NAME

lpforms – administer forms used with the LP print service

SYNOPSIS

lpforms –f *form-name option*
lpforms –f *form-name* **–A** *alert-type* [**–P** *paper-name* [**–d**]] [**–Q** *requests*] [**–W** *minutes*]

AVAILABILITY

SUNWlpu

DESCRIPTION

The **lpforms** command administers the use of preprinted forms, such as company letterhead paper, with the LP print service. A form is specified by its *form-name*. Users may specify a form when submitting a print request (see **lp**(1)). The argument **all** can be used instead of *form-name* with either of the command lines shown above. The first command line allows the administrator to add, change, and delete forms, to list the attributes of an existing form, and to allow and deny users access to particular forms. The second command line is used to establish the method by which the administrator is alerted that the form *form-name* must be mounted on a printer.

OPTIONS

–f *formname* Specify a form.

The first form of **lpforms** requires that one of the following *option* (–, **–l**, **–F**, **–x**) must be used:

–F *pathname* To add or change form *form-name*, as specified by the information in *pathname*.

– To add or change form *form-name*, as specified by the information from standard input.

–x To delete form *form-name* (this option must be used separately; it may not be used with any other option).

–l To list the attributes of form *form-name*.

The second form of the **lpforms** command requires the **–A** *alert-type* option. The other options are optional.

–A *alert-type* Defines an alert to mount the form when there are queued jobs which need it.

–P *paper-name* [**–d**]
Specify the paper name when creating the form. If **–d** is specified, this paper is the default.

–Q *requests* An alert will be sent when a certain number of print requests that need the form are waiting.

–W *minutes* An alert will be sent at intervals specified by minutes.

USAGE

Adding or Changing a Form

The **–F** *pathname* option is used to add a new form, *form-name*, to the LP print service, or to change the attributes of an existing form. The form description is taken from *pathname* if the **–F** option is given, or from the standard input if the – option is used. One of these two options must be used to define or change a form.

pathname is the path name of a file that contains all or any subset of the following information about the form.

Page length: *scaled –decimal –number*$_1$
Page width: *scaled –decimal –number*$_2$
Number of pages: *integer*
Line pitch: *scaled –decimal –number*$_3$
Character pitch: *scaled –decimal –number*$_4$
Character set choice: *character-set/print-wheel* [**mandatory**]
Ribbon color: *ribbon-color*
Comment:
comment
Alignment pattern: [*content-type*]
content

The term ''scaled-decimal-number'' refers to a non-negative number used to indicate a unit of size. The type of unit is shown by a ''trailing'' letter attached to the number. Three types of scaled decimal numbers can be used with the LP print service: numbers that show sizes in centimeters (marked with a trailing **c**); numbers that show sizes in inches (marked with a trailing **i**); and numbers that show sizes in units appropriate to use (without a trailing letter); lines, characters, lines per inch, or characters per inch.

Except for the last two lines, the above lines may appear in any order. The **Comment:** and *comment* items must appear in consecutive order but may appear before the other items, and the **Alignment pattern:** and the *content* items must appear in consecutive order at the end of the file. Also, the *comment* item may not contain a line that begins with any of the key phrases above, unless the key phrase is preceded with a **>** sign. Any leading **>** sign found in the *comment* will be removed when the comment is displayed. There is no case distinction among the key phrases.

When this command is issued, the form specified by *form-name* is added to the list of forms. If the form already exists, its description is changed to reflect the new information. Once added, a form is available for use in a print request, except where access to the form has been restricted, as described under the **–u** option. A form may also be allowed to be used on certain printers only.

A description of each form attribute is below:

Page length and **Page Width**

Before printing the content of a print request needing this form, the generic interface program provided with the LP print service will initialize the physical printer to handle pages *scaled –decimal –number*$_1$ long, and *scaled –decimal –number*$_2$ wide using the printer type as a key into the **terminfo**(4) database.

The page length and page width will also be passed, if possible, to each filter used in a request needing this form.

Number of pages

Each time the alignment pattern is printed, the LP print service will attempt to truncate the *content* to a single form by, if possible, passing to each filter the page subset of 1-*integer*.

