

# **03 Management App**

## **User Guide**

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# Overview

Welcome to O3 Management's online help. O3 Management is a web application for remotely configuring O3 Sensor Hub 2.0 devices using reusable cloud-based templates.

## About the O3 Sensor Hub 2.0

The O3 Sensor Hub 2.0 is a standalone multi-sensor that mounts to the ceiling and combines temperature, humidity, motion, sound, and light sensing in a single device. Using sensor fusion technology combined with machine learning techniques, the sensor hub monitors eight characteristics of a space. Sensor data and analytics are then sent to a cloud platform, where they can be read and analyzed by controllers or BMS supervisors. As an open-platform IoT device supporting both BACnet and standard IoT protocols, the sensor hub can integrate with almost any system.

## Configuring an O3 Sensor Hub 2.0

Using the O3 Management app, you can engineer sensor hubs from your desk, reducing commissioning times by up to 90 percent. The hub configuration settings are stored in the cloud in JSON format.

There are two basic levels of settings: job-level settings and hub-level settings.

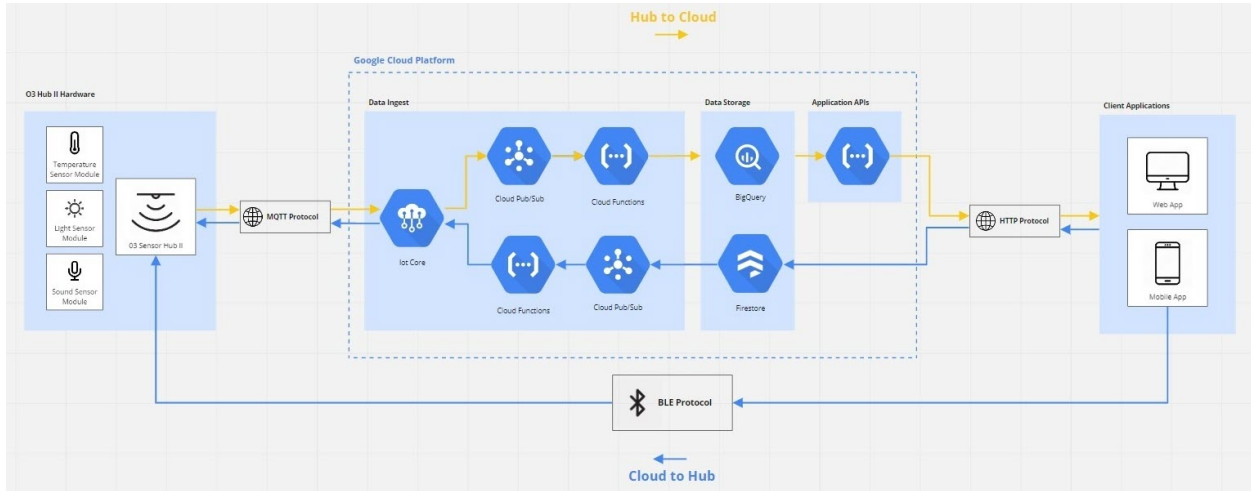
- **Job-level settings** include the site name and address, IP, BACnet, MQTT, and Bluetooth connection settings, hub naming conventions, and units of measure.
- **Hub-level settings** include the hub name, the configuration template used by the hub, and the BACnet device ID. Connection settings can also be edited at the hub level.

Hub attributes, such as temperature, humidity, motion, sound level, light level, and so on, are specified in a template. You can use the default template provided or create your own.

After you have created job sites and hubs in the web app, you need to create an installer user. This is the person who will install and set up the hubs in the field. When a new user is created, they are sent an email inviting them to join your organization. The email also contains an account activation link.

