rnbHydra

User Guide



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About the Plugin

Welcome

Welcome to the rnbHydra plugin for Homeseer.

What does this plugin do? The plugin allows you to connect to your Hydrawise system and create devices in Homeseer to reflect your system status as well as control it.

Hydrawise cloud software is a user-friendly water management software. Each homeowner can use Predictive Watering Adjustments to achieve water savings. Hydrawise software is also a powerful tool for professionals to do in-depth water management for their client's landscape, monitor piping system and valves electrical system. It is a professional cloud-based irrigation software that works for everyone with some of the benefits shown below.

SMART CONTROLLER

- WiFi Enabled
- Touchscreen
- Intuitive Interface
- Professional Hardware

WEATHER ADJUSTMENT

- Smart Watering
- Timebased Watering
- Weather Stations

ADVANCED REPORTS

- Advanced Reports
- Calendar View
- Controller Logs

SYSTEM MONITORING

- Flow Monitoring
- Detect Faulty Wiring

Hunter Hydrawise is a product and service provided by Hunter Industries. All rights, ownership of Hunter Hydrawise reside with Hunter Industries. This plugin (rnbHydra) is not developed or supported by Hunter Hydrawise

To learn more about Hydrawise hy Hunter, please visit their website: www.hydrawise.com

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*	✓	✓

There is a HS4 version of this plugin available

Revision History

Revision #	Version Details
3.0.0.0	Initial version • Support for HS3 - using Hydrawise v2 API
3.0.0.1	 Zone names updated to start with controller name after initial install to allow natural grouping New Device added to allow single device manage a controller and zones Error in custom run times for events and devices fixed (custom run timers were incorrectly taken as seconds)
3.0.0.2	Bugfix: Start All Zones was not starting zones unless a custom time had been entered
3.0.0.3	Bugfix: Polling service may go into error and stop

^{*}compatability mode - not recommended

Plugin Menu

rnbHydra Control

This is an interactive webpage designed to give you flexible use of your Hydrawise system. If you use wall mounted tablets, its a nice way to interact with your controllers. The page automatically updates and checks for changes in your Hydrawise system using the polling duration you have set. it checks for changes 3 times per polling duration. This means that if you use the default polling duration of 30 seconds, this page will update 3 times or every 10 seconds.

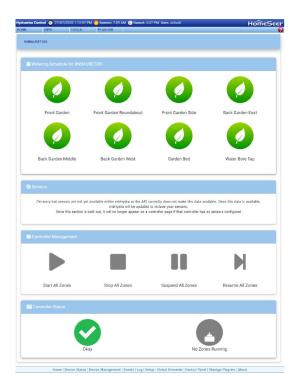
Note - when clicking an action in Homeseer, it may take upto the polling duration for the status to reflect correctly in Homeseer ie If you click **start zone**, it may take upto 30 seconds before Homeseer shows this zone as running. This is due to the fact Homeseer polls Hydrawise every 30 seconds. In a future update of this plugin, this will change to poll directly after each command is sent

Each controller in your Hydrawise account will show up as a new tab on this page. The example below has a single controller within the Hydrawise account.

The control page itself is divided into 3 sections:

- Zone actions each zone the controller is shown here. 4 Controllers are shown per line with no limit to the number of zones shown. Hydrawise can have upto 56 zones per controller.
- Sensors Currently this data is not available in the API. Once this data is made available, this section will be updated to show the sensors and associated data.
- Controller actions The actions shown are as per the titles.

Each action will popup an action box.



