

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

::
:: Copyright (c) 1989, 1990 by Venue & Xerox Corporation. All rights reserved.

(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

(ALISTS (CHAT.HOSTINFO SHELL)))

(COMS
; pseudo ostyle 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)

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

;; 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]))

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

```
(ADDTTOVAR NETWORKOSTYPES (SHELL . SHELL))
```

```
(PUTPROPS SYSTEMINITVARS VARTYPE ALIST)
```

```
(ADDTTOVAR SYSTEMINITVARS (NETWORKOSTYPES (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)))

(RPAQQ CHAT.HOSTMENU NIL)

(PUTPROPS UNIXCHAT COPYRIGHT ("Venue & Xerox Corporation" 1989 1990))
```

FUNCTION INDEX

LISP-TO-UNIX-TERMTYPE	2	UNIX.PARAMS.CONFIRM	2	UNIX.SETDISPLAYTYPE	2
UNIX.HOST.FILTER	1	UNIX.SENDSCREENPARAMS	2	UNIXCHAT.OPEN	1

VARIABLE INDEX

CHAT.ALLHOSTS	3	CHAT.HOSTMENU	3	NETWORKOSTYPES	2	UNIXCHAT.TSET.DELAY	3
CHAT.HOST.TO.PROTOCOL ...	1	CHAT.PROTOCOLTYPES	1	SYSTEMINITVARS	2		
CHAT.HOSTINFO	1	CHAT.TO.UNIX.TERMINALS ..	3	UNIXCHAT.NOTICE.RESHAPE ..	3		

PROPERTY INDEX

SYSTEMINITVARS
