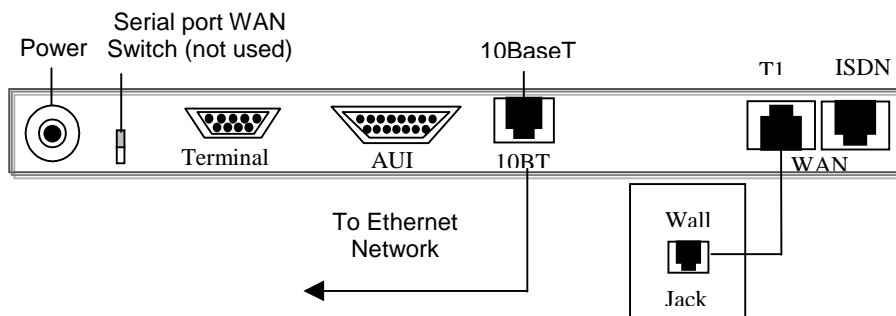


Configuring the Ascend Pipeline 130 for Leased Line

To configure the Ascend connect a console to the console port of the router. If the router was preconfigured by us a console session is unnecessary, just telnet into the router.

1. Connect the DB-9 to DB25 adapter to the console port of the router.
2. Connect the DB25 end of the adapter to an RS-232 cable (this is not provided).
3. Connect the RS-232 to a PC, or Mac with proper cables, with VT100 emulation software set to 9600 baud, 8 data bits, no parity, and 1 stop bit.
4. Connect the router to the LAN (see wiring diagram below).
5. Connect the WAN2 interface to the telco demarc (see wiring diagram below).
6. Make sure the router is turned on.
7. Press control – L to refresh the screen.



After hitting Ctrl-L you should see the main edit window:

First you need to create an FR connection profile.

- From the main edit window, select Ethernet.
- Select Connections.
- Choose profile 20-102.
- Configure the parameters as described below.

Main Edit Menu -->

+- 20-000 Ethernet -->

+- 20-100 Connections -->

+- 20-102

```

+----- DOMAIN EDIT -----+
| 20-102 FR                  | | 10-100 1 T1/CSU          | | 00-200 00:00:05         |
| >Station=FR               | | Link X CARRIER        | | >M31 Line Ch          |
| Active=Yes                | | B1 .                   | | Ethernet Up         |
| Encaps=FR                 | | B2 .                   | |                       |
| Dial #=N/A                | |                       | |                       |
| Route IP=Yes              | | 20-100 Sessions        | | 20-500 DYN Stat      |
| Route IPX=No              | | > 1 Active              | | Qual N/A 00:00:00   |
| Bridge=N/A                | | 0                       | | OK 0 channels       |
| Dial Broadcast=N/A        | |                       | | CLU 0% ALU 0%      |
| Encaps Options...         | |                       | |                       |
| IP Options...             | | 20-300 WAN Stat        | | 20-400 Ether Stat   |
| Ipx Options...           | | >Rx Pkt: 0^             | | >Rx Pkt: 0           |
| Session Options...        | | Tx Pkt: 0              | | Tx Pkt: 1           |
| Telco Options...          | | CRC: 0v                | | Col: 0              |
|                             | |                       | |                       |
|                             | | 00-100 Sys Option      | | 00-300 HW Config    |
|                             | | >Security Prof: 3 ^    | | >BRI U Interface    ^
|                             | | Software +4.5A+       | | Adrs: 00c07b520036  |
|                             | | S/N: 5366006 v        | | Enet I/F: AUI v     |
    
```

Press Ctrl-n to move cursor to the next menu item. Press return to select it.
 Press Tab to move to another window --- thick border indicates active window.

Configuring the Ascend Pipeline 130 (cont'd)

SER.SER.SER.1/24 is the IP address of our router. It is the first 3 octets of the Serial IP with a .1 as the fourth octet.

SER.SER.SER.SER/24 is the Serial IP address of the router.

Press ESC until you are back at the Main Edit Menu.

