

# VT8000 Room Controllers

## Connecting VT8000 to EcoStruxure Facility Expert Integration Guide



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# Prerequisites

Ask your Schneider Electric representative to provide you with the instructions on how to create an account and order a license.

You will need a:

- Room Controller (VT8000), Firmware Revision 2.4 or later.
- Wi-Fi Card (VCM8002), Firmware Revision 1.1 or later.

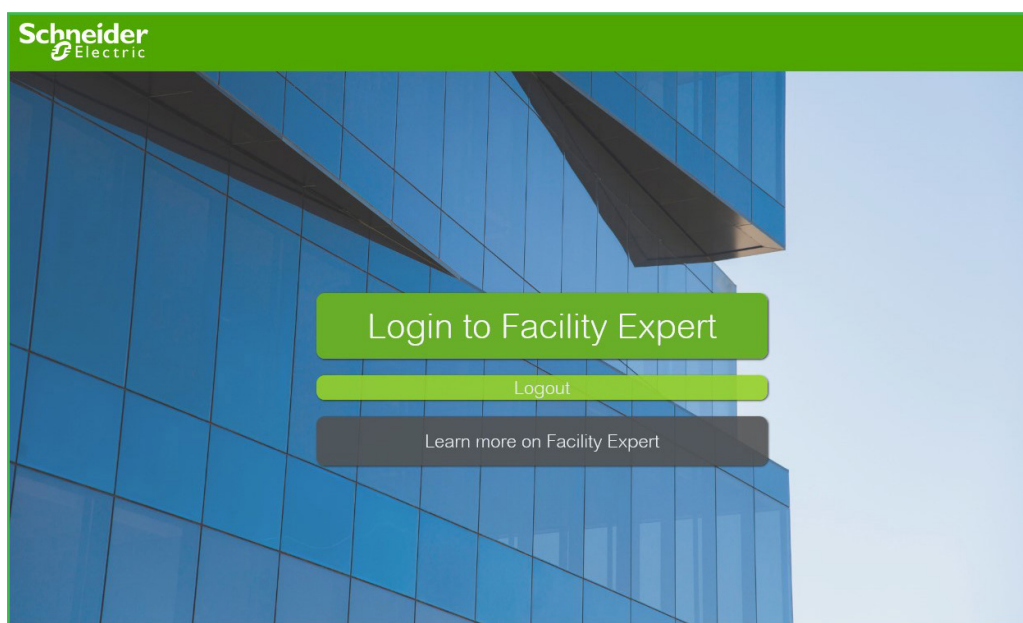
## Step 1: Facility Expert Web Portal

This step allows you to setup the site and register the VT8000.

**Important!** Before proceeding, you must first create an account and order a license for Facility Expert.

### Launch the Setup Wizard

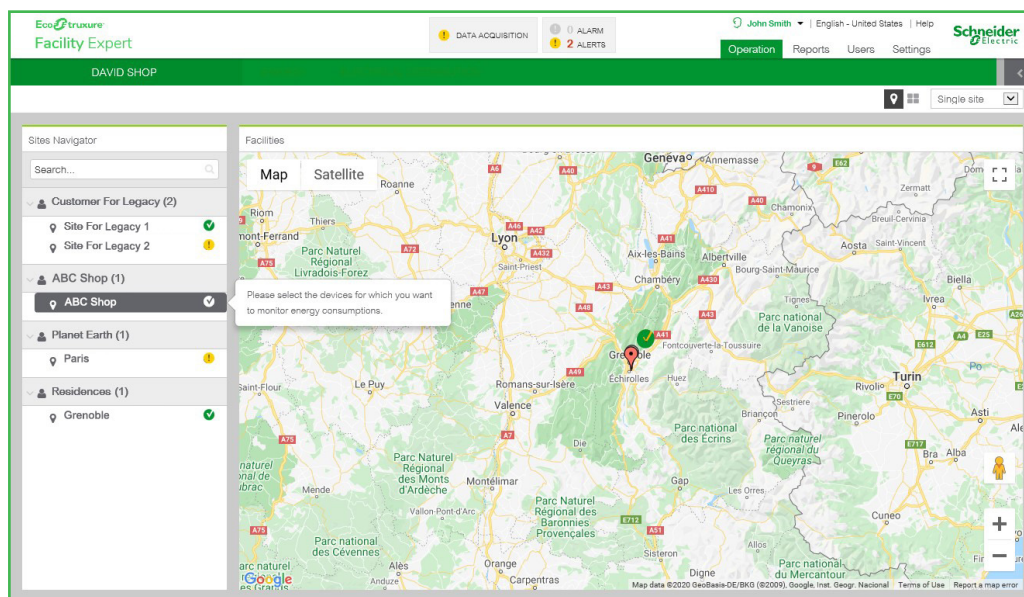
1. Open an Internet browser (Google Chrome or Mozilla).
2. Use the URL corresponding to your location to access the Facility Expert login page :
  - Europe, Middle-East and Africa: <https://facilityexpert-eu.schneider-electric.com/>
  - America, Asia, Australia and New Zealand: <https://facilityexpert-us.schneider-electric.com/>
3. Click on **Login to Facility Expert**.



