

```
(DECLARE (SPECVARS INPUTSTREAM))
(PROG ((POSITION (create POSITION))
      (TEXTSTREAM (TEXTSTREAM WINDOW))
      (SCRATCHPTR (ALLOCSTRING 0))
      (STRING (ALLOCSTRING 128))
      (EVENTFN (with TALK.PROTOCOLTYPE PROTOCOLTYPE TALK.EVENTFN))
      TEXTOBJ STRINGSTREAM EOFPTR BYTE ACTION CODE)
      (SETQ TEXTOBJ (fetch (TEXTSTREAM TEXTOBJ) of TEXTSTREAM))
      [SETQ EOFPTR (GETEOFPTR (SETQ STRINGSTREAM (OPENSTRINGSTREAM STRING 'BOTH))
      (while (OPENP TEXTSTREAM)
        do (APPLY* EVENTFN INPUTSTREAM OUTPUTSTREAM)
          (CL:UNLESS (AND (OPENP INPUTSTREAM)
                          (OPENP OUTPUTSTREAM))
```

```

    (RETURN))
    (TALK.FLASH.CARET WINDOW POSITION 'OFF)
    (while (AND (OPENP INPUTSTREAM)
                (READP INPUTSTREAM))
      do (SELCHARQ (SETQ BYTE (LOGAND (SETQ CCODE (READCCODE INPUTSTREAM))
                                      (MASK.1'S 0 8)))
          (BS
            (TALK.TEDIT.INSERT TEXTSTREAM STRING STRINGSTREAM SCRATCHPTR)
            ; Flush text buffer
            ; the escape code
            (SETQ CCODE (LOGAND (SETQ CCODE (READCCODE INPUTSTREAM))
                                (MASK.1'S 0 10)))
            (if [SETQ ACTION (for ACTION in TALK.TEDIT.ACTIONS
                                thereis (with ACTION ACTION (EQMEMB CCODE CCODES)
                                then (with ACTION ACTION (APPLY* ACTIONFN (if TEXTOBJP
                                                                              then TEXTOBJ
                                                                              else TEXTSTREAM)
                                                                              INPUTSTREAM)))]
              ; Flush text buffer
              (^G
                (TALK.TEDIT.INSERT TEXTSTREAM STRING STRINGSTREAM SCRATCHPTR)
                (TALK.RINGBELLS WINDOW))
              (if (LESSP CCODE (MASK.1'S 0 8))
                then (PRINTCCODE CCODE STRINGSTREAM)
                    (if (LEQ EOFPTR (GETFILEPTR STRINGSTREAM))
                      then (TALK.TEDIT.INSERT TEXTSTREAM STRING STRINGSTREAM SCRATCHPTR))
                    else (TALK.TEDIT.INSERT TEXTSTREAM STRING STRINGSTREAM SCRATCHPTR)
                        ; String streams don't handle NS charaters so don't buffer
                        (TALK.TEDIT.INSERT TEXTSTREAM CCODE)))
              finally (TALK.TEDIT.INSERT TEXTSTREAM STRING STRINGSTREAM SCRATCHPTR))
            (TALK.FLASH.CARET WINDOW POSITION 'ON))
    (CL:WHEN (SETQ TEXTOBJ (TEXTOBJ MAINWINDOW T))
      (SETTOBJ TEXTOBJ TXTFILE (CONCAT TXTFILE TALK.CLOSED.STRING))))))

