

Compressing Text Data with Flwrap

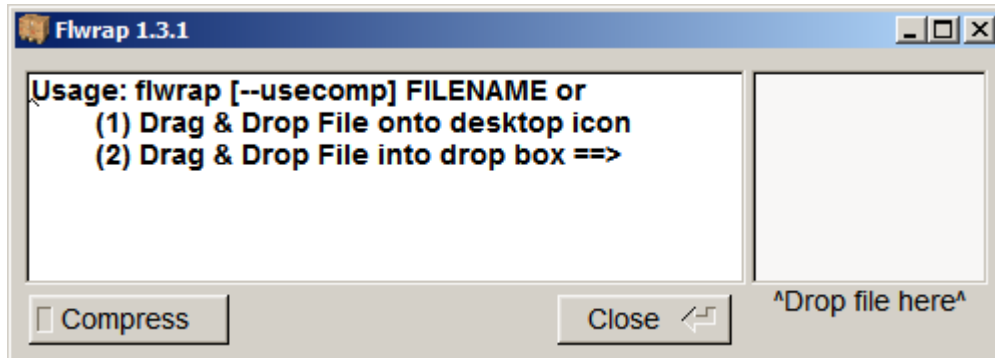
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Harry Bloomberg W3YJ

hpb@pitt.edu

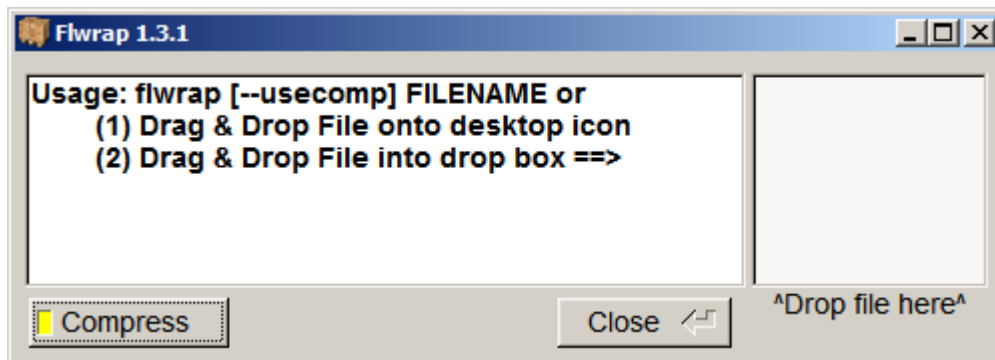
Flwrap can be used to compress text files before transmitting. Starting with Flwrap 1.3.1, you no longer need to have two separate desktop launchers, one to output wrapped data in plain text and another to output compressed data. As you will see, it's now much simpler.

Double-click on the Flwrap icon. You will see the following:



Dropping a file into the box above the "Drop file here" label will cause a file to be wrapped, just as if you were to drag and drop a file onto the Flwrap icon. As before, the wrap file will be written to the same folder/directory as the original file.

To wrap and compress a file, press the Compress button:



Now, when you drop your file into the "Drop file here" box, the file will be compressed and wrapped. The Usage instruction to use `--usecomp` is primarily for the small number of users who prefer using a command line interface for Flwrap.

That's it!

A benefit of Flwrap beginning with version 1.3.1 is that text files will never be compressed unless you first press the Compress button. Any non-text character such as tabs that are found embedded in a text file will be translated to text in the resulting wrap file and then translated back to the original non-text character when the file is unwrapped.

When to use Flwrap Compression

Compression does not come without a price. Small files do not compress very well and may actually increase in size. Also, no data can be extracted from a compressed wrap file if there is even one error in reception; the entire file will be corrupted and no meaningful data can be recovered. Finally, PSK modes do not benefit very much from Flwrap compression because you're no longer transmitting a document that contains the distribution of characters for which varicode is optimized. Plain text files of 2KB in size will actually take longer to transmit in PSK modes, and transmission times of plain text files of size up to 6KB do not improve appreciably.

So, we've come up with three simple rules of thumb for when to use compression. These rules are not perfect for all modes and situations. Instead, they're designed to be easily remembered by operators who might be sending traffic in emergency conditions under duress. We purposely did not write rules that require operators to memorize a chart that specifies which modes work best with compression for varying file sizes. We wanted to keep our rules simple even though we will miss some conditions under which data compression would be beneficial.

Our three simple rules are as follows:

Never compress any plain text file.

Never compress any file less than 2KB in size.

Transmit a compressed CSV file only if compression reduces the file size by 50% or more.