GREEN AND BLUE AND HELD

**OR I !**

Displays entries that use only one of the resources specified, for example:

- RED ! GREEN
- GREEN OR ACTIVE

**NOT I -**

Displays entries that do not use the resource that follows, for example:

- NOT RED
- - STITCH

You can use parentheses to indicate the resources that have the highest priority, otherwise, the order of priority is from left to right.

**CLASSIC**

Displays information in the CLASSIC format. Refer to the "Examples" section for a sample of the CLASSIC format.

**BRIEF**

Displays information in the BRIEF format. Refer to the "Examples" section for a sample of the BRIEF format.

**FULL**

Displays information in the FULL format. Refer to the "Examples" section for a sample of the FULL format.

**Examples** System and print queue status display.

```

Queue status mm/dd/yy hh:mm:ss
Queue Manager is stopped          schedule mode is resource
Queue Manager is stopped          schedule mode is received
Queue Manager is active           schedule mode is resource
Queue Manager is active           schedule mode is received
System is idle
System is ON-LINE
System is OFF-LINE
Input is stopped
Output is stopped -- printer fault
Output is stopped -- otext wait
Stitch off active
Stitch on active
Job queue is empty
Jobs held in queue
JOB ID xxxx JDE xxxxxxxx queued for INPUT
Approximately xxxx unused entries in the queue

```

If you select the CLASSIC format, the following information displays after the system and print queue status information.

Job #	Cust Job #	Rpt #	Report Name	JDE/JDL	Copy Count	Total Pages	Pages Prntd	Status Msg	Msg#
xxxx	xxxxxx	xxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxx/xxxxxx	xxxx	xxxxxx	xxxxxx	xxxxxxxxxx	xxxx

If you select the BRIEF format, the following information displays after the system and print queue status information.

Entry #	Cust ID	Report Name	Job #	Copy Count	Total Pages	Pages Printd	Color	JDE/JDL	Status
xxxxx	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx/xxxxxx	xxxxxxxxxx

If you select the FULL format, the following information displays after the system and print queue status information.

Entry #	Cust ID	Report Name	Job #	Rpt #	Copy Count	Total Pages	Pages Printd	JDE/JDL	Status
xxxx	xxxxxx	xxxxxxxxxxxx	xxxxx	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx/xxxxxx	xxxxxxxxxx
		Colors	Sti		Clusters				SMsg#
		xxx,xxx,xxx,xxx,xxx	x		xxxxxx,xxxxxx,xxxxxx,xxxxxx,xxxxxx				xxxx

**Display descriptions**

\*

An asterisk preceding a report attribute indicates that this attribute is causing the report to be held in the queue.

+

A plus symbol in the Color or Colors column indicates that the report uses multiple colors.

- A hyphen symbol indicates absence of color, clusters, or a status message.

**Job #**

The job identification number supplied by the system.

**Entry #**

The entry assigned by the Queue Manager that identifies an entry in the report queue. QM commands with the *entry string* parameter use this number when applicable.

**Cust Job# or Cust ID**

Specifies one of the following:

- Host job number as defined by the user with the HJOBNO command of the BANNER statement in an online job
- FILE ID (same as on accounting page) if in an offline job
- User ID for Ethernet from the PRINT request
- Blank if the information is not available.

**Rpt #**

The report number as currently defined on the accounting page. The position within the job. A report number of zero indicates that the job containing the report was terminated before the first report was processed.

**Report Name**

The report name as defined by the online user with the BANNER statement command, HRPTNA; or by the offline user with the RSTACK statement command, HRPTNA, or the DISC keyword in the START command. The BRIEF and FULL formats display the first 12 characters of the report name; CLASSIC displays the first 16 characters.

**JDE/JDL**

The JDE/JDL name keyed in to start the report or the DJDE JDE/JDL encountered.

**Copy Count**

The maximum number of copies if the report is in input, queued for output, or completed. If the report is in output, COPY COUNT is the number of copies remaining to print. COPY COUNT can differ from the copy count in the JSL due to the application of a DJDE.

**Total Pages**

The current number of pages written to disk if the report is in input. If the report is printing or queued for output, TOTAL PAGES is the total number of pages in the report.

**Pages Prntd**

The number of pages completed if printing. Otherwise, this value is zero.

**Note:** Even though the TOTAL PAGES and PAGES PRNTD fields display only a six-digit number on the screen, the status file maintains the correct page values.

**Color or Colors**

Displays the first three characters of the first color used in the report. Black is an assumed primary and never displays.

**Status**

Displays the state of the report as one of the following:

**IAbort**

INPUT aborted the report or job.

**OAbort**

OUTPUT aborted the report.

**UAbort**

User aborted the report or job.

**Active**

OUTPUT received the report but print has not been issued. When the printer stops, all active entries display a stopped status until printing resumes.

**Stopped**

The user stopped the report by pressing <STOP> or entering the STOP command, or there could be an internal problem.

**Done**

Printing is complete.

**Input**

The report is being prepared for printing and has not begun to print.

**Queued**

The report has been prepared for printing and is waiting to print.

**Held**

The entry cannot be sent to OUTPUT for printing. An asterisk (\*) indicates the resource preventing it from printing.

**In/prntg**

The report is being prepared for printing and part of it is printing.

**Printing**

The report has been prepared for printing and is printing.

**Reset**

The report was aborted by the RESET command.

**Rcvyn/s**

The operator did not request recovery on rollover.

**Sti**

Indicates if the report requires stitching.

**Clusters**

Indicates the required clusters, if any.

**SMsg#**

Displays one of the following:

- The completion code on the accounting page (blank if completion is normal)
- The error message number if the report aborted
- CS displays while the report is processing if the report is copy sensitive.

## LIGHT

---

Use this command to enable or disable the attention light, or to turn off the light without disabling it. The attention light warns you of the following print job conditions which require your attention:

- A steady light indicates that the print process will cycle down soon due to low toner or paper supply.
- A light modulating between bright and dim indicates one of the following:
  - The printer is cycling down due to a printer malfunction. You must correct this problem immediately.
  - The system is displaying WAIT messages and may stop without processing.

The attention light turns off when you correct the condition.

**Logon level**

Levels 1 through 5.

**Syntax**

LIGHT [ENABLE|DISABLE|OFF]

**Parameters****ENABLE**

Activates the light so that it signals printer conditions to the operator.

**DISABLE**

Deactivates the light so that it does not signal printer conditions to the operator.

**OFF**

Turns the light off without correcting the printer condition and without disabling the light.

Other situations which activate the attention light are:

- You entered STOP O
- STOP O executed automatically due to an LPS error
- OTEXT WAIT message coded in the print job
- No report is available for printing but the report queue is full.

## LIST

Use this command to print the list of all files on the disk. You can list specific *file-ids* within the catalog or the entire catalog and deliver them to the sample tray. The output page of the LIST command has a header line at the top of each page containing the page number, date, time, and disk-id.

**Logon level** Levels 1 through 5.

**Syntax** LIST [*disk-id*][*file-id*]/[*filename*.[*file-type*],[*leading string*],[*trailing string*]]

**Parameters** *disk-id*

Identifies the system disk (DP0:, DP1:, DP2:, or DP3:) containing the *file-ids* to be printed.

*file-id*

Specifies the file as *filename.file-type*. If omitted, the default prints the names of all the files in each directory. Masking can be used.

*/filename*.[*file-type*]

Specifies a disk file into which is stored a record for each file listed in the following order: *Leading string*, *file-id*, *trailing string*. The default *file-type* is .TMP.

*leading string*

Character string (except commas) that is added prior to each *filename* in the list that is created. No more than 50 leading characters may be added.

*trailing string*

Character string (except commas) added to each file name in the list that is created. No more than 50 trailing characters may be added.

To print only the specified *file-id*, enter the *disk-id* and the *file-id* parameters.

**Example** LIST DP0: \*.CMD

This command will print all .CMD *file-types* in DP0:.

Using the */filename*.[*file-type*], *leading string*, and *trailing string* parameters prints the specified *file-id* and stores it in the file specified by the */filename*.[*file-type*]. If no file exists matching the *filename*.[*file-type*], a file of that name will be created. If it does exist, it is written over.

List data can be stored and printed without the *leading string* and *trailing string*.

**Example** LIST DP0: \*.CMD/ED.CMD

This command will print all .CMD *file-types* and will store those in a file named ED.CMD.

List data can be stored and printed with the *leading string* and *trailing string*.

**Example** LIST DP0: \*.CMD/ED.CMD,...///

This command will print all .CMD *file-types* and will store those in a file named ED.CMD. Each displayed file will be preceded with "...", as specified by the *leading string* parameter. Also, each displayed file will be followed by "///", as specified by the *trailing string* parameter.

**LIST/EX**

Use this command to print an extended list of all the file characteristics of a given *file-id*.

**Syntax** LIST/EX [*disk-id*][*file-id*][,*file-id*,...]

**Parameters**

*disk-id*

Identifies the system disk (DP0:, DP1:, DP2:, or DP3:) containing the *file-ids* to be printed.

*file-id*

Specifies the file as *filename.file-type*. If you do not specify one, the default is all the files in the directory. You can use masking.

The print format includes a title line identifying the information in each column. The leading and trailing strings do not print. If you do not enter the /EX option, only the *file-ids* print. Refer to figure 1-8.

**Example** Figure 1-8 shows a sample print format when you enter /EX.

Figure 1-8. /EX parameter sample print

FILE NAME	UNIT	FSIZE	RSIZE	FFBY	EOF	DISK ADDR
XR.X.IMG	2	6	512	512	6	472522
KI1.IMG	2	8	512	0	8	472530
KI2.IMG	2	21	512	0	21	472540

**FILE NAME**

A one- to ten-character entry specifying the filename and type.

**UNIT**

System disk unit number (DP0:, DP1:, DP2:, DP3:) on which the file resides.

**FSIZE**

A one- to ten-character decimal entry indicating the number of blocks allocated to the file.

**RSIZE**

A one- to six-character decimal entry indicating the number of bytes in a record.

**FFBY**

A one- to six-character decimal entry indicating the first free byte in the last block of the file.

**EOF**

A one- to ten-character decimal entry indicating the end of file block number.

**DISK ADDR**

A one- to ten-character octal entry indicating the starting address of the file on the disk.

The total number of files printed, as well as the total number of disk sectors used by these files, are accumulated and printed by file-type.

*n*

Sum of the FSIZE field for all the files of a *file-type* requested by a parameter of the LIST command.



*m*

Decimal number that represents the total number of files requested by a parameter of the LIST command.

If, during the search of the system file directories, file catalogs are found to contain no files, this information is saved until all the parameters of the LIST command have been completed.

**Restriction** You cannot print /EX file information for licensed fonts, logos, or secured files.

---

### LIST /SORT

---

Use this command to sort a list of files by file-type to print. Sorts up to 3,600 filenames. On large disk volumes, sort files by their file-type.

**Syntax** LIST [*disk-id*][*file-id*]/SORT, *filename*[.*file-type*]

**Parameters***disk-id*

Identifies the system disk (DP0:, DP1:, DP2:, or DP3:) containing the *file-ids* to be printed.

*file-id*

Specifies the file as *filename.file-type*. If you do not specify one, the default is all the files in the directory. You can use masking.

*filename*[.*file-type*]

Specifies a disk file containing the alphabetically sorted list of tape files. The default *file-type* is .TMP.

**Example**

LIST DP0: \*.SYS/SORT, SYSFIL.TMP

This command creates a file called "SYSFIL.TMP" on the DP0: disk. The filenames in SYSFIL.TMP are sorted in alphabetical order, and SYSFIL.TMP is printed. If the printing of the sorted records is interrupted, then the file SYSFIL.TMP lists only the printed filenames.

## LOGON

Use this command to log on to the LPS at levels 1, 2, 3, 4, or 5 and to change the logon passwords.

**Logon level** Levels 1 through 5.

**Syntax** LOGON *logon-level* [*password*]

**Parameters** *logon-level*

Specifies the logon level as 2, 3, 4, or 5.

*password*

1- to 15-character string which consists of any characters (including leading, nested, or trailing blanks) on the keyboard. You can change the default passwords.

**Level assignments** Table 1-13 shows the assignments for each logon level.

Table 1-13. **Logon levels and default passwords**

Logon level	Assignments
1	None
2	(null)
3	Reserved for Xerox analysts
4	Reserved for Xerox service representative
5	SECURITY

**Changing passwords** A user already logged into class level 2, 3, 4, or 5 can change the password for that level by keying in LOGON with no parameters. The system prompts for the new password.

If you change a password during a print job, the change takes effect with the next print job.

**Restrictions** The default passwords are uppercase. The passwords you create may be uppercase, lowercase, or mixed case, but in order to use the recommended entry form, passwords must be uppercase. All passwords are case sensitive: the system recognizes a password only if it is entered correctly in content and case.

The percent sign (%) character is not valid for passwords.

For additional information on file access, refer to Table 1-20 in the "RCU" section of this chapter.

**Change logon levels** You must always use a password to access a logon level higher than the current level.

You may not need a password to move from a higher level to a lower level, however, you must use a password to move from level 5 to level 3 or 4

**CAUTION:** When you enter the LOGON command with the logon level and the password on one line, the password is captured in the DCU log if it is active. For greater security, enter LOGON and the security level on one line, then wait for the system to prompt you to enter the password. In this case, the password is not captured on the DCU log.

---

**MOVE *n* [FILES | BLOCKS]**


---

Use this command to physically position a tape or cartridge by a specified number of files or blocks either forward or backward. You can use MOVE during job processing, but you must stop input first with STOP I. If no job is active, you can enter the command directly.

This command operates on the tape or cartridge device that has been assigned to the TAPE keyword using the SUBSTITUTE DEVICE command.

**Logon level** Levels 1 through 5.

**Syntax** MOVE *n* [FILES|BLOCKS]

**Parameters** *n*

A decimal integer in the range -32768 to +32767. A positive number indicates forward movement and a negative number indicates backward movement. The default is 1.

**FILES**

Indicates positioning by files. A positive *n* moves the tape forward over *n* tape marks unless end-of-volume (EOV) terminates the tape movement. A negative *n* moves the tape backward over *n* tape marks unless BOT terminates the tape movement. File positioning is the default.

**BLOCKS**

Indicates positioning by blocks. A positive *n* moves the tape forward over *n* interblock tape gaps unless EOT or a tape mark terminates tape movement. A negative *n* moves the tape backward over *n* blocks unless BOT or a tape mark terminates tape movement.

**Restrictions** If a job is in process when you invoke MOVE, the system requests a CONTINUE I to resume.

Whenever a tape move is halted by reaching a tape mark, the tape is always positioned at the block one greater than the absolute block number of the tape mark. This is done regardless of the direction of the move.

MOVE BLOCKS is not allowed if ABNORMAL SECURITY=YES is coded in the job descriptor library of the report being processed.

**Recommendation** Use REWIND rather than TAPE [CARTRIDGE] REWIND after you issue the MOVE command.

---

**MOVE #*entry-string***


---

Use this command to reorder entries in the queue. This command processes entries in the left to right order. You can reorder entries that have a queued or held status. Active entries have already been passed to output so you cannot reorder them.

**Syntax** MOVE # *entry-string* [BEFORE|AFTER] #*entry*

or

MOVE # *entry-string* [TOP|BOTTOM]

**Parameters** #*entry-string*

Specifies an entry in the #*n*, #*n-m*, or #( *n-m,o,p-r*) format.

#*n*

Specifies a single entry. Must be an integer between 1 and 65,535.

**#n-m**

Specifies one set of multiple entries. n and m must be integers between 1 and 65535. All entries between n and m inclusive are passed to output.

 **#(n-m,o,p-r)**

Specifies multiple sets of entries. Values must be integers between 1 and 65535. All entries n to m inclusive, o, and p to r inclusive, are passed to output. Parenthesis are required around the string. Commas without spaces are required between string elements.

**#entry**

Specifies a single entry. Entry must be an integer between 1 and 65535. The entry-string entries are placed before or after this entry.

**BEFORE**

Places the entry-string entries before the *#entry*.

**AFTER**

Places the entry-string entries after the *#entry*.

**TOP**

Places the entry-string entries at the beginning of the active queue.

**BOTTOM**

Places the entry-string entries at the end of the active queue.

**Restrictions**

To successfully move an entry in the queue, it must have a status of either queued or held. If you specify multiple entries to be moved, they must all have the same status. For example, all entries must be queued or all held; you cannot intermix them.

Moving an entry in the report queue may not necessarily imply the order that it is scheduled because of its position in the queue. For example:

- If the schedule mode is by resource, moving one or more entries to the TOP of the report queue only ensures that they are scheduled next within the context of their attribute type, such as the primary.
- If the schedule mode is by order received, entries are scheduled based on their position in the queue.

For more information on how to use the MOVE # command refer to the *XEROX 4850/4890 HighLight Color LPS System Programming and Administration Guide*.

---

## OCS

---

Use the OCS (operator communications subsystem) command to display system version information.

**Logon level** Level 1.

**Syntax** OCS

The system displays the information shown in figure 1-9 but not necessarily in the format shown.

Figure 1-9. **System version display**

```
System version Vx.x x.x;
OCS version xxxxx;
Command table version xxxx;
System class 4;
Disk ID xxxxxxxxxxxxxxxxxxxx
```

---

## OFFLINE

---

Use this command to move the LPS from online to offline status. After you enter this command, online input data may not be transmitted to the LPS.

**Logon level** Levels 1 through 5.

**Syntax** OFFLINE

---

## ONLINE

---

Use this command to prepare the printer for online direct channel attachment data transmission. The system displays:

HostNrdy

in the upper right corner of the screen until you enter a START command.

**Logon level** Levels 1 through 5.

**Syntax** ONLINE

---

## PQA

---

Use this command to run Print Quality Adjustment (PQA) so the loaded inks are ready for printing.

**Logon level** Levels 1 through 5.

---

### PQA

---

Use this command to display current settings.

**Syntax** PQA

**PQA CONTINUE or STOP**

---

Use this command to initiate PQA with current or operator determined settings and parameters.

**Syntax**

PQA [CONTINUE|STOP] [,*papertray*],*cluster*] [,S],D]

**Parameters****CONTINUE**

Resumes printing the job automatically after PQA completes. On dual stacker systems, do not use automatic tray switching with this option.

**STOP**

Does not resume printing the job after PQA completes. The printer cycles down to allow you to remove PQA scratch sheets or to reload the correct stock for the print job. STOP is the default for the first PQA run after a sysgen.

*papertray*

Specifies a number from 1 to 4 indicating the tray you want to use for PQA. The default tray after a sysgen is 1.

*cluster*

Specifies the cluster with the stock to use for PQA. Must be a valid clustername and must have current trays defined.

**S**

Specifies simplex printing of PQA scratch sheets.

**D**

Specifies duplex printing of PQA scratch sheets. Duplex is recommended, and is the default after a sysgen.

**PQA CANCEL**

---

Use this command to cancel entered, but not yet run, PQA command.

**Syntax**

PQA CANCEL

Refer to the *Xerox 4890 HighLight Color LPS Operator Guide* for more information on the PQA command.

**PQA START**

---

Use this command to initiate PQA using current settings.

**Syntax**

PQA START

**PROBLEM**

---

Use this command to log system problems and generate the six-digit dispatch code requested by the LPS service representative. Respond to the prompts that display.

**Logon level**

Levels 1 through 5.

**Syntax**

PROBLEM

---

## PSC

---

The LPS automatically executes PSC (printer subsystem controller) each time you boot the LPS. PSC initializes the printed wire board assemblies (PWBA) and loads the software they execute during printing operations. In general, the automatic PSC at system start up is the only PSC needed. If the LPS displays a board error, this command can reinitialize any PWBA except the SCSI PWBA. The SCSI PWBA is initialized during the booting of the system and cannot be initialized using this command.

**Logon level** Levels 2 through 5.

**Syntax** The syntax can be entered in two ways: single device initialization and multiple device initialization.

For single device initialization:

PSC [CSI|RIP [0|1|2|3]|AIP|CRIB|SCSI]

For multiple device initialization:

PSC [CSI],[RIP [0|1|2|3]],[AIP],[CRIB],[PSC],[SCSI]

**Parameters** No parameters entered  
Prepares all configured PWBA boards except the SCSI board for LPS operations.

CSI  
Prepares the CSI board for LPS operations.

RIP:0:1:2:3  
Prepares the specified RIP boards for LPS operations.

AIP  
Prepares the AIP board for LPS operations.

CRIB  
Prepares the CRIB board for LPS operations.

SCSI  
Displays the current status and firmware level of the SCSI board.

Should you encounter an error, refer to the *Xerox 4850/4890 HighLight Color LPS Message Guide*.

---

## PSTATUS

---

Use this command or press <PRINTER STATUS> to verify the status of the printer.

**Logon level** Levels 1 through 5.

**Syntax** PSTATUS

**Restrictions** Expect a delay of a few seconds when you request the status during printing because displaying status information is a lower priority than printing operations. Specifically, responses are delayed until end-of-report processing is reported.

If you invoke this command when the printer is not cycling, tray status displays according to the current feed command. The next page to print is not considered. For example, if the current feed command is a cluster command with mixed tray (paper)

sizes, the cluster tray that displays may not be the cluster tray with the correct paper for the currently active job.

If the feeder is switching trays frequently, the status display may show falsely that no trays are ready (all are in use).

If the communication between the printer and the system controller is lost (because the printer is powered off, in diagnostics mode, or due to a system error) the PSTATUS display may be inaccurate.

Figure 1-10. **Printer status display**

```

Paper trays:                                     Output Trays:
    Feed Tray                                     SELECT: AUTO
    Tray 1 8.5 X 11      IN USE      Tray 1 IN USE
    Tray 2 8.5 X 14      READY
    Tray 3 8.5 X 11      READY
    Tray 4 8.5 X 11      READY

Stitcher:      READY

Xerographic Mode:  HIGHLIGHT      Dry Ink Color: RED

Attention light:  ENABLED, STEADY

Blade:  DISABLED

Darkness          (Lightest=1, Darkest=7)
    Black 4
    Color 4

```

Figure 1-11. **Printer status display with bypass transport**

```

Paper trays:                                     Output Trays:
    Feed Tray                                     SELECT: AUTO
    Tray 1 8.5 X 11      IN USE      Tray 1 IN USE
    Tray 2 8.5 X 14      READY
    Tray 3 8.5 X 11      READY
    Tray 4 8.5 X 11      READY

Bypass Transport:  READY

Xerographic Mode:  HIGHLIGHT      Dry Ink Color: RED

Attention light:  ENABLED, STEADY

Blade:  DISABLED

Darkness          (Lightest=1, Darkest=7)
    Black 4
    Color 4

```



The following is a description of the fields of the displays

**Feed tray**      Feed  
                          Shows the modes for the feed trays.

Table 1-14. **Feed modes**

Status display	Meaning	LPS status
MAIN	The tray designated MAIN is the feed tray.	N/A
AUTO	Automatic switching between feed trays.	
AUX	The auxiliary tray is the feed tray.	N/A
tray number	The specified tray is the feed tray.	N/A
cluster name	The trays assigned to the cluster are the feed trays.	N/A

Tray #  
                          Shows the feed trays configured for the system.

Size  
                          Shows the size of paper loaded in the feed tray.

Status  
                          Shows the status of each feed tray.

Table 1-15. **Feed trays status**

Status display	Meaning	LPS status
Ready	Tray is in a ready state.	Ready
In Use	Tray is currently being used.	Selected
Not Ready	Tray is in an unusable state.	Busy Jammed Broken Empty

**Output trays**      Select:  
                          Shows the mode selected for the output tray.

Table 1-16. **Output Modes**

Status display	Meaning	LPS status
AUTO	Automatic selection of output tray.	N/A
tray number	Tray for output specified by operator.	N/A
TRAY	Sample specified by operator.	N/A

Tray #  
                          Shows the output trays configured for the system.

## Status

Shows the status of each output tray.

Table 1-17. **Output trays status**

Status display	Meaning	LPS status
Ready	Output tray can receive sheets. If the printer is in SEL AUTO mode, this tray is selected when the other tray becomes full.	Ready Empty Ready
Empty Me	The printing system is in SEL AUTO mode, and the output tray can receive sheets. However, it is not completely empty and is not selected automatically.	Ready
Not Ready	Output tray is not ready.	Broken Offset Failure
Full	Output tray is completely full. If the tray is selected via SEL <i>n</i> and CONTINUE is pressed, up to 11 sheets are delivered to the tray before the tray full condition causes the LPS to cycle down.	Full
In Use	Sheets are currently being delivered to this tray.	Selected
Jammed	Output tray is jammed.	Jammed

**Stitcher** Displays the status for the stitcher.Table 1-18. **Stitcher status**

Status display	Meaning	LPS status
Ready	Stitcher is ready to stitch.	Able To Stitch
Out of Wire	Stitcher is ready to stitch but is out of wire.	Out Of Wire
Fault	Stitcher is not ready to stitch.	Unable To Stitch
Low Wire	Stitcher is ready to stitch but wire supply is low.	Able To Stitch

**Bypass Transport** Displays the status for the bypass transport.Table 1-19. **Bypass transport status**

Status display	Meaning	LPS status
Ready	Stitcher is ready to stitch.	Able To Stitch
Out of Wire	Stitcher is ready to stitch but is out of wire.	Out Of Wire
Fault	Stitcher is not ready to stitch.	Unable To Stitch
Low Wire	Stitcher is ready to stitch but wire supply is low.	Able To Stitch

**Xerographic Mode** Displays the status for the xerographic mode.

Table 1-20. **Xerographic mode**

Status display	Meaning	LPS status
Highlight	Printer is currently printing in highlight color mode.	N/A
Black	Printer is not currently printing in highlight color mode.	N/A

**Dry Ink color** Displays the color of dry ink currently in the printer.

**Attention blade** Displays that the spots blade is enabled or disabled.

**Darkness** Displays the range of darkness possible and the current setting of darkness for both color and black.

## PURGE

Use this command to overwrite deleted files with a meaningless pattern. Any deleted file (including sensitive files) may still be accessed by a system knowledgeable user until the files are overwritten. PURGE also erases the contents of the print file.

