

File created: 16-May-90 21:31:50 {DSK}<usr>local>lde>lispcore>sources>RESOURCE.;2

changes to: (VARS RESOURCECOMS)

previous date: 11-Aug-87 18:19:35 {DSK}<usr>local>lde>lispcore>sources>RESOURCE.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

;;  
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(RPAQQ **RESOURCECOMS**

```
[ (MACROS INITRESOURCE NEWRESOURCE GETRESOURCE FREERESOURCE WITH-RESOURCE WITH-RESOURCES)
  (FNS \GR.METHODEXPANDER \GR.WITHRESOURCEMAC)
  (FILEPKGCOMS RESOURCES INITRESOURCES)
  (FNS \GR.GETDEFFN \GR.PUTDEFFN \GR.DELDEFFN \GR.CONTENTENTS \GR.GvarInitLst)
  (FNS \GR.MAKEPRETTYCOMSL \IGR.MAKEPRETTYCOMSL)
  (INITVARS (GLOBAL.RESOURCES))
  (GLOBALVARS GLOBAL.RESOURCES)
  (PROP ARGNAME INITRESOURCE NEWRESOURCE GETRESOURCE FREERESOURCE)
  (COMS (* "need only be in ABC")
    (FILEPKGCOMS GLOBALRESOURCES)
    (MACROS GLOBALRESOURCE GLOBALRESOURCES)
    (MACROS RELEASERESOURCE))
  (DECLARE%: DONTVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILEVARS (ADDVARS (NLAMA \IGR.MAKEPRETTYCOMSL
                                                                    \GR.MAKEPRETTYCOMSL)
                                                                    (NLAML)
                                                                    (LAMA]))
```

(DECLARE%: EVAL@COMPILE

(PUTPROPS **INITRESOURCE MACRO** (X (\GR.METHODEXPANDER X 'INIT)))

(PUTPROPS **NEWRESOURCE MACRO** (X (\GR.METHODEXPANDER X 'NEW)))

(PUTPROPS **GETRESOURCE MACRO** (X (\GR.METHODEXPANDER X 'GET)))

(PUTPROPS **FREERESOURCE MACRO** (X (\GR.METHODEXPANDER X 'FREE)))

(PUTPROPS **WITH-RESOURCE MACRO** (= . WITH-RESOURCES))

(PUTPROPS **WITH-RESOURCES MACRO** (X (\GR.WITHRESOURCEMAC X)))

)  
(DEFINEQ

(\GR.METHODEXPANDER

```
[LAMBDA (X METHOD) ; Edited 27-Feb-87 15:54 by jop
  (PROG (DEF RVAR (NAME (OR (CAR (LISTP X))
                           X)))
    (RETURN (if (NULL (SETQ DEF (LISTGET (SETQ DEF (GETDEF NAME 'RESOURCES))
                                         METHOD)))
```

then  
;; Although these could all be implemented by functions, this is the default (and common) case; so just put in-line  
;; here.

```
(SETQ RVAR (PACK* '\ NAME '.GLOBALRESOURCE))
(SELECTQ METHOD
  (GET '[LET NIL (DECLARE (GLOBALVARS ,RVAR))
    (COND
      (,RVAR (PROG1 ,RVAR
                    (SETQ ,RVAR NIL)))
      (T (NEWRESOURCE ,NAME))
      (FREE '[LET NIL (DECLARE (GLOBALVARS ,RVAR))
        (SETQ ,RVAR ,(CADR (LISTP X))
        (INIT '(/SETTOPVAL ',RVAR NIL))
        (NEW (ERROR "No NEW method for resource" NAME))
        (SHOULDNT))
```

elseif (FNTYP DEF)

then (APPLY DEF X)

elseif (LISTP DEF)

```
then (SUBPAIR ' (RESOURCENAME ARGS)
      (LIST NAME (CDR (LISTP X)))
      DEF)
```

else (ERROR (CONCAT "Bad resource " METHOD " method for " NAME)  
DEF])

(\GR.WITHRESOURCEMAC

```
[LAMBDA (X) ; Edited 11-Aug-87 18:18 by Snow
  (PROG [(NAMES (MKLIST (CAR X)))
        (FORMS (\DECL.COMNT.PROCESS (CDR X))
  ;; Forms is a list of the form (decls comments . body)
```

