ADTRAN

TECH NOTE
ATLAS PPP Endpoint Creation

Overview

This document will describe in a step-by-step manner how to configure the Atlas 550 to terminate a PPP T1 link for use in local data routing. The configuration is straightforward in the Atlas. To create the Packet (PKT) Endpoint follow the instructions below.

Hardware/Software Requirements

The firmware on the Atlas 550 should be C.09 or later. An available physical T1/PRI port will be needed to terminate the T1 connection. The dedicated mapping of a full (24 DS0) T1 will require an HDLC resource from the system. An HDLC resource is required for any conversion between a TDM and packet interface. The 550 has three normal HDLC and 32 QMC resources that are assigned starting at the bottom of the dedicated map and working up. The HDLC resource status can be viewed by going to Modules and Sys Ctrl Menus.

Configuration Steps

1). Go to Packet Manager-->Packet Endpnts and press Enter.

```
Telnet 10.19.211.10                                        _ □ ×
Nates Atlas/Packet Manager/Packet Endpnts/Config
Packet Endpnts│ Status          [+]
Packet Cncts  │ Performance     [+]
Frame Relay IQ│ Config          [+]
              │ Test            [+]
              │ Endpnt Count    2
              │ Endpnts Sort    By name




SYS: OK      NETWK1:ALRM    NETWK2:ALRM        1: OK    2:ONLN   3:ONLN   4:ONLN
                                                              ^Z=help 11:58
```

2). Right arrow over and go to Config. Press Enter

3). Right arrow over and a # 1 will be created. (Pressing "I" will insert another entry, "D" to delete)

4). Right arrow over to Endpnt Name and press Enter. Name your link something meaningful.

5). Right arrow over to Protocol and press Enter. Select PPP.


```
Telnet 10.19.211.10                                        _ □ ×
Nates Atlas/Packet Manager/Packet Endpnts/Config[2]/Protocol
Status                 Endpnt Name      Protocol   Config Sublinks  Usage
Performance  │ 1 916E                    Frame Relay [+]    [+]      -2----u
Config       │ 2 PPP                     PPP          [+]           -2----u
Test

                              ┌Protocol──┐
                              │Frame Relay│
                              │PPP        │
                              │Trans BOP  │
                              └───────────┘




SYS: OK      NETWK1:ALRM    NETWK2:ALRM        1: OK    2:ONLN   3:ONLN   4:ONLN
                                                              ^Z=help 12:01
```
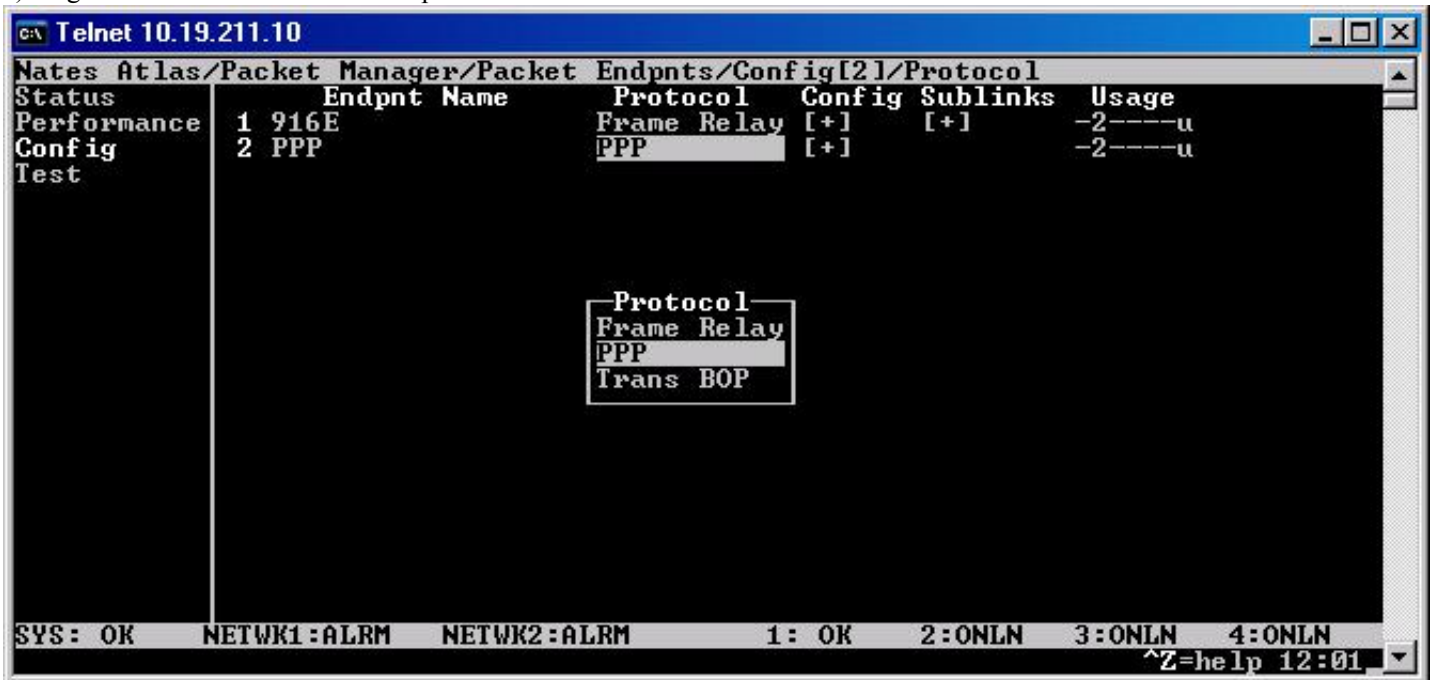
6). Press H on your keyboard to get back to the Main Menu. Packet Manager should be selected.

