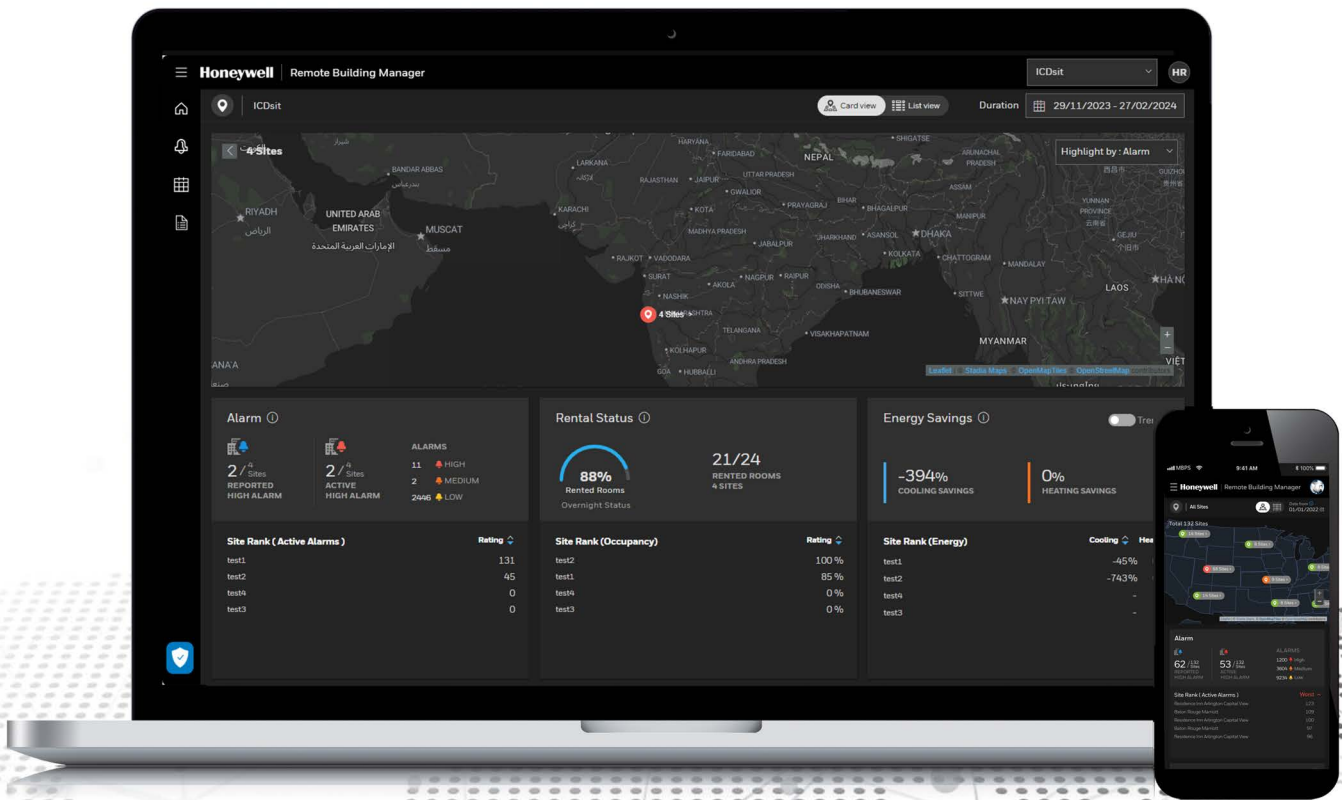




REMOTE BUILDING MANAGER

INNCOM DIRECT DASHBOARD



Gateway Configuration Guide

Notice

This document contains Honeywell proprietary information. Information contained herein is to be used solely for the purpose submitted, and no part of this document or its contents shall be reproduced, published, or disclosed to a third party without the express permission of Honeywell International Sàrl.

While this information is presented in good faith and believed to be accurate, Honeywell disclaims the implied warranties of merchantability and fitness for a purpose and makes no express warranties except as may be stated in its written agreement with and for its customer.

In no event is Honeywell liable to anyone for any direct, special, or consequential damages. The information and specifications in this document are subject to change without notice.

Copyright 2024 – Honeywell International Sàrl

Honeywell trademarks

Honeywell Forge™ is a trademark of Honeywell, Inc.

Other trademarks

Trademarks that appear in this document are used only to the benefit of the trademark owner, with no intention of trademark infringement.

Support and Other Contacts

For technical assistance or further information, call your nearest Honeywell office.

Related documentation

The following documents provide additional information about this product.

- INNCOM Direct Dashboard User Guide - 31-00707
- INNCOM Direct Onboarding Guide - 31-00746

Contents

1. Overview 4

2. Prerequisites..... 5

 2.1. Install the D578 Edge Routers..... 6

 2.2. Install the D1-528 Thermostats (For Single Component Solution) 6

 2.3. Install the D1-529 Thermostats and D-X47-24 Universal Relay Pack
 (For Two Component Solution)..... 7

3. Configuration 8

 3.1. Create a New Station Using ‘INNCOMDirectStation’ Template 9

 3.2. Connect to the Station 10

4. Wizard-Assisted Commissioning – (Easy Onboard Service) 13

 4.1. Overview..... 13

 4.2. Launching EasyOnboardService..... 14

 4.3. Gateway Onboarding Wizard Configuration 17

 4.3.1. Internet Configuration..... 18

 4.3.2. Property Configuration 20

 4.3.3. Edge Router Configuration..... 22

 4.3.4. Room Configuration 24

 4.3.4.1. Add/Edit/Delete Rooms..... 24

 4.3.5. Cloud Configuration 27

 4.3.5.1. Gateway Registration 28

 4.3.6. Review & Cloud Sync 32

 4.3.6.1. Review Points to Sync..... 33

5. INNCOM Direct OTA Firmware Upgrade 41

 5.1. Prerequisites 41

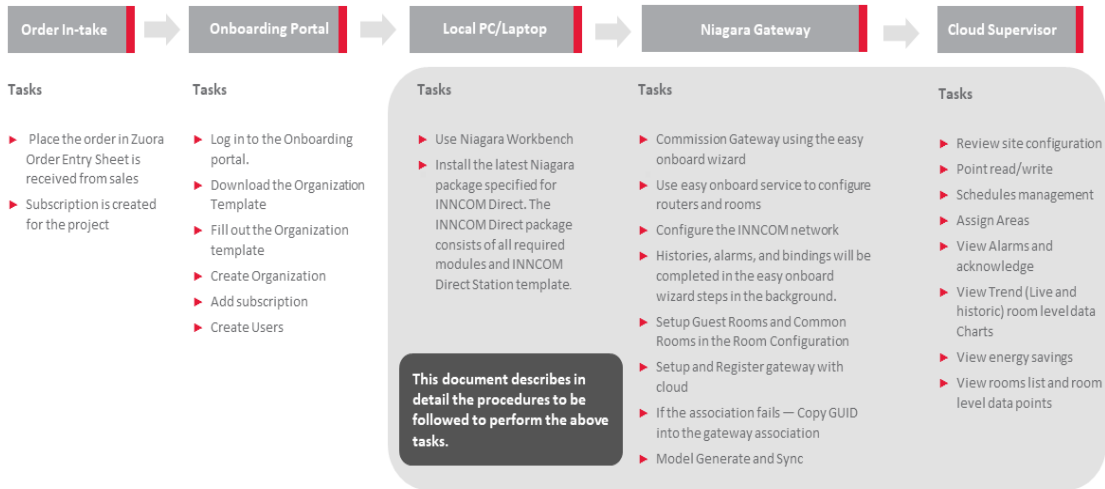
 5.2. Run the INNCOM Direct Firmware Upgrade Wizard 42

6. Troubleshooting 47

1 . OVERVIEW

The overview of the entire onboarding, configuration, cloud supervisor procedure for using the **INNCOM Direct Dashboard** is illustrated below:

RBM INNCOM DIRECT DASHBOARD OVERVIEW



For more details on configuring the above tasks, refer to the below documents:

Tasks	Document
Order In-take and Onboarding Portal	INNCOM Direct Onboarding Guide - 31-00746
Gateway Configuration	INNCOM Direct Gateway Configuration Guide - 31-00708
Cloud Supervisor	INNCOM Direct Dashboard User Guide - 31-00707


2. PREREQUISITES

The prerequisites to using Remote Building Manager - INNCOM Direct Dashboard are as follows:



IMPORTANT:

These requirements must be prepared/installed on-site as the initial step in the onboarding process.

Software Requirement	<ul style="list-style-type: none"> Niagara 4.13u3 Chrome browser (Recommended)
License Requirements	<ul style="list-style-type: none"> Must have a Global Capacity license only if PMS exists to cover the global points which are not a part of the standard Device/point calculation.
	<ul style="list-style-type: none"> The Niagara workbench license must be upgraded to Niagara 4.13u3. <div style="background-color: #f0f0f0; padding: 5px;"> <p> NOTE: Ensure the following licenses or features are enabled in the Niagara 4.13u3 license.</p> <ul style="list-style-type: none"> INNCOM1.license INNCOM1.certificate nCloudDriver feature </div>
Station Template	<p>Follow the steps below to set up a new station:</p> <ul style="list-style-type: none"> INNCOMDirectStation.ntpl station template file is located at 'C:\Niagara\Niagara4.13.x.xxx\defaults\workbench\newStations' folder. Use this template while station creation in Niagara Workbench
IP Network	<ul style="list-style-type: none"> Ensure an Internet connection is available, and ports are open. The following domain names should be added to inbound and outbound firewall rules for UDP INNCOM port 23211 for INNCOM Network: <ul style="list-style-type: none"> *.scm.azurewebsites.net *.azurewebsites.net *.cloud.tridium.com *.tridium.com *.honeywell.com *.niagara-community.com *.trafficmanager.net *.azure-devices.net sents01aprodfu.blob.core.windows.net domain should be opened for port 443.
Cloud Creation & Configuration and User Account Creation & Activation	<ul style="list-style-type: none"> A subscription must first be purchased. The user must be a member of the organization. <p>For more details on user registration and account activation, refer to INNCOM Direct Onboarding Guide - 31-00746.</p>
Firmware Upgrade	<p>Contact the technical support representative to obtain the latest firmware upgrade files.</p>



NOTE:

The PC must always be connected to an Uninterrupted power supply (UPS).

2.1. Install the D578 Edge Routers

Out of the box, INNCOM Direct D578 Edge Router is an essential part of Honeywell's online HVAC solution designed to reduce energy usage in guestroom and common area, enabling hoteliers to reach sustainability goals faster. Additionally, INNCOM Direct provides the capability for portfolio management to optimize room and equipment performance to increase guest satisfaction and decrease operational costs.



For further guidance, capabilities, and installation instructions, please refer to the following document:

- INNCOM Direct D-578 Edge Router Installation Instructions - 31-00720.

2.2. Install the D1-528 Thermostats (For Single Component Solution)

The INNCOM Direct D1-528 thermostat functions as a programmable digital thermostat, automatically adjusting the fan speeds and valves to achieve a set temperature. The D1-528 thermostat delivers superior convenience, comfort, and energy management for both guests and hoteliers and uses INNCOM's low cost, self-forming RF mesh network for wireless communications, fast setup, and easy maintenance. The INNCOM Direct D1-528 thermostat is equipped with an array of on-board sensing capability including temperature, humidity, motion, and photo sensors. When used in combination with the 5 on board relays and a collection of digital and analog I/O, the D1-528 becomes a central component for an online HVAC energy management system.



For further guidance, capabilities, and installation instructions, please refer to the following document:

- INNCOM Direct D1-528 Thermostat Installation Instructions - 31-00721 - 01.

2.3. Install the D1-529 Thermostats and D-X47-24 Universal Relay Pack (For Two Component Solution)

The battery powered INNCOM Direct D1-529 thermostat functions as a programmable thermostat, automatically adjusting the fan speeds and valves to achieve a set temperature when coupled with the DX47 HVAC Controller. The D1-529 thermostat delivers superior convenience, comfort and energy management for both guests and hoteliers and uses INNCOM’s low cost, self-forming RF mesh network for wireless communications, fast setup, and easy maintenance. The INNCOM Direct D1-529 thermostat is equipped with an array of on-board sensing capability including temperature, humidity, motion, and photo sensors. When used in combination with the DX47 HVAC Controller, the D1-529 becomes a central component for an online HVAC energy management system.



The DX47 provides five relay outputs and a range of digital and analog I/O to control a wide variety of light duty HVAC systems. The DX47 is the companion to the wireless D1-529-6V battery powered thermostat, and uses INNCOM’s low cost, self-forming RF mesh network for wireless communications, fast setup, and easy maintenance.



For further guidance, capabilities, and installation instructions, please refer to the following document:

- INNCOM Direct D1-529 Thermostat And D-X47 Power Relay Installation Guide - 31-00722

3. CONFIGURATION



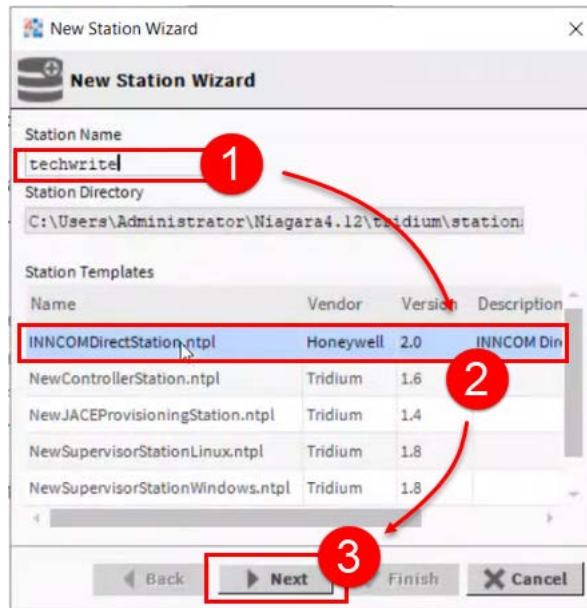
1. [Create a New Station Using 'INNCOMDirectStation' Template](#)
2. [Connect to the Station](#)
3. [Launching EasyOnboardService](#)
4. [Gateway Onboarding Wizard Configuration](#)
5. [Gateway Registration](#)

3.1. Create a New Station Using 'INNCOMDirectStation' Template

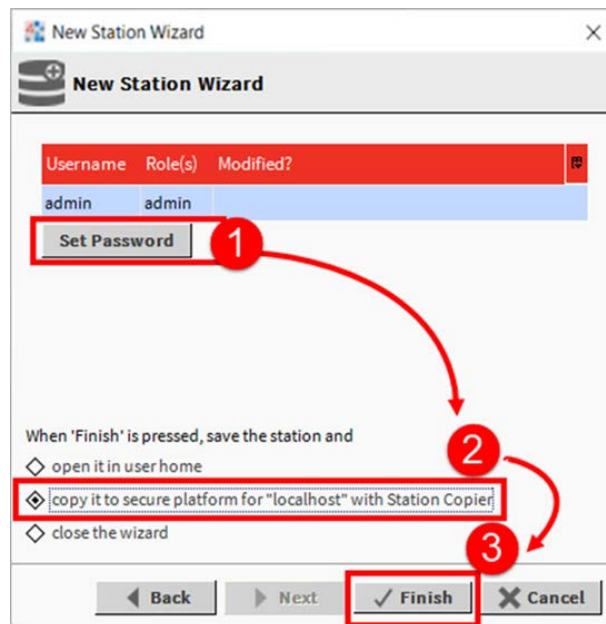
1. Open the Niagara workbench and connect to the platform.
2. Navigate to the menu bar and click **Tools > New Station**.
The **New Station Wizard** opens.
3. Type the station name in the **Station Name** text box.
4. Select **INNCOMDirectStation.ntpl** under Station Templates and then click **Next**.

NOTE:

Station should be created only using the **INNCOMDirectStation.ntpl** template

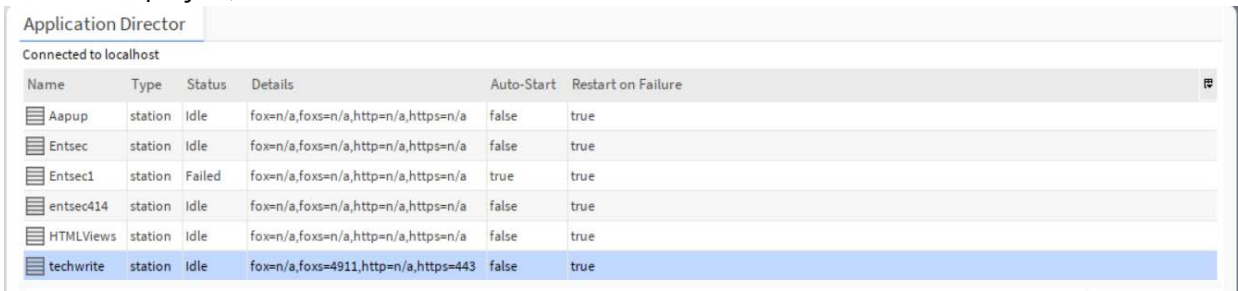


5. Click on **Set Password** to create user-defined credentials.
6. Select **copy it to secure platform for "localhost" with Station Copier** check box and then click **Finish**.

