SpaceLogic Room Controllers

SE8000 Samsung SmartThings App Integration Guide

Connecting the Room Controller to the
Samsung SmartThings App

Schneider Electric

Version 1

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Introduction

This integration guide is applicable to the Room Controllers that follow:

- SE8350 Low Voltage (24VAC) Fan Coil Unit (FCU) and Zone Control.
- SER8350 Line Voltage Fan Coil Unit (FCU).
- SE8650 Rooftop Unit (RTU), Heat Pump and Indoor Air Quality (IAQ).

Samsung SmartThings App

SmartThings is a smart home ecosystem of hubs and products developed by Samsung and other third parties.

With SmartThings, you can connect and control multiple devices quicker and easier. From your smartphone, you can monitor, control and automate your SmartThings compatible devices. To get started, simply purchase the SmartThings Hub, download the free SmartThings app, then add your connected devices.

There are two apps, the new "SmartThings" app, and the older "SmartThings Classic" app. You can use both to see which one you prefer. However, if you are a new user of SmartThings, it is recommended to start with the "SmartThings" app instead of the "SmartThings Classic" app.

Key features:

- From your smartphone, control and check the status of devices registered through a SmartThings Hub.
- Group multiple devices into a Mode and operate them simultaneously.
- Configure the settings of devices, including the time and operating conditions, and operate them automatically.
- Invite other users so they can view and operate the device.
- The notification feature allows you to receive status information about your device.
- Receive alerts from connected devices when there's unexpected activity.
- Integrates with IFTTT (If This Then That) easily for total home control.

Note: The SmartThings app, the Samsung account and their related services are owned by SmartThings, Inc. and Samsung Electronics Co., Ltd. respectively. Their products and services may change over time and may differ from the contents of this document. For more information go to www.smartthings.com.

Samsung SmartThings Hub

While the SmartThings App is compatible with various Wi-Fi products, adding the SmartThings Hub allows you to control ZigBee and Z-Wave products. The SmartThings Hub requires the free SmartThings app for Android or iPhone.

Key features:

- Compatible across a wide range of devices and brands, eliminating the need to buy multiple hubs.
- Wireless connection to your internet router's Wi-Fi network, using the Samsung cloud to communicate between the SmartThings app and the Hub.
- Connect to a wide range of wireless smart devices and make them work together.
- Control connected devices in your home with voice commands using SmartThings and Amazon Alexa or Google Home.
- Protocols: ZigBee, ZigBee 3.0, Z-Wave, Cloud-to-Cloud, LAN and Wi-Fi.

SmartThings Groovy IDE

The SmartThings Groovy IDE (Integrated Development Environment) allows you to integrate devices directly with the SmartThings Hub using ZigBee, Z-Wave, or LAN/HTTP protocols. The SmartThings Hub ZigBee settings are located in the Groovy IDE website, accessed preferably using a PC/laptop. A Samsung account is required to login to the IDE website located at https://graph.api.smartthings.com.

Room Controllers

The Room Controller is connected to the Samsung SmartThings Hub using the ZigBee wireless protocol. The Room Controller's ZigBee Network settings must be configured with the Hub's ZigBee settings (located in the Groovy IDE) before you can connect to the SmartThings app.
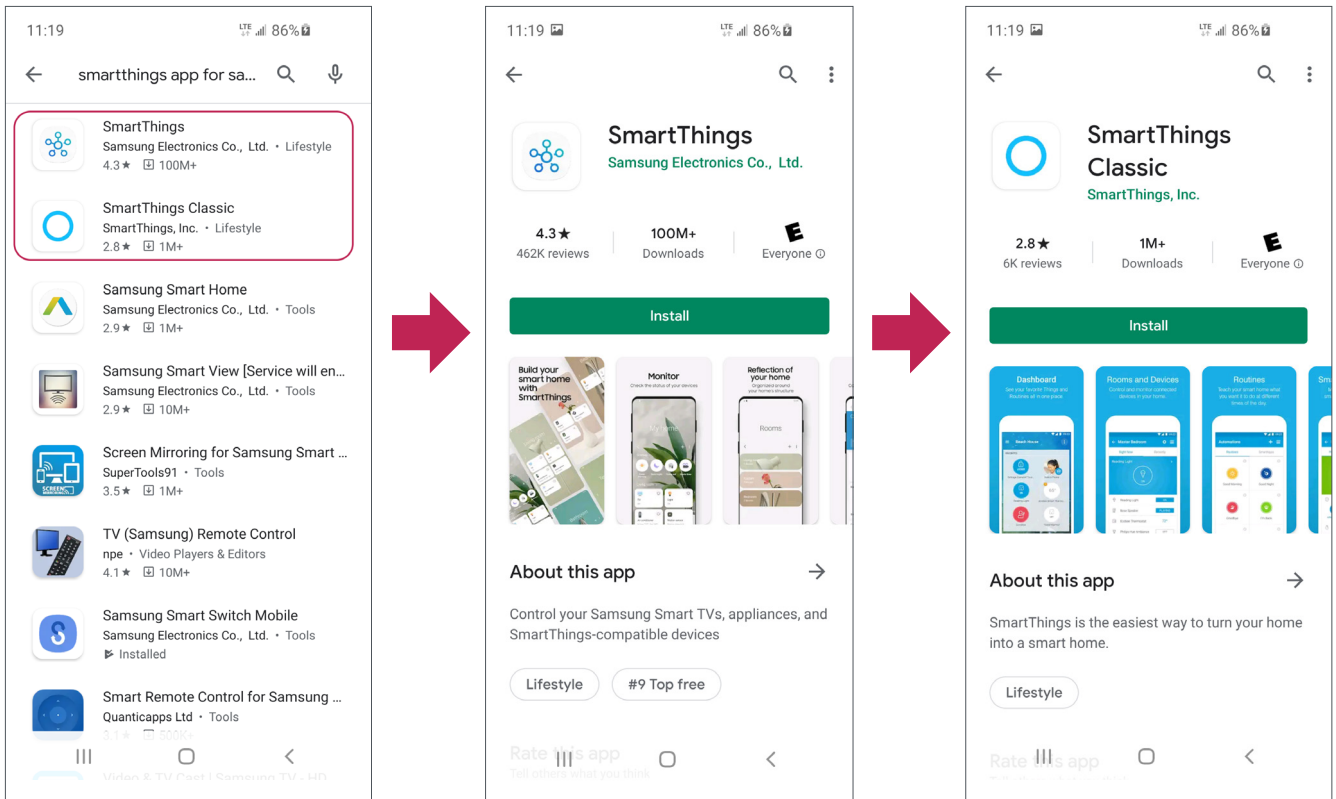
Note: For more information go to www.schneider-electric.com/buildings.

Note: The Hub's Pan ID is in hexadecimal format while the Room Controller's Pan ID is in decimal format. Search the internet for a Hexadecimal to Decimal Converter to do the conversion.

Step 1: SmartThings Hub Installation

Note: For more information and instructions to complete the steps below, go to SmartThings Support at https://support.smartthings.com/hc/en-us, scroll down to Additional Support, click on Guide to SmartThings, then click on Setting up an account, the Hub, and Things.

1. Install the SmartThings App onto your smartphone.

2. Sign up for SmartThings in the SmartThings app:

   - SmartThings uses your Samsung account.
   - Sign in if you already have an account, or touch Create account to make one.

Note: Login info for your Samsung Account will be sent by email.

