

# **rnbWeather**

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## **User Guide**



## Table of Contents

This user guide does not reflect the full offering or configuration of rnbWeather as it was written for an earlier version.

This user guide will be updated shortly

# Welcome

Welcome to the rnbWeather plugin for Homeseer.

What does this plugin do? The plugin allows you to connect various online weather services and create devices in Homeseer to reflect your the weather for your locations.

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Online weather services allow you access current and forecast weather data for nearly any location in the world.

rnbWeather currently works with the following online weather services:

- **OPENWEATHER [Free/Paid]**
  - Team of IT experts and data scientists that has been practising deep weather data science
  - Established ini 2014
- **NATIONAL OCEANIC AND ATMOSPHERIC ADINISTRATION (NOAA) [Free]**
  - NOAA's Mission: Science, Service and Stewardshi
  - Responsible to understand and predict changes in climate, weather, oceans and coasts
  - Established in 1970 as an agency within the Department of Commerce
- **NORWAY YR [Free]**
  - Joint online weather service from the Norwegian Meteorological Institute ([met.no](http://met.no)) and the Norwegian Broadcasting Corporation ([NRK](http://nrk.no))s
  - Two public institutions worked together since 1923 transmitting weather forecasts
  - Released in September 2007
- **AUSTRALIA BUREAU OF METEROLOGY [Free]**
  - Executive Agency of the Australian Government
  - Responsible for providing weather services to Australia and surrounding areas

Calendar View

  - Established in 1906 (under the Meteorology Act)

All weather services that this plugin can connect to are a product and service provided by the respective companies. All rights, ownership of these services and/ API's reside with the respective companies.

This plugin (rnbWeather) is not developed or supported by any of the weather services it may connect to.

To contact the Plugin developer, please use the support option from within the plugin.

This plugin is compatible with the following versions of Homeseer:

Version/OS	Windows	Linux
HS3	✗	✗
HS4	✓	✓

## Revision History

Revision #	Version Details
4.1.0.0	<ul style="list-style-type: none"> <li>Initial Release</li> <li>Support for HS4</li> <li>Openweather service configured and available</li> <li>YR service configured and available</li> <li>NOAA service configured and available</li> <li>Australia BOMservice configured and available</li> <li>Setup Wizr included</li> </ul>
4.0.0.36 <b>BETA</b>	<ul style="list-style-type: none"> <li>Bugfix: Fixed - Wizard error when choosing Australia BOM service</li> <li>Bugfix: Fixed - Regional settings for Openweather on Weather Overview page (use of , vs .)</li> <li>Updated: Openweather always returns atmospheric pressure in SI metric units (hPa)- now fixed to show correct Imperial value (inHg: inch of mercury)</li> <li>Added: Australia BOM - Latest conditions - added Rain since 9am</li> </ul>
4.0.0.35 <b>BETA</b>	<ul style="list-style-type: none"> <li>Bugfix: Fixed - Year, Month, and Day parameters describe an unrepresentable DateTime</li> <li>Bugfix: Fixed - An item with the same key has already been added</li> <li>Added: Australia BOM weather service</li> <li>Added: Ability to edit locations</li> <li>Updated: Relaxed requirement for version match on restsharp.dll</li> </ul>
4.0.0.34 <b>BETA</b>	<ul style="list-style-type: none"> <li>Bugfix: Status Graphic ranges causing some values not to show</li> <li>Bugfix: Some Day/night devices not updating with NOAA / YR</li> <li>Added: Ability to turn off a location without disabling full weather service</li> <li>Added: Weather Overview - 24hour period</li> <li>Added: Manual Poll button to connection features to poll weather service on demand</li> <li>Updated: NOAA processing and calculations - aligns to NWS Website</li> <li>Updated: YR processing and calculations - aligns to YR Website</li> <li>Updated: javascript busy dialog to allow it to show</li> <li>Changed http client for data download (more robust than .Net built-in)</li> </ul>

