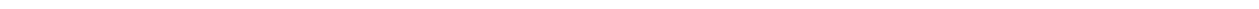




AmegaView Software

Application Software User Notes

21 – JAN – 2016
Version 3.0 B1209.07



This document shows the releases and changes made to AmegaView software and associated hardware firmware. It is ordered from newest (current release) to oldest.

General format is:

Build Number Release Date

Gateway (GW), VP Connect and Dialer (DL) firmware requirements

Type of changes

Itemized description of change (Issue ID)

Build 1209.07 21 Jan 2016 (Current Release)

Requires GW1209.16, VP Connect F6 and DL1208.14 or newer

New Features - AEMS Client Software:

1. Added ability for system administrator to lock or unlock User Accounts; add Automatic User Account Locking after a number of invalid Log in attempts (21-CFR-11 compliance issue). (CR 763).
2. If Input Calibration window is already open, it now refreshes based on any subsequent input selection for calibration made from the Floor Plan or Input Summary Review views (previously, once the input calibration window was open, it did not update to reflect newer selection, but had to be manually closed and then re-opened). (CR 775)
3. Added the ability for system administrators to move users to or from the Administrator group (previously, to do this, they have to delete and re-add the user). Limited user moving or deletion such that no user is allowed to Delete or Move themselves. (CR 799)

Corrections – AEMS Client Software:

1. Resolved a problem with renaming of VP Connect based Outputs (relays). (CR 760)
2. Resolved an Unhandled Exception (App Crash) when graphing an input where all readings in the time period were NULL (e.g. wired probed disconnected state). (CR 762)
3. Resolved a problem with the “Location” button on the Input Status window whereby the location information was not properly displayed for VP Connect based inputs. (CR 764)
4. “Online Comm B” message are a normal state, and should be displayed in activity log in green color (not the previous yellow warning). (CR 765)
5. Resolved a problem with deleting a Floor Plan after the recent addition of a new floor plan; a different floor plan than the currently selected one might be deleted. (CR 772)
6. Resolved an Unhandled Exception (App Crash) when accessing Input Calibration when a Floor Plan has not been previously opened in the current Client session. (CR 774)
7. Resolved a problem in the Hardware Programming window, Wireless Sensor Inputs grid; the sensor type description was wrong. Problem did not affect operation, and information in Input Programming and reports was accurate. (CR 776)
8. Activity Log entries for updating a user account show old and new user Passwords in human readable form. These should be masked (e.g. old and new values as asterisks) or simply annotated as "modified" (21-CFR-11 compliance requirement), but no longer displayed in readable form. (CR 778)
9. Resolved a problem when deleting VP Cards or an entire AS or VP Connect panel; the

Client software can issue input deletion commands faster than the Gateway can process. This can cause the Gateway to reset or miss sending input deletion events to the Client Activity Log. A 2.5 second delay was added between Client issued deletion commands. (CR 779)

10. Resolved a problem when adding an Output type VP Connect Slot manually (by Slot drag/drop); software would miss-index the Output Card ID (the index was set based on Slot ID, and should have been based on channel number); not only will the Output not work, it could also cause other existing IO cards with the same index to stop working. (CR 780)
11. Resolved a problem when graphing Alarm Limits that are very small (3 decimal places, most commonly used with Differential Pressure inputs), alarm limit information was sometimes processed with 3 decimal places, other times (for event/excursions) with 2 decimal places, causing the graphed limit line to jump/shift unexpectedly by the difference between 2 vs 3 decimal places. (CR 784)
12. The Green Logger was a prototype hardware and never released; the icon and supporting code for the green logger has been removed. (CR 790)
13. User interface improvements: In Input Programming, change Dialer “Confirmation Delay” to “Confirmation Inhibit Time”; in Input List programming, keep the selected input list constant when using “Modify” (the selected list would change after editing a list name, leading to potential editing of wrong list). (CR 802)
14. Correct issue where MKT Report does not print properly for an input if its alarm limit is equal to zero. (CR 804)

Corrections – AEMS Server Software:

