

HONEYWELL WIFI THERMOSTAT PLUG-IN FOR HOMESEER HS4

VERSION 4.2.1

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TERMS & CONDITIONS

Honeywell has chosen not to provide access to their API to anyone other than large businesses. As a result, this plugin uses the only way available to control these devices: the Total Connect™ Comfort Portal (TCCP). This means that if Honeywell changes their website, work will have to be done on this plugin to make it compatible, and that there is a chance the website changes could render it inoperable. These changes are done without my knowledge or control, and your purchase/use of this plug-in is as-is and at your own risk.

Furthermore, excessive activity on your account may result in your account being suspended, requiring you to call Honeywell and get it re-activated. While this plugin has been designed to minimize the chances of this occurring by implementing preventative measures such as queues, timers and minimum command, update and polling frequencies, these values can be changed by the user. Regardless of the values entered (be they the default, smaller or larger), by activating this plugin in your HomeSeer software, you acknowledge this risk and agree to indemnify and hold harmless the developer of this plugin, HomeSeer Technologies, and any other third party plugin developers from any damages (including but not limited to financial, time spent, opportunity cost, loss of account privileges, and the inability to control your thermostats or other connected devices).

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OVERVIEW

Thermostat Family Room			
📍 First Floor (3735)	Off	10/21/2022 4:44:20 PM	
✅ Status (3736)	Success	10/21/2022 4:44:20 PM	UPDATE
⚙️ System Mode (3739)	Heat	10/9/2022 7:50:19 AM	AUTO COOL HEAT OFF
🔌 Operating Status (3740)	Idle	10/21/2022 4:34:19 PM	
⚙️ Operating Mode (3741)	Heat	10/9/2022 7:50:19 AM	
⚙️ Fan Mode (3742)	Auto	11/13/2021 8:51:07 AM	ON AUTO CIRCULATE
⚙️ Fan Status (3743)	Off	10/8/2022 10:59:36 PM	
🕒 Hold Type (3747)	None	10/15/2022 2:34:01 PM	NONE TEMPORARY PERMANENT
🌡️ Cool Setpoint (2341)	74°F	10/21/2022 2:03:59 PM	74 -1 +1
🌡️ Heat Setpoint (2342)	72°F	10/21/2022 9:03:36 AM	72 -1 +1
🌡️ Indoor Temp (2429)	72°F	10/21/2022 9:03:36 AM	
🌡️ Outdoor Temp (2430)	66°F	10/21/2022 3:19:07 PM	
💧 Outdoor Humidity (2431)	33%	10/21/2022 4:19:16 PM	

The skWare Honeywell WiFi Thermostat Plug-In for HomeSeer provides you with a way to monitor and control your Honeywell Total Connect™ Comfort-controlled thermostat from HomeSeer.

INSTALLATION

This Plug-In is installed using the built-in updater capability of HomeSeer.

Before you set it up, you must create your account, login, and acknowledge any alerts or notifications on [Honeywell's Total Connect Comfort website](#). It may be necessary to do this from time to time as changes are made to the site.

UPGRADES FROM 1.X

For users of earlier versions, there are a few notable changes in this version of the plugin to improve the ability to support both HS3 and HS4 (there's no charge to upgrade to the HS4 release, but you will have to use HomeSeer's [Plugin Upgrades](#) page to get a 100% off coupon to purchase it) and to improve the user experience. Unfortunately, some of these changes may mean some work is required in events or scripts that reference these devices.

1. There will always be two setpoint devices (heat and cool) regardless of whether or not you have enabled "Simulated Auto" mode.
2. All Event Actions have been removed; control of the thermostat is now consolidated in the normal "Control a Device" action as it would be for any other HomeSeer device.

You must re-enter your credentials.

SYSTEM REQUIREMENTS

The skWare Honeywell WiFi Thermostat Plug-In for HomeSeer runs on both Windows and Linux installations of HS4 version 4.2.14.0 or higher.

As of 1.3.0: Due to security changes by Honeywell, this plugin is no longer supported on Windows XP, and for Linux/Zee users, it requires Mono version 4.8 or higher. Please see the [support forum](#) for more details.

The following thermostats have been tested with this plug-in, but any plugins controlled via the Honeywell Total Connect™ Comfort Portal (US-based models only at this time) may work. Please report back via the HomeSeer forums if you have success or problems with any specific model.

