

File created: 7-Sep-88 17:08:57 {ERINYES}<LISPUSERS>MEDLEY>CHATSERVER.;11

changes to: (FNS CHATSERVEROPENFN)

previous date: 19-May-88 00:37:49 {ERINYES}<LISPUSERS>MEDLEY>CHATSERVER.;10

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

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## (RPAQQ CHATSERVERCOMS

```
[(FNS CHATSERVER CHATSERVERWHENCLOSEDFN CHATSERVEROPENFN DOBE REQUIRED.LOGIN
SERVER-EXEC SWEEP.OFD \CLEARSSYBUF PROMPTFORWORD \CREATELINEBUFFER
\PROMPTFORWORDBIN \REMOTE.BIN \REMOTE.EXEC.OUTCHARFN CHATSERVER.FONT)
(DECLARE%: DONTEVAL@LOAD DOCOPY (VARS (DISPLAYTERMFLG 'DM))
(INITVARS (CHATSERVER.PROFILE)
(\SIMPLEIMAGEOPS))
(P (SETQ CHATSERVERTTBL (COPYTERMTABLE 'ORIG))
(for I from 1 to 8 do (ECHOCHAR I 'IGNORE CHATSERVERTTBL)
(ECHOCHAR I 'IGNORE ASKUSERTTBL))
(ECHOCHAR (CHARCODE CR)
'SIMULATE CHATSERVERTTBL)
(ECHOCHAR (CHARCODE CR)
'SIMULATE ASKUSERTTBL)
(ECHOCHAR 0 'SIMULATE ASKUSERTTBL)
(ECHOCHAR 0 'SIMULATE CHATSERVERTTBL)))
(ADDVARS (\SWEPT.OFDS))
(DECLARE%: EVAL@COMPILE DONTCOPY
(P (CHECKIMPORTS '(LLCHAR ATERM IMAGEIO FILEIO ATBL AOFD)
T)))
[COMS (FNS SIMPLECHATSERVER)
(INITVARS (CHATSERVERWINDOW)
(CHATSERVERWINDOWREGION '(11 228 392 190]
(MACROS \SYNCODE)
(DECLARE%: DONTEVAL@LOAD DOCOPY (FILES CL-TTYEDIT SIMPLECHAT)
(ADVISE MENU CHAT RINGBELLS))
(COMMANDS "QUIT" "SAY")
(DECLARE%: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILERVARS
(ADDVARS (NLAMA)
(NLAML)
(LAMA \REMOTE.BIN CHATSERVEROPENFN]))
```

(DEFINEQ

## (CHATSERVER

```
[LAMBDA NIL ; Edited 18-May-88 23:56 by amd
(PROMPTPRINT "Remote CHAT connection attempted")
(PRINTOUT T "Remote " HERALDSTRING T T)
(CL:UNWIND-PROTECT
[COND
((AND (LISTGET CHATSERVER.PROFILE 'IDLE.ONLY)
(NOT \IDLING))
(PRINTOUT T " Machine not in idle mode, login not allowed " T)
(DISSMISS 10000))
(T (COND
((LET ((PROFILE (APPEND CHATSERVER.PROFILE IDLE.PROFILE)))
(OR (REQUIRED.LOGIN PROFILE)
(REQUIRED.LOGIN PROFILE)
(REQUIRED.LOGIN PROFILE))))
; try three times
(PROMPTPRINT "Remote CHAT exec in use")
(PRINTOUT T (IF \IDLING
THEN "[Idling, "
ELSE "[Not in Idle, ")
```



(FULLNAME OUTSTREAM)  
(FULLNAME INSTREAM))

**THEN** (RESET)  
; abort  
**ELSE** NIL  
; ignore  
]

**(CHATSERVER]**

(SETQ \SWEPT.OFDS (REMOVE OUTSTREAM \SWEPT.OFDS)))

**(DOBE**

[LAMBDA NIL  
(FLUSHOUTPUT T T)]

**(REQUIRED.LOGIN**

[LAMBDA (PROFILE) ; Edited 30-Oct-87 16:13 by masinter

(PROG ((GROUP (LISTGET PROFILE 'ALLOWED.LOGINS))  
(AUTHTYPE (LISTGET PROFILE 'AUTHENTICATE))  
(NAME (USERNAME NIL NIL T))

PWD)

(COND

((NLISTP GROUP) ; no login check at all

(COND

((LISTGET PROFILE 'FORGET)  
(SETPASSWORD NIL NAME "")))