**Logon level** Levels 1 through 5. May be restricted with RCU.

**Syntax** PURGE [D|P|F|*disk-unit #*]

**Parameters** D

Purges the entire disk including the print file.

P

Purges only the print file.

F

Purges the entire disk excluding the print file.

*disk-unit #*

Purges the specific disk.

**Restriction** If the system was not rebooted after turning Data Capture on following the last system generation, the system may hang during PURGE and require a reboot. Prevent this situation by rebooting the system immediately after turning Data Capture on, or by turning Data Capture off before running PURGE and turning Data Capture back on when PURGE has completed.

## RCU

---

	<p>Use this command to restrict the use of system commands and tasks (PDL, FDL, OSDS, and so on) to the specified logon class. The system commands and task names are restricted by relating them to the classes previously defined in the LOGON command. To use a specific system command, you must be logged on to a class level equal to or greater than the user-defined (or default) restriction level.</p>
<b>Logon level</b>	Levels 2 through 5. May be restricted to higher logon classes with RCU.
<b>Syntax</b>	RCU <i>command</i> [, <i>class</i> ]
<b>Parameters</b>	<p><i>command</i> Specifies the command to be authorized or restricted. Some commands cannot be restricted.</p> <p><i>class</i> Specifies the lowest logon class allowed to use the command. If omitted, the current class level for that command displays.</p>
<b>Restrictions</b>	<p>You cannot restrict the use of a command to a level higher than the current logon class.</p> <p>You cannot change the class level of a command unless you are authorized to use that command.</p> <p>Table 1-20 shows the classes of file access available. The following are descriptors for the fields in the table.</p> <p>Record editing Specifies whether records in a file may be edited.</p> <p>File delete Specifies whether a file may be deleted with an editor or OSS DELETE command.</p> <p>File copy to disk Specifies whether a file may be copied to system disk with an editor or OSS COPY command.</p> <p>File secure Specifies limited access to a file to a logon level 5 user only.</p> <p>User file Specifies whether a file can be backed up using COPY TAPE/CARTRIDGE WRITE LABEL ALL or FLOPPY SAVE ALL.</p>

Table 1-20. File access classes

Function type	Record editing					File delete					File copy to disk					File secure	User file
	Logon level					Logon level					Logon level					Logon level	
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	5	
CMD		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•
CME							•	•	•	•	•	•	•	•	•	•	•
DAT			•	•				•	•				•	•			
FIS							•	•	•	•	•	•	•	•	•		
FNT							•	•	•	•	•	•	•	•	•	•	•
FRM							•	•	•	•	•	•	•	•	•	•	•
FSL		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•
ICT							•	•	•	•	•	•	•	•	•	•	•
IDR							•	•	•	•	•	•	•	•	•	•	•
IMG							•	•	•	•	•	•	•	•	•	•	•
IPF							•	•	•	•	•	•	•	•	•		
IPM								•	•				•	•			
ISL							•	•	•	•	•	•	•	•	•	•	•
JDL							•	•	•	•	•	•	•	•	•	•	•
JSL		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•
LGO							•	•	•	•	•	•	•	•	•	•	•
LIB*		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•
LOG								•	•				•	•	•	•	
MSC	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
OSD									•				•	•			
PCH		•	•	•	•		•	•	•	•	•	•	•	•	•		
PDE							•	•	•	•	•	•	•	•	•	•	•
SAF													•	•			
STK							•	•	•	•	•	•	•	•	•	•	•
SYS			•	•				•	•				•	•			
\$Y\$																	
TMP	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•
TPF								•	•				•	•			
TSK													•	•			
TST			•	•				•	•			•	•	•	•	•	•
XCS							•	•	•	•	•	•	•	•	•		•

\*Some .LIB files may be edited; others cannot.

---

**REALLOCATE**


---

Use the REALLOCATE command to set the size of the print file on the system disk. The print file size should be at least 400 cylinders. The print file is assigned 400 cylinders during system generation, but you may need to increase its size in order to meet your installation requirements. You can increase or decrease the print file size any time the system is idle.

If you enter a parameter, you will not receive system prompts during the reallocation process. The warning messages which inform you not to disturb the process still display. The size of the current print file is not displayed. The system informs you of the number of cylinders allocated and the number of cylinders actually usable by input and output. The system maintains and updates a permanent record of all unusable cylinders. These unusable cylinders are unavailable until the disk is reformatted during a full system generation. If the print file size is less than 400 cylinders or is too small for the job, the engine cycles up and down. This is not desirable.

**Logon level** Levels 2 through 5.

**Syntax** REALLOCATE [*ddd*?[!]] [,*nnn*?[!]]

**Print file parameters** No parameters entered  
Starts the interactive process.

*ddd*

Specifies the cylinder size for the new print file. If *ddd* is larger than the largest print file that REA can make, it makes the largest size print file it can. Must be equal to or greater than the minimum configuration for your system.

?

Creates up to the default size for the print file if one does not exist. If a print file already exists, a print file of the same size is created. The default size is 400 cylinders. This command is specifically for use in the SYSGEN.COMD file.

!

Creates a default size print file even if one already exists.

**Raster disk file parameters**

The Raster disk file is used to hold pages that the system cannot process through the character dispatcher/image generator circuits in normal processing time. When a line has too many characters and it takes longer than normal for the Character dispatcher/image generator process, the whole page is made into an image file. Print file data is sent through the Character dispatcher/image generator, and the image files stored in the Raster disk file are sent through the graphics video generator circuits of the controller. The process does not require the page sync and line sync as is required for normal character dispatcher/image generator processing. This file will also hold pages in the image format if multiple copies are required.

*nnn*

Creates a file size of *n* cylinders, subject to a minimum or maximum value. The default size of the raster disk file is the cylinder value which equates to 32,768 sectors; the minimum size is also the cylinder value. If *nnn* is specified as 0, the current raster disk file size will be deleted, but no new file will be created. Any other value of *nnn* less than minimum size results in an error message and no reallocation of any files.

?

Creates the file only if it does not exist and creates a default size.

!

Recreates the default size whether one exists or not.

**Default**

The default (and minimum) size of the raster disk file is the cylinder value which equals 32,768 sectors.

**Recommendations**

Manage cylinders so that the required minimum print file sizes are maintained in order to assure printing without input or output processing lock-up. REALLOCATE processing enforces the minimum print file sizes shown in table 1-21.

Table 1-21. **Minimum print file sizes**

Graphic configuration	10 MHz-182 MB cylinders	10 MHz-380 MB cylinders	SCSI All
No graphics	65	65	65
GVG or GVG-2	425	275	275

**Restrictions**

Reallocation may terminate with the message:

```
PRINT FILE TOO SMALL.
```

The message indicates that the print file has not been created because there is not enough available space. Correct this problem by deleting any unnecessary files on the Print File Disk; then rerun COMPRESS and REA. The Print File Disk is DP0: if the system is a single disk system, or DP1: if the system is a multi-disk system.

If  $n$  is 0, the current raster file size is deleted, but no new file is created. A value less than the minimum size results in an error message and reallocation does not occur.

You can use the following command to prevent local density fixes on your LPS:

```
REALLOCATE ?, 0
```

The REALLOCATE interactive dialogue does not allow you to change the size of the raster file.

Do not interrupt the reallocation process: interruption can make sections of the disk unusable until the next completed reallocation.

The *ddd* value should be at least 400. A high *ddd* value helps prevent disk saturation. The *ddd* value must also leave at least 50 cylinders of free space on the disk.

Refer to the *Xerox 4850/4890 HighLight Color LPS System Programming and Administration Guide* for more information regarding the use of the REALLOCATE command.

## REPORT

---

Use this command to generate customer billing reports, system activity reports, and user accounting reports. The report header includes the system type, time, date, customer ID (disk ID), and the machine ID.

- REPORT USER provides user and system activity information for the specified user account. The customer billing report summarizes billing information by retrieving billing meter information from the printer's non-volatile memory (NVM).
- REPORT ACTIVITY provides system activity information for all user accounts. The system activity report summarizes system activity by retrieving information from the system activity log file.
- REPORT BILLING provides page count information on:
  - Total print job output
  - Subtotal output produced by the black and highlight xerographic modes
  - Total output produced by the diagnostic mode.

The user accounting report summarizes the user accounting information by retrieving information from the user accounting log file.

The customer billing, user accounting, and system activity reports print in the system portrait font P0612\$.FNT by default. You can specify another font by creating a DFLT.SYS file which consists of any or all of these records:

BLRPTF = *font-id* (specifies customer billing font)

ACRPTF = *font-id* (specifies activity report font)

SARPTF = *font-id* (specifies system activity font).

The font specified must be fixed pitch, portrait, and 12 point or smaller.

You can output the three reports as follows:

- Display report on the keyboard/display.
- Print report.
- Display and print the report.
- Print report and clear the information in the log files (system activity and user accounting reports only).
- Display report, print report, and clear the information in the log file (system activity and user accounting reports only).

Successful delivery includes any user-specified point of delivery, and any dynamically diverted sheets. Dynamically diverted sheets are those diverted to the sample tray because of an output jam and transparencies diverted to the sample tray. Sheets purged after restart are not counted.

**Logon level**      Levels 1 through 5.



**Syntax** REPORT [ACTIVITY|USER] [,PRINT] [,DISPLAY] [,CLEAR]  
or  
REPORT [BILLING] [,PRINT] [,DISPLAY]

**Parameters** BILLING, ACTIVITY, USER  
Required parameter that specifies the report type.

DISPLAY  
Displays the report on the system controller display.

DISPLAY, PRINT  
Prints the report.

CLEAR  
Resets system values to zero after printing or displaying the report.

---

### Machine serial number

After you run a full sysgen or reformat the system disks, the first time you enter the REPORT command, the 4890 prompts you to enter the 9-character machine serial number located on a silver metal plate inside the front right-hand door of the printer. If your entry is valid, the information is saved in the file MCHID\$.SYS. You receive a prompt only once for the machine serial number. If the file MCHID\$.SYS is not on the system, you receive a prompt for the machine serial number each time you run the REPORT utility.

**Syntax** AAAnnnnnn

**Parameters** AAA  
Specifies the product code. The value can be any uppercase alphanumeric character.

nnnnnn  
Specifies the unique serial number for the machine. The value can be any numeric character.

---

## RESET

Use this command to stop all system processing activity. RESET removes all print jobs from the job queue and cycles any pages in the printer paper path to the print tray. When you display the queue, all of these reports show a status of RESET. The system remains in an idle state until you enter the next command.

If the input device is tape, the tape remains positioned as it was when the RESET command executed.

Due to the powerful and abrupt nature of the RESET command, you may wish to restrict use of this command with RCU to levels 2 and 5. Refer to the "Restrict file access and command usage" section of chapter 4 for more information.

**CAUTION:** RESET can cause substantial data loss. Check with your system administrator before entering the RESET command.

To terminate a job before it completes, enter the ABORT command rather than the RESET command.

**Logon level** Levels 1 through 5.

**Syntax** RESET

- Restrictions** If RESET executes during job processing, accounting data is recorded in the system accounting file only for reports completely processed and printed.
- You may need to enter HIP START after the system has fully reset to resume processing and printing jobs in the HIP queue.
- For systems configured with a stitcher/stacker, if RESET executes while a job is in process, the system holds a few sheets in the stitching tray. These sheets are released at the start of the next job.

---

## REVIEW

---

- Use this command to review a specified file, each file of a specified file type, a specified set of files, or a specified set of file types with the option to delete each file. The filenames display one at a time. You can advance to the next file by pressing <ENTER>, delete a file by entering D, or exit the display process by entering the X command.
- Logon level** Levels 1 through 5.
- Syntax** REVIEW [*disk-id*] [*file-type|file-id*][,*file-type*,...],*file-id*,...]
- Parameters**
- disk-id*  
Specifies the system disk (DP0:, DP1:, DP2:, DP3:) that contains the specified directory.
- file-type*  
Specifies the file-type of the file to be reviewed.
- file-id*  
Specifies the file as *filename.file-type*. (Masking can be used.)
- Examples**
- This command is not order sensitive. Filenames can be listed in any order. They can be combined with file types, in any order.
- REVIEW DP0: CMD
- This command allows you to review each file in DP0: that has a file type of CMD.
- REVIEW TEST.FRM
- This command allows you to review the file TEST.FRM no matter on which disk it resides.
- REVIEW TEST.FRM,CMD
- This command allows you to review the file TEST.FRM and then each file that has a file type of CMD no matter on which disk they reside.
- REVIEW CMD,TEST.FRM
- This command allows you to review each file that has a file type of CMD and then the file TEST.FRM no matter on which disk they reside.
- Restrictions**
- To delete a file from the system, you must have the logon level required.
- You cannot delete any filename containing a period or dollar sign. The system displays the following message:
- \*PROTECTED\*
- Any other response (for example, pressing the space bar) saves the file and the next file name being displayed.

---

## REWIND

---

When a tape or cartridge job completes (including jobs with the single report option), rewind the tape or cartridge by either entering this command or by taking the drive offline and performing a manual rewind.

This command operates on the tape or cartridge device that has been assigned to the TAPE keyword using the SUB DEV command.

Use REWIND rather than TAPE REWIND after issuing the MOVE command. (The MOVE command followed by the TAPE REWIND command can result in the misleading message, "Tape went offline during operation." In this case, you should ignore the message.)

**Logon level** Levels 1 through 5.  
**Syntax** REWIND

---

## RNAME

---

Use this command to change the name of a file. Rename files one at a time.

**Logon level** Levels 1 through 5.  
**Syntax** RNAME *old-file-id new-file-id*  
**Parameters** *old-file-id*  
 Specifies the current *filename*.  
*new-file-id*  
 Specifies the *filename.file-type* to replace the *old-file-id*.  
**Restriction** If you specify only the *filename*, the file-type remains the same.

---

## SAMPLE

---

Use this command to request a sample print while a job is printing, or to print a form, logo, image file, or font set when the system is idle. Each sample print of graphics provides a descriptor page. When a job is printing, the next page to be printed is delivered to an output tray and another copy to the sample tray. Use samples to check the job's print quality and alignment. If the system is idle, you must identify the file that you want to sample.

**Logon level** Levels 1 through 5.  
**Syntax** SAMPLE *filename<sub>1</sub>*|*mask* [.FRM|.FNT|.LGO] [,D] [,*copies*][,INKS=*ink-name*(*ink-name*[,*ink-name*,...])] |*filename<sub>2</sub>.file-type<sub>2</sub>*  
**Parameters** *filename<sub>1</sub>*  
 Specifies the name of the file you want to sample.  
*mask*  
 A generic filename that selects multiple files for printing. Within the mask, one or more question marks (?), asterisks (\*), or a combination of both are substituted for valid characters. An asterisk or question mark equals any character. If the last character of the mask is an asterisk, characters in subsequent positions equal the asterisk. If the

last character of the mask is a question mark, files with names longer than the mask are not sampled.

D

Duplex prints the file or files on both sides of the page. The default is simplex unless you are sampling multiple files.

*copies*

Specifies the number of copies to print. The default is 1 copy.

INKS

Specifies use of the following inks to sample print the files.

*ink-name*

Specifies the ink to use to sample print the files. If you specify more ink-names than listed in the file's ink list, the extra *ink-names* are ignored. *Inkname* must be specified within single quotes. Each *ink-name* may be up to 72 characters long. The default *catalog-name* is the system default ink catalog. The default *palette-name* is the system default palette.

*filename<sub>2</sub>*

Names the file that lists the inks to override the corresponding inks in the printed file's ink list.

*file-type<sub>2</sub>*

Must be .TMP or .MSC.

When you use SAMPLE\*.FRM to print multiple forms, the form name prints in the upper right corner of the form. Regardless of the form orientation, the name prints portrait.

The override ink list is specified for multiple font, form, or logo file samples to prevent primary color mismatch conditions.

### **SAMPLE *filename<sub>1</sub>*.TST**

---

Use this command to print up to 32,767 copies of a form.

**Logon level**

Levels 1 through 5.

**syntax**

SAMPLE *filename<sub>1</sub>*.TST[,D] [INKS=[*ink-name*](*ink-name* [,*ink-name*],...)]*filename<sub>2</sub>*.*file-type<sub>2</sub>*]

**Parameters**

*filename<sub>1</sub>*

The name of the form file in the FRM library.

TST

Specifies multiple copies of the form file.

D

Specifies duplex printing.

INKS

Specifies the following inks to override the corresponding inks specified in the printed file's ink list. The following inks are specified in the command line or in the *filename<sub>2</sub>*.*file-type* file.

*ink-name*

Specifies inks that override the corresponding inks listed in the printed file's ink list. You can omit *ink-names* in this parameter, but a comma must replace each *ink-name* you omit in order to maintain the relative position of the following ink references. If you specify more *ink-names* than are listed in the file's ink list, the extra *ink-names* are ignored.

You must specify the *ink-name* within single quotes. Each *ink-name* is up to 72 characters long. The default *catalog-name* is the system default ink catalog. The default *palette-name* is the system default palette.

*filename<sub>2</sub>*

Names the file that lists the inks to override the corresponding inks in the printed file's ink list.

*file-type<sub>2</sub>*

Must be .TMP or .MSC.

The specified form prints repeatedly until you issue the STOP or ABORT command.

If you entered SELECT *n*, SAMPLE, the copies are delivered to an output stacker tray. Otherwise, the copies go to the sample tray.

**Examples**

To override the corresponding inks specified in the ink list of a color form:

```
SAM COLOR.TST,INKS=('XEROX BLUE','BLACK')
```

or

```
SAM COLOR.TST,INKS=NEWINK.TMP
```

where NEWINK.TMP file specifies the following inks:

```
'BLUE',
```

```
'XEROX.XEROX BLUE',
```

```
'XEROX.XEROX.LIGHT GRAY',
```

**SAMPLE [*filename* | *mask*].IMG**

Use this command to sample print .IMG files. The extended options describe the horizontal and vertical positioning, orientation and scaling of the image to print. For each graphic you specify, the SAMPLE command prints two pages: the first page is an image; the second is a descriptor page containing metric data.

**Logon level**

Levels 1 through 5.

**Syntax**

```
SAMPLE [filename1 | mask][.IMG][,D][,copies][,([vpos[in|cm |dots]),[hpos[in|cm|dots]]][[L | P][,n[/d]]][,INKS = ink-name |(ink-name[,ink-name],...)| filename2.file-type2]
```

**Parameters***filename<sub>1</sub>*

Identifies the graphic to be sampled.

*mask*

A generic *filename* that selects multiple graphic files. Within the mask, one or more question marks (?), asterisks (\*), or a combination of both are substituted for legal alphanumeric characters. The name of each .IMG file on the disk is compared to the mask and a sample of the graphic is printed for each equal comparison. In *filename* comparison, an asterisk or question mark equals any character. If the last character of the mask is an asterisk, characters in subsequent positions equal the asterisk. If the last character of the mask is a question mark, files with names longer than the mask are not sampled. Samples are automatically sent to the output stacker tray.

**D**

Specifies duplex printing. Prints the graphic image on the front of the page, and the statistical information of the graphic on the back of the page. The default is simplex.

*copies*

Specifies the number of copies to print. The default is 1 copy.

*vpos*

Specifies the vertical position of the top edge of the graphic, relative to the physical page origin in *dots*, centimeters (*cm*), or inches (*in*), specified as a decimal number with up to three digits to the right of the decimal point. If you do not specify units, inches are assumed. The default is top left.

*hpos*

Specifies the horizontal position of the left edge of the graphic relative to the physical page origin. The form of this specification (*cm*, *in*, or *dots*) is the same as for *vpos*. The default is top left.

## L and P

Specifies a position reference orientation (landscape or portrait) for the graphic. The file header may specify the default orientation; otherwise, the default is portrait.

*n/d*

Specifies the reference scale factor. Each parameter, *n* and *d*, must be an integer between 1 and 8 inclusive, resulting in a reference scale factor between 1/8 and 8 inclusive. The reference allowing a reference scale factor is multiplied with that specified at the time the graphic was digitized, and the product is rounded to the nearest integer in the range 1 to 8. That integer becomes the effective scale factor with which the graphic is imaged. If the reference scale factor specified in the SAMPLE command is too large (so that the graphic exceeds the page size), the specified reference scale factor is flagged with an asterisk on the descriptor page and a reference scale factor of 1 is used.

## INKS

When followed by *ink-names* or a *filename*, these inks override the corresponding inks specified in the printed files' ink list. These inks may be listed in the command line or in *filename<sub>2</sub>.file-type<sub>2</sub>* file.

*ink-name*

Specifies inks that override the corresponding inks in the ink list of the form or logo files. If you omit an *ink-name* in the list, you must use commas to maintain the relative positioning of the remaining ink references. Extra *ink-names* are ignored. You must specify the *ink-name* within single quotes. Each *ink-name* may contain up to 72 characters. The default *catalog-name* is the system default ink catalog. The default *palette-name* is the system default palette.

*filename<sub>2</sub>*

Names the file that lists the inks to override the corresponding inks in the printed file's ink list.

*file-type<sub>2</sub>*

Must be .TMP or .MSC.

The override ink list is specified for multiple graphic file samples to prevent primary color mismatch conditions.

## Restrictions

All sample jobs, except form samples, are formatted for printing using the default paper size specified at system generation. (Form samples are formatted using the paper size specified by the form if one is specified, or the default paper size specified at system generation.)

You can sample an image only if the default paper size is larger than the graphic image.

When sampling multiple forms or color palettes using a wildcard specification, make sure that the FONTS command setting is 67 or higher, and that the FORMS command is set to 2. This prevents errors resulting from insufficient memory.

A sample font prints only in black and white. Do not add color parameters to a sample command that specifies a font file.

SAMPLE with parameters is not available during HIP printing.

You cannot print a sample if the document has fewer than three pages or if ABNORMAL SECURITY=YES is coded in the job descriptor library of the report being processed.

If you sample multiple font, form, or logo files without specifying an override ink list, numerous mismatch conditions may occur.

Your system must be equipped with the GVG2 processor hardware option in order to sample image files.

The system breaks large sample jobs (more than approximately 1,000 sampled files) into multiple print jobs.

Do not delete SAMCM1.CME. It is required for sampling files.

When Tape or Disk jobs are running, the SAMPLE command with parameters is not allowed.

For non-English sysgens, use of the translated SAMPLE command with optional position information does not work. (e.g. SAM XVGHO.IMG,,,(.5in, .5in) Please use the English command.

Use the ink override option to prevent a job abort of the sample print caused by an ink mismatch condition. Append to the SAMPLE command INK= or INKS= followed by '*ink-name*'[, '*ink-name*'] or followed by *filename.file-type*.

```
SAMPLE ABCD.FRM,,,2,INK='XEROX BLUE'
SAMPLE ABCD.LGO,D,10,INKS=TESTINK.TMP
```

TESTINK.TMP contains the following:

```
'DEFAULT.PICTORIAL.LIGHT GRAY'
'DEFAULT.PICTORIAL.MODERATE PINK'
'DEFAULT.PICTORIAL.RED'
'DEFAULT.PICTORIAL.BLACK')
```

When you specify INKS, followed by a list of *ink-names* (an ink list), be sure to enclose the list in parentheses (for example, SAMPLE ABCD.IMG,INKS=('LIGHT BLUE', 'DARK BLUE')).

## SCALE

---

	Use the SCALE command to convert files from 300 spi to 600 spi.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	SCALE <i>input-filename.file-type<sub>1</sub></i> [ <i>output-filename.file-type<sub>2</sub></i> ] [/a b o 5]
<b>Parameters</b>	<i>input-filename</i> Specifies the font (.FNT), form (.FRM) or logo (.LGO) file to be converted to 600 spi. <i>file-type<sub>1</sub></i> Specifies the file-type as .FNT, .FRM or .LGO. <i>output-filename</i> Specifies the name for the new 600 spi file. <i>file-type<sub>2</sub></i> Specifies the file-type as .FNT or .FN6, .FRM or .FR6, .LGO or .LG6, .MSC or .TMP; usually "6" is substituted for the last character of the original file-type. <i>/a</i> Assigns a character width of 255, if there is an overflow in the byte escapement. <i>/b</i> Bit doubles the font or logo bitmaps instead of using the interpolation formula to scale the input file. <i>/o</i> Forces overwrite of output file, if it already exists. <i>/5</i> Forces creation of five-word FSTS.
<b>Restriction</b>	Using <i>/a</i> may cause certain large characters to overlap. You cannot scale forms that contain boxes filled with tones of a highlight primary color. Make sure when scaling forms that all the components of the form, including all inks, are available on the system disk.