- [RTH6580WF](#) - Wi-Fi 7-Day Programmable Thermostat
- [RTH9580WF](#) - Wi-Fi Smart Thermostat
- THX9421R5021 - (Redesigned) Prestige 2.0 IAQ*
- THX9321R5000 - Prestige HD*
- THX9321R5030 - Prestige HD*
- TH8321R1001 - (All-New) RedLINK VisionPRO 8000*
- TH6320R1004 - FocusPRO® 6000 Wireless (programmable)*
- TH5320R1002 - FocusPRO® 5000 Wireless (non-programmable)*

*With a RedLINK Internet Gateway (THM6000R1002).

KNOWN ISSUES

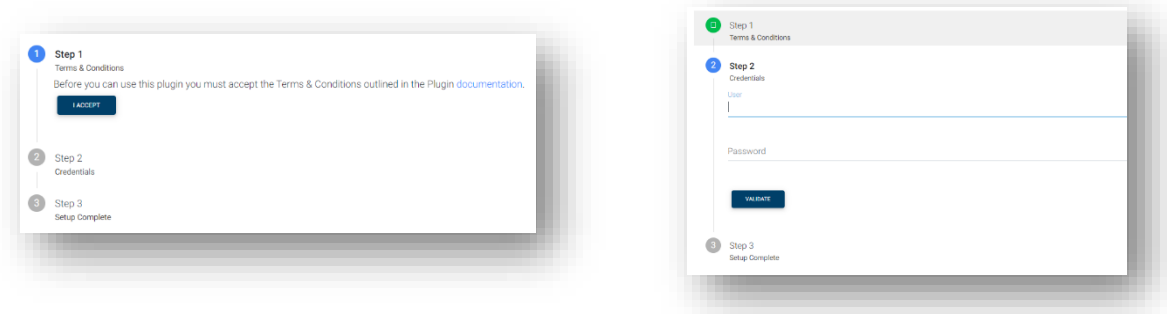
Because HS4 does not yet support dropdown values configured with the “Divisor” property nor does it allow defining the step size for numeric ranges, it is not possible to directly set a setpoint to a “.5” degree value when your Thermostat is configured to be in Celsius. You can still use the “+/- 0.5” buttons to achieve the desired temperature, but that’s not a clean solution. I am hopeful HST will address this soon! ([Issue 281](#), PSDK-112)

SETUP

After installing the Plug-In, a new “Honeywell WiFi Thermostat” menu item can be found under “Plug-Ins” menu in the HomeSeer browser interface.

INITIAL SETUP

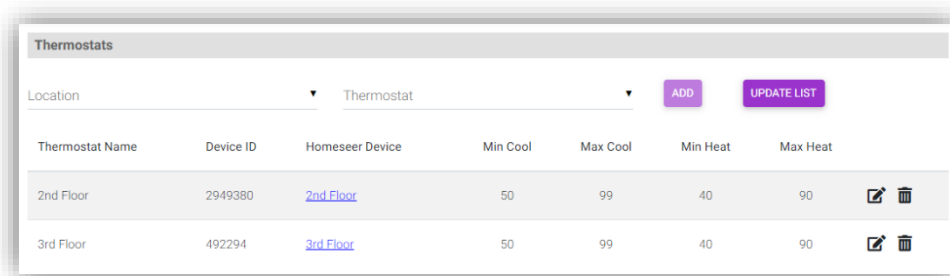
When the plugin first starts, the “Initial Setup” menu item will walk you through the first steps. After accepting the Terms & Conditions, you will be prompted to provide your My Total Connect Comfort Portal credentials.







Completing the setup process will send you to the “Thermostat List” page.

THERMOSTAT LIST

On the “Thermostat List” page, you can add one or more thermostats to be controlled by HomeSeer by selecting from the available thermostats listed on the Total Connect Comfort Portal. Click “Update List” if the list shown does not include any newly added thermostats. It will show both the assigned name in Honeywell as well as the name of the root device in Homeseer (which you’re free to change in Homeseer after the device is created).



Thermostat Name	Device ID	Homeseer Device	Min Cool	Max Cool	Min Heat	Max Heat	
2nd Floor	2949380	2nd Floor	50	99	40	90	 
3rd Floor	492294	3rd Floor	50	99	40	90	 

Once your thermostats are saved and created, for each device you can edit the minimum and maximum allowed cool or heat settings.

When you’ve added your thermostats to the list, a group of parent/child HomeSeer devices will be created for each thermostat based on the capabilities of your thermostat once the first update is complete.

