MDS5800 Software Release Notes

General Compatibility

- An ODU model ODU5800MxDPP cannot be used in the same link as an ODU model ODU5800MxRPP
- The version of iConductor used to connect to an IDU should always match the version of the software installed on that IDU
- The payload data encryption feature will only function if both IDU's are running 1.01 or later, and both IDU serial numbers are CC0007600 or later.

Release 1.1.6 7/11/2005

Summary

Version 1.1.6 contains both feature enhancements and bug fixes as described below. It is recommended that all customers upgrade to 1.1.6.

Compatibility

- An IDU running 1.1.6 will function correctly if the IDU at the other end of the link is running version 0.79 or later software as long as the Link Redundancy feature is not enabled. If Link Redundancy is required then both units must be running 1.1 or later.

Notes

- When this release is installed on an IDU that is running software release 1.1.5 or prior then the first time the IDU is rebooted after installing the release, the *EEPROM Reloaded* alarm will be set. This is due to a configuration change implemented in the software and is normal. The alarm will remain set until the next reboot and should not appear again.

- When upgrading to 1.1.6 the IDU must be rebooted after the installation (either software reboot or power-cycled), then rebooted a second time by cycling the power only. This is necessary to fully implement the Ethernet switch configuration changes mentioned under *Problems Fixed* below.

Enhancements

- A new Configuration Save and Restore function has been added to iPorter. This allows the user to save all configuration data from an IDU and later restore it to the same or a different IDU. This can be used to create a template for the rapid configuration of many IDU's that will share a similar configuration.

Problems Fixed

- Prior to Version 1.1.6 when an IDU was powered up while connected to a LAN via a payload Ethernet port, a loopback situation could occur under certain conditions. The internal Ethernet switch configuration has been modified to prevent this occurrence.

- Prior to Version 1.1.6 if a link was configured with data encryption enabled and with In-Band NMS traffic, there could be occasional corruption of payload data. This could result in data encryption alarms, T1 errors, or slow file transfers. This situation has been corrected.

Release 1.1.5 1/20/2005

Summary

Version 1.1.5 contains both feature enhancements and bug fixes as described below. It is recommended that all customers upgrade to 1.1.5.

Compatibility

- An IDU running 1.1.5 will function correctly if the IDU at the other end of the link is running version 0.79 or later software as long as the Link Redundancy feature is not enabled. If Link Redundancy is required then both units must be running 1.1 or later.

Notes

- When this release is installed on an IDU that is running software release 1.02 or prior then the first time the IDU is rebooted after installing the release, the *EEPROM Reloaded* alarm will be set. This is due to a configuration change implemented in the software and is normal. The alarm will remain set until the next reboot and should not appear again.

- There is an FPGA firmware upgrade included in this release. If it is required on a particular IDU, this upgrade will take place one time, the first time the unit is rebooted after the software installation. If the firmware is being upgraded the bootup process will take an extra 7 minutes during which the IDU will not be able to function in a link. The progress of the upgrade will show up on the front panel.

Enhancements

- A new *Slave Not Available* alarm has been added for *Link Redundancy* mode. If an IDU is configured as a Link Redundancy Master and the designated slave unit cannot be contacted, this alarm will be triggered to notify the operator that the link is no longer protected by a backup unit.

Problems Fixed

- In Release 1.1.4 the Front Panel NMS CPT LED was not operational. This has been fixed in 1.1.5.
- In previous releases when running with Data Encryption enabled there were certain conditions that resulted in the failure of the key exchange which in turn triggered an *Encryption One-Way* alarm. When this occurred, the key exchange in one direction could not be restarted without power-cycling the affected unit. Now if the key-exchange fails under these conditions it will automatically be restarted.
- In previous releases if an IDU was running with Data Encryption enabled, generated an *Encryption Failure* alarm for any reason, then had Data Encryption disabled, the alarm would

remain. Now the alarm will be cleared when Data Encryption is disabled.
- In releases 1.1 through 1.1.3, if a Sonet IDU was upgraded with iPorter, the incorrect version of FPGA code could be downloaded to that unit resulting in the failure of T1/E1 functionality. This has been corrected.

Release 1.1.4 12/17/2004

Summary

Version 1.1.4 contains both feature enhancements and bug fixes as described below. It is recommended that all customers upgrade to 1.1.4.

