

Intel MPI and Open MPI

Some Cheyenne users need to run Intel MPI or Open MPI instead of the HPE Message Passing Toolkit (MPT) MPI library that is loaded by default in the Cheyenne environment.

To do this, modify a [PBS job script](#) to load the appropriate module or modules, then use the **mpirun** command (with -n to specify the number of processes to use) instead of **mpiexec_mpt**. See the examples below.

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For Intel MPI

To use Intel MPI, the binary must be compiled and linked against the Intel MPI library with the Intel compiler.

Include the **module load** command in your script as shown below to enable **impi** at runtime.

```
module load intel
module load impi
mpirun -n [number of processes] ./executable_name.exe
```

For Open MPI

To use Open MPI, the binary must be compiled and linked against the Open MPI library with either the Intel compiler or GNU compiler.

Include the **module load** command in your script as shown below to enable **openmpi** at runtime. Also load the compiler that you used to compile your executable.

```
module load openmpi
module load compiler_modulefile_name/n.n.n
mpirun -n [number of processes] ./executable_name.exe
```