

# HUB Manual - Enterprise

v1.19.1

The logo for 'Hub' features a large, stylized letter 'H' in a light green color. To its right, the letters 'u' and 'b' are rendered in a dark teal color. The 'H' has a white, curved shape on its left side, resembling a stylized arrow or a drop.

***embion***

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# 1 Introduction

This document describes the enterprise usage on the HUB portal. The features described in this document can be activated using an enterprise license.


The enterprise is mainly used to manage and monitor large amount of devices in the HUB and allow custom HUB layouts for namespaces owned by enterprises.

## 2 About this manual

### 2.1 Callouts

 Note

Used for notes in this documentation

 Warning


Used for warnings in this documentation

 Important

Used for important notes in this documentation

 Tip

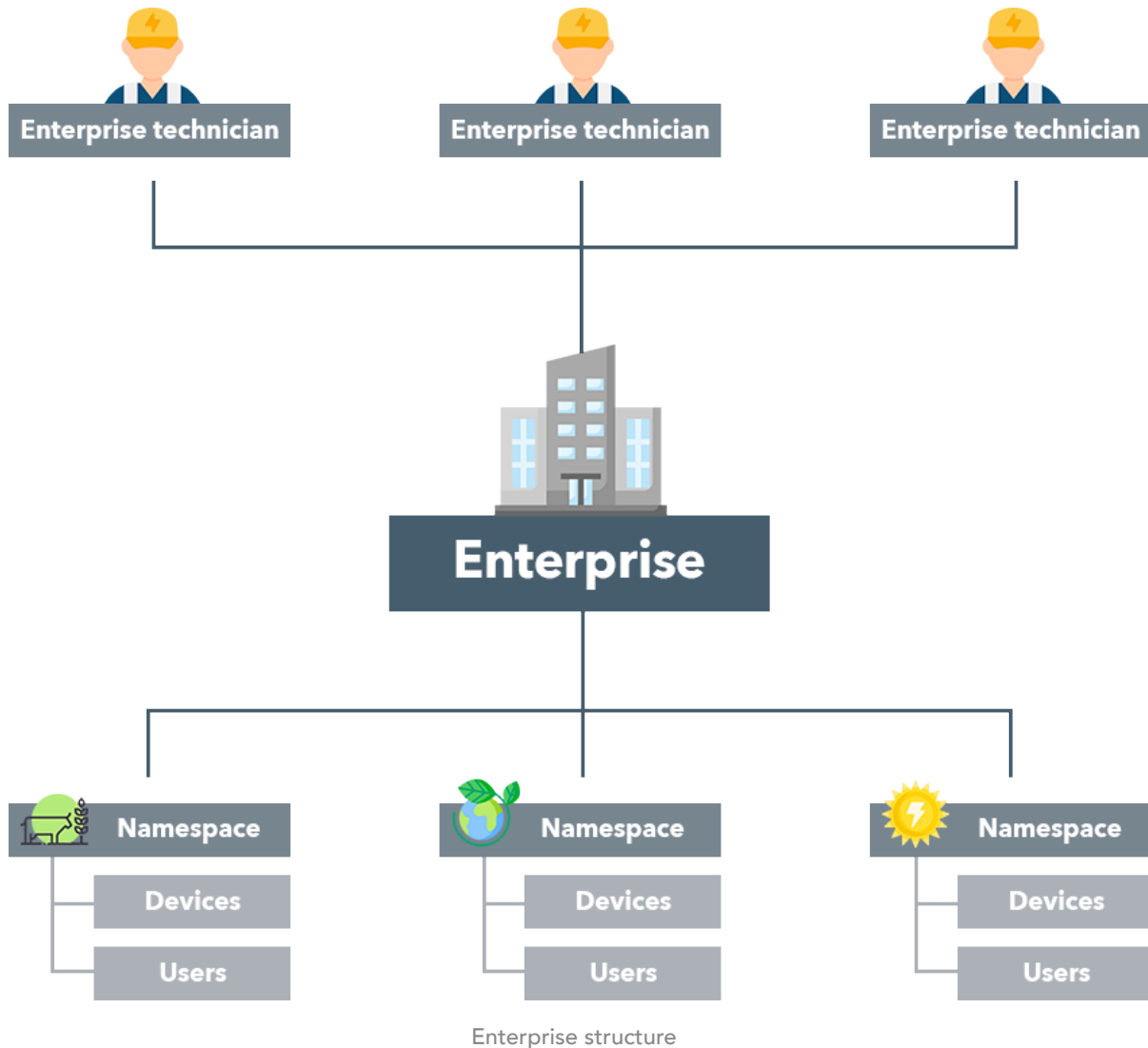
Used for tips in this documentation

 Caution

Used for caution notes in this documentation

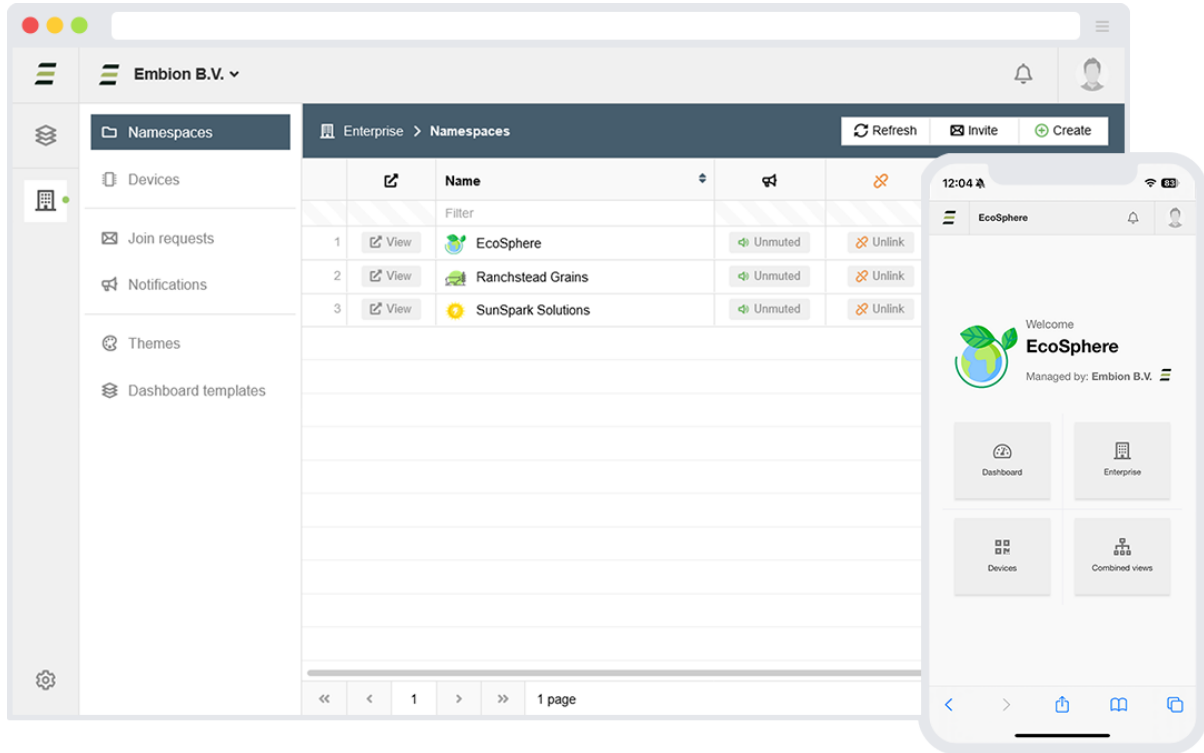
## 3 Enterprise

The enterprise feature allows users to upgrade a standard namespace to an enterprise variant, offering advanced functionality to manage multiple namespaces within this enterprise. By inviting namespaces to join, enterprises enable them to gain access to manage the namespace at an enterprise level, eliminating the need for end-users to set up their namespace and providing both a simpler user experience and improved enterprise management capabilities.



### 3 ENTERPRISE

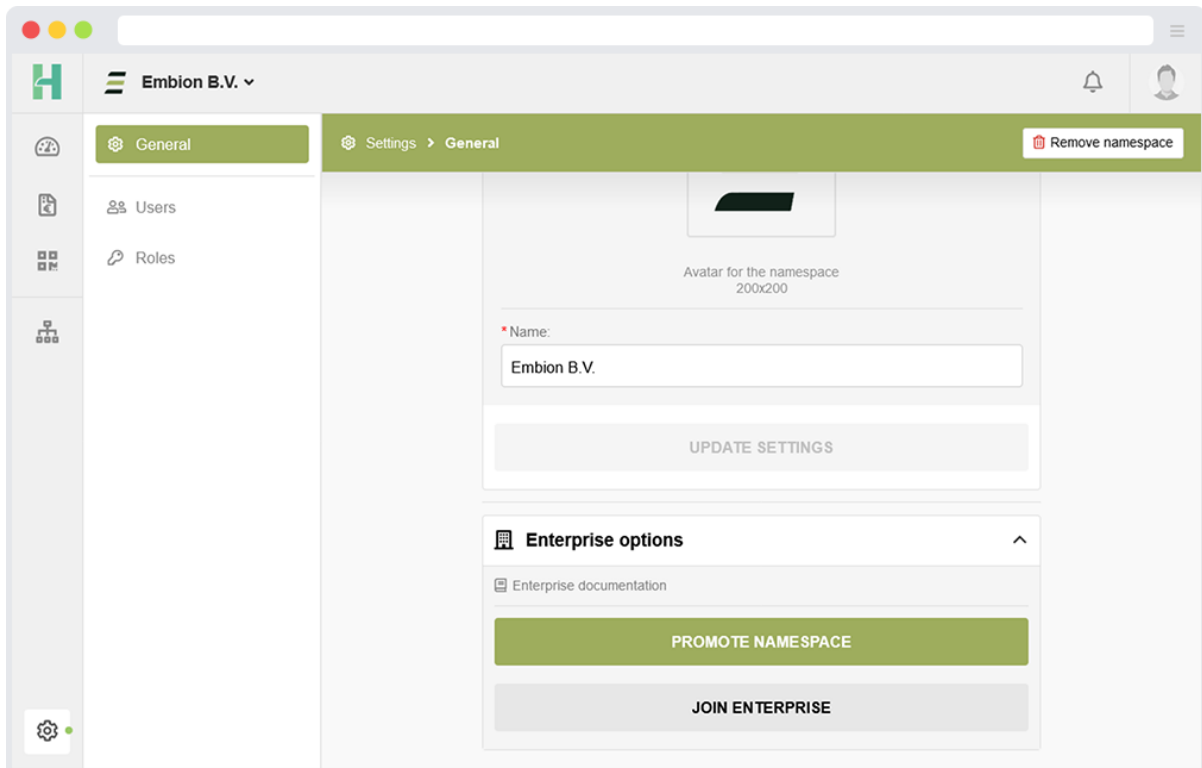
Enterprises have the feature to create custom themes, enhancing the visual experience for users across namespaces within the enterprise. These themes can be crafted using company colors and logo's, ensuring a consistent organizational look across all namespaces linked to the enterprise.



