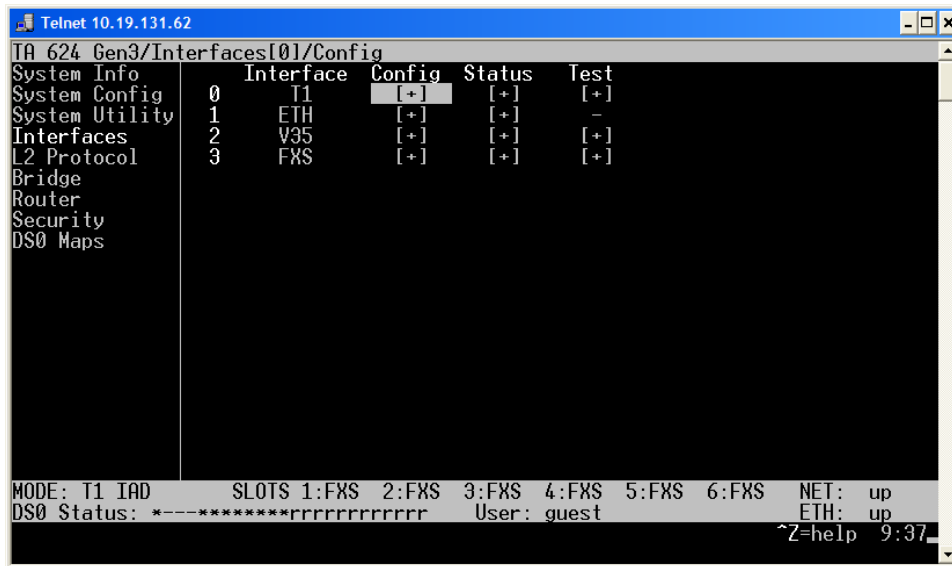


Configuring an ADTRAN Total Access 6xx Series for a full T1 for Bridging:

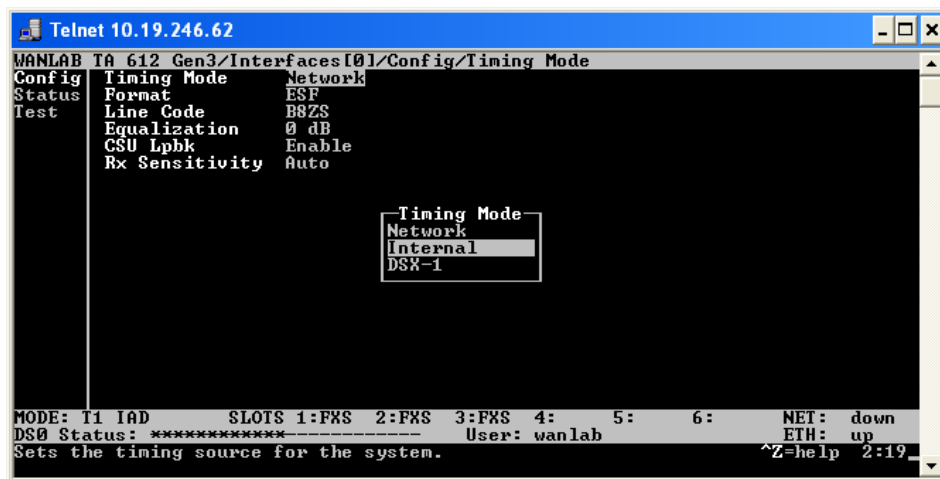
This document will walk you through the basic setup for a Total Access 6xx series. The process will follow the OSI model in that we begin with Layer 1 and work our way up to the router at Layer 3. The application is that we are using the full bandwidth of a T1 to connect two locations in a point-to-point configuration for bridging. Although there is no voice traffic in this application, simply changing the DS0 map would be all that is necessary for adding some voice channels.