## SCHEDULE

---

	Use this command to select the scheduling mode (single, multiple, or received). The scheduling mode affects the order in which reports print. You can enter the <i>#entry-string</i> with this command to submit documents immediately to output for printing once the current documents in output are completed. The SCHEDULE <i>#entry-string</i> command schedules reports for printing even if the resources required to print it are not available on the system. If you schedule a report, and it does require resources that are not available (color, stitching, and so forth), the system stops printing and waits for operator intervention: change the ink, substitute inks, enable stitching, etc.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	SCHEDULE [SINGLE MULTIPLE RECEIVED  <i>#entry-string</i> ]



<b>Parameters</b>	<p>No parameters entered Displays the current scheduling mode and state.</p> <p><b>SINGLE</b> Places all documents which use the loaded color ink (or current ink substitutions), or wire if stitching is on, in the active state. Holds all documents which do not.</p> <p><b>MULTIPLE</b> Places all documents that use multiple color inks in the active state.</p> <p><b>RECEIVED</b> Places documents in the active state in the order they are prepared by input processing.</p> <p><i>#entry-string</i> Specifies an entry in the <i>#n</i>, <i>#n-m</i>, or <i> #(n-m,o,p-r)</i> format.</p> <p><i>#n</i> Specifies a single entry. <i>n</i> must be an integer between 1 and 65535.</p> <p><i>#n-m</i> Specifies one set of multiple entries. <i>n</i> and <i>m</i> must be integers between 1 and 65535. All entries between <i>n</i> and <i>m</i> inclusive, are passed to output.</p> <p><i> #(n-m,o,p-r)</i> Specifies multiple sets of entries. <i>n</i>, <i>m</i>, <i>o</i>, <i>p</i>, and <i>r</i> must be integers between 1 and 65535. All entries between <i>n</i> and <i>m</i> inclusive, and <i>p</i> and <i>r</i> inclusive, are passed to output. You must use parenthesis around the string and commas without spaces between string elements.</p>
-------------------	--

## SECURE

---

Use SECURE to deny access to the specified files from logon levels 1 through 4.

The editor supports the security feature by maintaining the security characteristics of files that it manipulates (such as a renamed secured file retains its security characteristics). An unsecured file that replaces a secured file makes the file unsecured. However, if a secured font is referenced in a forms source library (.FSL) file compiled at logon level 5, the .FSL file and resulting .FRM file are not automatically secured. It is your responsibility to secure the .FSL and .FRM files. Likewise, if you copy a secured file to a new file or over an existing unsecured file, the resulting file is unsecured.

<b>Logon level</b>	Levels 5 and higher.
<b>Syntax</b>	SECURE <i>filename.file-type</i>
<b>Parameters</b>	<p><i>filename</i> A six-character name of a disk file.</p> <p><i>file-type</i> One of these extensions: CMD, CME, FNT, FRM, FSL, IMG, JDL, JSL, LGO, PDE, TST, STK, and LIB.</p> <p>Refer to the "Change logon levels" section in the "LOGON" section.</p> <p>The following editor commands are affected by the secured file feature: COPY, DELETE, FID, FILE, FIX, FLOPPY, GET, LIST, MERGE, REVIEW, RNAME, and SAVE.</p>

- Restriction** A secured file cannot be copied to tape.
- Exceptions** If a font or logo file has been secured to a particular logon level, the file cannot be copied or modified from lower logon classes. It can, however, be made usable for printing with the FIX command from any logon class.
- The contents of a secured file are left in the working storage area when it is manipulated by the editor. Issue a CLEAR command when terminating an edit session to prevent unauthorized access. This type of unauthorized access is not detected or reported.

## SELECT

---

Use this command to specify the active output tray or to allow the system to select it automatically. Manual tray selection allows you to fill the selected tray. When full, the operating system stops the printer. Automatic tray selection allows you to fill the active tray. When full, the operating system automatically changes to the alternate tray, thus allowing printing to continue and providing for improved throughput due to the overlapped operation.

For both selection modes, approximately 14 pages are delivered to the previously active tray after a new tray selection is made. Thereafter, pages are delivered to the new tray if it is ready.

The tray setting entered in the SELECT command remains in effect until you enter another SELECT command.

- Logon level** Levels 1 through 5.
- Syntax** SELECT [1[,SAMPLE]]|2[,SAMPLE]]|E[,SAMPLE]]|AUTO|TRAY]
- Parameters**
- 1 or 2  
Specifies tray 1 or 2, respectively. If the tray you select is not ready, the printer cycles down and issues an appropriate message. Whenever the tray you select is full, the printer cycles down. Select tray 1 for the stitcher.
- 1 or 2 or E  
Selects a specific tray by the tray number or by entering "E" for the Bypass Transport (BT) Output device. With the stitcher/stacker, tray 1 is the only valid tray number.
- Example: SELECT 1
- This command instructs the system to use tray 1 as the output tray on a printer with a two-tray stacker.
- Example: SELECT E
- This command instructs the system to use Bypass Transport Output device as the output tray.
- Example: SELECT 1
- This command instructs the system to use the stitcher stacker as the output tray on a printer with a stitcher stacker.
- SAMPLE**  
Selects the specified tray as the active tray to fill and assigns the remaining tray as a logical sample tray. If the tray you select is not ready, the printer cycles down and issues an appropriate message. If you enter a SELECT command with only a tray number (1 or 2), it cancels the SAMPLE option.
- AUTO**  
Selects the alternate tray automatically when the active tray

becomes full. Selects active tray if ready, or automatically changes role of trays at initiation of printing.

**TRAY**

Directs printed output to the top sample tray until you enter another SELECT command.

**No parameters entered**

Entering SELECT without an operand selects the alternate tray but does not change the mode (such as if in AUTO, it remains in AUTO; if specific, it remains so). The SAMPLE option is not canceled if the SAMPLE option was previously invoked to specify a tray as the logical sample tray. When you enter SELECT without an operand, the alternate tray is selected and the remaining tray becomes the sample tray. In other words, the active tray and the sample tray change roles.

Any attempt to designate the stitcher/stacker as an alternate sample destination (such as SELECT 1, SAMPLE, or SELECT 2, SAMPLE) is unacceptable.

**Restriction**

If SELECT AUTO is entered when a BT Output device is attached to the printer, the following (and existing) message is displayed:

```
OS1295 Destination trays not configured for this command
```

**SEPARATE**

Use this command to send the next output report processed to the other output tray.

**Logon level**

Levels 1 through 5.

**Syntax**

SEPARATE [OFF]

**Parameters**

OFF

Disables SEPARATE processing.

**Restrictions**

A tray change occurs only if the new tray is ready (such as not full or jammed). SEPARATE is disabled by one of the following:

- End of report
- SEPARATE OFF
- Current tray fills before end of report
- A SELECT command
- SEPARATE remains in effect for the duration of the current report. At end of report, the tray change occurs, and SEPARATE is disabled until you request it again.

**SET QUEUE DISPLAY**

Use this command to specify the type of information to display in the print queue. The option you specify remains in effect until you change it again.

**Logon level**

Levels 1 through 5.

**Syntax**

SET QUEUE DISPLAY [BRIEF|FULL|CLASSIC]

**Parameters**

BRIEF

Displays information in the BRIEF format.

CLASSIC

Displays information in the CLASSIC format.

**FULL**

Displays information in the FULL format.

Refer to the "JOBS" section earlier in this chapter for examples of each queue display format.

**SETTIME**

---

	Use this command to set the system time and date.
<b>Logon level</b>	Levels 2 through 5.
<b>Syntax</b>	SETTIME {[ <i>mm/dd/yy</i>   <i>mmm-dd-yy</i>   <i>dd-mmm-yy</i> ] [ <i>hh:mm[:ss]</i> ]}
<b>Parameters</b>	<i>mm</i> Month with a number between 1 and 12.
	<i>mmm</i> Month with a three-character abbreviation.
	<i>dd</i> Day of the month with one or two numbers.
	<i>yy</i> Last two digits of the year.
	<i>hh</i> Hour, using a 24-hour clock (military time). The system does not accept a zero (0) as the first digit of this parameter.
	<i>mm</i> Minute of the hour.
	<i>ss</i> Seconds field (optional).
<b>Restriction</b>	You can enter this command only when the system is idle (such as offline with no background tasks running, and not printing).  Changing the date and time using the SETTIME command may affect the DCU logging in progress on the system. Loss of data or unpredictable results may occur, especially when changing the date forward in time and then back again.

**@SETTMO**

---

	Use this command file to change the maximum period the system waits before sending the DEVICE END status to the host. Increase the maximum period if you receive INTERVENTION REQUIRED errors at the host computer. Decrease the maximum period if you are experiencing printer errors at the host.  After entry of this command, following the prompts allows you to change the timeout intervals.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	@SETTMO

---

**SFC**


---

The following are Status File Converter (SFC) commands.

---

**SFC**


---

Use this command to convert the QUE.SYS file to STAFIL.SYS.

**Syntax** SFC

---

**SFC SAVE**


---

Use this command to gain access to the QUE.SYS data file and copy it to a temporary file for storage or archival.

**Logon level** Levels 1 through 5.

**Syntax** SFC SAVE [[*filename*][*.file-type*]]

**Parameter** *filename*  
One to six alphanumeric characters specifying a temporary file for storage of the QUE.SYS data file. The default is QUE if you do not specify one.

*file-type*  
Lets you specify .MSC as the temporary file. The default is .TMP if you do not specify .MSC.

**Restriction** SFC SAVE cannot be performed when there are unprinted entries in the queue. It is solely to preserve the information of a job after it printed.

---

**SFC SFS DISPLAY**


---

Use this command to convert the QUE.SYS file to STAFIL.SYS and display the status file entries.

**Logon level** Levels 1 through 5.

**Syntax** SFC SFS DISPLAY [,SHORT|COMPLETE][,*num*]

**Parameters** SHORT  
Displays the print queue database summary in the short format, which lists the processed jobs. The short summary format contains the following fields: BLOCK NO., JOB NO., REPORT NO., AND ENTRY STATUS.

COMPLETE  
Displays all information in the print queue database summary, one entry at a time.

*num*  
Number of entries to display, where *n* and *m* are integers, equal to or greater than one, and equal to or less than the maximum number of entries in the print queue database.

*n*  
First *n* entries.

*m*  
Last *m* entries.

*n-m*

All entries between *n* and *m*, inclusive. If *n=m*, only one entry displays.

*n<sub>1</sub>;n<sub>2</sub>;...n<sub>10</sub>*

Up to ten discrete entries, where *n* is the *n*th file entry or a range of entries in the form *n-m*. You must specify entries in ascending order.

---

### SFC SFS filename

---

Use this command to convert the QUE.SYS file to STAFIL.SYS and print a status report.

**Logon level**

Levels 1 through 5.

**Syntax**

SFC SFS *filename* [,[SIMPLEX|DUPLEX|TEST]][, [*c*][, [*num*]]]

**Parameters**

No parameters entered

With no parameters entered, prints all entries.

*filename*

Specifies a user-created form file on disk, which has the format and content of a status report. The file name may be 1 to 6 characters (A through Z, 0 through 9). The file extension is .MSC and should not be specified. For more information about this file, refer to the *Xerox 4850/4890 HighLight Color LPS System Programming and Administration Guide*.

SIMPLEX

Prints the report on one side of the paper.

## DUPLEX

Prints the report on both sides of the paper.

## TEST

Prints only the report and column header information and delivers it to the sample tray.

*c*

Number of copies to print. The default value is 1.

*num*

Number of entries printed as follows (must be equal to or greater than one, and equal to or less than the maximum number of entries in the print queue database):

*n*

First *n* entries.

*-m*

Last *m* entries.

*n-m*

All entries between *n* and *m*, inclusive.

*n<sub>1</sub>;n<sub>2</sub>;...n<sub>10</sub>*

Up to ten discrete entries, where *n* is the *n*th file entry, or a range of entries *n-m*.

**Restrictions**

You must specify the entries in ascending order.

Avoid specifying an entry number [*num*] that does not exist in the SFS command.

---

**SFC SFS HARDCOPY**

---

Use this command to convert the QUE.SYS file to STAFIL.SYS and print the status report.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	SFC SFS HARDCOPY [, [SHORT COMPLETE] [, [SIMPLEX DUPLEX] [, <i>copies</i> ] [, <i>num</i> ]]
<b>Parameters</b>	<p><b>SHORT</b> Prints the status report in the short format which specifies the block number, the job number, the entry number, and the entry status.</p> <p><b>COMPLETE</b> Prints the status report in the long format.</p> <p><b>SIMPLEX</b> Prints the status report on one side of the paper.</p> <p><b>DUPLEX</b> Prints the status report on both sides of the paper.</p> <p><b>TEST</b> Prints only the report and column header information and delivers it to the sample tray.</p> <p><i>copies</i> Number of copies requested.</p> <p><i>num</i> Number of entries displayed, as follows:</p> <p><i>n</i> First <i>n</i> entries.</p> <p><i>-m</i> Last <i>m</i> entries</p> <p><i>n-m</i> All entries between <i>n</i> and <i>m</i>, inclusive.</p> <p><i>n<sub>1</sub>;n<sub>2</sub>;...n<sub>10</sub></i> Up to ten entries, where <i>n</i> is the <i>n</i>th file entry, or a range of entries <i>n-m</i>.</p> <p>The values you specify must be equal to or greater than one, and equal to or less than the maximum number of entries in the print queue database.</p>
<b>Restrictions</b>	<p>You must specify entries in ascending order.</p> <p>If requested entries have not been used (filled in), an error displays (coded as SF9500).</p> <p>You cannot specify discrete sets of entries with this command.</p>

---

**SFC SFS HOST**

---

Use this command to convert the QUE.SYS file to STAFIL.SYS and format the status file to transmit to a remote host. This command does not actually transmit the file.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	SFC SFS HOST [, [ <i>fmt</i> ] [, <i>num</i> ]]

<b>Parameters</b>	No parameters entered Formats all entries for transmission.  <i>fmt</i> Data format: EBCDIC or ASCII. The default is ASCII.  <i>num</i> Number of entries displayed, as follows:  <i>n</i> First <i>n</i> entries.  <i>-m</i> Last <i>m</i> entries.  <i>n-m</i> All entries between <i>n</i> and <i>m</i> , inclusive.  <i>n<sub>1</sub>:n<sub>2</sub>...n<sub>10</sub></i> Up to ten discrete entries, where <i>n</i> is the <i>n</i> th file entry or a range of entries <i>n-m</i> .
<b>Restrictions</b>	You must specify entries in ascending order.  The values you specify must be equal to or greater than one, and equal to or less than the maximum number of entries in the print queue database.  If requested entries have not been used (filled in), an error displays (coded as SF9500).  You cannot specify discrete sets of entries with this command.

#### SFC SFS TAPE

---

	Use this command to convert the QUE.SYS file to SYSFIL.SYS and save the status file on a tape.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	SFC SFS TAPE [, [ <i>fmt</i> ][, [ <i>blk</i> ][, [ <i>den</i> ][, [ <i>num</i> ]]]]
<b>Parameters</b>	No parameters entered Saves all entries.  <i>fmt</i> Data format: EBCDIC or ASCII. The default is ASCII.  <i>blk</i> Block length in bytes: 80, 256, or 512. The default is 256.  <i>den</i> Tape density: 1600 or 6250. The default is 1600.  <i>num</i> Number of entries saved, as follows:  <i>n</i> First <i>n</i> entries.  <i>-m</i> Last <i>m</i> entries.  <i>n-m</i> All entries between <i>n</i> and <i>m</i> , inclusive.
<b>Restrictions</b>	The SFS tape is created for processing on your host computer; it cannot be used by the LPS.  The values you specify must be equal to or greater than one, and



equal to or less than the maximum number of entries in the print queue database.

If requested entries have not been used (filled in), an error displays (coded as SF9500).

You cannot specify discrete sets of entries with this command.

## SFS

The following are Status File Service (SFS) commands.

### SFS DISPLAY

Use this command to display print queue database entries. You receive a prompt that allows you to continue or stop the display.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	SFS DISPLAY [, [SHORT COMPLETE] [, num]]
<b>Parameters</b>	No parameters entered Displays all entries.
	<b>SHORT</b> Displays the print queue database summary in the short format which lists the processed jobs. The short summary format contains the following fields: BLOCK NO., JOB NO., REPORT NO., and ENTRY STATUS.
	<b>COMPLETE</b> Displays all information in the print queue database summary, one entry at a time.
	<b>num</b> Specifies the number of entries to display, where <i>n</i> and <i>m</i> are integers. The values you specify must be equal to or greater than one, and equal to or less than the maximum number of entries in the print queue database.
	<b><i>n</i></b> First <i>n</i> entries.
	<b><i>m</i></b> Last <i>m</i> entries.
	<b><i>n-m</i></b> All entries between <i>n</i> and <i>m</i> , inclusive. If <i>n=m</i> , only one entry displays.
	<b><i>n<sub>1</sub>;n<sub>2</sub>;...n<sub>10</sub></i></b> Up to ten discrete entries, where <i>n</i> is the <i>n</i> th file entry or a range of entries in the form <i>n-m</i> . You must specify entries in ascending order.

### SFS filename

Use this command to print the contents of the print queue database in simplex or duplex.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	SFS filename [, [SIMPLEX DUPLEX TEST] [, [c] [, num]]]
<b>Parameters</b>	No parameters entered Prints all entries.

*filename*

Specifies a user-created form file on disk, which has the format and content of a status report. The file name may be 1 to 6 characters (A through Z, 0 through 9). The file extension is .MSC and should not be specified. For more information about this file, refer to the *Xerox 4850/4890 HighLight Color LPS System Programming and Administration Guide*.

SIMPLEX

Prints the report on one side of the paper.

## DUPLICATE

Prints the report on both sides of the paper.

## TEST

Prints only the report and column header information and delivers it to the sample tray.

*c*

Number of copies to print. The default value is 1. Not valid with the TEST parameter.

*num*

Number of entries printed as follows (not valid with the TEST parameter):

*n*

First *n* entries.

*-m*

Last *m* entries.

*n-m*

All entries between *n* and *m*, inclusive.

*n<sub>1</sub>:n<sub>2</sub>:...n<sub>10</sub>*

Up to ten discrete entries, where *n* is the *n*th file entry, or a range of entries *n-m*.

The specified values must be equal to or greater than one, and equal to or less than the maximum number of entries in the print queue database.

**Restrictions**

You must specify the entries in ascending order.

Avoid specifying an entry number [num] that does not exist in the SFS command.

**SFS HARDCOPY**

---

Use this command to print a report of the print queue database contents.

**Logon level**

Levels 1 through 5.

**Syntax**

SFS HARDCOPY [, [SHORT|COMPLETE] [, [SIMPLEX|DUPLICATE] [, *copies*] [, *num*]]]]

**Parameters**

No parameters entered

Prints all entries.

## SHORT

Prints the status report in the short format which specifies the block number, the job number, the entry number, and the entry status.

**COMPLETE**

Prints the status report in the long format.

**SIMPLEX**

Prints the status report on one side of the paper.

**DUPLEX**

Prints the status report on both sides of the paper.

**TEST**

Prints only the report and column header information and delivers it to the sample tray.

*copies*

Number of copies requested.

*num*

Number of entries displayed, as follows:

*n*

First *n* entries.

*-m*

Last *m* entries.

*n-m*

All entries between *n* and *m*, inclusive.

*n<sub>1</sub>;n<sub>2</sub>;...n<sub>10</sub>*

Up to ten entries, where *n* is the *n*th file entry, or a range of entries *n-m*.

The values you specify must be equal to or greater than one, and equal to or less than the maximum number of entries in the print queue database.

**Restrictions**

You must specify entries in ascending order.

If requested entries have not been used (filled in), an error displays (coded as SF9500).

You cannot specify discrete sets of entries with this command.

**SFS HOST**

Use this command to format the print queue database for transmission to a remote host and save this host format file to the LPS disk, using the file name SFASEB.MSC. The LPS to host file transfer interface can then be used to transfer the file. (The SFS HOST command does not send the print queue database file to the host.)

**Logon level**

Levels 1 through 5.

**Syntax**

SFS HOST [,*[fmt]* [,*[num]*]

**Parameters**

No parameters entered

Formats all entries for transmission.

*fmt*

Data format: EBCDIC or ASCII. The default is ASCII.

*num*

Number of entries displayed as follows:

*n*

First *n* entries.

*-m*

Last *m* entries.

*n-m*

All entries between *n* and *m*, inclusive.

*n<sub>1</sub>;n<sub>2</sub>;...n<sub>10</sub>*

Up to ten discrete entries, where *n* is the *n*th file entry or a range of entries *n-m*.

**Restrictions**

You must specify entries in ascending order.

The values you specify must be equal to or greater than one, and equal to or less than the maximum number of entries in the print queue database.

If requested entries have not been used (filled in), an error displays (coded as SF9500).

You cannot specify discrete sets of entries with this command.

---

**SFS TAPE**

---

Use this command to copy the print queue database to an LPS-labeled tape.

**Logon level**

Levels 1 through 5.

**Syntax**

SFS TAPE [, [*fmt*] [, [*blk*] [, [*den*] [, [*num*]]]]]

**Parameters**

No parameters entered  
Saves all entries.

*fmt*

Data format: EBCDIC or ASCII. The default is ASCII.

*blk*

Block length in bytes: 80, 256, or 512. The default is 256.

*den*

Tape density: 1600 or 6250. The default is 1600.

*num*

Number of entries saved, as follows:

*n*

First *n* entries.

*-m*

Last *m* entries.

*n-m*

All entries between *n* and *m*, inclusive.

**Restrictions**

The SFS tape is created for processing on your host computer; it cannot be read back into the LPS.

The values you specify must be equal to or greater than one, and equal to or less than the maximum number of entries in the print queue database.

If requested entries have not been used (filled in), an error displays (coded as SF9500).

You cannot specify discrete sets of entries with this command.

---

**SFS !**

---

Use this command to abbreviate the SFS TAPE,EBCDIC,80,1600 command.

**Logon level**

Levels 1 through 5.

---

**Syntax** SFS !

## SFT

---

Use this command to transfer single files from a DSR tape to a system disk drive. The system determines to which disk the file is copied.

**Logon level** Level 2.

**Syntax** SFT

The system displays a menu of choices for the SFT command. Choose the appropriate option from the menu.

**Restrictions** SFT restores files only from tapes created with DSR.

You can copy only one file at a time from tape to disk.

When writing a file to disk, SFT deletes the file on the disk (if it already exists) and writes the file from the DSR tape to the first location on the disk which can accommodate the file's size.

Specify the full file name: SFT does not support wildcards.

Copying of .\$\$\$, .SAF, .SYS, .TSK, or .LOG files is not supported.

If two files have the same name on the DSR tape, SFT writes only the first file to disk.

If a system disk is full, SFT writes the specified file to the next disk.

The system disks must be structurally intact and consistent.

## SHOW QUEUE STATUS

Use this command to display the following print queue information:

- Queue display mode
- Queue Manager status
- Schedule mode
- Status of STITCH
- Jobs in the input job queue
- Documents queued for output processing.

**Logon level** Levels 1 through 5.

**Syntax** SHOW QUEUE STATUS

**Example** An example of the SHOW QUEUE STATUS display is shown in figure 1-12.

Figure 1-12. **SHOW QUEUE STATUS display**

```
Queue status mm/dd/yy hh:mm:ss
Queue manager is xxxxxx  schedule mode is xxxx
System is OFF-LINE
Stitch off active
Job queue is xxxxxx
n reports queued requiring CYAN primary
n reports queued requiring MAGENTA primary
n reports queued requiring GREEN primary
n reports queued requiring BLUE primary
n reports queued requiring RED primary
n reports queued requiring multiple primary
n reports queued requiring stitching
OS1000 READY FOR COMMANDS hh:mm:ss
```

## SPACE

The following commands are used to position reports and pages during report printing.

### SPACE *n* REPORTS

Use the SPACE command with the REPORTS option to position a tape or cartridge by logical reports within the limits of the start-of-job tape position and the end-of-data. First enter the START command to initiate a job before you enter the SPACE command.

This command operates on the tape or cartridge device that has been assigned to the TAPE keyword using the SUB DEV command.

**Logon level** Levels 1 through 5.

**Syntax** SPACE *n* REPORTS

**Parameters** *n*

Specifies a decimal integer in the range -32767 to +32767. A positive number indicates forward report spacing, and a negative number, backward spacing. The tape cannot be positioned before the start-of-job tape position or after end-

of-data. If the start-of-tape position is on another tape, the tape cannot be positioned to it.

The range is -32767 to +32767.

#### REPORTS

Indicates positioning by logical report units.

#### Restrictions

Do not enter a SPACE *n* REPORTS command before the system has begun processing the job, for example, before the system prompts you to enter CON I. Doing so creates a blank queue entry in the queue (a null report).

You can enter a SPACE command any time after initiating a job provided that:

- Input is stopped. Use the STOP INPUT command; it is confirmed by the message `INPUT STOPPED`, or when the system is suspended.
- The START command did not specify the REPORTS option.

---

#### SPACE *n* PAGES

Use this command during report printing to position pages forward and backward within the current report. During forward page spacing, if output catches up with input, output displays a message indicating that this has occurred and resumes spacing when the catchup condition no longer exists. While output is caught up, output accepts and processes other commands with the exception of the SAMPLE command.

An accounting page is produced at the end of the report, indicating that the page spacing was performed.

Prior to selecting the PAGE SPACE command, stop output via the STOP or STOP O command. After the PAGE SPACE command, resume printing via the CONTINUE or CONTINUE O command.

#### Logon level

Levels 1 through 5

#### Syntax

SPACE *n* PAGES

#### Parameters

*n*

Specifies a decimal integer in the range -32767 to +32767. A positive number spaces forward over *n* pages unless end-of-report is encountered first. If encountered, no further forward spacing is allowed until printing is resumed. A negative value spaces backwards over *n* pages unless the beginning is encountered. If encountered, no further backward spacing is allowed until printing is resumed.

