ENCOM STRATOS Release Notes

Version 3.0.26 (March 7, 2018)

Fixed issue where an attempt to upgrade a broadband radio could fail with a “Local item doesn’t exist” error.

Fixed issue where upgrading a broadband radio to the same firmware version could fail with a “Could not upgrade drivers” error.

Version 3.0.25 (February 16, 2018)

Added support for drag-and-dropping gateway devices to the Ping Test panel.

Fixed issue where the wireless link status panel would no longer let you select the radio at the other end of a link by double-clicking the left mouse button on the link.

Fixed issue where the antenna chain selection panel was no longer being shown for Wireless-N and Wireless-AC radios.

Fixed issue where the position of the splitter in the Network Traffic panel was not being properly restored.

Fixed issue where the spacing of the graph bars in the Network Traffic panel were not being properly displayed unless the size of the Network Traffic panel was changed.

Version 3.0.24 (Internal release)

Implemented better support for showing disabled fields in the I/O device digital output editor.

Version 3.0.23 (Internal release)

Removed the "AC with Battery" and all "DC Power" options for the I/O device power sources.

The Analog Input and Output setting forms can now be viewed by a user that does not have rights to make changes.

Made miscellaneous enhancements and fixes to the I/O gateway configuration form.

A “Schedule out of date” indication is now displayed in the map view, item properties panel and I/O device panel when a device has been assigned a schedule that occurs entirely in the past.

Addressed issue where long-term schedule overrides could no longer be saved.

Fixed issue where an I/O device that was under short term override would momentarily show the schedule state as ‘Unknown’.

Version 3.0.22 (Internal release)

Added better validation for the I/O gateway configuration form password fields. Blank user names or passwords are no longer allowed.

Version 3.0.21 (Internal release)

Fixed issue where changing the IP address of an I/O gateway device would sometimes time out, even though the change was successful.

Fixed issue where the I/O Device List panel was not being updated properly when STRATOS was started with the I/O Device panel hidden.

Version 3.0.20 (Internal release)

Added support for broadband radios running firmware version 6.40.4.

An active bandwidth test is no longer terminated when the bandwidth test gets covered by another panel.

Fixed issue where pressing the Del key on a folder in the Radio List would remove the folder's parent folder as well.

Added "Add Root Folder" option to the radio list context panel (to make it consistent with the I/O device list panel).

Version 3.0.19 (Internal release)

Fixed issue where a change in I/O device monitoring frequency was not immediately being applied.

Version 3.0.18 (Internal release)

Addressed an issue that was causing I/O gateway communication failures when the I/O gateway was communicating with STRATOS via cell modem.

Version 3.0.17 (Internal release)

Fixed a number of small SNMP related issues with the Restore to Factory Default process.

Fixed issue where the Restore to Factory Defaults process would sometimes fail when restoring 900 MHz broadband radios.

Added confirmation prompt to the Upgrade Radio Firmware function.

Added warning indicator to the schedule manager form that informs the user that a schedule occurs in the past.

Version 3.0.16 (Internal release)

Added Export and Import functions to the I/O gateway configuration form.

Version 3.0.15 (Internal release)

Added a "No DFS" option to the broadband Radio Settings tab in the Radio Configuration form. This setting removes the DFS channels from the radio's channel list. This can significantly speed up the establishment of a connection between radios that are located close to radar installations.

Modified the I/O Device RSSI panel to show all field devices associated with a gateway when the gateway device is selected (previously, devices that were connected via a repeater were not shown).

Version 3.0.14 (Internal release)

Addressed issue where a gateway device would temporarily be shown in the 'Can't Login' state shortly after its password was changed.

Version 3.0.13 (Internal release)

Added support for specifying the lamp and panel type used for a Harmony Gateway Advanced device directly from the gateway configuration form.

Added support for configuring the I/O device gateway network, system, protocol, local I/O and time settings directly from the gateway configuration form.

Added support for displaying digital input and output transitions in the historical events report. This facilitates the creation of school zone flasher on/off reports.

Added support for the 'BB 900/900 S' radio model.

Updated the I/O device monitoring scheme to more quickly determine when a gateway device is off-line.

Added support for broadband radios that are constrained to the new FCC regulations (that come into force March 2, 2018, for new product purchases).

Version 3.0.12 (Internal release)

The map is automatically zoomed and centered on the associated device when an alert is double-clicked in the Alerts panel.

Brightened up the ON/OFF indicator icons in the I/O Devices and Item Properties panels.

Fixed issue that could prevent the 'Load Graphs from File' function from displaying the loaded graph information.

Fixed issue where a change in I/O device type (e.g. from unknown to SBX Remote when the device comes on-line) would not automatically update the STRATOS user interface (you had to de-select then re-select the device).

Fixed issue that prevented the spell checker from working in the release version of STRATOS.

Addressed issue that was preventing broadband radio alerts, as well as I/O device Offline and Online alerts, from being generated.

Version 3.0.11 (Internal release)

Added ability to select the range, resolution and types of readings to show when loading saved chart data using the ‘Load Graphs from File’ function.

Version 3.0.10 (Internal release)

Addressed memory leak in the charting forms.