Compatibility

- An IDU running 1.1.4 will function correctly if the IDU at the other end of the link is running version 0.79 or later software as long as the Link Redundancy feature is not enabled. If Link Redundancy is required then both units must be running 1.1 or later.

Notes

- When this release is installed on an IDU that is running software release 1.02 or prior then the first time the IDU is rebooted after installing the release, the *EEPROM Reloaded* alarm will be set. This is due to a configuration change implemented in the software and is normal. The alarm will remain set until the next reboot and should not appear again.

- There is an FPGA firmware upgrade included in this release. If it is required on a particular IDU, this upgrade will take place one time, the first time the unit is rebooted after the software installation. If the firmware is being upgraded the bootup process will take an extra 7 minutes during which the IDU will not be able to function in a link. The progress of the upgrade will show up on the front panel.

Enhancements

- The Antenna Alignment Mode has been modified to eliminate the fine adjustment mode when a newer ODU is attached. The newer ODU's use a voltmeter reading rather than an audio tone for alignment feedback and the fine adjustment mode is not necessary.
- The *Add Element* function on the Network menu of the iConductor initial window has been expanded to *Add Branch* and *Add Element*. This makes it easier to create a hierarchy of network elements.
- The calculation of the IDU RSSI value is now compensated for the temperature of the IDU.

Problems Fixed

- There was a problem with the way the SNMP counter *erroredSecondsTotal* was maintained and under some conditions it would be inaccurate. This problem has been corrected.

- The Restore Defaults command which is accessible from iConductor, the front panel, or SNMP, has been enhanced. In previous versions of software some parameters were not being reset to the factory default values.

- The front panel update logic was changed to ensure that the front panel LED's and LCD display are corrected if they get out of sync for any reason

Release 1.1.3 9/13/2004

Summary

Version 1.1.3 contains both feature enhancements and bug fixes as described below. It is recommended that all customers upgrade to 1.1.3.

Compatibility

- An IDU running 1.1.3 will function correctly if the IDU at the other end of the link is running version 0.79 or later software as long as the Link Redundancy feature is not enabled. If Link Redundancy is required then both units must be running 1.1 or later.

Notes

- When this release is installed on an IDU that is running software release 1.02 or prior then the first time the IDU is rebooted after installing the release, the *EEPROM Reloaded* alarm will be set. This is due to a configuration change implemented in the software and is normal. The alarm will remain set until the next reboot and should not appear again.

- There is an FPGA firmware upgrade included in this release. If it is required on a particular IDU, this upgrade will take place one time, the first time the unit is rebooted after the software installation. If the firmware is being upgraded the bootup process will take an extra 7 minutes during which the IDU will not be able to function in a link. The progress of the upgrade will show up on the front panel.

Enhancements

- A new *ODU Relay Malfunction* alarm has been added. I there is a problem with either the antenna or band relay in the ODU then this alarm will be generated.

- The MIB version has been changed to v1.4 since a new alarm was added.
- Two new operation modes have been added to Ethernet units: A 10 Mbit 4-channel mode (10 FE 4) and a 13 Mbit 4-channel mode (13 FE 4).

Problems Fixed

- There was a problem in the software that caused the IDU/ODU cable loss to occasionally be incorrectly calculated resulting in an erroneous *Excessive Cable Loss Alarm* being generated. This problem has been corrected.

Release 1.1.1 8/20/2004

Summary

Version 1.1.1 contains both feature enhancements and bug fixes as described below. It is recommended that all customers upgrade to 1.1.1.

Compatibility

- An IDU running 1.1.1 will function correctly if the IDU at the other end of the link is running version 0.79 or later software as long as the Link Redundancy feature is not enabled. If Link Redundancy is required then both units must be running 1.1 or later.

Notes

- The first time an IDU is rebooted after installing this release, the *EEPROM Reloaded* alarm will be set. This is due to a configuration change implemented in the software and is normal. The alarm will remain set until the next reboot and should not appear again.
- There is an FPGA firmware upgrade included in this release. If it is required on a particular IDU, this upgrade will take place one time, the first time the unit is rebooted after the software installation. When the firmware is being upgraded the bootup process will take an extra 7 minutes during which the IDU will not be able to function in a link. The progress of the upgrade will show up on the front panel.

