

Structures of data critnl and critth

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1 General information

One wants to store the criteria of resolution, the residues and the iteration counts of a calculation (requiring iterations) in a Structure of Data RESULT.

These criteria are checked in routines NMCRVC and NTCRAR (and are printed on the file MESSAGE).

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

2 Tree structure

```
critnl (K19)  :: =      record

      .CRTR   : OJB  S V R              LENGTH (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           LENGTH (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              LENGTH (2)
                1      =      nb_iter_glob
                2      =      nb_iter_inte

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

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

3 Contents of the OJB

3.1 Object .CRTI

Vector of entreties storing the iteration counts.

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.