Added support for logging and graphing the signal strength values of I/O field devices.

Re-arranging the chart options list to more closely follow the ordering of the corresponding readings in the Item Properties panel.

Version 3.0.9 (Internal release)

Fixed issue where manually changing the location of an I/O device in its configuration form would not immediately take effect (the device would have to be refreshed, or STRATOS restarted).

Live charting data is now automatically saved to a file. It can be viewed later using the STRATOS 'Load Graphs from File' function.

The amount of data shown in the live chart display is now limited to the last hour of the live charting session (to address performance and memory usage issues).

Added options to extend the live charting session up to one week.

Version 3.0.8 (September 27, 2017)

Added device notes editor that allows ad-hoc notes to be assigned to any broadband radio or I/O device. The notes editor contains Word-like features, such a embedding pictures, creating tables, formatting text, etc.

Added several enhancements to the Map View panel:

- I/O Device links are now shown as dotted lines on the map display.
- Added legend that identifies the lines used to display the wireless connections between devices on the map. The legend is shown in the upper right-hand corner of the map. It can be collapsed/expanded by clicking on the list triangle displayed in the legend title bar.
- Added map filter box in the lower right-hand corner of the map. This can be used to hide classes of devices (broadband radios, I/O devices, on-line devices, off-line devices, and devices that are in trouble) to help visualize the wireless network.
- Updated the map links to take into consideration the repeater device connections (for I/O field devices). Previously, all field devices would have a connection back to the gateway device, even if they were connected to a repeater.
- Added "Zoom To Device" option to all broadband radio and I/O device menus (allows you to easily zoom to the selected device).

- The device map tooltip for Gateway radios (such as the GTW E-Lite 450 INT radio) is now displayed using two background colors (light-blue for the broadband radio information, and darker blue for the integrated I/O device information).
- When an I/O device is dragged and dropped on the map, the state of the associated wireless link line is immediately updated to reflect the device's current state (before, you'd have to wait until the next monitoring cycle).
- Added a tooltip style prompt that indicates if the mouse pointer is over top of more than one device on the map.
- Added menu that prompts you to select a device when you left-click or right-click the mouse pointer on a map region that contains two or more device markers superimposed on each other.
- The type of device is now identified in the device tooltip Model field ("Broadband Radio Model" and "900 MHz Gateway Model" shown).
- You can now zoom to a map region by holding down the CTRL key and visually dragging a rectangle on the map using the left mouse button.

Added several enhancements to the Alerts panel:

- Added a visual indicator to show that new alarms have been added to the panel.
- Added a periodic audio notification that sounds when new alarms have been added to the panel.
- Added Quiet button to stop the periodic sound and visual indicator that is triggered when new alarms are added to the panel.

Added support for showing check boxes to the I/O Device List panel. The checkboxes are used to show/hide the I/O devices contained in the folder. This is the same functionality that the checkboxes in the Radio List implements.

Added feature that allows you to override the GPS location of a gateway or field device by either:

- Dragging and dropping the device icon on the map.
- Selecting the “Manually specify location” option in the Location tab of the I/O device configuration form.

Added several enhancements to the Analog I/O Device panel:

- Added visual indication of AC power state to the Analog I/O device diagram. The power connector is green if the AC is OK, and red if it has failed.

- Added support for showing the individual lamp that has failed in the analog diagram indicator boxes (previously, both lamps would be shown in the failed state if a single lamp of a two-lamp system failed).
- The lamp flasher image associated with a lamp no longer flashes while the lamp is in a failed state.

Fixed issue in the I/O Device Signal Strength panel where the wrong master device was being shown in the From column for a device connected to a repeater (a link back to the gateway device was being shown instead of a link back to the repeater device).

Added "Use Fast Monitoring Protocol" option to the System Settings form "Services -> Monitoring" panel. This allows you to select the API (fast monitoring) or SSH protocol for the radio monitoring tasks (API protocol is the default because it is more efficient, but some customers have IT infrastructure that blocks the API port, so they must use SSH).

Added support for the new AC Power Lost detection scheme that uses the device's first digital input to detect if the AC power is being applied.

Added support for generating DC power lost events when a Low Battery event is detected for devices that don't have backup batteries.

Version 3.0.7 (August 25, 2017)

The schedule editor now displays a warning if you try to save schedules that occur in the past.

Updated all forms to better handle screen DPI settings other than 100% (normally used to magnify the windows display when running very high-resolution displays).

Fixed issue where the range selector for the 'Load Graphs from File' feature was not always correctly determining the start and end times of the readings in the file.

Updated several forms to automatically save and restore their location, size and layout.

Added option to disable the persistent map help popups displayed for selected devices.

Version 3.0.6 (August 22, 2017)

I/O device links are now shown in gray if the CCQ option is selected in the map toolbar (since I/O devices don’t support CCQ readings).

The Advanced button is no longer shown on the I/O field device configuration forms.

Fixed issue where the ‘Resume Long Term Schedule Override’ menu item was displaying the ‘Resume Short Term/Permanent Schedule Override’ form (STRATOS Elite only).

Added support for the AES encryption type in the broadband radio SNMP Community configuration tabs (for radios running EncomOS V6.x.x and above).

