Digi Axess and Connect Sensor Configuration User Guide

User Guide

Revision history–90002623

Updates Release

January 2026, Revision D

Updates

- Updated information about changing the SIM card in a device.
  - Replace the SIM card and change the cellular network settings
- Updated **Physical I/O** > **Wireless** to **Physical I/O** > **Carrier**.
- Added information about bulk device registration.
  - Register a group of devices in bulk from the Devices page
- Digi Axess Assistant: This AI-powered tool is available to help answer questions about Digi Axess and related hardware.
  - Digi Axess Assistant
- Added information about the current status information for configured input and output pins.
  - Update a configured input pin
  - Update a configured output pin

Updates Release

December 2025, Revision C

Updates

- Updates to adding and updating a user profile.
  - Update a user profile from the Digi Axess Admin page
  - Add a user profile from the Digi Axess Admin page

25.10 Digi Axess Release

November 2025, Revision B

Connect Sensor web UI updates and new features

- Automation dashboard on the device's web UI
  - Access the Automation Dashboard for a Connect Sensor
  - Configure the Automation Dashboard groups and display
- Updated MQTT export values
  - Configure MQTT for a device from the device's web UI
- Configuration overview

    - Configure a Connect Sensor from the web UI
- System logging instructions
    - Configure system logging in the web UI
- Update device firmware from the web UI
    - Update the Connect Sensor firmware
- Program features
    - Programs
- Setting up I/O modules
    - Set up I/O modules

Digi Axess updates and new features

- Single Sign-On configuration
    - Configure SSO (Single Sign-On)
- Status definitions
    - Review status information for a Connect Sensor

Updates Release

October 2025, Revision A, Initial release

New release

- Created a separate document for Connect Sensor family.

Updates

- Updated the Digi Axess Mobile app documentation.
    - Install the Digi Axess Mobile app
    - Use the Digi Axess Mobile app to manage your devices
- Added documentation about switching from Cat-M1 to NB-IoT.
- Updated the MQTT configuration documentation
    - Configure MQTT for a device
    - Data Export: Manage MQTT configuration
- Change the SIM card in a device
    - Replace the SIM card and change the cellular network settings
    - Replace the SIM card and change the cellular network settings from the web UI
    - Replace the SIM card and change the cellular network settings from the CLI
- Data collection and push schedule
    - Configure the data collection and push schedule

New feature documentation

- Added documentation for the CLI commands.

Digi Axess 25.8 Release

August 2025, Revision A, Initial release

New features

- Audit logs:
  - Audit Logs
  - Review the device configuration updates audit log
  - Review the device connection history audit log
  - Review the device group configuration updates audit log
  - Review the user login history audit log
- Warranty information for the devices registered with **Digi Axess**:
  - Warranties: Review device warranties
  - Review warranty information for a device
- Device configuration update information is available from the **Devices** screen:
  - Review and update device information
  - Review device configuration update details
- Configuration reversion for a device or a device group:
  - Revert a device configuration update
  - Revert a device group configuration update
- Added **Device Schedule Values** to the formula options: **Read Interval** and **Report Interval**:
  - Device Schedule Values
- Comparison graphs: Select up to 10 devices to include:
  - Select devices to display in the comparison graphs
- Comparison graphs: Toggle the graph layout:
  - Toggle the graph layout
- Automation dashboard: View automation control thresholds in the analysis graphs:
  - View automation data in the Automation Dashboard
- Multi-factor authentication:
  - Configure Multi-Factor Authentication (MFA)

Updated features

- Updated the device group filter feature on the map toolbar: Device group filter
- Updated the user profile icon on the map toolbar:
  - Digi Axess Account menu options
  - Manage your user profile options
- Updated the notifications topics:

- View notifications from the bell icon in the Digi Axess toolbar
- Notification Management: Manage in Digi Axess Admin

New Features and Updates Release

May 2025, Revision A, Initial release

New features for the Connect Sensor XRT-M

- More features are available in the updated Digi Axess Mobile app: Use the Digi Axess Mobile app to manage your devices
- Updated MQTT topics to remove Beta test statement

Updated features

- Update Digi Axess account creation process: Step 1: Create a Digi Axess account and initial admin user
- User feedback form is now available: User feedback options and customer support
- Updated hardware list: Applicable hardware

New Features and Updates Release

March 2025, Revision A, Initial release

Updated features

- Documented how to change the cellular connection type: Change the connection from Cat-M1 to NB-IoT

