

## MaxAir Release History

|                                 |               |
|---------------------------------|---------------|
| <b>Current Version</b>          | <b>3.01</b>   |
| <b>Current Build</b>            | <b>010124</b> |
| <b>Current Database Version</b> | <b>1.0</b>    |
| <b>Current Database Build</b>   | <b>010124</b> |

## Last Update

- Commit #497 – New Feature – by default sensor readings are written to the database ‘messages\_in’ table, this is now selectable from the Settings/Device Configuration/Sensors dialogue For sensors where there is no requirement to graph readings, this will reduce the size of the database.

## History

| Date       | Version | Build    | DB Version | DB Build | ChangeLog  |
|------------|---------|----------|------------|----------|--|
| 28/10/2020 |         |          |            |          | Ported from PiHome, initial HVAC build                                       |
| 30/10/2020 |         |          |            |          | Improvements to setup.php  |
| 07/12/2020 |         |          |            |          | Change controller.php to operate on state change                             |
| 19/12/2020 |         |          |            |          | Bug Fixes and performance improvements                                       |
| 20/12/2020 |         |          |            |          | Performance improvements, change boiler table to system_controller           |
| 24/12/2020 |         |          |            |          | Further updates, update demo databases                                       |
| 26/12/2020 |         |          |            |          | Further updates, remove redundant files                                      |
| 26/12/2020 |         |          |            |          | Update system_c.php to work with Orange Pi boards                            |
| 29/12/2020 | 0.1     | Beta 1   |            |          | Introduce code version and build numbering                                   |
| 03/01/2021 | 0.1     | Beta 1   |            |          | Further updates  |
| 04/01/2021 | 0.1     | Beta1    |            |          | Add Orange Pi Zero pin mapping   |
| 05/01/2021 | 0.1     | Beta 1   |            |          | Update chars to use sensors table  |
| 06/01/2021 | 0.1     | Beta 1   |            |          | Cosmetic changes   |
| 07/01/2021 | 0.1     | Beta 1   |            |          | Allow creation of 'Dummy' sensor nodes                                       |
| 07/01/2021 | 0.1     | Beta 1   |            |          | Allow graph placement or suppression   |
| 09/01/2021 | 0.1     | Beta 1   |            |          | Bug fixes – graph related  |
| 11/01/2021 | 0.1     | Beta 1   |            |          | Bug Fixes – graph shading  |
| 13/01/2021 | 0.1     | Beta 1   |            |          | Combine Zone and System Controller logs                                      |
| 14/01/2021 | 0.1     | Beta 1   |            |          | Add support for Orange Pi Zero Plus board                                    |
| 14/01/2021 | 0.1     | Beta 1   |            |          | Combine add-on log tables  |
| 15/01/2021 | 0.1     | Beta 1   |            |          | Bug Fix  |
| 16/01/2021 | 0.1     | Beta 1   |            |          | Bug Fix – Orange Pi board detection  |
| 20/01/2021 | 0.1     | Beta 1   |            |          | Graphing for Add_On controllers  |
| 20/01/2021 | 0.1     | Beta 1   |            |          | Change all references from 'boiler' to 'system_controller'                   |
| 21/01/2021 | 0.1     | Beta 2   |            |          | Update to setup.php to add default network_settings record                   |
| 22/01/2021 | 0.1     | Beta 2   |            |          | Only process SonOff devices if network is available                          |
| 29/01/2021 | 0.1     | Beta 2.1 |            |          | Bug Fix and update to Onetouch menu  |
| 03/02/2021 | 0.1     | Beta 2.1 |            |          | Update to livetemp   |
| 04/02/2021 | 0.1     | Beta 2.1 |            |          | Improvements to livetemp   |
| 06/02/2021 | 0.1     | Beta 2.1 |            |          | Bug Fix – onetouch   |
| 08/02/2021 | 0.1     | Beta 2.2 |            |          | Relay control managed using the messages_out queue, improvements to livetemp |