3. Set Up a SmartThings Hub:

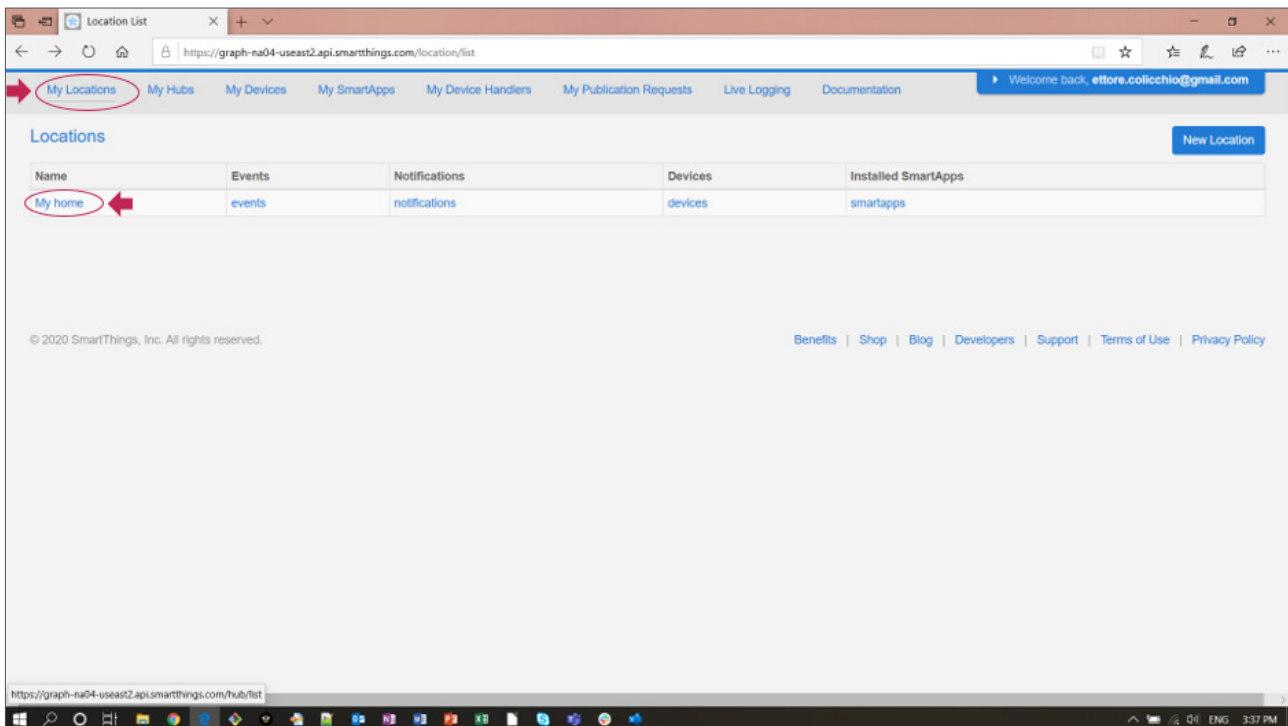   - Follow the instructions in SmartThings Support. Go to the link in the note above.

Note: You can change the Wi-Fi network that the SmartThings Hub is connected to in the SmartThings app. You can also connect the Hub via Wi-Fi after setting it up via Ethernet. This will not affect any devices connected to the Hub, and does not require a factory reset.

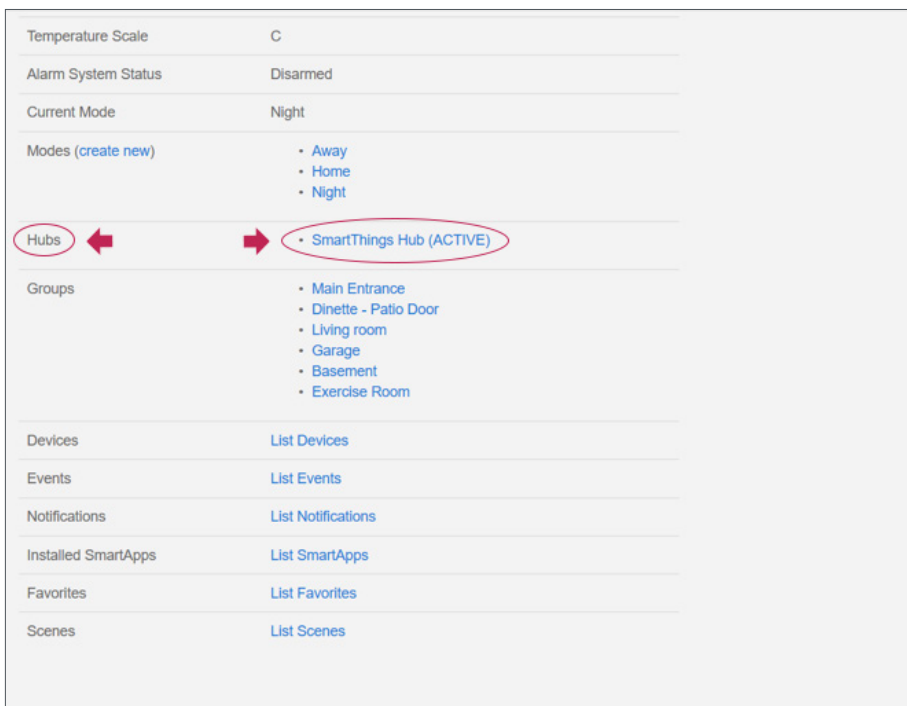# Step 2: Adding the Room Controller to the Network

Get your Hub's ZigBee Network Information

The Room Controller must be configured manually with the SmartThings Hub ZigBee network Pan ID and Channel, located in the SmartThings Groovy IDE website.
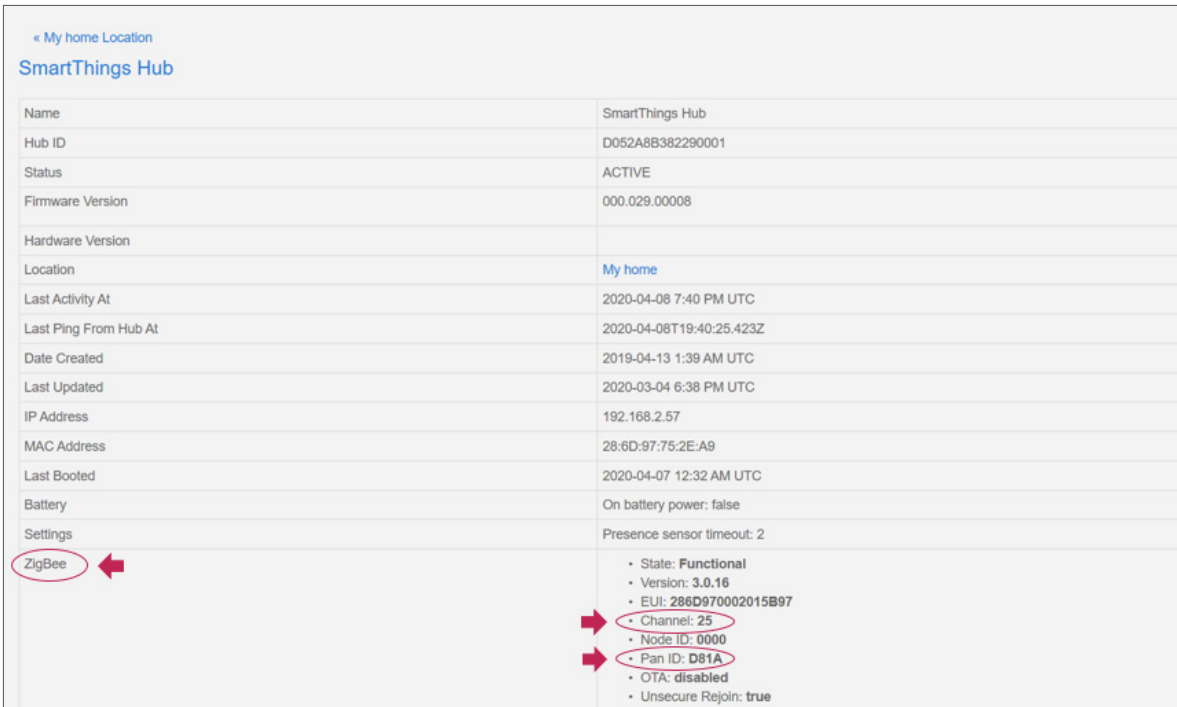
1. Go to the SmartThings Groovy IDE website at https://graph.api.smartthings.com, then login with your Samsung account.
2. Click on My Locations (sometimes the My Hubs list is empty until you click on My Locations first).
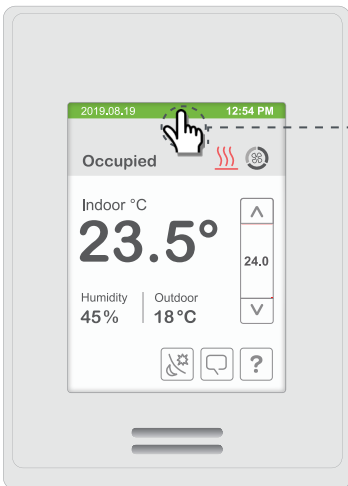3. Click on your Hub's location. Example: My home.

