File created: 26-May-86 18:04:19 **{QV}<NOTECARDS>1.3K>LIBRARY>NCSTAT.;8**

changes to: (FNS NCStat.InfoAboutFileBoxHierarchy NCStat.MarkDepthAndTerminals NCStat.SizeOfFileBoxHierarchy NCStat.DepthOfFileBoxHierarchy NCStat.#FileBoxesInHierarchy NCStat.#LinksFromCard NCStat.#CardsInNoteFile)
(VARS NCSTATCOMS)

previous date: 22-May-86 17:55:47 {QV}<NOTECARDS>1.3K>LIBRARY>NCSTAT.;1

Read Table: OLD-INTERLISP-FILE

Package: INTERLISP

Format: XCCS

```
(RPAQQ NCSTATCOMS ((FNS NCStat.SizeOfFileBoxHierarchy NCStat.#LinksFromCard NCStat.InfoAboutFileBoxHierarchy
                         NCStat.MarkDepthAndTerminals NCStat.#CardsInNoteFile)))

(DEFINEQ
```

```
(NCStat.SizeOfFileBoxHierarchy
  [LAMBDA (RootBox)                                               (* fgh: "22-May-86 20:09")

          (* * How many file boxes and cards in the file box hierarchy that starts at RootCard.
          Include both SubBox andFiledcard links to help very early NFs e.g., Nato-missiles, that had aproblem distinguishing these
          links.)

          (* * fgh 5/22/86 First created.)

    (if (NCP.ValidCard RootBox)
        then (LET ((Closure (NCP.ComputeTransitiveClosure RootBox (QUOTE (SubBox FiledCard))
                                   999999)))
                  (LIST (for Card in Closure count (EQ (QUOTE FileBox)
                                                         (NCP.CardType Card)))
                        (for Card in Closure count (NEQ (QUOTE FileBox)
                                                          (NCP.CardType Card])
```

```
(NCStat.#LinksFromCard
  [LAMBDA (Card Don'tIncludeGlobalFlg)                            (* fgh: "22-May-86 17:56")

          (* * Returns the number of ToLinks emenating from Card. If Don'tIncludeGlobalFlg is non-NIL, eliminates Global ToLinks)

          (* * fgh 5/22/86 First created.)

    (LET (Links)
         (if (NULL Card)
             then (SETQ Card (NCP.WhichCard)))
         [if (NCP.ValidCard Card)
             then (SETQ Links (NCP.GetLinks Card))
                  (if Don'tIncludeGlobalFlg
                      then (SETQ Links (for Link in Links when (NEQ (QUOTE GLOBAL)
                                                                     (CAADR (NCP.LinkDesc Link)))
                                         collect Links]
         (LENGTH Links])
```

```
(NCStat.InfoAboutFileBoxHierarchy
  [LAMBDA (RootCard)                                              (* fgh: "26-May-86 17:01")

          (* * Compute some interesting info about a filebox hierarchy)

          (* * fgh 5/22/86 First created.)

    (LET
     ((Marker (GENSYM))
      (TerminalMarker (GENSYM)))
     (if (NCP.ValidCard RootCard)
         then (NCStat.MarkDepthAndTerminals RootCard 0 Marker TerminalMarker)
              (PROG1 (LIST (QUOTE #FileBoxes)
                           (LET ((Count 0))
                                [NCP.MapCards (fetch (Card NoteFile) of RootCard)
                                       (FUNCTION (LAMBDA (Card)
                                                   (if (AND (EQ (NCP.CardType Card)
                                                                (QUOTE FileBox))
                                                            (NC.FetchUserDataProp Card Marker))
                                                       then (SETQ Count (ADD1 Count]
                                Count)
                           (QUOTE #Cards)
                           (LET ((Count 0))
                                [NCP.MapCards (fetch (Card NoteFile) of RootCard)
                                       (FUNCTION (LAMBDA (Card)
                                                   (if (AND (NEQ (NCP.CardType Card)
                                                                 (QUOTE FileBox))
                                                            (NC.FetchUserDataProp Card Marker))
```

```
                            then (SETQ Count (ADD1 Count]
     Count)
(QUOTE MaxDepth)
(LET ((MaxDepth 0))
     [NCP.MapCards (fetch (Card NoteFile) of RootCard)
            (FUNCTION (LAMBDA (Card)
                        (LET (Depth)
                             (if [AND (EQ (NCP.CardType Card)
                                          (QUOTE FileBox))
                                      (SETQ Depth (CAR (NC.FetchUserDataProp Card
                                                              Marker]
                                 then (SETQ MaxDepth (MAX MaxDepth Depth]
     MaxDepth)
(QUOTE MinDepth)
(LET ((MinDepth 9999999))
     [NCP.MapCards (fetch (Card NoteFile) of RootCard)
            (FUNCTION (LAMBDA (Card)
                        (LET (Depth)
                             (if (AND (EQ (NCP.CardType Card)
                                          (QUOTE FileBox))
                                      (SETQ Depth (CAR (NC.FetchUserDataProp Card
                                                              Marker)))
                                      (NC.FetchUserDataProp Card TerminalMarker))
                                 then (SETQ MinDepth (MIN MinDepth Depth]
     MinDepth)
