Signal Scout Revision History

2026.11.15

New Features

- Added a VHLC clock check when connecting LiveView, with an option to set the unit to the computer time.
- Microlok II and VHLC log downloads now record the equipment clock offset from the computer. LogView applies the recorded offset automatically when opening the log; logs without clock metadata open as before.

Improvements

- Added support for IXC-R20.

Bug Fixes

- Signal Scout will now retain proper sorting on the main screen table.
- Various LogView inference improvements and corrections.
- Added a previously missed “Lamp On Control” to IXC-20S cards.

2026.09.15

New Features

- Added Microlok II User Data log downloading from the main. Users can select a date/hour range or download the entire available log, save it as a .log file, and open a successful download in LogView.

Improvements

- Updated download timeframe controls to use whole hours, with a default one-day range for Microlok II and three-day range for VHLC, ending at the next whole hour.

Bug Fixes

- Fixed missing timers in ACE reports (credit Maxime Picard).
- Fixed timer parsing in older ACE reports.
- Fixed page ACE header parsing.

2026.09.12

Improvements

- Improved debug.log formatting to make diagnostic information easier to review, with clearer severity labels, visual separation for warnings and errors, and more.
- Widened the lens Signal Scout uses to determine log type.
- Improved license validation and offline startup.

Bug Fixes

- Fixed LogView inputs retaining an inferred false state when stepping backward across a processor reset into a period with no recorded input value (credit Alex Pereyra).
- Various fixes to other inferred states.
- Fixed processor resets being omitted from time-since/time-until-change calculations for logs that do not use initial-state backfilling.
- Improved handling of special characters, including apostrophes and commas, in log bit names and user-edited log states.
- Fixed LogView date/time limit controls to use the selected display time zone.
- Corrected interpretation of daylight-saving offsets in IXS log timestamps.
- Improved ElectroLogIXS login and connection handling.
- Improved ElectroLogIXS timer-status parsing and timer set-value formatting.
- Fixed license deactivation dialogs appearing behind the Settings window and improved machine-code copying.

2026.08.12

Improvements

- LogView window now defaults to showing the latest log timestamp when opened instead of the earliest.
- Signal Scout will no longer abort an entire program when it runs into a problem parsing a single equation. Notification will be given regarding the equation, and it will be skipped. When used, the program will have a tag explaining that it may be incomplete.
- LiveView now offers the option to continue when the CRC/Checksum from the equipment does not match the selected program. If this mismatch is accepted by the user, the window is clearly marked as unverified, and both the program and equipment values are shown so the correct program can be identified.
- Added check to ensure multiple programs are not present in folders when loading a (i)VPI program.

Bug Fixes

- Added logic to resynchronize the VHLC serial reader instead of stopping on an echo.
- Fixed an issue where linked calls could inadvertently change the selected IP address for an ElectroLogIXS program.
- Fixed an issue where declining a CRC/Checksum mismatch left the communications port in use, preventing later connection attempts.

- Fixed an issue where the list of programs found during a search could vary between runs, which in some cases caused saved program settings or collection entries to appear to go missing.

2026.07.22

Bug Fixes

- Changed how VHLC ACP menus are identified and navigated to be more flexible based on various versions that may be encountered in the wild (credit Simon Ho).
- Fixed an issue with some Microlok II log entries not being properly parsed.

2026.07.16

Improvements

- Added support for VHLC Genisys 2.3.

2026.07.14

New Features

- Introducing the LogView time-sync manager. This is available from the main screen and allows users to time-sync LogView windows with each other.
- Major changes to the Behavior Analysis tab in the crossing visualizer window.
    - FRA compliance metrics are now shown for more log-types.
    - User-definable warning time compliance band.
- Added a system health warning for HXP3 logs where the executive version is below the recommended revision.

Improvements

- Added support for XP4 Train Record logs.
- Added support for HXP3 crossing predictor logs:
    - Crossing System Event
    - Train Data
    - Train Record
- Major changes to the Behavior Analysis tab in the crossing visualizer window.
    - Time-series graphs now default to compressing inactive times. This allows more of the information that users are after to be visible at any given time

and for times of inactivity to be minimized. This can be changed to restore a 1:1 x-axis through the “View” menu.
    - Unified the “Warning Time” statistics.
    - Speed vs. Warning Time chart uses a new chart type to better visualize the data.
    - Anomaly card moves to the top, above track-specific cards.
    - Behavior Analysis is now the default tab.
- Field selector dock is now defaulted to hidden and user changes are now remembered within a session.
- Track associations dialog now contains a “Restore Defaults” button.
- Programs can now be deselected from the main screen by clicking again to deselect.
- Startup performance has been improved with more clear information provided to the user on what is happening at the time of program loading.

Bug Fixes

- Crossing Visualizer window now correctly shows the file name.
- Crossing Visualizer break hatches are now more representative of actual periods of inactivity.

2026.03.26

Improvements

- Added NVI32 support for VHLC platform.

Bug Fixes

- Fixed an issue with some VHLC equations not being properly parsed.

2026.02.20

Improvements

- Erratic RX anomalies in the Behavior Analysis tab are now clickable links that navigate to the Time Series tab and zoom to the anomaly's time range for direct investigation.

