

### 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 <u>required</u> 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.

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Atlas/Module:	s [ S ]	Lt0]/Sys Ci	trl Menus	s/Norma	1 HDLC	Status		a anda anatana	
Controller Info		Status	Tx Fram	es Rx I	Frames	Tx Unde	rruns R	x Overflo	ws
QMC HDLC Status	0	Available	0		0	Ø		Ø	
Normal HDLC Status		In Use	1220	1	1219	2		ស	
	2	In Use	И		И	И		И	
SYS: OK NETWK1:	<b>ìLR</b>	1 NETWK2	ALRM	1:	OK	2:0NLN	3:ONLN	4:0NLN	
System controller	DLO	C status				^A=	more ^Z=	help 11:5	1

# **Configuration Steps**

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

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Nates Atlas/Packet Manager/	Packet Endpnt	s/Config			
Packet Endpnts Packet Cncts Frame Relay IQ Frame Relay IQ Endpnt Count Endpnts Sort	[+] [+] [+] [+] t 2 t By name	s/conr 1g			
	LUV2 - 61 DM	1.01	2 - ONI N	2 - ONL N	4-0NLN
STO VA HEIWAI HEAN ME	1 11/2 - 11/1/11	1. 04	2 - VALA		neln 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.

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Nates Atlas/	Packet Manag	er/Packet End	lpnts/Conf	fig[2]/]	Protocol	(Appl)	
Status Performance Config Test	Endpnt 1 916E 2 PPP	Name Pi Fra 1991	otocol ime Relay	Config [+] [+]	Sublinks [+]	Usage -2u -2u	
		Pr Fra 199 Tra	otocol me Relay ins BOP				
SYS: OK 1	NETWK1:ALRM	NETWK2:ALRM	1	: OK	2:0NLN	3:0NLN	4:0NLN

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.

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Nates Atlas/Pacl	ket Manager/Pa	acket Cncts[	21/TO: Packe	et Endpoin	t	
Packet Endpots Packet Cocts Frame Relay IQ	1 Fr:916E 2 Pp:PPP	Sublink TA916E Not used	Router Router	Not used Not used	IP IP	N/A N/A N/A
			Endpoint-			
		Fr:916E Router				
SYS: OK NETWI	K1:ALRM NET	/K2:ALRM	1: OK	2:ONLN	3:ONLN	4:0NLN
Select Packet Er	ndpoint by Nam	ne		^A=	more ^Z=he	1p 12:04
12). Press H on your key	yboard to get back t	o the main menu.				
13). Go to Router. Right	t arrow over to IP an	d press Enter				
14). Go to Interfaces and	d press Enter. You'l	l be able to view the	he new PPP inter	face you just c	reated. To do	unnumbered
interfaces just leave the	IP address and subr	net fields blank.				
15). Go to Global in the s	same Menu and defi	ine your Gateway	IP address.			
16). Press H on your key	yboard to get back t	o the main menu.				
17). Go to Dedicated Ma	ps. Take note of the	e Active Map.	Draga Erster			
19) Go to Map 1 (or act	ive man) Right arrow	wover to (Cnets	(ps. Fless Eillei =0) and press Ent	er		
Telnet 10 19 211 1	in	wover to (chets-	-0) and press Ent	<b>CI</b> .		
Nates Atlas/Ded	icated Mans/Cu	reate/Edit M	ans [2]/Conne	ects		
Create/Edit Maps	s   Map Name	Sort TO/FRO	M Connect:	s Activa	te Time Er	ıbl Day
	1 Map 1 2 32k/850		LCnets=0	1 00:0 Ma 00:0	0:00 LI 0:00 TI	inable]
	3 Map 3	FROM	[Cncts=0	1 00:0	0:00 []	)isabl]
	4 Map 4	FROM	[Cncts=0	] 00:0	0:00 [] 0-00 []	)isabl]
	5 ոձբ 5	FROM	LOILCES-0	1 00-0	0-00 LI	JISADII
SYS: OK NETWI	K1 : ALRM NET	/K2:ALRM	1: OK	2:0NLN	3:ONLN	4:ONLN
					^Z=he	elp 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.

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<mark>Nates Atl</mark> Connects Enbl Day	as∕De # 1 2 3	edicated FROM Slt S1)FXS-8 S3)T1/PR S4)T1/PR	aps/Great Port 2)FXS 1 2)916E 1)T1/PR	<mark>TO Slt∕S</mark> TO Slt∕S N2)T1/PR PktEndpt PktEndpt	Prt/PEP 1)T1/PR Fr:916E Pp:PPP	Inects [3]/Po From Config [Port=2] [DSØ=1-24] [DSØ=1-24]	rt∕Pkt End To Conf [DSØ=2 [+] [+]	lpt Fig SIG
				Port/Pki -Fr:916E Pp:PPP	t Endpt-			
SYS: OK	NET	WK1:ALRM	NETWK2 :	ALRM	1: OK	2:ONLN	3:ONLN	4:0NLN

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.

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tlas∕Ded: From Config To Config	icated Maps∕Great DSØ Selection DSØs Available DSØ Rate	e/Edit Maps[2] 1, 4-6 *23***7890123 64Kbps	/Connects[ 4567890123	3]∕From C	config/DS6	Selection A
	-DSØ Selection					
SYS: OK	ETWK1:ALRM NET	WK2:ALRM	1: OK	2:0NLN	3:0NLN	4:0NLN
cuter as 11s	its LL, 5, 71 UP Pa	nges LI-IJI.			-10re 2-1	ICTD 17-02 M

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 <u>ADTRAN Technical</u> <u>Support</u>.

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