

EOS Manager

User Manual



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First Use

In this chapter, we describe how to install and register the EOS Manager application. We assume that you have a phone or tablet with Android 6 or later and Bluetooth version 4.1 available. An internet connection is also required in order to complete instructions in this manual. If you encounter any problems please contact your EOS sales representative or contact Bever Innovations support (support@beverinnovations.com)

1. Order EOS Manager license

In order to use the EOS Manager application for your EOS devices a valid license is required. License codes can be purchased via your EOS Sales representative. Different types of user licenses are available (Basic, Advanced and Expert), contact your EOS sales representative for further details. (Figure 1 below)

Enter the following code

AAAA-BBBB-CCCC-DDDD

to upgrade your account to

Advanced User for 12 Months

Figure 1: Example voucher license code

Note: If you've already downloaded and created an account, you can directly fill in your voucher code by clicking on the *about* button in the top right menu on the main screen. Here you'll find the button ENTER VOUCHER CODE which will redirect you to a website where you can update your account.

2. Download EOS Manager from Google Play Store

The EOS Manager is freely available for Android based devices through the Google Play Store. Updates of the app can also be obtained via this store. Search for EOS Manager or use the following link: <https://play.google.com/store/apps/details?id=com.eosconnected.eosmanager>

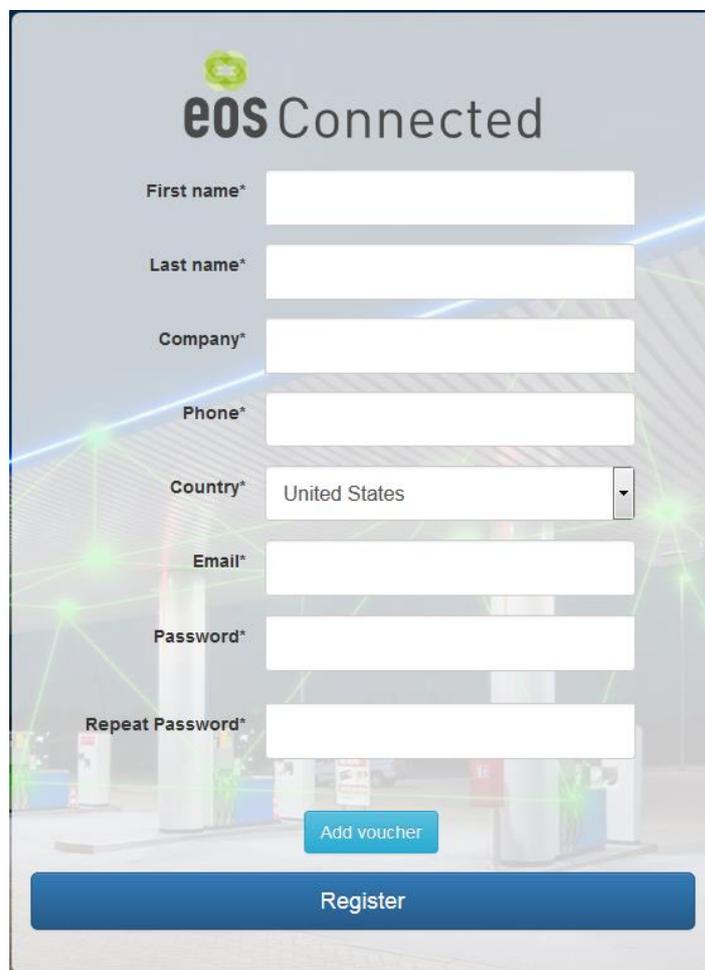


Figure 2: EOS Manager icon

Note that two permissions are requested when installing. First, the device location is required. This is needed for EOS communication and optimizing the apps functionality based on the user's geographic location. Second, access to storage is requested. This is needed to store and access manuals, maps and other EOS Manager files. All permissions should be granted to be able to use the app to its full potential.

3. Create EOS account

Registration is needed before you can use the EOS Manager. Registration can easily be done within the app by tapping the 'Register' button in the main screen. Note that you will be redirected to the EOS Connected web portal to create an EOS Connected account (Figure 3). With your EOS Connected account you can use both the EOS Manager app and EOS Connected web portal (under construction). The available functionality of the app and web portal depends on your account type. Please note to fill in your purchased voucher by clicking the Add voucher button.



The image shows a registration form for 'EOS Connected'. At the top, there is a green circular logo with a white 'e' and the text 'EOS Connected'. Below the logo, the form consists of several input fields, each with an asterisk indicating it is required: 'First name*', 'Last name*', 'Company*', 'Phone*', 'Country*' (with a dropdown menu currently showing 'United States'), 'Email*', 'Password*', and 'Repeat Password*'. Below the 'Repeat Password*' field, there is a blue button labeled 'Add voucher'. At the bottom of the form, there is a large blue button labeled 'Register'. The background of the form is a light gray with a faint, abstract network-like pattern of green and blue lines.

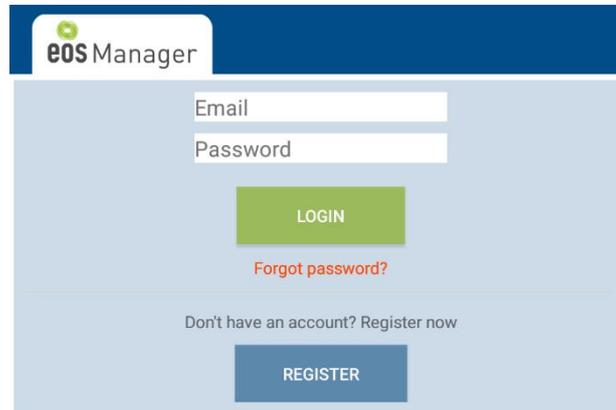
Figure 3: EOS Registration form

4. Activate your account

An e-mail will be sent to the e-mail account registered with Bever. Activate your account by clicking the link in the e-mail to activate your account. This may take a couple of minutes. Please check your spam-folder as well.

5. Login EOS Manager

After activating your account, insert your user credentials in the EOS Manager login screen on your device (Figure 4). After login, your e-mail address and account type should be made visible in the lower left part of the screen.