```

**(TALK.TEDIT.CHARFN**

; Edited 9-Jun-88 15:06 by cdl

```

[LAMBDA (TEXTOBJ CCODE)
  (DECLARE (SPECVARS CCODE))
  (PROG [(STREAM (TEXTPROP TEXTOBJ 'TALK]
    (if (OPENP STREAM)
      then (SELCHARQ CCODE
        ((BS ^W DEL UNDO REDO NEXT)
          (PRINTOUT STREAM .OP CCODE))
          ((SHIFT.UNDO SHIFT.REDO SHIFT.NEXT)
            (PRINTOUT STREAM .OP (BITCLEAR CCODE (MASK.1'S 5 1))))
          (^O (RETURN T))
          (^A (RETURN))
          ((SHIFT.DEL FONT SHIFT.FONT MARGINS SHIFT.MARGINS)
            (* Unimplemented function keys, pass through)
            (PRINTCCODE CCODE STREAM))
          (if (OR (LESSP CCODE (CHARCODE 2,0))
                  (GEQ CCODE (CHARCODE 3,0)))
            then (* Filter out function keys in the 2,0 range)
                (PRINTCCODE CCODE STREAM)))
          (if (NOT (READP))
            then (FORCEOUTPUT STREAM)))
      (RETURN T])
    )

```

;; TALK TEdit hooks

(DEFINEQ

**(TALK.TEDIT.USERFN**

(\* cdl "2-Mar-87 09:53")

```

[LAMBDA VAR
  (LET [(USERFN (TEXTPROP (ARG VAR 2)
                        (ARG VAR 1)
                (if USERFN
                  then (APPLY USERFN (for M from 2 to VAR collect (ARG VAR M))

```

**(TALK.TEDIT.INSERT**

(\* cdl "24-Mar-87 08:45")

```

[LAMBDA (TEXTSTREAM STRING.OR.CCODE STRINGSTREAM SCRATCHPTR)
  (if STRINGSTREAM
    then (LET ((FILEPTR (GETFILEPTR STRINGSTREAM)))
      (if (NOT (ZEROP FILEPTR))
        then (TEDIT.INSERT TEXTSTREAM (SUBSTRING STRING.OR.CCODE 1 FILEPTR SCRATCHPTR))
        (SETFILEPTR STRINGSTREAM 0)))
    else (TEDIT.INSERT TEXTSTREAM (MKSTRING (CHARACTER STRING.OR.CCODE)]))

```

**(TALK.SELFN**

; Edited 9-Jun-88 15:06 by cdl

```

[LAMBDA (TEXTOBJ SELECTION SELECTMODE FINAL?)
  (DECLARE (SPECVARS SELECTION SELECTMODE))
  (SELECTQ FINAL?
    (FINAL (SELECTQ SELECTMODE
                    ((NORMAL PENDINGDEL DELETE)
                     (PROG [(STREAM (TEXTPROP TEXTOBJ 'TALK]

```

```

                (if (OPENP STREAM)
                    then (PRINTOUT STREAM .OP (CHARCODE ^S)
                        .P2
                        (LIST (TALK.ENCODE.SEL SELECTION)
                            SELECTMODE)
                        .FORCE)))
        NIL))
NIL])

```

**(TALK.SETSELFN**

```

[LAMBDA (TEXTSTREAM CH#ORSEL LEN POINT PENDINGDELFLG LEAVECARETLOOKS OPERATION)
; Edited 9-Jun-88 15:09 by cdl
(DECLARE (SPECVARS CH#ORSEL LEN POINT OPERATION))
(PROG [(STREAM (TEXTPROP TEXTSTREAM 'TALK)
    (if (OPENP STREAM)
        then [if (NULL OPERATION)
            then (SETQ OPERATION (if PENDINGDELFLG
                then 'PENDINGDEL
                else 'NORMAL]
            (PRINTOUT STREAM .OP (CHARCODE ^S)
                .P2
                (LIST (TALK.ENCODE.SEL CH#ORSEL LEN POINT)
                    OPERATION)
                .FORCE])
        ]
    ]