Added Engine ID HEX display to the broadband radio SNMP configuration tab.

Updated the broadband radio Network Filter configuration tab to allow wireless-to-wireless filtering for single radios.

Fixed issue where it was not possible to save the SNMP MIB file to a folder that did not already contain a MIB file (from the broadband radio SNMP configuration tab).

Legacy broadband radios are now identified as Point-to-Multipoint radios in the radio configuration tabs.

Version 3.0.5 (August 14, 2017)

First release of STRATOS that supports ENCOM I/O devices.

Version 2.1.121 (July 19, 2017)

Added support for legacy "Energy WIFI w/WEBIO" radios.

Version 2.1.120 (Internal release)

Fixed issue where legacy 4.9 GHz radios would sometimes cause the ‘Configuration Settings Changed’ message to be displayed when trying to configure the radio.

If available, the serial number of the selected radio is now displayed in the Item Properties panel.

Added support for copying the contents of the bandwidth test and wireless link status panels to the Windows clipboard.

Added support for saving the contents of the bandwidth test, wireless link status, spectrum scan and map view panels to an image file directly from STRATOS.

Fixed issue where pressing the Del key when a radio was selected in the radio list would always delete the radio, even if the Del key was being pressed while another panel was selected, or if the CTRL-ALT-DEL key sequence was being carried out.

Version 2.1.119 (May 18, 2017)

Fixed issue where changing the country for a 900 MHz radio would corrupt the radio's configuration. This issue only occurred with the 6.34.3 radio firmware.

Added support for setting custom radio power levels (settable in 1 dBm steps from the lowest allowed value to the maximum available power).

Added an 'Update Radio Power' button to the radio settings tab that allows the radio output power to be changed without having to save the entire radio configuration form.

Fixed issue where the Restore to Factory defaults function would fail for a Mesh radio running firmware version 6.22 or greater.

Fixed issue where the restore to factory defaults function was not using the right frequencies when restoring XR9 based radios to factory defaults.

Fixed issue where the "The selected channel and channel mode is not supported by all ENCOM broadband radios." warning was being displayed for all 900 MHz radio frequencies.

The latest version of STRATOS that was used to configure a radio is now stored on the radio. This information will be used to inform the user that an out-of-date version of STRATOS is being used to configure a radio if a newer version was used to configure the radio.

Version 2.1.118 (Apr 24, 2017)

Added support for missing variants of the BB and BBMESH dual radios, including the BB 58/24 INT model.

Version 2.1.117 (Mar 28, 2017)

Added support for ENCOM 450 (AC-based) E-Lite radio models.

Version 2.1.116 (Jan 4, 2017)

Added support for AC-based E-Lite and Gateway radio variants.

Added support for disabling the IP cloud and time zone autodetect settings in the restore to factory

defaults script (for radios with V6.27 firmware and above).

Added support for the Mikrotik R52HnD radio card.

Fixed issue in the script used to control the external power LED state (for certain radios with firmware V6.22 and above).

Version 2.1.115 (Sep 22, 2016)

Addressed issue with the Open Street map provider no longer working on some systems.

Addressed issue where the channels for the 5, 10 and 40 MHz channel modes were not being displayed when the “A with Clients” wireless mode was selected (in the radio configuration form Radio Settings tab). This only occurred with 5.8 GHz legacy (Wireless-A) broadband radios running EncomOS V6.34 or greater.

Removed the eMax option from the “A/N/AC” and “A/N” wireless mode options (in the radio configuration form Radio Settings tab) since Wireless-A connections only support the legacy eMax option.

A warning message is now displayed in the Radio Settings tab if the Auto-Frequency option is selected for master radios. For greatest network stability, master radios should be configured to use a specific channel.

EncomOS V6.34 and above supports a slightly different set of channels (frequencies) than the older versions when running in the 40 MHz Wireless-A channel mode. A warning message is now displayed in the Radio Settings tab if a channel and channel mode combination is selected that is not supported by all versions of EncomOS.

Version 2.1.114 (Aug 26, 2016)

Added support for the following high voltage PoE radio models: BBE-HV, BBM-HV, E-Lite-E-HV, E-Lite-EM-HV, BBE-HV-GPS, BBM-HV-GPS, E-Lite-E-HV-GPS, E-Lite-EM-HV-GPS.

Fixed regression introduced in STRATOS V2.1.113 where it was no longer possible to move a radio on the map by dragging and dropping from its current location.

Version 2.1.113 (Aug 18, 2016)

Added support for E-Lite-EM and E-Lite-EM-GPS radio models.

Added support 'BB 24 S' radio model.

Modified the map popup help balloons so that they are always displayed on the map surface.

Removed the MapQuest map options since the free MapQuest tile service is no longer available.

Version 2.1.112 (June 10, 2016)

Added support for BBX class radios.

Version 2.1.111 (May 25, 2016)

Fixed issue where it was not possible to select the 20 MHz channel mode for 4.9 GHz radios that were using EncomOS V6.34.3.

Version 2.1.110 (May 19, 2016)

Fixed issue where the 'Restore to Factory Defaults' process would fail the final verification step on some older radio hardware.

