

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%: DONTVAL@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 (ffetch (IP IPTOTALLENGTH) of IP)
    LENGTH))
```

```
(UDP.APPEND.BYTES
```

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

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```
[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%: DONTEVAL@LOAD DOCOPY
```

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

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

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