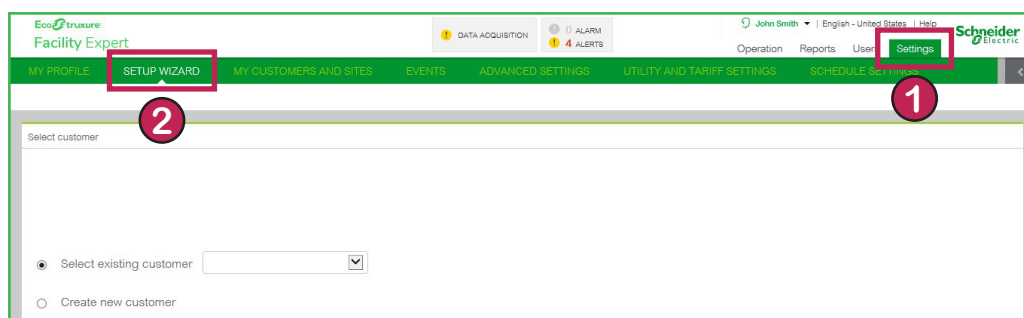
- Enter your credentials (email and password), then click on **Login**.

**Important!** If this is the first time you connect to Facility Expert, click on **Register** to create your account. Refer to "Prerequisites" on page 3 for more information.

You have successfully connected to Facility Expert and now see the **Operation** page.



- Click on **Settings**, and then on **SETUP WIZARD**.



You have successfully launched the setup wizard. Refer to the following sections for the next steps.

## Create a Customer

1. Click on **Create new customer**.
2. Enter a **Name** and **Country**, then select an **Activity** for this new customer. The rest of the fields are optional.  
**Note:** The selected Activity will be applied to all sites of this customer.
3. Click on **Next**.

MY PROFILE SETUP WIZARD MY CUSTOMERS AND SITES EVENTS ADVANCED SETTINGS UTILITY AND TARIFF SETTINGS SCHEDULE SETTINGS

Select customer

☐ Select existing customer


☒ Create new customer

Name: \*

Email:

Country: \* ALBANIA

Activity: \* Clinic or Hospital

Logo:  Upload logo

Exit Previous Next

## Create a Site

1. Click on **Create new site**.
  2. Complete the fields in the **Site Information** section.
  3. Select a **Time zone** from the drop-down list in the General Parameters section.
  4. Provide a **User name** and a valid **Email** address in the Company Legal Information section. A message requesting the signature of the Company Data Agreement will be sent to this email address.
- Important!** The legal representative of the site must sign the Company Data Agreement **before any data can be imported**.
5. Click on **Next**.

MY PROFILE SETUP WIZARD MY CUSTOMERS AND SITES EVENTS ADVANCED SETTINGS UTILITY AND TARIFF SETTINGS SCHEDULE SETTINGS

Company Name > Select site

☐ Select existing site

☒ Create new site

**Site information**

Name: \*

Country: \* UNITED STATES

Address 1: \*


Address 2:

ZIP Code: \*

City: \*

State: \*

GPS Coordinates: 37.09024 -95.71289

Logo:  Upload logo

**General Parameters**

Time zone: \*

Activity: \* Office

**Company Legal Information**

End user / building owner user name \*

End user / building owner Email \*

End user / building owner Email Confirmation \*

Exit Previous Next

## Assign a Multi-Site Subscription to the Site

1. Click a checkbox in the **Assign** column to select a Facility Expert multi-site subscription (SVSFE0004). The displayed subscriptions are the ones that you have purchased.
2. Click on **Next**.

Company Name > Company Name > Select subscription

Select the service and options you want to assign to the site. The here below table lists the services that are available and the services that are already assigned to the site.

Id	Assign	Date	Subscriptions					Label
			Subscription name	Part numbers	Expiration date	Assets	Energy meters	
manual-03f8bac-47d2-4b2b-b417-d89e2f5b187	<input checked="" type="checkbox"/>	02/14/2020	Facility Expert Multi-Site	SVSFE0004		0 / 50	0 / 50	
manual-0475f417-bd12-45b2-9eca-c551787774e2	<input checked="" type="checkbox"/>	02/14/2020	Facility Expert Multi-Site	SVSFE0004		0 / 50	0 / 50	
manual-049851de-9de9-4bcd-8648-dc302b049526	<input type="checkbox"/>	02/14/2020	Facility Expert Smart Power	SVSFE0001				
			Energy cost	SVSFEOPT00A		0 / 5	0 / 5	
			Energy kiosk	SVSFEOPT007				

Exit Previous Next

## Enter a Surface Area

1. Enter the building **Surface area** (in square meters or feet).
2. Click on **Next**.

Company Name > Company Name > Settings

Site Information

Building(s) Characteristics

Surface area  sq ft

First day of week: Monday ☒

Electrical Distribution

Declare main switchboards to be monitored: Main

Previous years consumption (manual entry)

Targets

Exit Previous Next

**Note:** There is no need to select a main switchboard in the Electrical Distribution section if you are only connecting an VT8000 Room Controller.

## Associate a VT8000 Room Controller

1. Select **VT8000** from the Data source type drop-down list, and enter the **MAC Address** of the Wi-Fi card (**no space, no colon**). The MAC Address can be found here:
  - Use the Copy button on the Facility Expert page of the Wi-Fi communication module.
  - Refer to the Wi-Fi Network screens of the VT8000 Room Controller.
  - Refer to the label on the Wi-Fi communication module.
2. Click on **Associate**.
3. Once “The data source has been associated to the site ...” is displayed, click on **Next**.

