AirVision Version 4.1 (build 116) Release Notes - August 1, 2019

Issues Found and Resolved

- 1. Corrections were made to the ADVP logic for Value Decrease (value) / Less Than (value) and Value Increase (value) / Increase Less Than (Value) to handle fringe conditions where data could be seen to meet the ADVP condition but do not from a usage perspective.
- 2. The delete restriction on annotations with the category of 'Audit' have been removed from the Average Data and Sample Data editors.
- 3. The summary columns of the Daily Parameter Report have had their font size corrected to match up with the other cells of the report.
- 4. An issue was resolved where some application files were not updated / installed when the AirVision or AVTrend setup programs were run.
- 5. An issue was addressed where the Data Completeness Report would include two extra rows if run for a full calendar year.

New Features

- 1. The Average Data Trend, Sample Data Graph, and Sample/Hourly Comparison Graph reports have all had the legend placement revised to make better use of page space and provide the maximum area for display of the graphed data.
- 2. Copy / Paste functionality has been added to the Email Alarm Trigger Editor.
- 3. A Sample Data Graph report has been created. This report can also be used to chart PAMS retention times as well (option box).
- 4. A Daily Valid SO2 Maximum Average Report has been added which uses the EPA SO2 NAAQS consideration (require 75% of valid hours in day or max would not be reported for that day per 40 CFR Part 50, Appendix T).
- 5.An option has been added to the AQS Text report to include Zero Span 'QA' records in the output (this has been separated from the calibration precision 'RP' records.
- 6. Support has been added for use of 3 digit channels with the 8864 loggers.
- 7. Support has been added for MetOne cloud API data collection via direct instrument polling ('MetOne CCS Stream') and file import ('MetOne CCS JSON_1H').
- 8. An AQ View report has been added for California agencies. Contact Agilaire support if you need this report enabled.
 - a. Parameter for instrument A must have a POC of 100 and have Metatags configured for "AQViewInstrument", "AQViewAdjustment", and "AQViewUncertainty"
 - b. Parameters for instrument B must have a POC of 101 and C must have a POC of 102
- 9. Three digit channel number support has been added for 8864 loggers.

Site Node Logger

- 1. Updated RMA policies are now in place for the 8872s:
 - a. Contact Agilaire for troubleshooting and RMA authorization before shipping
 - b. RMA form required for all 8872 components sent to Agilaire, items received without a completed form will be returned to sender
 - c. If you are sending back more than one item, complete a form for each
- An issue was resolved where syncing between systems running on different time zones or daylight saving settings could cause the AirVision service on the destination system to restart repeatedly for the duration of the time difference.

AirVision Version 4.1 (build 79) Release Notes – July 1, 2019

The 'AIRNow Report', which outputs in the OBS format, is planned for obsoletion in AirVision. Beginning with release 4.1.15 the report will no longer be eligible for development updates or fixes. The AirVision release following December 2019 will have the report removed from the application. Any users utilizing this report should begin preparation to replace its usage with another suitable report from AirVision.

The 'AQI Report – Range', which is functionally a duplicate of the 'AQI Report – Standard', is planned for obsoletion in AirVision. Beginning with release 4.1.15 the report will no longer be eligible for development updates or fixes. The AirVision release following December 2019 will have the report removed from the application. Any users utilizing this report should begin preparation to replace its usage with another suitable report from AirVision.

Issues Found and Resolved

- 1. The Average Data Editor graph displays now properly apply group security restrictions regarding edits.
- 2. Interval filtering in the application selection grids has been relaxed in the manual poll task and task wizard to better accommodate brand new system configurations.
- 3. The 'upload only' and 'download only' options for sync contracts has been disabled. The 'one way' options present scenarios that could cause future sync failures and do not present a usage case that isn't supported by the remaining options.
 - a. All Upload contracts will automatically be updated to Upload then Download.
 - b. All Download contracts will automatically be updated to Download then Upload.
- 4. The 'Update Field Values' option of the File Import Tool has been adjusted so that repeated imports will not revert the date/time stamps on the data (PAMS issue).
- 5. An issue was resolved where flags selected under 'Apply Flags' on file import templates where not being applied.
- 6. The VOS limit line logic for display on the Average Data Graph Report and Average Data Trend Report has been revised to better support multiple option selections within the Violations Program configuration.
- 7. Completing a work item stopped making an automated logbook entry (if set via Utility Setting), this has been corrected.
- 8. The Site Map View had an issue with the default background map provider not displaying a map, this has been resolved.
- 9. An issue causing the Sample / Hourly Comparison Graph to not work has been resolved.
- 10. The 'download' of a rainfall channel to an 8864 now correctly sets the channel type as '9'.

