



Environment Modules

Environment Module modulefile

(load) (unload) (switch)

/etc/profile ~/.bashrc ~/.bash\_profile Environment Module

source Environment Module

module

Environment Modules



- module help
- module avail
- module list
- module load MODULEFILE
- module unload MODULEFILE
- module switch OLD\_MODULEFILE NEW\_MODULEFILE module unload  
OLD\_MODULEFILE; module load NEW\_MODULEFILE
- module purge
- module whatis MODULEFILE
- module display MODULEFILE
- module use
- module unuse

# Bash

 Bash  Login Shell 

Shell  bsub  -L

 Login Shell  Bash

 Login Shell  tcsh

```
#!/bin/tcsh # Shell
```

```
#BSUB ...
```

```
...
```

```
...
```

```
#BSUB -L /bin/bash # Login Shell Bash
```

```
...
```



```
$ module avail #
```

```
----- /fs00/software/modulefiles -----
```


```
gcc/5.2.0                impi/5.0.3.048
```

```
iccifort/15.0.3          ips/2011sp1u3
```

```
ics/2013                 ips/2015u3
```

```
ics/2013sp1u1            openmpi/1.10.0-gcc-5.2.0
```

```
imkl/11.2.3              openmpi/1.10.0-iccifort-15.0.3
```

```
$ module list #
```

```
No Modulefiles Currently Loaded. #
```

```
$ icc --version #
```

```
-bash: icc: command not found
```

```
$ module whatis ips/2015u3 #
```

```
ips/2015u3                : Intel Parallel Studio XE 2015 Update 3 Cluster Edition
```

```
$ module load ips/2015u3 #
```

```
$ icc --version
```

icc (ICC) 15.0.3 20150407

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\$ module list #

Currently Loaded Modulefiles:

1) ips/2015u3

\$ module unload ips/2015u3 #



\$ module use

Search path for module files (in search order):

/fs00/software/modulefiles

\$ module avail

--- /fs00/software/modulefiles ---

gcc/12.1.0

.....

\$ module use /fs00/software/modulefiles/oneapi/2024.0 # MODULEPATH

\$ module use

Search path for module files (in search order):

/fs00/software/modulefiles/oneapi/2024.0

/fs00/software/modulefiles

\$ module avail

--- /fs00/software/modulefiles/oneapi/2024.0 ---

mkl32/2024.0

compiler/2024.0.2

mkl/2024.0

.....

--- /fs00/software/modulefiles ---

gcc/12.1.0

.....

