

File created: 11-May-93 13:18:13 {DSK}<usr>local>lde>loops>users>rules>RULES-ROOT.;2

changes to: (VARS RULES-ROOTCOMS)

previous date: 11-May-93 12:42:46 {DSK}<usr>local>lde>loops>users>rules>RULES-ROOT.;1

Read Table: XCL

Package: INTERLISP

Format: XCCS

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(RPAQQ **RULES-ROOTCOMS**

```
((DECLARE\ : DONTCOPY (PROP MAKEFILE-ENVIRONMENT RULES-ROOT))
 (COMS
  (FNS |MoveMethod|)
  (METHODS |Class.CopyMethod| |Class.DefRSM| |Class.EditMethod| |Class.PPMethod|))
 (COMS
  (FNS |AddDefRSMtoClassBrowser|))
 (COMS
  (FILES (FROM VALUEOF LOOPSUSERSDIRECTORY)
         LOOPSBACKWARDS LOOPSMIXIN)
  (FILES (FROM VALUEOF LOOPSUSERSRULESDIRECTORY)
         RULES RULESP RULESC RULESD RULESTTY))
 (P (|AddDefRSMtoClassBrowser|))
 (PROP MAKEFILE-ENVIRONMENT RULES-ROOT)))
```

(DECLARE\ : DONTCOPY)

:: Override a few basic fns in Loops

(DEFINEQ

(|**MoveMethod**|

```
(LAMBDA (|oldClassName| |newClassName| |selector| |newSelector| |files|)
 ; Edited 17-Jun-88 17:21 by raf
```

::: Move a method from oldClassName to newClassName, renaming function if appropriate

```
(SETQ |oldClassName| (|GoodClassName| |oldClassName| NIL T))
(OR |newClassName| (SETQ |newClassName| |oldClassName|))
(SETQ |newClassName| (|GoodClassName| |newClassName| NIL T))
(OR |newSelector| (SETQ |newSelector| |selector|))
(PROG (|oldDef| |newLocalFn| |delFnFlg| |oldRuleSetName| |oldRuleSet| |newRuleSetName| |newRuleSet|
      |methodName| (|oldClass| (|GetClassRec| |oldClassName|))
      (|newClass| (|GetClassRec| |newClassName|))
      (|localFn| (|FindLocalMethod| (|GetClassRec| |oldClassName|)
                                   |selector|)))
```

:: Punt now for null moves

```
(|if| (AND (EQ |oldClass| |newClass|)
          (EQ |selector| |newSelector|))
 |then| (RETURN NIL))
(COND
 (NULL |localFn|)
 (|printout| T |selector| " not found in " |oldClassName|)
 (RETURN NIL))
 (STRPOS |oldClassName| |localFn|)
 (OR (SETQ |oldDef| (GETDEF |localFn| 'METHOD-FNS))
     (ERROR "No definition found for " |localFn|)) ; Remember to delete fn def Dont use DELDEF since it bitches.
 (SETQ |delFnFlg| T)
 (COND
  ((|ValueFound| (SETQ |oldRuleSetName| (|GetMethod| |oldClass| |selector| 'RuleSet|)))
   ; Treat specially those that are implemented by RuleSets.
  (LET* ((|oldRuleSet| (|GetObjectRec| |oldRuleSetName|))
        (|newRuleSetName| (|MethName| (|ClassName| |newClass|)
                                       |selector|))
        (|newRuleSet| (|_ |oldRuleSet| |CopyRules| |newRuleSetName| |newClass|)))
   (SETQ |newLocalFn| (|DefRSM| |newClass| |selector| |newRuleSetName|)))
  (T
   ; Define the method
   (SETQ |newLocalFn| (EVAL (CL:MULTIPLE-VALUE-BIND (|cname| |sel| |args| |decls| |formsd|
                                                    |doc| |quals| |method-type|)
           (PARSE-METHOD-BODY |oldDef|)
           (PACK-METHOD-BODY |newClassName| |newSelector| |args| |decls|
                               |formsd| |doc| |quals| |method-type|))))))
  (T (|AddMethod| |newClass| |newSelector| |localFn|)))
 (|for| |prop| |in| (DREMOVE 'RuleSet| (|_ |oldClass| |ListAttribute| 'Method| |selector|))
  |do| (|PutMethodOnly| |newClass| |newSelector| (|GetMethodOnly| |oldClass| |selector| |prop|)
      |prop|)
 (|DeleteMethod| |oldClass| |selector| |delFnFlg|)
 (RETURN (OR |newLocalFn| |localFn|))))
```

