

File created: 20-Jan-2023 22:44:05 {DSK}<home>frank>il>medley>gmedley>library>UNIXPRINT.;4

changes to: (VARS UNIXPRINTCOMS)

previous date: 18-Jan-2023 13:28:36 {DSK}<home>frank>il>medley>gmedley>library>UNIXPRINT.;3

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

::
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(RPAQQ **UNIXPRINTCOMS**

```
[ (FILES UNIXUTILS)
  (FNS InstallUnixPrinter UnixPrint UnixShellQuote UnixTempFile UnixPrintCommand)
  (INITVARS (UnixPrinterName NIL)
    (UNIXPRINTSWITCHES " -r -s "))
  (P ;; (InstallUnixPrinter) commented out because POSTSCRIPT indirects according to platform
    (PRIN1 "Please feel free to edit UnixPrintCommand." PROMPTWINDOW))
  (PROP FILETYPE UNIXPRINT)
  (DECLARE%: DONTEVAL@COMPILE DOCOPY (FNS UnixPrintCommand))
  (DECLARE%: EVAL@COMPILE DOCOPY (FILES UNIXCOMM))
  (DECLARE%: EVAL@COMPILE DONTCOPY (GLOBALVARS UnixPrinterName))
  (DECLARE%: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILEVARS (ADDVARS (NLAMA)
    (NLAML)
    (LAMA]))
```

(FILESLOAD UNIXUTILS)

(DEFINEQ

(**InstallUnixPrinter**

[LAMBDA (PrinterTypes)

; Edited 8-Feb-97 11:33 by rmk:

;; Set up any printers in PrinterTypes (or just Postscript by default) so that they'll be printed using the unix LPR command.

```
(DECLARE (GLOBALVARS PRINTERTYPES))
(for type inside (OR PrinterTypes '(POSTSCRIPT)) do (for x in PRINTERTYPES when (EQMEMB type (CAR x))
  do (LET ((PRINTERTYPE type))
    (PUTASSOC 'SEND (LIST 'UnixPrint)
      (CDR x]))
```

(**UnixPrint**

[LAMBDA (HOST FILE PRINTOPTIONS)

; Edited 7-Dec-2001 14:55 by rmk:

; Edited 20-May-92 14:13 by nilsson

;; Given a print FILE, use the Unix "lpr" command to spool it to a printer.

;; The printer is named by HOST or UnixPrinterName, a Global variable.

```
[LET* ((PRINTER (OR HOST UnixPrinterName))
  (COPIES (LISTGET PRINTOPTIONS '%#COPIES))
  (NAME (LISTGET PRINTOPTIONS 'DOCUMENT.NAME))
  (NSIDES (LISTGET PRINTOPTIONS '%#SIDES))
  (TYPE (PRINTERTYPE PRINTER)))
  ;; Removed redundant check (we already know it's a PS printer), JDS 2/19/92:
  ;; (COND ((NULL TYPE) (ERROR (CONCAT "Printertype unknown for " PRINTER))) ((NOT (EQL (U-CASE TYPE) 'POSTSCRIPT))
  ;; (ERROR (CONCAT "Printertype for " PRINTER " is not Postscript"))))
```

```
[COND
  ((OR (NULL NAME)
    (STRPOS "{LPT}" NAME 1 NIL T))
    (SETQ NAME "Medley Output"))
  ((EQ (CHCON1 NAME)
    (CHARCODE {}))
    (SETQ NAME (UNPACKFILENAME.STRING NAME 'NAME))
    (COND
      ((EQ (NCHARS NAME)
        0)
        (SETQ NAME "Medley Output"]
```

;; Don't break if you have trouble with preexisting files, e.g. because of protection.

```
(FOR F IN [CAR (NLSETQ (FILDIR (PACKFILENAME 'HOST 'DSK 'EXTENSION '* 'BODY (UnixTempFile
  'medleyprint. T)
  WHEN (CAR (NLSETQ (IGREATERP (DIFFERENCE (IDATE)
    (GETFILEINFO F 'ICREATIONDATE))
    120)))
  DO (NLSETQ (DELFILE F)))
```

