

NAME

sendpage – submit a pager job for transmission

SYNOPSIS

sendpage [*options*] [*message...*]

DESCRIPTION

sendpage submits a pager transmission request to a server using the Simple Network Paging Protocol (SNPP) described in RFC 1861. Pager requests specified with *sendpage* are normally processed immediately, although they may also be queued for transmission at a later time using a syntax identical to the *at(1)* command. For each job that is queued, *sendpage* prints a *job identifier* on the standard output. A job identifier is the token by which jobs are identified within *HylaFAX*. Job identifiers can be supplied to the *faxrm(1)* command to remove the jobs or to the *faxalter(1)* command to alter job parameters.

Pages may be sent to one or more destination paging terminals and, optionally, include a text message (depending on the capability of the receiving device). Each destination is identified by a Pager Identification Number (PIN) specified with the **-p** option; for example, `sendpage -p 12345 "Help, the fax machine is on fire!"`. A PIN is typically a numeric string though it may also be an alpha-numeric alias depending on the capabilities of the SNPP server.

Text messages can be specified on the command line or taken from standard input. The **-n** option must be used if no text message is to be supplied with the page request—as for a numeric-only pager. Text supplied to the paging system is sent exactly as submitted including any newline, carriage return, or non-ASCII data. Message preparation including filtering and formatting must be done prior to submitting the data to *sendpage*. Note that text supplied on the command line does not include a trailing newline character.

The order of options on the command line is significant. Each page to be transmitted is assigned the current value of parameters specified on the command line; e.g. whether or not to queue the request. This means that options that specify parameters for a particular destination must precede the pager ID specified with the **-p** option. For example,

```
sendpage -l 2 -p sam Your network is hosed
```

submits a page to “sam” that has service level 2 while

```
sendpage -p sam -l 2 Your network is hosed
```

submits the same page but with the default service level (1). Note also that parameter values persist across **-p** options so the following

```
sendpage -l 0 -p sam -p 5551212 Your network is hosed
```

submits two pages, both of which have service level 0.

OPTIONS

- a** *time* Schedule transmission at the indicated *time*. Times are specified using the syntax of the *at(1)* command; e.g. “now + 30 minutes” to schedule transmission 30 minutes in the future. By default, *sendpage* schedules pages for “now”. (In SNPP parlance this option specifies the “hold time” for the page; and may result in the page being delivered to the paging terminal but not delivered to the user until the specified time.)
- D** Enable notification by electronic mail when the page has been delivered to the service provider. This option is meaningful only when communicating with a *HylaFAX* server.
- f** *from* Use *from* as the identity of the message sender. Otherwise the sender is the user that invoked *sendpage*. The sender is an account name to which the *HylaFAX* software should direct email notification messages. The *from* identity may be a fullblown “From:” line, e.g. e.g. “Joe Blow <joe@foo.com>” and “joe@foo.com (Joe Blow)” are acceptable. If no host-part is specified in the *from* string the local hostname is used. This option is useful when *sendpage* is invoked on behalf of another user, such as in the implementation of an electronic mail to pager gateway.

- h** [*modem@*]*host[:port]*
Force the jobs to be processed on a specific *host* and, optionally, using a particular *modem*. The *host* may be either a symbolic name or a network address. If no **-h** option is supplied, *sendpage* uses the SNPPSERVER environment variable to identify the SNPP server to which the pages should be directed. If no server is specified then *sendpage* attempts to contact a server on the local host. If no modem is specified, the job will be submitted to any available modem.
- I** *time*
If a job must be requeued because of a communication failure schedule the retry according to the specified *time*. Times are given in seconds. Minutes, hours, and days can be specified with “*min*”, “*hour*”, and “*day*” suffixes, respectively. By default *HylaFAX* reschedules jobs using retry times that depend on the manner in which the job failed; this interface permits a user to override this algorithm and specify a single fixed retry time for all communication failures. This option is meaningful only when communicating with a *HylaFAX* server.
- l** *level*
Specify a particular service *level* to use in delivering a page. A service level defines both a scheduling priority and the time that a client is willing to wait to find out if delivery is successful or not. Normal delivery is obtained with level 1 (default). The specification identifies level 0 as the highest priority service level with levels 1-7 lower priority and levels 8-11 vendor/server-specific. For *HylaFAX* server machines the mapping between service level and scheduling priority is defined by the configuration of the SNPP server process; see the **PriorityMap** parameter in *hfaxd*(8C)
- n**
Send to a numeric-only paging device; i.e. do not send a text message in the paging request.
- N**
Do not notify the sender by electronic mail when the page has been delivered to the service provider (default). This option is meaningful only when communicating with a *HylaFAX* server.
- p** *PIN*
The Pager Identification Number (PIN) for a terminal that is to receive the message. A message can be sent to multiple destinations by specifying multiple **-p** options.
- q**
Mark pages to be queued on the server and do not wait for their delivery. By default *sendpage* conforms to the SNPP spec by synchronously waiting for each page to be delivered. This option instructs *sendpage* to submit one or pages and then terminate immediately without waiting for their completion. When pages are queued it is advisable to enable email notification with the **-D** or **-R** options. Job queueing is a non-standard function of the SNPP implementation in *HylaFAX* and is not available when submitting pages to non-*HylaFAX* servers.
- R**
Enable notification by electronic mail when the message has been delivered and when it is requeued for retransmission. *HylaFAX* will always notify the sender by electronic mail if there is problem delivering a page (irregardless of the email notification setting). This option is meaningful only when communicating with a *HylaFAX* server.
- s** *subject*
Set the “subject” for the specified pages according to *subject*. For *HylaFAX* *subject* is used as the identifier string returned in any email notification messages (instead of the usual job identifier number). This option is useful for applications that cross reference notification messages against job submissions.
- t** *tries*
Make no more than *tries* attempts to send the page. By default, *HylaFAX* will terminate a job if: 3 consecutive attempts to send a particular message fail, or it appears the receiver is not a service provider. Otherwise *HylaFAX* places no limit on the *number* of attempts to send a page, instead terminating a job if it is not completed within a fixed period of time specified by the service level. Note that a try is a phone call in which carrier is established and the IXO/TAP or UCP protocol is commenced; this is contrasted with a call attempt that might have failed because the line was busy. This option is meaningful only when communicating with a *HylaFAX* server.

