O3 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 auto-populate at the hub level so they only need to be entered once, saving you time. Job-level settings include the site name and address, IP, BACnet, MQTT, and Bluetooth connection settings, hub naming conventions, units of measure, and so on.
- **Hub-level settings** are hub-specific. These 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 connection settings previously assigned to it in the cloud. At the job site, the installer transfers 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.

Current org dropdown Tabs	Alpha Organization :						ne help	- Profile settings Create button
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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 (2) 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@deltacontrols.com.

Sign out

To sign out, click (2) in the upper right corner of the page, then click Sign out.

Managing Organizations

On the Organizations page, you can:

- Create organizations
- Edit organization settings
- Archive organizations

Create organizations

To create an organization:

- 1. Click Create organization.
- 2. Enter the company's name, account ID, and address.
- 3. Enter the administrator's first and last name, email address, and language preference. If there is more than one administrator, choose someone to be the primary administrator.
- 4. Enable the Subscription slider and enter company's subscription expiry date.
- 5. When you have finished making changes, click Create.

Edit organization settings

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

Archive organizations

If an organization is no longer active, you can archive it. In the **Active** list, select the organization(s) you want to archive, then click **Archive**. The selected organization(s) are removed from the **Active** list and added to the **Archived** list. Once an organization is archived, its settings are no longer editable. To make the organization active again, click **Activate**.

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 job sites and sensor hubs
- Edit job site and sensor hub settings
- Archive job sites and sensor hubs

Create job sites

To create a job site:

- 1. Click Create job.
- 2. Enter the name and address of the job site.
- 3. Enter the connection settings that will be used by the site's sensor hubs (these can be modified later for individual hubs).

Select DHCP or Static , depending on whether IP settings will be assigned dynamically or manually. If Static is selected, provide the IP address, subnet mask, gateway, and DNS information.
Select Ethernet or IP , 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 IP is selected, also provide the UDP port number (the default for BACnet/IP traffic is 47808).
Provide the 6-digit passkey required for Bluetooth pairing.
MQTT protocol is enabled by default. To disable it, deselect the slider. If MQTT is enabled, provide the MQTTP broker IP address or URL address, and the MQTT port number.

- 4. If you want, you can change the hub reporting rates:
 - Sample rate is the rate at which hub data is sent to the cloud. Default is 5 min.
 - Report rate is the rate at which hub data is stored in the cloud. Default is 60 min.
 - Change of value is the rate at which changes to the hub data are reported to the cloud. Default is 5 sec.
- 5. If you want, you can change the units of measure for temperature and light levels.
- 6. If you want, you can change the way the hub names are formed. Hub names are formed

by combining the zone name and hub label. You can choose whether the zone name is placed before or after the hub label.

Note: Hub reporting rates, units of measure, and hub naming conventions are not editable after a job is created.

7. When you have finished making changes, click **Create**.

Create sensor hubs

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

To create a sensor hub:

- 1. Click the name of the job site 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 would enter "Room 101" as the zone name and "SW" as the hub label.
- 4. Edit the connection settings as needed. These are the settings you selected when you created the job site. Some settings, such as **Device ID**, will need to be updated for specific hubs.
- 5. When you have finished making changes, click Create.

Edit settings

To edit job or sensor hub settings, under **Details**, click \checkmark . 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 item(s) you want to archive, then click **Archive**. The selected item(s) 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 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, then click **Duplicate**. The duplicate template, called "Default (copy)", is added to the Active list.
- 2. To rename the duplicate template, under **Details**, click \checkmark , enter a new template name and description, and then click **Save**.
- 3. Edit individual attributes as needed. To edit an attribute, under **Details**, click \checkmark , enter the desired settings, and then click **Save**.

Duplicate templates

To duplicate a template, in the **Active** list, select 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 \checkmark . 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 template(s) you want to archive, then click **Archive**. The selected template(s) 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 main types of users: administrator and installer.

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

As an administrator user, you can invite users to the O3 Management app as administrators or to the O3 Setup app as installers.

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. Assign the user to be an administrator or an installer.
- 5. If the user is an installer, assign the user to one or more job sites.
- 6. When you have finished making changes, click Invite.

The user is added to the **Active** list and an invitation email is sent to the user with a link to access either the O3 Management app or the O3 Setup app based on their assigned role.

Edit user settings

To edit user settings, under **Details**, click \checkmark . Edit the settings as needed. If you need to resend the invitation email, click **Resend invite**. When you have finished making changes, click **Save**.

Archive users

If a user is no longer active, you can archive them. In the **Active** list, select the user(s) you want to archive, then click **Archive**. The selected user(s) 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**.