
Procedure ENGENDRE_TEST

1 Drank

To write a “piece of file” to check the later NON-regression of the code.

This piece of file (containing commands `TEST_RESU` and `TEST_TABLE`) could be inserted in a case test to check the NON-regression of the contents of the JEVEUX objects created by this case test.

This command is useful only for the developers (and mainteneurs) of the code.

2 Syntax

```
ENGENDRE_TEST      (
/FORMAT            = "OBJET",
                    ♦/TOUT=' OUI' ,
                    / CO=l_conc                ,                [l_CO ()]
                    ♦
                    TYPE_TEST=' SOMME',        [DEFAULT]

/# if the key word FORMAT = "OBJET" is not used:
♦ CO=l_conc                ,                / [sd_resultat]
                    / [field]
                    / [array]

♦TYPE_TEST=/                "SOMME_ABS",        [DEFAULT]
                    / "SUM",
                    / "MIN",
                    / "MAX",

♦ UNITE=/iunit        ,                [I]
                    /8 ,                [DEFAULT]

♦FORMAT_R=/format        ,                [TXM]
                    / "1PE20.13",        [DEFAULT]

♦ PREC_R=/prec        ,                [TXM]
                    / "1.E-10" ,        [DEFAULT]
                    )
```

3 Operands

3.1 General information

This command is used to generate "pieces" of file which one can include in the command file of a test in order to check the "NON-regression" of the code.

When key word `FORMAT='OBJET'` (what is advised) is not used, the types of concepts which one can test are fewer: arrays, fields and the `sd_resultat`. For each concept, command `ENGENDRE_TEST` will generate a command `TEST_TABLE` or `TEST_RESU`.

If the concept is an array, each column of the array will be tested. If the concept is a `sd_resultat`, all the fields will be tested for all the sequence numbers.

If key word `FORMAT='OBJET'` (what is not recommended) is used, the command will write in the file attached to the unit `iunit` (`RESULTAT` by default) of the lines of the type:

```
_F (NOM=' CHAMEL14          .VALE', S_R=-1.45779E+08, PRECISION=1.D-5, ),  
_F (NOM=' CHAMNO3          .VALE', S_R= 1.16344E+06, PRECISION=1.D-5, ),  
_F (NOM=' LR3              .NBPA', S_I= 5,          PRECISION=0., ),  
_F (NOM=' LR3              .BINT', S_R= 1.00000E+01, PRECISION=1.D-5, ),  
_F (NOM=' LR3              .VALE', S_R= 3.00000E+01, PRECISION=1.D-5, ),  
_F (NOM=' FO20             .VALE', S_R=-1.16733E+06, PRECISION=1.D-5, ),
```

These lines can be then inserted in the text of a command `TEST_RESU` :

```
TEST_RESU (OBJET= (  
<< l nes ins r es>>  
,),
```

Each line will of the command cause an occurrence of key word `OBJET TEST_RESU`. One will thus test thus the NON-regression of the contents of the specified `JEVEUX` objects.

To be able to print the contents of the `JEVEUX` objects, it is necessary obviously that these objects exist and this is why this command is generally called at the end of the command file.

3.2 Operand `TOUT`

```
◆/TOUT      = "OUI"
```

All the objects present on the `GLOBALE` data base at the time of the call to `ENGENDRE_TEST` will cause a test of NON-regression.

3.3 Operand `CO`

```
/CO = l_conc
```

`l_conc` is the list of the concepts for which one wants to generate the tests of NON-regression.

3.4 Operand TYPE_TEST = "SUM"

◇TYPE_TEST = 'SOMME'

For each JEVEUX object selected, one tests:

| | |
|--------------|--|
| SOMMELa | value tested corresponds to the sum of the values of the numbers contained in the object |
| .SOMME_ABSLa | value tested corresponds to the sum of the absolute values of the numbers contained in the object .MINLa |
| | value tested corresponds at least of the values of the numbers contained in the object .MAXLa |
| | value tested corresponds to the maximum of the values of the numbers contained in the object. |

3.5 Operand UNITE

◇UNITE =/iunit , [DEFAULT]
/8 ,

This integer makes it possible to choose the logical unit of the file where the printing will be done.

3.6 Operand FORMAT_R

◇FORMAT_R =/format , [DEFAULT]
/ "1PE20.13",

This character string makes it possible to choose the number of decimals printed for the real numbers.

3.7 Operand PREC_R

◇PREC_R =/prec , [DEFAULT]
/ "1.E-10",

This character string makes it possible to choose the accuracy with which will be made the test in command TEST_RESU (for the floating numbers).

4 Example

```
ENGENDRE_TEST (CO= (chamno, chamel, tabl2, evolth))
```