

File created: 7-Sep-88 17:17:04 {ERINYES}<LISPUSERS>MEDLEY>CHATSERVER-NS.;2

changes to: (FNS MAKE.NS.CHAT.CONNECTION)

previous date: 16-Mar-88 22:34:39 {ERINYES}<LISPUSERS>MEDLEY>CHATSERVER-NS.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

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(RPAQQ CHATSERVER-NSCOMS

```
[ (FNS MAKE.NS.CHAT.CONNECTION NS.CHAT.SERVE NSCHAT.SERVER.ATTENTION NSCHAT.SERVER.OUTPUTABORTED
  NSCHAT.SERVER.WHENCLOSED SPP.EOMP \NSCHAT.BIN \REMOTE.EOFP \REMOTE.PEEKBIN \REMOTE.READP
  GAP-SERVER-INIT)
  (FILES COURIERSERVE CHATSERVER)
  (DECLARE%: DONTEVAL@LOAD DOCOPY (P (GAP-SERVER-INIT)
                                     (COURIER.START.SERVER)))
  (DECLARE%: EVAL@COMPILE DONTCOPY (FILES (SOURCE)
                                           MODARITH)
        (FILES (LOADCOMP)
                LLNS SPP))
  (FUNCTIONS CHECK)
  (DECLARE%: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILEVAR (ADDVARS (NLAMA)
                                                                           (NLAML)
                                                                           (LAMA MAKE.NS.CHAT.CONNECTION]))
```

(DEFINEQ

(MAKE.NS.CHAT.CONNECTION

```
(CL:LAMBDA (CSTREAM CPROG CPROC PARAMETERS TRANSPORT WAITTIME CREDENTIALS VERIFIER)
; Edited 2-Sep-88 23:43 by masinter
  (LET ((OUTPUTSTREAM (SPPOUTPUTSTREAM CSTREAM)))
    (with SPPCON (fetch SPP.CONNECTION of CSTREAM)
      (SETQ SPPEOMONFORCEOUT T)
      (SETQ SPPATTENTIONFN (FUNCTION NSCHAT.SERVER.ATTENTION))
      (SETQ SPPOUTPUTABORTEDFN (FUNCTION NSCHAT.SERVER.OUTPUTABORTED))
      (SETQ SPPWHENCLOSEDFN (FUNCTION CHATSERVERWHENCLOSEDFN)))
    (with STREAM CSTREAM (SETQ DEVICE (create FDEV
                                                DEVICENAME _ 'NSCHATDEVICE
                                                ;
                                                PEEKBIN _ #' \REMOTE.PEEKBIN
                                                ;
                                                READP _ #' \REMOTE.READP
                                                ;
                                                EOFP _ #' \REMOTE.EOFP
                                                ;
                                                GETEOFPTR _ (FUNCTION NIL)
                                                ;
                                                BIN _ ' \NSCHAT.BIN using DEVICE)))
      (SETQ STRMBINFN ' \NSCHAT.BIN))
    ;; return the value, and then
    [COURIER.RETURN CSTREAM CPROG CPROC ' ((0 0)
      (SPP.FORCEOUTPUT OUTPUTSTREAM)
      (SPP.SENDATTENTION CSTREAM 209)
      (PROCESS.NAME (THIS.PROCESS)
                    'CHAT.SERVER)
      (SPP.DSTYPE OUTPUTSTREAM 192)
      (CHATSERVEROPENFN CSTREAM OUTPUTSTREAM))])
```

(NS.CHAT.SERVE

```
[LAMBDA (INPUTSTREAM OUTPUTSTREAM OPENFN WHENCLOSEDFN) (* Imm "7-Jan-86 13:21")
  (PROG (PARAMETERS TRANSPORT WAITTIME CREDENTIALS VERIFIER)
    (repeatuntil (SPP.READP INPUTSTREAM) do (BLOCK))
    (for I to 4 do (* Echo Courier version number)
      (BOUT OUTPUTSTREAM (BIN INPUTSTREAM)))
    (SPP.SENDEOM OUTPUTSTREAM)
    (SPP.CLEAREOM INPUTSTREAM)
    (repeatuntil (SPP.READP INPUTSTREAM) do (BLOCK))
    (for I to 12 do (* Courier protocol bytes [...])
      (BIN INPUTSTREAM))
    (SETQ PARAMETERS (COURIER.READ INPUTSTREAM 'GAP 'SessionParameterObject))
    (SETQ TRANSPORT (COURIER.READ INPUTSTREAM 'GAP 'Sequence.TransportObject))
    (SETQ WAITTIME (COURIER.READ INPUTSTREAM 'GAP 'WaitTime))
    (SETQ CREDENTIALS (COURIER.READ INPUTSTREAM 'GAP 'credentials))
    (SETQ VERIFIER (COURIER.READ INPUTSTREAM 'GAP 'verifier))
    (* Courier RETURN command)
    (BOUT OUTPUTSTREAM 0)
    (BOUT OUTPUTSTREAM 2)
    (BOUT OUTPUTSTREAM 0)
```

```

(BOUT OUTPUTSTREAM 0)
(COURIER.WRITE OUTPUTSTREAM ' (0 0)
  ' GAP
  ' SessionHandle)
(SPP.SENDEOM OUTPUTSTREAM)
(SPP.FLUSH.TO.EOF INPUTSTREAM)
(with STREAM OUTPUTSTREAM (SETQ EOLCONVENTION 2))
(with STREAM INPUTSTREAM (SETQ IMAGEDATA OUTPUTSTREAM)
  (SETQ DEVICE (create FDEV
    DEVICENAME _ 'NSCHAT
    BIN _ (FUNCTION \REMOTE.BIN)
    PEEKBIN _ (FUNCTION \REMOTE.PEEKBIN)
    READP _ (FUNCTION \REMOTE.READP)
    EOF _ (FUNCTION \REMOTE.EOF)
    GETEOFPTR _ (FUNCTION NIL) using DEVICE)))
  (SETQ STRMBINFN (FUNCTION \REMOTE.BIN)))
(SPP.CLEAREOM INPUTSTREAM T)
(SPP.CLEARATTENTION INPUTSTREAM T)
(CHATSERVEROPENFN INPUTSTREAM OUTPUTSTREAM)
(SPP.CLOSE INPUTSTREAM T])

