**gfePorter.py**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/AppGfePorter#gfePorter.py)

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**Description**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/AppGfePorter#Description)

This program does simple translation for some of the known items that have changed in AWIPS 2, like Numeric to numpy. What the program converts is based on changes found when doing diffs of AWIPS 1 and 2 Python files (based on R1G1-3).

The program does not do a full porting of the code, only automate some of the simpler string substitutions. It also provides a detailed log file that will indicate if other possible changes are needed.

The program should not be considered complete or static. As more users port GFE modules, it is likely more items that could have been changed by this program will be discovered. Please update the program or contact the maintainer if you discover any additional items. It will greatly help all that need to port modules if you take notes during the porting and post your information on [HowToGfePortingNotes](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/HowToGfePortingNotes).

For some files, no further changes will be required to run in AWIPS 2. However, some files will need much more work than others. Please review the log output carefully. Many warning messages are printed for items that may need to be changed. Try running the file and if errors occur, refer to the log for initial items to check.

**Source Code**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/AppGfePorter#SourceCode)

* [Browse code](https://collaborate.nws.noaa.gov/trac/ncladt/browser/trunk/gfe/applications/gfePorter) Do not download the code using the Trac repository browser (i.e., via this web site). You must use svn export or svn checkout.
* Subversion:
* svn checkout https://collaborate.nws.noaa.gov/svn/ncladt/trunk/gfe/applications/gfePorter

**Installation**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/AppGfePorter#Installation)

The files must be downloaded using svn, not from the source code browser on this Wiki:

svn export https://collaborate.nws.noaa.gov/svn/ncladt/trunk/gfe/applications/gfePorter

Just copy gfePorter.py and gfePorter.csh onto the workstation where the porting work is to be done. This is more of a run once utility program than something that needs to be permanently installed.

**Usage**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/AppGfePorter#Usage)

gfePorter.py file

gfePorter.py processes a single file at a time and the translated code is written to stdout so the normal way to run is to redirect the output to a file. Information about what was changed and items that need manual changes are written to gfePorter.log in the current directory:

foreach f (gfe\_a1/Procedure/\*.py)

set fn=`basename $f`

gfePorter $f > gfe\_a2/Procedure/$fn

mv gfePorter.log gfe\_a2/Procedure/$fn.log

end

gfePorter.csh is provided as an example wrapper script to batch process Procedure, TextProduct, TextUtility, Tool, and Utility GFE modules. Edit gfePorter.csh for your directory structure.

**Note: the input modules should have already been renamed using the** [**GFE\_rename\_modules**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/AppGfeRenameModules) **program.**

**How the program works**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/AppGfePorter#Howtheprogramworks)

The program basically does simple string substitutions. Please refer to the actual code for details of what it checks and changes:

* In the code, afpsTransList defines how to handle AFPS methods (there is no AFPS module in AWIPS 2). Some changes require importing different modules so this list also needs to define how to change any "import AFPS" statements.
* genericTransList defines simple translations that do not affect the structure of the original code.
* warnTransList defines strings to search for where a specific substitution is not known, possible, too complex, or are context sensitive. Some warnings are just a heads up for potential problems like Tkinter which may require significant changes.
* Function \_numeric handles any conversions from Numeric to numpy that can't be done using simple string substitution.