

File created: 25-Feb-88 18:29:26 {NEWTON:EUOPARC:RX}<MACLEAN>LISP>DATESORT.;2

previous date: 11-Jun-87 10:15:34 {NEWTON:EUOPARC:RX}<MACLEAN>LISP>DATESORT.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

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(RPAQQ **DATESORTCOMS**

```
((UGLYVARS RQIREADTABLE)
 (FNS DATESORTER COMPAREDATE COMPAREDATE2 FIXNAME GETRF GETFTS DATESORT GETDATE GETINFORMATION
  CORRECTDATE MAKEFINALFILE)
 (ADDVARS (BackgroundMenuCommands ("Date Sorter" '(DATESORTER)
  "Sort a Mail file by date")))
 (VARS (BackgroundMenu)
  (DEFAULTDATESORT NIL))))
```

```
(READVAR-FROM-STRING 'RQIREADTABLE "{D(9 10 11 25 31 32 39 44 63 96 124)OTHER OTHER SEPRCHAR (MACRO FIRST
 (LAMBDA (FILE RDTBL) (EVAL
 (READ FILE RDTBL)))) OTHER OTHER (MACRO FIRST READ') (MACRO FIRST READBQUOTECOMMA) (INFIX FIRST
 NOESCQUOTE DO?) (MACRO FIRST READBQUOTE) (INFIX ALWAYS READVBAR) }
")
```

(DEFINEQ

(DATESORTER

```
[LAMBDA NIL
 (ADD.PROCESS ' (DATESORT)
  'NAME
  'DATESORTER
  'INFOHOOK
  ' (PROMPTPRINT "This is the Mail Date Sorter process" "Killing this process may leave open files, so
  make sure to close them" " and erase the files in {CORE}"))
(* edited%: "28-Jan-86 11:24")
```

(COMPAREDATE

```
[LAMBDA (A B)
 (PROG NIL
  (RETURN (OR (NOT (IDATE (CAR B)))
  (AND (IDATE (CAR A))
  (ILESSP (IDATE (CAR A))
  (IDATE (CAR B)))
(* edited%: "21-Jan-86 15:57")
```

(COMPAREDATE2

```
[LAMBDA (A B)
 (PROG NIL
  (RETURN (OR (NOT (IDATE (CAR A)))
  (AND (IDATE (CAR B))
  (ILESSP (IDATE (CAR A))
  (IDATE (CAR B)))
(* edited%: "23-Jan-86 17:45")
```

(FIXNAME

```
[LAMBDA (NAMETOFIX RVFLG)
 (PROG NIL
  (RETURN (PACKFILENAME (if (MEMB 'EXTENSION (UNPACKFILENAME NAMETOFIX))
  then [if RVFLG
  then (UNPACKFILENAME NAMETOFIX)
  else (for x in (UNPACKFILENAME NAMETOFIX) collect x
  until (EQUAL X 'VERSION)]
  else (if RVFLG
  then (APPEND (UNPACKFILENAME NAMETOFIX)
  ' (EXTENSION MAIL))
  else (for x in (APPEND (UNPACKFILENAME NAMETOFIX)
  ' (EXTENSION MAIL))
  collect x until (EQUAL X 'VERSION)]
(* edited%: "23-Jan-86 14:43")
```

(GETRF

```
[LAMBDA (RF FTS)
 (PROG NIL
  (SETQ FTS (FULLNAME (FIXNAME FTS)
  'NEW))
  (if (NOT RF)
  then (SETQ RF (MKATOM (PROMPTFORWARD "Enter name of resulting file: " FTS)))
  (TERPRI T))
  (if [AND RF (SETQ RF (FULLNAME (FIXNAME RF)
  'NEW)]
  then (RETURN RF)
  else (RETURN))
(* edited%: "23-Jan-86 15:04")
```

(GETFTS

```

[LAMBDA (FTS)                                     (* edited%: "23-Jan-86 15:05")
  (PROG NIL
    (if (NOT FTS)
      then (SETQ FTS (MKATOM (PROMPTFORWORD "Enter name of file to be sorted: ")))
      (TERPRI T))
    (if [AND FTS (SETQ FTS (FULLNAME (FIXNAME FTS T]
      then (RETURN FTS)
      else (RETURN]))