| Date       | Version | Build    | DB Version | DB Build | ChangeLog   |
|------------|---------|----------|------------|----------|---|
| 10/02/2021 | 0.1     | Beta 3   |            |          | Schedule control using Python Schedule in place of Cron   |
| 11/02/2021 | 0.1     | Beta 3.2 |            |          | Implement GUI for Job Scheduling  |
| 12/02/2021 | 0.1     | Beta 3.2 |            |          | Bug Fix – controller.php  |
| 15/02/2021 | 0.1     | Beta 4   |            |          | Change to Frost Protection to make it sensor rather than zone based   |
| 16/02/2021 | 0.1     | Beta 4   |            |          | Use node_id in relay setup and display  |
| 17/02/2021 | 0.1     | Beta 4   |            |          | Bug Fix – email address entry   |
| 17/02/2021 | 0.1     | Beta 4   |            |          | Bug Fix – email address modal   |
| 17/02/2021 | 0.1     | Beta 4   |            |          | Bug Fix – Frost Protection  |
| 18/02/2021 | 0.1     | Beta 4.2 |            |          | User Account Management   |
| 18/02/2021 | 0.1     | Beta 4.2 |            |          | Enable/Disable User Accounts  |
| 18/02/2021 | 0.1     | Beta 4.2 |            |          | Enable the disabling of a logged-on user account  |
| 19/02/2021 | 0.1     | Beta 4.3 |            |          | Add admin category to User Account Management, suppress Settings menu for non-admin users. Delete redundant files |
| 19/02/2021 | 0.1     | Beta 4.3 |            |          | Tidy up display of disabled delete buttons  |
| 20/02/2021 | 0.1     | Beta 4.3 |            |          | Bug Fix – update_db.php referencing the wrong repository  |
| 20/02/2021 | 0.1     | Beta 4.3 |            |          | Bug Fix – boostSet.php  |
| 20/02/2021 | 0.1     | Beta 4.3 |            |          | Tidy up Views   |
| 20/02/2021 | 0.1     | Beta 4.3 |            |          | Bug Fix – setup.php   |
| 20/02/2021 | 0.1     | Beta 4.3 |            |          | Re-commit of model.php  |
| 21/02/2021 | 0.1     | Beta 4.3 |            |          | Improvements to Job Scheduling  |
| 21/02/2021 | 0.1     | Beta 4.3 |            |          | Implement System Controller Max Run Time  |
| 21/02/2021 | 0.1     | Beta 4.4 |            |          | Big Fix – Add relay modal, reorder Settings Menu  |
| 22/02/2021 | 0.1     | Beta 4.4 |            |          | Tidy up of model.php  |
| 23/02/2021 | 0.1     | Beta 4.4 |            |          | Re-sync messages_out on gateway startup, HVAC bug fix for frost protection and update to test databases           |
| 23/02/2021 | 0.1     | Beta 4.4 |            |          | Update relay.php to include select/option applied to sensor.php   |
| 24/02/2021 | 0.1     | Beta 4.4 |            |          | Bug Fix – header.php  |
| 25/02/2021 | 0.1     | Beta 4.4 |            |          | Bug Fix – add/edit System Controller record   |
| 25/02/2021 | 0.1     | Beta 4.4 |            |          | Add Status Menu option to display last Job Schedule report  |
| 26/02/2021 | 0.1     | Beta 4.5 |            |          | Add option to gateway to not process networked messages_out (test mode)   |
| 27/02/2021 | 0.1     | Beta 4.5 |            |          | Add python script to update code base from GitHub repository  |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog   |
|------------|---------|--------|------------|----------|---|
| 27/02/2021 | 0.1     | Beta 5 |            |          | Rename database from 'pihome' to 'maxair'   |
| 27/02/2021 | 0.1     | Beta 5 |            |          | Home Assistant Integration – api changes  |
| 05/03/2021 | 0.1     | Beta 5 |            |          | Bug Fix – add additional zone controllers   |
| 06/03/2021 | 0.1     | Beta 5 |            |          | Enable blocking of outgoing messages (test mode)                                      |
| 07/03/2021 | 0.1     | Beta 5 |            |          | Bug Fix – onetouch.php  |
| 14/03/2021 | 0.1     | Beta 5 |            |          | Bug Fix – Raspbian compatibility for AutoHotSpot                                      |
| 17/03/2021 | 0.1     | Beta 5 |            |          | Bug Fix – work in AP mode   |
| 17/03/2021 | 0.1     | Beta 5 |            |          | Bug Fix – Echo and HomeKit installer  |
| 18/03/2021 | 0.1     | Beta 5 |            |          | Improvements in Echo and HomeKit installer  |
| 20/03/2021 | 0.1     | Beta 5 |            |          | Bug Fix – allow scheduling of zones with no attached sensor (Tasmota)                 |
| 22/03/2021 | 0.1     | Beta 5 |            |          | Bug Fix – gateway.py, enable/block outgoing messages. Bug Fix – add new scheduled job |
| 23/03/2021 | 0.1     | Beta 5 |            |          | Implement WiFi reboot for systems running NetworkManager                              |
| 24/03/2021 | 1.0     | RC1    |            |          | Move to Release Candidate 1   |
| 26/03/2021 | 1.0     | RC1    |            |          | Move AutoHotSpot to add_on directory  |
| 26/03/2021 | 1.0     | RC1    |            |          | Add nodes listing to Status menu  |
| 26/03/2021 | 1.0     | RC1    |            |          | Update to English language file   |
| 27/03/2021 | 1.0     | RC1    |            |          | Add documentation   |
| 27/03/2021 | 1.0     | RC1    |            |          | Add documentation Tasmota Lamps   |
| 27/03/2021 | 1.0     | RC1    |            |          | More documentation  |
| 28/03/2021 | 1.0     | RC1    |            |          | Update to Operating Modes documentation   |
| 28/03/2021 | 1.0     | RC1    |            |          | Documentation – add separate Boiler and HVAC mode setup guides                        |
| 29/03/2021 | 1.0     | RC1    |            |          | Documentation – Live Temperature Control, Displaying Graphs and Frost protection      |
| 30/03/2021 | 1.0     | RC1    |            |          | Update to APIs and API Documentation  |
| 31/03/2021 | 1.0     | RC1    |            |          | Bug Fix – create HTTP message and Documentation                                       |
| 31/03/2021 | 1.0     | RC1    |            |          | Zone Types Documentation  |
| 31/03/2021 | 1.0     | RC1    |            |          | Task Scheduling Documentation   |
| 01/04/2021 | 1.0     | RC1    |            |          | Add AutoHotSpot to Services Configuration menu  |
| 02/04/2021 | 1.0     | RC1    |            |          | Improve install of APIs – add script to check for and enable Apache2 mod-rewrite      |
| 08/04/2021 | 1.0     | RC1    |            |          | Enable background add-on install, plus Bug Fixes                                      |
| 08/04/2021 | 1.0     | RC1    |            |          | Big Fix – sw_install.py. Display install text when finished installing                |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 10/04/2021 | 1.0     | RC1    |            |          | Bug Fix – setup.php. New version of software install process.  |
| 11/04/2021 | 1.0     | RC1    |            |          | Documentation – Software Install   |
| 11/04/2021 | 1.0     | RC1    |            |          | Documentation – Technical description of install process. Add documentation access from the System Status menu   |
| 12/04/2021 | 1.0     | RC1    |            |          | Documentation Update – Task Scheduling. Add gpio_ds18b20 disabled task, all other tasks enabled by default by setup.php  |
| 13/04/2021 | 1.0     | RC1    |            |          | Documentation – Using Dummy Sensors to Import External Data  |
| 13/04/2021 | 1.0     | RC1    |            |          | Bug Fix – Gateway type default set to Serial if gateway table is empty   |
| 14/04/2021 | 1.0     | RC1    |            |          | Add Si7021 Humidity Sensor, with selection of sensor type in sensor.php, plus associated database changes  |
| 16/04/2021 | 1.0     | RC1    |            |          | Improvement to task scheduling to allow once daily jobs. Enable db_cleanup task. Simplification of humidity graphing. Bug Fix  |
| 16/04/2021 | 1.0     | RC1    |            |          | Update to controller.php for OFF mode to set system completely OFF (NO frost protection)   |
| 17/04/2021 | 1.0     | RC1    |            |          | Documentation – Humidity Sensors   |
| 27/04/2021 | 1.0     | RC1    |            |          | Change table temperature_sensors to sensors and controller_relays to relays. Database changes can be implemented by executing the php script 'migrate_sensors_relays.php from within the /var/www/MySQL_Database directory |
| 28/04/2021 | 1.0     | RC1    |            |          | Add Sensor Type GUI. Terminate gateway script if route to network gateway is lost  |
| 01/05/2021 | 1.0     | RC1    |            |          | Enable deletion of unused nodes  |
| 02/05/2021 | 1.0     | RC1    |            |          | Bug Fix – db.php   |
| 02/05/2021 | 1.0     | RC2    |            |          | Remove Nodes option from System Status menu as function now provides by Nodes in Node and Zone Configuration menu. Add tooltips to Sensors and Relays model for disabled entries   |
| 04/05/2021 | 1.0     | 040521 |            |          | First Release Version<br>Add hardware support for the PineH64 board. Manage messages_out queue entries from relay.php rather than zone.php   |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 06/05/2021 | 1.0     | 050521 |            |          | Enable Zone delete at the end of controller.php cycle using purge record marker (this function was previously performed by piconnect.php)  |
| 06/05/2021 | 1.0     | 050521 |            |          | Tidy up Zone Deletion. Documentation   |
| 07/05/2021 | 1.0     | 050521 |            |          | Bug Fix – update mysql_database.sql Foreign Key Constraint name on relay table   |
| 08/05/2021 | 1.0     | 080521 |            |          | Database update for zone_controllers and relays tables. Associated php modules code updates. Note: DO NOT run update_db.php, instead use migrate_zone_controllers.php to retain existing data                  |
| 11/05/2021 | 1.0     | 080521 |            |          | Bug Fix – database   |
| 11/05/2021 | 1.0     | 080521 |            |          | Add check to migrate_zone_controllers.php to abort if zone_relays table already exists   |
| 18/05/2021 | 1.0     | 170521 |            |          | Bug Fix – Boost Update deleting GIO controller messages_out records when no boost console is installed   |
| 22/05/2021 | 1.0     | 210521 |            |          | Bug Fix – Correct Login heading when AutoHotSpot is not installed. DS18B20 Documentation   |
| 25/05/2021 | 1.0     | 250521 |            |          | Add support for Rock Pi E board  |
| 08/06/2021 | 1.0     | 250521 |            |          | Update Pin_Dict.py add Orange Pi Zero2 1x13 header GPIO pins   |
| 08/06/2021 | 1.0     | 250521 |            |          | Tidy up – removing duplicates  |
| 09/06/2021 | 1.0     | 250521 |            |          | LoRa (RFM95) sketch  |
| 09/06/2021 | 1.0     | 250521 |            |          | Add documentation for using the Orange PI Zero 2 board   |
| 10/06/2021 | 1.0     | 100621 |            |          | Update db_cleanup.php.<br>Remove delete zone_graphs as already actioned in gateway.py.<br>Update system_c.pjp board detection method to use Adafruit PlatformDetect.<br>Correct latest document name spelling. |
| 10/06/2021 | 1.0     | 100621 |            |          | Documentation – Adafruit Blinka  |
| 12/06/2021 | 1.0     | 100621 |            |          | Update Orange Pi Zero 2 documentation – implementing 1-wire interface  |
| 13/06/2021 | 1.0     | 100621 |            |          | Delete document, in wrong directory  |
| 16/06/2021 | 1.0     | 100621 |            |          | Add separate AutoHotSpot function for distributions running NetworkManager   |
| 17/06/2021 | 1.0     | 170621 |            |          | Bug Fix = installer improvements and implementation of iptables for connection with internet   |
| 18/06/2021 | 1.0     | 170621 |            |          | Update README.md to include list of supported boards   |
| 28/06/2021 | 1.0     | 190621 |            |          | Update build number  |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 28/06/2021 | 1.0     | 190621 |            |          | Commenting out update title  |
| 27/07/2021 | 1.0     | 270721 |            |          | Trap error line in gateway.py<br>Tidy up Pin_Dict.py   |
| 29/07/2021 | 1.0     | 280721 |            |          | Gateway.py – if WiFi type gateway then ping router once every 3600 seconds   |
| 30/07/2021 | 1.0     | 300721 |            |          | Bug Fix – code update  |
| 04/08/2021 | 1.0     | 010821 |            |          | Move MaxAir Update to the Settings.Status meni and rename as MaxAir Versions   |
| 05/08/2021 | 1.0     | 040821 |            |          | Add Update Code from GUI   |
| 06/08/2021 | 1.0     | 060821 |            |          | Bug Fix – update_code.py for nested sub-directories  |
| 09/08/2021 | 1.0     | 070821 | 1.0        |          | Bug Fix – move_files.php<br>Initial implementation for database updates from GUI   |
| 11/08/2021 | 1.0     | 100821 | 1.0        | BASE     | Tidy up  |
| 12/08/2021 | 1.0     | 120821 | 1.0        | BASE     | Add documentation links to modal headers   |
| 14/08/2021 | 1.0     | 130821 | 1.0        | 130821   | Implement Correction Factor for sensor readings<br>Bug Fix – gpio_ds18b20.py   |
| 14/08/2021 | 1.0     | 140821 | 1.0        | 130821   | Bug Fix – apply_database_update.php and setup.php to add any database updates required over the BASE database image  |
| 14/08/2021 | 1.0     | 150821 | 1.0        | 130821   | Bug Fix – header.php not suppressing updates.txt in file list<br>GPIO relay test   |
| 16/08/2021 | 1.0     | 170821 | 1.0        | 130821   | Enable 1-wire script to return either Centigrade or Fahrenheit depending on units selected   |
| 16/08/2021 | 1.0     | 170821 | 1.0        | 170821   | Bug Fix – add column sub_type to nodes table to support humidity sensors   |
| 17/08/2021 | 1.0     | 170821 | 1.0        | 170821   | Fixes for working in Fahrenheit  |
| 18/08/2021 | 1.0     | 180821 | 1.0        | 180821   | Allow selection of GPIO Relay trigger level  |
| 19/08/2021 | 1.0     | 190821 | 1.0        | 180821   | Update to move_files.php to kill gateway.py and/or gpio_ds18b20.py and/or jobs_schedule.py if they have been updated.<br>Set live temp icon depending on Units.<br>Documentation |
| 23/08/2021 | 1.0     | 230821 | 1.0        | 180821   | Bug Fix – scheduling.php, slider max temperature Fahrenheit conversion if required   |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 26/08/2021 | 1.0     | 240821 | 1.0        | 180821   | Only allow 'admin' user to perform updates<br>Sensor and Zone documentation  |
| 27/08/2021 | 1.0     | 260821 | 1.0        | 180821   | Update foreign language files  |
| 28/08/2021 | 1.0     | 270821 | 1.0        | 270821   | Allow creation of non temperature zones  |
| 28/08/2021 | 1.0     | 270821 | 1.0        | 280821   | Update to 270821.sql to check zone type record does not already exist  |
| 30/08/2021 | 1.0     | 300821 | 1.0        | 300821   | Enable definition of units character (or special character string) for Sensor Type   |
| 30/08/2021 | 1.0     | 300821 | 1.0        | 300821   | Update Sensors documentation.<br>Check for existing column in 300821.sql<br>Bug Fix and improvements to setup.php  |
| 31/08/2021 | 1.0     | 310821 | 1.0        | 300821   | Bug Fix for initial setup when no relays are installed<br>find_my_gateway not triggering when incorrect ip is entered for wifi gateway   |
| 31/08/2021 | 1.0     | 310821 | 1.0        | 300821   | Update check_gw.php to improve reliability of counter<br>Ug Fix – zone.php when only 1 sensor is available   |
| 02/09/2021 | 1.0     | 010921 | 1.0        | 310821   | Fix for add new node<br>Fix for gateway.py to enable it to run when relays have been added but not allocated to a zone<br>Basic Fault Finding documentation<br>Improved document listing |
| 02/09/2021 | 1.0     | 020921 | 1.0        | 310821   | Documentation update.<br>Missing model.php code update<br>Change to update_code.py to fix directory privileges error introduced by using 'shutil'  |
| 03/09/2021 | 1.0     | 030921 | 1.0        | 310821   | Bug Fix – remove shutil from update_code.py completely, use rm -R to avoid permission error  |
| 04/09/2021 | 1.0     | 040921 | 1.0        | 310821   | Add sketch for Switch Sensor<br>Sensor Types documentation<br>Fix move_files.php   |
| 06/09/2021 | 1.1     | 040921 | 1.0        | 310821   | Bug Fix – change move_files.php to move_files.py   |
| 06/09/2021 | 1.1     | 060921 | 1.0        | 310821   | Fix typo in documentation  |
| 06/09/2021 | 1.1     | 060921 | 1.0        | 310821   | Add 'Switch' zone, for use with a binary sensor<br>Documentation<br>Change Arduino Sketches directory<br>Bug Fix – update_code.py  |
| 06/09/2021 | 1.1     | 060921 | 1.0        | 310821   | MySensors Gateway installation script  |



| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 07/09/2021 | 1.1     | 070921 | 1.0        | 310821   | Change to move_files.py to create any missing/new sub-directories  |
| 07/09/2021 | 1.1     | 070921 | 1.0        | 310821   | Change default password to maxair  |
| 08/09/2021 | 1.1     | 070921 | 1.0        | 310821   | Enable log pipe for MySensors Gateway  |
| 09/09/2021 | 1.1     | 070921 | 1.0        | 310821   | Script to enable 1-wire sensors  |
| 11/09/2021 | 1.1     | 110921 | 1.0        | 310821   | Switch Zone – Bug Fix<br>Move switch zone to Add-On area of home screen  |
| 13/09/2021 | 1.1     | 130921 | 1.0        | 310821   | Bug Fix – Switch Zone  |
| 13/09/2021 | 1.1     | 130921 | 1.0        | 310821   | HA Integration   |
| 13/09/2021 | 1.1     | 130921 | 1.0        | 310821   | Bug Fix – scheduling.php updated to match last table update  |
| 14/09/2021 | 1.1     | 140921 | 1.0        | 310821   | Update ReadMe  |
| 14/09/2021 | 1.1     | 140921 | 1.0        | 110921   | Move all add-on zones to right of boiler tile<br>Change Lamp icon to Switch icon<br>Separate out switching type zone processing in controller.php  |
| 16/09/2021 | 1.1     | 160921 | 1.0        | 110921   | Modify Software Install Process to display name and description  |
| 16/09/2021 | 1.1     | 160921 | 1.0        | 110921   | Stand-alone sensors  |
| 17/09/2021 | 1.1     | 170921 | 1.0        | 110921   | Bug Fix – zone index_id not updating<br>Add name/description to HomeAssistant install.sh   |
| 18/09/2021 | 1.1     | 180921 | 1.0        | 180921   | Add Sunset/Sunrise option to scheduling.php<br>Active Schedule Processing move to a function and processed using variable comparison rather than SQL time functions. Fixes a midnight rollover, where end time is on the day after start time.<br>Bug Fix – not creating database backup |
| 19/09/2021 | 1.2     | 180921 | 1.0        | 180921   | Bug Fix – Update 180921.sql  |
| 19/09/2021 | 1.2     | 180921 | 1.0        | 180921   | Bug Fix – Update relay.php, widen scope of MySensor name check   |
| 20/09/2021 | 1.2     | 200921 | 1.0        | 180921   | Fix for model.php to add default value to gateway timeout, to prevent setup record not being save to database  |
| 21/09/2021 | 1.2     | 200921 | 1.0        | 180921   | MQTT Nodes   |
| 22/09/2021 | 1.2     | 210921 | 1.0        | 180921   | Partial bug fix controller.php to follow   |
| 22/09/2021 | 1.2     | 210921 | 1.0        | 180921   | Bug Fix controller.php for MySensor relays   |
| 23/09/2021 | 1.2     | 210921 | 1.0        | 180921   | Restore gateway.py   |
| 23/09/2021 | 1.2     | 210921 | 1.0        | 180921   | Minor bug fix to controller.php for screen message using wrong variable name   |
| 23/09/2021 | 1.2     | 210921 | 1.0        | 180921   | Bug Fix  |
| 24/09/2021 | 1.2     | 210921 | 1.0        | 180921   | Stabilization Fix  |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 24/09/2021 | 1.2     | 240921 | 1.0        | 180921   | Bug Fix for scheduling.php to display status icons correctly<br>controller.php add missing variable initialization   |
| 26/09/2021 | 1.2     | 250921 | 1.0        | 250921   | Update gateway.py for MQTT Nodes   |
| 30/09/2021 | 1.2     | 250921 | 1.0        | 250921   | Use of column description instead of fix index access the cursor   |
| 03/10/2021 | 1.2     | 250921 | 1.0        | 031021   | Bug Fix – Update gateway.py to reduce wifi ping check to once ever 60 seconds else network connection could be lost and restored with no gateway reset   |
| 07/10/2021 | 1.2     | 280921 | 1.0        | 031021   | MQTT Web Interface   |
| 08/10/2021 | 1.2     | 081021 | 1.0        | 031021   | Mode Button can operate in current cyclic mode or with pop-up button menu. Choose at Mode Selection either cyclic or button  |
| 09/10/2021 | 1.2     | 091021 | 1.0        | 031021   | Bug Fix – mode.php   |
| 09/10/2021 | 1.2     | 091021 | 1.0        | 031021   | Bug Fix – model.php to set correct value for Mode selection<br>Fix for homelist.php where multiple zone controllers are attached to a single zone  |
| 10/10/2021 | 1.2     | 101021 | 1.0        | 031021   | Home Assistant Integration Update  |
| 10/10/2021 | 1.2     | 101021 | 1.0        | 031021   | Change to update_code.py in order to retain correct file permissions<br>Add ChangeLog History document   |
| 10/10/2021 | 1.2     | 101021 | 1.0        | 031021   | MQTT Nodes bug fix   |
| 12/10/2021 | 1.2     | 121021 | 1.0        | 031021   | Bug Fix – move_files.py to fix version and build update to system table.<br>Add pkill to maxair sudoers.d file (Note : added to setup .php but will require manual update to /etc/sudoers.d/maxair to add 'www-data ALL=(ALL) NOPASSWD:/bin/pkill' |
| 13/10/2021 | 1.3     | 131021 | 1.0        | 031021   | Add Support for MQTT Devices   |
| 15/10/2021 | 1.3     | 151021 | 1.0        | 031021   | Bug Fix to display Fahrenheit temperatures in Boost and Override<br>Bug Fix display Boost and Override icons for both cyclic and button modes  |
| 17/10/2021 | 1.3     | 171021 | 1.0        | 031021   | Bug Fix to model.php mode settings vale corrected for Button Control modes.  |
| 18/10/2021 | 1.3     | 181021 | 1.0        | 031021   | Update to scheduling to not display Sunrise/Sunset options if Openwaether has not updated in the last 24 hours.<br>Addition of Slovakian language file (thanks to Mr.T)<br>Added support for MQTT sensors sending data in a nested JSON format     |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog   |
|------------|---------|--------|------------|----------|---|
| 19/10/2021 | 1.3     | 191021 | 1.0        | 191021   | Enable placement of selected Onetouch buttons on either Home or Onetouch screen   |
| 20/10/2021 | 1.3     | 201021 | 1.0        | 191021   | Working in Fahrenheit Bug Fix for deadband temperature and to display cut-in and cut-out temperatures in Fahrenheit.  |
| 21/10/2021 | 1.3     | 211021 | 1.0        | 191021   | Add GUI for Button page selection. Move db-cleanup.php interval values to new table db_cleanup.   |
| 22/10/2021 | 1.3     | 221021 | 1.0        | 191021   | Bug Fix de.php error at line 176 Update to ajax.php and model.php to use language file for all labels. Update to Slovakian language file.   |
| 25/10/2021 | 1.3     | 251021 | 1.0        | 191021   | Check for messages_in record. Split System Configuration menu and add new System Maintenance menu. Add GUI for db_cleanup table Add new table 'graphs' to allow selection of graph menus. Add GUI for modification of table 'graphs'. Update ajax.php to use language files                   |
| 26/10/2021 | 1.3     | 261021 | 1.0        | 261021   | Update to notice.py to enable SMTP Port to be set, for SSL or non-encrypted operation. Update to E-Mail GUI.  |
| 27/10/2021 | 1.3     | 271021 | 1.0        | 261021   | Fix for notice.py when interval is set to 0. Fix for start_backup.py to use correct FROM, TO addresses.   |
| 28/10/2021 | 1.3     | 281021 | 1.0        | 281021   | Add battery level and threshold values to display output. Disable PiConnect option in Settings. Tidy-up system table for updates, use single field 'repository' to point to the GitHub repository. Add GUI to enable change. Change update_code.py to use repository value from system Table. |
| 28/10/2021 | 1.3     | 281021 | 1.0        | 281021   | Bug Fix model.php, not updating Alert settings. Missed update_code.py in #257 Update to request.js when using document.getElementsByTagName("input") or that it operates within a DIV rather than over the whole of model.php   |
| 30/10/2021 | 1.3     | 301021 | 1.0        | 301021   | Improvement to Repository selection.  |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog   |
|------------|---------|--------|------------|----------|---|
| 31/10/2021 | 1.3     | 311021 | 1.0        | 311021   | Tidy-up Repository selection, everything now contained in a single table 'repository' rather than using 'fork' and 'system' table.<br>Bug Fix 200921.sql.<br>Update to setup.php to enable re-install when database already exists. |
| 01/11/2021 | 1.3     | 011121 | 1.0        | 311021   | Further improvement to setup.php for when installing where no previous database copy exists.  |
| 04/11/2021 | 1.3     | 041121 | 1.0        | 311021   | Use 20% wider buttons when de or sk language files are in use.<br>Allow creation of dummy controller device (for systems which do not use a zone controller).<br>Bug Fix for Reboot and Shutdown – use Python3 rather than Python2. |
| 06/11/2021 | 1.3     | 061121 | 1.0        | 061121   | Update to allow CPU Temperature at which notice is sent.  |
| 07/11/2021 | 1.3     | 071121 | 1.0        | 061121   | Update to allow operation of gateway.py when no physical gateway exists (eg for systems with GPIO relays and 1-wire sensors).   |
| 08/11/2021 | 1.3     | 081121 | 1.0        | 061121   | Bug Fix for homelist.php, not showing correct temperature for add-on typ zones.   |
| 09/11/2021 | 1.3     | 091121 | 1.0        | 061121   | Update to sk language file<br>Bug Fix to System Controller model.php to display currently selected relay correctly in the dropdown lists for heat, cool and fan relays.<br>Documentation – Gateway Types and Setup                  |
| 11/11/2021 | 1.3     | 111121 | 1.0        | 061121   | Update ajax.php, modify Services menu to remove pihome_mqtt.service and replace with HA_integration.service.  |
| 12/11/2021 | 1.3     | 121121 | 1.0        | 061121   | Update to Slovakian language file, thank you Mr.T.<br>Bug fix gateway.py not updating last_seen for MQTT sensors.   |
| 13/11/2021 | 1.3     | 131121 | 1.0        | 061121   | Bug Fix ajax.php not selecting set Type value when in Edit MQTT Connection.   |
| 15/11/2021 | 1.3     | 151121 | 1.0        | 061121   | Add documentation for MQTT Connection Setup and Configuration.  |
| 16/11/2021 | 1.3     | 161121 | 1.0        | 161121   | Change GPIO Output type gateway to Virtual as it better reflects its use.   |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog   |
|------------|---------|--------|------------|----------|---|
| 18/11/2021 | 1.3     | 181121 | 1.0        | 161121   | For SWITCH type zone, update home screen status on button press.  |
| 21/11/2021 | 1.3     | 211121 | 1.0        | 211121   | Force gateway script to exit if MQTT disconnects.<br>setup.php will create a 'Virtual' gateway as default.<br>Bug Fixes for HVAC Mode operation.<br>Update to Boiler and HVAC Setup Guides.   |
| 24/11/2021 | 1.3     | 241121 | 1.0        | 211121   | Various documentation updates.<br>controller.php additional error trapping (no functional change).  |
| 25/11/2021 | 1.3     | 251121 | 1.0        | 211121   | Enable graphing of sensor data when in HVAC mode.   |
| 27/11/2021 | 1.4     | 271121 | 1.0        | 261121   | Introduce new zone category HVAC-M to support multi-zone HVAC systems.<br>Introduce 3 timer modes for HVAC systems, HEAT, COOL and AUTO.<br>Add hvac_relays_state to table system_controller to enable home screen status updates of system controller button.<br>Change 'look' of Modes button menu to fit extra line of text.<br>Bug Fix schedulelist.php not showing not included zones correctly. |
| 02/12/2021 | 1.4     | 021221 | 1.0        | 261121   | Update sb-admin-2.css to add space above button.  |
| 04/12/2021 | 1.4     | 041221 | 1.0        | 261121   | Enable swapping of heating and Hot Water graph positions.   |
| 08/12/2021 | 1.4     | 081221 | 1.0        | 261121   | Bug Fix HVAC Mode, cool and fan relays were not being added to the messages_out queue.  |
| 13/12/2021 | 1.4     | 131221 | 1.0        | 261121   | Do not process zone overrun until a controller_zone_logs record exists.   |
| 15/12/2021 | 1.4     | 151221 | 1.0        | 261121   | Bug Fix – Time Zone change will force a restart of gateway.py and if required gpio_ds18b20.py<br>model.php correct spelling for Timezone Europe/Kiev<br>Documentation update MQTT Setup Guide.  |
| 17/12/2021 | 1.4     | 171221 | 1.0        | 261121   | Remove remaining instances of MySQL Now() function.   |
| 19/12/2021 | 1.4     | 191221 | 1.0        | 261121   | Bug Fix - controller.php, count controller_zone_logs record count.  |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog   |
|------------|---------|--------|------------|----------|---|
| 21/12/2021 | 1.4     | 211221 | 1.0        | 261121   | Encrypted SMTP password stored in database. Encrypt MQTT connection password. Added password decryption to gateway.py( MQTT password), start_backup.py and notice.py, Added notice.py (disabled) to jobs table. |
| 22/12/2021 | 1.4     | 221221 | 1.0        | 221221   | Bug Fix for Override function, plus documentation.  |
| 23/12/2021 | 1.4     | 231221 | 1.0        | 221221   | Bug Fix for start_backup.py and notice.py, missing newline before HOST =.<br>Bug Fix for zone.php when more than 2 relays are attached.   |
| 24/12/2021 | 1.4     | 241221 | 1.0        | 221221   | Bug Fix Email and MQTT re-encrypting already encrypted passwords, when record re-saved.   |
| 01/01/2022 | 1.4     | 010122 | 1.0        | 010122   | New Feature to enable an start time offset to be applied to any selected schedule.  |
| 02/01/2022 | 1.4     | 020122 | 1.0        | 010122   | Add Start Time Offset value to Offset button, when active. Fix button title font for One Touch buttons.   |
| 03/01/2022 | 1.4     | 030122 | 1.0        | 010122   | Limit Start Time Offset to Maximum value when control temperature is less than low limit  |
| 05/01/2022 | 1.4     | 050122 | 1.0        | 010122   | Add GPIO pin mapping for Orange Pi 3 and Orange Pi 3 LTS.<br>Add Fahrenheit temperature span to Add Offset modal.   |
| 09/01/2022 | 1.4     | 090122 | 1.0        | 010122   | Bug Fix for HA_HVAC_integration.py, decrypt MQTT_PASSWORD.<br>Add documentation for Zigbee2mqtt device connection.  |
| 10/01/2022 | 1.4     | 100122 | 1.0        | 010122   | Supress Sunset/Sunrise option for Night Climate scheduling.<br>Add documentation for Night Climate Scheduling.  |
| 12/01/2022 | 1.4     | 120122 | 1.0        | 010122   | Add documentation for Orange Pi 3 LTS.<br>Change which documentation dropdowns show Night Climate Scheduling.   |
| 14/01/2022 | 1.4     | 140122 | 1.0        | 010122   | Bug Fix - HA_HVAC_integration.py, set system controller mode.   |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 15/01/2022 | 1.5     | 150122 | 1.0        | 010122   | Add new feature 'Pump Relays' for control of external pumps.<br>Update zone_view to show relays.type field.  |
| 17/01/2022 | 1.5     | 170122 | 1.0        | 010122   | Bug Fix for db.php, missing field when adding new controller.  |
| 21/01/2022 | 1.6     | 210122 | 1.0        | 210122   | New Feature – add Email notification is sensor values are above or below pre-set values.<br>Bug Fix for zone.php, issue with sp_deadband when converting to Fahrenheit.  |
| 23/01/2022 | 1.6     | 230122 | 1.0        | 230122   | Remove Weather Factoring from HVAC mode.<br>Make Weather Factoring optional for Boiler Mode.   |
| 24/01/2022 | 1.6     | 240122 | 1.0        | 240122   | Allow selection of sensor to be used for Weather Factoring.  |
| 25/01/2022 | 1.6     | 240122 | 1.0        | 240122   | Add missing notice.py for commit #304.   |
| 26/01/2022 | 1.6     | 260122 | 1.0        | 240122   | gateway.py - apply Relay Trigger setting to MQTT type relays.  |
| 27/01/2022 | 1.6     | 270122 | 1.0        | 240122   | Bug Fix – scheduling.php, fix for night climate update to operate on the correct record id.  |
| 28/01/2022 | 1.6     | 280122 | 1.0        | 240122   | Bug Fix – Night Climate tile Status indicator not showing correct colour.  |
| 29/01/2022 | 1.6     | 290122 | 1.0        | 240122   | Maximum Operating Time and Hysteresis Time removed from Zone GUI. Note disabled in the GUI, database fields will be populated with default values, in case it is decided to reimplement at some future date.   |
| 30/01/2022 | 1.6     | 300122 | 1.0        | 240122   | Bug Fix – getTemperature.php not using the correct node_id when accessing messages_in table.<br>Move legacy database utility files into a new legacy folder within MySQL_Database folder.<br>Bug Fix – gateway.py, only try and retrieve trigger levels for relay nodes. |
| 31/01/2022 | 1.6     | 310122 | 1.0        | 240122   | Bug Fix –schedulelist.php, sunset/sunset offsets not being retrieved from the database.  |
| 01/02/2022 | 1.6     | 010222 | 1.0        | 240122   | Bug Fix – sw_install.py and HomeAssistant/install.sh   |
| 02/02/2022 | 1.6     | 020222 | 1.0        | 240122   | Add documentation for Home Assistant Integration.  |
| 03/02/2022 | 1.6     | 030222 | 1.0        | 240122   | Bug Fix for sensor.php, not updating correctly.  |

