

AirVision Version 3.5 (build 137) Release Notes – January 19, 2018

*****NOTE: due to required code changes in this release, updating from an older version to this version (or beyond) will require all AirVision client installations to be updated manually. The automated client update process WILL NOT work for this transition.*****

Issues Found and Resolved

1. Annual Performance Evaluation Report has been corrected to allow / display blank record values.
2. An issue has been resolved where ADVP would not apply rule actions when the conditions were met IF the conditions spanned multiple sites.
3. The AQS Text report will now display zero values in 1-Point QC records.
4. The Maximum Hourly Value report would return an error when run on parameters not linked to a ParameterTemplateKey, this has been resolved.
5. An issue was resolved with the Monitor Downtime Report returning 'no data found' when data was available.
6. An issue was resolved with the Daily Opacity Report repeating values across sites with common parameter names.
7. An issue was resolved where the Transfer button for the AQCSV Report was grayed out / not operable.
8. 'Help' menu items had their web links updated to reflect new locations on Agilaire's website.
9. An issue has been resolved that caused the graph/chart area of the Data Analysis report not to function.
10. Updates were made to logger download strings for V and W channels (Vector Wind Speed/Direction GSI) to support the 8864.
11. Several items not being properly handled by the 'Parse Config File' tool for 8832 imports have been addressed.

New Features

1. A serial number column has been added to the Asset Current Status Report.
2. The site name has been added to the header of the Cylinder Gas Audit report.
3. The AQS Text Import Tool will now handle the insert of records with the same date/time and site/parameter but different blank types.
4. The Daily Opacity Report has been updated to show zero values rather than blank cells on the report.
5. Efficiency improvements have been made to the file import tool logic.
6. The file import logic now supports capture of codes from multiple Qualifier Code columns OR multiple, space separated qualifier codes within a single 'column'.
7. Polling code has been updated so that for direct polling of average data, a 'no data found' condition will return as an error, while for 'sample' data, it will return a warning.
8. User login tracking ability has been added to AirVision along with two related reports, Login Event History and Login Session History.
9. New UtilitySetting options have been added to allow for management of failed user logins. The logic is- If 'X' number of failed logins occur with 'N' minutes, then lock out that client for 'M' minutes.
 - LoginRateLimitAttempts (default value 5). This is the "X" value.
 - LoginRateLimitLookbackMinutes (default value 1). This is the "N" value.
 - LoginRateLimitLockoutMinutes (default value 1). This is the "M" value.
10. A new column is available in the Calibration Data Editor, AQS Null Code. This is to support applying the 1C null code to 'invalid check' data and correctly report in the AQS reports.
11. Two new monitor assessment editors have been added, Speciation Flow Rate Verification and Speciation Semi Annual Flow Rate Audit.
12. The CEMS 7 and 30 day rolling average reports have been updated to retrieve time online automatically and to include operating parameters if they are configured for the site (these are based on Parameter Template names – STARTUP, SHUTDOWN,UPSET, and SU_SD_UPSET).

Site Node Logger

1. An issue with extremely long decimal values used in math channel equations has been resolved.
2. An issue with the Site Node service was caused by channel intervals being set at 000s (except for General ch), this has been resolved and the 000s interval removed as an option for all non-General channel types.
3. Input pattern forms were updated to default to 'AND' to avoid unexpected results.

AgileWeb

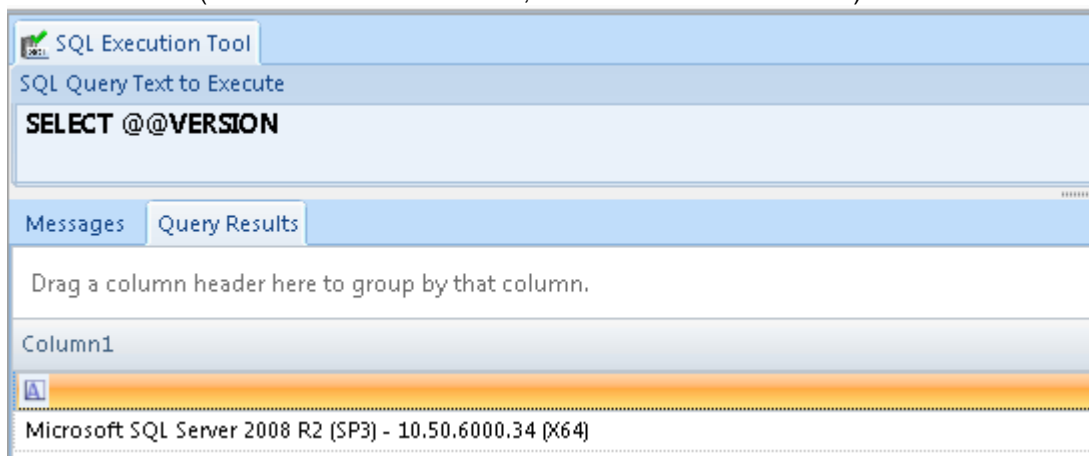
****NOTE: due to changes listed below, AgileWeb *MUST* be upgraded at the same time AirVision is in order to maintain website functionality****