(QUOTE AvgDepth)
(LET ((SumDepth 0)
      (Count 0))
     [NCP.MapCards (fetch (Card NoteFile) of RootCard)
            (FUNCTION (LAMBDA (Card)
                        (LET (Depth)
                             (if (AND (SETQ Depth (CAR (NC.FetchUserDataProp Card
                                                              Marker)))
                                      (NC.FetchUserDataProp Card TerminalMarker))
                                 then (SETQ SumDepth (PLUS SumDepth Depth))
                                      (SETQ Count (ADD1 Count]
     (FQUOTIENT SumDepth Count))
(QUOTE AvgBoxesPerBox)
(LET ((Sum 0)
      (Count 0))
     [NCP.MapCards (fetch (Card NoteFile) of RootCard)
            (FUNCTION (LAMBDA (Card)
                        (if (EQ (NCP.CardType Card)
                                (QUOTE FileBox))
                            then (LET (#SubBoxes)
                                      (if (SETQ #SubBoxes (CADDR (NC.FetchUserDataProp
                                                                  Card Marker)))
                                          then (SETQ Sum (PLUS Sum #SubBoxes))
                                               (SETQ Count (ADD1 Count]
     (FQUOTIENT Sum Count))
(QUOTE MaxCardsPerBox)
(LET ((Max 0))
     [NCP.MapCards
      (fetch (Card NoteFile) of RootCard)
      (FUNCTION (LAMBDA (Card)
                  (if (EQ (NCP.CardType Card)
                          (QUOTE FileBox))
                      then (LET (#Cards)
                                (if (SETQ #Cards (CADDDR (NC.FetchUserDataProp Card
                                                               Marker)))
                                    then (SETQ Max (MAX Max #Cards))
                                         (if (ZEROP #Cards)
                                             then (PRINT (NCP.CardTitle Card]
     Max)
(QUOTE MinCardsPerBox)
(LET ((Min 999999))
     [NCP.MapCards (fetch (Card NoteFile) of RootCard)
            (FUNCTION (LAMBDA (Card)
                        (if (EQ (NCP.CardType Card)
                                (QUOTE FileBox))
                            then (LET (#Cards)
                                      (if (SETQ #Cards (CADDDR (NC.FetchUserDataProp
                                                               Card Marker)))
                                          then (SETQ Min (MIN Min #Cards]
     Min)
(QUOTE MinCardsPerBoxForBoxesWithGT1Card)
(LET ((Min 999999))
     [NCP.MapCards (fetch (Card NoteFile) of RootCard)
            (FUNCTION (LAMBDA (Card)
                        (if (EQ (NCP.CardType Card)
                                (QUOTE FileBox))
                            then (LET (#Cards)
                                      (if (AND (SETQ #Cards (CADDDR (
                                                                   NC.FetchUserDataProp
                                                                    Card Marker)))
                                              (NOT (ZEROP #Cards)))
                                          then (SETQ Min (MIN Min #Cards]
                                Min)
                           (QUOTE AvgCardsPerBox)
                           (LET ((Sum 0)
                                 (Count 0))
                                [NCP.MapCards (fetch (Card NoteFile) of RootCard)
                                       (FUNCTION (LAMBDA (Card)
                                                    (if (EQ (NCP.CardType Card)
                                                           (QUOTE FileBox))
                                                        then (LET (#Cards)
                                                                  (if (SETQ #Cards (CADDDR (NC.FetchUserDataProp
                                                                                            Card Marker)))
                                                                      then (SETQ Sum (PLUS Sum #Cards))
                                                                           (SETQ Count (ADD1 Count]
                                (FQUOTIENT Sum Count))
                           (QUOTE AvgBoxesPerCard)
                           (LET ((Sum 0)
                                 (Count 0))
                                [NCP.MapCards (fetch (Card NoteFile) of RootCard)
                                       (FUNCTION (LAMBDA (Card)
                                                    (if (NEQ (NCP.CardType Card)
                                                            (QUOTE FileBox))
                                                        then (LET (#Cards)
                                                                  (if (SETQ #Cards (CADR (NC.FetchUserDataProp
                                                                                          Card Marker)))
                                                                      then (SETQ Sum (PLUS Sum #Cards))
                                                                           (SETQ Count (ADD1 Count]
                                (FQUOTIENT Sum Count))