| Date       | Version | Build    | DB Version | DB Build | ChangeLog  |
|------------|---------|----------|------------|----------|--|
| 04/02/2022 | 1.6     | 040222   | 1.0        | 240122   | Update to gateway.py, detect_chip_board.py and system_c.php to enable them to work with boards that do not support Adafruit Blinka for GPIO functionality. Note:- GPIO is disabled for these boards.   |
| 06/02/2022 | 1.6     | 060222   | 1.0        | 240122   | Bug Fix – zone.php - enable editing of Boost Console Id<br>Bug Fix – zone.php – only allow selection of unallocated sensors.<br>Bug Fix – zone.php – fix displaying of unwanted fields<br>Bug Fix – homekit/config_json.py – reflect new database structure. |
| 07/02/2022 | 1.6     | 070222   | 1.0        | 240122   | Update to the Homekit add-on to remove the update function from within controller.php and replace it with a python script, which will be installed as a service as part of the overall Homebridge installation.  |
| 08/02/2022 | 1.6     | 080222   | 1.0        | 240122   | Bug Fix – zone.php, missing sensor when in edit mode.  |
| 09/02/2022 | 1.6     | 090222   | 1.0        | 240122   | Update to HomeKit add-on and Home Assistant Integration documentation.   |
| 09/02/2022 | 1.6     | 090222_2 | 1.0        | 240122   | Update to HomeKit add-on.<br>New api, thermostatscript.php to support Homebridge-http-webhooks thermostat.<br>Home Assistant Integration documentation.  |
| 10/02/2022 | 1.6     | 100222   | 1.0        | 240122   | Update to webhooks.py to handle outlets type and to reflect MaxAir Boost and Switch Zone status back to Homebridge screen.   |
| 11/02/2022 | 1.6     | 110222   | 1.0        | 240122   | Bug Fix – notice.py, not clearing messages when notice_interval = 0  |
| 11/02/2022 | 1.6     | 110222   | 1.0        | 110222   | Away Scheduling, create a single schedule which will be executed when 'Away' is enabled.   |
| 11/02/2022 | 1.6     | 110222+2 | 1.0        | 110222_2 | Bug Fix – controller.php to fix issues with logs, introduced in #325<br>Bug Fix – 110222.sql re-order queries  |



| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 12/02/2022 | 1.6     | 120222 | 1.0        | 110222_2 | Update to Away function so that it will operate irrespective of current Mode setting.<br>Change to controller.php to use colour indication is schedule name is running or idle.<br>Add documentation to describe Away Function.<br>Add document to describe Zone Mode numbering. |
| 13/02/2022 | 1.6     | 130222 | 1.0        | 110222_2 | Disable Away function if in OFF mode.<br>Use Away icon in zone tile if an Away schedule is running.  |
| 15/02/2022 | 1.6     | 150222 | 1.0        | 110222_2 | Bug Fix – scheduling.php, coop option not displayed when working in menu type mode selection.<br>Update HA Integration documentation.  |
| 16/02/2022 | 1.6     | 160222 | 1.0        | 110222_2 | Add coop indicator to hone screen zone modal.<br>Update to controller.php for switch zones, enable override while a schedule is running.<br>Add zone name to controller.php display and re-arrange fields in zone displays.  |
| 16/02/2022 | 1.6     | 160222 | 1.0        | 110222_2 | Updates to Switch type zone control using Amazon Echo and Home screen button to toggle state.  |
| 17/02/2022 | 1.6     | 170222 | 1.0        | 110222_2 | Further updates to Switch type zone control using Amazon Echo and Home screen button to toggle state.  |
| 18/02/2022 | 1.6     | 180222 | 1.0        | 110222_2 | Performance improvement to Home screen load time by replacing schedule_daily_time_zone_view with a query.  |
| 20/02/2022 | 1.6     | 200222 | 1.0        | 110222_2 | Bug Fix 1 db.php missing field in database update for system_controller table.<br>Change to controller.php to allow changes to HTTP Tasmota switch state to be reflected in GUI.   |
| 22/02/2022 | 1.6     | 220222 | 1.0        | 110222_2 | Performance updates to check schedule routine.<br>Removal of screen print functions from controller.php to improve performance.<br>Updates to Away Scheduling.   |

| Date       | Version | Build    | DB Version | DB Build | ChangeLog  |
|------------|---------|----------|------------|----------|--|
| 23/02/2022 | 1.6     | 220222   | 1.0        | 230222   | Update to schedule_daily_time_zone_view to improve performance.  |
| 24/02/2022 | 1.6     | 240222   | 1.0        | 240222   | Bug Fix - schedulelist.php to display sunrise/sunset icon in schedule list, if enabled.<br>Performance improvement opening settingslist.php.   |
| 25/02/2022 | 1.6     | 250222   | 1.0        | 240222   | Bug Fix – scheduling.php – not getting correct time zone status when editing.<br>Fix for gateway.py when HTTP relay cannot be reached by IP address  |
| 28/02/2022 | 1.6     | 280222   | 1.0        | 240222   | Bug Fix – Home screen displaying the wrong Away status icon when Away enabled, with no associated Away schedule.   |
| 03/03/2022 | 1.6     | 030322   | 1.0        | 240222   | Update to RFM96 Sketches to fix issue with IRQ pin definition when using MySensors ver 2.3.2 library.  |
| 06/03/2022 | 1.6     | 060322   | 1.0        | 240222   | Update to the Sensors option in the System Status menu. The last date time value is now a button, which when clicked on will display the timestamps for all sensors attached to the node over the last 24 hours.               |
| 07/03/2022 | 1.6     | 070322   | 1.0        | 240222   | Update to the Sensors option in the System Status menu to add average count per sensor per hour.   |
| 08/03/2022 | 1.6     | 080322   | 1.0        | 080322   | Update to Boost modal to allow deletion of zone boost setting when there is more than one setting present.   |
| 09/03/2022 | 1.6     | 090322   | 1.0        | 080322   | Bug Fix – controller on times, for home screen and usage graphs.   |
| 10/03/2022 | 1.6     | 100322   | 1.0        | 080322   | Add gateway sketch for the wireless-tag WT32_ETH01 combined ESP32 WiFi and Ethernet board. Sketch is configurable for NRF24L01, RFM69 and RFM95 radio modules. Implements WiFiManager and supports Ethernet only working mode. |
| 10/03/2022 | 1.6     | 100322_2 | 1.0        | 080322   | Modification to gateway sketch for the wireless-tag WT32_ETH01 to add option to disable the ethernet interface using a jumper.   |
| 11/03/2022 | 1.6     | 110322   | 1.0        | 080322   | Simplification of the gateway sketch for the wireless-tag WT32_ETH01   |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog   |
|------------|---------|--------|------------|----------|---|
| 12/03/2022 | 1.6     | 120322 | 1.0        | 080322   | Simplification of the gateway sketch for the wireless-tag WT32_ETH01 by redefining SPi pins within the sketch and starting the SPi interface before the MySensors radio.  |
| 18/03/2022 | 1.61    | 180322 | 1.0        | 080322   | Bug Fix -<br>MaxAir_GatewayW5100_v100.ino change MY_RADIO_NRF24 to MY_RADIO_RF24.<br>Bug Fix gateway.py, change if is syntax at line 517.<br>Update to update_code.py to fix issue when creating a new directory which contains no files but only sub-directories.  |
| 29/03/2022 | 1.7     | 290322 | 1.0        | 290322   | Revised Settings Menu option, using a dropdown selection list, to improve performance.<br>Update – All documentation referencing the Settings Menu.<br>Bug Fix – updating Boost Settings.   |
| 30/03/2022 | 1.7     | 300322 | 1.0        | 290322   | Improvement in graph load time.   |
| 31/03/2022 | 1.7     | 310322 | 1.0        | 290322   | Further improvement in graph load times.<br>Add waiting message when loading graphs.  |
| 01/04/2022 | 1.7     | 010422 | 1.0        | 290322   | Bug Fix – Daily usage graphs set x-axis to local time.  |
| 08/04/2022 | 1.80    | 080422 | 1.0        | 030422   | New Feature – Display graphs when Zone or standalone sensor tile is clicked.<br>New Feature - A revised Home screen, which no longer auto-refreshes. The data and indicator fields on the screen are updated individually once every second. The result is that now any pop-up windows that are opened, will remain displayed until closed by the user.<br>Update to Settings/Sensors Status to display additional information.<br>WT32-ETH01 Gateway sketch – swap functions on pins 36 and 39 to match PCB configuration.<br>Enable status indicators update on OneTouch page without page refresh. |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog   |
|------------|---------|--------|------------|----------|---|
| 09/04/2022 | 1.80    | 090422 | 1.0        | 030422   | Weather data and Running Time not updating on page footer.<br>Update to the Setting/System Status/Sensors popup to update the temperature values in real time.  |
| 10/04/2022 | 1.80    | 100422 | 1.0        | 030422   | Bug Fix – Standalone sensors displayed before System Controller not updating.<br>Update to make popup modal windows scrollable.<br>Bug Fix – OneTouch Offset button not working.  |
| 11/04/2022 | 1.80    | 110422 | 1.0        | 030422   | Bug Fix – Controller 'last_seen' datetime not updating on controller state change.  |
| 12/04/2022 | 1.80    | 120422 | 1.0        | 120422   | Delay opening of Plotly graphs until modal window opens, to improve sizing on mobile devices.<br>Update to the Home and OneTouch page refresh routines to allow the refresh period to be varied. A new Settings/System Maintenance/Page Refresh option has been added to allow the refresh period to be set between 1 and 15 seconds.<br>Update to the database table 'system' to add a new field 'page_refresh'.   |
| 13/04/2022 | 1.80    | 130422 | 1.0        | 120422   | Home page refresh 'hanging' when trying to update fields where no data had changed.   |
| 15/04/2022 | 1.80    | 150422 | 1.0        | 150422   | All page refresh removed and replaced with page data updates at a configurable refresh rate.<br>All Ajax data refresh PHP modules combined in a new PHP module 'ajax_fetch_data.php'.<br>Zone popup disable schedule feature updated to enable toggling of the schedule enabled/disabled state.<br>New column 'disabled' added to table 'schedule_daily_time_zone' to record enabled/disabled state.<br>Bug Fix – schedule listing temperature circle not showing correct data. |
| 16/04/2022 | 1.80    | 160422 | 1.0        | 150422   | Bug Fix – Correct date/time positioning on schedule list page.<br>Change schedule disabled colour to blue in zone popup.  |