Bug Fixes

- Fixed a bug where erratic RX segments could span across log gaps.
- Fixed bugs that were preventing some programs from being properly parsed.

- Fixed a bug that was causing the debug.log file to be saved to the wrong location.

2026.02.16

New Features

- **Crossing Predictor Visualizer** – New tool for visualizing crossing predictor log files. Displays interactive time-series graphs of track RX and PH values, binary field status bands, and data gap indicators. Automatically detects which binary fields belong to each track, supports viewing multiple tracks simultaneously, and includes behavior analysis with activation statistics and anomaly detection. Time zone selection is available for adjusting displayed timestamps.
- **LogView time zone selector** – Added a time zone selector to the LogView toolbar, allowing users to view log timestamps in any time zone without modifying the underlying log data.

Improvements

- **License deactivation** – Deactivation now shows a confirmation prompt before proceeding, displays clear success or failure messages, and no longer clears the product key field when deactivation fails.
- **Screen recording on high-DPI displays** – Fixed screen recording capture area being misaligned on displays with scaling above 100%.
- **LogView time bar styling** – The LogView time bar now follows the system theme instead of using custom styling.

Bug Fixes

- Fixed an issue where time zone assignment could be incorrect during log parsing.

Breaking Changes

- **Settings storage migration** – Several user-configurable settings previously stored in the INI file have been moved to the Windows Registry. Because existing values were not migrated, the following settings will revert to their defaults and must be re-configured after updating:
    - All folder paths configured in the Settings dialog (application definitions, application programs, nomenclature definitions, saved states, MLK symbols, MLK revision compiler)
    - COM port selection (defaults to COM1)
    - Selected collections
    - Window size and position
    - Draw scalar and show-retired preferences

Signal Scout Revision History

2025.11.16

- Add re-ordering of equations via the ability to drag-and-drop (credit Ron Doremus).
- Added background colors in the equation list to provide state information if available.

Bug Fixes

- Improved I/O window folding of unused branches.
- Forced “light” mode to prevent readability issues if using Windows “dark” mode.

2025.07.19

- Implemented option for perpetual (non-expiring) licensing.

2025.06.13

- Update required for deprecated functions within Windows 11.

2025.02.20

- Improved how inferring bits that depend on other inferred bits are resolved.

Bug Fixes

- Identified ACE bug with some LER files. Modified Signal Scout to try to use “list” LER files over the alternative. Where problem still exists, created a fix to work around the error (credit Ron Doremus).
- Fixed an issue where ElectroLogIXS timer bits could not be removed when they were filtered out of view using the Equation Name Search.
- Attempted to clarify how lamp flasher bits are identified in xVPI programs.

2024.09.04

- Improved how inferring bits that depend on other inferred bits are resolved.

Bug Fixes

- Fixed an issue where ElectroLogIXS timer bits could not be removed when they were filtered out of view using the Equation Name Search.
- Attempted to clarify how lamp flasher bits are identified in xVPI programs.

Signal Scout Revision History

2024.07.24

- Removed LogView date time limiters.

Bug Fixes

- Fixed an issue with time zones that was shifting logs depending upon computer local time settings.

2024.07.05

- Changed the behavior of the MLR generator assistant. The program will now ask which folder you would like to look in for MLP files to generate MLR files from. It will also look in all sub-directories.
- Added support for Microlok II LED12 lamp driver.
- All log records are now time zone aware. If a time zone cannot be detected the time zone “UTC” is selected as the default.
- Started to account for potential use of Windows “Dark” themes.

Bug Fixes

- Fixed a bug with some I/O being incorrectly identified as belonging to “Microtrax Track Interface” modules.
- Allowed for the use of the “$” character in equations.

2024.03.14

Bug Fixes

- Fixed a bug that was preventing some ATCS protocol bits from being recognized as I/O (credit Maxime Picard).

2024.02.25

- Added support for VPM-2 GDA-style data logs.

Bug Fixes

- Improved xVPI detection of I/O, specifically regarding Serial I/O.

2024.02.19

- Added MicroTrax module support to MicroLok II.

Bug Fixes

- Fixed an issue where Signal Scout would fail to open a log if it found a bit state change prior to the first log time stamp (credit Injae Chang).

2024.02.05

Bug Fixes

- Fixed a bug where Signal Scout was not properly identifying Code M inputs and outputs for ElectroLogIXS.
- Fixed a bug with some I/O not being properly identified with VLD-C6S, VTI-2S, and VPM cards for ElectroLogIXS.

2024.01.11

- Largescale under-the-hood rework of LiveView equipment connections for better error reporting and overall behavior.

Bug Fixes

- IXS non-vital only programs will now default to having a VPM module in System Slot 1.
- Fixed an issue with Alstom logs not properly populating some timer related timestamps.
- Fixes an issue with ElectroLogIXS logs that had time continuity issues confusing Signal Scout.

2023.11.26

- Improved how Signal Scout handles time changes that could result in time being “repeated”. Bit states that change within an overlapping time window will now be removed and shown as unknown until a new state change occurs outside the overlapping time window.
- Added support for MMS formatted iVPI logs.

Bug Fixes

- Restored keyboard shortcuts that were unintentionally removed.
- Fixed a bug with Microlok II logs interpreting 12 AM incorrectly.

