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Everyone should be using something like this, as well as maybe not many other related things. But you probably don't know what this is, so have fun. (ie. rewrite this placeholder text later)

# Usage

```
./ubiquitous_bash.sh
```

# Standards

input.rrf  
framed.rrf  
output.rrf

Any automation of the preprocessing/postprocessing step by 'gr-pipe' may use a separate 'flowgraph' pointing to 'framed.rrf' .  
Similarly, shell/batch files may perform this step.

# Design

# Conclusions

\*) Framing arbitrary size files with stock GNURadio is not possible, due to 'Stream to Tagged Stream', at least with the stock version, blocking output until a multiple of the specified length for tagging.

\*) Cygwin installation of GNURadio may be possible. Possibly also gr-pipe .

# Safety

# Reference

[https://aaronscher.com/GNU\\_Radio\\_Companion\\_Collection/Audio\\_modem.html](https://aaronscher.com/GNU_Radio_Companion_Collection/Audio_modem.html)

<https://wiki.gnuradio.org/index.php?title=CygwinInstallMain>

[https://wiki.gnuradio.org/index.php/Package\\_Communications](https://wiki.gnuradio.org/index.php/Package_Communications)

MAJOR - 'Functionally it replaces a 'File Source' block and a 'Stream to Tagged Stream' block. The advantage of this block is that when the input file size is not an exact multiple of the selected packet length, the remainder at the end of the file is not lost in the 'Stream to Tagged Stream' buffer. This precludes the need for a pre-processor such as the text padding program above.'

[https://raw.githubusercontent.com/gnuradio/gnuradio/master/gr-digital/examples/ofdm/ofdm\\_loopback.grc](https://raw.githubusercontent.com/gnuradio/gnuradio/master/gr-digital/examples/ofdm/ofdm_loopback.grc)

[https://wiki.gnuradio.org/index.php/Package\\_Communications](https://wiki.gnuradio.org/index.php/Package_Communications)

MAJOR - 'Header Format Object' .

MAJOR - 'Using Header Format Default and Correlate Access Code' .

[https://wiki.gnuradio.org/images/f/fd/Pkt\\_7\\_base\\_fg.png](https://wiki.gnuradio.org/images/f/fd/Pkt_7_base_fg.png)

'Protocol Formatter' 'Format Obj'

'Header/Payload Demux'

[https://wiki.gnuradio.org/images/8/89/Pkt\\_7\\_base.grc](https://wiki.gnuradio.org/images/8/89/Pkt_7_base.grc)

Format Obj.: hdr\_format

[https://github.com/gnuradio/gnuradio/blob/master/gr-digital/examples/ofdm/tx\\_ofdm.grc](https://github.com/gnuradio/gnuradio/blob/master/gr-digital/examples/ofdm/tx_ofdm.grc)

Format Obj.: header\_formatter.base()

[https://www.gnuradio.org/doc/doxygen/classgr\\_1\\_1digital\\_1\\_1packet\\_\\_header\\_\\_default.html](https://www.gnuradio.org/doc/doxygen/classgr_1_1digital_1_1packet__header__default.html)

'packet\_header\_default'

<https://www.youtube.com/watch?v=RnAgqGR-D-8>

<https://www.youtube.com/watch?v=VR0mej2o-SM>

Windows... HackRF...



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