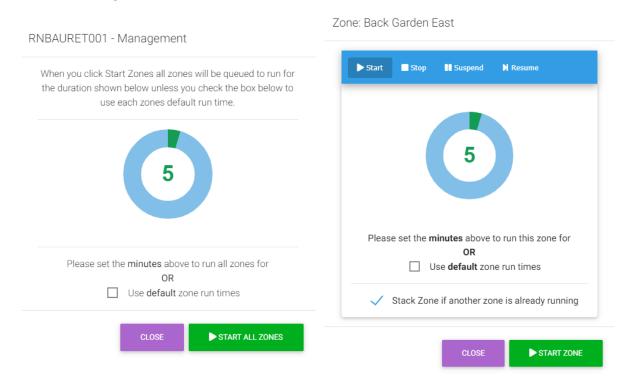
Start Zones

The pop-up box for Controller Start Zones and Zone Start Zone are near identical with the difference being in the stack zone option under a zone action. This does not exist on the Controller Start Zones action.

Stack Zone option will add this zone in the queue behind any current running zones.

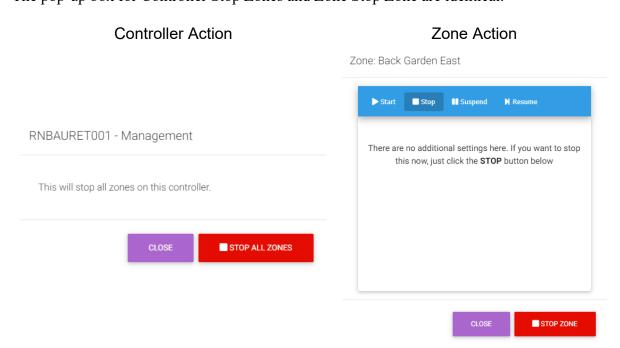
Controller Action

Zone Action



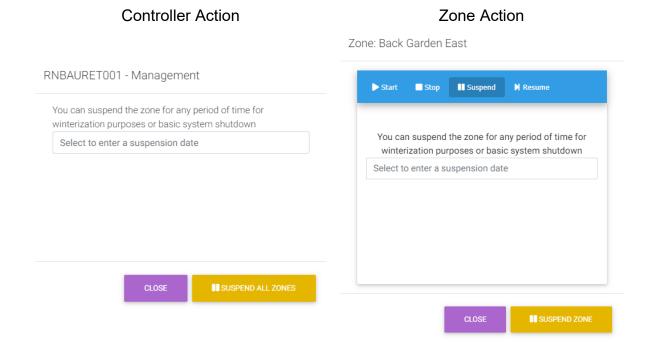
Stop Zones

The pop-up box for Controller Stop Zones and Zone Stop Zone are identical.



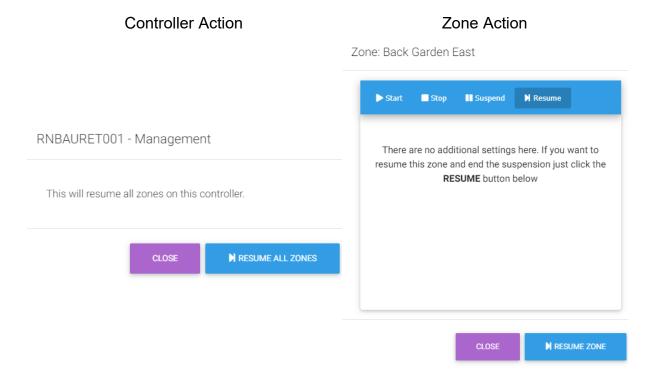
Suspend Zones

The pop-up box for Controller Stop Zones and Zone Stop Zone are identical.



Resume Zones

The pop-up box for Controller Stop Zones and Zone Stop Zone are identical.



Support

rnbHydra 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 generate a new unique number.

This page is broken into 4 sections:

- Current/Open This shows a list of open requests for your support number, for rnbHydra for HS4.
- Previous/Closed This shows a list of closed requests for your support number, for rnbHydra 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 briing all your support requests together.

