

File created: 15-Aug-90 11:05:53 {PELE:MV:ENVOS}<LISPCORE>LIBRARY>UNIXCHAT.;3

changes to: (VARS UNIXCHATCOMS)

previous date: 13-Jun-90 01:05:35 {PELE:MV:ENVOS}<LISPCORE>LIBRARY>UNIXCHAT.;2

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

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(RPAQQ **UNIXCHATCOMS**

(;; A Chat "protocol" that handles 1 host: SHELL, by opening a pty & fork to a csh.

(FILES UNIXCOMM CHAT)
(DECLARE%: EVAL@COMPILE DONTCOPY (FILES (LOADCOMP)
UNIXCOMM CHATDECLS))

(COMS ;; Tell Chat about us: give host filter & opening fn.

(FNS UNIX.HOST.FILTER UNIXCHAT.OPEN)
(ADDVARS (CHAT.PROTOCOLTYPES (SHELL . UNIX.HOST.FILTER))
(CHAT.HOST.TO.PROTOCOL (SHELL . SHELL)))

;; make the BS key send DEL when talking to shell

(COMS (ALISTS (CHAT.HOSTINFO SHELL)))

; pseudo ostype for Shell. Not sure if this is still needed. Make
; sure it survives logout

(ADDVARS (NETWORKOSTYPES (SHELL . SHELL)))
(PROP VARTYPE SYSTEMINITVARS)
(ALISTS (SYSTEMINITVARS NETWORKOSTYPES)))

(COMS ; telling unix about terminal

(FNS UNIX.SENDSCREENPARAMS UNIX.SETDISPLAYTYPE LISP-TO-UNIX-TERMTYPE UNIX.PARAMS.CONFIRM)
(INITVARS (CHAT.TO.UNIX.TERMINALS)
(UNIXCHAT.NOTICE.RESHAPE 'ASK)
(UNIXCHAT.TSET.DELAY 2000))

(GLOBALVARS CHAT.TO.UNIX.TERMINALS UNIXCHAT.NOTICE.RESHAPE))

(VARS (CHAT.ALLHOSTS (SORT (UNION ' (SHELL)
CHAT.ALLHOSTS)
(FUNCTION UALPHORDER)))
(CHAT.HOSTMENU)))

;; A Chat "protocol" that handles 1 host: SHELL, by opening a pty & fork to a csh.

(FILESLOAD UNIXCOMM CHAT)

(DECLARE%: EVAL@COMPILE DONTCOPY

(FILESLOAD (LOADCOMP)
UNIXCOMM CHATDECLS)

)

;; Tell Chat about us: give host filter & opening fn.

(DEFINEQ

(**UNIX.HOST.FILTER**

[LAMBDA (HOST)
(if (AND (EQ \MACHINETYPE \MAIKO)
(STRING.EQUAL HOST "SHELL"))
then ' (SHELL UNIXCHAT.OPEN)

; Edited 13-Apr-89 17:18 by bvm

(**UNIXCHAT.OPEN**

[LAMBDA (HOST TERMTYPE)

;; Return input and output sides of a stream connection to the "host" SHELL.

(AND (EQ \MACHINETYPE \MAIKO)
(LET ((STR (CREATE-SHELL-STREAM TERMTYPE))
(LIST STR STR 'LOGOPTION 'NONE]))

; Edited 15-Feb-90 15:01 by bvm

; Tell chat that no login is necessary

)

(ADDTOVAR **CHAT.PROTOCOLTYPES** (SHELL . UNIX.HOST.FILTER))

(ADDTOVAR **CHAT.HOST.TO.PROTOCOL** (SHELL . SHELL))

;; make the BS key send DEL when talking to shell

(ADDTOVAR **CHAT.HOSTINFO** [SHELL :KEYACTIONS ((BS (127 127))

:: pseudo ostype for Shell. Not sure if this is still needed. Make sure it survives logout

(ADDTOVAR NETWORKKOSTYPES (SHELL . SHELL))

(PUTPROPS SYSTEMINITVARS VARTYPE ALIST)

(ADDTOVAR SYSTEMINITVARS (NETWORKKOSTYPES (SHELL . SHELL)))

:: telling unix about terminal

(DEFINEQ

(UNIX.SENDSCREENPARAMS

```

[LAMBDA (STREAM HEIGHT WIDTH ASK) ; Edited 14-Feb-90 14:14 by bvm
  (if (SUBRCALL UNIX-HANDLECOMM 8) ; It's implemented right
    then
      [LET ((CONN (UNIX-CHANNEL STREAM)))
        (AND CONN (SUBRCALL UNIX-HANDLECOMM 10 (\DTEST CONN 'SMALLP)
          (\DTEST HEIGHT 'SMALLP)
          (\DTEST WIDTH 'SMALLP])
      ]
    elseif (if ASK
      then (UNIX.PARAMS.CONFIRM STREAM "size")
      elseif (STREAMPROP STREAM 'UNIXWINDOWSIZE (CONS WIDTH HEIGHT))
      then ; Not the first time, so spawn a process to handle the interaction
        (ADD.PROCESS `(UNIX.SENDSCREENPARAMS ',STREAM ',HEIGHT ',WIDTH T))
        NIL
      else ; First time, do it!
        T)
    then (CL:FORMAT STREAM "stty rows ~D columns ~D~%" HEIGHT WIDTH])