```

**(TALK.IMAGEOBJFN**

```

[LAMBDA (TEXTSTREAM OBJECT CH#ORSEL)
; Edited 9-Jun-88 15:10 by cdl
(DECLARE (SPECVARS TEXTSTREAM CH#ORSEL))
(PROG [(STREAM (TEXTPROP TEXTSTREAM 'TALK)
    (if (OPENP STREAM)
        then (PRINTOUT STREAM .OP (CHARCODE ^T))
            (WRITEIMAGEOBJ OBJECT STREAM)
            (PRINTOUT STREAM .P2 (with SELECTION (TEDIT.GETSEL TEXTSTREAM)
                (TALK.ENCODE.SEL CH#ORSEL DCH POINT))
            .FORCE])
    ]

```

**(TALK.LOOKSFN**

```

[LAMBDA (TEXTSTREAM NEWLOOKS CH#ORSEL LEN)
; Edited 9-Jun-88 15:10 by cdl
(DECLARE (SPECVARS NEWLOOKS CH#ORSEL LEN))
(PROG [(STREAM (TEXTPROP TEXTSTREAM 'TALK)
    (if (OPENP STREAM)
        then (PRINTOUT STREAM .OP (CHARCODE ^U)
            .P2
            (LIST NEWLOOKS (TALK.ENCODE.SEL CH#ORSEL LEN))
            .FORCE])
    ]

```

**(TALK.PARAFN**

```

[LAMBDA (TEXTOBJ NEWLOOKS CH#ORSEL LEN)
; Edited 9-Jun-88 15:10 by cdl
(DECLARE (SPECVARS NEWLOOKS CH#ORSEL LEN))
(PROG [(STREAM (TEXTPROP TEXTOBJ 'TALK)
    (if (OPENP STREAM)
        then (PRINTOUT STREAM .OP (CHARCODE ^V)
            .P2
            (LIST NEWLOOKS (TALK.ENCODE.SEL CH#ORSEL LEN))
            .FORCE])
    ]

```

**(TALK.INSERTFN**

```

[LAMBDA (TEXTSTREAM TEXT CH#ORSEL LOOKS DONTSCROLL)
; Edited 9-Jun-88 15:11 by cdl
(DECLARE (SPECVARS TEXT CH#ORSEL LOOKS DONTSCROLL))
(PROG [(STREAM (TEXTPROP TEXTSTREAM 'TALK)
    (if (OPENP STREAM)
        then (PRINTOUT STREAM .OP (CHARCODE ^R)
            .P2
            (LIST TEXT (TALK.ENCODE.SEL CH#ORSEL)
                LOOKS DONTSCROLL)
            .FORCE])
    ]

```

**(TALK.INCLUDEFN**

```

[LAMBDA (TEXTSTREAM FILE START END)
; Edited 9-Jun-88 15:11 by cdl
(DECLARE (SPECVARS FILE START END))
(PROG [(STREAM (TEXTPROP TEXTSTREAM 'TALK)
    (if (OPENP STREAM)
        then (PRINTOUT STREAM .OP (CHARCODE ^O)
            .P2
            (LIST FILE START END)
            .FORCE])
    ]

```

**(TALK.DELETEFN**

```

[LAMBDA (TEXTSTREAM CH#ORSEL LEN)
; Edited 9-Jun-88 15:12 by cdl
(DECLARE (SPECVARS TEXTSTREAM CH#ORSEL LEN))

```

```

(PROG [(STREAM (TEXTPROP TEXTSTREAM 'TALK]
  (if (OPENP STREAM)
    then (PRINTOUT STREAM .OP (CHARCODE ^P)
      .P2
      (LIST (TALK.ENCODE.SEL (OR CH#ORSEL (TEDIT.GETSEL TEXTSTREAM))
        LEN)
      .FORCE]))

```

**(TALK.GETFN**

```

[LAMBDA (TEXTSTREAM FULLFILENAME WHEN)
  (DECLARE (SPECVARS FULLFILENAME))
  (SELECTQ WHEN
    (BEFORE (PROG [(STREAM (TEXTPROP TEXTSTREAM 'TALK]
      (if (OPENP STREAM)
        then (PRINTOUT STREAM .OP (CHARCODE ^Q)
          .P2
          (LIST FULLFILENAME)
          .FORCE))))
    NIL])
)

