

File created: 19-Jan-93 11:27:11 {DSK}<python>lde>lispcore>sources>XCLC-DATABASE.;2

previous date: 23-May-90 12:57:24 {DSK}<python>lde>lispcore>sources>XCLC-DATABASE.;1

Read Table: XCL

Package: COMPILER

Format: XCCS

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(IL:RPAQQ IL:XCLC-DATABASECOMS

(

::: The XCL Compiler's database of information about the properties of functions and other constructs.

(IL:DEFINE-TYPES COMPILER-DATA)

:: Side Effects (The first keyword is the effects of the function itself and the second is those effects that can affect the running of the  
:: function.)

(IL:FUNCTIONS DECLARE-SIDE-EFFECTS SIDE-EFFECTS)

(IL:SETFS SIDE-EFFECTS)

(IL:PROP IL:PROPTYPE SIDE-EFFECTS-DATA)

(COMPILER-DATA ("Side-effects data for CLtL, Chapter 4: Type Specifiers" (:CONS  
:NONE)

("Side-effects data for CLtL, Chapter 4: Type Specifiers" :NONE :NONE)

("Side-effects data for CLtL, Chapter 6: Predicates" :NONE :NONE)

("Side-effects data for CLtL, Chapter 7: Control Structure" (:CONS  
:ANY)

("Side-effects data for CLtL, Chapter 7: Control Structure" :ANY :NONE)

("Side-effects data for CLtL, Chapter 7: Control Structure" :NONE :ANY)

("Side-effects data for CLtL, Chapter 7: Control Structure" :ANY :ANY)

("Side-effects data for CLtL, Chapter 8: Macros" :ANY :ANY)

("Side-effects data for CLtL, Chapter 8: Macros" :NONE :ANY)

("Side-effects data for CLtL, Chapter 9: Declarations" :ANY :ANY)

("Side-effects data for CLtL, Chapter 10: Symbols" :NONE :ANY)

("Side-effects data for CLtL, Chapter 10: Symbols" :ANY :ANY)

("Side-effects data for CLtL, Chapter 10: Symbols" (:CONS CL::\*GENSYM-PREFIX\*  
CL::\*GENSYM-COUNTER\*)

(CL::\*GENSYM-PREFIX\* CL::\*GENSYM-COUNTER\*)

("Side-effects data for CLtL, Chapter 10: Symbols" (:CONS

:NONE)

("Side-effects data for CLtL, Chapter 10: Symbols" (:CONS

:ANY)

("Side-effects data for CLtL, Chapter 10: Symbols" :NONE :NONE)

("Side-effects data for CLtL, Chapter 11: Packages" :NONE :ANY)

("Side-effects data for CLtL, Chapter 11: Packages" :ANY :ANY)

("Side-effects data for CLtL, Chapter 12: Numbers" (:CONS

:NONE)

("Side-effects data for CLtL, Chapter 12: Numbers" :ANY :ANY)

("Side-effects data for CLtL, Chapter 12: Numbers" :NONE :NONE)

("Side-effects data for CLtL, Chapter 13: Characters" :NONE :NONE)

("Side-effects data for CLtL, Chapter 14: Sequences" :ANY :ANY)

("Side-effects data for CLtL, Chapter 14: Sequences" :NONE :ANY)

("Side-effects data for CLtL, Chapter 14: Sequences" (:CONS

:ANY)

("Side-effects data for CLtL, Chapter 15: Lists" :NONE :NONE)

("Side-effects data for CLtL, Chapter 15: Lists" (:CONS

:NONE)

("Side-effects data for CLtL, Chapter 15: Lists" :ANY :ANY)

("Side-effects data for CLtL, Chapter 15: Lists" :ANY :NONE)

("Side-effects data for CLtL, Chapter 16: Hash Tables" :ANY :NONE)

("Side-effects data for CLtL, Chapter 16: Hash Tables" :ANY :ANY)

("Side-effects data for CLtL, Chapter 16: Hash Tables" :NONE :ANY)

("Side-effects data for CLtL, Chapter 16: Hash Tables" :NONE :NONE)

("Side-effects data for CLtL, Chapter 16: Hash Tables" (:CONS

:NONE)

("Side-effects data for CLtL, Chapter 17: Arrays" :NONE :NONE)

("Side-effects data for CLtL, Chapter 17: Arrays" :NONE :ANY)

("Side-effects data for CLtL, Chapter 17: Arrays" (:CONS

:NONE)