New Features

- 1. NOY Converter Efficiency Reports have been added for both Span and Precision. These reports rely on the following configuration settings in order to properly function:
 - a. parameter templates NO and NOY in use / assigned
 - calibration results must have levels defined ZERO, SPAN, GPT_SPAN or ZERO, PREC, GPT_PREC
- 2. The Multi Phase Calibration Report header has been updated with clarified field names and information.
- 3. Warning messages have been added to the AQS text and XML reports to notify if any hours have ZZ null codes
- 4.8864 Link to Logger logic has been changed from a fixed username/password to a prompt based approach to follow prior 8832 logic and allow for different logins to be used.
- 5. The Monthly Report now has an option to show Qualifier Codes in addition to Null Codes.

Site Node Logger

The SQL port used for sync with all Windows 10 8872s after June 2019 is 8998 rather than 1433. An 'instructional' folder is available on the AVTrend FTP download site with updated documentation noting this.

- Site Node Logger service code has been updated to persist alarm states and RTN/ACK status when the AirVision Server service is restarted (this would include logger reboots).
- 2. An issue was resolved where Site Node Logger could not handle Modbus coils configured with large gaps between (2000+).

AirVision Version 4.1 (build 15) Release Notes - May 8, 2019

Issues Found and Resolved

- 1. The Monthly Report has been updated to follow the same parameter Report Order logic as used in other reports in the application place parameters with NULL Report Order at end when a mix of NULL and defined order exists, those with NULL Report Order will be listed alphabetically.
- 2. An issue has been resolved where deletion of a calibration phase would not properly save / reappear after saving.
- 3. An issue was found with generation of scheduled AIRNow reports (NOT using the specific AIRNow task) returning 'no data' results. This has been corrected.
- 4. Performance improvements have been made in the Average Data Editor linear display for large data sets.

- 5. The Annotations Report has been updated to better handle entries made via CTRL click batch edits; reported time span will be per data point rather than span non sequential points.
- 6. A constraint error when copying calibration sequences in Data Source Details has been addressed.
- 7. An issue was found where some 1d or 24h interval data stopped displaying data after a prior AirVision upgrade due to some new database intervals related to sample data. This was addressed and scripts are available to resolve historical data issues if necessary contact Agilaire support with any questions.
- 8. The Equation report had its header changed so that the menu item and report header match.
- Handling of units of measure for sample blanks has been improved in the Sample Data Editor and AQS reports.
- 10. An issue was resolved that affected display of data for Continuous Sample data type parameters in the Realtime Tabular Display.
- 11. User following (carrying selected date/time ranges, etc. over into new editor tabs) has been revised so that prior selected values are NOT changed due to having used the drill down or child parameter options from within the Average Data Editor.

New Features

- 1. The AQI Calculation Task now has the ability to write the AQI result for site (highest value) to a parameter using the SITE_AQI parameter template. The data will be annotated with the responsible parameter/program/concentration information.
- 2. The AQS Text report now has a checkbox option for including blank records in the report output.

 NOTE- any user Favorites or Scheduled Tasks using the AQS Text report should be reviewed after this update to confirm desired records are properly selected.
- 3. Report Order logic has been added to additional reports: Data with Flags, Annotations Report, Basic Sample Data Export, Sample Annotations Report. Parameters with report order go first in configured order, any parameters with null report order setting are placed after those with settings and the null parms are sorted alpha numerically.
- 4. The Asset Tracking editor has had the column Additional Identifier added to the display grid to allow for additional sorting / filtering options for users.
- 5. The AIRNow AQCSV Report can now be run for minute interval data.
- 6. When changing a logger to type 8864, a prompt is offered where the emulation port can be automatically updated to port 22.
- 7. Improvements have been made to the Site Map View display:
 - a. Better zoom fit to data upon load
 - b. Hide right panel initially, and only show it when a site is clicked on
 - c. Show the AQI color in the rectangle around the AQI value by default
- 8. Functionality has been added to the file import tool to allow for saving from files in batches and to continue processing a file even if an error is encountered. These settings are on the 'Processing' tab in the file import configuration. **NOTE: the data backstamp option has been moved to the 'Advanced' tab **
- A pop-up has been added when the Server Configuration->Add TCP Route option is used. The prompt
 is to offer an automatic disconnect value setting for wireless / remote devices to avoid communications
 issues
- 10. The manual File Import Tool now has an option to override the template and select action of 'Do Not Modify Existing Data', 'Update Field Values', or 'Reset Record and Overwrite'.
- 11. The Work Item Notification Task now has an option to look for expiring assets. The notification is if a work item's associated asset is expiring based on the expiration date on the asset entry itself, not assets outside the context of work items.
- 12. Instrument poll tokens can now support referencing site metatags for use with instruments like AirPointer.