4.0.0.33 <b>ALPHA</b>	<ul style="list-style-type: none"> <li>• Alpha - user testing</li> </ul>
4.0.0.32 <b>ALPHA</b>	<ul style="list-style-type: none"> <li>• Alpha - user testing</li> </ul>
4.0.0.31 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Bugfix: Menu pages not appearing for all users</li> </ul>
4.0.0.30 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Added: Weather Overview - Selectable default page to open/load</li> <li>• Updated: Weather Overview now correctly shows selected units (previously only showed metric)</li> <li>• Added: Day name to hourly features (all services)</li> <li>• Bugfix: Fix missing CSS for Weather Overview page - alerts section</li> <li>• Bugfix: Unable to save unit selection for NOAA and YR services</li> <li>• Bugfix: Enable service start/stop when enabled or disabled in settings</li> <li>• Bugfix: Not all features for YR devices were updating (YR service restructured)</li> <li>• Bugfix: Air Quality features on NOAA and YR were not updating</li> </ul>
4.0.0.29 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Fix icon and status text not displaying for some features post v4.0.0.25 (sunrise/sunset)</li> <li>• Bugfix: extra spacing in summary alerts device</li> <li>• Added: Air Quality Index to current conditions</li> </ul>
4.0.0.28 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Fix icon and status text not displaying for some features post v4.0.0.25</li> <li>• Correctly terminate weather service threads to allow plugin to shutdown gracefully</li> <li>• Openweather Monthly API feature added to show cumulative monthly calls</li> </ul>
4.0.0.27 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Republished</li> </ul>
4.0.0.26 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Updated library files</li> </ul>
4.0.0.25 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Weather Overview Page (<i>Draft</i>) now available</li> <li>• Bug fix: Norway YR - manage devices (was not saving changes or creating devices/features)</li> <li>• Bug fix: Words displaying instead of values (eg: the word temperature showing instead of the value)</li> <li>• Finalized code for Day/Night updates for NOAA</li> <li>• Auto poll devices after adding new devices &amp; features (Openweather)</li> <li>• Auto poll devices after adding new devices &amp; features (YR.NO)</li> <li>• Isolate all Openweather calculations to prevent a failed calculation sending rnbWeather into a reboot loop</li> <li>• Isolate all YR.no calculations to prevent a failed calculation sending rnbWeather into a reboot loop</li> <li>• Enabled prefix/suffix for value devices in Openweather</li> </ul>

	<ul style="list-style-type: none"> <li>Enabled prefix/suffix for value devices in YR.no</li> </ul>
4.0.0.24 <b>BETA</b>	<ul style="list-style-type: none"> <li>Fixed issue between day/afternoon in NOAA</li> </ul>
4.0.0.23 <b>BETA</b>	<ul style="list-style-type: none"> <li>Remove shutdown error causing plugin to "hang" and show "Loaded Remotely"</li> </ul>
4.0.0.21 <b>BETA</b>	<ul style="list-style-type: none"> <li>Remove bug introduced in .20</li> <li>Isolate all NOAA calculations to prevent a failed calculation sending rnbWeather into a reboot loop</li> </ul>
4.0.0.20 <b>BETA</b>	<ul style="list-style-type: none"> <li>Remove redundant code for older versions (may cause reboot loop)</li> <li>Auto poll devices after adding new devices &amp; features (NOAA)</li> </ul>
4.0.0.19 <b>BETA</b>	<ul style="list-style-type: none"> <li>Add increased error handling for initialisation and polling threads</li> </ul>
4.0.0.18 <b>BETA</b>	<ul style="list-style-type: none"> <li>Fixed issue between day/night in NOAA</li> </ul>
4.0.0.17 <b>BETA</b>	<ul style="list-style-type: none"> <li>Improved error handling for period calculations</li> <li>Fixed Wind Speed calculation error for units conversion</li> <li>Fixed Wind Chill calculation for units conversion</li> <li>Fixed Wind Direction conversion to compass heading</li> <li>Fixed error in updating night devices</li> <li>Removed min temp device from day</li> <li>Removed max temp device from night</li> <li>Updated min temperature to reflect overnight low</li> <li>Wizard updated to allow NOAA and YR selection</li> <li>Disabled NOAA feature prefix and suffix for non value items (eg: moon phase)</li> </ul>
4.0.0.16 <b>BETA</b>	<ul style="list-style-type: none"> <li>NOAA weather service added (testing version)</li> </ul>
4.0.0.15 <b>BETA</b>	<ul style="list-style-type: none"> <li>NOAA weather service added (testing version)</li> </ul>
4.0.0.14 <b>BETA</b>	<ul style="list-style-type: none"> <li>NOAA weather service added (testing version)</li> </ul>
4.0.0.11 <b>BETA</b>	<ul style="list-style-type: none"> <li>Alert device rebuilt for user selected number of devices (incl summary devices)</li> <li>Downgraded NodaTime dependency on .Net standard</li> </ul>
4.0.0.10 <b>BETA</b>	<ul style="list-style-type: none"> <li>Fixed: Updated Poll duration did not take effect until after restart</li> <li>Alert Device added for Openweather</li> </ul>
4.0.0.9 <b>BETA</b>	<ul style="list-style-type: none"> <li>Test fix for rnbWeather not starting on some Windows machines</li> </ul>

