

File created: 27-Jul-90 09:46:57 {DSK}<usr>local>lde>loops>src>SYSTEM>LOOPSACTIVEVALUES.;2

changes to: (VARS LOOPSACTIVEVALUESCOMS)

previous date: 24-Feb-88 08:56:36 {DSK}<usr>local>lde>loops>src>SYSTEM>LOOPSACTIVEVALUES.;1

Read Table: INTERLISP

Package: INTERLISP

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;;
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(RPAQQ **LOOPSACTIVEVALUESCOMS**

```
[(CLASSES ActiveValue AppendSuperValue ExplicitFnActiveValue FirstFetchAV IndirectVariable InheritingAV
  LocalStateActiveValue NestedNotSetValue NoUpdatePermittedAV NotSetValue ReplaceMeAV)
 (METHODS ActiveValue.AVPrintSource ActiveValue.AddActiveValue ActiveValue.CopyActiveValue
  ActiveValue.DeleteActiveValue ActiveValue.DeleteNestedActiveValue ActiveValue.GetWrappedValue
  ActiveValue.GetWrappedValueOnly ActiveValue.HasAV? ActiveValue.NestActiveValue
  ActiveValue.PutWrappedValue ActiveValue.PutWrappedValueOnly ActiveValue.ReplaceActiveValue
  ActiveValue.ReplaceNestedActiveValue ActiveValue.WrapOutside? ActiveValue.WrappingPrecedence
  AppendSuperValue.CopyActiveValue AppendSuperValue.GetWrappedValue
  ExplicitFnActiveValue.AVPrintSource ExplicitFnActiveValue.GetWrappedValue
  ExplicitFnActiveValue.PutWrappedValue FirstFetchAV.AVPrintSource FirstFetchAV.GetWrappedValue
  IndirectVariable.AddActiveValue IndirectVariable.GetWrappedValueOnly
  IndirectVariable.PutWrappedValueOnly IndirectVariable.WrappingPrecedence
  InheritingAV.InheritedValue LocalStateActiveValue.DeleteActiveValue
  LocalStateActiveValue.GetWrappedValueOnly LocalStateActiveValue.NewInstance
  LocalStateActiveValue.PutWrappedValueOnly NestedNotSetValue.AVPrintSource
  NoUpdatePermittedAV.PutWrappedValue NotSetValue.AVPrintSource NotSetValue.CopyActiveValue
  NotSetValue.GetWrappedValue NotSetValue.GetWrappedValueOnly NotSetValue.HasAV?
  NotSetValue.PutWrappedValue NotSetValue.PutWrappedValueOnly NotSetValue.WrappingPrecedence
  ReplaceMeAV.PutWrappedValue)
```

;;; Fix NotSetValue. It was given a bogus value earlier for bootstrapping purposes; now give it the right value

```
(P (replace annotatedValue of NotSetValue with (_ ($ NotSetValue)
  Prototype)))
```

;;; Set up the WrappedNotSetValue

```
[INITVARS (NestedNotSetValue (create annotatedValue annotatedValue _ (_ ($ NestedNotSetValue)
  Prototype)
 (GLOBALVARS NestedNotSetValue)
```

;;; The _AV macro

```
(FUNCTIONS _AV)
(ALISTS (PRETTYPRINTMACROS _AV))
```

;;; Set up for automatic translation from annotatedValues to their active values

```
(CLASSES AnnotatedValue)
(METHODS AnnotatedValue.MessageNotUnderstood AnnotatedValue.GetValue)
(P (PUTHASH 'annotatedValue ($ AnnotatedValue)
  LispClassTable))
```

;;; Deferred values

```
(FUNCTIONS Defer)
(FNS \Defer)
```

;;; For ExplicitFnActiveValue avs

```
(FNS DefAVP)
```

;;; Editing AnnotatedValues

```
(FNS AnnotatedValueEditSource AnnotatedValueInstallEditSource)
(ADDVARS (DT.EDITMACROS (annotatedValue AnnotatedValueEditSource AnnotatedValueInstallEditSource)))
```

;;; Printing and reading annotated values

```
(FNS PrintAnnotatedValue $A $AV)
(INITVARS (DefaultActiveValueClassName 'ExplicitFnActiveValue))
(GLOBALVARS DefaultActiveValueClassName)
```

```
(P (DEFPRINT 'annotatedValue 'PrintAnnotatedValue))
(DECLARE%: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILEVAR (ADDVARS (NLAMA $AV)
                                                                    (NLAML $A)
                                                                    (LAMA]))

(DEFCLASSES ActiveValue AppendSuperValue ExplicitFnActiveValue FirstFetchAV IndirectVariable InheritingAV
LocalStateActiveValue NestedNotSetValue NoUpdatePermittedAV NotSetValue ReplaceMeAV)

(DEFCLASS ActiveValue (MetaClass AbstractClass Edited%: (* sml "21-Apr-86 13:05"))
(Supers Object))

(DEFCLASS AppendSuperValue (MetaClass Class Edited%: (* sml " 8-May-86 14:06"))
(Supers ReplaceMeAV InheritingAV LocalStateActiveValue))

[DEFCLASS ExplicitFnActiveValue (MetaClass Class Edited%: (* sml "23-Sep-85 14:45"))
(Supers LocalStateActiveValue)
(InstanceVariables (getFn NIL doc (* the getFn for this activeValue))
(putFn NIL doc (* the putFn for this activeValue))]

(DEFCLASS FirstFetchAV (MetaClass Class Edited%: (* sml " 7-May-86 12:53"))
(Supers ReplaceMeAV LocalStateActiveValue))

[DEFCLASS IndirectVariable (MetaClass Class doc (* Active Value for redirecting references to another variable)
Edited%: (* sml " 9-May-86 09:52"))
)
(Supers ActiveValue)
(InstanceVariables (object NIL doc (* The object with the "real" variable))
(varName NIL doc (* The name of the "real" variable))
(propName NIL doc (* The prop name of the "real" variable))
(type NIL doc (* The type of the "real" variable))]

(DEFCLASS InheritingAV (MetaClass AbstractClass Edited%: (* sml " 8-May-86 18:24"))
(Supers ActiveValue))

[DEFCLASS LocalStateActiveValue (MetaClass Class Edited%: (* sml "16-Apr-86 10:37"))
(Supers ActiveValue)
(InstanceVariables (localState NIL doc (* The local state of the active value)))]
```