```

(DATESORT

```

[LAMBDA (FILETOSORT SORTEDFILE)                   (* edited%: "23-Jan-86 17:48")
  (PROG (COREFILE FILEINFO RESULTS)
    (CLRSPROMPT)                                   (* Code to check the filenames and error if problems!!)
    (if (SETQ FILETOSORT (GETFTS FILETOSORT))
      then (if (NOT (SETQ SORTEDFILE (GETRF SORTEDFILE FILETOSORT)))
        then (PRINTOUT PROMPTWINDOW "Error, no file to sort to ...aborted!" T)
              (FLASHWINDOW)
              (RETURN (CLOSEW T)))
        else (PRINTOUT PROMPTWINDOW "Error, no file to sort or file not found " FILETOSORT " ...aborted!" T)
              (FLASHWINDOW)
              (RETURN (CLOSEW T)))
      (* Error on file being open -
      FATAL)
    (if (OPENP FILETOSORT)
      then (PRINTOUT PROMPTWINDOW "File to be sorted is already open ...aborted" T)
            (FLASHWINDOW)
            (RETURN (CLOSEW T)))
    (PRINTOUT T "Working ..." T)
    (SETQ COREFILE (COPYFILE FILETOSORT '{CORE}DATESORT.SCRATCH))
    (SETQ COREFILE (OPENSTREAM COREFILE 'INPUT 'OLD))
    (SETQ FILEINFO (GETINFORMATION COREFILE))
    (CLOSEF COREFILE)
    (DELFIL COREFILE)
    (if DEFAULTDATESORT
      then (SORT FILEINFO 'COMPAREDATE)
      else (SORT FILEINFO 'COMPAREDATE2))
    (BLOCK)
    (SETQ RESULTS (MAKEFINALFILE FILETOSORT SORTEDFILE FILEINFO))
    (if RESULTS
      then (PRINTOUT PROMPTWINDOW " Messages sorted" T)
            (FLASHWINDOW PROMPTWINDOW)
            (CLOSEW T)
            (RETURN SORTEDFILE)
      else (PRINTOUT PROMPTWINDOW "Errors...")
            (FLASHWINDOW)
            (CLOSEW T)
            (RETURN "Errors..."]

```

(GETDATE

```

[LAMBDA (GDFIL GDBEG GDNEXT)                       (* edited%: "22-Jan-86 10:25")
  (PROG NIL
    (SETFILEPTR GDFIL (FFILEPOS "DATE: " GDFIL GDBEG GDNEXT NIL NIL UPPERARRAY))
    (RSTRING GDFIL)
    (RETURN (RSTRING GDFIL RQIREADTABLE]))

```

(GETINFORMATION

```

[LAMBDA (SFIL)                                     (* edited%: "23-Jan-86 17:20")
  (* Will return a list consisting of the Message number and the
  information about it.)

  (PROG ((CURRENTSTART (FFILEPOS "**start*" SFIL 0))
    (NEXTSTART 0)
    (MSGCOUNT 0)
    INFO)
    (repeatwhile (SETQ CURRENTSTART NEXTSTART) do (SETQ NEXTSTART (FFILEPOS "**start*" SFIL (ADD1
      CURRENTSTART
      )))
    [SETQ INFO (APPEND INFO
      (LIST (LIST (GETDATE SFIL CURRENTSTART
        NEXTSTART)
        CURRENTSTART NEXTSTART]
      (BLOCK))
    [SETQ INFO (for X in INFO collect (APPEND (LIST (CORRECTDATE (CAR X)))
      (CDR X) (* fixes bug when a date is of the form Wed 16 Dec...))
    (RETURN INFO)]

```

(CORRECTDATE

```

[LAMBDA (DATETOPIX)                                (* edited%: "22-Jan-86 09:52")
  (PROG (TEMP)
    (if (IDATE DATETOPIX)
      then (RETURN DATETOPIX)
      else (SETQ TEMP (GNC DATETOPIX))

```

```
(until (NUMBERP TEMP) do (SETQ TEMP (GNC DATETOFIX)))  
(RETURN (CONCAT TEMP DATETOFIX])
```

(MAKEFINALFILE

```
[LAMBDA (FROMFILE TOFILE DATESLIST) (* edited%: "23-Jan-86 17:27")  
  (PROG (ENDOFMSG)  
    (if (OR (OPENP FROMFILE)  
            (OPENP TOFILE))  
      then (PRINTOUT PROMPTWINDOW "File open in conflicting way ... aborted" T)  
            (FLASHWINDOW)  
            (RETURN))  
      (SETQ FROMFILE (OPENSTREAM FROMFILE 'INPUT 'OLD))  
      (SETQ TOFILE (OPENSTREAM TOFILE 'OUTPUT 'NEW))  
      (for X in DATESLIST do (if (SETQ ENDOFMSG (CADDR X))  
                                then (COPYBYTES FROMFILE TOFILE (CADR X)  
                                                ENDOFMSG)  
                                else (COPYBYTES FROMFILE TOFILE (CADR X)  
                                                (GETEOFPTR FROMFILE)))  
      (BLOCK) )  
      (CLOSEF TOFILE)  
      (CLOSEF FROMFILE)  
      (RETURN TOFILE])  
)  
  
(ADDTOTVAR BackgroundMenuCommands ("Date Sorter" '(DATESORTER)  
                                     "Sort a Mail file by date"))  
  
(RPAQQ BackgroundMenu NIL)  
  
(RPAQQ DEFAULTDATESORT NIL)  
  
(PUTPROPS DATESORT COPYRIGHT ("XEROX Corporation" 1986 1987 1988))
```

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