Code_Aster

Version default

Titre : Opérateur EXTR_RESU
Responsable : Jean-Pierre LEFEBVRE

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Clé : U4.71.04   Révision : 9739

Operator EXTR_RESU

1 Drank

To extract from the fields within a data structure of the type `result`. The extraction results in reducing the obstruction of starting data structure, when the result concept is reentrant.

The reduction of the obstruction of data structure `result` is obtained by filing part of the fields which it contains. One can choose the fields to be filed either by indicating the fields to be preserved, or by indicating the fields to be excluded.

The extraction can also be done on part of the mesh or model on which the data structure rests result.

If the data structure has the same name as initial structure, the fields not saved are destroyed.

To recover indeed the disk space associated with the global database , it is necessary to use of the command `option` RETASSAGE FIN (cf [U4.11.02]).

D-entering operator.

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2   Syntax

```
RESUOUT = EXTR_RESU (
            ◊reuse = RESUOUT,
            ♦RESULTAT =RESUIN  ,                    /  [evol_elas]
                                                    /  [dyna_trans]
                                                    /  [dyna_harmo]
                                                    /  [acou_harmo]
                                                    /  [mode_meca]
                                                    /  [mode_acou]
                                                    /  [mode_stat_depl]
                                                    /  [mode_stat_acce]
                                                    /  [mode_stat_forc]
                                                    /  [evol_ther]
                                                    /  [evol_noli]
                                                    /  [mult_elas]
                                                    /  [fourier_elas]


        ◊ARCHIVAGE=_F          (
           ◊/LISTE_ARCH=LIARCH              ,            [listis]
            /PAS_ARCH          =PAS      ,            [I]
           #sélection     fields
           ◊/CHAM_EXCLU=CHAMEXCLU           ,        [l_Kn]
            /NOM_CHAM          =NOMCHAM ,        [l_Kn]
           #sélection     sequence numbers
           ◊/NUMÉRIQUE_ORDRE=LORDRE           ,            [l_I]
            /LIST_ORDRE      =LENTI    ,            [listis]
            /NUME_MODE         =LMODE    ,            [l_I]
            /NOEUD_CMP         =LNOECMP ,        [l_K16]
            /NOM_CAS        =NCAS ,           [l_K16]
            //FREQ           =LFREQ    ,           [l_R]
               /LIST_FREQ        =LREEL    ,            [listr8]
               /INST          =LINST    ,           [l_R]
               /LIST_INST        =LREEL    ,            [listr8]
        ◊   |    PRECISION=/         PREC    ,         [R]
                          /1.0D-6,           [DEFAULT]
            |    CRITERE=/        "RELATIF",         [DEFAULT]
                         /"ABSOLU",
                    ),
        ◊RESTREINT= _F        (
           ♦/MAILLAGE=ma           ,                   [mesh]
            /MODELE         =mo ,                  [model]
                    ),
        ◊TITER=titer                                 [l_Kn]
            )
```

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3   Operands

3.1   Operand RESULTAT

Data format of result starting.
If REUSIN is different from RESUOUT, then RESUIN is not modified.

Note:
• If RESUIN contains one (or several) arrays, for example: "OBSERVATION", "PARA_CALC", …, those are ignored by the command.
• The concepts of the type FOURIER_THER are not treated by the operator EXTR_RESU.

3.2   Factor key word ARCHIVAGE

Defines the fields to be saved. This perhaps more repeated key word once.

3.2.1   Operands LIST_ARCH and PAS_ARCH

Define the sequence numbers to be saved.

LIST_ARCH = LIARCH ; list sequence numbers by the command obtained DEFI_LIST_ENTI [U4.34.02],
PAS_ARCH   = NOT ; saves results starting from the first, all the "steps" sequence numbers.

3.2.2   Operands CHAM_EXCLU and NOM_CHAM

of results Defines the types which one does not wish to save (SIEF_ELNO,…) according to the type of data structure result RESUIN as starter. To specify the fields which one does not wish to save, one can:

* •   either to list the fields to be preserved with operand NOM_CHAM,
* •   or to list the fields to be excluded with operand CHAM_EXCLU.

If one of the fields to be retained is not part of data structure result, the code stops in fatal error.

3.3   Factor key word RESTREINT

This key word makes it possible to restrict the fields of result on a restricted mesh built using command CREA_MAILLAGE.

If the restriction relates to only fields at nodes, the user can provide only the mesh restricted using the key word MESH . If the restriction relates to also fields with elements, it is necessary to provide a MODELE restricted resting on the restricted mesh.

3.4   Operand TITER

Titrates given to data structure RESUOUT created (cf [U4.03.01]).

3.5   Operands NUME_ORDRE / LIST_ORDRE / INST / LIST_INST / FREQ / LIST_FREQ / NUME_MODE / NOEUD_CMP / NOM_CAS / accuracy / CRITERE

Selection in a data structure result (cf [U4.71.00]).

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4   Examples

Recopies in data structure FREQ2 of a mode on 8 of data structure FREQ.

```
FREQ  = MODE_ITER_INV (MATR_RIGI= MATASSR,      MATR_MASS= MATASSM
            CALC_FREQ= _F (OPTION= "ADJUSTS",
                            FREQ= (5. , 10. , 15. , 20. , 24. , 27. , 30. , 32.
,)),
            CALC_MODE=_F (OPTION= "DIRECT"))

FREQ2  = EXTR_RESU (RESULTAT  = FREQ,
                    ARCHIVAGE = _F (  PAS_ARCH = 8)
                )
```