How to run a second server on your machine

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Fldigi allows you to run more than 1 instance of the program. This comes in handy when you want to run e.g. a CW Igate parallel to the main pskmail server.

I have experimented with this, and now a CW Igate is running on PI4TUE, in parallel to the normal multi-mode server. Of course you need a machine capable of running 2 fldigis without being overloaded. The PI4TUE servers take <50% CPU on a 2 GHz Dell Optiplex. The experiments were done with **fldigi-3.21.72BW**, which looks quite stable.

Both instances need their own enviroment, including a separate .pskmail directory and a separate .fldigi directory to hold the parameter sets for both servers and modems.

The trick is to run the second instance under a different user, which is easy to do on Linux. I have called the second user **cw**, and it is made like:

sudo adduser cw

[sudo] password for rein:

Adding user `cw' ...

Adding new group `cw' (1002) ...

Adding new user `cw' (1001) with group `cw' ...

Creating home directory `/home/cw' ...

Copying files from `/etc/skel' ...

Enter new UNIX password:

Retype new UNIX password:

passwd: password updated successfully

Changing the user information for cw

Enter the new value, or press ENTER for the default

Full Name []:

Room Number []:

Work Phone []:

Home Phone []:

Other []:

Is the information correct? [Y/n]

rein@pskmail:~$

The next action is to copy the parameter files of the first server to the new user directory:

rein@pskmail:~$ ***cd ../cw***

rein@pskmail:/home/cw$ ***sudo cp -r ../rein/.fldigi .***

rein@pskmail:/home/cw$ ***sudo cp -r ../rein/.pskmail .***

rein@pskmail:/home/cw$ ***ls -al***

total 40

drwxr-xr-x 4 cw   cw   4096 Jul 24 09:47 .

drwxr-xr-x 4 root root 4096 Jul 24 09:43 ..

-rw-r--r-- 1 cw   cw   220 Jul 24 09:43 .bash_logout

-rw-r--r-- 1 cw   cw   3486 Jul 24 09:43 .bashrc

drwxr-xr-x 13 root root 4096 Jul 24 09:46 .fldigi

-rw-r--r-- 1 cw   cw   675 Jul 24 09:43 .profile

drwxr-xr-x 15 root root 4096 Jul 24 09:47 .pskmail

-rw-r--r-- 1 cw   cw   8445 Jul 24 09:43 examples.desktop

As we see the new parameter files are owned by root. We can change this with:

sudo chown -R cw:cw .fldigi

sudo chown -R cw:cw .pskmail

Also the files should we read/writable by everybody, so:

sudo chmod 777 .fldigi

sudo chmod 777 .pskmail

We now have the base parameter files ready for adaptation to the new (CW) Igate.