The screenshot shows the EOS Manager login interface. At the top left, the 'EOS Manager' logo is displayed. Below it, there are two input fields: 'Email' and 'Password'. A green 'LOGIN' button is centered below the password field. Below the login button is a red link for 'Forgot password?'. At the bottom, there is a link 'Don't have an account? Register now' and a blue 'REGISTER' button.

Figure 4: EOS Manager login screen

Off-site Commissioning Preparation

In this chapter, we describe what to prepare before a site is being visited.

1. Update EOS Manager application to the latest version

Please make sure you have the latest version of the EOS Manager on your tablet or phone before you visit a site. The application will be updated on a regular basis to update application functionally and optimize user experience. Visit the Google Play Store, check if an update is available and update the EOS Manager application if possible.

2. Login EOS Manager and verify account details

If not already signed in, use your credentials to login to the EOS Manager. Verify the user level and the remaining account validity by clicking the information button in the top right corner of the screen (Figure 5, Figure 6). Check if the account validity is long enough for on-site commissioning. If not, contact your EOS sales representative and ask for a new EOS Manager license.



Figure 5: Information button

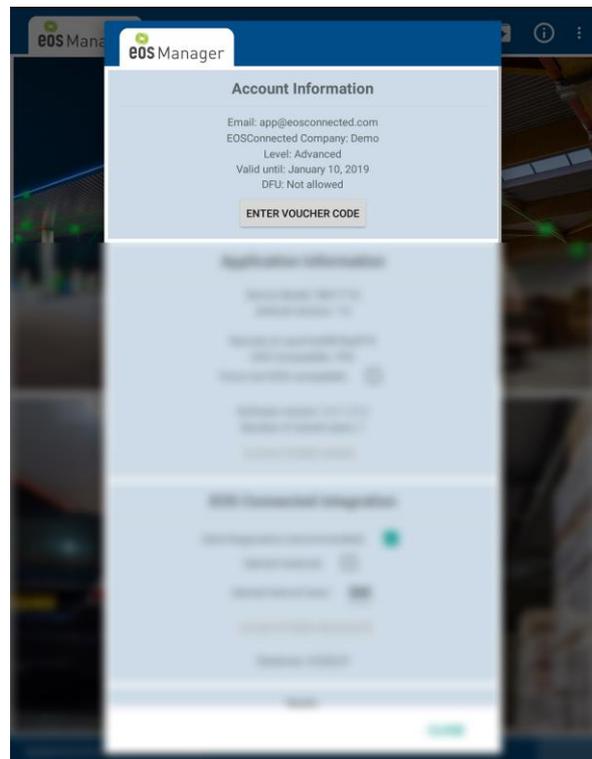


Figure 6: Information screen

3. Verify availability of required package licenses

Please verify the availability of package licenses locally on your tablet or phone. EOS devices have the option to upgrade their functionality based on different packages. Make sure to have the purchased package licenses and have them coupled to your account. After coupling them to your account, the EOS Manager can be used to enable the packages on EOS devices. Open the EOS License Manager by clicking the button shown in Figure 7. The EOS Package License Manager will pop-up. Note that the screen lay-out may slightly differ between versions of the EOS Manager (Figure 8).



Figure 7: License Manager button

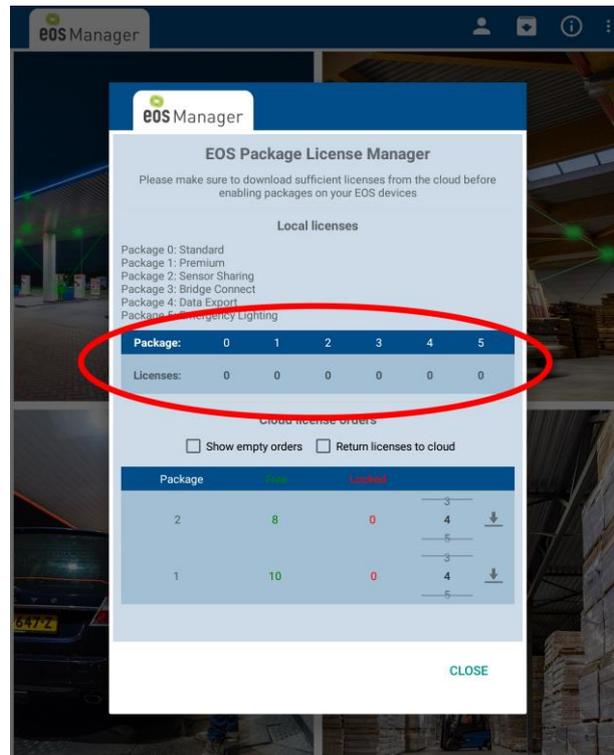


Figure 8: Package License Manager

Check the numbers in the package overview table (Figure 8, red ellipse). These numbers should at least equal the amount of packages you need on the site you are going to visit. If this is the case, please proceed to step 5. If not, continue with step 4.

4. Download package licenses to your device

Licenses can be bought via your EOS sales representative. All purchased license orders on your account are shown in bottom part of the EOS Package License Manager (Figure 9). Verify whether enough licenses are available in the cloud. If this is not the case, contact your EOS sales representative. If enough licenses are available you can start downloading these licenses to your local device. To do so, select the correct amount of licenses you need with help of the slider and press the download button. See Figure 10 - where 4 licenses of each of package one and package two are both selected and ready to be downloaded. The result is shown in Figure 11. Note: The 4 downloaded licenses are now available locally on your device and *locked* in the cloud. Locked implies that they cannot be used by anyone else and that they are fixed to your tablet. Once you have downloaded enough licenses you can proceed to the next step.