;; The temp file's name will be of the form medleyprint.<idate>, so all such files can be found for deletion on a subsequent call after a
;; certain amount of time (2 minutes) has gone by. If we delete immediately, it may happen before lpr has done its thing.

```
(CL:MULTIPLE-VALUE-BIND (tmpstream tmpname)
  (UnixTempFile 'medleyprint.)
```

```

(COND
  (tmpstream
    ;; First, copy the lisp file to /tmp so lpr can find it.
    [CL:WITH-OPEN-STREAM
      (out tmpstream)
      (CL:WITH-OPEN-STREAM (in (OPENSTREAM FILE 'INPUT))
        (printout PROMPTWINDOW .TAB0 0 "Spooling output to Unix printer"
          (COND
            (PRINTER (CONCAT " ' " PRINTER "'"))
            (T ""))
          "...")
        (IF NSIDES
          THEN
            ;; Have to put magic simplex/duplex stuff in the tmp file itself, after the first line, cause there is no
            ;; other way to control some duplex printers.
            (BIND C SAWCR
              DO (SETQ C (BIN in))
                (IF (MEMB C (CHARCODE (CR LF)))
                  THEN (BOUT out C)
                      (SETQ SAWCR T)
                  ELSEIF SAWCR
                    THEN ;; First char of 2nd line: nonCR/LF after CR/LF
                        ;; Put out simplex header, then print character in C
                        (PRINTOUT out "%BeginSetup" T)
                        (PRINTOUT out "[{" T "%%BeginFeature: *Duplex
                          Simplex" T "<< /Duplex " (CL:IF (EQ NSIDES 1)
                            "false"
                            "true")
                          " /Tumble false >> setpagedevice" T
                          "%%EndFeature" T "}") stopped cleartomark" T)
                        (PRINTOUT out "%EndSetup" T)
                        (BOUT out C)
                        (COPYCHARS in out (GETFILEPTR in)
                          -1)
                        (RETURN)
                      ELSE (BOUT out C)))
                ELSE (COPYCHARS in out 0 -1]
            )
          )
      )
    )
  )
  ;; Now make Unix print the /tmp file.
  (ShellCommand (UnixPrintCommand PRINTER COPIES NAME tmpname)
    PROMPTWINDOW)
  (printout PROMPTWINDOW "done" T)
  (T (ERROR "Couldn't create unix temp file")))]
T))

```

(UnixShellQuote

```

[LAMBDA (STRING)
  (DECLARE (LOCALVARS . T))
  (LET* ((X (CHCON STRING))
    (CT X)
    C FLG)
    [while (LISTP CT) do (SETQ C (CAR CT))
      (COND
        ([OR (<= (CHARCODE a)
          C
          (CHARCODE z))
          (<= (CHARCODE A)
          C
          (CHARCODE Z))
          (<= (CHARCODE 0)
          C
          (CHARCODE 9))
          (FMEMB C (CHARCODE (- /])
            (SETQ CT (CDR CT)))
          (T (SETQ FLG T)
            (RPLNODE CT (CHARCODE \)
              (CONS (COND
                ((FMEMB C (CHARCODE (CR LF)))
                  (CHARCODE SPACE))
                (T C))
                (SETQ CT (CDR CT))
              )
            )
          )
        )
      )
    (COND
      (FLG (CONCATCODES X))
      (T STRING))
    )
  )

```

; Edited 19-Apr-89 21:14 by TAL

(UnixTempFile

```

[LAMBDA (Prefix DontOpen)
  (LET* ([host (AND (BOUNDP 'FISTempDir)
    (UNPACKFILENAME.STRING FISTempDir 'HOST)
    (dir (OR [COND
      ((OR (STRING-EQUAL host "UNIX")

