



GE MDS *PRODUCT RELEASE NOTES Rev M*

RELEASE NOTE For: MDS ORBIT MCR Firmware Version 3.1.1

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FIRMWARE

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MDS™ Orbit MCR

COVERING FIRMWARE – REV 3.1.1

Overview

This section describes Software/Firmware updates for the MDS Orbit MCR platform.

Products: MDS Orbit MCR

Firmware Version: 3.1.1

Orbit™ MCR Learning and Development YouTube Channel



New Features

1. GPS service
 - The GPS service obtains location information from the GPS sources in the system and makes it available as status data to all northbound management interfaces. GPS service supports following sources:
 1. Standalone GPS in MC7354 and MC7304 cellular modules.
2. DDNS service
 - The DDNS service supports dynamic update of the primary address of the interface on the unit against a pre-registered fully qualified domain name (FQDN) for the unit with a DDNS provider. The update occurs when the address changes as well as periodically. This release has built in support for DynDNS.com and No-IP.com DDNS providers. The service also supports user specified URL for updating DDNS providers that do not have built-in support.
3. WebUI
 - Config files, Event logs and support package can now be exported to local file.
 - Event log display has been optimized to load log entries faster.
 - Web UI now uses high strength ciphers (128bits or higher).
 - High level service status is now displayed on the home page.

Changes to Existing Features

1. The NX915 encryption handling has been modified in this version. Please refer to separately provided application bulletin.

Resolved Issues (Fixed)

1. Fixed an issue where ipsec gets stuck when doing IKEv2 with peer when network connectivity is down.
2. Fixed an issue with creating interfaces on the Web UI.
3. Fixed an issue where an inactive NETCONF session would not timeout.
4. Enabled the WiFi AP list to be user ordered.
5. Fixed an issue where certain parameters (like filters applied to interfaces) could not be deleted even when blank entry is selected on Web UI.
6. Updated NTP per ICS-CERT Advisory ICSA-14-353-01A.
7. Fixed an issue where VLAN configuration parameters are not being displayed when selecting VLAN mode for an interface on the Web UI.
8. Fixed an issue where currently connected WiFi clients are not displayed on the AP details panel on the Web UI.
9. Fixed an issue where TCP client could not be configured in the terminal server on the Web UI.
10. Added manual configuration of geographical location to Web UI (System->General->Basic Config).
11. Events log details can now be viewed on the Web UI by clicking on the event log entry.

Known Errata

1. Password configuration may be missing from the Initial Setup Wizard. Use the manual configuration located in the System -> User Authentication -> Action section of the Web GUI.
2. Importing a configuration file using a fileserver will fail and put your unit into alarm. The alarm will not affect the unit's operation. TO clear the alarm, reboot the system.
3. Leaving your system on the reprogramming screen for an extended period of time will cause the unit to eventually reboot.
4. File Server imports and exports are not functional. Use the Local File method for these requests.
5. When using hex as a custom ethertype in a QoS classifier it is incorrectly labeled as "T #".
6. Wizards which require a 'Ruleset' name, cannot include spaces or other special characters.
7. Reprogramming using a local file may fail and get into a bad state. Reboot the device to regain local file reprogramming functionality.
8. If multicast terminal server operation fails, disabling the Wi-Fi interface may restore functionality.
9. The DHCP server does not support IPv6.
10. Modifying a static route may not apply changes to the routing table until the Orbit interface associated with the static route is disabled then enabled.
11. The Web GUI may fail to login after a firmware upgrade. It is recommended to clear your web browser's cache.
12. When modifying existing 802.1x Radius Server configuration in the Orbit, the interface affected must be disabled and re-enabled.
13. When using multiple Orbits as WiFi Access Points, they must be located on separate broadcast domains.
14. Currently there is no way to modify the IP Address of an existing interface, instead add the new IP Address and Subnet Mask, then delete the old one and commit your changes.
15. On NxRadio interface status tab, refresh of NxRadio panel at the rate of 1 sec can cause the loader to be always running, thereby preventing the user from clicking 'stop' to stop the automatic refresh. It is recommended that nx-status be refreshed no more than every 5 secs. In the event, the user gets in this state, normal operation can be restored by clicking browser's reload/refresh button.
16. Wi-Fi interface interruptions may occur in the presence of high RF interference. If a service interruption occurs, the ORBIT MCR will detect and reset the Wi-Fi interface to restore service.
17. Changing the Wi-Fi configuration may cause station-bridge clients to stop passing data. A reboot is required to recover.
18. When a Commit is aborted by the ORBIT MCR, the device may misrepresent the current configuration. It is recommended to confirm the configuration is correct and re-commit.
19. Rebooting a Station Bridge may cause a service outage to other Wi-Fi connected devices.
20. When using Dual SSIDs, changes to ap-config parameters may cause the device to reboot upon commit.
21. Monitoring a disconnected interface may cause a *netmgr* failure. (See #21 under Operational Notes and Limitations).
22. Changing a Wi-Fi interface from an enabled Station with an IP address and filters to a disabled, bridged, Access Point without an IP address and filter may cause a *netmgr* failure.
23. When a Wi-Fi Station is in the bridge, the STP status information for the Wi-Fi device is not available.

