

NETWORK FAX SERVER FOR SME SERVER

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It's a SMERP Project documentation...



<http://smerp.free.fr>



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Introduction

This documentation allows a quick setup of a faxserver module for SME Server 6.x

The module is part of the future distribution from SMERP.

The project proposes an integrated solution for companies and in particular for SMB (Small Medium Business).

This solution for company management/administration should offer tools for messaging, webserver, database, e-commerce, faxserver...

The SMERPFax allows users to send facsimiles from every applications of their computers.

The fax module also allows receiving of faxes in a shared environment where one user has to distribute them via the mailsystem.

General architecture

The general system architecture is as follows:

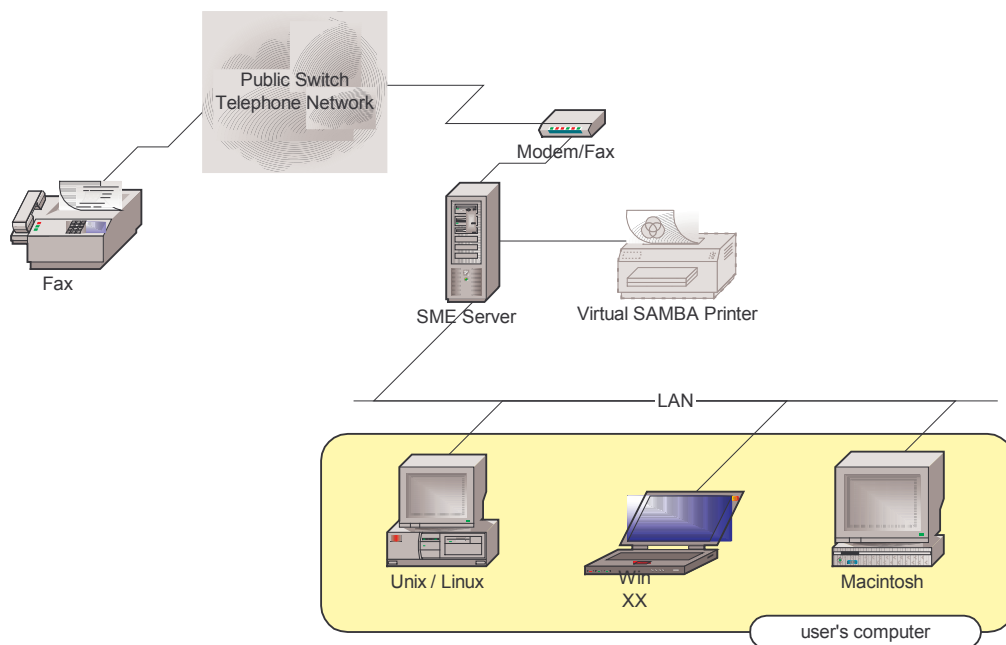
To use SMERPFax you should possess a Hayes compatible faxmodem.

The modem should be recognized by the SME server. In general it means that there should be drivers available for Red Hat 7.x

The modem should be connected to the server on the serial port (com-port).

The use of an internal modem is possible but an external modem seems more useful due to replacement in case of failure or defect.

Moreover certain external modems offer the possibility to temporary store faxes in internal memory, which is important in case the server is not available (see maintenance).



As you can see in the picture, the clients messages are being sent as faxes through a virtual samba printer.

On receivement the faxes are being placed in a waiting zone from where a user distributes them via the message system. The faxmaster is a pseudonym which points to a user of the server. The "real" users receives all faxes to redistribute them.

The next version of the faxmodule will offer support for multiple modems and a routing system for direct arrival of faxes to their destinations.



Installation

You install the rpm as root from the console.
From the console type the following command:

```
# Wget http://smerp.free.fr/fichiers/binaires/SMERPFax-0.6b1-9.noarch.rpm
```

Launch the installation

```
# rpm -Uvh SMERPFax-0.6b1-9.noarch.rpm
Preparing...                               ##### [100%]
 1:SMERPFax                               ##### [100%]
Now you have to launch /tmp/SMERPFax.ins/SMERPFax_ins.sh
```

At the end of the installation process change to /tmp/SMERPFax.ins and execute the file SMERPFax_ins.sh

```
# /tmp/SMERPFax.ins/SMERPFax_ins.sh
Installing suporting modules (RPM)
Installing libtiff-3.5.7
Installing cups-libs-1.1.19
Installing ghostscript-7.05.6
Installing ghostscript-fonts-6.0
Installing metamail-2.7
Installing hylafax-4.1.8
Installing some files.
#1
#2
#3
Adding fax user.
Cleaning...
Rebuilding Web Server Manager Left Panel Cache... Can take up to a minute.
Installation Finished !
```

If all has gone well the faxserver is installed.
You can access the configuration panel from the SME server-manager.



