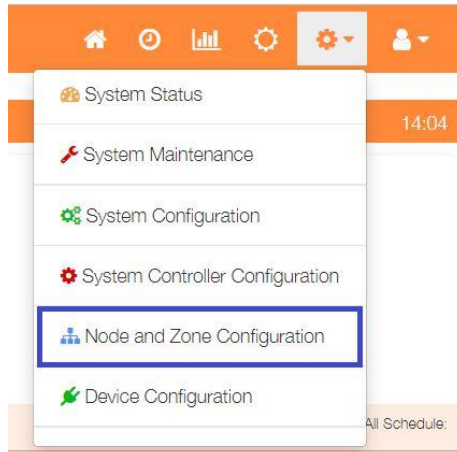


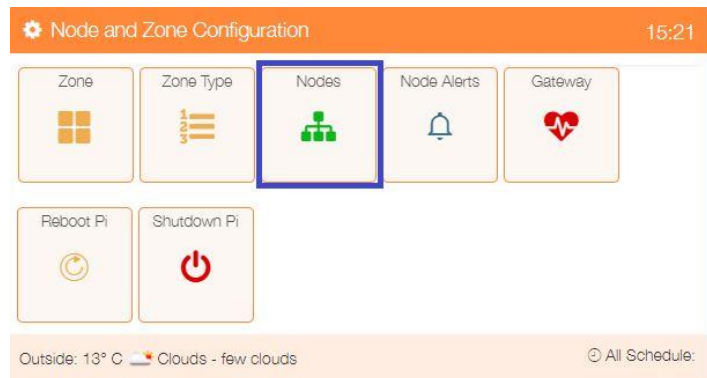
MaxAir Technical – Creating Sensor Devices

Sensors are created as control devices; they need to be attached to nodes using a 'node_id' and 'child_id'. The nodes will typically be either 'MySensor', 'GPiOSensor' or 'Dummy'.

Identify the Node_ID and Child_ID



To show the nodes currently available select 'Node and Zone Configuration' from the Settings dropdown list, then click the 'Nodes' button.



Sensor Settings

Edit or Delete the Sensor's Configuration.
Sensors Allocated to a Zone Cannot be Deleted.
Last Seen Date/Time is shown with Sensor Name.

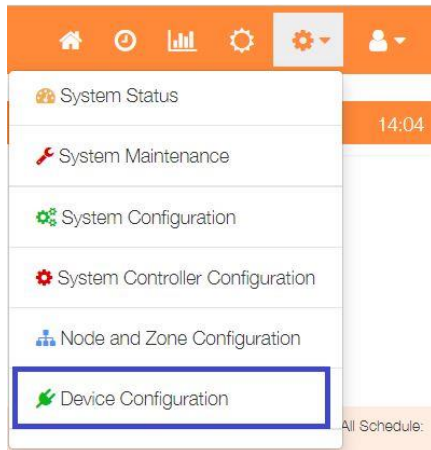
Sensor Name	Node ID	Sensor Child ID	Mode	Correct Factor	Zone Name	Show	
Bedroom 1 (2022-04-20 11:24:46)	20	0	▶	0	Not Allocated	<input checked="" type="checkbox"/>	 
Bedroom 2 (2022-04-20 11:23:10)	27	0	▶	0	Not Allocated	<input checked="" type="checkbox"/>	 
Bedroom 3 (2022-04-20 11:25:27)	25	0	▶	0	Not Allocated	<input checked="" type="checkbox"/>	 
Boiler Flow (2021-09-20 18:16:47)	100	0	60	0	Not Allocated	<input checked="" type="checkbox"/>	 
Boiler Return (2021-09-20 18:16:47)	100	2	▶	0	Not Allocated	<input checked="" type="checkbox"/>	 
Boiler State (2021-09-20 18:16:47)	100	3	▶	0	Not Allocated	<input type="checkbox"/>	 
Boiler Target (2021-09-20 18:16:47)	100	1	▶	0	Not Allocated	<input type="checkbox"/>	 
Conservatory (2022-04-20)	24	0	▶	0	Not	<input checked="" type="checkbox"/>	 

The listing shows a number of Sensor nodes and a GPIO Controller Node. For this example, three sensor devices will be attached to the relevant nodes.