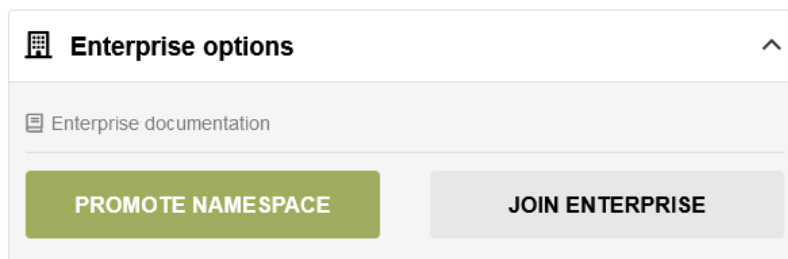
HUB Enterprise

# 4 Enterprise management

To create a new enterprise, navigate to the namespace settings where enterprise options can be found. Within the enterprise options, a button to promote the namespace to an enterprise can be found. This same location serves as the point of access for namespace users who wants to submit a join request for an existing enterprise.



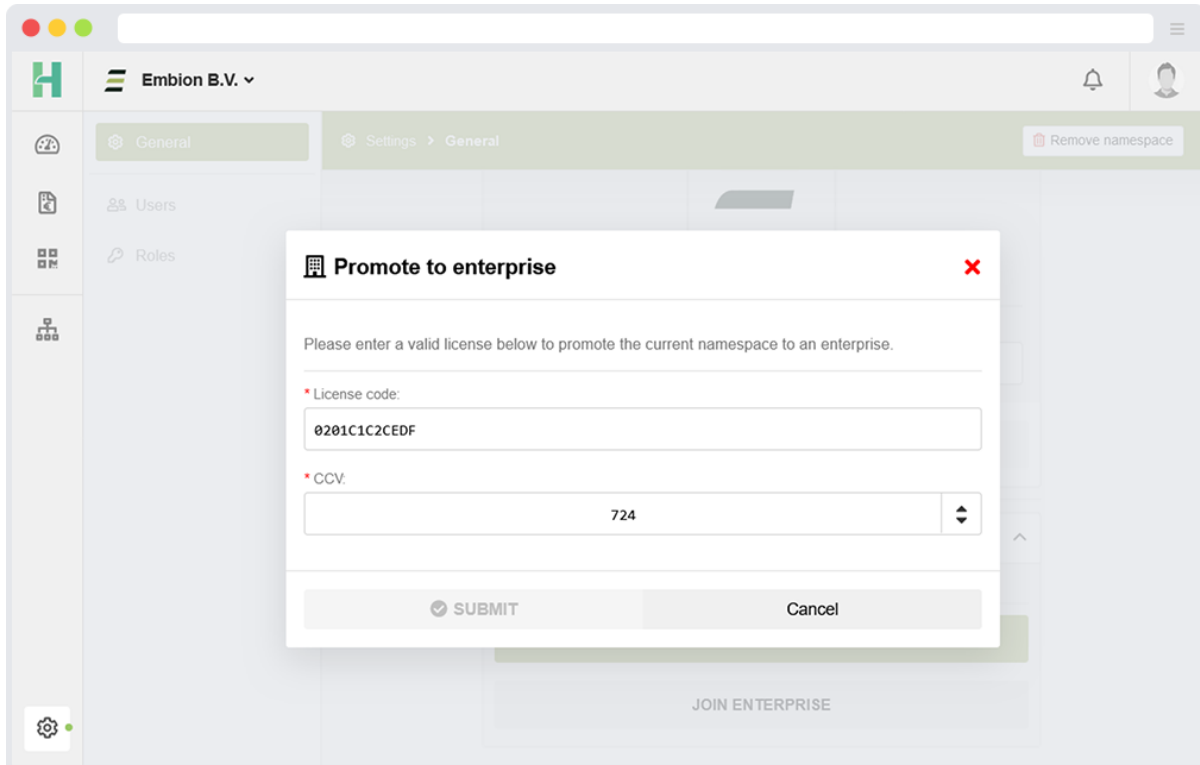
Namespace settings



Enterprise options

## 4.1 Create enterprise

To upgrade a namespace to enterprise, you'll need a valid license code and CCV code. If the license is valid and not expired or already used, the upgrade will be successful. Licenses can be bought from authorized resellers.



Promote enterprise with license

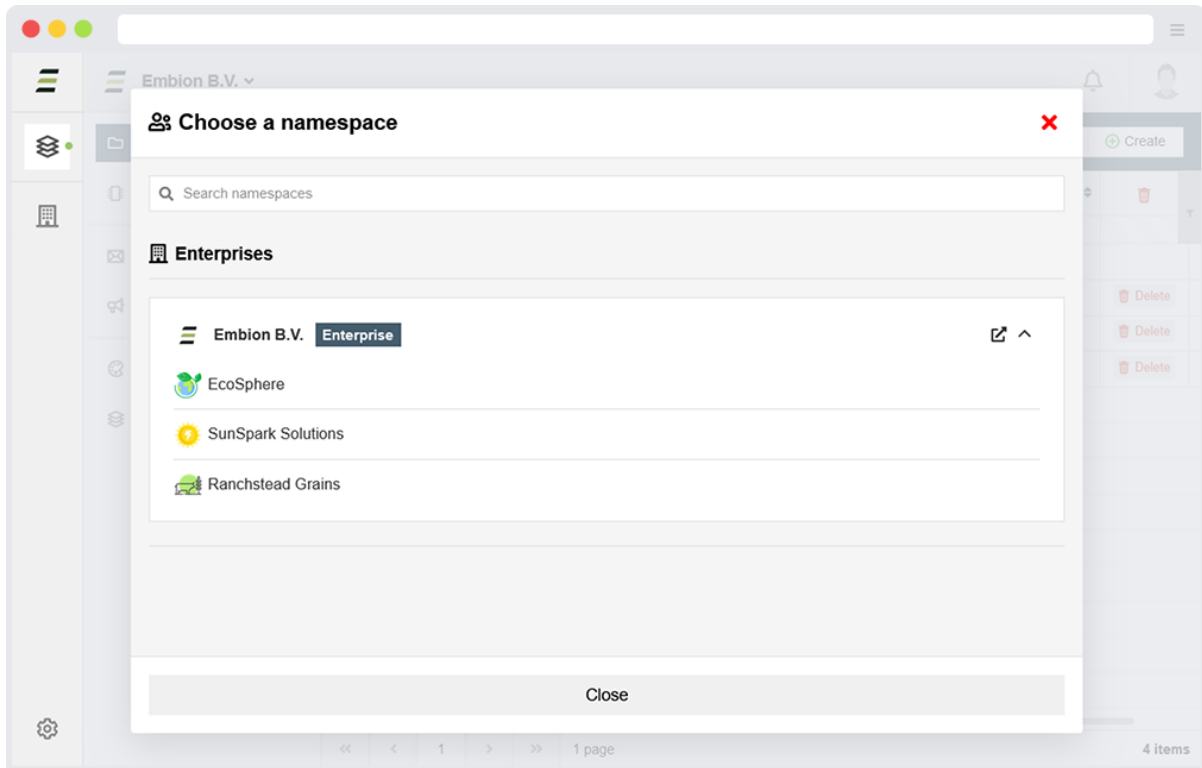
### Warning

A license can only promote a namespace to enterprise once. When the enterprise is removed, it cannot be promoted again with the same license.

### Important

Before promoting a namespace to an enterprise, ensure that it does not contain any linked devices. If so, please disconnect them before proceeding with the promotion.

After a namespace is promoted to an enterprise, the enterprise will now be displayed within the namespace selector. Users can open the enterprise by pressing the 'open' symbol.



Enterprise displayed within namespace selector

Connected namespaces are listed under the enterprise and can be toggled open or closed to hide them. From here, users can navigate to the connected namespace by pressing them.

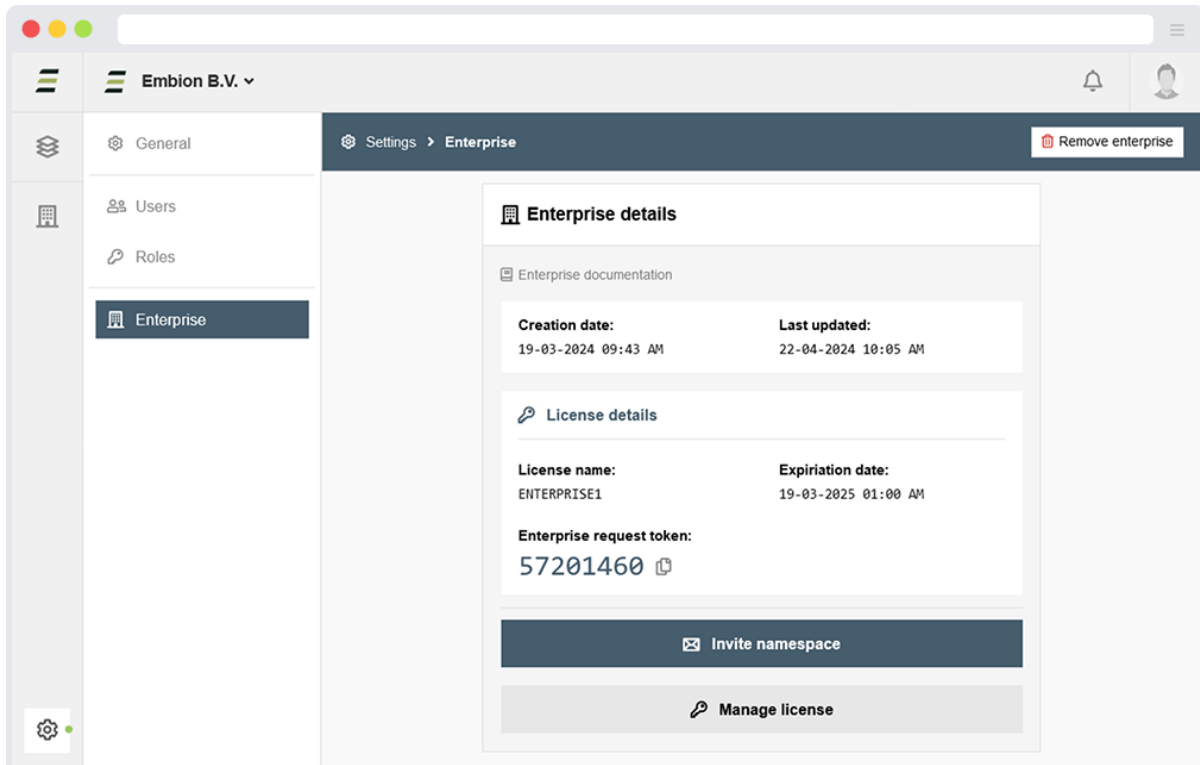
**! Important**

When enterprise users visit a namespace connected to the enterprise, their role within the enterprise determines their role within the connected namespace.



## 4.2 Enterprise details

After a namespace is promoted to an enterprise, a new 'Enterprise' page is added to the settings application. Here, users can find details of the active license and manage it as needed. Additionally, the enterprise token, which can be provided to users to create a join request with their namespace for the enterprise, can be found here.



