

File created: 3-Mar-89 18:17:39 {ERINYES}<LISPUSERS>MEDLEY>NSTHASIZE.;1

changes to: (FNS NSTHASIZE)  
(VARS NSTHASIZECOMS)

previous date: 8-Apr-86 09:09:30 {DSK}/usr/local/koto/lispusers/nsthasize.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

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```
(RPAQQ NSTHASIZECOMS ((INITVARS (GV.TO.NS.REG))
  (FNS CONVERT.GV.TO.NS GV.READFORWARDING READ-GV-NS-MAPPING NSTHASIZE \GETSTRING
    \GV.COLLECT.ENTRY \GV.COLLECT.ENTRY.1 \GV.COLLECT.ENTRY.LIST)
  (FILES (LOADCOMP)
    MAINTAIN)))
```

(RPAQ? **GV.TO.NS.REG** )

(DEFINEQ

**(CONVERT.GV.TO.NS**

```
  [LAMBDA (X)
    (COND
      ((SETQ X (\CHECKNAME X))
        (PROG ([REG (MKATOM (U-CASE (CDR X)
          NSREG)
          (RETURN (if (EQ REG 'NS)
            then (OR (CH.LOOKUP.OBJECT (SUBSTRING (CAR X)
              2 -2))
              (PROGN (PRINTOUT T "[Unable to check " X " in clearinghouse, assuming
                correct]")
                (SUBSTRING (CAR X)
                  2 -2)))
            else (OR (SETQ NSREG (ASSOC REG GV.TO.NS.REG))
              (RETURN))
              (LET (NAME)
                (OR [CH.LOOKUP.OBJECT (SETQ NAME (CONCAT (CAR X)
                  ":"
                  (CDR NSREG)
                  (PROGN (PRINTOUT T "[Unable to check " NAME " in clearinghouse, assuming
                    correct]")
                    NAME]))
```

**(GV.READFORWARDING**

```
  [LAMBDA (X)
    (CDR (ASSOC 'Forwarding (GV.READENTRY X NIL '\GV.COLLECT.ENTRY]))
```

**(READ-GV-NS-MAPPING**

```
  [LAMBDA NIL
    (SETQ GV.TO.NS.REG
      (RESETLST
        (PROG ((STREAM (OPENSTREAM '{INDIGO}<REGISTRAR>GV>GV-NS-MAPPING.TXT 'INPUT 'OLD))
          (RT (COPYREADTABLE 'ORIG))
          LINES)
          RESTART
            (RESETSAVE NIL (LIST 'CLOSEF? STREAM))
            (SETSEPR NIL NIL RT)
            (SETBRK (CHARCODE (CR))
              NIL RT)
            (OR (FFILEPOS "GV-to-NS Mappings:" STREAM 0 NIL NIL T)
              (ERROR "Couldn't find string GV-to-NS Mappings in " (FULLNAME STREAM)))
            (FILEPOS " " STREAM)
            [RETURN (do (SELCHARQ (BIN STREAM)
              (TAB)
              (CR (RETURN LINES))
              (%. [LET ((LINE (RSTRING STREAM RT)))
                (PRINTOUT T LINE T)
                (push LINES (LET ((POS (STRPOS " -> " LINE)))
                  (OR POS (GO BADFORMAT))
                  (CONS [MKATOM (U-CASE (SUBSTRING LINE 1 (SUB1 POS)
                    (SUBSTRING LINE (PLUS POS 4)
                    -1]
                  (BIN STREAM))
                (GO BADFORMAT]
              BADFORMAT
                (ERROR "bad format on {INDIGO}<Registrar>GV>GV-NS-MAPPING.TXT")))]))
```

**(NSTHASIZE**