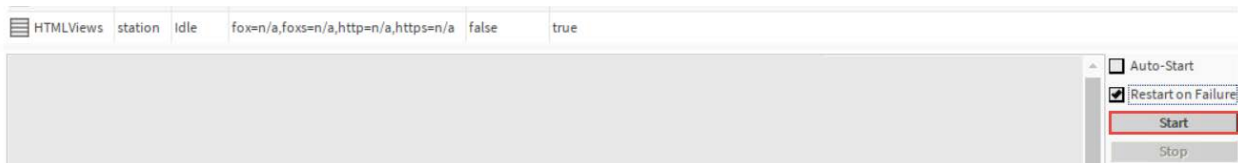


3.2. Connect to the Station

1. On the Platform pane on the right, double-click on the **Application Director** utility. All stations displayed, Under **Connected to localhost**.



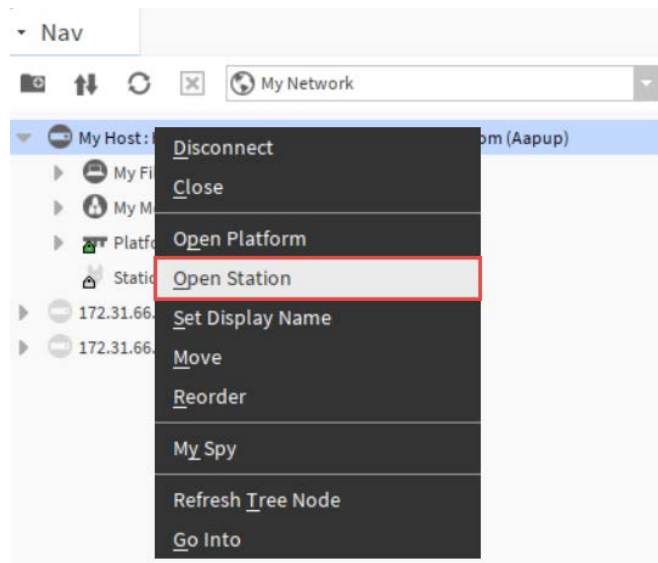
2. In the list, select the station, and then click **Start** button on the right.



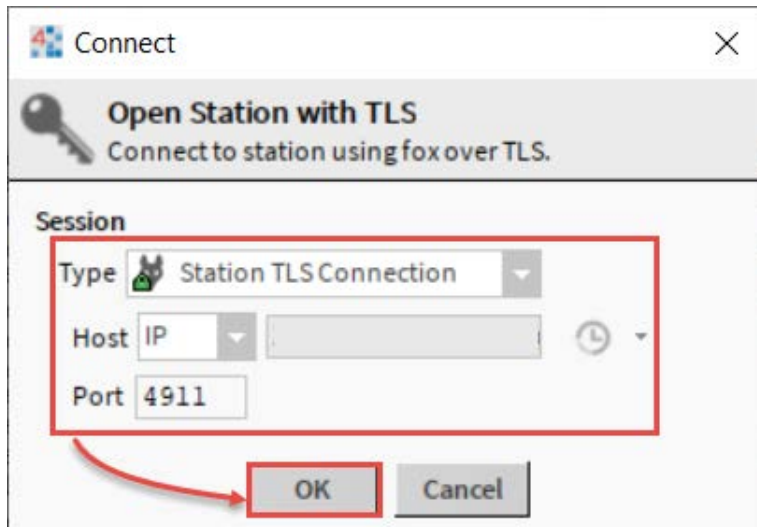
The station starts, as indicated by the status **Running** in the **Status** column.



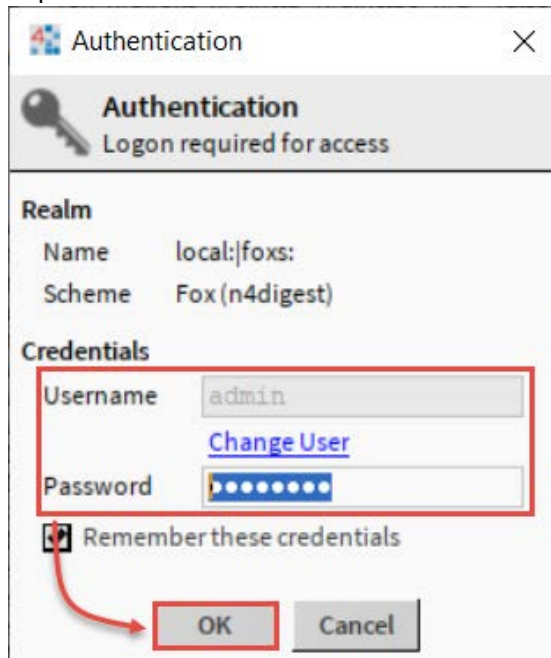
3. In the Nav Tree, right-click on the **My Host** folder, and then click **Open Station** in the context menu.



The **Connect** dialog box opens.







4. Click **OK**.
The **Authentication** dialog box opens.



5. If not already done, enter **Username** and **Password** and check **Remember these credentials** box.
6. Click **OK**.
The station opens. On the Station pane on the right the components of station are displayed:

- Alarm
- Config
- Files
- Spy
- Hierarchy
- History

At the bottom, the Summary pane displays general properties and its settings (Station Name, Host, etc.) of the station.

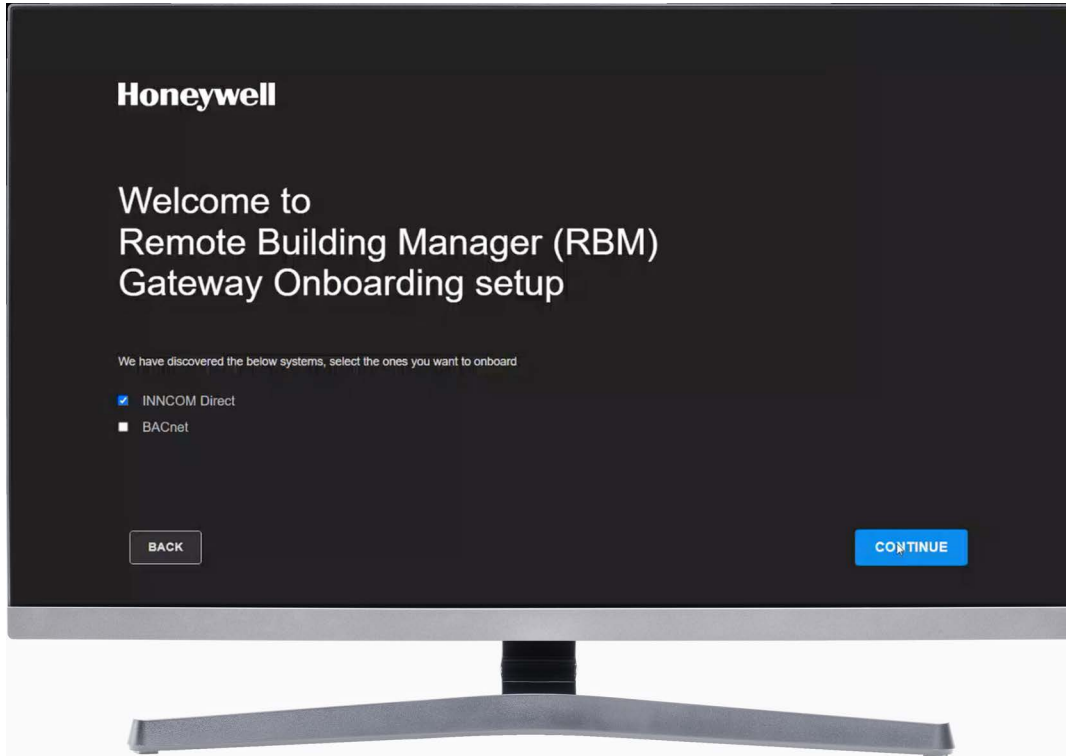
Station (techwrite)	
Name	Description
 Config	The station configuration database
 Files	File System accessed over Fox session
 Spy	Diagnostics information for remote VM
 History	History database

Summary Properties	
Property	Value
Station Name	techwrite
Host	/10.68.128.186
Host Model	Workstation
Host Model Version	
Host Product	
Host Id	Win-53D0-BCA9-F02C-3749
Niagara Version	4.14.0.159.134
Java Version	OpenJDK 64-Bit Server VM 25.412-b08
OS Version	amd64 Windows 10 10.0
Locale	en_US

4. WIZARD-ASSISTED COMMISSIONING – (EASY ONBOARD SERVICE)

4.1. Overview

The EasyOnboard Service wizard allows users to onboard INNCOM Direct rooms and devices and sync them to the cloud. Through an easy-to-use dashboard, Easy Onboard Service eliminates the need to manually update parameters within stations on the Workbench, allowing even less Niagara-savvy users to configure the INNCOM Direct dashboard easily.



4.2. Launching EasyOnboardService

The EasyOnboardService comes built-in with **INNCOMDirectStation** template.

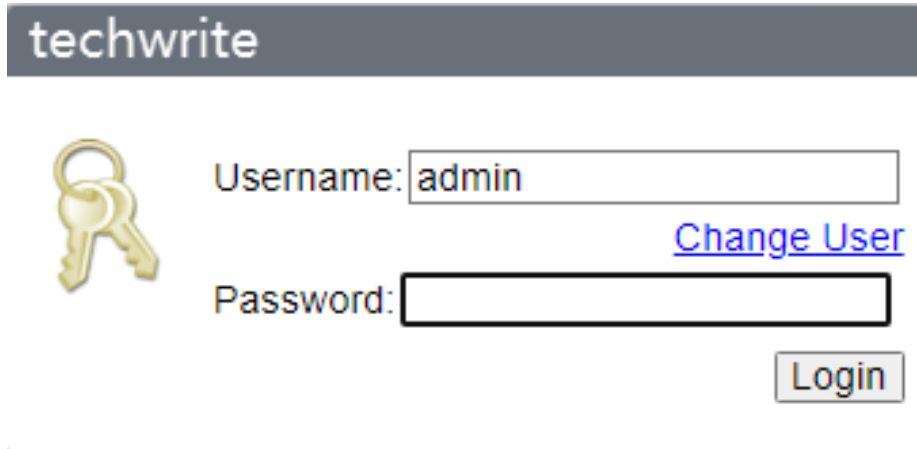
Steps to launch EasyOnboardService:

1. Go to the **Service** folder and double-click **EasyOnboardService**.


















 **NOTE:**

The EasyOnboardService is available in both the Niagara workbench view as well as the web-based view. It is recommended to use the web-based view to get a better experience of EasyOnboardService.

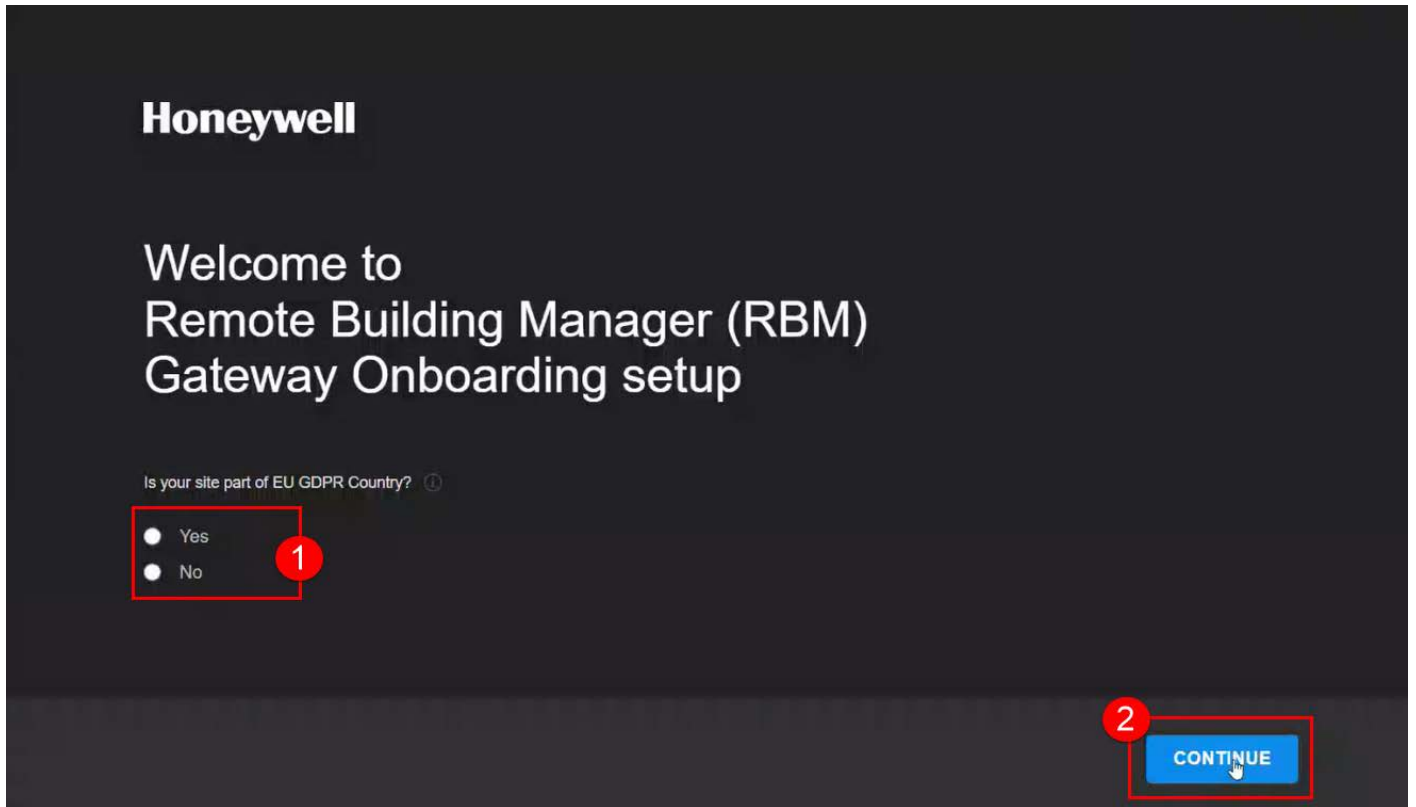
2. Open your web browser, type “https://” followed by hostname or IP address of the local host (PC) in the browser’s address field, and press **Enter**.
The login window opens.



3. Enter your credentials (Username and Password), and click **Login**.
4. In the Nav tree, expand the **Station > Config > Services** and click **EasyOnboardService**.

▶  ProgramService	Program Service	
▶  SearchService	Search Service	 
▶  TagDictionaryService	Tag Dictionary Service	
▶  TemplateService	Template Service	
▶  WebService	Web Service	
▶  EasyOnboardService	Easy Onboard Service	
▶  InncomFirmwareUpgradeService	Inncom Fw Upgrade Service	
▶  PlatformServices	Platform Service Container	

This action launches the Remote Building Manager Gateway Onboarding setup.



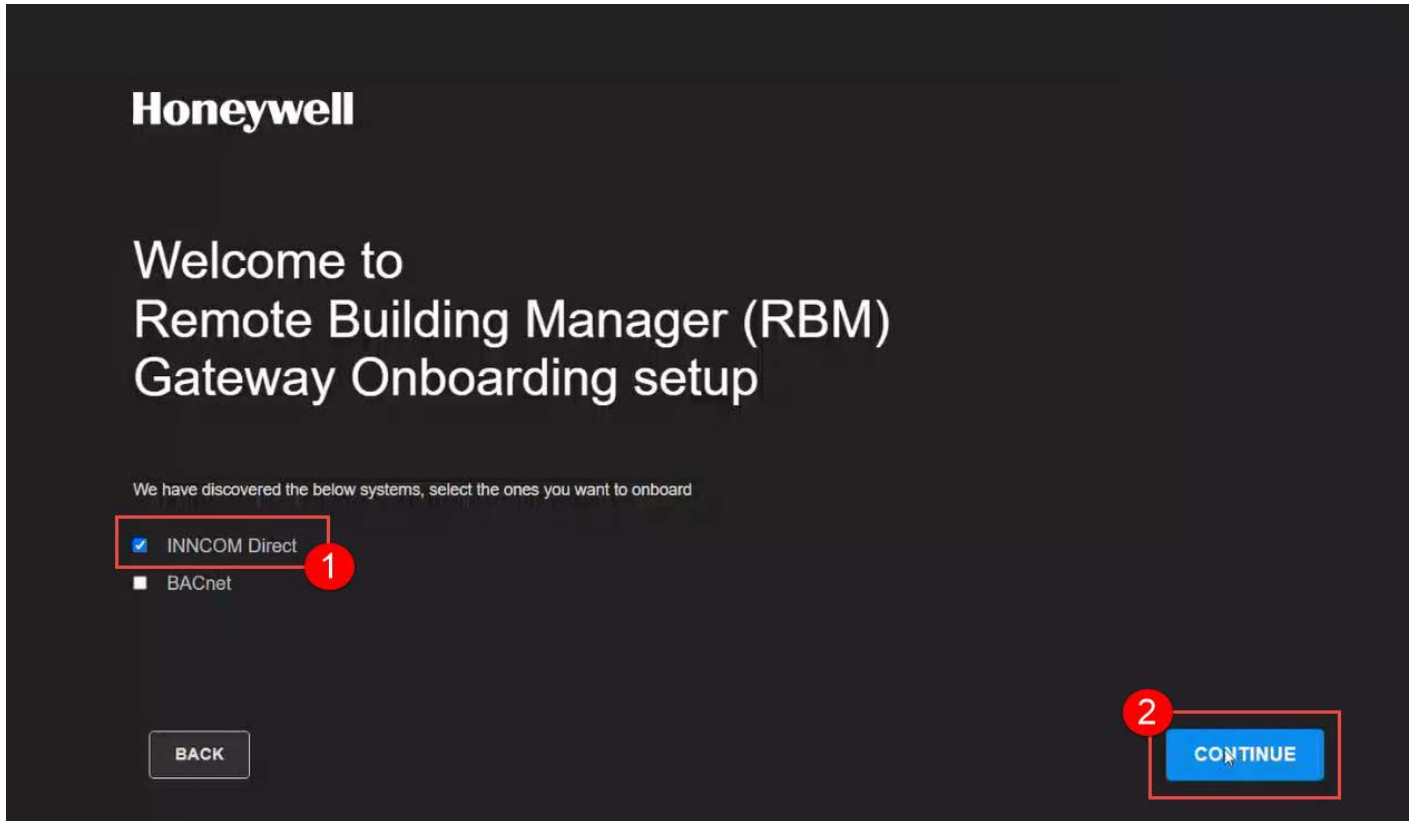
5. If your remote site is a part of the EU GDPR country, click **Yes** and **CONTINUE**. The wizard will update the URL based on the selection of the checkbox. For more details about the GDPR country, click (i) icon.