15. Adding VP Outputs (relays) to an input list is not supported in GW firmware and is not needed, removed the CRC check for Outputs on a phone list at Server side (this caused Gateway to go offline intermittently); also removed ability to assign a VP Output to an input list at the Client side. (CR 771)
16. Diagnostic "Verbose Enable" does not show important configuration communication events (“ADI” command for input addition or deletion) which would assist in debugging. Added logging to a flat file for all events. (CR 777)
17. State reset/update of relay Outputs occurs every 20 minutes asynchronously which generates too many Command missed events. The update is now synchronized with standard data acquisition. (CR 783)
18. Wireless Receiver Online/Offline events were not always broadcast real time to the Client’s Activity Log. (CR 785)
19. When the SQL service is not available (e.g. during backup), data is logged to the local disk (Readings.dat file); this could contain incorrect data type codes, causing the data to never be processed for data recovery (and could lead to missing data). (CR 788)
20. Depending on database provenance (older version history), the table “tblprototypestructure” might have a mis-named field; it should be 'emailpre_flag' and might be 'emialpre_flag'. The Server was modified to find the mis-named field and automatically correct it. This bug affected issuance of pre-alarm email notifications. (CR 789)
21. Resolved a problem where the Server was not returning accurate MIN and MAX per hour data as requested by the Client for the Daily Report. (CR 791)
22. Server data acquisition from multiple gateways was asynchronous; this could lead to

collisions, missed commands and slower system response. Data acquisition from multiple gateways is now sequential (and synchronized with output update per CR 783). (CR 795)

23. Output trigger option “Pulse on Alarm” does not function as intended, and causes conflicts and missed Gateway commands when the output is triggered from a remote Gateway or Netlink. Functionality is not needed, option is removed. This affects Client side user interface also. (CR 800)
24. Correct SQL error for email transmission of “Dialing Input List Completed” message. (CR 801)
25. Server listen port (for gateway comm) was dynamic but should have been static. Corrected to match documentation, added INI file control if dynamic or alternate port numbers are needed. (CR 805)
26. Data field for storage of Prototype changes in the Activity Log is too short to record all possible changes. Code now automatically increments field size to 2500 characters (previously 2000). (CR 808)
27. Unhandled exception can occur for wireless reception (in FetchBlocks routine) if the LAN network is down. Not critical, but causes undesired SQL Error log entries and in the long term (months) might cause an app crash. Added an error handler to FetchBlocks. (CR 809)

Corrections – AEMS Gateway Firmware:

28. Resolved a problem where the NetLink version of the Gateway monitoring a Wireless 418 network could lose communications with the receiver and never recover automatically, and a warning email / alarm event was never sent. A power off reboot was required for recovery, and data could be lost. Issue was traced to Serial comm port handling where if a problem occurred, the port was reset to the default Gateway auxiliary board serial port instead of the NetLink TS-7800 serial port. (CR 717)
29. Resolved a problem where the Flat-Line alarm routine compared sequential values to seven decimal places, and a flat-line alarm event might not be generated even if the displayed (and logged) values were identical (at 2 decimal place resolution). Values are now compared to 2 decimal places within the flat-line alarm routine. (CR 786)
30. For the wireless Green Receiver, USB port handling was unstable and could lock up and require Gateway Reset; and data would also be lost. Note: this problem is probably what historically was called the “Green Indexing” issue. USB port issues were fixed with the assistance of C. Norris. (CR 792)
31. Miscellaneous Code Cleanup Items: Removed support for obsolete VIPER board; Add control for console view debugging statements. (CR 794)
32. Dialing of telemetry lost alarms, if not answered (inhibited) would re-dial immediately instead of after the configured phone delay time. (CR 806)

Build 1209.06 06 Nov 2015

Requires GW1209.14 and DL1208.14 or newer

Corrections:

1. Corrected issue with spurious Panel Offline events followed immediately by an Online event. (CR 751)
2. Simplified the Moving of linear transducers from AS to VP Connect (CR 754)
3. Corrected issue with Wireless Temp/RH sensor reprogramming (CR 755)
4. Corrected issue with VP Connect COM B failure if the RS485 network contains an AS Connect or Dialer; fix for GW1209.14 Gateway firmware. (CR 756).
5. Corrected issue with the printing of calibration labels (CR 757)

Build 1209.05 15 Sep 2015

Requires GW1209.13 and DL1208.14 or newer

New Features:

1. Revised methods for loading floor plans in order to reduce the time it takes for floor plans to load on systems with large numbers of inputs (CR 730).
2. For calibration functions, added the ability to enter a NIST probe identifier and show it on a calibration report (CR 736)
3. Improved AD (Active Directory) handling, now includes support for multiple levels of sub-groups (CR 723).