You can also highlight a thermostat in the list and click “Remove”, which will delete the associated devices.

CONFIGURATION

The “Configuration” page provides the connection information and control over the logging output.

ACCOUNT SETTINGS

The User Name & Password are required for logging in to your Honeywell Total Connect™ Comfort Portal (TCC).

The screenshot shows a web form titled "Account Options". It contains two input fields: "User Name" and "Password". Below the password field, there is an "Authorization Status" section with a green checkmark icon. To the right of this status is a purple button labeled "TEST CONNECTION".

If your credentials change or login failures have occurred and the status is marked as unsuccessful, use the “Test Connection” button to perform a test login and ensure the credentials are correct.

Note that frequently logging in (using this button or by re-starting the plugin or removing & adding devices rapidly) could cause your account to be temporarily blocked. If this occurs, stop the plug-in and wait a few minutes before restarting it.

THERMOSTAT OPTIONS

The polling interval (in seconds) specifies how often HS should login to the website and check the current settings. A value of 300 seconds (5 minutes) or higher is required.

The screenshot shows a web form titled "Thermostat Options". It has two input fields: "Poll Interval" with a value of 300 and a note "seconds (min: 300)", and "Update Frequency" with a value of 20 and a note "seconds (min: 15)". At the bottom, there is a toggle switch labeled "Simulate Auto mode for thermostats without native support", which is currently turned on.

The Update Frequency controls how much time must pass between explicit update requests. These are specific requests outside of the polling window requested manually (via the “Update” button or script commands, etc.). A value of 15 seconds or higher is required.

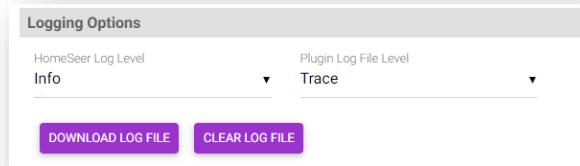
Requests made within less time than this will result in a “Waiting for update...” status temporarily, until the required amount of time has passed.

For thermostats that do not support “Auto” mode, the Plug-in can simulate this capability if you enable it. If the Indoor Temperature is greater than the Cool Setpoint or lower than the Heat Setpoint, the operating mode will be changed automatically. You must maintain a 3-degree difference between Cool and Heat Setpoints.

LOGGING OPTIONS

Optional log data can be recorded in both the HomeSeer log and in a stand-alone log file (which can be found in the “Logs” directory of your HomeSeer installation). Please note that the “TRACE” message level should only be used when troubleshooting or sending in for support as it can have a significant impact on performance.

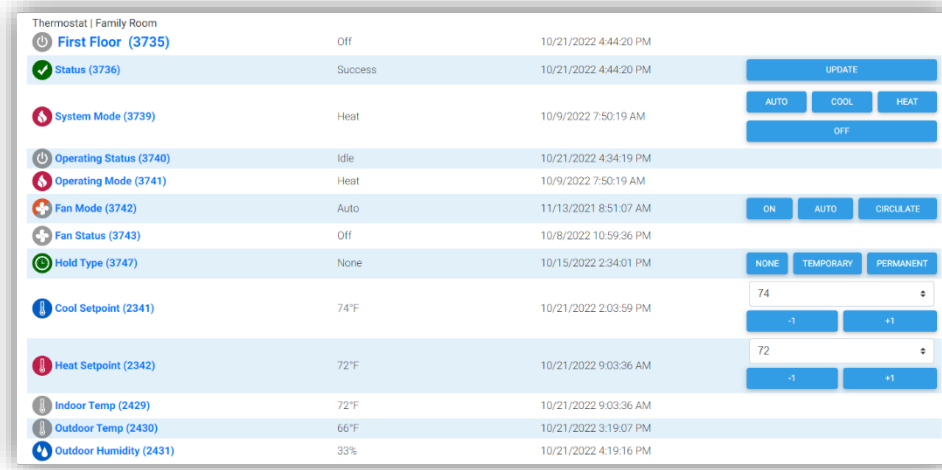
The “Download Log File” and “Clear Log File” buttons on this page make it easier to manage the plugin log files on your server, as you are no longer required to access the file system to get them when requested for support.



When logging is set to Debug or Trace, an additional menu item, Debug, is added that includes an overview of all the data the plugin has configured. This information is very useful for troubleshooting and, in combination with a plugin log file (not a copy/paste of the Homeseer log), will greatly speed up any investigation on reported issues.

