



## Q&A

# How do I configure the Atlas for Non-Facility Associated Signaling (NFAS)?

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**Q:** How do I configure the Atlas for Non-Facility Associated Signaling (NFAS)?

**A:**

### Before You Begin

NFAS is a feature ordered from the service provider and is also supported by some customer premises equipment (CPE). If connecting the ATLAS to a Primary Rate Interface (PRI) from the service provider, verify that the PRI has been provisioned for NFAS before configuring the ATLAS to support it. If connecting the ATLAS via PRI to a CPE device, verify that the CPE device is capable of supporting NFAS. The Atlas 550 unit is not capable of doing NFAS. Only the Atlas 800/800+/830/890 can be configured to use NFAS.

### Description

NFAS is an ISDN service that uses a single DS0 as a D-channel for multiple PRI circuits. This allows you to free up one DS0 on each secondary PRI so that the extra DS0 on each PRI can be used for calls instead of as a D-channel. This method of D-channel signaling may also be less expensive than ordering several traditional PRIs.

### Configuration

Configuring the ATLAS for NFAS is very similar to entering any other Dial Plan entry. First decide whether the entry needs to go in the Network Term or User Term. The Network Term is used when connecting the ATLAS to a larger network, typically the service provider's network. The User Term is used when connecting the ATLAS to a CPE device that will terminate a call, such as a PBX, Key System, or Video Conferencing Codec.

In the Dial Plan, select the slot and port which will connect to the PRI containing the D-channel. This is the only PRI port that will be configured in the Dial Plan. Now select NFAS for the SIG option. Enter the appropriate phone numbers in the Incoming Number Accept List. The Incoming Number Accept List should contain the phone numbers to be accepted for all of the PRIs being controlled by the one D-channel. Figure 1 shows how the Network Term entry should look:

```

y1lab.adtran.com - PuTTY
FATLAS 830/Dial Plan/Network Term
Network Term # Slot/Svc Port/PEP Sig Out#&accept Out#Rej Ifce Config
User Term 1 5) T1/PRI 1) T1/PRI NFA [$] [+] [+]
Global Param

SYS: OK CSU:ONLN 1:ALRM 2:ONLN 3: -- 4:ONLN 5:ALRM 6: -- 7:ALRM 8: --
Terminations of connections to the network ^Z=help 13:18

```

**Figure 1**

In the Interface Config menu, in the Secondary Interfaces field, select the slot and port for each of the PRIs which do not contain a D-channel. The Interface Number will automatically increment for each entry added. This Interface Number is a unique identifier used to differentiate between interfaces when DS0s are selected for calls. By default, the circuit containing the D-channel is Interface 0. The Secondary Interfaces begin at Interface 1 and count upward. These settings should match what the service provider assigns to the PRIs. Additionally, you can configure at most one backup D-channel. Please note that this backup D-channel cannot be used as a B-channel when not in use. Figure 2 shows the Secondary Interfaces menu:

```
ylab.adtran.com - PuTTY
...AS 830/Dial Plan/Network Term[1]/Interface Configuration/Secondary Interfaces
Secondary Interfaces
# Slot Port Interface Number Backup D Channel
1 5) T1 2) T1 1 Enabled
2 5) T1 3) T1 2 Disabled
3 5) T1 4) T1 3 Disabled
SYS: OK CSU:ONLN 1:ALRM 2:ONLN 3: -- 4:ONLN 5:ALRM 6: -- 7:ALRM 8: -- ^Z=help 13:20
```

**Figure 2**

Once all the Secondary Interfaces are configured, the remaining options deal specifically with the D-channel. If configuring a Network Term, Switch Type should be configured to what the service provider has specified. If configuring a User Term, Switch Type should be configured to match the CPE device configuration. First DS0 and Number of DS0s define how the channels are allocated on the primary circuit which contains the D-channel. All of the secondary circuits must use all 24 DS0s. Note that on the primary circuit, DS0 24 is unavailable because the ATLAS always uses the 24th DS0 for the D-channel. The remaining options are used to fine tune the configuration of the D-Channel. Detailed descriptions may be found in the product manual. Figure 3 shows the Interface Config menu:

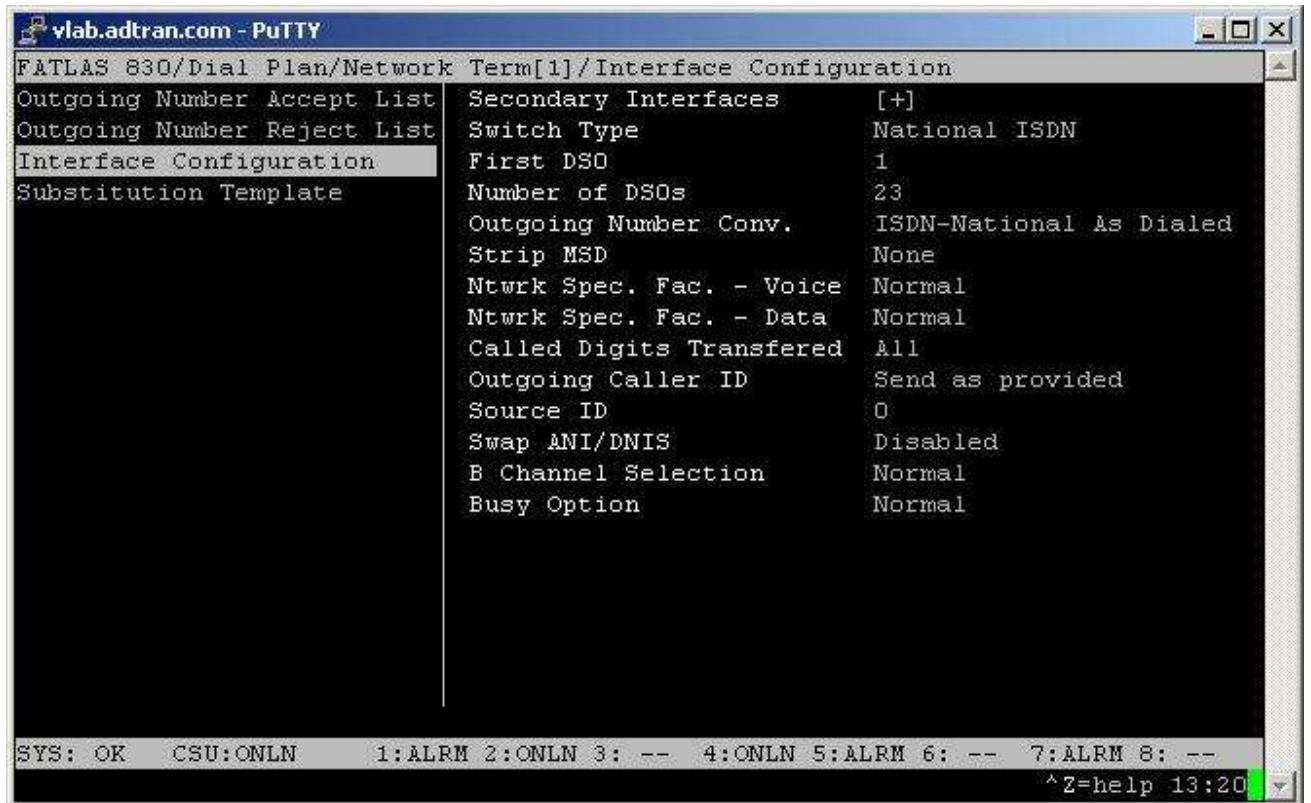


Figure 3