

# BTM CGW Dscd Cells Errors

Document ID: 10849

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## Introduction

This document discusses the BTM CGW Dscd Cells error and provides steps on how to troubleshoot this error message.

## Prerequisites

## Requirements

There are no specific requirements for this document.

## Components Used

This error applies to the IGX Broadband Trunk Module (BTM) with E1, E2, E3, and T3 backcards.

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

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

## Error Definition

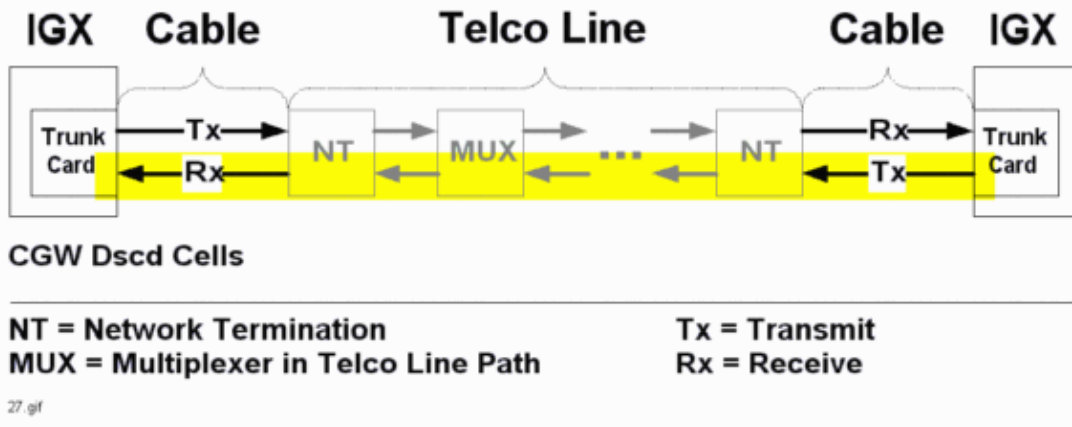
CGW Dscd Cells errors indicate that the complex gateway (CGW) function of the BTM has discarded an ATM Adaptation Layer-5 (AAL5) protocol data unit (PDU) in the ingress direction. The ingress direction is from the network to BTM. CGW is not a type of traffic flow. CGW generates legacy StrataCom Trunk Interface (STI) or standard AAL5 ATM cell payloads out of FastPackets. The BTM trunk card can convert FastPackets into AAL5 ATM cells. The CGW Dscd Cells error counter begins to increment after an AAL5 PDU, which has a bad cyclic redundancy check (CRC-32) value, has been reassembled from ATM cells received from the trunk. This is typically caused by bit errors on the Telco line or by faulty hardware.

The BTM supports CGW connections with the limitation that CGW connections will not pass data when they are routed across a BTM trunk that has been configured for simple addressing mode (SAM). CGW connections pass data if they are routed across BTM trunks that are configured for BPX addressing mode

(BAM) or cloud addressing mode (CAM). Refer to IGX Trunk Interfaces for more information. The CGW function is determined by endpoint cards. ATM-to-FR connections always use CGW. Most FR-to-FR connections use CGW, except for FRM-to-FRM connections, which use simple gateway. Refer to FastPacket Adaptation to ATM for more information.

## Error Example

The likely location of equipment errors is highlighted in yellow.



## Troubleshooting

The following troubleshooting activities are intrusive. Perform these steps in a maintenance window only

- if user traffic is affected,
- or**
- if the **dsptrks** command indicates an error condition still persists such as when the trunk is not in Clear-OK.
1. Both ends of the trunk must be active during troubleshooting. Issue the **dsptrks** command to verify that the trunk is active. If the trunk number is not displayed in the **dsptrks** command screen, the trunk is not active. To activate a trunk, issue the **uptrk** command.
  2. Check cabling between the BTM backcard and the next device upstream. Typically, this is the local network termination (NT).

- a. Leave the local cabling connected to the trunk card but remove it from the NT.
- b. Connect the transmit (Tx) end to the receive (Rx) end of the open cable to loop it back to the local BTM.

For E1, use a loopback plug.

For T3/E3, use an appropriate BNC connector.

- Alternatively, place the local NT into the metallic loop toward the local customer premises equipment (CPE). The local CPE is the local BTM card set. If the **dsptrkerrs** command no longer shows incremental errors, the cable and the local trunk module are working properly.
- c. Monitor the **dsptrkerrs** command for five minutes. Continue with Step 3. If the **dsptrkerrs** command continues to increment errors, continue with Step 2.

3. Check the local hardware by placing a loopback plug for E1 or loopback cable for T3/E3 onto the

BTM backcard connector. If the trunk status in `dsprks` changes to `Clear-OK` and if the `dsprkerrs` command no longer shows incremental errors, the BTM card set is functioning properly.

- a. Replace the cabling and verify that the errors have stopped.
  - b. Wait at least five minutes before continuing.
4. Check cabling between the remote trunk card and its next device downstream. Typically, this is the remote NT.
- a. Leave the remote cabling connected to the remote BTM backcard but remove it from the remote NT.
  - b. Connect Tx to Rx of the open cable to loop it back to the trunk card.

For E1, use a loopback plug.

For T3/E3, use an appropriate BNC connector.

Alternatively, place the remote NT into the metallic loop toward the remote BTM. If the remote trunk `dsprkerrs` command no longer shows incremental errors, the cable and trunk module are working properly.

- c. Monitor the `dsprkerrs` command for at least five minutes before proceeding.
5. Check the Telco line.
- a. Connect Tx and Rx of the remote NT to loop it back to the Telco line. For E1, use a loopback plug
- For T3/E3, use an appropriate BNC cable.
- If no line test equipment is available, check whether the `dsprkerrs` command on the local trunk continues to increment errors.
- b. Monitor the `dsprkerrs` command for at least five minutes. If no further trunk errors are counted, the Telco line is functioning properly in one direction.
  - c. Reconnect the cable to the NT and perform the test in the opposite direction.
6. Make sure the signal strength is sufficient and that the maximum cable length has not been exceeded. For T3 trunks, the line build-out (LBO) is configured from the Line cable length field of the `cnftrk` command. To correct the Line cable length setting, delete the trunk.

**Note:** Deleting the trunk could remove all connections routed across the trunk. Before deleting a trunk, verify whether an alternate route for the connections exist, or record all connections and parameters as needed to readd connections.

7. Ask the Telco to test the line.

If the problem persists after performing the troubleshooting steps, please contact the Cisco Systems Technical Assistance Center (TAC) at (800) 553-24HR, (408) 526-7209, the Cisco TAC web site, or send e-mail to [tac@cisco.com](mailto:tac@cisco.com).

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## Related Information

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

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Updated: Oct 04, 2005

Document ID: 10849

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