4. Scroll down to Hubs, then click on your SmartThings Hub.

5. Scroll down to ZigBee to see your Hub's Channel and Pan ID numbers.
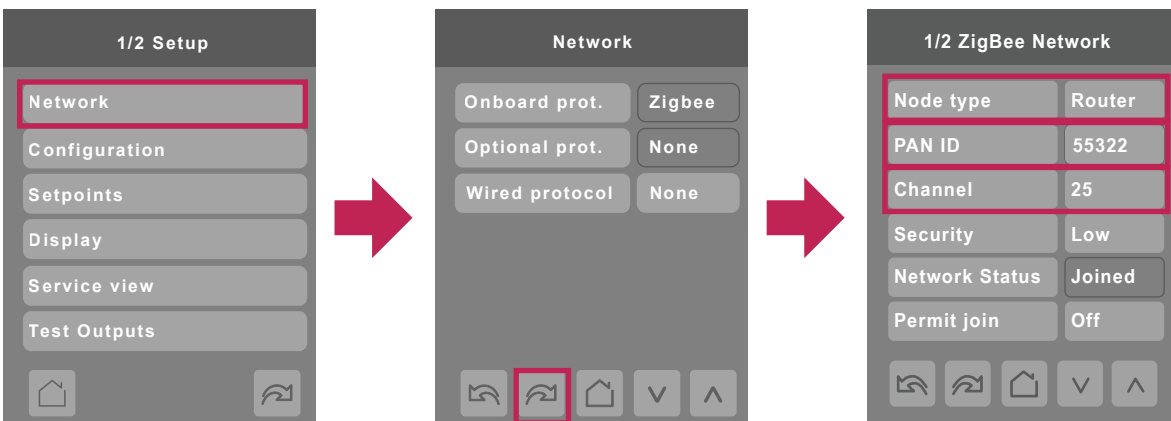6. Convert the Pan ID from hexadecimal to decimal.

« My home Location
SmartThings Hub

Name	SmartThings Hub
Hub ID	D052A8B382290001
Status	ACTIVE
Firmware Version	000.029.00008
Hardware Version	
Location	My home
Last Activity At	2020-04-08 7:40 PM UTC
Last Ping From Hub At	2020-04-08T19:40:25.423Z
Date Created	2019-04-13 1:39 AM UTC
Last Updated	2020-03-04 6:38 PM UTC
IP Address	192.168.2.57
MAC Address	28:6D:97:75:2E:A9
Last Booted	2020-04-07 12:32 AM UTC
Battery	On battery power: false
Settings	Presence sensor timeout: 2
ZigBee	• State: **Functional** • Version: **3.0.16** • EUI: **286D970002015B97** • Channel: **25** • Node ID: **0000** • Pan ID: **D81A** • OTA: **disabled** • Unsecure Rejoin: **true**

7. On your Room Controller, go into the hidden configuration menu.

Touch and hold this point for 3 seconds to enter set-up mode

Note: If a configuration/installer password is activated to prevent unauthorized access to the configuration menu parameters, you will be prompted to enter your password before proceeding.
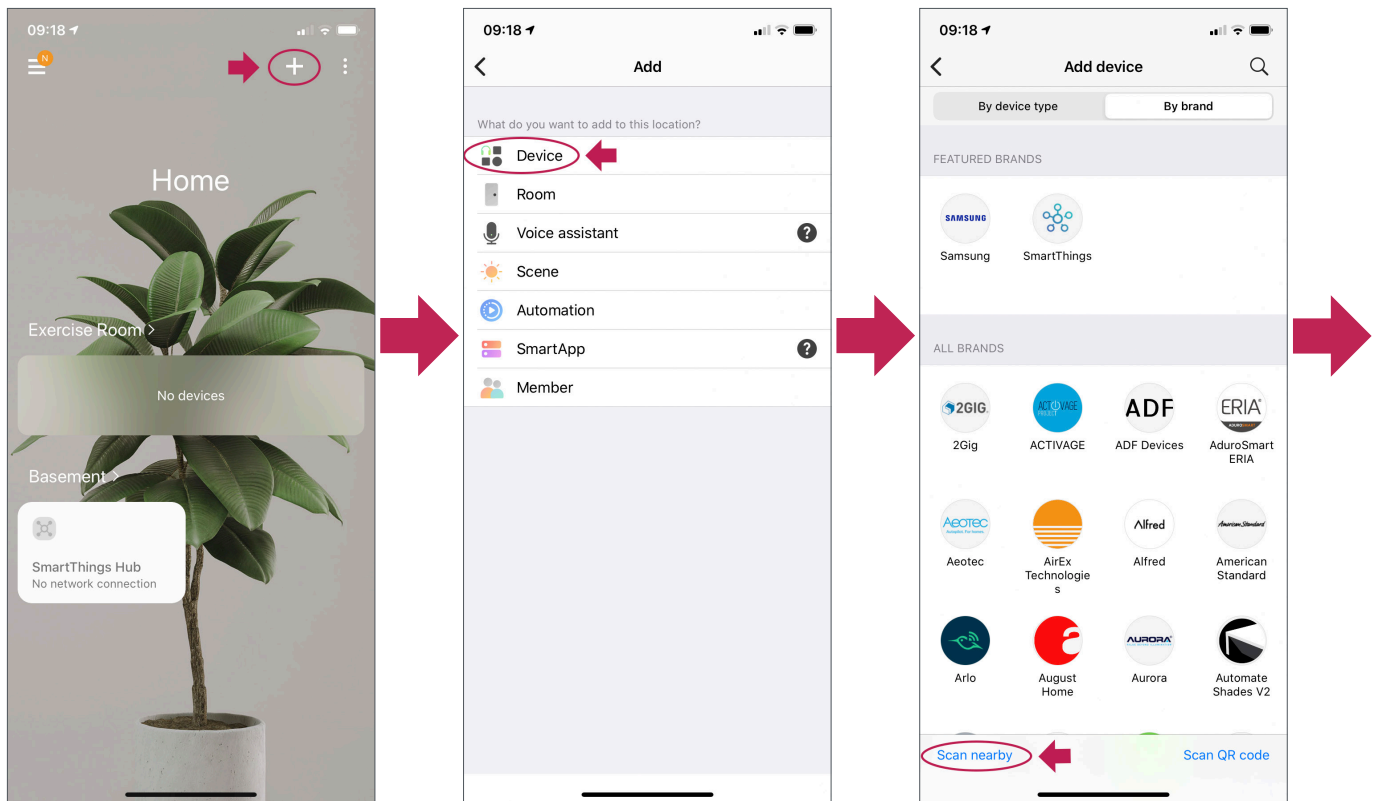
8. Touch Network, then go to the ZigBee Network screen.
9. Change the Node type to Router, then change the Channel and PAN ID decimal numbers so that they are the same as the Hub's numbers.
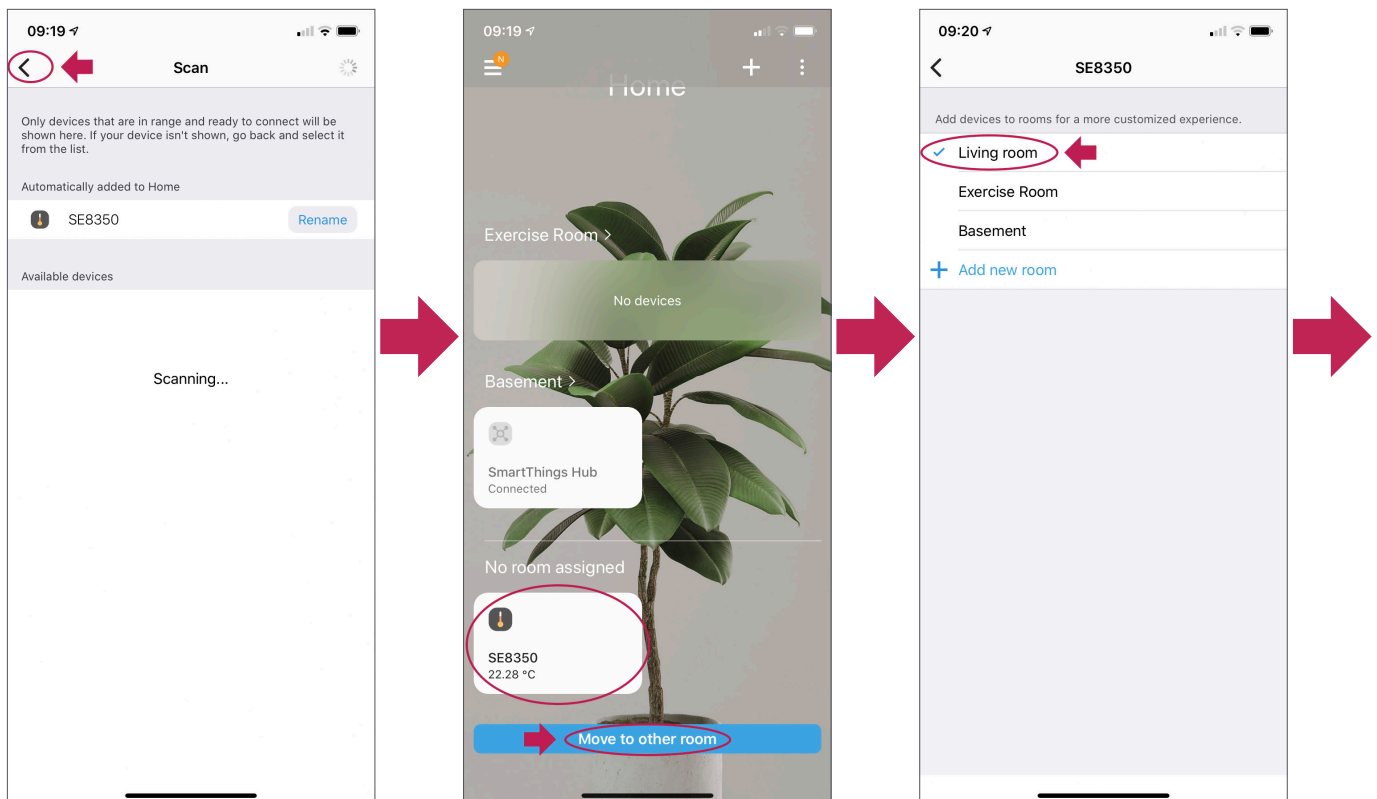
1/2 Setup