)

(|\BatchMethodDefs|)

(METH |Class| |CopyMethod| (|selector| |newClass| |newSelector|)
"Copy method from self to newClass. newSelector defaults to selector"
(|category| (|Class|)))

(METH |Class| |DefRSM| (|selector|)
"Installs a RuleSet as a method in the class. If ruleSetName is NIL, then DefRSM creates a RuleSet,
invokes the RuleSet editor, compiles the RuleSet, and installs it as a method in the class. Also
initializes the workspace instance variable."
(|category| (|Class|)))

(METH |Class| |EditMethod| (|selector| |commands|)
"Called by Class.EditMethod. Finds the function associated with selector in class, and calls editor on
it"
(|category| (|Class|)))

(METH |Class| |PPMethod| (|selector|)
"Prettyprint the function which implements selector in this class."
(|category| (|Class|)))

(|Method| ((|Class| |CopyMethod|) |self| |selector| |newClass| |newSelector|)
; RBGMartin 13-Oct-87 17:10
"Copy method from self to newClass. newSelector defaults to selector"
(OR |newSelector| (SETQ |newSelector| |selector|))
(LET (|def| |newFn| |oldRuleSetName| (|myMethName| (|FindLocalMethod| (|GetClassRec| |self|)
|selector|)))
(COND
((NULL |myMethName|)
(COND
((SETQ |myMethName| (|FetchMethod| |self| |selector|))
(HELPCHECK |selector| " is not local for " |self| "
To copy anyway, type OK")
(T (ERROR |selector| (CONCAT "is not a selector for " |self|))))))
(OR (|type?| |class| |newClass|)
(SETQ |newClass| (OR (|GetClassRec| |newClass|)
(AND (HELPCHECK |newClass| " is not a class. Type OK to use oldClass: "
|self|))))))
(COND
((|ValueFound| (SETQ |oldRuleSetName| (|GetMethod| |self| |selector| ' |RuleSet|)))
; Treat specially those that are implemented by RuleSets.
(LET* ((|oldRuleSet| (|GetObjectRec| |oldRuleSetName|))
(|newRuleSetName| (|MethName| (|ClassName| |newClass|)
|selector|))
(|newRuleSet| (_ |oldRuleSet| |CopyRules| |newRuleSetName| |newClass|))
(SETQ |newFn| (|DefRSM| |newClass| |selector| |newRuleSetName|)))
; Define the method
(T
(OR (SETQ |def| (GETDEF |myMethName| 'METHOD-FNS))
(ERROR |myMethName| " is not a defined function"))
(SETQ |newFn| (EVAL (CL:MULTIPLE-VALUE-BIND (|cname| |sel| |args| |decls| |forms| |doc| |quals|
|type|)
(PARSE-METHOD-BODY |def|)
(PACK-METHOD-BODY (|ClassName| |newClass|
|newSelector| |args| |decls| |forms| |doc| |quals| |type|))))))
(|for| |prop| |in| (DREMOVE ' |RuleSet| (_ |self| |ListAttribute| ' |Method| |selector|))
; Copy all the properties
(|PutMethod| |newClass| |newSelector| (|GetMethod| |self| |selector| |prop|)
|prop|))
|newFn|))

(|Method| ((|Class| |DefRSM|) |self| |selector|) ;dgb: 9-NOV-83 11:20
"Installs a RuleSet as a method in the class. If ruleSetName is NIL, then DefRSM creates a RuleSet, invokes
the RuleSet editor, compiles the RuleSet, and installs it as a method in the class. Also initializes the
workspace instance variable."
(|DefRSM| |self| |selector|))