4.0.0.8 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Test fix for rnbWeather not starting on some Windows machines</li> <li>• Added Day Mapping as an option</li> </ul>
4.0.0.7 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Add missing dll files to install package</li> </ul>
4.0.0.6 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Add missing dll files to install package</li> </ul>
4.0.0.5 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Noda Time downgraded due to Mono (Linux) dependency</li> </ul>
4.0.0.4 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Enable weather service checks at startup</li> </ul>
4.0.0.3 <b>BETA</b>	<ul style="list-style-type: none"> <li>• YR Weather service added</li> <li>• Moon Phase added to all weather services</li> <li>• Zodiac Sign added to all weather services</li> <li>• Sunrise/Sunset/Solar Noon all calculated from chosen location (no based on weather station location)</li> <li>• Support Upload server disabled on Linux due to config within Mono (under review)</li> </ul>
4.0.0.2 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Wizard did not automatically start the weather service updates after completion (fixed)</li> </ul>
4.0.0.1 <b>BETA</b>	<ul style="list-style-type: none"> <li>• Update installer for rnbWeather</li> </ul>
4.0.0.0 <b>BETA</b>	Initial version <ul style="list-style-type: none"> <li>• Support for HS4</li> <li>• Openweather service configured and available</li> </ul>

## Weather Overview

**This page is not yet enabled by the developer - coming soon**

This page will give 5 day overview per weather service per weather location irrespective of whether you have the HomeSeer device configured or not

## Locations/Devices

This page is used to manage the devices you want to retrieve weather for by weather service. Only weather services which you have enabled in the [settings](#) appear here.

To add a location for your chosen weather service:

- Select the weather service in the tab area eg: select Openweather
- Click *Add New Weather Location* button (green)
- Give the location a friendly name that makes sense to you (or maybe use the actual location name)
- Enter the geographical coordinates. If you do not know your co-ordinates, you can use the following tool to find your co-ordinates: [www.mapdevelopers.com/geocode\\_tool.php](http://www.mapdevelopers.com/geocode_tool.php)
- Clicking Save location as this as a location to rnbWeather but it **does not** yet create devices/features for you.
- Expand the location you just added and select the devices/features you want in HomeSeer.
- Clicking **save** will allow rnbWeather to add each of these devices/features for you. Failure to click save will result in **no devices/features** being created.

To delete a location from your chosen weather service:

- Select the weather service in the tab area eg: select Openweather
- Click *Delete Existing Weather Location* button (yellow)
- Select each location you want to delete. Deleting her will remove it from the update service but it **will not** delete existing devices/features

★ *Each location is added with a unique ID and once removed, it cannot be readded with the same ID. If you add the same location on the same weather services again, it will get a new unique ID.*

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#### Location/Devices Page:

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#### Add New Weather Location Page:



## Add NEW weather location for Openweather

This weather service provides weather based on **co-ordinates**. If you do not know the c-ordinates for the location you want weather for, please go to [www.mapdevelopers.com/geocode\\_tool.php](http://www.mapdevelopers.com/geocode_tool.php)  
Please enter a location name and your co-ordinates below

Location Name

The location name will be used to display the weather

Latitude

North-South position of a point on the Earth's surface

Longitude

East-West position of a point on the Earth's surface

↩ CLOSE

💾 SAVE LOCATION

## Delete Existing Weather Location Page:

### Delete existing weather location for Openweather

Deleting a location **does not** delete existing Homeseer Devices

- ☐ Home (-31.2147, 151.2093)
- ☐ Waterford (52.2686, 10.0841)

↩ CLOSE

🗑 DELETE SELECTED LOCATIONS

## Selecting Devices/Features per location:

ADD NEW WEATHER LOCATION

DELETE EXISTING WEATHER LOCATION

▼ Location: Home (20201004062201)

To understand the options here, please refer to the [userguide here](#). After selecting which features/devices to create, remember to click **SAVE** at the bottom of this location.