- Network
- Configuration
- Setpoints
- Display
- Service view
- Test Outputs

Network

Onboard prot.	Zigbee
Optional prot.	None
Wired protocol	None

1/2 ZigBee Network

Node type	Router
PAN ID	55322
Channel	25
Security	Low
Network Status	Joined
Permit join	Off

Adding the Room Controller to the Hub

1. In your SmartThings app, touch +, Add Device, then Scan nearby to detect your Room Controller.
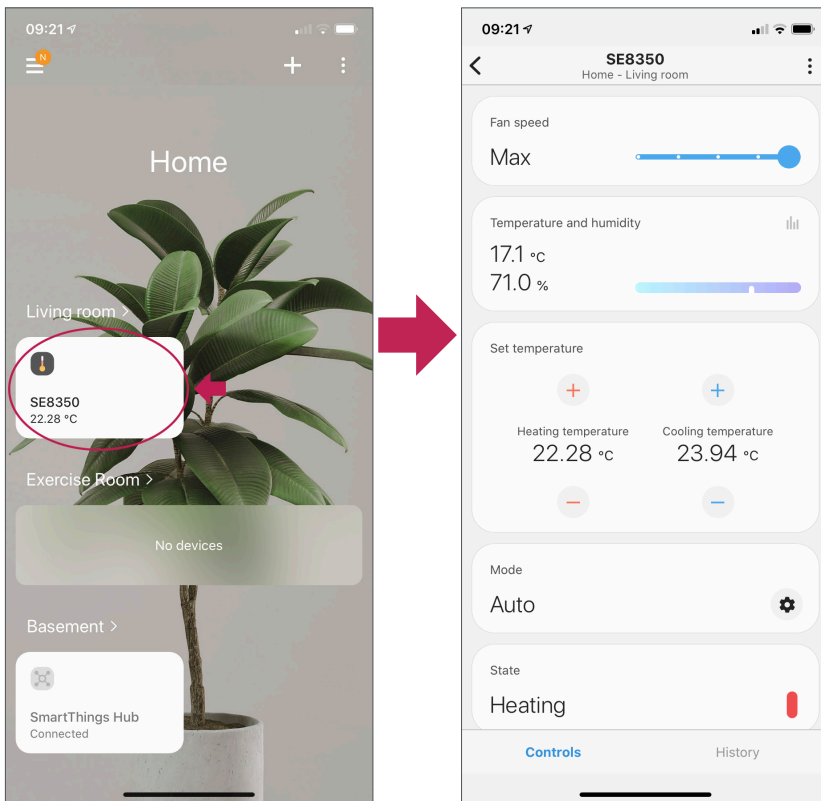
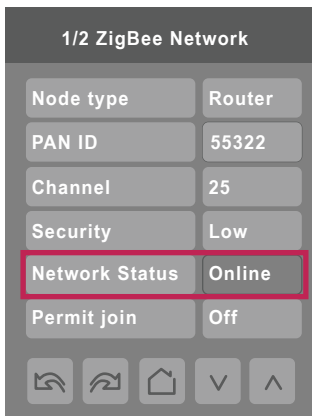**Note**: Make sure the Room Controller is in ZigBee range of the Hub.

2. The scan can take up to a minute. If it fails, just scan again.
3. Your Room Controller will be added to your Home screen. Touch < in the top-left corner a few times to return to the Home screen where the Room Controller will appear at the bottom.
4. You can move your Room Controller to another location. Example: Living Room.

