

Glossary



This character indicates that the current command line is a continuation of the previous line. For example, “These ↗ words are all part of the same line.”



The vertical bar, when shown in a command, indicates that either one or the other options may be selected, but not both.

Active I/O Port

The I/O port which is providing the data for the current print job. For LaserJet printers with automatic I/O switching, if there is no current print job, then automatic I/O switching is enabled and all I/O ports are active.

Auto-Continue

If the auto-continue mode is configured to ON, the printer continues printing during certain non-fatal error conditions. If auto-continue is OFF and these same conditions occur, the printer goes off-line until the Continue or On Line key is pressed. Auto-continue mode can be configured using the printer's control panel or using PJL commands (refer to the user's manual for the specific PCL 5 printer).

Automatic I/O Switching

Automatic I/O switching allows data to be sent to any of the printer's I/O ports without reconfiguring the active I/O port from the control panel.

When the printer is turned on, all I/O ports are enabled to accept data. The first port to receive data is called the active I/O port. The active I/O port is the source for the current print job. All other I/O ports temporarily are disabled until the next job boundary.

After a job boundary is encountered and there is no data available from the active I/O port, all the I/O ports are enabled and checked for available data. The first port to receive data is the new active I/O port. The other ports are temporarily disabled, the print job processed, and then the automatic I/O switching process repeats.

Configuration

Configuration is the process of changing printer settings. The printer is configured using the control panel or PJJL.

Context-Sensitive Printer Language Selection

Context-sensitive printer language selection is a method of selecting a printer language by looking at the first portion of a job to discover clues as to which printer language to use. The syntax differences in each printer language allow the language to be determined.

Context-sensitive language selection is only operational if the control panel variable PERSONALITY is set to AUTO and the print job does not contain a PJJL ENTER command before non-PJJL data.

Control Code

A control code is a non-printable ASCII character that initiates a printer function, for example carriage return (<CR>), line feed (<LF>), and form feed (<FF>).

Default

A value used instead of a programmatically selected value. A factory default is a value programmed into the printer at the factory; this value is stored in read-only memory and cannot be changed by a user or operator. A user default is a default value, stored in non-volatile RAM (in printers that have NVRAM), that is selectable using the control panel or the PJJL DEFAULT command.

Download

The process of transferring data, including soft fonts, macros, or raster data from a host computer to the printer.

Environment

See "Print Environment."

Explicit Switching

Explicit switching occurs when a printer language is activated due to processing a P_JL ENTER command.

Factory Default

Factory defaults refer to the feature settings that are programmed into the printer at the factory. These values are stored in read-only memory and cannot be changed. Factory default settings are in use unless you override them using either the control panel or by sending printer commands.

Factory Default Environment

A factory default is a setting programmed into the printer at the factory. The group of all the printer's factory settings is referred to as the Factory Default Environment.

Implicit Switching

Implicit switching occurs when a printer language is activated due to reception of non-P_JL data which is not preceded by a P_JL ENTER command. (See context-sensitive printer language selection.)

Job Boundary

The beginning or end of a print job. The position between two characters of data in the data stream where the previous character is the last character of the previous print job, and the next character is the first character of the next print job.

Macro

A macro is a collection of escape sequences, control codes, and data downloaded to the printer. Its execution can be initiated using a single command.

Modified Print Environment

Once a printer language, such as PCL, is entered, the current feature settings constitute the modified print environment. Whenever a feature setting is altered using printer language commands, the new setting is recorded in the Modified Print Environment.

Non-Printing Mode

Printing selected pages in a print job by sending the entire print job, the desired starting page number, and the ending page number. The P.J.L. JOB command options START and END are used to provide the starting page number and the ending page number. When the printer processes the pages that are not printed, the printer is said to be in non-printing mode.

Non-Volatile Memory

Random Access Memory where contents are preserved when the printer is powered off (volatile RAM is memory where contents are not preserved when the device is powered off).

Offline/Online

Online is a condition during which the printer accepts data from the host computer. When the printer is online, the ON LINE light is lit. When offline, the printer cannot accept data from the host.