(RETURN T))

(COND

((EQ 0 (NCHARS NAME)) ; Not logged in, so don't complain about anything

(RETURN T))

CLEAR

(CLEARBUF T T)

(SETQ NAME (USERNAME NIL NIL T))

(SETQ PWD NIL)

RETRY

(COND

[(AND (EQUAL GROUP '(T))

NAME)

; Only previous user allowed to login

(SETQ PWD (**PROMPTFORWARD** (CONCAT NAME " password:")

NIL NIL NIL '\*])

(T [SETQ NAME (**PROMPTFORWARD** "Login (<return> to terminate): " NAME

NIL T NIL T (CHARCODE (CR LF]

(**if** (MEMBER NAME ('("Logon" "ogon"))

**then** (GO CLEAR))

(SETQ PWD (**PROMPTFORWARD** " (password) " NIL NIL T '\*))

(TERPRI T))

(**if** (EQUAL PWD "Logon")

**then** (GO CLEAR))

(RETURN (COND

((NULL PWD)

NIL)

([AND (OR (MEMB T GROUP)

(MEMB '\* GROUP))

(\IDLE.IS.PREVIOUS NAME PWD (EQUAL GROUP '(T)

;; Previous user is allowed to login. Also, if only allowed login is old user, but old password

;; is unknown, allow it

T)

((\IDLE.ISMEMBER GROUP NAME PWD)

(PROG1 (COND

((COND

[AUTHTYPE (\IDLE.AUTHENTICATE NAME PWD AUTHTYPE

(NOT (MEMB T GROUP)

(T T))

(AND (LISTGET PROFILE 'FORGET)

(SETPASSWORD NIL NAME PWD))

(SETQ \IDLE.PASSWORD.SET T)

T))

```
(TERPRI T))
(T (PRINTOUT T "login incorrect" T)
NIL))
```

(SERVER-EXEC

```
[LAMBDA NIL
(\CALLME 'T)
(do (EXEC :TOP-LEVEL-P T))
```

; Edited 6-Oct-87 16:37 by Masinter

(SWEEP.OFD

```
[LAMBDA NIL (* Imm "15-Mar-86 14:40")
(while \SWEPT.OFDS
do (for X in \SWEPT.OFDS
do (if (if (NLISTP X)
then [OR (NOT (OPENP X 'OUTPUT))
(NOT (NLSETQ (FORCEOUTPUT X)
else T)
then (SETQ \SWEPT.OFDS (REMOVE X \SWEPT.OFDS)))
(BLOCK]))
```

(\CLEARSYSBUF

```
[LAMBDA (ALLFLG)
(LET ((KEY (fetch (LINEBUFFER KEYBOARDSTREAM) of \LINEBUF.OFD)))
(while (READP KEY) do (BIN KEY]))
```