Line pitch and **Character pitch**

Before printing the content of a print request needing this form, the interface program provided with the LP print service will initialize the physical printer to handle these pitches, using the printer type as a key into the **terminfo**(4) database. Also, the pitches will be passed, if possible, to each filter used in a request needing this form. $scaled-decimal-number_3$ is in lines-per-centimeter if a **c** is appended, and lines-per-inch otherwise; similarly, $scaled-decimal-number_4$ is in characters-per-centimeter if a **c** is appended, and characters-per-inch otherwise. The character pitch can also be given as **elite** (12 characters-per-inch), **pica** (10 characters-per-inch), or **compressed** (as many characters-per-inch as possible).

Character set choice

When the LP print service alerts an administrator to mount this form, it will also mention that the print wheel *print-wheel* should be used on those printers that take print wheels. If printing with this form is to be done on a printer that has selectable or loadable character sets instead of print wheels, the interface programs provided with the LP print service will automatically select or load the correct character set. If **mandatory** is appended, a user is not allowed to select a different character set for use with the form; otherwise, the character set or print wheel named is a suggestion and a default only.

Ribbon color

When the LP print service alerts an administrator to mount this form, it will also mention that the color of the ribbon should be *ribbon-color*.

Comment

The LP print service will display the *comment* unaltered when a user asks about this form (see **lpstat**(1)).

Alignment pattern

When mounting this form, an administrator can ask for the *content* to be printed repeatedly, as an aid in correctly positioning the preprinted form. The optional *content-type* defines the type of printer for which *content* had been generated. If *content-type* is not given, **simple** is assumed. Note that the *content* is stored as given, and will be readable only by the user **lp**.

When an existing form is changed with this command, items missing in the new information are left as they were. When a new form is added with this command, missing items will get the following defaults:

Page Length: **66**
Page Width: **80**
Number of Pages: **1**
Line Pitch: **6**
Character Pitch: **10**
Character Set Choice: **any**
Ribbon Color: **any**

Deleting a Form

The −**x** option is used to delete the form *form-name* from the LP print service.

Listing Form Attributes

The −**l** option is used to list the attributes of the existing form *form-name*. The attributes listed are those described under **Adding and Changing a Form,** above. Because of the potentially sensitive nature of the alignment pattern, only the administrator can examine the form with this command. Other people may use the **lpstat**(1) command to examine the non-sensitive part of the form description.

Allowing and Denying Access to a Form

The −**u** option, followed by the argument **allow:***login-ID-list* or −**u deny:***login-ID-list* lets you determine which users will be allowed to specify a particular form with a print request. This option can be used with the −**F** or − option, each of which is described above under **Adding or Changing a Form**.

The *login-ID-list* argument may include any or all of the following constructs:

login-ID A user on any system

system_name!*login-ID*
A user on system *system_name*

system_name!**all** All users on system *system_name*

all!*login-ID* A user on all systems

all All users on all systems

The LP print service keeps two lists of users for each form: an ''allow-list'' of people allowed to use the form, and a ''deny-list'' of people that may not use the form. With the −**u allow** option, the users listed are added to the allow-list and removed from the deny-list. With the −**u deny** option, the users listed are added to the deny-list and removed from the allow-list. (Both forms of the −**u** option can be run together with the −**F** or the − option.)

If the allow-list is not empty, only the users in the list are allowed access to the form, regardless of the content of the deny-list. If the allow-list is empty but the deny-list is not, the users in the deny-list may not use the form, (but all others may use it). All users can be denied access to a form by specifying −**f deny:all**. All users can be allowed access to a form by specifying −**f allow:all**. (This is the default.)

Setting an Alert to Mount a Form

The −**f** *form-name* option is used with the −**A** *alert-type* option to define an alert to mount the form when there are queued jobs which need it. If this option is not used to arrange alerting for a form, no alert will be sent for that form.