New Features and Updates Release

December 2024, Revision A, Initial release

New feature documentation

- **New** device status option: Filter the location pins by location status and Display device tiles in a grid format
- External battery power change notification: Notification types
- Battery status display as a graphic: Review status information for a Connect Sensor and Digi Axess Location Status information
- Configure input pins: Numeric, Digital, and Hex: Configure input pins
- Configure output pins: Numeric, Digital, and Hex: Configure output pins
- Create a customer account on your own: Step 1: Create a Digi Axess account and initial admin user
- Configure MQTT: Data Export: Manage MQTT configuration and Configure MQTT for a device

- Configure event queues: Data Export: Configure Event Queues
- Review Device Reports: Device Reports: Review in Digi Axess Admin
- **Reference Device** feature available when adding a formula: Add a device group formula in the web UI and Add a formula from the Administration dashboard
- Updated device schedule: Configure the data collection and push schedule
- Mobile App for initial device connection:Use the Digi Axess Mobile app to manage your devices

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To provide feedback on this document, email your comments to

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Include the document title and part number (Welcome to Digi Axess, 90002623 C) in the subject line of your email.

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Review device status information in the Device Summary page

Digi Axess Account menu options

Create device comparison graphs in Digi Axess

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Device Management: Manage in Digi Axess Admin

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Use the Digi Axess Mobile app to manage your devices

Configure a Connect Sensor from the web UI

Automation Control

CLI Commands

Legacy device: Connect Sensor+

Welcome to Digi Axess

Digi Axess is a web-based application that brings alarms, reports and control to your web browser.

Applicable hardware

This manual supports configuration on hardware listed below. Hardware information is here:

- Connect Sensor family: *Digi Connect Sensor Family Hardware Guide*

Note For information about Connect Sensor+ with Digi Axess (CSENSE-S210), see Legacy device: Connect Sensor+.

Digi Connect Sensor XRT-M

SKU	Description
CSENSE-M110	Digi Connect Sensor XRT-M ■ DIN rail mountable modular telemetry

Digi Connect Sensor XRT-M NEMA

SKU	Description
CSENSE-M210	Digi Connect Sensor XRT-M NEMA ■ NEMA case ■ Batteries are included
CSENSE-M210-N	Digi Connect Sensor XRT-M NEMA, no batteries ■ NEMA case ■ Batteries are not included

Safety information

Before you begin, you should review the safety statements for the devices that you want to configure.

Connect Sensor XRT-M

- Safety notices

Connect Sensor XRT-M NEMA

- Safety notices
- Technical ratings

Get started with Digi Axess

Digi Axess offers a comprehensive solution for collecting and presenting data from your remote infrastructure and assets. When you log in to Digi Axess, a location map that includes complete information about each of the monitoring devices that are connected to Digi Axess displays. The devices are displayed in a list on the side of the map as well as noted by location pins on the map.

This process explains how to access the Digi Axess map, assemble your devices and connect them to the cellular network, and then view the devices on the map.

Step 1: Create a Digi Axess account and initial admin user

You can create your Digi Axess account after you have purchased a Connect Sensor and have the device's IMEI.

Account creation includes entering an email address for the initial admin user. When this process is completed by Digi, Digi Axess sends an email to the initial admin user, notifying the admin to complete their account setup and set a password for their Digi Axess account.

Note If you already own devices that you want to connect to Digi Axess, contact the Digi Support Team for help registering a pre-owned device.

Before you begin

You should gather the required account information before you begin creating a Digi Axess account.

- The IMEI of the device you have purchased. The IMEI is printed on the device label.
- A descriptive name for your customer account.
- A unique customer account ID. The ID must be at least 4 characters long and contain only letters and numbers.
- An email address for the account administrator.

To create a new Digi Axess account:

1. Navigate to digiaxess.com in your web browser.
2. Click **Login**. The **Digi Axess Log In** page displays.
3. Click **Create New Account**. The **Create New Digi Axess Account** page displays.
4. Enter the account fields.

- **Serial number**: (Required): Enter the IMEI of the device you have purchased.

  As an alternative, click the **Scan Barcode** button next to the field and use a camera or a saved image to enter an identifier.
- **Company Name**: (Required) Enter a descriptive name for your customer account.
- **Account ID**: (Required) Enter a unique customer account ID. The ID must be at least 4 characters long and contain only letters and numbers.
- **Email**: (Required) Enter the account administrator's email address.
- **First Name** and **Last Name**: Enter the first and last name of the account administrator.

5. Click **Create Account**.
6. Digi Axess sends an email to the initial admin user, notifying the admin to complete their account setup and set a password for their Digi Axess account.

NEXT STEP: Proceed to Step 2: Assemble and power your devices.

Step 2: Assemble and power your devices

You need to assemble and power your devices, and make sure they can connect to the cellular network. A cellular network connection is needed to be able to see your devices on Digi Axess.

