



Calnex SNE Firmware V4.00 Release Notes



Note, this release requires two updates to the firmware and an update to the client GUI software. See below for details.

Important Upgrade Information

- 1) This release involves a two stage firmware upgrade, firstly to 3.70 and then to 4.00. The SNE firmware should be updated to the version v3.70 prior to upgrading the GUI software. See the next section for detailed instructions.
- 2) After installation, this version of the GUI client software may not display maps created in earlier versions
 - The default installation directory for the SNE GUI release v4.23 (Build #885) has changed, if you are upgrading from a version prior to this and you wish to access previously created maps, these should be copied from the old location to new location after the installer has completed.
 - To determine the directory where the database files reside, open the old (or new) GUI and select the "Help" and "About" menu items, scroll to the bottom of the 'End-User License Agreement' and locate the "Database Path" field.
 - For more details, see Page 45, section 11.3.3 (Administrator menu) in the SNE Manual.
- 3) This firmware version introduces a new default IP address (when the unit is reset via the reset switch). The new IP address is 192.168.209.254.

Upgrade Procedure

Step 1: Update the SNE firmware to v3.70 – Installation of the Web Firmware Upgrader

- Please remove all network cables from the physical ports except the 1Gb Management Port
- Within the SNE GUI navigate to Tools -> Administration -> Firmware Update.
- Beside “Firmware Path” click browse and select the file “sne-release-3.70.3673.pck”
- Click Begin Update. Please note this update will take a considerable amount of time
- Once the update completes and your unit has completed its reboot, please navigate to the device/map navigation pop out
- Double click on the settings tab
- Navigate to Version Information
- Ensure the Firmware Version is set to V3.70

Step 2: Install the latest version of the SNE GUI

- Please close your existing installation of the SNE GUI.
- Please download the latest GUI from the SNE Calnex download page
- Extract the zip file
- Run setup.exe
- Once the installer completes the SNE GUI may ask you for a license key to activate, please use the key that was shipped along with your unit on the supplied USB or via a email

Step 3: Update the SNE firmware to v4.00 – Installation of the latest firmware

- Please remove all network cables from the physical ports except the 1Gb Management Port
- Open a web browser
- Navigate to the IP address of your SNE (http://ip_address)
- This is the new way of updating the firmware of an SNE unit.
- Click on Select File
- Select the file “sne-release-4.00.0000.pck”
- Click Update
- Once the unit completes the update and reboots please refresh the page.
- You will now see the Firmware Info updated to 4.0.0000 and the OS version updated to 4.00

Fixes

- Firmware: Implemented new OS / firmware upgrade mechanism
- Firmware: Added support for the new i9 platform
- Firmware: Added support for the Intel x710-DA4 (x4 port 10G)
- Firmware: New bandwidth throttle algorithm which greatly reduces latency and provides a configurable packet buffer
- Installer: Replaced the Spirent EULA with the Calnex EULA on the welcome page
- Installer: Updated Spirent logo
- Installer: On machines with an old JAR install, the Start Menu folder default would still be JAR Emulate. It now always defaults to Network Emulator, even if a previous install used something else
- UI: Updated Spirent logos (desktop icon, toolbar and about page)
- UI: Updated a number of references to JAR in the languages database (various error messages)
- UI: Updated the bandwidth throttle and bandwidth chart to define kilo as 1000 instead of 1024. This ensures throttling occurs at the correct rate.
- UI: Bandwidth throttle fixes:
 - removed the auto buffer size checkbox
 - fixed a range check error when displaying the bandwidth throttle settings when set to range mode
 - now supports a max rate of 10000 Mbps
 - the buffer max size is now 20000 bytes (reduced from 1024 kB)
 - the time constraints and range duration work correctly now (previously they interpreted seconds as milliseconds)
 - the advanced tab is available both in constant and range mode (previously it was hidden in range mode)
 - updated the help messages in the advanced tab

Known Issues

- The Force Release (admin) button is always enabled, even for unallocated ports
- Starting a map and then logging in as a different user it is possible to stop (but not restart) the same map
- At low packet rates aggressive enable / disable of “Delay” and/or “Accumulate and Burst” impairments (toggling the impairment every second) may result in a lock-up that is fixed when a network map is stopped
- Packet capturing of delayed traffic does not operate correctly
- Aggressive enable/disable of the background traffic generator may cause lock-up
- Load generator targets do not operate correctly in bridged mode; they operate correctly in the virtual routed mode
- Maps which include virtual routers may occasionally crash on map shutdown when using high packet rates
- Using an earlier version of the GUI to perform the update may cause it to report that it has failed in some environments