| Date       | Version | Build    | DB Version | DB Build | ChangeLog   |
|------------|---------|----------|------------|----------|---|
| 17/04/2022 | 1.80    | 170422   | 1.0        | 150422   | schedule list not displaying correctly and initial screen being loaded twice. Add disabled 'D' marker to schedule list where the schedule is either not enabled or all linked schedules have been disabled from the associated zone popups              |
| 19/04/2022 | 1.80    | 190422   | 1.0        | 150422   | Bug Fix – schedule list not displaying correctly, re-apply #367 fix removed in error #368.<br>Update to gateway.py for MQTT sensors, on update message_in queue on data change or every hour if no change.<br>Update login.py banner script to Python3. |
| 20/04/2022 | 1.80    | 200422   | 1.0        | 200422   | Update to allow all sensor types to be configured to report either continuously or only on data change, with a variable timeout.  |
| 21/04/2022 | 1.80    | 210422   | 1.0        | 200422   | Update to sensor reading timeout function, to use the last recorded sensor value as the current data value. Documentation update.   |
| 21/04/2022 | 1.80    | 210422_1 | 1.0        | 200422   | Bug Fix gpio_ds18b20.py. Popup graphs display either Temperature or Humidity on y axis.   |
| 23/04/2022 | 1.80    | 220423   | 1.0        | 230422   | Reimplement on-change feature for GPIO sensors.<br>Update – add option to set the sensor resolution.  |
| 23/04/2022 | 1.80    | 230422_1 | 1.0        | 230422   | Cosmetic change to the Sensors GUI to hide field where applicable.  |
| 26/04/2022 | 1.80    | 260422   | 1.0        | 260422   | Add an option to make individual user sessions persistent, rather than as currently they expire after 24 minutes of inactivity, default is non-persistent. Bug Fix to scheduling.php  |
| 28/04/2022 | 1.80    | 280422   | 1.0        | 260422   | Update to the WT32-ETH01 Gateway sketch for when using NRF24L01 radio modules and correction to LED pin assignments.  |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 02/05/2022 | 1.80    | 020522 | 1.0        | 260422   | Bug Fix index.php to fix long standing error where trying to write lastlogin data to wrong table.<br>Move WT32-ETH01 gateway sketch to nRF24L01 and RFM96 folders, with correct radio selection set.<br>Update to refresh_session.php, to rewrite cookies.<br>Bug Fix user_accounts.php - not saving enabled state when editing logged-on account. |
| 03/05/2022 | 1.80    | 030522 | 1.0        | 260422   | Replace header logged on user name with 'Session Timed Out' when a non-persistent session terminates.  |
| 04/05/2022 | 1.80    | 040522 | 1.0        | 040522   | Further enhancement of the persistent session feature.   |
| 05/05/2022 | 1.80    | 050522 | 1.0        | 040522   | Block user from applying code updates before applying any pending database updates.  |
| 12/05/2022 | 1.80    | 120522 | 1.0        | 040522   | Improvement to disable/enable schedule within zone popup – update indicator and keep popup open until 'Close' button clicked.  |
| 16/05/2022 | 1.80    | 160522 | 1.0        | 160522   | Bug Fix - Weather not showing temperature on header.<br>Add flexibility to Repository selection data.  |
| 17/05/2022 | 1.80    | 160522 | 1.0        | 170522   | Database change for future possible update   |
| 02/06/2022 | 1.80    | 020622 | 1.0        | 170522   | Bug Fix – gateway.py not saving MQTT type humidity sensor values to zone_graphs table  |
| 09/06/2022 | 2.02    | 090622 | 1.0        | 060622   | Major update from version 1.81 to version 2.02. Move to Bootstrap 5.2.1beta. Introduction of colour themes.  |
| 10/06/2022 | 2.02    | 100622 | 1.0        | 070622   | Update Backup documentation  |
| 11/06/2022 | 2.02    | 110622 | 1.0        | 110622   | Add Burnt Orange Theme<br>Add documentation for Themes<br>Add documentation of Status Indicator Icon descriptions<br>Change colour of Hysteresis status indicator to make bolder.  |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog   |
|------------|---------|--------|------------|----------|---|
| 12/06/2022 | 2.02    | 120622 | 1.0        | 110622   | Add missing logo for the Burnt Orange theme.<br>Remove reference to Ionicons.<br>Manual Backup will use Auto Backup destination if set or else will use /var/www/MySQL_Database/database_backups  |
| 13/06/2022 | 2.02    | 130622 | 1.0        | 110622   | Bug Fix - start_backup.py to allow backups to networked folders.  |
| 14/06/2022 | 2.02    | 140622 | 1.0        | 110622   | Bug Fix - start_backup.py resolve folder permission issue   |
| 15/06/2022 | 2.02    | 150622 | 1.0        | 110622   | Bug Fix – boostlist.php, header colour  |
| 16/06/2022 | 2.02    | 160622 | 1.0        | 160622   | Rename zone_graphs table to sensor_graphs.<br>Delete all sensor_graphs table records older than 24 hours.   |
| 21/06/2022 | 2.02    | 210622 | 1.0        | 160622   | Implement Database Restore menu option.   |
| 22/06/2022 | 2.02    | 220622 | 1.0        | 160622   | Sort Documentation by Document Title.   |
| 24/06/2022 | 2.02    | 240622 | 1.0        | 160622   | Add Sketch<br>/nRF24L01/MaxAir_Temperature_Sensor_v035/MaxAir_Temperature_Sensor_v035.ino.  |
| 26/06/2022 | 2.02    | 260622 | 1.0        | 160622   | Delete Arduino_Sketches/nRF24L01/Pi Home_Temperature_Sensor_v034<br>Bug Fix – setup.php, creation of initial version of the 'system' table.   |
| 27/06/2022 | 2.02    | 270622 | 1.0        | 270622   | Bug Fix – sensor_limits.php, set theme colours correctly.<br>Bug Fix – reset 'repository' table to contain valid repository pointers.   |
| 28/06/2022 | 2.02    | 280622 | 1.0        | 280622   | Bug Fix – chart_batteryusage.php, mask NULL bat_level values.<br>Update to Auto Backup process to store last backup datetime in table 'auto_backup'. This change to ensure that a backup is not triggered by a system restart.  |
| 29/06/2022 | 2.02    | 290622 | 1.0        | 280622   | Bug Fix – chart_addonusage.php, display correctly when node has multiple child ids, delete orphaned 'add_on_logs' start records before building graph data.<br>Bug Fix – scheduling.php, set 'disabled' field in table 'schedule_daily_time_zone' table to be 0 by default. |

| Date       | Version | Build    | DB Version | DB Build | ChangeLog   |
|------------|---------|----------|------------|----------|---|
| 30/06/2022 | 2.02    | 300622   | 1.0        | 280622   | Update – gateway.py – only update 'nodes' table 'min_val' on first time see node, this will allow changes from GUI to persist.<br>Bug Fix – model.php, Zone Modal text positioning.   |
| 03/07/2022 | 2.02    | 030722   | 1.0        | 280622   | Bug Fix – mqtt_device.php, submit error when adding or editing 'MQTT Sensor' type devices.<br>Bug Fix – change 'Senor' to 'Sensor' in all language files.   |
| 04/07/2022 | 2.02    | 040722   | 1.0        | 280622   | Updated Bug Fix – mqtt_device.php, submit error when adding or editing 'MQTT Sensor' type devices.  |
| 11/07/2022 | 2.02    | 110722   | 1.0        | 280622   | Bug Fix – Update any relay linked entries in the messages_out table when the relay node or child ids are edited   |
| 11/07/2022 | 2.02    | 110722_2 | 1.0        | 280622   | Add documentation to describe message queue usage.  |
| 15/07/2022 | 2.03    | 150722_2 | 1.0        | 150722   | New Feature – add negative sensor control slope zone type, uses a sensor and relay/s to control zone based on a negative sensor gradient.<br>Update Zone Type categories, add new category 'Controller, Binary Sensor and NO System Control'.<br>Update Zone Type categories, re-word the two existing 'Controller, Sensor and NO System Control' categories. |
| 16/07/2022 | 2.03    | 160722_2 | 1.0        | 150722   | Bug Fix – Switch type zones not displaying status correctly.<br>Update Zone Type documentation  |
| 20/07/2022 | 2.03    | 200722   | 1.0        | 200722   | Update – Zone GUI allows selection of Sensor Type.<br>Update – Remove Zone Category 6, replaced by using Category 1 or 5 and a Binary Sensor.<br>Update – Modify controller.php, homelist.php and ajax_fetch_data.php to use zone category 1 or 5, with Binary sensor type, in place of Category 6.   |
| 20/07/2022 | 2.03    | 200722_2 | 1.0        | 200722   | BUG FIX – controller.php extra ')' in if statement at line 1387.  |
| 21/07/2022 | 2.03    | 210722   | 1.0        | 200722   | BUG FIX – controller.php missing ';' terminator at line 398.  |



| Date       | Version | Build  | DB Version | DB Build | ChangeLog   |
|------------|---------|--------|------------|----------|---|
| 22/07/2022 | 2.03    | 220722 | 1.0        | 220722   | Update to http_messages table processing to use 'zone_id' rather than 'zone_name', to improve flexibility.  |
| 23/07/2022 | 2.03    | 230722 | 1.0        | 230722   | Further update to http_messages table processing to remove redundant column 'zone_name'.<br>Bug Fix – zone.php, set footer colour correctly.  |
| 26/07/2022 | 2.04    | 260722 | 1.0        | 260722   | New Feature – Implementation of 'Message Sensors'.  |
| 05/08/2022 | 2.04    | 050822 | 1.0        | 260722   | Bug Fix – add missing folder '/var/www/cron/logs'.<br>Bug Fix – 1-wire sensor documentation.  |
| 07/08/2022 | 2.05    | 070822 | 1.0        | 070822   | New Feature – allow creation of sensors to capture data from an eBUS compliant interfaced boiler  |
| 29/08/2022 | 2.05    | 290822 | 1.0        | 070822   | Bug Fix – gateway.py.<br>Update eBUS sensor documentation   |
| 06/09/2022 | 2.05    | 060922 | 1.0        | 070822   | Update – Create and destroy relay messages_out entries with relay addition or deletion (rather than create with zone creation).   |
| 08/09/2022 | 2.05    | 080922 | 1.0        | 070822   | Bug Fix – settings.php, remove redundant read of table 'frost_protection' (table no longer exists).<br>Bug Fix – controller.php, add timeout when reading Tasmota switch manual button using HTTP.  |
| 09/09/2022 | 2.05    | 090922 | 1.0        | 070822   | compatibility changes for PHP version 8.x<br>Update – add pin mapping for OrangePi 4 LTS  |
| 13/09/2022 | 2.05    | 130922 | 1.0        | 070822   | Bug Fix – homelist.php and cron/controller.php – display target temperature correctly for category 1 type zones<br>Update – install symlink if required for boards running Orange Pi OS to enable Adafruit Platform Detect to identify the board. |
| 22/09/2022 | 2.05    | 220922 | 1.0        | 070822   | Bug Fix – model.php, zone_controller table referenced instead of zone_relays.   |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 23/09/2022 | 2.05    | 230922 | 1.0        | 230922   | Update – Add new field 'n_id' to messages_out table (future implementation of Gateway Relay Controller).<br>Update – relay.php to reflect database change.   |
| 27/09/2022 | 2.05    | 270922 | 1.0        | 230922   | Bug Fix – settingslist.php to capture the last CPU temperature reading correctly.<br>Bug Fix – zone.php, not correctly maintain the page format when additional controller relays added.<br>Bug Fix – js/request.js, not returning correctly when zones deleted.<br>Update – gateway.py, apply trigger setting to MySensors relays when the sketch version is greater the 0.34<br>Update – gateway.py, in-coming message check for node-id changed from check for 0 (interger) to "0" (string) to match payload variable type.<br>Update – gateway.py, relay updates use new messages_out field 'n_id' in place of 'node_id' to cope with instances where two node table entries may have the same node_id (GPIO controller and Gateway controller). |
| 02/10/2022 | 2.05    | 021022 | 1.0        | 230922   | Bug Fix – zone.php, not capturing sensor_type_id in Edit mode.   |
| 03/10/2022 | 2.05    | 031022 | 1.0        | 230922   | Update – controller.php, functions.php to allow the controller script to execute with minimal zone settings.   |
| 08/10/2022 | 2.05    | 081022 | 1.0        | 230922   | Bug Fix – functions.php – schedule start and end times require an offset for both timezone and daylight-saving time.<br>Bug Fix – mode.php and homelist.php, when working in HVAC mode with button mode selected the lower right legend not being displayed correctly.   |
| 09/10/2022 | 2.05    | 091022 | 1.0        | 230922   | Bug Fix – controller.php, move initialization of \$system_controller array to outside of the main control loop.  |
| 10/10/2022 | 2.05    | 101022 | 1.0        | 230922   | Bug Fix – mode.php, missing set variable \$system_controller_id = \$row['id'];.  |