Current Weather Features

Current weather features will show the weather now

Item	Feature	Prepend	Append	Create
1	Weather Summary	<input type="checkbox"/>	<input type="checkbox"/>	✓
2	Temperature	<input type="checkbox"/>	<input type="checkbox"/>	✓
3	Feels Like (Temp)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Humidity	<input type="checkbox"/>	<input type="checkbox"/>	✓
6	Dew Point	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Sunrise	<input type="checkbox"/>	<input type="checkbox"/>	✓
8	Sunset	<input type="checkbox"/>	<input type="checkbox"/>	✓
9	Solar Noon	<input type="checkbox"/>	<input type="checkbox"/>	✓
10	Midday UV index	<input type="checkbox"/>	<input type="checkbox"/>	✓
11	Cloud Cover	<input type="checkbox"/>	<input type="checkbox"/>	✓
12	Visibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Wind Speed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Wind Direction	<input type="checkbox"/>	<input type="checkbox"/>	✓

Daily Forecast Devices

Each day will be shown as a device. How many days forecast do you want to show for this location?

Item	Daily Forecast Day	Create
1	Day 0 (Today)	✓

## Support

rnbWeather has an in-built support system request. This page allows you to submit a support request directly to the author.

Support requests are tracked using an unique reference number for each user. When the plugin starts, it checks for any other rnbPlugins, if one is found, it takes that support reference and uses it for this plugin. If no number is found, it will then generates new unique number.

This page is broken into 4 sections:

- Current/Open - This shows a list of open requests for your support number, for rnbWeather for HS4.
- Previous/Closed - This shows a list of closed requests for your support number, for rnbWeather for HS4.
- Raise Support Request - dfd
- Support Settings - In the event you use rnbPlugins on other Homeseer's, you can change the support reference number used on this machine to be the same as those to help bring all your support requests together.

Shown below is the Support Request screen within rnbWeather. To allow effective support, the following information is required when raising a support request:

User Details

- Name - allow communication on a friendly basis during the support
- Email Address - required to provide updates on your support request. This is also required to login and retrieve request updates. *If you do not want to share your email address, please use **do\_not\_share@projectservices.ie** as the email address.*
- Request Type - please select the type of support required

### Homeseer / Plugin Information


- Homeseer version- automatically determined from your Homeseer system
- Plugin Name - Automatically set by the plugin
- Support Request Number - automatically read from your system (see Support Settings tab)

### Support Request

- Request Title- required - please use a descriptive title to give insight to the request type
- Request Overview - required - please enter as much detail as possible describing the issue or idea. You can add attachments later on this page

### Supporting Files / Information

- Standard Support Files
    - Include your System information. To see what will be shared, please click on the link. If you do not want to share this information then just untick the option
  - Additional Support Files
    - You can upload additional files to help explain and/or demonstrate your issue/idea. Files are limited to 5mb in size and only the following file types can be uploaded: Images, PDF, Text or videos. If the file is greater than 5mb, please upload it to a file share and include the link in the detailed request overview. One example of file(s) that you may want to attach is the data file for ann update for your weather location located in the data/rnb/rnbWeather folder
-



[Current/Open](#) [Previous/Closed](#) [Raise Support Request](#) [Support Settings](#)

User Details:

Name:

Email Address:

Request Type:

General Request ▼

Homeseer / Plugin Information:

Homeseer Version:

HS4

Plugin Name:

rnbWeather

Support Request Number:

MTc0Ljw4Ljw4Ljw4MTk5MDEwMDc=

Support Request:

Request Title:

Request Overview:

Please enter in as much detail as possible the support required

Supporting Files / Information:

Standard Support Files:

☒ Include my System information [\(Review support file to be included in support request\)](#)

Additional Support Files:

Drop files here, paste or [browse files](#)

CLEAR REQUEST FORM

SUBMIT REQUEST NOW

# Setup Wizard

rnbcWeather has an in-built setup wizard to make it easy for you to get going as soon as possible with the smallest effort. It is a 4 step wizard.

Just follow the setup wizard to get going. Each weather service has their own authentication to get an API key. Instructions are provided where possible to help guide you in getting an API key.

All API keys stored in the settings file in the plugin are encrypted using Triple DEScripto to provide some additional level of security.

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### Setup Wizard - Overview

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#### 1 Overview

About rnbWeather Services

This wizard will guide you through the process of setting up **rnbWeather** for the first time.  
rnbWeather allows you to connect to a number of different internet based weather services as follows.

- Openweather Map

OpenWeather is a team of IT experts and data scientists that has been practising deep weather data science since 2014.  
For each point on the globe, OpenWeather provides historical, current and forecasted weather data via light-speed APIs. Headquarters in London, UK.

