

Using ice-solv Feature without ice-pak



Fluent Solver - ice-solve

- ⇒ It is possible to use the Fluent Solver independently from Icepak.
- ⇒ Advantages for eCADFEM:

It is possible to start several jobs in parallel.

It is possible to run jobs over night – when the job is finished, it will be closed automatically.



Single Run

- \Rightarrow Start the job in Icepak as usual.
- ⇒ Wait until Icepak writes files for Fluent and then Fluent will be visible in the task bar.





⇒ Close Icepak. One can still see residuals in the Fluent Window.

```
FIUENT [3d, pbns, lam]

File Grid Define Solve Adapt Surface Display Plot Report Parallel Help

10 2.0815e-01 1.3075e-02 4.8064e-03 9.7068e-03 1.1456e-06 0:01:05 40

reversed flow in 516 faces on pressure-inlet 2.

11 1.9005e-01 1.1758e-02 4.3592e-03 8.7568e-03 1.1357e-06 0:01:06 39

reversed flow in 516 faces on pressure-inlet 2.

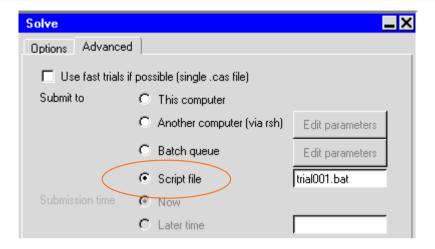
iter continuity x-velocity y-velocity z-velocity energy time/iter

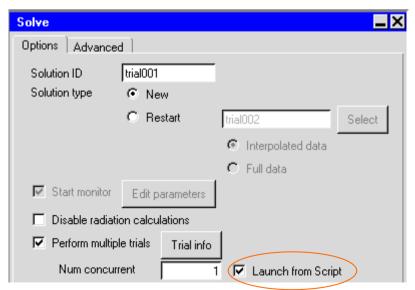
12 1.7499e-01 1.0771e-02 3.9866e-03 7.8819e-03 1.1125e-06 0:00:59 38
```



Multiple Trials - Consecutive

- ⇒ Define Trials as usual.
- ⇒ Choose both Submit to script file Launch from the script
- ⇒ Make run and wait until Icepak writes all files and starts Fluent
- \Rightarrow Close Icepak.

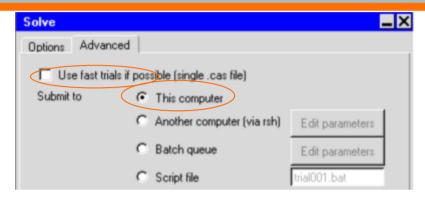


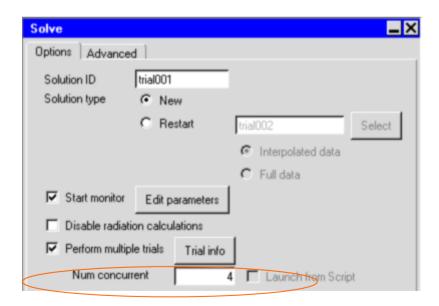




Multiple Trials - Parallel

- ⇒ Here it is assumed that runs do not depend on each other.
- \Rightarrow Define trials as usual.
- ⇒ Use send to this computer and make sure that Use fast trials is not checked.
- ⇒ Define the number of runs
- ⇒ Run, wait until Icepak writes Fluent files and starts all Fluents.
- \Rightarrow Close Icepak.

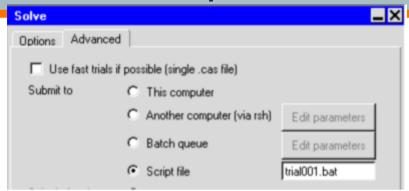






Using an option Submit to Script File

- ⇒ Is working both for a single run and multiple trials.
- ⇒ Choose Submit to script file in Icepak.
- ⇒ Make run. Now Icepak only writes files but does not start Fluent.
- ⇒ Do this for as many projects as you need.
- ⇒ Close Icepak.



- ⇒ Double click on the batch file to start Fluent.
- ⇒ You can start several jobs in parallel.
- ⇒ Alternatively for a consecutive execution of several jobs, merge all batch files together and run the resulting batch file.



Displaying Monitors or Stopping Fluent

- ⇒ Start Icepak
- ⇒ Open the project
- ⇒ Make Solve | Solution monitor
- ⇒ If necessary close Fluent by choosing Terminate
- ⇒ Close Icepak

