

File created: 8-Aug-88 11:21:37 {ERINYES}<LISPUSERS>MEDLEY>RPCLOWLEVEL.;3

changes to: (VARS RPCLOWLEVELCOMS)
(FNS STRING.ZEROBYTES)

previous date: 8-Aug-88 11:13:29 {ERINYES}<LISPUSERS>MEDLEY>RPCLOWLEVEL.;2

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

::
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(RPAQQ **RPCLOWLEVELCOMS**

```
  [(PROPS (RPCLOWLEVEL MAKEFILE-ENVIRONMENT FILETYPE))  
   (FNS TCP.STREAM.SOCKET TCP.SOCKET.EVENT STRING.ZEROBYTES STRING.BOUTS STRING.BINS \IP.APPEND.BYTES  
         UDP.APPEND.BYTES UDP.GET.BYTES UDP.MYGET.STRING \UDP.SET.CHECKSUM.ZERO)  
   (DECLARE%: EVAL@COMPILE DONTCOPY (FILES (SOURCE)  
                                         TCPEXPORTS))  
   (DECLARE%: DONTEVAL@LOAD DOCOPY (P (CHANGENAME 'UDP.SEND '\UDP.SET.CHECKSUM '\UDP.SET.CHECKSUM.ZERO))
```

(PUTPROPS **RPCLOWLEVEL MAKEFILE-ENVIRONMENT** (:READTABLE "INTERLISP" :PACKAGE "INTERLISP"))

(PUTPROPS **RPCLOWLEVEL FILETYPE** :COMPILE-FILE)

(DEFINEQ

(**TCP.STREAM.SOCKET**

[LAMBDA (STREAM) ; Edited 27-Apr-88 21:51 by drc:

::: Return IPSOCKET of a TCP Stream

(**fetch** TCB.IPSOCKET **of** (**fetch** F1 **of** STREAM))

(**TCP.SOCKET.EVENT**

[LAMBDA (IPSOCKET) ; Edited 27-Apr-88 21:51 by drc:

::: For some reason Eric did not include this function, but it is identical to UDP.SOCKET.NUMBER, anyway.

(**fetch** (IPSOCKET IPSEVENT) **of** IPSOCKET))

(**STRING.ZEROBYTES**

[LAMBDA (STRING FIRST NBYTES) ; Edited 5-Aug-88 18:20 by bvm

::: Zero bytes of a string

(\CLEARBYTES (**fetch** (STRINGP BASE) **of** STRING)
FIRST NBYTES))

(**STRING.BOUTS**

[LAMBDA (STREAM STRING FIRST NBYTES) ; Edited 27-Apr-88 21:51 by drc:

::: Write substring to stream

(\BOUTS STREAM (**fetch** (STRINGP BASE) **of** STRING)
FIRST NBYTES))

(**STRING.BINS**

[LAMBDA (STREAM STRING FIRST NBYTES) ; Edited 27-Apr-88 21:51 by drc:

::: Read substring from stream

(\BINS STREAM (**fetch** (STRINGP BASE) **of** STRING)
FIRST NBYTES))

(**IP.APPEND.BYTES**

[LAMBDA (IP ADDR OFFSET LENGTH) ; Edited 27-Apr-88 21:51 by drc:

::: Append bytes (not necessarily a string) to IPPACKET.

```
(\MOVEBYTES ADDR OFFSET (fetch (IP IPBASE) of IP)  
  (fetch (IP IPTOTALLENGTH) of IP)  
  LENGTH)  
(add (fetch (IP IPTOTALLENGTH) of IP)  
  LENGTH))
```

(**UDP.APPEND.BYTES**

{MEDLEY}<lispusers>RPCLOWLEVEL.;1 (UDP.APPEND.BYTES cont.)

Page 2

[LAMBDA (UDP ADDR OFFSET NBYTES)

; Edited 27-Apr-88 21:52 by drc:

;;; Append bytes (not necessarily a string) to UDP Packet

```
(\IP.APPEND.BYTES UDP ADDR OFFSET NBYTES)
  (add (fetch (UDP UDPLength) of UDP)
       NBYTES])
```

(UDP.GET.BYTES

[LAMBDA (UDP SOFFSET DEST DOFFSET NBYTES)

; Edited 27-Apr-88 21:52 by drc:

;;; Move bytes out of UDP Packet to another buffer without string creation

```
(\MOVEBYTES (fetch (UDP UDPCONTENTS) of UDP)
             SOFFSET DEST DOFFSET NBYTES)
  DEST])
```

(UDP.MYGET.STRING

[LAMBDA (UDP OFFSET LENGTH)

; Edited 27-Apr-88 21:52 by drc:

;;; Fetch string from packet. String does not go to end of packet as in UDP.GET.STRING.

```
(OR (SMALLP OFFSET)
     (SETQ OFFSET 0))
(LET* ((STRING (ALLOCSTRING LENGTH))
       (\MOVEBYTES (fetch (UDP UDPCONTENTS) of UDP)
                   OFFSET
                   (fetch (STRINGP BASE) of STRING)
                   (fetch (STRINGP OFFST) of STRING)
                   LENGTH)
       STRING])
```

(\UDP.SET.CHECKSUM.ZERO

[LAMBDA (UDP)

; Edited 27-Apr-88 21:52 by drc:

;;; Avoid doing a UDP checksum. Packet already gets IP Checksum.

```
(replace (UDP UDPCHECKSUM) of UDP with 0))
```

)

(DECLARE%: EVAL@COMPILE DONTCOPY

```
(FILESLoad (SOURCE)
            TCPEXPORTS)
)
```

(DECLARE%: DONTVAL@LOAD DOCOPY

```
(CHANGENAME 'UDP.SEND '\UDP.SET.CHECKSUM '\UDP.SET.CHECKSUM.ZERO)
)
```

(PUTPROPS **RPCLOWLEVEL COPYRIGHT** ("Stanford University and Xerox Corporation" 1987 1988))

FUNCTION INDEX

STRING.BINS	1	TCP.SOCKET.EVENT	1	UDP.GET.BYTES	2	\UDP.SET.CHECKSUM.ZERO ..	2
STRING.BOUTS	1	TCP.STREAM.SOCKET	1	UDP.MYGET.STRING	2		
STRING.ZEROBYTES	1	UDP.APPEND.BYTES	1	\IP.APPEND.BYTES	1		

PROPERTY INDEX

RPCLOWLEVEL