Shown below is the Support Request screen within rnbHydra. 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

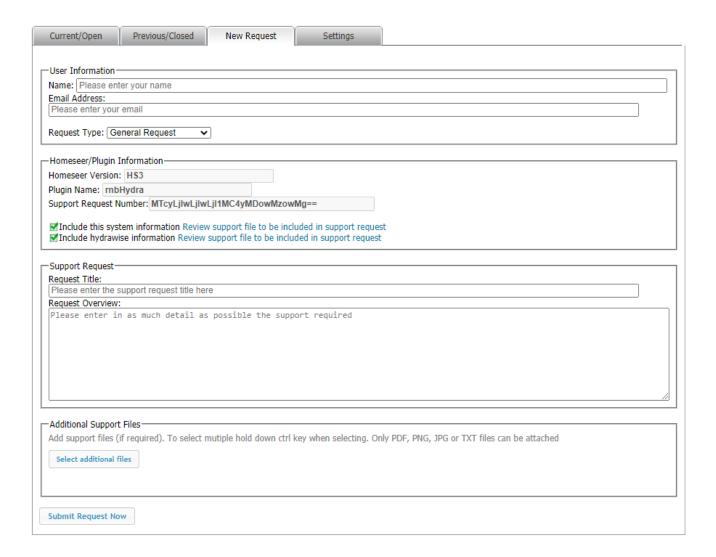
Supporting Files / Information

- Standard Support Files
 - Include your System infomation. 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

 Include your Hydrawise infomation. 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



Setup Wizard

rnbHydra has an in-built setup wizard to make it easy for you to get going as soon as possible with the smallest effort.

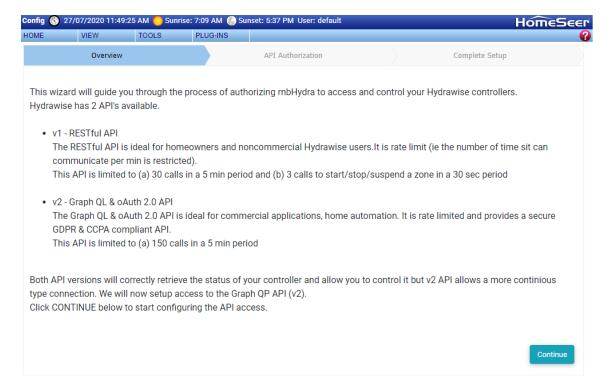
Just follow the setup wizard to get going. Hydrawise by Hunter Industries using oAuth 2.0 access delegation to provide access to youur controller. OAuth 2.0 is a protocol that allows a

user to grant a third-party web site or application access to the user's protected resources, without necessarily revealing your long-term credentials or even your identity.

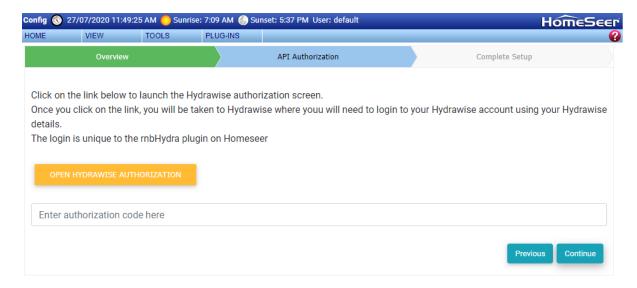
Note: after Granting Permission to Homeseer you will be redirect to rnbPlugins website. This page will show you the authorization code you need. click to copy the code and paste it into your setup wizard.

The authorization code and access token stored in the plugin are encrypted using Triple DESCrypto to provide some additional level of security. The access token used by rnbHydra lasts for 60 mins after which rnbHydra will generate a number access code. Although you should not need to generate a new access token yourself, if there is an issue, simply rerunning the setup wizard will generate a new access token for you.

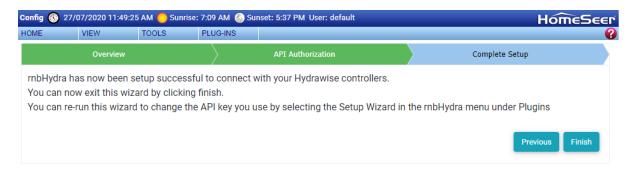
Setup Wizard - Overview



Setup Wizard - API Authorization



Setup Wizard - Complete Setup



Settings

The Settings page allows you configure how the plugin works.