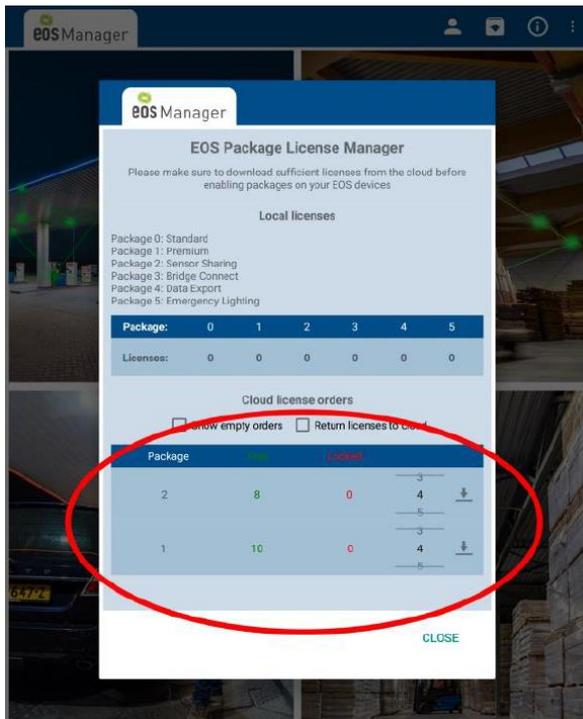


Figure 9: Purchased licenses

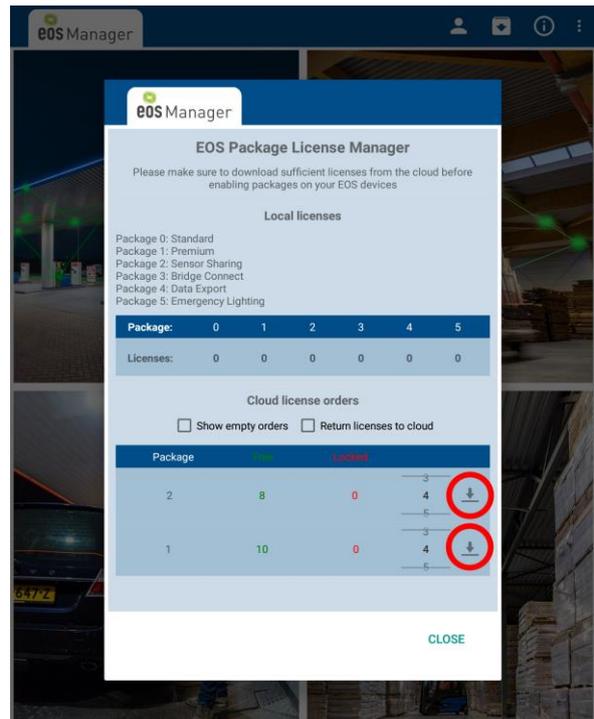


Figure 10: Download licenses

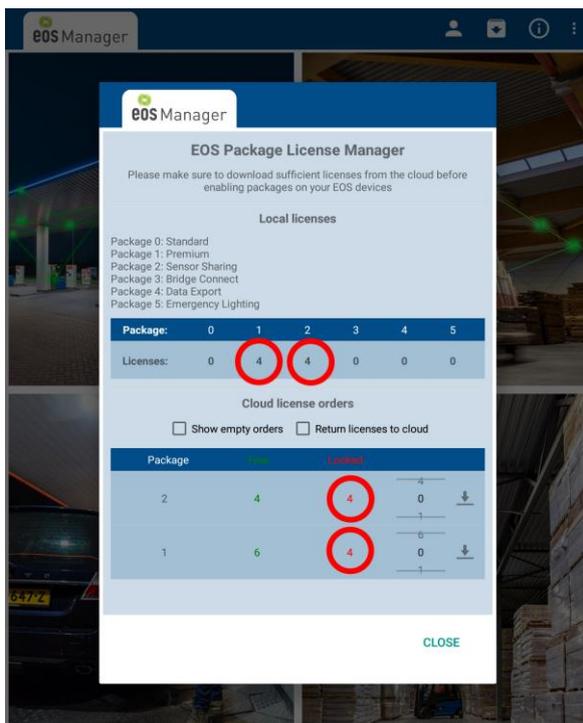


Figure 11: Downloaded licenses

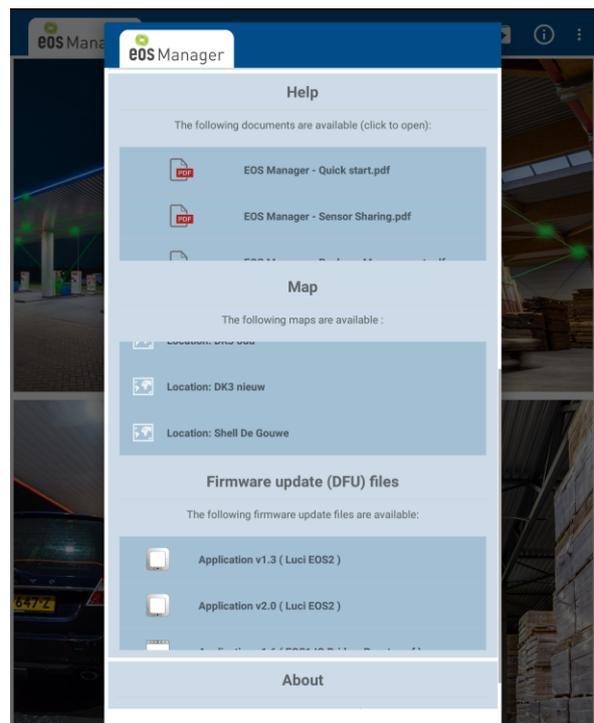


Figure 12: Available maps

In case you've downloaded too many licenses you can return them to the cloud making them available again for other devices. Tick the box Return licenses to cloud and repeat the steps mentioned above.

5. Verify availability of site overview map

If you would like to have a better visual experience of the site you are going to visit, a map can be used within the EOS manager. This map can be used to place your EOS devices on. This can either be a custom map (saved on your tablet or phone) or a map made available by your EOS sales representative (saved in the EOS cloud). To check if your map is available, open the information screen (Figure 6) and scroll down until you reach the heading Map. (Figure 12)

6. Prepare Device Firmware Update

If it is required to perform a Device Firmware Update (DFU), please refer to the *EOS Manager - Device firmware update* manual.

On-site Commissioning

In this chapter, we describe how to start the process of on-site commissioning. Note that some of the steps are optional.

1. Power on devices all EOS devices

To get started with configuring your EOS site, make sure all EOS devices are powered on first and you are situated in range of at least one EOS device.

2. Start EOS Manager Application

Log in with your user credentials and click on the EOS logo to get started. You may be asked to turn on your Bluetooth.

3. Search for EOS devices

During the search of EOS compatible devices you will see the screen in Figure 13. Note that for some devices it may take a bit of time before this screen is shown as they first need to find a nearby EOS device to connect to (finding its way through the EOS network).

