

File created: 12-Mar-85 14:02:50 {ERIS}<LISPCORE>LIBRARY>FILENAME.S;1

changes to: (VARS FILENAMESCOMS)

Read Table: OLD-INTERLISP-FILE

Package: INTERLISP

Format: XCCS

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```
(RPAQQ FILENAMESCOMS ((FNS REPACKFILENAME.STRING REPACKFILENAME.STRING.D REPACKFILENAME.STRING.LISPM
                        REPACKFILENAME.STRING.TOPS20 REPACKFILENAME.STRING.UNIX)))
```

(DEFINEQ

(REPACKFILENAME.STRING

```
[LAMBDA (NAME FOROSTYPE)
  (LET ((NAMELST (UNPACKFILENAME.STRING NAME)))
    (SELECTQ FOROSTYPE
      (UNIX (REPACKFILENAME.STRING.UNIX NAMELST))
      ((TOPS20 TOPS-20)
       (REPACKFILENAME.STRING.TOPS20 NAMELST))
      ((LISPM 3600 SYMBOLICS)
       (REPACKFILENAME.STRING.LISPM NAMELST))
      ((D IFS)
       (REPACKFILENAME.STRING.D NAMELST))
      NAME]))
```

(* edited: "12-Mar-85 13:51")

(REPACKFILENAME.STRING.D

```
[LAMBDA N
```

(* ejs: "9-Mar-85 16:02")

(* * Convert file names to native format)

```
(if (AND (EQ N 1)
         (LISTP (ARG N 1)))
```

then

(* spread argument list)

```
(APPLY (FUNCTION REPACKFILENAME.STRING.D)
      (ARG N 1))
```

else (PROG ((BLIP ""))

(I 1)

HOST DEVICE STRUCTURE DIRECTORY NAME EXTENSION VERSION PACKLIST VAR VAL TEMP)

(DECLARE (SPECVARS HOST DEVICE STRUCTURE DIRECTORY NAME EXTENSION VERSION))

LP (COND

((NOT (IGREATERP I N))

(COND

((LISTP (SETQ VAR (ARG N I)))

(SETQ VAL (CDR VAR))

(SETQ VAR (CAR VAR))

((NOT (IGREATERP (SETQ I (ADD1 I))

N))

(SETQ VAL (ARG N I)))

(T (SETQ VAL)))

(OR (STRINGP VAL)

(ATOM VAL)

(ERRORX (LIST 27 VAL)))

(* fields must be atom)

(SELECTQ VAR

(BODY (MAP (UNPACKFILENAME.STRING (COND

((LISTP VAL)

(* PACKFILENAME.STRING for error checking of fields)

(REPACKFILENAME.STRING.D VAL))

(T VAL)))

[FUNCTION (LAMBDA (X) (* NIL => not yet seen, BLIP => seen as NIL.)

(OR (EVALV (CAR X))

(SET (CAR X)

(OR (CADR X)

BLIP]

(FUNCTION CDDR)))

(HOST (OR HOST (SETQ HOST (if VAL

then (SELCHARQ (CHCON1 VAL)

(({ % [% (

(SUBSTRING VAL 2 (SELCHARQ (NTHCHARCODE

VAL -1)

(({ %] %))

-2)

-1)))

VAL)

else BLIP)))

(DIRECTORY

(* DIRECTORY really is treated as {Host}device:<directory>)

[for X on (UNPACKFILENAME.STRING VAL NIL T) by (CDDR X)

do (OR (EVALV (CAR X))

(SET (CAR X)

(OR (CADR X)

BLIP])

((DEVICE HOST NAME EXTENSION VERSION)

