

# Available Software

## The Module environment

The lilac and juno clusters make use of a module environment for managing software packages where it is important to provide users with several different versions. The module environment makes it easy to configure your software versions quickly and conveniently.

To see the various options available, type

```
module
```

To list currently loaded modules and versions:

```
module list
```

```
Currently Loaded Modulefiles:
```

```
1) gcc/4.8.1
2) mpich2_eth/1.5
3) cuda/5.5
4) cmake/2.8.10.2
```

To list all available modules that can be loaded:

```
module avail
```

To add a new module, use module add:

```
module add cuda/5.5
```

The number that comes after the module name followed by a slash is the version number of the software. More information about available modules can be obtained with the module show command:

```
module show cuda/5.5
```

```
-----
/etc/modulefiles/cuda/5.5:
module-whatis  cuda
module-whatis  Version: 5.5
beta module-whatis  Description: cuda toolkit
prepend-path   PATH /usr/local/cuda-5.5/bin
prepend-path   LD_LIBRARY_PATH /usr/local/cuda-5.5/lib:/opt/cuda-5.5/lib64
-----
```

## Available additional shared software

The juno and luna clusters have additional shared software in the /opt/common directory. The juno cluster is CentOS\_7. The luna cluster is CentOS\_6 and in the process of being retired.

In an effort to keep track of frequently changing software versions, we are now using this path structure:

```
/opt/common/CentOS_version/package/version/
```

For example the latest bwa is at:

```
/opt/common/CentOS_7/bwa/bwa-0.7.12/bwa
```

R-3.2.0 is at:

```
/opt/common/CentOS_7/R/R-3.2.0/bin/R
```

You can set these paths in your .bashrc or use the full path in your code. If you put paths in your .bashrc make sure that you source it or somehow add the path to your grid engine scripts.

## Requesting installation of additional software

If you need additional software, check with us to see if we already have it installed. We can install packages for you globally or help you with your own install. To request help installing the software, please use this form here: <http://hpc.mskcc.org/software-installation-request/>