1. A new Web Settings Editor has been added to the AirVision client. This editor will allow client users to make changes to almost all of the configuration settings that were previously handled through the custom.config file. Setting details can be found in the AgileWeb manual: <http://agilaire.com/manuals/AgileWeb.pdf>
2. Any customer using the ThinkGeo contour license will need to contact Agilaire regarding an upgrade process necessary when upgrading to this AgileWeb version or greater.
3. An issue was addressed where instrument controlled calibrations would error due to duration values.
4. For the historical concentration graphs, logic has been changed to apply autoscaling by default. This is to avoid the graphs not showing a full 24 hours along the X axis due to the Site/Parameter configuration for the parameter not having zero included in the range between Graph Minimum and Graph Maximum.

AirVision Version 3.5 (build 8) Release Notes – September 27, 2017

*****NOTE: Due to new logic for monitoring of database size and drive space, all AirVision servers and 8872s must be running SQL 2008r2 SP1 or greater BEFORE installing this release. Agilaire will have SP3 posted for download on our FTP site with this new release.*****

To check your SQL version and service pack level, run the query `SELECT @@VERSION` from the 'SQL Execution Tool' in AirVision/AVTrend (X86 denotes 32 bit version, X64 denotes 64 bit version):



If you are running SQL Server 2012 or greater, the above is not applicable.

*****NOTE: A future release (date TBD) will require AirVision, AVTrend, and client systems to be running .Net framework 4.7 – a standalone installer is available from our FTP site. If applying SQL SP updates to any 8872s or site PCs, it may be a time save to do the .Net framework update at the same time.*****

Issues Found and Resolved

1. Updates to log constant values have been excluded from the change audit tracking as they were contributing to excessive logs. If a customer needs this tracking reinstated, contact Agilaire support.
2. An issue was resolved where scheduled AIRNow FTP tasks would give a 'results empty' error but the report did contain records and was successfully transmitted.
3. The warning criteria for AIRNow report generation has been updated to accept parameters from multiple systems as long as the agency, country, and timezone codes are all equal.
4. An issue was resolved where the logger 'Parse Config File' utility would improperly ignore unused inputs and insert all labels one directly after the other.
5. The template list column in the Parameter Template Editor now allows for resizing to improve viewing of long template names.
6. Report Criteria selection areas have been reviewed and updated to provide consistent resizing and display.

7. An issue was resolved where an instrument poll task might lose its poll type if multiple tasks were set up prior to a save.

New Features

1. The AQCSV Report has been updated so in a scheduled task an option is available to mark the records as updates instead of inserts.
2. The AQCSV Report has been updated to allow selection of sub-hourly data and present the number of minutes in the interval into the duration column.
3. A new utility setting (AddLeadingZero) has been added that, if enabled, will place a leading zero before the decimal point for values less than 1 for the reports Daily Summary, Monthly, and Daily Parameter.
4. The sorting order of the Calibration Export report has been updated to allow for easier tracking of trends for sequences (Site -> Parameter -> Cal Sequence ->Cal Phase ->Date/Time).
5. A Site Node Logger Status Report has been added which can be viewed on the 8872 logger or the AirVision server and displays the polled status of logger database and drive space (see item 4 under Site Node Logger below).

Site Node Logger

1. Merge and Average Merge channel types have been added for the 8872.
2. An issue was found where the Floor Limit and Ceiling Limit was being used as both the limit AND the value, this has been corrected.
3. An issue was found where some operators from 8816 logger dump files could not be handled by the SNL logic, this has been corrected.
4. New logic has been added to monitor both the hard drive free space and SQL database size on 8872 loggers. This information can be polled via the AirVision server [Poll 8872 Status ("XS")] and if there is a drive space or database size warning, the task will return an error and a descriptive status message. If desired, customers can set up notifications on the tasks along with emails to receive notice.
5. Code was updated to better retain customized tabular display layouts.
6. An issue was resolved where an instrument controlled calibration with the same phase running twice wouldn't report the proper zero values.
7. An issue was resolved where an invalid channel configuration would stop the Site Node Logger service from successfully running.