;; This should probably expand into UNWIND-PROTECT instead of PROG1. Cf AR 8944

```
(RETURN `([, 'LAMBDA ,NAMES
            ,@(CAR FORMS)
            ,@(CADR FORMS)
            (PROG1 (PROGN ,@(CDDR FORMS))
                  ,@[for NAME in NAMES collect `(FREERESOURCE ,NAME ,NAME)])
            ,@[for NAME in NAMES collect `(GETRESOURCE ,NAME)])
)

[PUTDEF 'RESOURCES 'FILEPKGCOMS '((COM MACRO [X (DECLARE%: EVAL@COMPILE (P * (\GR.MAKEPRETTYCOMSL . X)
                                CONTENTS \GR.CONTENTS)
                                (TYPE DESCRIPTION "global resources" GETDEF \GR.GETDEFFN DELDEF \GR.DELDEFFN
                                PUTDEF \GR.PUTDEFFN]

[PUTDEF 'INITRESOURCES 'FILEPKGCOMS '((COM MACRO (X (P * (\IGR.MAKEPRETTYCOMSL . X)))
                                CONTENTS \GR.CONTENTS]

(DEFINEQ

(\GR.GETDEFFN
  [LAMBDA (NAME TYPE)
    (CDR (ASSOC NAME GLOBAL.RESOURCES])]
    (* rmk%: "14-Jun-84 22:39")

(\GR.PUTDEFFN
  [LAMBDA (NAME TYPE DEF)
    (if (OR (NULL NAME)
            (NOT (LITATOM NAME)))
        then (ERRORX (LIST 14 NAME)))
    (if [AND (LISTP DEF)
            (NOT (LISTGET DEF 'NEW])
        then ;; Conversion from old format -- to be flushed soon after CAROL release. Jonl 5/14/84
            (SETQ DEF (LIST 'NEW DEF))
        elseif [AND DEF (NOT (LISTGET (LISTP DEF)
                                      'NEW])
            then (ERROR "No NEW method for resource" NAME)
        (if (NULL DEF)
            then (\GR.DELDEFFN NAME TYPE)
            else (PROG NIL
                  (MARKASCHANGED NAME 'RESOURCES (if (SETQ TYPE (ASSOC NAME GLOBAL.RESOURCES))
                                                         then
                                                         ; The initialization has to be performed regardless of whether or
                                                         ; not the definition has changed.
                                                         (EVAL (\GR.METHODEXPANDER NAME 'INIT))
                                                         (AND (EQUAL DEF (CDR TYPE))
                                                         (RETURN))
                                                         (/RPLACD TYPE DEF)
                                                         'CHANGED)
                                                         else (/SETTOPVAL 'GLOBAL.RESOURCES (CONS (CONS NAME DEF)
                                                                 GLOBAL.RESOURCES))
                                                         (EVAL (\GR.METHODEXPANDER NAME 'INIT))
                                                         'DEFINED]
                  NAME)))
    ; Edited 4-Aug-87 12:25 by amd
    ; Note that the variable GLOBAL.RESOURCES has been
    ; GLOBALVAR'd by the file COMS

(\GR.DELDEFFN
  [LAMBDA (NAME TYPE)
    (if (NOT (AND NAME (LITATOM NAME)))
        then (ERRORX (LIST 14 NAME)))
    (PROG ((DEF (ASSOC NAME GLOBAL.RESOURCES))
           (if DEF
               then (MARKASCHANGED NAME 'RESOURCES 'DELETED)
                    (/SETTOPVAL 'GLOBAL.RESOURCES (REMOVE DEF GLOBAL.RESOURCES))
                    (if (NULL (LISTGET (CDR DEF)
                                      'GET))
                        then
                        (* Help clean up mess left by the default case)
                        (/SETTOPVAL (PACK* ' \ NAME ' .GLOBALRESOURCE)
                                   'NOBIND))
                    (RETURN T]))
    (* rmk%: "15-Jun-84 11:23")

(\GR.CONTENTS
  [LAMBDA (COM NAME TYPE)
    (COND
      ((EQ TYPE 'RESOURCES)
       [SETQ COM (COND
                   ((EQ (CAR (LISTP (CDR COM)))
                        '*))
                   (EVAL (CADDR COM)))
               (T (CDR COM])
      (COND
        ((EQ NAME T)
         (AND COM T))
        ((AND NAME (LITATOM NAME))
```

```
(AND [find X in COM suchthat (EQ NAME (COND
                                ((LISTP X)
                                 (CAR X))
                                (T X])
    T))
(T (MAPCAR COM (FUNCTION (LAMBDA (X)
                          (COND
                           ((LISTP X)
                            (CAR X))
                           (T X]))
```