Site Node Logger

Issue address where the input channel was disabled for Sigma Theta or Linear Theta channels but the
theta channel was enabled would cause an exception affecting the Site Node service from running
properly.

AgileWeb

1. The 'Enable Login' web setting was not hiding the login link on the website when the key was set to false; this has been corrected.

AirVision Version 4.0 (build 58) Release Notes - January 31, 2019

Issues Found and Resolved

- A revision was made to the AIRNow AQCSV Report logic to address timeout issues encountered by some users.
- 2. An update was made to the sample data purge logic to avoid orphaned data records remaining in the database.
- 3. An issue with the Fill Average Data Gaps utility was addressed where blank sample records were being created

New Features

- 1. A delete option has been added to the Asset Tracking editor. Note that deletions will not be allowed / saved if work items are associated with the asset.
- 2. Options have been added to the File Import Configuration for handling existing data:
 - a. Do Not Modify Existing Data the existing record is unchanged
 - b. Update Field Values this will keep the existing record, and only overwrite the specific fields which have incoming data as configured in the template
 - c. Reset Record and Overwrite same behavior as the old "Overwrite Existing Data?" checkbox, an existing record gets deleted/cleared and a new record is written, overwrites all fields within the record.

Site Node Logger

1. The logic behind the Collection, Disabled Flag, and Maintenance Flag columns of Site Node Logger Toolbox has been revised to clarify language in the pop up prompts and to NOT prompt regarding other channels when the selected channel is tied to an analog input (8872_AM module).

AgileWeb

1. The controls for the report viewer have been updated to help address some customer compliance items and to move away from a legacy version of the control.

AirVision Version 4.0 (build 36) Release Notes - January 10, 2019

Issues Found and Resolved

- 1. Database related modifications to how calibration data is tied to parameters created potential Data Source Detail edit and configuration sync issues for systems that use the sync feature and had run it prior to the 4.0 upgrade. This is addressed in build 4.0.33 and beyond.
- **If already running a 4.0 build and were using sync prior to the upgrade, contact Agilaire for a scripted correction if you prefer not to upgrade at this time.**
- 2. The Multi Phase Calibration Report has been updated to include child parameters in the report output.

New Features

- 1. A Modbus Instrument Configuration Report has been added.
- 2. Support has been added for Modbus multi-threading on the 8864 logger.
- 3.A new button 'Build Modbus server.cfg File' has been added to Data Source Details, allowing users to locally save a copy of the server.cfg file for review or troubleshooting.

AirVision Version 4.0 (build 20) Release Notes - December 17, 2018

Issues Found and Resolved

- 1. The Parse Config File tool within Data Source Details can now correctly process logger dump files that have the CR/LF line terminators transposed.
- 2. The automated logic to handle AirVision server PC name changes has been changed to update the Network Address field as well. An incorrect Network Address can cause 'Link to Logger' issues.