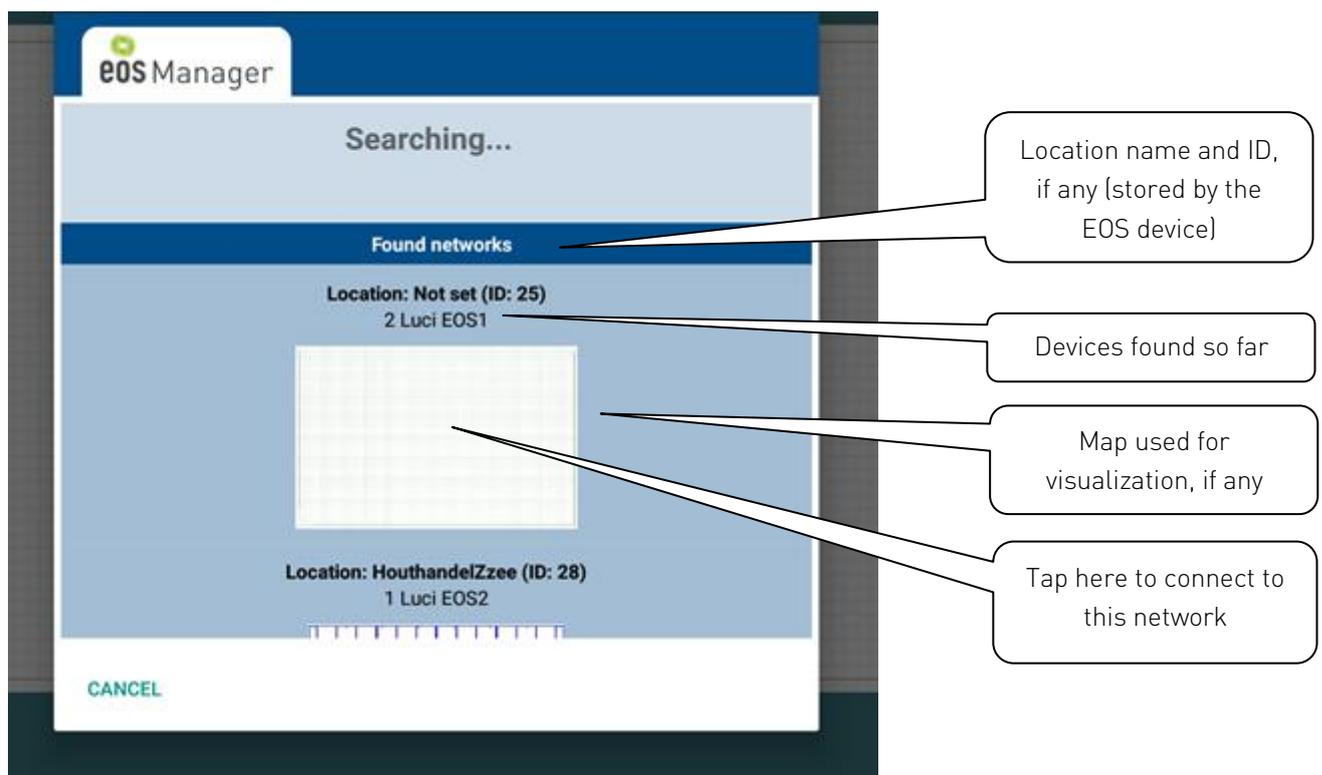


Figure 13: Searching for EOS devices

Multiple networks may be in range that contain one or more EOS devices. The data shown is collected from devices that have already announced themselves to the app. Finding all devices in your network can take some time, depending on the size of your network. You can click on any of the found networks as soon as you observe that all devices within the network are found. Devices that are not configured,

and not assigned to a network, are placed in a network with ID: Not set. Click on this not set network to start configuring.

(Note depending on when the luminaires are powered up there may be more than one network – this can be changed afterwards if needed – for info, each network may be further divided into more than one group).

4. Connect to the EOS network

Connecting implies authorizing the user with the devices to establish secure communication, and thereby avoids that a user can communicate with devices they do not own. For security we assume that only authorized users are able to physically switch the EOS devices off and on again on request of the EOS Manager app. This physical authorization step is only needed once. Afterwards, the devices will remember the newly authorized user and directly allow user to connect. Connecting and authorizing to all devices in the network may take some time, depending on the size of your network (Figure 14).

Note that after connecting to the EOS devices you may be asked to assign a unique identifier to your network. This is the highest level of ordering your devices. EOS devices that interact with each other should be placed in the same network. Within a network, groups can be made to further order your potentially large number of devices. This is discussed in more detail in subsection 8. Networks and groups are stored by the EOS devices, so they only need to be set ones.

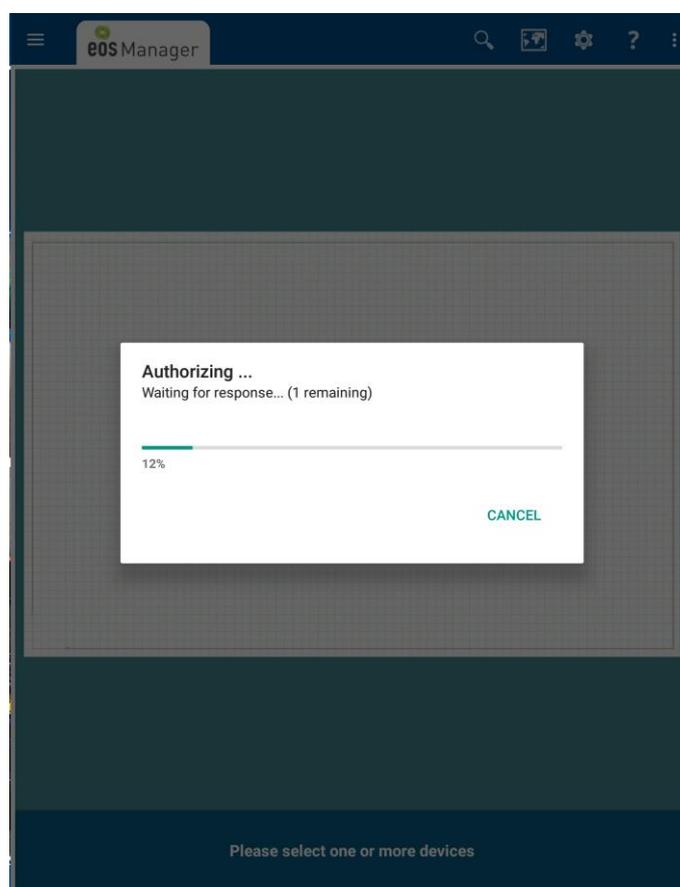


Figure 14: Authorizing devices

After authorization you will see the following screen (in case no background map is selected and devices are not placed on the map yet). Note that all devices that are not placed on the map are shown on top of the screen.