The Settings page is only available after you first run the <u>setup wizard</u>.

The Settings page groups similar settings together to allow you to configure them how you would like. Shown below are typical screens from the Settings page:

API Settings

 This provides an overview of the different API's available from Hydrawise. This pluginn uses the v2 (Commercial) API as this provides secure access for GDPR and CCPA compliance.

Manage Controllers

Each controller found in your Hydrawise account is shown here and enabled by default. If you do not want to have this plugin update a controller, just turn off the controller in this screen. From here you can also select how to reppresent your zones in HomeSeer. By default, each zone is its own root device (parent) with a number of child devices on it. You can choose to only have one device reresenting the controller with each zone control as a child on it. See section below titled: Device Representation in HomeSeer. Note: This does not affect anything on your Hydrawise controller but only disables updates within HomeSeer

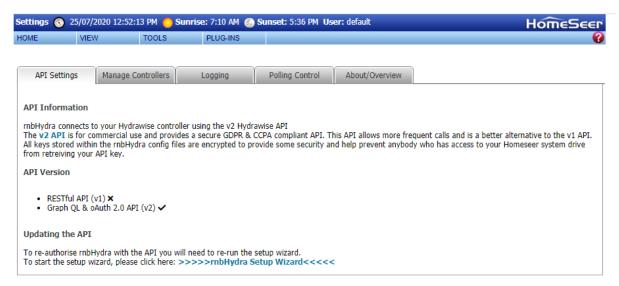
Logging

 This allows you to configure how many messages are written into your Homeseer log. The default is **error's only** and using a lower setting will help in debugging any issues buty will also fill up your log fast.

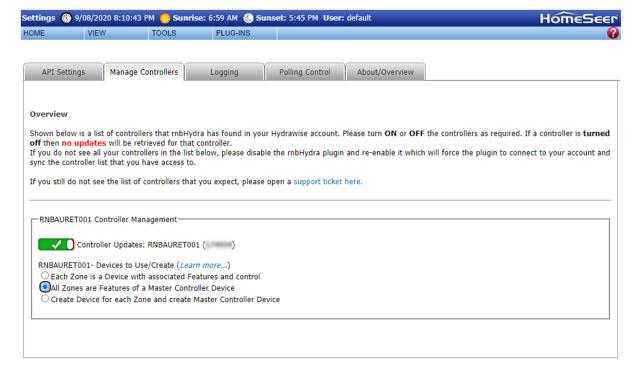
Polling Control

 rnbHydra communicates with your Hydrawise controller using polling (polling is where it asks for controller regularly for updates). Hydrawise uses minutes for zone run times so the default polling interval of 30 seconds should be sufficiant for uses. You can incease or decrease this pollingtime depending on your needs