Signal Scout Revision History

2023.11.02

- Signal Scout now has screen recording capabilities.
- Signal Scout will now allow for vital only or non-vital only (i)VPI programs.
- Changed how (i)VPI if/else blocks are handled.
- Improved the way Signal Scout handles if file paths have ceased to exist and reporting if a folder is not able to be created.

Bug Fixes

- Fixed a bug that wasn't allowing some bits to be properly inferred following processor log resets in LogView.
- Fixed an issue with (i)VPI timers being set for the wrong amount of time by default in Training mode.
- Fixed an issue with debug logging inserting way too many returns to be useful.
- Fixed an issue with how Signal Scout was grouping programs within folders and reporting errors regarding folder organization.

2023.09.13

- Added visual indication of processor resets within LogView.
- Added support for VIO-44S standby cards that was previously omitted.

Bug Fixes

- Fixed a bug where some bits would not be properly shown as unknown following processor resets.

2023.07.19

- Performance improvement of approximately 10x around nomenclature definitions.
- Made the location where Signal Scout looks for files selectable (Application Definitions, Nomenclature Definitions, Saved States).

Bug Fixes

- Fixed a bug where training mode did not start evaluating equations until the first variable was selected to view (credit Jerry Sauer).
- Fixed a bug where (i)VPI timers were not being evaluated to False (credit Jerry Sauer).
- Fixed a bug where some inputs were not being identified in (i)VPI programs (credit Jerry Sauer).

Signal Scout Revision History

2023.06.30

- Performance improvements around Nomenclature Definition Files. Signal Scout will now allow for the Ladder Window to display before the nomenclature work has been completed. Nomenclature information will continue to load in the background while allowing the Ladder Window to be usable.
- Updated message box when a new version is available.
- Improved error logging for Nomenclature Definition Files.

Bug Fixes

- Fixed a bug that would allow adding application programs to an undefined application collection.
- Fixed an issue where some IXS PTC data logs weren't having all their bit state changes read.
- Fixed a bug where some (i)VPI equations were not being identified and added for use in Signal Scout.

2023.05.30

- Added ability to set a default nomenclature definition file from the Settings window. Selecting this will apply the default when no nomenclature definition file has been selected for a given program. If a nomenclature definition file has been selected for a program that will be used instead of the default.

Bug Fixes

- Fixed an issue with some equations not being built due to LER/ALL file formatting differences (credit Kevin Smith).

2023.04.26

Bug Fixes

- Fixed a bug that would prevent some vital timers from being identified if complied with an older version of ACE (credit Kevin Smith).

2023.04.13

Bug Fixes

- Fixed an issue that prevented the "Change All" functions within the application edit window from working (credit Ron Doremus).

2023.03.23

- Dropped support for Windows 7 operating system. This allows for upgrading to faster operation through a more modern programming language version.
- Reworked Input and Output windows to make use of a tree view structure. Added the ability to pin I/O items from an unexpanded tree for continuous viewing and better organization of the needed information at any given time.
- Added the ability to navigate log times through use of the Left and Right arrow keys. Pressing the Left arrow key will move a log one event backward in time, right will move the log one event forward in time.
- Changed how vital and non-vital programs are matched to no longer be based on naming but to be based on placement within folders. Programs will only be matched if there is one vital and one non-vital program in a folder. If this is not the case, the programs will still be displayed but will not be matched with any other program. Reporting around this has been improved and will be displayed to the user and logged.
- Signal Scout will now connect to IXS or VHLC in LiveView if only one of the vital or non-vital programs matches. A warning will be given to the user warning them about potential problems with the information being displayed.
- Improved naming of some Input / Output bits.
- Improved VHLC communication.

Bug Fixes

- Fixed an issue where the communications port was not being selected by default correctly when using the Download Log feature.
- Fixed a bug where some events were not being properly displayed when selecting equations to open while utilizing a text variable filter.
- Fixed an issue with multi-line Microlok lamp output variables not being identified.

2023.02.06

Bug Fixes

- Fixed an issue where (i)VPI cards that may not be defined with any I/O were not being handled correctly.
- Fixed a bug that didn't allow edits to be made to (i)VPI, VHLC, and Microlok II program names, locations, etc.
- Fixed a bug where communication port values were not being saved correctly.

Signal Scout Revision History

2023.02.01

- Changed the way Signal Scout deals with storage and loading of Application Programs. Introduced the program "Collections" concept to speed the loading of application programs as well as to ease the ability of users to share and keep up to date with the latest application programs and to allow for better organization.
- Removed "Key" button from the main window.
- Signal Scout now sorts by Location Name alphabetically by default.
- Removed scaling from the "Settings" window since this is available in all LadderViews.
- Narrowed the range for scaling a LadderView. This will give finer control over the size displayed and eliminate the edge cases that weren't useful.

Bug Fixes

- Fixed a bug that would result from hidden .ALL files not being recognized by Signal Scout.

2022.11.16

- Signal Scout will now offer to open the downloaded log after successfully completing the download.
- Implemented a speed improvement in LogView.