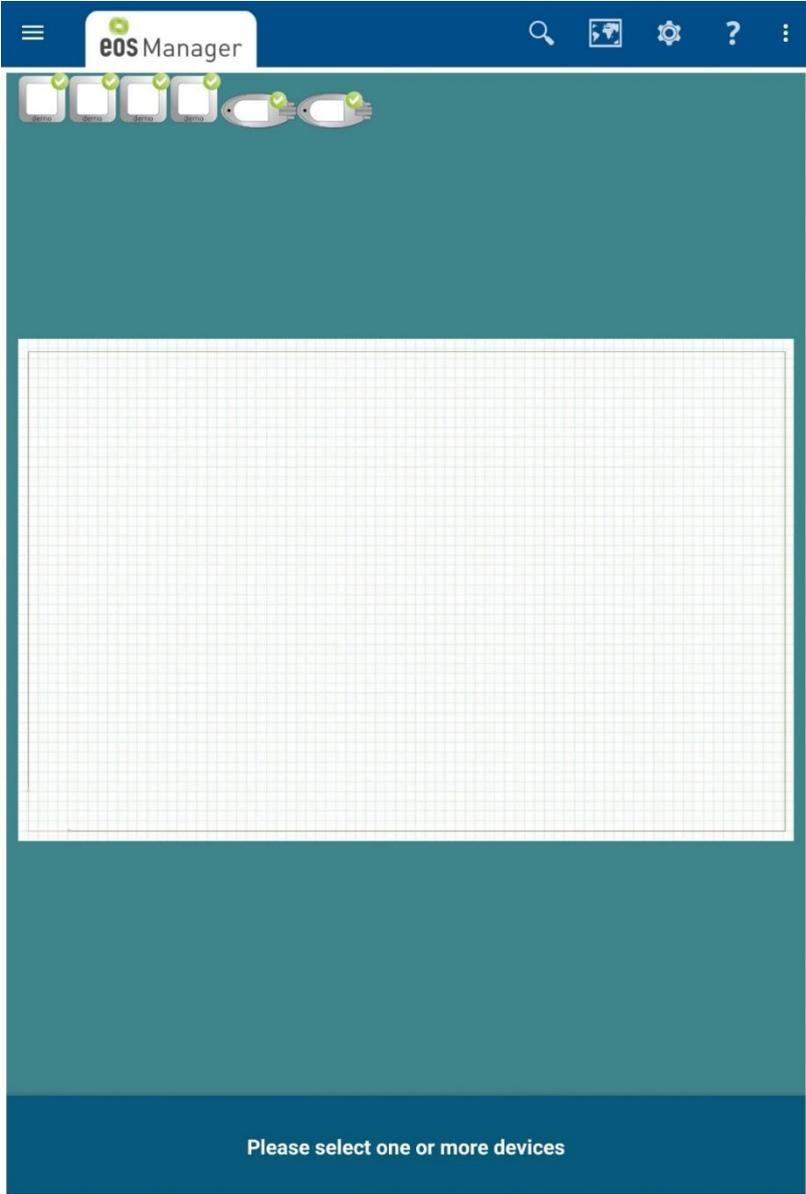


Figure 15: Main screen

5. Select site overview map

To make identification of devices easier, a background map can be selected. Tap on the map symbol in the menu:



This will open your device file browser. Search for the EOS Manager/Files/maps-image folder. This folder contains the site overview maps linked to your account. Select one. This is be communicated to all devices in the network to ensure the map needs to be selected only ones.

6. Drag devices to location on map

Select a device by tapping on it. It will start blinking so you can easily detect where on the map it should be placed. Tap and hold the device for 1 second to start dragging the device onto the map. As soon as the device is dropped on the map, it will be informed. This ensures that you only need to drag the device on the map ones. Next time you connect, the map and location will be directly shown to you.

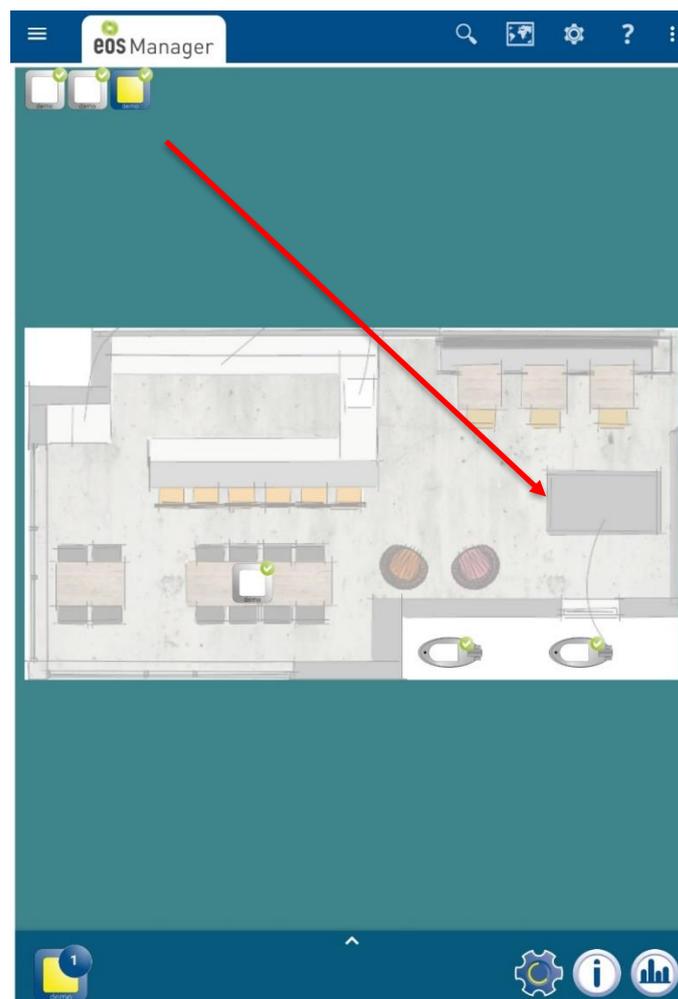


Figure 16: Drag and drop device

7. Create groups

Grouping of devices is useful for quickly configuring, or extracting statistics for, multiple devices at the same time. Furthermore, grouping is needed to apply sensor sharing. With sensor sharing, sensor information, such as motion and light, can be shared within a group. All devices in a group can thereby respond to a single sensor observation within the group. An example on how to configure sensor sharing can be found in the next section.