NOTE:

EU region is not available in INNCOM Direct MVO1 release. Please do not select 'Yes' in this step.

6. Select the **INNCOM Direct** checkbox, and then click **CONTINUE** to proceed to the [Gateway Onboarding Wizard Configuration](#).



4.3. Gateway Onboarding Wizard Configuration

The Remote Building Manager Gateway Onboarding wizard consists of six tabs. To complete the Remote Building Manager Gateway Onboarding setup, complete the below configuration in the sequential order mentioned below.

1. Internet Configuration
2. Property Configuration
3. Edge Router Configuration
4. Room Configuration
5. Cloud Configuration
6. Review & Cloud Sync

Honeywell Remote Building Manager (RBM) Gateway Onboarding setup

1. Internet Configuration | 2. Property Configuration | 3. Edge Router Configuration | 4. Room Configuration | 5. Cloud Configuration | 6. Review & Cloud Sync

Host Name
IE3BBMSIC5Dev02

DNS Domain
honeywell.com

IPv4 Gateway
10.78.2.1

IPv4 Address
10.78.2.215

Adapter
Intel(R) 82574L Gigabit Network Connection #2

Use IPv6

Primary DNSv4 Server
199.63.219.166

Secondary DNSv4 Server
10.255.100.10

IPv4 Subnet mask
255.255.255.0

DHCPv4 Server
10.192.14.220

[Advance View >](#)

4.3.1. Internet Configuration

The Internet Configuration tab displays the details of all the parameters required for Internet configuration. Additionally, the dashboard allows you to modify the adapter or IP settings. If you modify the IP settings, then you will be prompted to reboot the gateway by clicking **Test Connection to Continue** button to reflect the IP changes.

By default, IPv4 protocol configuration information is displayed, if you want to use IPv6 protocol configuration select the **Use IPv6** option.

The below table describes the components of the Internet Configuration tab.

Components	Description
Host Name	Display the hostname of the Niagara Workbench.
DNS Domain	Display the DNS domain of the Niagara Workbench.
IPv4 Gateway	Display IPv4 gateway address of the Niagara Workbench.
IPv4 Address	Display IPv4 address of the Niagara Workbench.
Adapter	Display adapter details and allows the user to select a different adapter, if available.
Primary DNSv4 Server	Display primary DNSv4 server address of the Niagara Workbench.
Secondary DNSv4 Server	Display secondary DNSv4 server address of the Niagara Workbench.
IPv4 Subnet mask	Display IPv4 Subnet mask address of the Niagara Workbench.
DHCPv4 Server	Display DHCPv4 Server address of the Niagara Workbench.

To perform additional configuration, click on **Advance View**, and modify the necessary parameters.

Save the configuration and exit the advance view.

Tcp Ip Platform Service Plugin

Host Name localhost

Hosts File ▼

Use IPv6 Yes

DNS Domain

IPv4 Gateway 159.99.183.1

199.63.219.166

DNSv4 Servers 165.195.30.99

⊕ ✕ ▲ ▼

IPv6 Gateway

DNSv6 Servers ⊕ ✕ ▲ ▼

Interfaces Interface 1 ▼
Interface 2 ▼

Click **TEST CONNECTION TO CONTINUE** to verify the Internet configuration settings.

EasyOnboardService checks the IP configuration and ensures that it can connect to the registration, authentication, and registration URL present on the EasyOnboardService property sheet.

The tab displays a green banner indicating a successful connection established.

Configuration Configuration Configuration Configuration Cloud Sync

Hostname Default Hostname

Adapter Intel(r) 82574l gigabit network conne... ▼

Use IPv6

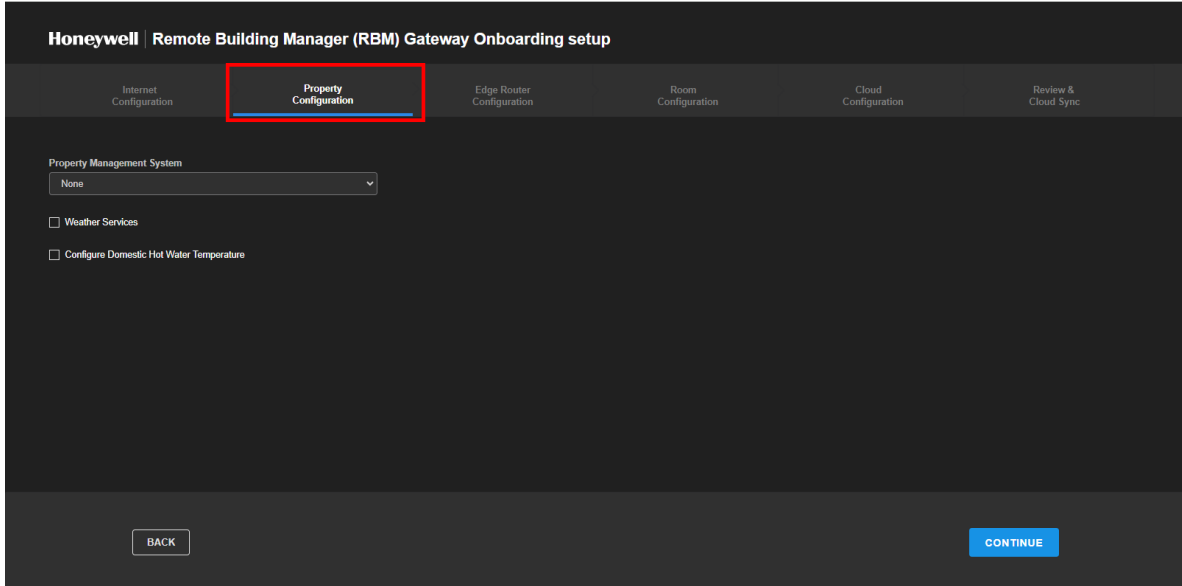
DNS Domain

Primary DNSv4 Server

Testing Connectivity
 ✓ Internet connectivity established

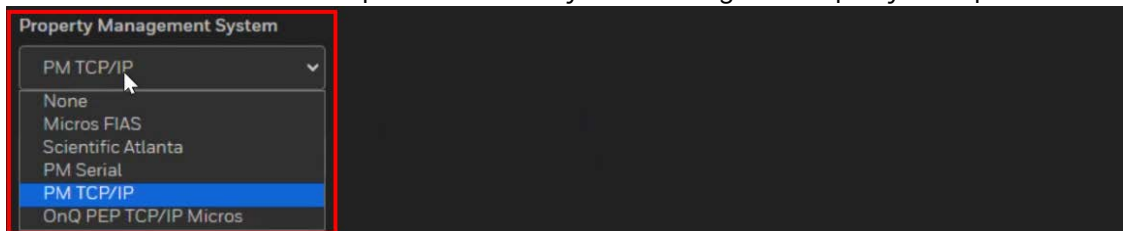
4.3.2. Property Configuration

The **Property Configuration** tab allows you select the **Property Management System (PMS)**, and configure **Weather Services** and **Domestic Hot Water Temperature**.

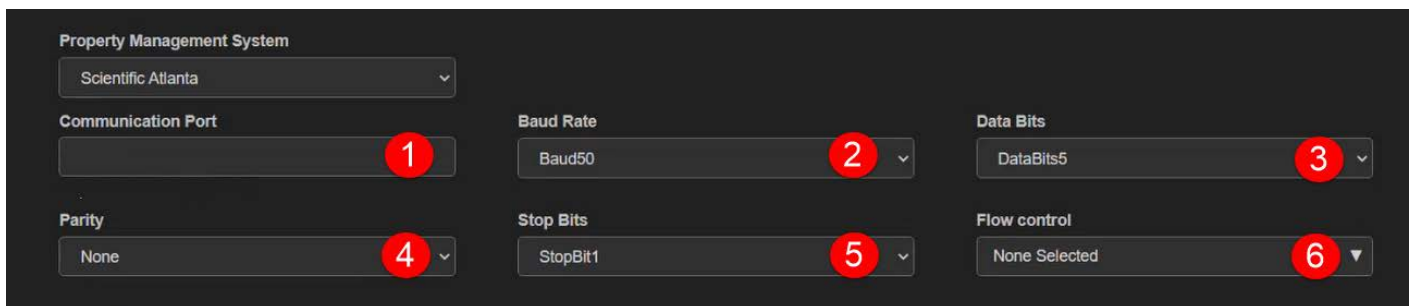


Property Management System: A Property Management System (PMS) is a software platform used to streamline and automate various tasks associated with managing the operations of a property. It serves as a central hub for managing reservations, check-ins, check-outs, room assignments, billing, housekeeping, guest preferences, and other administrative functions.

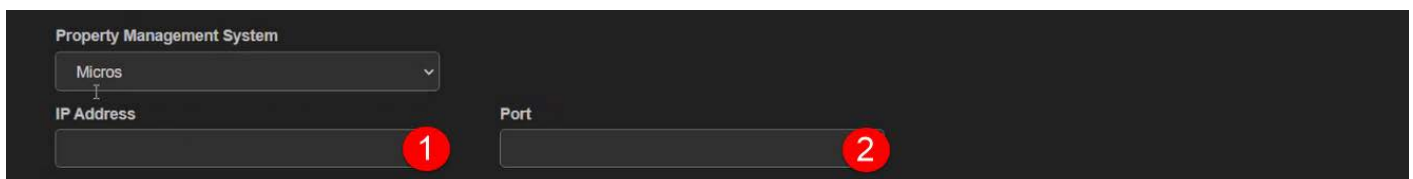
1. Select **None** if you are not using a third-party PMS platform.
2. Select the desired PMS from the drop-down menu if you are using a third-party PMS platform.



3. Configure the following parameters if your PMS platform is a serial-based communication driver.



4. Configure the following parameters if your PMS platform is a TCP/IP-based communication driver.



- Configure the following parameters if your PMS is PM TCP/IP.

The screenshot shows a configuration interface for the Property Management System. A dropdown menu is set to 'PM TCP/IP'. Below it, the 'Port' label is followed by an empty input field. A red circle with the number '1' is placed over the input field to indicate where the user should enter the port number.

IMPORTANT:
 The PMS configuration establishes communication between the third-party PMS platform and the gateway (Niagara Workbench) to update real-time check-ins, check-outs, and room assignments.

Weather Services: The INNCOM Direct provides a provision to activate the weather services on which the site resides.

- Select the Weather Services checkbox.
- Enter the latitude and longitude where the site is located.
- Enter the API Key.

An API key for a weather service is a unique identifier that allows system to access and use the weather data provided by that service through its Application Programming Interface (API).

Domestic Hot Water Temperature: The INNCOM Direct provides a provision to measure Domestic Hot water temperature.

- Select the Configure Domestic Hot Water Temperature checkbox.
- Select the Thermostat’s Room ID from the drop-down menu.
- After configuring the above properties, click **CONTINUE** to proceed to the [Edge Router Configuration](#).

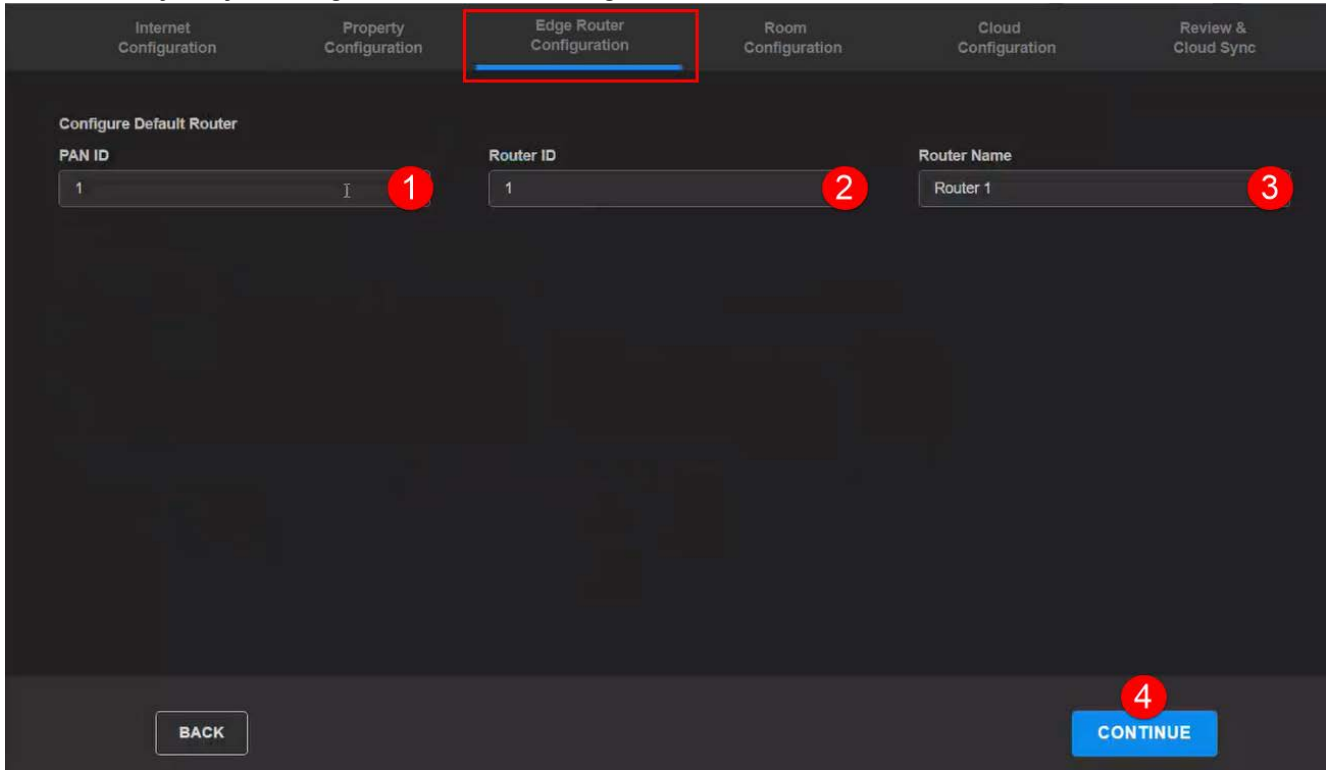
The screenshot displays the 'Honeywell Remote Building Manager (RBM) Gateway Onboarding setup' interface. The 'Property Configuration' step is active, showing several configuration options:

- Property Management System:** Scientific Atlanta
- Communication Port:** [Empty input field]
- Parity:** None
- Weather Services:** Checked checkbox
- Latitude:** [Empty input field]
- Longitude:** [Empty input field]
- Configure Domestic Hot Water Temperature:** Checked checkbox
- Thermostat's Room ID:** [Empty dropdown menu]
- Baud Rate:** [Empty dropdown menu]
- Stop Bits:** StopBit
- Data Bits:** [Empty dropdown menu]
- Flow control:** [Empty dropdown menu]
- Api Key:** [Empty input field]

 At the bottom, there are 'BACK' and 'CONTINUE' buttons. The 'CONTINUE' button is highlighted with a red border.

4.3.3. Edge Router Configuration

The **Edge Router Configuration** tab allows you to configure the Edge Router connected to the INNCOM Direct network. Currently, only one edge router can be configured.

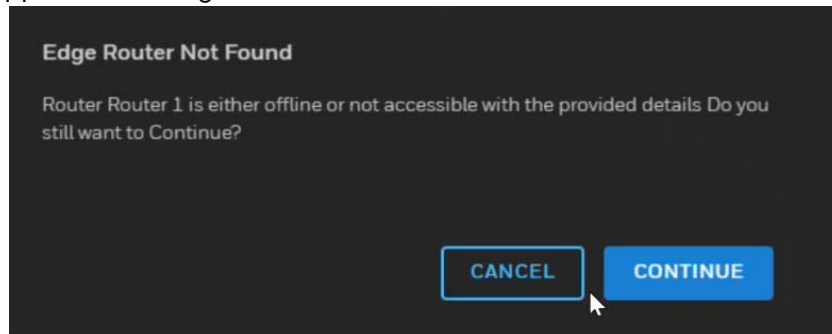


1. Enter the device **PAN ID**.
2. Enter the **Router ID**.

NOTE:

The PAN ID and Router ID are set at the factory. The system fills these IDs automatically. Therefore, do not change the PAN ID and Router ID unless necessary.

3. Enter the **Router Name**.
4. Click **CONTINUE** to proceed to the [Room Configuration](#).
The below dialog appears if the edge router is offline or fails to communicate.



