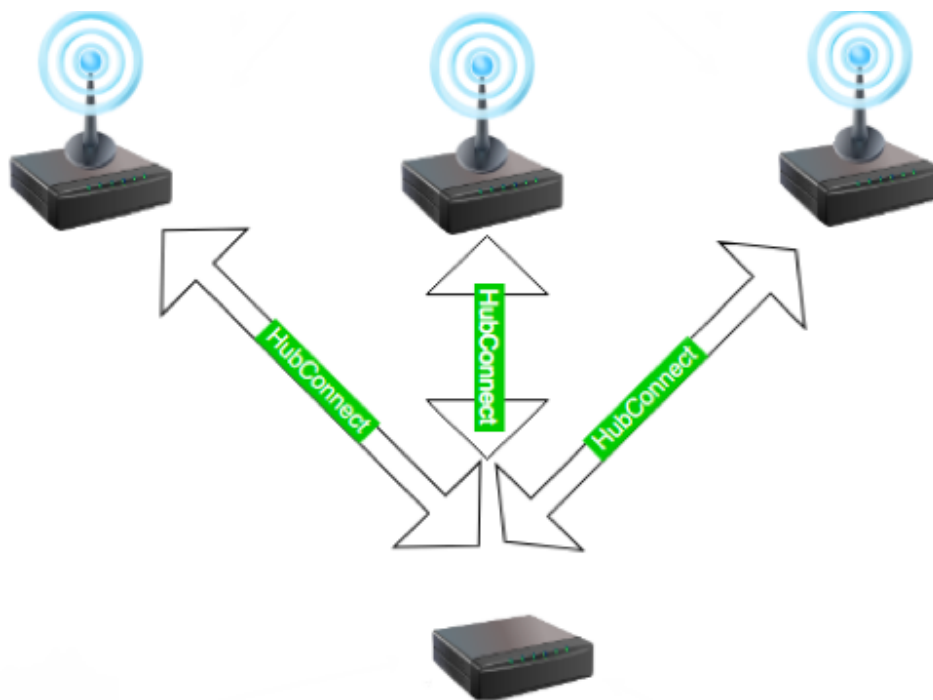# HubConnect 1.2
Installation Instructions

Multi-Platform, Real-Time Device Intercommunication

HUBCONNECT MULTIPLATFORM DEPLOYMENT

Minimum System Requirements:

- 1 Hubitat Hub (Coordinator).
    - AND -
- 1 Hubitat Hub (Remote)
    - OR -
- 1 SmartThings Hub (Remote)

Please note that the HubConnect apps are not released under any open-source license. Be sure to read the license agreement before installing.

Before installing HubConnect it is important to designate one Hubitat hub to act as the the coordinator or "server". The server hub will be responsible for managing the links to all of the remote hubs, managing custom device drivers, and reporting the up/down status of the remote hubs.

On designated Server Hub, perform the following pre-installation steps:

1. Install the *HubConnect Server* (container) app:

   1. In the left menu, click *Apps Code,* then *New App*.
   2. Click *Import* located near the top-right of the page.
   3. Paste the following URL into the input:

      https://raw.githubusercontent.com/HubitatCommunity/HubConnect/master/Hubitat/apps/HubConnect-Server.groovy

   4. Click *Import*.

2. Install the *HubConnect Server Instance* app:

   1. In the left menu, click *Apps Code,* then *New App*.
   2. Click *Import* located near the top-right of the page.
   3. Paste the following URL into the input:

      https://raw.githubusercontent.com/HubitatCommunity/HubConnect/master/Hubitat/apps/HubConnect-Server-Instance.groovy

   4. Click *Import*.
   5. After import, click *oAuth*, then click *Enable oAuth in App*.
   6. Close the window.

3. Install the *HubConnect Remote Hub* driver:

   1. In the left menu, click *Drivers Code,* then *New Driver*.
   2. Click *Import* located near the top-right of the page.
   3. Paste the following URL into the input:

      https://raw.githubusercontent.com/HubitatCommunity/HubConnect/master/Hubitat/drivers/HubConnect-Remote-Hub.groovy

   4. Click *Import*.

4. Optionally, install all drivers:

   For most environments, this step is optional as HubConnect will alert which drivers are needed at the time of device selection. But for large systems, or those with a wide variety of device types, it may be convenient to pre-install all device drivers. Follow the instructions in step #3 above and import all of the following drivers located at:

   https://github.com/HubitatCommunity/HubConnect/tree/master/UniversalDrivers

Once the Server or "coordinator" hub apps and drivers have been installed, install the HubConnect Remote Client on all of the satellite hubs.

