

File created: 10-May-88 00:46:44 {ERINYES}<LISPUSERS>MEDLEY>IRISNET.;1

previous date: 4-Feb-87 19:47:55 {ERINYES}<LISPUSERS>LYRIC>IRISNET.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

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```
(RPAQQ IRISNETCOMS
  ([DECLARE%: EVAL@LOAD DONTCOPY (P (LOADCOMP 'LLEETHER)
                                     (LOADCOMP 'ETHERRECORDS]
    (FNS IRIS.RESET IRIS.TRACE IRISBOOTPROCESS SENDIRISPACKET IRISFILTER OPEN.IRISCONN IRISBOOTSERVER)
    (VARS \IRIS.VERBOSE (PRINTSPPDATAFLG T))
    (VARS (IRIS.LOCK (CREATE.MONITORLOCK "iris boot lock")))
    (GLOBALVARS IRISNSHOSTNUMBER)
    [INITVARS (IRISNET 146)
              (IRISBOOTDIRECTORIES '({CORE} {ERIS}<IRIS>gl2>boot>]
    (CONSTANTS (IRISSOCKET 37)
              (IRIS.PACKETTYPE 32790)
              (IRIS.BOOT.STREAM.NAME '|IRIS boot SPP|))
  [DECLARE%: EVAL@LOAD DONTCOPY (FILES ETHERRECORDS)
    (P (LOADCOMP 'LLEETHER)
      [P (ACCESSFNS IRISENCAPSULATION [(IRISBASE (LOCF (FETCH (ETHERPACKET EPENCAPSULATION)
                                                             OF DATUM]
        [BLOCKRECORD IRISBASE ((IRISLENGTH WORD)
                                (IRISDESTHOSTO 3 WORD)
                                (IRISSOURCEHOSTO 3 WORD)
                                (IRISTYPE WORD)
                                (IRISEXCHID WORD)
                                (INFOCHAR1 BYTE)
                                (INFOCHAR2 BYTE))
          [ACCESSFNS IRISDESTHOSTO ((IRISDESTHOST (\LOADNSHOSTNUMBER (LOCF DATUM))
                                                    (\STORENSHOSTNUMBER (LOCF DATUM)
                                                                    NEWVALUE))
                                (IRISPACKETBASE (LOCF DATUM))
                                (IRISDESTHOSTBASE (LOCF DATUM]
          (ACCESSFNS IRISSOURCEHOSTO ((IRISSOURCEHOST (\LOADNSHOSTNUMBER (LOCF DATUM))
                                                         (\STORENSHOSTNUMBER (LOCF DATUM)
                                                                    NEWVALUE))
                                (IRISSOURCEHOSTBASE (LOCF DATUM]
        (TYPE? (type? ETHERPACKET DATUM]
        (MACROS BROADCASTP)))
    (DECLARE%: EVAL@LOAD DONTCOPY
      (LOADCOMP 'LLEETHER)
      (LOADCOMP 'ETHERRECORDS)
    )
    (DEFINEQ
      (IRIS.RESET
        [LAMBDA NIL
          (PROG (PROC)
            (CLOSEF? '{DSK}IRISBOOTFILE)
            (if (SETQ PROC (FIND.PROCESS IRIS.BOOT.STREAM.NAME))
              then (DEL.PROCESS PROC))
            (if (SETQ PROC (FIND.PROCESS '|Iris Terminal SPP|))
              then (DEL.PROCESS PROC))
            (if (SETQ PROC (FIND.PROCESS 'IRISBOOTPROCESS))
              then (DEL.PROCESS PROC))
            (PROCESS.STATUS.WINDOW (CREATEPOSITION 5 5))
          )
        (* gbn "24-Jun-85 01:31")
      )
      (IRIS.TRACE
        [LAMBDA NIL
          (SETQ PRINTSPPDATAFLG NIL)
          (SETQ XIPIGNORETYPES '(1 TRANS))
          (XIPTIME T))
        (* gbn "25-Feb-86 12:24")
      )
      (IRISBOOTPROCESS
        [LAMBDA (IRISPACKET)
          (DECLARE (GLOBALVARS IRISBOOTDIRECTORIES IRISNSADDRESS IRIS.LOCK IRISNET IRISNSHOSTNUMBER))
          (COND
            ((OBTAIN.MONITORLOCK IRIS.LOCK T T)
              [PROG (DH CHAR NET IRISBOOTFILE INBOOTSTREAM OUTBOOTSTREAM IRISBOOTFILENAME BOOTFILENAME TEMP)
                (SETQ DH (fetch (IRISENCAPSULATION IRISSOURCEHOST) of IRISPACKET))
                (SETQ CHAR (fetch (IRISENCAPSULATION INFOCHAR1) of IRISPACKET))
                (replace (IRISENCAPSULATION IRISDESTHOST) of IRISPACKET with (SETQ IRISNSHOSTNUMBER
```

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                                (fetch (IRISENCAPSULATION
                                         IRISOURCEHOST)
                                of IRISPACKET))
(replace (IRISENCAPSULATION IRISOURCEHOST) of IRISPACKET with \MY.NSHOSTNUMBER)
[COND
  (\IRIS.VERBOSE                                (* inform the user that a boot attempt is being made)
    (FLASHWINDOW PROMPTWINDOW)
    (PROMPTPRINT (CONCAT "IRIS boot initiated to: " DH]
                                (* "E" for "reply" to booting and "H" for "hostname" for spp
