```
29-Sep-88 01:18:17 {PHYLUM}<BURWELL>LISP>LYRIC>PROGRAMCHAT.;1
 File created:
  changes to:
                 (FNS OPENCHATSTREAM PROGRAMCHAT PROGRAMCHAT.LOGIN)
previous date:
                 12-May-88 21:46:25 {OV}<BURWELL>LISP>PROGRAMCHAT.;1
 Read Table:
                 INTERLISP
    Package:
                 INTERLISP
       Format:
                  XCCS
"; Copyright (c) 1985, 1986, 1987, 1988 by Xerox Corporation. All rights reserved.
(RPAQQ PROGRAMCHATCOMS
        (FNS OPENCHATSTREAM PROGRAMCHAT PROGRAMCHAT.LOGIN PROGRAMCHAT.OUTPUT)
          (P [if (ASSOC 'TENEX NETWORKLOGINFO)
                  then
             (PUTASSOC 'LOGOUT '("LOGOUT" CR)
(CDR (ASSOC 'TENEX NETWORKLOGINFO]
[if (ASSOC 'TOPS20 NETWORKLOGINFO)
                  then
                  (PUTASSOC 'LOGOUT '("LOGOUT" CR)
(CDR (ASSOC 'TOPS20 NETWORKLOGINFO)
             [if (ASSOC 'UNIX NETWORKLOGINFO)
                  then
                  (PUTASSOC 'LOGOUT '(WAIT CR "logout" CR)
(CDR (ASSOC 'UNIX NETWORKLOGINFO)
             [if (ASSOC 'VMS NETWORKLOGINFO)
                  then
             (PUTASSOC 'LOGOUT '("LOGOUT" CR)
(CDR (ASSOC 'VMS NETWORKLOGINFO)
[if (ASSOC 'IFS NETWORKLOGINFO)
                  (PUTASSOC 'LOGOUT '("Quit" CR)
(CDR (ASSOC 'IFS NETWORKLOGINFO]
             (if (ASSOC 'NS NETWORKLOGINFO)
                  then
                  (PUTASSOC 'LOGOUT '("Quit" CR)
(CDR (ASSOC 'NS NETWORKLOGINFO])
(DEFINEQ
OPENCHATSTREAM
                                                                               ; Edited 23-Sep-88 16:57 by bbb
  [LAMBDA (HOST)
     (PROG (OPENFN SLASH PROTOCOL)
            (COND
                ((BOUNDP 'CHAT.PROTOCOLTYPES)
                 [if [AND (SETQ SLASH (STRPOS "/" HOST))
                           (SETQ PROTOCOL (CDR (CL:ASSOC (SUBSTRING HOST (ADD1 SLASH))
                                                           CHAT.PROTOCOL.ABBREVS : TEST 'STRING-EQUAL]
                                                                               ; Caller explicitly specified protocol to use
                      then
                           (RETURN NIL)
                             elseif [NOT (SETQ OPENFN (CL:FUNCALL OPENFN (SETQ HOST (SUBSTRING HOST 1 (SUB1 SLASH]
    then (printout PROMPTWINDOW T (CONCAT HOST " is not a recognized " PROTOCOL " host."))
                                      (RETURN NIL)
                              else (RETURN (APPLY*
                                                      (CADR OPENFN)
                                                     (CAR OPENFN]
                   elseif (AND [SETQ PROTOCOL (CDR (CL:ASSOC HOST CHAT.HOST.TO.PROTOCOL :TEST 'STRING-EQUAL]
                                (SETQ OPENFN (CDR (ASSOC PROTOCOL CHAT.PROTOCOLTYPES)))
                                (SETQ OPENFN (CL:FUNCALL OPENFN HOST)))
                      then
                                                                                use protocol that worked the last time. Clear PROTOCOL to
                                                                               skip the test below for remembering it
                            (SETQ PROTOCOL NIL)
                            (RETURN (APPLY* (CADR OPENFN)
                                              (CAR OPENFN)))
                                                                               ; Try all protocols
                   else
                         (for PAIR in CHAT.PROTOCOLTYPES when (SETQ OPENFN (CL:FUNCALL (CDR PAIR)
                                                                                             HOST))
                                                                               ; Value returned is (CanonicalHostName OpenFn)
                                (SETQ PROTOCOL (CAR PAIR))
(RETURN (APPLY* (CADR OPENFN)
                                                  (CAR OPENFN]
                                                                               (* old code (if (for PROTOCOL in CHAT.PROTOCOLTYPES
                                                                               thereis (SETQ OPENFN (APPLY*
(CDR PROTOCOL) HOST))) then
(RETURN (APPLY* (CADR OPENFN)
                                                                               (CAR OPENFN))))
                 ])
(PROGRAMCHAT
```