5.   On your Home screen, touch your Room Controller to view its user interface.

6.   The Room Controller will show Online in the ZigBee Network status parameter.

Step 3: Using the SmartThings Apps
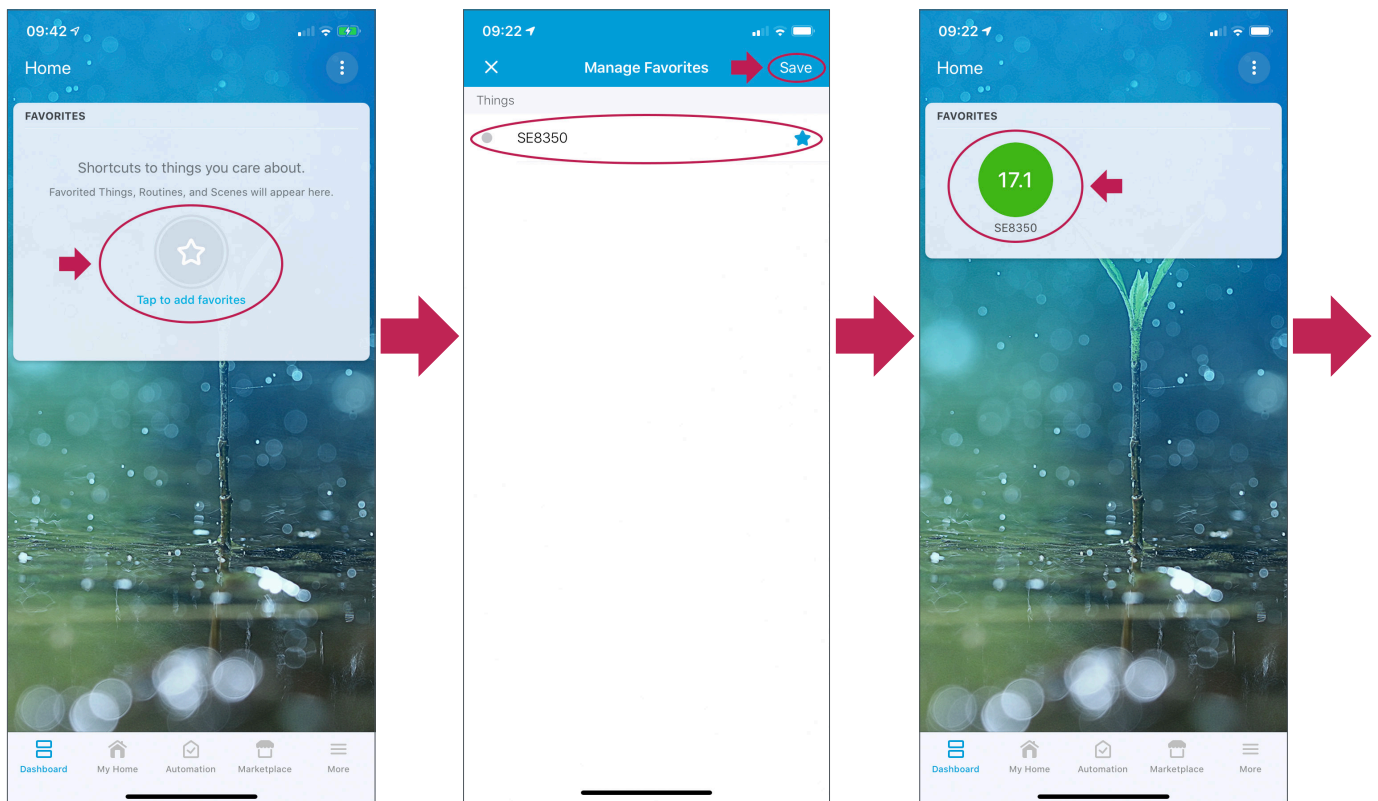
SmartThings Classic App

Room Controller parameters that are visible and/or configurable on the user interface:

- Room Temperature.
- Relative Humidity.
- System Mode.
- Occupancy Command and Status.
- Occupied and Unoccupied Heating and Cooling Setpoints.

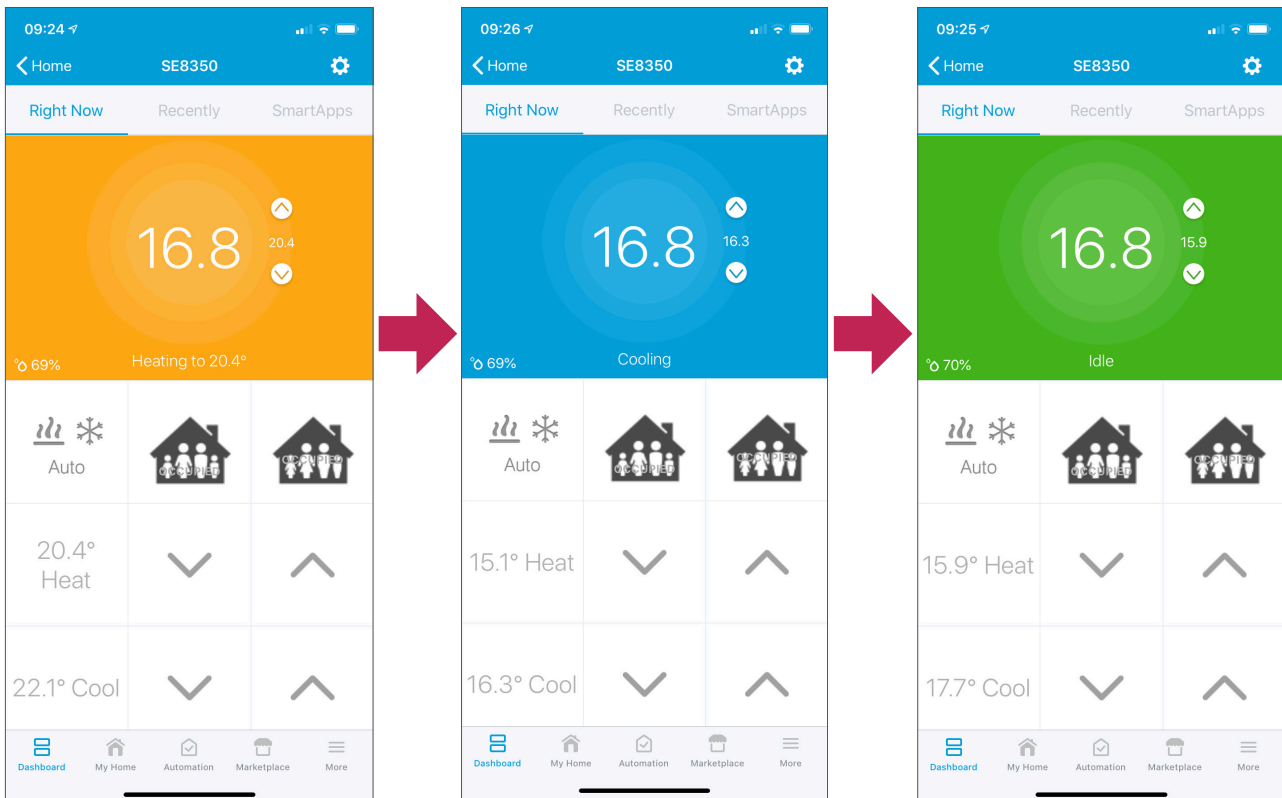Change the Room Controller system settings by touching the following:

- System Mode button toggles between Off, Auto, Cool and Heat.
- Occupancy Command button toggles between Local occupancy, Occupied and Unoccupied.
- Up/Down arrows adjust the temperature setpoints by 1°F (0.5°C).
- Reload button requests the Hub to poll.
- Configure button requests a poll and binding.

1. To add your Room Controller to your Home screen, use the Manage Favorites menu. Tap to add favorites, select your Room Controller, then Save.
2. On your Home screen, touch your Room Controller to view its user interface.