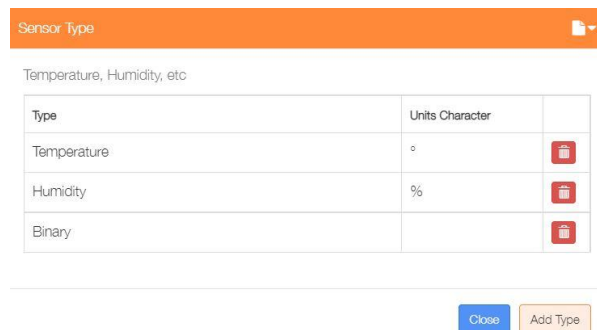
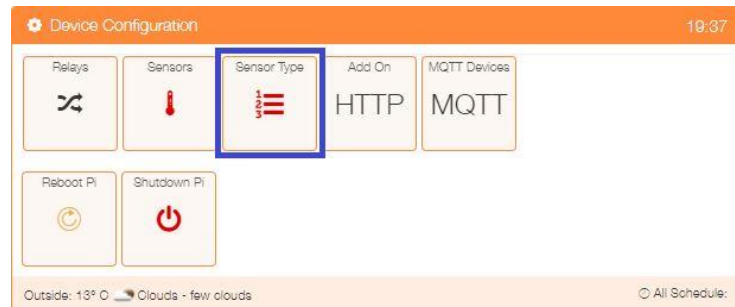
For this example, will use three temperature sensors, one for the Central Heating, one for the Hot Water and a third to monitor a bedroom temperature. We will use the sensor attached to Node 21, Child ID 0 for the Central Heating, Node 20, Child ID 0 for the Hot Water and Node 28-f3a49d1964ff, Child ID 0 for Bedroom 1 (Note: this is a 1-wire sensor, connected directly to the controller device.).

Sensor Types

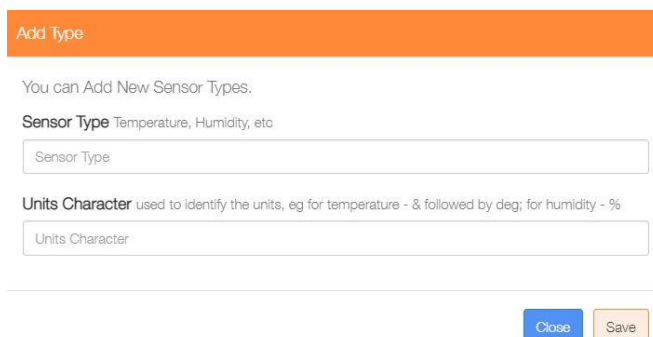
MaxAir is capable of supporting different sensor types, by default Temperature and Humidity sensors are supported. Sensor readings will be displayed and their data stored in the database depending on their type, for instance Temperature Sensor data will be displayed with a degree unit symbol and the value converted to either Centigrade or Fahrenheit, depending on if MaxAir is configured to work in either Centigrade or Fahrenheit.



To show the Sensor Types currently available select 'Device Configuration' from the Settings dropdown list, then click the 'Sensor Type' button.



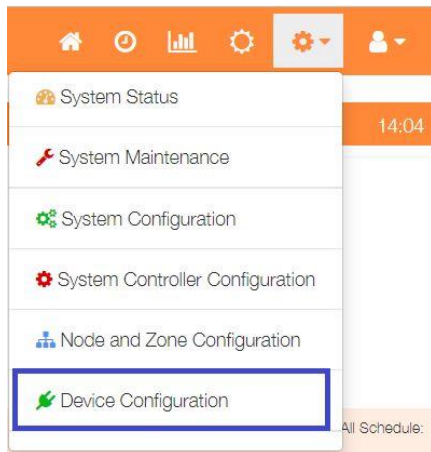
Sensor Types can be deleted or added. To add new type click on the 'Add Type' button to open the 'Add Type' menu.



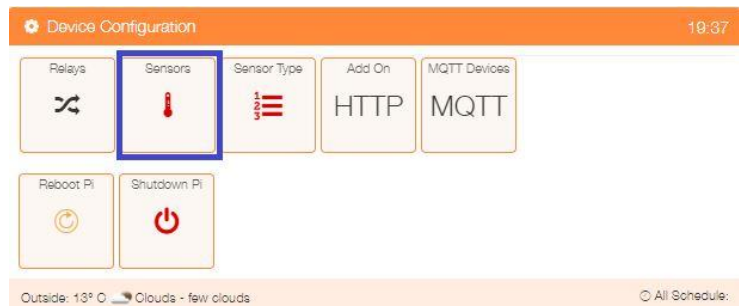
Define a name for the sensor and the character to be used for the units. In some instance to it may be necessary to use a 'special' sequence of characters to display the unit's symbol, for example to display the temperature degree symbol ° enter °

Click on 'Save' to finish.