Bug Fixes

- Fixed a bug that would prevent the inferring of some timers to the False state.
- Fixed a bug that would result in some bits being inferred when they shouldn't have been.
- Fixed a bug that would prevent use of the date and time bounding with spanning between months in LogView.
- Fixed a bug that could prevent the renaming of locations the first time they were loaded in Signal Scout.
- Fixed a small visual bug where horizontal lines were being drawn too far to the right.

2022.11.03

- Improved how linking between networked locations works with ElectroLogIXS LiveView.

Bug Fixes

- Fixed an issue where Microlok NV.IN32.OUT32 card were being identified as NV.IN32 cards.

2022.10.29

- Reverted to the previous, slower method of LiveView information gathering for ElectroLogIXS. The faster version could cause issues by requesting information too quickly for the C processor to handle.

Bug Fixes

- Further improvements and additions to VPI and iVPI program coverage.

2022.10.17

- iVPI now utilizes the same file requirements as VPI.
- Signal Scout is now smarter about creating a minimum program files folder.

Bug Fixes

- Added detection of non-vital serial elements through use of ".css" files for (i)VPI.
- Added support for (i)VPI use of "If / Else" statements.
- Numerous bug fixes and improvements to (i)VPI systems.

2022.09.28

- Added VPI LogView support.
- Output information is now shown in a manner similar to that of inputs.
- Added real-time timer values to the ElectroLogIXS timer window.
- Removed unnecessary columns from the Timers Window that do not apply to certain platforms.
- Timer names in the Timers Window for ElectroLogIXS and VHLC no longer include both relay names, and instead gives only the actual timer's name.

Bug Fixes

- Fixed an issue where fast scrolling through a LogView would lose information about some bit states.
- Fixed an issue where IXS LiveView would not detect and report LiveView disconnects.
- Fixed an issue with IXS timer bit not being properly identified as unrecorded.

- Fixed an issue with some bits being identified with an inferred state when they should have been.
- Fixed an error that would occur when cancelling out of an iVPI program selection after trying to open a log.
- Fixed an error with how some equations from .ALL files were drawn.
- Added Non-Vital I/O as a covered module for VHLC (.ALL) files.

2022.09.02

Bug Fixes

- Second attempt at a fix for an ElectroLogIXS LiveView bug associated with timers that have fractional second values.

2022.09.01

- Added the ability to shift data log times to adjust for incorrect times. This will not change the original log file and will be reset after a log is closed. Information about the shift is placed next to the current log time, and a button and window has been added to shift the time.

Bug Fixes

- Fixed a bug that would allow windows to open outside of the usable screen size.
- Fixed an ElectroLogIXS LiveView bug associated with timers that have fractional second values.

2022.08.03

- Signal Scout can now download logs from the IXS platform!
- Added the ability to save program states from LiveView to be used in Training Mode.
- Sped up LiveView status updates for ElectroLogIXS.
- Added timer information to ElectroLogIXS LiveView.

Bug Fixes

- Improved the way Signal Scout handled iVPI programs. Fixed some associated bugs.
- “Unknown” bit states are no longer showed with the “inferred” grey box surround.
- Signal Scout no longer incorrectly infers timer expired states when the timer “set” or “clear” value is not absolutely known.

- Fixed a bug associated with logs that had processor resets.
- Fixed a timer message inconsistency.

2022.06.08

- Improved the way equations are drawn. Variable names should no longer be cut-off when they are too long. Bits are spaced more tightly where possible to make more efficient use of space and fit more information into a smaller area.
- The “just changed” background highlighting will now only update based on variables that are being displayed. This means that if there is a constantly changing bit (a flash bit for instance) that is not being displayed, but changing in the background, this will not affect the just changed status of the bits being displayed. This should keep the information the user is interested in on the screen more informative.
- Added a button to toggle showing/hiding the equation selection sidebar. This gives the option to create more screen real estate for small monitors or large equations.
- Removed menus in favor of icons. Added icons where appropriate for clarity.
- Added the ability to clear all selected variables in any LadderView.
- Added support for Microlok II “Coded Outputs”. A new symbol was added that represents when the output is coding between the on and off state.
- Reworked modules, inputs, and outputs to try to provide a more accurate and informative information of their location within the equipment.
- Added the ability for Signal Scout to download VHLC logs for the user from the main window or from a VHLC LiveView window.
- Added the ability to save the program state from a log that can then be loaded in Training mode.
- Improved the way pausing works in Training mode. Evaluation of equations will now be paused until running is resumed, or equations will be evaluated one displayed change at a time if using the “Step” function.
- Sped up the function of showing all instances of a selected bit.
- Equipment passwords are now hidden.
- Added the ability to deactivate a computer’s license from within the Settings menu.
- Added progress bars in some places to keep the user informed.
- Users can now set variables to the “Unknown” state in training mode.
- Removed support for .MLL files. There is too much variability in these files so the requirement has been added to provide .MLR files for Microlok II programs.
- Edited date/time constrainers in LogView mode to reflect the same 24-hour clock format as is given when displaying the “Current Log” time (credit Tom Hunter).

- Added time zone information to information provided while viewing IXS logs (credit Mike Weber/Tom Hunter).
- Added GFD as a recognized module for ElectroLogIXS.
- General performance improvements.