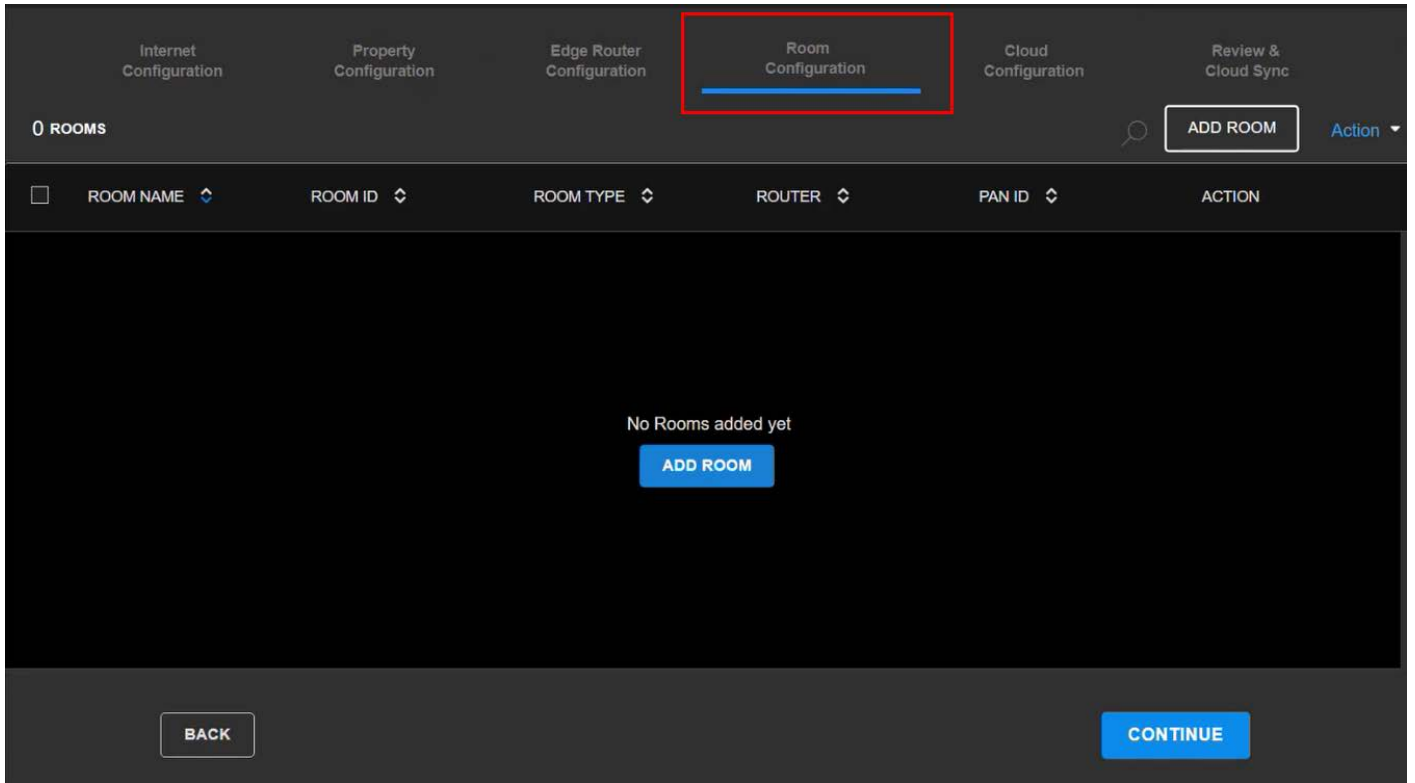
5. Click **CANCEL**, and then click **CONTINUE** to retry the Edge Router configuration.

NOTE:

The system will take approximately 90 seconds to complete the router configuration and proceed to the next screen.

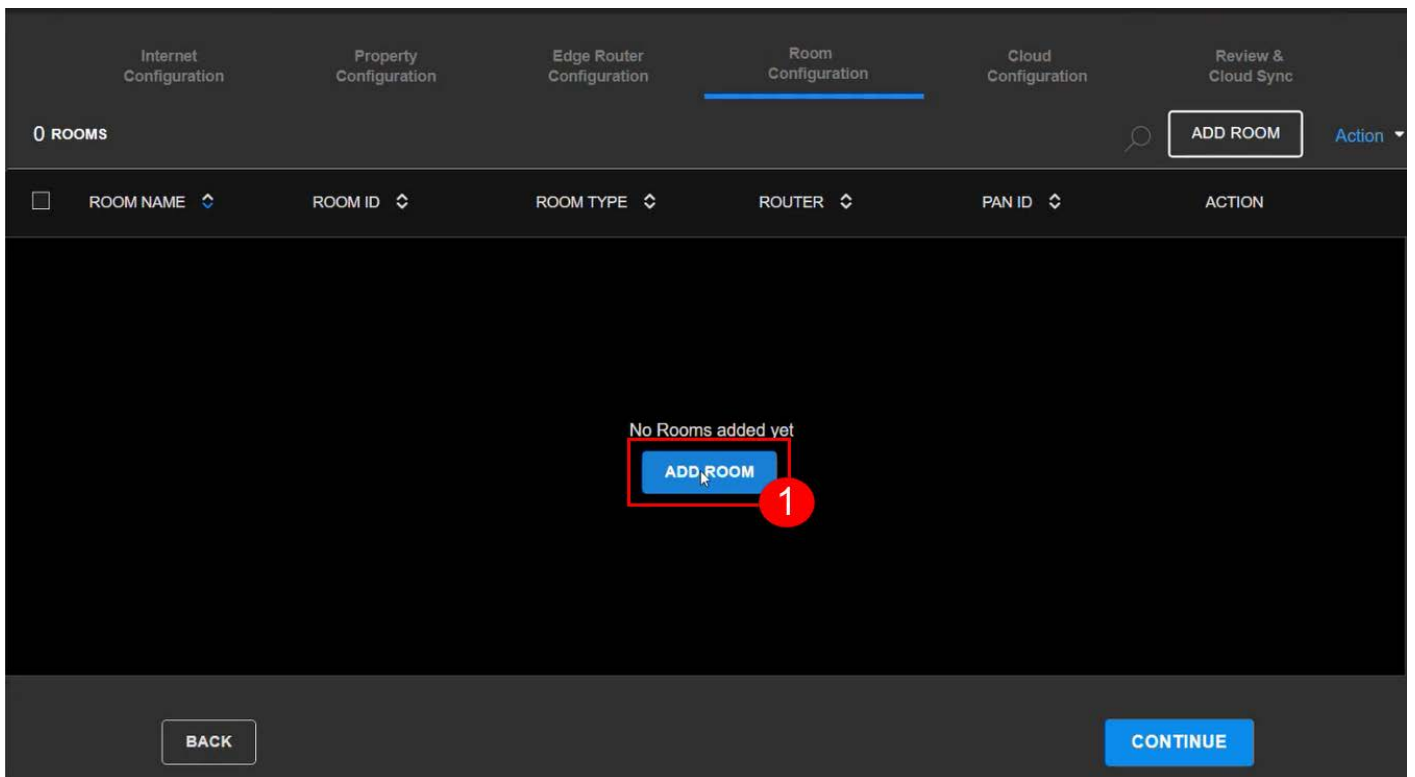
4.3.4. Room Configuration

The Room Configuration tab allows you to add rooms, edit or delete rooms, and configure the properties of rooms.



4.3.4.1. Add/Edit/Delete Rooms

1. Click **ADD ROOM**.



The **ADD ROOM** window is displayed.

2. Select the room type, **Guest** or **Common**.
3. Select the thermostat configuration, **Wired D1 Thermostat** or **Wireless D529 D47**.
4. Enter the room ID. There are two ways to add room IDs:
 - **Single entry** - Enter a room ID and press the space bar or comma (,) on your keyboard to add the entry.
 - **Bulk entry** - Enter room IDs in the range (for example, 100-199) and press the space bar or comma (,) on your keyboard to add the entry.
5. Select **Odd**, **Even**, or **All** rooms. This only applies to the bulk entries (the room IDs entered in the range).

For example, if you select

- **Odd** - In the bulk entries (100-199), only odd room IDs will be added to the room list.
 - **Even** - In the bulk entries (100-199), only even room IDs are added to the room list.
 - **All** - Adds all room IDs (odd and even) to the room list.
6. Select the router (the router is automatically selected by default).
 7. Enter the room name prefix.
 8. Click **ADD**.

The rooms are added to the list.

ROOM NAME	ROOM ID	ROOM TYPE	ROUTER	PAN ID	ACTION
Room 174	174	Guest	Router 11	11	...
Room 172	172	Guest	Router 11	11	...
Room 170	170	Guest	Router 11	11	...
Room 168	168	Guest	Router 11	11	...
Room 166	166	Guest	Router 11	11	...
Room 164	164	Guest	Router 11	11	...

9. To edit a room, click the three-dot icon (...) next to the desired room and click **Edit Room**.
10. To delete a room, click the three-dot icon (...) next to the desired room and click **Delete Room**.

ROOM NAME	ROOM ID	ROOM TYPE	ROUTER	PAN ID	ACTION
Room 198	198	Guest	Router 11	11	...
Room 196	196	Guest	Router 11	11	...
Room 194	194	Guest	Router 11	11	...
Room 192	192	Guest	Router 11	11	...

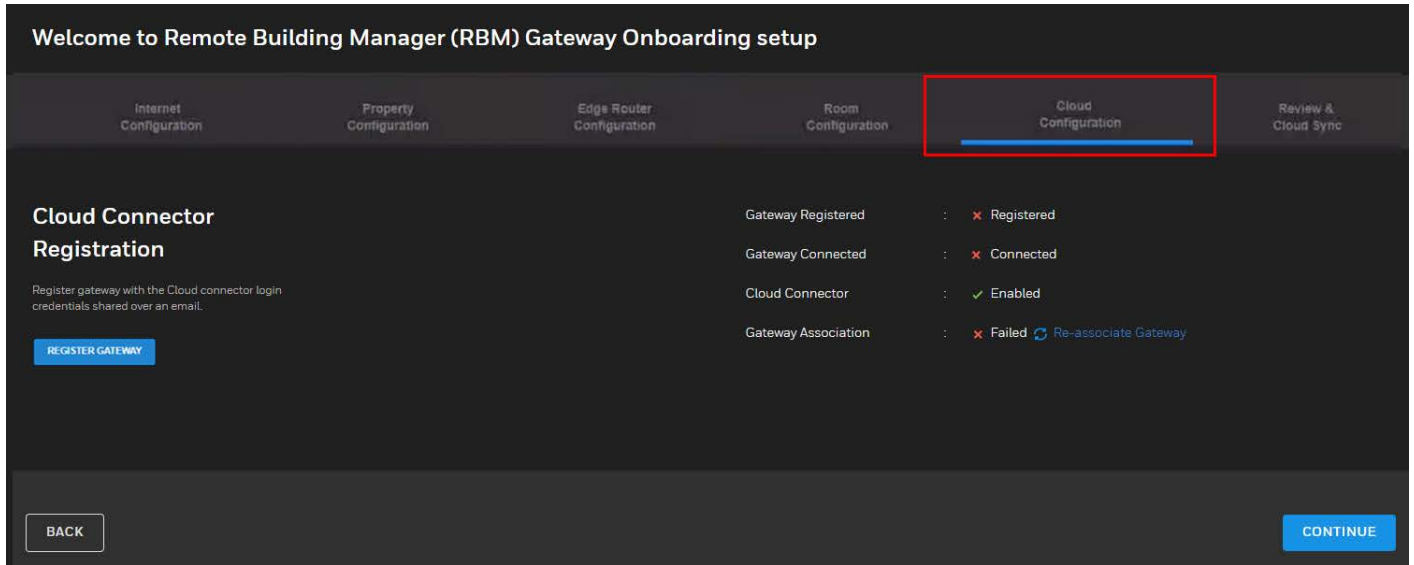
11. After completing the room configurations, click **CONTINUE** to proceed to the *Cloud Configuration*.

NOTE:

A room will be added or deleted only after you click the **Continue** button.

4.3.5. Cloud Configuration

The Cloud Configuration dashboard allows registering the device gateway with Cloud Connector. Additionally, the dashboard provides the details of status gateway registration, gateway connected, cloud connector, system type, and system GUID.



The below table describes the components of the **Cloud Configuration** tab.

Components	Description
Gateway Registered	Displays the status of gateway registration.
Gateway Connected	Displays the online or offline status of the connected gateway.
Cloud Connector	Displays the status of the Cloud Connector.
Gateway Association	Displays the status of the gateway association. It also allows users to perform gateway association by clicking Re-associate Gateway .

To register the gateway, click **REGISTER GATEWAY**.



4.3.5.1. Gateway Registration

To register the gateway, follow the steps below.

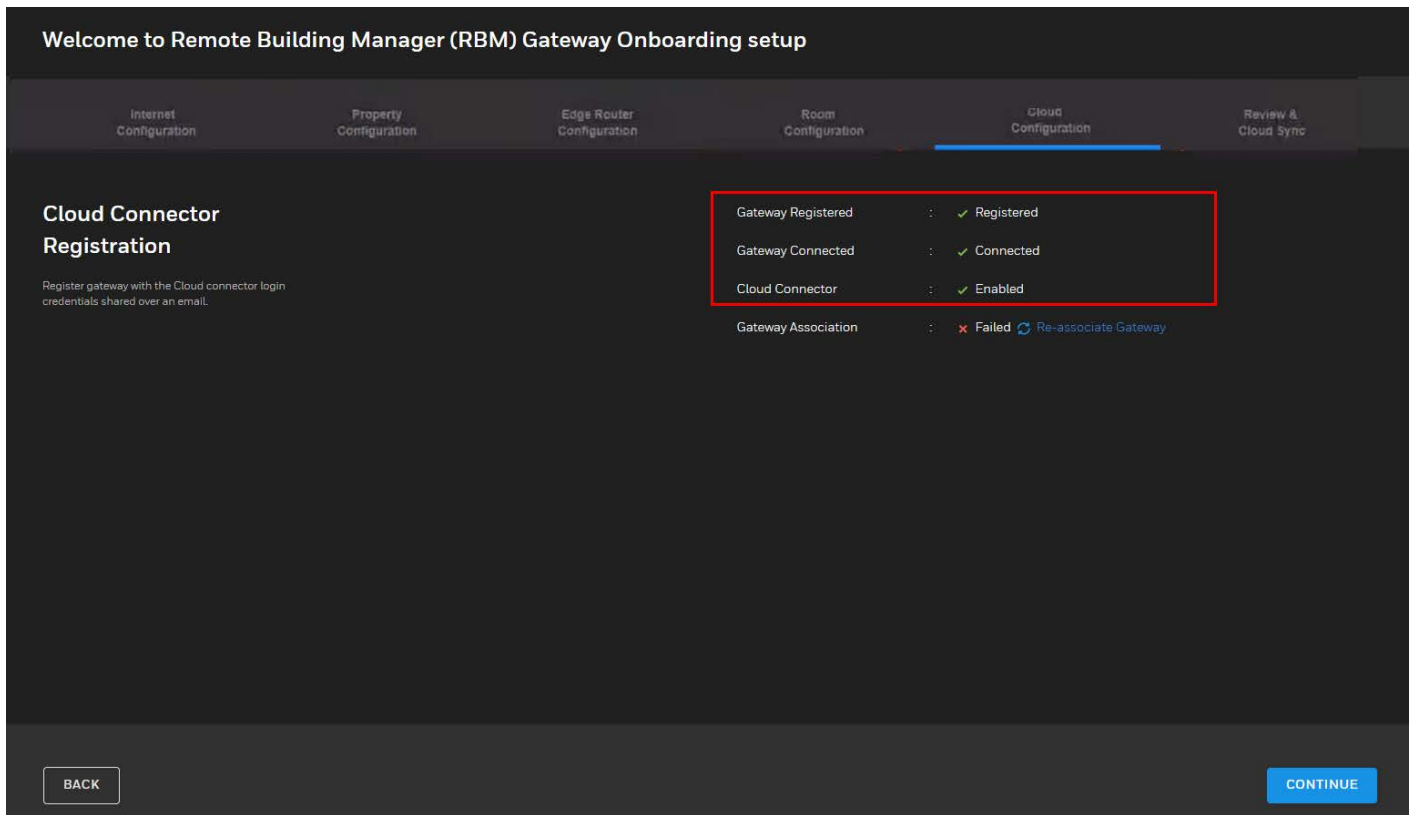
1. By Clicking **REGISTER GATEWAY** on the **Cloud Configuration** dashboard, a web page will be displayed based on the environment selected.

The screenshot shows the 'Gateway Registration' page in a Google Chrome browser. The page title is 'Honeywell | Gateway Registration'. The URL is 'admin-buildingsmanager-qaa.dev.honeywellcloud.com/gateway/registration/#/?systemId=N4%3ADeansgate-Station%3ATst-A32C-DDD9-619F-AB3B&systemType=honeywell-niagar...'. The page includes a language dropdown set to 'English US (English-US)' and a 'Logout' link. Under the heading 'Review gateway details', there are three input fields: 'System ID' containing 'N4:Deansgate-Station:Tst-A32C-DDD9-619F-AB3B', 'System Type' containing 'honeywell-niagara-device', and 'Version' containing '4.10.0.154'. Below this, under 'Select site to register the gateway', there are two dropdown menus: 'Organization' set to 'HTS' and 'Site' set to 'Orion Tower 2'. A blue 'REGISTER' button is located at the bottom right of the form area.

2. Log in using the user credentials you received after activating your account.
3. Select the organization and site that you specified in the order form.
4. Click **REGISTER**.
The gateway registration process will be initiated.
5. After Successful registration, the gateway registration status will be shown.