                           (QUOTE #CardsFiledInMoreThan1Box)
                           (LET ((Count 0))
                                [NCP.MapCards (fetch (Card NoteFile) of RootCard)
                                       (FUNCTION (LAMBDA (Card)
                                                    (if (NEQ (NCP.CardType Card)
                                                            (QUOTE FileBox))
                                                        then (if (AND (CADR (NC.FetchUserDataProp Card Marker))
                                                                      (GREATERP (CADR (NC.FetchUserDataProp Card
                                                                                       Marker))
                                                                             1))
                                                                 then (SETQ Count (ADD1 Count]
                                Count)
                           (QUOTE #BoxesFiledInMoreThan1Box)
                           (LET ((Count 0))
                                [NCP.MapCards (fetch (Card NoteFile) of RootCard)
                                       (FUNCTION (LAMBDA (Card)
                                                    (if (EQ (NCP.CardType Card)
                                                           (QUOTE FileBox))
                                                        then (if (AND (CADR (NC.FetchUserDataProp Card Marker))
                                                                      (GREATERP (CADR (NC.FetchUserDataProp Card
                                                                                       Marker))
                                                                             1))
                                                                 then (SETQ Count (ADD1 Count]
                                Count))
                  [NCP.MapCards (fetch (Card NoteFile) of RootCard)
                         (FUNCTION (LAMBDA (Card)
                                      (NC.SetUserDataProp Card Marker NIL)
                                      (NC.SetUserDataProp Card TerminalMarker NIL])])

(NCStat.MarkDepthAndTerminals
  [LAMBDA (RootCard Depth Marker TerminalMarker)                    (* fgh: "22-May-86 21:30")

          (* * Mark RootCard for its depth in hierarchy, then recurse on the children of root.)

          (* * fgh 5/22/86 First created.)

    (LET (Children)
         [NC.SetUserDataProp RootCard Marker (LIST Depth (LENGTH (NCP.CardParents RootCard))
                                                    [if (EQ (NCP.CardType RootCard)
                                                           (QUOTE FileBox))
                                                        then (for Card in (NCP.FileBoxChildren RootCard)
                                                                count (EQ (NCP.CardType Card)
                                                                          (QUOTE FileBox]
                                                    (if (EQ (NCP.CardType RootCard)
                                                           (QUOTE FileBox))
                                                        then (for Card in (NCP.FileBoxChildren RootCard)
                                                                count (NEQ (NCP.CardType Card)
                                                                           (QUOTE FileBox]
         (if [SETQ Children (NCP.GetChildren RootCard (QUOTE (SubBox FiledCard]
             then (for Card in Children do (NCStat.MarkDepthAndTerminals Card (ADD1 Depth)
                                                 Marker TerminalMarker)))
         (if [AND (EQ (NCP.CardType RootCard)
                      (QUOTE FileBox))
                  (for Card in Children never (EQ (NCP.CardType Card)
                                                  (QUOTE FileBox]
             then (SETQ XXC (ADD1 XXC))
                  (NC.SetUserDataProp RootCard TerminalMarker T])
```

```
(NCStat.#CardsInNoteFile
  [LAMBDA (NoteFile TypeList)                                      (* fgh: "22-May-86 17:53")

          (* * Returns the number of cards of one of the types in TypeList in NoteFile.)

          (* * fgh 5/22/86 First created.)

    (if TypeList
        then (SETQ TypeList (MKLIST TypeList)))
    (if (type? NoteFile NoteFile)
        then (LET ((Count 0))
                  [NCP.MapCards NoteFile (FUNCTION (LAMBDA (Card)
                                                     (if (AND (NCP.ValidCard Card)
                                                              (OR (NULL TypeList)
                                                                  (FMEMB (NCP.CardType Card)
                                                                         TypeList)))
                                                         then (SETQ Count (ADD1 Count]
                  Count])
)
(PUTPROPS NCSTAT COPYRIGHT ("Xerox Corporation" 1986))
```

{MEDLEY}<notecards>library>ncstat.;1 28-Jun-2024 18:35:17

-- Listed on 30-Jun-2024 13:57:02 --

FUNCTION INDEX

VARIABLE INDEX