- NOAA (National Oceanic and Atmospheric Administration) **\*\*\*Coming Soon\*\*\***

NOAA is an agency that enriches life through science. Their reach goes from the surface of the sun to the depths of the ocean floor as we work to keep the public informed of the changing environment around them

- Norway YR **\*\*\*Coming Soon\*\*\***

Yr is a joint service by the Norwegian Meteorological Institute and the Norwegian Broadcasting Corporation

- Australian Bureau of Meteorology **\*\*\*Coming Soon\*\*\***

The Bureau of Meteorology is Australia's national weather, climate and water agency. Its expertise and services assist Australians in dealing with the harsh realities of their natural environment, including drought, floods, fires, storms, tsunamis and tropical cyclones. Through regular forecasts, warnings, monitoring and advice spanning the Australian region and Antarctic territory, the Bureau provides one of the most fundamental and widely used services of government.

This wizard will now allow you to choose one of these services to configure. After the wizard is complete, you can configure additional services as required. There is no limit to the number of services or locations you can configure.

Click **CONTINUE** below to start configuring a service now.

**CONTINUE**

#### 2 Choose Weather Service

Choose an initial weather service to configure now

#### 3 Weather Service Configuration

Enter configuration settings now

#### 4 Complete Setup

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### Setup Wizard - Choose Weather Service

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✓ Overview  
About mnbWeather Services

2 Choose Weather Service  
Choose an initial weather service to configure now  
Select the service you would like to configure now.  
To configure the service you will require some key information such as an API key,the units of measure you want to use etc. To learn how to get an API Key key for your chosen service, click the how to get a key link beside the option

- ☐ Openweather - [How to get an Openweather key](#)
- ☐ NOAA - [How to get a NOAA key](#) \*\*\*Coming Soon\*\*\*
- ☐ Norway YR \*\*\*Coming Soon\*\*\*
- ☐ Australia Bureau of Meteorology \*\*\*Coming Soon\*\*\*

3 Weather Service Configuration  
Enter configuration settings now

4 Complete Setup

BACK

CONTINUE

## Setup Wizard - Complete Setup

✓ Overview  
About mnbWeather Services

✓ Choose Weather Service  
Choose an initial weather service to configure now

3 Weather Service Configuration  
Enter configuration settings now

- ✓ Enable weather service for locations  
To update weather information, the service needs to be enabled. If is enabled by default during the wizard but you can disable it later in the settings
- ☐ Enable personal/custom icons for weather service  
You can use your own icons for the weather if you wish. Please check the userguide for more information

4 Complete Setup

Enter your API key here

Enter a valid API key. If you do not know how to get an API key, please see the help in the previous step

JSON - Javascript Object Notation

Please select the output/debug file type format. This file is saved to your data directory after each update.

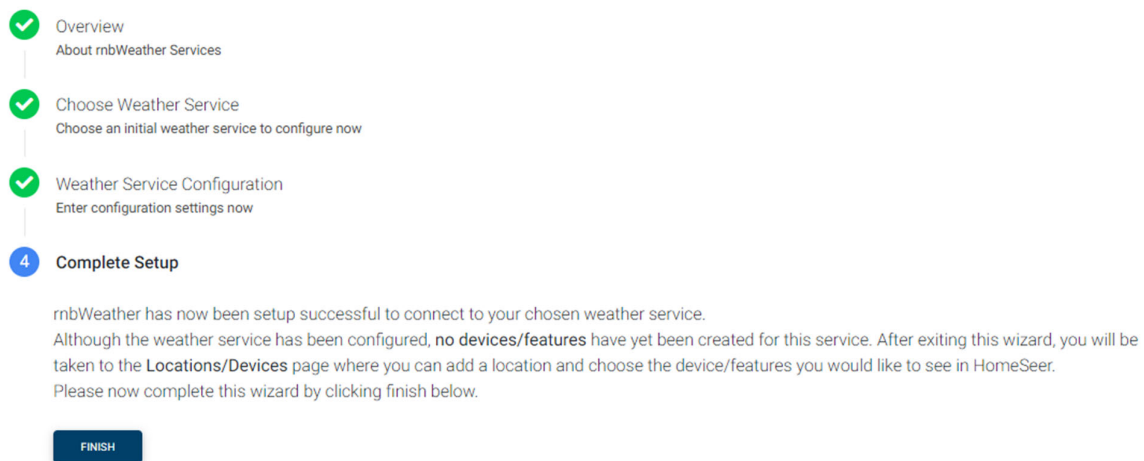
Metric - temperature in Celsius and wind speed in meter/sec

Please select the units to be used with this weather services. You can change this later in the settings if required.

BACK


CONTINUE

## Setup Complete



## Settings

The Settings page allows you configure how the plugin works.

 The Settings page is only available after you first run the [setup wizard](#).

