

Q&A

How do I configure an Atlas for BRI switching to Cisco BRI interfaces?

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A:

Introduction

The ADTRAN ATLAS supports Basic Rate ISDN. Basic Rate ISDN provides up to two 64k B channels and one D channel. The ATLAS BRI Module provides a standard U-interface, which uses an RJ-45 connector. Converting the ATLAS BRI U-interface to an S/T bus requires the use of an NT1 device.

In switching applications, the ATLAS uses a simple configuration scheme known as the **Dial Plan**. There are two parts to the **Dial Plan** - **Network Term** and **User Term**. The **User Term** will be the ATLAS interface used to connect the Cisco BRI interface.

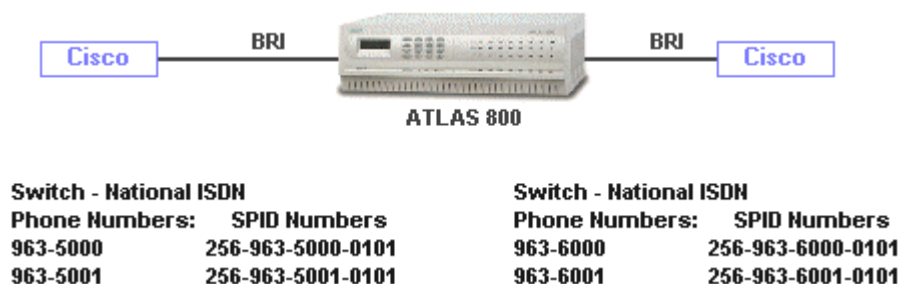


Figure 1

NOTE: Although Figure 1 shows an ATLAS 800, the ATLAS 800Plus, 810Plus or 550 may be used.

Before you begin

Before you begin configuration of the ADTRAN ATLAS, you need some basic information.

Information needed from the end user/customer:

- Switch Type of the BRI line* (determined by the BRI switch - i.e., ATLAS)
- Phone Numbers for the BRI
- SPIDS for the BRI line* (See note on creating these in the section *Configuring the ATLAS BRI Interface.*)
- Determine if the Cisco's BRI interface is a U or S/T interface.*

* **NOTE:** The Switch Type and SPIDS for the BRI are user-defined. Remember to use an NT1 device between the Cisco and the ATLAS if the BRI interface is S/T.

Configuring the ATLAS BRI Interface

To create the network shown in Figure 1, you must configure the BRI side of the network in the **User Term** portion of the **Dial Plan**. The **User Term** configuration is concerned with the following fields:

In # Accept

This represents the phone number associated with the BRI Line. Calls coming into the ATLAS matching the **In # Accept list** are routed to this port. For example, if all calls to phone number 963-5000 should be routed to the BRI on Slot 1, Port 1 (1.1), the **In # Accept List** for 1.1 will contain the number 963-5000.

Out Number Reject List

Typically left blank. This feature can also be used to restrict outbound calls. In contrast to the Accept List, the Reject List blocks all calls meeting the criteria entered in this field.

Interface Configuration

This contains user-defined provisioning information for the BRI. The user-defined information is local to the ATLAS and the BRI terminal equipment. Do not contact your telco for this information; this is completely independent of the PRI provisioning. For example, in Figure 1, the switch type is National ISDN, and the number of active B channels is 2. The BRI has two phone numbers associated with it along with two corresponding SPIDS. Configure this BRI with the following parameters.

Switch Type:

National ISDN

SPID LIST:

Phone Number	SPID	Calls
963-5000	25696350000101	1
963-5001	25696350010101	1

NOTE: The SPIDS were created using a standard format of area code, phone number, and suffix of 0101. Use this format to avoid any problems with minimum length requirements. Make sure to program the same SPIDS in the Cisco's BRI interface as well as the ATLAS.

Configuring the Cisco BRI Interface

The Cisco's BRI interface needs to be set up to match the ATLAS. First, you need to set the ISDN switch-type to National ISDN-1. Then you need to enter the SPIDS exactly as you did in the ATLAS. Be sure to add the LDN or phone number at the end of the SPID command. Finally, configure the Cisco's BRI interface for the type of dialing you wish to do. A sample of how the Cisco's configuration should look is shown below.

```
interface BRI0
 isdn switch-type basic-ni
 isdn spid1 25696350000101 9635000
 isdn spid2 25696350010101 9635001
```

For information on programming SPIDs on a Cisco BRI interface, please see the Cisco document [Troubleshooting ISDN BRI SPIDs](#).

To verify the ISDN status of the Cisco, use the **show isdn status** command. Under **Spid Status** you should see **spid1 configured, spid 1 sent, spid 1 valid**. If you do not see this, verify that the SPID numbers in the BRI interface match the SPID numbers programmed into the ATLAS.

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