Configuration

The receiving of faxes is done by the faxmaster. There are two possibilities for receiving faxes

- via a user faxmaster
- via a pseudonym faxmaster which points to an existing user

Wichever is your choice, the received faxes are being sent in the mailbox of the faxmaster.

To not have too many accounts, the utilisation of a pseudonym is recommended.
To create a pseudonym go to server manager and enter the the pseudonyms menu.

Create, modify, or remove pseudonyms

The server automatically creates an e-mail alias for each group. If you want to define an e-mail alias for a list of users, simply create a group and the list will automatically be maintained by the server.

Pseudonyms allow you to create other names for existing users or groups. For example, you may wish to create a pseudonym "webmaster" for your "webdevelopers" group or a pseudonym "joe" for the user "joseph".

The server automatically creates pseudonyms of the form firstname.lastname and firstname_lastname for every user on the system and a pseudonym "everyone" which contains all users on the system.

You can modify or remove a pseudonym by clicking on the corresponding command next to the pseudonym.

Add pseudonym

Current List of Pseudonyms

Pseudonym	User or group	Action	
everyone	Everyone(local network only)		
mailer-daemon	Administrator		
postmaster	Administrator		
anonymous	Administrator	Modify	Remove

On clicking of the button "add a pseudonym" we create a pseudonym "faxmaster" who distributes the faxes.

In our example we use the administrator account, even it would be more careful to use another account for distribution because the faxes are sent by mail to the user.

Nom du pseudonyme	faxmaster
Sélectionner le compte ou le groupe	Administrator

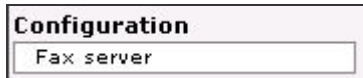
Make sure to review the list of the pseudonyms on the following form

Current List of Pseudonyms

Pseudonym	User or group	Action	
everyone	Everyone(local network only)		
mailer-daemon	Administrator		
postmaster	Administrator		
anonymous	Administrator	Modify	Remove
faxmaster	Administrator	Modify	Remove



After creating the faxmaster, you want to configure the faxserver. From the configuration menu (in SME server manager) choose "Faxserver".



At first time usage the default values are stored in the configuration file /home/e-smith/configuration under Hylafax.

Configuration of fax server.

The fax server allows sending and receiving facsimiles through the network. The workstations receive facsimiles through e-mail. Sending is managed by a virtual printer located in the SMERP server.

Start the service



Fax server stopped.

Change configuration

The following table shows the actual configuration of the fax server.

Name of the parameter	Value
Fax number	0123456789
Fax sender's name	SMERP-Fax
Volume of speaker	medium
Speed of the modem/fax	19200
Serial port	/dev/ttyS0
Country code	33
Area dial code	0
Long distance dial code	0
International dial code.	00
Number of rings	2
Flow control.	xonxoff
Type of modem/fax	Class1
Dialling mode	TONE
User's name	faxmaster
SAMBA name	sambafax

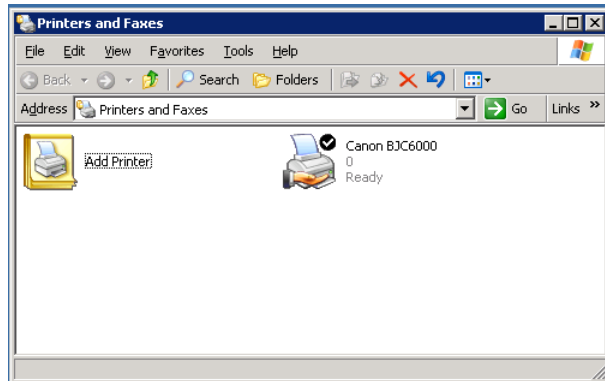
As default the fax server is stopped. In this mode it will not sent or recieve faxes. In the field "user name" enter the username wich is the Faxmaster (e.g. the Admin)