- Assemble the Connect Sensor XRT-M NEMA hardware
- Assemble the Connect Sensor XRT-M

Note If the Connect Sensor is deployed in an area without Cat-M1 cellular service, you can switch to the device from Cat-M1 to NB-Iot to allow a cellular connection. See Establish a connection to NB-IoT.

NEXT STEP: Proceed to Step 3: Register your device.

Step 3: Register your device

You must register the devices that you want to access and manage from Digi Axess. The process uses the device's IMEI as a unique identifier.

- Register a Connect Sensor device

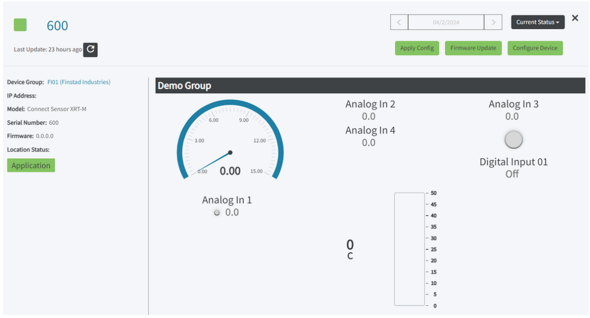
NEXT STEP: Proceed to Step 4: Verify device registration.

Step 4: Verify device registration

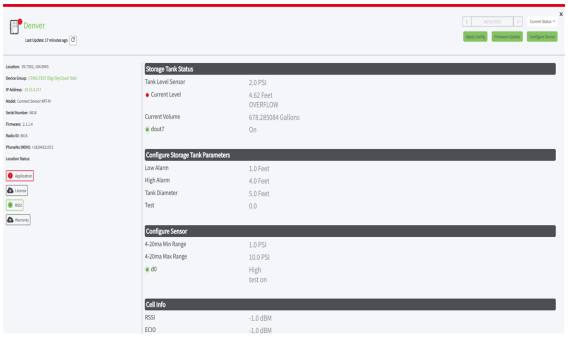
After you have registered your device, you can log into Digi Axess and verify that it is mapped correctly.

1. Wake the Connect Sensor using a magnet. See Manually wake the Connect Sensor.
2. Log into Digi Axess.

3. Find the registered device using one of the following methods.
   - Use the **Search Devices** field in the toolbar to find the device that you just registered. You can search by serial number or location name.
   - Click on the device's location pin in the map.
   - Select a device from the list of mapped devices.
   - Display the devices in the table format, and search for the device.
4. Click on the device location pin or device name from the list of devices to display the device's Device Summary page. The information that displays in the Device Summary page depends on the configuration option you chose during initial registration.
   - **Demo Configuration**: This is the default configuration, and displays basic information in the Device Summary page: Analog in Voltage, Digital in, and Case temperature.



   - **Blank Configuration**: No data displays. You must manually configure the device in the device's **Administration** page.
   - **Saved Configuration**: Data for the options in the saved configuration display.



Set up is complete!

Step 5: Experience Digi Axess and configure your devices

After you have assembled your devices and connected to a network, you can log into Digi Axess and configure your devices, review device information, and manage the Digi Axess map and administration features, such as device registration and passwords.

Devices can also be configured from the device's web UI. You can access a device's web UI from Digi Axess or by logging into a device from a browser window.

Working with the Digi Axess map

The Digi Axess device map displays as the main page when you log into Digi Axess. A location pin displays on the map for each device that has location coordinates assigned.

- Log in to Digi Axess: Log into Digi Axess
- Information about the map, toolbars, and location pins is found here: Digi Axess map overview
- Information about the status of a device displays in the Device Summary page. The page is displayed from the Digi Axess map by clicking on a location pin or on a device name from the mapped device list. Information about the Device Summary page is here: Review device status information in the Device Summary page.
- Information about the user profile features is found here: Digi Axess Account menu options. You can use the **Account** menu options to change your password, register a device, edit your contact preferences, set your map display preferences, allow pop-up notifications, and log out of Digi Axess.

Configuring a device

You can configure a device by logging into its web user interface, either from the Device Summary page from the Digi Axess map, or by logging into the web UI from a browser window.

- Device Summary page in the Digi Axess map: Access the device's web UI from the Device Summary page

Configuration documentation is available here:

- Configure a Connect Sensor from the web UI

Use the Digi Axess Mobile app for initial device connection and to monitor your devices

You can use the Digi Axess Mobile app to log into Digi Axess to monitor all of your devices, and receive and manage notifications from Digi Axess.

