Extension of UP-FHDI GUI on other HPC Facilities

Generally, UP-FHDI GUI consists of four python files and a shell script:

1) *GUI.py*: creations and positioning of GUI widgets
2) *next_back.py*: actions of the "Next >" and "< Back" buttons
3) *submit_terminate.py*: actions of "Submit" and "Terminate the task" buttons
4) *explain.py*: explain UP-FHDI parameters with question-mark buttons
5) *auto.sh*: deployment of UP-FHDI software

Developers should pay attention to three aspects to extend UP-FHDI GUI on other HPC facilities.

Dependencies

- VcXsrv is required to forward the GUI display from Condo2017 to the local host. Other HPC facilities may require different software for the display.
- Intel/18.3 is automatically loaded in the shell script to launch MPI applications. Developers must check the compatibility of Intel compilers on other HPC facilities [Line 34 in *auto.sh*].
- The shell script periodically monitors the status of submitted MPI jobs. Developers must check if these Condo commands are compatible with other HPC facilities [Lines 49, 70, 78, and 86 in *auto.sh*]

Job Script Specifications

- Different HPC facilities may have different job script specifications. Developers can add new specifications by elseif statements [Lines 279-287 in *submit_terminate.py*].

List of all HPC facilities

- On the last page of GUI, users need to select the adopted HPC facility from a drop-down menu as shown below. Developers must add the new HPC facility to this list [Line 853 in *GUI.py*].