AirVision Version 3.4 (build 15) Release Notes – July 13, 2017

*****NOTE: due to significant upgrades to the Site Node Logger service functionality for 8872 loggers, this upgrade is strongly recommended for 8872 users.*****

*****NOTE: default backup settings in the database update utility, part of every AirVision/AVTrend upgrade, have been changed. The database will NOT be backed up by default. If you wish to have the backup run, select the appropriate check box before clicking the update button.*****

Options

Backup Option

While this updater will NOT make any changes to the database if an error is encountered, Agilaire still strongly recommends a current, pre-update database backup be made. If you need assistance backing up, contact your IT support or see our backup video tutorial at: [Video](#)

Backup database before applying changes

Delete old backups from previous updates

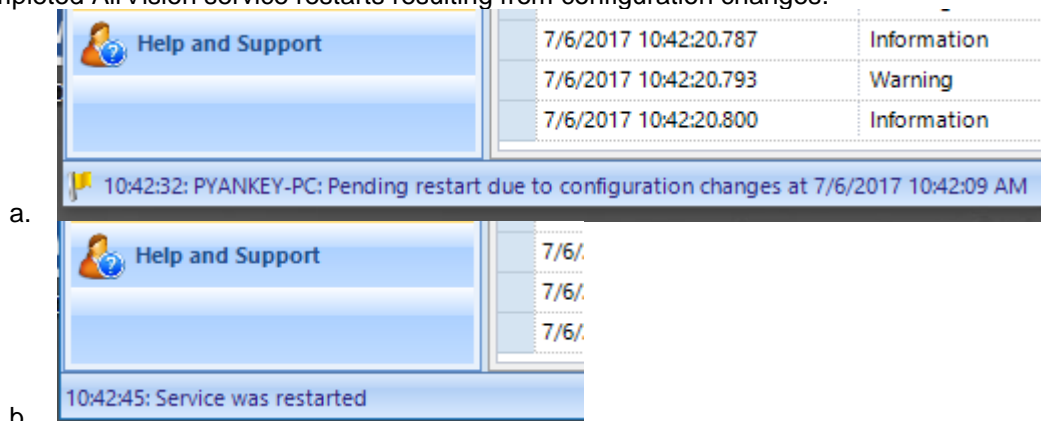
Issues Found and Resolved

1. E-mail Notification Subscriptions now has the group members sorted alphabetically by user name.
2. Calibration error method descriptions have been updated for improved clarity; "Ambient (L)" and "CEM (S)" rather than Linearity and Standard.
3. The highest level on the wind rose report has been updated to clarify that it represents any values greater than the level 7 value.

4. An error has been resolved that was caused if a scheduled task name was over 50 characters. Note- the limit is 80 characters.
5. The Monthly Sample Data Report has been updated to show a null code from the data whether or not a value exists for the data point.
6. In the Database Sync utility, the scroll bar was not available in the lower log pane. This has been resolved.
7. Changes were made to the null code option on the Basic Data Export so that its behavior is consistent with other summary reports.

New Features

1. The Average Data Archive Loader has been updated to allow the selection of specific parameters for import rather than having to import all data points from an archive file.
2. The Calibration Graph Report now includes the units of measure with the phase and parameter.
3. Automated logic has been added to make sure that logger I/O Label columns Modbus Instrument and Modbus coil are properly completed.
4. A 'tool tip' has been added to the file output path within the task scheduler, reminding users that the path must be a UNC (not mapped drive) path.
5. Options for excluding hours per the EPAs 17 hour ozone rule and being able to sort by date rather than concentration have been added to the Maximum Hourly Averages Report.
6. Support has been added for HTTP routes for use in direct polling of instruments (such as the API T640).
7. An option for logbook polling has been added to the Task Scheduler Wizard.
8. The ability to lock and unlock data now have their own Group Permissions (Lock Readings & Unlock Readings). They are granted by default to the administrator groups 'as shipped' from Agilaire. Other groups needing the rights will have to have those permissions added to their group.
9. Notifications have been added to the left side of the client status bar to inform users of pending and completed AirVision service restarts resulting from configuration changes.



10. The AQS Import tool will now check for additional sites with the same identifier if the parameter attempting to be imported isn't found on the first site match the importer encounters.
11. A new UtilitySetting has been added (LogMonitorAssessmentEntries) which if configured to a value of 1 (true) will create a logbook entry with date/time, user, type of form, date/time of record on form any time a MA form is saved.
12. Two new CEMS reports have been added, 12 Month Rolling Average and 12 Month Rolling Total
 - a. For the Total report, the Site/Parameter setting "Totalize in Reports" is used to define what parameters appear in the report and a Parameter Metatag of "12MonthRA_Tons" with a value of "true" will result in the total being converted to tons

Site Node Logger

4. Multiple changes have been made to improve the manner in which the 8872 executes scheduled events and times its data capture activities.
5. An issue was found where some configuration changes would not trigger an automated restart of the AirVision service. This has been corrected.
6. To allow customers to adjust the precision displayed in the Site Node Logger Toolbox, SNLT will look at the value in the Round Precision field of the channel. IF that field is null, the current logic of using the Site/Parm precision settings will be applied.