```

[LAMBDA (GVDL NSDL NODELETE) ; Edited 3-Mar-89 18:16 by masinter
  (OR GV.TO.NS.REG (PROGN (PRIN1 "Reading gv to ns mapping ...")
    (READ-GV-NS-MAPPING))) (* Imm "8-Apr-86 09:03")
  (SETQ GVDL (OR (\CHECKNAME GVDL)
    (ERROR "Invalid grapevine group" GVDL)))
  (SETQ NSDL (OR (CH.LOOKUP.OBJECT NSDL)
    (ERROR "Invalid NS distribution list" NSDL)))
  (LET (FORWARDING NSADDRESS)
    (for X in (CDR (GV.READMEMBERS GVDL))
      do (if (OR (COND
        ((SETQ NSADDRESS (CONVERT.GV.TO.NS X))
          (PRINTOUT T X)
          T))
        (AND (SETQ FORWARDING (GV.READFORWARDING X))
          (PROGN (PRINTOUT T X " => " FORWARDING)
            (if (CDR FORWARDING)
              then (PRINTOUT T " -- more than one address." T)
              NIL
            else T))
          (if [NOT (SETQ NSADDRESS (CONVERT.GV.TO.NS (CAR FORWARDING]
            then (PRINTOUT T " not an NS equivalent address." T)
            NIL
          else T)))
        then (PRINTOUT T " => " NSADDRESS "...")
        (PROG (VALUE)
          LP (if (OR (type? NSNAME (SETQ VALUE (CH.ADD.MEMBER NSDL 'MEMBERS NSADDRESS)))
            (MATCH VALUE WITH (%'ERROR %'UPDATE.ERROR %'NoChange --)))
            then (if (AND NODELETE (OR (NEQ NODELETE 'FIRST)
              (NLISTP VALUE)))
              then (PRINTOUT T "ok." T)
              else (PRINTOUT T "ok, delete: " (GV.REMOVEMEMBER GVDL X)
                T))
            elseif (COND
              ((AND (EQ (CAR VALUE)
                'ERROR)
                (SELECTQ (CAR (CDR VALUE))
                  (CALL.ERROR (SELECTQ (CADDR VALUE)
                    (TooBusy (PRINTOUT T " error:" VALUE " ...
                      retrying" " ..."))
                    (AccessRightsInsufficient
                      (PRINTOUT T " error:" VALUE " will not
                        move..." T)
                      (RETURN))
                    (HELP VALUE))
                  (GO LP))
                (HELP VALUE)))
              T))
            then (TERPRI T)
            NIL
          else (HELP VALUE]))

```

**(GETSTRING**

```

[LAMBDA (STREAM LENGTH) (* Imm "19-Nov-85 10:21")
  (COND
    ((IGREATERP LENGTH \MAXGVSTRING)
      (ERROR "stream must be confused - string too long" LENGTH))
    (T (LET ((STRING (ALLOCSTRING LENGTH))
      (AIN STRING 1 LENGTH STREAM)
      (COND
        ((ODDP LENGTH)
          (BIN STREAM)))
      STRING]))

```

**(GV.COLLECT.ENTRY**

```

[LAMBDA (INSTREAM) (* Imm "4-Apr-86 16:53")

  (** Called by GV.READENTRY to parse and display some of what Grapevine sends back as "the entire database entry" for
  NAME. The contents are different for groups, individuals, and dead folk)

  (LET (NAMETYPE (RESULTS))
    (\RECEIVESTAMP INSTREAM T) (* Skip stamp)
    (BIN16 INSTREAM) (* Skip component count)

    (* First component is the "prefix" %, which contains, among other things, the name's type and its "official" name)

    (BIN16 INSTREAM) (* Length of this component)
    (\RECEIVESTAMP INSTREAM T) (* Skip stamp)
    (SETQ NAMETYPE (BIN16 INSTREAM))
    (\RECEIVERNAME INSTREAM)
    (SELECTC NAMETYPE
      (\NAMETYPE.INDIVIDUAL
        (\SKIPCOMPONENT INSTREAM) (* Skip password)
        (SETQ RESULTS (\GV.COLLECT.ENTRY.1 INSTREAM 'ConnectSite RESULTS))
        (SETQ RESULTS (\GV.COLLECT.ENTRY.LIST INSTREAM 'Forwarding RESULTS))

```