Corrections:

1. Corrected issue with error notification in the event a Dialer call failed (CR 731)
2. Corrected issue when manually changing an Input Number for a VP Connect input (CR 733).
3. Corrected issue whereby a configuration change to a prototype might not be updated (CR 734)

Build 1209.04 24 July 2015

Requires GW1209.12 and DL1208.14 or newer

Corrections:

1. Corrects issue in generating the standard MKT Report which reported the MKT value using demo data instead of the actual input values. (CR 726).
2. Enables use of redundant Com B Gateway serial port for VP Connect communications (CR 704)

Build 1209.03 13 July 2015

Requires GW1209.11 and DL1208.14 or newer

Corrections:

1. Corrects issue when using the setting that requires a comment when handling alarms that could lead to a collision such that the comment is added to the wrong Activity Log event (CR 714).
2. Corrects issue where on systems with more than one gateway, secondary gateways might not start up automatically after Server/Service reboot (CR 724).

Build 1209.02 17 June 2015

Requires GW1209.11 and DL1208.14 or newer

Features Added:

1. Add Support for VP Connect Panel (CR 643)
 - i. Include simultaneous function with both AS and VP Connect.
 - ii. Moving an input from AS to VP Connect maintains historical data access.
2. Add RJ11 RTD type for Wireless 418, improve input type descriptions (CR 671).
3. Provide means to remove “ghost” inputs that have become dis-associated from a panel or receiver and cannot be deleted by standard means (CR 672).
4. Provide means to graph more than 5 inputs at once simultaneously (CR 678).
5. Add unit of measure display to Input Review Summary grid (CR 684).
6. Add input number and name to pre-alarm email notification (TRAK 515)
7. Add option (in system configuration) to issue a pending alarm email notification (TRAK 518)
8. Add email notification for Wireless Receive Offline/Online events (TRAK 526).
9. Add Server configuration option for diagnostic logging of gateway error “Command Missed” into Activity Log (TRAK 519).

Corrections:

1. Fix miscellaneous occurrences of 999 in the database for invalid data (e.g. wired probe disconnected, telemetry lost), use NULL; for all reports, display as “----“(CR 683).
2. Fix ongoing “data spikes” issue that can occur by mixing of data between AS Connect panels (CR 680).
3. Control number of decimal points displayed for Temp/Hum Wireless 418 sensor and on various reports, properly apply calibration offset changes (CR 675 & 677).
4. Correct issue where an input configured with a latching alarm can stay in alarm after an alarm pending and return to normal cycle; without entering a true alarm state (TRAK 273).
5. Correct graphing Y axis scale issue for flat-lined differential pressure readings (TRAK 517).
6. Correct issue where wireless Temp/Humidity sensor might not issue email/dialer notification for Telemetry Lost event (CR 687).
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Build 1208.13 15 Feb 2015

Requires GW1208.95 and DL1208.14 or newer

Corrections:

1. Correct “data spikes” issue caused by intermingling of input data between panels (CR 644)
2. Fix issue where zero value data could appear in database during server start up (CR 641, 651 & 668)
3. Fix issue where e-mail functions could be permanently lost if SQL connection was temporarily unavailable (CR 654)
4. Fix Forced Comment when inhibiting or enabling an alarm.