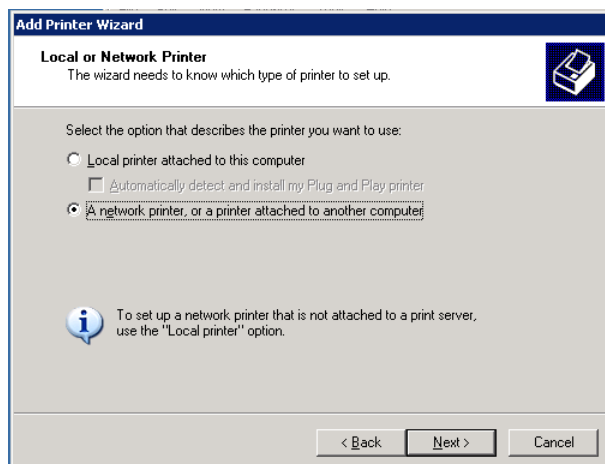
- Fill in the field fax number your fax number. Your fax no. will appear in the headline, if you don't give a name (for the station?).
- The Faxname or the name of the station identifies the sender of the fax. If this field is filled correct the name appears on the fax.
- The volume of the modem is adjustable in 5 different modes from off to loud.
- The field modemspeed sets the communicationspeed between computer and modem. The speed will automatically managed by the ITU Protokoll.
- You attach the modem at the serial port. The serial port (COM 1 under DOS) is /dev/ttyS0 under Linux, the 2nd port (COM 2 under DOS) is /dev/ttyS1 under Linux. SMERPFax only manages the two first serial ports.
- Countrycode is the international dialing number without the first 0 (e.g. 33 France, 1 USA, 49 Germany).
- The areacode (not used in France.)
- The long distance code (not used in France.)
- The international country code allows sending of faxes abroad.
- The number of ringtones until the fax is accepted is adjustable. 0 does never accept the fax.
- Hardware flow control xon or xoff must be set.
- Type of faxmodem: There are class 1, 2, and 2.1. (I have not seen 2.1. To find out which type is supported, use a program like "minicom" and sent "ATI7." to the modem. Alternatively you can tail -f /var/log/messages and see if the modem is recognized by hylafax).
- Dialing modus: tone or impulse.
- Name of the user faxmaster, who distributes the faxes. If you have an user faxmaster, then "faxmaster" should be entered here. If you have a pseudonym Faxmaster enter the name of the account.
- Enter the name of the virtual samba-printer (without \\servername\)

To sent a fax e.g from a MS-Windows or *samba-like* system it is neccessary to install a virtual postscript printer (e.g. a Apple Laser Writer 12/640 PS).

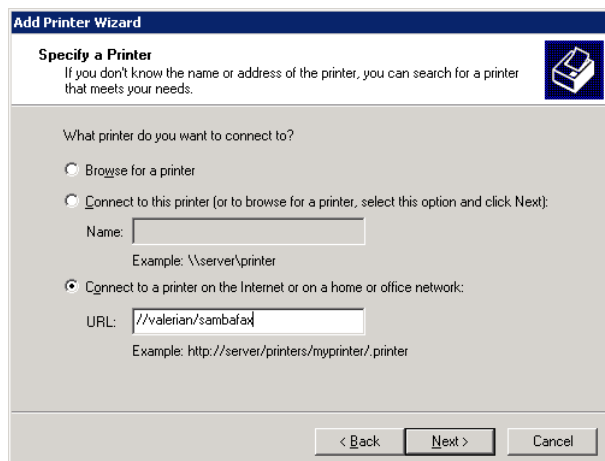
Under MS-Windows chose START / SETTINGS / PRINTERS



Click « Add Printer »



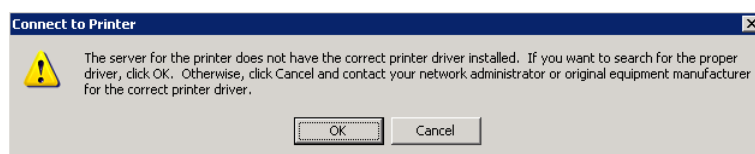
Here, you have to choose network printer since SambaFax is not on the Windows side !



