

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

;;
;; Copyright (c) 1985, 1986, 1987, 1990 by Venue & Xerox Corporation. All rights reserved.

(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%: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILERVARS (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)
, @ (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) ; (* rmk%: "14-Jun-84 22:39")
(CDR (ASSOC NAME GLOBAL.RESOURCES])
```

(\GR.PUTDEFFN

```
[LAMBDA (NAME TYPE DEF) ; Edited 4-Aug-87 12:25 by amd
(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) ; Note that the variable GLOBAL.RESOURCES has been
; GLOBALVAR'd by the file COMS
[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]))
```

(\GR.DELDEFFN

```
[LAMBDA (NAME TYPE) ; (* rmk%: "15-Jun-84 11:23")
(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]))
```

(\GR.CONTENTS

```
[LAMBDA (COM NAME TYPE) ; (* rmk%: "14-Jun-84 22:29")
(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

(\IGR.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 (RELEASERESOURCE cont.)

Page 4

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

)

(DECLARE%: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILERVERS

(ADDTOVAR **NLAMA** \IGR.MAKEPRETTYCOMSL \GR.MAKEPRETTYCOMSL)

(ADDTOVAR **NLAML**)

(ADDTOVAR **LAMA**)

)

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

FUNCTION INDEX

\GR.CONTENTES2 \GR.GvarInitLst3 \GR.PUTDEFFN2
\GR.DELDEFFN2 \GR.MAKEPRETTYCOMSL3 \GR.WITHRESOURCEMAC1
\GR.GETDEFFN2 \GR.METHODEXPANDER1 \IGR.MAKEPRETTYCOMSL3

MACRO INDEX

FREERESOURCE1 GLOBALRESOURCE ...3 INITRESOURCE1 RELEASERESOURCE ...3 WITH-RESOURCES1
GETRESOURCE1 GLOBALRESOURCES ...3 NEWRESOURCE1 WITH-RESOURCE1

PROPERTY INDEX

FREERESOURCE3 GETRESOURCE3 INITRESOURCE3 NEWRESOURCE3

VARIABLE INDEX

GLOBAL.RESOURCES ..3
