Università della Svizzera italiana

Institute of Computational Science ICS

Introduction to mini-app

How to compile and run the code on icsmaster

Radim Janalík

Università della Svizzera italiana

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Log-in to icsmaster with X-forwarding

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

```
$ ssh -Y icsmaster
```

- Load gcc and python modules

```
$ module load gcc/6.1.0 python/2.7.12
```

- Update the git repository

```
$ cd HPC_2019/
$ git pull
```

Compile and run the code

- Go to mini-app directory

```
$ cd HPC_2019/Mini-project4/miniapp_openmp/
```

- Use makefile to compile the code

```
$ make
```

- Connect to compute node

```
$ salloc
```

- Run the app on compute node

```
$ ./main 128 128 100 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)