Click next and enter the name of the printer as netbios name

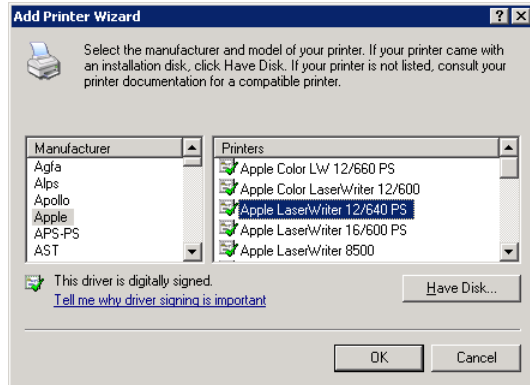
[\\servername\printername.](#)

(if the virtual samba printer is already available in the network neighbourhood you can just search after the printer)

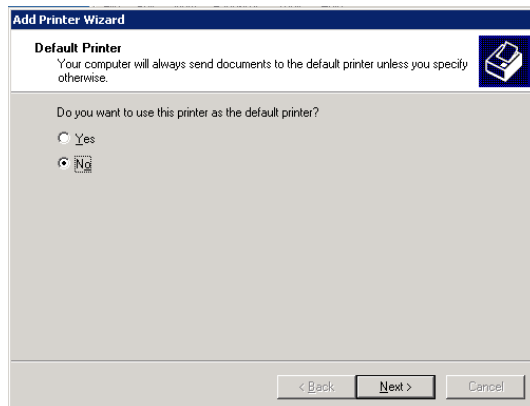


Probably there will be a message that there is no driver available an you will have to install a suitable driver.

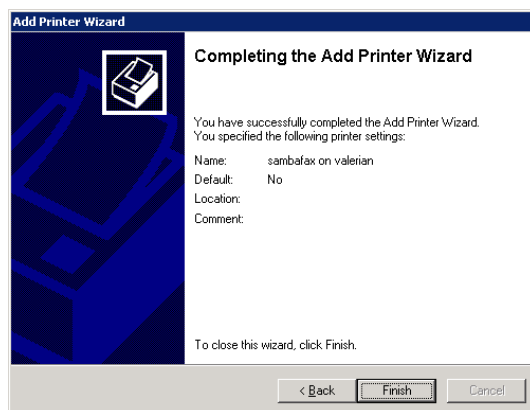
The printer wizard will propose to choose a driver, take a postscript printer like Apple Laserjet or any other postscript printer



Answer the question if windows should take this newly installed printer as default with no

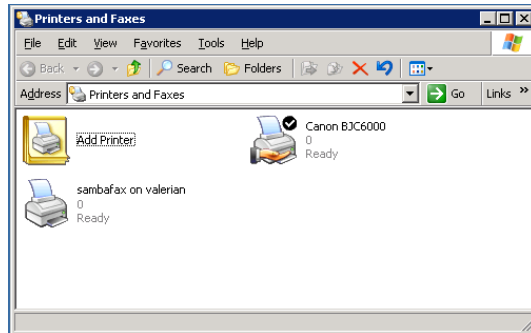


At the end the assistant will report, that the driver is installed and you can go for a test.





At the end of the printer installation you should see the following screen:





Usage

On receiving, the server sends all faxes as pdf to the email of the userfaxmaster (who maybe the admin or root user).

Then the faxmaster distributes the faxes by sending the mail to to appropriate user.

To send faxes, the virtual samba-printer is being used.

To send a document off a worksation, the user has to enter specific characters onto the first page (e.g. first page). These characters should contain the text Fax-Nr. followed by the number of the receiver.. eg. Fax-Nr: 0123456789.

If you have the dial an anteceding 0 per default, write a 0 and a comma. The comma indicates the faxsoftware that it should shortly pause after the 0.

If you want to sent to multiple recipients, you should have a program capable of sending multiple faxes (Word or Open Office).



Deinstallation

if you want to uninstall the faxserver go to directory /tmp/SMERPFax.ins and issue SMPERFax_uninst.sh at the command prompt.

```
# ./SMERPFax_uninst.sh
Removing SMERP Fax panel
Removing hylafax
Removing metamail
Removing ghostscript-fonts
Removing ghostscript
Removing cups-libs
Removing libtiff
Removing fax user.
Rebuilding Web Server Manager Left Panel Cache... Can take up to a minute.
Uninstall Finished !
```

That's all folks !

No it's up to you...



Annexes



Installed files.