Hubitat Remote Hub; perform the following pre-installation steps:

1. Install the *HubConnect Server Instance* app:

    1. In the left menu, click *Apps Code,* then *New App*.
    2. Click *Import* located near the top-right of the page.
    3. Paste the following URL into the input:

       https://raw.githubusercontent.com/HubitatCommunity/HubConnect/master/Hubitat/apps/HubConnect-Remote-Client.groovy

    4. Click *Import*.
    5. After import, click *oAuth*, then click *Enable oAuth in App*.
    6. Close the window.

2. Optionally, install all drivers:

    Since the majority of communications flow form remote hub to server hub, this step is largely unnecessary. For any devices linked from the Server hub to the Remote hub, HubConnect will still alert which drivers are needed at the time of device selection.

    However for large systems, or those with a large number of devices connected from the Server hub, it may be convenient to pre-install all device drivers. Follow the instructions in step #3 in the first section (*"Install the HubConnect Remote Hub driver"*) and import all of the following drivers located at:

    https://github.com/HubitatCommunity/HubConnect/tree/master/UniversalDrivers

SmartThings Remote Hub; perform the following pre-installation steps:

1. Install the ***HubConnect Server Instance for SmartThings*** app:

    1. Log into the SmartThings IDE, click ***+ New SmartApp***.
    2. Click the ***From Code*** tab located near the top-left of the page.
    3. Paste the following URL into the input:

        https://raw.githubusercontent.com/HubitatCommunity/HubConnect/master/SmartThings/HubConnect-Remote-Client.groovy

    4. Click ***Create***.
    5. After import, click ***App Settings***, then click ***OAuth***
    6. Click ***Enable OAuth in Smart App***
    7. Click ***Update***
    8. Close the window.

2. Optionally, install all drivers:

    Since the majority of communications flow form remote hub to server hub, this step is largely unnecessary. For any devices linked from the Server hub to the Remote hub, HubConnect will still alert which drivers are needed at the time of device selection.

    However for large systems, or those with a large number of devices connected from the Server hub, it may be convenient to pre-install all device drivers. Follow the instructions in step #3 above and import all of the following drivers located at:

    https://github.com/HubitatCommunity/HubConnect/tree/master/SmartThings/DeviceTypes

    Not all Device Types are currently supported in SmartThings. For those that do not appear in the folder above, please import the equivalent Universal Driver found at:

    https://github.com/HubitatCommunity/HubConnect/tree/master/UniversalDrivers

Once HubConnect Remote Client has been installed on all of the satellite hubs, move on to connecting them to the Server Hub.

Connecting a Hub:

1. On the Master hub, go to the *HubConnect Server for Hubitat* app.

2. Click *Connect a Hub*

3. At the *Main Menu*, Click *Connect to Client Hub*

   1. Enter a *Friendly Name* for the hub.
   2. Enter the *Private LAN IP Address of Client Hub* of the remote Hub (even if the hub is not on the same LAN or in the same location)
   3. Choose the *Type of Remote Hub:*
      1. *Hubitat (LAN)* - Remote hub is on the same LAN and IP subnet as the Server.
         1. Choose one of the following connection methods (this setting can be changed at any time):
            1. Hubitat oAuth (http) - Uses https calls for every event. Great for small systems or system with less than 70% of remote devices connected to the server.
            2. Hubitat Event Socket - Recommended for maximum performance when at least 60% of remote devices will be connected to the server.
      2. *Hubitat (Internet)* - Remote hub is connected via Hubitat cloud over the internet.
      3. SmartThings - Remote hub is a SmartThings hub which connects using the Hubitat Cloud to the SmartThings cloud.
   4. Copy the Connection Key shown in the text box. You will need to paste this into the Remote Client.

4. Click *Done*

5. Switch over to the Hubitat web UI (or SmartThings app) for the Remote Hub being connected. Then go to the *HubConnect Remote Client* app.

6. Click *Connect to Server Hub*

   1. Enter the *Local LAN IP Address of the Server Hub* (even if the hub is not on the same LAN or in the same location)
   2. Paste the Server Hub's Connection Key (copied from step 3.4 above) into the *Paste the server hub's connection key here* input.
   3. Press *Enter* or click away from the field.
   4. The client will attempt to contact the Server hub. In a few seconds the UI should update to show a "*Connected!*" status if successful. If not, an error message should be displayed.
   5. If the connection is successful, Click *Done*

7. The Remote Client will exit back to the apps list. To select devices on the Remote Hub to connect to the Server hub, navigate back to the *HubConnect Remote Client* app.

1. Click ***Select Devices to Synchronize to Server Hub…***
2. Select devices on the Remote that you wish to have connected to the Server hub.
3. If the drivers were not previously installed, make sure all of the recommended device drivers are installed on the Remote Hub prior to clicking ***Done***.

8. **Enjoy using HubConnect!**