5. Microsoft is ending support for Bing maps V7 API. Any customer using a Bing map for their AgileWeb implementation should upgrade to this (or a later) version prior to June 30th.

AirVision Version 3.3 (build 16) Release Notes – May 10, 2017

Issues Found and Resolved

1. Negative values during the generation of the AQS reports will no longer trigger warning log messages.
2. Assessment value labels have been corrected on the Annual Performance Evaluation report.
3. The Calibration Graph report has had the parameter information added to the graph legend.
4. Application logic has been added to ignore any whitespace in IP address fields.
5. The 'mean' column on the Statistical Report has been relabeled to 'geometric mean' to better clarify the calculation methodology of that column.
6. When the database sees a PC name change (e.g., restoring database on a new server / logger with different serial number), if there is only one executive, the system will just rename it, and will not create a new executive.

New Features

1. The Monitor Assurance records are now available for selection and inclusion in the AQS 2.2 Text Report.
2. An option has been added to the Basic Data Export to include flags and null codes in the report.
3. Instrument polling has been updated to use the frequency code from the associated import template when determining the number of records to request for non-continuous samplers.
4. ADVP has been updated to not send out exception messages, if they occur, in place of the normal ADVP email text. If notification of ADVP task exceptions is desired, the task notification settings should be configured as desired.
5. Additional date/math functions have been added for use within central math processing - MONTH(), DAY(), YEAR()
6. The Site Health Report will no long include parameters that are disabled.
7. The Daily Parameter Report will now color the cell backgrounds in the flag color if a flag is present on the data.
8. The Monthly Sample Data report will now exclude sample data marked with a null code.
9. A new utility setting (ImportAQSDDataOverwrite) is available to enable data overwrite when using the AQS import utilities (text or XML). The default setting is to NOT overwrite. Note that the primary fields are all overwritten and flags are reset, but extended sample fields, annotations, etc. are not reset.
10. Two new average data rollup methodologies have been added that will find the highest sub-average or lowest sub-average in the rolling/block interval range. The 'Method Key' field of the rollup method must contain "Minimum" or "Maximum" to trigger the new calculations. A min-to-hr max and min-to-hr min rollup method have been added by default.
11. The format of the Asset Current Status report has been revised for improved organization of information.
12. Instrument polling logic for sample data has been updated to use the frequency code from the template to more accurately determine the number of records to request when direct polling the instrument. This does not apply to 'irregular' intervals (random, seasonal, etc.).
13. For CEMS systems / sources that fall under the old 40CFR60 rules, a new min-to-hr rollup method has been added - Minute to Hour (40CFR60) – for valid hour calculation.
14. Support for IPv6 has been added to several areas of AirVision; Executive remote interface (main client/server endpoint), Controller Interface Service, Modbus Slave Service, and Logger Manager (Link to Logger relay service).

Site Node Logger

1. Additional date/math functions have been added for use within the 8872 math channels - MONTH(), DAY(), YEAR()

ATTENTION:

As our customers' AirVision databases increase in both age and size, the topic of SQL database maintenance should be reviewed by each customer and their respective IT support groups.

Proper regularly scheduled database maintenance is essential to the long term performance and stability of any SQL database. From an AirVision client user perspective, lack of maintenance can result in slower performance of reports and data retrieval. Long term neglect of database maintenance can lead to data queries timing out and not returning the requested values or report.

Please note that database maintenance is the responsibility of the owner. However, Agilaire does offer a script that adds some database items and a scheduled task into AirVision for monthly reindexing of the database (when the script is applied, the task is disabled by default).

These scripts address index fragmentation and the update of table statistics after checking the fragmentation levels and only act if warranted. Agilaire does not guarantee they will work with every system as some security policies may block the scripts from working, nor does Agilaire maintain or support the tasks.

It is also extremely important to have scheduled database backups in place. Database backups serve several purposes; they provide an option to restore your configuration and data in the case of a catastrophic failure and the backup action results in maintenance action against the database log file. Backups can be scheduled from within the AirVision Task Scheduler, contact Agilaire Support if you need information on creating a scheduled backup task.

For more information about database maintenance, a link below leads to a Microsoft TechNet article that more thoroughly discusses this topic.

<https://technet.microsoft.com/en-us/library/2008.08.database.aspx?f=255&MSPPError=-2147217396>