Enhancements

- The Form C relays in the IDU can now be controlled via SNMP if desired. The default behavior however, remains for them to be automatically driven by the IDU and ODU alarm states.
- The Front Panel Interface can now be locked out and password protected if desired. The default behavior however, is for the Front Panel to be open.
- Several new SNMP variables have been added to allow in better remote management. The new MIB version is v1.3.
- The new Link Redundancy feature has been added to enable a pair of IDU's and ODU's to be used in a one plus one redundancy setup. The use of this feature is covered in a separate document.
- A new Excessive Cable Loss alarm has been added. The approximate loss in the IDU/ODU coaxial cable is automatically determined as before, but if that loss is excessive then an alarm is generated.
- Both near and far loopback capabilities have been added to the SONET IDU's to enable better diagnostics when setting up a new link.
- The RSSI at the ODU is now reported in iConductor, on the Front Panel, and via SNMP, as long as the cable loss in dB is entered into the IDU.

Problems Fixed

- When IP addresses are entered in the Network Management screens of the Front Panel they are now validated more thoroughly. Previously if leading zeroes or all spaces were entered the IDU would not respond correctly.

Release 1.02 5/5/2004

Summary

Version 1.02 contains bug fixes as described below. It is recommended that all customers upgrade to 1.02.

Compatibility

- An IDU running 1.02 will function correctly if the IDU at the other end of the link is running version 0.79 or later software.

- The payload data encryption feature will only function if both IDU's are running 1.01 or later, and both IDU serial numbers are CC0007600 or later.

Problems Fixed

- The storage and retrieval of configuration information in the IDU has been made much more robust. These changes will minimize the possibility of corruption of this information due to unexpected power failures or other events.

Release 1.01 4/19/2004

Summary

Version 1.01 contains both feature enhancements and bug fixes as described below. It is recommended that all customers upgrade to 1.01.

Compatibility

- An IDU running 1.01 will function correctly if the IDU at the other end of the link is running version 0.79 or later software.

- The payload data encryption feature will only function if both IDU's are running 1.01 and both IDU serial numbers are CC0007600 or later.

SNMP

- MIB version 0.2.7 is required for this release

Enhancements

The following new features were added with this software release:

- The MIB-2 variable *ifInErrors* for the payload over-air port now returns errored seconds rather than packet errors

- Added support for Ethernet payload Data Encryption
- Added new option to the SNMP variable antennaPolarization; It can now return *external* in addition to *horizontal* and *vertical*;

Problems Fixed

- The SNMP MIB-2 variable *ifSpeed* now returns the actual speed of the over-the-air payload interface; Previously it always returned 100 Mbits regardless of configuration mode of the IDU's;

Release 0.80 1/5/2004

Summary

Version 0.80 contains both feature enhancements and bug fixes as described below. It is recommended that all customers upgrade to 0.80.

Compatibility

- An IDU running 0.80 will function correctly if the IDU at the other end of the link is running version 0.79 or later software.

SNMP

- MIB version 0.2.4 is required for this release

Enhancements

The following new features were added with this software release:

- Added the SNMP read-only variable *erroredSeconds* which shows the total number of errored seconds on the over-the-air link since the last time it was read
- Added the SNMP read-only variable *erroredSecondsTotal* which shows the total number of errored seconds on the over-the-air link for the previous 24 hours
- Added the SNMP read-only variable *rohLinkState* which shows whether the over-the-air radio overhead management link is up or down
- Added the SNMP read-write variable *overairNmsMode* which is used to set or query the mode of the over-the-air network management link (Out-of-band, In-band, or Disabled)
- Added the SNMP read-only variable *currentAlarmState* which is used to determine whether the IDU has any active alarms or not
- Added the SNMP read-only variable *alarmCountTotal* which shows the number of alarms that have occurred in the previous 24 hours
- Added the *Payload Disconnect* alarm: If nothing is plugged into either payload port on an Ethernet IDU, this alarm will be set.
- Added the *Shutdown IDU* command to the Maintenance menu of the front panel interface
- Reorganized the front panel interface menus for ease of use

Problems Fixed

- Spanning Tree mode can no longer be enabled unless the Over-the-Air NMS mode is set to *Out-of-Band*