```

      (SETQ RESULTS (\GV.COLLECT.ENTRY.LIST INSTREAM 'MailboxSites RESULTS))
(\NAMETYPE.GROUP
  (\GV.COLLECT.ENTRY.1 INSTREAM 'Remark RESULTS)
  (\MT.SKIPSTRINGLIST INSTREAM)
  (\SKIPCOMPONENT INSTREAM) (* Skip stamp list)
  (\SKIPCOMPONENT INSTREAM) (* Skip DelMembers)
  (\SKIPCOMPONENT INSTREAM) (* Skip stamp list)
  (PROGN (* owners)
    (\MT.SKIPSTRINGLIST INSTREAM)
    (\SKIPCOMPONENT INSTREAM)
    (\SKIPCOMPONENT INSTREAM)
    (\SKIPCOMPONENT INSTREAM))
  (PROGN (* friends)
    (\MT.SKIPSTRINGLIST INSTREAM)
    (\SKIPCOMPONENT INSTREAM)
    (\SKIPCOMPONENT INSTREAM)
    (\SKIPCOMPONENT INSTREAM))
  '( (GROUP . T))
(\NAMETYPE.DEAD
  '( (DEAD . T))
NIL])

```

(GV.COLLECT.ENTRY.1

(\* Imm " 2-Apr-86 12:51")

```

[LAMBDA (INSTREAM HEADING RESULTS)
  (COND
    ((EQ (BIN16 INSTREAM)
         0)
     RESULTS)
    (T (CONS (CONS HEADING (LET [(STRLEN (PROGN (\RECEIVESTAMP INSTREAM T)
                                                  (* Skip stamp)
                                                  (BIN16 INSTREAM)
                                                  (LET ((STRING (ALLOCSTRING STRLEN))
                                                       (AIN STRING 1 STRLEN INSTREAM)
                                                       (COND
                                                         ((ODDP STRLEN)
                                                          (BIN INSTREAM)))
                                                       STRING)))
              RESULTS]))

```

(GV.COLLECT.ENTRY.LIST

(\* Imm " 2-Apr-86 12:52")

(\* \* return a component consisting of an RList, a stamp list, a "removal" RList (not interesting) and another stamp list)

```

(PROG1 (PROG ((CNT 0)
             (NWORDS (BIN16 INSTREAM))
             STRLEN RMAR VAL)
  (COND
    ((EQ NWORDS 0)
     (RETURN RESULTS)))
  [do (add CNT 1)
    (SETQ STRLEN (BIN16 INSTREAM))
    (BIN16 INSTREAM) (* ignore maxLength)
    (push VAL (\GETSTRING INSTREAM STRLEN))
    (SETQ NWORDS (IDIFFERENCE NWORDS (IPLUS (QUOTIENT (ADD1 STRLEN)
                                                         2)
                                             2)))
    (COND
      ((ILEQ NWORDS 0)
       (RETURN]
      (RETURN (CONS (CONS HEADING VAL)
                    RESULTS)))
    (\SKIPCOMPONENT INSTREAM)
    (\SKIPCOMPONENT INSTREAM)
    (\SKIPCOMPONENT INSTREAM) ]])
)

```

(FILESLOAD (LOADCOMP) MAINTAIN)

(PUTPROPS NSTHASIZE COPYRIGHT ("Xerox Corporation" 1986 1989))

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**FUNCTION INDEX**

CONVERT.GV.TO.NS . . . . .1	NSTHASIZE . . . . .2	\GETSTRING . . . . .2	\GV.COLLECT.ENTRY.1 . . . .3
GV.READFORWARDING . . . . .1	READ-GV-NS-MAPPING . . . . .1	\GV.COLLECT.ENTRY . . . . .2	\GV.COLLECT.ENTRY.LIST . .3

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**VARIABLE INDEX**

GV.TO.NS.REG . . . . .1

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