| Date       | Version | Build    | DB Version | DB Build | ChangeLog  |
|------------|---------|----------|------------|----------|--|
| 11/10/2022 | 2.06    | 111022   | 1.0        | 141022   | Update – New option to allow Live Temperature control to be attached to any selected zone.<br>Update – New option for Immersion and Cooling type zones to allow them to remain active and track to the zone's set default temperature when no schedule is active, until the next schedule becomes active..<br>Bug Fix – When the Mode is set to OFF all schedules and manual functions will be inoperative.<br>Update – Remove table ebus_messages, replaced by sensor_messages. |
| 18/10/2022 | 2.06    | 181022   | 1.0        | 141022   | Bug Fix – gateway.py, when re-sync relays attached to the new combined gateway/controller, trigger not being applied.<br>Update – WT32-ETH01 Gateway/Controller sketch.  |
| 20/10/2022 | 2.06    | 201022   | 1.0        | 201022   | Update – Software Update processing – if a scheduler restart is required this is now handled within the script 'sw_install.py' rather than 'install.sh'.   |
| 21/10/2022 | 2.06    | 211022   | 1.0        | 201022   | Enhancement – Optional Add-On software install of system image creation tools. New menu option to schedule creation of a system backup image file to a NAS drive.<br>Bug Fix – sw_install.py use of space instead of tab.<br>Bug Fix – model.php, initialise variable for software install status flag.  |
| 22/10/2022 | 2.06    | 221022   | 1.0        | 201022   | Update – image-backup utility, use wildcard when checking root volume type for Armbian OS compatibility.<br>Bug Fix – restore ebus_messages table.   |
| 22/10/2022 | 2.06    | 221022_2 | 1.0        | 201022   | Only allow installation of Image Tools on systems running Raspian.   |
| 23/10/2022 | 2.06    | 231022   | 1.0        | 201022   | Bug Fix – check_gw.php trying to retrieve process info when no process running.  |
| 26/10/2022 | 2.06    | 261022   | 1.0        | 201022   | Bug Fix – zone.php, not updating the zone_id field in the messages_out table.  |

| Date       | Version | Build    | DB Version | DB Build | ChangeLog  |
|------------|---------|----------|------------|----------|--|
| 02/11/2022 | 2.06    | 021122   | 1.0        | 201022   | Bug Fix – HA_HVAC_integration.py, when none RPi boards do not process under voltage.<br>Bug Fix – Home Assistant install requirements file requirements.txt.<br>Documentation – ‘Setup Guide Home Assistant Ingegration’, add case where Mosquitto broker is already installed.<br>Documentation – update ReadMe for WT32-ETH01 Gateway version 2. |
| 06/11/2022 | 2.06    | 061122   | 1.0        | 061122   | Bug Fix – In some instances the message_out table zone_id field is not populated correctly, this database update refreshes the data.   |
| 12/11/2022 | 2.06    | 121122   | 1.0        | 061122   | bug: fix launching find_mygw instead of gateway  |
| 27/11/2022 | 2.06    | 271122   | 1.0        | 061122   | Bug Fix - gpio_ds18b20.py, only process sensors which already have a database entry, code aligned with gateway.py.   |
| 27/11/2022 | 2.06    | 271122_2 | 1.0        | 061122   | Update – holiday.php and holidayslist.php to apply theme colours correctly.  |
| 01/12/2022 | 2.06    | 011222   | 1.0        | 061122   | Update – Add documentation for Holidays function.<br>Bug Fix - relay.php and Arduino sketch for Gateway Controller, use distinct type id of 25.  |
| 07/12/2022 | 2.06    | 071222   | 1.0        | 061122   | Update – sketch MaxAir_GatewayWT32_ETH01_v002.in o.<br>Bug Fix - zone.php maintain default value not being captured or displayed correctly.  |
| 10/12/2022 | 2.06    | 101222   | 1.0        | 101222   | Update – add new table ‘relay_logs’ to capture state changes sent to the relays.<br>Update – gateway.py populate table ‘relay_logs’ whenever a state change is applied to a relay.<br>Update – db_cleanup.php clear new table ‘relay_logs’ after a set interval.   |
| 13/12/2022 | 2.06    | 131222   | 1.0        | 131222   | Update – new option in Settings/Device Configuration/Test Relays, allows the state of any ‘created’ relay to be toggled OFF/ON (System Controller operation is suspended whilst dialogue is active).   |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 19/12/2022 | 2.06    | 191222 | 1.0        | 131222   | Update – ebus.py, implement 'Mode', 'Timeout', 'Resolution' and 'Correction Factor' for EBus type sensors.<br>Update – controller.php, flag any zones that have missing sensors or relays and continue processing.<br>Bug Fix – db.php, zone_delete function using wrong table name. |
| 22/12/2022 | 2.06    | 221222 | 1.0        | 211222   | Update – move_files.py, force restart of ebus.py if file updated.<br>Bug Fix – change table 'system_control;er', field 'max_running_time' from type TINYINT to UNSIGNED TINYINT to match GUI maximum value of 180.   |
| 28/12/2022 | 2.06    | 281222 | 1.0        | 211222   | Update – gateway.py improved error trapping.   |
| 29/12/2022 | 2.06    | 291222 | 1.0        | 211222   | Bug Fix – db.php – processing add_on switch zone relays - \$category variable not set.<br>Bug Fix – missing sub-mode 8 added for max_running_time exceeded.  |
| 31/12/2022 | 2.06    | 311222 | 1.0        | 211222   | Update – Enable STATE topic generation for MQTT Controller devices.  |
| 03/01/2023 | 2.06    | 030123 | 1.0        | 211222   | Update - Enable STATE topic generation for MQTT Controller devices, where multiple relays are attached to the same MQTT controller.  |
| 11/01/2023 | 2.06    | 110123 | 1.0        | 211222   | Bug Fix – gpio_ds18b20.py – remove test code left in place.  |
| 21/01/2023 | 2.07    | 210123 | 1.0        | 210123   | New Feature – allow a delay time in seconds to be applied to any relay ON command.   |
| 23/01/2023 | 2.07    | 230123 | 1.0        | 210123   | Update – Relays documentation for Lag Time.<br>Update – gateway.py – suppress outgoing messages when relays are waiting for lag delay to expire.   |
| 24/01/2023 | 2.07    | 240123 | 1.0        | 210123   | Bug Fix – gateway.py, relay initialization now used any lag delay settings.  |
| 25/01/2023 | 2.07    | 250123 | 1.0        | 210123   | Update/Bug Fix – gateway.py, process all relays where 'sent'=0 in a single pass, rather than 1 relay per pass.   |
| 27/01/2023 | 2.07    | 270123 | 1.0        | 210123   | Update – Pin_Dict.py, add GPIO support for OrangePi 5.   |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 30/01/2023 | 2.07    | 300123 | 1.0        | 210123   | Update – PHP script 'apply_database_updates.php' added to 'MySQL_Database' directory, used to apply missing database updates.<br>Update – example databases – gateway changed from serial to virtual.                              |
| 17/02/2023 | 2.07    | 170223 | 1.0        | 210123   | Update – gateway.py to apply sensor correction factor for MQTT sensors.<br>Update – check_gw.php cosmetic change to display text.<br>Update – add new repository for Version 3.  |
| 23/02/2023 | 2.07    | 230223 | 1.0        | 210123   | Bug Fix – onetouch.php – footer running time query using wrong table name and requires setting of system_controller_id variable.   |
| 25/02/2023 | 2.07    | 250223 | 1.0        | 210123   | Update - onetouch.php to display information message if LiveTemp is selected for a zone which is not in an active state.   |
| 26/02/2023 | 2.07    | 260223 | 1.0        | 210123   | Update – homelist.php, db.php and request.js, improvement when clicking on an add-on zone tile to toggle the zone ON/OFF state.  |
| 28/02/2023 | 2.07    | 280223 | 1.0        | 210123   | Bug Fix – db.php Add New Job not closing dialogue window.  |
| 01/03/2023 | 2.07    | 010323 | 1.0        | 010323   | Update – add new column 'status-prev' to table 'zone_current_state'. Used to improve operation of 'switch' type zones when state is changed by clicking on the zone tile. Associated changes to 'controller.php' and 'gateway.py'. |
| 05/03/2023 | 2.07    | 050323 | 1.0        | 010323   | Bug Fix – controller.php, syntax error in query definition for "INSERT INTO zone_current_state .....   |
| 09/03/2023 | 2.07    | 090323 | 1.0        | 090323   | Update – controller.php, db.php, model.php and request.js to improve operation of the 'Test Relays feature.<br>Update – Add documentation for combined Gateway/Controller, with Relay Adapter board.                               |
| 10/03/2023 | 2.07    | 100323 | 1.0        | 090323   | Update – gateway.py, bypass any set relay lag time when using the 'Test Relays' option.  |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog   |
|------------|---------|--------|------------|----------|---|
| 24/03/2023 | 3.00    | 240323 | 1.0        | 230323   | <p>Update – Implement Version 3.00. Main change is to replace 'controller.php' with 'controller.py'. 'controller.py' is a continuously running script rather than a scheduled task, this improves overall responsiveness of the GUI. A new watchdog job 'check_sc.php' is implemented and added to the job scheduler to restart the new 'controller.py' script.</p> <p>Update – changes to scheduling so that the current schedule state and its 'id' are stored in the 'zone_current_state' table, where updates are implemented in the 'controller.py' script, function 'get_schedule_status' in 'st_inc/functions.php' is no longer used and is replaced by a function within script 'ccontroller.py'.</p> <p>Update –sensor current values are stored on update within 2 new fields in table 'sensors', the Home screen GUI retrieves these values, rather than reading the 'messages_in' table.</p> <p>Update – for the Gateway/Controller hardware the 'heartbeat timer' timeout value is set in the Gateway GUI.</p> <p>Update –update example databases to Build 210323.</p> <p>Update –create new Settings option 'Settings/System Status/Scripts Status' to display information relating to the 'gateway.py' and 'controller.py' scripts.</p> <p>Bug Fixes – shutdown and reboot process changed to check flags in the 'system' table, new scheduler job added to control script 'shutdown_reboot.py'.</p> <p>Bug Fixes – various fixes to enable the 'gateway.py' and 'controller.py' scripts to run without error where the system has not yet been fully configured.</p> |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 24/03/2023 | 3.00    | 240323 | 1.0        | 230323   | Update to Bootstrap Version 5.2.3<br><br>Update to Bootstrap Icons Version 10.1.3  |
| 31/03/2023 | 3.00    | 310323 | 1.0        | 310323   | Bug Fix – Add On zones do toggle from the GUI, fix to request.js and db.php.<br>Tidy Up – ajax_fetch_data.php. use existing variable in place of table reference.<br>Update – new field ‘test_run+time’ added to ‘system’ table, to be used in future release to run MaxAir at an artificial time as a way to test scheduling.<br>Update – zone and boiler controller NRF24L01 sketches and gateway.py to add ‘heartbeat’ feature.   |
| 01/04/2023 | 3.00    | 010423 | 1.0        | 310323   | New Feature – A new option Settings/System Configuration/Schedule Test allows you to select a date and time to be used by MaxAir as its current time, MaxAir will move to this date and time and then virtual time will progress forwards from this start point. The time displayed on the toolbar will be annotated to indicate that the system is operating in a TEST MODE.<br>Update – Icon changes, change MQTT Settings button to display icon, change System Controller Settings dropdown and button icon. |
| 05/04/2023 | 3.00    | 050423 | 1.0        | 310323   | Bug Fix – Auto Backup when using a 1 DAY frequency.<br>Update – update to various button icons.<br>Bug Fix – controller.py not capturing schedule count per zone correctly.  |
| 06/04/2023 | 3.00    | 060423 | 1.0        | 310323   | Update – apply schedule and test mode run time updates to deprecated ‘controller.php’, which is kept as a ‘fallback’ option.   |
| 09/04/2023 | 3.00    | 090423 | 1.0        | 310323   | Bug Fix – auto_backup.py fix for 1 DAY frequency.<br>Bug Fix – controller.py, set time_id = 0 when no schedule is found.<br>Update – gateway.py, use dictionary to hold heartbeat timers for multiple relay controller.  |



