

File created: 13-Jul-88 17:58:45 {POGO: AISNORTH: XEROX}<LOOPSCORE>USERS>CONVERSION-AIDS.;5

changes to: (FUNCTIONS DEFINE-METHOD-FNS)

previous date: 16-Jun-88 12:20:55 {POGO: AISNORTH: XEROX}<LOOPSCORE>USERS>CONVERSION-AIDS.;4

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

::
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(RPAQQ **CONVERSION-AIDSCOMS**
((DECLARE%: DONTCOPY (PROP MAKEFILE-ENVIRONMENT CONVERSION-AIDS))

::: Some aids for converting files from KOTO-Loops to Lyric-Loops

(FNS CONVERT-BQUOTE CONVERT-COMMENTS CONVERT-COMS CONVERT-METHODS CONVERT-ONE-COMMENT
CONVERT-LOOPS-FILES)
(FUNCTIONS DEFINE-METHOD-FNS WITH-LOOP-LIMIT)
(INITVARS (SEDT.CONVERT.UPGRADE 100)) ; Different name under Medley, so set it if not already.
)

(DECLARE%: DONTCOPY

(PUTPROPS **CONVERSION-AIDS MAKEFILE-ENVIRONMENT** (:PACKAGE "IL" :READTABLE "INTERLISP")
)

::: Some aids for converting files from KOTO-Loops to Lyric-Loops

(DEFINEQ

(**CONVERT-BQUOTE**
[LAMBDA (NAME TYPE) ; Edited 16-Jun-88 12:08 by raf

::: Fix up old style BQUOTE forms left over from a KOTO file

(if (HASDEF NAME TYPE)
then (WITH-LOOP-LIMIT 1000 (EDITDEF NAME TYPE NIL
(for pair in '((%, . \,) ; Edited 16-Jun-88 12:08 by raf
(%, @ . \, @)
(%, . . \, .))
join `(^ (LPQ (F , (CAR pair)
1)
(BI 1 2)
1
(REPLACE 1 WITH , (CDR pair]))

(**CONVERT-COMMENTS**
[LAMBDA (NAME TYPE) ; Edited 1-Sep-87 17:57 by smL

::: Convert the top-level comments to the new-style comment

(if (HASDEF NAME TYPE)
then (WITH-LOOP-LIMIT 300 (EDITDEF NAME TYPE NIL
(LPQ (F (, COMMENTFLG --)
NIL)
UP
[COMS `(REPLACE 1 WITH , (CONVERT-ONE-COMMENT (CAR (%##))
2 UP])

(**CONVERT-COMS**
[LAMBDA (FILE-NAME) ; Edited 16-Jun-88 12:09 by raf

::: Change the COMS of a file so that any DEFMACRO forms are now dumped out as (FUNCTIONS ...) instead.

(WITH-LOOP-LIMIT
300
(EDITDEF FILE-NAME 'FILES NIL
'((LPQ (F (MACROS --)
1)
[COMS (LET* ((FUNCTION-NAMES (for m in (CDR (%##)) when (HASDEF m 'FUNCTIONS) collect m))
(MACRO-NAMES (LDIFFERENCE (CDR (%##))
FUNCTION-NAMES))
(if (NULL FUNCTION-NAMES)
then NIL
elseif (NULL MACRO-NAMES)
then '(REPLACE 1 WITH FUNCTIONS)


```
[for file inside files do (PRINTOUT T "Defining makefile-environment for file " file T)
  (PUTPROP (ROOTFILENAME file)
    'MAKEFILE-ENVIRONMENT
    ' (:PACKAGE "IL" :READTABLE "INTERLISP" :BASE 10))
  (SET (FILECOMS file)
    `([DECLARE%: DONTCOPY (PROP MAKEFILE-ENVIRONMENT ,(ROOTFILENAME file)
    ,@(EVALV (FILECOMS file)
```

;; Walk thru the files, cleaning up any odd forms

```
[for file inside files
  do (BLOCK)
    ;; Change any DEFMACRO forms from MACROS to FUNCTIONS on the coms of the file
    (PRINTOUT T "Changing DEFMACROs to FUNCTIONS in the coms of file " file T)
    (CONVERT-COMS (ROOTFILENAME file))
    ;; Fix any odd BQUOTE forms that are lying around
    (PRINTOUT T "Fixing old BQUOTE expressions" T)
    (CONVERT-BQUOTE (ROOTFILENAME file)
      'FILES)
    (for type in '(MACROS FNS FUNCTIONS) do (for m in (FILECOMSLST (ROOTFILENAME file)
      type)
      do (BLOCK)
        (CONVERT-BQUOTE m type)))
```