API Settings

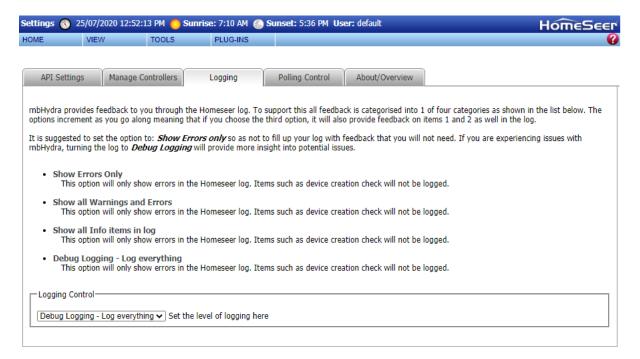


Manage Controllers

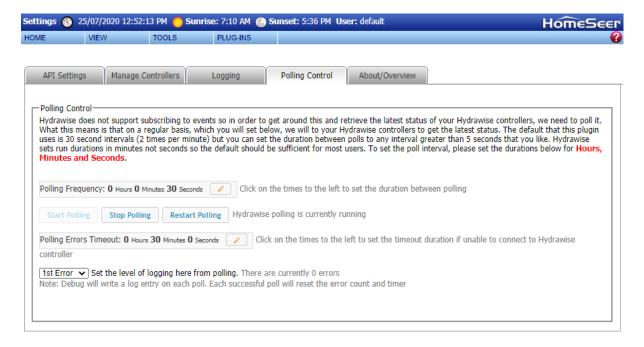


Home | Device Status | Device Management | Events | Log | Setup | Global Elements | Control Panel | Manage Plug-ins | About

Logging



Polling Control



Error! Filename not specified. Device Representation in HomeSeer

rnbHydra has 2 methods of creating parent and child devices to represent your Hydrawise Controllers and zones. Shown below are both options but the main difference is in the number of devices created and not in functionality. Shown below are both options enabled (Create Deice for each zone and create MAster Controller Device).

Option A

The devices highlighted as A in the screenshot below relates to the default option - "Each Zone is a device with associated Features and control".

A device is created for each zone on your controller(s). the zone device has 2 child devices included which shows if the device currently running or not and the next scheduled Hydrawise run.

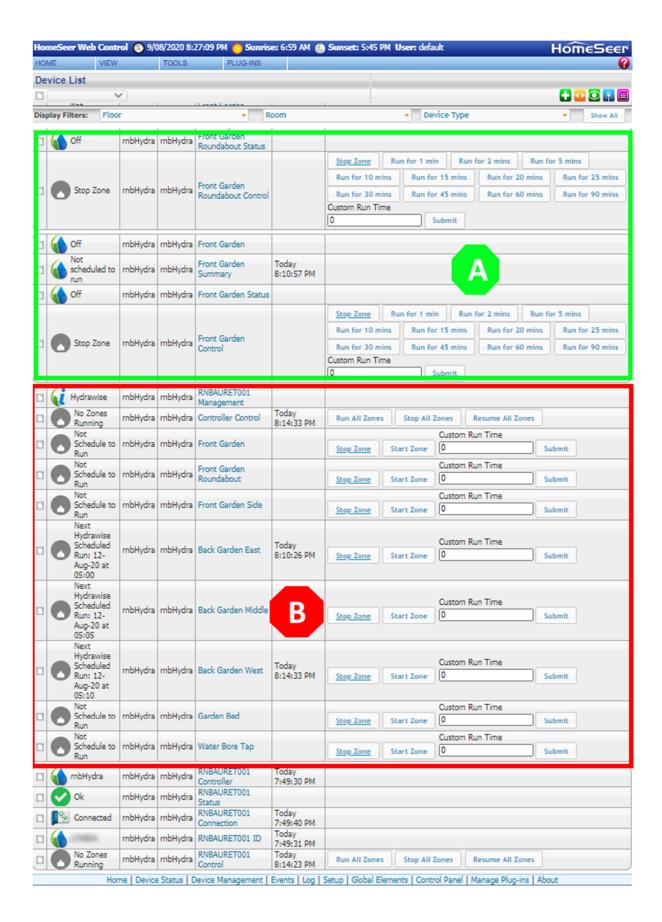
Option B

The device highlighted as B in the screenshot below relates to the option - "All Zones are Features of a Master Controller Device".

A single root device (parent) is created for your controller and all the zones are created as child devices on it. This saves space and allows you to have less devices.

Option C

This combines options A & B above thusu creating extra devices.