Version 2.1.109 (Internal release)

Addressed issue where the Ethernet interface information for some older radios was not being shown in the correct order (in the radio properties panel).

Added support for upgrading older Power-PC based radios to EncomOS V5.26.

Fixed issue where the PoE voltage displayed for some of the older radios was not being displayed properly when monitoring using the API interface(value was 10x too large).

Fixed issue where some radios could be erroneously displayed as off-line, when the processing of an API based command failed.

Version 2.1.108 (April 27, 2016)

Fixed issue where it was no longer possible to load the radio configuration form for radios where the radio.inf was not present (for most of the legacy radios).

Addressed issue where STRATOS could no longer be installed on some newer versions of Windows.

Switched to using the radio API interface to get the wireless link status information, and when periodically monitoring the radios since it is a more efficient than the SSH method previously used.

Made further enhancements to address the high processor loading that occurs when STRATOS is started in a network that contains a large number of radios.

Version 2.1.107 (Internal release)

Modified the radio settings form so that dynamic security is automatically enabled when the user selects the 'WiFi Hotspot' option.

Added support for BBE 900 EXT, BBE 900/58 EXT, BBE 900 INT, BBE-GPS 900 EXT, BBE-GPS 900/58 EXT and BBE-GPS 900 INT radio models.

Fixed issue where exceptions were being logged when a radio that had not been provisioned was selected in the radio list.

Version 2.1.106 (Internal release)

Updated the restore to factory defaults process to handle the new wireless mode WifiHotspot setting.

Version 2.1.105 (Internal release)

Added support for WiFi access point radios (Energy 24N/58N WIFI, Energy 58N/58N WIFI, Energy AC INT WIFI, E-Lite-E 24N/58N WIFI, E-Lite-E 58N/58N WIFI, E-Lite-E-GPS 24N/58N WIFI, E-Lite-E-GPS 58N/58N WIFI).

Version 2.1.104 (Internal release)

Fixed issue where the Add and Find radio processes would no longer work.

Added support for Gateway radio models (GTW Energy AC INT, GTW Energy 58 INT, GTW E-Lite 58 INT, GTW BB 24 INT, GTW BB 49 INT, GTW BB 58 INT).

Version 2.1.103 (Internal release)

Fixed issue where the radio configuration form could no longer be displayed properly when the WMM setting was enabled in the QoS sub tab.

Version 2.1.102 (Internal release)

Added support for radios based on RB532A main boards.

Version 2.1.101 (Internal release)

Cleaned up the value displayed in the Wireless Link Status panel 'Tx/Rx Rate' column (only the numeric Tx/Rx values are displayed).

Fixed issue in the radio configuration form where a backslash character typed in the Wireless-N security pre-shared key could not be saved.

Version 2.1.100 (March 31, 2016)

No changes.

Version 2.1.99 (Internal release)

Addressed issue where errors were being logged in the STRATOS event log when radios with 0.0.0.0 IP addresses were discovered.

Fixed issue where the Restore to Factory Defaults process would set the wireless mode for BB 49 INT radios using WLM200N5-26ESD cards to Only-N instead of Only-A.

Fixed issue where the wrong band mode was assigned to legacy 4.9 GHz radios for the A-Mode setting.

Version 2.1.98 (Internal release)

Added support for radios with version 6.34.3 firmware.

Version 2.1.97 (Internal release)

Addressed issue where STRATOS was unable to restore Energy AC radios to factory defaults.

Version 2.1.96 (Internal release)

No changes.

Version 2.1.95 (March 11, 2016)

Fixed issue that prevented the eMax setting of older radios (with version 3.30 firmware) from being set properly.

Version 2.1.94 (Internal release)

Minor changes to legacy wireless mode options that were misnamed as 'G-Only with Clients' and 'A-Only with Clients' in the radio settings form.

Added support for the new Energy AC radios models: Energy AC INT, Energy AC EXT, Energy AC INT DUAL, Energy AC INT WIFI.

Removed unused antenna chains in the radio settings form.

Changed the name of the 'Wireless-N' sub-tab in the radio setting form to 'Antenna Settings'.

Replaced the 'Client Protocol' property with the 'Wireless Mode' property in the Item Properties panel.

Added prompt to inform the user to enable a DHCP server if a radio is configured to support client devices in the radio settings form.

Version 2.1.93 (Internal release)

Fixed issue where a newly added radio that was moved to a non-default folder would be returned to the

default folder when STRATOS was restarted (regression introduced in STRATOS version 2.1.86).

Version 2.1.92 (Internal release)

Added guard to prevent discovery packets from changing the IP address of a radio to a non-reachable address if a reachable address was recently processed. This addresses the issue where a VLAN management address discovery packet overrides the Ethernet port discovery packet, rendering the radio unavailable to the user.

Addressed issue where system note information was not updated properly when the user exported the radio configuration.

Version 2.1.91 (Internal release)

No changes.

Version 2.1.90 (Internal release)

No changes.

Version 2.1.89 (Internal release)

Fixed issue where the Ethernet link status was no longer being displayed properly in the Item Properties panel.

Version 2.1.88 (Internal release)

No changes.

Version 2.1.87 (Internal release)

Added support for 4.9 GHz E-Lite radio models.