;; Fix comments

```
(PRINTOUT T "Upgrading some comments" T)
(CONVERT-COMMENTS file 'FILES)
(for type in '(FUNCTIONS) do (for m in (FILECOMSLST (ROOTFILENAME file)
  type)
  do (BLOCK)
    (CONVERT-COMMENTS m type)))
```

;; Clean up the documentation in the classes...

```
(PRINTOUT T "Converting documentation comments to strings in classes" T)
(for class-name in (FILECOMSLST (ROOTFILENAME file)
  'CLASSES)
  do (BLOCK)
    (if (HASDEF class-name 'CLASSES)
      then (MARKASCHANGED class-name 'CLASSES)
        [LET ((c ($! class-name))
          [LET* ((doc (GetClass c 'doc))
            (new-doc (CONVERT-ONE-COMMENT doc)))
              (if (NEQ new-doc doc)
                then (PutClass c (CAR (LAST new-doc))
                  'doc)
                [for iv in (_ c ListAttribute 'IVS)
                  do (LET* ((doc (GetValue c iv 'doc))
                    (new-doc (CONVERT-ONE-COMMENT doc)))
                      (if (NEQ new-doc doc)
                        then (PutValue c iv (CAR (LAST new-doc))
                          'doc)
                        [for cv in (_ c ListAttribute 'CVS)
                          do (LET* ((doc (GetClassValue c cv 'doc))
                            (new-doc (CONVERT-ONE-COMMENT doc)))
                              (if (NEQ new-doc doc)
                                then (PutClassValue c cv (CAR (LAST new-doc))
                                  'doc)
                                else (DELFROMFILE class-name 'CLASSES file))]]]]]]
```

;; ... and the methods

```
(PRINTOUT T "Converting documentation comments to strings in methods " T)
(for method-name in (FILECOMSLST (ROOTFILENAME file)
  'METHODS)
  do (BLOCK)
    (if (HASDEF method-name 'METHODS)
      then [LET* ((method-obj ($! method-name))
        (doc (GetValue method-obj 'doc))
        (new-doc (CONVERT-ONE-COMMENT doc)))
          (if (NEQ new-doc doc)
            then (PutValue method-obj 'doc (CAR (LAST new-doc))
              (MARKASCHANGED method-name 'METHODS)]
            else (DELFROMFILE method-name 'METHODS)]
```

;; Dump out the files

```
(SELECTQ dump-files-p
  (:COMPILE (for file inside files do (PRINTOUT T "Dumping & Compiling file " file T)
    (MAKEFILE file '(NEW))
    (CL:COMPILE-FILE file)))
  (:COMPILE/LOAD
    (for file inside files do (PRINTOUT T "Dumping, Compiling, & Loading file " file T)
      (MAKEFILE file '(NEW))
      (LOAD (CL:COMPILE-FILE file))))
  (if dump-files-p
    then (for file inside files do (PRINTOUT T "Dumping file " file T)
      (MAKEFILE file '(NEW))
```

)

(DEFMACRO **DEFINE-METHOD-FNS** (&REST METHOD-DEFS)