```

; Edited 9-Jun-88 15:12 by cdl

(DEFINEQ

**(TALK.TEDIT.BACKSPACE**

```

[LAMBDA (TEXTSTREAM)
  (with SELECTION (TEDIT.GETSEL TEXTSTREAM)
    (TEDIT.DELETE TEXTSTREAM (SUB1 (SELECTQ POINT
      (LEFT CH#)
      CHLIM) )
    1])
)

```

(\* cdl " 5-May-87 18:07")

**(TALK.TEDIT.INCLUDE**

```

[LAMBDA (TEXTSTREAM STREAM)
  (with DATA (READ STREAM)
    (TEDIT.INCLUDE TEXTSTREAM FILE START END])
)

```

(\* cdl "10-Mar-87 17:04")  
(\* DECLARATIONS%: (RECORD DATA  
(FILE START END)))

**(TALK.TEDIT.DELETE.TEXT**

```

[LAMBDA (TEXTSTREAM STREAM)
  (with DATA (READ STREAM)
    (TEDIT.DELETE TEXTSTREAM (TALK.DECODE.SEL TEXTSTREAM PLST)
      LEN])
)

```

(\* cdl " 2-Mar-87 12:06")  
(\* DECLARATIONS%: (RECORD DATA  
(PLST LEN)))

**(TALK.TEDIT.GET**

```

[LAMBDA (TEXTOBJ STREAM)
  (with TEXTOBJ TEXTOBJ (SETQ \XDIRTY NIL))
  (with DATA (READ STREAM)
    (TEDIT.GET TEXTOBJ FULLFILENAME])
)

```

; Edited 3-Jun-88 09:54 by cdl  
(\* DECLARATIONS%: (RECORD DATA  
(FULLFILENAME)))

**(TALK.TEDIT.INSERT.TEXT**

```

[LAMBDA (TEXTSTREAM STREAM)
  (with DATA (READ STREAM)
    (TEDIT.INSERT TEXTSTREAM TEXT (TALK.DECODE.SEL TEXTSTREAM PLST)
      LOOKS DONTSCROLL])
)

```

(\* cdl " 2-Mar-87 11:42")  
(\* DECLARATIONS%: (RECORD DATA  
(TEXT PLST LOOKS DONTSCROLL)))

**(TALK.TEDIT.SETSEL**

```

[LAMBDA (TEXTSTREAM STREAM)
  (with DATA (READ STREAM)
    (TALK.DECODE.SEL TEXTSTREAM PLST SELECTMODE])
)

```

(\* cdl " 1-Mar-87 10:33")  
(\* DECLARATIONS%: (RECORD DATA  
(PLST SELECTMODE)))

**(TALK.TEDIT.INSERT.OBJECT**

```

[LAMBDA (TEXTSTREAM STREAM)
  (LET (OBJECT)
    (if [SETQ OBJECT (RESETFORM (INPUT STREAM)
      (ERRORSET (READ)
      then (TEDIT.INSERT.OBJECT (CAR OBJECT)
        TEXTSTREAM
        (TALK.DECODE.SEL TEXTSTREAM (READ STREAM)])

```

(\* cdl " 5-May-87 18:04")

**(TALK.TEDIT.LOOKS**

[LAMBDA (TEXTSTREAM STREAM)

(\* cdl " 1-Mar-87 12:19")

(\* DECLARATIONS%: (RECORD DATA  
(NEWLOOKS PLST)))

(with DATA (READ STREAM)

(TEDIT.LOOKS TEXTSTREAM NEWLOOKS (TALK.DECODE.SEL TEXTSTREAM PLST]))

**(TALK.TEDIT.PARALOOKS**

[LAMBDA (TEXTSTREAM STREAM)

(\* cdl " 1-Mar-87 12:22")

(\* DECLARATIONS%: (RECORD DATA  
(NEWLOOKS PLST)))