The method by which the alert is sent depends on the value of the *alert-type* argument specified with the −**A** option. The *alert-types* are:

mail Send the alert message using the **mail** command to the administrator.

write Write the message, using the **write** command, to the terminal on which the administrator is logged in. If the administrator is logged in on several terminals, one is arbitrarily chosen.

quiet Do not send messages for the current condition. An administrator can use this option to temporarily stop receiving further messages about a known problem. Once the form *form-name* has been mounted and subsequently unmounted, messages will again be sent when the number of print requests reaches the threshold specified by the −**Q** option.

showfault
Attempt to execute a form alert handler on each system that has a print job for that form in the queue. The fault handler is **/etc/lp/alerts/form**. It is invoked with three parameters: *form_name*, *date*, *file_name*. *file_name* is the name of a file containing the form alert message.

none Do not send messages until the −**A** option is given again with a different *alert-type* (other than **quiet**).

shell-command
Run the *shell-command* each time the alert needs to be sent. The shell command should expect the message in standard input. If there are blank spaces embedded in the command, enclose the command in quotes. Note that the **mail** and **write** values for this option are equivalent to the values **mail** *login-ID* and **write** *login-ID* respectively, where *login-ID* is the current name for the administrator. This will be the login name of the person submitting this command unless he or she has used the **su** command to change to another login-ID. If the **su** command has been used to change the user ID, then the *user-name* for the new ID is used.

list Display the type of the alert for the form on standard output. No change is made to the alert.

The message sent appears as follows:

The form *form-name* **needs to be mounted**
on the printer(s):
printer **(**$integer_1$ **requests).**
$integer_2$ **print requests await this form.**
Use the *ribbon-color* **ribbon.**
Use the *print-wheel* **print wheel, if appropriate.**

The printers listed are those that the administrator has specified as candidates for this form. The number $integer_1$ listed next to each printer is the number of requests eligible for the printer. The number $integer_2$ shown after the list of printers is the total number of requests awaiting the form. It will be less than the sum of the other numbers if some requests can be handled by more than one printer. The *ribbon-color* and *print-wheel* are those specified in the form description. The last line in the message is always sent, even if none of the printers listed use print wheels, because the administrator may choose to mount the form on a printer that does use a print wheel.

Where any color ribbon or any print wheel can be used, the statements above will read:

Use any ribbon.
Use any print-wheel.

If *form-name* is **any**, the *alert-type* defined in this command applies to any form for which an alert has not yet been defined. If *form-name* is **all**, the *alert-type* defined in this command applies to all forms.

If the −**W** *minutes* option is not given, the default procedure is that only one message will be sent per need to mount the form. Not specifying the −**W** option is equivalent to specifying −**W once** or −**W 0**. If *minutes* is a number greater than **0**, an alert will be sent at intervals specified by *minutes*.

If the −**Q** *requests* option is also given, the alert will be sent when a certain number (specified by the argument *requests*) of print requests that need the form are waiting. If the −**Q** option is not given, or the value of *requests* is **1** or **any** (which are both the default), a message is sent as soon as anyone submits a print request for the form when it is not mounted.

Listing the Current Alert

The −**f** option, followed by the −**A** option and the argument **list** is used to list the *alert-type* that has been defined for the specified form *form-name*. No change is made to the alert. If *form-name* is recognized by the LP print service, one of the following lines is sent to the standard output, depending on the type of alert for the form.

- **When** *requests* **requests are queued:**
  alert with *shell-command* **every** *minutes* **minutes**
- **When** *requests* **requests are queued:**
  write to *user-name* **every** *minutes* **minutes**
- **When** *requests* **requests are queued:**
  mail to *user-name* **every** *minutes* **minutes**
- **No alert**

The phrase **every** *minutes* **minutes** is replaced with **once** if *minutes* (−**W** *minutes)* is 0.

Terminating an Active Alert

The −**A quiet** option is used to stop messages for the current condition. An administrator can use this option to temporarily stop receiving further messages about a known problem. Once the form has been mounted and then unmounted, messages will again be sent when the number of print requests reaches the threshold *requests*.

Removing an Alert Definition

No messages will be sent after the −**A none** option is used until the −**A** option is given again with a different *alert-type*. This can be used to permanently stop further messages from being sent as any existing alert definition for the form will be removed.

FILES

/etc/lp/alerts/form fault handler for **lpform**.

SEE ALSO

lp(1), **lpadmin**(1M), **lpstat**(1), **terminfo**(4)

System Administration Guide, Volume II