| Date       | Version | Build  | DB Version | DB Build | ChangeLog   |
|------------|---------|--------|------------|----------|---|
| 10/04/2023 | 3.00    | 100423 | 1.0        | 310323   | Bug Fix – gateway.py, convert MQTT payload to float type for cases where no 'Attribute' is used.  |
| 12/04/2023 | 3.00    | 120423 | 1.0        | 310323   | Update – Allow custom tile messages for Binary Sensors, rather the simply 'ON' or 'OFF'.  |
| 16/04/2023 | 3.00    | 160423 | 1.0        | 310323   | Bug Fix - controller.py, weather factoring when using a user sensor   |
| 04/09/2023 | 3.00    | 040923 | 1.0        | 040923   | Update – Added a new option 'Settings/Device Configuration/Hide Sel/Rel'. Administrators can select to hide stand-alone Sensors and Add-On Zones on the Home screen for non-admin users.                                |
| 08/09/2023 | 3.00    | 080923 | 1.0        | 040923   | Update – Allow unallocated sensor to be associated with a SWITCH type zone, so that the sensor tile is displayed adjacent to the add-on zone tile.  |
| 21/09/2023 | 3.00    | 210923 | 1.0        | 040923   | Update – gateway.py- improvement in processing of MQTT sensors.<br>Update - New option Settings/Device Configuration/Hide Sen/Rel to allow Sensors and/or Relays to be hidden on the Home Screen for a particular user. |
| 25/09/2023 | 3.00    | 250923 | 1.0        | 250923   | Further Update – gateway.py- improvement in processing of MQTT sensors.<br>Update – table 'nodes_battery', change field 'node_id' from int(11) to char(50), to match 'nodes' table definition.                          |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog   |
|------------|---------|--------|------------|----------|---|
| 08/10/2023 | 3.00    | 081023 | 1.0        | 071023   | <p>New Feature – gateway.py, notice.py, model.php, mqtt_device.php and database update 260923.sql, to enable the setting of 'Notice Interval' and 'Minimum Value' on the MQTT Devices screen.</p> <p>Update – further updates to MQTT device handling to enable Battery graphs and Sensor/Relay loss of communication indications.</p> <p>Bug Fix – table 'http_messages' correct 'node_id' field format.</p> <p>Bug Fix – model.php, db.php and request.js – selection of sensors to graph query correction.</p> <p>Bug Fix – homelist.php – 'Add-On' type zones to only display a single tile, even when multiple controllers are attached.</p> <p>Bug Fix - model.php – fix error where 'unallocated' sensors are not detected correctly.</p> <p>Bug Fix – model.php – fix error where 'unallocated' type 1 relays are not detected correctly.</p> |
| 27/10/2023 | 3.00    | 271023 | 1.0        | 071023   | <p>Update – create local Python module 'schedule.py' and remove check in '/var/www/cron/install_jobs.sh'.</p> <p>Update –Image Tools.</p>   |
| 30/10/2023 | 3.00    | 301023 | 1.0        | 071023   | <p>Update – nmcli_reboot_wifi.sh – retrieve connection name using the 'nmcli con' command.</p>  |
| 07/11/2023 | 3.00    | 071123 | 1.0        | 071023   | <p>Bug Fix – setup.php – creation of initial gateway record not adding a default value for field 'heartbeat_timeout'.</p>   |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog   |
|------------|---------|--------|------------|----------|---|
| 10/11/2023 | 3.00    | 101123 | 1.0        | 071023   | Update – gateway.py – Python module ‘telnetlib’ (used to send and receive TCP data packets) is deprecated in Python version 3.11 and will be removed in version 3.13. Replaced with socket.sendall and socket.recv(1). As there is no direct replacement for telnetlib.readline(), a separate program thread has been created to read the socket stream until a newline character has been detected and compose a message queue, which is read line by line by the main program thread.<br>Update – gateway.py – a logfile to monitor incoming ‘heartbeat’ messages is created at ‘/var/www/logs/gateway_heartbeat.log’. The logfile is automatically emptied at midnight each day. |
| 11/11/2023 | 3.00    | 111123 | 1.0        | 071023   | Bug Fix – gateway.py – fix Queue error handling for ‘Empty’ Exception.<br>Update - Image Tools install.sh and image filename format generated by auto_image.py  |
| 12/11/2023 | 3.00    | 121123 | 1.0        | 071023   | Bug Fix – setup.php – remove update to heartbeat_timeout field in table gateway, it will be set by database update 170323.sql<br>Update – model.php – change to ethernet model to accommodate different ethernet interface names (eg. eth0, end0).  |
| 14/11/2023 | 3.00    | 141123 | 1.0        | 071023   | Bug Fix – gateway.py – correct Queue syntax for ‘Empty’ exception.  |
| 23/11/2023 | 3.00    | 231123 | 1.0        | 071023   | Update – gateway.py, sensor.php – ensure that when a sensor is operating in ‘On-Change’ mode that the ‘Timeout’ value is a minimum of 10 minutes and that ‘gateway.py’ will ignore any zero ‘Timeout’ values.   |
| 24/11/2023 | 3.00    | 241123 | 1.0        | 071023   | Update – model.php, sensor.php – further refinement to Sensors GUI to correctly process changes between Continuous and On_Change modes, also add icon for On-Change mode.   |

| Date       | Version | Build  | DB Version | DB Build | ChangeLog  |
|------------|---------|--------|------------|----------|--|
| 30/11/2023 | 3.01    | 301123 | 1.0        | 071023   | Update – Bootstrap Icons update from 1.10.3 to 1.11.0<br>Bug Fix – model.php, syntax changed for ethernet interface name check in Ethernet Modal.<br>Update –update Bootstrap from version 5.2.3 to 5.3.2  |
| 05/12/2023 | 3.01    | 051223 | 1.0        | 071023   | Update – gateway.py – trap deadlock errors when updating nodes table to resolve gateway reboot during Auto Backup.   |
| 01/01/2024 | 3.01    | 010124 | 1.0        | 010124   | New Feature – by default sensor readings are written to the database 'messages_in' table, this is now selectable from the Settings/Device Configuration/Sensors dialogue For sensors where there is no requirement to graph readings, this will reduce the size of the database. |