

File created: 20-Sep-88 20:44:51 {ERINYES}<LISPUSERS>MEDLEY>SIMPLECHAT.;2

changes to: (FNS TTYCHAT)

previous date: 30-Oct-87 16:20:30 {ERINYES}<LISPUSERS>MEDLEY>SIMPLECHAT.;1

Read Table: XCL

Package: INTERLISP

Format: XCCS

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```
(RPAQQ SIMPLECHATCOMS ((FNS TTYCHAT TTYCHAT.EOSOP TTYCHAT.LOGIN TTYCHAT.TYPEOUT TTYCHAT.CLOSE)
  (VARS (TTYCHAT.TTBL NIL))
  (DECLARE\: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILEVARS (ADDVARS (NLAMA)
    (NLAML)
    (LAMA TTYCHAT)))))

(DEFINEQ
  (TTYCHAT
    (CL:LAMBDA
      (&OPTIONAL HOST LOGOPTION) ; Edited 20-Sep-88 20:44 by masinter
      (PROG (CONNECTION STREAMS OPENFN RESULT)
        (OR HOST (SETQ HOST DEFAULTCHATHOST))
        (COND
          ((NOT (OR HOST (SETQ HOST (PROMPTFORWARD "
            Host: " NIL "Enter name of host to chat to, or <cr> to abort" NIL
            NIL NIL (CHARCODE (CR)))))
            (RETURN NIL)))
          (COND
            ((NOT (SETQ OPENFN (FIND.CHAT.PROTOCOL HOST))) ; Don't know how to talk to this host
              (RETURN (CONCAT "Unknown Chat host: " HOST)))
            ((NOT (SETQ STREAMS (APPLY* (PROGN (SETQ HOST (CAR OPENFN))
              ; Value returned was (CanonicalHostName OpenFn)
              (CADR OPENFN))
              HOST)))
              (RETURN "Failed"))
            (T (LET* ((INSTREAM (CAR STREAMS))
              (OUTSTREAM (CDR STREAMS)))
              (STREAMPROP INSTREAM 'OLDEOSOP (|fetch| ENDOFSTREAMOP |of| INSTREAM))
              (|replace| ENDOFSTREAMOP |of| INSTREAM |with| (FUNCTION TTYCHAT.EOSOP))
              (COND
                ((NOT (FMEMB HOST CHAT.ALLHOSTS))
                  (SETQ CHAT.ALLHOSTS (CONS HOST CHAT.ALLHOSTS))
                  (SETQ CHAT.HOSTMENU)))
                (LET (TYPEOUT (KEY (|fetch| (LINEBUFFER KEYBOARDSTREAM) |of| \\LINEBUF.OFD))
                  CH
                  (STATE (LIST ' :BINARY))
                  (OKEY \\CURRENTKEYACTION)
                  (NKEY NIL))
                  (CL:UNWIND-PROTECT
                    (PROGN (COND
                      ((EQ KEY \\KEYBOARD.STREAM)
                        (SETQ \\CURRENTKEYACTION (SETQ NKEY
                          (LET ((KEYACTION (KEYACTIONTABLE
                            \\DEFAULTKEYACTION)))
                            (|for| PAIR |in| (CURRENTINTERRUPTS
                              KEYACTION)
                              |when| (LEQ (CAR PAIR)
                                255)
                              |do| (INTCHAR (CAR PAIR)
                                NIL NIL KEYACTION))
                                ; turn off all interrupts in charset 0
                                (|for| PAIR |in| CHAT.INTERRUPTS
                                  |do| (INTCHAR (CAR PAIR)
                                    NIL NIL KEYACTION))
                                (|for| PAIR |in| CHAT.KEYACTIONS
                                  |do| (KEYACTION (CAR PAIR)
                                    (CDR PAIR)
                                    KEYACTION))
                                    KEYACTION))))))
                      (PRINTOUT T "[Connected to " HOST ", type ^] to escape]" T)
                      (SETQ TYPEOUT (ADD.PROCESS ` (TTYCHAT.TYPEOUT
                        ',INSTREAM
                        ',(GETSTREAM T 'OUTPUT)
                        ',STATE
                        ',(THIS.PROCESS))
                        'NAME
                        'CHAT.TYPEOUT)))
                      (AND (NEQ LOGOPTION 'NONE)
                        (TTYCHAT.LOGIN INSTREAM OUTSTREAM HOST LOGOPTION))
                      (PROG NIL
                        WAIT-FOR-TYPEIN
                        (COND
                          ((NULL (CAR STATE))
```