Room Temperatue → 16.8

Relative Humidity → 69%

System Mode button → Auto

Occupied Heating Setpoint → 21.4° Heat

Occupied Cooling Setpoint → 21.9° Cool

Up/Down arrows to adjust effective system mode temperature setpoint

Effective System Mode → Heating to 21.4°

Occupancy Status

Occupancy Command button

Up/Down arrows to adjust temperature setpoints

Unoccupied Heating Setpoint → 17.2° Unocc Heat

Unoccupied Cooling Setpoint → 26.7° Unocc Cool

Reload button

Configure button → Configure

3. The color of the Room Temperature background changes based on effective system mode (heating = orange, cooling = blue, idle = green).
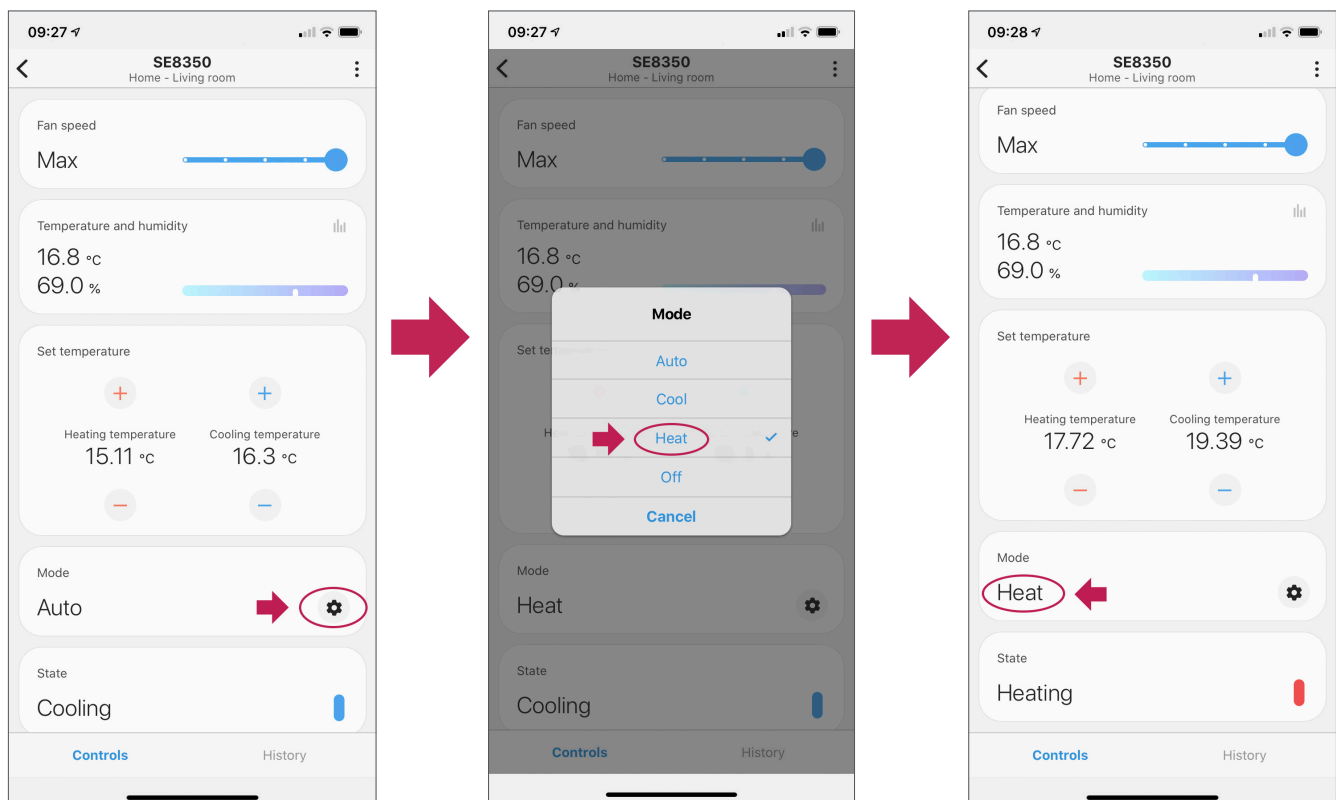
SmartThings App

Room Controller parameters that are visible and/or configurable:

- Fan Speed (SE8350, SER8350).
- Fan Mode (SE8650).
- Room Temperature.
- Relative Humidity.
- Occupied Heating and Cooling Setpoints.
- System Mode.
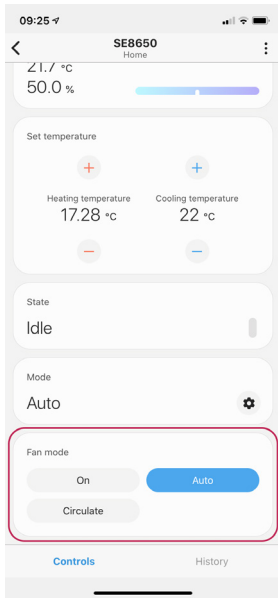- Effective System State (Heating, Cooling, Idle).

Change the Room Controller system settings by touching the following:

- System Mode settings button brings up a menu to change between Auto, Cool, Heat and Off.
- Fan Speed slide settings on the SE8350 and SER8350 are as follows:
  - Off and Max set the fan mode to Auto.
  - Low, Medium and High set the fan speeds directly.
- Fan Mode button settings on the SE8650 selects between On, Auto and Circulate (smart).
- +/- buttons adjust the temperature setpoints by 1°F (1°C).

1. To change the System Mode, touch the Mode settings button, then select the mode from the list.

2. To change the Fan Mode on the SE8650, touch one of the three Fan Mode buttons at the bottom of the screen.
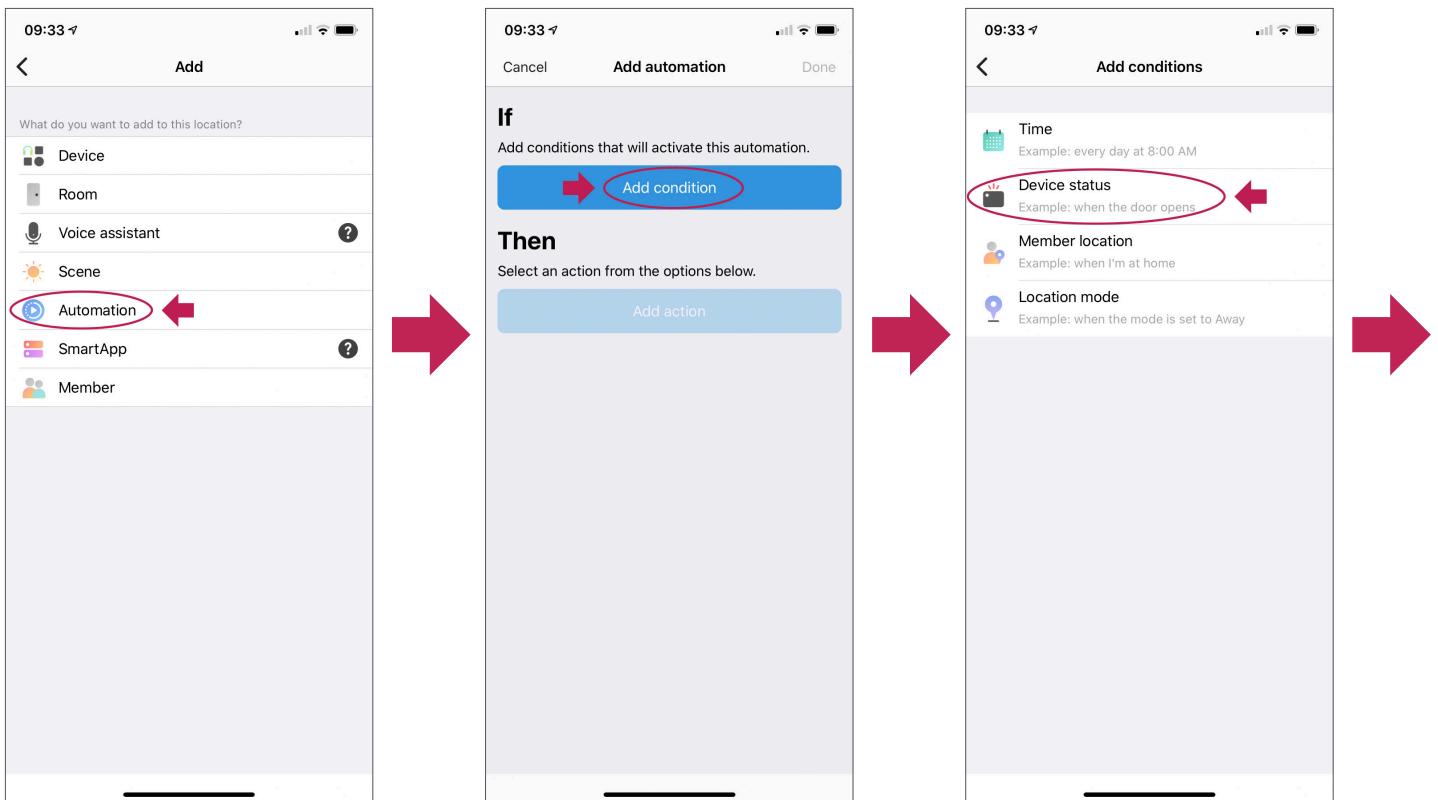