Added support for B/G/N, A/N and AC/N wireless modes to support mixed-mode networks (for example networks where both Legacy-A and Wireless-N remote radios report back to a Wireless-N master).

Added support for legacy eMax protocol (used by legacy ENCOM radios, and by some third party WiFi radios) to the E-Lite and Energy radios.

Added support for E-Lite-H and E-Lite-H-GPS radio models (hybrid dual radios that contain a legacy and a wireless-N card).

Added support for showing the frequency at which a remote radio is operating in the Item Properties panel (and in the exported configuration profiles).

Modified the background radio monitoring task to use less memory.

Version 2.1.86 (Internal release)

Greatly increased the performance of the 'Assign Static IP Address' function (down from 45 seconds to 8 seconds average to change the radio's IP address).

Addressed issue where duplicate device records in the radio list database would cause issues managing the radios (could not show the configuration form, etc.).

Made a number of improvements to the mechanism used to get the configuration information from the radios (the process now uses less processor and memory resources).

Moved the process that updates the radio list database to a background thread. This should address performance issues when STRATOS is managing a network with many hundreds of radios.

Fixed issue with the restore to factory defaults process where the external power LED setting was being set to the wrong value.

Added support for E-Lite-M radios (the mesh variant of the E-Lite-E radios).

Fixed issue where the radio card type was not being set properly when restoring mesh radios to factory defaults.

Added support for setting the speed of Ethernet ports to the STRATOS radio configuration form.

Added support for setting the network type of a Wireless-N or Wireless-AC radio to Point-to-Multipoint (where eMAX can be enabled), or Point-to-Point (where eMAX is always enabled, and Only-N or Only-AC options are selected).

Modified the 'Restore Original Layout' function to properly recover the original state of the main window panel layout (the function would often fail to restore the layout, requiring the user to manually delete the corrupted DockState file).

Version 2.1.85 (Internal release)

Added support for full spectral scans for radios that support the feature. (The Spectrum Scan panel adjusts itself to the capabilities of the selected radio card.)

Added support for taking a snapshot of the Spectrum Scan panel graphs.

Addressed issue where STRATOS would not detect the situation where a new or replacement radio has been assigned the same IP address as an old radio, when the radios are behind a firewall.

When STRATOS starts up, the radios in the system are queried for their full configuration, rather than just a partial configuration.

Version 2.1.84 (Internal release)

No changes.

Version 2.1.83 (November 11, 2015)

Added prompt to radio list that informs the user that an E-Lite Dual radio needs to be downgraded if the wrong version of the radio firmware or drivers is present (this affects very few E-Lite Dual radios).

Version 2.1.82 (Internal release)

Fixed issue where the Power LED on the back of some E-Lite radios was no longer being powered.

Added support for E-Lite-E and E-Lite-E-GPS radio models (E-Lite radios with external blue power LED and external audio alignment output).

Version 2.1.81 (Internal release)

Added support for E-Lite radios based on newer main boards.

Version 2.1.80 (Internal release)

Fixed issue that sometimes prevented the radio properties from being updated properly when STRATOS started up.

Version 2.1.79 (August 21, 2016)

Fixed issue that prevented multiple radios from being moved from one folder to another in the radio list.

Fixed issue where a firmware upgrade would fail with a "could not find file encom--3.30.npk" error when attempting to upgrade pre-version 3.00 radio firmware.

Version 2.1.78 (Internal release)

Fixed issue where the Restore to Factory Defaults process would fail the final verification step because STRATOS would misinterpret the system note (a very rare occurrence).

Version 2.1.77 (August 17, 2016)

Adding support for automatically restarting a bandwidth test if a running bandwidth test would normally terminate itself (due a radio being temporarily disconnected, etc.).

Changed from using FTP to SFTP for uploading and downloading file to and from the radio. The FTP protocol was proving to be unreliable when a radio was heavily loaded.

Version 2.1.76 (Internal release)

Added support for displaying the radio's PoE voltage and internal temperature (if the radio's main board supports it).

Added support for the new broadband radio model names that replace the older inconsistent model names. These are: BB 24 EXT, BB 49 EXT, BB 58 EXT, BB 24 INT, BB 49 INT, BB 58 INT, BB 24/49 EXT, BB 24/58 EXT, BB 49/49 EXT, BB 49/58 EXT, BB 58/58 EXT, BB 24/49 INT, BB 24/58 INT, BB 49/49 INT, BB 49/58 INT, B 58/58 INT, BB 24N EXT, BB 49N EXT, BB 58N EXT, BB 24N INT, BB 49N INT, BB 58N INT, BB 58N/58N INT, B 900 EXT, B 900/58 EXT, BB 900 S, BB-GPS 900 S, BB 900 INT and BB 58 S.

Added support for generating alerts based on the low or high temperature readings at a radio.

Added support for selecting metric or imperial units in the system settings form. This allows distance and temperatures to be displayed using the desired units.

Added support for changing the ping timeout interval for the radio monitor. This addresses the issue where radios in networks that have high latency are shown as off-line, even though they are just slow to respond.

Added field to specify the ping timeout in the Ping Test panel.

Version 2.1.75 (July 15, 2015)

Added support for resetting the radio's password.