```

      (OR (EVALV VAR)
        (SET VAR (OR VAL BLIP))))
      (\ILLEGAL.ARG VAR))
      (SETQ I (ADD1 I))
      (GO LP)))
      (RETURN (CONCATLIST (NCONC (AND HOST (NEQ HOST BLIP)
        (LIST "{" HOST "}"))
        [AND DEVICE (NEQ DEVICE BLIP)
        (SELCHARQ (NTHCHARCODE DEVICE -1)
          (: (LIST DEVICE)))
        (LIST DEVICE (QUOTE :])
        (AND DIRECTORY (NEQ DIRECTORY BLIP)
        (PROGN (SETQ DIRECTORY (CONCAT DIRECTORY))
          [for C from 1 to (NCHARS DIRECTORY)
            do (COND
              ([FMEMB (NTHCHARCODE DIRECTORY C)
                (CONSTANT (LIST (CHARCODE %.]
                  (RPLCHARCODE DIRECTORY C (CHARCODE >])
                (LIST "<" DIRECTORY ">"))))
        (AND NAME (NEQ NAME BLIP)
        (LIST NAME))
        (AND (OR (AND EXTENSION (NEQ EXTENSION BLIP))
          (AND VERSION (NEQ VERSION BLIP))))
        (LIST (COND
          ((AND EXTENSION (EQ (CHCON1 EXTENSION)
            (CHARCODE %.)))
            BLIP)
          (T (QUOTE %.)
            (OR EXTENSION BLIP)))
        (AND VERSION (NEQ VERSION BLIP)
        (COND
          ((FIXP VERSION)
            (LIST (QUOTE ;)
              VERSION))
          (T (SELCHARQ (CHCON1 VERSION)
            (; (LIST VERSION))
            ((%. !)
              (LIST (QUOTE ;)
                (SUBSTRING VERSION 2 -1)))
            (LIST (QUOTE ;)
              VERSION]))

```

(REPACKFILENAME.STRING.LISPM

[LAMBDA N

(* ejs: "23-Feb-85 17:19")

(* * Can you believe this???)

```

(if (AND (EQ N 1)
  (LISTP (ARG N 1)))

```

then

(* spread argument list)

```

  (APPLY (FUNCTION REPACKFILENAME.STRING.LISPM)
    (ARG N 1))

```

else (PROG ((BLIP ""))

(I 1)

HOST DEVICE STRUCTURE DIRECTORY NAME EXTENSION VERSION PACKLIST VAR VAL TEMP)

(DECLARE (SPECVARS HOST DEVICE STRUCTURE DIRECTORY NAME EXTENSION VERSION))

LP (COND

(NOT (IGREATERP I N))

(COND

((LISTP (SETQ VAR (ARG N I)))

(SETQ VAL (CDR VAR)))

(SETQ VAR (CAR VAR)))

((NOT (IGREATERP (SETQ I (ADD1 I))

N))

(SETQ VAL (ARG N I)))

(T (SETQ VAL)))

(OR (STRINGP VAL)

(ATOM VAL)

(ERRORX (LIST 27 VAL)))

(* fields must be atom)

(SELECTQ VAR

(BODY (MAP (UNPACKFILENAME.STRING (COND

((LISTP VAL)

(* PACKFILENAME.STRING for error checking of fields)

(REPACKFILENAME.STRING.LISPM VAL))

(T VAL)))

[FUNCTION (LAMBDA (X) (* NIL => not yet seen, BLIP => seen as NIL.)

(OR (EVALV (CAR X))

(SET (CAR X)

(OR (CADR X)

BLIP]

(FUNCTION CDDR)))

(HOST (OR HOST (SETQ HOST (if VAL

then (SELCHARQ (CHCON1 VAL)

(({ %[%()

(SUBSTRING VAL 2 (SELCHARQ (NTHCHARCODE

VAL -1)

(REPACKFILENAME.STRING.TOP20

```
[LAMBDA N
  (if (AND (EQ N 1)
           (LISTP (ARG N 1)))
      then
        (APPLY (FUNCTION REPACKFILENAME.STRING.TOP20)
                (ARG N 1))
      else (PROG ((BLIP ""))
                 (I 1)
                 HOST DEVICE STRUCTURE DIRECTORY NAME EXTENSION VERSION TEMPORARY PROTECTION ACCOUNT PACKLIST
                 VAR VAL TEMP)
          (DECLARE (SPECVARS HOST DEVICE STRUCTURE DIRECTORY NAME EXTENSION VERSION TEMPORARY PROTECTION
                           ACCOUNT))
          LP (COND
              ((NOT (IGREATERP I N))
               (COND
                ((LISTP (SETQ VAR (ARG N I)))
                 (SETQ VAL (CDR VAR))
                 (SETQ VAR (CAR VAR)))
                ((NOT (IGREATERP (SETQ I (ADD1 I))
                                N))
                 (SETQ VAL (ARG N I)))
                (T (SETQ VAL)))
              (OR (STRINGP VAL)
                  (ATOM VAL)
                  (ERRORX (LIST 27 VAL))))
              (SELECTQ VAR
                (BODY (MAP (UNPACKFILENAME.STRING (COND
                                                         ((LISTP VAL)
                                                          (* PACKFILENAME.STRING for error checking of fields)
                                                          (REPACKFILENAME.STRING.TOP20 VAL))
                                                         T))
                          )
                  (* ejc: "23-Feb-85 17:20")
                  (* spread argument list)
                  (* fields must be atom)
```