```

; Edited 28-Apr-93 13:49 by rmk:
; Edited 12-Jan-89 19:07 by TAL

```

                (STRING-EQUAL host "DSK"))
            (UNPACKFILENAME.STRING FISTempDir 'DIRECTORY]
            "tmp"))
    (str (CONCAT (OR Prefix "")
              (IDATE)))
    file unix)
(COND
  ([for i from 1 to 100 thereis (NOT (INFILEP (SETQ file (CONCAT "{UNIX}"
                                                                (SETQ unix
                                                                (CONCAT "/" dir "/" str i]

  (CL:VALUES [COND
    (DontOpen file)
    (T ;; Type TEXT seems to be important for Apple LaserWriters at PARC
      (OPENSTREAM file 'OUTPUT NIL '({TYPE TEXT]
      unix]))

```

(UnixPrintCommand

[LAMBDA (PRINTER COPIES NAME TMPNAME)

; Edited 4-May-2018 17:17 by rmk:

; Edited 20-May-92 14:26 by nilsson

;; This function is called when the user wants to UNIXPRINT a file. It has to return a string that when sent to a shell prints the file tmpname. In the
 ;; cub version this should look something like "/usr/ucb/lpr tmpname". The arguments to this function are:

;; PRINTER - the name of the printer. Usually something like lw or plw.

;; COPIES - how many copies of this job to be printed.

;; NAME - the name of this job. This gets printed on the banner of your job.

;; TMPNAME - The name of the temporary file that contains the postscript code for this job.

;; Note the clever function UnixShellQuote. It converts any lisp name to a string that is quoted according to /bin/sh syntax

;; UNIXPRINTSWITCHES makes it easy for other sites to change just the lpr switches.

;; Use raw lpr, let system decide where it is located.

```

(CONCAT "lpr " (COND
  ((AND PRINTER (NEQ 0 (NCHARS PRINTER)))
   (CONCAT "-P" (UnixShellQuote PRINTER)
            " ")))
  (T ""))
(COND
  ((AND (FIXP COPIES)
        (NEQ COPIES 1))
   (CONCAT "-#" COPIES " ")))
  (T ""))
  "-J"
  (UnixShellQuote NAME)
  " "
  (OR UNIXPRINTSWITCHES "")
  " " TMPNAME])

```

)

(RPAQ? UnixPrinterName NIL)

(RPAQ? UNIXPRINTSWITCHES " -r -s ")

;; (InstallUnixPrinter) commented out because POSTSCRIPT indirections according to platform

(PRIN1 "Please feel free to edit UnixPrintCommand." PROMPTWINDOW)

(PUTPROPS UNIXPRINT FILETYPE :COMPILE-FILE)

(DECLARE%: DONTEVAL@COMPILE DOCOPY

(DEFINEQ

(UnixPrintCommand

[LAMBDA (PRINTER COPIES NAME TMPNAME)

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```

(CONCAT "lpr " (COND
  ((AND PRINTER (NEQ 0 (NCHARS PRINTER)))
   (CONCAT "-P" (UnixShellQuote PRINTER)
            " ")))
  (T ""))

```

```
        (T ""))
      (COND
        ((AND (FIXP COPIES)
              (NEQ COPIES 1))
         (CONCAT "-#" COPIES " "))
        (T ""))
      " -J"
      (UnixShellQuote NAME)
      " "
      (OR UNIXPRINTSWITCHES "")
      " " TMPNAME])

)
)

(DECLARE%: EVAL@COMPILE DOCOPY

(FILESLoad UNIXCOMM)
)

(DECLARE%: EVAL@COMPILE DONTCOPY

(DECLARE%: DOEVAL@COMPILE DONTCOPY

(GLOBALVARS UnixPrinterName)
)
)

(DECLARE%: DONT EVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILEVARs

(ADDTovar NLAMA )

(ADDTovar NLAML )

(ADDTovar LAMA )
)

(PUTPROPS UNIXPRINT COPYRIGHT ("Venue" 1990 1991 1992 1993 1995 1997 1999 2001 2018 2023))
```

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UNIXPRINT3