Build 1208.12 10 Dec 2014

Requires GW1208.91 and DL1208.14 or newer

Corrections:

1. Correct “Green Indexing”; implement ‘Self Describing Inputs’ in order to correct the receiver from getting out of phase with software and causing a ‘lost telemetry’ alarm.
2. When input goes open/shorted the software puts a “999” into the database, this version of the software keeps the record in the database, but puts a NULL value in for the reading.
3. The show readings report will show a “----“for a “999” or a NULL.
4. The custom MKT report will skip a “999” or NULL and will not show those points as part of the report.
5. The High/Low/Avg Report will skip ‘999’ of NULLs.
6. The show daily report will skip “999” or NULL readings.
7. The graph will skip “999” or NULL readings and show a line of a different color between the points.

Build 1208.11 12 Aug 2014

Requires GW1208.91 and DL1208.14 or newer

Features Added:

1. Added two new reports; Daily Report & Daily MKT Report. These are variations of the High, Low, Avg report & the MKT Report.

Corrections:

2. The Auto Print of Graph for a 1 week time period was fixed to start and end with 12:00 AM.

Build 1208.10 18 Mar 2014

Requires Gateway FW 1208.90 and DL1208.14 or newer

Features Added:

1. Add support for WiFi logging of telemetry lost zero values.

Corrections:

2. Fix prototype template error opcode 00195.
 3. Fix for calibration tags not generating.
 4. Fix ability to add high low average report to auto print scheduler.
 5. Fix adding input to another gateway causing activity history to report GatewayID=1.
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Build 1208.9 15 Jun 2013

Requires GW1208.83 and DL1208.14 or newer

Features Added:

1. Do not show 999 (no data) on reports and graph.
2. Only allow connection to reports.mdb.
3. Add support for WiFi 4-20ma sensor and 0-5vdc sensing module.
4. Add new alarm schedule feature.

Corrections:

1. Fix issue where dialer calls out for a shorted probe.
 2. Fix wrong time stamp on comments (when modified).
 3. Fix opcode error 00115 and 00112 when adding email address to a user.
 4. Fix error when generating system summary report.
 5. Fix graphing of a zero reading input causes graph to crash.
 6. Fix database passcode readable in server configuration screen.
 7. Fix output stays locked after inhibit.
 8. Dialer bug-phone inhibit stores info on check status.
 9. Network dialer bug- only reports whole numbers.
 10. Amegaview shortcut problems with Installer.
 11. Delay and alarm settings don't take on Gateway when an active alarm is happening.
 12. Cannot non-local dialer to check an input.
 13. Fix double readings when pending alarm events are generated.
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Build 1208.8 10 Oct 2012

Requires GW1208.77 and DL1208.11 or newer

Features Added:

1. Support two outputs per input and cross activation.
2. Gateway to use slope and offset corrections ($Y = mX + b$).
3. Increased to 1000 users.

4. Ability to edit the port number the dialer uses for network dialing.

Corrections:

1. Fix MKT report setup for auto print.
2. Fix telemetry loss section in Alert/Log not accessible for wireless inputs.
3. Fix Nak-11 error caused by input number 999.
4. Fix navigation to graph from input review summary window.
5. Fix user and password encrypted for email section.
6. Modified email to display Gateway name instead of number.
7. Fix Gateway name change caused NAK01.

Build 1208.7 01 May 2012

Requires GW1208.71 and DL1208.10 or newer

Features Added:

1. Use new graphing engine for improved performance.

Corrections:

2. Fix for report review event does not display probe reviewed for readings report.
3. Fix when using the alarm handling shortcut input number defaults to 1

Build 1208.6 20 Feb 2012

Requires GW1208.65 and DL1208.09 or newer

Features Added:

1. Add hot swap a wireless receiver functionality.

Corrections:

1. Fix for email report only shows first user.
2. Fix server INI file SQL user variable deleted.
3. Fix problem when exporting to Excel 2007.
4. Fix phone code appearing in Activity Log.

Build 1208.5 23 Nov 2011

Requires GW1208.62 and DL1208.09 or newer

Features Added:

1. Allow multiple database connections.
2. Add summaries report for all system hardware and software.
3. Increased input list size limit (to 100).
4. Increased user groups limit (to 100).

