Software Release Notification

CDM/ODM-840 Version 1.4.7 Release

Applicability
Bulk Release 1.4.7 (FW-0000408V) for the CDM/ODM-840. Includes all related firmware and SNMP MIBs.

Revision History		
Rev #	**Description**	**Date**
-	Initial Release version 1.1.1	08/16/10
A	Maintenance Release version 1.1.2	12/10/10
B	Feature Release 1.2.1	12/22/10
C	Maintenance Release 1.2.2	1/28/2011
D	Feature and Maintenance Release 1.2.3	4/11/2011
E	Feature and Maintenance Release 1.2.4	6/10/2011
F	Feature Release 1.2.5	9/2/2011
G	ODM-840 Initial Release 1.2.6	11/3/2011
H	Feature Release 1.3.1	11/17/2011
J	Feature and Maintenance Release 1.3.2	1/26/2012
K	Maintenance Release 1.3.3	4/6/2012
L	Feature Release 1.4.1	5/15/2012
M	Maintenance Release 1.4.2	6/26/2012
P	Maintenance Release 1.4.3	9/12/2012
R	Maintenance Release 1.4.4	10/12/2012
T	Maintenance Release 1.4.5	1/4/2013
U	Maintenance Release 1.4.6	2/26/2013
V	Maintenance Release 1.4.7	4/29/2013

FSCM No. 4J515

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Introduction

Release 1.4.7 is a maintenance release.

Features

- None

Defect Fixes

- Added support for a new VMS multi-command to allow the VMS to set a transmit delay timer for every switch. This functionality allows the jitter due to dSCPC switches to be dramatically reduced as compared to v1.4.6.
- Added MIB change to provide the ECM Aloha (RID) stats for wait state transmit verification.
- Defect #8279: Putting a CDM-840 into ECM Wait state now functions as expected.
- Added the Web/SNMP tasks to the watchdog service. If these services fail, the unit will not reboot.
- Defect # 8285: Fixed RxBER formatting issues with SNMP. Also updated Web to convert new format to m.mmEee.
- Defect # 7979: The CLI command "<0/RES?" now returns the last event over-written the previous event.
- Defect # xxxx: Turn off requests for ACM threshold messages when reverting to ECM.
- Defect #8434: Added a check when switching to make sure the symbol rate is in an acceptable range.
- Defect # 8378: The Qos Diffserv Assured Forwarding first, second and third code points are now protected in the correct order.

Network Upgrade Notes (from 1.4.x to 1.4.7 release)

In order for dSCPC and Return Link ACM to function as expected, it is required to follow this procedure when upgrading existing networks:

1. Upgrade all CDM-880s to v1.4.7. Reboot the CDD-880s and verify traffic is passing
2. Upgrade all CDM-840s to v1.4.7. Reboot the CDM-840s and verify traffic is passing.
3. Note: The CTOG-250/CDM-800 can be upgraded to the 1.4.7 release at any point during this process – there is no required order.

For best ECM performance always operate the return channel (CDM-840 to CDD-880) at lowest MODCOD BPSK. This will insure that under different environmental condition the remote modem has best opportunity to gain access into SCPC operation. Operating at any other MODCOD cannot guarantee reliable entry or re-entry into the network.

Network Upgrade Notes (from 1.3.x to 1.4.7 release)

When upgrading to version 1.4.7 from v1.3.x, Customers are required to follow this procedure when upgrading existing networks:

1. Upgrade all CDM-880s to v1.4.7. Reboot the CDD-880s and verify traffic is passing.
2. Upgrade all CDM-800s to 1.3.4 first. Reboot the CDM-800s and verify traffic is passing.
3. Upgrade all CDM-840s to 1.4.7. Reboot the CDM-840s and verify traffic is passing.
4. Upgrade all CDM-800s to 1.4.5. Reboot and verify that traffic is passing.
5. If adding a CTOG-250 to the network, now is the time to upgrade it (if needed) and connect it to the CDM-800.

If this order of upgrade is not followed, there will be packets drops due to a change in how DVB-S2 baseband frames are processed.

Note: Upon upgrading to v1.4.x, the CDM-840 Rx MODCOD will be forced to "Auto". This is a required configuration that allows ACM/VCM to function correctly on the Outbound Carrier. RF performance characteristics are not reduced when going to "Auto".

CDM-840 upgrades when in redundancy mode

The following procedure is suggested when upgrading the CDM-840 in redundancy mode:

A. Upgrade the offline unit
B. Reboot the offline unit
C. Force a switch
D. Upgrade the new offline unit
E. Reboot the offline unit

Firmware Compatibility

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

CTOG-250	CDM-800	CDD-880	CDM/ODM-840	VMS	CXU-810
n/a	1.2.x	1.2.x	1.2.x	N/A	N/A
n/a	1.3.1	1.3.1	1.3.1	3.8.1.1602	2.2.1
n/a	1.3.2	1.3.2	1.3.2	3.8.1.1635*	2.2.1
n/a	1.3.3	1.3.2	1.3.2	3.8.1.1635*	2.2.1
n/a	1.3.4	1.3.3	1.3.3	3.8.1.1635*	2.2.1
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
1.4.3/1.4.4	1.4.3/1.4.4	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
1.4.6	1.4.5	1.4.6	1.4.6	3.10.2	2.2.1
1.4.6	1.4.5	1.4.7	1.4.7	3.11.1	2.2.1

*Note the VMS will require CDM8XX-1.3.3 device driver update package.

Compatible SNMP MIBs

MIB Name	Filename	Date
CEFD Root	ComtechEFData.mib	2/15/2011

| CDM-840 SNMP MIB | FW-0000407M_CDM840.mib | 4/29/2013 |

Known Issue(s) In This Release

- Defect #6298: The "Pkt Dropped" counter in the Mod Statistics page section of the traffic status does not update.

  Workaround: None, the statistic is inoperable.

- Defect #6925: Incoming traffic should be Qos'ed based upon uncompressed/LAN size. The Qos system should enforce Min and Max bandwidth restrictions based upon the LAN size. It will do this for Payload compression, but not Header Compression. Currently, the compressed packet size is used for Qos calculations.

  Workaround: The user should offset the Qos bandwidth configuration based upon the post compression size/datarate when header compression is enabled.

- Defect 5848: IP Address return by tracert is incorrect The CDM-840 will return the value 169.254.0.1 as the IP address of the WAN interface when performing a tracert through the device.

  Workaround: None

- Defect #xxxx: Some multicast configurations (IGMP v1/v2/v3), when toggled on and off can traffic flow anomalies to be observed. This occurs as a result of leaving the multicast groups too early, or inadvertently.

  Workaround: Currently we have made the query interval configurable so customers can adjust this according to their networks requirements.

- Defect #8497: The Qos priorities displayed on the CDM-840 when in Diffserv mode are incorrect. The AFClass 4, 3, 2 and 1 should be labeled priority 8 and the Default priority should be labeled priority 9.

  Workaround: None, the product continues to treat the packets correctly but the mislabeling can lead to confusion. Fixed in 1.5.1.