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Modulefiles

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Modulefiles Motivation

- On HPC cluster it is often desirable to have multiple version of the same software installed
- Changing environment variables like \$PATH manually to accommodate this is tedious
- Corresponding shell scripts would have to be written for multiple languages
- All of these explicit steps are error prone and difficult to maintain
- There is no simple upgrade path



Module Commands

- module avail
 - Display the current available module tree
- module list
 - Display currently loaded modules
- module purge
 - Deletes all modules from list of loaded
- module load <package>
 - Loads the current default module of package



Module Commands

- module load <package/version>
 - Loads the specific version *version* of a package
- module unload
 - Remove module package from the environment
- module show <package>
 - Displays command triggered by module load
- module whatis <package>
 - Displays a 1-line info about the module
- module help package



Exercise

- Download FFTW3 and install the package on the virtual server
- Create a module for the FFTW3 package (use the proposed template)
- Download the source from Indico and compile the code
- Run the code within a job script