Corrections:

1. Fix issue were dual green sensor with no ID would only show one input for reports.
2. Fix opcode error 00220 when using a prototype in the system hardware screen.
3. Fix issue with system auto-logs out while in move mode, the next login is still in move mode.
4. Fix high and low graph legend.
5. Fix issue where Input current value report showed whole numbers if generated immediately after login.
6. Fix duplicate logged readings in database.

Build 1208.4 31 Aug 2011

Requires GW1208.57 and DL1208.09 or newer

Features Added:

Extended phone delay to accept 3 characters.

1. Added support for special characters for phone numbers.
2. Add confirmation pass code for dialer.
3. Add option for passcode expires on first use.

Corrections:

1. Fix prototype event details to large causing Opcode00168.
2. Fix mid-range signal strength showed RED.
3. Fix system configuration window "Accept" button cut off.
4. Fix input review summary calibrate bug.
5. Fix auto print multiple input graph error.
6. Fix legacy user phone codes worked when in Active Directory.
7. Fix email timer to lock during processing.

Build 1208.3 20 May 2011

Requires GW1208.49 and DL1208.08 or newer

Features Added:

1. User reports shows total number of users.
2. Add min/max/avg report for all input types.
3. New input report gives total number of inputs.
4. Shows both High and Low values on a graph.
5. New mode to filter multiple inputs for calibration report and tags.
6. New manual method to add users for Active Directory.
7. Add to system errors event a phone line failure.
8. Lockout older client builds from connecting to Server.
9. Copy Server window to clipboard.
10. Added SSL encryption for Active Directory.
11. Multi-filter for Activity reporting.

Corrections:

1. Fix right click on floor plan tree gives an unhandled exception.
2. Fix battery update does not update input review summary window.
3. Fix prototype WiFi sensors did not update.
4. Fix wired input reconnect from a disconnect event showed normal range.
5. Fix wired input required reset when status set to input phoning.
6. Fix selecting the right side window pane to configure group shows no users.
7. Fix prototyping flat-line alarms for 418 sensors.
8. Fix input programming out of order.
9. Fix current value report unaware for green sensor type.
10. Fix user sees previous user input on reports.

Build 1208.2 01 Mar 2011

Requires GW1208.45 and DL1208.08 or newer

Features Added:

1. Green switch shows in calibration label.
2. Implement a watchdog on the Gateway and restart if any problems are detected.
3. Gateway uses ages on green sensor for open probes.

Corrections:

1. Fix Server INI file to accept UTF-8 settings.
2. Fix Active Directory so encryption was not reversed.
3. Fix reading report pre high and low reversed.
4. Fix issue where prototype accepts changes to flat line and telemetry lost.
5. Fix location of new input being dropped on floor plan.
6. Fix green receiver accepting signals from non-repeated and repeated transmitter.
7. Fix Gateway crashes when deleting a wired input.
8. Fix when adding a new wired input server does not accept command causing a NAK.
9. Fix Green sensor running on AC power.
10. Fix Dialer option 1 not reporting inputs in alarm for low level alarms.
11. Fix Graphing a month that has 31 days did not show day 31

Build 1208 19 Nov 2010

Requires GW1208.24 and DL1208.04 or newer

Features Added:

1. Add input review summary
2. Add Input Battery update on input list programming screen
3. Support Green Sensor inputs.
4. Add Input Current Value Report Export Filename.
5. Add Selective Open Probe Dial Out.
6. Add Special Activity for 'Program Change Not Accepted' (NAK).
7. Add Flat Line Alarms.
8. Add blinking for Input Pending Alarm.

9. Support WiFi Sensors

Corrections:

1. Fix Prototype could change a wireless input into a wired.
2. Fix when a wireless signal loss inhibit expires and the status is still signal loss the input would turn green.
3. Generate an Input Report Sorted by Gateways to verify all inputs reported correctly.

Build 1207.1 18 Aug 2010

Requires GW1207.23 and DL1208.03 or newer

Features Added:

1. Added High Low limit columns to MKT report.
2. Added Export button to Input Current Value report.

For release note on versions prior to Build 1207.1, refer to Amega Scientific document “Software Version history.doc”