## (\GR.GvarInitLst

```
[LAMBDA (NAME)
  `(/SETTOPVAL ',(MKATOM (CONCAT "\RESOURCE." NAME ".LST"))
    (LIST NIL))
```

; Edited 4-Aug-87 12:28 by amd

)

(DEFINEQ

## (\GR.MAKEPRETTYCOMSL

```
[NLAMBDA L
  [COND
   ((EQ (CAR (LISTP L))
    '*))
   (SETQ L (EVAL (CADR L]
  (for Y NAME DEF in L collect [COND
    [(LISTP Y)
     (SETQ NAME (CAR Y))
     (SETQ DEF (CAR (LISTP (CDR Y]
    (T (SETQ NAME Y)
        (SETQ DEF (GETDEF NAME 'RESOURCES]
    (OR (AND NAME (LITATOM NAME))
        (ERROR "Bad filepkg command" L))
    `(PUTDEF ',NAME 'RESOURCES ',DEF])
```

; Edited 4-Aug-87 12:29 by amd

## (\GR.MAKEPRETTYCOMSL

```
[NLAMBDA L
  [if (EQ (CAR (LISTP L))
    '*))
  then (SETQ L (EVAL (CADR L]
  (for NAME in L collect (LISPFORM.SIMPLIFY (LIST 'INITRESOURCE NAME)
    T])
```

(\* JonL "24-Oct-84 18:49")

)

(RPAQ? GLOBAL.RESOURCES )

(DECLARE%: DOEVAL@COMPILE DONTCOPY

(GLOBALVARS GLOBAL.RESOURCES)

)

(PUTPROPS INITRESOURCE ARGNAMES (NIL ("<RESOURCENAME>" . ARGS)))

(PUTPROPS NEWRESOURCE ARGNAMES (NIL ("<RESOURCENAME>" . ARGS)))

(PUTPROPS GETRESOURCE ARGNAMES (NIL ("<RESOURCENAME>" . ARGS)))

(PUTPROPS FREERESOURCE ARGNAMES (NIL ("<RESOURCENAME>" DATUM . ARGS)))

:: need only be in ABC

```
[PUTDEF 'GLOBALRESOURCES 'FILEPKGCOMS '((COM MACRO (X (DECLARE%: DONTCOPY (RESOURCES . X))
  (INITRESOURCES . X]
```

(DECLARE%: EVAL@COMPILE

(PUTPROPS GLOBALRESOURCE MACRO (= . WITH-RESOURCES))

(PUTPROPS GLOBALRESOURCES MACRO (= . WITH-RESOURCES))

)

(DECLARE%: EVAL@COMPILE

```
(PUTPROPS RELEASERESOURCE MACRO [ARGS ([LAMBDA (RVALVAR)
  (OR (AND (LITATOM RVALVAR)
    RVALVAR
    (NEQ T RVALVAR))
    (ERROR "Must RELEASERESOURCE from a variable" ARGS]
  (CADR ARGS))
  (SUBPAIR ' (RNAME RVALVAR . FORMS)
    ARGS
    ' (PROGN (FREERESOURCE RNAME RVALVAR)
      (PROG1 (PROGN . FORMS)
```

```
{MEDLEY}<sources>RESOURCE.;1  (RELEASERRESOURCE cont.)
```

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```
(SETQ RVALVAR (GETRESOURCE RNAME))))
```

```
)
```

```
(DECLARE%: DONTVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILERVERS
```

```
(ADDTOWAR NLAMA \IGR.MAKEPRETTYCOMSL \GR.MAKEPRETTYCOMSL)
```

```
(ADDTOWAR NLAML )
```

```
(ADDTOWAR LAMA )
```

```
)
```

```
(PUTPROPS RESOURCE COPYRIGHT ("Venue & Xerox Corporation" 1985 1986 1987 1990))
```

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