```

(T VAL)))
[FUNCTION (LAMBDA (X) (* NIL => not yet seen, BLIP => seen as NIL.)
  (OR (EVALV (CAR X))
    (SET (CAR X)
      (OR (CADR X)
        BLIP]
  (FUNCTION CDDR)))
(HOST (OR HOST (SETQ HOST (if VAL
  then (SELCHARQ (CHCON1 VAL)
    (({ %[ %()
      (SUBSTRING VAL 2 (SELCHARQ (NTHCHARCODE
        VAL -1)
          (({ %[ %))
            -2)
              -1)))
        VAL)
    else BLIP))))
(DIRECTORY (* DIRECTORY really is treated as {Host}device:<directory>)
  [for x on (UNPACKFILENAME.STRING VAL NIL T) by (CDDR X)
    do (OR (EVALV (CAR X))
      (SET (CAR X)
        (OR (CADR X)
          BLIP]))
    ((DEVICE HOST NAME EXTENSION VERSION TEMPORARY)
      (OR (EVALV VAR)
        (SET VAR (OR VAL BLIP))))
    (\ILLEGAL.ARG VAR))
  (SETQ I (ADD1 I))
  (GO LP)))
(SELECTQ TEMPORARY
  ((T S ;S) (* hack for Interlisp-D!)
    (OR HOST DEVICE (PROGN (SETQ HOST (QUOTE CORE))
      (SETQ TEMPORARY))))
  NIL)
(RETURN (CONCATLIST (NCONC (AND HOST (NEQ HOST BLIP)
  (LIST "{" HOST "}"))
  [AND DEVICE (NEQ DEVICE BLIP)
    (SELCHARQ (NTHCHARCODE DEVICE -1)
      (: (LIST DEVICE))
      (LIST DEVICE (QUOTE :])
    (AND DIRECTORY (NEQ DIRECTORY BLIP)
      (PROGN (SETQ DIRECTORY (CONCAT DIRECTORY))
        [for c from 1 to (NCHARS DIRECTORY)
          do (COND
            ([FMEMB (NTHCHARCODE DIRECTORY C)
              (CONSTANT (LIST (CHARCODE /)
                (CHARCODE >]
                (RPLCHARCODE DIRECTORY C (CHARCODE %.)
              (LIST "<" DIRECTORY ">"))))
            (AND NAME (NEQ NAME BLIP)
              (LIST NAME))
            (AND (OR (AND EXTENSION (NEQ EXTENSION BLIP))
              (AND VERSION (NEQ VERSION BLIP)))
              (LIST (COND
                ((AND EXTENSION (EQ (CHCON1 EXTENSION)
                  (CHARCODE %.)
                  BLIP)
                  (T (QUOTE %.)
                    (OR EXTENSION BLIP)))
                (AND VERSION (NEQ VERSION BLIP)
                  (COND
                    ((FIXP VERSION)
                      (LIST (QUOTE %.
                        VERSION))
                    (T (SELCHARQ (CHCON1 VERSION)
                      (; (LIST VERSION))
                      ((%. !)
                        (LIST (QUOTE %.
                          (SUBSTRING VERSION 2 -1)))
                        (LIST (QUOTE %.
                          VERSION]
                    (AND TEMPORARY (NEQ TEMPORARY BLIP)
                      (LIST (QUOTE ;
                        (SELECTQ TEMPORARY
                          ((S ;S)
                            (QUOTE S))
                          T]))

```

(REPACKFILENAME.STRING.UNIX

```

[LAMBDA N (* ejs: "23-Feb-85 17:20")
  (if (AND (EQ N 1)
    (LISTP (ARG N 1)))
    then
      (APPLY (FUNCTION REPACKFILENAME.STRING.UNIX)
        (ARG N 1))
    else (PROG ((BLIP ""))
      (* spread argument list)

```

