Università della Svizzera italiana

Institute of Computational Science ICS

Introduction to mini-app

How to compile and run the code on icsmaster

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Log-in to icsmaster with X-forwarding

- Log-in to icsmaster with X-forwarding
  - ssh with flags `-X` or `-Y`
  - You will need this for visualization of results

```
$ ssh -Y icsmaster
```

- Load gcc and python modules

```
$ module load gcc python
```

- Update the git repository

```
$ cd HPC2020/
$ git pull
```

Compile and run the code

- Go to mini-app directory

```
$ cd HPC2020/Projects/Project4/src
```

- Use makefile to compile the code

```
$ make
```

- Connect to compute node

```
$ salloc --x11
```

- Run the app on compute node

```
$ ./main 128 100 0.01
```

Visualize results

- The application generates two files with the final solution
  - `output.bin`
  - `output.bov`
- There is a Python script that converts these data files to png image

```
$ ./plotting.py
```

Visualize results (t=0.01)