Pellet Code Gridification – Report

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Pellet Code

The binary is compiled and can run on an UI machine.

Constant input files:

- general.in – global switches

- diagnostics.in – describes the output

- perpex.in, prllex.in – setting for the main subrutines

- ctot.in, h_plt.in, h_prb.in – atom-physical data

Input file that changes during PS:

- shot.in – describes the pellet and the plasma

Output:
There are can be several hundred output files.

Total output size: 1 MB - 100 MB.

- output.dat – ablation rate, penetration depth

- tube001.dat, tube002.dat, . . .

- cloud_length001.dat, cloud_length002.dat, . . .

- tube001_en_cons.dat, . . .

IO

The number of output files are not known in advance.

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The output is compressed into one file

A shell script starts the pellet code and then compresses the output (Pellet.sh).

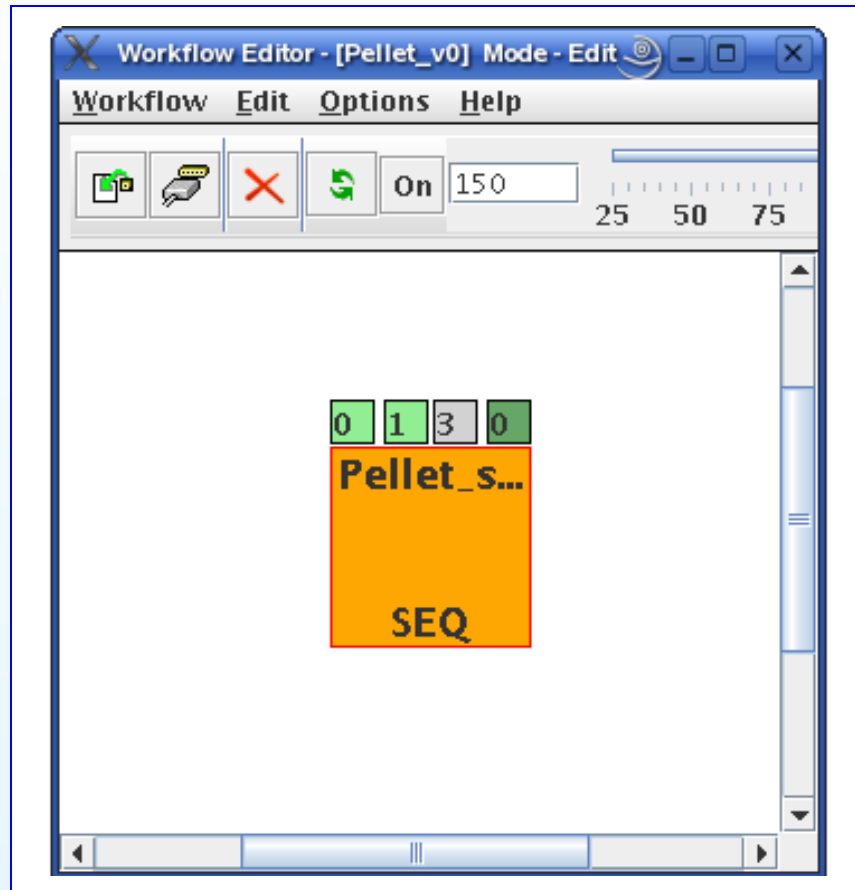The constant input files are also packed to one file (input.tar).

Large output file size

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The output data have to be stored on a storage element.

P-GRADE portal is used

Job description

The executable is the Pellet.sh script.

Ports:

0 input.tar

1 Pellet.exe

3 Pellet_Output.tar.gz (remote)

0 PS input directory for the shot.in files

PS directory must be remote → a script (transfer.sh) is used to upload the files.

Parameter Study

Results

- The input file are uploaded succesfully to a remote directory.

- eWorkflows are started

- There are some problems with the output files.