TCP/IP Over the X.25 Network Interface (XT)

Special Notices

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> **Note:** The information in this document has **not** been verified for AIX 4.1.

Diagram

The following is a diagram of TCP/IP running over the x.25 network interface (xt).

```
===========                                ============
  xhost    <--------mdmeliminator----->    yhost
===========       direct connection     ============



===========          X25 net             ============
  xhost     <----mdm1------mdm2------>     yhost
===========     modem   connection      ============
```

Procedure for Setting Up IP/X.25:

1. Make sure the microcode exists (/etc/microcode/icaaim.com). If not, install it and reboot.
2. Make sure the ODM database is synchronized.

   If x.25 adapter cards have been moved to different slots, it is possible that the ODM database will have incorrect information. To verify that the database has correct information, run the following command:

   ```
   lsdev -Cc adapter
   ```

   You will see a list of objects and their current state. There should be one entry for each X.25 adapter you have installed. If the PTFs for support on the ARTIC card family are installed on your machine, you will see ampx0,

ampx1, etc. If the PTFs are not installed, the adapters will be named x25s0, x25s1, etc. See fax on rename.adapter.sna (from the defect support center) for information on ARTIC support.

If there is an error, run the following command for each x25 adapter to correct the database:

```
rmdev -l objectname -d
```

For example,

With ARTIC support

```
rmdev -l x25s0 -d          # x25 device driver
rmdev -l x25s1 -d          # x25 device driver
rmdev -l ampx0 -d          # x25 adapter
rmdev -l ampx1 -d          # x25 adapter
```

Without ARTIC support

```
rmdev -l x25s0 -d          # x25 adapter
rmdev -l x25s1 -d          # x25 adapter
```

After running rmdev for each x25 adapter, boot the machine.

3. If the local network user address is not already configured, use SMIT to set it. To do this, enter "smit x25" and go to "Change Network Parameters". For systems at 3.2.3E or later, enter "smit x25cs" and go to "Change / Show Network Parameters".
4. Set any other X.25 configuration parameters you need to customize at this point. This is optional.
5. If the connection is direct and the line type is not already configured, use SMIT to set it to DCE for one of the machines. Enter "smit x25" and go to "Change Packet Parameters".
6. Bring up the XT interface (xhost and yhost must be in /etc/hosts on both machines or available from a nameserver).

   Note: If the connection is direct, the following commands must be issued simultaneously on both machines due to link start-up requirements for direct connection. Normally the host is attached to an X.25 network which would not require this.

   If the host is connected to an X.25 network, the network interface may be configured via SMIT ("smit tcpip"), allowing automatic startup of the interface at IPL time. DO NOT do this with a direct connection due to the timing problem described above.

   On xhost, do the following:

   a. Enter "smit mkinet".
   b. Select "Add an X.25 Network Interface".
   c. Select xt0 for the first x25 adapter, xt1 for the second x25 adapter, etc.
   d. Provide for the "INTERNET ADDRESS (dotted decimal)" and "Network MASK (hexadecimal or dotted decimal)".

On yhost, do the following:

a. Enter "smit mkinet".
b. Select "Add an X.25 Network Interface".
c. Select xt0 for the first x25 adapter, xt1 for the second x25 adapter, etc.
d. Provide for the "INTERNET ADDRESS (dotted decimal)" and "Network MASK (hexadecimal or dotted decimal)".

7. Map every remote x25 host's IP address to X.25 NUAs on smit by issuing "smit mkx25s". You will need the following information:

   Remote HOSTNAME
   Remote DTE Address
   X25 Device Number
   Other Optional X.25 Facilities

8. Now verify that the X.25 network interface is operational:

   On the xhost, issue the command

   ```
   ping yhost
   ```

   On the yhost, issue the command

   ```
   ping xhost
   ```

Reader's Comments

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