Enterprise details

## 4.3 Remove enterprise

Removing the enterprise will change it back to a regular namespace and lose the ability to manage connected namespaces. All users will keep their roles within the namespace.

### ! Important

Removing the enterprise is only possible if there is at least one administrator in all of the connected namespaces. If not, an administrator must be assigned before proceeding with the removal.

## 5 Enterprise features

When a namespace becomes an enterprise, users within the enterprise gain access to the enterprise application, where they can use all available enterprise features.

### **i** Note

The enterprise application is only visible for users when inside an enterprise they member of or a connected namespace within this enterprise.

### 5.1 Namespaces

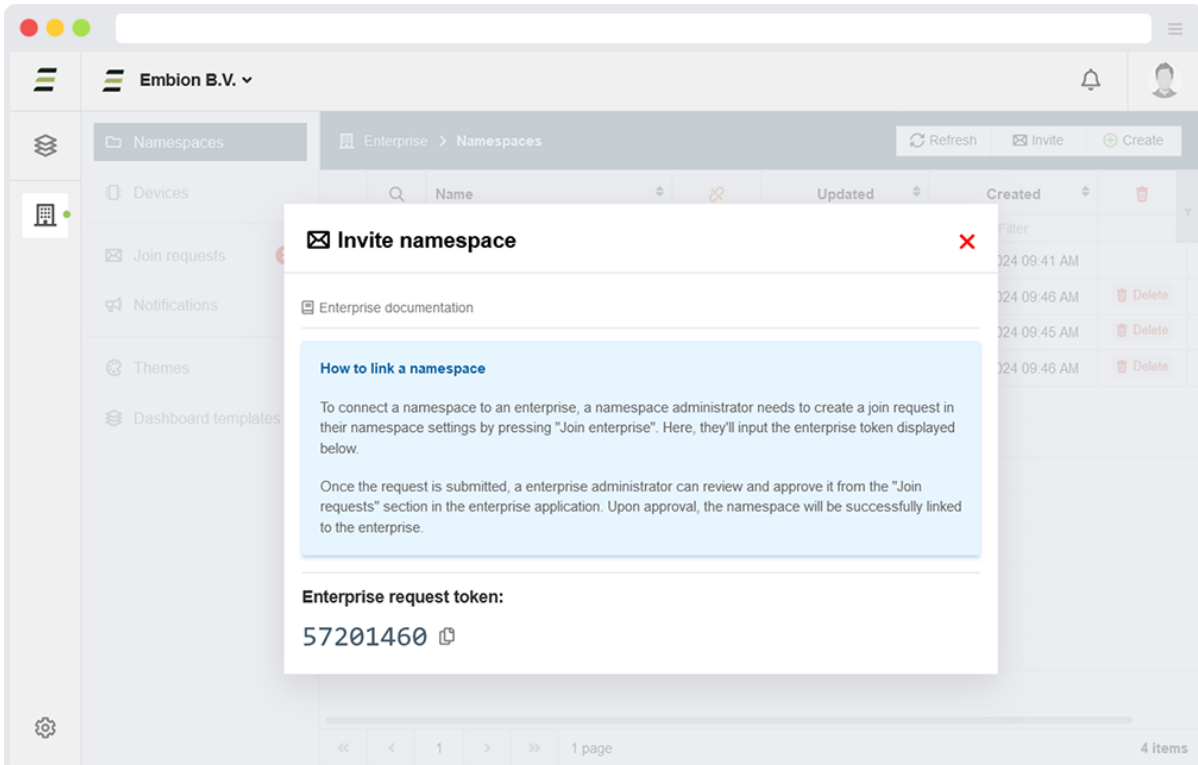
		Name			Created
		Filter			Filter
1		EcoSphere	Unmuted	Unlink	19-03-2024 09:46 AM
2		Ranchstead Grains	Unmuted	Unlink	19-03-2024 09:45 AM
3		SunSpark Solutions	Unmuted	Unlink	12-03-2024 15:46 PM

Namespaces overview

On the namespaces page, it is possible to manage all connected namespaces. It is possible to create new namespaces which are directly linked to the enterprise, allowing to set them up before inviting end-users.

### 5.1.1 Invite namespaces

For enterprise users, adding existing namespaces to the enterprise isn't directly possible. Instead, a user within the namespace must create a join request. To do this, they need a token, which can be found by pressing the invite button on the namespace overview or within the enterprise details in the settings application.



Invite namespaces

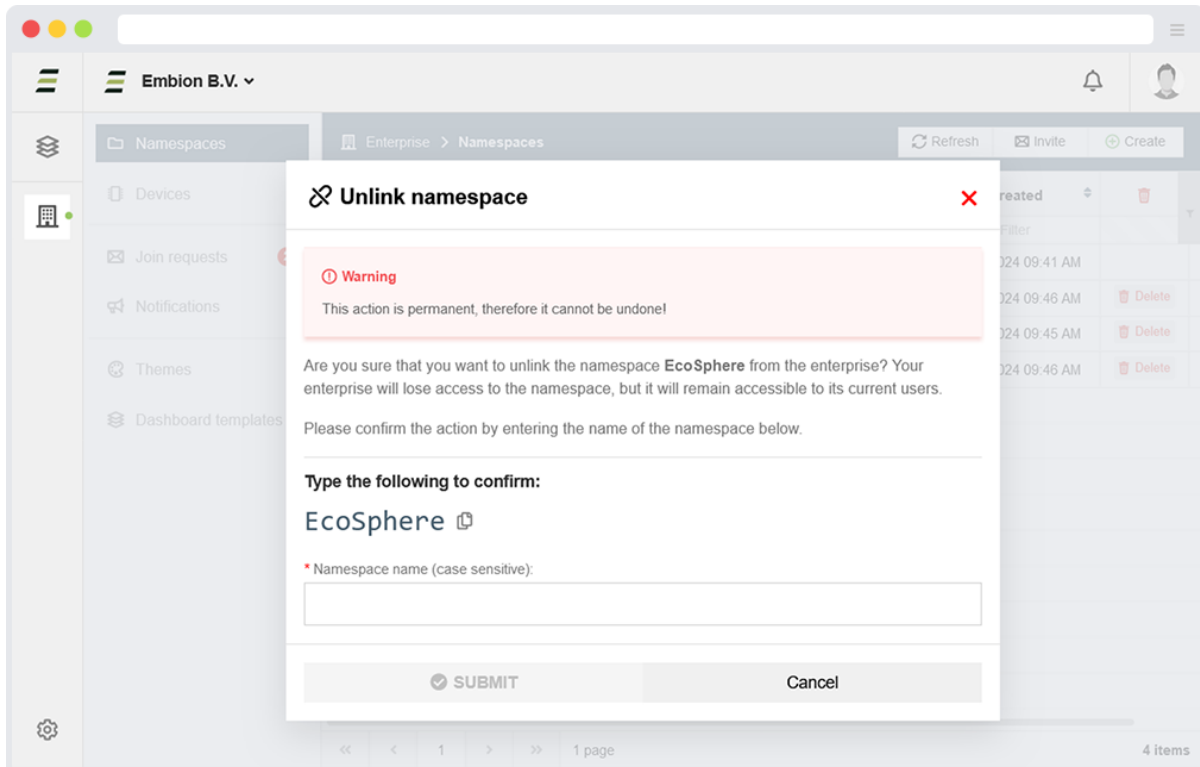
#### **i** Note

When a namespace creates a join request, enterprise users will receive a notification within the HUB. Upon acceptance or rejection, namespace users will receive a notification informing them of the status of their request.

#### **💡** Tip

When users require further information on joining the enterprise, documentation is accessible [here](#).

### 5.1.2 Unlink namespaces



Unlink namespaces

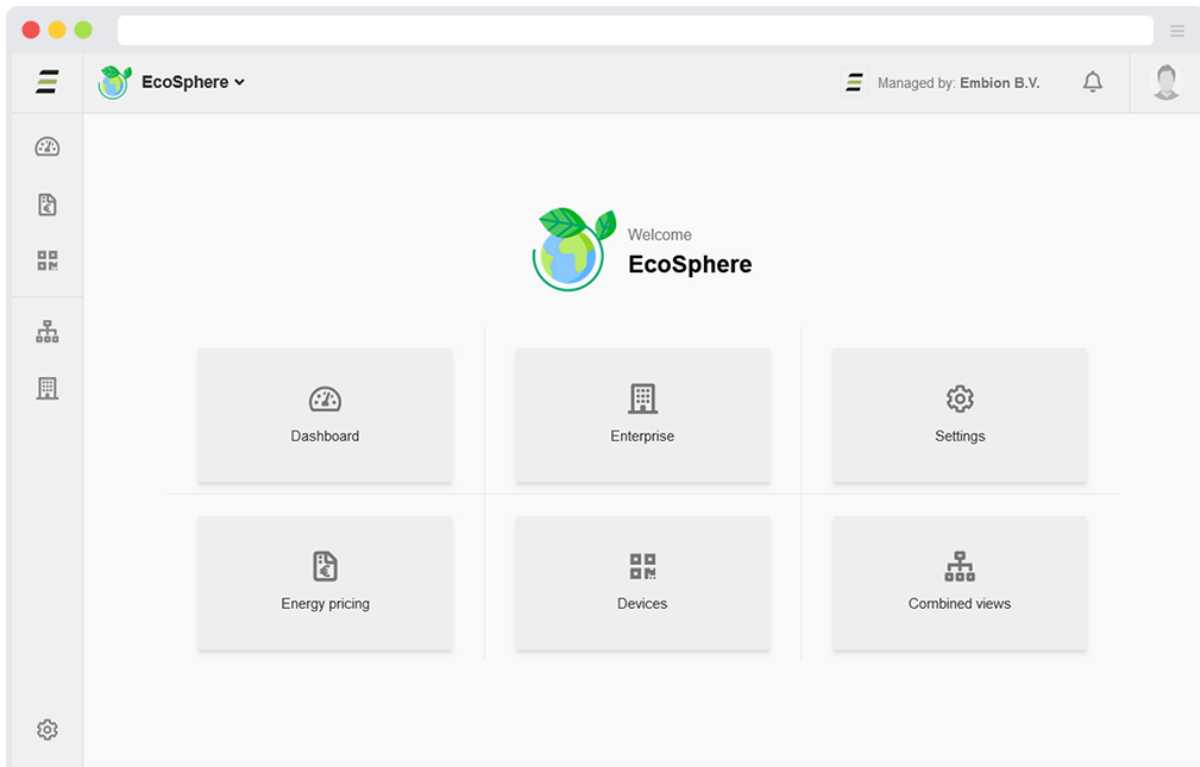
It's possible to unlink a namespace from the enterprise, which results in losing access to manage it. However, the namespace will continue to exist with its current users.

#### ! Important

Unlinking the namespace is only possible if there is at least one administrator within the connected namespace. If not, an administrator must be assigned before unlinking the namespace.