To create a group, select the devices you want to group by tapping them one by one. The lower left button shows how many devices are selected. Tap it to create a group.



Figure 17: Device grouping

The following pop-up will be shown. It allows you to select a group number. If the selected group number already exists, the devices will be combined into that single group.

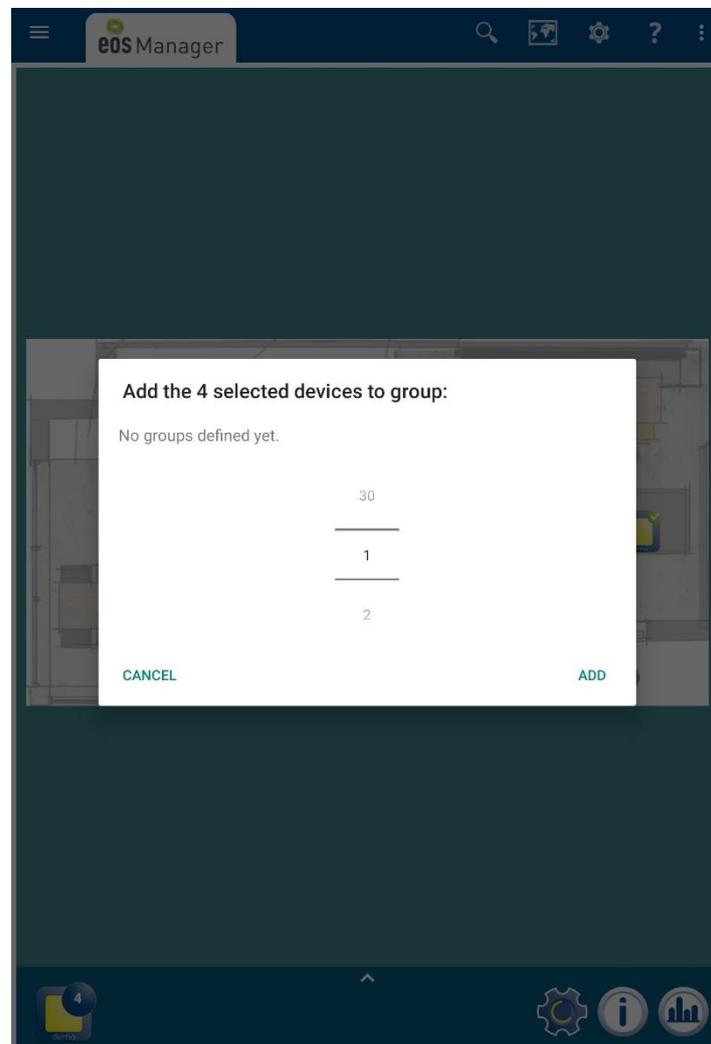


Figure 18: Group selection

By swiping from left to right, or clicking the upper left 'hamburger' menu, the group overview will be shown.

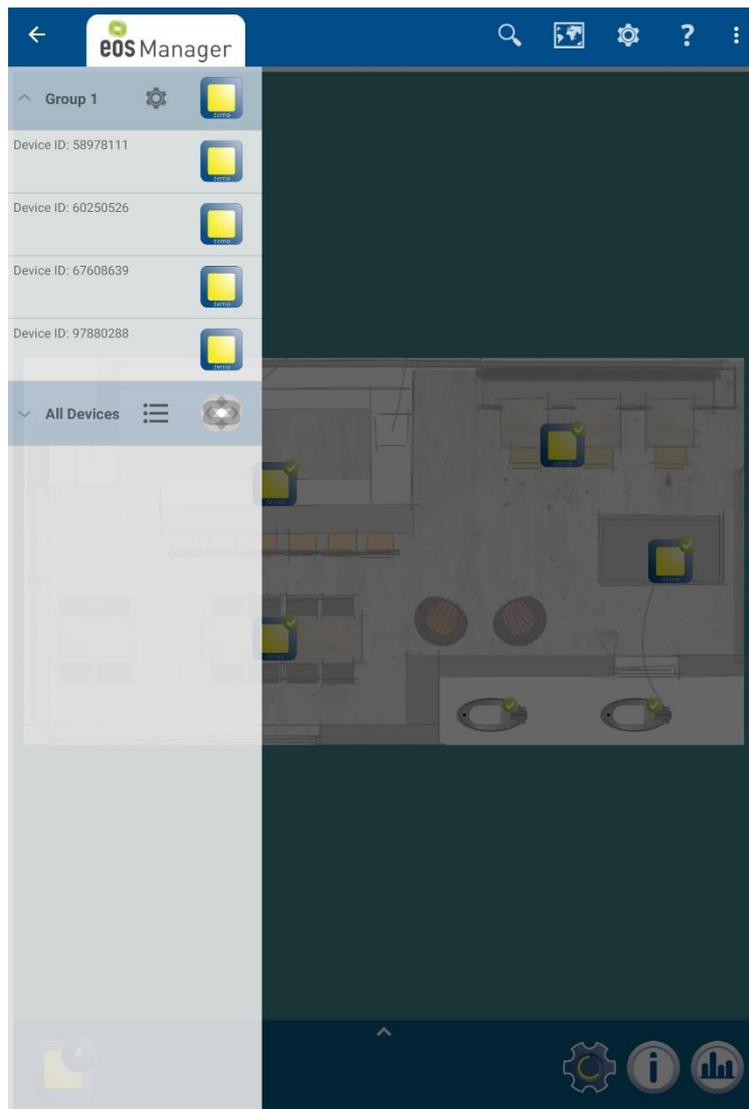


Figure 19: Group overview

8. Perform DFU

If it is required to perform a Device Firmware Update (DFU), please refer to the *EOS Manager - Device Firmware Update* manual. Complete DFU before continuing this manual.