Bug Fixes

- Fixed a bug that would result in some Microlok II and iVPI equations being drawn incorrectly.
- Fixed a bug where Input and Output windows were not always being colored and styled correctly.
- Fixed a bug where Signal Scout would create a Minimum Program Files Folder even if the user tried to cancel out of the process.
- Fixed a parsing bug for some .ALL files.
- Corrected some .ALL file I/O configuration that was assigning inputs to outputs.
- Added detection of “Executive Communication” inputs for VHLC ACP.
- Fixed an issue that could come up when saving times from a training state.
- Fixed a crash that would result from starting a variable search with the “*” character (credit Mike Weber).
- Fixed numerous issues when connecting to LiveView on Microlok II including the ability for Signal Scout to now try multiple baud rates (9600 and 19200).
- Fixed an error that would occur from trying to open an already-open LiveView window.
- Signal Scout can now handle VHLC logs that are recorded from Newest-to-Oldest or Oldest-to-Newest.
- Added identification of VLP remote inputs and outputs.
- Fixed a bug that would cause a crash with certain .LER files.
- Fixed a bug that identified some non-vital outputs as non-vital inputs for iVPI programs.

2022.02.17

Bug Fixes

- Fixed a crash associated with Microlok II programs that record no variables.
- Other fixes associated with the proper identification of Microlok II inputs.

Signal Scout Revision History

2022.01.29

Bug Fixes

- Fixed a bug that would cause a crash with certain .LER files.

2022.01.25

Bug Fixes

- Added NVIO16 as a recognized module for ElectroLogIXS.
- Added Chassis ID as a recognized module for ElectroLogIXS.
- Fixed a bug where some bits from Microlok logs were not being properly identified.

2021.11.24

- Added “Training” mode. Additional details about this new mode and how to use it have been added to the User’s Manual.
- Modified home window layout.

Bug Fixes

- Fixed an issue with Microlok II logs that had the same bit change state twice within the same recording period.
- Fixed an issue where VHLC programs that made use of two different compilers (ACE and ALC) between the non-vital and vital programs would not have all equations, modules, and timers show up.
- Fixed an issue with some wireless crossing bits being incorrectly identified as Inputs instead of Outputs.
- Fixed additional issues with identification of XP4 crossing module inputs and outputs.
- Fixed some issues around iVPI adjustable timer detection and classification.
- Fixed an issue where not all inputs were being properly identified for iVPI programs.

2021.10.18

Bug Fixes

- Fixed a crash associated with XTI-1S modules.

2021.10.08

- Removed dependency on .geif files for ACE compiled programs. ACE compiled programs will continue to need .rpt files and will require .ler files instead of .geif files. These files are generated during the normal compile of a program so no additional work should be required as was the case when .geif files were utilized.
- General improvements to how bits are inferred. More bits should now be inferred at any given time and the process should be faster.
- Left clicking input or output items from the Inputs or Outputs windows will now toggle their display in the draw canvas. Users will now need to right-click on these items from within the I/O windows to change states, this function is more consistent with the function of the main draw canvas.
- Shortcut keys were added to be able to change the state of unknown variables. These shortcuts are given in the context menu that is displayed after a right-click event.
- Microlok II LiveView sessions now give the user the option to set the Microlok II clock from Signal Scout if there is a difference of more than five (5) seconds between the equipment time and the computer time.
- Stopped Signal Scout from backfill inferring original VHLC log states. These cannot always be guaranteed to be in the opposite state of the first occurrence as is the case with ElectroLogIXS logs.

Bug Fixes

- Improvements to how LiveView Microlok II connections are handled. This should result in smoother operation and fewer errors.
- Improved the identification of some I/O in VHLC programs (remote inputs and outputs).
- Fixed a bug where bit state changes that happened in the same timestamp from a log would get recorded in the wrong order.
- Fixed a bug that would cause crashes with certain application programs.
- Fixed a bug with how timer bit status was being displayed on VHLC LiveView.
- Fixed visual issues with Microlok LiveView.
- Signal Scout was not identifying user bits for Microlok II applications. This is now corrected.
- Fixed a small visual bug with how thick relay borders were being drawn.
- Fixed an issue with IP addresses sometimes being incorrectly pulled from .rpt files.
- Fixed a crash that would occur after closing a VHLC LiveView window.
- Fixed an issued with linking between ElectroLogIXS vitally connected remotes.

Signal Scout Revision History

2021.07.14

- LogView now supports the iVPI platform!
- LogView is now available for logs that do not have a CRC or Checksum. Signal Scout will notify the user that a match between program and log could not be made and allow the user to select a program with which to match the log.
- Signal Scout will now check and notify you if there is a newer version of Signal Scout available for download.
- Implemented a new license management system. All existing users will be provided with a new key. Machines must be allowed to connect to the internet to activate the key or use the air gapped activation method outlined in the User's Manual. Keys must be refreshed at least every six (6) months by connecting to the internet (default) or supplying a new air gapped cert.skm file.
- Changed method used to adjust display scaling from within the settings window.
- Added a button to "Reset Scaling" to the program default value within the settings window next to the new scaling slider.
- Added ability to change scaling from within a LadderView window. Size slider is toggled through the "Display" menu.
- Added ability to present further information to the user using Nomenclature Definition Files. The user can now mouseover the details section, and if additional information is placed in the NDF, it will be displayed as a tooltip pop-up. Additional details on how to utilize this have been added to the Nomenclature Definition Files manual.
- Changed the "Create Minimum Program Files Folder" function in the Settings window to allow for the user to select the destination of the folder creation. Also changed some of the pop-ups to hopefully make the function a little clearer.