- T dials** Make no more than *dials* phone calls when attempting to send a page. By default, *HylaFAX* will terminate a job if: 12 attempts to reach a service provider fail, or it appears the receiver is not a service provider. Otherwise *HylaFAX* terminates a job if it is not completed within a fixed period of time specified by the *service level*. This option is meaningful only when communicating with a *HylaFAX* server.
- v** Trace the protocol between *sendpage* and the SNPP server process that does the delivery work on the remote machine. This information is directed to the standard output.

CONFIGURATION PARAMETERS

sendpage reads configuration information from the files `/usr/local/lib/fax/hyla.conf`, `/usr/local/lib/fax/sendpage.conf`, and `~/.hylarc`; in that order. Configuration files follow the conventions described in *hylafax-client*(1). The following configuration parameters are recognized:

Tag	Type	Default	Description
HoldTime	string	-	hold time to assign to pages
Host	string	localhost	host to contact for service
MailAddr	string	-	mail address for notification messages
MaxDials	integer	12	times to retry dialing
MaxTries	integer	3	times to retry transmission
Notify	string	none	control email notification
Port	integer	444	port to use in contacting server
Protocol	string	tcp	protocol to use in contacting server
QueueSend	boolean	No	whether or not to queue pages
RetryTime	string	-	delay between failed attempts to send
ServiceLevel	integer		SNPP service level for pages
Verbose	boolean	No	whether or not to enable protocol tracing

The configuration parameters are explained below:

HoldTime	The hold time to assign to pages. (Equivalent to the -a option.)
Host	The host to contact for service. (Equivalent to the -h option.)
MailAddr	The electronic mail address to direct notification messages from the server. If this string is specified without an "@hostname" part then the local hostname will automatically be appended. (Equivalent to the -f option.)
MaxDials	The maximum number of times to dial the phone for each job. (Equivalent to the -T option.)
MaxTries	The maximum number of times to retry sending a job. (Equivalent to the -t option.)
Notify	Control the email notification messages from the server. This string may be one of "done", "none", "requeued" or "default" with an optionally preceding "when " (e.g. "when done"). Note that "when requeued" implies "when done". (Equivalent to the -D , -R , and -N options.)
Port	The network port to contact for service. (Equivalent to the -h option.)
Protocol	The name of the communication protocol to use when contacting a server. (Equivalent to the SNPPSERVICE environment variable.)
QueueSend	Control whether or not to wait for the pages to be delivered. (Equivalent to the -q option.)
RetryTime	The time to delay between job retries due to a communication failure. (Equivalent to the -I option.)
ServiceLevel	The SNPP service level to assign to each page. (Equivalent to the -l option.)
Verbose	Control protocol tracing. (Equivalent to the -v option.)

ENVIRONMENT

The following environment variables are used by *sendpage*:

SNPPSERVER The identity of the SNPP server to contact for service. This value is specified as “[*modem*@]*host*[:*port*]” where *host* is either a host name or the Internet “.” (dot) address of the host; *port* is the TCP port number or service name to use (default is “snpp” or 444); and *modem* is an optional modem name or class on the server machine to use in processing the requests (this is meaningful only when the server is running *HylaFAX*).

SNPPSERVICE The communication service specification for communicating with the SNPP server. This value is specified as “*port*[/*protocol*]”; by default “444/tcp”.

FILES

/var/spool/hylafax/tmp/sndpageXXXXXX temporary files

NOTES

The phone number of the pager service provider is stored on the server machine and is not specified by the user; this is a departure from pager support that was supplied with *HylaFAX* version 3.0.

HylaFAX version 3.0 used to recognize a null text message and assume the destination paging device was numeric-only. This is no longer true; if a null text message is submitted then a null message will be included in the paging request. This may cause paging requests submitted to “real SNPP” servers to be rejected if the paging device is in fact numeric-only. When sending to a numeric-only paging device the **-n** option should be used.

BUGS

It is not possible to page text- and non-text devices together; *sendpage* must be run twice, once to send to text-capable devices and once to send to non-text devices.

SEE ALSO

at(1), *hylafax-client*(1), *faxalter*(1), *faxrm*(1), *faxstat*(1), *faxq*(8C), *hfaxd*(8C), *hylafax-server*(5F)