                                connection)
    (SETQ NET (fetch (XIP XIPSOURCENET) of IRISPACKET))
    (SETQ IRISNSADDRESS (create NSADDRESS
                                NSNET _ IRISNET
                                NSHOSTNUMBER _ IRISNSHOSTNUMBER))

(* this should be using the net from the iris, but it can't be trusted.
SGI doesn't handle turning around packets properly)

(COND
  ((EQ CHAR (CHARCODE C))                                (* replace EPSOCKET of IRISPACKET with 41)
    (replace (IRISENCAPSULATION INFOCHAR1) of IRISPACKET with (CHARCODE E))
    (SENDIRISPACKET IRISPACKET)                                (* just sends back an "E" packet with our host socket
                                                                (41) filled in)
    (SETQ INBOOTSTREAM (SPP.OPEN NIL 41 NIL IRIS.BOOT.STREAM.NAME))
    (SETQ OUTBOOTSTREAM (SPP.OUTPUTSTREAM INBOOTSTREAM))
    (SPP.DSTYPE INBOOTSTREAM 108)                                (* returns a connection which is not yet established)
    (BIN INBOOTSTREAM)
    [SETQ TEMP (CONCAT (PACKC (while (SPP.READP INBOOTSTREAM) collect (BIN INBOOTSTREAM)
    [SETQ BOOTFILENAME (L-CASE (SUBSTRING TEMP (STRPOS ".*" TEMP 1 NIL NIL T)
                                (SUB1 (STRPOS (CONCAT (CHARACTER 0))
                                TEMP]
    [COND
      ((STREQUAL BOOTFILENAME (CONSTANT "defaultboot"))
        (SETQ BOOTFILENAME (CONSTANT "iris") (* This is a packet specifying the boot file name,)
      [SETQ IRISBOOTFILE (OPENSTREAM (SETQ IRISBOOTFILENAME (FINDFILE BOOTFILENAME NIL
                                IRISBOOTDIRECTORIES))
                                'INPUT NIL ' ((TYPE BINARY]
    [COND
      (\IRIS.VERBOSE                                (* inform the user that a boot attempt is being made)
        (PROMPTPRINT (CONCAT "Booting IRIS from: " IRISBOOTFILENAME]
        (COPYBYTES IRISBOOTFILE OUTBOOTSTREAM NIL NIL)
        (FORCEOUTPUT OUTBOOTSTREAM)
        (CLOSEF IRISBOOTFILE)
        (PROMPTPRINT "IRIS boot server complete, closing boot file")
        (CLOSEF INBOOTSTREAM))
      ((EQ CHAR (CHARCODE A))                                (* replace EPSOCKET of IRISPACKET with 41)
        (replace (IRISENCAPSULATION INFOCHAR1) of IRISPACKET with (CHARCODE E))
        (SENDIRISPACKET IRISPACKET)                                (* just sends back an "E" packet with our host socket
                                                                (41) filled in)
        (SETQ INBOOTSTREAM (SPP.OPEN NIL 41 NIL IRIS.BOOT.STREAM.NAME))
        (SETQ OUTBOOTSTREAM (SPP.OUTPUTSTREAM INBOOTSTREAM))
        (SPP.DSTYPE INBOOTSTREAM 108)                                (* returns a connection which is not yet established)
        (BIN INBOOTSTREAM)
        (while (SPP.READP INBOOTSTREAM) collect (BIN INBOOTSTREAM))
        (SETQ BOOTFILENAME (CONSTANT "iris") (* This is a packet specifying the boot file name,)
        [SETQ IRISBOOTFILE (OPENSTREAM (SETQ IRISBOOTFILENAME (FINDFILE BOOTFILENAME NIL
                                IRISBOOTDIRECTORIES))
                                'INPUT NIL ' ((TYPE BINARY]
    [COND
      (\IRIS.VERBOSE                                (* inform the user that a boot attempt is being made)
        (PROMPTPRINT (CONCAT "Booting IRIS from: " IRISBOOTFILENAME]
        (COPYBYTES IRISBOOTFILE OUTBOOTSTREAM NIL NIL)
        (FORCEOUTPUT OUTBOOTSTREAM)
        (CLOSEF IRISBOOTFILE)
        (PROMPTPRINT "IRIS boot server complete, closing boot file")
        (CLOSEF INBOOTSTREAM))
      ((EQ CHAR (CHARCODE H))                                (* serv-hostname in SGIspeak)
        (PRINT "workstation server connection")                                (* replace EPSOCKET of IRISPACKET with 41)
        (replace (IRISENCAPSULATION INFOCHAR1) of IRISPACKET with (CHARCODE H))
        (SETQ INBOOTSTREAM (SPP.OPEN NIL 37))
        (SENDIRISPACKET IRISPACKET))
      (T (PRINT "Iris connection")                                (* replace EPSOCKET of IRISPACKET with 41)
        (PRINTOUT PROMPTWINDOW CHAR "RECEIVED")
        (replace (IRISENCAPSULATION INFOCHAR1) of IRISPACKET with (CHARCODE H))
        (SETQ INBOOTSTREAM (SPP.OPEN NIL 37))
        (SENDIRISPACKET IRISPACKET]
    (RELEASE.MONITORLOCK IRIS.LOCK))

