

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))
    (LOGININFO (GETHOSTINFO HOST 'LOGININFO))
    NAME/PASS COM)
    (OR LOGININFO (RETURN))
    (SETQ NAME/PASS (\\INTERNAL/GETPASSWORD HOST NIL NIL NIL NIL OSTYPE))
    (SETQ COM (COND
      (OPTION)
      ((ASSOC 'ATTACH LOGININFO)
        (OR (CHAT.LOGININFO 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 LOGININFO (ASSOC COM LOGININFO)))
        (|printout| PROMPTWINDOW T "Login option " COM " not implemented for this type of host"))
      (T (|for| X |in| (CDR LOGININFO) |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\ : DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILERVERS
```

```
(ADDTOVAR NLAMA )
```

```
(ADDTOVAR NLAML )
```

```
(ADDTOVAR LAMA TTYCHAT)
```

)

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

FUNCTION INDEX

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TTYCHAT.TTBL3