### 5.1.3 Visit namespaces

In the namespace overview, it is possible to access the listed namespaces by clicking on the row or the “show” button. When enterprise users visit a namespace, their role within the enterprise determines their role within the namespace.



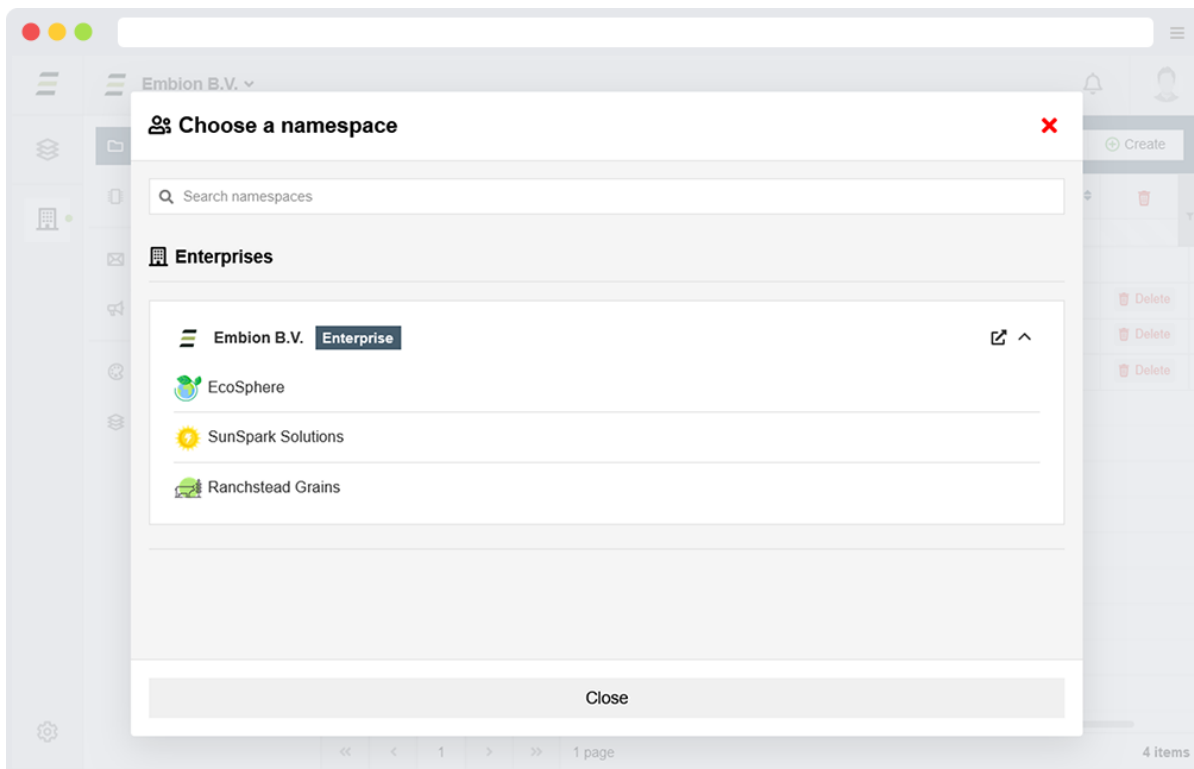
Visit namespaces

#### ! Important

When enterprise users visit a namespace connected to the enterprise, their role within the enterprise determines their role within the connected namespace.

### 5.1.4 Switch namespaces

When a user is a member of an enterprise, enterprises will appear within the namespace selector. This allows enterprise users to easily switch between namespaces they have access to, without needing to open the enterprise application.



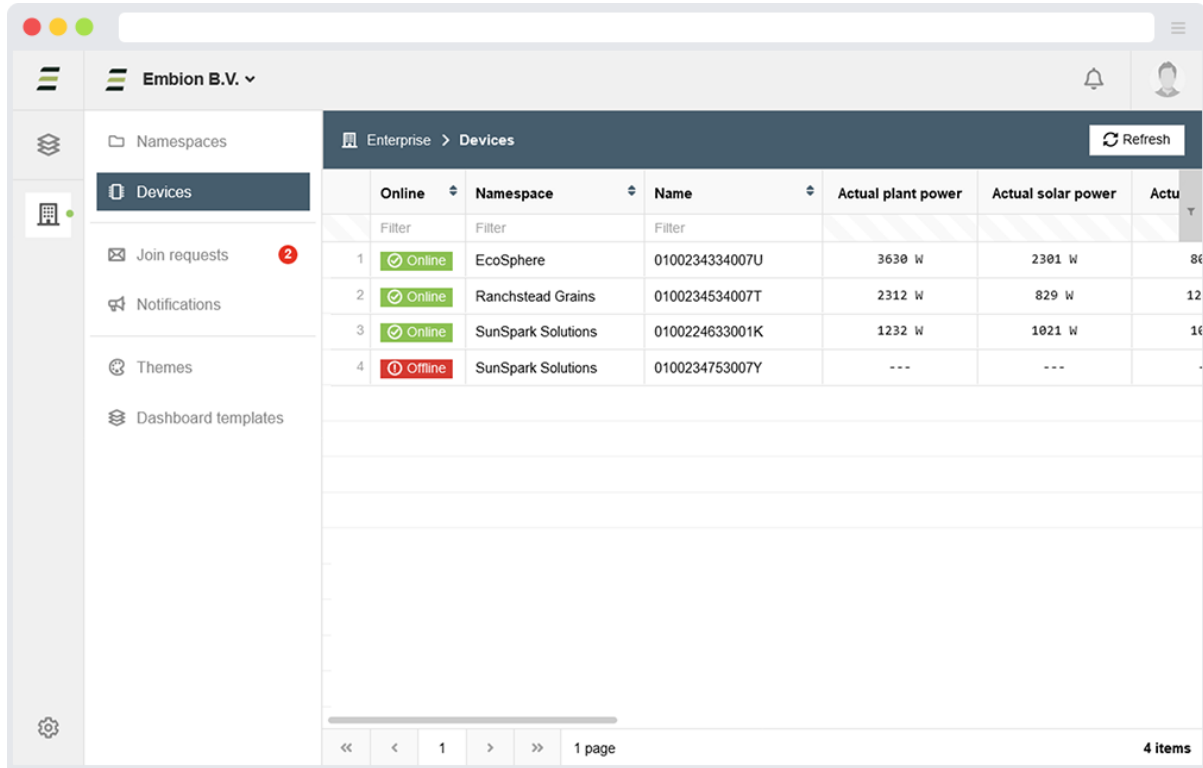
Switch namespaces

#### ! Important

When enterprise users visit a namespace connected to the enterprise, their role within the enterprise determines their role within the connected namespace.

## 5.2 Devices

On the devices page, users can view all connected devices within namespaces linked to the enterprise. Various information about the devices will be displayed here.



Online	Namespace	Name	Actual plant power	Actual solar power	Actual grid power
Filter	Filter	Filter			
1 <span>Online</span>	EcoSphere	0100234334007U	3630 W	2301 W	800 W
2 <span>Online</span>	Ranchstead Grains	0100234534007T	2312 W	829 W	1200 W
3 <span>Online</span>	SunSpark Solutions	0100224633001K	1232 W	1021 W	1000 W
4 <span>Offline</span>	SunSpark Solutions	0100234753007Y	---	---	---

4 items

Devices overview

The following details can be read from the devices:

- Online / offline status
- Name of the device
- Namespace where the device is registered in
- Actual plant, solar and grid power
- Run status, error and warning amount
- Plant control status
- Status message
- Device software status
- Product and serial number
- Dates of last data and status calls

## 5.3 Join requests

When a namespace wants to join the enterprise and has created a join request, those requests are listed here, giving the enterprise the ability to accept or reject them.

	Name	Accept	Reject	Created
1	EcoCharge Solutions	Accept	Reject	22-04-2024 10:42 AM
2	SolarCity	Accept	Reject	22-04-2024 10:46 AM

Join requests

### **i** Note

When a namespace creates a join request, enterprise users will receive a notification within the HUB. Upon acceptance or rejection, namespace users will receive a notification informing them of the status of their request.



## 5.4 Notifications

As an enterprise, it is possible to receive notifications from managed namespaces. This means when, for example, a device goes offline or a pricing scheme expires in a namespace managed by the enterprise, the enterprise users can receive these notifications based on their personal and enterprise notification settings. Additionally, an entire namespace within the enterprise can be completely muted if preferred, which can be done within the namespace overview.

Notification preferences for each user can be changed by selecting the user and adjusting the settings.

	<input type="checkbox"/>	Name	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
1	<input type="checkbox"/>	Harper Stone	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	<input type="checkbox"/>	Jordan Wells	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

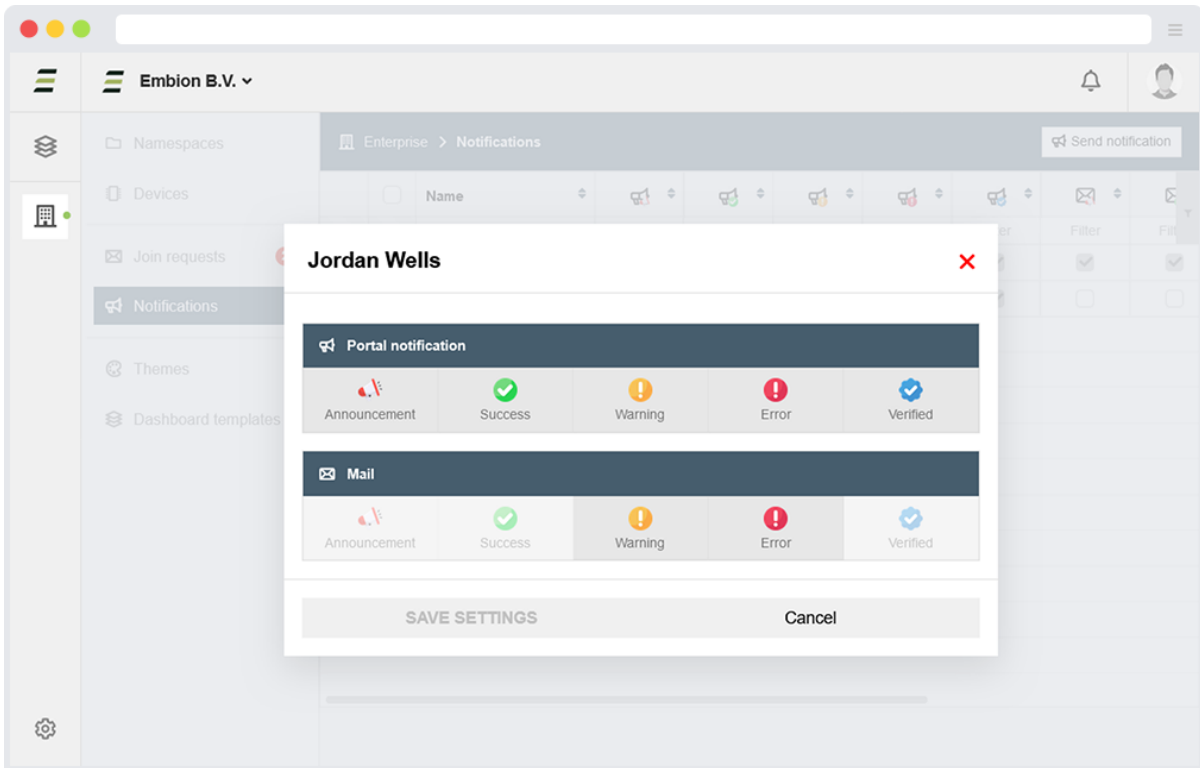
Notifications

### Tip

Namespaces within the enterprise can be completely muted if preferred, which can be done within the namespace overview.