The Settings page groups similar settings together to allow you to configure them how you would like. Shown below is the settings overview screen and each screen is shown on the other userguide pages:

- **Logging**
  - This allows you to set the level of logging by the plugin from errors only all the way to debug logging which shows everything. All logging is done to the HomeSeer database.
- **Database Settings**
  - This will allow you to configure a database connection to log all weather into. This can be useful for later analysis of trends. Databases support will include SQLite, Microsoft Access, Microsoft SQL, MySQL
- **Openweather**
  - This allows you to configure settings for the Openweather service such as API key, frequency of updates and units of measure.
- **NOAA**
  - This allows you to configure settings for the NOAA service such as API key, frequency of updates and units of measure
- **Norway YR**
  - This allows you to configure settings for the YR service such as frequency of updates and units of measure
- **Australia BOM**
  - This allows you to configure settings for the Australian Bureau of Meteorology service such as frequency of updates and units of measure

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## API Settings

mbWeather Overview   Logging   Database Settings   Openweather   NOAA   Norway YR   Australia BOM

### API Information

mbweather can connect to various API's to retrieve weather data

Shown below are the various API's configured in mbWeather. Instructions for obtaining a key/token are included with each API below.

When connecting to each API, you must comply with all terms and conditions of the API

### weatherXL

Part of the design of this plugin is based on weatherXML for HS3 by Jeff Farmer ([CFGuy](#)).

CANCEL   SAVE

## General Plugin Settings

The general settings covers the logging and database pages and allow you configure how the plugin works generally for all weather services.



These Settings page are only available after you first run the [setup wizard](#).

The Settings page groups similar settings together to allow you to configure them how you would like. Shown below is the settings overview screen and each screen is shown on the other userguide pages:

- Logging
  - This allows you to set the level of logging by the plugin from errors only all the way to debug logging which shows everything. All logging is done to the HomeSeer database.
- Database Settings
  - This will allow you to configure a database connection to log all weather into. This can be useful for later analysis of trends. Databases support will include SQLite, Microsoft Access, Microsoft SQL, MySQL

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### Setting: Logging



**Logging Level**

rnbWeather provides feedback to you through the Homeseer log. To support this all feedback is categorised into 1 of four categories as shown in the list below. The options increment as you go along meaning that if you choose the third option, it will also provide feedback on items 1 and 2 as well in the log.

It is suggested to set the option to: *Show Errors only* so as not to fill up your log with feedback that you will not need. If you are experiencing issues with rnbWeather, turning the log to *Debug Logging* will provide more insight into potential issues.

- **Show Errors Only**  
This option will only show errors in the Homeseer log. Items such as device creation check will not be logged.
- **Show all Warnings and Errors**  
This option will only show errors in the Homeseer log. Items such as device creation check will not be logged.
- **Show all Info items in log**  
This option will only show errors in the Homeseer log. Items such as device creation check will not be logged.
- **Debug Logging - Log everything**  
This option will only show errors in the Homeseer log. Items such as device creation check will not be logged.

Debug Logging - Log everything

CANCEL SAVE


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**Setting: Database *Not yet enabled - coming soon***

CANCEL SAVE

## Openweather Settings

The Openweather settings covers the items below.

 This Settings page is only available after you first run the [setup wizard](#).

The Settings page groups similar settings together to allow you to configure them how you would like. Shown below is the settings overview screen and each screen is shown on the other userguide pages:

- Enable Openweathermap service for locations
  - Weather is obtained using geographical coordinates and an API key. To learn how to get an API key, see the instructions included within the plugin or the bottom of this page
- Enable personal/custom icons for Openweathermap service
  - The Openweather icons are included within the plugin and are part of the Openweather service. You can use your own icons if you prefer to do so by


enabling this option. To use custom icons, you must place the icons you want to use into the **custom** folder under openweather. The icons must follow the same name as the main folder as rnbWeather will look for each icon with the same name in the custom folder. The easiest way to use custom icons is to first copy all the icons from the main folder into the custom folder then replacing as you go.

