Rx BIP−16 Errors

Document ID: 10808

Introduction

This document defines Rx BIP−16 errors.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

This document is not restricted to specific software and hardware versions.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Conventions

Refer to Cisco Technical Tips Conventions for more information on document conventions.

What are they?

The RX BIP−16 error count is taken at the BIF−RX as the cell is received off the backplane. It covers the data path from:

- The TX−RX of the transmitting card
- Out through its Serial Interface Unit (SIU)
- Across the backplane
- Through the crosspoint switch on the active Broadband Controller Card (BCC)
- Across the backplane
- Across the backplane

What do they mean?

These errors indicate corruption of the Bframe, which could result in either payload errors or dropping of the Bframe on the Egress.

What should I do to make them go away?

Isolation is the difficult part with these errors because of a long path through multiple cards. This is unique to a particular slot−to−slot transmission. Use all information available to minimize the number of pieces of hardware that you suspect cause the error. If multiple cards report the errors, there is a good chance that a transmit path problem exists. One clue to the source might be a particular card or port which does not show any errors, since it is less likely to send to itself.

Broadband Network Interface (BNI) trunks can be tested using the **tstber** command to generate traffic from the BCC to that BNI. It goes out of the trunk, then in the other end of the BNI. It is sent to the BCC on the remote node and looped back there. This is a long path, so errors do not necessarily point to the culprit. However, if the traffic also seems to increase the BIP−16 errors reported by the BCC, you might have found the cause of the problem. You can use the **switchcc** command to vary which backplane traces and crosspoint are used. This allows you to see if any of those components of the data path are the problem.

Related Information

- **Cisco WAN Switching Solutions − Cisco Documentation**
- **Guide to New Names and Colors for WAN Switching Products**
- **Downloads − WAN Switching Software (registered customers only)**
- **Technical Support & Documentation − Cisco Systems**

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