Changes for running fldigi as a CW modem

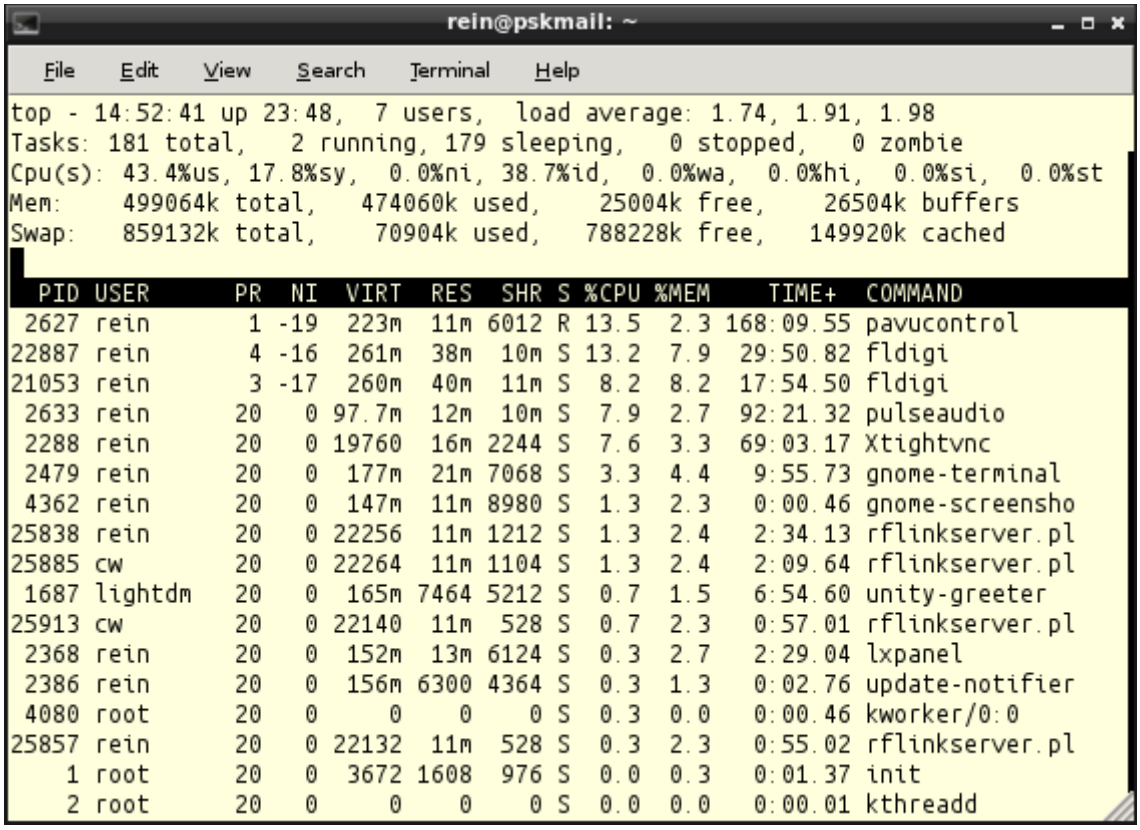
As the modem will run in CW-only mode in the background, **RxID has to be switched off,** so the modem will remain in CW mode while the primary server handles all other modes. This is done simply by clearing all modes in cofiguration->ID´s->Receive modes. After that, incoming RSID requests will not have any effect anymore, and the Igate will remain in CW mode.

You may have to experiment a bit with the **audio**. On PI4TUE I use pulseaudio, and the soundcard of the Igate is set to Pulseaudio. This brings the audio to both modems in parallel. I Run pavucontrol all the time... this seems to tell pulseaudio to make the audio available to multiple applications.

Of course both modems need a **different socket port** for connection to the server. The primary modem has default port 7322, the Igate modem is started with port number 7333. The command line parameter for this is:

--arq-server-port 7322

To make sure both modems get the necessary attention of the kernel, I **reniced** both instances of fldigi:



Pavucontrol runs with the highest priority (-19),

the primary modem runs as priority 3 (-17),

the Igate modem runs as priority 4 (-16).

You can tell fldigi which home directory and config directory it should use.

The command line parameters are:

--home-dir /home/cw --config-dir /home/cw/.fldigi

Don´t forget to save the configuration on the Igate modem...

Summing all up, you start the **primary** modem from your user directory with:

/usr/local/bin/fldigi --home-dir /home/you --config-dir /home/you/.fldigi --arq-server-port 7322 --wfall-only --debug-pskmail

and the **Igate** modem with:

/usr/local/bin/fldigi --home-dir /home/cw --config-dir /home/cw/.fldigi --arq-server-port 7333 --wfall-only --debug-pskmail

Preparing the server(s)

The primary server does not need to be changed... use **pskmail_server-2.1.b** for both servers.

The Igate server needs new parameters, so you will have to edit the parameters file (**/home/cw/.pskmail/pskmailrc.pl**).