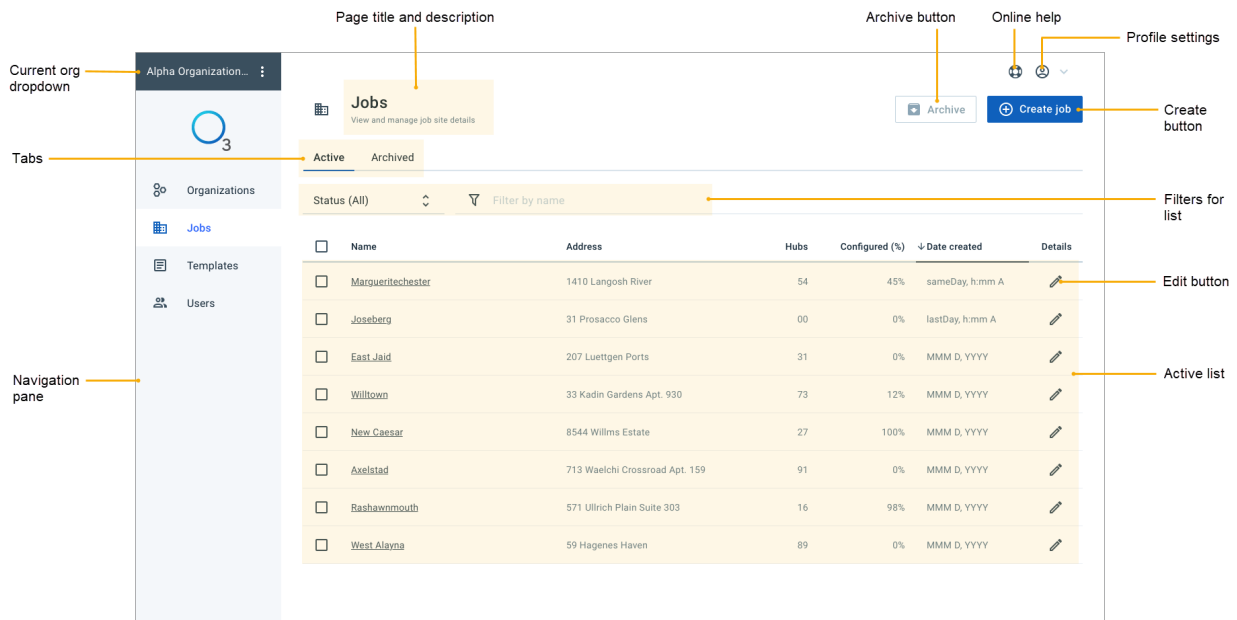
Once an installer has been added to your organization and has activated their account, they can sign in to the O3 Setup mobile app and see the hubs that belong to their assigned job site. For each hub, the app shows the configuration settings previously created in the web app. At the job site, the installer applies these settings to the physical hub using the app and a Bluetooth (or NFC) connection. When the hub connects to the internet, it pulls its remaining configuration settings from the cloud. The hub also starts sending data to the cloud.

The following diagram shows the overall system design:



## Workspace

The O3 Management app's workspace uses a simple, flexible design that lets you work the way you want. The following illustration shows the main interface elements.



## Typical Workflow

Delta Controls will set up an account for your organization and invite you to the web app as an admin user. Click the link in the invite email to activate your account. After you have activated your account, you will receive a second email with a sign-in link.

When you sign in to O3 Management, you are automatically taken to the [Jobs](#) page. From the Jobs page, you can create and edit job sites and sensor hubs (just click a job site name to create and edit hubs for that site).

**Note:** If don't plan to use the default hub attribute settings, you should start with the [Templates](#) page, where you can create a duplicate of the default template and edit the settings as needed.

After you have created the sensor hubs, go to the [Users](#) page to create an installer user. Creating an installer user adds them to your organization and allows them to access the O3 Setup mobile app. It does not give them access to the O3 Management web app.

# Getting Started

To start using the O3 Management web app, you need to activate your account and sign in.

## Activate your account

On the Activate account page, enter your first and last name. Next, create a password for the account. The password is case-sensitive and must be at least 6 characters in length. There are no restrictions on special characters. Click **Activate account** to continue.

You'll receive an email confirming that your account was successfully activated. The email will also include a link to the sign-in page.


## Sign in

Open the confirmation email you received when you activated your account and click **Sign in**. On the Sign in page, enter your email address and the password you created when you activated your account. Click **Sign in** to continue.