("Side-effects data for CLtL, Chapter 17: Arrays" :ANY :ANY)

("Side-effects data for CLtL, Chapter 18: Strings" :ANY :ANY)

("Side-effects data for CLtL, Chapter 18: Strings" (:CONS

:NONE)

("Side-effects data for CLtL, Chapter 18: Strings" (:CONS

:ANY)

("Side-effects data for CLtL, Chapter 18: Strings" :NONE :NONE)

("Side-effects data for CLtL, Chapter 18: Strings" :NONE :ANY)

("Side-effects data for CLtL, Chapter 20: The Evaluator" :NONE :ANY)

("Side-effects data for CLtL, Chapter 20: The Evaluator" :ANY :ANY)

("Side-effects data for CLtL, Chapter 21: Streams" (:CONS

:ANY)

("Side-effects data for CLtL, Chapter 21: Streams" (:CONS

:NONE)

("Side-effects data for CLtL, Chapter 21: Streams" :ANY :NONE)

("Side-effects data for CLtL, Chapter 21: Streams" :NONE :NONE)

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("Side-effects data for CLtL, Chapter 21: Streams" :ANY :ANY)
("Side-effects data for CLtL, Chapter 22: Input/Output" :NONE :NONE)
("Side-effects data for CLtL, Chapter 22: Input/Output" :ANY :ANY)
("Side-effects data for CLtL, Chapter 22: Input/Output" :NONE :ANY)
("Side-effects data for CLtL, Chapter 22: Input/Output" (:CONS)
:ANY)
("Side-effects data for CLtL, Chapter 23: File System Interface" :NONE :ANY)
("Side-effects data for CLtL, Chapter 23: File System Interface" (:CONS)
:ANY)
("Side-effects data for CLtL, Chapter 23: File System Interface" :ANY :ANY)
("Side-effects data for CLtL, Chapter 23: File System Interface" :NONE :NONE)
("Side-effects data for CLtL, Chapter 24: Errors" :ANY :ANY)
("Side-effects data for CLtL, Chapter 25: Miscellaneous Features" :NONE :ANY)
("Side-effects data for CLtL, Chapter 25: Miscellaneous Features" :ANY :ANY)
("Side-effects data for CLtL, Chapter 25: Miscellaneous Features" :ANY :NONE)
("Side-effects data for CLtL, Chapter 25: Miscellaneous Features" :NONE :NONE)
("Side-effects data for IRM, Chapter 2: Litatoms" :ANY :NONE)
("Side-effects data for IRM, Chapter 2: Litatoms" :NONE :ANY)
("Side-effects data for IRM, Chapter 2: Litatoms" :NONE :NONE)
("Side-effects data for IRM, Chapter 2: Litatoms" :ANY :ANY)
("Side-effects data for IRM, Chapter 2: Litatoms" (:CONS)
:ANY)
("Side-effects data for IRM, Chapter 3: Lists" :NONE :NONE)
("Side-effects data for IRM, Chapter 3: Lists" :ANY :ANY)
("Side-effects data for IRM, Chapter 3: Lists" :ANY :NONE)
("Side-effects data for IRM, Chapter 3: Lists" (:CONS)
:NONE)
("Side-effects data for IRM, Chapter 3: Lists" (:CONS)
:ANY)
("Side-effects data for IRM, Chapter 3: Lists" :NONE :ANY)
("Side-effects data for IRM, Chapter 4: Strings" (:CONS)
:ANY)
("Side-effects data for IRM, Chapter 4: Strings" :NONE :ANY)
("Side-effects data for IRM, Chapter 4: Strings" :NONE :NONE)
("Side-effects data for IRM, Chapter 4: Strings" :ANY :ANY)
("Side-effects data for IRM, Chapter 5: Arrays" :ANY :NONE)
("Side-effects data for IRM, Chapter 5: Arrays" :NONE :ANY)
("Side-effects data for IRM, Chapter 5: Arrays" :NONE :NONE)
("Side-effects data for IRM, Chapter 5: Arrays" (:CONS)
:ANY)
("Side-effects data for IRM, Chapter 6: Hash Arrays" :ANY :ANY)
("Side-effects data for IRM, Chapter 6: Hash Arrays" :NONE :NONE)
("Side-effects data for IRM, Chapter 6: Hash Arrays" (:CONS)
:NONE)
("Side-effects data for IRM, Chapter 6: Hash Arrays" (:CONS)
:ANY)
("Side-effects data for IRM, Chapter 6: Hash Arrays" :NONE :ANY)
("Side-effects data for IRM, Chapter 6: Hash Arrays" :ANY :NONE)
("Side-effects data for IRM, Chapter 7: Numbers and Arithmetic Functions" :ANY :ANY)
("Side-effects data for IRM, Chapter 7: Numbers and Arithmetic Functions" :NONE :NONE)
("Side-effects data for IRM, Chapter 7: Numbers and Arithmetic Functions" :ANY :NONE)
("Side-effects data for IRM, Chapter 8: Record Package" :NONE :ANY)
("Side-effects data for IRM, Chapter 8: Record Package" :ANY :ANY)
("Side-effects data for IRM, Chapter 9: Conditionals and Iterative Statements" :NONE :NONE)
("Side-effects data for IRM, Chapter 9: Conditionals and Iterative Statements" :NONE :ANY)
("Side-effects data for IRM, Chapter 9: Conditionals and Iterative Statements" :ANY :ANY)
("Side-effects data for IRM, Chapter 10: Function Definition, Manipulation, and Evaluation"
:ANY :NONE)
("Side-effects data for IRM, Chapter 10: Function Definition, Manipulation, and Evaluation"
:NONE :ANY)
("Side-effects data for IRM, Chapter 10: Function Definition, Manipulation, and Evaluation"
:ANY :ANY)
("Side-effects data for IRM, Chapter 10: Function Definition, Manipulation, and Evaluation"
:NONE :NONE)
("Side-effects data for IRM, Chapter 11: Variable Bindings and the Interlisp Stack" :NONE :ANY
)
("Side-effects data for IRM, Chapter 11: Variable Bindings and the Interlisp Stack" :ANY :NONE
)
("Side-effects data for IRM, Chapter 11: Variable Bindings and the Interlisp Stack" :ANY :ANY)
("Side-effects data for IRM, Chapter 11: Variable Bindings and the Interlisp Stack" :NONE
:NONE)
("Side-effects data for IRM, Chapter 12: Miscellaneous" :NONE :NONE)
("Side-effects data for IRM, Chapter 12: Miscellaneous" :ANY :ANY)
("Side-effects data for IRM, Chapter 12: Miscellaneous" :NONE :ANY)
("Side-effects data for Pointer reads" :NONE :NONE)
("Side-effects data for Internal functions in CMLARITH" :NONE :NONE)

```

:: Arrange for the correct compiler to be used.