; Edited 29-Sep-88 00:48 by bbb

[LAMBDA (HOST CMDSTREAM LOGSTREAM)

```
(PROG ((STREAMPAIR (OPENCHATSTREAM HOST))
             INCHAT OUTCHAT)
            [if (STRPOS "/" HOST)
                then (SETQ HOST (SUBSTRING HOST 1 (SUB1 (STRPOS "/" HOST]
            (COND
               (STREAMPAIR (SETQ INCHAT (CAR STREAMPAIR))
                       (SETQ OUTCHAT (CDR STREAMPAIR))
                       (SETFILEINFO OUTCHAT 'ENDOFSTREAMOP (FUNCTION CHAT.ENDOFSTREAMOP))
(SETFILEINFO INCHAT 'ENDOFSTREAMOP (FUNCTION CHAT.ENDOFSTREAMOP))
[ADD.PROCESS '(PROGRAMCHAT.OUTPUT (QUOTE %, INCHAT)
                                               (QUOTE %, LOGSTREAM]
                       (PROGRAMCHAT.LOGIN HOST INCHAT OUTCHAT)
                       [COND
                          ((STRINGP CMDSTREAM)
                           (SETQ CMDSTREAM (OPENSTRINGSTREAM CMDSTREAM 'INPUT]
                       [COND
                          ((NULL LOGSTREAM)
                            (SETQ LOGSTREAM (OPENSTREAM '{NULL} 'OUTPUT]
                       (while (AND (OPENP OUTCHAT 'OUTPUT)
                                    (NOT (EOFP CMDSTREAM)))
                          do (BOUT OUTCHAT (BIN CMDSTREAM))
                              (BLOCK)
                          finally (COND
                                     ((EOFP CMDSTREAM)
                                      (CLOSEF CMDSTREAM)
                                      (BOUT OUTCHAT (CHARCODE CR))
                                      (PROGRAMCHAT.LOGIN HOST INCHAT OUTCHAT 'LOGOUT)
                                      (FORCEOUTPUT OUTCHAT T)
                                      (until (NOT (OPENP INCHAT 'INPUT)) do (BLOCK) finally (CLOSEF? OUTCHAT])
(PROGRAMCHAT.LOGIN
  [LAMBDA (HOST INSTREAM OUTSTREAM OPTION)
                                                                          ; Edited 29-Sep-88 01:08 by bbb
            (* * Login to HOST. If a job already exists on HOST, Attach to it unless OPTION overrides.)
     (PROG ((LOGINFO (CDR (ASSOC (OR (GETOSTYPE HOST)
                                         'IFS)
                                    NETWORKLOGINFO)))
            NAME/PASS COM)
            (OR LOGINFO (RETURN))
            (SETQ NAME/PASS (\INTERNAL/GETPASSWORD HOST))
           [SETQ COM (COND
                          (OPTION)
                          ((ASSOC 'ATTACH LOGINFO)
                           (OR (CHAT.LOGINFO INSTREAM HOST (CAR NAME/PASS))
                                 LOGIN))
                                                                          (* 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 LF)
                                                          (BOUT OUTSTREAM (CHARCODE CR))
                                                          (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])
(PROGRAMCHAT.OUTPUT
  [LAMBDA (INCHATSTREAM LOGSTREAM)
                                                                          (* ejs%: "23-Feb-85 19:18")
     (bind CH while (AND (NEQ CH -1)
                          (OPENP INCHATSTREAM 'INPUT))
           (SETQ CH (BIN INCHATSTREAM))
           [COND
               (NEQCH-1)
                (COND
                   (LOGSTREAM (BOUT LOGSTREAM CH]
        finally (COND
                  ((OPENP INCHATSTREAM)
                   (CLOSEF INCHATSTREAM])
)
```

```
[if (ASSOC 'TENEX NETWORKLOGINFO)
then (PUTASSOC 'LOGOUT '("LOGOUT" CR)
(CDR (ASSOC 'TENEX NETWORKLOGINFO]
```

[if (ASSOC 'TOPS20 NETWORKLOGINFO) then (PUTASSOC 'LOGOUT '("LOGOUT" CR) (CDR (ASSOC 'TOPS20 NETWORKLOGINFO]

[if (ASSOC 'UNIX NETWORKLOGINFO) then (PUTASSOC 'LOGOUT '(WAIT CR "logout" CR) (CDR (ASSOC 'UNIX NETWORKLOGINFO]

[if (ASSOC 'VMS NETWORKLOGINFO)
then (PUTASSOC 'LOGOUT '("LOGOUT" CR)
(CDR (ASSOC 'VMS NETWORKLOGINFO]

(PUTPROPS **PROGRAMCHAT COPYRIGHT** ("Xerox Corporation" 1985 1986 1987 1988))

FUNCTION INDEX			
OPENCHATSTREAM1	PROGRAMCHAT1	PROGRAMCHAT.LOGIN2	PROGRAMCHAT.OUTPUT2