## If you forgot your password...


If you don't remember your account password, click **Forgot password**. Enter the email address associated with your account, then click **Send link**. Simply open the email and click the link to be signed in automatically.

## Edit your account settings


If you need to edit your account settings, click  in the upper right corner of the page, and then click **My account**. You can edit your name, change your password, or change your language preference.

- To edit your name, under **Profile**, click **Edit**. Enter your first and last name, then click **Save**.
- To change your password, under **Security**, click **Change password**. Enter your current password, enter the new password, enter the new password again, and then click **Save**.
- To change your language preference, under **Preferences**, click **Edit**. Select a language from the list, then click **Save**.

## Get help

If you need help, click  in the upper right corner of the page and a help topic will open in a new tab. If you can't find what you're looking for, contact [support@deltaccontrols.com](mailto:support@deltaccontrols.com).

## Sign out

To sign out, click  in the upper right corner of the page, then click **Sign out**.



# Managing Jobs

When you sign in to the O3 Management app, you are automatically taken to the Jobs page. On the Jobs page, you can:

- Create jobs and sensor hubs
- Edit job and sensor hub settings
- Archive jobs and sensor hubs

## Create jobs

To create a job:

1. Click **Create job**.
2. Enter the name and address of the job site.
3. Enter global or starting settings for the job's sensor hubs.

<b>Network settings</b>	Select <b>DHCP</b> or <b>Static</b> , depending on whether IP settings will be assigned dynamically or manually. If <b>Static</b> is selected, provide the network address, subnet mask, gateway, and DNS information.
<b>BACnet settings</b>	Select <b>Ethernet</b> or <b>IP</b> , depending on whether you want to set up the hubs as BACnet/Ethernet or BACnet/IP devices. Provide the network number (identifies a BACnet network segment) and starting device ID (identifies a device on the BACnet network). If <b>IP</b> is selected, also provide the UDP port number (the default for BACnet/IP traffic is 47808).
<b>Security settings</b>	Enter the 6-digit passkey required for Bluetooth pairing.
<b>MQTT protocol</b>	MQTT is a messaging protocol used by the hub to communicate with the cloud. Click the slider to enable or disable MQTT. If MQTT is enabled, provide the MQTT broker IP address or URL address, and the MQTT port number. You can use the provided address or specify your own.

4. If you want, you can modify the default settings for hub reporting, hub naming, and units of measure.

<b>Hub reporting rates</b>	You can change the hub reporting rates. <ul style="list-style-type: none"><li>• <b>Sample rate</b> is the rate at which sensors record data to the hub. By default, data is recorded every 5 minutes (range 5–1440).</li><li>• <b>Report rate</b> is the rate at which sensor data is sent to the cloud. By default, data is sent every 60 minutes (range 5–1440).</li></ul>
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	<ul style="list-style-type: none"> <li>• <b>Change of value</b> is the rate at which sensor data is sent to the cloud after a change of value. By default, data is sent 5 seconds after a change of value (range 0–3600).</li> </ul>
<b>Hub naming</b>	Hub names are formed by combining the zone name and hub label. You can place the zone name before the hub label ( <b>Prefix</b> ) or after the hub label ( <b>Suffix</b> ).
<b>Units of measure</b>	You can use metric or US customary units of measure.

5. Click **Create**.


## Create sensor hubs

After you have created a job, you can create sensor hubs for it.

To create a sensor hub:

1. Click the name of the job that you want to create sensor hubs for, then click **Create sensor hub**.
2. Under **Template**, select the template you want to apply to the hub. You can apply the default template or you can apply a custom template that you have created (see [Create custom templates](#)).
3. Give a name to the hub to help identify it. First, create (or reuse) a zone name to identify the location of the hub within the building. Then, create a hub label to identify the location of the hub within the zone (and distinguish it from any other hubs in the same zone). For example, to identify a hub located in the southwest corner of Room 101, you might enter "Room 101" as the zone name and "SW" as the hub label.
4. Edit the network, BACnet, MQTT, and Bluetooth settings as needed. To save time, these settings are inherited from the job level. You only need to change the settings that are hub-specific, such as **Device ID**.
5. Click **Create**.