The screenshot shows the 'Gateway Registration' page after a successful registration. The URL is 'admin-buildingsmanager-qaa.dev.honeywellcloud.com/gateway/registration/#/?systemId=N4%3ADeansgate-Station%3ATst-4582-C0FD-E571-F06A&systemType=honeywell-niagara-device&...'. The page layout is similar to the previous screenshot, but the 'Organization' dropdown is now set to 'Shopping Malls' and the 'Site' dropdown is set to 'King of Prussia'. A green-bordered box highlights the registration success message: 'System Guid b52be03d-6637-4368-bdc3-e29312f3941c' followed by a green checkmark icon and the text 'Gateway Registration Success'. Below this, a red text instruction reads 'Please check gateway connectivity and proceed with gateway association.' A blue 'ASSOCIATION' button is located at the bottom right of the page.

- After the gateway registration is successful, confirm the gateway status is changed to registered and connected on the **Cloud Configuration** page of the Onboarding Wizard.



NOTE: If **Gateway Registered** & **Gateway Connected** status are shown as **Unregister** & **Disconnected**, then go to the Station's service container, right-click on **CloudConnector** > **Actions** > **Reconnect**. Wait for a few minutes. The gateway will attempt to reconnect.

- Once the gateway status shows as **Registered** and **Connected**, proceed with association from the **Gateway Registration** web page.
- Click **ASSOCIATION** in the Gateway Registration web page. The gateway association process will initiate.

9. After successful association, the gateway association status will be shown.

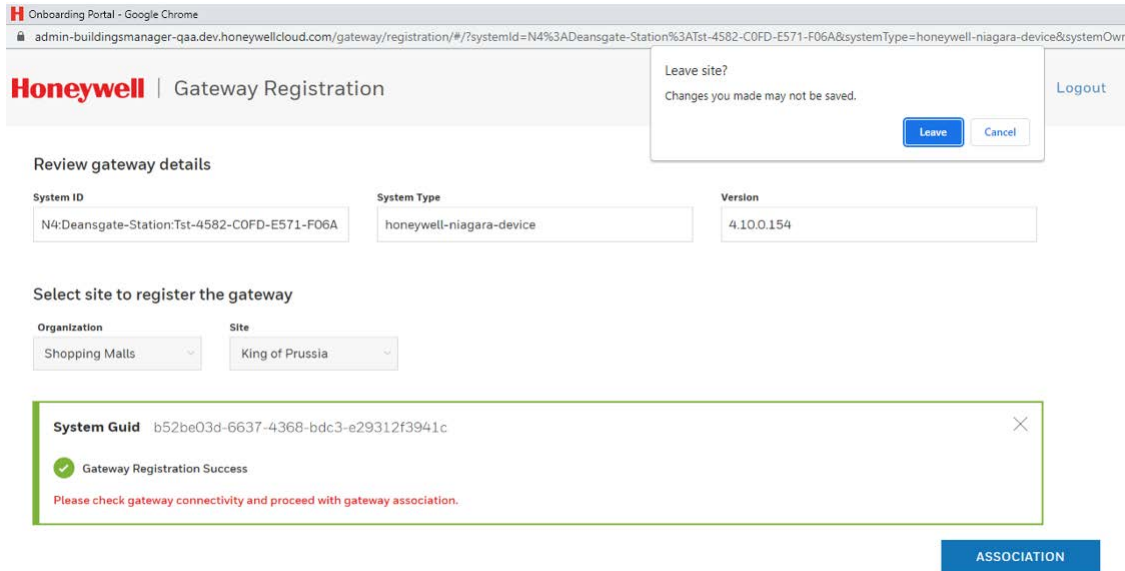
The screenshot shows the Honeywell Gateway Registration page in a browser. The page title is "Honeywell | Gateway Registration". Below the header, there is a section titled "Review gateway details" with three input fields: "System ID" containing "N4:Deansgate-Station:Tst-4582-C0FD-E571-F06A", "System Type" containing "honeywell-niagara-device", and "Version" containing "4.10.0.154". Below this is a "Select site to register the gateway" section with two dropdown menus: "Organization" set to "Shopping Malls" and "Site" set to "King of Prussia". A green-bordered box highlights a "System Guid" field with the value "b52be03d-6637-4368-bdc3-e29312f3941c" and two success messages: "Gateway Registration Success" and "Gateway Association Success". At the bottom right, there is a grey button labeled "ASSOCIATION".

10. After the gateway association is successful, confirm the **Gateway Association** status is changed to **Completed** on the Cloud Configuration page of the Onboarding Wizard, as shown below.

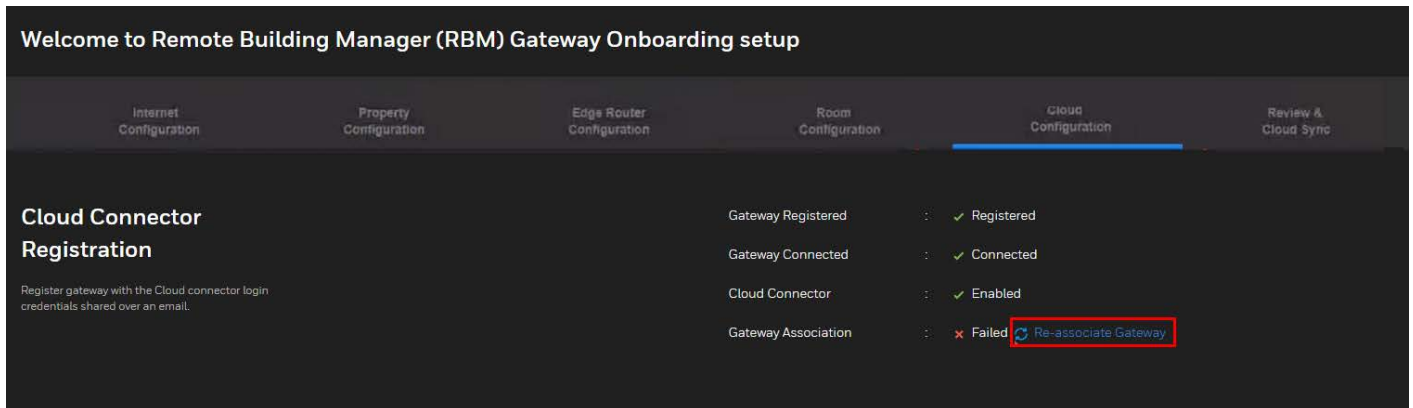
The screenshot shows the "Welcome to Remote Building Manager (RBM) Gateway Onboarding setup" wizard. The wizard has six steps: "Internet Configuration", "Property Configuration", "Edge Router Configuration", "Room Configuration", "Cloud Configuration", and "Review & Cloud Sync". The "Cloud Configuration" step is currently active and highlighted with a blue underline. Under the "Cloud Configuration" step, there is a section titled "Cloud Connector Registration" with the instruction "Register gateway with the Cloud connector login credentials shared over an email." To the right of this section is a list of status checks: "Gateway Registered" (Registered), "Gateway Connected" (Connected), "Cloud Connector" (Enabled), and "Gateway Association" (Completed). The "Gateway Association" status is highlighted with a red border. At the bottom left, there is a "BACK" button, and at the bottom right, there is a "CONTINUE" button.

NOTE:

A warning message is shown if the user is trying to close the Gateway Registration web page before the Association process. Once it is closed, the Association cannot be done from the Gateway Registration web page. To re-associate the gateway, refer to step 11.



11. If the **Gateway Registration** web page is closed without performing the association, open the **Cloud Configuration** page of the Onboarding Wizard, and click **Re-associate Gateway** to complete the association.



NOTE:

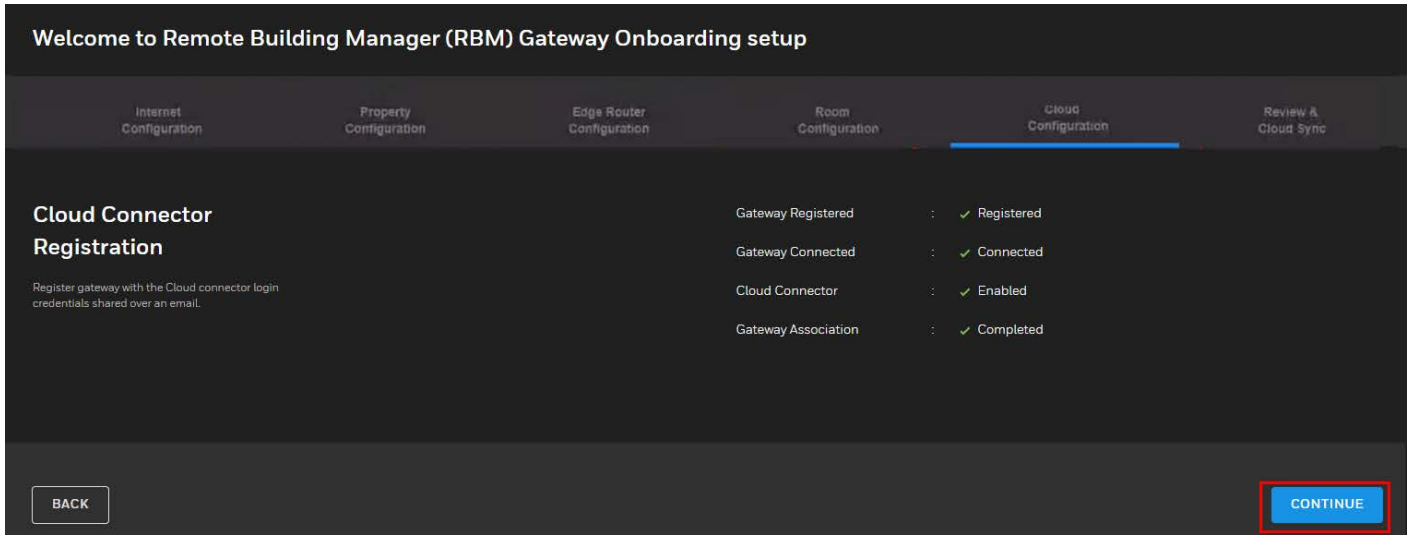
If **Gateway Registered & Gateway Connected** status are shown as **Unregister & Disconnected**, then go to the Station's service container, right-click on **CloudConnector > Actions > Reconnect**. Wait for a few minutes. The gateway will attempt to reconnect.

If reconnecting fails, go to the **Gateway Certificate Management** window and ensure the status of the cloud connector certificate is in the approval state.

If the **Cloud Connector** reconnect failed, and **Gateway Registered** and **Gateway Connected** are not changed to **Registered** and **Connected**, copy and save the system GUID from the **Gateway Registration** web page and contact your system administrator.

12. Close the **Gateway Registration** web page on successful Association and navigate to the **Gateway Onboarding** wizard.

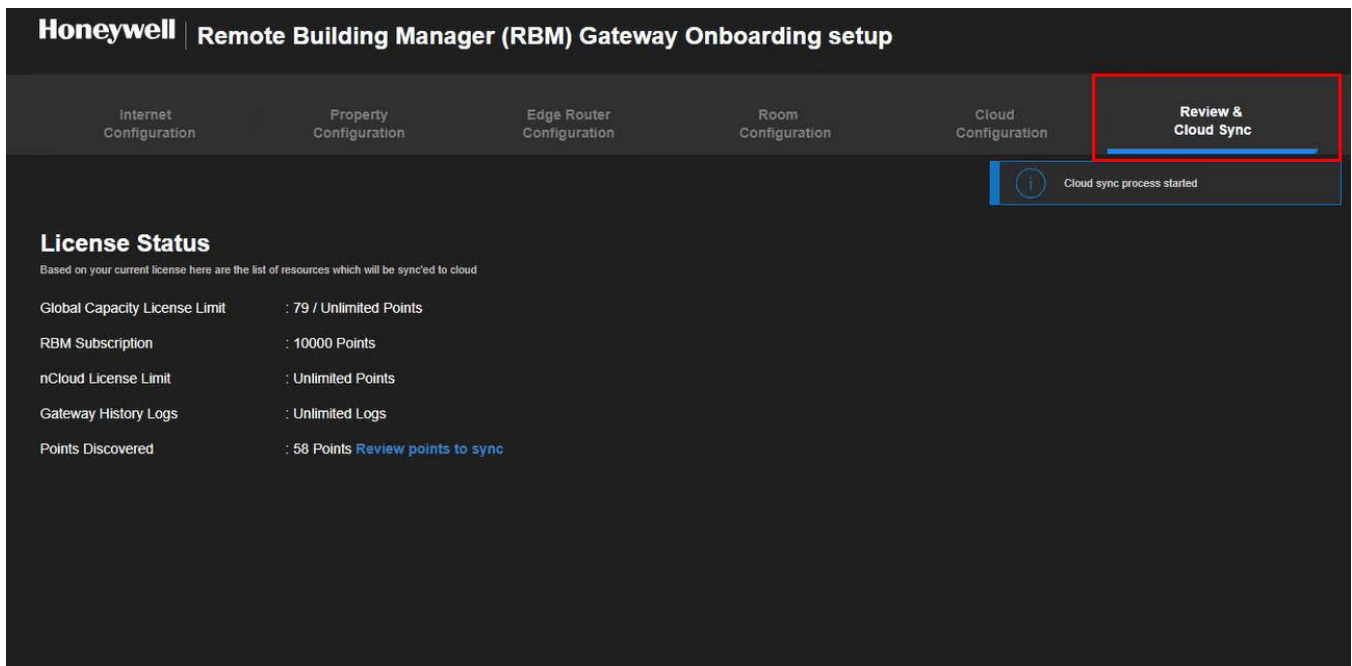
13. Click **CONTINUE** to proceed to the [Review & Cloud Sync](#) dashboard.



The point tagging and cloud device configuration process will occur automatically before landing on **Review & Cloud Sync** dashboard.


4.3.6. Review & Cloud Sync

The **Review & Cloud Sync** tab validates the status of the existing license synced to the cloud. Additionally, this tab displays your license capacity and discovered points and allows the user to modify the synced points.



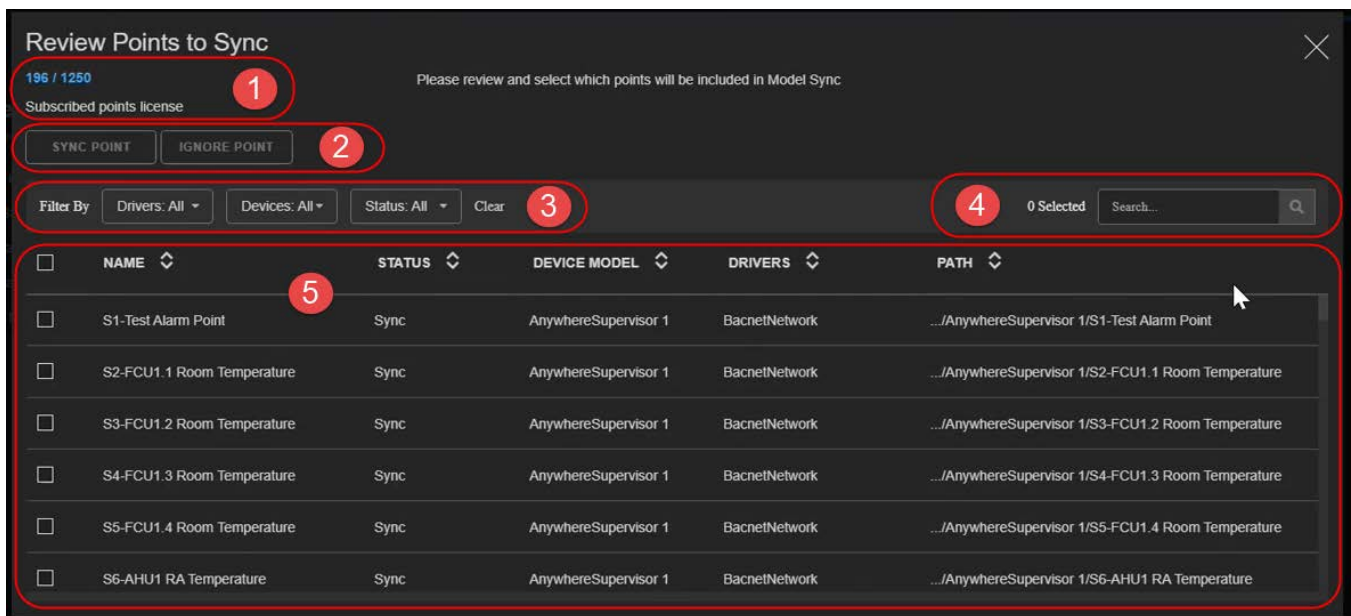
The below table describes the components of the **Review & Cloud Sync** window.


Components	Description
License Status	
Global Capacity License Limit	Displays the global capacity license limit.


RBM Subscription	Displays the number of licenses subscribed for points.
nCloud License Limit	Displays the available license capacity for the nCloud driver.
Gateway History Logs	Displays the limit of history logs for the gateway.
Points Discovered	<p>Displays the number of discovered points.</p> <p>A red alert icon  is displayed if the discovered points are more than the Remote Building Manager licensed points.</p> <p>Click the Review points to sync option to add or remove points. For information, see Review Points to Sync.</p>

4.3.6.1. Review Points to Sync

The **Review Points to Sync** window allows users to add or remove points based on the requirements and license limit. The selected point will be included in the Model Sync.