Select Ethernet then Static Rtes then Default.

```

Main Edit Menu --
      +- 20-000 Ethernet --
                +- 20-300 Static Rtes --
                          +- 20-3** Default
+----- DOMAIN EDIT -----+ +-----+ +-----+
| 20-3** Default              | | 10-100 1   T1/CSU   | | 00-200 00:00:05 |
| >Name=Default              | | Link X   CARRIER  | | >M31 Line   Ch  |
| Active=Yes                 | | B1      .          | | Ethernet Up  |
| Dest=0.0.0.0/0            | | B2      .          | |               |
| Gateway=SER.SER.SER.1     | | +-----+ +-----+ |
| Metric=1                  | | 20-100 Sessions  | | 20-500 DYN Stat |
| Preference=100            | | > 1 Active       | | Qual N/A 00:00:00 |
| Private=No                | | 0                   | | OK      0 channels |
|                           | | +-----+ +-----+ | | CLU   0% ALU   0% |
|                           | | 20-300 WAN Stat   | | 20-400 Ether Stat |
|                           | | >Rx Pkt:      0^  | | >Rx Pkt:      0   |
|                           | | Tx Pkt:      0   | | Tx Pkt:      1   |
|                           | | CRC:        0v  | | Col:        0   |
|                           | | +-----+ +-----+ |
|                           | | 00-100 Sys Option | | 00-300 HW Config  |
|                           | | >Security Prof: 3 ^  | | >BRI U Interface ^  |
|                           | | Software +4.5A+   | | Adrs: 00c07b520036 |
|                           | | S/N: 5366006     v  | | Enet I/F: AUI   v  |
+-----+ +-----+ +-----+
    
```

Press Ctrl-n to move cursor to the next menu item. Press return to select it.
Press Tab to move to another window --- thick border indicates active window.

Press ESC to get to the Static Rtes menu, then Press ESC again to get to the Ethernet
Select Mod Config, then Ether options...

```

Main Edit Menu --
      +- 20-000 Ethernet --
                +- 20-B00 Mod Config --
                          Ether options...
+----- DOMAIN EDIT -----+ +-----+ +-----+
| Ether options...          | | 10-100 1   T1/CSU   | | 00-200 00:00:05 |
| >IP Adrs=LAN.LAN.LAN.LAN/24 | | Link X   CARRIER  | | >M31 Line   Ch  |
| 2nd Adrs=0.0.0.0/0       | | B1      .          | | Ethernet Up  |
| RIP=Off                  | | B2      .          | |               |
| Ignore Def Rt=Yes       | | +-----+ +-----+ |
| Proxy Mode=Off          | | 20-100 Sessions  | | 20-500 DYN Stat |
| Filter=Off              | | > 1 Active       | | Qual N/A 00:00:00 |
| IPX Frame=None          | | 0                   | | OK      0 channels |
| IPX Enet#=N/A           | | +-----+ +-----+ | | CLU   0% ALU   0% |
| IPX Pool#=N/A           | | 20-300 WAN Stat   | | 20-400 Ether Stat |
| IPX SAP Filter=N/A      | | >Rx Pkt:      0^  | | >Rx Pkt:      0   |
| IPX SAP Proxy=N/A       | | Tx Pkt:      0   | | Tx Pkt:      1   |
| IPX SAP Proxy Net#=N/A  | | CRC:        0v  | | Col:        0   |
| Handle IPX Type20=N/A   | | +-----+ +-----+ |
|                           | | 00-100 Sys Option | | 00-300 HW Config  |
|                           | | >Security Prof: 3 ^  | | >BRI U Interface ^  |
|                           | | Software +4.5A+   | | Adrs: 00c07b520036 |
|                           | | S/N: 5366006     v  | | Enet I/F: AUI   v  |
+-----+ +-----+ +-----+
    
```

Press Ctrl-n to move cursor to the next menu item. Press return to select it.
Press Tab to move to another window --- thick border indicates active window.