SmartThings App Automation and Notifications

Automations is a fun feature that allows you to create notifications, control other devices and change your home's status (Home, Night, Away) based on different conditions. These conditions include Time events (at 12:00 set Occupancy to Away), Device status (Motion detected in basement), Member location (I am home) and Location (home is set to Away). The format of an automation is IFTTT (If This Then That). Example: If SE8650 temperature is equal to or above 21.0° C, then send a notification to all members.
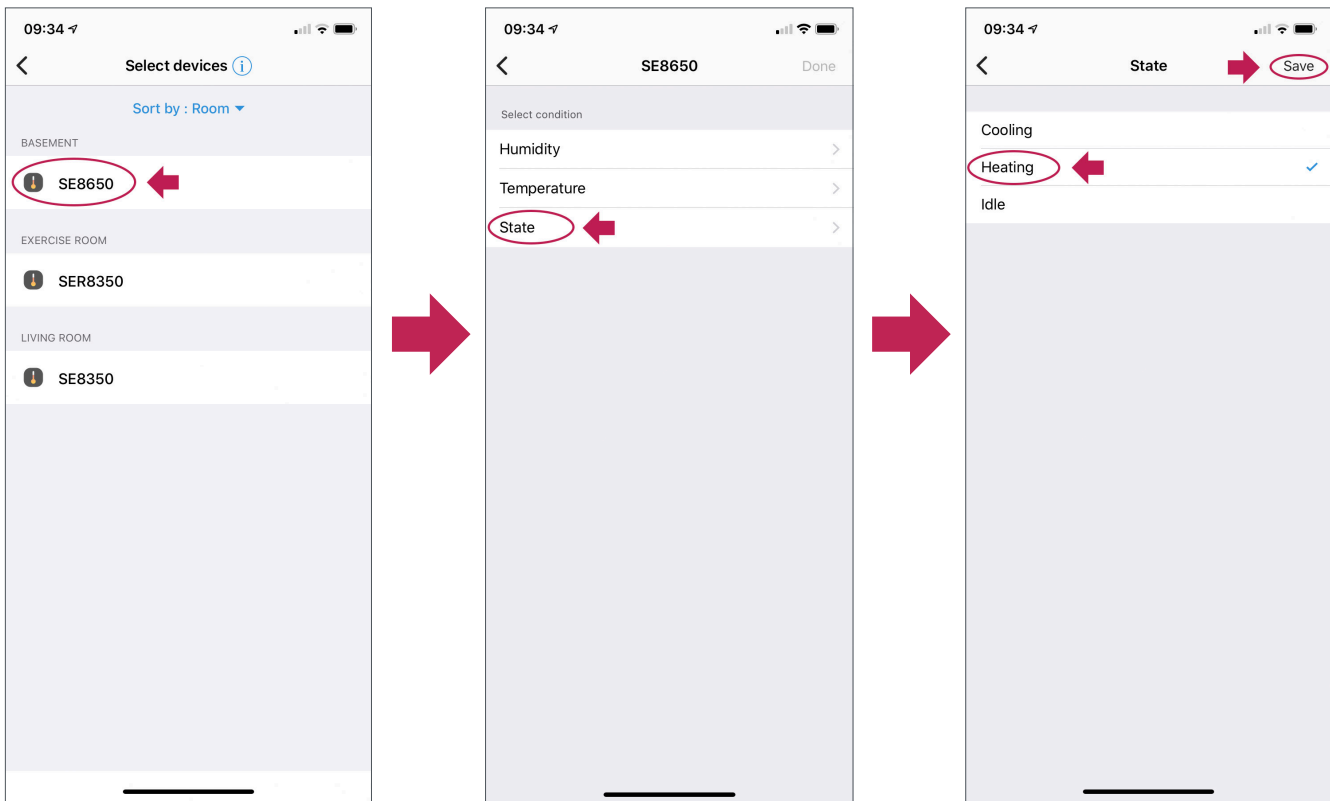
Setting up an automation in the SmartThings App (Example: When SE8650 is heating, trigger notification):

1. Add condition:

    a. In your SmartThings app, touch + (or touch the menu, then Automations), Add Automation, then Add condition.

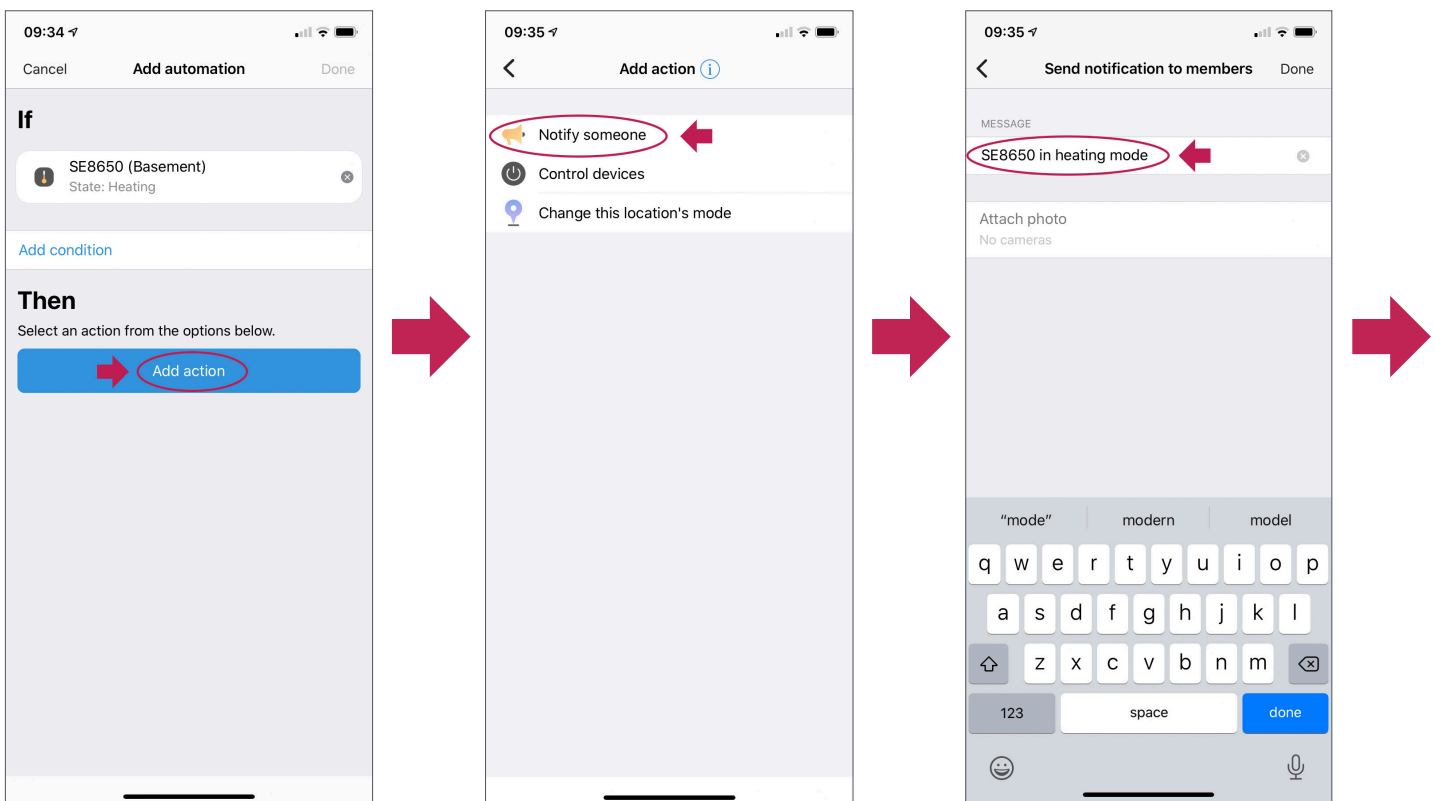   b. Choose the type of condition that triggers an action. Example: Device status.

