# Procedure END

## 1 Goal

To finish the work started by one of the orders 'BEGINNING' or 'CONTINUATION'

The call to this procedure is **obligatory,** what requires to finish any command file by:

```
END ()
```

# 2 Syntax

```
END    (
          ◊  FORMAT_HDF =     /   'NOT',              [DEFECT]
                              /   'YES',

          ◊  RETASSAGE =      /   'YES',
                              /   'NOT',              [DEFECT]

          ◊  INFO_RESU =      /   'YES',              [DEFECT]
                              /   'NOT'

          ◊  PROC0     =      /   'YES',              [DEFECT]
                              /   'NOT'

        )
```

# 3 Operands

The order END saves the whole of the concepts calculated during the execution in the file glob.1 (and possibly glob.2,... if necessary), as well as the whole of the python objects of the context of execution in the file pick.1. These objects will be available for one CONTINUATION calculation.

**Notice**

*Are not saved in pick.1, the python objects of the type classifies, function and type.*

## 3.1 Operand RETASSAGE

◊ RETASSAGE = /'YES',
/'NOT', [DEFECT]

Cause the retassage of the base 'TOTAL' before writing on the associated file. This makes it possible to preserve smaller bases (removed from the objects associated with the concepts destroyed by the user).

This retassage is carried out as follows by the order:

- closing of the bases,
- opening of the base 'TOTAL',
- opening of a base 'VOLATILE',
- recopy, nonempty recording by nonempty recording of the base 'TOTAL' on the basis 'VOLATILE',
- renaming by the code of this base 'VOLATILE' for safeguard as if it were the base 'TOTAL' classic.
-

The TOTAL base consists of one or more binary files organized in the form of fixed-length recordings. At the time of the operations of destruction, the associated recordings are declared free and can possibly be re-used in the course of execution. At the end of the execution, it can remain of the unoccupied recordings which contribute to the final size of the file. The operation of retassage thus consists in re-using this place by reorganizing the recordings. It is an operation which can involve many readings and writings on disc.
During an execution in parallel (MPI), it is each authority of the TOTAL base which is treated, which multiplies the inputs/outputs.

## 3.2 Operand FORMAT_HDF

◊ FORMAT_HDF =/'YES',
/'NOT', [DEFECT]

Allows to write the TOTAL base in a file with format HDF (Hierarchical Dated Format). This file could be read again on a different platform (operating system, platform 32 or 64 bits). It is only about one format of transport of the files constituting the TOTAL base. In CONTINUATION, the original base will be rebuilt with identical, one will preserve the length of the recordings, their organization including the empty recordings results of an operation of destruction.

The operation of retassage perhaps activated, but it will not have an effect that on the base with format Jeveux (file of direct access glob.1, glob.2, etc. ). The size of the base to format HDF will remain unchanged. On the other hand at the time of the continuation of calculation, after second reading of the base to format HDF, the file of direct access is recreated in the state where it was saved. It can thus be advantageous to have used the retassage.

## 3.3 Operand INFO_RESU

◊ INFO_RESU = /'YES', [DEFECT]

/'NOT',

Cause the impression in the file MESSAGE relative information with the contents of the whole of the structures of data result stored in the base TOTAL.

**Note:**

*The use of this keyword can increase in a consequent way the execution time of the order END, it is thus advised to modify the value by default when one carries out calculations generating of important quantities of data by their diversity.*

## 3.4 Operand PROC0

The operand PROC0 whose value by default is 'YES', allows to restrict the writing of the structures of data in the TOTAL base on the processor of row 0. If one affects the value to him 'NOT', the operations of safeguards will be carried out on all the processors. This operation can have high costs, it can thus be very penalizing to carry out it on each processor.
It perhaps necessary to carry out this safeguard on all the processors if one connects several command files (COM, com1, com2, etc…) in the same execution.

# 4 Example of impression resulting from the order END

The example below is extracted from the file MESSAGE associated with the case test TTNL02A.

```
#  ------------------------------------------------------------------------
#  ORDER NO: 0026           CONCEPT OF THE TYPE:
#  -------------                -----------------
END (RETASSAGE=' NON',
     INFO_RESU=' OUI',
     FORMAT_HDF=' NON',
     PROC0=' OUI',
   )


======>

STRUCTURE OF THE CONCEPT TEMPLE    CALCULATE FOR         15 SEQUENCE NUMBERS

LIST OF THE REFERENCE SYMBOLS:
! -----------! ----------------! ---------------!
! NUME_ORDRE!      TEMP       !   HYDR_ELGA    !
! ---------- ! ----------------! ---------------!
!          0!     TEMP_R      !    HYDR_R      !
!          1!     TEMP_R      !                !
!        …!       …         !                !
!          9!     TEMP_R      !                !
!         10!     TEMP_R      !    HYDR_R      !
!         28!     TEMP_R      !                !
!        …!       …         !                !
!        118!     TEMP_R      !                !
! ---------- ! ----------------! ---------------!

LIST OF THE NAMES OF VARIABLES OF ACCESS:
                                    INST             OF TYPE  R
```

```
LIST OF THE NAMES OF PARAMETERS:
! -----------! --------------! --------------! -------------!
--------------!
! NUME_ORDRE!    MODEL     !   CHAMPMAT    !   CARAELEM  !      EXCIT     !
! ---------- ! --------------! --------------! -------------!
--------------!
!           0!       K8       !       K8       !       K8      !       K24      !
!           1!       K8       !       K8       !       K8      !       K24      !
!         …!      …        !      …        !      …      !       …      !
!         118!       K8       !       K8       !       K8      !       K24      !
! ---------- ! --------------! --------------! -------------!
--------------!
```