**Note:** To delete or modify the association of the VT8000, you must contact the Viconics Technologies Technical Support.

## Step 2: VT8000 Web Pages

This step allows you to configure and connect the VT8000 to the Cloud.

**Important!** Make sure the legal representative of the site has signed the Data Company Agreement. Otherwise, **no data will be imported** in Facility Expert. Refer to “[Create a Site](#)” on [page 5](#) for more information.

### Enter the Set-Up Mode of a Room Controller

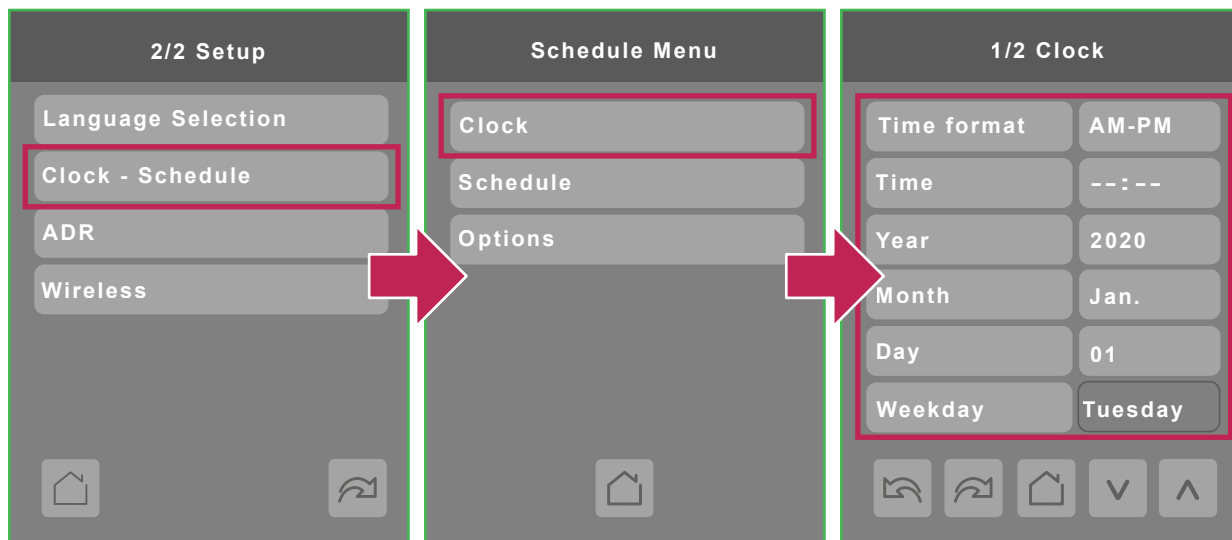


Touch and hold this point for 3 seconds to enter set-up mode

**Note:** If a configuration/installer password is activated to prevent unauthorised access to the configuration menu parameters, you will be prompted to enter your password before proceeding.

## Set the Date and Time

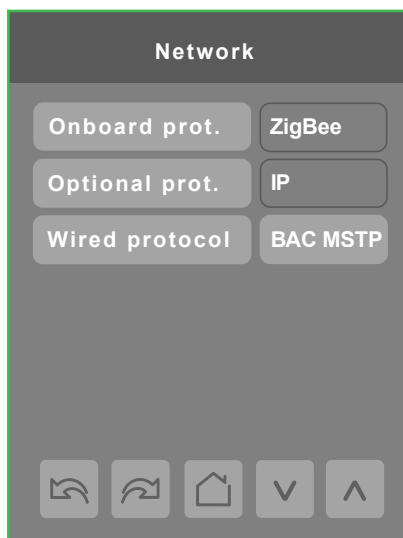
Tap **Clock - Schedule**, then **Clock**, and configure the VT8000 Room Controller for the HVAC Unit.



**Important!** Make sure the date and time have been set correctly.

## Connect your Laptop / Smartphone to the Wi-Fi Module

1. Enter the Set-Up Mode of a Room Controller.
2. Navigate to the **Network** menu.



3. Using the left and right arrows, navigate to the **Wi-Fi configuration** screens.



4. Enable the **Wi-Fi Access Point**.  
The SSID, Password and IP address fields will be populated.



5. Connect your laptop or smartphone to the Access Point using the **SSID** and **Password** displayed on the Room Controller screen.
6. Open an Internet browser and connect to the IP address **192.168.71.1**.

**Note:** When connecting to the web page, the browser will display a warning due to the use of a self-signed certificate. Although strong security measures are in place, this warning appears as the browser is not able to authenticate the web site as online certificate authority. The warning must be accepted to proceed with the Configuration Web Page.

