



## Software Release Notification

# CTOG-250

## Release 1.4.6

### CTOG-250 Version 1.4.6 Release

#### Applicability

Bulk Release 1.4.6 (FW-0020601E) for the CTOG-250. Includes all related firmware and SNMP MIBs.

#### Revision History

Rev #	Description	Date
-	Initial Release version 1.4.1	05/15/12
A	Release version 1.4.2	06/27/12
B	Release version 1.4.3	8/28/12
C	Release version 1.4.4	9/13/2012
D	Release version 1.4.5	10/12/2012
E	Release version 1.4.6	2/4/13

FSCM No. 4J515

## Table of Contents

<b>INTRODUCTION .....</b>	<b>3</b>
<b>FEATURES .....</b>	<b>3</b>
<b>DEFECT FIXES .....</b>	<b>3</b>
<b>CTOG-250 UPGRADE NOTES FROM 1.4.X TO 1.4.6.....</b>	<b>3</b>
<b>NETWORK UPGRADE NOTES FROM 1.4.X TO 1.4.6 WHEN ADDING A CTOG-250.</b>	<b>4</b>
<b>FIRMWARE COMPATIBILITY.....</b>	<b>4</b>
<b>COMPATIBLE SNMP MIBS .....</b>	<b>4</b>
<b>KNOWN ISSUE(S) IN THIS RELEASE .....</b>	<b>5</b>

## Introduction

Release 1.4.6 is a maintenance release.

## Features

- None

## Defect Fixes

Release 1.4.6 contains the following defect number fixes:

- Defect #7880: ACM transition from QPSK ¼ to QPSK 1/3 no longer drops packets when using Max/Pri QoS.
- Defect #6873: MODCOD stats for 16APSK 8/9 now reports the correct throughput value.
- Defect #7858: Corrected a transition bug from 16APSK to 32APSK that was causing packets to be dropped.
- Defect #7711: Forced header and payload compression configurations are no longer lost when the CDM-800 is re-booted.
- Defect #7846: Payload compression is now enabled for RTP video traffic.
- Defect #7821: G.703 clock extension alarms now reflect the clock state.
- Defect #7773: Diffserv now protects higher priority traffic during ACM transitions as bandwidth decreases.
- Defect #7857: RTP voice and video are now properly classified in QoS.
- Defect #7961: Improved ICMP messaging to not overwhelm the CTOG when a route does not exist.
- Defect #7923 & #7937: Improved WAN utilization.
- Defect #7933: Improved buffering between the CTOG-250 and the CDM-800 to smooth out traffic after a CTOG-250 re-boot.
- Defect #7863: The CTOG-250 will now correctly set the external reference of the CDM-800.
- Defect #7887: The management counters on the router stats page now increment accordingly.
- Defect# 7513: Es/No table has been updated to better match modem performance.
- Defect# 8095: low CIR and MIR Group Qos setting (<100kbps) no longer causes packets/pings to drop.
- Defect# 8051: Wan Label statistics now work as expected.
- Defect# 7871: Header and Payload compression can now be changed on a multicast route without having to delete and re-add the route.
- Defect# 8174: Outbound stats are now properly summed at the bottom of the page.
- Defect# 8160: Multicast stream passing at a lower MODCOD with an assigned CIR is now protected as expected.
- Defect# 8120: Overdriving all streams, no longer able to get one CIR unmet while others are being over-filled.
- Defect# 7352: Can now change the CTOG-250's time via the web page.

## CTOG-250 Upgrade Notes from 1.4.x to 1.4.6

There are no special upgrade requirements for upgrading from 1.4.x to 1.4.6 for the CTOG-250. The attached CDM-800 will automatically also be updated if needed as a result of the CTOG-250 unit being updated.

## Network Upgrade Notes from 1.4.x to 1.4.6 when adding a CTOG-250

**When upgrading an existing network to 1.4.6 or higher, customers are required to follow this procedure:**

1. Upgrade all CDM-880s to 1.4.5. Reboot the CDD-880s and verify traffic is passing.
2. Upgrade all CDM-800s to 1.4.5 first. Reboot the CDM-800s and verify traffic is passing.
3. Upgrade all CDM-840s to 1.4.5. Reboot the CDM-840s and verify traffic is passing.
4. Upgrade the CTOG to v1.4.6 and reboot. Connect to the CDM-800 to the CTOG-250.
5. Now follow the procedure described in the Quick Start section of the CTOG-250 manual to add a CTOG-250 to the Advanced VSAT network.

### Additional Upgrade Notes:

- In order to avoid issues during transition, when a CTOG-250 is added to a network, the transmitter will be disabled. Once all upgrades are complete, **the user must re-enable transmit on the Modulator**.
- If Comtech Dynamic Routing Protocol (CDRP) is enabled, any exactly matching routes will be automatically replaced by CDRP routes. These routes are not stored. As such, it is recommended that the user store a backup copy of the configuration before upgrading to v1.4.6 or enabling CDRP.

## Firmware Compatibility

The following table describes the compatibility between Advanced VSAT component versions.

CTOG-250	CDM-800	CDM/ODM-840	CDD-880	VMS	CXU-810
1.4.1	1.4.1	1.4.1	1.4.1	3.9.2	2.2.1
1.4.2	1.4.2*	1.4.2	1.4.2	3.9.2	2.2.1
1.4.3	1.4.3*	1.4.2/1.4.3	1.4.2/1.4.3	3.9.2/3.9.10	2.2.1
1.4.4	1.4.4*	1.4.3	1.4.3	3.9.10	2.2.1
1.4.5	1.4.4*	1.4.4.	1.4.4	3.10.1	2.2.1
1.4.6	1.4.5*	1.4.5	1.4.5	3.10.2	2.2.1

\* The CTOG-250 will automatically upgrade CDM-800 to required version.

## Compatible SNMP MIBs

The following table describes the SNMP MIBs compatible with the CTOG for this version of software.

MIB Name	Filename	Date
CEFD Root	ComtechEFData.mib	2/14/2011
CDM-800 SNMP MIB	FW-0000431M_CDM800.mib	2/4/2013

## Known Issue(s) In This Release

- Defect #7753: The boot .CFG file very rarely could become empty after upgrade.

*Workaround:* A backup file of the config file is currently stored on the unit and the CTOG can be restored to normal boot by renaming that file to comtech.cfg.

- Defect #8153: Duplicate CDRP Routes at multiple CDM-840s causes additional packet drops. When multiple CDM-840's report the same subnet for CDRP, the CTOG will go into a continuous "ping-pong" process of replacing the associated routes. This process causes the CTOG-250 to add and delete all routes associated with the remote continuously which causes extra packet drops.

*Workaround:* Remove the duplicate routes at the CDM-840s.

- Defect #8156: The CTOG-250 does handle Short frame well above 15Msps.

*Workaround:* Once the outbound carrier is above 15Msps, it is required to switch the system to DVB-S2 Normal framing.