

Data structures critnl and critth

Summarized:

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1 General information

One want to store the criteria of resolution, the residues and the nombres of iterations of a computation (requiring iterations) in Data format a RESULTAT.

These criteria are checked in routines NMCRCV and NTCRAR (and are printed on the message file).

To make forward these criteria of routines NMCRCV and NTCRAR with the routines of storage NMARCH and NTSTOC, one created Data structures CRITNL for mechanical nonlinear computation and CRITTH for thermal nonlinear computation.

2 Tree structure

```
critnl (K19)  :: =      record

      .CRTR   : OJB   S V R                LONG (9)
                1     =      nb_iter_glob
                2     =      nb_iter_line
                3     =      resi_glob_rela
                4     =      resi_glob
                5     =      eta_pilotage
                6     =      char_mini
                7     =      resi_glob_moins
                8     =      resi_refe
                9     =      resi_comp

      .CRDE   : OJB   S V K24             LONG (9)
                1     =      "ITER_GLOB"
                2     =      "ITER_LINE"
                3     =      "RESI_GLOB_RELA"
                4     =      "RESI_GLOB"
                5     =      "ETA_PILOTAGE"
                6     =      "CHAR_MINI"
                7     =      "RESI_GLOB_MOINS"
                8     =      "RESI_REFE"
                9     =      "RESI_COMP"

critth (K19)  :: =      record

      .CRTI   : OJB   S V I                LONG (2)
                1     =      nb_iter_glob
                2     =      nb_iter_inte

      .CRTR   : OJB   S V R                LONG (3)
                1     =      resi_glob_rela
                2     =      crit_lagr_rela
                3     =      crit_inte_rela

      .CRDE   : OJB   S V K24             LONG (5)
                1     =      "ITER_GLOB"
                2     =      "ITER_INTE"
                3     =      "RESI_GLOB_RELA"
                4     =      "CRIT_LAGR_RELA"
                5     =      "CRIT_INTE_RELA"
```

3 Contained of the OBJ

3.1 Object .CRTI

Vector of integers storing the nombres of iterations.

3.2 Object .CRTR

Vector of realities storing the criteria of resolution and the residues.

3.3 Object .CRDE

Vector of K24 describing the values stored in objects .CRTI and .CRTR.

The first parameters describe the values of the whole type.

The following describes the values of the real type.