

## MaxAir Release History

<b>Current Version</b>	<b>1.6</b>
<b>Current Build</b>	<b>030222</b>
<b>Current Database Version</b>	<b>1.0</b>
<b>Current Database Build</b>	<b>240122</b>

## Last Update

- Commit #313 – Bug Fix for sensor.php, not updating correctly.

## 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 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. Remove delete zone_graphs as already actioned in gateway.py. Update system_c.php board detection method to use Adafruit PlatformDetect. 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 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 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 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 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. Set live temp icon depending on Units. 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 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. Check for existing column in 300821.sql 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 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 Ug Fix – zone.php when only 1 sensor is available
02/09/2021	1.0	010921	1.0	310821	Fix for add new node Fix for gateway.py to enable it to run when relays have been added but not allocated to a zone Basic Fault Finding documentation Improved document listing
02/09/2021	1.0	020921	1.0	310821	Documentation update. Missing model.php code update 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 Sensor Types documentation 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 Documentation Change Arduino Sketches directory 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 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 Change Lamp icon to Switch icon 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 Add name/description to HomeAssistant install.sh
18/09/2021	1.1	180921	1.0	180921	Add Sunset/Sunrise option to scheduling.php 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. 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 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 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 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. 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 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. Addition of Slovakian language file (thanks to Mr.T) 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. Bug Fix 200921.sql. 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. Allow creation of dummy controller device (for systems which do not use a zone controller). 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 Bug Fix to System Controller model.php to display currently selected relay correctly in the dropdown lists for heat, cool and fan relays. 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. 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. setup.php will create a 'Virtual' gateway as default. Bug Fixes for HVAC Mode operation. Update to Boiler and HVAC Setup Guides.
24/11/2021	1.3	241121	1.0	211121	Various documentation updates. 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. Introduce 3 timer modes for HVAC systems, HEAT, COOL and AUTO. Add hvac_relays_state to table system_controller to enable home screen status updates of system controller button. Change 'look' of Modes button menu to fit extra line of text. 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 model.php correct spelling for Timezone Europe/Kiev 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 =. 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. 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. Add documentation for Zigbee2mqtt device connection.
10/01/2022	1.4	100122	1.0	010122	Supress Sunset/Sunrise option for Night Climate scheduling. Add documentation for Night Climate Scheduling.
12/01/2022	1.4	120122	1.0	010122	Add documentation for Orange Pi 3 LTS. 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. 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. 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. 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. Move legacy database utility files into a new legacy folder within MySQL_Database folder. 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.