- 3. The X Bar R Chart report has been updated so that the plus and minus drift lines are based on percentage when applicable based on calibration sequence configuration.
- 4. The AQS report logic has been updated to use the method code from the calibration record if present. If not available, the method code from Site/Parameter configuration will be used.
- 5. Improvements have been made so that the favorites editor and scheduled task report query configuration load faster.
- 6. The monitor assessment forms have been updated so that if they are saved as favorites a lookback period can be defined and set to load data upon launch.
- 7. The annotation text has been changed to be left justified on the Annotations Report.
- 8. The default behavior of the 'Enable AIRNow Reporting' box getting checked during new parameter creation has been disabled.
- 9. The Site Health Report has been updated to apply the same calibration logic as the Calibration Results report uses.
- 10. The date/time field in the pop-up for adding data annotations has been made read-only so that annotations are only added for the data point that was initially selected.
- 11. A database procedure causing an error for AQS text importing has been corrected.
- 12. AirVision code has been updated to better handle extremely large digital driver lists when selections are being made within the IO tab of the logger configuration.
- 13. Changes made to rounding logic within the application to ensure consistent display of values throughout the application.
- 14. The file import tool will now handle blank Excel cells (previously omitted) so that values are placed into the correct destination fields.
- 15. The AQI logic has been updated so that a resulting negative Nowcast or 24 hour PM2.5 concentration is reported as a zero (0) AQI.
- 16. Additional 'differs' value relationships have been added to ADVP. There is now both a differs by percent and differs by value option.
- 17. ADVP now offers comparison options to MDL and SQL. Referenced values are from the parameter configuration fields 'Minimum Detectable Limit' and 'Practical Quantitation Limit'.

New Features

- 1. Additional updates to PAMS functionality, contact Agilaire for a copy of the PAMS Application Note if desired.
- 2.A new Converter Efficiency Report has been added. For results to be included, the cal result level must be set (Zero, Span, or GPT) and the parameters be assigned templates NO and NOY.
- 3. A column has been added to the Journal Message Log report to show the Thread ID value.
- 4.Two new export reports have been added: Asset Export Report and Work Item Export Report.
- Comment fields have been added to the monitor assessment forms. If the LogMonitorAssessmentEntries UtilitySetting is enabled, these comments will also be included in the logbook entry.
- 6. The Flow Rate Verification Details editor will check and alert if a prior entry exists for the selected parameter within the last 14 days.
- 7. The data grid in the Calibration Trend Graph now allows multiple rows to be click-selected and copied (via Ctrl+V) for pasting into external applications.
- 8. The ability to do logbook addendums has been moved from a UtilitySetting that affects all AirVision users to a group permission that can be managed on a more granular basis. The new permission is titled 'Add Logbook Addendum' and is under the Edit Data branch.
- 9. Default rounding precision on newly created channels is now null rather than 1.
- 10. The File Import Configuration editor and the Sample Data Editor now allow entries to be made with a null 'Frequency Code'.
- 11. Create, Read, Update, Delete security permissions and site restrictions have been extended to include the sample data and calibration editors.
- 12. The File Import tool can now process calibration data. *The calibration configuration must pre-exist, the import will NOT create calibration sequences or phases.*
 - a. When importing cal data, it finds the best matching phase for the parameter. The calibration level, if set, will filter the phase search criteria. If there are columns to denote calibration name and/or phase name, those are also used to narrow down the phase search. If there are multiple phase matches for that parameter having the same key info, the tool picks the first ordered by Enabled, Calibration Name, then by phase number.
 - b. If end time is configured as a column it is used. If not, it will default the end time to the start time + phase duration. If no phase duration is set, it sets end time equal to start time.

c. If expected value is configured as a column it is used. If not, it will default to using the configured expected value for the phase/parameter.

Site Node Logger

- 1. A new button has been added to the Site Node Logger Toolbox utility. The 'Show All Channel Types' button can be toggled in the ribbon bar as desired. Channel types affected by this toggle are: General, Rolling, Avg Math, Avg Merge, External, Sigma Theta, Linear Sigma
- 2. The Site Node Logger Status Report has been revised to represent database usage in a more easily understood format.
- 3. The 'Digital Outputs' tab of the Site Node Logger Toolbox has been updated to refresh immediately upon any manual state change of an output.
- 4. The automated restart of the AirVision Server service due to configuration changes now logs more information to assist with troubleshooting when needed.
- 5. A ribbon button has been added to the Interactive Calibration screen with the option to 'Add Logbook Entry' creating an entry with the event time set to the current time and the category defaulted to QA.
- 6. To coincide with prior 8832 logic, the 8872 now considers a 2 bytes as a 16-bit signed integer when the channel is configured with DataFieldType=Integer and DataValueFormat=B.
- 7. The 8872 now allows greater than 16 phases to be configured for a single calibration sequence.

AgileWeb

1. The 'Default Value' column in the Web Settings Editor has been set to read-only as edits to that field would not impact the actual website behavior.