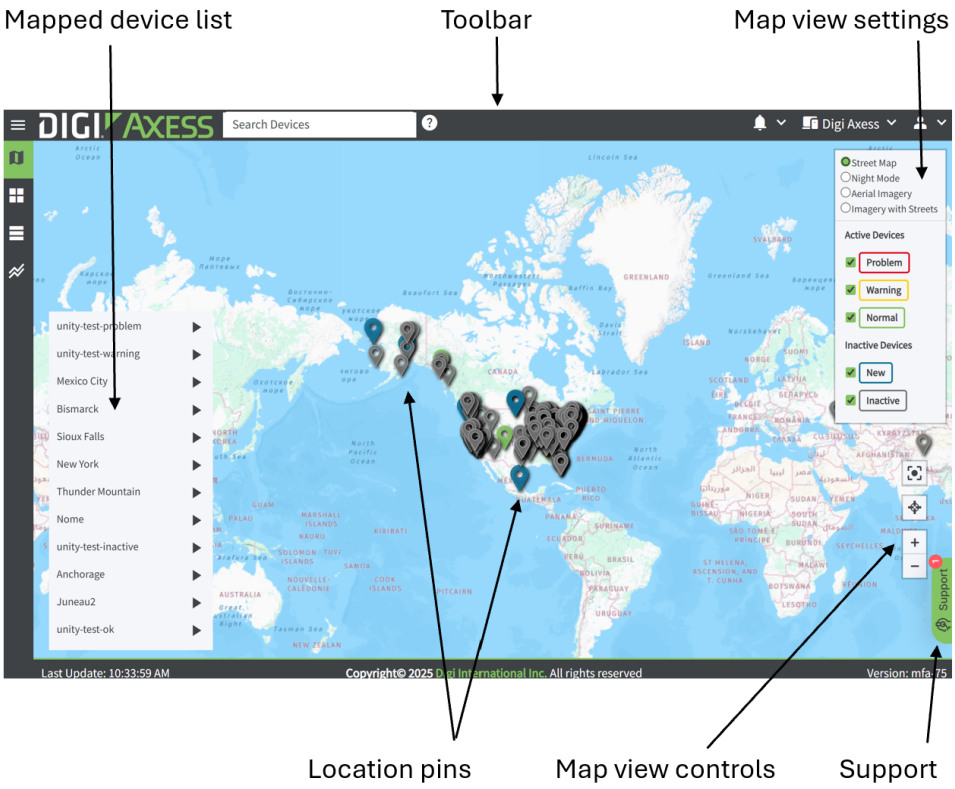
In addition, you can easily connect to your Connect Sensor devices from the Digi Axess Mobile app. The app uses Bluetooth to find and connect to the Connect Sensor devices near you that are awake and have the mobile app service enabled on the device.

This feature is intended to be used for the initial connection to a Connect Sensor. You can connect to a Connect Sensor and then verify that the sensors connected to the device are working as expected.

- Use the Digi Axess Mobile app to manage your devices

Digi Axess map overview

The Digi Axess device map displays as the main page when you log into Digi Axess. A locator pin displays on the map for each mapped industrial control and monitoring device.

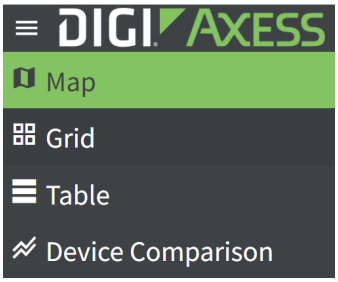


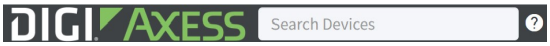
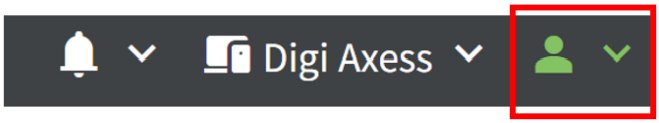
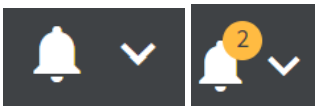
Item	Description
Toolbars	Use the toolbar items at the top of the page and in the left pane to display lists of devices: mapped devices, other devices, or device groups. You can also search for a device. ■ Digi Axess map toolbar
Location pins	Devices that have latitude and longitude coordinates assigned are noted with a location pin on the Digi Axess map.

Item	Description
	■ Location pins on the Digi Axess map
Map view settings	The Digi Axess map settings determine the map design and which location pins are displayed in the map. ■ Specify Digi Axess map display style
Mapped device list	The mapped device list is a list of up 20 devices that have assigned latitude and longitude coordinates, and that are in the viewable map area. As you change the focus of the map, or zoom in or out, the list is updated to match the devices displayed on the map. You can hover or click on a device name to display more information about the device. ■ Digi Axess mapped device list
Map view	Use the icons on the lower right corner of the map to manage the map view. ■ Manage the Digi Axess map view
Support	Click the green **Support** link to access a set of feedback options, a link to the Digi Axess user guide, and access to customer support. The **Support** link displays on the bottom of every page. ■ User feedback options and customer support

Digi Axess map toolbar

The table below includes information on the Digi Axess map toolbar.