#### PAGES

Indicates positioning by page units.

#### Restrictions

A sample cannot be obtained during spacing.

Once you begin page spacing, you cannot stop it before the specified number of pages have been spaced without aborting the report.

The value *n* must include all pages, including the system-generated pages.

Page spacing is not executed when:

- ABNORMAL SECURITY = YES is coded in the JDE/JDL in effect. The system displays the following message:

OS1420 SPACING NOT ALLOWED BY JDE

- Current report is N-1. The system displays the following message:

OS1421 SPACING NOT ALLOWED FOR N-1 REPORTS

- Output is not stopped. The system displays the following message:

OS2840 OUTPUT MUST BE STOPPED BEFORE PAGE SPACING CAN BE DONE

- Output is not currently working on a job. The system displays the following message:

OS2715 COMMAND IGNORED...RETRY LATER

Backward spacing is not allowed if the system is printing the last (or only) copy of a collated report.

For duplex printing, page spacing prints on the front and back of each sheet. Therefore, if you enter an odd page count in a space command, the total number of pages actually spaced is 1 greater. Page spacing logic counts physical sides of sheets; both sides in duplex, only one side in simplex. No consideration is given to logical pages on any physical side.

**Example**

Suppose a report requires 5 sheets in duplex, 10 sheets in simplex, and each side consists of four logical pages (4-up) for a total of 40 logical pages, and you issue a space command of 3 pages. In simplex, the system delivers 3 sheets, for a total of 12 logical pages. In duplex, the system increments the odd space count to 4, such that 2 sheets will be delivered (16 logical pages).

---

## SST

Use this command to create a system software tape or cartridge. You can also perform the following tasks:

- Create backups of Xerox labeled tapes and cartridges, primarily of system software tapes (SST) or system software cartridges (SSC). (These are referred to as "offline" SST or cartridges in the system prompts.)
- Create backups of SST and cartridges which can be read from your host and downloaded to the LPS. (These are referred to as "online" SST or cartridges in the system prompts.)
- Modify an SST or cartridge by deleting or replacing files on it.
- Restore a file from the SST tape or cartridge to the LPS.
- Copy the restored files to another SST tape or cartridge.
- Delete the restored files from the LPS disk.

The SST tape or cartridge you create with SST is used to run a full offline or online system generation.

Once you enter the command, the system prompts you with menu choices.

**Logon level** Level 4 or 5.

**Syntax** SST

**Parameters** None to create backups, restore files to the LPS, copy restored files to another tape or cartridge, or delete the restored files.



---

	ADD, DELETE, and MOVE allow you to modify files on the SST tape or cartridge.
<b>Add syntax</b>	ADD /BF: <i>n filename<sub>1</sub> filename<sub>2</sub></i>
<b>Add parameters</b>	<p>ADD Adds a file that resides on the disk to the list. Provides the following parameters:</p> <p>/BF:<i>n</i> Assigns a blocking factor from 1 to 16 to the added file.</p> <p><i>filename<sub>1</sub></i> Specifies the file in the list after which <i>filename<sub>2</sub></i> is to be added. The <i>filename<sub>1</sub></i> may be the word BEGIN which adds <i>filename<sub>2</sub></i> to the beginning of a list.</p> <p><i>filename<sub>2</sub></i> The file residing on the disk that is to be added to the list.</p>
<b>Add restriction</b>	The ADD command does not include a date in the tape header.
<b>Delete Syntax</b>	DELETE <i>filename</i>
<b>Delete Parameters</b>	<p>DELETE Deletes the file from the list.</p> <p><i>filename</i> Specifies the file name to be deleted from the list.</p>
<b>Move Syntax</b>	MOVE {BEGIN  <i>filename<sub>1</sub></i> } <i>filename<sub>2</sub></i>
<b>Move Parameters</b>	<p>MOVE Moves a file from one position on the list to another.</p> <p>BEGIN Moves <i>filename<sub>2</sub></i> to the beginning of the list.</p> <p><i>filename<sub>1</sub></i> Moves <i>filename<sub>2</sub></i> after the specified filename.</p> <p><i>filename<sub>2</sub></i> Specifies the list of files to be moved.</p>
<b>Restrictions</b>	<p>You can copy 1 to 1350 files with SST or SSC.</p> <p>The tape used to duplicate the original SST should be the same density.</p>

## START [*print-job*]

---

	Use the START command to submit print jobs. Use the various options depending upon the input source and the output destination. The print data will be read from the tape or cartridge device that has been assigned to the TAPE keyword using the SUB DEV command.
	You can enter another START or a SAMPLE command while the previous START command is executing.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	START[[ <i>jde-name</i> ][, <i>jdl-name</i> ][, <i>S M</i> ][, <i>copies</i> [,REPORTS: <i>r<sub>1</sub>,r<sub>2</sub>,...</i> ]]]]
<b>Interpress syntax</b>	START [ <i>jde-name</i> ],[ <i>jdl-name</i> ],[, <i>copies</i> ],DISC: <i>document-name</i> ]
<b>Parameters</b>	<p><i>jde-name</i> One- to six-character identifier for the job descriptor entry to be used in processing the job. If you omit this entry, the user-specified default (DFLT) of the job descriptor library is used.</p>

*jdl-name*

One- to six-character identifier of the job descriptor library for the print job. It must be listed in the jdl file directory. If you omit this entry, the default jdl created by the user with the identifier DFAULT in the PDL SYSTEM command is used.

## S or M

For offline jobs, specifies single report (S) or multiple report (M). The default is multiple report. Single report halts the system after each report so you can select the job set-up parameters for the next report by entering a new START command. The accounting sheet refers to the report as "REPORT 1." If REPORTS is invoked with the S mode, the REPORT overrides the S option. If multiple reports are listed in the REPORTS option, all the reports are processed in multiple report mode, except the last report, which is processed in single report mode. Multiple report mode allows all reports in all files to be processed continuously.

*copies*

Prints a specified number of copies of a report. Overrides the value specified in the job descriptor entry and any DJDE COPIES commands.

REPORTS:*r<sub>1</sub>,r<sub>2</sub>...*

For offline jobs, specifies the sequence of 1 to 14 reports to be processed. Only reports specified are printed. *r<sub>1</sub>,r<sub>2</sub>...* are numeric values or ranges of values representing the print order of reports. A range is specified as n-m, where n and m are the first and last reports in the range, respectively. Entering REPORTS: 6,1-3,5,4 causes the sixth report to print first, followed by 1 to 3, followed by 5 then 4. The REPORTS option is also useful for printing one report of a multiple report tape, saving the step of spacing over reports. Refer to the SPACE command.

DISC: *document-name*

Specifies the name of the file created by the HIP CHANGE command.

**Examples**

START J12,H2SYS

This command starts a print job using the H2SYS job descriptor library and the job descriptor entry J12. It runs in multiple report mode (by default) and prints the number of copies as specified in the J12 job descriptor entry. The job descriptor library, H2SYS, must reside in the JDL directory.

START J12,H2SYS,,5

This command is the same as the example above except that that five copies are requested. The value entered for copies overrides the value specified in the J12 job descriptor entry. Note that a comma replaces the unspecified mode option; therefore, the default mode, multiple report, takes effect.

START

No options are specified, so the START command defaults take effect. The default for the job descriptor library is DFAULT, which must exist in the JDL directory. The job descriptor entry used is DFLT, which must exist in the DFAULT JDL. The command START,DFAULT is identical.

START J12,H2SYS,,2,REPORTS:3-4

This command reprints 2 copies of the third and fourth reports on the data tape.

START, ONLINE,,,FORM=GBAR

This command processes online data according to the DFLT JDE in the online .JDL file, using the GBAR form.

### Restrictions

The REPORTS and S|M options are available only for offline jobs. If you are running an online job, you must key in a comma (,) as a place holder for the S or M in the START command.

START parameters are positional and must be separated by commas. You must enter a comma to replace a parameter that is not specified.

The START options override those specified in the job descriptor library. Refer to figure 1-13 for details on override parameters.

If a specified font or form file fails a validity check during input, the system aborts the job and displays the following messages:

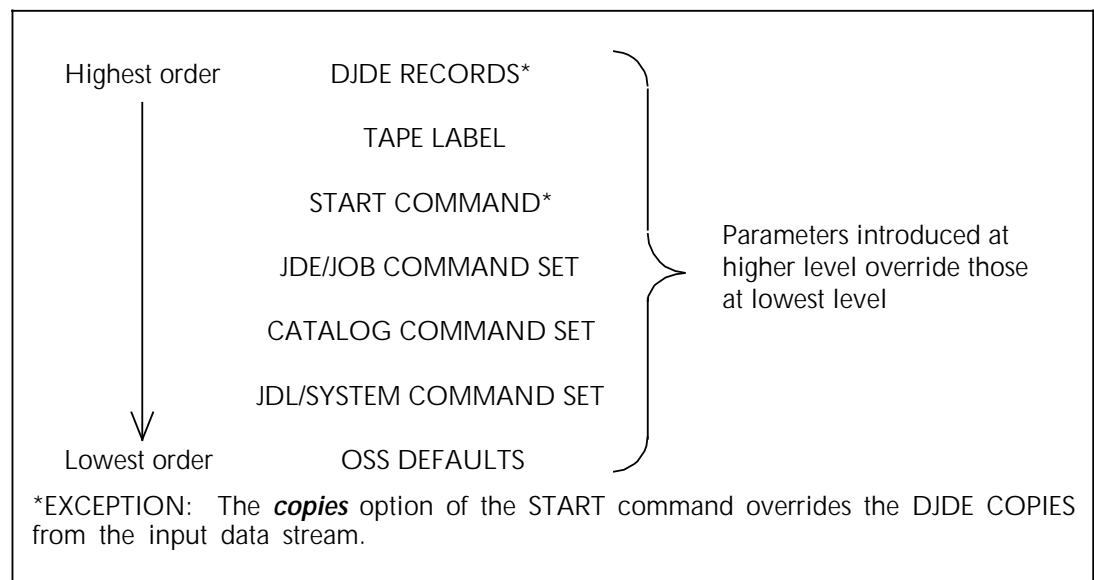
```
OS8852 INVALID FONT FILE HEADER
```

```
Or
```

```
OS8855 INVALID FORM FILE HEADER.
```

When HIP submitted jobs are running, the START command is not allowed. When Tape or Disk jobs are running, the START command is allowed.

Figure 1-13. **Hierarchy of replacement**



**START n, DUMP**

---

Use this START command to print a tape dump.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	START <i>n</i> ,DUMP
<b>Parameters</b>	<i>n</i> =1 H6000 BCD tape (OCTAL dump). <i>n</i> =2 EBCDIC tape (HEX dump). <i>n</i> =3 ASCII tape (HEX dump). <i>n</i> =4 H2000 BCD tape (OCTAL dump). <i>n</i> =5 IBM BCD tape (OCTAL dump). <i>n</i> =6 UNIVAC tape (OCTAL dump).

**STITCH**

---

Use this command to automatically staple a document with 2 to 50 pages. The printer staples portrait sheets in the upper left corner. The printer staples landscape sheets in the upper right corner.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	STITCH [ON OFF]
<b>Parameters</b>	ON Enables stapling. OFF Overrides the job and turns off the stapling. The parameter you specify remains in effect until you change it with another STITCH ON or STITCH OFF command.

**STOP**

---

Use the STOP command to suspend input processing, output processing, or both. The system can process input for one job and output for another job since input and output are controlled separately. Stopping input suspends the processing of input data, but allows output to continue. Stopping output suspends printing after cycling out the paper path, but allows processing of input data to continue.

You can also use the STOP command to stop the QM before switching modes. If you do not stop the QM, it can pass entries to output processing while you are moving entries, resulting in a print sequence you do not want.

STOP Q stops scheduling of reports for printing, but the report being printed continues to print. STOP Q also stops input from accepting a new job (a START command), but input continues processing the job currently being processed until the job

	completes input processing or until the print file has no more work space available.)
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	STOP [I O Q]
<b>Parameters</b>	No parameters entered Stops input and output processing and the QM scheduling activity until you enter CONTINUE.
	I Suspends input activities until you restart them with CONTINUE I.
	O Suspends output activities until you restart them with CONTINUE O.
	Q Suspends the QM. The QM does not reschedule reports until you restart it with CONTINUE Q.
<b>Restriction</b>	If you enter STOP without an operand, input and output activities suspend.

---

## SUBSTITUTE DEVICE

The following system commands use the TAPE keyword in the command line to specify the physical tape drive to access: DSR, IFU TAPE, MOVE, REWIND, SFS, SPACE, SST, TAPE (editor command), and COPY (editor command).

The following system commands use the CARTRIDGE keyword in the command line to specify the physical cartridge tape drive to access: DSR, IFU TAPE, TAPE (editor command), and COPY (editor command).

System boots, updates, or mini-sysgens do not reset TAPE and CARTRIDGE physical device assignments. A full sysgen with disk format resets SUBSTITUTE DEVICE assignments to their defaults.

---

### SUBSTITUTE DEVICE

Use this command to display the physical tape or cartridge drive currently associated with the TAPE and CARTRIDGE keywords.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	SUBSTITUTE DEVICE

---

### SUBSTITUTE DEVICE DEFAULT

Use this command to assign the TAPE and CAR keyword to the default physical tape device (CTS for CARTRIDGE and REEL for TAPE).

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	SUBSTITUTE DEVICE DEFAULT

---

### SUBSTITUTE DEVICE *physical-device*

Use this command to display information about a specific device.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	SUBSTITUTE DEVICE <i>physical device</i>
<b>Parameters</b>	<i>physical device</i> Displays information about the physical device you specify. You can specify one of the following:  SREEL 9 track, open-reel tape drive (SCSI) mounted in the peripheral cabinet.  MREEL 9 track, open-reel tape drive (MTA) mounted in the cabinet that is usually placed on top of the system controller cabinet.  REEL This parameter allows the system to pick whichever open-reel tape drive is installed on your system.  SCTS 1/4 inch cartridge tape drive (SCSI).  SFCTS 1/2 inch, 3480-compatible, cartridge tape drive (SCSI).  MFCTS For the 4850 only, the 1/2 inch, 3480-compatible, cartridge tape drive mounted in the 180-CTS Cartridge Tape System (MTA).  CTS This parameter allows the system to pick whichever cartridge tape drive is installed on your system.

Due to the long power-up/initialization period of the 3480 cartridge tape drive, this device is always considered present, regardless of the true system configuration. Thus, any SUBSTITUTE DEVICE assignment involving the SFCTS physical name will be accepted, even if this tape drive is not physically present. (An example of such a tape command is SUB DEV SFCTS FOR CAR. If you attempt to access and use this drive (such as with the command COP CAR REA LAB XYS.FNT), you are informed that the device is offline. In this situation, this offline message indicates that the device does not exist.

---

**SUBSTITUTE DEVICE *physical-device* FOR *keyword***

---

Use this command to assign a specific physical device to the TAPE or CARTRIDGE keyword.

System boots, updates, or mini-sysgens do not reset TAPE and CARTRIDGE physical device assignments. A full sysgen with disk format resets SUBSTITUTE DEVICE assignments to their defaults.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	SUBSTITUTE DEVICE [ <i>physical-device</i> ] FOR [ <i>keyword</i> ]
<b>Parameters</b>	<i>physical-device</i> Associates the keyword with the physical device you specify. Refer to the preceding section for a description of the physical devices available.  <i>keyword</i> The following keywords are available:

	TAPE	Specifies the device assigned to the TAPE keyword.
	CARTRIDGE	Specifies the device assigned to the CAR keyword.
<b>Example</b>	SUB DEV REEL FOR TAPE	Assigns the physical device for REEL to the keyword TAPE.
<b>Restriction</b>	You can change device assignments only when the LPS is idle.	

---

## SUBSTITUTE INK

---

	Use the following commands to display the substitute ink status, cancel any substitution, and change the substitute ink status.
<b>Logon level</b>	Levels 1 through 5.
<b>Restrictions</b>	When a SUB INK command expires, the substitution is canceled as if by a SUB INK CANCEL command.  Do not enter conflicting SUB INK commands for a highlight primary color and for black. Unpredictable results can occur.  Substituting an ink cancels any previous substitution for that primary. For example, if you enter SUB INK BLACK FOR RED, JOB followed by SUB INK CURRENT FOR RED, the printer substitutes the currently loaded primary for RED until the current document finishes printing, then cancels the substitution for RED.

---

### SUBSTITUTE INK

---

	Use this command to display the current substitute ink status.
<b>Syntax</b>	SUBSTITUTE INK

---

### SUBSTITUTE INK CANCEL

---

	Use this command to cancel any substitution.
<b>Syntax</b>	SUBSTITUTE INK CANCEL { <i>ink</i>  ALL}
<b>Parameters</b>	<i>ink</i> Cancels substitutions for the named ink. ALL can replace <i>ink</i> because ALL cancels all substitutions currently active.

---

### SUBSTITUTE INK (for changing current substitutions)

---

	Use this command to substitute an available ink for an ink requested by a job. You can also use the command SUBSTITUTE PRIMARY interchangeably with this command.
<b>Syntax</b>	SUBSTITUTE INK { <i>new ink</i> } FOR { <i>old ink</i>   <i>color</i>  ALL} [REPORT JOB ALWAYS]
<b>Parameters</b>	<i>new ink</i> Specifies the ink to substitute.  <i>old ink</i> Specifies the ink to be replaced in the substitution. The color variable or ALL can replace old ink.  <i>color</i> Specifies the dry ink. Must be one of the primary colors. Refer to the 4850/4890 Highlight Color LPS Palettes appendix

at the end of this document for a list of primary colors currently available.

#### REPORT

Cancels the SUBSTITUTE INK command automatically after the current document prints. If the printer is idle when you issue SUBSTITUTE INK, then REPORT cancels the command after the first document prints. REPORT is the default.

#### JOB

Cancels the SUBSTITUTE INK command automatically after all the documents in the current job print. If the printer is idle when you issue SUBSTITUTE INK, then JOB cancels the command after all the documents in the first job print.

If the schedule resource mode is RECEIVED, you can use the JOB parameter. If the mode is SINGLE or MULTIPLE, you cannot use the JOB parameter.

#### ALWAYS

Prevents automatic cancellation of the SUBSTITUTE INK command. The specified substitution must be canceled by another SUBSTITUTE INK command.

**NOTE:** If REPORT|JOB|ALWAYS is entered it will default to REPORT.

### SUBSTITUTE INK CURRENT

---

Use this command to substitute the color ink currently in the printer for other color inks.

**Syntax** SUBSTITUTE INK CURRENT [FOR {*old ink*|*color*|ALL}]  
[REPORT|JOB|ALWAYS]

**Parameters** No parameters entered  
The current dry ink loaded will be substituted for all color inks for the current report.

The other parameters are the same as the previous command.

### TAPE [CARTRIDGE] [FIND | LIST | NEXT | REWIND | SKIP | UNLOAD | VOLINIT]

---

Use the TAPE keyword for the device designated as TAPE, or TAPE CARTRIDGE keyword to specify the device designated as CARTRIDGE. The physical device is assigned to the TAPE or CARTRIDGE keyword using the SUB DEV command.

#### TAPE [CARTRIDGE] FIND

---

Use this command to position the tape or cartridge preceding the label record of the file. You can then issue commands to manipulate this file.

**Logon level** Levels 1 through 5.

**Syntax** TAPE [CARTRIDGE] [FIND,*file-id*]

**Parameters** FIND,*file-id*  
Positions an LPS-labeled tape or cartridge at the specified file.

#### TAPE [CARTRIDGE] LIST

---

Use this command to create a disk file of *filenames* and sort them alphabetically. You can also add leading or trailing strings



to facilitate future command file manipulation of that tape or cartridge.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	TAPE [CARTRIDGE] LIST [,PRINT][ /SORT, <i>filename</i> [ <i>.file-type</i> ]] or TAPE [CARTRIDGE] LIST [,PRINT] / <i>filename</i> [ <i>.type</i> ],[ <i>leading string</i> ],[ <i>trailing string</i> ]
<b>Parameters</b>	<p>LIST[,PRINT] Lists the <i>file-ids</i> of the labeled tape, beginning at the current tape position. If you omit this parameter, the tape directory displays.</p> <p>/SORT Alphabetically sorts a list of filenames of the files on tape. Up to 3,600 file names can be sorted. Sort by file-types for large disk or tape volumes.</p> <p><i>leading string</i> Character string (except commas) that is added before each <i>filename</i> in the list that is created.</p> <p><i>trailing string</i> Character string (except commas) appended to each <i>filename</i> in the list that is created. The total number of leading and trailing characters cannot be greater than 50.</p> <p><i>filename</i> [<i>.file-type</i>] Specifies the file created on disk that contains the alphabetically sorted list of tape files. The default <i>file-type</i> is .TMP.</p> <p>/<i>filename</i> [<i>.file-type</i>] Specifies the file, created on disk that contains a record for each file listed in the following order: <i>Leading string</i>, <i>file-id</i>, <i>trailing string</i>. The default <i>file-type</i> is .TMP.</p>
<b>Example</b>	<p>TAPE LIST,PRINT /SORT, *.FRM FRMFIL.TMP</p> <p>This command creates a file called "FRMFIL.TMP" which lists all the .FRM files on the mounted tape. The file names in the FRMFIL.TMP file are sorted in alphabetical order and printed. If the screen display of the sorted records is interrupted during a pause, then the created file "FRMFIL.TMP" lists only the displayed filenames.</p> <p>Listing begins at the current tape position and continues to the end of the tape. (The listing may be stopped by entering the X command when the pause occurs on the display.) If the PRINT option is specified, the operator is asked to enter a tape volume ID. The ID can be 1 to 30 characters. If more than 30 characters are entered, only the first 30 characters are used. The following title line appears on each page of the printed listing:</p> <pre>TAPE DIRECTORY date time TAPE ID: id string</pre> <p>The following header line precedes the tape file information on both the screen and printed listings:</p> <pre>FILE NO. FILE NAME FILE SIZE - BF - DATE</pre> <p>FILE NO. Decimal number that indicates the numerical position of the file on the tape.</p>

**FILE NAME**

The *file-id*.

**FILE SIZE**

Number of 512 byte disk sectors.

**- BF -**

Number of 512 byte disk sectors in one tape block.

**DATE**

Date the file was written to tape.

If a valid tape label cannot be found, a number appears in the FILE NO. field but the other fields are blank. This is the case when listing a system software tape (SST). The first two files of the SST do not have labels. A string of asterisks appearing in the date field means no date was specified in the label or that it could not be properly converted.

To print the file, exit from the editor (using the END command). You may spool editor print files. The current working storage file is intact if you reenter the editor after the file is printed. The listing is in portrait mode.

---

**TAPE [CARTRIDGE] NEXT**

---

Use this command to display the next file on the tape or cartridge and position the tape or cartridge for manipulating that file.

**Logon level**

Levels 1 through 5.

**Syntax**

TAPE [CARTRIDGE] NEXT

**Restriction**

The system ignores another NEXT command until it executes another TAPE command.

---

**TAPE [CARTRIDGE] REWIND**

---

Use this command to rewind a tape or cartridge.

**Logon level**

Levels 1 through 5.

**Syntax**

TAPE [CARTRIDGE] REWIND

**Restriction**

Use REWIND rather than TAPE [CARTRIDGE] REWIND after issuing a MOVE command. Using the TAPE [CARTRIDGE] REWIND command after MOVE can result in the erroneous and misleading message "Tape went offline during operation."

---

**TAPE [CARTRIDGE] SKIP**

---

Use this command to position the tape or cartridge after the specified number of files.

**Logon level**

Levels 1 through 5.

**Syntax**

TAPE [CARTRIDGE] SKIP [*n*]

**Parameter**

*n*

A positive integer which specifies the number of tape marks the tape or cartridge is past.

---

**TAPE [CARTRIDGE] UNLOAD**

---

Use this command to unload the tape or cartridge. If the tape or cartridge is not at BOT, this command will rewind then unload the tape or cartridge.

**Logon level** Levels 1 through 5.  
**Syntax** TAPE [CARTRIDGE] UNLOAD

---

**TAPE [CARTRIDGE] VOLINIT**

---

Use this command to initialize a tape or cartridge at 1600 or 6250 bpi.

**Logon level** Levels 1 through 5.  
**Syntax** TAPE [CARTRIDGE] VOLINIT [,1600],6250]

---

**TIME**

---

Use this command to verify the time and date maintained by the system, or to turn the display on and off. Some non-print tasks turn this display off during processing, but turn it back on when completed. If you do not specify a parameter, the current date, time and system status display continually in the upper right hand corner of the system controller display.

**Logon level** Levels 1 through 5.  
**Syntax** TIME [ON|OFF]  
**Parameters** ON  
 Turns display on, and keeps it updated.  
 OFF  
 Turns display off.

Refer to the *Xerox 4850* and the *4890 HLC LPS Operator Guides* for more information about the time and date display.

---

**TYPE**

---

Use this command to display a source file without editing the file.

**Logon level** Levels 1 through 5.  
**Syntax** TYPE [*disk-id*]*file-id*  
**Parameters** *disk-id*  
 Identifies the system disk (DP0:, DP1:, DP2:, or DP3:) containing the *file-id* to be displayed.  
*file-id*  
 Specifies the file name *filename.file-type* of the source file.

To view a file in the system, you must have an appropriate level of access.