- Openweather API key
  - Weather is obtained using geographical coordinates and an API key. To learn how to get an API key, see the instructions included within the plugin or the bottom of this page.
- Polling Frequency for locations in minutes
  - Openweathermap is a data retrieval service so must be polled. This means that on a timer/schedule, rnbWeather will contact openweather for each of the locations you have configured. The recommended time for Openweather is 10 minutes but this can be safely changed to any duration you want. Openweather recommends making calls to the API no more than one time every 10 minutes for one location. This is due to the fact that weather data in our system is updated no more than one time every 10 minutes
- Output/Debug File Type
  - To allow you to use the weather data in any scripts you may have or for other use, each time the weather data for each of your configured locations is retrieved, this is written/stored in a file in the **data/rnb/rnbWeather** folder inside HomeSeer. Using this setting you can set the file type you prefer between JSON (default) and XML (converted). The file is named as per the unique id generated when you create a location. To find the ID you want, open the **Location/Devices** page from the rnbWeather plugin menu. From here you will see each location as you have named it with the unique ID in brackets after the name.
- Units of Measure
  - Openweather allows retrieving the weather in your chosen units of measure. Select the units of measure that best suit you (eg: Australia uses metric while America uses Imperial).

---

#### Setting: Openweather

mbWeather Overview
Logging
Database Settings
**Openweather**
NOAA
Norway YR
Australia BOM



## OpenWeather

OpenWeather is a team of IT experts and data scientists that has been practising deep weather data science since 2014. For each point on the globe, OpenWeather provides historical, current and forecasted weather data via light-speed APIs. Headquarters in London, UK.

Enable OpenWeathermap service for locations ☒

Enable personal/custom icons for OpenWeathermap service ☐

Openweather API Key
7RSMCQhawy6eIRnKQ9w/EFVis6h7+k0RRPBQYqesouq4uPbnqyl5ow==

Polling Frequency for locations in minutes
5

Output/Debug File Type
JSON - Javascript Object Notation

Units of Measure
Metric - temperature in Celsius and wind speed in meter/sec

GET OPENWEATHER API KEY

MANAGE WEATHER LOCATIONS AND DEVICES

CANCEL

SAVE

## Obtaining an API KEY

If you do not already have an API key, you can obtain a new API key from Openweathermap by following these steps:

### NEW USERS TO OPENWEATHERMAP

- Go to [openweathermap.org](https://openweathermap.org) and click [Sign up](#)
- Create a *username*, enter your *email address* and a *password*. Review the checkboxes and answer as appropriate before finally completing the CAPTCHA and click **Create Account**
- Answer the questions in the popup - *How and where will you use our API* eg: Company=Personal and Purpose=Other. Click **Save**
- Go to your email and using the email from Openweater, click **Verify your email**

**ALL USERS** Remember to enable this service above if you want to retrieve data using Openweathermap

- Go to the [sign in page](#) and log into your account using your email/password combination
- Click on **API Keys**
- **Copy** the key and enter it into this page in the **Openweathermap API Key** box above
- Click save at the bottom (right) and you're good to use Openweathermap

# NOAA Settings

This weather service is not yet enabled by the developer - coming soon

# Norway YR Settings

This weather service is not yet enabled by the developer - coming soon

# Australia BOM Settings

This weather service is not yet enabled by the developer - coming soon

## Device Types

rnbWeather makes use of different devices and features which can be explored further in the coming section. Below is the single device that rnbWeather creates with/without weather services configured.

- Device: rnbWeather Accounts
  - Feature: Openweather Connection
  - Feature: NOAA Connection
  - Feature: YR Connection
  - Feature: Australia BOM Connection

## Openweather Device Types











rnbWeather makes use of different devices and features and the list below shows some of the possible options available with the Openweather service.

- Device: Current Forecast
  - Feature: Weather Summary
  - Feature: Temperature
  - Feature: Feels Like (Temp)















- Feature: Pressure
- Feature: Humidity
- Feature: Dew Point
- Feature: Sunrise
- Feature: Sunset
- Feature: Solar Noon
- Feature: Midday UV index
- Feature: Cloud Cover
- Feature: Visibility
- Feature: Wind Speed
- Feature: Wind Direction
  
- Device: Daily Forecast
  - Feature: Weather Summary
  - Feature: Day Name
  - Feature: Max Temperature
  - Feature: Min Temperature
  - Feature: Average Day Temp
  - Feature: Average Night Temp
  - Feature: Average Morning Temp
  - Feature: Average Evening Temp
  - Feature: Chance of Rain
  - Feature: Daily Rain
  - Feature: Daily Snow
  - Feature: Pressure
  - Feature: Humidity
  - Feature: Dew Point
  - Feature: Sunrise
  - Feature: Sunset
  - Feature: Solar Noon
  - Feature: Midday UV index
  - Feature: Cloud Cover
  - Feature: Visibility
  - Feature: Wind Speed
  - Feature: Wind Direction
  