Version 2.1.74 (July 8, 2015)

Added support for COMMPAKBB4949, BB4949INT, BBMESH4949, BBMESH4949INT, BBE 49/49 EXT, BBE 49/49 INT, BBE-GPS 49/49 EXT and BBE-GPS 49/49 INT radio models.

Version 2.1.73 (Internal release)

No changes.

Version 2.1.72 (Internal release)

The item properties panel shows an Ethernet link as established when auto-negotiation is disabled.

Version 2.1.71 (June 11, 2015)

Fixed issue in the antenna alignment script that prevented the external power LED of a BBE radio from being turned off.

Added support for colorized text in the terminal panel.

Modified the STRATOS licensing so that is it is automatically licensed out-of-the-box.

Fixed issue where the Power LED Enable options was not being imported properly.

Fixed issue where the manual location of a radio was not properly imported when a GPS receiver was active.

'Manual Override' is now show in the item properties GPS field if a GPS receiver is present, but the user has manually assigned a location to the radio.

Fixed issue where converting a 4.9 GHz PtMP radio to Mesh would result in a verification failure because the radio was being configured as a Remote instead of a Master.

Fixed issue where a wireless link was not being identified as the 'Default' link (for on-radio antenna alignment) for a newly provisioned radio.

Version 2.1.70 (Internal release)

Fixed issue where the SNMP contact and location info would not be read properly if it was too long.

Fixed a number of issues that caused the RADIUS monitor window to no longer work.

Added support for login credentials to the Find Radios form.

The Login form displayed in the 'Add Radio' form now has the user name defaulted to 'admin' (it was previously blank).

Fixed issue where the user could delete a folder against which a 'Find Radios' task was being carried out.

Added restrictions on the characters that can be used in the folder names to prevent errors when trying to rename or delete the folder.

Fixed issue where the map display would temporarily show a link to (0,0) when a radio's coordinates had not been read yet.

The restore to factory defaults task now resets the time zone setting.

Addressed issue where the radio configuration could not be completely read, and configuration changes could not be saved, if the user logged into STRATOS with a password, but no password was actually assigned to the radios.

Version 2.1.69 (Internal release)

Fixed issue where the model number of a radio was not always displayed on the radio configuration form's About tab.

Version 2.1.68 (Internal release)

Fixed issue where the Assign Static IP Address function would fail if the Ethernet port information had not already been read from a radio.

Version 2.1.67 (Internal release)

No changes.

Version 2.1.66 (Internal release)

Addressed issue where the Ethernet information in the 'Item Properties' panel would only show up after the user had clicked on a radio.

Added check for a compatible radio model to the firmware upgrade form.

Added guard to prevent a spurious radio from being added to the radio list when a radio is reset to factory defaults.

Updated the radio properties panel to show SPF interfaces properly (they were previously being identified as Ethernet interfaces).

Fixed issue where the radio configuration form would incorrectly determine that static WDS links had changed.

Changed the radio monitoring and wireless scanning functions to increase their reliability.

Added context menu to the wireless link status panel that allows a user to select the radio associated with an item in the wireless status list. This can also be accomplished by double-clicking the left mouse button on the item.

Fixed issue where the model name was not always displayed in the map tool-tips.

Added Distance column in the Wireless Link Rate panel that shows the distance of the associated link.

Added support for logging incoming CDP packets.

Version 2.1.65 (Internal release)

Added missing ConfigCommonV3.cfg, ConfigCommonV4.cfg, ConfigCommonV5.cfg and ConfigCommonV6.cfg to the client and factory setup programs.

Added support for Broadband-E (BBE) radios (that have external reset button, RSSI LEDS and power LED).

Version 2.1.64 (Internal release)

Fixed issue with the antenna alignment script not working properly with radios using firmware version 6.22.

Fixed issue where radios were not being added properly if a folder was not selected when the 'Add Radio' and 'Find Radios' functions were used.

Version 2.1.63 (Internal release)

No changes.

Version 2.1.62 (Internal release)

No changes.

Version 2.1.61 (Internal release)

No changes.

Version 2.1.60 (Internal release)

No changes.

Version 2.1.59 (Internal release)

Updated copyright end year to 2015.

Version 2.1.58 (February 18, 2015)

Fixed issue where a missing RadioCards section in the radio.inf file would prevent a radio with a Wireless-N card from being configured.

Version 2.1.57 (Internal release)

Added feature to the Restore to Factory Defaults process that prevents one instance of STRATOS that is logging into a radio with incorrect credentials from interfering with another instance of STRATOS.

Increased the time spent on each channel width in the spectrum scan panel from 10 seconds to 20 seconds. This addresses an issue where some the newer radio cards take longer than 10 seconds to acquire their first reading, causing each channel session to time out without showing any data on the graph.

Version 2.1.56 (Internal release)

Added support for radios running EncomOS V6.22.

Updated the bandwidth test panel so that the Start button is automatically enabled when the selected radio goes on-line.

Fixed issue where the login form would only be displayed once if the wrong credentials were entered for the remote radio in the bandwidth test panel.

An error message is now displayed in the upgrade radio form if the OK button is clicked with no firmware selected.