; Edited 30-Oct-87 11:07 by Masinter

(PROMPTFORWARD

```
[LAMBDA (PROMPT.STR CANDIDATE.STR GENERATE?LIST.FN ECHO.CHANNEL DONTECHOTYPEIN.FLG
URGENCY.OPTION TERMINCHARS.LST KEYBD.CHANNEL)
(* Imm "16-Jan-86 18:07")
```

```
(DECLARE (SPECVARS TERMINCHARS.LST ECHO.CHANNEL DONTECHOTYPEIN.FLG))
[COND
```

```
((NOT (TERMTABLEP \PROMPTFORWARDTTBL)) ; Initializes the special readtable on the first time
; through.
```

```
(SETQ \PROMPTFORWARDTTBL (bind (TTBL_ (COPYTERMTABLE 'ORIG)) for CHAR
from 0 to 31
do (SELCHARQ CHAR
((EOL ESCAPE SPACE LF TAB))
(ECHOCHAR CHAR 'INDICATE TTBL))
finally (PROGN (ECHOMODE NIL TTBL)
(CONTROL T TTBL)
(RETURN TTBL)
```

```
(RESETLST
```

```
(RESETSAVE (SETTERMTABLE \PROMPTFORWARDTTBL))
(PROG ([CHARBUFFER (COND
(CANDIDATE.STR (DREVERSE (CHCON CANDIDATE.STR)
TTYD X0Y0 TIMELIMITEXPIRED? BELLBEENHEARD? CANDIDATE.LENGTH CHAR
BEGUNTYPING? RUBBING? ?HELPMMSGTRIEDP ?HELPMGLIST TIMER)
(DECLARE (SPECVARS TTYD X0Y0 TIMELIMITEXPIRED? BELLBEENHEARD? CHARBUFFER
RUBBING?))
```

```
[COND
[(EQMEMB 'TTY URGENCY.OPTION) ; If we're going to switch the TTY process, better do
; it before looking for TTYDISPLAYSTREAM etc.
[OR (TTY.PROCESSP)
(RESETSAVE (TTY.PROCESS (THIS.PROCESS)
(AND \PROMPTFORWARD.CURSOR (RESETSAVE (CURSOR \PROMPTFORWARD.CURSOR)
(T (OR (FIXP URGENCY.OPTION)
(SELECTQ URGENCY.OPTION
((NIL T)
T)
NIL)
(\ILLEGAL.ARG URGENCY.OPTION)
(SETQ ECHO.CHANNEL (GETSTREAM (OR ECHO.CHANNEL T)
'OUTPUT)) ; Normalize the echo channel.
(CL:WHEN (SETQ TTYD (DISPLAYSTREAMP ECHO.CHANNEL))
(RESETSAVE (TTYDISPLAYSTREAM ECHO.CHANNEL)))
```



```

                                (\PROMPTFORWORDERASE)))
                                (SETQ BEGUNTYPING? T)
                                (SETQ CHARBUFFER))
                                (T (SETQ RUBBING?)))
                                NIL)
(RETTYPE (COND
  (CHARBUFFER (COND
    ((NEQ DONTECHOTYPEIN.FLG T)
     (\PROMPTFORWORDERASE)))
    (\PROMPTFORWORDRETYPE))
  (T (SETQ RUBBING?)))
  NIL)
(WORDEDELETE (COND
  [CHARBUFFER
  (SETQ BEGUNTYPING? T)
  (bind (SPACEP _ (SYNTAXP (CAR CHARBUFFER)
                            'WORDSEPR
                            \PROMPTFORWORDTTBL))
    do (\PROMPTFORWORDBS)
      (COND
        ((NULL CHARBUFFER)
         (RETURN)))
        (SETQ CHAR (CAR CHARBUFFER))
        (COND
          [(NOT SPACEP)
           (COND
             ((SYNTAXP CHAR 'WORDSEPR
                          \PROMPTFORWORDTTBL)
              (RETURN)]
            ((NOT (SYNTAXP CHAR 'WORDSEPR
                               \PROMPTFORWORDTTBL))
             (SETQ SPACEP NIL)]
          (T (SETQ RUBBING?)))
        NIL)
  (CNTRLV (COND
    ((NOT DONTECHOTYPEIN.FLG)
     ;; Well, so echo the ^V SO THAT THE LOSER CAN SEE THAT HE'S IN THE
     ;; STATE OF WAITING FOR THE NEXT CHARACTER AFTER A ^V
     (COND
       ((AND RUBBING? (NOT TTYD))
        (BOUT ECHO.CHANNEL (CHARCODE \)))
        (SETQ RUBBING?)))
       (PRIN3 (CHARACTER CHAR)
              ECHO.CHANNEL)))
    (COND
      ((NULL (SETQ CHAR (\PROMPTFORWORDBIN
                        KEYBD.CHANNEL TTYD
                        URGENCY.OPTION TIMER T)))
       (RETURN T)))
    (COND
      ((AND TTYD (NOT DONTECHOTYPEIN.FLG)
        (NULL (DSPRUBOUTCHAR TTYD CHAR)))
       ;; Well, we tried to erase the ^V so that the typed-in charcter could be echoed,
       ;; but apparently the ^V was split between lines.
       (\PROMPTFORWORDERASE)
       (\PROMPTFORWORDRETYPE)))
      T)
  (COND
    ((EQ CHAR (CHARCODE ?))
     (FRESHLINE ECHO.CHANNEL)
     [COND
       ((AND GENERATE?LIST.FN (NOT ?HELPMMSGTRIEDP))
        (SETQ ?HELPMMSGLIST (OR (STRINGP GENERATE?LIST.FN)
                                (APPLY* GENERATE?LIST.FN
                                       PROMPT.STR CANDIDATE.STR)))
        )
       (SETQ ?HELPMMSGTRIEDP T))