- Device: Hourly Forecast
  - Feature: Weather Summary
  - Feature: Temperature
  - Feature: Feels Like (Temp)
  - Feature: Pressure
  - Feature: Humidity
  - Feature: Dew Point

- Feature: Cloud Cover
- Feature: Visibility
- Feature: Wind Speed
- Feature: Wind Direction
- Feature: Chance of Rain
- Feature: Rain last hour
- Feature: Snow last hour







## Current Forecast Device

rnbWeather   rnbWeather			
 <b>Current Weather: Home</b>	cf20201004062201		
 <b>Weather Summary</b>	clear sky	Today 2:02:22 AM	cf20201004062201weather
 <b>Temperature</b>	19	Today 8:53:13 PM	cf20201004062201temp
 <b>Humidity</b>	82	Today 8:58:15 PM	cf20201004062201humidity
 <b>Sunrise</b>	5:32:27 AM	Today 12:01:27 AM	cf20201004062201sunrise
 <b>Sunset</b>	6:30:40 PM	Today 12:01:27 AM	cf20201004062201sunset
 <b>Solar Noon</b>	12:01:33 PM	Today 12:01:27 AM	cf20201004062201snoon
 <b>Midday UV index</b>	9	Today 2:17:37 PM	cf20201004062201uvi
 <b>Cloud Cover</b>	0	Yesterday 9:04:01 PM	cf20201004062201clouds
 <b>Wind Direction</b>	South SouthWest	Today 8:58:15 PM	cf20201004062201wind_deg

## Daily Forecast Devices & Features

rnbWeather   rnbWeather			
 <b>Day 2: Home</b>	dfd20201004062201day2		
 <b>Weather Summary</b>	broken clouds: 51-84%	Today 7:40:06 PM	dfd20201004062201day2weather
 <b>Day Name</b>	Wednesday	Today 12:01:27 AM	dfd20201004062201day2dayname
 <b>Max Temperature</b>	20	Today 7:40:06 PM	dfd20201004062201day2max
 <b>Min Temperature</b>	16	Today 7:40:06 PM	dfd20201004062201day2min
 <b>Chance of rain</b>	0	Today 7:40:06 PM	dfd20201004062201day2pop
 <b>Daily Rain</b>	0	Today 7:40:06 PM	dfd20201004062201day2rain
 <b>Daily snow</b>	0		dfd20201004062201day2snow
 <b>Sunrise</b>	5:30:15 AM	Today 12:01:27 AM	dfd20201004062201day2sunrise
 <b>Sunset</b>	6:32:11 PM	Today 12:01:27 AM	dfd20201004062201day2sunset
 <b>Solar Noon</b>	12:01:13 PM	Today 12:01:27 AM	dfd20201004062201day2snoon
 <b>Midday UV index</b>	9	Today 2:17:37 PM	dfd20201004062201day2uvi
 <b>Wind Speed</b>	5	Today 7:40:06 PM	dfd20201004062201day2wind_speed
 <b>Wind Direction</b>	South SouthWest	Yesterday 7:38:33 AM	dfd20201004062201day2wind_deg

## Hourly Devices & Features

rnbWeather   rnbWeather			
 <b>Hour 24: Home</b>			hfd20201004062201hour24
 <b>Weather Summary</b>	clear sky	Today 9:03:19 PM	hfd20201004062201hour24weather
 <b>Temperature</b>	18	Today 9:03:19 PM	hfd20201004062201hour24temp
 <b>Wind Speed</b>	7	Today 9:03:19 PM	hfd20201004062201hour24wind_speed
 <b>Wind Direction</b>	South	Today 9:03:19 PM	hfd20201004062201hour24wind_deg
 <b>Chance of Rain</b>	0	Today 9:03:19 PM	hfd20201004062201hour24pop

## Triggers/Conditions

There are currently no plugin dedicated triggers. The reasoning is based on the fact that Homeseer already has device triggers built in and this should be used eg: If the current forecast midday UV becomes high, send a message. In this example the midday UV rating for the current forecast is already a device so you can use the built-in trigger as shown below:

**If**

Trigger  
A Device's Value is... ▼

Trigger Type  
This Device Changes and Becomes... ▼

Device  
mbWeather-mbWeather-Current Weather: Home ▼

Feature  
Midday UV index ▼

Changes and becomes:

Trigger Value  
High ▼

☐ Choose a specific value

**THEN**

Action  
Send an Email ▼

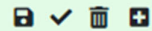
To  
alert\_email\_address@tld.com

CC

BCC

Subject  
UV rating has become: HIGH

Message



Attachment:

[ADVANCED OPTIONS](#)