Cisco D9804 Multiple Transport Receiver Software Version 2.10 Release Note

Overview

This document describes the new features and changes included in software version 2.10 for the Cisco® D9804 Multiple Transport Receiver (MTR) since the previous version 1.18.

The MTR product includes an FPGA that performs transport stream routing, decombining and deterministic remultiplexing (DM) functions.

- The DM application software provides six independent transport routing and decombining functions when operated with FPGA version 1.00, also known as the Base FPGA (6+0).
- The DM application provides four independent transport routing and decombining functions and one independent deterministic remultiplexing function when operated with FPGA version 2.00, also known as the DM FPGA (4+1).

By default, the Base FPGA is selected. The FPGA type is user selectable if the DM FPGA is installed during upgrade or when the MTR is manufactured.

New Features

The following repairs, new features, and enhancements are included in MTR software version 2.10.

1. Added Deterministic Remultiplexing (DM) in conjunction with FPGA version 2.00 (DM FPGA).
   - Four simultaneous independent decombine operations supported
   - One independent remultiplex output supported
   - Operates in legacy mode with original Base FPGA (FPGA 1.0) and DM mode with new DM FPGA (FPGA 2.0)
2. Added support for Over-the-Air application download from the IBCC, including trap messages to indicate successful and unsuccessful downloads.
3. The following changes were made to the web user interface:
   a. Summary page includes additional information to identify the MTR and the active configuration of each ASI port.

b ASI output setup pages include parameters to configure remultiplexed streams for the ASI outputs.

c ASI output status pages show additional status information pertaining to deterministic remultiplexing.

d Added a page to set specific control parameters for remultiplexing time thresholds for alarm indication and duration of null stuffing in place of corrupted or missing content.

e Added a 'Flash Verification' page to show the flash memory area checksums to support device comparisons.

f Added a page to show progress and status of over-the-air application download.

g Modified the versions page to include user controls for:

- selecting the application version to be used after the next MTR reboot
- selecting the FPGA version to be used after the next MTR reboot
- rebooting the MTR

4 The following changes were made to the front panel interface:

a ASI output setup screens expanded to include parameters for configuring remultiplexed streams for the ASI outputs.

b ASI output status screens show additional status information pertaining to deterministic remultiplexing.

c Added menu items to permit setting specific control parameters for remultiplexing time thresholds for alarm indication and duration of null stuffing in place of corrupted or missing content.

d Added a 'Flash Verification' screen to show flash memory area checksums to support device comparisons.

5 Improved fan start-up during device restart.

6 Added a number of new alarms and warnings related to deterministic remultiplexing.

7 Improved the set and reset description texts of many previously defined alarms and warnings to facilitate network diagnostics.

Improvements

The following improvements were made in version 2.00.

1. Corrected an issue where the ASI outputs were not muted if the required RF carrier was removed from the NIT.
2. LNB power supplies are reconfigured after 30 seconds of continuous loss of RF lock. This corrects an issue where LNB power supply loses configuration after AC power brown-out.
3. Corrected issues that resulted in the ASI outputs being stuck in the mute state, with or without alarms, after network control changes.
4. Corrected an issue where the ASI output was muted after group assignment changes.
5. Improved the ability of the MTR to lock to the bit rate of the decombined stream when there is a significant difference between system element clock rates (e.g., DTF, MTR).
6. Improved MTR resource recovery and resource allocation feature to provide allocation priority to uplink controlled outputs
7. Corrected an issue causing incorrect PID identification in ASI output mute alarm.
8. Corrected issues that blocked successful Web user interface login from another PC if a previous logged in user did not close the web browser.

Limitations

The following limitations are noted in this release.

1. This application provides legacy 6+0 functionality when operated with Base FPGA R1.00.
2. Functionality for the 4+1 remultiplexing feature is provided when the application is operated with DM FPGA R2.00.
3. The DM FPGA supports four simultaneous, independent decombine operations.
   a. Decombine can be routed to any one or more of the ASI outputs.
   b. Decombine is configured per ASI output and is identical to prior releases.
   c. ASI outputs with the same decombine configuration use the same MTR resource. This reduces resource usage if multiple, independent outputs perform the same function.
4. The DM FPGA supports one independent remultiplex output.
   a. The remultiplex configuration can be applied for each remux ASI output to any ASI output. In this case, the remultiplex configuration must be identical as the MTR has only one resource available to perform the remultiplex function.

For Information

Cisco provides its customers who have purchased support agreements with telephone support from anywhere in the world. If you require technical telephone assistance or product training support, or if you have any questions concerning the Cisco product, you may contact the appropriate Customer Support Center from those listed below. Charges may apply for customers without a current and applicable product support agreement.

Customers	**Location**	**Phone Number**
Programmers and Broadcasters	USA and Canada	Toll-Free: 1.888.949.4786 +1.770.236.4786 dmn_support@cisco.com
Telcos and Cable Service Providers	Cisco Services	Toll-Free: 1.800.722.2009 Local: 770.236.6900 (press 2 at the prompt) customer-service@cisco.com
All Customers	Europe	+32.56.445.155 or +32.56.445.197 saemea-support@cisco.com
All Customers	Asia	+852.2588.4746 saapac-support@cisco.com

Customers who call a Customer Support Center are asked specific questions in order to identify their needs. In this way, each call can be directed to the customer support representative most experienced with their Cisco product.

Cisco Systems, Inc.
5030 Sugarloaf Parkway, Box 465447
Lawrenceville, GA 30042

678 277-1120
800 722-2009
www.cisco.com

Printed in USA
October 2011 Part Number 4042846 Rev A