;; This is uglier than it should be, because of the need to convert old-style top-level comments in the body of the method. Otherwise, evaling the
;; result produces nasty warnings about "Possible comment not stripped"

```
[CONS 'PROGN
  (for def in METHOD-DEFS
    collect (COND
      [(IGNORE-ERRORS (LET ((FULL-METHOD-NAME (CL:FIRST def))
                           (METHOD-WORD (CL:FIRST (CL:SECOND def)))
                           METHOD-KEYWORDS METHOD-ARGLIST METHOD-BODY CLASS-NAME SELECTOR ARGS)
                           ;; Parse the def, which looks like (Foo.Bar (Method {keyword value}* ((ClassName Selector)
                           ;; ..args) ..forms))
                           [SETQ METHOD-KEYWORDS (for x on (CL:REST (CL:SECOND def)) by CDDR
                               until (LISTP (CL:FIRST x))
                               join ` (, (CL:FIRST x)
                                     , (CL:SECOND x))
                               finally (SETQ METHOD-ARGLIST (CL:FIRST x))
                                       (SETQ METHOD-BODY (CL:REST x))
                                       (SETQ CLASS-NAME (CL:FIRST (CL:FIRST METHOD-ARGLIST)))
                                       (SETQ SELECTOR (CL:SECOND (CL:FIRST METHOD-ARGLIST)))
                                       (SETQ ARGS (CL:REST METHOD-ARGLIST))
                                       ;; Sometimes Loops got confused when renaming a method, and the CLASS-NAME and SELECTOR
                                       ;; don't jive with the real method name. So we have to make sure that they are OK
                                       [if (NOT (EQ FULL-METHOD-NAME (PACK* CLASS-NAME "." SELECTOR)))
                                         then ; OK gang, we got a problem
                                         (LET ((delimiter-pos (STRPOS "." FULL-METHOD-NAME)))
                                           (if (EQP delimiter-pos
                                                  (STRPOS "." FULL-METHOD-NAME NIL NIL NIL NIL NIL
                                                    T))
                                             then ; Only one delimiter, so se know how to break it in two
                                             (SETQ CLASS-NAME (SUBATOM FULL-METHOD-NAME 1
                                                                    (SUB1 delimiter-pos)))
                                             (SETQ SELECTOR (SUBATOM FULL-METHOD-NAME
                                                                    (ADD1 delimiter-pos)))
                                             else ; HELP!
                                             (CL:WARN "~Method name ~S doesn't match
                                                                    method-body" FULL-METHOD-NAME]
                                         ;; Convert top-level comments in the body of the method, to keep the reader from generating
                                         ;; lots of awful warning messages
                                         ;; JRB - first find the documentation comment, if any, and make it a string
                                         [LET ((DOC-COMMENT-INDEX 0)
                                               FOUND-ONE)
                                           (while (AND (LISTP (CL:NTH DOC-COMMENT-INDEX METHOD-BODY))
                                                       (EQ (CAR (CL:NTH DOC-COMMENT-INDEX METHOD-BODY))
                                                           COMMENTFLG))
                                             do (CL:INCF DOC-COMMENT-INDEX)
                                                (SETQ FOUND-ONE T))
                                           (CL:DECF DOC-COMMENT-INDEX)
                                           ;; HACK: If there is a string in the selected comment already, it probably is the date
                                           ;; stamp and shouldn't be mucked with
                                           (if (AND FOUND-ONE (for X in (CL:NTH DOC-COMMENT-INDEX METHOD-BODY)
                                                                    never (STRINGP X)))
                                               then (CL:SETF (CL:NTH DOC-COMMENT-INDEX METHOD-BODY)
                                                           (CADDR (CONVERT-ONE-COMMENT (CL:NTH
                                                                                               DOC-COMMENT-INDEX
                                                                                               METHOD-BODY)
                                                                                               (SETQ METHOD-BODY (for x in METHOD-BODY
                                                                                                   collect (if (AND (LISTP x)
                                                                                                       (EQ (CAR x)
                                                                                                           COMMENTFLG))
                                                                                                       then (CONVERT-ONE-COMMENT x)
                                                                                                       else x)))
                                                                                               DOC-COMMENT-INDEX
                                                                                               METHOD-BODY]
                                               ;; Got it all figured out...
                                               ` (,METHOD-WORD ,@METHOD-KEYWORDS ((,CLASS-NAME ,SELECTOR)
                                                                                               ,@ARGS)
                                                                                               ,@METHOD-BODY]
                                               (T (CL:FORMAT *ERROR-OUTPUT* "Trouble converting method ~A:~%~%if this is a RuleSet, you
                                                                                               must recompile it~%" (if (CL:CONSP def)
                                                                                               then (CAR def)
                                                                                               else def))
                                                                                               NIL]))
      ]))
    ]))
  ]))
```

(DEFMACRO **WITH-LOOP-LIMIT** (VALUE &BODY FORMS)

```
[LET ((VAR (GENSYM)))
  \ (LET ((,VAR MAXLOOP))
    (CL:UNWIND-PROTECT
      (PROGN (SETQ MAXLOOP ,VALUE)
              ,@FORMS)
```

```
{MEDLEY}<loops>users>CONVERSION-AIDS.;1 (WITH-LOOP-LIMIT cont.)
```

Page 5

```
(SETQ MAXLOOP ,VAR))])
```

```
(RPAQ? SEdit.CONVERT.UPGRADE 100)
```

```
:: Different name under Medley, so set it if not already.
```

```
(PUTPROPS CONVERSION-AIDS COPYRIGHT ("Xerox Corporation" 1987 1988))
```

FUNCTION INDEX

CONVERT-BQUOTE	1	CONVERT-COMS	1	CONVERT-METHODS	2
CONVERT-COMMENTS	1	CONVERT-LOOPS-FILES	2	CONVERT-ONE-COMMENT	2

MACRO INDEX

DEFINE-METHOD-FNS	4	WITH-LOOP-LIMIT	4
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VARIABLE INDEX

SEDT.CONVERT.UPGRADE	5
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PROPERTY INDEX

CONVERSION-AIDS	1
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