```

(NSCHAT.SERVER.ATTENTION

```

[LAMBDA (X) ; Edited 6-Oct-87 13:25 by Masinter
  (SPP.CLEARATTENTION X T)
  (LET (BYTE)
    (SELECTQ (SETQ BYTE (BIN X))
      (209 ; attention 209, whatever that is
        NIL)
    (PRINTOUT PROMPTWINDOW T "attention byte " BYTE " recieved."]))

```

(NSCHAT.SERVER.OUTPUTABORTED

```

[LAMBDA (STREAM X Y Z) (* Imm "10-Jan-86 00:32")
  NIL])

```

(NSCHAT.SERVER.WHENCLOSED

```

[LAMBDA (STREAM X Y Z) (* Imm "9-Jan-86 18:06")
  (CLOSEF? (SPPOUTPUTSTREAM STREAM))]

```

(SPP.EOMP

```

[LAMBDA (STREAM) ; Edited 6-Oct-87 13:04 by Masinter
  (EQ (fetch SPPEOFBITS of STREAM)
    \SPPFLAG.EOM)])

```

(\NSCHAT.BIN

```

[LAMBDA (STREAM) ; Edited 30-Oct-87 10:35 by Masinter
  (until (\REMOTE.READP STREAM) do (BLOCK))
  (\BUFFERED.BIN STREAM)])

```

(\REMOTE.EOF

```

[LAMBDA (STREAM) ; Edited 6-Oct-87 11:37 by Masinter
  ;; terminal EOF: never
  NIL])

```

(\REMOTE.PEEKBIN

```

[LAMBDA (STREAM NOERRORFLG) ; Edited 6-Oct-87 11:35 by Masinter
  ;; SPP peek: ignore EOM
  (until (SPP.READP STREAM) do (if (SPP.EOMP STREAM)
    then (SPP.CLEAREOM STREAM T))
    (BLOCK)))
  (PROG ((BYTE (\BUFFERED.PEEKBIN STREAM NOERRORFLG))
    (if (SPP.EOMP STREAM)
      then (SPP.CLEAREOM STREAM T))
    (RETURN BYTE]))

```

(\REMOTE.READP

```

[LAMBDA (STREAM) ; Edited 6-Oct-87 14:06 by Masinter
  ;; termal READP: ignore EOM
  (PROG NIL
    RETRY
    (COND
      ((SPP.READP STREAM)
        (RETURN T))
      ((SPP.EOMP STREAM)
        (SPP.CLEAREOM STREAM)
        (GO RETRY))
      (T (RETURN NIL]))

```

(GAP-SERVER-INIT

```

[LAMBDA NIL
  (LET* [(DEF (GETDEF 'GAP 'COURIERPROGRAMS))
        (LST (CDDDR (ASSOC 'Create (CL:GETF (CDR DEF)
                                              'PROCEDURES]
                    (CL:UNLESS (EQ (CL:GETF LST 'IMPLEMENTEDBY)
                                    'MAKE.NS.CHAT.CONNECTION)
                                (CL:SETF (CL:GETF LST 'IMPLEMENTEDBY)
                                          'MAKE.NS.CHAT.CONNECTION)
                                (PUTDEF 'GAP 'COURIERPROGRAMS DEF)))
        (COURIER.START.SERVER])
    )
  (FILESLOAD COURIERSERVE CHATSERVER)
  (DECLARE%: DONTEVAL@LOAD DOCOPY

```

(GAP-SERVER-INIT)

```

(COURIER.START.SERVER)
)

(DECLARE%: EVAL@COMPILE DONTCOPY

(FILESLOAD (SOURCE)
  MODARITH)

(FILESLOAD (LOADCOMP)
  LLNS SPP)
)

(DEFMACRO CHECK (X)
  `(CL:ASSERT ,X))

(DECLARE%: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILEVAR
(ADDTOVAR NLAMA )
(ADDTOVAR NLAML )
(ADDTOVAR LAMA MAKE.NS.CHAT.CONNECTION)
)

(PUTPROPS CHATSERVER-NS COPYRIGHT ("Xerox Corporation" 1987 1988))

```

FUNCTION INDEX

GAP-SERVER-INIT	3	NSCHAT.SERVER.OUTPUTABORTED	2	\REMOTE.EOF	2
MAKE.NS.CHAT.CONNECTION	1	NSCHAT.SERVER.WHENCLOSED	2	\REMOTE.PEEKBIN	2
NS.CHAT.SERVE	1	SPP.EOMP	2	\REMOTE.READP	2
NSCHAT.SERVER.ATTENTION	2	\NSCHAT.BIN	2		

MACRO INDEX

CHECK	3
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