### 5.4.1 Settings

Enterprises can manage notification settings for each user. Administrators can customize which types of notifications users receive and decide which notifications will (also) send an email.



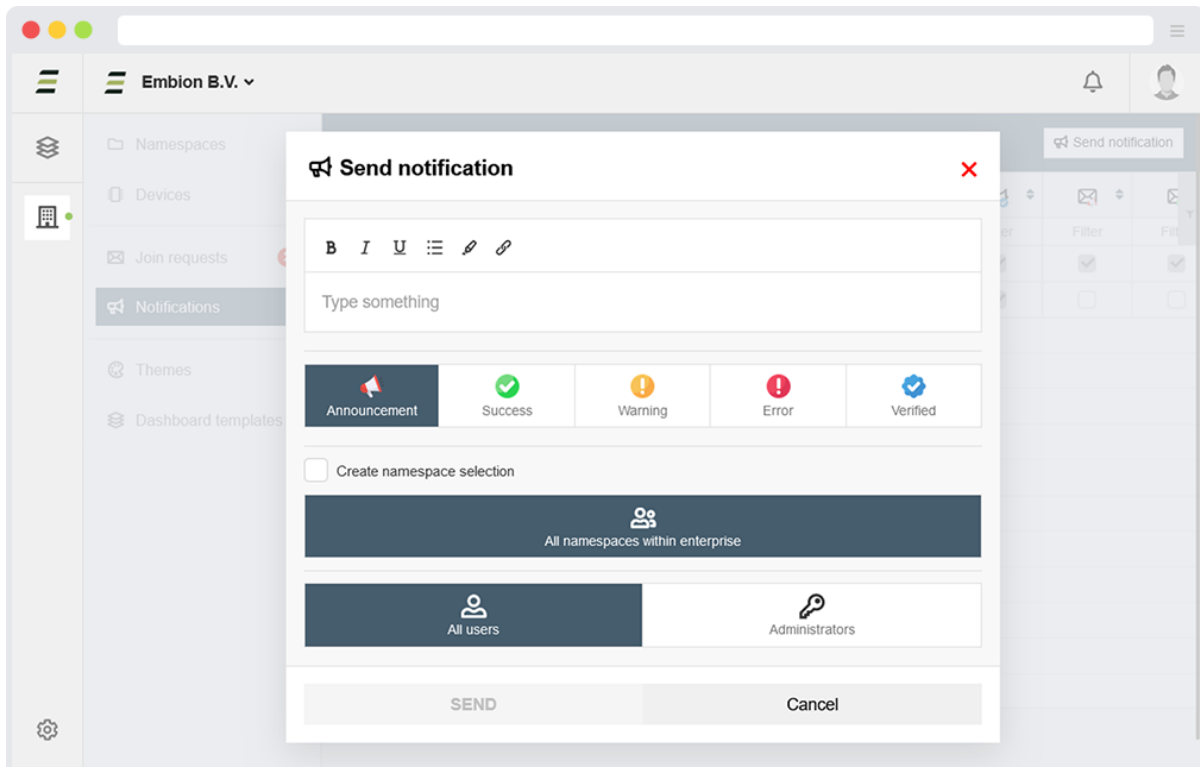
Notifications settings

#### ! Important

These settings do not override personal account settings. For example, if a user disables warnings in their personal account settings, they will not receive any warnings notifications, even if the enterprise settings enable them.

### 5.4.2 Custom notification

Enterprises have the ability to send custom notifications to all or selected namespaces they manage. They can choose the type of notification and decide whether it will be sent to all users or only to namespace administrators.



Sent notifications

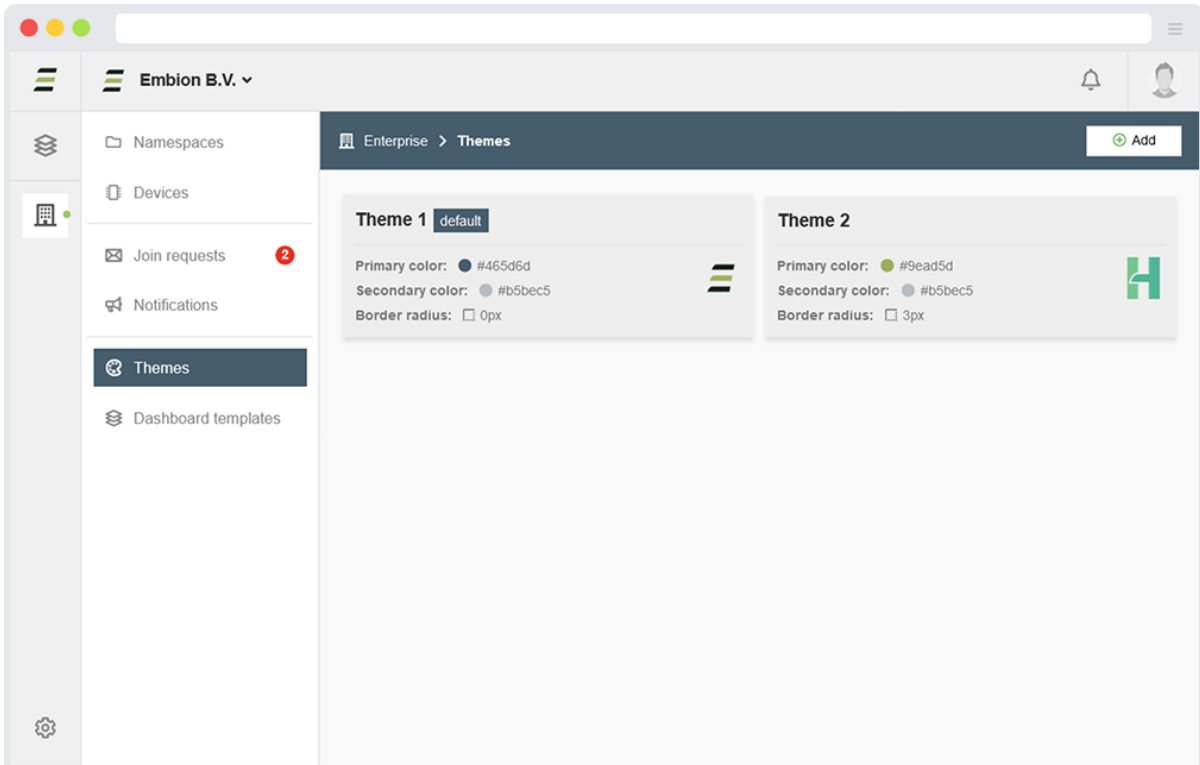
#### 💡 Tip

Text within custom notifications can be styled within the input field and links can be created.

## 5.5 Themes

Enterprises have the feature to create custom themes, enhancing the visual experience for users across namespaces within the enterprise. These themes can be crafted using company colors and logo's, ensuring a consistent organizational look across all namespaces linked to the enterprise.

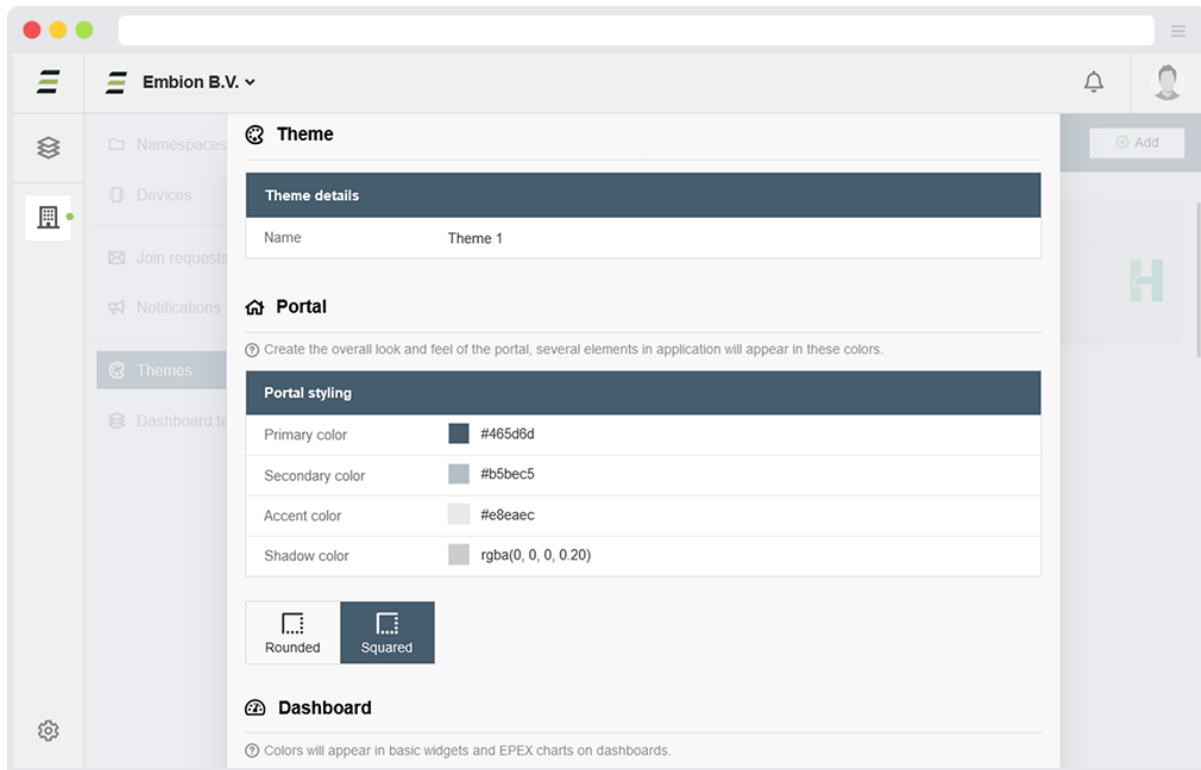
When a new namespace is created or linked to the enterprise, the default theme is automatically set for the users within the namespace.



Themes

### 💡 Tip

Multiple themes can be created, allowing users within connected namespaces to choose one based on their preferences.