```

```

((NOT ?HELPMMSGTRIEDP)
 (SETQ ?HELPMMSGLIST '??)
(COND
 ((LISTP ?HELPMMSGLIST)
 (PRIN3 ' { ECHO.CHANNEL)
 (PRIN3 (CONSTANT (CHARACTER (CHARCODE SPACE)))
 ECHO.CHANNEL)
 [MAPC ?HELPMMSGLIST (FUNCTION (LAMBDA (X)
 (PRIN1 X ECHO.CHANNEL)
 (PRIN3
 (CONSTANT
 (CHARACTER (CHARCODE
 SPACE)))
 ECHO.CHANNEL]
 (PRIN3 ' } ECHO.CHANNEL))
 (T (PRIN1 ?HELPMMSGLIST ECHO.CHANNEL)
 ; FOO we'd really like this FRESHLINE to be just a
 ; MOVETO some initial position.
 ))
 (FRESHLINE ECHO.CHANNEL)
 (GO PROMPTAGAIN))
 (T T))) ; If the SELCHARQ doesn't select out any of its
 ; 'special' characters, then just fall through here
(COND
 ((AND (NOT BEGUNTYPING?)
 CHARBUFFER)
 ;; This is the case of the CANDIDATE.STR having been proffered, but the user starts
 ;; typing something else.
 (COND
 ((EQ CHAR (CHARCODE SPACE))
 ;; Special kludge for benefit of those with old space-terminating habits: If there is a
 ;; candidate string, and the first thing you do is type a space, then the space
 ;; terminates even if it isn't a member of TERMINCHARS.LST
 (RETURN)))
 (COND
 ((NOT DONTECHOTYPEIN.FLG)
 ; Don't need to do anything if type-in isn't being
 ; echoed
 (\PROMPTFORWORDERASE)))
 (SETQ CHARBUFFER CHAR)
 (push CHARBUFFER CHAR)
 (SETQ BEGUNTYPING? T)
 (COND
 ((NEQ DONTECHOTYPEIN.FLG T) ; Well, so echo the typed-in character already!
 (COND
 ((AND RUBBING? (NOT TTYD))
 (PRIN3 '\ ECHO.CHANNEL)
 (SETQ RUBBING?)))
 (BOUT ECHO.CHANNEL (OR DONTECHOTYPEIN.FLG CHAR]
[SETQ CHARBUFFER (COND
 [TIMELIMITEXPIRED?
 ; Ha, we overflowed the time limit.
 (COND
 (CANDIDATE.STR (CONCAT CANDIDATE.STR]
 (CHARBUFFER (CONCATCODES (DREVERSE CHARBUFFER]
 (\CARET.DOWN ECHO.CHANNEL)
 (RETURN CHARBUFFER))))])

```

## (\CREATELINEBUFFER

[LAMBDA (TERMINAL.STREAM)

; Edited 13-Apr-87 22:57 by bvm:

;; Create a new stream that buffers the raw input from TERMINAL.STREAM (default is the keyboard).

```

(LET* ([STREAM (\OPENFILE '{LINEBUFFER} 'BOTH 'NEW ' ((CHARSET T]
 (DEV (fetch (STREAM DEVICE) of STREAM))
 EOFMETHOD)

```

```
(replace LINEBUFSTATE of STREAM with READING.LBS)
(replace (LINEBUFFER KEYBOARDSTREAM) of STREAM with (OR TERMINAL.STREAM
\KEYBOARD.STREAM))

(replace USERCLOSEABLE of STREAM with NIL)
(replace UServisible of STREAM with NIL) ; Other linebuffer fields default properly
[replace ENDOFSTREAMOP of STREAM with (FUNCTION (LAMBDA (STREAM)
(CL:FUNCALL \RefillBufferFn]
(if (AND TERMINAL.STREAM (NEQ (SETQ EOFMETHOD (fetch (FDEV EOFP)
of (fetch (STREAM DEVICE)
TERMINAL.STREAM)))
'NIL))
then
;; Need to install an eof method for the buffered stream that looks at TERMINAL.STREAM when
;; the buffer runs out. This is optimized away for the normal keyboard case, which never runs
;; out.
(replace (STREAM DEVICE) of STREAM with (SETQ DEV (NCREATE
'FDEV DEV)))
; Copy the basic linebuffer device
(replace (FDEV EOFP) of DEV with EOFMETHOD))
STREAM])
```

