Data format sd_partition

Summarized:

This data structure is related to the parallelism of elementary computations and the assemblies. It is attached to a model and makes it possible to know which processor must calculate (and to assemble) which finite element.

Note:

- *For a sequential version of the code, this data structure does not exist.*
- *If PARALLELISME=' CENTRALIZE' , this data structure does not exist.*
- *The "late" finite elements (those of the dualized loads or the contact loads for the method "CONTINUE") all are treated by processor 0 except if PARALLELISME=' GROUP_ELEM' .*

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1 Tree structure

```
sd_partition    (K8)   :: =record
(O)  ".PRTK"           :     OJB  S  V  K24   long = 2
(O)  ".PRTI"           :     OJB  S  V  I     long = 1
(F)  ".NUPROC.MAILLE"  :     OJB  S  V  I  long = nb_mailles (mesh) + 1
```

2 Contents of JEVEUX objects

2.1 ".PRTI": S V I long = 1

V (1)	nbproc : many processors MPI available at the time of the creation of sd_partition

2.2 ".PRTK": S V K24 long = 2

V (1)	Standard of parallelism requested by the user: /"GROUP_ELEM" /"SOUS_DOMAINE" /"MAIL_CONTIGU" /"MAIL_DISPERSE"
V (2)	Name of the sd_feti if v (1) = ' SOUS_DOMAINE'

2.3 ".NUPROC.MAILLE": S V I

This object is length nb_ma + 1, with nb_ma : number of meshes of the mesh subjacent with the ligrel.

It informs about the distribution of the finite elements carried by meshes of the mesh.

V (nb_ma + 1)	nbproc : many processors MPI available (identical to PRTI (1))

for ima of 1, nb_ma :

V (ima)	number of the processor (of 0 with nbproc - 1) which must So V treat the finite element carried by

the mesh ima (ima) =-999 : the mesh ima does not carry a finite element in the ligrel