

HCA Tech Note 143

Hubitat Tools

The programs in this library package are designed to keep track of the message receptions from the Hubitat to HCA.

There are two programs that process receptions from the Hubitat are these:

- *HTTP Server Receive HTTP* (port 80). This is used by the HCA object device drivers, so they are used by Hubitat when it handles a voice command from a voice assistant.
- *Hubitat Elevation Hubitat Event Handler* (port 8080). The MakerAPI sends to this port to report state changes in Hubitat managed devices.

These programs keep track of when these receptions happen and the maximum elapsed time between the current reception and the previous reception. Over time the goal is to determine the maximum quiet time between receptions from the Hubitat. Aside from being just interesting, this allows handling of the case where the Hubitat has encountered a failure or error where a restart would clear it. But before a program can say "If the Hubitat has been silent for slong, it must be dead so tell someone", it is important to see that in your environment this long> is 10 minutes, 50 minutes, 2 hours, or whatever.

So, how can you get access to these programs? All the pieces you need are in the online library.

Unfortunately, HCA import doesn't have the facilities to import both the package you want and to automatically import or update all the packages it uses in its implementation. You need to do this manually. Follow these steps closely.

Step 1.

Install HCA 18.0.10. There are changes to some of these packages that will not operate with older HCA versions.

Step 2.

Read over this doc about how the new library is accessed.

https://www.homecontrolassistant.com/download/Doc/TechNotes/TechNote_142_OnlineLibrary.pdf

One of the packages you will be installing has the "changed package name" issue described on page 2 in the above note. If you have that package, follow the instructions to sort out this name change before you go further.



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Step 3. Make a backup of your design file. Please do not forget to do this!

Step 4. You will be installing these packages from the library in this order.

- 1. File Tools (version 1)
- 2. Messaging Tools (version 2)
- 3. Elapsed Time Image (version 4)
- 4. Network Tools (version 2)
- 5. HTTP Server (version 6)
- 6. Hubitat (in the class section of the library version 28)
- 7. Hubitat State Connector (version 2)
- 8. Hubitat Tools (version 3)

Some of these you may already have, but there are updates to them.

Step 5.

There is a change to the Hubitat HCAApp implementation, and you will have to get that text file and replace what you have in the HCAApp code in your Hubitat. That file is here:

https://homecontrolassistant.com/download/Hubitat2/HCAApp.txt

If you don't remember the procedure for this, go back to technical note #703, step 5, starting on page 9.

https://www.homecontrolassistant.com/download/Doc/TechNotes/TechNote_703_HubitatCreateVirtualHCADevices.pdf

In brief, open the app code in Hubitat, select it all, delete it, get the new code from the web, paste in the new code, and then save.

Step 6. Use the Hubitat Tools package.

In the Hubitat tools package are several programs. These are:

• "Hubitat Watch" and "Hubitat Check". Read the notes in the programs and you will see how they work. The idea is that Hubitat Check is most always running – it is restarted by each Hubitat communication. If ever it gets through its delay, the Hubitat has been silent for too long.



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• "Hubitat Command Timing Info" and "Hubitat Report Timing Info". These create text strings of the data that has been kept.

After some time has passed for the Hubitat to send messages to HCA in response to a voice command or a sensor report, then do this. Open the program notes viewer – it's in the "Tools" ribbon category, "Visual Programmer" panel – and make sure those programs have access to the viewer – use the button at the lower left of the viewer window - and then run the two "Timing Info" programs. The program notes viewer should show something like this:

Last Hubitat HCA driver request 56 minutes 3 seconds ago (07-Nov 02:53:57). Before the last reception max time between driver requests was 12 hours 10 minutes 33 seconds.

Last Hubitat state report message 33 seconds ago (07-Nov 03:49:27). Before the last reception max time between report messages 1 minute 2 seconds.

Yours will be different of course and may have less information until HCA receives receptions from the Hubitat.

The first line "Hubitat HCA driver request" comes from Alexa (or Google Assistant) making a request of Hubitat to satisfy a verbal command. If you don't use Hubitat for voice control, then this line has no meaning for you.

The second line "Hubitat state report message" comes from the Hubitat Maker-API reporting a state change to a device it manages. That could be a ZWave device that changes state or a ZWave sensor that is reporting a condition. If you don't have any of these then this line has no meaning for you. If you want to cause this to happen as a test, use the Hubitat UI to control a ZWave device. If that device is one of those devices that the Maker-API is configured to report, HCA will get a message about that state change.

In the "Hubitat Tools" package there is a program named "Add to Daily Report". If you have the Daily Report configured for your system, you can schedule this program to run a few minutes before the Daily Report sending time, and you will get Hubitat timing info added to the report each day.

You can change the "Add to Daily Report" program to remove messages that don't apply to your system. That is, if you don't use Alexa or Google Assistant you can remove the first Start-Program element (the one that starts the program "Hubitat Command Timing Info"). If you don't have Hubitat managed devices, you can remove the second Start-Program element (the one that starts the program "Hubitat report timing info").

##end##