```

        (RETURN NIL)))
      (COND
        ((NOT (READP KEY))
         (GO WAIT)))
      GOT-CHAR
      (SETQ CH (BIN KEY))
      (COND
        ((EQ CH CHAT.CONTROLCHAR)
         (SETQ CH (LOGAND (BIN KEY)
                           31)))
        ((EQ CH CHAT.METACHAR)
         (SETQ CH (LOGOR (BIN KEY)
                           128)))
        ((EQ CH (CHARCODE "^"))
         (FORCEOUTPUT OUTSTREAM)
         (SELECTQ (ASKUSER NIL NIL "Chat command:" '((B . "inary")
                                                         (T . "ext")
                                                         (C . "lose")
                                                         (" "))))
         (B (RPLACA STATE ':BINARY))
         (T (RPLACA STATE ':TERMINAL))
         (C (RETURN NIL))
         NIL)
        (TERPRI T)
        (GO NO-CHAR))
      ((IGEQ CH \\MAXTHINCHAR)
       (COND
        ((EQ (LRSH CH 8)
              1)
         (SETQ CH (LOGOR 128 (LOGAND CH 127))))
        (T (RINGBELLS)
            (GO NO-CHAR)))))
      (BOUT OUTSTREAM CH)
      (COND
        ((READP KEY)
         (GO GOT-CHAR)))
      NO-CHAR
      (COND
        ((NULL (CAR STATE))
         ;; check here 'cause the other process might have aborted
         (RETURN NIL)))
        (FORCEOUTPUT OUTSTREAM)
      WAIT
      (COND
        ((NULL (CAR STATE))
         (RETURN NIL)))
        (WAITFORINPUT 1000)
        (GO WAIT-FOR-TYPEIN)))
      ;; here be unwind protect clauses
      (COND
        ((EQ \\CURRENTKEYACTION NKEY)
         (SETQ \\CURRENTKEYACTION OKEY)))
        (ADD.PROCESS '(TTYCHAT.CLOSE ',TYPEOUT ',INSTREAM ',OUTSTREAM))))
      (RETURN HOST))))

```

**(TTYCHAT.EOSOP**

(LAMBDA (STREAM)

; Edited 30-Oct-87 13:32 by Masinter

;;; Return -1 to indicate EOS to CHAT, and restore the streams EOS op incase it's needed for other things.

```

(|replace| ENDOFSTREAMOP |of| STREAM |with| (OR (STREAMPROP STREAM 'EOSOP)
                                                  (FUNCTION \\EOSERROR)))
-1))

```

**(TTYCHAT.LOGIN**

(LAMBDA (INSTREAM OUTSTREAM HOST OPTION)

; Edited 30-Oct-87 13:47 by Masinter

```

  (PROG ((OSTYPE (GETOSTYPE HOST))
         (LOGINFO (GETHOSTINFO HOST 'LOGINFO))
         NAME/PASS COM)
    (OR LOGINFO (RETURN))
    (SETQ NAME/PASS (\\INTERNAL/GETPASSWORD HOST NIL NIL NIL NIL OSTYPE))
    (SETQ COM (COND
      (OPTION)
      ((ASSOC 'ATTACH LOGINFO)
       (OR (CHAT.LOGINFO INSTREAM HOST (CAR NAME/PASS))
            'LOGIN))
      (T
       ;; Don't know how to do anything but login, so silly to try anything
       ;; else
       'LOGIN)))
    (COND
      ((NULL (SETQ LOGINFO (ASSOC COM LOGINFO)))
       (|printout| PROMPTWINDOW T "Login option " COM " not implemented for this type of host"))
      (T (|for| X |in| (CDR LOGINFO) |do| (SELECTQ X

```