**XPS**

---

	Use this command to reset XPSM accounting. This command causes the XPSM accounting database to be cleared of all entries, and all accounting files to be freed.
<b>Logon level</b>	Level 5.
<b>Syntax</b>	XPS
<b>Parameters</b>	None
<b>Restriction</b>	This command should only be used as a means to reset accounting in the event that a non-recoverable incident occurred. Using this command results in the loss of all accumulated accounting data within the printer.  The XPS command is recognized only when HIP is online.

This section describes the text file editing conventions and commands available for the 4850 and 4890 HighLight Color Laser Printing Systems (LPS).

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## Conventions

---

The following conventions apply to the editor commands:

**Commands** You can enter all commands except composite commands in full or with the first three characters only. For example, you can enter RENUMBER or REN.

Except for CE, GPCE, PCE, and SCE, you must enter composite commands in full. You cannot abbreviate them.

Press <ENTER> to submit each command for execution.

**CAUTION:** There is only one working storage file; any intervening use of the editor is likely to destroy its contents.

**Character strings** Split character strings longer than 80 characters as follows:

- Use the ampersand character (&) to indicate the character string continues in the next record.
- Use the syntax of the character string to indicate it continues in the next record.

**Examples**

'XEROX.PICTORIAL.RED'	00010
Ink name within one record:	
'XEROX.PICTORIAL.	00010
RED'	00020
Ink name within two records using string syntax (a period) to continue the string.	
'XEROX.PICTORIAL.&	00010
RED'	00020
or	
'XEROX'PICTORIAL.&	00010
RED'	00020
or	
XEROX.PICTORIAL.&	00010
RED'	00020

Ink name within two records using an ampersand to continue the string.

<b>Syntax variations</b>	<i>n-m</i>	Specifies starting and ending line numbers.
	<i>n</i>	Specifies one line number.
	<i>n-</i>	Specifies the starting line number to the end of the file.
	<i>-m</i>	Specifies beginning of the file to the identified line number. The highest valid line number is 32,765. The maximum number of file records (lines) is 5,000.

---

## Command summary

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Table 2-1 shows the editor commands.

Table 2-1. **Editor commands**

Command	Function
<b>C</b>	Changes the specified character string into another string.
<b>CE</b>	Abbreviates the commands CLEAR, END.
<b>CLEAR</b>	Clears the contents of the working file.
<b>CONVERT</b>	Turns on use of pound sign (#) to alter capitalization.
<b>COPY</b>	Copies files from tape, disk-to-disk, or tape to cartridge.
<b>D</b>	Deletes string.
<b>DELETE</b>	Deletes a file from the system.
<b>DISPLAY</b>	Displays source lines in the text work area on the LPS console monitor.
<b>DUPLICATE</b>	Duplicates lines from a file into another area of the file.
<b>EDIT</b>	Begins an editing session.
<b>END</b>	Ends an editing session.
<b>F</b>	Inserts a new string following the specified string.
<b>FID</b>	Creates a prototype command file.
<b>FILE</b>	Lists the disk file catalog on the LPS display.
<b>FIND</b>	Finds and displays lines containing a specified text string.
<b>FIX</b>	Modifies fonts and logos.
<b>FLOPPY</b>	Initiates floppy disk utility commands.
<b>GET</b>	Copies an existing file into the text work area.
<b>GPCE</b>	Abbreviates the commands GET, PRINT, CLEAR, END.
<b>INSERT</b>	Inserts lines using a specified line number.
<b>KEYS</b>	Displays beginning and ending line numbers of the file in the text work area.
<b>LIST</b>	Lists the disk file catalog on the printer.
<b>MERGE</b>	Appends an existing file to the current contents of the text work area.
<b>MODIFY</b>	Specifies a range of lines for intra-record commands.
<b>MOVE</b>	Moves lines from one place to another.
<b>NOCONVERT</b>	Turns off use of pound sign (#) to alter capitalization.
<b>O</b>	Overlays existing string by specified string.

Table 2-1. Editor commands (continued)

Command	Function
P	Inserts a new string prior to the specified string.
PCE	Abbreviates the commands PRINT, CLEAR, END.
PRINT	Prints all or specified lines of the working file to sample or output tray.
REMOVE	Deletes a specified group of lines.
RENUMBER	Renumbers the lines in the working file.
REPLACE	Substitutes the specified existing lines with specified new lines.
REVIEW	Provides sequential listing of filenames with optional delete.
RNAME	Changes the name or type of a file.
S	Substitutes existing string by specified string.
SAVE	Saves the contents of working storage as a disk file.
SCE	Abbreviates the commands SAVE, CLEAR, END.
SORT	Alphabetizes the records in the file currently being edited.
STEP	Displays the next record in the file and indicates that it will be modified.
TAPE	Initiates tape or cartridge utility commands.
TYPE	Displays source files without copying them to the editor work area.

---

## Commands

---

You must invoke the editor to access the editor commands. Refer to the EDIT command for more information. The editor commands appear in alphabetical order.

### C

---

Use this command to change the specified character string to another character string.

**Syntax** C [*n*]/*string*<sub>1</sub>/*string*<sub>2</sub>/

**Parameters** *n*

Indicates that the *n*th occurrence of the string in each line is to be affected (*n* = 0 specifies all occurrences). When *n* is specified, it must be preceded by one blank character. One string is changed from lines specified in the MODIFY command, the entire file is the default for *n*. In addition to the slash (/), a dollar sign (\$), a period (.), or a single quote (') may be used as an intra-record command delimiter.

*string*<sub>1</sub>

Indicates the string you want to change.

*string*<sub>2</sub>

Indicates the new string that replaces *string*<sub>1</sub>.

*string*<sub>1</sub> and *string*<sub>2</sub> are case sensitive.

## CE

---

	Use this command to remove all data lines from the working file and terminate the editing session. Refer to the CLEAR and END commands for further information.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	CE
<b>Restrictions</b>	This command is an abbreviated method of entering two commands, CLEAR and END. If the first command fails to execute because of an error condition, the system may ignore subsequent commands.

## CLEAR

---

	Use this command to erase all records.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	CLEAR
<b>Examples</b>	<pre>EDIT&gt; CLEAR       Clear working storage.</pre>

## CONVERT

---

	Use this command to edit files transferred from other Xerox printers with uppercase-only keyboards. You can edit files containing lowercase characters using the uppercase keyboard. To insert or reference lowercase characters in a file, precede and follow the lowercase characters with the pound sign (#). The pound sign indicates the start and the end of conversion to lowercase characters. Use the NOCONVERT command to make the pound sign a character again instead of a toggle.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	CONVERT
<b>Example</b>	Use the CONVERT command to alter capitalization in the text of line 10: THIS IS THE END. <pre>EDIT&gt; CONVERT EDIT&gt; MOD 10 THIS IS THE END EDIT&gt; S/T#HIS/T#HAT/ That is the end EDIT&gt; NOCONVERT</pre>

## COPY

---

You can initiate the COPY command from the editor or at the system level. Refer to the "System commands" chapter of this reference for more information on the COPY command.



---

**D**


---

	Use this command to delete a string from one or more records in the working storage file.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	D [ <i>n</i> ]/ <i>string</i> /
<b>Parameters</b>	<p><i>n</i></p> <p>Indicates that the <i>n</i>th occurrence of the string in each line is to be affected (<i>n</i> = 0 specifies all occurrences). When <i>n</i> is specified, it must be preceded by one blank character. One string is deleted from lines specified in the MODIFY command, the entire file is the default. In addition to the slash (/), a dollar sign (\$), a period (.), or a single quote (') may be used as an intra-record command delimiter.</p> <p><i>string</i></p> <p>Indicates the string you want to delete.</p> <p><i>string</i> is case sensitive.</p>
<b>Examples</b>	<pre>EDIT&gt; MODIFY 5 EDIT&gt; D/SYSTEM/</pre> <p>Displays the line you want to modify and specifies deleting the first occurrence of SYSTEM from line 5.</p> <pre>EDIT&gt; MOD 5-70 EDIT&gt; D 0/JDE/</pre> <p>Specifies deleting all occurrences (such as <i>n</i>=0) of JDE from each line, starting with line 5 and proceeding through line 70. If <i>k</i> were set to 2 (instead of 0), the second occurrence of JDE in each line (if any) would be deleted.</p>

---

**DELETE**


---

You can initiate the DELETE command from the editor or at the system level. Refer to the "System commands" chapter of this reference for more information on the DELETE command.

## DISPLAY

---

	Use this command to display a listing of all lines or selected lines of the current working storage file.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	DISPLAY <i>n-m</i> <i>n-m</i> are defined in the "Conventions" section of this chapter.
<b>Examples</b>	The following examples show how to use the DISPLAY command: <pre>EDIT&gt; DISPLAY     Displays all lines.  EDIT&gt; DISPLAY 10-20     Displays lines 10 through 20.  EDIT&gt; DIS 5     Displays lines 5 through the end of the file.  EDIT&gt; DIS -100     Displays lines from the beginning of the file through line 100.  EDIT&gt; DIS - 100 - 125     Displays lines from the beginning of the file through 100.     Ignores the '-125'.</pre>

## DUPLICATE

---

	Use this command to copy a line or group of lines to another point in the file.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	DUPLICATE <i>n[-m],p[,s]</i> <i>n-m</i> are defined in the "Conventions" section of this chapter.
<b>Parameters</b>	<i>p</i> Specified lines are moved to a new location starting with line number <i>p</i> .  <i>s</i> New line numbers are incremented by <i>s</i> . The default value for <i>s</i> is 1.  The specified lines are moved to a new location starting with line number <i>p</i> . The new line numbers are incremented by <i>s</i> . The default value for <i>s</i> is 1. This command is similar to the MOVE command except that original lines are not deleted from the file.

## EDIT

---

	Use the EDIT command to create a source file, access a source file, or execute a file. When you invoke the editor, it prompts you by displaying <code>EDIT&gt;</code> . If you do not enter a parameter, this command creates an empty source file ready for input.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	EDIT [ <i>disk-id</i> ][ <i>filename.file-type</i> [@ <i>filename</i> [ <i>file-type</i> ]]
<b>Parameters</b>	<i>disk-id</i> Refers to the system disk (DP0:, DP1:, DP2:, or DP3:) containing the file.

*filename*

Identifies a one- to six-character disk file.

*file-type*

Specifies the file directory under which the filename is cataloged.

*@filename*

Specifies that the editor is to retrieve commands from an editor command file. If no file type is entered, the system defaults to CMD.

You specify the filename (without the @) if the file is put into working storage.

**Example**

```
OS1000 READY FOR COMMANDS (TIME) HH:MM:SS
EDIT SYSPDL.JSL
```

Operator keys in

```
EDIT>
```

System prompt

**END**

Use this command to terminate the editing session. Control is returned to the system, and no more editor commands are accepted until the editor is requested again. The system displays the following message after the END command takes effect:

```
OS1000 READY FOR COMMANDS HH:MM:SS
```

**Logon level**

Levels 1 through 5.

**Syntax**

END

**F****Purpose**

Use this command to insert a character string following another character string.

**Logon level**

Levels 1 through 5.

**Syntax**

F [*n*]/string<sub>1</sub>/string<sub>2</sub>/

**Parameters**

*n*

Indicates that the *n*th occurrence of the string in each line is to be affected (*n* = 0 specifies all occurrences). When *n* is specified, it must be preceded by one blank character. One string is inserted from lines specified in the MODIFY command, the entire file is the default. In addition to the slash (/), a dollar sign (\$), a period (.), or a single quote (') may be used as an intra-record command delimiter.

string<sub>1</sub>

Indicates string to be followed by string<sub>2</sub>.

string<sub>2</sub>

Insert following string<sub>1</sub> for lines specified in the MODIFY command.

string<sub>1</sub> and string<sub>2</sub> are case sensitive.

## FID

---

You can initiate the FID command from the editor or at the system level. Refer to the "System commands" chapter of this reference for more information on the FID command.

## FILE

---

You can initiate the FILE command from the editor or at the system level. Refer to the "System commands" chapter of this reference for more information on the FILE command.

## FIND

---

Use this command to display all lines in the specified range which contain the specified string.

**Logon level** Levels 1 through 5.

**Syntax** FIND [*n*[-*m*]]/*string*/

**Restrictions** The space between the command and the *n* is mandatory.

The *string* is case sensitive.

**Examples** The following examples show how to use the FIND command:

EDIT>FIND /JDE/  
Displays each line that contains the characters JDE.

EDIT>FIN 5-100/JOB/  
Displays lines 5 through 100 that have the characters JOB.

EDIT>FIN 5/SYSTEM/  
Displays line 5 if it contains the word SYSTEM.

EDIT>FIN 5-/SYSTEM/  
Displays lines 5 through end-of-file that contain the word SYSTEM.

EDIT>FIN -100/JOB/  
Displays lines 1 through 100 that have the characters JOB.

## FIX

---

You can initiate the FIX command from the editor or at the system level. Refer to the "System commands" chapter of this reference for more information on the FIX command.

## FLOPPY

---

You can initiate FLOPPY commands from the editor or at the system level. Refer to the "FLOPPY" section in the "System commands" chapter for information about the following commands:

- FLOPPY CLEAR
- FLOPPY DELETE
- FLOPPY FCHECK
- FLOPPY FILE
- FLOPPY FORMAT
- FLOPPY LIST

- FLOPPY RESTORE
- FLOPPY SAVE.

---

## GET

---

Use this command to bring an existing file into the work area. The previous contents of the work area are erased, and the file name is automatically associated with the contents of the work area.

If you issue the SAVE command without a file name, the contents of the work area overwrite the existing file.

**Logon level** Levels 1 through 5.

**Syntax** GET [*disk-id*]*file-id*

**Parameters** *disk-id*

Specifies the system disk that contains the file as DP0:, DP1:, DP2:, or DP3:.

*file-id*

Specifies the file (by filename.file-extension) to move into the work area.

**Example**

```
OS1000 READY FOR COMMANDS (TIME) HH:MM:SS
EDIT
EDIT> GET SYS2.JSL
```

---

## GPCE

---

Use this command to bring the specified file into working storage, to format it for printing all or selected lines of the file, to remove all data lines from the working file, to terminate the editing session, and to deliver a printed report to the sample tray or to a print tray.

Refer to the GET, PRINT, CLEAR, and END commands for further information.

**Logon level** Levels 1 through 5.

**Syntax** GPCE [*disk-id*]*file-id*[*n-m*]

**Parameters** *disk-id*

Specifies the system disk that contains the file as DP0:, DP1:, DP2:, or DP3:.

*file-id*

Specifies the file (by filename.file-extension) to move into the work area.

*n-m*

Specifies the lines to be printed. No entry of *n-m* results in all lines being printed.

**Restriction** You cannot abbreviate this command to the first three characters.

This command is an abbreviated method of entering four commands, GET, PRINT, CLEAR and END. If one or more of the first three commands fails to execute because of an error condition, the system may ignore subsequent commands.

## INSERT

---

	Use this command to add a line or group of lines into the file.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	{INSERT <i>n</i> [, <i>s</i> ]  <i>n text</i> }
<b>Parameters</b>	<i>n</i> Lines are inserted starting at <i>n</i> and incremented by <i>s</i> . Line <i>n</i> must not already exist.  <i>s</i> New line numbers are incremented by <i>s</i> . The default value for <i>s</i> is 1.  <i>text</i> Any character string. Enter <i>n</i> , one space, and then the text.  With INSERT <i>n</i> [, <i>s</i> ], lines are inserted starting at <i>n</i> and incremented by <i>s</i> . Line <i>n</i> must not already exist. The system prompts you with the next sequence number. Terminate input with a null line such as pressing <ENTER> or encountering an existing record. The default value for <i>s</i> is 1.  With <i>n text</i> , the text you enter replaces the existing line contents.
<b>Examples</b>	<pre>EDIT&gt;INSERT 10,10     Insert lines starting at 10 and increment by 10 for next line.  EDIT&gt;INS 15     Insert lines starting at 15 and increment by 1.  EDIT&gt;55 ACCT USER=(BIN,TRAY);     Insert text at line 55. In this case, the text you enter replaces     the existing line contents.</pre>

## KEYS

---

	Use this command to verify the beginning and ending line numbers of the working file.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	KEYS
<b>Example</b>	<pre>EDIT&gt; GET SYS2.JSL EDIT&gt; KEYS BEGINNING LINE NUMBER 000010 ENDING LINE NUMBER 000050</pre>

## LIST

---

You can initiate the LIST command from the editor or at the system level. Refer to the "System commands" chapter of this reference for more information on the LIST command.

## MERGE

---

Use this command to insert a file into working storage where specified, or to add line numbers to source files created on the host computer and downloaded to the printer. An editor message CANNOT GET, FILE IMPROPERLY SEQUENCED appears if a file

---

	must be merged. The current records in working storage are not destroyed when the records of the new file are brought in.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	MERGE [ <i>disk-id</i> ] <i>file-id</i> [, <i>n</i> [, <i>s</i> ]]
<b>Parameters</b>	<p><i>disk-id</i> Specifies the system disk (DP0:, DP1:, DP2:, DP3:) that contains the file to be moved into working storage.</p> <p><i>file-id</i> Specifies the file (by filename.file-extension) to merge into the specified line(s) of the work area.</p> <p><i>n</i> Specifies the sequence number assigned to the first record of the file being merged with the contents of working storage. The default is the last line number in the working file +10.</p> <p><i>s</i> Sequence increment. The default is 10.</p>
<b>Restriction</b>	If there is not enough space to merge the file into the designated area, a message is displayed.

## MODIFY

---

	Use this command to specify a range of lines that can be affected by subsequent string modification commands. These lines are displayed after the MODIFY command has been issued. The default for the modify range is the entire file. If you specify a range, all records in that range are displayed.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	MODIFY [ <i>n-m</i> ]
<b>Examples</b>	<p>EDIT&gt; MODIFY 5-100 Prepare to modify lines 5 through 100.</p> <p>EDIT&gt; S/JDE/JOB Substitute occurrences of JDE with JOB in lines 5 through 100.</p> <p>EDIT&gt; MOD 5 Prepare to modify line 5.</p> <p>EDIT&gt; D/HOST=OSWTR/ Delete text HOST=OSWTR from line 5.</p> <p>If no match is found in the modify range, the NO MATCH FOUND message is displayed.</p>

## MOVE

---

	Use this command to relocate a line or group of lines to new line positions.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	MOVE <i>n[-m],p[,s]</i>
<b>Parameters</b>	<i>p</i> Specified lines ( <i>n[-m]</i> ) are moved to a new location starting with line number <i>p</i> .
	<i>s</i> New line numbers are incremented by <i>s</i> . The default value for <i>s</i> is 1.
<b>Restriction</b>	Lines <i>n-m</i> are deleted from the file. If there is not enough space to move the file into the designated area, a message will be displayed telling you that there is not enough room.

## NOCONVERT

---

	Use this command to toggle off the CONVERT command so that the pound sign (#) does not convert uppercase characters to lowercase characters.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	NOCONVERT

## O

---

	Use this command to erase a character string by <i>overlaying</i> it with a second character string.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	O [ <i>n</i> ] / <i>string</i> <sub>1</sub> / <i>string</i> <sub>2</sub> /
<b>Parameters</b>	<i>n</i> Indicates that the <i>n</i> th occurrence of the string in each line is to be affected ( <i>n</i> = 0 specifies all occurrences). When <i>n</i> is specified, it must be preceded by one blank character. One string is overlaid from lines specified in the MODIFY command, the entire file is the default. In addition to the slash (/), a dollar sign (\$), a period (.), or a single quote (') may be used as an intra-record command delimiter.
	<i>string</i> <sub>1</sub> / <i>string</i> <sub>2</sub> The <i>n</i> th occurrence of <i>string</i> <sub>1</sub> is overlaid by <i>string</i> <sub>2</sub> for lines specified in the MODIFY command. It is useful for replacing characters that are unknown or that you cannot create from the keyboard.
	<i>string</i> <sub>1</sub> and <i>string</i> <sub>2</sub> are case sensitive.
<b>Examples</b>	ABCDEF <del>GH</del> XJKL Initial string contains a lowercase x which cannot be input through the keyboard. EDIT> O/GH/GHI/ Command



ABCDEFGHIJKLM  
Final string

---

## P

---

<b>Purpose</b>	Use this command to insert one character string <i>prior</i> to another character string.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	P [ <i>n</i> ] / <i>string</i> <sub>1</sub> / <i>string</i> <sub>2</sub> /
<b>Parameters</b>	<p><i>n</i></p> <p>Indicates that the <i>n</i>th occurrence of the string in each line is to be affected (<i>n</i> =0 specifies all occurrences). When <i>n</i> is specified, it must be preceded by one blank character. One string is inserted from lines specified in the MODIFY command, the entire file is the default. In addition to the slash (/), a dollar sign (\$), a period (.), or a single quote (') may be used as an intra-record command delimiter.</p> <p><i>string</i><sub>1</sub></p> <p>Indicates string to be preceded by <i>string</i><sub>2</sub>.</p> <p><i>string</i><sub>2</sub></p> <p>Insert just prior to <i>string</i><sub>1</sub> for lines specified in the MODIFY command.</p>

---

## PCE

---

	Use this command to format for printing all or selected lines of the working file, to remove all data lines from the working file, to terminate the editing session, and to deliver a printed report to the sample tray or to a print tray.
	Refer to the PRINT, CLEAR, and END commands for further information.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	PCE [ <i>n-m</i> ]
<b>Restriction</b>	This command is an abbreviated method of entering three commands, PRINT, CLEAR and END. If either one of the first two commands fails to execute because of an error condition, the system may ignore subsequent commands.

**PRINT**

	Use this command to print all or selected lines of the current working storage file.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	PRINT [ <i>n-m</i> ]
<b>Parameters</b>	<i>n-m</i> Specifies the lines to be printed.
	To print the file, exit from the editor using the END command. You can then spool editor print files. The current working storage file is intact if you enter the editor after the file is printed. The listing is in portrait mode.
	Three title lines precede the data requested for printing and appear on each logical page:

```

FILE NAME:      file-id PRINTED ON:  date time
DISK ID:        disk id
1.....10.....20.....30.....40.....50.....60 .....70

```

The *file-id* is the filename and file type associated with the current working storage file. If *file-id* is **\*\* NONE \*\***, a hardcopy of the data was requested before the data in the working storage file was given a file name. This is possible if the data is a result of a MERGE command used to obtain the data of a file rather than using the GET command, the data is in a new file that has not been saved on the disk using the SAVE command, or the working storage file is restored upon entering the editor from the system prompt.

---

## REMOVE

---

Use this command to delete a line or group of lines from the working storage file.

**Logon level** Levels 1 through 5.

**Syntax** [REMOVE ]*n*[-*m*]

**Parameter** *n-m*

*n* is always required. If there is a range, *m* is also required (a hyphen cannot be used to imply the first or last line).

**Examples**

```
EDIT>REMOVE 5-25
Remove lines 5 through 25.
```

```
EDIT>REM 15
Remove line 15.
```

You can also erase a line from the working storage file by entering the line number. To delete a group of lines, enter the beginning and ending line numbers separated by a hyphen.

```
EDIT>55
Delete line 55.
1 RECORD DELETED
```

```
EDIT>10-40
Delete lines 10 through 40.
```

```
4 RECORDS DELETED
Assuming the line numbers are incremented by 10.
```

---

## RENUMBER

---

Use this command to renumber the lines of the working storage file. Renumbering begins with line number *n* and successive data lines are assigned numbers in increments of *s*. The default value for *n* and *s* is 10.

**Logon level** Levels 1 through 5.

**Syntax** RENUMBER [*n*[,*s*]]

---

## REPLACE

---

Use this command to replace a line or group of lines by the specified lines. There are two methods for initiating the replace function. Each method has its own syntax.

**Logon level** Levels 1 through 5.

**Syntax** REPLACE *n*[-*m*][,*s*]

or

*n text*

**Parameters** *n-m*

*n* is always required and is the first line to be replaced. If there is a range, *m* is also required (a hyphen cannot be used to imply the first or last line).

*s*

Sequence increment. The default is 1.

*text*

Text you want to enter on the *n*th line.

For the REPLACE *n*[-*m*][,*s*] command, you can replace the designated line or lines and are allowed to enter data into line *n* through the next existing line, incremented by *s*.

For the *n text* command, you can enter text for the *n* line, and you will be prompted for the next sequential command line.

**Examples** For a command file with 10 lines sequenced by 10, we will replace some lines with these two commands:

```
10 aaaaaaa
20 bbbbbbb
30 ccccccc
40 ddddddd
50 eeeeeee
60 fffffff
70 ggggggg
80 hhhhhh
90 iiiiii
100 jjjjjj
```

**Example 1** EDIT>REPLACE 20

With this command, you delete the contents of line 20 and are allowed to replace it with new data you would then enter. You would start with line 20 and, at increments of 1, enter data from line 20 through line 29. You are stopped at 29 because 30 would be the next sequential existing line not to be replaced.

**Example 2** EDIT>REPLACE 30-40

This time you replace lines 30 and 40 with lines 30-49 at increments of 1.

Of course, you do not have to use all of the numbers, just the ones you need.

**Example 3** EDIT>REPLACE 50-80,5

With this command, you delete the contents of lines 50 through 80 and are allowed to replace them with new data you would then enter. You would start with line 50 and, at increments of 5, enter data commands from line 50 through line 85. You are

stopped at 85 because 90 would be the next sequential existing line not to be replaced.

**Example 4**

```
EDIT>100 kkkkkk
```

With this type of command you are only allowed to replace one line, the one you designated. 100 in this case. It is replaced with the text you entered as *kkkkkk*. You will then be prompted for command line 101.