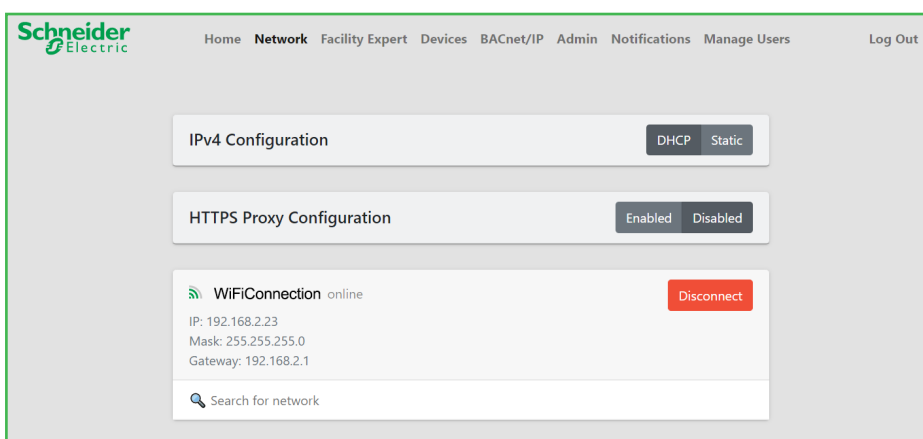
7. Enter the credentials below:

Username: **admin**  
Password: **admin8000**

**Note:** The first time you log in to the system, you will be asked to change the password. Passwords must be at least 8 characters long and include: uppercase character, lowercase character, and a number or a symbol.

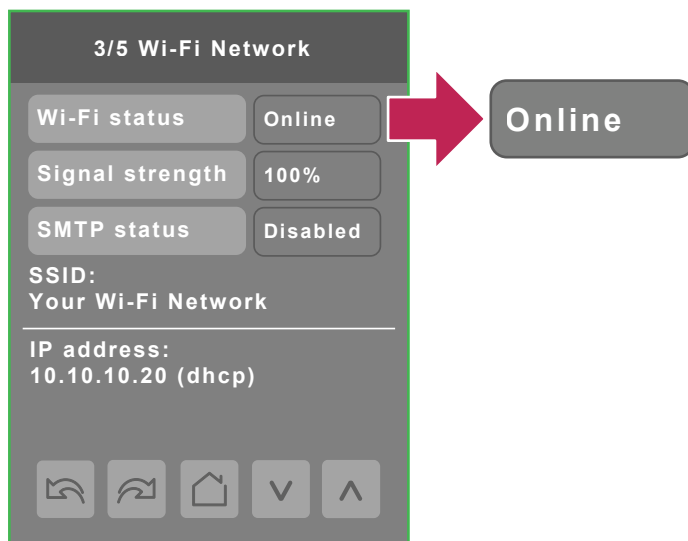
Each device should be configured with a strong and unique password. Do not re-use passwords for multiple devices.

8. Enter a new password and click on **Submit**. You are now ready to manage your Room Controller via the Configuration Web Page.
9. Click on the **Network** tab and connect to your desired Wi-Fi network.



- Once connected, the status will be displayed as **Ready** on the Wi-Fi network screen 3/5 on your Room Controller. The SSID and IP address to access the Room Controller via the browser are displayed.

When the Room Controller is connected to the internet, the status switches to **Online**.

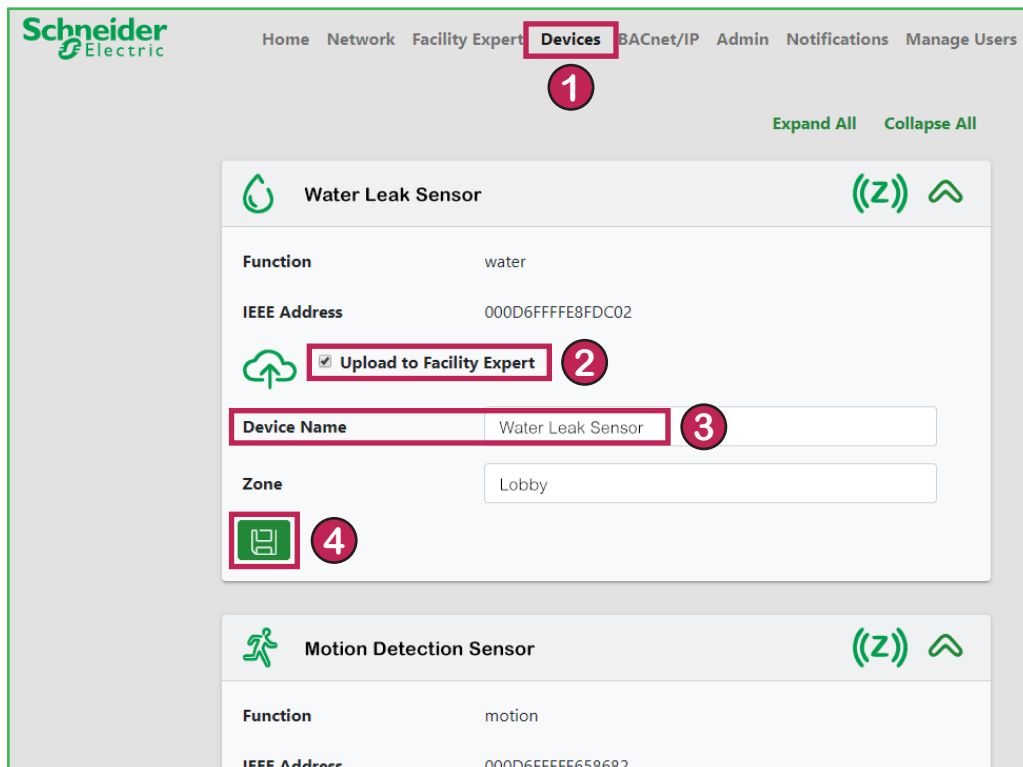


- You can continue configuring your Room Controller using the Access Point or connect via the building Wi-Fi network.