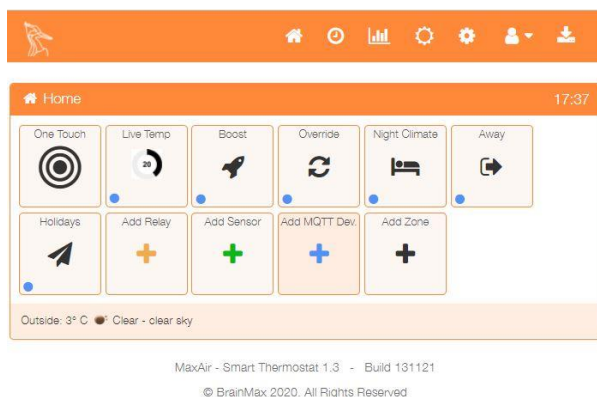
Adding a New Sensor



To display a list of any currently configured sensors, select 'Device Configuration' from the Settings dropdown list, then click the 'Sensors' button.



Click on the 'Add Sensor' button to configure the first sensor



An alternative method to go directly to the Add Sensor dialogue, is from the Home screen click on the 'One Touch' button then select the 'Add Sensor' menu item.



Show either before or after the system controller on the Home screen

Used to order where on the Home screen the sensor is displayed

Edit Sensor: Central Heating19:38

Before System Controller

When Sensor is NOT Allocated to a Zone, Locate Tile either Before or After the System Controller Tile on the Home Screen

Index Number

In the List of sensors where you want to place this sensor on home screen

1

Sensor Type

Temperature, Humidity, etc

Temperature

Sensor Name

Select either Outside Weather or Sensor to be used to calculate the Start Time Offset Applied.

Central Heating

Sensor ID

Node ID for the Sensor

21 - Temperature Sensor

Sensor Child ID

Node Child ID for the Sensor

0

Mode

Sensor Readings Captured either Continuously or Only on Value Change

On-Change

Timeout

On Change Mode - maximum interval in Minutes between Sensor readings if no Value Change

10

Sensor Resolution

Resolution between +/- 0.0 to 1.0

0.2

Sensor Correction Factor

Positive or Negative Correction Factor

0.00

Frost Protection

The System will protect itself against frost. To Disable protection you can set the temperature to 0

3

Frost Controller

The zone controller to be activated when frost protection is triggered by this temperature sensor.

Central Heating

Fail Timeout

Maximum interval in Minutes before the device is considered to have failed to reported. Fault monitoring is disabled for the device if Timeout is set to 0.

0

Submit

Cancel

Outside: 25° C

Clouds - scattered clouds

Either Temperature or Humidity

Provide a name for this sensor device

Select the Sensor ID from the dropdown list of available Nodes

Choose the Child ID from the dropdown list, nodes with only 1 sensor, this will be 0

Select either Continuous date reporting or only on-change of data.

For on-change mode, the maximum time between reporting data, in minutes.

Resolution for sensor readings

Positive or Negative factor to be applied to the sensor reading as a correction.

Select the frost protection temperature or 0 to disable this feature

If frost protection is enabled, then select the zone to be activated on protection

Timeout after which sensor will be considered to not be reporting readings.

Click on 'Submit' to add the device.

Repeat the process to add any other temperature sensors.

Re-selecting the Sensors menu item from the Settings/Node and Zone Configuration menu will display the updated list of currently configured temperature sensors.







This dialogue can be used to Add/Delete/Edit the sensor configurations.

The ‘Show’ tickbox can be used suppress displaying a sensor on the Home screen, with the exception of any sensors allocated to a zone.

This example shows one unallocated and two allocated sensors.

Sensor Settings

Edit or Delete the Sensor's Configuration.
Sensors Allocated to a Zone Cannot be Deleted.
Last Seen Date/Time is shown with Sensor Name.

Sensor Name	Node ID	Sensor Child ID	Mode	Correct Factor	Zone Name	Show	
Bedroom 1 (2022-04-20 11:24:46)	20	0	▶	0	Not Allocated	<input checked="" type="checkbox"/>	 
Ground Floor (2022-04-20 13:14:07)	21	1	▶	0	Central Heating	<input checked="" type="checkbox"/>	 
Hot Water (2022-04-20 13:14:08)	30	1	▶	0	Hot Water	<input checked="" type="checkbox"/>	 

Close

Save

Add Sensor

4