24. The "Local IPs" configuration parameter for Terminal Servers is not currently functional.

Special Notes

1. **This release features updated configuration data models that are not backwards compatible with older releases (pre 2.0.9). When a unit running an older release is upgraded to this release, a snapshot of its configuration will be made and stored on the unit. The unit's configuration will be automatically migrated to newer data model. The user will be allowed to downgrade to older firmware version only by choosing to go back to legacy configuration snapshot.**
2. This release contains a feature (point-to-point-connection) that can be enabled to force assignment of a /32 address to cell modem. This prevents an issue where modems can be assigned a /30 prefix causing connectivity issues from one such unit to another over the Cellular network.

`% set interfaces interface Cell ipv4 dhcp point-to-point-connection true.`

It is recommended that above configuration be applied to Cell interface that have been configured to obtain address via DHCP.

Operational Notes and Limitations

1. Internet Explorer version 8 is no longer supported. Please upgrade this application to version 11, or use Mozilla Firefox or Google Chrome.
2. The Firewall (Access Control List) Wizard currently does not support configuration of MAC filtering rules. However, these rules can be configured by going to services->firewall page.
3. When using an Orbit on both sides of an IPsec tunnel there is an IKEv1 issue. IKEv2 is recommended regardless of this IKEv1 limitation.
4. In the CLI, deleting a single entry in a leaf-list will delete the entire list. Do not use brackets in the command when deleting an element in the list.
5. Internal software alarms cannot be cleared unless the ORBIT MCR is rebooted. (The Alarm *will* be in Event Log after reboot for record).
6. Configuring multiple Terminal Servers on the *same* TCP port does generate a warning, but operation will not work correctly.
7. Configuration of the station-max parameter, on the Wi-Fi interface, is not limited to 7 Stations, even though the ORBIT MCR currently supports 7 Stations.
8. To delete all IPv4 addresses from an interface use the following command:
`% delete interfaces interface myInterface IPv4`
9. The ORBIT MCR NTP service may not accept time from Windows W32Time Time service (SNTP).
10. Wi-Fi Station Bridging is not interoperable with other vendor's Wi-Fi devices.
11. When the Wi-Fi interface is enabled with Dual SSIDs, Station Bridging operation is restricted to the first alphanumeric SSID.
12. When using Dual SSIDs maximum throughput is achieved only on the first SSID; the second SSID will have reduced capacity (details are system dependent)
13. There is currently no SCEP configuration WebUI support. SCEP must be configured via the CLI.
14. SCEP operations require certificate information to contain a Common Name, otherwise the operation will fail. No direct indication of failure is provided.
15. On a Microsoft CA server, the SCEP template used should not include Extended Key Usage.
16. In WebUI, there are no preconfigured file servers. This facility is only accessible from the CLI.
17. The USB port is currently intended for console access only
 - Note: If the USB port is in use as a Terminal Server and the ORBIT MCR is rebooted (or connection interrupted) the USB cable must be disconnected and reconnected and the Terminal Session on the connected device must be restarted.
18. Any member of a disabled bridge will be disabled. Members must first be removed from the bridge in order to regain access to the interface.
19. A Wi-Fi Station will not age out in the event that its corresponding Wi-Fi Access Point is no longer present.
20. Date/Time settings on ORBIT MCR are expressed in GMT format.

21. Some CLI command sequences, particularly those involving device configuration or repeat status monitoring, may rarely cause an internal error known as a *netmgr* failure. The system will effect recovery, but to ensure proper operation a reboot is recommended.
22. In rare conditions DHCP may fail to provide IP addresses; in this case a manual reboot is required.
23. The “\” character is an escape character for the CLI. If you want to enter a “\” into a text field (such as a user password), you will need to use “\\”.
24. Changes to the Wi-Fi interface mode may result in loss of data for several minutes.
25. STP is not functional over interfaces belonging to a VLAN.
26. Configuration files cannot be imported while there are any active WebUI sessions.
27. Tab completion is not available on the CLI when deleting list entries. The entry name must be manually entered using the name as displayed by the show command.
28. Not all certificate upload or download actions create proper events in the event log.
29. Displaying the active routes will not show all configured routes, when connectivity to an affected subnet cannot be established.
30. When changing a Wi-Fi Station to put it into a VLAN, you must reboot the device.
31. Attempting to perform simultaneous reprogramming operations on more than four NxRadio remotes, via the Over-the-Air link, may result in reprogramming failures. This will be more noticeable at lower modem modes.
32. The NxRadio connected-remotes database will not show an IP address if the Remote is configured to participate in VLANs.
33. The configuration parameter to enable a specific Wi-Fi Access Point, overrides the higher level configuration to enable the Wi-Fi interface.
34. Long association times for Remotes may occur when an NxRadio Access Point interface is flooded with traffic.
35. QoS may not affect the Ethernet interfaces or bridging of Ethernet traffic between a Wi-Fi Access Point and a Wi-Fi Station in a bridge.
36. A bridged link between a Wi-Fi Access Point and a Station will only pass <1492 byte frames.
37. When using a Public Dynamic IP Addressed SIM card, On-Demand IPsec Mode is not supported. Always-On mode must be used instead.