Fixed issue where the upgrade process was not re-applying firmware when the current firmware version was selected in the upgrade form.

Reduced the amount of time required for the selected radio to be shown as on-line after being off-line.

Version 2.1.55 (November 7, 2014)

Changed 'E-Lite EXT 24' formatted model names to 'E-Lite 24 EXT' format to be more consistent with the model names of other broadband radio families.

Added support for converting Broadband radios to Mesh radios, and visce-versa (for select models only).

Added help button to the title bar of all forms. Also added "Press'F1' for help" indicator at the right of the main menu. This should make it more obvious that on-line help is available for all STRATOS features.

Modfied the configuration import process to prevent 802.11 a/b/g radio configurations from being imported into 802.11 n radios (and vice-versa).

Added support for the Mikrotik R52n-M dual-band radio card.

Fixed issue where the country name could not be changed to China or United Kingdom if a radio card was configured with an 802.11a or 802.11g 40 MHz channel mode.

Added support for upgrading Energy radios to EncomOS V5.26.

Changed 'E-Lite EXT 24' formatted model names to 'E-Lite 24 EXT' format to be more consistent with the model names of other broadband radio families.

Version 2.1.54 (September 30, 2014)

Replaced the 'Energy X', 'Energy NT', 'Energy Dual' and 'Energy Dual NT' radio models with 'Energy EXT', 'Energy INT', 'Energy EXT - Dual' and 'Energy INT - Dual' models respectively to match sales and marketing literature.

Version 2.1.53 (September 19, 2014)

Fixed issue where STRATOS could no longer change the description, location, icon or street address of a radio when a radio.inf file was not present on the radio.

A warning is now displayed if the user tries to assign a blank password to the radio (although the user is still allowed to assign it).

Leading '0' characters are no longer allowed when specifying IP addresses, as they were causing the IP address to be interpreted incorrectly.

The '$' character is no longer allowed when specifying the radio SSID, dynamic security pre-shared keys and radio password, as it would cause the configuration process to fail.

Version 2.1.52 (September 4, 2014)

Added checks to prevent STRATOS from trying to configure or reset radios if it detects that the radio contains a hardware profile that it does not support.

Version 2.1.51 (Internal release)

Added support for the Mikrotik R52H dual-band radio card.

Version 2.1.50 (Internal release)

Fixed issue where the 'Restore to Factory Defaults' process could fail when restoring dual-card radios, or radios with V3.30 firmware.

Version 2.1.49 (August 7, 2014)

Fixed issue where changing the management or client VLAN IP addresses, when connected to the radio via the management VLAN, would cause the radio to appear off-line longer than necessary.

Version 2.1.48 (Internal release)

Added support for E-Lite-GPS radios (E-Lite model that contains a GPS receiver plugged into the USB port).

Added logging support for all radio communication channels.

Version 2.1.47 (June 24, 2016)

Fixed issue that prevented radios from appearing on the map if the radio model information was missing from the system note.

Added support for COMMPAKBB900INT Point-to-Multipoint radio model.

Version 2.1.46 (Internal release)

No changes.

Version 2.1.45 (Internal release)

No changes.

Version 2.1.44 (Internal release)

No changes.

Version 2.1.43 (Internal release)

No changes.

Version 2.1.42 (June 4, 2014)

Fixed issue where the "Restore to Factory Defaults" function would not include the suffix on the SSID of multi-card radios.

Removed the radio firmware version from the list of properties verified at the end of the "Restore to Factory Defaults" function. This prevents verification failures with radios that are provisioned or upgraded with newer EncomOS versions.

Version 2.1.41 (Internal release)

Addressed issue where a bandwidth test would terminate prematurely if a bandwidth reading was missed.

Fixed issue where the incorrect model and radio name was being assigned by the 'Restore to Factory Defaults' function when the radio.inf file was missing on the radio.

Version 2.1.40 (Internal release)

No changes.

Version 2.1.39 (May 20, 2014)

Added support for Broadband-X radio models (standard broadband radios that have external RSSI LEDs and a reset button).

Version 2.1.38

No changes.

Version 2.1.37 (Internal release)

No changes.

Version 2.1.36 (Internal release)

Fixed issue where the "Restore to Factory Defaults" function for legacy (version 3.x) radios was no longer working.

Fixed issue with the generation of default and restore scripts that did not work properly when dealing with wireless-N cards that are not allowed to operate in Wireless-N mode.

Fixed issue where the "Restore to Factory Defaults" function was not setting the scan-list properly for XR9 cards.

Version 2.1.35 (Internal release)

Added support for the Compex WLE200NX dual-band radio card.

Fixed incorrect power level setting for the Compex WLE200NX card (only affects the medium and low power levels).

Added support for Mikrotik R11e-2HPnD radio card.

Added feature that allows STRATOS V2.1.35 and above to determine if it must be upgraded to a newer version in order to configure a particular radio.

The radio configuration form's "Wireless N" tab is no longer displayed if a Wireless N capable card is not allowed to operate in Wireless N mode (for certain radio models).

Version 2.1.34 (April 25, 2014)

Added support for "E-Lite EXT 24/58" and "E-Lite INT 24/58" radio models.

Version 2.1.33 (Internal release)

No changes.