```
(IL:PROP IL:FILETYPE IL:XCLC-DATABASE)
```

:: Set up the correct package environment.

```
(IL:PROP IL:MAKEFILE-ENVIRONMENT IL:XCLC-DATABASE))
```

::: The XCL Compiler's database of information about the properties of functions and other constructs.

(DEF-DEFINE-TYPE **COMPILER-DATA** "XCL Compiler information")

:: Side Effects (The first keyword is the effects of the function itself and the second is those effects that can affect the running of the function.)

(DEFDEFINER (**DECLARE-SIDE-EFFECTS** (:NAME (LAMBDA (WHOLE)  
(LIST (FORMAT NIL "Side-effects data for ~A" (SECOND WHOLE  
))  
(THIRD WHOLE)  
(FOURTH WHOLE))))))

COMPILER-DATA (TITLE EFFECTS AFFECTED &REST FUNCTIONS)  
(COND

((AND (OR (EQ EFFECTS :NONE)  
(EQ EFFECTS :ANY)  
(LISTP EFFECTS))

(OR (EQ AFFECTED :NONE)  
(EQ AFFECTED :ANY)  
(LISTP AFFECTED))))

`(LET ((DATA ', (CONS EFFECTS AFFECTED)))  
,@(MAPCAR #'(LAMBDA (F)  
'(SETF (**SIDE-EFFECTS** ',F)  
DATA))  
FUNCTIONS)))

(T (CERROR "Ignore the declaration" "Malformed side-effects descriptor in DECLARE-SIDE-EFFECTS: ~S"  
(CONS EFFECTS AFFECTED))  
NIL)))

(DEFUN **SIDE-EFFECTS** (NAME)  
(GET NAME 'SIDE-EFFECTS-DATA))

(DEFSETF **SIDE-EFFECTS** (NAME) (DATA)  
'(IL:PUTPROP ,NAME 'SIDE-EFFECTS-DATA ,DATA))

(IL:PUTPROPS **SIDE-EFFECTS-DATA** IL:PROPTYPE IGNORE)