(|Method| ((|Class| |EditMethod|) |self| |selector| |commands|) ; RBGMartin 17-Feb-87 16:34
"Called by Class.EditMethod. Finds the function associated with selector in class, and calls editor on it"
(LET* ((|selector| (OR |selector| (_ |self| |PickSelector| (CONCAT "EditMethod: " (|ClassName| |self|))))
(|method| (AND |selector| (|FindLocalMethod| |self| |selector|)))
(|if| (NULL |selector|)
|then| NIL
|elseif| (NULL |method|)
|then| (LET ((|allSelectors| (_ |self| |ListAttribute| ' |Selectors|))
(|if| (MEMB |selector| |allSelectors|)
|then| ; The method is an inherited one
(|if| (EQ 'Y (ASKUSER NIL NIL (CONCAT |selector| " is not a local method of "
|self| ". Should I make it local for
editing? ")))
|then| (SETQ |method| (_ |self| |MakeLocalMethod| |selector|)))
|else| (LET* ((|containingForm| (|if| (AND (BOUNDP '|\SendForm|)
(EQ |\Obj| |self|)
(EQ |\Selector| ' |EditMethod|))
|then| |\SendForm|))
(|correctedSelector| (|\LoopsFixSpell|
|selector| |allSelectors| (CONS ' _ |containingForm|)
(|if| (EQ 'QUOTE (CAR (CADDR |containingForm|)))
|then| (CDR (CADDR |containingForm|))))))

```

      (|if| |correctedSelector|
      |then| (SETQ |selector| |correctedSelector|)
            (SETQ |method| (OR (|FindLocalMethod| |self| |correctedSelector|)
                              (_ |self| |MakeLocalMethod| |correctedSelector|
                                )))))
  (LET ((|ruleSet| (AND |method| (|GetMethod| |self| |selector| ' |RuleSet|))))
    (|if| (NULL |method|)
      |then| NIL
      |elseif| (|ValueFound| |ruleSet|)
      |then|
        (_ (|GetObjectRec| |ruleSet|)
          |EditRules|)
        ; Here if the method is implemented by a RuleSet.
      |elseif| (NULL (|CheckMethodForm| |self| |selector| |method|))
      |then| (PROMPTPRINT |method| " is not a known function.")
      |else| (|if| (GETDEF |method| 'METHOD-FNS NIL ' (NOERROR NOCOPY NODWIM))
        |then| (EDITDEF |method| 'METHOD-FNS NIL |commands|)
        |else| (PROMPTPRINT "Can't find source for " |method| T)
              NIL))))

```

```
(|Method| ((|Class| |PPMethod|) |self| |selector|) ; sML 9-Apr-87 19:18
```

;;; Prettyprint the function which implements selector in this class.

;;;

```

  (LET ((|selector| (OR |selector| (_ |self| |PickSelector| (CONCAT "PPMethod: " (|ClassName| |self|)))))
    (COND
      (|selector| (LET ((|fn| (_ |self| |FetchMethod| |selector|))
                      (|outFile| (|PPDefault| NIL)))
        (|if| |fn|
          |then| (RESETFORM (OUTPUT |outFile|)
                          (WITH.PP.OUTPUT |outFile| (TERPRI |outFile|)
                          (PRINTDEF (GETDEF |fn| 'METHOD-FNS))))
          |else| (PRINTOUT |outFile| "No method for selector " |selector| " in " |self| T))))
    ))

```

```
(|\UnbatchMethodDefs|)
```

;; Patch the class browser menus to add DefRSM

(DEFINEQ

(|AddDefRSMtoClassBrowser|

; Edited 16-Dec-87 12:23 by jrb:

```

  (LAMBDA NIL
    (PROG ((MIDDLEITEMS (|GetClassValue| ($ |ClassBrowser|)
                                       ' |MiddleButtonItems|)))
      (|PutClassValue| ($ |ClassBrowser|)
        ' |MiddleButtonItems|
        (|for| N |in| MIDDLEITEMS |collect| (COND
          ((EQUAL (CAR N)
                 "Add (AddMethod)")
            (LET ((SUBITEMFORM (CADR N)))
              (LIST (CAR N)
                    (LIST (CAR SUBITEMFORM)
                          (LSUBST ' ("AddMethod" |AddNewMethod|
                                    "Add a new method to the
                                    class")
                                ("DefRSM" |DefRSM| "Add a new
                                ruleset method to the
                                class")
                                ' ("AddMethod" |AddNewMethod| "Add a
                                new method to the class")
                                (CADADR N))
                          (CADDR SUBITEMFORM))
                    (CADDR N))))
          (T N))))
      (|ClearAllCaches|))))

```

)

;; Load the Rules files

```
(FILESLOAD (FROM VALUEOF LOOPSUSERSDIRECTORY)
  LOOPSBACKWARDS LOOPSMIXIN)
```

```
(FILESLOAD (FROM VALUEOF LOOPSUSERSRULESDIRECTORY)
  RULES RULESP RULESC RULESD RULESTTY)
```

(|AddDefRSMtoClassBrowser|)

```
(PUTPROPS RULES-ROOT COPYRIGHT ("Venue" 1993))
```

FUNCTION INDEX

|AddDefRSMtoClassBrowser|3 |MoveMethod|1