```

(CR (BOUT OUTSTREAM (CHARCODE CR))
  (FORCEOUTPUT OUTSTREAM))
(LF (BOUT OUTSTREAM (CHARCODE LF))
  (FORCEOUTPUT OUTSTREAM))
(USERNAME (PRIN3 (CAR NAME/PASS)
  OUTSTREAM))
(PASSWORD (PRIN3 (\\DECRYPT.PWD (CDR NAME/PASS))
  OUTSTREAM))
(WAIT ; Some systems do not permit typeahead
  (COND
    ((NOT (CHAT.FLUSH&WAIT INSTREAM))
      ; Couldn't sync, so wait longer.
      (DISMISS CHAT.WAIT.TIME)))
    (DISMISS CHAT.WAIT.TIME)))
(PRIN3 X OUTSTREAM))
(FORCEOUTPUT OUTSTREAM))))))

```

**(TTYCHAT.TYPEOUT**

```

(LAMBDA (INSTREAM TERMINAL STATE PROC) ; Edited 30-Oct-87 16:19 by masinter
  (SETTERMTABLE (OR TTYCHAT.TTBL (SETQ TTYCHAT.TTBL (LET ((TT (COPYTERMTABLE 'ORIG)))
    (|for| I |from| 0 |to| 31 |do| (ECHOCHAR I 'REAL TT))
    (ECHOCHAR (CHARCODE LF)
      'IGNORE TT)
    TT))))))

  (LET (MSG CH LAST-CHAR SPACE-WIDTH)
    (OR (EQUAL (CHARWIDTH (CHARCODE "i")
      TERMINAL)
      (CHARWIDTH (CHARCODE "w")
        TERMINAL))
      (DSPFONT DEFAULTFONT TERMINAL))
    (SETQ SPACE-WIDTH (CHARWIDTH (CHARCODE SPACE)
      TERMINAL))
    (|while| (IGEQ (SETQ CH (BIN INSTREAM))
      0)
      |do| ; Print any protocol related msgs that might have come along
        ; while we where asleep

        (IF (EQ (CAR STATE)
          ' :BINARY)
          THEN (BOUT TERMINAL CH)
          ELSE (SELCHARQ CH
            (LF (|if| (EQ LAST-CHAR (CHARCODE CR))
              |then| ; ignore
              NIL))
            (^H (DSPBACKUP SPACE-WIDTH TERMINAL))
            (PROGN (SETQ LAST-CHAR CH)
              (BOUT TERMINAL CH))))))
    (PRINTOUT TERMINAL "[Connection closed remotely]" T) ; tell other process we aborted
    (RPLACA STATE NIL)
    (WAKE.PROCESS PROC T)))

```

**(TTYCHAT.CLOSE**

```

(LAMBDA (TYPEOUT INSTREAM OUTSTREAM) ; Edited 30-Oct-87 14:39 by Masinter

```

```

;;; Close the streams for a connection if they are open.

```

```

  (DEL.PROCESS TYPEOUT)
  (COND
    ((OPENP INSTREAM)
      (CLOSEF INSTREAM)))
  (COND
    ((OPENP OUTSTREAM)
      (CLOSEF OUTSTREAM))))
)

(RPAQQ TTYCHAT.TTBL NIL)

(DECLARE\ : DONTVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILERVERS

(ADDTOVAR NLAMA )

(ADDTOVAR NLAML )

(ADDTOVAR LAMA TTYCHAT)
)

(PUTPROPS SIMPLECHAT COPYRIGHT ("Xerox Corporation" 1987 1988))

```

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FUNCTION INDEX

TTYCHAT .....1    TTYCHAT.CLOSE .....3    TTYCHAT.EOSOP .....2    TTYCHAT.LOGIN .....2    TTYCHAT.TYPEOUT ...3

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VARIABLE INDEX

TTYCHAT.TTBL .....3

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