(with DATA (READ STREAM)

(TEDIT.PARALOOKS (TEXTOBJ TEXTSTREAM)

NEWLOOKS

(TALK.DECODE.SEL TEXTSTREAM PLST]))

**(TALK.TEDIT.DELETE**

[LAMBDA (TEXTSTREAM

(\* cdl " 1-Mar-87 10:34")

(TEDIT.DELETE TEXTSTREAM (TEDIT.GETSEL TEXTSTREAM))

)

(DEFINEQ

**(TALK.ENCODE.SEL**

[LAMBDA (CH#ORSEL LEN POINT)

(\* cdl "16-Mar-87 08:18")

(\* DECLARATIONS%: (PROPRECORD PLST  
(CH# DCH POINT)))

(if (type? SELECTION CH#ORSEL)

then [for FIELD in [CONSTANT (LDIFFERENCE (RECORDFIELDNAMES 'SELECTION)

'(X0 Y0 XLIM YLIM L1 LN DX \TEXTOBJ SELOBJINFO]

join (LIST FIELD (RECORDACCESS FIELD CH#ORSEL (CONSTANT (RECLOOK 'SELECTION))

'FETCH]

else (create PLST

CH# \_ CH#ORSEL

DCH \_ (OR LEN 0)

POINT \_ (OR POINT 'LEFT])

**(TALK.DECODE.SEL**

[LAMBDA (TEXTSTREAM PLST SELECTMODE)

(\* cdl "16-Mar-87 08:12")

(\* DECLARATIONS%: (PROPRECORD PLST  
(CH# DCH POINT)))

(with PLST PLST (TEDIT.SETSEL TEXTSTREAM (OR CH# (fetch (SELECTION CH#) of (TEDIT.GETSEL TEXTSTREAM)))

DCH POINT (EQ 'PENDINGDEL SELECTMODE)

NIL SELECTMODE])

)

;; TALK data

**(RPAQQ TALK.TEDIT.ACTIONS**

((8 TALK.TEDIT.BACKSPACE)

(15 TALK.TEDIT.INCLUDE)

(16 TALK.TEDIT.DELETE.TEXT)

(17 TALK.TEDIT.GET TEXTOBJ)

(18 TALK.TEDIT.INSERT.TEXT)

(19 TALK.TEDIT.SETSEL)

(20 TALK.TEDIT.INSERT.OBJECT)

(21 TALK.TEDIT.LOOKS)

(22 TALK.TEDIT.PARALOOKS)

(23 \TEDIT.WORDDELETE TEXTOBJ)

(127 TALK.TEDIT.DELETE)

(516 TEDIT.UNDO TEXTOBJ)

(520 TEDIT.REDO TEXTOBJ)

(530 TEDIT.NEXT))

**(RPAQQ TALK.FROM.TEDIT.PROPS** (PROMPTWINDOW DON'T NOTITLE T COPYBYBKSYSEBUF T MENU ((Put 'Put NIL (SUBITEMS

Plain-Text

Old-Format

))

Find Quit)))

**(RPAQQ TALK.TO.TEDIT.PROPS** (CHARFN TALK.TEDIT.CHARFN SELFN TALK.SELFN GETFN TALK.GETFN IMAGEOBJFN

TALK.IMAGEOBJFN LOOKSFN TALK.LOOKSFN PARAFN TALK.PARAFN INSERTFN TALK.INSERTFN

SETSELFN TALK.SETSELFN DELETEFN TALK.DELETEFN INCLUDEFN TALK.INCLUDEFN NOTITLE

T QUITFN TRUE COPYBYBKSYSEBUF T))

(DECLARE%: DOEVAL@COMPILE DONTCOPY

(GLOBALVARS TALK.TEDIT.ACTIONS TALK.TO.TEDIT.PROPS TALK.FROM.TEDIT.PROPS)

