

使用 Environment Module 设置应用环境

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1 基本信息

- 系统 module 所在位置: `/lustre/utility/modulefiles`
- 全局导入方法: 在`/etc/profile`末尾添加: `export MODULEPATH=/lustre/utility/modulefiles:`

2 命令

查看 module 命令列表:

```
$ module
```

查看可用模块:

```
$ module avail
```

查看已经加载的模块:

```
$ module list
```

加载某模块:

```
$ module load MODULE_NAME
```

卸载模块:

```
$ module unload MODULE_NAME
```

3 模块内容

3.1 intel-compiler

```
##Module 1.0
prepend-path PATH /lustre/utility/intel/composerxe/bin/intel64
prepend-path PATH /lustre/utility/intel/impi/4.1.1.036/intel64/bin
```

```
prepend-path MANPATH /lustre/utility/intel/composerxe/man/en_US
prepend-path LD_LIBRARY_PATH /lustre/utility/intel/mkl/lib/intel64
```

3.2 intel-mpi

To be determined.

3.3 mpich2-1.4.1p1-gcc (TODO)

```
##%Module 1.0
#
# MPICH2 module for use with 'environment-modules' package:
#
# Define prefix so PATH and MANPATH can be updated.
setenv      MPI_BIN      /usr/lib64/mpich2/bin
setenv      MPI_SYSCONFIG /etc/mpich2-x86_64
setenv      MPI_FORTRAN_MOD_DIR /usr/include/mpich2-x86_64
setenv      MPI_INCLUDE  /usr/include/mpich2-x86_64
setenv      MPI_LIB      /usr/lib64/mpich2/lib
setenv      MPI_MAN      /usr/share/man/mpich2
setenv      MPI_PYTHON_SITELARCH /usr/lib64/mpich2/bin
setenv      MPI_COMPILER mpich2-x86_64
setenv      MPI_SUFFIX   _mpich2
setenv      MPI_HOME     /usr/lib64/mpich2
prepend-path PATH        /usr/lib64/mpich2/bin
prepend-path MANPATH     /usr/share/man/mpich2
```

3.4 mpich2-1.4.1p1-intel (TODO)

```
##%Module 1.0
#
# MPICH2 module for use with 'environment-modules' package:
#
```

```
# Define prefix so PATH and MANPATH can be updated.
setenv      MPI_BIN      /usr/lib64/mpich2/bin
setenv      MPI_SYSCONFIG /etc/mpich2-x86_64
setenv      MPI_FORTRAN_MOD_DIR /usr/include/mpich2-x86_64
setenv      MPI_INCLUDE  /usr/include/mpich2-x86_64
setenv      MPI_LIB      /usr/lib64/mpich2/lib
setenv      MPI_MAN      /usr/share/man/mpich2
setenv      MPI_PYTHON_SITEARCH /usr/lib64/mpich2/bin
setenv      MPI_COMPILER mpich2-x86_64
setenv      MPI_SUFFIX   _mpich2
setenv      MPI_HOME     /usr/lib64/mpich2
prepend-path PATH        /usr/lib64/mpich2/bin
prepend-path MANPATH     /usr/share/man/mpich2
```

3.5 fftw-impi-3.3.3 (TODO)

```
prepend-path LD_LIBRARY_PATH /lustre/software/fftw3/fftw-3.3.3_impi/FLOAT/lib
```

3.6 openmpi-gcc (TODO)

3.7 openmpi-intel (TODO)

3.8 cuda-5.0

```
prepend PATH /lustre/utility/cuda-5.0/bin
```

4 参考资料

- “Environment Module” <http://modules.sourceforge.net/>