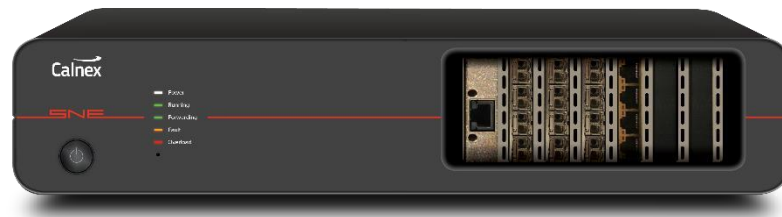


Calnex SNE Firmware V6.00

Release Notes



Upgrade Information

This release requires an update of the firmware and the client GUI software.

Release Bundle

The SNE release is delivered as a zip file. The file contains:

- Documentation: ***Operating Manual, Release Notes, CLI to RESTful API Migration Guide*** and the ***RESTful Remote Control API Manual***
- GUI Installer: ***setup_calnex_6.0.0-xxxx.exe***
- Firmware: ***sne-release-6.0.0.xx.pck***

Note:

- The SNE CLI has been deprecated in favour of the RESTful API. The CLI will be supported for v6.00 but no support will be available for subsequent releases. IF you require the v6.00 CLI, please contact your Calnex Sales Representative.

Upgrade Procedure

Step 1: Installation of the latest firmware

- Do not power off the SNE during the upgrade process
- Ensure that all maps are stopped
- Open a web browser
- Navigate to the IP address of your SNE (http://<ip_address>)
- Click on Select File
- Select the firmware file ***sne-release-6.0.0.xx.pck***
- Click Update
- Once the unit completes the update and reboots, refresh the page
- Confirm that the Firmware Info Version is now 6.0.0.xx

Step 2: Install the latest version of the SNE GUI

- Close any running instances of the SNE GUI application
- Launch ***setup_calnex_6.0.0-xxxx.exe***. Note that the installer requires admin privileges which may require an admin password to be provided.
- 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 email

Fixes

- Firmware: Timer accuracy improvements, affecting all time based impairments (e.g. delay, jitter, bandwidth throttle, bandwidth chart, etc)
- Firmware: Added phase 1 Remote Control Restful API
- Firmware: Added an admin user to the SSH interface to providing system info, network configuration, reboot and shutdown.
- Firmware: When Idle Traffic Flow is enabled continue to forward traffic on idle ports
- Firmware: Added jumbo frame support
- Firmware: Increased maximum standard packet size in order to support a single vlan tag
- Firmware: Significantly enhanced system packet drop throughput, providing increased scalability, performance and reduced latency in all drop based functionality (Bandwidth Throttle, Packet Drop, Sink Hole, Ethernet fragmentation, etc)
- GUI: Removed RTCP from the Tap context menu
- Firmware: Bandwidth chart data was incorrect when placed directly after a filter
- Firmware: Fixed a number of memory leaks
- Firmware: Added vlan tag support to the Ethernet Fragmentation impairment
- Firmware: Automatic detection and mounting of packet capture SSD on startup
- Firmware: Added the facility for factory to format a retrofitted capture SSD
- Firmware: Fixed incorrect reporting of available packet capture space
- Firmware + GUI: Enhanced validation of packet capture upload / download
- GUI: Removed the fixed size dropdown from the Traffic Capture tap
- Firmware: Enhanced system logging
- Firmware: Added facility for customer to retrieve support logs via the firmware upgrader page
- Firmware: Enhanced link status (flapping) functionality (called via Restful API)
- GUI: Link flapping (reset ports) now only flaps the ports defined in the current map
- Firmware: The TCP and Background Traffic Load Generator rate did not take account of the layer 2 packet header data
- Firmware: The TCP and Background Traffic Load Generator rate assumed

1024 instead of 1000 bytes per KB

- Firmware: The Background Traffic Generator bursted data once per millisecond which could cause the bandwidth throttle output to fall below the specified rate even when the generation rate exceeded the throttle rate in some scenarios. The Traffic Generator rate has been increased to ensure a more continuous stream of packets.
- Firmware: Improved throughput traffic bandwidth and performance in the Background, TCP and Replay Load Generators.
- The TCP Load Generator settings could not be modified whilst the map was running.
- Firmware: The TCP Load Generator Analyser Tap identified unique streams via the source IP address only.
- Firmware: The TCP Load Generator Analyser TAP did not take account of the layer 2 packet header data
- Firmware: Added more stringent checks on map startup to ensure sufficient resources are available.
- Firmware: Fixed packet reorder impairment (time based mode only)
- Firmware: Fixed an issue that could cause a crash on map start when using pcap files larger than 2GB (when no capture SSD is installed)
- Firmware: Fixed an issue that could cause a crash on map start when using traffic generators with extremely high packet rates
- Firmware: Fixed an issue that could cause a crash on map stop
- GUI: Removed the "Link Added" popup on success
- GUI: Output switcher now shows correct path when disabled
- GUI: Prohibit adding multiple instances of the same start port
- GUI: Added the hardware serial number to the Version Information tab (if specified in the firmware license key)
- GUI: Updated the port icons
- GUI: Fixed spelling in object deletion confirmation message
- GUI: Disabling filter displayed incorrect traffic flow
- Firmware: Disabling the Packet Count Filter caused all traffic to be passed (instead of failed)
- Firmware: Starting or stopping a map when other maps are running could cause the timer to miss a small number of ticks.
- Firmware: Extremely high packet rates could cause the delay and accumulate & burst impairments to crash on map stop.
- Firmware: Forcing the latency time beyond the maximum permitted value could cause the delay impairment to crash.
- Firmware: On systems with 1G ports and more than 32GB RAM, the max delay time is restricted to 10 seconds.

Known Issues

- 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
- Load generator targets do not operate correctly in bridged mode; they operate correctly in the virtual routed mode
- Packet Reorder (distance based mode) may not reorder packets as expected