```

(UNIX.SETDISPLAYTYPE

```

[LAMBDA (STREAM CODE NAME ASK) ; Edited 14-Feb-90 15:27 by bvm
  (LET (OLDTYPE)
    (if (AND NAME (if (SETQ OLDTYPE (STREAMPROP STREAM 'UNIXTERMTYPE))
      then ; Not the first time
        (if ASK
          then (UNIX.PARAMS.CONFIRM STREAM "type")
          else ; spawn a proc so we don't tie up the typeout proc
            (ADD.PROCESS `(UNIX.SETDISPLAYTYPE ',STREAM NIL ',NAME T))
            NIL)
        elseif (SUBRCALL UNIX-HANDLECOMM 8)
        then (STREAMPROP STREAM 'UNIXTERMTYPE NAME)
          ; The open shell stream already told it the type, so just note it
          ; now
        NIL
      else ; First time, do it!
        T))
    then [if (NOT OLDTYPE)
      then ; On the very first call, wait until there's some output. Newer chats do this before opening the stream, which is a big
      ; improvement. This is actually a race here with chat.typeout
        (LET [(TIMER (SETUPTIMER 15000))
          (WINDOW (PROCESSPROP (THIS.PROCESS)
            'WINDOW])
          (if [AND WINDOW (SETQ WINDOW (WINDOWPROP WINDOW 'CHATSTATE))
            then (replace (CHAT.STATE HELD) of WINDOW with T))
          (until (OR (READP STREAM)
            (TIMEREXPIRED? TIMER))
          (do (BLOCK))
          (if WINDOW
            then (replace (CHAT.STATE HELD) of WINDOW with NIL)
            (DISMISS UNIXCHAT.TSET.DELAY)
          (CL:FORMAT STREAM "set noglob; eval `tset ~@[~e^~A ~]-srIQ ~A`; set glob~%"
            [AND (NULL OLDTYPE)
            (LET [(BS (CAAR (KEYACTION 'BS))
              (if (EQ BS 127)
                then "?"
                else (CL:CODE-CHAR (LOGOR BS (CHARCODE "@"))
              (LISP-TO-UNIX-TERMTYPE NAME))
            (STREAMPROP STREAM 'UNIXTERMTYPE NAME])

```

(LISP-TO-UNIX-TERMTYPE

```

[LAMBDA (TERMTYPE) ; Edited 14-Feb-90 14:20 by bvm
  (OR (CDR (ASSOC TERMTYPE CHAT.TO.UNIX.TERMINALS))
  (CL:STRING-DOWNCASE TERMTYPE])

```

(UNIX.PARAMS.CONFIRM

```

[LAMBDA (STREAM TYPE) ; Edited 31-Jan-90 16:00 by bvm
  (CASE UNIXCHAT.NOTICE.RESHAPE
    ((T) T)
    (ASK (EQ (MENU (create MENU
      ITEMS _ '("Stuff shell command to adjust terminal parms" T "Chat will inject a
        command to set the terminal parameters.
        You must be talking to a shell prompt for this to work.

```

If you're not at a shell prompt now, get to one before selecting this.)

("Skip it--I'm not talking to the shell" :NO "Don't tell the host about the change"))

CENTERFLG _ T
TITLE _ (CL:FORMAT NIL "Tell host about change in terminal ~A?" TYPE))

NIL T)
T)))]

```
)  
(RPAQ? CHAT.TO.UNIX.TERMINALS )  
(RPAQ? UNIXCHAT.NOTICE.RESHAPE 'ASK)  
(RPAQ? UNIXCHAT.TSET.DELAY 2000)  
(DECLARE%: DOEVAL@COMPILE DONTCOPY  
(GLOBALVARS CHAT.TO.UNIX.TERMINALS UNIXCHAT.NOTICE.RESHAPE)  
)  
(RPAQ CHAT.ALLHOSTS (SORT (UNION '(SHELL)  
                                CHAT.ALLHOSTS)  
                            (FUNCTION UALPHORDER)))  
(RPAQ CHAT.HOSTMENU NIL)  
(PUTPROPS UNIXCHAT COPYRIGHT ("Venue & Xerox Corporation" 1989 1990))
```

FUNCTION INDEX

LISP-TO-UNIX-TERMTYPE2 UNIX.PARAMS.CONFIRM2 UNIX.SETDISPLAYTYPE2
UNIX.HOST.FILTER1 UNIX.SENDSCREENPARAMS2 UNIXCHAT.OPEN1

VARIABLE INDEX

CHAT.ALLHOSTS3 CHAT.HOSTMENU3 NETWORKOSTYPES2 UNIXCHAT.TSET.DELAY3
CHAT.HOST.TO.PROTOCOL ...1 CHAT.PROTOCOLTYPES1 SYSTEMINITVARS2
CHAT.HOSTINFO1 CHAT.TO.UNIX.TERMINALS ..3 UNIXCHAT.NOTICE.RESHAPE .3

PROPERTY INDEX

SYSTEMINITVARS2