Devices

Device Types

Each time the plugin is started from the interface plugins page, it checks for the existence of each of the devices used to report and/or control your Hydrawise Controller and zones. If a device cannot be found in the system, it will re-create it. This approach helps mitigate any errors by device deletion by a user. The device type is used to identify the device within Hydrawise that needs to be controlled or reported. The plugin will create 6 different device types which are:

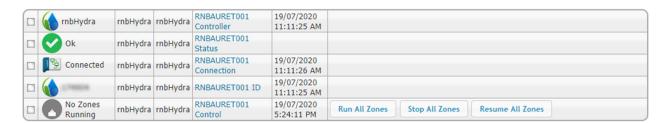
- 1. Hydrawise controller root device
- 2. Hydrawise controller information device
- 3. Hydrawise controller action device
- 4. Hydrawise zone root device
- 5. Hydrawise zone information device
- 6. Hydrawise zone action device

Hydrawise Controller

Shown below is the Controller Device and associated Features.

rnbHydra creates the following for each controller:

- **PARENT:** Controller
 - **o CHILDREN:**
 - **CONTROLLER STATUS:** shows if the controller is okay or in alert
 - **CONTROLLER CONNECTION:** If we are connected (successful polling) or not connected
 - **CONTROLLER ID:** The unique number of your controller in the Hydrawise system
 - CONTROLLER CONTROL: Allows you to send commands to the controller [Default Feature]
 - Start All Zones all the zones on the controller will be scheduled to run for either the default time or a custom time of your chossing
 - Stop All Zones all the zones currently running on the controller will be stopped
 - Resume All Zones you can restart your system before the end of the suspension period. The suspension period will be ended.

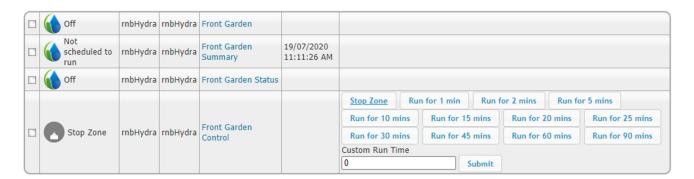


Hydrawise Zone

Shown below is the Zone Device and associated Features.

rnbHydra creates the following for each zone:

- **PARENT:** Zone
 - CHILDREN
 - **SUMMARY:** shows if the controller is okay or in alert
 - STATUS: If we are connected (successful polling) or not connected
 - **ZONE CONTROL:** Allows you to send commands to the zone. Zone Control Actions are shown below [Default Feature]
 - Stop Zone the selected zone on the controller will be stopped
 - Start Zone the selected zone on the controller will be scheduled to run for either the default time or a custom time of your choosing. Some preset times are included for your convenience but you can enter a custom run time using the value box at the end of the control list



Single Controller / Zone Device

If you want to reduce the number of devices this plugin creates or want a different way to interact/manage your Hydrawise controller(s), you can enable the setting "All Zones are Features of a Master Controller Device" in settings under Controller Management. If you select this option, a new device will be created with each zone on that controller created as a feature.

The device has 3 action options

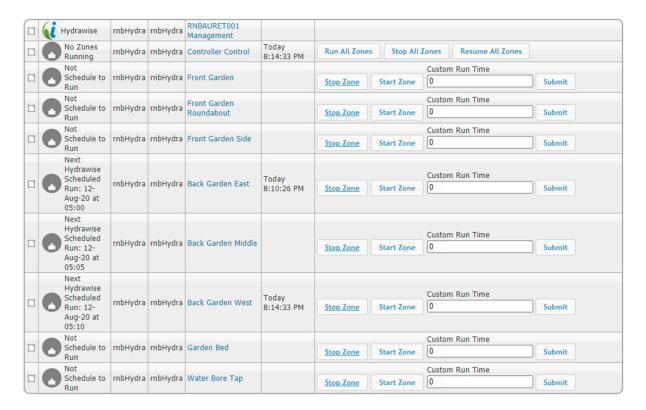
- Run All Zones All the zones on the controller will be scheduled to run for the default time
- Stop All Zones All the zones currently running on the controller will be stopped
- Resume All Zones you can restart your system before the end of the suspension period. The suspension period will be ended.