/var/spool/hylafax		
/var/spool/hylafax/archive		
/var/spool/hylafax/FIFO		
/var/spool/hylafax/bin		
notify.awk	pdf2fax.gs	ps2fax.gs
archive	pcl2fax	tiff2fax
faxrcvd	ps2fax	wedged
mkcover	pdf2fax	faxrcvd.org
notify	pollrcvd	
/var/spool/hylafax/client		
/var/spool/hylafax/config		
att-dataport-2.0	class1.0	digi-20
att-dataport	class2	everex-2496d
att-dataport-2	class2.0	e-tech
digi	class2.1	eicon
att-dpexpress-2	davicom-2	eicon-2
cirrus	dsi-scout+	gvc-288-2
class1	digi-2	
exar	ppi-pm14400fxmt	telebit-wb
skel	ppi-pm14400fxsa	topic
elsa-microlink-56k-basic-2.0	prometheus	tricom2842
gvc-288	rc144ac	uds-fastalk
intel-400e	rc144ac-1	umc92144
hayes	rc288dpi	umc9624
lucent-isa	rc288dpi-1	usr-2.0
lucent	rc32acl	usr-rts
lucent-mt-20	rc32acl-1	usr-xon
lucent-mt-2	rockwell-k56	zyxel-1496e
lucent-mt-21	rockwell-rc	zyxel-1496e-1
moto-288	sierra	zyxel-1496e-2.0
mt-1432	telebit-qblazer	zyxel-2864
nuvo-voyager	telebit-t3000	
/var/spool/hylafax/config/defaults		
config.modem	setup.cache	setup.modem
config		
/var/spool/hylafax/dev		
null	socksys	
/var/spool/hylafax/docq		
/var/spool/hylafax/doneq		
/var/spool/hylafax/etc		
dialrules.europe	dpsprinter.ps	lastrun
FaxDispatch	hosts.hfaxd	config.ttyS0
cover.templ	lutRS18.pcf	config.sav
dialrules	setup.modem	xferfaxlog.1.gz
setup.cache	config	xferfaxlog.2.gz
dialrules.sf-ba	xferfaxlog	xferfaxlog.3.gz
/var/spool/hylafax/		
FIFO.ttyS0	ttys0	ttyS0
/var/spool/hylafax/info		
/var/spool/hylafax/log		
/var/spool/hylafax/log/seqf		
/var/spool/hylafax/pollq		
/var/spool/hylafax/recvq		
/var/spool/hylafax/recvq/seqf		
/var/spool/hylafax/sendq		
/var/spool/hylafax/status		
/var/spool/hylafax/status/any.info		
/var/spool/hylafax/status/ttyS0		
/var/spool/hylafax/tmp		
/var/flat/dmc-mitel-hylafax-pkg		
chkfontpath-1.7.2-5.i386.rpm	install.sh	XFree86-xfs-4.0.1-1.i386.rpm
dmc-mitel-hylafax-setup-4.1.5-1.noarch.rpm	libtiff-3.5.5-7.i386.rpm	/var/flat/dmc-mitel-hylafax-pkg-4.1.5-1.noarch.rpm
ghostscript-5.50-8.i386.rpm	metamail-2.7-25.i386.rpm	/var/flat/hylafax-4.1.8-1rh7.i386.rpm
ghostscript-fonts-5.50-3.noarch.rpm	upgrade.sh	
hylafax-4.1.5-1rh7.i386.rpm	urw-fonts-2.0-8.noarch.rpm	
	XFree86-libs-4.0.1-1.i386.rpm	



/etc/e-smith/locale/fr/etc/e-smith/web/functions/faxsrv
/etc/e-smith/web/functions/faxsrv
/etc/e-smith/web/panels/manager/cgi-bin/faxsrv
/etc/e-smith/templates-custom/etc/inittab/S85hylafax
/etc/rc.d/init.d/hylafax
/etc/rc.d/rc0.d/K05hylafax
/etc/rc.d/rc1.d/K05hylafax
/etc/rc.d/rc2.d/K05hylafax
/etc/rc.d/rc3.d/S95hylafax
/etc/rc.d/rc4.d/S95hylafax
/etc/rc.d/rc5.d/S95hylafax
/etc/rc.d/rc6.d/K05hylafax
/etc/rc.d/rc7.d/S92hylafax
/etc/cron.daily/hylafax
/etc/cron.hourly/hylafax
/etc/logrotate.d/hylafax
/etc/hylafax

faxcover.ps	log	hfaxd.conf
etc	faxcover_example_sgi.ps	hyla.conf
pagesizes	faxmail.ps	typerules
/usr/bin/		
capifax	faxalter	faxstat
capifaxrcvd	faxcover	sendfax
fax2ps	faxmail	
fax2tiff	faxrm	