**Note:** The Access Point will be disabled after the timeout period.

## Configure Wireless Sensors (Optional)

- Go to the **Devices** tab.
- Enable **Upload to Facility Expert**, if needed.
- Change the **Device Name**, if needed.
- Click on **Save**.



## Select the Time Zone

1. Go to the **Admin** tab.
2. Select the **Time Zone** of the site.
3. By default, NTP is set to Disabled. This is not a problem, because the device will synchronize its time with Facility Expert. However, you can choose to **Enable** NTP and configure a backup connection to ensure that time is still synchronized in the case where connectivity to Facility Expert is lost.
4. Click on **Save**.

The screenshot shows the Schneider Electric web interface. The top navigation bar includes links for Home, Network, Facility Expert, Devices, BACnet/IP, **Admin** (highlighted with a red box and a red circle with the number 1), Notifications, and Manage Users. Below the navigation bar, the device name 'rc8000-9207' is displayed with an edit icon. A note states: 'The device name should uniquely identify a Room Controller. It is used in e-mail notifications and as the name of the Access Point.'

The 'Time' configuration page is shown below. It has a 'Time Source' set to 'Cloud'. The 'Time Zone' is set to '-05:00 America/New York' (highlighted with a red box and a red circle with the number 2). The 'Local Time' is '3:11PM 04-Mar-2020' and the 'UTC Time' is '8:11PM 04-Mar-2020'. The 'NTP' section has 'Enabled' and 'Disabled' buttons (highlighted with a red box and a red circle with the number 3). A 'Save' button (highlighted with a red box and a red circle with the number 4) is at the bottom left.

## Select to Enable the Device Monitoring Features

1. Go to the **Admin** tab.
2. **Enable** Wi-Fi Connection Status.
3. **Enable** Ping Remote Machine.

**Note:** If your IT infrastructure allows the Room Controller to access the Internet, you can use a domain name. If Internet access is restricted by your IT administrator, you can use the network's gateway IP address (as your IT administrator for those details).

4. Click on **Save**.

The screenshot displays the Schneider Electric VT8000 Admin interface. The top navigation bar includes links for Home, Network, Facility Expert, Devices, BACnet/IP, **Admin**, Notifications, and Manage Users. The **Admin** tab is highlighted with a red box and a circled '1'. Below the navigation bar, the device name 'rc8000-9207' is shown with an edit icon. A note states: 'The device name should uniquely identify a Room Controller. It is used in e-mail notifications and as the name of the Access Point.'

The 'Device Monitoring' section is shown below. It contains two sub-sections:

- Wi-Fi Connection Status:** Restarts: 0. The 'Enabled' button is highlighted with a red box and a circled '2'. Below it, a text field shows '60' minutes. A green checkmark icon and the word 'online' are displayed.
- Ping Remote Machine:** Restarts: 0. The 'Enabled' button is highlighted with a red box and a circled '3'. Below it, a text field shows 'www.google.com' and another shows '15' minutes. A green checkmark icon is displayed, followed by a detailed ping result: 'PING www.google.com (172.217.13.196) 56(84) bytes of data. 64 bytes from yul03s05-in-f4.1e100.net (172.217.13.196): icmp\_seq=1 ttl=54 time=22.9 ms --- www.google.com ping statistics --- 1 packets transmitted, 1 received, 0% packet loss, time 0ms rtt min/avg/max/mdev = 22.883/22.883/22.883/0.000 ms'.

A red box and a circled '4' highlight the 'Save' button at the bottom left of the configuration area.

## Enable the Facility Expert Connection

1. Go to the **Facility Expert** tab.
2. Enter the **Zone Name** and **Unit Name** that are controlled by the VT8000. Make sure you use clearly-defined names, as they will be retrieved in Facility Expert (e.g.RTU Kitchen).
3. Click on **Save**. Changes are updated in the section underneath.
4. Make sure the Wi-Fi Network status is “Online”. This can be verified using the “Network” tab on this web page or using the Wi-Fi Network pages on the VT8000 Room Controller. Refer to [“Connect your Laptop / Smartphone to the Wi-Fi Module” on page 8](#).
5. Back on the Configuration Web Page, click on **Enabled**. The connection status will be changed to “Online”. The VT8000 Room Controller is now connected to Facility Expert.

**Schneider Electric**

Home Network **Facility Expert** Devices BACnet/IP Admin Notifications Manage Use

**1**

**HVAC**

**HVAC Zone Name** **2** Zone Réfectoire

**HVAC Unit Name** RTU Réfectoire

**3**

**Facility Expert** online **4** **Enabled** Disabled

<b>MAC Address</b>	74:e1:82:07:92:07	
<b>Serial Number</b>	9207	
<b>Controller Name</b>	SE8650-74e182079207	
<b>Last Communication Time</b>	03:09pm 04-Mar-2020	
<b>HVAC Zone Name</b>	Zone Réfectoire	
<b>HVAC Unit Name</b>	RTU Réfectoire	
<b>Time Zone</b>	America/New York	
<b>Local Time</b>	3:13PM 04-Mar-2020	
<b>UTC Time</b>	8:13PM 04-Mar-2020	

If not already done, go to Facility Expert to pair the room controller with a site.