7). Right arrow over and go to Packet Cncts. Press Enter

8). Right arrow over and a # 1 is created. (Pressing "I" will insert another entry, "D" to delete)

9). Go to TO: PEP and press Enter. Select Router

10). Right arrow over to FROM: PEP and press Enter. Select the Packet Endpoint Name you just created. If you named it PPP, you'd select pp:PPP.

11). Right arrow over to Protocol and press Enter. Select IP.

```
Nates Atlas/Packet Manager/Packet Cncts[2]/TO: Packet Endpoint
Packet Endpnts      FROM: PEP    Sublink     TO: PEP      Sublink     Protocol   Config
Packet Cncts     1  Fr:916E      TA916E      Router       Not used    IP         N/A
Frame Relay IQ   2  Pp:PPP       Not used    Router       Not used    IP         N/A




                         ┌TO: Packet Endpoint┐
                         │ Fr:916E            │
                         │ Router             │
                         └────────────────────┘




SYS: OK      NETWK1:ALRM     NETWK2:ALRM         1: OK     2:ONLN    3:ONLN    4:ONLN
Select Packet Endpoint by Name                             ^A=more ^Z=help 12:04
```

12). Press H on your keyboard to get back to the main menu.

13). Go to Router. Right arrow over to IP and press Enter

14). Go to Interfaces and press Enter. You'll be able to view the new PPP interface you just created. To do unnumbered interfaces just leave the IP address and subnet fields blank.

15). Go to Global in the same Menu and define your Gateway IP address.

16). Press H on your keyboard to get back to the main menu.

17). Go to Dedicated Maps. Take note of the Active Map.

18). Right arrow over and then Down arrow to Create/Edit Maps. Press Enter

19). Go to Map 1 (or active map). Right arrow over to (Cncts=0) and press Enter.

```
Nates Atlas/Dedicated Maps/Create/Edit Maps[2]/Connects
Create/Edit Maps      Map Name Sort TO/FROM   Connects    Activate Time Enbl Day
                   1   Map 1         TO        [Cncts=0]   00:00:00     [Enable]
                   2   32k/850       TO        [Cncts=3]   00:00:00     [Disabl]
                   3   Map 3         FROM      [Cncts=0]   00:00:00     [Disabl]
                   4   Map 4         FROM      [Cncts=0]   00:00:00     [Disabl]
                   5   Map 5         FROM      [Cncts=0]   00:00:00     [Disabl]







SYS: OK      NETWK1:ALRM     NETWK2:ALRM         1: OK     2:ONLN    3:ONLN    4:ONLN
                                                          ^Z=help 12:06
```

20). Right arrow over and a # 1 will be created.

21). Right arrow over to From Slt and press Enter. Select the T1 interface that's connecting the 2 Atlas units.

22). Right arrow over to Port and press Enter. Select the T1 port on the T1 card that you are using.

23). Right arrow over to TO Slt/Service and press Enter. Select PktEndpt.

```
Telnet 10.19.211.10                                                _ □ ×
Nates Atlas/Dedicated Maps/Create/Edit Maps[2]/Connects[3]/Port/Pkt Endpt  ▲
Connects │  #  FROM Slt    Port    TO Slt/S Prt/PEP  From Config   To Config   SIG
Enbl Day │  1  S1>FXS-8  2>FXS 1 N2>T1/PR  1>T1/PR   [Port=2]      [DS0=24]
         │  2  S3>T1/PR  2>916E  PktEndpt  Fr:916E   [DS0=1-24]    [+]
         │  3  S4>T1/PR  1>T1/PR PktEndpt  Pp:PPP    [DS0=1-24]    [+]



                        ┌─Port/Pkt Endpt─┐
                        │─Fr:916E         │
                        │ Pp:PPP          │
                        └─────────────────┘






SYS: OK      NETWK1:ALRM    NETWK2:ALRM        1: OK     2:ONLN    3:ONLN    4:ONLN
Port or Packet Endpoint (PEP)                            ^Z=help 12:08  ▼
```

24). Right arrow over to Port/PEP and press Enter. Here you select the name you gave the packet endpoint earlier.

25). Right arrow over to From Config and press Enter. Right arrow over to DSO selection and press Enter. This is where you'll define the bandwidth for the link. If you want to use 6 DSO's for the PPP link, then you would enter 1-6.

```
Telnet 10.19.211.10                                                _ □ ×
...tlas/Dedicated Maps/Create/Edit Maps[2]/Connects[3]/From Config/DS0 Selection ▲
From Config │ DS0 Selection   1, 4-6
To Config   │ DS0s Available  *23***789012345678901234
            │ DS0 Rate        64Kbps




                ┌─DS0 Selection──────────────────────────────┐
                │1, 4-6                                       │
                └────────────────────────────────────────────┘







SYS: OK      NETWK1:ALRM    NETWK2:ALRM        1: OK     2:ONLN    3:ONLN    4:ONLN
Enter as lists [1,5,7] or ranges [1-13].              ^A=more ^Z=help 12:09  ▼
```

26).Press H to get back to the main menu. The changes you make take effect immediately.

Example Configuration

No example configuration is available for this document.

Troubleshooting

If problems occur begin by checking the physical cabling. Do you have the T1 plugged into the correct slot/port? Is the cable a crossover? If the T1 is taking errors note the error types and alarms and follow normal layer 1 T1 troubleshooting steps. If a conflict is noted in any of the mappings check for existing configurations that are using that port or DS0. If the physical links are up but you are unable to ping from end to end insure that you have applied the correct IP address and subnet mask for you network. If everything appears to be configured correctly finally check that an HDLC resource is available.

If you experience any problems using your ADTRAN product, please contact [ADTRAN Technical Support](#).