/usr/lib/perl5/site_perl/esmith/FormMagick/Panel/faxsrv.pm

/usr/lib/

libfaxserver.so.4.1.8
libfaxserver.so

libfaxutil.so.4.1.8

libfaxutil.so

/usr/share/doc/hylafax-4.1.8

CONTRIBUTORS

CHANGES

/usr/share/doc/hylafax-4.1.8/html

Majordomo
Majordomo/help.html
HOWTO.html
index.html
acknowledge.html
binary.html
building.html
class1.html
class2.0.html
class2.html
contrib.html
copyright.html
documentation.html
faxgateway.html
ftpmail-help.html
ghostscript.html
hylafax.gif
hylafax3.0.html
hylafax4.0.html
troubleshooting.html
install-source.html
ixotap.html

mailing-lists.html
matthias.gif
matthias.html
modems.html
namechange.html
operation.html
overview.html
sam.gif
sam.html
setup-advanced.html
setup-client.html
setup.html
source.html
toc.html
v2.3beta036.html
upgrade4.0.html
v2.3beta036special.html
v3.0beta096.html
v3.0beta100.html
v3.0beta108.html
v3.0beta110.html
v3.0beta111.html

v3.0beta112.html
v3.0beta113.html
v3.0beta114.html
v4.0beta005.html
v4.0beta006.html
v4.0beta007.html
v4.0beta008.html
v4.0beta009.html
v4.0beta010.html
v4.0beta011.html
v4.0beta012.html
v4.0beta013.html
v4.0beta014.html
v4.0beta015.html
v4.0beta018.html
v4.0beta020.html
v4.0beta021.html
v4.0beta022.html
v4.0beta023.html
version.html

/usr/share/doc/hylafax-4.1.8/html/Modems

Hayes
Hayes/hayes.html
Supra
Supra/class1.html
Supra/class2.html
Telebit
Telebit/faxcmds.html
ZyXEL
ZyXEL/compression.html
ZyXEL/autodetect.html
ZyXEL/codes.html
ZyXEL/commands.html

ZyXEL/examples.html
ZyXEL/voice.html
hayes-accura288.html
att-dataport.html
digicom-scout.html
everex-2496d.html
hayes-optima2400.html
index.html
multitech-1432.html
multitech-1932.html
multitech-2834.html
nuvo-96424pfx.html

ppi-pm14400fxmt.html
rockwell-56k.html
supra-v32bis.html
telebit-t3000.html
twincom-144df.html
ucom-traveller96.html
usr-courier.html
usr-sportster.html
zyxel-1496.html
zyxel-elite.html
zyxel-omni.html

/usr/share/doc/hylafax-4.1.8/html/icons



Network Fax Server
for SME Server

Christian DUMONT
Translate by
E.Perrault & M.Bachmann

at_work_icon.gif back.gif ball_blue_icon.gif button.excl.gif /usr/share/doc/hylafax-4.1.8/ COPYRIGHT INSTALL /usr/share/man/man1/ fax2ps.1.gz fax2tiff.1.gz edit-faxcover.1.gz faxalter.1.gz /usr/share/man/man8/ fax500.8.gz faxabort.8c.gz faxaddmodem.8c.gz faxadduser.8c.gz faxanswer.8c.gz faxconfig.8c.gz faxcron.8c.gz faxdeluser.8c.gz faxgetty.8c.gz /usr/share/man/man5/ hosts.hfaxd.5f.gz hylafax-config.5f.gz hylafax-info.5f.gz /usr/share/zoneinfo/America/Halifax /usr/share/zoneinfo/posix/America/Halifax /usr/share/zoneinfo/right/America/Halifax /usr/sbin/ edit-faxcover faxsetup.linux faxaddmodem faxadduser faxcron faxconfig fax500 faxdeluser faxgetty	contents.gif frog.gif improved.gif info_icon.gif README README.rpm faxcover.1.gz faxmail.1.gz faxrm.1.gz faxstat.1.gz faxinfo.8c.gz faxlock.8c.gz faxmodem.8c.gz faxq.8c.gz faxqclean.8c.gz faxquit.8c.gz faxrcvd.8c.gz faxsend.8c.gz faxsetup.8c.gz hylafax-log.5f.gz hylafax-server.5f.gz hylafax-shutdown.5f.gz	new.gif next.gif smiley.gif warning_icon.gif TODO VERSION hylafax-client.1.gz sendfax.1.gz sgi2fax.1.gz faxstate.8c.gz faxwatch.8c.gz hfaxd.8c.gz pdf2fax.8c.gz ps2fax.8c.gz tiff2fax.8c.gz xferfaxstats.8c.gz xferfaxlog.5f.gz hfaxd hylafax xferfaxstats.org faxanswer faxlock faxmsg faxquit faxabo
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