Version 2.1.32 (Internal release)

No changes.

Version 2.1.31 (April 21, 2014)

Fixed (hopefully for that last time) an issue with the radio configuration form not properly handling a radio.inf file that is missing information.

Added support for BBMESH58N radio model.

Added support for upgrading from Encom OS V5.8 to V5.14.

Fixed issue where the Restore to Factory Defaults process was not setting the correct SSID for Mesh radios.

Version 2.1.30 (April 16, 2014)

Added support for the Compex WLM200N5-23ESD-4.9 radio card.

Added support for the BB49N2 radio model.

Made the Micro option true by default for the radio.inf file(to support incomplete radio.inf files).

Fixed issue where radios discovered by the "Find Radios" or "Add Radio" functions were not being assigned to the correct folder in the database.

Modified the "Find Radios" process so that discovered radios are shown in the radio list immediately after the radio is determined to be a valid Encom radio (before the full radio information is requested from the radio). This makes the process appear more responsive.

Version 2.1.29 (April 2, 2014)

Modified handling of the radio.inf file to set the most appropriate defaults for information that is missing from the radio.inf file (this was a problem with older Energy radios).

Version 2.1.28 (March 28, 2016)

Fixed issue where the contents of the radio.inf file would not be read properly if certain expected information was missing.

Fixed issue where a missing radio.inf file would prevent STRATOS from being able to configure Energy radios.

Fixed issue were the Antenna Alignment countdown would proceed too slowly for Energy radios.

Version 2.1.27 (Internal release)

No changes.

Version 2.1.26 (March 13, 2014)

No changes.

Version 2.1.25 (Internal release)

No changes.

Version 2.1.24 (Internal release)

No changes.

Version 2.1.23 (Internal release)

Added support for the '\' character in the WPA and WPA2 security keys.

Added support for the new Energy-Lite (E-Lite) radios.

Adjusted the antenna alignment LED signal strength thresholds of the non-Energy radios so that they match the thresholds of the Energy radios.

Added support for "Energy NT Rev1" radios (the original Energy radios that shipped without a micro-controller).

Fixed issue with contention between the Power LED and Antenna Alignment script with respect to the Power LED enable/disable setting.

Fixed issue with the "Disable" button in the "Wireless Link Status" panel not being enabled at the appropriate times. It's enabled state now matches that of the "Enable" button.

The EMax protocol is now enabled by default for Point-to-Multipoint radios outfitted with B/G and A cards.

Version 2.1.22 (Internal release)

Fixed issue where the bandwidth charts were not displaying the correct labels on the Y-Axis.

Version 2.1.21 (Internal release)

Fixed issue where 24/58 or 49/58 combo cards could no longer be restored to factory defaults using the 5.8 GHz frequency band.

Version 2.1.20 (February 19, 2014)

Added support for the COMMPAKBB900S radio model.

Added support for Compex WLM200N5-26ESD wireless-N card.

Version 2.1.19 (Internal release)

Fixed issue where radios that contained a radio.inf file, but did not have the AllowedChains property, would not handle N-type cards properly.

Version 2.1.18 (Internal release)

Added support for managing the power level assigned to radio cards based on the power characteristics of the individual cards (only affects the medium and low power modes).

Added support for new radio cards that do not support the ‘card-rates’ power mode (only affects the medium and low power modes).

Added "Total" line to the "Bandwidth Test" panel to show the total of the Tx and Rx values when a bidirectional bandwidth test is being carried out.

Version 2.1.17 (Internal release)

Added support for DBii F50-PRO dual-band 4.9/5.8 GHz card.

Version 2.1.16 (January 24, 2014)

No changes.

Version 2.1.15 (Internal release)

Added support for Dbii F50N-PRO dual-band 4.9/5.8 GHz N-card.

Fixed issue with the "Restore to Factory Defaults" process where it would fail because the radio identity was not being set properly when a radio.inf file was not present on the radio.

Removed the code that attempted to upgrade or downgrade the main board firmware (not EncomOS) during the firmware upgrade process. The procedure was fragile and not really necessary.

Version 2.1.14 (January 21, 2014)

Fixed issue where setting the country code on a radio with Wireless-N cards would cause STRATOS to prompt the user to save configuration changes. If the user tried to save the configuration, it would fail as STRATOS would try to configure the radio cards with 0 antenna chains.

Fixed issue where changing the Power LED state only would inform the user that the configuration change failed, even though it had succeeded.

Fixed issue where the radio alignment beeps could no longer be turned off for radios that allow the sound to be turned off.

Version 2.1.13 (Internal release)

No changes.

Version 2.1.12 (Internal release)

Added support for the MikroTik R11e-5Hn radio card.

Fixed regression that prevented radios with XR9 wireless cards from being restored to factory defaults.

Version 2.1.11 (Internal release)

Added delay in "Restore to Factory Defaults" process for radios running V51.4 EncomOS. This addresses an issue with the process sometimes failing with the new Energy and Broadband radios.

Added support for identifying the main board provisioned in the radios.

Version 2.1.10 (Internal release)

No changes.

Version 2.1.9 (Internal release)

Added support for identifying the wireless cards provisioned in the radios.