Option	Description
Details	Use the icons in the toolbar in the left pane to display the map, device information, and device comparisons. The icons display by default. To expand the toolbar to include the icon names, click the hamburger icon in the upper left corner of the page.  ■ **Map**: Display the default map page. ■ **Grid**: Display device information in a grid format. You can filter and sort the devices. See Display device tiles in a grid format. ■ **Table**: Display device information in a table format. You can filter and sort

Option	Description
	the devices. See Display devices in a table format. ■ **Device comparison**: Display application automation information for up to 10 devices in the selected group in graphs. See Create device comparison graphs in Digi Axess.
Search Devices	Search for a device by an identifying feature: serial number, model, device group, location name, or IP address. The search field is available only when the map page is in the **Map** or **Grid** views. 
Device group filter	Filter the devices displayed on the map page by device group. The default is the top level of the device group hierarchy. Only the device groups associated with your log in credentials display. Click the down arrow to display a search field, the **All Devices** option, and list of groups to choose from. ■ **Default selection**: The top level of the device group hierarchy. ■ **All Devices**: Click this option to reset the device group filter to the top level of the device group hierarchy. ■ **Search**: As you type in the search field, a hierarchical tree of the device groups that match your text string displays. 
User profile icon	The user profile icon displays in the toolbar. Click the down arrow next to the icon for a list of user profile management options and the login name for the current user. See Digi Axess Account menu options. 
Notifications	The bell icon shows you whether you have any notifications to review. The colored dot on the bell shows how many new notifications you have and the color of the dot signifies the notification level. Click the down arrow next to the bell icon to can view and manage the Digi Axess notifications.  For more detailed information, see View notifications from the bell icon in the Digi Axess toolbar.

Location pins on the Digi Axess map

Devices that have latitude and longitude coordinates assigned are noted with a location pin on the Digi Axess map.

Assigning coordinates

The latitude and longitude coordinates can be assigned manually or automatically.

Manually

You can assign the coordinates to the device from the web UI.

- Configure the location with manually defined coordinates

Automatically

The coordinates are assigned using the GPS on the device.

The device must have a cellular connection to be able to automatically assign coordinates.

- Configure the location with GPS-defined coordinates

Location pin color

The color of the location pin shows the status of the location. The color is determined by the Location Status items, which are a set of metrics tracked by the firmware.

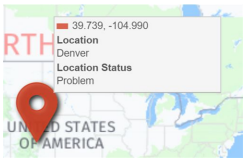
- **Red**: At least one of the **Location Status** items is red.
- **Yellow**: At least one of the **Location Status** items is yellow. The rest may be green or yellow, but none are red.
- **Green**: All of the **Location Status** items are green.
- **Gray**: The device has not connected to Digi Axess within the last 24 hours.

Location pin with a blue center

A location pin has a blue center if the device has an Automation input configured that evaluates either a threshold or an on/off state, and is then received by Digi Axess from the device. The input configuration is user-defined.

Hover over a location pin

When you hover over a location pin on the map, a dialog that shows information about the location displays: the latitude and longitude of the location, and the location name and status.

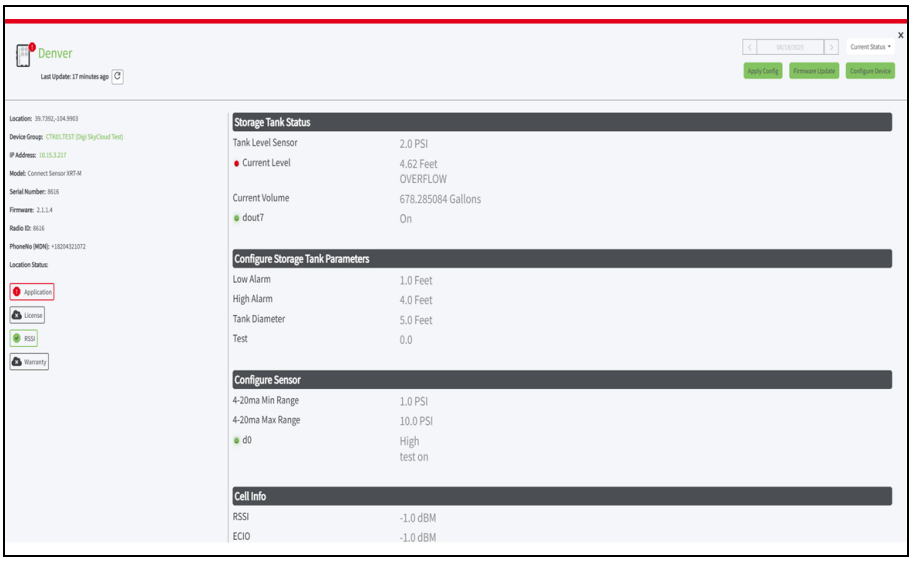


Item	Description
Color bar	Denotes the status of the location, which matches the location pin color.
Coordinates	The latitude and longitude of the device's physical location. Location coordinates can be configured manually or using the device's GPS.