Bug Fixes

- Signal Scout now takes more time processing while opening an application program so that it can run faster while running.
- Signal Scout will now be able to generate .geif files even if some ElectroLogIXS files are marked as read-only.
- The user will no longer need to restart Signal Scout to properly load Nomenclature Definition files. Settings will not update on LadderView windows that are already open, the location must be reloaded after the selection is made in the Application Edit window.
- Fixed a small visual issue with Microlok II timers.
- Fixed an issue with .ALL file based VHLC timers.

Signal Scout Revision History

2021.04.15

Bug Fixes

- Fixed a bug that would cause Microlok logs to crash.
- Fixed a bug where all inputs and outputs to certain Microlok II protocols were not properly identified.

2021.03.22

Bug Fixes

- Fixed a bug that would prevent the generation of .geif files for programs that had only vital or only a non-vital set of equations.
- Fixed a bug that would sometimes allow the same equation to be created twice.

2021.03.17

- Restored compatibility with Windows 7.

2021.03.12

- Added direct inputs as selectable “equations” in all LadderViews. Clicking on a direct input will no longer issue a pop-up box but will add a special icon to the draw canvas representing a direct input including module and slot information.
- Created the “Outputs Window” in all LadderViews.
- Added the ability to open the “Inputs Window” in LiveView.
- Moved the Inputs and Outputs Windows to be displayed from the “Additional Windows” menu from all LadderView windows.
- Changed the visual cues provided in input and output windows. Signal Scout now makes use of colors similarly to the rest of the program to indicate True and False.
- For Input and Output modules added the ability to “Pin to Top” accessible from the menu bar of each window.

Bug Fixes

- Fixed a bug that would prevent the user from selecting Eth2 for the IP address to use for ElectroLogIXS.
- Fixed a bug that prevented users from setting unrecorded variable bit states in LogView.

Signal Scout Revision History

2021.03.01

- Improved the initial pulling of bit state information for VHLC LiveView.
- When generating .geif files, the original .veq, .neq, and .ncf files will now be preserved in their original states instead of allowing ACE to modify them in any way.

Bug Fixes

- Fixed a bug that prevented some Microlok II inputs from being properly identified.
- Improved symbol file matching for Microlok II executive 3.20.
- Fixed a communication port setting bug for Microlok II.
- Fixed a bug that would allow VHLC logs to sometimes open when all necessary program files were not in place.

2021.02.18

- Signal Scout now requires that vital and non-vital files that are part of the same location be in the same folder to be matched together.
- Added the ability to create .mlr files from .mlp files for Microlok II on a large scale (like with .geif file creation).
- When generating .geif files, the original .ccf file will now be preserved in its original state instead of allowing ACE to modify it in any way.
- Creating all geif files is now simpler. Signal Scout will no longer get hung up waiting for the user to click ok in certain instances, it will now attempt to do that for you to keep things going.
- Communication port assignments for VHLC and Microlok II will no longer be saved by application program. The user can still select the COM port through the application edit window but changing the communications port selection will affect all locations.
- ElectroLogIXS IP addresses will no longer be referred to as “Remote” and “Local” but by the port through which access is granted, either “Port 1” or “Port 2”.
- From within the Edit Application Information window the user can right-click on the text “Ethernet Port 1 IP Address” or “Ethernet Port 2 IP Address” and get the option to set the default port used. This will change the default setting for all the ElectroLogIXS programs in the selected applications folder to that ethernet port.
- Improved settings window layout.

Bug Fixes

- Fixed a bug that would prevent CRC and checksum information from being evaluated for programs with a single .rpt file.

- Changed Signal Scout to be able to handle file paths with lengths greater than 260 characters.
- Fixed a bug that would sometimes prevent Signal Scout from properly generating geif files when .ccf and .rpt file names did not match exactly.
- Fixed a bug that would cause a program crash due to another type of not well-formed XML format in .geif files.
- Allowed for program matching between ALC- and ACE-compiled VHLC programs.
- Fixed a bug that was causing remote vital IP linking on ElectroLogIXS to fail.
- Fixed a bug that was preventing VHLC LiveView from properly displaying which bits are unrecorded.
- Fixed a bug that was preventing VHLC LiveView from working with an older ACP Executive (SCS-128 Version 1.1)
- Fixed a bug that prevented the use of all possible IP addresses.
- Other minor bug fixes.