The lines to be changed are:

$ServerCall = "PI4TUE-2"; # needs a separate call to connect to APRS

@Beaconarray = qw (0 0 0 0 0); # switch off beaconing on the Igate

$Aprs_beacon = "5126.94NP00529.25E& 2.1.b CW Igate ";

$Defaultmode = "CW";

$fldigiport = 7333; # add this line to tell the server to connect to 7333.

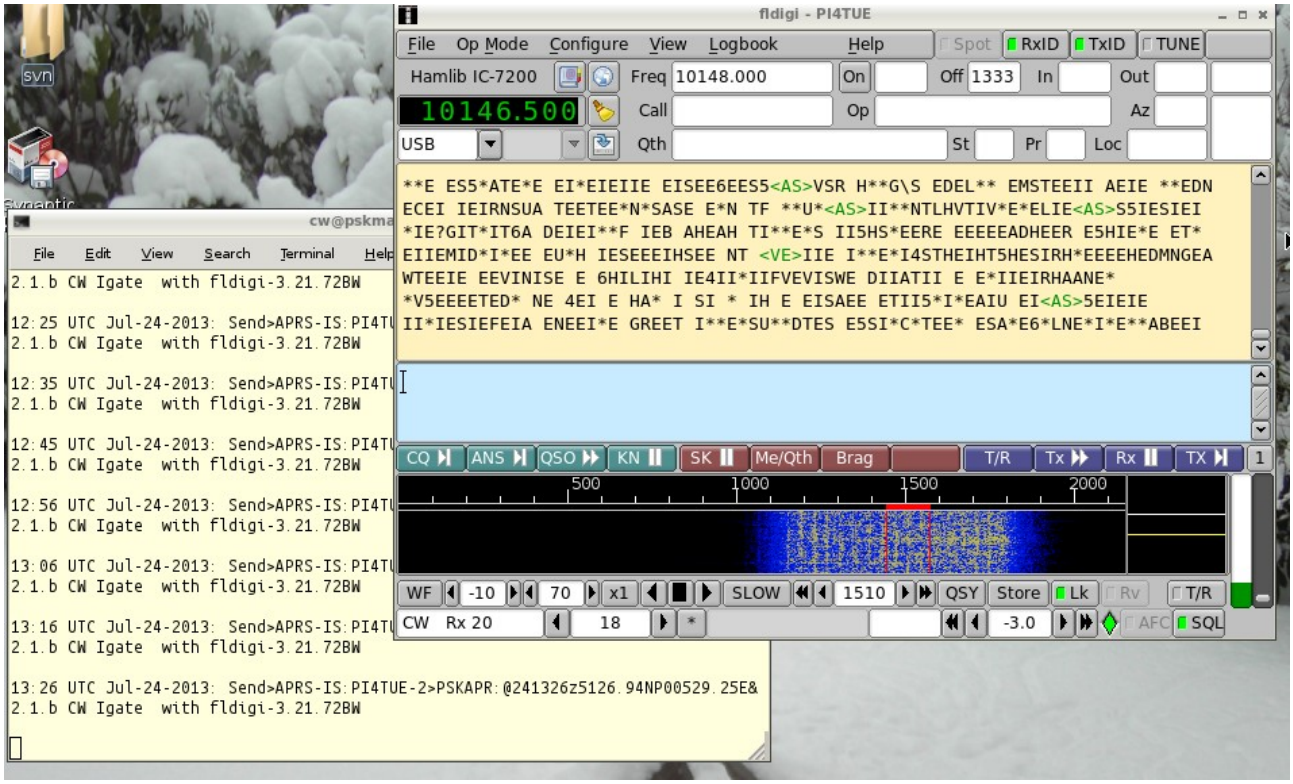
Start the primary server from your **home/user** directory:

/usr/local/share/pskmail_server/rflinkserver.pl

Start the Igate server from **/home/cw**, to make it read the proper parameter file:

/usr/local/share/pskmail_server/rflinkserver.pl

Your Igate is now ready for testing.....



Downloads from *http://pskmail.org/CW.html*