Introduction

This document discusses Universal Switching Module (UXM) Path AIS errors and provides steps to troubleshoot these errors.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document applies to the Cisco IGX" UXM with OC3 backcards.

Conventions

For more information on document conventions, refer to the Cisco Technical Tips Conventions.

Error Definition

One of the Synchronous Optical Network/Synchronous Digital Hierarchy (SONET/SDH) systems on the path from the remote UXM has a problem from which it can not recover. It sends a path alarm indication signal (AIS) to inform downstream systems of this situation.

Error Example

The likely location of equipment errors is highlighted in yellow in this diagram:

Path AIS
### Troubleshoot

The troubleshooting activities in this section are intrusive. Perform these steps in a maintenance window only in these situations:

- user traffic is affected
- the `dsptrks` command output indicates that an error condition still persists, such as when the trunk is not in `Clear-OK` status

Both ends of the trunk must be active when you troubleshoot.

1. Issue the `dsptrks` command to verify that the trunk is active. If the trunk number is not displayed in the `dsptrks` command output, then the trunk is not active. To activate a trunk, issue the `uptrk` command.
2. Check the cabling between the remote trunk card and the remote network termination (NT).
3. On the remote end, loop the network termination back to the Telco line with a loopback cable.
   
   a. Issue the `dsptrks` command to see if the local node changes to `Clear-OK`.
   b. Issue the `dspphyslnerrs` command to see whether errors continue to increment.
   c. If the trunk status has changed to `Clear-OK` and if errors no longer increment, then the local trunk module and the Telco line are probably working properly.
   d. Monitor `dspphyslnerrs` for a few minutes before you proceed.
   e. The remote cabling or remote trunk hardware could be the source of the alarm. Continue with Step 2 to determine if that is the source of the error.
   f. If the trunk status does not change to `Clear-OK` or if `dspphyslnerrs` shows that errors continue to increment, continue to Step 4.
4. Place a loopback plug or cable directly onto the connector at the backcard of the trunk module, to check remote hardware.
   
   a. Issue the `dsptrks` command to see if the remote node has changed to `Clear-OK`.
   b. Issue the `dspphyslnerrs` command to see whether errors continue to increment.
   
   If the remote status has changed to `Clear-OK` and if errors no longer increment, then the trunk module and backcard are probably working properly.
   c. Wait at least 10 seconds longer than the `Red Alm Out` timer setting in `cnftrkparm` before you proceed.
5. Ask your Telco to trace the source of the AIS signal. The problem might be located on an intermediate device.

If the problem persists after you perform the troubleshooting steps, contact Cisco Systems Technical Support:
Related Information

- IGX 8400 UXM Trunk Error Troubleshooting and Definitions
- WAN Switching Network Synchronization Fundamentals
- International Telephony Union (ITU) Recommendation G.704
- Cisco WAN Switching Solutions – Cisco Documentation
- Guide to New Names and Colors for WAN Switching Products
- Software Center – WAN Switching Software
- Technical Support – Cisco Systems