### (\PROMPTFORWORDBIN

```
[LAMBDA (INSTREAM DISPLAYECHOSTREAM URGENCY.OPTION TIMER)
; Edited 7-Oct-87 11:25 by Masinter
; Takes in one character from the
; KEYBD.CHANNEL
(DECLARE (USEDFREE TERMINCHARS.LST TIMELIMITEXPIRED? BELLBEENHEARD?))
(PROG ((WAITINTERVAL.secs 15)
(TTYWAITLIMIT (if URGENCY.OPTION
then (if BELLBEENHEARD?
then 30000
else 0)))
[BROADURGENCY? (AND URGENCY.OPTION (NOT (FIXP URGENCY.OPTION]
CHAR READABLE (KEYSTREAM (fetch (LINEBUFFER KEYBOARDSTREAM) of \LINEBUF.OFD)))
NEXTROUND
[if BROADURGENCY?
then (SETQ TIMER (SETUPTIMER WAITINTERVAL.secs TIMER 'SECONDS]
LP (if (SETQ READABLE (OR INSTREAM (NEQ KEYSTREAM \KEYBOARD.STREAM)
(WAIT.FOR.TTY TTYWAITLIMIT)))
then
; Ready to read
(if (SETQ CHAR (if (NULL INSTREAM)
then (if (READP KEYSTREAM T)
then (BIN KEYSTREAM))
elseif (READP INSTREAM T)
then (BIN INSTREAM)
elseif (EOF? INSTREAM)
then (CAR TERMINCHARS.LST)))
then (RETURN CHAR))
(if DISPLAYECHOSTREAM
then ; \TTYBACKGROUND so that a caret will flash
(\TTYBACKGROUND)
else (BLOCK)))
(if (AND TIMER (TIMEREXPIRED? TIMER 'SECONDS))
then (if (AND URGENCY.OPTION (NOT BROADURGENCY?))
then (SETQ TIMELIMITEXPIRED? T)
(RETURN))
else (SETQ TTYWAITLIMIT 30000)
(AND READABLE (GO LP)))
(if (NULL BELLBEENHEARD?)
then (SETQ BELLBEENHEARD? T)
(RINGBELLS))
[if (AND BROADURGENCY? (TTY.PROCESSP))
then
;; Double the wait interval time (the time between 'flashings') up to about 2 minutes, so that it
;; doesn't become obnoxious
(SETQ WAITINTERVAL.secs (IMIN (LLSH WAITINTERVAL.secs 1)
(TIMES 2 60]
(GO NEXTROUND]))
```



**(\REMOTE.BIN**

[CL:LAMBDA (STREAM) ; Edited 30-Oct-87 10:47 by Masinter  
(CL:MACROLET

```

  [(REALBIN NIL ' (CL:FUNCALL (FETCH (FDEV BIN)
                                     (fetch (STREAM DEVICE)
                                             STREAM))
                               STREAM))
   (CLR NIL ' (while (READP STREAM) do (REALBIN]
  (PROG (CH)
    RETRY
      (SELCHARQ (SETQ CH (REALBIN))
        (^E (CLR)
            (ERROR!))
        (^D (CLR)
            (RESET))
        (^B (CLR)
            (\DOHELPINTERRUPT1)
            (GO RETRY))
        (^T (CL:CATCH 'DONE
                  (PROG ((CNT 0)
                        (FRESHLINE T)
                        [BACKTRACE -2 T NIL T
                          (FUNCTION (LAMBDA (X)
                                      (PRIN1 (if (EQ CNT 0)
                                                  then "Running in "
                                                  else " in ")
                                              T)
                                      (CL:PRIN1 X *TERMINAL-IO*)
                                      (if (IGEQ (add CNT 1)
                                             5)
                                          then (CL:THROW 'DONE NIL]
                                                  (FRESHLINE T)))
                        (GO RETRY))
        NIL)
      (RETURN CH])