Item	Description
	■ Configure the location with manually defined coordinates ■ Configure the location with GPS-defined coordinates.
Location Name	The name assigned to the device.
Location Status	The status of the location, which coordinates with the color assigned to the location pin. The location status is determined by the Location Status items, which are a set of metrics tracked by the firmware. ■ **OK**: Green color bar. All of the **Location Status** items are green. ■ **Warning**: Yellow color bar. At least one of the **Location Status** items is yellow. The rest may be green or yellow, but none are red. ■ **Problem**: • Red color bar: At least one of the **Location Status** items is red. • Gray color bar: The device has not connected to Digi Axess within the last 24 hours.

Click a location pin

Click a location pin to display the Device Summary page with status information about the device. For information about this page, see Review device status information in the Device Summary page.

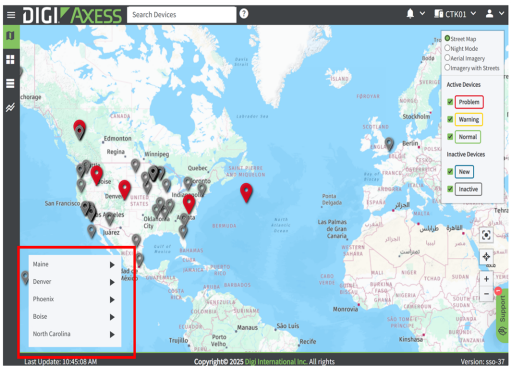


Digi Axess mapped device list

A list of the mapped devices displays in the lower left corner of the map. Only devices that have latitude and longitude coordinates assigned display in the list.

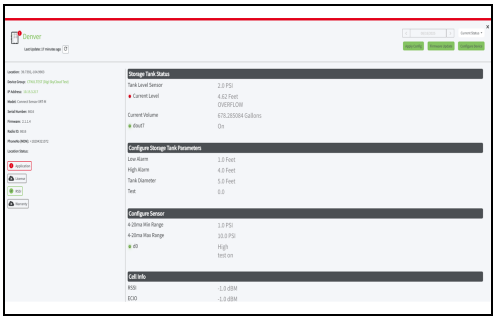
Up 20 devices are included in the list, and match the devices that are in the viewable map area. As you change the focus of the map, or zoom in or out, the list is updated to match the devices displayed on the map.

You can hover or click on a device name to display more information about the device.



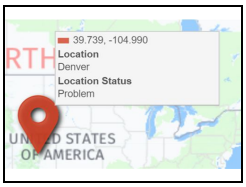
Click a device name

Click the name of a device to display the Device Summary page with status information about the device. For information about this page, see Review device status information in the Device Summary page.



Hover over a device name

When you hover over a name in the list or over a location pin on the map, a dialog that shows information about the location displays: the latitude and longitude of the location, and the location name and status.

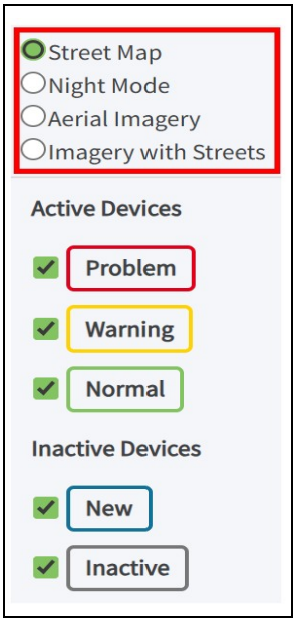


Item	Description
Color bar	Denotes the status of the location, which matches the location pin color.
Coordinates	The latitude and longitude of the device's physical location. Location coordinates can be configured manually or using the device's GPS. ■ Configure the location with manually defined coordinates ■ Configure the location with GPS-defined coordinates.
Location	The name assigned to the device.

Item	Description
Name	
Location Status	The status of the location, which coordinates with the color assigned to the location pin. The location status is determined by the Location Status items, which are a set of metrics tracked by the firmware. ■ **OK**: Green color bar. All of the **Location Status** items are green. ■ **Warning**: Yellow color bar. At least one of the **Location Status** items is yellow. The rest may be green or yellow, but none are red. ■ **Problem**: • Red color bar: At least one of the **Location Status** items is red. • Gray color bar: The device has not connected to Digi Axess within the last 24 hours.