Create theme

### 5.5.1 Portal style

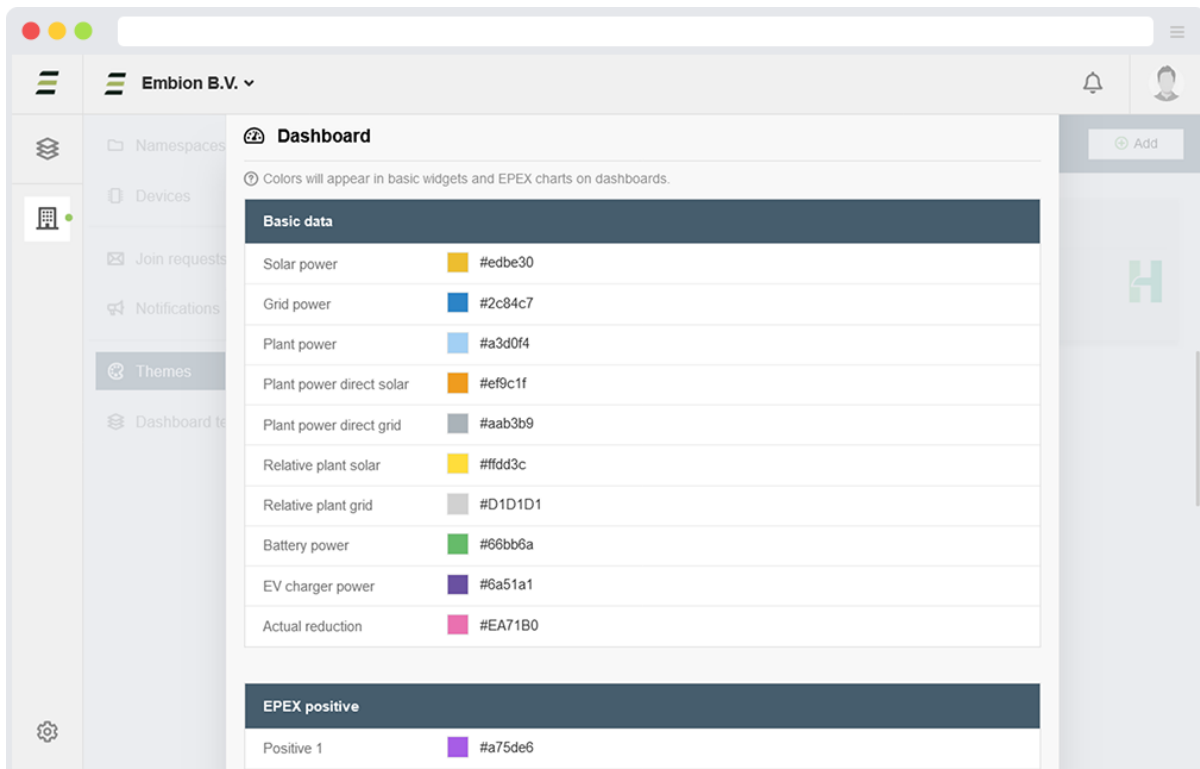
When creating a theme, several colors can be changed to change the overall look across the HUB platform. For now these colors and settings can be defined within the portal section of the theme.

- **Primary color** - Used in the header, badges, and titles throughout the portal
- **Secondary color** - Used as background on pages and element throughout the portal
- **Accent color** - Used as background within several elements throughout the portal
- **Shadow color** - Used as shadow on several element throughout the portal
- **Border radius** Change the border radius of element throughout the portal

#### **i** Note

When defining a theme, HEX, RGB, and RGBA colors are supported.

## 5.5.2 Graph colors



Namespaces overview

Custom graph colors can also be defined when creating a theme.

### 5.5.2.1 Basic data

Colors for the following data within **basic widgets** on dashboards can be set:

- Solar power
- Grid power
- Plant power
- Plant power direct solar
- Plant power direct grid
- Relative plant solar
- Relative plant grid
- Battery power
- EV charger power
- Actual reduction

### 5.5.2.2 EPEX data

Colors for the data within **EPEX widgets** on dashboards can be set. There are four sets, where positive 1 corresponds to negative 1, and so forth.

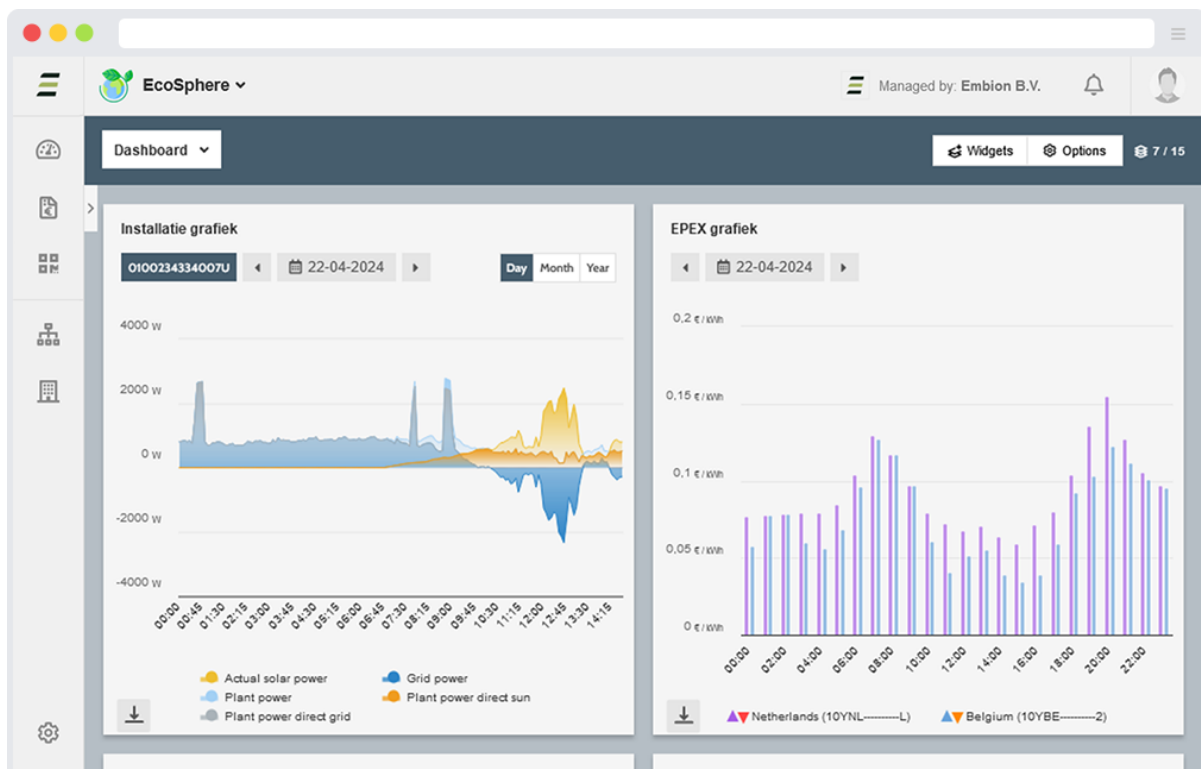
- EPEX positive (1-4)
- EPEX negative (1-4)

### 5.5.2.3 Advanced data

Colors for data within **Advanced widgets** on dashboard can be set. There is a total of ten colors that can be defined. Advanced widgets will use these colors based on how many graphs get drawn. For example: A advanced widget with four data sets will use the first four colors defined here.

### 5.5.2.4 Example

Example of a dashboard with the use of custom colors defined in a theme.



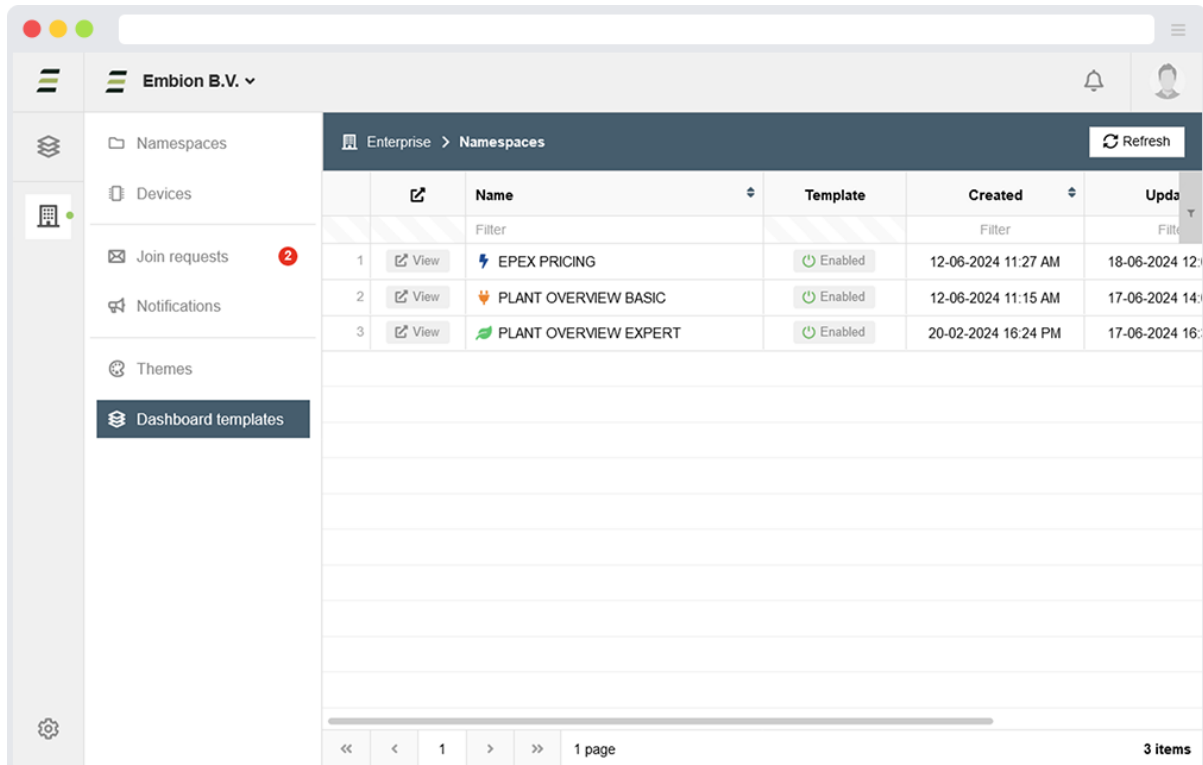
Dashboard example with theming

## 5.6 Dashboard templates

Enterprises can create dashboard templates, making it easier to configure dashboards across all linked namespaces.

When a new namespace is created or linked to the enterprise, users within the namespace can select from these pre-configured dashboard templates when creating a new dashboard.

This feature reduces the time and effort needed to set up new dashboards.