```

**(\REMOTE.EXEC.OUTCHARFN**

[LAMBDA (STREAM CHARCODE) ; Edited 11-Oct-87 23:17 by Masinter  
; OUTCHARFN for standard files  
[SELECTC (**ffetch** CCECHO **of** (\SYNCODE \PRIMTERMSA CHARCODE))  
(INDICATE.CCE ; Make sure that all the chars in the indicate-string  
; fit on the line or wrap-around together.

```

      (CL:MAP NIL #' [LAMBDA (CH)
                    (CL:WRITE-CHAR CH STREAM)
                    (CL:INCF (ffetch CHARPOSITION of STREAM]
                    (\INDICATESTRING CHARCODE)))
      (IGNORE.CCE)
      (PROGN (if (EQ CHARCODE ERASECHARCODE)
                then (BOUT STREAM (CHARCODE ^H))
                    (BOUT STREAM (CHARCODE SPACE))
                    (BOUT STREAM (CHARCODE ^H))
                    (add (fetch CHARPOSITION of STREAM)
                        -1)
                else (SELCHARQ CHARCODE
                        ((EOL CR LF)
                         (BLOCK)
                         [COND
                          ([OR (EQ \CURRENTDISPLAYLINE -1)
                               (AND (SMALLP \CURRENTDISPLAYLINE)
                                    (EQ \#DISPLAYLINES (SETQ \CURRENTDISPLAYLINE
                                                                (ADD1
                                                                  \CURRENTDISPLAYLINE
                                                                    ]
                                                                (SETQ \CURRENTDISPLAYLINE 0)
                                                                (LET ((KEYSTREAM (fetch (LINEBUFFER KEYBOARDSTREAM)

```

```
{DSK}<home>larry>ilisp>medley>lispusers>CHATSERVER.;1 (\REMOTE.EXEC.OUTCHARFN
```

```
of \LINEBUF.OFD)))  
(COND  
  ((READP KEYSTREAM))  
  (T (PRIN1 \STOPSCROLLMESSAGE STREAM)  
      (SELCHARQ (BIN KEYSTREAM)  
                (^B (INTERRUPT))  
                (^E (ERROR!))  
                NIL)  
      ; Now erase the message  
      (FRPTQ (NCHARS \STOPSCROLLMESSAGE)  
            (\REMOTE.EXEC.OUTCHARFN  
             STREAM ERASECHARCODE))  
      (BLOCK]  
(BOUT STREAM (SELECTC (ffetch EOLCONVENTION of STREAM)  
                  (CR.EOLC (CHARCODE CR))  
                  (LF.EOLC (CHARCODE LF))  
                  (CRLF.EOLC  
                   ;; The CRLF is EOL only if the bytes are immediately adjacent in the  
                   ;; stream, with no additional encoding bytes  
                   (BOUT STREAM (CHARCODE CR))  
                   (CHARCODE LF))  
                   (SHOULDNT))))  
      (freplace CHARPOSITION of STREAM with 0))  
(ESCAPE (BOUT STREAM (CHARCODE $))  
        (add (ffetch CHARPOSITION of STREAM  
             1))  
(TAB (SPACES (DIFFERENCE 8 (IMOD (POSITION)  
                                 8))  
      STREAM))  
(PROGN (BOUT STREAM CHARCODE)  
      (add (ffetch CHARPOSITION of STREAM  
           1]  
CHARCODE] )
```

### (CHATSERVER.FONT

```
[LAMBDA (STREAM FONT) (* Imm "20-Nov-86 00:01")  
  (SELECTQ DISPLAYTERMFLG  
    (DM [COND  
      ((OR (EQ BOLDFONT FONT)  
           (EQ FONT LAMBDAFONT))  
       (BOUT STREAM (CHARCODE ^N)))  
      (T (BOUT STREAM (CHARCODE ^X))  
         (BOUT STREAM (CHARCODE "^]"])  
        NIL])  
    )
```

```
(DECLARE%: DONTEVAL@LOAD DOCOPY
```

```
(RPAQQ DISPLAYTERMFLG DM)
```

```
(RPAQ? CHATSERVER.PROFILE )
```

```
(RPAQ? \SIMPLEIMAGEOPS )
```

```
(SETQ CHATSERVERTTBL (COPYTERMTABLE 'ORIG))
```

```
(for I from 1 to 8 do (ECHOCHAR I 'IGNORE CHATSERVERTTBL)  
                    (ECHOCHAR I 'IGNORE ASKUSERTTBL))
```

```
(ECHOCHAR (CHARCODE CR)  
  'SIMULATE CHATSERVERTTBL)
```

```
(ECHOCHAR (CHARCODE CR)  
  'SIMULATE ASKUSERTTBL)
```

```
(ECHOCHAR 0 'SIMULATE ASKUSERTTBL)
```

```
(ECHOCHAR 0 'SIMULATE CHATSERVERTTBL)
)
```

```
(ADDTTOVAR \SWEPT.OFDS )
```

```
(DECLARE%: EVAL@COMPILE DONTCOPY
```

```
(CHECKIMPORTS ' (LLCHAR ATERM IMAGEIO FILEIO ATBL AOFD)
T)
)
```

```
(DEFINEQ
```