## Edit settings

To edit job or sensor hub settings, under **Details**, click . Edit the settings as needed. When you have finished making changes, click **Save**.

## Archive job sites and sensor hubs

If a job site or sensor hub is no longer in use, you can archive it. In the **Active** list, select the checkboxes of the items you want to archive, then click **Archive**. The selected items are removed from the **Active** list and added to the **Archived** list. Once a job site or sensor hub is archived, its settings are no longer editable. To make it active again, click **Activate**.

# Managing Templates



On the Templates page, you can:

- Create custom templates
- Duplicate custom templates
- Edit template and attribute settings
- Duplicate templates
- Archive templates

## Create custom templates

You can create a custom template by duplicating the default template and editing the attributes.


To create a custom template:

1. In the **Active** list, select the **Default** template's checkbox, then click **Duplicate**. A confirmation message appears. Click **Yes, duplicate** to continue. The duplicate template, called "Default (copy)", is added to the **Active** list.
2. To rename the duplicate template, under **Details**, click , enter a new template name and description, then click **Save**.
3. Edit individual attributes as needed. To edit an attribute, under **Details**, click , enter the desired settings, then click **Save**.

## Duplicate custom templates

To duplicate a custom template, in the **Active** list, select the checkbox of the template you want to duplicate, then click **Duplicate**. The duplicate template has "(copy)" appended and is added to the **Active** list. All duplicate templates can be edited.

## Edit settings

To edit template or attribute settings, under **Details**, click . Edit the settings as needed. When you have finished making changes, click **Save**.

## Archive templates

If a template is no longer in use, you can archive it. In the **Active** list, select the checkboxes of the templates you want to archive, then click **Archive**. The selected templates are removed from the **Active** list and added to the **Archived** list. Once a template is archived, its settings are no longer editable. To make it active again, click **Activate**.

# Managing Users

On the Users page, you can:

- Invite users
- Edit user settings
- Archive users

## User types

There are two types of users: administrators and installers.

<b>Administrator</b>	Manages jobs, templates, and users within organizations using the O3 Management web app
<b>Installer</b>	Configures sensor hubs on assigned jobs using the O3 Setup mobile app

As an administrator user, you can invite others to create a user account with your organization, which will allow them to use either the O3 Management app or the O3 Setup app, depending on their role.

## Invite users

To invite a user:

1. Click **Invite user**.
2. Enter the first and last name and the email address of the person you want to invite.
3. Select the user's preferred language.
4. Specify the user's role: **Administrator** or **Installer**. If the user is an installer, assign them to one or more job sites.
5. Click **Invite**.

The user is added to the **Active** list and an invitation email is sent to the user containing an activation link. After the user activates their account, a second email is sent with a sign-in link to either the O3 Management app or the O3 Setup app, based on the user's assigned role.

**Note:** You can see if a user has activated their account by looking at the **Date joined** column. If the user hasn't activated their account yet, it shows "*Pending invite*." If the user has activated their account, it shows the date the account was activated.

## Edit user settings

To edit user settings, under **Details**, click . Edit the settings as needed.

If the user hasn't activated their account, you can resend or cancel the invitation to create an account. To resend the invitation email, click **Resend invite**. To cancel the invitation to create an account (and remove the user from the **Active** list), click **Remove invite**.

When you have finished making changes, click **Save**.

**Note:** Email addresses are not currently editable. If you need to correct an email address, in the **Edit user** panel, click **Remove invite**, then click **Save**. Then re-create the user: click **Invite user**, re-enter their details (with the correct email address), then click **Invite**.

## Archive users

If a user is no longer active, you can archive them. In the **Active** list, select the checkboxes of the users you want to archive, then click **Archive**. The selected users are removed from the **Active** list and added to the **Archived** list. Once a user is archived, the user's settings are no longer editable. To make the user active again, click **Activate**.