)

```

;; etc

(FILESLoad TALK TEDIT)

(APPENDTOVAR GAP.SERVICETYPES (6 Tedit TALK.NS.SERVER))

(APPENDTOVAR TALK.SERVICETYPES (Tedit TALK.TEDIT.DISPLAY TALK.TEDIT.LISTEN))

(ADDTOTVAR TALK.TEDIT.ADVISEDFN TEDIT.SETSEL TEDIT.INSERT TEDIT.DELETE TEDIT.INSERT.OBJECT TEDIT.LOOKS
          TEDIT.PARALOOKS OPENFILE-IN-TEDIT.INCLUDE)

[XCL:REINSTALL-ADVICE 'TEDIT.SETSEL :BEFORE '(:LAST (TALK.TEDIT.USERFN 'SETSELFN STREAM CH# LEN POINT
          PENDINGDELFLG LEAVECARETLOOKS OPERATION)]

[XCL:REINSTALL-ADVICE 'TEDIT.INSERT :BEFORE '(:LAST (TALK.TEDIT.USERFN 'INSERTFN STREAM TEXT CH#ORSEL LOOKS
          DONTSCROLL)]

[XCL:REINSTALL-ADVICE 'TEDIT.DELETE :BEFORE '(:LAST (TALK.TEDIT.USERFN 'DELETEFN STREAM SEL LEN LEAVECARETLOOKS
          ]

[XCL:REINSTALL-ADVICE 'TEDIT.INSERT.OBJECT :BEFORE '(:LAST (TALK.TEDIT.USERFN 'IMAGEOBJFN STREAM OBJECT CH#)]

[XCL:REINSTALL-ADVICE 'TEDIT.LOOKS :BEFORE '(:LAST (TALK.TEDIT.USERFN 'LOOKSFN STREAM NEWLOOKS SELORCH# LEN)]

[XCL:REINSTALL-ADVICE 'TEDIT.PARALOOKS :BEFORE '(:LAST (TALK.TEDIT.USERFN 'PARAFN TEXTOBJ NEWLOOKS SEL LEN)]

[XCL:REINSTALL-ADVICE ' (OPENFILE :IN TEDIT.INCLUDE)
  :BEFORE
  '(:LAST (TALK.TEDIT.USERFN 'INCLUDEFN STREAM FILE START END)]

(READVISE TEDIT.SETSEL TEDIT.INSERT TEDIT.DELETE TEDIT.INSERT.OBJECT TEDIT.LOOKS TEDIT.PARALOOKS
  (OPENFILE :IN TEDIT.INCLUDE))

(DECLARE%: DOEVAL@COMPILE DONTCOPY

(GLOBALVARS TALK.TEDIT.ADVISEDFN)
)

(DECLARE%: DONTCOPY DOEVAL@COMPILE

(FILESLoad TEDIT-EXPORTS.ALL)

(ADDTOTVAR CHARACTERNAMES
  (UNDO 2,4)
  (REDO 2,10)
  (NEXT 2,22)
  (MARGINS 2,111)
  (FONT 2,112)
  (SHIFT.UNDO 2,44)
  (SHIFT.REDO 2,50)
  (SHIFT.NEXT 2,62)
  (SHIFT.MARGINS 2,151)
  (SHIFT.FONT 2,152)
  (SHIFT.DEL 2,27))

(ADDTOTVAR PRINTOUTMACROS
  [.OP (LAMBDA (COMS)
    (CONS '(PROGN (PRINTCCODE (CHARCODE BS)
      NIL)
      (PRINTCCODE , (CADR COMS)
      NIL))
    (CDDR COMS)]
  [.FORCE (LAMBDA (COMS)
    (CONS ' (FORCEOUTPUT NIL)
    (CDR COMS]))
  )

(DECLARE%: DONTVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILEVAR)

(ADDTOTVAR NLAMA )

(ADDTOTVAR NLAML )

(ADDTOTVAR LAMA TALK.TEDIT.USERFN)
)

```

---

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