Callout	Description
1	Displays the proportion of synced points to the total subscribed license points.
2	<p>SYNC POINT: This option allows the user to sync the selected points (included in the Model Sync).</p> <p>IGNORE POINT: This option allows the user to ignore the synced points (excluded from the Model Sync).</p> <p> NOTE: Do not change points to be synced unless necessary.</p>

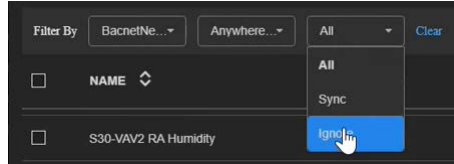
Callout	Description																																										
3	<p>Allows the user to filter the points by Drivers, Devices, and Status.</p> <p>Filter by Drivers:</p> <ul style="list-style-type: none"> • All: Displays all the points that are associated with all the drivers. • BacnetNetwork: Displays the points that are associated only with the Bacnet network (in case of TC500 exists). <p>Filter by Devices:</p> <ul style="list-style-type: none"> • All: Displays all the data points connected to all the device models. • AnywhereSuperviosr 1: Displays the points that are associated only with the specific device model (for example, AnywhereSupervisor 1, Anywheresupervisor 2). <p>Filter by Status:</p> <ul style="list-style-type: none"> • All: Displays all the synced and ignored points. • Sync: Displays only the synced points. • Ignore: Displays only the ignored points. <div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <p> NOTE: Click Clear to set the filter options (Drivers, Devices, and Status) to the default state All.</p> </div>																																										
4	<p>Selected: Displays the number of selected points from the point list.</p> <p>Search Field: Allows the user to search the points by their name or equipment type (for example, FCU, AHU, VAV, Temperature, and so on).</p>																																										
5	<p>Displays the list of Points per the selected filter.</p> <div style="background-color: #333; color: #ccc; padding: 10px; margin: 10px 0;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 30%;">NAME</th> <th style="width: 15%;">STATUS</th> <th style="width: 20%;">DEVICE MODEL</th> <th style="width: 15%;">DRIVERS</th> <th style="width: 15%;">PATH</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td><input type="checkbox"/> S1-Test Alarm Point</td> <td>Sync</td> <td>AnywhereSupervisor 1</td> <td>BacnetNetwork</td> <td>.../AnywhereSupervisor 1/S1-Test Alarm Point</td> </tr> <tr> <td style="text-align: center;">2</td> <td><input type="checkbox"/> S2-FCU1.1 Room Temperature</td> <td>Sync</td> <td>AnywhereSupervisor 1</td> <td>BacnetNetwork</td> <td>.../AnywhereSupervisor 1/S2-FCU1.1 Room Temperature</td> </tr> <tr> <td style="text-align: center;">3</td> <td><input type="checkbox"/> S3-FCU1.2 Room Temperature</td> <td>Sync</td> <td>AnywhereSupervisor 1</td> <td>BacnetNetwork</td> <td>.../AnywhereSupervisor 1/S3-FCU1.2 Room Temperature</td> </tr> <tr> <td style="text-align: center;">4</td> <td><input type="checkbox"/> S4-FCU1.3 Room Temperature</td> <td>Sync</td> <td>AnywhereSupervisor 1</td> <td>BacnetNetwork</td> <td>.../AnywhereSupervisor 1/S4-FCU1.3 Room Temperature</td> </tr> <tr> <td style="text-align: center;">5</td> <td><input type="checkbox"/> S5-FCU1.4 Room Temperature</td> <td>Sync</td> <td>AnywhereSupervisor 1</td> <td>BacnetNetwork</td> <td>.../AnywhereSupervisor 1/S5-FCU1.4 Room Temperature</td> </tr> <tr> <td style="text-align: center;">6</td> <td><input type="checkbox"/> S6-AHU1 RA Temperature</td> <td>Sync</td> <td>AnywhereSupervisor 1</td> <td>BacnetNetwork</td> <td>.../AnywhereSupervisor 1/S6-AHU1 RA Temperature</td> </tr> </tbody> </table> </div> <ol style="list-style-type: none"> 1. Allows the user to select the points to perform sync or ignore operation based on the requirement. 2. Displays the point's name. 3. Displays the point's status (Sync or Ignore). 4. Displays the point's Device Model. 5. Displays the associated driver name. 6. Displays the point's directory path. 		NAME	STATUS	DEVICE MODEL	DRIVERS	PATH	1	<input type="checkbox"/> S1-Test Alarm Point	Sync	AnywhereSupervisor 1	BacnetNetwork	.../AnywhereSupervisor 1/S1-Test Alarm Point	2	<input type="checkbox"/> S2-FCU1.1 Room Temperature	Sync	AnywhereSupervisor 1	BacnetNetwork	.../AnywhereSupervisor 1/S2-FCU1.1 Room Temperature	3	<input type="checkbox"/> S3-FCU1.2 Room Temperature	Sync	AnywhereSupervisor 1	BacnetNetwork	.../AnywhereSupervisor 1/S3-FCU1.2 Room Temperature	4	<input type="checkbox"/> S4-FCU1.3 Room Temperature	Sync	AnywhereSupervisor 1	BacnetNetwork	.../AnywhereSupervisor 1/S4-FCU1.3 Room Temperature	5	<input type="checkbox"/> S5-FCU1.4 Room Temperature	Sync	AnywhereSupervisor 1	BacnetNetwork	.../AnywhereSupervisor 1/S5-FCU1.4 Room Temperature	6	<input type="checkbox"/> S6-AHU1 RA Temperature	Sync	AnywhereSupervisor 1	BacnetNetwork	.../AnywhereSupervisor 1/S6-AHU1 RA Temperature
	NAME	STATUS	DEVICE MODEL	DRIVERS	PATH																																						
1	<input type="checkbox"/> S1-Test Alarm Point	Sync	AnywhereSupervisor 1	BacnetNetwork	.../AnywhereSupervisor 1/S1-Test Alarm Point																																						
2	<input type="checkbox"/> S2-FCU1.1 Room Temperature	Sync	AnywhereSupervisor 1	BacnetNetwork	.../AnywhereSupervisor 1/S2-FCU1.1 Room Temperature																																						
3	<input type="checkbox"/> S3-FCU1.2 Room Temperature	Sync	AnywhereSupervisor 1	BacnetNetwork	.../AnywhereSupervisor 1/S3-FCU1.2 Room Temperature																																						
4	<input type="checkbox"/> S4-FCU1.3 Room Temperature	Sync	AnywhereSupervisor 1	BacnetNetwork	.../AnywhereSupervisor 1/S4-FCU1.3 Room Temperature																																						
5	<input type="checkbox"/> S5-FCU1.4 Room Temperature	Sync	AnywhereSupervisor 1	BacnetNetwork	.../AnywhereSupervisor 1/S5-FCU1.4 Room Temperature																																						
6	<input type="checkbox"/> S6-AHU1 RA Temperature	Sync	AnywhereSupervisor 1	BacnetNetwork	.../AnywhereSupervisor 1/S6-AHU1 RA Temperature																																						

Steps to perform the Sync action:

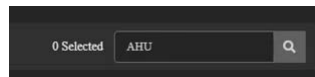
1. Filter the points by **Drivers**, **Devices**, and **Status**.

NOTE:

To perform the Sync action, ensure the filter by **Status** is set to **Ignore**.



2. Enter the point name in the search field to select the specific point type – for example, AHU, FCU, VAV, Temperature, Room and so on.



3. Click the checkbox to select the required points that have the **Ignore** status.

<input type="checkbox"/>	NAME	STATUS	DEVICE MODEL
<input checked="" type="checkbox"/>	S6-AHU1 RA Temperature	Ignore	AnywhereSupervisor 1
<input checked="" type="checkbox"/>	S7-AHU1 RA Humidity	Ignore	AnywhereSupervisor 1
<input checked="" type="checkbox"/>	S8-AHU1 RA CO2	Ignore	AnywhereSupervisor 1
<input checked="" type="checkbox"/>	S9-AHU1 Inlet Temperature	Ignore	AnywhereSupervisor 1
<input checked="" type="checkbox"/>	S10-AHU1 Outlet Temperature	Ignore	AnywhereSupervisor 1
<input type="checkbox"/>	S11-AHU2 RA Temperature	Ignore	AnywhereSupervisor 1

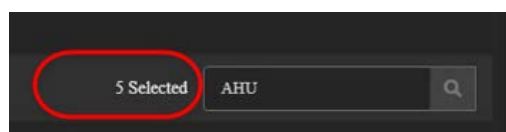
4. Or, use the select all checkbox column to select all the points from the list.

<input type="checkbox"/>	NAME	STATUS	DEVICE MODEL
<input checked="" type="checkbox"/>	S2-FCU1.1 Room Temperature	Sync	AnywhereSupervisor 1
<input checked="" type="checkbox"/>	S3-FCU1.2 Room Temperature	Sync	AnywhereSupervisor 1
<input checked="" type="checkbox"/>	S4-FCU1.3 Room Temperature	Sync	AnywhereSupervisor 1
<input checked="" type="checkbox"/>	S5-FCU1.4 Room Temperature	Ignore	AnywhereSupervisor 1
<input checked="" type="checkbox"/>	D5-FCU1.1 Heating Valve	Ignore	AnywhereSupervisor 1
<input checked="" type="checkbox"/>	D6-FCU1.1 Cooling Valve	Ignore	AnywhereSupervisor 1

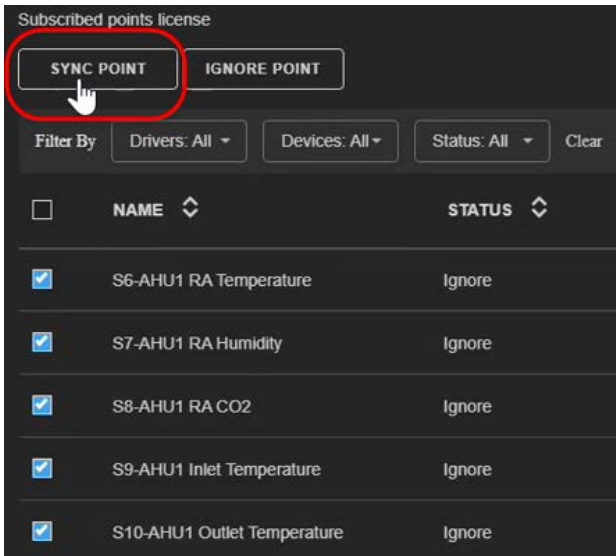
NOTE:

The points are listed based on the applied filter and the particular point type searched in the previous steps.

5. The number of selected points is displayed next to the search field.



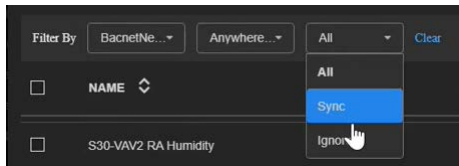
6. Click **SYNC POINT** to sync the selected points to be a part of Model Sync.



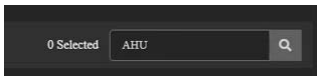
Steps to perform the Ignore action:

1. Filter the points by **Drivers**, **Devices**, and **Status**.

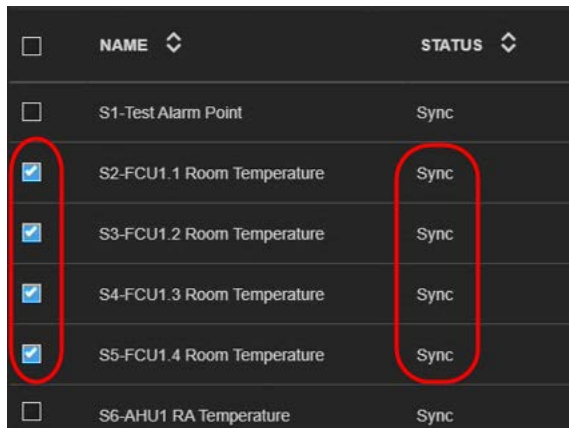
NOTE:
To perform the Ignore action, ensure the filter by **Status** is set to **Sync**.



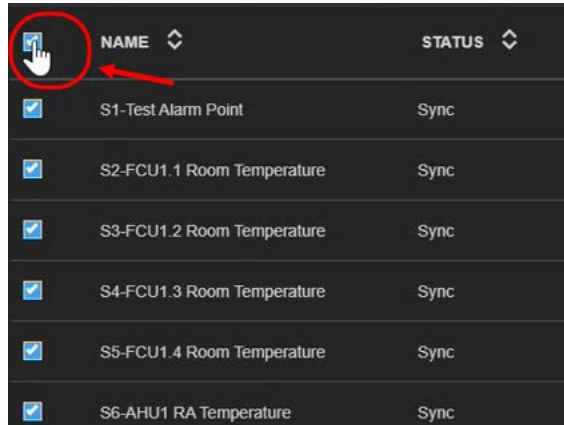
2. Enter the point name in the search field to select the specific point type – for example, AHU, FCU, VAV, Temperature, and so on.



3. Click the checkbox to select the required points that have the **Sync** status.



- Or, use the select all checkbox column to select all the points from the list.

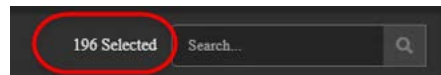


<input checked="" type="checkbox"/>	NAME	STATUS
<input checked="" type="checkbox"/>	S1-Test Alarm Point	Sync
<input checked="" type="checkbox"/>	S2-FCU1.1 Room Temperature	Sync
<input checked="" type="checkbox"/>	S3-FCU1.2 Room Temperature	Sync
<input checked="" type="checkbox"/>	S4-FCU1.3 Room Temperature	Sync
<input checked="" type="checkbox"/>	S5-FCU1.4 Room Temperature	Sync
<input checked="" type="checkbox"/>	S6-AHU1 RA Temperature	Sync

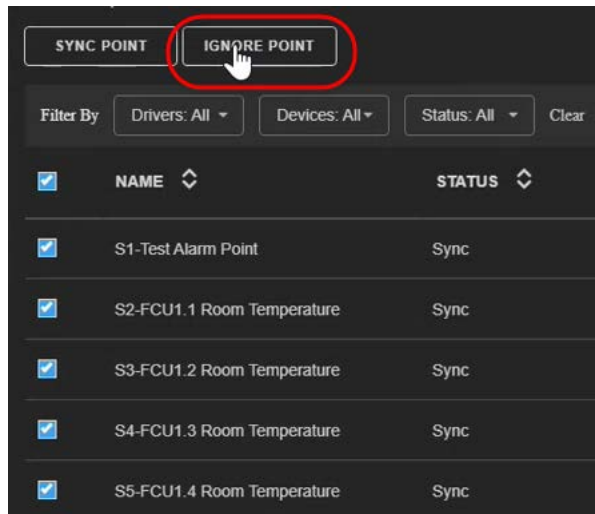
NOTE:

The points are listed based on the applied filter and the particular point type searched in the previous steps.

- The number of selected points is displayed next to the search field.



- Click **IGNORE POINT** to exclude the synced points from the Model Sync.

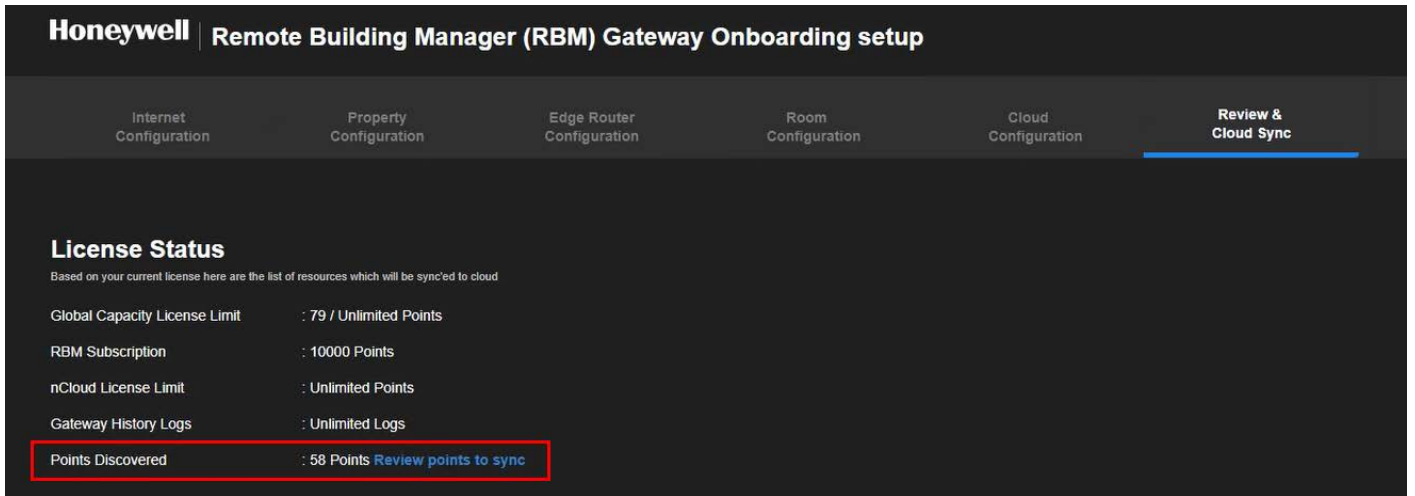


SYNC POINT | **IGNORE POINT**

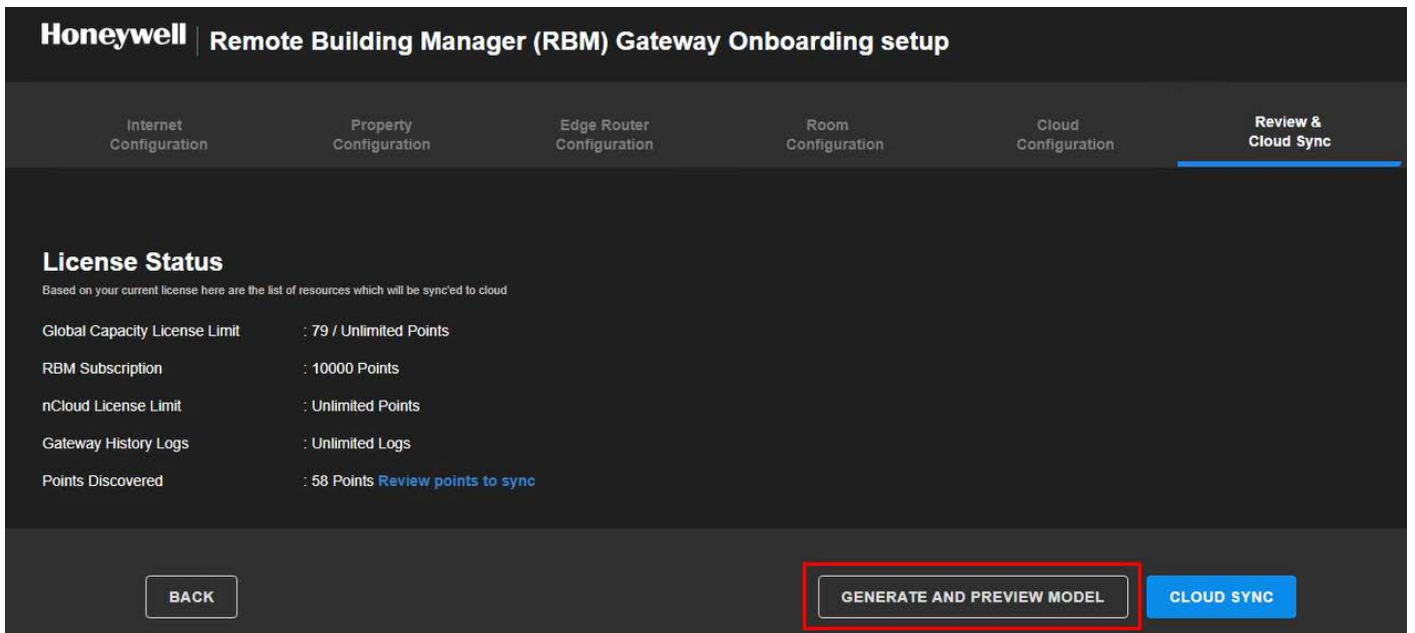
Filter By Drivers: All Devices: All Status: All Clear