DEVICES

Once your thermostats are configured, your devices will show the current values on the Home screen.



The parent “Thermostat” device will show whether the plug-in is able to connect for that thermostat or not.

The “Status” device shows the status of the last request or command and tracks the last data refresh date/time.

The “Indoor Temp”, “Indoor Humidity”, “Outdoor Temp”, and “Outdoor Humidity” devices are status-only displays of the data last reported at the thermostat’s location and are included based on your thermostat’s capabilities.

The “Fan Mode” shows what the setting is (“On” or “Auto”) and provides control buttons to change the mode.

The “Fan Status” device indicates whether the fan is actually running at this time or not (“On”, “Off”).

The “Setpoint” device (or the Cool/Heat Setpoint Devices if your thermostat supports “Auto” mode) shows what the current setpoint is. It provides a dropdown of valid values to adjust the setpoint for the current mode, as well as +1/-1 adjustments. If the device is currently in a Permanent Hold, that hold will be maintained, otherwise a temporary hold will be issued if your thermostat supports such a capability.

The “Hold Type” device shows whether the thermostat is following the schedule (“None”), in a Temporary Hold (“Until HH:MM”) or a “Permanent” hold, depending on capabilities. Buttons are provided to change the type of hold in place.

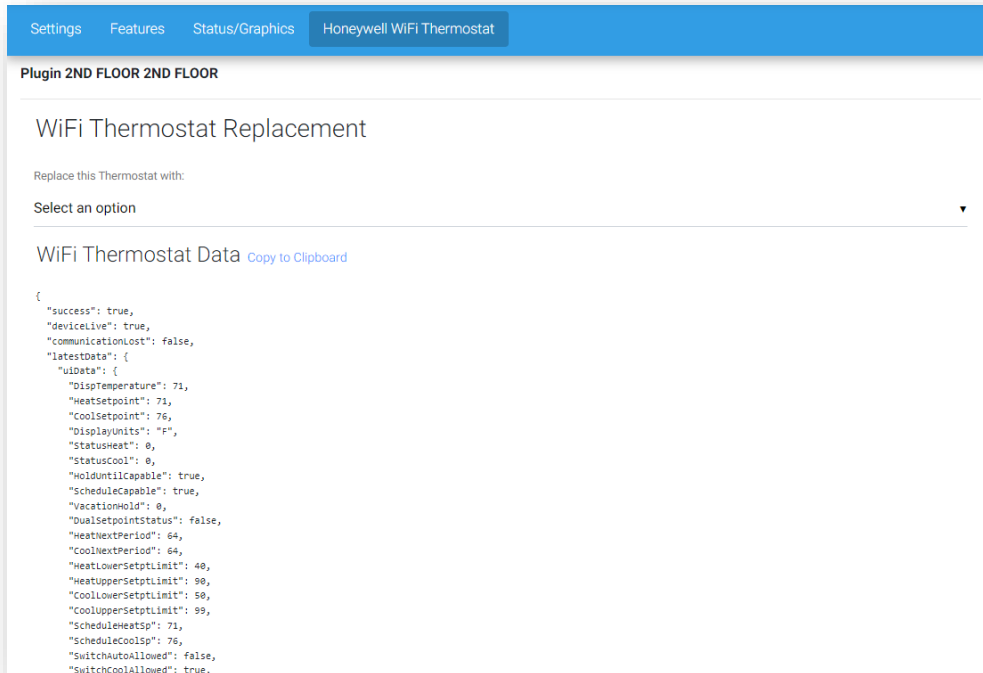
The “System Mode” shows what the setting is (“Cool”, “Heat”, “Emergency Heat”, “Auto” or “Off”, as appropriate to your thermostat model) and provides control buttons to change the mode. If you have enabled the “Simulate Auto” option, an “Auto” mode button will be added even if your thermostat doesn’t support it natively, and switching will be handled by the plug-in if the temperature exceeds the cool setpoint or drops below the heat setpoint.

The “Operating Status” is an indication of whether the system is currently running or not (“Idle”, “Heating”, “Cooling”).

An “Operating Mode” device is also created to show the mode the unit is currently working in for those using Auto or Simulated Auto mode.

DEVICE CONFIGURATION

The plugin also provides additional configuration information on the root thermostat device itself. Here you can change the connection between the parent device and the actual thermostat, which is useful if you need to replace your thermostat but do not want break the events that are currently configured with these HomeSeer devices. The list of devices only includes those that are not already associated with this plugin.



