

1 Job Arrays

1.1 Use Cases

Running multiple instances of the same job with different arguments without a need to communicate between jobs.

1.2 Examples

<MINTED>

Listing 1: Job Array SBATCH File Example

2 MPI

2.1 Use Cases

Process based parallelization where the different process can communicate with each other by passing messages. It works on both distributed and shared memory systems.

2.2 Examples

`mpi-binary-search.c`

<MINTED>

`mpi-bin.sh`

<MINTED>

3 OpenMP

3.1 Use Cases

Thread based parallelization where the different threads share memory.

3.2 Examples

openmp-binary-search.c

<MINTED>

openmp-bin.sh

<MINTED>