## Step 3: Facility Expert Mobile App

This step allows you to check and complete the HVAC Unit settings.

### Log in to the Facility Expert App

**Note:** You can use the mobile app on a smartphone or tablet, but there is better visibility on the tablet version.

Open the **Facility Expert** mobile app or download it to your tablet (from Google Play or iTunes).



Or log in to the web version:

[app.schneider-electric.com/ecotruxure/facilityexpert/](http://app.schneider-electric.com/ecotruxure/facilityexpert/)

**Important!** When downloading the mobile app, do **NOT** download Facility Expert Small Buildings (FE SB).



### Check the Site

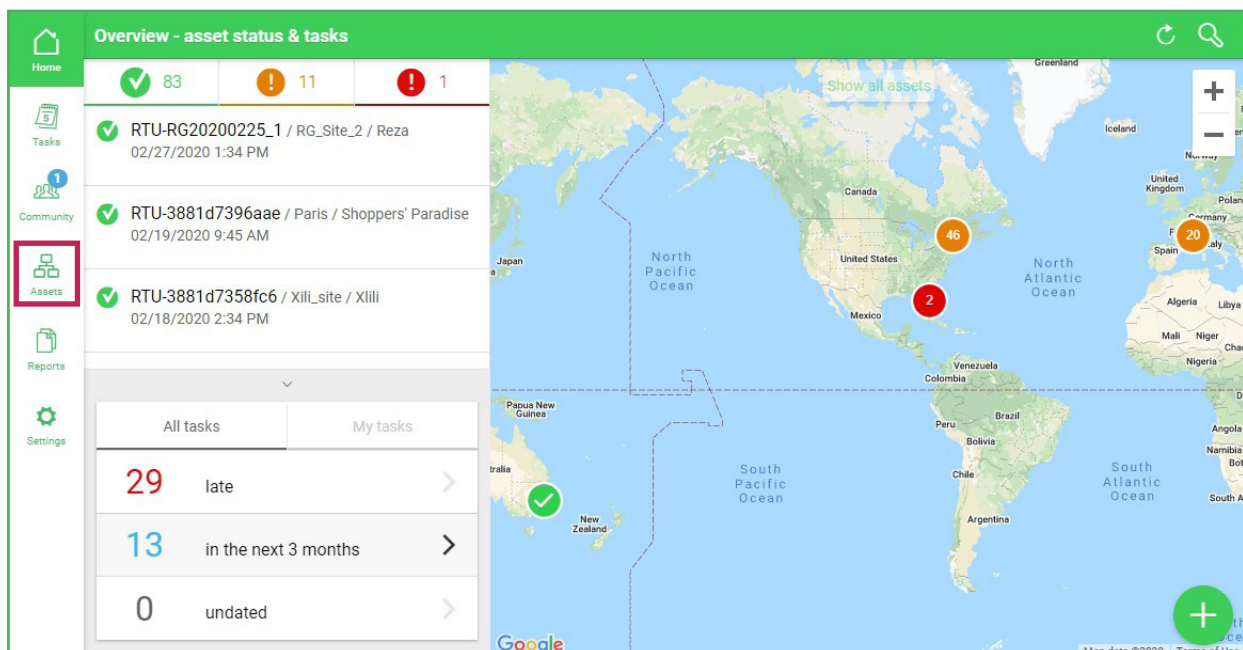


**Wait 5 minutes after connecting a Room Controller to Facility Expert.**

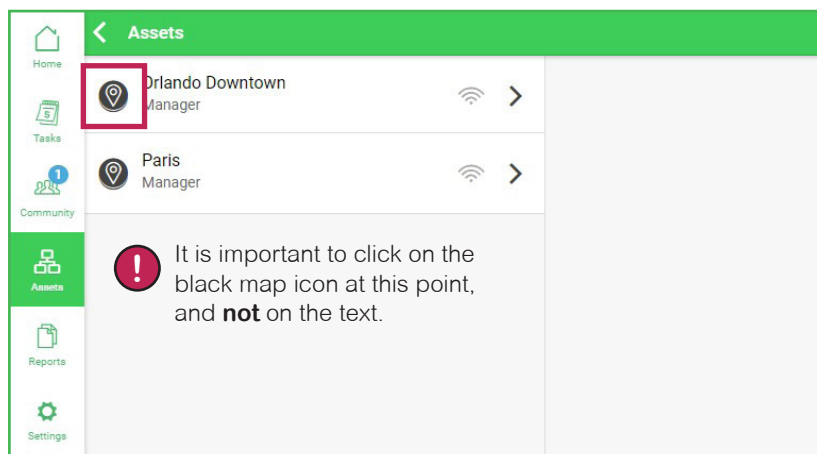
**Note:** It is important to make sure that:

- The end user has received the email and validated the data agreement, otherwise there will be no data sync.
- They are using the latest Firmware Revision of the VT8000 Room Controller.

