

### **Asynchronous Communications Links**

Network MailMan can be used to communicate with computers that are connected via asynchronous media. Leased lines with modems, statistical multiplexors, or line drivers and Simple Twisted Pair (STP) connections are among the choices available. Auto-dial modems may be used, provided that appropriate modem dial and hang-up logic similar to that shown in the previous example is provided.

### **Synchronous Communications Links**

Network MailMan can be used across synchronous networks if the capability is available. TCP/IP channels have been in use at 20 sites using VAX DSM for 6 months to a year as of June 1993, and the number increases steadily.

### **Notes on the Mini Out Device**

It appears that the new LatMaster software is too fast when trying to open ports. TaskMan will open a port to see if it is free before tasking a job to it. If it is free, TaskMan will close the port and immediately have the process requesting a tasked job open the same port. The server isn't finished cleaning up the port from the CLOSE when the second process tries to open it. It gets caught in a loop of trying to open what it thinks is free, but actually isn't. It will then time-out or get a data set hang up error. If there is no time-out set, it may appear that tasked jobs take 30-45 minutes (or maybe longer) before they print.

A hang needs to be placed between TaskMan's closing of the port and the second process trying to open the port. A hang of seven seconds is recommended and has been proven to work. Hang times need to be tweaked for each system; some systems may get away with lower hang times than others.

### **For ALL Systems**

There are two other significant changes.

- Set the Open Time-out field in the Device file to seven.
- For active Network Mail ports, enter `S IO("C")=1,ZTNONEXT=1,%ZTIO=""` in the Close Execute field of the Terminal Type file.

This Close Execute property drops the current connection so that the device can be used to initiate a new one.

**Note:** Not doing this will cause the system to loop indefinitely! The outgoing ports will be reused without connections being properly dropped. Network Mail tasks will fail repeatedly.

## Network Architecture

### Setting up Network MailMan -- Devices

Additionally, it has been found that setting the LAT ports/queues will also work. Previously, no-queues had been used for host initiated requests. This may be documented in the LAT database. It also contains an added feature to prevent TaskMan from slowing down.

An example of DOS/MSM MINIOUT Physical Link Device follows.

OUTPUT FROM WHAT FILE:    **DEVICE**                           (168 entries)

```
NAME:    MINIOUT    $I:    nn
ASK DEVICE:    YES            ASK PARAMETERS:    YES
LOCATION OF TERMINAL:    MINIOUT TO FOC-AUSTIN
MARGIN WIDTH:    225            FORM FEED:    #
PAGE LENGTH:    66 BACK SPACE    $C(8)
SUBTYPE:    C-MSM-MINIOUT        TYPE:    TERMINAL
VMS SERVER NODE:    sssss        VMS SERVER PORT:    nn
```

OUTPUT FROM WHAT FILE:    **TERMINAL TYPE**                   (180 entries)  
Select TERMINAL TYPE NAME:    **C-MSM-MINIOUT**

```
NAME:    C-MSM-MINIOUT    RIGHT MARGIN:    255
FORM FEED:    #            PAGE LENGTH:    66
BACK SPACE:    $C(8)        OPEN EXECUTE:    X ^%ZOSF("EOFF")
CLOSE EXECUTE:    X ^%ZOSF("EON") S IO("C")=1, ZTNONEXT=1,
                  %ZTO=""
```

**Note:** X ^%ZOSF("EOFF") is the same as U IO:(::::1) and X ^%XOSF("EON") is the same as U IO:(::::1).