---

**REVIEW**


---

You can initiate the REVIEW command from the editor or at the system level. Refer to the "System commands" chapter of this reference for more information on the REVIEW command.

---

**RNAME**


---

You can initiate the RNAME command from the editor or at the system level. Refer to the "System commands" chapter of this reference for more information on the RNAME command.

---

**S**


---

Use this command to substitute one character string for another.

**Logon level**

Levels 1 through 5.

**Syntax**

*S* [*n*] /*string*<sub>1</sub>/*string*<sub>2</sub>/

**Parameters**

*n*

Indicates that the *n*th occurrence of the string in each line is to be affected (*n* = 0 specifies all occurrences). When *n* is specified, it must be preceded by one blank character. One string is substituted from lines specified in the MODIFY command, the entire file is the default. In addition to the slash (/), a dollar sign (\$), a period (.), or a single quote (') may be used as an intra-record command delimiter.

*string*<sub>1</sub>

Indicates string to be substituted by *string*<sub>2</sub>.

*string*<sub>2</sub>

Substituted for *string*<sub>1</sub> for lines specified in the MODIFY command.

*string*<sub>1</sub> and *string*<sub>2</sub> are case sensitive.

**Example**

```
ABCDEFGHIJKLML
```

```
EDIT>S/GHX/GHI/
```

```
ABCDEFGHIJKLML
```

Initial string, command, and final string.

**SAVE**

---

	Use this command to save the contents of the working storage file (or a subset of it) in permanent file storage.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	SAVE [ <i>file-id</i> [, <i>n</i> [, <i>m</i> ]]]
<b>Parameters</b>	<i>file-id</i> If no <i>file-id</i> is specified, the contents of the working storage file are saved under the name currently associated with it (as set by a previous GET command or as set when the Editor is called). If no <i>file-id</i> is currently associated with the working storage file, the operator is prompted for a <i>file-id</i> under which to save its contents.  <i>n,m</i> Saves a set of lines by specifying the starting line number <i>n</i> and the ending line number <i>m</i> . The default for <i>n</i> is the first line number. The default for <i>m</i> is the last line number.  If a <i>file-id</i> is given, and a file already exists with that file-id, the system displays the following message:  THE FILE ALREADY EXISTS, DO YOU WANT TO OVERWRITE IT (YES/NO)?  If you enter YES, the file is overwritten and its original contents are lost. If you enter NO, the SAVE command is ignored. A message displays if there is insufficient disk space to save a file.

**SCE**

---

	Use the SCE (SAVE CLEAR END) command to save the contents of the working file (or a subset of it) into permanent file storage, to remove all data lines from the working file, and to terminate the editing session.  Refer to the SAVE, CLEAR, and END commands for more information.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	SCE [ <i>disk-id</i> ][ <i>file-id</i> [, <i>n</i> [, <i>m</i> ]]]
<b>Parameters</b>	<i>disk-id</i> Specifies the system disk that will contain the saved file as DP0:, DP1:, DP2:, or DP3:.  <i>file-id</i> Specifies the file (by filename.file-extension) into which the contents of the working file is saved.  <i>n-m</i> Specifies the lines to be saved. No entry of <i>n-m</i> results in all lines being saved.
<b>Restrictions</b>	This command is an abbreviated method of entering three commands, SAVE, CLEAR and END. If one of the first two commands fails to execute because of an error condition, the system may ignore subsequent commands.

---

## SORT

---

Use SORT after you invoke FID from within the editor. FID generates a list of all files of the file type you specified on the system and creates a .CMD file that consists of one record for each file. Each record is a semicolon followed by the one- to six-character filename, a period, and the file type. You must use GET to put this .CMD file in the editor work area before you issue the SORT command, since SORT operates only on the file in the editor work area. SORT copies the .CMD file records to a .TMP file, putting them in alphabetical sequence by the sort order of the characters in positions 2 through 7.

The sort priority used by the SORT command is:

?, A,B,C...Z,0,1,2,...9

The ? represents any character that is not an uppercase letter or a number. Lowercase, trailing or special characters are ignored, and the record is written to the beginning of the file.

If the editor work file is empty when you issue the SORT command, the system displays the message "NOTHING TO SORT."

**Logon level** Levels 1 through 5.

**Syntax** SORT

**Example** In the following example, FID creates a file named "FSLFIL.CMD" listing all the .FSL files on the LPS disks. Use GET to put the FSLFIL.CMD file in the editor's working area. Then FSLFIL.CMD is sorted, and is printed or displayed.

```
EDIT>FID FSLFIL.CMD FSL
EDIT>GET FSLFIL.CMD
EDIT>SORT
EDIT>PRINT (or DISPLAY)
```

---

**STEP**


---

	Use this command to display each record of a file, one at a time, starting with the next record as specified in the MODIFY command.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	STEP
<b>Examples</b>	<pre>EDIT&gt; MODIFY 10       Sets the modify range.  ...line 10 displays...  EDIT&gt; STEP  ...text of next line after line 10 displays...  EDIT&gt; S/MOST/HOST       Changes text in next line after line 10.  ...1 string changed  EDIT&gt; STEP  ...next line displays  EDIT&gt;...       User can enter an intra-record command (such as S, F, P, or D) or another STEP.  Pressing &lt;ENTER&gt; is an implied STEP command. If there is an active working file, the modify range is stepped as if a STEP command had been issued. When you attempt to step past the last record of the file, the system displays the following message:  INVALID SEQUENCE NUMBER</pre>

---

**TAPE [CARTRIDGE] EOF or NOEOF or ENDFILE**


---

	Use this command to control the writing of tape marks between files for LPS labeled and unlabeled tapes.
<b>Logon level</b>	Levels 1 through 5. Available only from the editor.
<b>Syntax</b>	TAPE [CARTRIDGE ]{NOEOF EOF ENDFILE}
<b>Parameters</b>	<p><b>CARTRIDGE</b> Specifies the cartridge device assigned to the CAR keyword using the SUB DEV command. If you do not specify CAR, TAPE keyword is used.</p> <p><b>NOEOF</b> Disables the writing of tape marks between files. This command must precede the list of file names to be written to tape.</p> <p><b>EOF</b> Enables the writing of tape marks. This command writes two tape marks and then backs up over one of the tape marks.</p> <p><b>ENDFILE</b> Enables the writing of tape marks. It writes the file ENDFIL.END and ends the tape with two tape marks. It then backs up over one of the tape marks. This selection is provided for compatibility with the HOSTCOPY procedure, which requires that the end of the last physical file on the tape be identified with a logical file called ENDFIL.END. This</p>



file results in the message being displayed during HOSTCOPY:

```
End of tape found. Is another file to be sent?
```

It also concatenates files without tape marks between logical files. For example, you may create a backup tape with all user files concatenated into one file (multiple logical files in one physical file), thereby eliminating the need for multiple job steps when executing HOSTCOPY to download these files.

### Restrictions

If tape mark writing is disabled using NOEOF, you must enable it again using EOF or ENDFILE, or the tape will not contain any tape marks to signify the end of the tape. A tape must normally end with two tape marks.

If NOEOF is selected and the end of tape is reached while writing a file, the LPS marks the tape two times in that area, and the last file will be corrupted.

### Examples

In the following example of NOEOF and ENDFILE, three .IMG files are copied to cartridge with no tape marks written between the .IMG files. TAPE ENDFILE enables the writing of tape marks, writes the ENDFIL.END file to tape, writes two tape marks, and backs up over one of them:

```
EDIT> TAPE CARTRIDGE NOEOF
EDIT> COPY CARTRIDGE WRITE LABEL ABC.IMG
EDIT> COPY CARTRIDGE WRITE LABEL ABD.IMG
EDIT> COPY CARTRIDGE WRITE LABEL BCD.IMG
EDIT> TAPE CARTRIDGE ENDFILE
```

In the following example of NOEOF and EOF, three .IMG files are copied to tape with no tape marks written between the .IMG files. TAPE EOF writes two tape marks and backs up over one of them:

```
EDIT> TAPE NOEOF
EDIT> COPY TAPE WRITE LABEL ABC.IMG
EDIT> COPY TAPE WRITE LABEL ABD.IMG
EDIT> COPY TAPE WRITE LABEL BCD.IMG
EDIT> TAPE EOF
```

### Recommendation

Use the ENDFILE option to prepare a tape to be used by the HOSTCOPY command.

For example, you can create a backup tape with all user files concatenated into one file (multiple logical files in one physical file), thereby eliminating the need for multiple job steps when executing HOSTCOPY to download these files.

This command is provided for compatibility with the HOSTCOPY procedure, which requires that the end of the last physical file on the tape be identified with a logical file called ENDFIL.END. The system displays the following message during HOSTCOPY:

```
END OF TAPE FOUND. IS ANOTHER FILE TO BE SENT
```

## TYPE

---

You can initiate the TYPE command from the editor or at the system level. Refer to the "System commands" chapter of this reference for more information on the TYPE command.

---

## 3. Font editor commands

This section describes the font editor commands available for the 4850 and 4890 HighLight Color Laser Printing Systems (LPS). Font editor commands allow you to create and edit font files. You can also modify font and logo files to allow printing.

---

### Font editor

---

Evaluate the general and specific characteristics of the standard, licensed, and user-created font files on your LPS to select the file that most closely matches the requirements of the new font file. The font files you create should differ from source font files primarily in the composition of the character sets. The new font files are either an abridged, enhanced, or hybrid version of one or more source font files. Use the existing font files as either:

- The primary source font file, which provides general overall font characteristics, plus specified characters
- A secondary source font file, which provides only specified characters added to the primary source font file.

During a font file editing session, the source font files are identified and copied. The primary source font file is specified first and all its characteristics are copied to the work area. Next the specified characters within it are copied into the file being created. Finally, the secondary font files are specified.

You obtain the general characteristics of the font file from either:

- The first selected licensed source font file (when the complement of selected source font files is composed of both licensed and non-licensed or only licensed font files)
- The primary source font file (when all the selected source font files are nonlicensed).

The general characteristics of the new font file are augmented with security information from the first selected licensed source font file.

Characters contained in the new font file are copied from the primary or secondary source font files and may be enumerated as lists of character literals, or octal or hexadecimal values. Each character in the new font file (whether copied from a fixed-pitch or proportional source font file) has an associated character width field of information.

You can create new font files either manually in an interactive mode or automatically as specified within a designated command file.

Both the source and output font files can be up to 1 MB.

The font editor cannot edit Kanji fonts.

## Command summary

Table 3-1 provides a summary of the font editor commands.

Table 3-1. **Font editor commands**

Keyword	Function
CHARACTER	One of three keywords sets the selection mode (CHARACTER, HEXADECIMAL, or OCTAL). CHARACTER signifies that subsequent characters included in the new font file will be expressed as character literals.
CLOSE	Explicitly terminates access to the current secondary source font file.
END	Explicitly terminates the font editing session.
FEDIT	Invokes the font editor.
FIX	Modifies fonts and logos to the LPS configuration.
HEXADECIMAL	One of three keywords sets the selection mode (CHARACTER, HEXADECIMAL, or OCTAL). HEXADECIMAL signifies that subsequent characters included in the new font file will be expressed as hexadecimal values.
INCLUDE	Precedes the list of characters to be copied from the currently accessible source font file to the new font file without character code reassignments (refer to RECODE).
INPUT	Specifies the primary source font file.
OCTAL	One of three keywords sets the selection mode (CHARACTER, HEXADECIMAL, or OCTAL). OCTAL signifies that subsequent characters included in the new font file will be expressed as octal values.
OPEN	Specifies the secondary source font file.
OUTPUT	Stores the current contents of the working storage as a new and permanent font file.
RECODE	Specifies the list of characters that are copied from the source font file to the new font file with new character code assignments (refer to INCLUDE).
REORDER	Changes the access sequence of characters within a specified font file as required to achieve compatibility with Interpress standards.
SUBSTITUTE	Replaces a blank character within the new font with another character from the INPUT font file
#	Functions in character mode to signify shifting from uppercase to lowercase, or vice versa, alternately.
(comma)	Acts as a delimiter in the font editor.
(hyphen)	Acts as a delimiter in the font editor.
(space character)	Acts as a delimiter in the font editor.

## Commands

You must invoke the font editor to access the font editor commands. Refer to the FEDIT command for more information. The font editor commands appear in alphabetical order.

---

## CHARACTER

---

	Use this command to specify that subsequent font characters are expressed by their character literals rather than by their hexadecimal or octal codes.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	CHARACTER
<b>Default</b>	The default for specifying a character is hexadecimal code.
<b>Restriction</b>	You cannot specify some characters by character literals, for example nonprintable characters and delimiters such as blank, comma, and hyphen. You must specify their hexadecimal or octal codes.

---

## CLOSE

---

	Use this command to close the secondary source font file.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	CLOSE
	You can also close a secondary source font file by issuing one of the following commands:
	OPEN Selects another existing font file as a secondary source font file.
	INPUT Initiates a font editing session for another new font file.
	END Terminates all font editing operations.
	OUTPUT Saves the font file which has been modified or created.

---

## END

---

	Use this command to exit the font editor. If all new information for the last font file created or modified has not been saved with OUTPUT, the system prompts you to confirm saving the file or losing the file before executing END.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	END

---

## FEDIT

---

	Use this command to invoke the font editor and access the commands available. If you do not enter a parameter, this command begins a font editing session.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	FEDIT [[ <i>filename</i> [.FNT]]   [@ <i>filename</i> [.CMD]]]
<b>Parameters</b>	<i>filename</i> [.FNT] Begins a font editing session and specifies the font file to be copied to the work area.

*@filename*[.CMD]

Begins a font editing session and specifies the command file with font editor commands to be executed to create or modify a font file.

## FIX

---

Use this command to modify licensed and standard fonts and logos, and to format the font or logo matrix so it can be printed by your printer's IG version. This is a system command that does not work in the font editor. Refer to the "Systems commands" chapter of this document for more information.

## HEXADECIMAL

---

Use this command to specify that subsequent font characters are expressed by their hexadecimal codes rather than their octal codes or character literals.

**Logon level** Levels 1 through 5.  
**Syntax** HEXADECIMAL  
**Default** The default is to specify a character by its hexadecimal code.

## INCLUDE

---

Use this command to assign the same character codes in the last font file copied by the INPUT command to the specified characters in the new font file. Specify these characters as hexadecimal or octal codes, or as character literals. (The bitmaps of the specified characters are copied from the INPUT font file to the font file being created.) You can use this command multiple times to copy characters from the INPUT font file.

**Logon level** Levels 1 through 5.  
**Syntax** INCLUDE A-Z, a-z  
**Parameters** A-Z  
                   Specifies uppercase characters with contiguous character code assignments, starting with A and ending with Z.  
                   a-z  
                   Specifies lowercase characters with contiguous character code assignments, starting with a and ending with z.

**Example** In the following example, the FEDIT command invokes the font editor and the INPUT command selects a designated font file as the primary source font file for the font editing session. The CHARACTER command then specifies the use of character literals by the following INCLUDE command.

```
FEDIT
FEDIT>INPUT L05TBC.FNT
FEDIT>CHARACTER
FEDIT>INCLUDE A-Z, a-z
```

---

## INPUT

---

Use this command to specify the font file to use as the primary source file for the new font file you are creating. General font characteristics information is copied to the new file.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	INPUT <i>filename</i> [.FNT]
<b>Parameters</b>	<i>filename</i> [.FNT] Specifies the font file to be used as the source file.
<b>Restriction</b>	INPUT will erase a font file just created or modified unless it has been saved with OUTPUT.

---

## OCTAL

---

Use this command to specify that subsequent font characters are expressed by their octal codes rather than their hexadecimal codes or character literals.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	OCTAL
<b>Parameters</b>	None.
<b>Default</b>	The default to specify characters is by hexadecimal codes.

---

## OPEN

---

Use this command to specify the next font file to use as a secondary source. You can copy characters from the secondary file to the new font file. You can also select multiple secondary source font files.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	OPEN <i>filename</i> [.FNT]
<b>Parameters</b>	<i>filename</i> [.FNT] The <i>file-id</i> or name of a font file to open and access as a secondary source font file. .FNT is assumed if omitted.
<b>Restrictions</b>	While the specified secondary source font file is open: <ul style="list-style-type: none"> <li>• The primary source font file is unavailable until the secondary source font is closed (refer to the CLOSE command in this section).</li> <li>• The character selection mode may be HEXADECIMAL, OCTAL, or CHARACTER.</li> <li>• The INCLUDE and RECODE commands may be specified, as required, to enumerate the characters to be copied from the secondary source font file with or without being recoded.</li> </ul> <p>The system monitors the selection of secondary source font files and issues an appropriate warning message whenever a condition of possible font incompatibility is detected. It is assumed that a font-knowledgeable user understands the full consequence of any error/warning message before continuing.</p> <p>If a secondary source font file is the first licensed font selected for this new font file, the general overall characteristics initially copied from the primary source font file are overwritten with</p>

general overall characteristics and augmented with security information from the licensed font file.

A selected secondary source font file may be closed explicitly or implicitly.

A secondary source font file may be incompatible with the font character of the primary source (INPUT) font file. The system displays a warning message if this occurs.

If a secondary source font file is the first licensed font selected for this new font file, the general characteristics copied from the primary source font file are overwritten characteristics augmented with security information from the licensed font file.

## OUTPUT

---

	Use this command to save the font file you create or modify.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	OUTPUT <i>filename</i> [.FNT]
<b>Parameters</b>	<i>filename</i> [.FNT] Names the font file. .FNT is assumed if omitted.
<b>Restrictions</b>	OUTPUT executes only if you have copied characters from a source font file with INCLUDE or RECODE.

If an existing font file has the same name as that specified in an OUTPUT command, the system issues a message requesting confirmation that the existing font file should be overwritten.

- If you enter Y, OUTPUT executes. This occurs when the user is working on a long font editing session and wishes to save the intermediate results. The latest intermediate results supersede the preceding intermediate results.
- If you enter N, OUTPUT does not execute. This response helps to prevent the inadvertent loss of an existing font file. The current newly created font file may be saved by issuing another OUTPUT command and using a unique file name.

The contents of working storage are not affected by the OUTPUT command. Thus, a series of new font files where the first file is a subset of a latter file may be created. This is done by issuing an OUTPUT command at intermediate points within a font editing session, using the same primary source font file and any number of secondary source font files.

## RECODE

---

	Use this command to copy characters and assign hexadecimal or octal codes in the new font file which are different from their codes in the source font file.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	RECODE [ <i>n=m</i>   <i>n-m =x-y</i>   <i>n =x-y</i> ]
<b>Parameters</b>	<i>n=m</i> Copies the character represented by <i>m</i> (a hexadecimal or octal code, or the character literal) to the character in the new font file, which is represented by <i>n</i> .
	<i>n-m =x-y</i> Copies the characters represented by the hexadecimal or



octal codes (or character literals) in the range  $x$ - $y$  to characters in the new font file which are represented by the range  $n$ - $m$ .

$n = x$ - $y$

Copies the characters represented by the hexadecimal or octal codes (or literal characters) in the range  $x$ - $y$  from the source file to characters in the new font file which are represented by the hexadecimal or octal codes (or character literals) beginning with  $n$ .

**Example**

In the following example, the OCTAL keyword command specifies that the character selection mode is octal. Therefore, characters specified by subsequent RECODE command must be expressed as octal values representing character code assignments. As shown, a character within the source font file with character code assignment octal 232 is copied into the new font file and assigned character code of octal 44. Then the HEXADECIMAL keyword command sets the character selection mode to hexadecimal. Finally, a string of contiguous characters with character code assignments hexadecimal 41 through 46 in the source file are copied as contiguous characters into the new font and assigned character codes hexadecimal 3A through 3F.

```
FEDIT> OCTAL
FEDIT> RECODE 44= 232
FEDIT> HEXADECIMAL
FEDIT> RECODE 3A=41-46
```

## REORDER

Use this command to reorder bitmaps into ascending sequence for compatibility with Interpress standards.

**Logon level**

Levels 1 through 5.

**Syntax**

REORDER *filename* [.FNT]

**Parameters**

*filename* [.FNT]

Specifies the font file whose bitmaps are to be reordered.

**Restriction**

Do not issue REORDER during a font editing session once a primary source font file has been specified.

## SUBSTITUTE

Use this command to replace a character within the new font with another character from the INPUT font file.

**Logon level**

Levels 1 through 5.

**Syntax**

SUBSTITUTE  $m$   $n$

**Parameters**

$m$

Copies the character represented by  $m$  (a hexadecimal or octal code, or a character literal) from the INPUT font file.

$n$

Becomes the character represented by  $m$  (a hexadecimal or octal code, or a character literal) in the new or modified font file.



---

## 4. Command file commands

This chapter describes the command file commands available for the Xerox 4850 and 4890 HighLight Color Laser Printing Systems (LPS). These commands allow you to create and edit command files.

A command file is a set of frequently used commands that was created using the editor and stored as a .CMD file. It can be a system command file (consisting of OSS commands), an editor command file (consisting of editor commands), or a font editor command file (consisting of font editor commands). You cannot abbreviate commands within command files. You must spell out each command.

---

### Command summary

---

Table 4-1. Command file commands

Command	Function
*	First symbol in a command file line providing a message to the programmer.
;	First symbol in a command file line providing a message to the operator.
.ASK	Alters symbol settings.
.ASKS	Substitutes character string for variable name.
.ASKV	Assigns symbol integer values.
.BCP	Branches if the processor is correct.
.BEZ	Branches if the symbol is zero.
.BF	Branches if false.
.BNZ	Branches if symbol is not zero.
.BR	Branches unconditionally.
.BT	Branches if true.
.BX	Branches to label selected by operator.
.CHAIN	Chains editor command files.
.DEC	Decrements a symbol.
.DELAY	Delays for a specified time.
.EXIT	Terminates a command file.
.HOME	Clears the LPS display.
.INC	Increments a symbol.
.NOSHOW	Discontinues displaying logical commands.
.PAUSE	Suspends execution of command file.
.QWAIT	Queues the print job submitted to the command file.
.SETC	Sets symbol to current logon class.

Table 4-1. **Command file commands** (continued)

Command	Function
.SETF	Sets symbol false.
.SETT	Sets symbol true.
.SETV	Sets symbol to a value.
.SHOW	Displays logical commands.
.WAIT	Suspends command file processing until print job completes.

---

## Commands

---

The following command file commands are available for the 4890 HighLight Color LPS.

\*

Use a \* as the first character in a record that documents the code in the file. It must be the first character on line.

**Logon level** Levels 1 through 5.  
**Syntax** \*

;

Use a ; to display comments for the operator command file during execution of the coded command file. It displays messages to prompt the operator for entries which the command file cannot provide. It must be in the first position of the record.

**Logon level** Levels 1 through 5.  
**Syntax** ;

---

### @command-file [.CMD]

---

Use editor command files to preserve and execute frequently used sets of OSS, editor, and font editor commands. An OSS command file contains OSS and command file commands. An editor command file contains editor and command file commands, and may also invoke ACCOUNT commands.

**Logon level** Levels 1 through 5.  
**OSS Syntax** OSS READY>@filename[.CMD]  
**Editor Syntax** EDIT>@filename[.CMD]  
**Font editor Syntax** FEDIT>@filename[.CMD]  
**Parameters** @  
                   Specifies that a command file is identified.  
                   filename  
                   Specifies the command file to execute.  
                   .CMD  
                   Specifies the *file-type* (optional).

---

**.ASK**

---

Use this command to set symbol *x* to true if at the prompt defined by *question-text*, the operator enters Y and to set the symbol to false if the operator enters N or presses <ENTER>.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	<code>.ASK x 'question-text'</code>
<b>Parameters</b>	<p><i>x</i></p> <p>Specifies a variable (A-H) whose condition can be set true or false by the yes or no response entered by the operator.</p> <p><i>question-text</i></p> <p>Prompts the operator for a Y or N response. Single quotes required. System appends " ? (Y/N)" to text.</p> <p>If the operator enters Y at the keyboard, <i>x</i> is set to true.</p> <p>If the operator enters N or presses &lt;ENTER&gt;, <i>x</i> is set to false.</p>
<b>Example</b>	<code>.ASK H `; DO YOU WISH TO PROCEED'</code>

---

**.ASKS**

---

Use this command to substitute a character string entered by the operator for a symbol I, J, or K.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	<code>.ASKS {I J K} 'message-text'</code>
<b>Parameters</b>	<p>I, J, K</p> <p>I, J, or K is set to a string entered by the operator in response to the <i>message text</i> prompt. It is substituted for symbol <i>x</i> in related commands that follow.</p> <p><i>message-text</i></p> <p>Prompts the operator to enter a string for the I, J, or K value. Single quotes are required.</p>
<b>Example</b>	<code>.ASKS I `; ENTER THE FILE TO BE DELETED'</code>

---

**.ASKV**

---

Use this command to set the symbol *x* value to an integer between 0 and 255, inclusive. The integer is the operator's response to the *question text* prompt.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	<code>.ASKV x 'question text'</code>
<b>Parameters</b>	<p><i>x</i></p> <p>Specifies a variable (A-H) whose value will be set to the an integer from 0 to 255 as entered by the operator in response to the <i>question text</i>.</p> <p><i>question text</i></p> <p>Prompts the operator for an integer entry from 0 to 255. Single quotes are required.</p>
<b>Example</b>	<code>.ASKV C `; ENTER THE NUMBER OF DISK DRIVES IN THE SYSTEM'</code>

**.BCP**

---

Many command files must be executed by a specific processor. If a command file is written for the font editor, it will not function under the text editor. Use the .BCP command to ensure proper operation by branching to the specified label only if the command file is invoked by the correct processor.