Personality

The printer firmware related to transforming a particular type of printer language data, like PCL or PostScript, into images that the printer's operating system can print. The printer uses different personalities (different firmware) to handle data from different printer languages. PCL and PostScript commands are each processed by separate firmware.

New personalities can be added to some LaserJet printers using means such as cartridges or ROM SIMMs. P.J.L. is not a personality (you cannot print using P.J.L.). See "Personality Switching."

Personality Switching

The process of shutting down the current personality and activating the appropriate personality to process the next print job. For example, when the printer is processing PCL data, the PCL personality is activated; for PostScript data, the PostScript personality is activated.

PJL Current Environment

The PJL Current Environment is the set of features that is active when a PJL job is entered. As soon as a PJL job is entered, the PJL Current Environment settings are the same as the User Default Environment. Applications then can modify the PJL Current Environment values using the PJL SET command. The PJL Current Environment provides a base set of values when entering a printer language.

PJL Job

A PJL job is any print job containing PJL commands. Properly formed PJL jobs always begin and end with the UEL command.

PJL Reset Condition

A PJL reset condition prompts the printer to load the User Default values into the PJL Current Environment, which are then loaded into the Modified Print Environment. In this document, the term PJL reset condition refers to any of the following events: a power-on, UEL command (when not between a JOB/EOJ command pair), the @PJL INITIALIZE, @PJL RESET, @PJL JOB, or @PJL EOJ commands. Also included are other printer-specific events, such as control panel reset, a printer language-specific exit command (when not between a JOB/EOJ pair), such as ^D for PostScript, and data stream idle timeouts (see Appendix A for information about job boundaries and timeouts for the HP LaserJet 4 and 5 printer families).

Poorly Formed Print Job

A print job which either starts or ends with an invalid data stream sequence. For example, any job that does not begin *and* end with a UEL command is a poorly formed job. This manual describes how to create properly formed print jobs and contains many examples to demonstrate them. See Chapters 1 – 3 and Chapter 11 for more information about creating well-formed jobs.

Print Environment

The group of all the printer's current feature settings, collectively, is referred to as the print environment. The print environment is modified using printer commands and control panel settings.

Printer Language

A set of syntax and semantic rules used to control a printer. PCL and PostScript are both printer languages—they both contain commands that enable the user to control where marks are printed on a page.

Ready Message

A ready message is displayed on the control panel display when no error conditions are present. When errors occur, an error message replaces the ready message until the situation is corrected or the printer auto-continues. The PJL RDYMSG command is used to specify a ready message to replace the “00 READY” message.

Secure PJL Job

A “secure” PJL job is a job that contains the correct password in the JOB command. See the “PJL Job Security” section in Chapter 5 for more information.

Solicited Status

Solicited status is printer status information that is specifically requested. For example, the command @PJL INFO ID solicits the printer's ID. The printer responds to solicited status messages as they are received. See “unsolicited status.”

Status Readback

Sending printer status information from the printer to the host computer.

Universal Exit Language (UEL) Command

A PJL command, understood by all LaserJet personalities, that prompts the active personality to finish processing the current job and exit the personality. PJL also recognizes the UEL command and, when received, PJL discards any unprocessed partial PJL command and prepares to accept the next PJL command.

Unsolicited Status

Unsolicited status (USTATUS) is printer status information sent as a result of certain printer events occurring, such as when the printer runs out of paper, a job finishes printing, or when a certain time period elapses. There are several types of unsolicited status (DEVICE, JOB, PAGE, and TIMED); unsolicited status must be enabled with the USTATUS command.

User Default

A user default is a default value that is selectable by way of the operator control panel or the PJI DEFAULT command.

User Default Environment

The User Default Environment consists of the user default settings selected from the control panel or by way of the PJI DEFAULT command. The user default settings are stored in non-volatile memory (in those printers that have NVRAM). Those settings not selected using the control panel or PJI DEFAULT command are set to the factory default values.