You can also find the JSON data provided by Honeywell, which is always very useful when troubleshooting or reporting issues.

FUNCTIONS

The Honeywell WiFi Thermostat Plug-In for HomeSeer currently provides the following script functions:

- **ChangeMode(DeviceID, Mode, Update)** – this action allows you to switch between supported system modes for the specified thermostat.
- **ChangeFanMode(DeviceID, FanMode, Update)** – this action allows you to switch the fan between supported fan modes for the specified thermostat.
- **ChangeSetpoint(DeviceID, Setpoint, HoldType, Mode, Update)** – this action allows you to change the setpoint for the specified system mode for the specified thermostat. You can choose whether this is a permanent temperature or only until the next scheduled change.
- **ChangeHold(DeviceID, HoldType, Update)** – If the specified thermostat is in a hold state, this action will return to the programmed temperature configured via the thermostat’s online programming.

Where:

- **DeviceID** = the string ID used in adding your thermostat to the plugin
- **Mode** = 0 (Emergency Heat), 1 (Heat), 2 (Off), 3 (Cool), 4 (Auto)
- **FanMode** = 0 (Auto), 1 (On), 2 (Circulate), 3 (Scheduled)
- **HoldType** = 0 (None), 1 (Temporary), 2 (Permanent)
- **Update** = This parameter is deprecated and retained only for backwards compatibility of signatures with existing scripts. The plugin no longer performs updates after individual commands.

For example, setting the Heat setpoint to 71 with a permanent hold for thermostat 123456:

```
&nhs.PluginFunction("Honeywell WiFi Thermostat", "", "ChangeSetpoint", {"123456",71,2,1,true})
```

SUPPORT

Support for the skWare Honeywell WiFi Thermostat Plug-In for HomeSeer is provided through the standard HomeSeer channels. The primary mechanism is via the [Honeywell WiFi Thermostat forum](#) on the HomeSeer website. The author can be contacted directly at steve@skware.net.

Links to the documentation and the support forum can be found on the Plugin’s “Documentation” page in the Plugin menu.

APPENDIX 1: FILES

The following files are used by the Plug-In. Directories in bold are part of the standard HomeSeer installation. Files marked with * are created by the software during usage; all other files are included in the installation.

<HomeSeer Installation Directory>

```

HSPI_SKWARE_HW_WIFI_TSTAT.exe
HSPI_SKWARE_HW_WIFI_TSTAT.exe.config
\Bin
  \skWare
    \WiFiThermostat
      HtmlAgilityPack.dll
      Newtonsoft.Json.dll
      skWare.HomeSeer.WiFiThermostat.Core.dll
      skWare.HomeSeer.WiFiThermostat.Core.dll.config
\Config
  HSPI_SKWARE_HW_WIFI_TSTAT.ini*
\html
  \WiFiThermostat
    reset_connection.html
    skware_common.js
    skWare Honeywell WiFi Thermostat Plug-In User Guide.pdf
    thermostat_list.html
    WiFi_Tstat_Configuration.html
    WiFi_Tstat_Docs.html
    WiFi_Tstat_Setup.html
    WiFi_Tstat_Thermostats.html
  \images
    auto.png
    auxheat.png
    cool.png
    emergheat.png
    failed.png
    fan-auto.png
    fan-circulate.png
    fan-off.png
    fan-on.png
    fan-scheduled.png
    heat.png
    humidity.png
    nostatus.png
    off.png
    permanent.png
    schedule.png
    temporary.png
    Thermometer-cool-0.png
    Thermometer-cool-1.png
    Thermometer-cool-2.png
    Thermometer-cool-3.png
    Thermometer-cool-4.png
    Thermometer-cool-5.png
    Thermometer-generic-0.png
    Thermometer-generic-1.png
    Thermometer-generic-2.png
    Thermometer-generic-3.png
    Thermometer-generic-4.png
    Thermometer-generic-5.png
    Thermometer-heat-0.png
    Thermometer-heat-1.png
    Thermometer-heat-2.png
    Thermometer-heat-3.png
    Thermometer-heat-4.png

```

HONEYWELL WIFI THERMOSTAT PLUG-IN FOR HOMESEER HS4

Thermometer-heat-5.png

\Logs

HSPI_SKWARE_HW_WIFI_TSTAT.log*