**Logon level** Levels 1 through 5.

**Syntax** .BCP {EDITOR|SYSTEM|FEDIT} *num*

**Parameters** EDITOR, SYSTEM, or FEDIT  
Specifies the command file type for this command file.

*num*

A label defined in the command file to which the program branches if the command file is invoked by the correct processor.

**Example** In the following example, the .BCP command prevents the editor and font editor from trying to execute the system command file.

```
* THIS COMMAND FILE MUST BE RUN AT THE SYSTEM LEVEL
.BCP SYSTEM 25
; THIS COMMAND FILE MUST BE RUN AT THE SYSTEM LEVEL
; PLEASE RESTART IT
.EXIT
.25
(Body of system level command file)
.EXIT
```

---

**.BEZ**

---

The .BEZ command branches to the specified label if the value of symbol *x* is equal to zero. If the symbol *x* (A-H) is not zero, a branch will not occur and the next sequential command following the .BEZ command in the command file will be acted upon.

**Logon level** Levels 1 through 5.

**Syntax** .BEZ *x num*

**Parameters** *x*

A variable (A-H) whose value ranges from 0 to 255. The value of this variable defines if a branch occurs.

*num*

A label defined in the command file to which the program branches if the variable value is equal to zero.

**Example**

```
.SETV C=50
.BEZ C 0
; YOU DID NOT BRANCH BECAUSE C DOES NOT EQUAL ZERO
.EXIT
.0
; YOU BRANCHED BECAUSE C DOES EQUAL ZERO
.EXIT
```

**.BF**

---

The **.BF** command branches to the specified label if the condition of symbol *x* is false. If the symbol *x* is set to true, a branch will not occur, and the next sequential command following the **.BF** command in the command file will be acted upon.

**Logon level** Levels 1 through 5.

**Syntax** **.BF** *x num*

**Parameters** *x*

A variable (A-H) whose condition can be true or false. The condition of this variable defines if a branch will occur.

*num*

A label defined in the command file to which the program branches if the variable value is false.

**Example**

```
.SETF E
.BF E 256
; YOU DID NOT BRANCH BECAUSE E IS NOT FALSE
.EXIT
.256
; YOU BRANCHED BECAUSE E IS FALSE
.EXIT
```

**.BNZ**

---

The **.BNZ** command branches to the specified label if the value of symbol *x* is not equal to zero. If the symbol *x* is zero, a branch will not occur and the next sequential command following the **.BEZ** command in the command file will be acted upon.

**Logon level** Levels 1 through 5.

**Syntax** **.BNZ** *x num*

**Parameters** *x*

A variable (A-H) whose value ranges from 0 to 255. The value of this variable defines if a branch will occur.

*num*

A label defined in the command file to which the program branches if the variable value is NOT equal to zero.

**Example**

```
.SETV A=0
.BNZ A 200
; YOU DID NOT BRANCH BECAUSE A DOES EQUAL ZERO
.EXIT
.200
; YOU BRANCHED BECAUSE A DOES NOT EQUAL ZERO
.EXIT
```



---

**.BR**

---

The **.BR** command unconditionally branches out of the normal program sequence to a specified label.

**Logon level** Levels 1 through 5.

**Syntax** **.BR** *num*

**Parameters** *num*

A label defined in the command file to which the program unconditionally branches. *num* consists of an integer.

**Example**

```
.BR 20
; YOU DID NOT BRANCH
.EXIT
.20
; YOU BRANCHED TO LABEL 20
.EXIT
```

---

**.BT**

---

The **.BT** command branches to the specified label if the condition of symbol *x* is true. If the symbol *x* is set to false, a branch will not occur, and the next sequential command following the **.BF** command in the command file will be acted upon.

**Logon level** Levels 1 through 5.

**Syntax** **.BT** *x num*

**Parameters** *x*

A variable (A-H) whose condition can be true or false. The condition of this variable defines if a branch occurs.

*num*

A label defined in the command file to which the program branches if the variable value is true.

**Example**

```
.SETT B
.BT B 700
; YOU DID NOT BRANCH BECAUSE B IS NOT TRUE
.EXIT
.700
; YOU BRANCHED BECAUSE B IS TRUE
.EXIT
```

**.BX**

The .BX command branches to a label selected by the operator. If the operator selects a value larger than the number of labels, the branch will not occur and the next sequential command following the .BX command in the command file will be acted upon.

**Logon level** Levels 1 through 5.

**Syntax** .BX *x num<sub>0</sub>,num<sub>1</sub>,...num<sub>n</sub>*

**Parameters** *x*

A variable (A-H) whose value is selected by operator input. The value of the variable can be from 0 to 255.

*num<sub>0</sub>, num<sub>1</sub>...num<sub>n</sub>*

Labels defined in the command file to which the program branches. Each label corresponds to an option given to the operator by its position in the command string (the first option to the first label, and so forth). The operator enters a number representing the position of the option (0 for first option, for example), and the program branches to the corresponding label.

**Example** The following is an example of how the .BX command would fit in:

```
.1
; DO YOU WANT TO GENERATE:
;
; 0) QUIT
; 1) MASTER PATCH TAPE
; 2) OFF-LINE ONLY PATCH TAPE
; 3) ONLINE ONLY PATCH TAPE
; 4) SCSI CARTRIDGE PATCH TAPE
; 5) PATCH FLOPPY
;
.ASKV H ' ; ENTER NUMBER CORROSPONDING TO YOUR SELECTION:'
.BX H 9999,20,20,20,100,200
; INAPPROPRIATE RESPONSE, TRY AGAIN
;
.BR 1
.9999
.EXIT
.20
(Commands for generating master, offline, and online patch
tapes.)
.EXIT
.100
(Commands for generating a SCSI Cartridge patch tape.)
.EXIT
.200
(Commands for generating a patch floppy disk.)
.EXIT
```

---

**.CHAIN**

---

Use this command to close the current command file and begin processing the file specified. This command clears all values and strings.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	<code>.CHAIN filename[.file-type]</code>
<b>Parameters</b>	<p><i>filename</i> Specifies the filename of the file to be processed next.</p> <p><i>file-type</i> Specifies the file type of the file to be processed next. If no <i>file-type</i> is specified, it defaults to <code>.CMD</code>.</p>
<b>Example</b>	<pre><code>.CHAIN VERIFY.CMD OR .CHAIN VERIFY</code></pre>

---

**.DEC**

---

Use this command to decrease the value of x by 1.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	<code>.DEC x</code>
<b>Parameters</b>	<p><i>x</i> A variable (A-H) whose value will be decremented. The range of the variable is from 0 to 255. If its value is 0, decrementing by 1 assigns x a value of 255.</p>
<b>Example</b>	<code>.DEC D</code>

---

**.DELAY**

---

Use this command to suspend command file processing for the specified period of time.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	<code>.DELAY n</code>
<b>Parameters</b>	<p><i>n</i> Specifies the delay in seconds before processing continues. Must be within the range 0 to 300 seconds (0 seconds to 5 minutes).</p>
<b>Example</b>	<code>.DELAY 180</code>

---

**.EXIT**

---

Use this command to end command file processing. Ending the command file also discontinues command file processing.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	<code>.EXIT</code>

**.HOME**

---

Use this command to clear the LPS display. The cursor is set to the upper left corner of the display.

**Logon level** Levels 1 through 5.

**Syntax** .HOME

**.INC**

---

Use this command to increase the value of x by 1.

**Logon level** Levels 1 through 5.

**Syntax** .INC x

**Parameters** x  
A variable (A-H) whose value is incremented by 1. If its value is 255, adding 1 assigns it a value of 0.

**Example** .INC E

**.NO SHOW**

---

Use this command to end screen display of logical commands during command file processing.

**Logon level** Levels 1 through 5.

**Syntax** .NO SHOW

**.PAUSE**

---

Use this command to temporarily suspend a command file. The following message displays and processing stops until you press <ENTER> or enter the @RESUME command:

OS1275 COMMAND FILE SUSPENDED

If you enter @ABORT at this point, command file processing terminates.

**Logon level** Levels 1 through 5.

**Syntax** .PAUSE

## .QWAIT

Use this command to queue the print job just submitted by the command file. The .QWAIT command can replace the .WAIT command in command files written for previous OSS versions.

The .QWAIT command delays command file execution until the job completes input processing. Using .QWAIT allows the command file to run faster because input processing of a job can occur simultaneously with output processing of the previous job.

**Logon level** Levels 1 through 5.

**Syntax** .QWAIT

**Example** Figure 4-1 shows a .QWAIT sample code in a command file.

Figure 4-1. **.QWAIT sample code in a command file**

```
START <job A>          /* Job A starts.                */
START <job B>          /* Job B is queued to start input processing when
                       job A finishes input processing and begins
                       printing.                */
.QWAIT                /* The command file waits for job A to complete
                       printing before executing the next step. */
START <job C>          /* Job C is processed by input when job B begins
                       output processing.        */
.QWAIT                /* The command file waits for job B to complete
                       printing before executing the next step. */
START <job D>          /* Job D is processed by input when job B begins
                       output processing.        */
```

## .SETC

Use this command to assign the value of the current logon class to the symbol x.

**Logon level** Levels 1 through 5.

**Syntax** .SETC x

**Parameters** x

A variable (A-H) whose value represents an integer value from 1 to 5.

**.SETD**

---

	Use this command to set up variables for the following date components: year, month, day of the month, hour, minute, second, day of the week.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	<code>.SETD [m],[n],[o],[p],[q],[r],[s]</code>
<b>Parameters</b>	<i>m</i> A variable between A and H inclusive, which sets the year. <i>n</i> A variable between A and H inclusive, which sets the month. <i>o</i> A variable between A and H inclusive, which sets the day of the month. <i>p</i> A variable between A and H inclusive, which sets the hour. <i>q</i> A variable between A and H inclusive, which sets the minute. <i>r</i> A variable between A and H inclusive, which sets the second. <i>s</i> A variable between A and H inclusive, which sets the day of the week.
<b>Restriction</b>	The variables are positional. Variables may be omitted, but each omitted variable must be replaced by a comma.
<b>Examples</b>	<code>.SETD ,,,,,,A</code> Sets A to the day of the week. <code>.SETD C,B,A</code> Sets C to the year, B to the month, and A to the day of the month <code>.SETD A B C</code> Invalid. Commas are required.

**.SETF**

---

	Use this command to set the symbol x value to false.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	<code>.SETF x</code>
<b>Parameters</b>	<i>x</i> A letter from A to H that represents true or false.

**.SETT**

---

	Use this command to set the symbol x value to true.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	<code>.SETT x</code>
<b>Parameters</b>	<i>x</i> A letter from A to H that represents true or false.

---

**.SETV**

---

	Use this command to set the symbol <i>x</i> value to the value of <i>v</i> .
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	.SETV <i>x=v</i>
<b>Parameters</b>	<i>x</i> A letter from A to H.
	<i>v</i> An integer value from 0 to 255.

---

**.SHOW**

---

	Use this command to begin screen display of logical commands during command file processing.
<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	.SHOW

---

**.WAIT**

---

Use this command to delay command file processing until the submitted job completes processing. Then the LPS processes the next command file entry. Any operator entry made during this waiting period functions normally. An @ABORT entry discontinues command file processing.

Be sure to include a .WAIT command after each print job (whether a START, SAMPLE, or disk print job, such as an FDL or PDL compilation with printing specified). Otherwise the commands following the print job request are refused because the system is printing.

If a print job is held in the queue in the schedule single or schedule multiple mode, a .WAIT or .QWAIT command may hold up the command file processing indefinitely.

<b>Logon level</b>	Levels 1 through 5.
<b>Syntax</b>	.WAIT
<b>Example</b>	Figure 4-2 shows a .WAIT sample code in a command file.

Figure 4-2. **.WAIT sample code in a command file**

```
START <job A>          /* Job A is started.                */
START <job B>          /* Job B is queued to start input  */
                      /* processing when job A finishes  */
                      /* input processing and begins    */
                      /* printing.                       */
.WAIT                 /* The command file waits for jobs */
                      /* A and B to complete printing   */
                      /* before executing the next      */
                      /* step.                           */
START <job C>          /* Job C starts after job B        */
                      /* completes output processing.   */
.WAIT                 /* The command file waits for job  */
                      /* C to complete printing before  */
                      /* executing the next step.       */
START <job D>          /* Job D starts after job C        */
                      /* completes output processing.   */
```





---

## 5.

## SDI Option commands

The Xerox Shared Disk Interface Option commands are defined in the *Xerox Shared Disk Interface Option Operations Guide*.



<b>4890 palette</b>	A predefined set of colors or inks provided with the 4890 HighLight Color LPS. Different versions are provided with the printer and with host- or PC-based application software.
<b>A3</b>	International paper size measuring 297 mm by 420 mm or 11.69 by 16.54 inches.
<b>A4</b>	International paper size measuring 210 by 297 mm or 8.27 by 11.69 inches.
<b>additive primary color</b>	There are five additive primary colors: red, green, blue, magenta and cyan. When light of these five colors is combined in equal amounts, the result is white light.
<b>American Standard Code for Information Interchange (ASCII)</b>	Standard 7-bit code that represents alphanumeric information. Each alphanumeric character and several nonprinting characters are assigned a binary number, covering 128 possible characters. It is used for information interchange among data processing systems, data communication systems, and associated equipment.
<b>ANSI</b>	American National Standards Institute.
<b>application software</b>	Host- or LPS-resident software that directs the computer to perform specific tasks or functions. Common business applications include payroll, accounting, and inventory.
<b>argument</b>	Independent variable of a function, such as a parameter.
<b>ascender</b>	Portion of a lowercase alphabetic character that extends above the main body of characters such as b, d, or h. See also <i>descender</i> .
<b>asynchronous</b>	Transmission in data communications controlled by start and stop characters; thus, time intervals between transmitted data blocks may be unequal in length.
<b>ASCII</b>	American Standard Code for Information Interchange. Standard 7 or 8-bit code that represents alphanumeric characters and several nonprinting characters by assigning each a binary number covering 128 possible characters. It is a common standard for information interchange among data processing systems, data communication systems, and associated equipment.
<b>B4</b>	International paper size measuring 250 mm by 353 mm or 9.84 by 13.9 inches.

<b>batch processing</b>	Process that allows for repetitive operations to be performed sequentially on batched data without much involvement from the computer operator.
<b>background job</b>	Low-priority job, usually batched, which is executed automatically as system resources become available.
<b>baud</b>	Measurement of data flow between devices in bits per second. Common baud rates are 110, 300, 1200, 2400, 4800, and 9600.
<b>BCD</b>	Binary coded decimal.
<b>binary</b>	Numbering system with a base of 2. All numbers are represented by combinations of 1 and 0.
<b>binary synchronous communication</b>	See <i>BSC</i> .
<b>binary synchronous transmission</b>	Data transmission where synchronization of characters is controlled by timing signals generated at the sending and receiving stations.
<b>bit</b>	Abbreviation for binary digit, the smallest unit of information recognized by a computer.
<b>bitmap</b>	Visual representation of graphic images in which a bit defines a picture element (pixel) and a matrix of bits defines an image. For example, if a bit is 1, the corresponding pixel is printed.
<b>bitmapped</b>	Display image generated bit by bit for each point or dot. A software-driven scanner is used to create characters and/or graphics.
<b>bits per second</b>	See <i>bps</i> .
<b>block length</b>	Number of characters or bytes contained in a block of data (the block is treated as a unit within the computer). Block length is usually invariable within a system and may be specified in units such as records, words, computer words, or characters.
<b>blocking</b>	Process of combining two or more records into a single block of data which can be moved, operated upon, stored, and so on, as a single unit by the computer.
<b>BOF</b>	Bottom of form.
<b>boot</b>	To load the initial instructions of a program into memory. These instructions direct the loading of the operating system and application software.
<b>BOT</b>	Beginning of tape.

---

<b>bpi</b>	Bits per inch.
<b>bps</b>	Bits per second. In serial communication, the instantaneous bit speed a device or channel transmits a character.
<b>BSC</b>	Binary synchronous communications. 1. Data transmission in which synchronization of characters is controlled by timing signals generated at the sending and receiving stations. 2. Communication using binary synchronous line discipline. 3. Uniform procedure using a standardized set of control characters and control character sequences for synchronous transmission of binary-coded data between stations.
<b>buffer</b>	Area of memory in which data is stored during transfer from one device to another. Used for: 1. Accumulating data into blocks before storage or processing. 2. Adjusting differences of speed between devices, or between a device and a communicating facility.
<b>byte</b>	Fixed number of bits (in data processing, usually 8) processed as a single binary value.
<b>cache memory</b>	A fast, small memory used to enhance CPU performance, separate from the main processor memory.
<b>CCID</b>	Character code identifier. Code associated with the universal identifier "Xerox" to indicate the version of the Xerox character code standard used to code Interpress strings.
<b>CCU</b>	Customer Changeable Unit. The color housing that fits inside the printer.
<b>central processing unit</b>	Interprets and executes instructions, performs all operations and calculations, and controls input and output units and auxiliary attachments.
<b>channel</b>	1. In data communications, a path or line that enables two or more devices to communicate (sometimes called a circuit, facility, or link). 2. In computers, a path for communication between the central processing unit (CPU) and input and output units, or between the CPU and peripheral devices.
<b>character cell</b>	Area defined by the outside dimensions of a character plus all horizontal and vertical spacing. In electronic printing, the character cell is defined by a bitmap of dots.
<b>character code identifier</b>	See <i>CCID</i> .
<b>character set</b>	Set of all characters defined in a font, including alphabetic, numeric, and special characters such as symbols.
<b>characters per inch</b>	See <i>cpi</i> .

<b>clearing house service</b>	Directory of registered users, services, and other resources, allowing relevant information about each item to be retrieved by name.
<b>clocking</b>	A method of synchronizing sending and receiving data communications devices. Clocking allows synchronous transmission at high speeds.
<b>cluster</b>	Group of related feeder trays, usually containing the same size and type of paper (stock). Each cluster has a name, consisting of one to six alphanumeric characters.
<b>CME</b>	Entry modifying the output printing characteristics of a report on a copy-to-copy basis.
<b>CMT</b>	Character mapping table.
<b>CMYK</b>	A printing industry standard color definition model where all colors are defined in terms of values for the four-color process primary colors: cyan, magenta, yellow, and black. Refer to color definition model.
<b>Code</b>	1. A set of symbols representing data or instructions to a computer. 2. To write a program or routine that instructs a computer to perform specified operations.
<b>code conversion</b>	Translation of one type of character or symbol code to another.
<b>color definition model</b>	A standardized format for defining colors using quantifiable values. The most popular such models are RGB, CMYK, and HSB.
<b>color substitution</b>	The 4890 HighLight Color LPS uses an algorithm to translate a color specified in a printing industry standard color definition model to a tone of the Highlight primary color using a 4890 palette.
<b>command language</b>	A language used to instruct an operating system.
<b>communication line</b>	Telecommunication line connecting devices at one location with devices at other locations in order to transmit and receive information.
<b>communication link</b>	Physical means connecting one location to another to transmit and receive information, such as a data link
<b>compiler</b>	Software that translates instructions written in high-level language into machine language for execution by a system.
<b>composite character</b>	Character that has multiple bitmap references combined into one and stored on disk in font memory.

---

<b>continuous printing</b>	Refers to Interpress job integrity under any of the following conditions: excessive graphics, forms, or font use problems.
<b>continuous tone</b>	A photograph, rendering, or other similar image that is made of blended gray tones or values that flow into each other gradually and without hard edges.
<b>control program</b>	An operating system program that manages job flow, input/output processing, and other overall system functions and resources.
<b>Copy Modification Entry</b>	See <i>CME</i> .
<b>copy-sensitive</b>	Job in which multiple copies of a report contain different data, such as paychecks and banking statements.
<b>cpi</b>	Characters per inch. Measure of the size of a fixed-pitch font expressed as the number of characters of the font that can be set in one horizontal inch. See also <i>pitch</i> .
<b>CSI</b>	Command status interface.
<b>Data Capture Utility</b>	See <i>DCU</i> .
<b>data communications</b>	Transmission and reception of encoded information over telecommunication lines.
<b>data file</b>	Collection of related data records organized in a specific manner so that each record is similarly structured. An example of this would be a payroll file set up with one record for each employee, last name first, indicating the rate of pay and all deductions.
<b>data link</b>	Physical means of connecting one location with another for communication. This might include the communications lines, modems, and controls that transmit information between two or more stations.
<b>DCU</b>	Data capture utility. LPS function that saves and prints all system controller activity and provides tracing and event logging facilities.
<b>DDCMP</b>	Digital Data Communication Message Protocol.
<b>default</b>	Value assigned to a field by the system if no input is received from the operator.
<b>defined ink</b>	The tone (defined in the ink catalog file and reproduced for your reference on the printed samples of 4890 HighLight Color LPS palettes) as it is applied to the page.

<b>descender</b>	Portion of the lowercase alphabetic character that extends below the main body of characters such as g, p, or y. See also <i>ascender</i> .
<b>DEC</b>	Digital Equipment Corporation.
<b>device</b>	Any piece of hardware other than the CPU (Central Processing Unit).
<b>digitize</b>	To express or represent data in digital (binary) form so that it can be processed electronically.
<b>DJDE</b>	Dynamic job descriptor entry. Command within an input data stream used to modify the printing environment dynamically.
<b>DMA</b>	Direct memory access.
<b>DMR</b>	Data mode ready. Command parameter that designates a Digital Equipment Corporation host system.
<b>document</b>	1. Data medium and the data recorded on it, usually permanent, which can be read by you or a computer. 2. Collection of information pertaining to a specific subject or related subjects.
<b>dot</b>	Picture element (pixel) imaged by a printer. The number of dots imaged per inch measures printer resolution, for example, 300 dots per inch (dpi). See also <i>spot</i> .
<b>dpi</b>	Dots per inch. Indicates the number of dots per inch displayed on a terminal screen or printed to form a character or graphic.
<b>dry ink</b>	Minute particles of resin and carbon black that can accept an electrical charge and create images. Resin and carbon black or color pigment toner are combined with developer to form the dry ink.
<b>DSDD</b>	Double sided double density.
<b>DSSD</b>	Double sided single density.
<b>DSU</b>	Digital signal unit.
<b>duplex</b>	1. Ability of a data communications system to send and receive information simultaneously. 2. In printing, duplex means printing on both sides of the paper.
<b>dynamic Job descriptor entry</b>	See <i>DJDE</i> .
<b>EBCDIC</b>	Extended binary coded decimal interchange code. Coded character set consisting of up to 256 8-bit coded characters.



---

<b>edge marking</b>	Use of graphic objects (usually lines or boxes) that bleed off the edge of the physical page. See also <i>physical page</i> .
<b>electronic publishing</b>	The integrated production of documents on demand, using digitally stored documents, computerized composition, and electronic printing systems.
<b>elite</b>	Smallest size standard typewriter type which is 12 characters per horizontal inch.
<b>embedded blanks</b>	Blank spaces within a command line.
<b>EMT</b>	Emulator trap. Language instruction.
<b>enabler</b>	Hardware devices or software packages that come with the printer and allow it to perform as specified.
<b>ENET</b>	Ethernet network.
<b>EOF</b>	End of file.
<b>EOT</b>	End of tape.
<b>escapement</b>	Lateral positioning of characters or font families.
<b>Ethernet</b>	Xerox developed local area network (LAN) that allows transmission of data by cable from one device to another. A modified version of the Ethernet specification has been approved as IEEE standard 802.3.
<b>Extended binary coded decimal interchange code</b>	See <i>EBCDIC</i> .
<b>extended metrics</b>	Measurements used in Interpress to alter the size of fonts, allowing more precision with character escapement. Used for rendered characters.
<b>FCB</b>	Forms control buffer. Controls the vertical format of printed output.
<b>FCP</b>	File control parameter.
<b>FCG</b>	Finishing Configuration Utility.
<b>FCU</b>	File Conversion Utility.
<b>FDL</b>	Forms description language. LPS-resident source language used to design electronic forms. See also <i>FSL</i> and <i>form</i> .

<b>FDR</b>	File directory.
<b>feedback</b>	Portion of an output signal that is returned, directly or indirectly, to be compared to a reference signal to maintain the quality of the output signal.
<b>FFM</b>	Font file management.
<b>firmware</b>	Permanent programs stored in read-only memory (ROM).
<b>fixed font</b>	Font containing characters with fixed spacing.
<b>fixed pitch</b>	Font set with every character cell having the same width. In reference to character sets, this term describes typefaces with all character cells having equal width. Monospaced as opposed to proportional spaced.
<b>fixed spacing</b>	Arrangement of characters on a line so that all characters occupy the same amount of horizontal space.
<b>flag</b>	Small indicator marking the occurrence of an event or the existence of a certain condition while the program is executing.
<b>floating accent</b>	Nonspacing accent characters that can be combined with characters and printed as a composite.
<b>font</b>	Complete set of characters of a particular font family having the same point size, weight, stress, and orientation.
<b>Font Interchange Standard (FIS)</b>	A standard that defines the digital representation of fonts and character metrics for the generation of an entire series of Interpress fonts.
<b>form</b>	1. Compiled .FSL file. 2. Specific arrangement of lines, text, and graphics stored in an electronic version. Forms can be printed without variable data or merged with variable data during the printing process. See also <i>FDL</i> and <i>FSL</i> .
<b>format</b>	1. Layout of a document, including margins, page length, line spacing, and typeface. 2. In data storage, the way the surface of a disk is organized to store data. 3. To prepare the surface of a disk for acceptance of data.
<b>format line</b>	Line preceding the message text in a formatted message display.
<b>form feed</b>	Keyboard and printer control character that causes the printer to skip to the top of the next page.
<b>forms control buffer</b>	See <i>FCB</i> .

