

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
          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))

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