1. From the Interfaces menu, select Config for the T1 Interface and hit Enter.



```
Telnet 10.19.131.62
TA 624 Gen3/Interfaces[0]/Config
System Info      Interface  Config  Status  Test
System Config   0         T1      [+]     [+]     [+]
System Utility  1         ETH     [+]     [+]     -
Interfaces       2         V35     [+]     [+]     [+]
L2 Protocol     3         FXS     [+]     [+]     [+]
Bridge
Router
Security
DS0 Maps
MODE: T1 IAD      SLOTS 1:FXS 2:FXS 3:FXS 4:FXS 5:FXS 6:FXS  NET: up
DS0 Status: *---*****rrrrrrrrrrr User: guest      ETH: up
^Z=help 9:37
```

2. This is where you configure the frame format, line coding, and T1 timing. We are going to use ESF/B8ZS (which are the defaults). Now we need to set the T1 clocking. T1 clocking is extremely important. There can be one and only one clock source on a T1 circuit. In this example we are going to set the main side router to be the clocking for the T1 circuit. Set the Timing Mode to Internal.



```
Telnet 10.19.246.62
MANLAB TA 612 Gen3/Interfaces[0]/Config/Timing Mode
Config Timing Mode Network
Status Format          ESF
Test    Line Code       B8ZS
        Equalization 0 dB
        CSU Lpbk     Enable
        Rx Sensitivity Auto
Timing Mode
Network
Internal
DSX-1
MODE: T1 IAD      SLOTS 1:FXS 2:FXS 3:FXS 4:  5:  6:  NET: down
DS0 Status: ***** User: wanlab      ETH: up
Sets the timing source for the system. ^Z=help 2:19
```


- Arrow over to the Protocol column for the T1 interface. Hit Enter and select the appropriate protocol. For this example, we are setting up a PPP connection. When asked to confirm, hit Y.

```

Telnet 10.19.131.62
IA 624 Gen3/L2 Protocol[0]/Protocol
System Info      Interface Protocol Config Status
System Config    0      T1      AUTO      -      [+]
System Utility   1      ETH     802.3     [+]   [+]
Interfaces
L2 Protocol
Bridge
Router
Security
DS0 Maps

Protocol
PPP
PRE
AUTO
HDLC

MODE: T1 IAD      SLOTS 1:FXS 2:FXS 3:FXS 4:FXS 5:FXS 6:FXS  NET: up *
DS0 Status: *----- User: guest      ETH: up
^Z=help 9:42

```

- Arrow over to the Config column for the T1 interface. Hit Enter. Change the Mode to Bridge All as shown.

```

Telnet 10.19.246.62
WANLAB TA 612 Gen3/L2 Protocol[0]/Config/Mode
Config Mode Bridge All
Status Authentication [+]
PPP [+]

Mode
Route IP
Bridge All
Route IP/Bridge Other

MODE: T1 IAD      SLOTS 1:FXS 2:FXS 3:FXS 4: 5: 6:  NET: down
DS0 Status: *****p----- User: wanlab      ETH: up
^Z=help 23:02

```

- Arrow back to the left one time and down to Config for the Ethernet interface. Hit Enter and change the Mode there to Bridge All also. Hit H to return to the main menu.

8. At this point, you should have a working configuration for the "Host Router." All 24 DS0s are being bridged by the Total Access. Connecting a switch to the 10/100 Base-T interface of the Total Access will allow your LAN to communicate to the remote location. *Note: If you do not have the "Remote Router" configured, repeat the steps above, but note that step #2 will need to be left at Network timing. **Note: If you would like telnet access to the unit from the internal LAN then you will need to go to Router > Config > Ethernet > Setup > Primary IP and set the IP address and subnet mask of the unit. You will also have to set the default gateway: Router > Config > Routes > Default Gateway. This will allow you telnet access from inside the LAN.
9. For some initial troubleshooting, you can check the Interfaces/T1/Status menu. The Performance/Current numbers should be ZERO. Checking the Alarms menu should reveal no alarms (dashes are good, asterisks indicate alarms).
10. For further troubleshooting help, please call 1-888-423-8726 or email support@adtran.com.