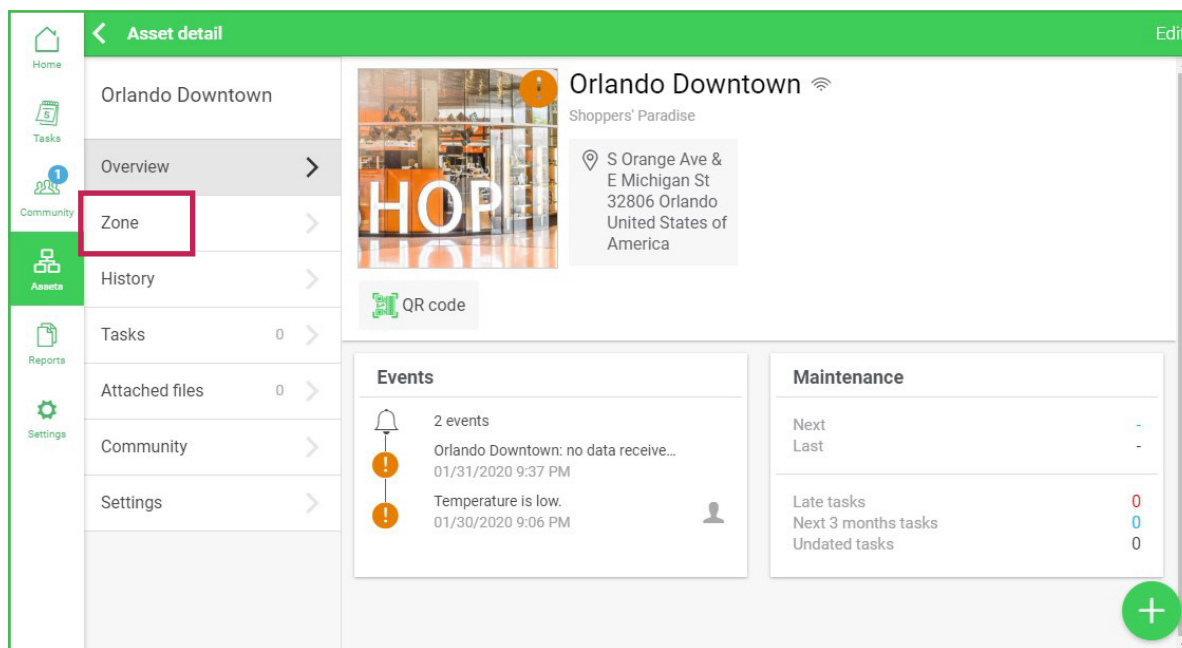
1. Click on the **Asset** tab.



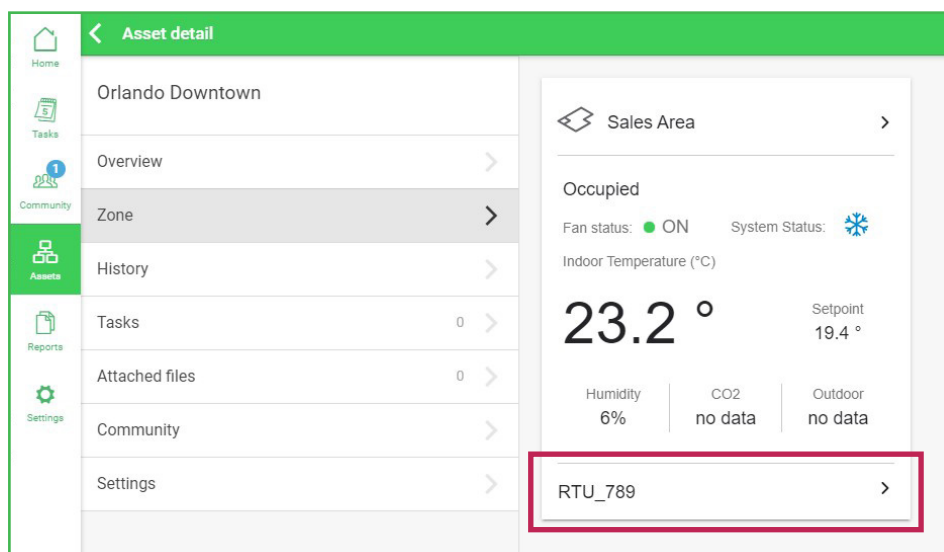
2. Check that the site is listed and click on its **icon**.



3. Check the site data and if needed, add a site picture by clicking on the icon . Click on the **Zone** tab.



4. Check that the zone card is present for the commissioned Room Controller, and click on the **RTU name**.



5. If needed, you can add an RTU picture, as well as modify the address and nameplate (i.e. manufacturer, model, serial number, etc.). You can also generate a **QR code** that can be affixed on the RTU. Once scanned, it gives you direct access to the RTU in Facility Expert.