    c. Select the device. Example: SE8650.

    d. Select the condition. Example: State.

    e. Select the state. Example: Heating.

    f. Touch Save in the top right corner to save the condition.
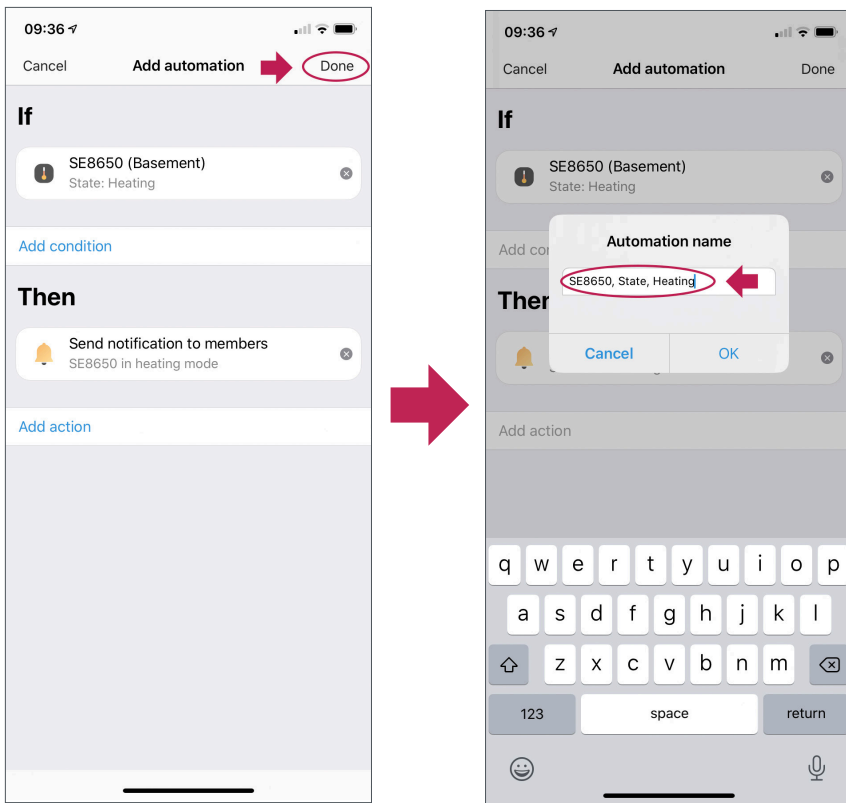
g.   Touch Done to return to the If-Then screen.

2.   Add action:

a.   Touch the Add action button.

b.   Touch Notify someone.

c.   Touch Send notification to members.

d.   Enter a message. Example: SE8650 in heating mode.

e.   Touch Done to return to the If-Then screen.

f.   Touch Done again, give the Automation a name, then Touch OK. The automation will be saved.
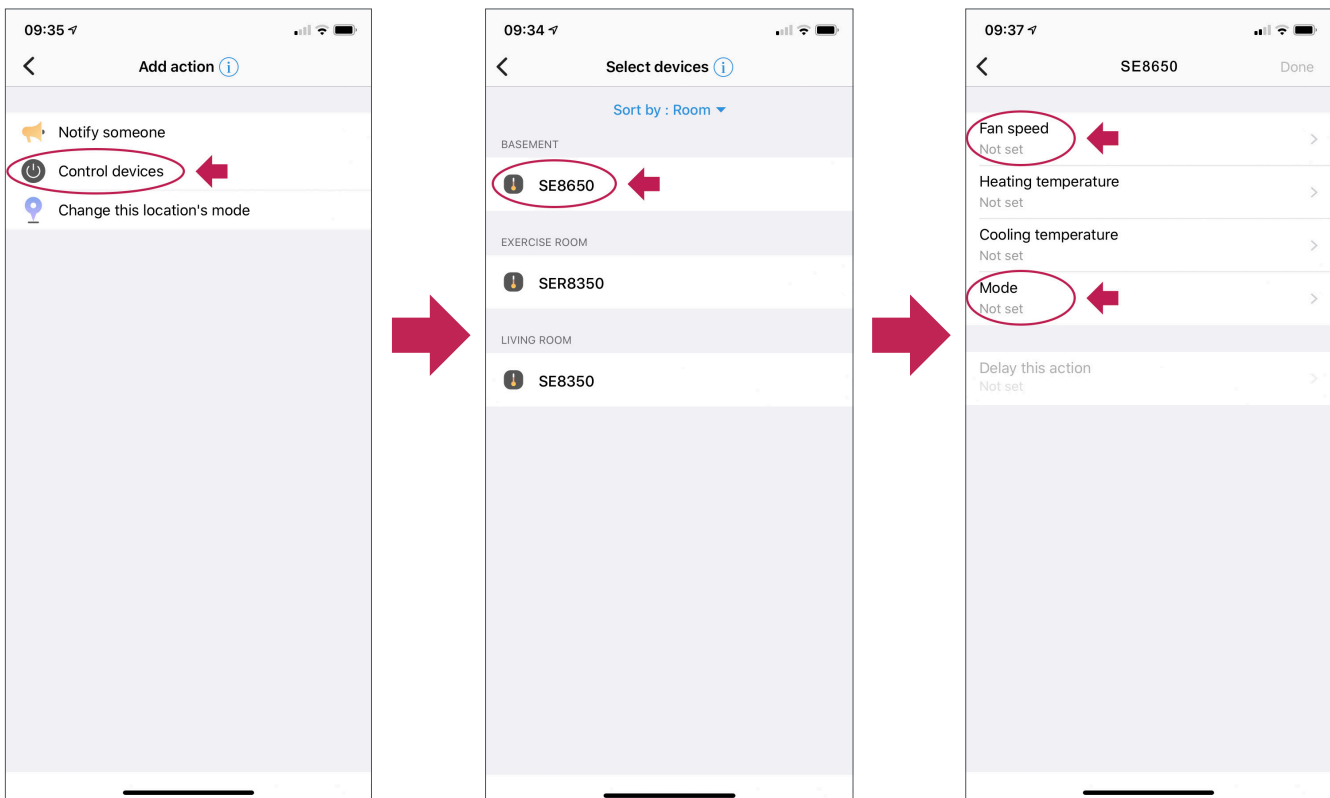
    g.   A notification will be sent when the SE8650 is heating.

Note: There could be a delay of up to 10 minutes due to the Hub's polling.

3.   Add Control devices:

     The same steps can be repeated to control other devices. Instead of choosing "Notify someone", choose "Control devices".

    a.   Touch Control devices.

    b.   Select the device. Example: SE8650.

    c.   Choose a parameter to control (like Fan Speed or Mode).

    d.   Choose the parameter value that triggers the action.

Technical Support

For any issues with SmartStruxure Solution or SmartStruxure Lite, contact Schneider Electric Technical Support according to your region.

North America (NAM) Product Support
Building Management Systems (BMS): nam.esxp.partner-led@se.com

Global Product Support
Building Management Systems (BMS): productsupport.BMS@schneider-electric.com

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Schneider Electric is leading the Digital Transformation of Energy Management and Automation in Homes, Buildings, Data Centers, Infrastructure and Industries.

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We believe that great people and partners make Schneider a great company and that our commitment to Innovation, Diversity and Sustainability ensures that Life Is On everywhere, for everyone and at every moment.

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