**(SIMPLECHATSERVER**

```
[LAMBDA (INSTREAM OUTSTREAM)
```

; Edited 6-Oct-87 14:37 by Masinter

```
(if NIL
```

```
  then (PRINTOUT OUTSTREAM "Simple chat echo service")
```

```
        (do (\OUTCHAR OUTSTREAM (BIN INSTREAM)))
```

```
  else (PROG ([WINDOW (OR CHATSERVERWINDOW (SETQ CHATSERVERWINDOW (CREATEW
CHATSERVERWINDOWREGION
"Chat
Listener"]
```

```
      (KEYSTREAM \KEYBOARD.STREAM)
```

```
      MYSTREAM)
```

```
(printout OUTSTREAM "Xerox Lisp Chat echo service" T)
```

```
(CLEARW WINDOW)
```

```
(SETQ MYSTREAM (GETSTREAM WINDOW 'OUTPUT))
```

```
[WINDOWPROP WINDOW 'CLOSEFN (FUNCTION (LAMBDA (W)
      (SETQ SIMPLECHATSERVERDONE T)
      (AND (OPENWP W)
```

```
        (WINDOWPROP W 'TITLE
          "Connection closed"]
```

```
(WINDOWPROP WINDOW 'PROCESS (THIS.PROCESS))
```

```
(bind CH do (while (READP INSTREAM) do (\OUTCHAR OUTSTREAM
      (SETQ CH (BIN INSTREAM)))
      (\OUTCHAR MYSTREAM CH))
```

```
(BLOCK)
```

```
(while (READP KEYSTREAM) do (\OUTCHAR OUTSTREAM
      (SETQ CH (BIN KEYSTREAM)
      ))
      (\OUTCHAR MYSTREAM CH))
```

```
(if (EQ (TTY.PROCESS)
      (THIS.PROCESS))
    then (\TTYBACKGROUND)
    else (BLOCK)))
```

```
(printout MYSTREAM T T "Connection closed" T)
```

```
(WINDOWPROP WINDOW 'TITLE "Connection closed")
```

```
(WINDOWPROP WINDOW 'CLOSEFN NIL)))
```

;;; The following isn't executed

```
  ])
```

```
)
```

```
(RPAQ? CHATSERVERWINDOW )
```

```
(RPAQ? CHATSERVERWINDOWREGION '(11 228 392 190))
```

```
(DECLARE%: EVAL@COMPILE
```

```
[PROGN (PUTPROPS \SYNCODE DMACRO [OPENLAMBDA (TABLE CHAR)
      (CHECK (type? CHARTABLE TABLE))
      ; 0 is either NONE.TC, REAL.CCE, or OTHER.RC
      (COND
        ((IGREATERP CHAR \MAXTHINCHAR)
         (OR (AND (fetch (CHARTABLE NSCHARHASH)
of TABLE)
```

```

                                (GETHASH CHAR (fetch (CHARTABLE
                                                    NSCHARHASH)
                                                    of TABLE)))
                                0))
                                (T (\GETBASEBYTE TABLE CHAR])
(PUTPROPS ISYNCODE MACRO [OPENLAMBDA (TABLE CHAR)
                            (CHECK (type? CHARTABLE TABLE))
                            (COND
                             ((IGREATERP CHAR \MAXTHINCHAR)
                              (OR (AND (fetch (CHARTABLE NSCHARHASH)
                                                of TABLE)
                                     (GETHASH CHAR (fetch (CHARTABLE
                                                            NSCHARHASH)
                                                            of TABLE)))
                              0))
                             (T (\GETBASEBYTE TABLE CHAR]))
)
(DECLARE%: DONTEVAL@LOAD DOCOPY
(FILELOAD CL-TTYEDIT SIMPLECHAT)
[XCL:REINSTALL-ADVICE
'MENU :BEFORE ' (:LAST (OR (DISPLAYSTREAMP \TERM.OFD)
                            (RETURN (ASKUSER NIL NIL (OR (FETCH (MENU TITLE)
                                                                MENU)
                                                                "Menu choice:")
                                                                (MAPCAR (FETCH (MENU ITEMS)
                                                                MENU)
                                                                (FUNCTION (LAMBDA (X)
                                                                (COND
                                                                ((LISTP X)
                                                                (LIST (CAR X)
                                                                ""
                                                                'RETURN
                                                                (CADR X))))
                                                                (T X]
)
[XCL:REINSTALL-ADVICE 'CHAT :BEFORE ' (:LAST (AND (NOT WINDOW)
                                                    (NOT FROMMENU)
                                                    (NOT (DISPLAYSTREAMP (TTYDISPLAYSTREAM)
                                                    ))
                                                    (RETURN (TTYCHAT HOST LOGOPTION]
)
[XCL:REINSTALL-ADVICE 'RINGBELLS :BEFORE
' (:LAST (OR (WFROMDS \TERM.OFD)
            (RETURN (RPTQ (OR (FIXP N)
                            1)
                        (BOUT \TERM.OFD 7]
)
(READWISE MENU CHAT RINGBELLS)
)
(DEFCOMMAND "QUIT" ()
  (RETFROM 'CHATSERVEROPENFN))
(DEFCOMMAND "SAY" (&REST LINE)
  [MAPC \PROCESSES (FUNCTION (LAMBDA (PROC)
    (CL:WHEN (STRPOS "CHAT.SERVER" (PROCESS.NAME PROC))
      (MAPPRINT LINE (IF (EQ PROC (THIS.PROCESS))
        THEN *STANDARD-OUTPUT*
        ELSE (EVALV '*STANDARD-OUTPUT* PROC)
        )
      "
      " "
      ")]