Each feature/zone created will show the status of that zone through the icon. It will either show the zone as not running or running. The status text will show if the zone is running of when the next schedule run on Hydrawise is for that zone. *Note: It will not show the next scheduled run if from a HomeSeer event.*

Each feature/zone has 3 action options

- Stop Zone Stops the zone if it is currently running
- Start Zone Adds the zone to the queue to run. It will use the default time programmed within Hydrawise
- **Submit** This allows you to enter a custom time, in minutes, for the zone to run for. On clicking submit, it will be added to the queue to run for theduration you entered.

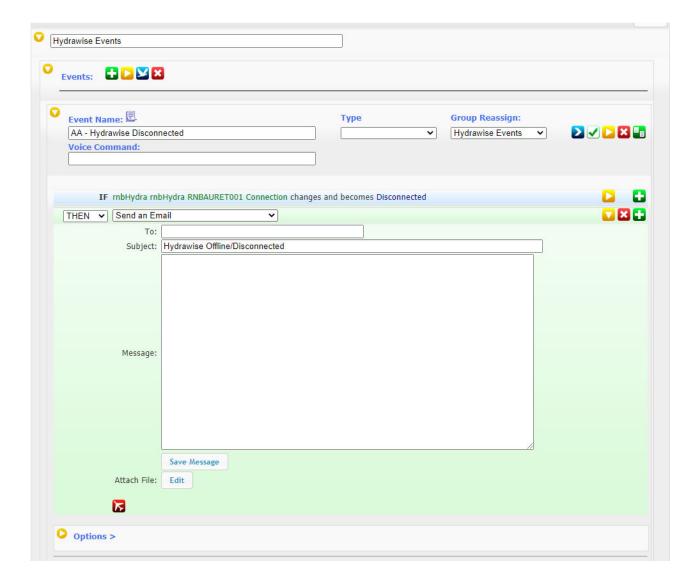
Single Device - Controller and Zones



Events

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 Hydrawise becomes disconnected, send a message. In this example the Hydrawise connection status is already a device so you can use the built-in trigger as shown below:



Actions

There are three actions associated with this plugin which are:

Manage Controller

- This allows you to run any of the following actions on the selected controller:
 - Start All Zones all the zones on the controller will be scheduled to run for either the default time or a custom time of your chossing
 - Stop All Zones all the zones currently running on the controller will be stopped
 - Suspend All Zones you can suspend your system for any period of time for winterization purposes or basic system shutdown. At the end of the suspension date, your system will resume its normal watering schedule. [At the moment, there is not method inside rnbHydra for determining if a suspension is already in place]
 - Resume All Zones you can restart your system before the end of the suspension period. The suspension period will be ended.

Manage Zone

- This allows you to run any of the following actions on the selected zone on the selected controller:
 - Start Zone the selected zone on the controller will be scheduled to run for either the default time or a custom time of your chossing
 - Stop Zone the selected zone on the controller will be stopped
 - Suspend Zone you can suspend the selected zone for any period of time for winterization purposes or basic system shutdown. At the end of the suspension date, the zone will resume its normal watering schedule. [At the moment, there is not method inside rnbHydra for determining if a suspension is already in place]
 - Resume Zone you can restart your system before the end of the suspension period. The suspension period will be ended.

Manage Hydrawise Polling

- This allows you to control the polling service that talks to Hydrawise and has 3 mainn sub actions:;
- Start Polling This will check if the polling service is already running and if not, starts it
- Stop Polling This will check if the polling service is already running and if it is, stops it
- Restart Polling this runs both of the polling actions above first the Stop Polling service followed by the Start Polling action

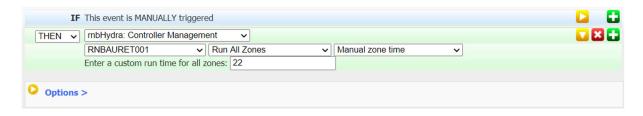
Manage Controller

This action event has a number of settings that must be set/chosen to correctly configure the action. Shown below is the list of items that need to be set and sample screens from each of the four controller actions. Not all settings are required for