Configuring the Ascend Pipeline 130 (cont'd)

Press ESC to go to the Mod Config menu, then press ESC again to get to the Ethernet menu
 Select the Frame Relay menu.

```

Main Edit Menu --+
                +- 20-000 Ethernet --+
                                +- 20-500 Frame Relay --+
                                                +- 20-501 * FR
+----- DOMAIN EDIT -----+ +-----+ +-----+
| 20-501 * FR                 | | 10-100 1   T1/CSU   | | 00-200 00:00:05 |
| >Name=FR                   | | Link X   CARRIER | | >M31 Line  Ch   |
| Active=Yes                 | | B1      .             | | Ethernet Up   |
| Call Type=Nailed          | | B2      .             | |               |
| FR Type=DTE               | |-----+-----| |               |
| LinkUp=Yes                | | 20-100 Sessions | | 20-500 DYN Stat |
| Nailed Grp=3              | | > 1 Active     | | Qual N/A 00:00:00 |
| Data Svc=64K              | | 0                 | | OK      0 channels |
| Dial #=N/A                | |-----+-----| | CLU   0% ALU   0% |
| Link Mgmt=T1.617D         | | 20-300 WAN Stat | | 20-400 Ether Stat |
| N391=6                    | | >Rx Pkt:      0^  | | >Rx Pkt:      0   |
| DTE N392=3                | | Tx Pkt:      0   | | Tx Pkt:      1   |
| DTE N393=4                | | CRC:         0v  | | Col:         0   |
| DTE N392=N/A              | |-----+-----| |               |
| DTE N393=N/A              | | 00-100 Sys Option | | 00-300 HW Config |
| T391=10                   | | >Security Prof: 3 ^ | | >BRI U Interface ^ |
| T392=N/A                  | | Software +4.5A+  | | Adrs: 00c07b520036 |
| MTU=1532                  | | S/N: 5366006    v | | Enet I/F: AUI     v |
+-----+ +-----+ +-----+
    
```

Press Ctrl-n to move cursor to the next menu item. Press return to select it.
 Press Tab to move to another window --- thick border indicates active window.

Set Nailed Grp=3
 Set Data Svc=64K

Press ESC until you return to the Main Edit Menu
 From the Main Edit Menu, select Nailed T1, then Mod Config.

```

Main Edit Menu --+
                +- 30-000 Nailed T1 --+
                                +- 30-100 Mod Config --+
+----- DOMAIN EDIT -----+ +-----+ +-----+
| 30-100 Mod Config         | | 10-100 1   T1/CSU   | | 00-200 00:00:05 |
| >Nailed T1 Group=3       | | Link X   CARRIER | | >M31 Line  Ch   |
| Activation=Enabled       | | B1      .             | | Ethernet Up   |
| Framing Mode=ESF        | | B2      .             | |               |
| Encoding=B8ZS           | |-----+-----| |               |
| Build Out=0 dB          | | 20-100 Sessions | | 20-500 DYN Stat |
| Number of DS0 channels=24 | | > 1 Active     | | Qual N/A 00:00:00 |
| Loop Back=Normal        | | 0                 | | OK      0 channels |
|                          | |-----+-----| | CLU   0% ALU   0% |
|                          | | 20-300 WAN Stat | | 20-400 Ether Stat |
|                          | | >Rx Pkt:      0^  | | >Rx Pkt:      0   |
|                          | | Tx Pkt:      0   | | Tx Pkt:      1   |
|                          | | CRC:         0v  | | Col:         0   |
|                          | |-----+-----| |               |
|                          | | 00-100 Sys Option | | 00-300 HW Config |
|                          | | >Security Prof: 3 ^ | | >BRI U Interface ^ |
|                          | | Software +4.5A+  | | Adrs: 00c07b520036 |
|                          | | S/N: 5366006    v | | Enet I/F: AUI     v |
+-----+ +-----+ +-----+
    
```

Press Ctrl-n to move cursor to the next menu item. Press return to select it.
 Press Tab to move to another window --- thick border indicates active window.

Set the Number of DS0 channels to be your line speed divided by 64K. If you have a 256k connection then the number of DS0 channels is 4.

Configuring the Ascend Pipeline 130 (cont'd)

The router should now be configured for Frame Relay.

Press ESC until you are at the Main Edit Menu.

Select System.

Select Sys Diag.

Select System Reset.

This will reset the router.

The Frame Relay connection should come up.