Bernie

MEMORANDUM

To: Software Distribution List

From: J. B. Levin

Subject: PDP-1d Network Handler   SD#34

Date: November 15, 1972

---

1. Since I am thus far the only person who has written programs
   using the network handler queues, I have felt free to modify the
   structure of the queues. I removed three spare words and included
   the first twelve words of message in the queue blocks. This
   has not changed the lengths of either the queue block or the
   queue item (as shown in the attatched crib sheet). The change
   is motivated by the size of the TIP's allocate: now that it fits
   entirely in the queue block, SYSNET writes and NETLIST reads are
   saved, and NETLIST runs roughly 20% - 30% faster.
2. Also a bug which caused SYSNET to crash every few days was fixed
   (I hope).

   JBL/ph

NETWORK INPUT QUEUE ITEM STRUCTURE

```
                    ---------------------
            /   !                       !    QUEUE ITEM LENGTH (204)
            !   ---------------------
            !   !                       !    RE-WRITE NUMBER
 OVERHEAD--+    ---------------------
            !   !                       !    CHAIN POINTER TO PREVIOUS ITEM
            !   ---------------------
            \   !                       !    REL. POINTER TO FIRST EMPTY BLOCK
                ---------------------
                ---------------------
            /   !XXX!                   !    MSG WORD 0 (LEADER)
        !   ---------------------
            !   !XXX!                   !    MSG WORD 1 (LINK)
            !   ---------------------
            !   !XXX!                   !    MSG WORD 2
            !   ---------------------
            !   !XXX!                   !    MSG WORD 3
            !   ---------------------
            !   !XXX!                   !    MSG WORD 4
            !   ---------------------
            !   !XXX!                   !    MSG WORD 5
            !   ---------------------
            !   !XXX!                   !    MSG WORD 6
            !   ---------------------
            !   !XXX!                   !    MSG WORD 7
 8.--------+    ---------------------
            !   !XXX!                   !    MSG WORD 8
            !   ---------------------
            !   !XXX!                   !    MSG WORD 9
            !   ---------------------
            !   !XXX!                   !    MSG WORD 10
            !   ---------------------
            !   !XXX!                   !    MSG WORD 11
            !   ---------------------
            !   !                       !    POINTER TO MESSAGE ITEM IF LONGER
            !   ---------------------        THAN 12 WORDS
            !   !                       !    LENGTH OF MESSAGE (WORDS)
            !   ---------------------
            !   !                       !    DATE PLACED ON QUEUE
            !   ---------------------
            \   !                       !    TIME PLACED ON QUEUE
                ---------------------
```