```

```
(MAPPRINT LINE PROMPTWINDOW "
  " "
  ")
(CL:VALUES))

(DECLARE%: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILERVERS

(ADDTOVAR NLAMA )

(ADDTOVAR NLAML )

(ADDTOVAR LAMA \REMOTE.BIN CHATSERVEROPENFN)
)

(RPAQQ CHATSERVERCOMS
 [(FNS CHATSERVER CHATSERVERWHENCLOSEDFN CHATSERVEROPENFN DOBE REQUIRED.LOGIN
  SERVER-EXEC SWEEP.OFD \CLEARSSYBUF PROMPTFORWORD \CREATELINEBUFFER
  \PROMPTFORWORDBIN \REMOTE.BIN \REMOTE.EXEC.OUTCHARFN CHATSERVER.FONT)
 (DECLARE%: DONTEVAL@LOAD DOCOPY (VARS (DISPLAYTERMFLG 'DM))
  (INITVARS (CHATSERVER.PROFILE)
   (\SIMPLEIMAGEOPS))
  (P (SETQ CHATSERVERTTBL (COPYTERMTABLE 'ORIG))
   (for I from 1 to 8 do (ECHOCHAR I 'IGNORE CHATSERVERTTBL)
    (ECHOCHAR I 'IGNORE ASKUSERTTBL))
   (ECHOCHAR (CHARCODE CR)
    'SIMULATE CHATSERVERTTBL)
   (ECHOCHAR (CHARCODE CR)
    'SIMULATE ASKUSERTTBL)
   (ECHOCHAR 0 'SIMULATE ASKUSERTTBL)
   (ECHOCHAR 0 'SIMULATE CHATSERVERTTBL)))
 (ADDVARS (\SWEPT.OFDS))
 (DECLARE%: EVAL@COMPILE DONTCOPY
  (P (CHECKIMPORTS '(LLCHAR ATERM IMAGEIO FILEIO ATBL AOFD)
   T)))
 [COMS (FNS SIMPLECHATSERVER)
  (INITVARS (CHATSERVERWINDOW)
   (CHATSERVERWINDOWREGION '(11 228 392 190]
 (MACROS \SYNCODE)
 (DECLARE%: DONTEVAL@LOAD DOCOPY (FILES CL-TTYEDIT SIMPLECHAT)
  (ADVISE MENU CHAT RINGBELLS))
 (COMMANDS "QUIT" "SAY")
 (DECLARE%: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILERVERS (ADDVARS
  (NLAMA)
  (NLAML)
  (LAMA
   CHATSERVEROPENFN
  ]))

(DECLARE%: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILERVERS

(ADDTOVAR NLAMA )

(ADDTOVAR NLAML )

(ADDTOVAR LAMA CHATSERVEROPENFN)
)

(PUTPROPS CHATSERVER COPYRIGHT ("Xerox Corporation" 1984 1985 1986 1987 1988))
```

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