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Software Release Notification

SR/13130
Release 1.4.2

CMR5990 1.4.2 Release Notes

Approval Signatures			
Product Manager:	Date:	System Test:	Date:
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Applicability

This is the release notes for CMR5990 Version 1.4.2 (fw13130B). This release includes:

1. upgrade file to Version 1.4.2 (fw13130B),
2. full image Version 1.4.2 (fw13130B) image,

Revision History

Rev #	Description	Date	Prepared by
-	Version 1.3.1	May 14, 2007	Randy Montgomery
A	Version 1.3.2	July 20, 2007	Randy Montgomery
B	Version 1.4.2	May 25, 2008	Alan Roper

FSCM No. 4J515

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Upgrade

- Version 1.4.2 is **strongly recommended** for all field-installed systems. This release includes a single upgrade file that must be downloaded to the unit from a TFTP server through the upgrade screens on the HTTP or CLI interfaces.
- Reference the CMR5990 Upgrade Instructions V142.pdf for details.

Features and Functional Enhancements

Version 1.4.2 is a maintenance release with the following feature enhancements:

- Redundancy functionality if a backup receiver is available and configured.
- Remote management of the receiver by the Vload application.
- Ability to update the OS boot loader through the application (web or Telnet).
- Enhancements to the web interface.
- Syslog messages and SNMP traps for additional events.
- Enhanced login and connection security.

Maintenance Fixes

This maintenance release addresses the following issues:

1. Fixed reported LNB current values.
2. Telnet logic has been modified so that it won't display the main menu 3 times.
3. Removed DiSeqC debug messages.
4. Fixed test tracker digicast issue 440. Fixed telnet logic when disconnect timer expires. The logic was trying to use a socket after the disconnect timer expired, closed it and set it to -1 which is an invalid value.
5. Roll off forced to 20% if DVB-S mode.
6. Pilot forced to off if DVB-S mode.
7. Fixed issue with minimum ebno threashold value. It was -10 and should be 0.
8. Changed symbol rate foprmat to Msps.
9. Added SNMP trap for CLI authentication failure.
10. Added syslog trap for CLI authentication failure.
11. The length of the SNMP R/O community and R/W community were too long. They were set to 255 but SNMP only accepted 32.
12. Fixed factory defaults and also maximum value.
13. Added the ability to disabled the cli and web auto logout feature. This is controlled only on the cli under the "auto logout and port configuration menu".
14. Added SNMP traps for DMA overflow and DMA overflow cleared.
15. Added a clear timer that will not send a clear message until there have been no overflows for at least 5 seconds.
16. Added local static ARP tables entries to the eCos ARP table.
17. VLAN ALL was missing in the VLAN matching logic so if VLAN ALL was chosen, all packets would be dropped.

18. Increased the number of sockets available to the eCos network stack from 32 to 64. Decreased the number of pending network event for the eCos network stack from 128 to 64.
19. Added code to PSI and MPE/IP processing to look at the tsc bits of the DVB packet. If not zero, the packet is ignored and a rejected scrambled counter is incremented.
20. Added checks to the MPEGTS PMT processing to see if a transport PID is being used by an MPE/IP routes. If so, it is not used and a PID conflict trap and syslog message is generated.
21. Fixed math conversion problems with ebno error threshold.
22. Added logic to reject the ip address/port/vlan if they conflict with another route to prevent multiple routes from streaming to the same destination.
23. Added flash lock semaphore to protect the flash from simultaneously being accessed by more than one thread. Also added code that will prevent the unit from rebooting if flash updates are in progress.
24. The unicast logic was not properly flushing the data cache thus corrupting the data be transmitted.
25. Added the capability of updating the Redboot loader image via the CLI or web.
26. Added traps and syslog messages for redundancy backup and primary states.
27. Added logic to the MPE/IP processing to reject DVB packets that have the scrambling bits set.
28. Enhanced the TEI error bit processing. The original logic only incremented a counter and was still trying to use the packet. The TEI error processing now rejects the packet.
29. Added Erthernet stats web page.
30. Added the tuner state to each web page.
31. Added SNMP R/W community and SNMP R/O community to SNMP page.
32. Turned on TEI error bit processing.
33. Fixed LNB voltage enable. eCos was not initializing the LNB enable output on the processor.
34. The factory defaults were being loaded before the R/O config so the default unit name etc were not being setup properly.
35. When EbNo falls below threshold setting, SNMP trap is now fired only once instead of every 30 seconds.
36. Fixed math calculating the number of DVB packets required to generate a PMT for MPEG-TS routes.
37. Selecting between framing modes 188 and 204 would stop traffic from passing. When this occured a hard reboot was required to recover.
38. Unit name length changed from 16 characters to 255 characters.
39. Display for default value of fill rate was incorrect.
40. Added "Display Config" button to the admin page which then dumps all configuration information to a page.
41. On the Web interface, Tuner Menu allowed user to set the filter roll off to a value other than 35% for DVB-S.
42. Other minor cleanups and fixes.

Backward Compatibility

A CMR5990 unit running V1.4.2 is verified compatible with units running pre-V1.4.2 firmware.

Known Issues

Issue: Framing mode 204 not functional for Tuner Interface - Select 204 framing mode from a L-Band device, and the receiver will not acquire the new framing mode. The framimg mode of the receiver stays at 188.
Workaround: None

Issue: The CMR-5990 will not control ASI out on the back up unit in redundant mode.
Workaround: None

Issue: sysObjectID in public mib trying to resolve incorrect OID value (1.3.6.1.4.1.2021.250.255).
Workaround: Note that 1.3.6.1.4.1.2021.250.255 is an invalid OID.