		Name	Template	Created	Updated
1	<a href="#">View</a>	EPEX PRICING	Enabled	12-06-2024 11:27 AM	18-06-2024 12:00 AM
2	<a href="#">View</a>	PLANT OVERVIEW BASIC	Enabled	12-06-2024 11:15 AM	17-06-2024 14:00 AM
3	<a href="#">View</a>	PLANT OVERVIEW EXPERT	Enabled	20-02-2024 16:24 PM	17-06-2024 16:00 AM

Templates

Within the enterprise application a template plugin is added where enterprise users can manage their templates. In this overview the following options can be found:

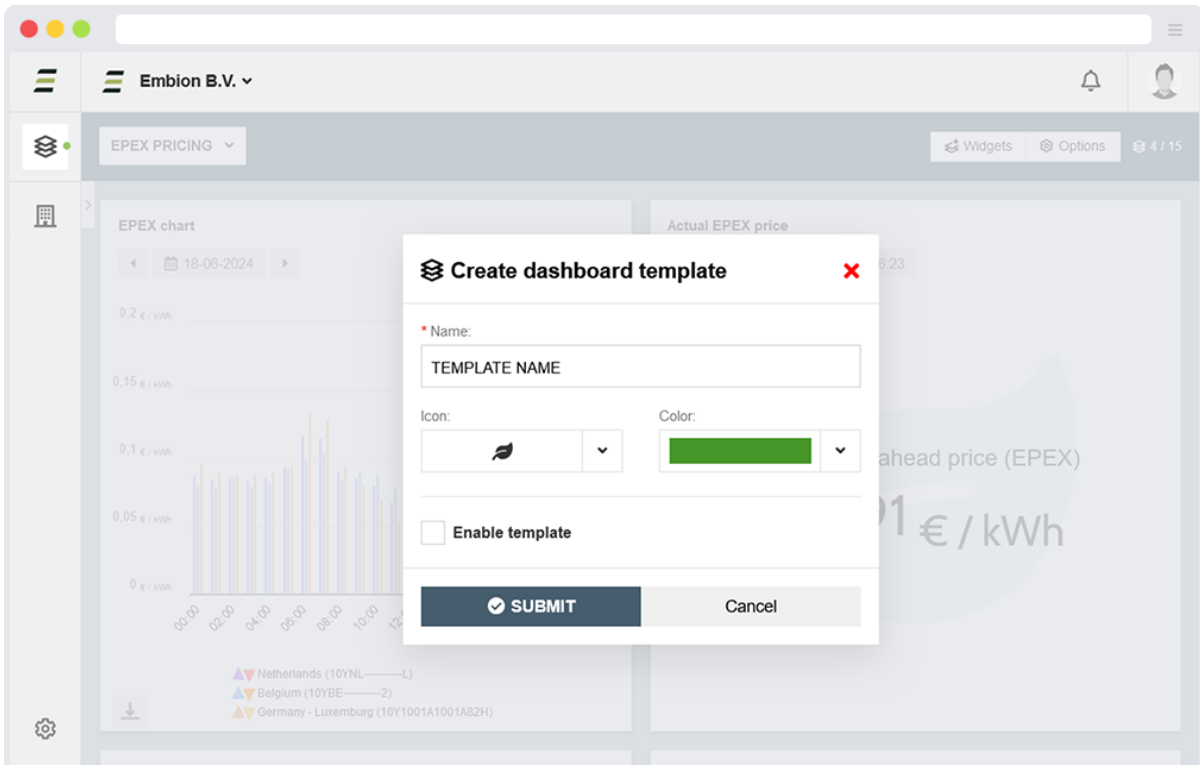
- **View templates** - This will open the dashboard application where the templates can be made
- **Enable or disable templates** - This will enable or disable the ability for linked namespaces to select the template
- **Delete templates** - This will remove the dashboard template (and dashboard itself within the dashboard application)



### 5.6.1 Create dashboard template

Templates can be created by opening the 'Dashboard templates' application within the enterprise namespace. When creating a new dashboard, there is an option to enable the dashboard as a template.

All available widgets can be used to create the template. The configuration settings of the widgets will also be saved within the template, allowing enterprise users to pre-define widget configurations based on the template.



Create template

#### 💡 Tip

Enterprise users can create new dashboard templates and enable them later. This allows them to set up and configure the dashboard before making it available to users in the linked namespaces.

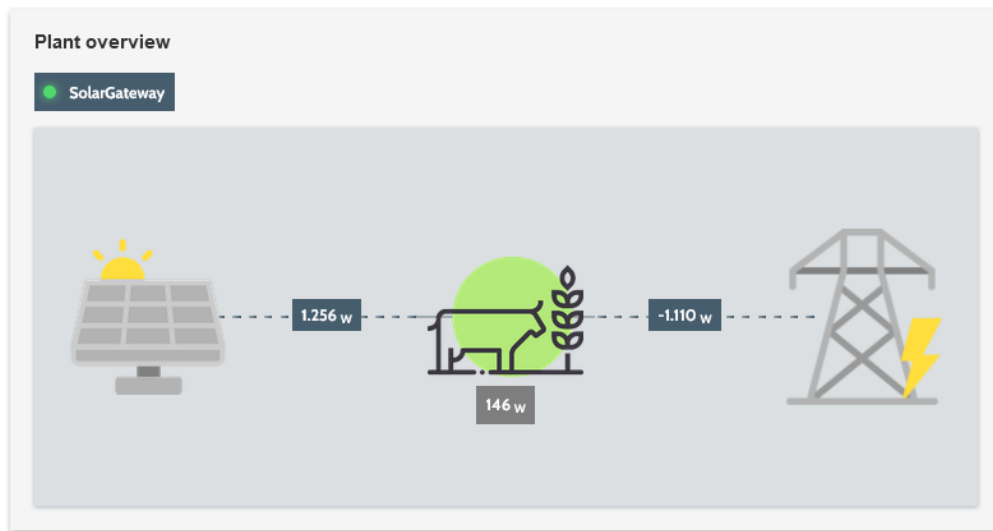
### 5.6.2 Widget features

Enterprises can use additional configuration settings in widgets while creating dashboard templates. Currently, only the Plant Overview widget contains these extra settings, but more widgets will include them in future updates.

#### 5.6.2.1 Plant overview

##### Namespace image instead of icon

In addition to the default icons, Enterprise users can enable the option to display the uploaded namespace image as icon within the Plant Overview widget.

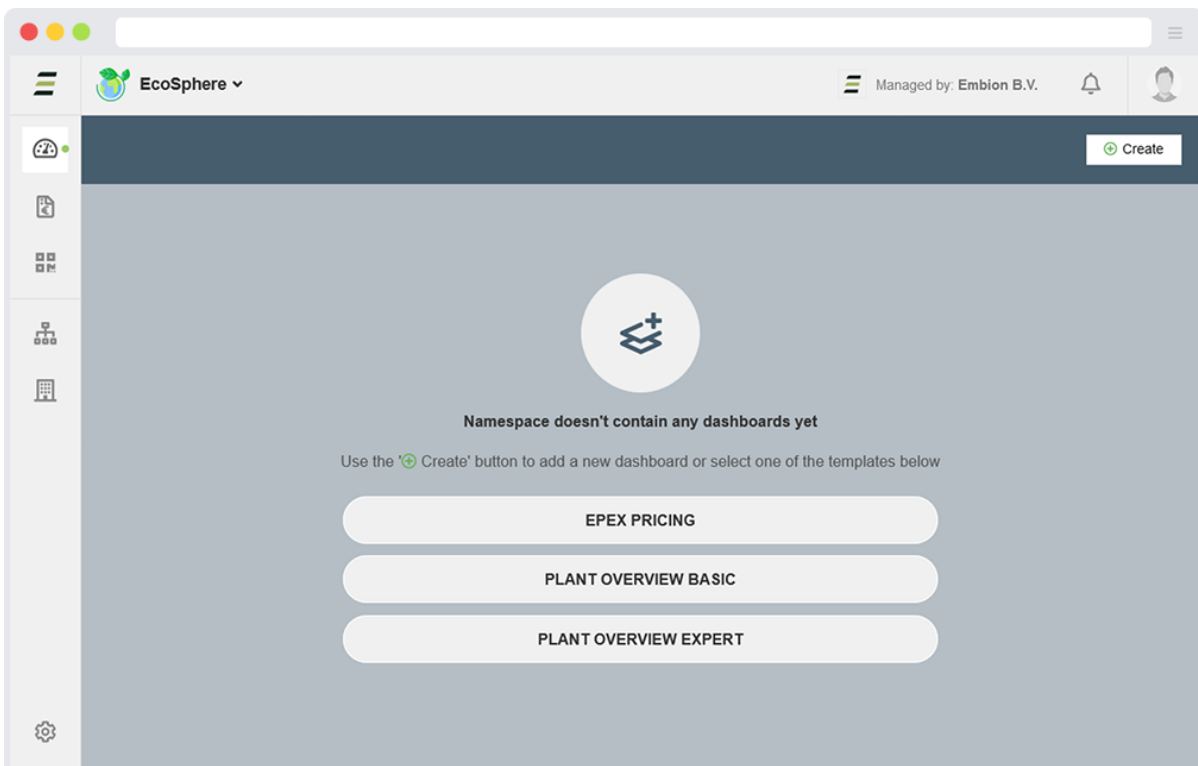


Namespace image within plant overview widget

### 5.6.3 Select dashboard template

Dashboard templates can be selected and used within all linked namespaces. When a user in a linked namespace opens the dashboard application and no dashboards are created yet, a list of available templates is displayed. Users can press on a template to create a dashboard based on it.

When a dashboard template is selected, all configuration settings of the widgets are copied from the template. If a namespace has only one device connected, the device will automatically be selected in the configuration for the widgets that need a device configuration. Otherwise, the user has to open the configuration settings and select one of the connected devices.

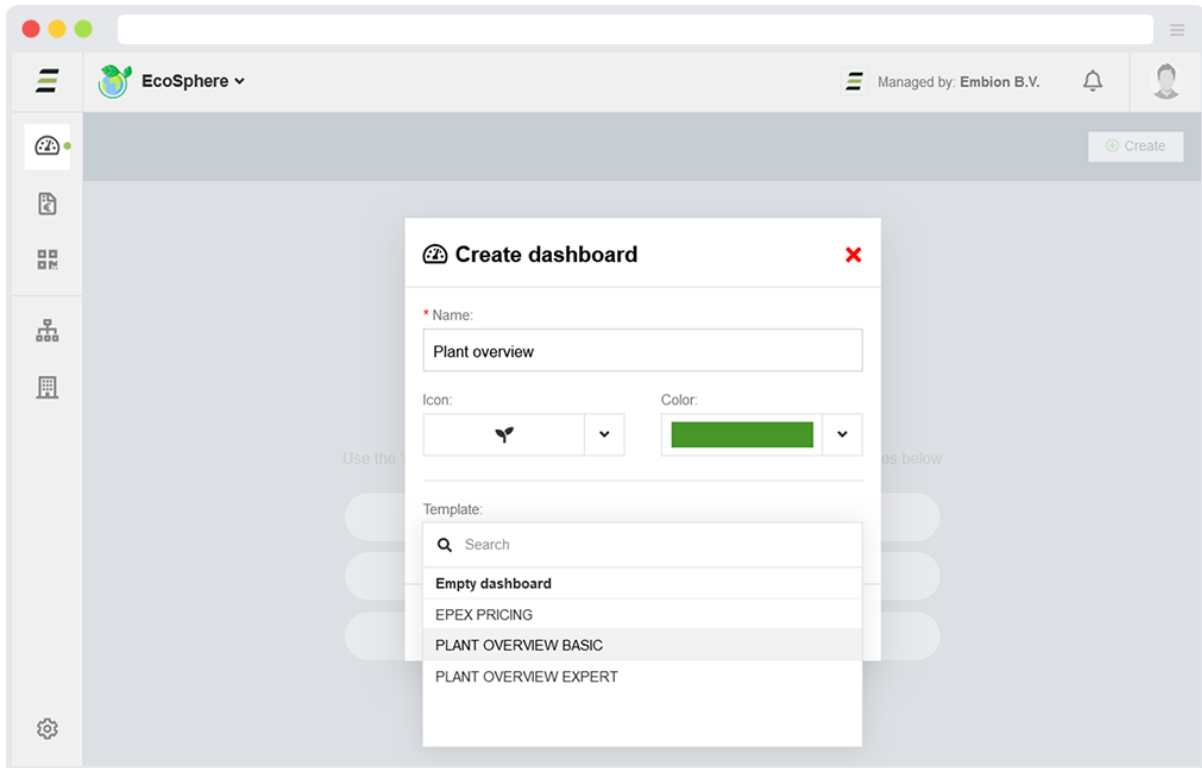


Select template with no dashboards created yet

#### **i** Note

If a namespace has only one device connected, the device will automatically be selected in the configuration for the widgets that need a device configuration. Otherwise, the user has to open the configuration settings on first usage and select one of the connected devices.