2021.01.01

- Added VHLC support! VHLC programs have different file structures depending on when and how they were compiled. For older versions of VHLC programs that were compiled using ALC, Signal Scout requires the .all files be present for use. For VHLC programs compiled using ACE, the same .rpt and .geif files required for ElectroLogIXS equipment are required for use. Signal Scout has a lot to verify is properly setup when connecting to a VHLC unit for LiveView, so status information is not instantaneously available. Keep your eye on the status bar at the bottom of the LiveView window for information on what Signal Scout is doing.
- Added Nomenclature assistance! Understanding Signal Application nomenclature can be difficult, especially for newer employees or those who encounter a wide range of logic standards. Signal Scout has added the ability to provide additional information to the user about variable names, and explanations of how the variable works. Because nomenclature and mnemonics vary so much, there is some setup involved to get this feature working. Contact customer support to get more information about this feature and identify how it best makes sense to take advantage of it for your situation.
- Scaled down the default size of breaks to allow more information to fit on the screen.
- Relay and break size scaling will now take place as soon as the value is changed in the settings so the user can see what effect their changes are having instead of needing to re-load Signal Scout.
- Modified the layout of LadderView windows.

- Added ability to open the colors and symbols key from any LadderView window.
- The Direct Inputs window now follows more closely with the LadderView when it comes to colors and borders to show what has recently change, user-defined bit states, inferred, etc. When searching for variables in the Direct Inputs window the matching bits are now identified with red text.

Bug Fixes

- Fixed a bug that would identify some variables incorrectly as unrecorded that were being recorded.
- Fixed a bug that would cause .geif files to sometimes not be generated when Signal Scout tried to generate them through ACE.
- Tried to improve the way Signal Scout helps create and use .geif files when naming is a bit odd.
- Fixed a bug where asking Signal Scout to display all instance of a variable could result in the same relay logic being displayed multiple times.
- Signal Scout now does a better job of grouping “Network” bits in the direct inputs window for ElectroLogIXS.
- Fixed a bug that would cause user-defined site-specific location information to be saved incorrectly after changing the “Applications Folder” path.
- Fixed a bug where bit statuses were not getting cleared properly from LiveView modes following a disconnect and attempted reconnect.

2020.08.23

- When trying to open an ElectroLogIXS program that does not have a GEIF file, Signal Scout will now ask the user if they would like the GEIF to be generated (if the ACE.exe path is set in the settings window). This allows users to generate the GEIF on an as-needed basis or add programs more easily without having to go to the settings window and possibly re-create all GEIF files.

Bug Fixes

- Inferred bit state changes will now be properly colored with a yellow background.
- If the same bit would change state more than once at the same timestamp within a log Signal Scout would throw out the “older” instance and allow only one bit-state change per timestamp. This would inadvertently hide some program function. Signal Scout will now create multiple slightly different time values for when this occurs, so all the information is retained and visible to the user.
- Fixed a bug that would sometime cause input backgrounds to display the incorrect color in the inputs window.
- Signal Scout will now try to prevent windows from going missing off-screen.

2020.07.18

- Changed LogView to show which bit states changed when going forward in time (no longer have the confusion of showing bit state changes as going backward in time if scrolling through the log in reverse chronological order).
- Added an information box below the variable selection list in LogView. This information box will give information about whichever variable is currently being moused over.
- Changed the function of right clicking in the LogView and LiveView windows. Previously right-clicking in LogView would change the state of a variable (if possible). Right-clicking will now bring up a context menu that allows you to change the state of a variable (if possible). The menu will also allow you to bring up all equations in which that bit is used as well as clear the user-set status for that bit in LogView if applicable.
- Changed LogView to give the user the option to display ALL direct inputs in a separate window through selection of a checkbox in the lower left corner of the LogView window. Previously this would only show unchanged inputs. Now that all inputs will be shown, the checkbox background of user-defined variable states will be blue and inferred variables state backgrounds will be grey to match the color scheme of the LogView window. The user can also right-click to change the state of these bits as well as bring up equations in which that bit is used into the LogView screen.
- Added a notification pop-up when .geif file creation initiated through the settings window has completed.
- Visual changes to help understandability.

Bug Fixes

- Fixed a bug where EC5 programs were not properly recognized by Signal Scout.
- Fixed a bug that would cause a program crash due to not well-formed XML format in .geif files.
- Fixed a bug that would cause equation battery sources to be displayed improperly in some cases.
- Fixed a bug with ElectroLogIXS logs that have processor reset(s) in them not properly showing variables in the “Unchanged Inputs” window or allowing for the user to set their values in all unknown state cases.
- Fixed a bug that would cause .geif files not to be generated properly if multiple application programs were stored in the same folder together.
- Fixed a bug that would cause program crashes where duplicate application programs exist within the folder structure.

2020.04.19

- Added LiveView support for MicroLok II.
- The unchanged inputs window that loads with logs is now hidden by default and can be toggled (shown / hidden) by a new checkbox in the lower left-hand corner of the LogView window.

Bug Fixes

- Fixed a bug that would result in the time being inadvertently changed when adding or removing equations to be viewed in LogView mode.
- Fixed a bug that would cause crashes when closing out of a LogView window.
- Implemented better handling of the settings file. The program will now handle missing information or unintended changes to the settings file better and with less effect on the user.

2020.03.01

- Logs will now have an additional window that is loaded. This window will display all inputs that do not have a state change during the log. Since these bits do not change their state is unknown. Since the user may know what the state of those variables is, this window gives the user a simple interface to change the set value of those bits. The checkbox is tri-state with the check mark representing True, the empty box representing False, and the filled box representing Unknown. This is especially useful for setting Vital Configuration bits that will go long periods of time without changing.
- Signal Scout will now infer the initial states of variables where possible in LogView.
- Added ability to change the scaling of the displayed equations. This is accessible in the “Settings” screen.
- Improved handling of loading program settings. Should handle updates and possible files corruption or alteration more effectively.
- Improved how Signal Scout handles ElectroLogIXS Vital Configuration bits in LogView.