9. Perform package updates

Select the device(s) you would like to manage the packages for. Open the EOS Package Management screen by tapping the Group Overview button followed by the button shown in Figure 20. The lay-out of this screen may slightly vary between versions of the EOS Manager. The EOS Package Management screen functionality is described on the next page. Note that you may have the option to set a trial (if enabled). By using a trial, the package is automatically disabled after a given amount of time. Please contact your EOS sales representative for more information.

Furthermore note that you are also able to disable a package on a given device. The package license will be returned to your tablet or phone. The configuration items related to the package will be set to default.

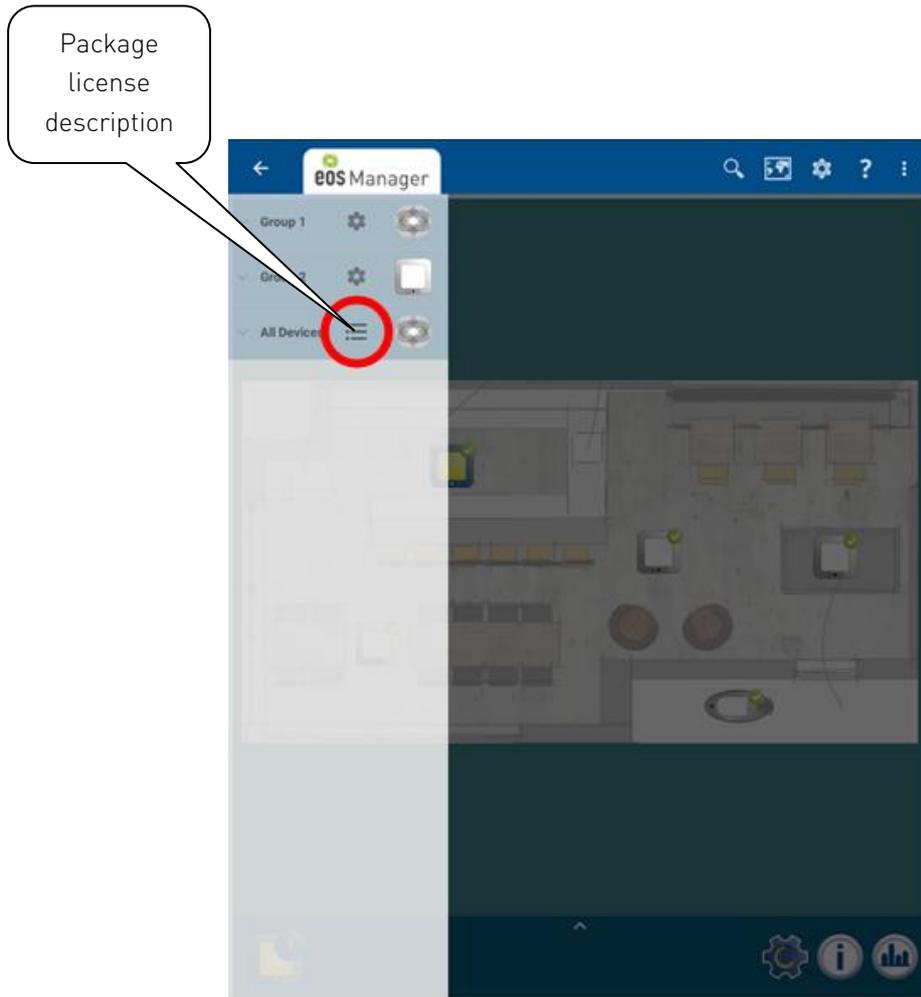


Figure 20: Group Overview Button

EOS Manager

Package overview

Package 0: Standard
 Package 1: Premium
 Package 2: Sensor Sharing
 Package 3: Bridge Connect
 Package 4: Data Export

Data availability:
 All data available.
 Allow to set free trial (100 hours)

Overview:
 Only show selected devices

Package:	0	1	2	3	4
Locally available licenses (as downloaded in previous step)	0	5	0	0	0
All devices:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1674100003 (∞)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CLOSE

Check to enable trial (if available)

Check to only show selected devices

Check any of the checkboxes to directly enable (or disable) a package

10. Apply site-specific configuration

By applying the previous steps you are now set to configure the deployment as you please. Data can furthermore be extracted to get a good insight the network behavior. The next page describes the main ways to interact with the EOS Manager and your network. The next section discusses some examples of configuring your network.

The screenshot shows the EOS Manager mobile application interface. At the top, there is a dark blue header with the 'EOS Manager' logo and several icons: a search icon, a globe icon, a gear icon, a question mark icon, and a vertical ellipsis icon. Below the header is a large map area displaying a floor plan with several device icons (represented as small screens) placed on it. At the bottom, there is a dark blue footer with a home indicator, a notification icon with the number '1', and three circular icons: a gear, an information 'i', and a bar chart.

Callout boxes provide the following information:

- Search again:** Points to the search icon in the top header.
- Select background map:** Points to the globe icon in the top header.
- App settings:** Points to the gear icon in the top header.
- Help:** Points to the question mark icon in the top header.
- Extended menu:** Points to the vertical ellipsis icon in the top header. The menu items are:
 - Add demo devices
 - Identify closest devices
 - Add authorized manager to devices
 - Close app
- Tap to open group overview:** Points to the hamburger menu icon in the top left corner.
- Map for device drag and drop:** Points to a device icon on the map.
- Tap and hold device for 1 second to start dragging:** Points to the same device icon on the map.
- Selected devices. Tap to create new group of selected devices:** Points to the notification icon in the bottom left footer.
- Slide up or tap one of the three buttons to view device data:** Points to the home indicator in the bottom center footer.
- Tap for Configuration:** Points to the gear icon in the bottom right footer.
- Information:** Points to the information 'i' icon in the bottom right footer.
- Statistics:** Points to the bar chart icon in the bottom right footer.