<input checked="" type="checkbox"/>	NAME	STATUS
<input checked="" type="checkbox"/>	S1-Test Alarm Point	Sync
<input checked="" type="checkbox"/>	S2-FCU1.1 Room Temperature	Sync
<input checked="" type="checkbox"/>	S3-FCU1.2 Room Temperature	Sync
<input checked="" type="checkbox"/>	S4-FCU1.3 Room Temperature	Sync
<input checked="" type="checkbox"/>	S5-FCU1.4 Room Temperature	Sync

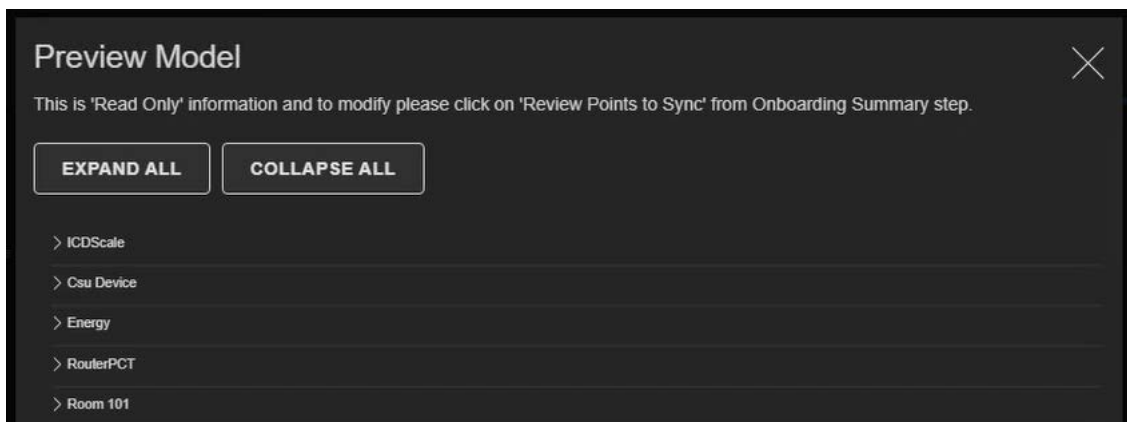
After configuring the components in the **Review points to sync** window, the number of synced points are in displayed on the **Review & Cloud Sync** dashboard.



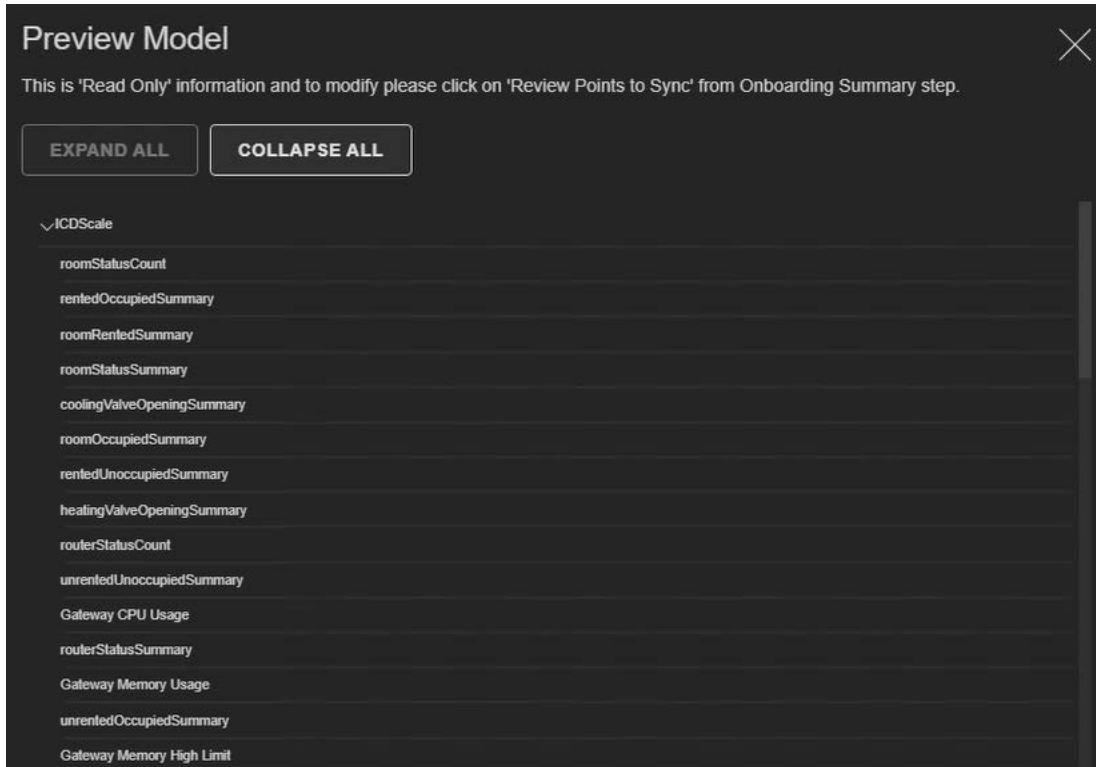
Click **GENERATE AND PREVIEW MODEL** to display the **Preview Model** window of the synced points.



The Preview Model window displays the point list preview that will be synced to the cloud.

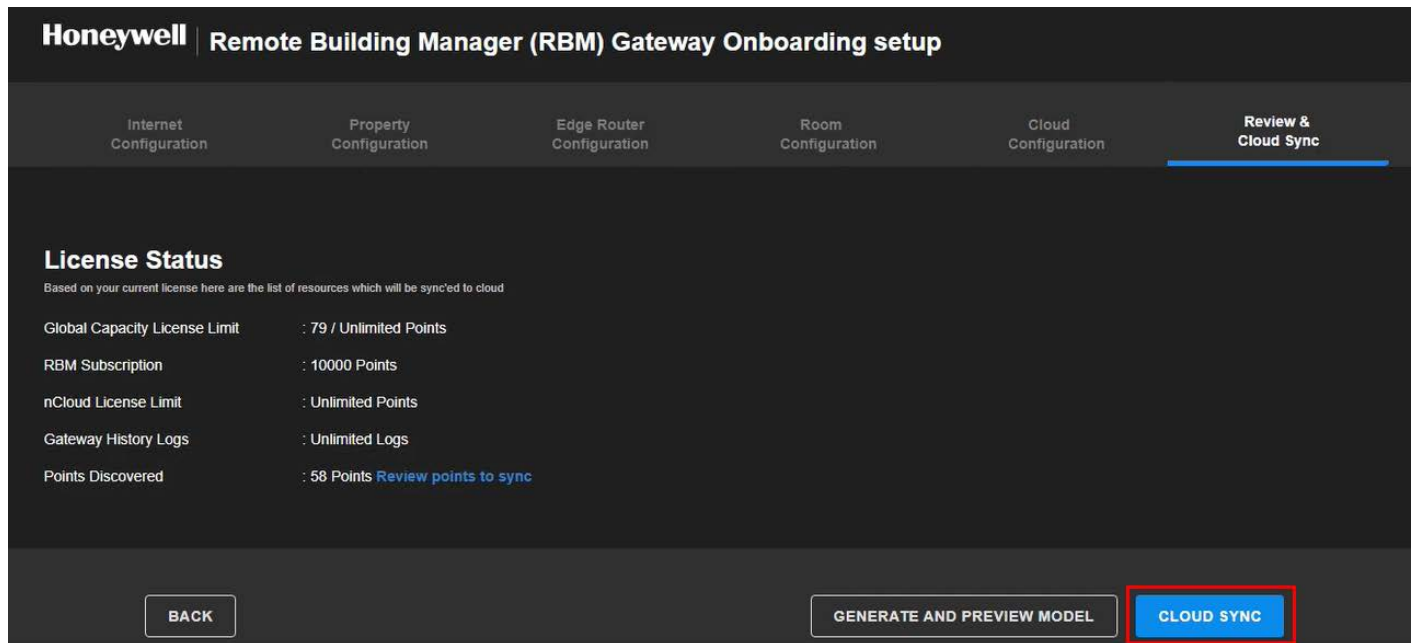


- The points hierarchy list is generated based on the tagging. .
- Click **EXPAND ALL** to expand the hierarchy list.



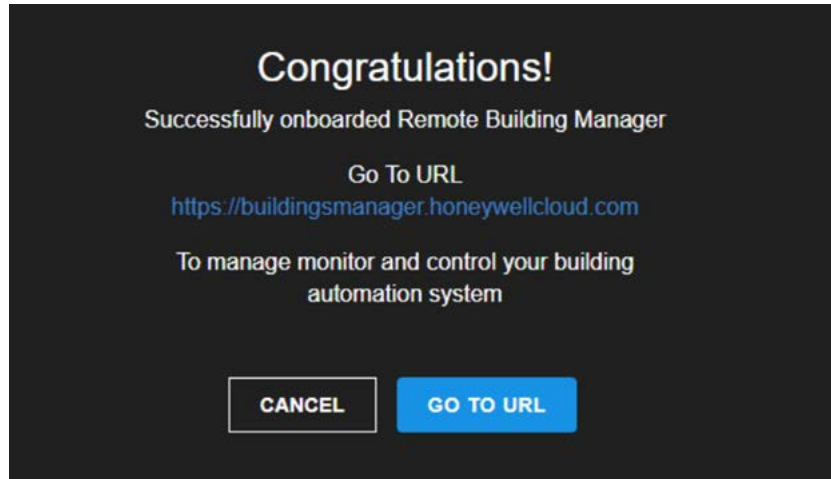
- Click **COLLAPSE ALL** to display the default view.

After validating the components in the Review & Cloud Sync dashboard, click **CLOUD SYNC**. This action uploads the filtered points to the cloud.



The dashboard notifies when the points are synced to the Cloud.

The Remote Building Manager INNCOM Direct supervisor URL will display on the successful onboarding. Visit the URL link to remotely control and command the building automation system from the RBM INNCOM Direct supervisor. Click **CANCEL** to restart the Remote Building Manager Gateway onboarding configuration.



In any time of product life cycle, if there is necessity to re-onboard like removal/addition of entities, user can directly switch to any tab and make necessary modifications and press continue to apply the changes.

**NOTE:**

User should complete onboard atleast once successfully i.e., till above tab to directly switch to particular tab otherwise perform procedure explained in 4.3 section.

5 . INNCOM DIRECT OTA FIRMWARE UPGRADE

The firmware upgrade process via an OTA firmware wizard is a step-by-step process to update the software running on a device (Thermostat, Edge Router, or Relay). Users typically initiate the process by accessing the Firmware Upgrade Wizard service within the Gateway. Once started, the wizard will guide you through the process, providing status updates and prompting you to take the necessary actions.

During the upgrade process, the wizard displays progress bars to keep you informed of the status of each device being upgraded. If multiple devices are selected, the dashboard can organize upgrades in parallel or queue them sequentially based on system capabilities and user preferences. Upon completion, the wizard provides confirmation of the successful upgrade and any relevant post-upgrade instructions, allowing you to verify the updated firmware version and ensure the device is functioning properly.

5.1. Prerequisites

5.1.1. Create an INNCOM firmware folder in the station shared folder.

1. Contact the technical support representative to obtain the latest firmware upgrade files.
 - D1-528 thermostat: INNCOM_Direct_D1_528_vx.x.xx.bin
 - D-X47 Relay: INNCOM_Direct_DX47_vx.x.xx.bin
 - D-578 Router: INNCOM_Direct_D578_vx.x.xx.bin
2. If you are using a daemon user home, in your local PC, navigate to the following location:
C:\ProgramData\Niagara4.13\tridium\stations\station_name\shared.
3. If you are using workbench user home, in your local PC, navigate to the following location:
C:\Users\Niagara4.13\tridium\stations\station_name\shared.
4. Place the firmware files that is required for the firmware upgrade in **inncom_firmware** folder.

5.1.2. Ensure devices are connected to the INNCOMNetwork.

Ensure that your devices remain connected to the INNCOM Network. If the INNCOM Network is deleted or removed from the driver, your connection to the devices will be lost. In such instances, you must manually:

1. Create new station with recommended template or contact support.
2. Initiate the EasyOnboard service to re-establish connection with the devices.

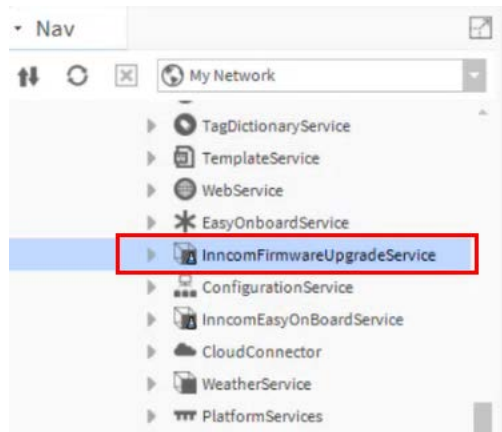


NOTE:

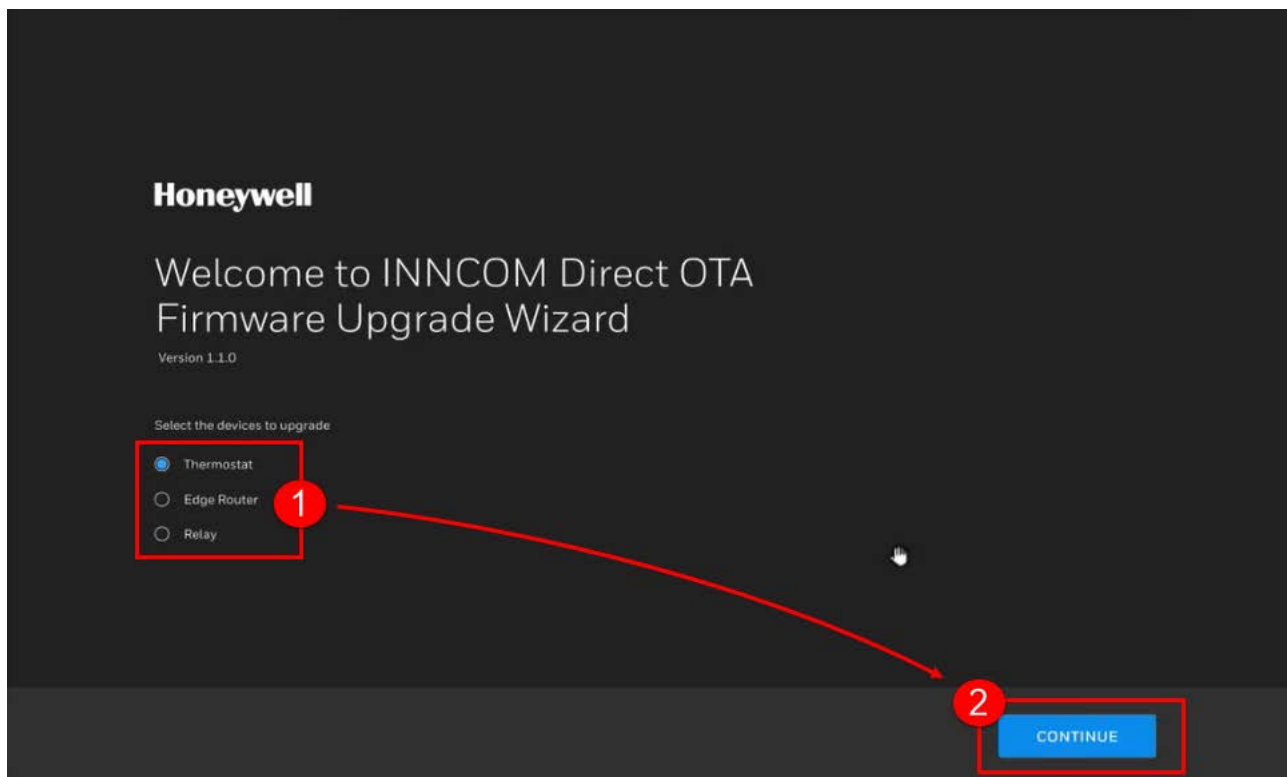
After onboarding, the current firmware version of the devices will be fetched in 24 hours. You can perform firmware upgrade at any time, but current firmware version may not be shown during firmware upgrade.

