

Controlling dependencies in CMT

There are two ways to reduce the dependencies in CMT:

- put the "use" statement in a private section
- append the qualifier -no_auto_imports

We need to consider both compile/link time dependencies, and run-time. Many packages, like flux, have xml files in the package that need to be made visible at run time, but compile-time resources like header files and libraries are only needed by packages that build against it. So flux has the following statement:

```
# default path to xml files
set FLUX_XML "${flux_root}/xml"
```

This defines the environment variable FLUX_XML which will be set by the setup.* script in the cmt folder of any package that depends on flux via a public path.

But to avoid adding the include path and link options to clients of such a package, FluxSvc, for example, has the following statement:

```
use flux * -no_auto_imports
```

But this applies to FluxSvc as well, so the statement to build the FluxSvc library must have the qualifier

```
-import=flux
```

The full command is:

```
private

macro source ".cxx" WIN32 ".h *.cxx *.txt"

#these need to be explicitly imported since we use -no_auto_imports for the used packages

macro library_imports "-import=flux -import=tip -import=GRB -import=celestialSources -import=f2c -import=eblAtten"

-s=../FluxSvc $(source) \
-s=Dll *.cxx\library FluxSvc $(library_imports) \
-s=../src $(source)
```