Examples

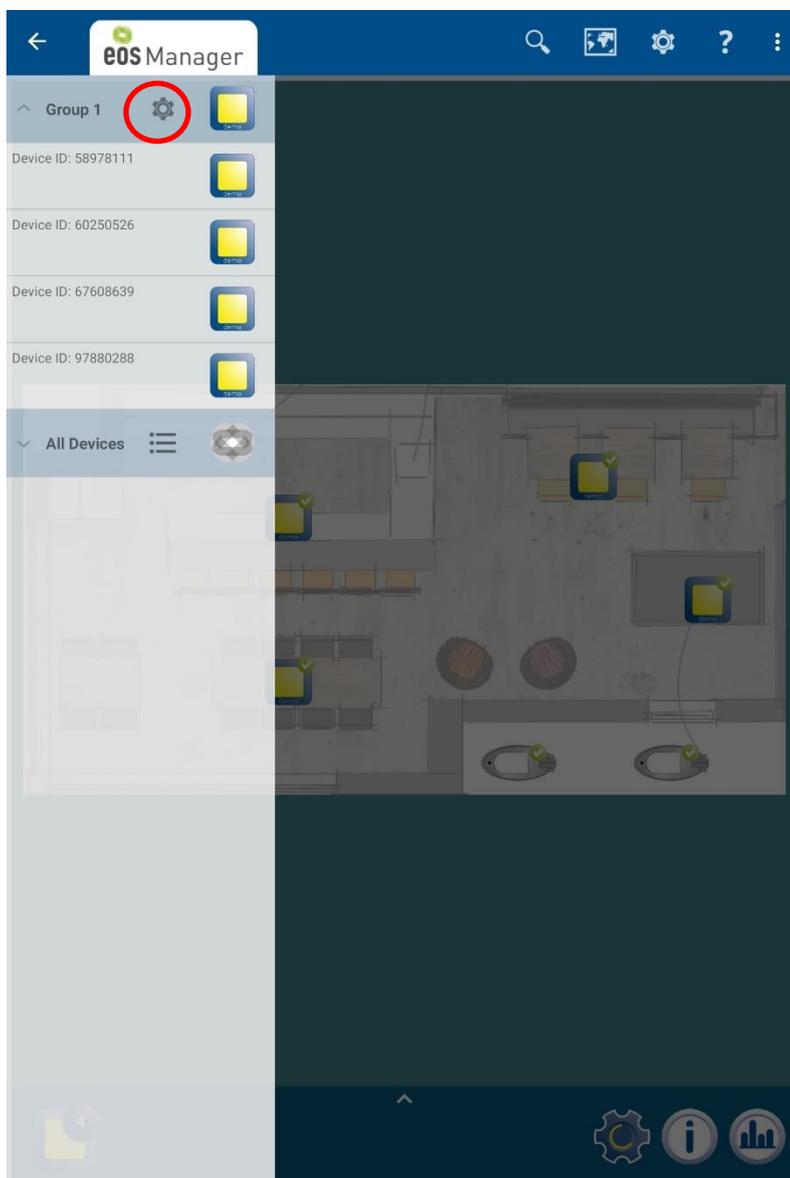
In this chapter, we describe how to configure EOS devices for given example scenarios.

1. Sensor sharing between all devices in a group

Assume we want a group of devices that all respond to each other's motion sensor, e.g. if one of the Luci's in a group detects something, all Luci's go to full power.

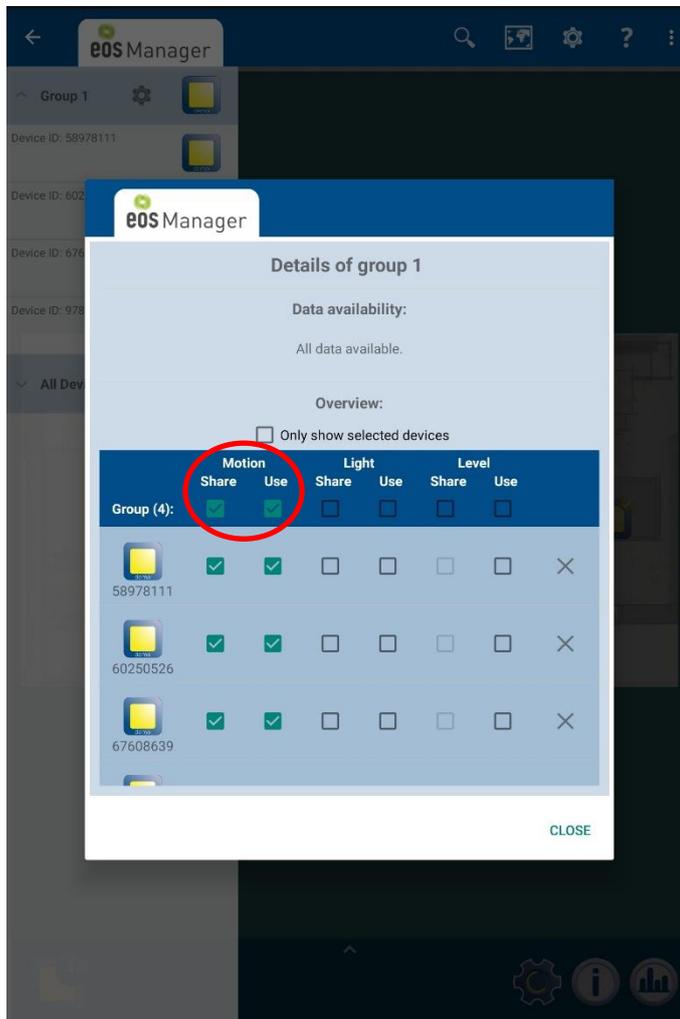
Given that devices are placed on a map, we perform the following steps to achieve this scenario:

- Select all devices on the map that should be part of the sensor sharing group
- Create a group
- Open the group settings



- Press get data to get the current sensor sharing details

- Tap the 'Motion Share' and 'Motion use' option for all devices in this network. Note: if the boxed are red, proceed to subsection 9 of the on-site commissioning section to set the correct packages (sensor sharing package for this example).



Now you successfully applied sensor sharing within this group. A motion detected by a least one of the Luci's in the group will result in all Luci's to go to their configured maximum output percentage.

Revision	Date	Description
1	15-11-2018	First release
2		