5.2. Run the INNCOM Direct Firmware Upgrade Wizard

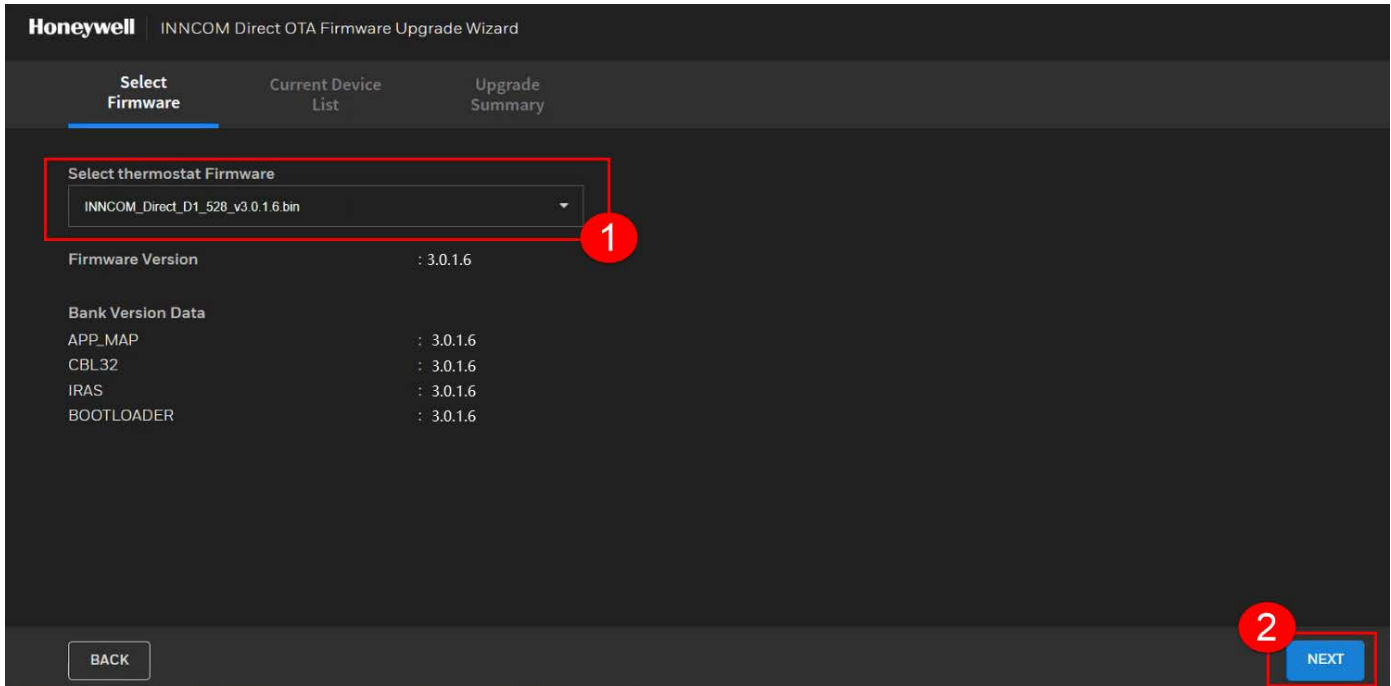
1. In the Nav tree, expand station > **Config** > **Services** folder.
2. Double-click **INNCOMFirmwareUpgradeService**.



3. The **INNCOM Direct OTA Firmware Upgrade Wizard** opens.
4. Select the required device (Thermostat, Edge Router, or Relay) and click **CONTINUE**.



5. Select the required firmware file from the drop-down menu and click **NEXT**.

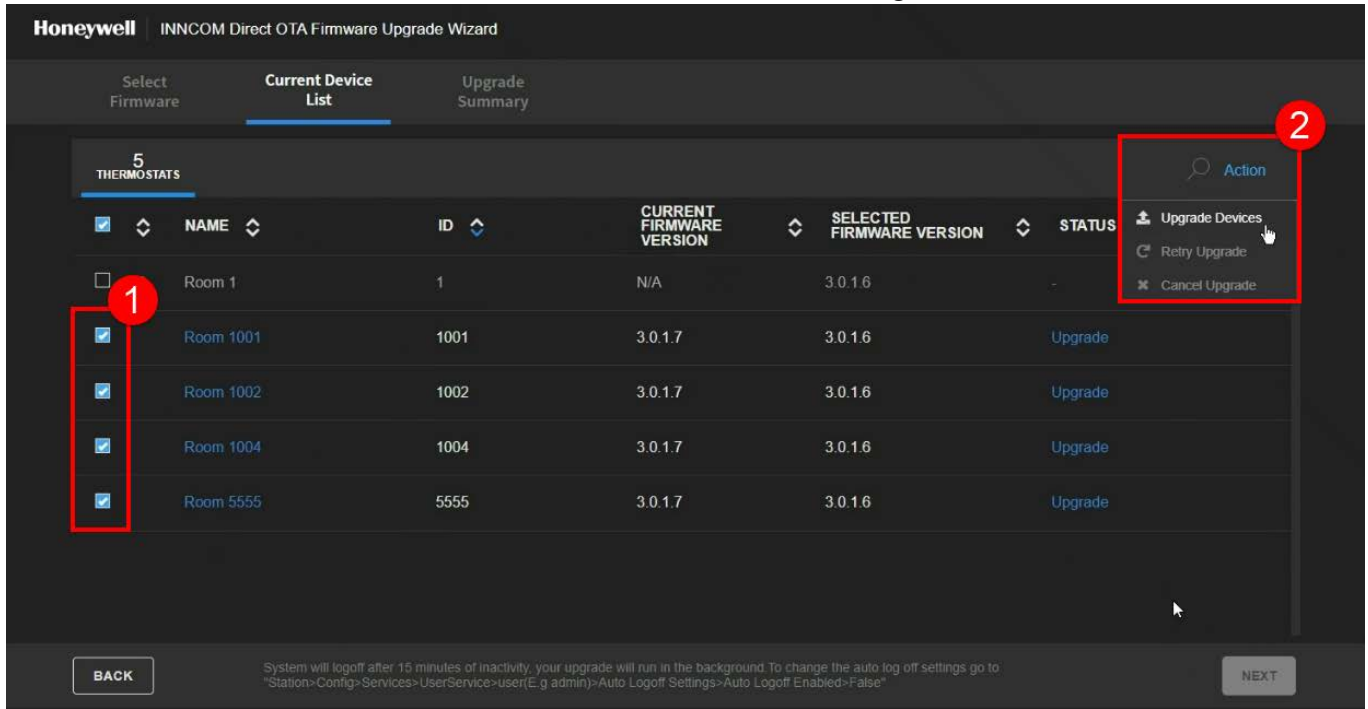


NOTE:

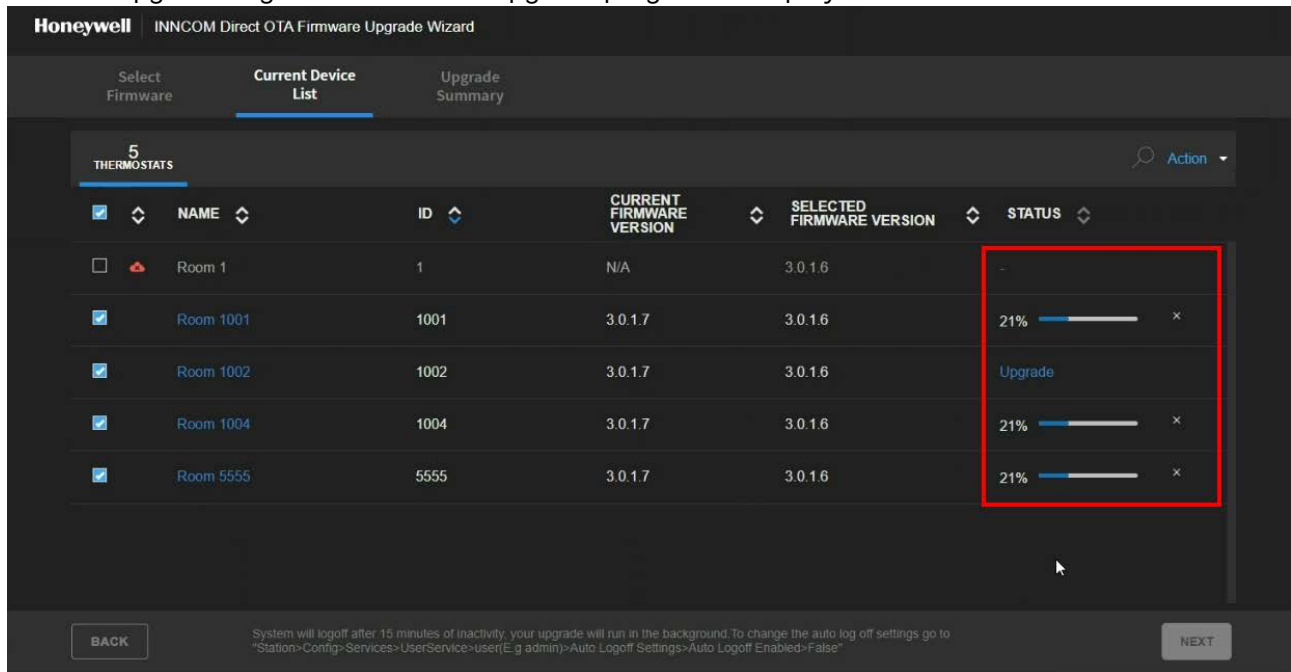
Please be aware that when choosing the device type as thermostat, you should select the corresponding thermostat firmware file. Similarly, for edge routers and relays, choose their respective firmware files accordingly.

6. The current list of devices associated with the relevant rooms is displayed. It displays the room name, room ID, current firmware version, selected firmware version and the status of the thermostats.
 - Note that the **Upgrade** option is only enabled if the selected firmware version is higher or lower than the current firmware version.
 - You cannot upgrade the firmware for offline rooms.

7. Click the checkbox to select the required rooms and click **Action > Upgrade Devices**.



8. Firmware upgrade begins and firmware upgrade progress is displayed in the status column.



NOTE: When selecting more than five rooms for the upgrade process, the system will commence upgrading the first three rooms simultaneously. The remaining rooms will be queued and processed sequentially following the completion of each preceding room.

9. At this stage, the system allows you to cancel the upgrade process.

You can perform this action in two ways:

- **Single room:** Click on the cancel icon (in the progress bar) next to the appropriate room to cancel the upgrade on that particular room.

- **Multiple rooms:** Select the required room checkboxes and click **Action > Cancel Upgrade**.
10. Once the upgrade process is complete, the status of the devices will either fall into the following state:
- **Upgrade Successful:** This indicates that the firmware upgrade is successful.
 - **Failed:** Indicates the firmware upgrade is failed and enables the **Retry** option.

Honeywell | INNCOM Direct OTA Firmware Upgrade Wizard

Select Firmware | **Current Device List** | Upgrade Summary

5 THERMOSTATS

<input checked="" type="checkbox"/>	NAME	ID	CURRENT FIRMWARE VERSION	SELECTED FIRMWARE VERSION	STATUS
<input type="checkbox"/>	Room 1	1	N/A	3.0.16	
<input checked="" type="checkbox"/>	Room 1001	1001	3.0.16	3.0.16	Upgrade Successful
<input checked="" type="checkbox"/>	Room 1002	1002	3.0.16	3.0.16	Upgrade Successful
<input checked="" type="checkbox"/>	Room 1004	1004	3.0.17	3.0.16	Failed Retry
<input checked="" type="checkbox"/>	Room 5555	5555	3.0.17	3.0.16	Failed Retry

System will logoff after 15 minutes of inactivity, your upgrade will run in the background. To change the auto log off settings go to "Station>Config>Services>UserService>user(E.g admin)>Auto Logoff Settings>Auto Logoff Enabled>False"

[BACK](#) [NEXT](#)

11. To re-initiate the upgrade process on a failed device, click **Retry** on the appropriate room row.
12. Click **NEXT** when the device upgrade is complete.

13. The **Upgrade Summary** tab opens, displaying the summary of the upgrade process for the selected devices. It allows you to:
- a Reinitiate the upgrade process by clicking **Retry Upgrade** on failed devices.
 - b Download the summary log by clicking **DOWNLOAD REPORT** in .CSV format.

Honeywell | INNCOM Direct OTA Firmware Upgrade Wizard

Select Firmware | Current Device List | **Upgrade Summary**

Summary

44 Upgrade Successful
5 Upgrade Failed

[Retry Failed \(5\)](#)

[DOWNLOAD REPORT](#)

5 THERMOSTATS

NAME	ID	CURRENT FIRMWARE VERSION	SELECTED FIRMWARE VERSION	STATUS	LOG
Room 1001	101	3.0.1.6	3.0.1.6	Upgrade Successful	>> Job Completed - Firmware Upgrade for Room 101 - 202 40705030056 - [devId=101]
Room 1002	102	3.0.1.6	3.0.1.6	Upgrade Successful	>> Job Completed - Firmware Upgrade for Room 102 - 202 40705022416 - [devId=102]
Room 1004	103	3.0.1.7	3.0.1.6	Failed Retry	Communication error

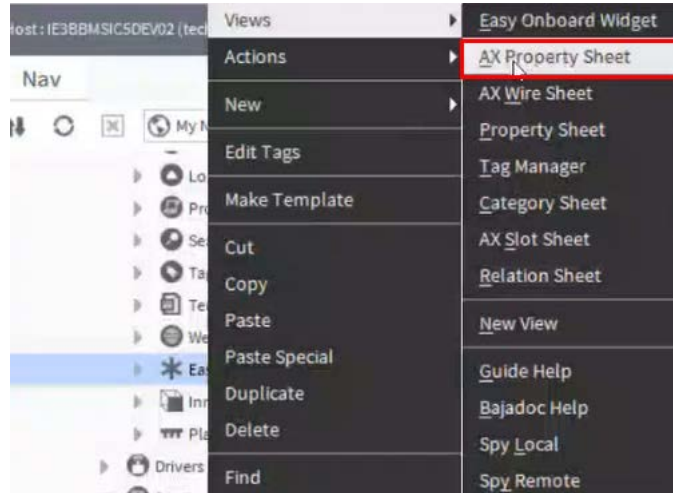
BACK | System will logoff after 15 minutes of inactivity, your upgrade will run in the background. To change the auto log off settings go to "Station>Config>Services>UserService>user(E.g admin)>Auto Logoff Settings>Auto Logoff Enabled>False" | **FINISH**

14. Click **FINISH** to complete the upgrade. Repeat the above steps to upgrade different device types (Edge Router or Relay).

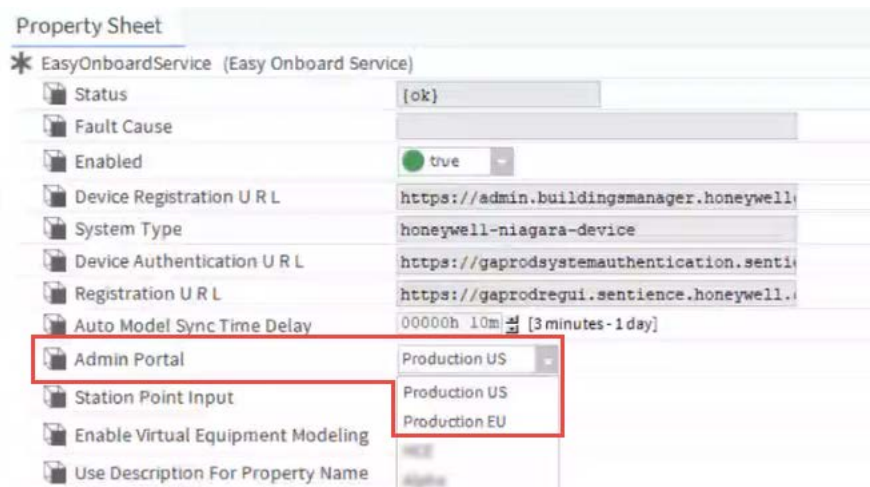
6 . TROUBLESHOOTING

If the model sync is failing or Cloud registration then follow this section to verify if correct admin portal is selected.

1. In the Nav tree, expand the **Station > Config > Services** folder.
2. Right-click **EasyOnboardService** and select **Views > AX Property Sheet**.
The **EasyOnboardService** property sheet opens.



3. Click the **Admin Portal** drop-down menu and select one of the following, depending on your region.
 - **Production US** - for the US region
 - **Production EU** - for the European Union region.



4. Click **Save** to apply changes.

The material in this document is for information purposes only. The content and the product described are subject to change without notice. Honeywell makes no representations or warranties with respect to this document. In no event shall Honeywell be liable for technical or editorial omissions or mistakes in this document, nor shall it be liable for any damages, direct or incidental, arising out of or related to the use of this document. No part of this document may be reproduced in any form or by any means without prior written permission from Honeywell.

Honeywell | Building Automation

715 Peachtree Street, N.E.,
Atlanta, Georgia, 30308,
United States.
buildings.honeywell.com

® U.S. Registered Trademark
©2024 Honeywell International Inc.
31-00708-01 | Rev. 07-24