**Overview** Edit Close

**RTU\_789**

Orlando Downtown / Shoppers' Paradise

S Orange Ave & E Michigan St  
32806 Orlando  
United States of America

Asset type: Rooftop

[Go to asset detail >](#)

QR code

**Events**

1 event

**Internet connection lost**  
02/14/2020 1:17 PM

**Maintenance**

Next: 02/16/2020 9:05 PM

Last: -

Late tasks: 1

Next 3 months tasks: 0

Undated tasks: 0

6. Click on **Go to asset detail**, then click on **Control**.

**Asset detail** Edit

**RTU\_789**

Home

Tasks

Community

Assets

Reports

Settings

**Overview** >

**History** >

**Tasks** 1 >

**Attached files** 0 >

**Community** >

**Trends** >

**Control** >

**Settings** >

**RTU\_789**

Orlando Downtown / Shoppers' Paradise

S Orange Ave & E Michigan St  
32806 Orlando  
United States of America

Asset type: Rooftop

QR code

**Events**

1 event

**Internet connection lost**  
02/14/2020 1:17 PM

**Maintenance**

Next: 02/16/2020 9:05 PM

Last: -

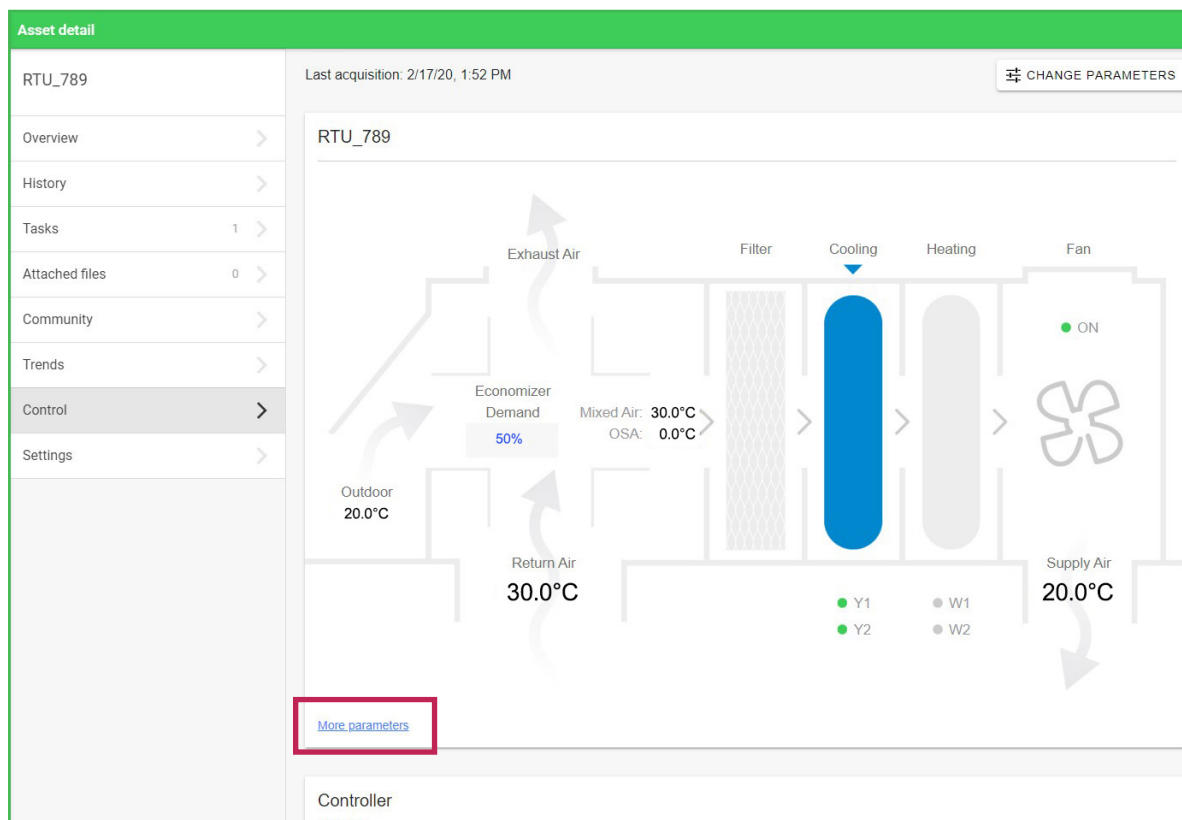
Late tasks: 1

Next 3 months tasks: 0

Undated tasks: 0



7. Click on **More parameters** to see advanced data (this link is also available under the Controller section).



RTU_789 - More Parameters		×
Economizer Configuration	Enabled	
Economizer Demand	0%	
Change Over Setpoint	12.8°C	
Mixed Air Temperature (Airflow)	no data	
Economizer Minimum Position	0%	
Economizer Maximum Position	100%	
Maximum Fresh Air Flow	0gal US/s	
Minimum Fresh Air Flow	0gal US/s	
Compressor Interlock	Inactive	
Dehumidification Status	Inactive	
Mechanical Cooling	Not allowed	
Cooling CPH	4	
Heating CPH	4	

SE8650 - More Parameters		×
Unoccupied Cool Setpoint	26.7°C	
Standby Cool Setpoint	25.6°C	
Occupied Cool Setpoint	19.4°C	
Unoccupied Heat Setpoint	16.7°C	
Standby Heat Setpoint	20.6°C	
Occupied Heat Setpoint	17.1°C	
Dehumidification Setpoint	50%	
Minimum CO <sub>2</sub>	800ppm	
Maximum CO <sub>2</sub>	1,200ppm	
Minimum Deadband	1.3°C	
Minimum Cooling	19.4°C	
Maximum Heating	32.2°C	

You have successfully completed commissioning!