



Configuring AOS for use with Safe-T-Net Frame Relay Featuring NetVanta 3200

Introduction

Safe-T-Net™ provides a complete disaster recovery solution for Frame Relay networks. Safe-T-Net, when deployed through the ADTRAN ATLAS system, allows end-users to be proactive in their disaster recovery plans by designing a complete dial-around-the-cloud solution. The NetVanta has this innovative back-up system incorporated as well. This technical support note provides a backup solution for the NetVanta 3200 to another NetVanta 3200 backup scenario.. The configuration shown for the NetVanta 3200 is applicable for ISDN and V.34 modem backup (with a few modifications).

* Before You Begin

To perform this application, the NetVanta 320X products requires firmware revision 1.1 or higher, and the corresponding Dial Backup Network Interface Module (ISDN or Analog modem).

IMPORTANT! All circuits MUST provide Caller-ID for the application to function properly.

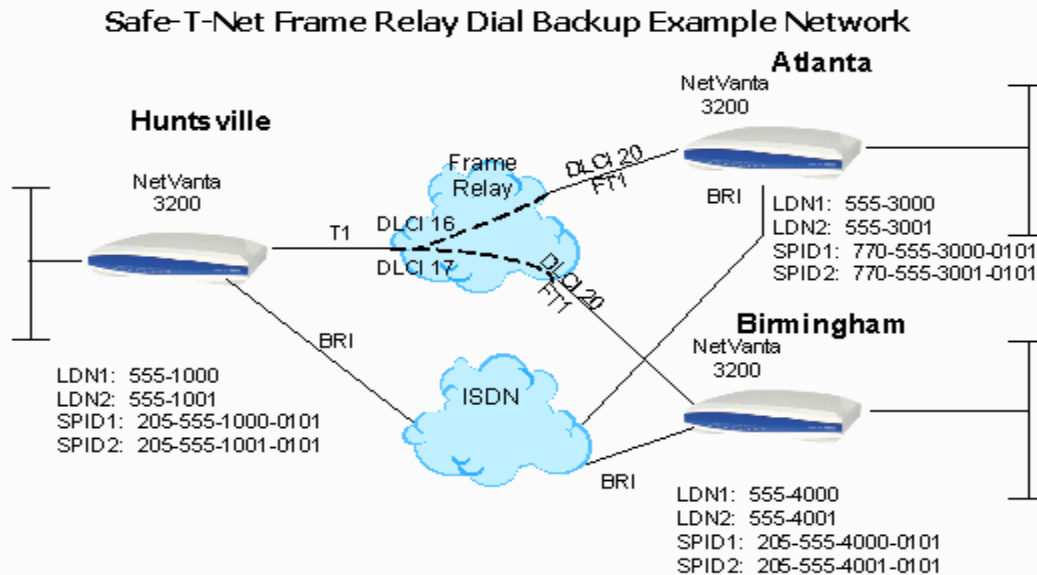


Figure 1

Configuring the NetVanta 3200

1. To configure the remote site NetVanta 3200, telnet or connect a terminal to the unit. The configuration task can be broken into two parts: configuring the BRI and configuring dial back-up. Install the DBU module per the procedure in the provided installation guide. When properly installed, module configuration access is provided through the router interface configuration mode by entering *interface bri 1 / 2* at the configuration mode prompt. Enter the spids and phone numbers as shown in figure 2. The switch type here is defaulted to National, but can be changed to 5ESS or DMS100. No setup is required for a modem dbu.

```
interface bri 1/2
isdn spid1 25655530000101 5553000
isdn spid2 25655530010101 5553001
no shutdown
```

2. Figure 2

- 3.
4. Remote Dial back-up setup – The commands to force dial back-up are applied to the frame relay sub-interface. Issuing the dial-backup command enables backup operation on the interface. The dial-backup call-mode originate command configures the NetVanta 3200 to dial to the Atlas or central-site NetVanta 3200 on primary link failure (frame relay dlci 20 for this example). By default there is a 10-second delay prior to dialing. The dial-backup number command has several functions: in this example the phone number of the Huntsville NetVanta 3200 is entered, the dialing mode is set to be 64Kbps ISDN (versus 56K), and the minimum – maximum number of channels are set (here 1 and 1). In a bonding situation where 2 channels (or 128Kbps) are desired, the channels may be set as 1 and 2 indicating a minimum of 64K with a maximum of 128K. Finally, the Dial Back-Up DLCI (DBU DLCI) must be configured. For 3200 – 3200 the DBU DLCI must match the DLCI of the end being called. In this case we change the remote (calling end) to match the central site. Therefore the DBU DLCI will be 16. Use the Dial-backup remote dlci command to set the DBU DLCI.

```
interface fr 1.20 point-to-point
frame-relay interface-dlci 20
ip address 192.168.100.4 255.255.255.0
dial-backup
dial-backup call-mode originate
dial-backup number 5551000 digital-64K 1 1
! dial-backup number 5551000 analog "for modem"
dial-backup remote dlci 16
```

5. Figure 3

- 6.
7. Central Site Dial Backup Configuration – The central site is similarly configured. The major difference is that the caller ID number for each remote is used to "check" the inbound call rather than dial it. Remember that caller ID must be available and not be

blocked at the remote sites. Only one site at a time can be backed up with analog modems. See figure 4 for a typical configuration. Notice that the DBU DLCI is only set on the calling end.

```
interface fr 1.16 point-to-point
frame-relay interface-dlci 16
ip address 192.168.100.3 255.255.255.0
dial-backup
dial-backup call-mode answer
dial-backup number 5553000 digital-64K 1 1
dial-backup number 5553001 digital-64K 1 1
! dial-backup number 5553001 analog "for modem"
interface fr 1.17 point-to-point
frame-relay interface-dlci 17
ip address 192.168.101.3 255.255.255.0
dial-backup
dial-backup call-mode answer
dial-backup number 5554000 digital-64K 1 1
! dial-backup number 5554001 analog "for modem"
```

8. Figure 4

9.

Completing the Application

After configuring both the host and remote sites for the Safe-T-Net DBU application, the units should be tested to ensure proper functioning. Test the dial backup configuration easily by removing the T1 line from the NetVanta 3200 and allowing the unit to enter dial backup operation by dialing the Central Site (Huntsville) NetVanta 3200. After an ISDN connection is made, verify that data works normally to prove the path is good. If the test is successful, insert the T1 cable in its proper port to restore the main line.

Troubleshooting the Application

When a BRI circuit is connected to the NetVanta 3200, alerts are presented on the terminal screen to show the SPIDS are all registered. In addition, several commands are available for troubleshooting. Start at OSI layer 1 and establish that all layers are functional to resolve the issue. Refer to the NetVanta 3200 support documents for troubleshooting help. The relevant command line interface (CLI)- commands are:

1. Show interface bri 1/X (x=2 or 3) – displays the spids that are registered and shows DBU byte data counts.
2. Show interface t1 1/1 (or serial 1/1, or DDS 1/1) – displays the physical layer status
3. Show frame pvc – displays whether the DLCI is active, inactive or deleted.
4. Show dial-backup interface frame X.X– displays the state of the dbu for a given sub-interface

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

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This is the old FR backup model using ATLAS and is no longer supported