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1 Routine/Function Prologues

1.1 Fortran: Module Interface GC_SomethingIncludeFile.h

This include file contains the various parameters that will allow the module and routine to do stuff to various things in various routines in various places.

PUBLIC TYPES:

```
TYPE t_GeosChemSomething
  !%%% declare stuff here %%%
END TYPE t_GeosChemSomething
```

PUBLIC MEMBER FUNCTIONS:

None

PUBLIC DATA MEMBERS:

```
INTEGER(ESMF_KIND_I8), PUBLIC, PARAMETER :: myIntParam    ! INTEGER value
REAL(ESMF_KIND_I8),    PUBLIC, PARAMETER :: myRealParam    ! REAL*8 value
```

REVISION HISTORY:

21 May 2008 - R. Yantosca - Initial Version

REMARKS:

1.2 Fortran: Module Interface GC_SomethingMod.F90

This module contains the data type to declare a Something object and the methods to work with the Something object.

INTERFACE:

```
MODULE GC_SomethingMod
```

USES:

```
USE ESMF_Mod
IMPLICIT NONE
```

PUBLIC TYPES:

```
TYPE t_GeosChemSomething
  !... declare stuff here
END TYPE t_GeosChemSomething
```

PUBLIC MEMBER FUNCTIONS:

```
PUBLIC :: GC_SomethingRoutine1
PUBLIC :: GC_SomethingFunction1
```

PUBLIC DATA MEMBERS:

```
INTEGER(ESMF_KIND_I4), PUBLIC :: myPublicVariable ! public data variable
```

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REMARKS:

Protex is great!

1.2.1 GC_SomethingRoutine1

This routine does something to the input variable and returns the result in the output variable.

INTERFACE:

```
SUBROUTINE GC_SomethingRoutine1( input, inpout, output, status )
```

INPUT PARAMETERS:

```
INTEGER(ESMF_KIND_I4), INTENT(IN) :: input ! Input variable
```

INPUT/OUTPUT PARAMETERS:

```
INTEGER(ESMF_KIND_I4), INTENT(IN) :: inpout ! In/out variable
```

OUTPUT PARAMETERS:

```
INTEGER(ESMF_KIND_I4), INTENT(IN) :: output ! Output variable
```

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REMARKS:

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1.2.2 GC_SomethingFunction1

This function does something to the input variable and returns the result in the value variable.

INTERFACE:

```
FUNCTION GC_SomethingFunction1( input ) RESULT( value )
```

INPUT PARAMETERS:

INTEGER(ESMF_KIND_I4), INTENT(IN) :: input ! Input variable

OUTPUT PARAMETERS:

INTEGER(ESMF_KIND_I4), INTENT(IN) :: value ! Output variable

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REMARKS:

Protex is great!

1.2.3 GC_Routine.F90

This routine takes in an input variable, does something to it, and then sends out an output variable.

INTERFACE:

SUBROUTINE GC_Routine(input, output)

USES:

USE GC_SomethingMod

INPUT PARAMETERS:

REAL(ESMF_KIND_R8), INTENT(IN) :: input ! input variable

OUTPUT PARAMETERS:

REAL(ESMF_KIND_R8), INTENT(IN) :: output ! output variable

BUGS:

None known at this time

SEE ALSO:

GC_SomethingMod.F90

SYSTEM ROUTINES:

None

FILES USED:

GC_SomethingMod.F90

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REMARKS:

Protex is great!