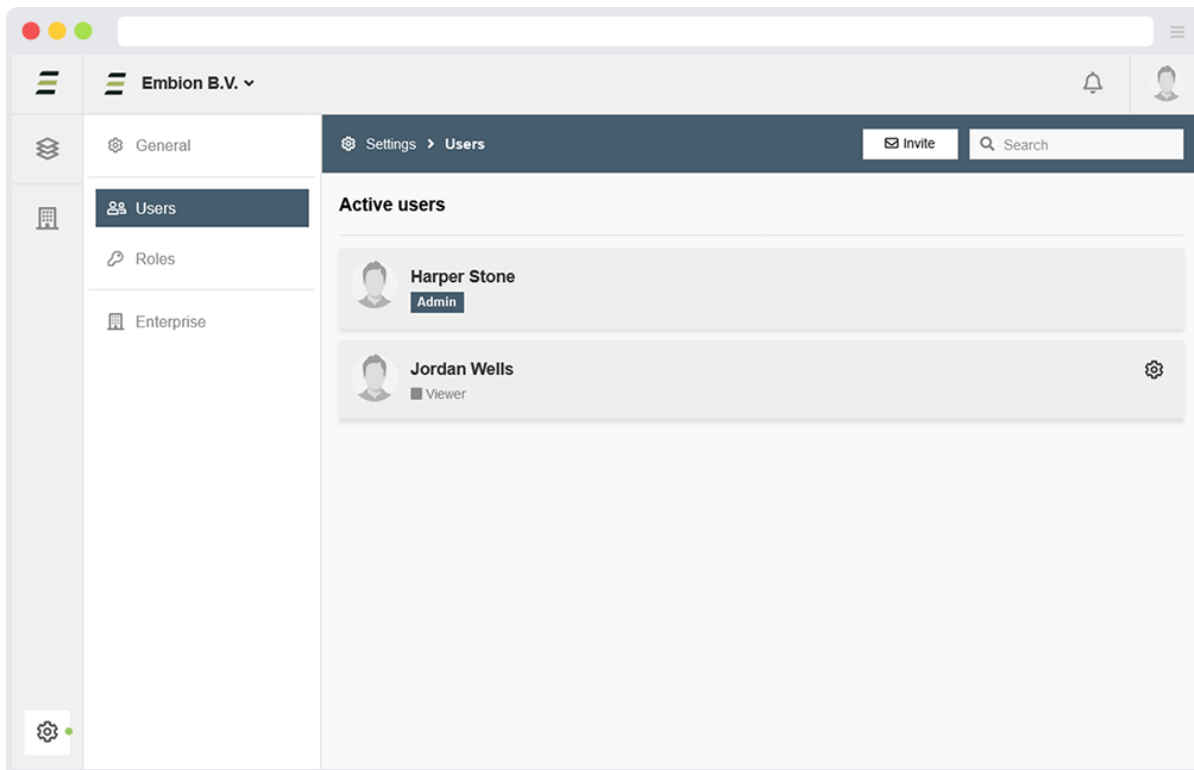
Additionally, users can open the create dashboard form and select one of the templates if desired. If no template is selected, an empty dashboard is created.



Select template within the dashboard create form

# 6 Enterprise user management

## 6.1 Users



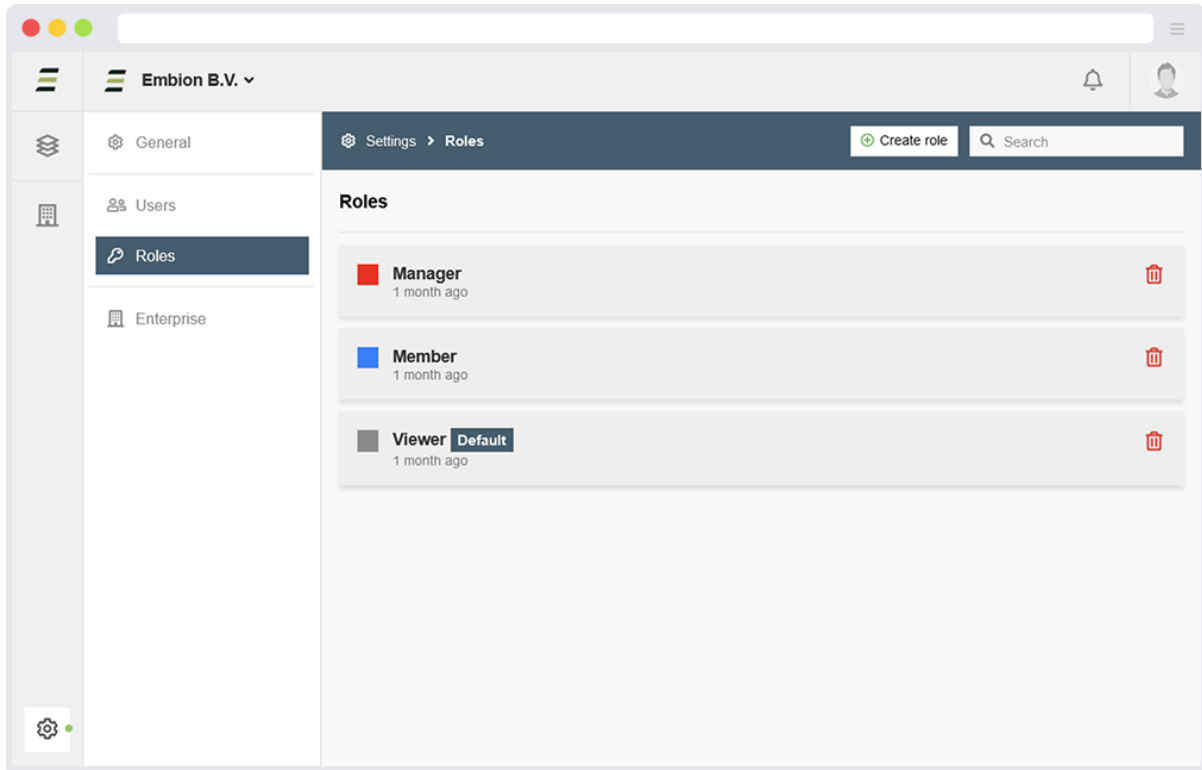
Enterprise users

The users page shows all active and pending users within the enterprise, new or existing users of the HUB can be added by pressing the invite button. By pressing the user, roles can be applied.

When enterprise users visit a connected namespace, their role within the enterprise determines their role within the namespace.

By pressing the settings icon the user can be made admin or can be removed.

## 6.2 Roles



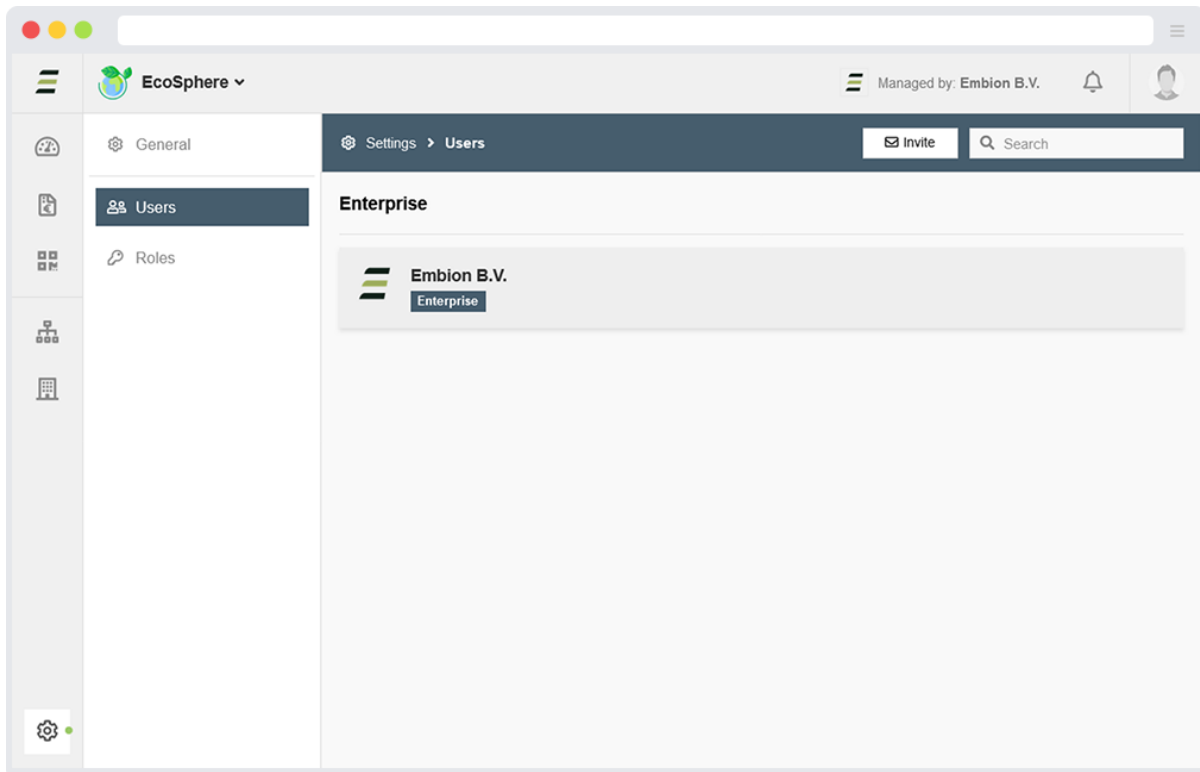
Enterprise roles

In each enterprise, custom roles can be assigned to users. By default, certain roles are available, but they can be modified as per the requirements. If needed, new custom roles can be created.

### **i** Note

When enterprise users visit a connected namespace, their role within the enterprise determines their role within the namespace.

## 6.3 Connected enterprise



Enterprise shown in user overview

When a namespace is connected to an enterprise, the enterprise will be displayed in the user overview within that namespace.



All products described in this document are owned by **Embion B.V.**

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