Objects:

mode	adr	conval	link	scope	leaf	
Undef						Not used
Var	vadr		next		regopt	Glob or loc var or proc value parameter
VarPar	vadr		next		regopt	Var parameter (vis = 0 | inPar | outPar)
Con		val				Constant
Fld	off		next			Record field
Typ						Named type
LProc	entry	sizes	firstpar	scope	leaf	Local procedure, entry adr set in back-end
XProc	entry	sizes	firstpar	scope	leaf	External procedure, entry adr set in back-end
SProc	fno	sizes				Standard procedure
CProc		code	firstpar	scope		Code procedure
IProc	entry	sizes		scope	leaf	Interrupt procedure, entry adr set in back-end
Mod				scope		Module
Head	txtpos		owner	firstvar		Scope anchor
TProc	entry	sizes	firstpar	scope	leaf	Bound procedure, mthno = obj.num

Structures:

form	comp	n	BaseTyp	link	mno	txtpos	sysflag
Undef	Basic						
Byte	Basic						
Bool	Basic						
Char8	Basic						
Int8	Basic						
Int16	Basic						
Int32	Basic						

```
    Real32  Basic |
    Real64  Basic |
    Set     Basic |
    String8 Basic |
    NilTyp  Basic |
    NoTyp   Basic |
    Pointer Basic |        PBaseTyp           mno  txtpos   sysflag
    ProcTyp Basic |        ResTyp    params    mno  txtpos   sysflag
    Comp    Array | nofel  ElemTyp            mno  txtpos   sysflag
    Comp    DynArr| dim    ElemTyp            mno  txtpos   sysflag
    Comp    Record| nofmth RBaseTyp  fields    mno  txtpos   sysflag
    Char16  Basic |
    String16Basic |
    Int64   Basic |

Nodes:

design   = Nvar|Nvarpar|Nfield|Nderef|Nindex|Nguard|Neguard|Ntype|Nproc.
expr     = design|Nconst|Nupto|Nmop|Ndop|Ncall.
nextexpr = NIL|expr.
ifstat   = NIL|Nif.
casestat = Ncaselse.
sglcase  = NIL|Ncasedo.
stat     = NIL|Ninittd|Nenter|Nassign|Ncall|Nifelse|Ncase|Nwhile|Nrepeat|
           Nloop|Nexit|Nreturn|Nwith|Ntrap.


              class     subcl     obj      left      right     link
              ------------------------------------------------------
```

design	Nvar		var			nextexpr
	Nvarpar		varpar			nextexpr
	Nfield		field	design		nextexpr
	Nderef	ptr/str		design		nextexpr
	Nindex			design	expr	nextexpr
	Nguard			design		nextexpr (typ = guard type)
	Neguard			design		nextexpr (typ = guard type)
	Ntype		type			nextexpr
	Nproc	normal	proc			nextexpr
		super	proc			nextexpr

expr	design					
	Nconst		const			(val = node.conval)
	Nupto			expr	expr	nextexpr
	Nmop	not		expr		nextexpr
		minus		expr		nextexpr
		is	tsttype	expr		nextexpr
		conv		expr		nextexpr
		abs		expr		nextexpr
		cap		expr		nextexpr
		odd		expr		nextexpr
		bit		expr		nextexpr {x}
		adr		expr		nextexpr SYSTEM.ADR
		typ		expr		nextexpr SYSTEM.TYP
		cc		Nconst		nextexpr SYSTEM.CC
		val		expr		nextexpr SYSTEM.VAL
	Ndop	times		expr	expr	nextexpr
		slash		expr	expr	nextexpr
		div		expr	expr	nextexpr

```
                    mod             expr    expr    nextexpr
                    and             expr    expr    nextexpr
                    plus            expr    expr    nextexpr
                    minus           expr    expr    nextexpr
                    or              expr    expr    nextexpr
                    eql             expr    expr    nextexpr
                    neq             expr    expr    nextexpr
                    lss             expr    expr    nextexpr
                    leq             expr    expr    nextexpr
                    grt             expr    expr    nextexpr
                    geq             expr    expr    nextexpr
                    in              expr    expr    nextexpr
                    ash             expr    expr    nextexpr
                    msk             expr    Nconst  nextexpr
                    len             design  Nconst  nextexpr
                    min             expr    expr    nextexpr MIN
                    max             expr    expr    nextexpr MAX
                    bit             expr    expr    nextexpr SYSTEM.BIT
                    lsh             expr    expr    nextexpr SYSTEM.LSH
                    rot             expr    expr    nextexpr SYSTEM.ROT
            Ncall           fpar    design  nextexpr nextexpr
            Ncomp                   stat    expr    nextexpr

nextexpr    NIL
            expr

ifstat      NIL
            Nif                     expr    stat    ifstat

casestat    Ncaselse                sglcase stat        (minmax = node.conval)
```

```
sglcase     NIL
            Ncasedo                 Nconst    stat      sglcase

stat        NIL
            Ninittd                                     stat     (of node.typ)
            Nenter          proc    stat      stat      stat     (proc=NIL for mod)
            Nassign assign          design    expr      stat
                    newfn           design    nextexp   stat
                    incfn           design    expr      stat
                    decfn           design    expr      stat
                    inclfn          design    expr      stat
                    exclfn          design    expr      stat
                    copyfn          design    expr      stat
                    getfn           design    expr      stat     SYSTEM.GET
                    putfn           expr      expr      stat     SYSTEM.PUT
                    getrfn          design    Nconst    stat     SYSTEM.GETREG
                    putrfn          Nconst    expr      stat     SYSTEM.PUTREG
                    sysnewfn        design    expr      stat     SYSTEM.NEW
                    movefn          expr      expr      stat     SYSTEM.MOVE
                                                                 (right.link = 3rd par)
            Ncall           fpar    design    nextexpr  stat
            Nifelse                 ifstat    stat      stat
            Ncase                   expr      casestat  stat
            Nwhile                  expr      stat      stat
            Nrepeat                 stat      expr      stat
            Nloop                   stat                stat
            Nexit                                       stat
            Nreturn         proc    nextexpr            stat     (proc = NIL for mod)
            Nwith                   ifstat    stat      stat
```

Ntrap		expr	stat
Ncomp	stat	stat	stat