Specify Digi Axess map display style

A set of Digi Axess map imagery options displays on the map page in the upper right corner by default. You can choose the imagery option that provides the level of detail you need.



Option	Description
Street Map	A flat street map without aerial imagery. This is the default.
Night Mode	A flat street map without aerial imagery in night (dark) mode.
Aerial Imagery	A high resolution satellite aerial image.
Imagery with Streets	A high resolution hybrid aerial image with street names superimposed.

Filter the location pins by location status

A set of Digi Axess location pin filters displays on the map page in the upper right corner by default. You can filter the types of location pins that display in the map.

When a pin type is selected, pins of that type are displayed. By default, all active devices are displayed and inactive devices are not displayed.

Option	Description
Active Devices	The active devices are grouped by the status of the devices, which coordinates with the color assigned to the location pin. The location status and color is determined by the Location Status items, which are a set of metrics tracked by the firmware. ■ **Problem** (Red): At least one of the **Location Status** items is red. ■ **Warning** (Yellow): At least one of the **Location Status** items is yellow, and none are red. ■ **OK** (Green): All of the **Location Status** items are green.
Inactive Assets	■ **Inactive 24 hours** (Gray): The device has not connected to Digi Axess within the last 24 hours. ■ **New** (Blue): The device is registered to your account but has not yet reported to Digi Axess. The device remains in this status until it connects to Digi Axess and reports a status.

Manage the Digi Axess map view

You can use the icons on the lower right corner of the map to manage the map view.

Icon		Description
	**Center Map**	Click to center the map on the Digi Axess map page.
	**My location**	Click to center the map on the mapped location associated with your computer. Any location information available on the computer you are using to access Digi Axess is sent to Digi Axess to determine your location. A blue shaded circle displays over the most likely area of your location. Note Location information is between your laptop and the Digi Axess server over the network. Typically, the location determination is made by identifying the location of the first network element that your network traffic is passing through. The actual accuracy of this can vary significantly depending on the network architecture of your serving network. The location permission must be turned on for this feature to work as expected. ▪ **Location permission ON**: A blue location circle displays on the map at the location assigned to your computer. ▪ **Location permission OFF**: A dialog box displays a message about a geolocation error. To use this feature, click the lock icon next to the URL name in your browser window, and look for the location option for your browser. Turn the location permission option **ON**.
	**Zoom in**	Click to zoom in on the map.
	Zoom out	Click to zoom out on the map.
	Hand icon	The Windows hand icon displays in the map. Click and depress the left mouse button to move the map and focus on the desired area.

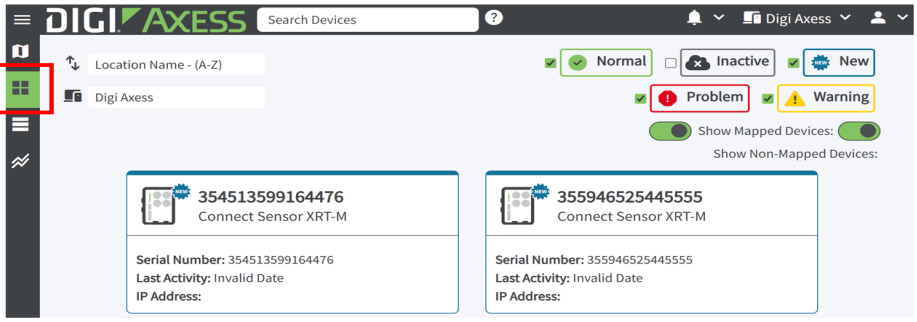
Display device tiles in a grid format

You can display device information in a grid format. Within the grid, you can filter and sort the devices.

Note You can also display devices in a table format. See Display devices in a table format.

Display the device grid

1. Log into Digi Axess.
2. Click the grid icon on the toolbar on the left side of the screen to display the device grid.



Filter the devices by location status

A set of Digi Axess location status filters displays at the top of the grid. You can use these to specify which types of devices should be displayed. The location status and color is determined by the Location Status items, which are a set of metrics tracked by the firmware.

- **Problem** (Red): At least one of the **Location Status** items is red.
- **Warning** (Yellow): At least one of the **Location Status** items is yellow, and none are red.
- **OK** (Green): All of the **Location Status** items are green.
- **Inactive 24 hours** (Gray): The device has not connected to Digi Axess within the last 24 hours. By default, this option is not selected.
- **New** (Blue): The device is registered to your account but has not yet reported to Digi Axess. The device remains in this status until it connects to Digi Axess and reports a status.