```
(I 1)
HOST DEVICE STRUCTURE DIRECTORY NAME EXTENSION VERSION PACKLIST VAR VAL TEMP)
(DECLARE (SPECVARS HOST DEVICE STRUCTURE DIRECTORY NAME EXTENSION VERSION))
LP (COND
  ((NOT (IGREATERP I N))
    (COND
      ((LISTP (SETQ VAR (ARG N I)))
        (SETQ VAL (CDR VAR))
        (SETQ VAR (CAR VAR)))
      ((NOT (IGREATERP (SETQ I (ADD1 I))
        N))
        (SETQ VAL (ARG N I)))
      (T (SETQ VAL)))
    (OR (STRINGP VAL)
      (ATOM VAL)
      (ERRORX (LIST 27 VAL)))) (* fields must be atom)
  (SELECTQ VAR
    (BODY (MAP (UNPACKFILENAME.STRING (COND
      ((LISTP VAL)
        (* PACKFILENAME.STRING for error checking of fields)
        (REPACKFILENAME.STRING.UNIX VAL))
      (T VAL)))
      (FUNCTION (LAMBDA (X)
        (* NIL => not yet seen, BLIP => seen as NIL.)
        (OR (EVALV (CAR X))
          (SET (CAR X)
            (OR (CADR X)
              BLIP]
          (FUNCTION CDDR)))
        (HOST (OR HOST (SETQ HOST (if VAL
          then (SELCHARQ (CHCON1 VAL)
            (({ %[ %()
              (SUBSTRING VAL 2 (SELCHARQ (NTHCHARCODE
                VAL -1)
                (({ %[ %])
                  -2)
                  -1)))
              VAL)
            else BLIP))))))
    (DIRECTORY
      [for x on (UNPACKFILENAME.STRING VAL NIL T) by (CDDR X)
        do (OR (EVALV (CAR X))
          (SET (CAR X)
            (OR (CADR X)
              BLIP])
          ((DEVICE HOST NAME EXTENSION VERSION)
            (OR (EVALV VAR)
              (SET VAR (OR VAL BLIP))))
          (\ILLEGAL.ARG VAR))
        (SETQ I (ADD1 I))
        (GO LP)))
  (RETURN (CONCATLIST (NCONC (AND HOST (NEQ HOST BLIP)
    (LIST {" HOST "}))
    (AND DEVICE (NEQ DEVICE BLIP)
      (LIST "/" DEVICE))
    (AND DIRECTORY (NEQ DIRECTORY BLIP)
      (PROGN (SETQ DIRECTORY (CONCAT DIRECTORY))
        [for c from 1 to (NCHARS DIRECTORY)
          do (COND
            ([FMEMB (NTHCHARCODE DIRECTORY C)
              (CONSTANT (LIST (CHARCODE >)
                (CHARCODE %.]
                (RPLCHARCODE DIRECTORY C (CHARCODE /]
                (LIST "/" DIRECTORY "/"))
                (LIST "/" DIRECTORY "/"))
            (AND NAME (NEQ NAME BLIP)
              (LIST NAME))
            (AND (OR (AND EXTENSION (NEQ EXTENSION BLIP))
              (AND VERSION (NEQ VERSION BLIP))))
            (LIST (COND
              ((OR (AND EXTENSION (EQ (CHCON1 EXTENSION)
                (CHARCODE %.)))
                (OR (NULL EXTENSION)
                  (EQ EXTENSION BLIP)
                  (STREQUAL EXTENSION "")))
                BLIP)
              (T (QUOTE %.)))
              (OR EXTENSION BLIP)))
            (AND VERSION (NEQ VERSION BLIP)
              (COND
                ((FIXP VERSION)
                  (LIST (QUOTE ;)
                    VERSION))
                (T (SELCHARQ (CHCON1 VERSION)
                  (; (LIST VERSION))
                  (%. !))
                  (LIST (QUOTE ;)
                    (SUBSTRING VERSION 2 -1))))
```

(LIST (QUOTE ;)
VERSION])

)

(RPAQQ **FILENAMESCOMS** [(FNS REPACKFILENAME.STRING REPACKFILENAME.STRING.D REPACKFILENAME.STRING.LISPM
REPACKFILENAME.STRING.TOPS20 REPACKFILENAME.STRING.UNIX)
(DECLARE: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILEVAR
(ADDVARS (NLAMA)
(NLAML)
(LAMA REPACKFILENAME.STRING.UNIX REPACKFILENAME.STRING.TOPS20
REPACKFILENAME.STRING.LISPM REPACKFILENAME.STRING.D])

(DECLARE: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILEVAR

(ADDTOTVAR **NLAMA**)

(ADDTOTVAR **NLAML**)

(ADDTOTVAR **LAMA** REPACKFILENAME.STRING.UNIX REPACKFILENAME.STRING.TOPS20 REPACKFILENAME.STRING.LISPM
REPACKFILENAME.STRING.D)

)

(PUTPROPS **FILENAMES COPYRIGHT** ("Xerox Corporation" 1985))

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