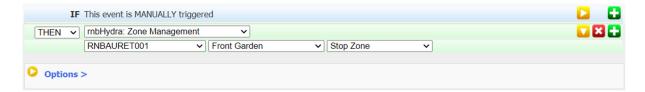
Settings/Variables

- Hydrawise Controller Select the controller from the list available within rnbHydra
- Select Controller Action Select the action from the list available (Start, Stop, Suspend, Resume) within rnbHydra
- **Duration Type** Select the duration type from the list (Default, Manual) available within rnbHydra
 - Default run time uses the zones as already configured in Hydrawise itself (preconfigured watering schedule)
- Custom Run Duration in minutes Enter a custom time in minutes to run all zones for.
 - This will <u>not change</u> your preconfigured watering schedule for each zone as already configured within Hydrawise
- Enter date to suspend until This allows you to set the date to suspend to (for winterisation as an example).
 - Currently there is no date popup available for plugins on the event page so you must enter the date you want manually. It must be in the format of year-month-date (eg: 1st October 2020 in the required format would be 2020-10-01)

Run All Zones



Stop All Zones



Suspend All Zones



Resume All Zones



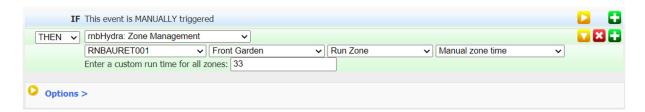
Manage Zone

This action event has a number of settings that must be set/chosen to correctly configure the action. Shown below is the list of items that need to be set and sample screens from each of the four controller actions. Not all settings are required for

Settings/Variables

- Hydrawise Controller Select the controller from the list available within rnbHydra
- Controller Zone Select the zone, from the selected controller, from the list available within rnbHydra
- Select Controller Action Select the action from the list available (Start, Stop, Suspend, Resume) within rnbHydra
- Duration Type Select the duration type from the list (Default, Manual) available within rnbHydra
 - Default run time uses the zones as already configured in Hydrawise itself (preconfigured watering schedule)
- Custom Run Duration in minutes Enter a custom time in minutes to run all zones for.
 - This will <u>not change</u> your preconfigured watering schedule for each zone as already configured within Hydrawise
- Enter date to suspend until This allows you to set the date to suspend to (for winterisation as an example).
 - Currently there is no date popup available for plugins on the event page so you must enter the date you want manually. It must be in the format of year-month-date (eg: 1st October 2020 in the required format would be 2020-10-01)

Run Zone



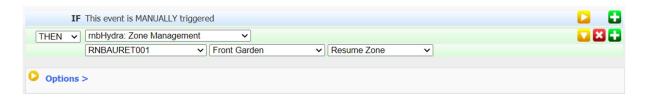
Stop Zone



Suspend Zone



Resume Zone



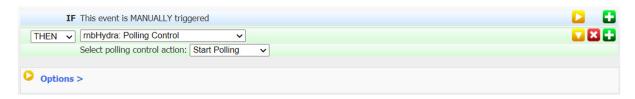
Manage Hydrawise Polling

This action event has only a single setting to be set/chosen to correctly configure the action. Shown below is the list of items that need to be set and sample screens from each of the four controller actions. Not all settings are required for

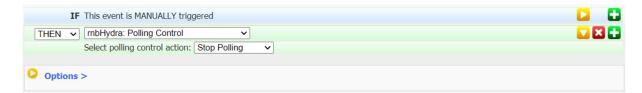
Settings/Variables

- Polling Action Select the action you want to perform on the polling service:
 - Start Polling This will check if the polling service is already running and if not, starts it
 - Stop Polling This will check if the polling service is already running and if it is, stops it
 - Restart Polling this runs both of the polling actions above first the Stop Polling service followed by the Start Polling action

Start Polling



Stop Polling



Restart Polling