Bug Fixes

- Fixed crashes associated with trying to open LiveView or editing program information without selecting a program.
- Fixed a bug where a small number of variables were incorrectly being identified as “unrecorded” when reviewing ElectroLogIXS logs.

- Fixed a bug caused by files being renamed that could result in Signal Scout not recognizing the .geif file for a program.

2020.01.24

- Status change highlighting added to LiveView.

Bug Fixes

- Fixed a crash that would occur when first loading the software for the first time.
- Fixed a problem that prevented the user from setting unknown variable states with a right-click in LogView.
- Fixed a crash associated with window positioning.

2020.01.18

- Reverted to previous LiveView functionality. The methodology used to obtain the real time status updates was preferable but did not receive new statuses for unrecorded variables rendering the data incomplete and inaccurate.
- Bug fixes and quality of life improvements.

2020.01.12

- Date/Time limiters in LogView are now easier to work with.
- Main and LadderView windows will now remember their size and position.
- Fixed an issue where ElectroLogIXS resets were not handled properly in LogView.
- Bug fixes and quality of life improvements.

2020.01.01

- Sped up LiveView for ElectroLogIXS. Statuses are now updated in real time. Because of some underlying oddities it was necessary to disable the “Retry Connection” button. If another user logs onto the same box, Signal Scout will not be able to recognize being “kicked off”. If statuses seem to be out of sync, restart Signal Scout. This should not be a frequent occurrence and is likely to only be an issue if someone else tries to remote into the same unit while it is being used by Signal Scout.
- Logs will now be automatically loaded for review instead of requiring the user to click the “Open” button.

- Added ability to “retire” programs. By default, “retired” programs will not be shown in the programs table on the main window so that the user will not accidentally try to select this location to access LiveView. You can select a program as “retired” under the edit location screen. If you want to review all “retired” programs you can have them shown by going into the Settings window and selecting the checkbox for “Show retired programs in the main window table”.
- Bug fixes and quality of life improvements.

2019.12.09

- Added MicroLok II log view support. Signal Scout will recognize MicroLok II programs if the “.mll” file is present in the selected application programs folder.
- Removed ChromeDriver dependency. It is no longer required to have Google Chrome installed or the ChromeDriver placed at C:to use the “LiveView” feature.
- Added Code Signing Certificate.
- Bug fixes and quality of life improvements.

2019.10.27

- Signal Scout can now “infer” unrecorded bit states. Unrecorded bits are still shown with a dashed line to indicate the bit is not recorded, but when Signal Scout can confidently determine the state a grey box will be drawn around the inferred bit and the state will be given.
- Added a color and symbols key. Access through the main windows “Help” menu then “Key”.
- Bug fixes and quality of life improvements.

2019.10.11

- Added colorized relay pick paths.
    - Power source begins as green. Known variable states either pass power forward or break and result in red to show the pick path is broken. For unknown variables, the exit side of the break is shown as black for unknown. Vertical lines connecting multiple logic rungs take on the green color if fed from any power to the left. Red if all sources are known and red, and unknown otherwise.
- Added recognition of unrecorded variables. For some programs not all bits are set to be recorded. Signal Scout now shows which variables are not recorded by making the line style of their contact or relay into a dotted line instead of a solid line.

- Added detail to timer bits. Timer bits will now show two relays. The normally drawn relay picks when the timer is enabled, the relay with the triangle drawn through the coil is the slow pick and will pick if the path is true and after the time set for that variable has run.
- Bug fixes and quality of life improvements.

2019.09.04

- Log review! Load a log to be reviewed in the same intuitive format as the LiveView function.
    - In log view, user can right-click on variables in the display view to change their display state in a cycle of FALSE -> TRUE -> UNKNOWN. If the user right-clicks on a variable that does show up in the log it will set the state prior to the first time the variable shows up in the log, but the user cannot change the state after the first time the bit shows up in the log. User-set variables are outlined with a blue box so that the user can see that the variable is user-set and not pulled from the log.
    - In log view, the time scroll bar will change based on what variables are selected for display. This ensures that every time you move to the next record a status changes that is being displayed.
- Moved some items around in the main window.
- Bug fixes and quality of life improvements.

2019.08.21

- Status bar updates with work going on in the background.
- Program no longer freezes when running background web access tasks.
- Auto-scroll to bottom when new statuses are added to view.
- Bug fixes and quality of life improvements.

2019.08.04

- Added ability to change the ElectroLogIXS login username and password.
- Added error logging.
- Added “About” window to include software version and copyright.
- Bug fixes and quality of life improvements.

Signal Scout Revision History

2019.07.10

- First distributed program build.
- Pulls data from ElectroLogIXS to build ladder logic view and then display real-time bit statuses.
- Can automate creation of GEIF files (LogicStation 2.8 required).
- Can automatically open “remote” locations through linked variables.
- Ability to edit location information (location name, area/subdivision, and IP addresses with local and remote selection).