<b>forms description language</b>	See <i>FDL</i> .
<b>forms source library</b>	See <i>FSL</i> .
<b>FPS</b>	Formatting print service.
<b>FSL</b>	Forms source library. Uncompiled collection of user-created files containing FDL commands. See also <i>FDL</i> and <i>form</i> .
<b>FST</b>	Font specification table.
<b>fuse</b>	To affix dry ink to paper by heat or pressure or a combination of both.
<b>GB</b>	Gigabyte. Unit of approximately one billion bytes.
<b>GCR</b>	Group code recording.
<b>GHO</b>	Graphics handling option.
<b>gigabyte</b>	See <i>GB</i> .
<b>group code recording (GCR) mode</b>	Refers to the specific density of data (such as 6250 bpi) as it is recorded on tape, which is measured in bits per inch (bpi).
<b>gsm</b>	Grams per square meter.
<b>GVG</b>	Graphics video generator.
<b>halftone screen</b>	A tool used in offset printing, typesetting, and laser printing to convert a continuous tone (such as photographic) image to dots, which allows the image to be rendered accurately in these printing processes.
<b>hardcopy</b>	Machine output in permanent form, such as printed reports and listings. Output in a permanent form (usually on paper or paper tape) rather than in temporary form, as on a display. Contains readable printed copy of machine (such as computer) output.
<b>hardware</b>	Physical components (mechanical, magnetic, electronic, and so on) of a system, as opposed to programs, procedures, rules, and associated documentation. The hardware is operated by software and firmware.
<b>HCF</b>	High-capacity feeder.
<b>HCSS</b>	High-capacity stitcher/stacker; also referred to as stitcher/stacker.

<b>hexadecimal</b>	Numbering system with a base of 16. The numbers 10 through 15 are represented by A through F.
<b>HFDL</b>	Host forms description language.
<b>hierarchy</b>	Relative priority assigned to arithmetic or logical operations that must be performed.
<b>high-level language</b>	Programming language consisting of words and symbols that are close to normal English and, also readily understandable by the user. High-level source languages are used for most commercial programs.
<b>highlight color</b>	Printing with black plus another color. A range of colors, tints, and shades is printed by varying the percentage of black dots, colored dots, and the white space between the dots.
<b>HIP</b>	Host interface processor.
<b>host</b>	Computer accessed by users that serves as a source of high-speed data processing for workstations with less computer power. Commonly referred to as mainframe.
<b>host interface</b>	Connection between network and host computer.
<b>HSB</b>	A printing industry standard color definition model in which all colors are defined in terms of values for hue, saturation, and brightness. Refer to <i>color definition model</i> .
<b>hue</b>	The name that describes a color's general appearance, such as red, green, and blue.
<b>identifier (id)</b>	Character(s) used to identify or name data and possibly to indicate certain properties of that data image area on a physical page that may contain text or graphics.
<b>IFU</b>	Interpress font utility. A utility for managing Interpress fonts.
<b>image area</b>	Area on a physical page that may contain text or graphics.
<b>initialize</b>	1. To prepare a blank diskette so it can accept data. This is usually accomplished when a program is booted. 2. To set all information in a computer system to its starting values.
<b>initial program load</b>	See <i>IPL</i> .
<b>ink catalog</b>	File containing inks that is referenced by all software for color information. The ink catalog file has the extension <i>.ICT</i> .

<b>ink referencing</b>	Process by which inks within the ink catalog are referenced in PDL and FDL commands, and by page description language interpreters.
<b>ink substitution</b>	Option of aborting the printing process or continuing with a substitute ink if the referenced ink is not found.
<b>input devices</b>	Keyboards, magnetic media, or any device used to give a system information.
<b>input/output</b>	General term encompassing the flow of data into and out of a system. Also referred to as I/O.
<b>interface</b>	The device that connects two systems to allow them to communicate.
<b>Interpress</b>	Industry-standard page description language developed by Xerox. Interpress documents can be printed on any sufficiently powerful printer equipped with Interpress print software.
<b>Interpress font utility (IFU)</b>	Utility for managing fonts.
<b>Interpress font utility (IFU) program</b>	Program used to convert FIS fonts to LPS fonts.
<b>Interpress master</b>	File written according to the Interpress standard.
<b>IPD</b>	Interpress decomposer.
<b>IPL</b>	Initial program load. For the optional 9-track magnetic tape drive, the internal initialization sequence whereby certain functions are loaded into random access memory (RAM).
<b>IPM</b>	Interpress mapping.
<b>ips</b>	Inches per second.
<b>JCB</b>	Job control block.
<b>JCL</b>	Job control language.
<b>JDE</b>	Job descriptor entry. Collection of job descriptions.
<b>JDL</b>	Job description library. Collection of compiled job descriptions. See also <i>JSL</i> .
<b>JID</b>	Job identifier.
<b>job descriptor entry</b>	See <i>JDE</i> .

<b>job descriptor library</b>	See <i>JDL</i> .
<b>job source library</b>	See <i>JSL</i> .
<b>JSL</b>	Job source library. Collection of uncompiled job descriptions. See also <i>JDE</i> and <i>JDL</i> .
<b>keyword</b>	Required part of a command.
<b>label</b>	Reference to a file saved on tape or disk, a record indicating the file name or date created, or other control information.
<b>LAN</b>	Local area network. LAN is the lower two layers of the network architecture: the physical layer and the data link layer
<b>landscape</b>	Orientation in which text and images are positioned parallel to the long edge of the paper.
<b>laser printing</b>	Technology that uses a laser to transfer character forms to a page by direct or indirect means.
<b>latent image</b>	Static charge present on the photo conductor before contact with dry ink particles.
<b>leading</b>	(pronounced <i>ledding</i> ) Vertical distance between lines of type (also called line space), measured from a baseline of one line to the baseline of the next.
<b>legal size</b>	Paper size measuring 8.5 by 14 inches or 216 by 356 mm.
<b>letter size</b>	Paper size measuring 8.5 by 11 inches or 216 by 279 mm.
<b>light emitting diode (LED)</b>	Solid substance that glows when a current is passed through it. Often used for indicator lights on disk drives or modems, as well as for displays on other electronic equipment.
<b>LF</b>	Line feed character.
<b>line feed</b>	Control character that (unless set to be interpreted as a line end) causes the printing system to begin printing in the current character position of the next line.
<b>literal</b>	Alphanumeric character beginning with a letter, including an asterisk, period, colon, or slash, and not enclosed in single quotes.
<b>logical page</b>	In Xerox printing systems, a logical page is a formatted page that is smaller than the physical page. A logical page is defined by an origin, thus allowing more than one logical page to be placed on a physical page.

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<b>logo</b>	Small illustration or design, usually simple, typically used to identify a company.
<b>long-edge feed</b>	See <i>LEF</i> .
<b>lpi</b>	Lines per inch.
<b>LPS</b>	Laser printing system.
<b>LUN</b>	Logical unit number. A number that identifies a peripheral device to the OSS.
<b>magnetic media</b>	Term for all storage devices (disks, tape, and so on) on which data is stored in magnetic form.
<b>map</b>	To establish a set of values having a defined correspondence with the quantities or values of another set.
<b>mask</b>	Selection of bits from a storage unit by use of an instruction that eliminates the other bits in the unit. In accessing files, a file name mask is used to reference one or more files with similar file-id (identifier) syntax. In Interpress, a mask serves as a template, indicating the shape and position of an object on a page.
<b>master file</b>	File serving as a general reference point for a particular application system and providing information to be used by the program. It is usually updated and maintained to reflect the results of current or daily processing operations.
<b>MB</b>	Megabyte. Unit of approximately one million bytes.
<b>metacode</b>	Method of controlling the image generator. The character dispatcher uses these codes to generate scan line information. This information is sent in the form of character specifications to the image generator, which uses it to compose the bit stream that modulates the laser. Also called native mode.
<b>MHz</b>	Megahertz. One million cycles per second. Used to measure electromagnetic waves.
<b>mixed environment</b>	Multiple printers or printing systems in the same location.
<b>modem</b>	Device that converts digital information into an analog signal suitable for sending over analog telecommunication lines. Also converts an analog signal from telecommunication lines into digital information.
<b>monochrome</b>	Printing in one color only.

<b>nesting</b>	Subroutine or set of data, such as a comment, contained sequentially within another set of data.
<b>network</b>	System of hardware and software that manages communication and sharing of common resources (such as printers) between computers and terminals for multiple users at once.
<b>node</b>	Station, terminal or computer operating in a network environment.
<b>object file</b>	Source file converted into machine language (binary code).
<b>octal</b>	System of representing numbers based on 8.
<b>offline</b>	Devices not under the active control of a central processing unit. For example, a computer makes output to a magnetic tape. The tape is then used by an offline printing system to produce printed data. Offline operations are much slower than online operations. Refer to <i>online</i> .
<b>offset</b>	To place printed output sets in slightly different positions from each other in an output bin for easy separation of collated sets.
<b>offset printing</b>	Widely-used method of commercial and corporate printing, in which ink is picked up by a metal or paper plate, passed to an offset drum, then passed to the paper.
<b>online</b>	Devices under the direct control of a central processing unit, such as a printing system in interactive communication with a mainframe. Refer to <i>offline</i> .
<b>operand</b>	That which is acted upon, for example, data, in an operation or process.
<b>operating system</b>	Software that controls the low-level tasks in a computer system, such as input or output and memory management. The operating system is always running when the computer is active.
<b>orientation</b>	In reference to image area, describes whether the printed lines are parallel to the long edge of the paper (landscape) or the short edge of the paper (portrait).
<b>origin</b>	In reference to image area, the upper left corner of a sheet.
<b>output</b>	1. Material produced by a peripheral device of a computer, such as a printout or a magnetic tape. 2. The result of completed operations.
<b>overprint lines</b>	Print lines whose carriage control specifies printing with no line spacing after the last printed line.



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<b>overprint ratio</b>	Maximum number of variable data and form characters that can be intersected by a single scan line.
<b>page end</b>	Command character (form feed) to terminate the current page.
<b>page orientation</b>	Direction that data is printed on a report. Refer to <i>landscape page orientation</i> and <i>portrait page orientation</i> .
<b>pagination</b>	Process of separating text into pages.
<b>palette</b>	Predefined set of colors or inks. Different versions are provided with the printer and with some application software packages.
<b>parameter</b>	Part of a command, other than the keyword. See <i>keyword</i> .
<b>pass-through job</b>	On systems with XPAF, a job that is sent directly from a host to a Xerox printer through XPAF without undergoing XPAF processing.
<b>parse</b>	To read or interpret a command; to build up a parameter list from information within a command.
<b>PCC</b>	Printer carriage control.
<b>PDE</b>	Page description entry.
<b>PDL</b>	Print description language. Language used to describe printing jobs to a laser printing system. PDL describes the input (type, format, characteristics), performs the processing functions (logical processing), and describes the output (type, format, font selection, accounting options).
<b>PE</b>	Phase encoded.
<b>physical page</b>	Actual page size your printer uses to print a form.
<b>pica</b>	1. Unit of measurement equal to twelve points or approximately 1/6 inch. 2. A 10-pitch typeface having ten characters per inch and 12 points in height. See also <i>point</i> .
<b>pitch</b>	Width of a fixed-pitch font expressed in characters per horizontal inch.
<b>pixel</b>	Acronym for picture element. Smallest addressable point of a bitmapped screen that can be independently assigned color and intensity.
<b>point</b>	In Xerox laser printing systems, a unit of measurement equal to 0.0139 inch. Points are always used to express type, size, and leading. There are 12 points to a pica and about 72 points to an inch. See also <i>pica</i> .

<b>point size</b>	Height of character set from the top of its ascenders to the bottom of its descenders in units (points). Point size does not always include leading.
<b>portrait</b>	Orientation in which text and images are positioned parallel to the short edge of the paper.
<b>PostScript</b>	Proprietary page definition language, compatible with the Xerox 4890 Highlight Color LPS when a front-end conversion utility is installed.
<b>ppm</b>	Pages per minute.
<b>print quality adjustment</b>	See <i>PQA</i> .
<b>primary color</b>	A color that, when combined with one or more other primary colors in a color model system in varying quantities, produces the palette of colors described by that model.
<b>print description language</b>	See <i>PDL</i> .
<b>print ratio</b>	The maximum number of variable data and form characters that may be intersected by a single scan line.
<b>printer subsystem controller</b>	See <i>PSC</i> .
<b>print file</b>	Portion of the system disk memory (up to 4 MB) reserved for temporary storage of formatted pages for printing. Pages are retained until they are delivered to the output tray.
<b>PQA</b>	The process the 4890 HighLight Color LPS uses to maintain the electrostatic state of the xerographic subsystem to ensure optimal print quality.
<b>printout</b>	Informal expression referring to almost anything printed by a computer peripheral device.
<b>PROM</b>	Programmable read-only memory.
<b>prompt</b>	Message or symbol displayed on a system console requiring the operator to take action.
<b>process color printing</b>	In process color printing, every color in the spectrum is printed by combining various percentages of the four-color process primary colors—cyan, magenta, yellow, and black.
<b>processor</b>	Applies to any system that is capable of receiving and performing operations upon data and supplying the results of those operations.

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<b>protocol</b>	Formal set of conventions governing format of data and control of information exchange between two communication devices.
<b>proportional font</b>	Font containing characters that vary in width.
<b>proportional spacing</b>	Text where each alphanumeric character is given a weighted amount of space. Such output has print-like appearance. Proportional spacing allows more space for wide characters and less space for narrow characters.
<b>proportional type</b>	Characters that vary in width.
<b>PSC</b>	Printer subsystem controller. Command and task that download the printer and/or raster image processor (RIP) software if selected.
<b>query</b>	Request for data or other information, entered by an operator while the system is processing.
<b>queue</b>	Managed database of documents waiting to be processed.
<b>RAM</b>	Random access memory.
<b>raster data</b>	Binary data, usually consisting of dots arranged in scan lines, according to the print order.
<b>raster image processor</b>	See <i>RIP</i> .
<b>rasterization</b>	The creation of a bitmap image on a page for printing.
<b>read-only memory</b>	See <i>ROM</i> .
<b>read/write head</b>	A small electromagnet that reads, writes, and erases data in the form of magnetic dots on the surface of an external storage medium, such as a magnetic disk.
<b>real time</b>	To process transactions as they are entered into a system. User and system interchange allow transactions to be processed and the results returned to the user.
<b>remote access</b>	Access to a central computer by terminals or devices geographically separated from that computer.
<b>RGB</b>	A printing industry standard color definition model where all colors are defined in terms of values for the three additive primary colors: red, green and blue. Refer to <i>color definition model</i> .
<b>ROM</b>	Solid-state memory for programs. It cannot be rewritten.

<b>rendered character</b>	Character whose bitmap is a combination of other bitmaps positioned relative to each other, such as accented characters and single characters consisting of two or more characters. A rendered character does not require additional disk space or font memory.
<b>report</b>	In setting a separation boundary, report refers to a subset of a job. A job may consist of one or more reports.
<b>resolution</b>	Number of dots per inch (dpi) or spots per inch (spi). The greater the number of dots, the higher the resolution and the clearer the image. The terms dots, spots, and pixels are synonymous.
<b>RIP</b>	Raster image processor. LPS option that supports the Interpress V3.0 Publications Set.
<b>scale</b>	To adjust font or image size according to given proportions.
<b>sci</b>	START command index.
<b>scroll</b>	Manipulation of a display to bring upper or lower portions of a document page into view when available space is insufficient to view the entire document at once.
<b>SCSI</b>	Small computer system interface. Common standard for connecting devices to computers.
<b>SDI</b>	System diagnostics interface. OSS task used by service personnel to diagnose system problems.
<b>secondary storage</b>	Form of storage external to a system, such as magnetic tapes or floppy disks.
<b>security</b>	1. Procedure for limiting access to the system's resources, programs, or files, to authorized personnel. 2. Protecting programs and files from unintentional or undesired modification.
<b>SEF</b>	See <i>short-edge feed</i> .
<b>sequential</b>	1. In numeric sequence, usually in ascending order. 2. A file structure in which records are written one after another and cannot be randomly accessed.
<b>set</b>	Multiple copies of the same report.
<b>SFC</b>	Status file converter.
<b>SFS</b>	Status file service.

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<b>shade</b>	Color resulting from adding black to a pure hue. See also <i>tint</i> and <i>tone</i> .
<b>short-edge feed</b>	Movement of paper through the printer in the direction of the paper width (the shorter side of a sheet of paper).
<b>SIF</b>	Sequence insert file.
<b>simplex printing</b>	Printing on one side of the page.
<b>small computer system interface</b>	See <i>SCSI</i> .
<b>SNA</b>	System network architecture. Total description of logical structure, formats, and protocols of operation sequences for transmitting an information unit through the communication system.
<b>special processing</b>	Commands allowing the user to process special reports such as printing certain records, and printing on special paper
<b>spi</b>	Spots per inch. See <i>resolution</i> .
<b>spooling</b>	Process of releasing data from main memory and storing it temporarily until a peripheral device is ready to accept it, for example, storing print data before sending it to a printer.
<b>spot</b>	A picture element imaged by the printer. Synonymous with <i>dot</i> and <i>pixel</i> .
<b>statement</b>	Detailed instructions in a program step, written according to specific rules called syntax.
<b>static data</b>	Information usually found on preprinted forms or overlays.
<b>station</b>	1. In data communications, a terminal device connected to a data link. 2. In computer networks, any of the numerous terminal devices that form a network.
<b>stock</b>	User-defined name in the JSL that specifies a certain type of paper for printing a job.
<b>stock descriptor</b>	A stock reference or a stock name.
<b>stock name</b>	The name of a cluster as defined by a system command.
<b>stock reference</b>	An application specific pseudonym for a cluster.
<b>stockset</b>	Collection of stocks to be used on a print job. See also <i>stock</i> .

<b>string</b>	Connected sequence of alphanumeric characters treated as one unit of data by a program.
<b>symbiont</b>	Device which shares a common purpose and close association with other devices. This term is used to identify the Xerox print software which resides in the Digital host system as part of the XPMF-VMS communications link.
<b>symbol</b>	Character used in a computer language to specify a particular function.
<b>synchronous</b>	Efficient encoding of data suitable for high-speed, block-oriented data transmission by using equal time elements.
<b>syntax</b>	Rules governing the structure of expressions in a programming language.
<b>syntax error</b>	System response to a mistake in a command's entry.
<b>sysgen</b>	Abbreviated form of system generation.
<b>System</b>	1. In data processing, a collection of computer components and procedures organized to accomplish a set of specific functions. 2. Assembly of components united by some form of regulated interaction to form an organized whole. 3. Operations or procedures used to accomplish a business activity.
<b>System controller</b>	The part of the LPS that provides interfacing capability, data handling, formatting, buffering, and operator control for the system. Also called the system controller.
<b>system disk</b>	Magnetic disk storage medium, usually of large capacity, that is not removable as opposed to floppy disk or disk packs.
<b>system file</b>	Master software program that keeps all components working together.
<b>system generation</b>	Process whereby the system is made ready to operate. Typically involves selecting the operative parameters and activating the relevant software.
<b>System Network Architecture</b>	See <i>SNA</i> .
<b>system page</b>	Maximum area in which text and graphics can be imaged on a printing system.
<b>tape density</b>	Expression of the format of a magnetic tape measured in number of bytes that can be stored per inch of tape.

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<b>tape drive</b>	Input/output device that controls the movement of magnetic storage tape past the read/write head while data is accessed or stored.
<b>telecommunications</b>	The transfer of data through telephone lines.
<b>teleprocessing</b>	Data transfer through telecommunication lines for processing among various remote terminals and the central processing unit (CPU).
<b>templates</b>	1. Preset document formats, usually furnished along with application software, such as electronic spreadsheets or data base programs. 2. Also applies to keyboard overlays showing function keys for particular software packages.
<b>temporary storage</b>	Main memory locations reserved for intermediate results of processing, control values, or other information that needs to be kept on hand as a program proceeds.
<b>terminal</b>	Interface device connected to a computer or network. A terminal has no processing capability of its own.
<b>throughput</b>	Measure of the number of pages printed during a given unit of time, usually expressed as pages per minute.
<b>tint</b>	Color resulting from adding white to a pure hue. See also <i>shade</i> and <i>tone</i> .
<b>TOF</b>	Top of form.
<b>toggle</b>	In an LPS system, to switch (alternate) from one tray to another. The system will switch from an active feeder or stacker tray to an inactive one to allow continuous printing when the proper commands are invoked.
<b>token</b>	A coded character representing a word used in programs. For instance STOP is a word and the one-byte token for it in a BASIC dialect is 250.
<b>tone</b>	Primary color in its pure form, or mixed with black or white to create a lighter tint or darker shade of the primary color. See also <i>shade</i> and <i>tone</i> .
<b>total xerographic convergence (TXC)</b>	For the 4890 HighLight Color LPS, a function of the operating system software (OSS) that monitors the state of the color and black developer housings. If TXC detects a condition that may affect print quality, TXC requests that the operator initiate Print Quality Adjustment (PQA) to adjust the xerographic subsystem. Refer to <i>print quality adjustment</i> .
<b>tpi</b>	Tracks per inch.

<b>transaction processing</b>	Method of data processing that updates files and results are generated immediately after data entry.
<b>translation</b>	1. In data communications, the conversion of one code to another on a character-by-character basis. 2. In programming, the function of a language processor that converts a source program from one programming language to another.
<b>transmission speed</b>	In data communications, the rate data is passed through communication lines, usually measured in bits per inch (bpi).
<b>Tri-level xerography</b>	The feature of the 4890 HighLight Color LPS that enables the rasterization of both the black and the color images in a single pass by the creation of a third charge state.
<b>truncated</b>	Cut off before completion, as when data transfer from a host to a printer is cut off before all data has been transmitted.
<b>two-up</b>	Printing two logical pages on one side of a physical page.
<b>TXC</b>	Total xerographic convergence.
<b>type style</b>	Italic, condensed, bold, and other variations of typeface that form a type family.
<b>typeface</b>	Set of fonts having identical design features that give the type a uniform appearance.
<b>UCS</b>	Universal Character Set. Printer feature that permits the use of a variety of character arrays.
<b>UCSB</b>	Universal Character Set Buffer.
<b>UI</b>	User interface.
<b>Universal Character Set</b>	See <i>UCS</i> .
<b>utility program</b>	General-purpose program that performs activities, such as initializing a disk or sorting, which are not specific to any application.
<b>validation</b>	Process of testing a system's ability to meet performance objectives by measuring or monitoring its performance in a live environment.
<b>variable data</b>	Changeable information which is merged with a standard document to create specialized or personalized versions of that document. Variable data is not a part of a form design, but varies from page to page.



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<b>variable text</b>	Text of changing nature (such as names and addresses) combined with a form letter to make a complete document.
<b>verification</b>	Process of testing a system's ability to meet performance objectives by running programs in a simulated environment.
<b>virtual page</b>	Page area selected by a forms designer for printing.
<b>vpos</b>	Vertical positioning.
<b>WAN</b>	Wide area network.
<b>weight</b>	Perceived blackness of a character affected by varying the width of the stroke. Weight is expressed in general terms as either bold or roman.
<b>wildcard</b>	Character (usually an asterisk *) which can be inserted into a command string to indicate that it may represent one or more characters in that position.
<b>write protection</b>	Data protection feature implemented on magnetic media (for example, floppy disk, 9-track tape) to prevent stored data from being modified, written over, or erased.
<b>x axis</b>	Horizontal axis on a forms grid.
<b>x height</b>	Height of lowercase letters without their ascenders or descenders (height of letter "x").
<b>xdot</b>	Unit of measurement representing a fraction of an inch. May also be referred to as a picture element (pixel) or spot; for example, 1/600 spots per inch (spi).
<b>xerographic engine</b>	Component of a printer that develops an image, transfers it to paper, and fuses it for output as hardcopy.
<b>xerographic mode</b>	Either of two possible printer configurations: 1. Black mode which allows printing with black dry ink only. 2. Highlight mode which enables both highlight color and black printing.
<b>xerographic mode persistence (XMP)</b>	For the 4890 HighLight Color LPS, a value specified during sysgen, in JDL or in DJDE code that specifies on what basis xerographic mode switching (XMS) may take place. Refer to <i>xerographic mode switching</i> .
<b>xerographic mode switching (XMS)</b>	A function of the operating system software (OSS) that controls the xerographic mode of the 4890 HighLight Color LPS. The operator or programmer controls XMS through the xerographic mode persistence (XMP) setting. Refer to <i>xerographic mode</i> .
<b>XICS</b>	Xerox Integrated Composition System.

<b>XJCF</b>	Xerox Job Control Facility.
<b>XNS</b>	Xerox Network Systems is the network architecture and protocol used with Xerox equipment.
<b>XPAF, XPF</b>	Xerox Printer Access Facility.
<b>XPPI</b>	Xerox Pen Plotter Interface.
<b>XPS</b> (Xerox Print Service)	Xerox Print Service (XPS) Manager is a printer front end to other hosts. XPS Manager server communicates with the printer via a layered communication protocol, based on the XNS protocol suite but enhanced with "online" capability.
<b>XPS</b> (Xerox Publishing System)	Xerox Publishing System.
<b>XPMF-VMS</b>	Xerox Print Management Facility-VMS Version.
<b>y axis</b>	Vertical axis on a forms grid.