

# Third Party Software: How do I enable OHPC with Bright?

OpenHPC is a collaborative, community effort that initiated from a desire to aggregate a number of common ingredients required to deploy and manage High Performance Computing (HPC) Linux clusters including provisioning tools, resource management, I/O clients, development tools, and a variety of scientific libraries.

Bright offers a package to easily integrate, and leverage OHPC libraries and packages for use within a Bright cluster.

## Prerequisites

The ohpc-reposetup requires either RHEL/CentOS 7 or SLES 12 as these are the two operating systems that OHPC supports. Currently, only the x86\_64 architecture is supported by this procedure.

This package assumes that /opt/ohpc will be a symlink to /cm/shared/apps/ohpc/ and admins will be prompted if a previous OHPC install is detected. Each software image will also contain a symlink as mentioned above so that OHPC can resolve its path correctly.

OpenHPC reposetup packages for Bright can be obtained from <http://support2.brightcomputing.com/ohpc/>.

Setup

In the head-node install the integration package. CMD should be running and responding in-order for the install process to work correctly.

```
[root@bright80]# rpm -ivh http://support2.brightcomputing.com/ohpc/ohpc-reposetup-1.1_100008_cm8.0_590aab9b26.x86_64.rpm
```

```
Retrieving http://support2.brightcomputing.com/ohpc/ohpc-reposetup-1.1_100008_cm8.0_590aab9b26.x86_64.rpm
Preparing... ##### [100%]
Updating / installing...
```

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```
1:ohpc-reposetup-1.1_100008_cm8.0_##### [100%]
```

```
. .  
.To setup OHPC run module load ohpc-reposetup/1.1/ohpc-reposetup.module from the head  
node then ohpc-reposetup.sh.
```

```
[root@bright80]# module load ohpc-reposetup/1.1/ohpc-reposetup.module
```

```
[root@bright80]# ohpc-reposetup.sh
```

```
Checking prerequisite files.
```

```
Setting up OHPC for use with Bright...
```

```
Backing up default modules.
```

```
/etc/sysconfig/modules/lmod/cm-lmod-init.sh
```

```
/etc/sysconfig/modules/lmod/00-modulepath.sh
```

```
==== The following images were detected ====
```

```
Please choose which images you wish to  
enable the OHPC repo in.
```

```
=====
```

```
a) All software images.
```

```
0) default-image /cm/images/default-image
```

```
d) Disable OHPC on the head node and software images.
```

```
q) Quit.
```

```
(selection): a
```

```
You selected: a
```

```
Enable OHPC in all software images.
```

```
Creating symlink to /opt/ohpc in: /cm/images/default-image
```

```
Backing up lmod modules.
```

```
/cm/images/default-image/etc/sysconfig/modules/lmod/00-modulepath.sh
```

```
/cm/images/default-image/etc/sysconfig/modules/lmod/z00-lmod.sh
```

```
/cm/images/default-image/etc/sysconfig/modules/lmod/z01-default_modules.sh
```

Once the script has been run to set up the OHPC repository with Bright, then cluster admins can then install packages via yum or zypper from the head node. No action is needed for the compute nodes to see these changes. As with any module, users should then load with "module load" and "module unload".

e.g

```
sles12ohpc:~ # module load prun/1.2
```

```
sles12ohpc:~ # module unload prun/1.2
```

```
Unique solution ID: #1399
```

```
Author: Martijn de Vries
```

```
Last update: 2019-05-29 12:30
```