HylaFAX HowTo

By: Ernst Bergen   March 29, 2001   v1.1

This HowTo will explain the process of getting the HylaFAX server and client working with e-smith server v4.1.1 and Windows 2000 SP1

Required Files:

libtiff-3.5.5-7.i386.rpm => *http://www.redhat.com/swr/i386/libtiff-3.5.5-7.i386.html*
ghostscript-fonts-6.0-2.noarch.rpm => *http://www.cs.wisc.edu/~ghost/doc/AFPL/get650.htm*
ghostscript-6.50-2.i386.rpm => *http://www.cs.wisc.edu/~ghost/doc/AFPL/get650.htm*
XFree86-libs-4.0.1-1.i386.rpm => *http://www.redhat.com/swr/i386/XFree86-libs-4.0.1-1.i386.html*
compat-libstdc++-6.2-2.9.0.9.i386.rpm => *http://www.redhat.com/swr/i386/compat-libstdc++-6.2-2.9.0.9.i386.html*
hylafax-4.1beta3-1rh6.i386.rpm => *ftp://ftp.hylafax.org/binary/linux/redhat/RPMS/i386/*
Cypheus.exe => *http://www.urania.com/cyhome_e.htm*
help_e.zip => *http://www.urania.com/cyhome_e.htm*

Procedure:

All the steps take place at the e-smith command prompt. Hit alt+F2 and then log in as root with your admin password. The HowTo will assume you are already in the directory where you have placed all of the above files. These steps are one way that works, but there are many different ways to do this. I used the pico text editor, but vi works just as well. Just substitute your choice of text editor wherever pico appears. The order of the steps is very important. Type the following at the prompt:

1)   rpm –Uvh libtiff-3.5.5-7.i386.rpm
2)   rpm –Uvh ghostscript-fonts-6.0-2.noarch.rpm
3)   rpm –Uvh XFree86-libs-4.0.1-1.i386.rpm
4)   rpm –Uvh compat-libstdc++-6.2-2.9.0.9.i386.rpm
5)   rpm –Uvh ghostscript-6.50-2.i386.rpm
6)   rpm –Uvh hylafax-4.1beta3-1rh6.i386.rpm

These packages are all required to satisfy the dependencies of HylaFAX and GhostScript. If you use the GNU version of GhostScript, some of these steps may not be necessary because the program paths change.

7)   cd /usr/share/fax
        pico hyla.conf

        add the following two lines and then save the file and exit:

        FontMap: /usr/local/share/ghostscript/6.50/lib
        FontPath: /usr/share/ghostscript/fonts

8) cd /usr/local/share/ghostscript/6.50/lib
mv Fontmap Fontmap.SAV
mv Fontmap.GS Fontmap

9) cd usr/sbin
pico faxsetup

change the following lines and then save the file and exit:

PATH=/bin:/usr/bin:/etc:
to
PATH=/bin:/usr/bin:/etc:/usr/local/bin:

PATH_AFM=whatever_was_originally_here
to
PATH_AFM=/usr/local/share/ghostscript/6.50:/usr/share/ghostscript/fonts:
/usr/local/share/ghostscript/fonts/default/Type1

The above PATH_AFM should all be on the same line in the document. These
changes may not be necessary if you used the GNU GhostScript.

10) Type faxsetup at the prompt

Follow the steps that appear. Refer to the following documents for help:

http://www.hylafax.org/howto/index.html
http://www.hylafax.org/setup.html

In general, if you don't know the answer to a configuration question, just use the
default setting that is provided.
If you want to run HylaFAX in send-only configuration, when prompted for the # of
rings to answer, enter 0. At the end of the setup, the script will prompt you to run
faxaddmodem for all available devices. You can choose yes, or just type
faxaddmodem at the prompt, after the faxsetup script is finished. The HylaFAX docs
recommend you use the ttySx syntax for your serial ports when running
faxaddmodem.

ttyS0 => com 1
ttyS1=> com 2

11) Once you have run faxsetup, and faxaddmodem and those two things are properly
configured, you are almost there. At the prompt type:

faxadduser –p some_password some_username

Add all your intended fax users and their passwords to the access configuration file.
These user names do not need to coincide with your e-smith user names, since you
can enter any valid username when Cypheus opens. Cypheus checks the hosts.hfaxd
file for valid users when it opens. Just for the record, this file is located in:

/var/spool/fax/etc/hosts.hfaxd

12) I had some problems with the Cypheus client adding the country code or area code prefix to the fax number all the time. This would cause the fax to fail since the result is an invalid phone number. The client reads the dialrules from HylaFAX and applies those rules to the fax number you type in. a really quick and dirty way of fixing this is to just comment out the country and area code variables in the dialrules file. At the prompt type:

cd /var/spool/fax/etc
pico dialrules

scroll down to where it says:

!Process a dialing string according to local requirements.
!blah blah blah

scroll down a little further to the following two lines:

^[+]${Country}
^[+]

Add an exclamation mark ! to the beginning of both these lines. I found that fixed my problem. You may have to play with this a bit, depending on what area you live in and what kind of dialing rules your particular situation needs. Save the file and exit.

13) to start your HylaFAX server, at the prompt type:

cd /etc/rc.d/init.d
hylafax start

then use the following command to activate each modem device you would like to be available for faxing:

faxmodem ttySx

You could put these commands in a startup script if you so choose.

14) The last step! Install the Cypheus client on you Windows machine and follow the setup instructions to make it work. You'll have to install a postscript printer driver that points to the rpt1 port. You can use either:

Apple LaserWriter 12/640 PS
or
APS-PS PIP with APS-6-108 v49.3 or 52.2

Both work just fine. Once Cypheus is installed, run the program and point it to your e-smith server with the ip address/hostname and the username and passwords that you set up with the faxadduser command. You can then go into the configuration options in Cypheus and change things to the way you want them. You're on your own for cover pages. I'm still working on that. There is a lot of info available on creating custom cover pages. Look up the HylaFAX docs that I referenced above to find more info on that. There are other clients available. Cypheus seems to be the nicest GUI, is user friendly and really easy to install.

Check the HylaFAX documentation links above for more info on clients. I pieced together fragments of information from a wide variety of websites, newsgroups etc… to get this to work. This document is meant as a convenient reference that has a complete set of steps from start to finish that work with the system specified at the top of this doc. This is by no means the only way of doing this. Feel free to experiment. There is probably a nicer way to incorporate some of the changes HylaFAX makes, into e-smith template files. If you run the server configuration utility, it will re-write a lot of the script files and HylaFAX may not function as expected. If something isn't working after you do this, just run the faxsetup script again and it will rewrite all the things HylaFAX needs to function. If you incorporate e-smith templates, this shouldn't be necessary. If you get it working with e-smith templates, please post a HowTo at the e-smith site!

Finished!

Enjoy telling your boss you just set up a completely free fax server for the company (minus your time of course, but that never counts anyway).
Tell them to donate to the e-smith guys, cuz they have an awesome product!

www.e-smith.org