```

(SENDIRISPACKET

[LAMBDA (IRISPACKET)

(* gbn "10-Jun-85 16:05")

(* * Sends a raw seething IRIS packet)

```

(COND
  ((fetch (ETHERPACKET EPTRANSMITTING) of IRISPACKET)
    'AlreadyQueued)

```

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(T
  (TRANSMIT.ETHERPACKET (fetch (ETHERPACKET EPNETWORK) of IRISPACKET)
    IRISPACKET]))
(* (\RCLK (LOCF (fetch (ETHERPACKET EPTIMESTAMP) of
  IRISPACKET)))

```

(IRISFILTER

```

[LAMBDA (IRISPACKET)
  (if (AND (EQ (fetch (ETHERPACKET EPTYPE) of IRISPACKET)
    IRIS.PACKETTYPE)
    (BROADCASTP IRISPACKET))
    then (ADD.PROCESS '(IRISBOOTPROCESS %, IRISPACKET))
    T
  else
    NIL))
(* gbn "3-Jun-85 22:49")
(* not an iris packet)

```

(OPEN.IRISCONN

```

[LAMBDA (NSADDRESS)
  (SETQ IRISCONN (SPP.OPEN (OR NSADDRESS IRISNSADDRESS)
    IRISOCKET T 'Iris Terminal SPP|))
(* gbn "7-Jul-85 14:42")

```

(IRISBOOTSERVER

```

[LAMBDA (ON?)
  (if ON?
    then (PROMPTPRINT "Enabling IRIS boot server")
    (\ADD.PACKET.FILTER (FUNCTION IRISFILTER))
  else (PROMPTPRINT "Disabling IRIS boot server")
    (\DEL.PACKET.FILTER (FUNCTION IRISFILTER)))
(* gbn "7-Jul-85 14:54")

```

)

(RPAQQ \IRIS.VERBOSE T)

(RPAQQ PRINTSPPDATAFLG T)

(RPAQ IRIS.LOCK (CREATE.MONITORLOCK "iris boot lock"))

(DECLARE%: DOEVAL@COMPILE DONTCOPY

(GLOBALVARS IRISNSHOSTNUMBER)

)

(RPAQ? IRISNET 146)

(RPAQ? IRISBOOTDIRECTORIES '({CORE} {ERIS}<IRIS>gl2>boot>))

(DECLARE%: EVAL@COMPILE

(RPAQQ IRISOCKET 37)

(RPAQQ IRIS.PACKETTYPE 32790)

(RPAQQ IRIS.BOOT.STREAM.NAME |IRIS boot SPP|)

```

(CONSTANTS (IRISOCKET 37)
  (IRIS.PACKETTYPE 32790)
  (IRIS.BOOT.STREAM.NAME '|IRIS boot SPP|))

```

(DECLARE%: EVAL@LOAD DONTCOPY

(FILESLOAD ETHERRECORDS)

(LOADCOMP 'LLEther)

)

```

(ACCESSFNS IRISENCAPSULATION [(IRISBASE (LOCF (FETCH (ETHERPACKET EPENCAPSULATION) OF DATUM]
  [BLOCKRECORD IRISBASE ((IRISLENGTH WORD)
    (IRISDESTHOSTO 3 WORD)
    (IRISSOURCEHOSTO 3 WORD)
    (IRISTYPE WORD)
    (IRISEXCHID WORD)
    (INFOCHAR1 BYTE)
    (INFOCHAR2 BYTE))
  [ACCESSFNS IRISDESTHOSTO ((IRISDESTHOST (\LOADNSHOSTNUMBER (LOCF DATUM))
    (\STORENSHOSTNUMBER (LOCF DATUM)
      NEWVALUE))
    (IRISPACKETBASE (LOCF DATUM))
    (IRISDESTHOSTBASE (LOCF DATUM]
  (ACCESSFNS IRISSOURCEHOSTO ((IRISSOURCEHOST (\LOADNSHOSTNUMBER (LOCF DATUM))
    (\STORENSHOSTNUMBER (LOCF DATUM)
      NEWVALUE))
    (IRISSOURCEHOSTBASE (LOCF DATUM]
  (TYPE? (type? ETHERPACKET DATUM)))

```

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{MEDLEY}<obsolete>lispusers>IRISNET.;1
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```
(DECLARE%: EVAL@COMPILE
```

```
(PUTPROPS BROADCASTP MACRO ((PACKET)
  ([LAMBDA (NDB)
    (AND NDB (APPLY* (fetch NDBBROADCASTP of NDB)
                     PACKET NDB]
    (fetch EPNETWORK of PACKET))))
)
```

```
(PUTPROPS IRISNET COPYRIGHT ("Xerox Corporation" 1988))
```

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