Filter the devices by device group

You can filter the devices displayed on the map page by device group. From the **Filter By Device Group** list box, select a device group option.

The default is **All Device Groups**. Only the device groups associated with your login credentials display.

Sort the devices

You can sort the devices in ascending (A-Z, low-high) or descending order (Z-A, high-low). From the **Sort By** list box, select a sort order option:

- **Status - Ascending**: inactive, green, yellow, red
- **Status - Descending**: red, yellow, green, inactive
- **Location Name - (A-Z)** 0 - 9, then A - Z
- **Location Name - (Z-A)** Z - A, then 9 - 0
- **Serial Number - Ascending** 0 - 9
- **Serial Number - Descending** 9 - 0

- **Model - Ascending**: blank, 0 - 9, A - Z
- **Model - Descending** Z-A, 9-0, blank

Review the device grid

The device information in the grid is a subset of the information included in the Device Summary page.

Item	Description
Name banner	The colored location name banner shows the status of the location. The color is determined by the Location Status items, which are listed on the left pane. ■ **Green**: All of the **Location Status** items are green. ■ **Yellow**: At least one of the **Location Status** items is yellow. The rest may be green or yellow, but none are red. ■ **Red**: At least one of the **Location Status** items is red. ■ **Gray**: The device has not connected to Digi Axess within the last 24 hours.
Serial Number	The device's identifier, which is the device's IMEI.
Model	The device model name.
Name	The name of the location. To change the location name, click the name to access the web UI for the device. ■ Change the location name for a Connect Sensor
Date and time	The date and time on which the device last connected to Digi Axess.
IP Address	The IP address assigned to the device.
Location	The latitude and longitude for the device's physical location. See the Assigning Coordinates table for details.
Location Status	A set of metrics tracked by the firmware. The color denotes the status of the metric. For detailed information, see Digi Axess Location Status information.

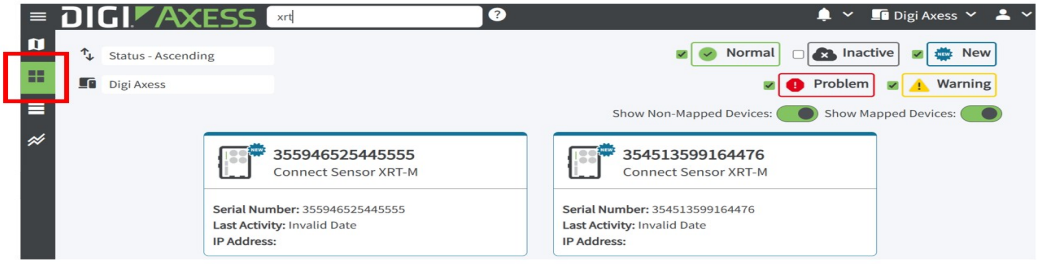
Display devices in a table format

You can display device information in a table format. Within the table, you can filter the devices.

Note You can also display devices in a grid format. See Display device tiles in a grid format.

Display the table

1. Log into Digi Axess.
2. Click the table icon on the toolbar on the left side of the screen to display the table.
3. Click a row in the table to display the Device Summary page for the device.



Filter the devices

Use the columns to filter the devices in the table.

Item	Description
Status	Click the **Status** list box and select the location status you want to display. The location status is a set of metrics tracked by the firmware. The color denotes the status of the metric. For detailed information, see Digi Axess Location Status information.
Serial Number	Enter the device's IMEI. The device list is limited to matching entries as you type.
Model	Select a device model from the list box.
Device Group	Select a device group from the list box.
Location	Enter the name of a device. The device list is limited to matching entries as you type.
IP Address	Enter the IP address of a device. The device list is limited to matching entries as you type.

Select the columns to display

By default, all of the columns display in the table. You can de-select the columns that you don't want to display.

Click the **Columns** button to display a list of the columns. By default, **Toggle All** is selected and all columns display. De-select the columns that you don't want to display. You can re-select a column at any time.

If you de-select **Toggle All**, only the **Status** and **Serial Number** columns display.

Change the pagination of the table

Click the **Hide/Show Pagination** icon at the top of the page to remove pagination.

Display the devices as cards

You can display the table as a set of cards.

Click the **Cards** icon at the top of the page to display the table as cards. Click the icon again to return to the table view.

Set your map page display defaults

You can configure the display defaults for the map page with the user profile **Preferences** options. These defaults are applied to the map page each time you log in.

1. Log into Digi Axess.
2. In the toolbar, click the down arrow next to the user profile icon. The **Account** menu displays.
3. Click **Preferences**. A list of preference options displays. Click each option and select a default.

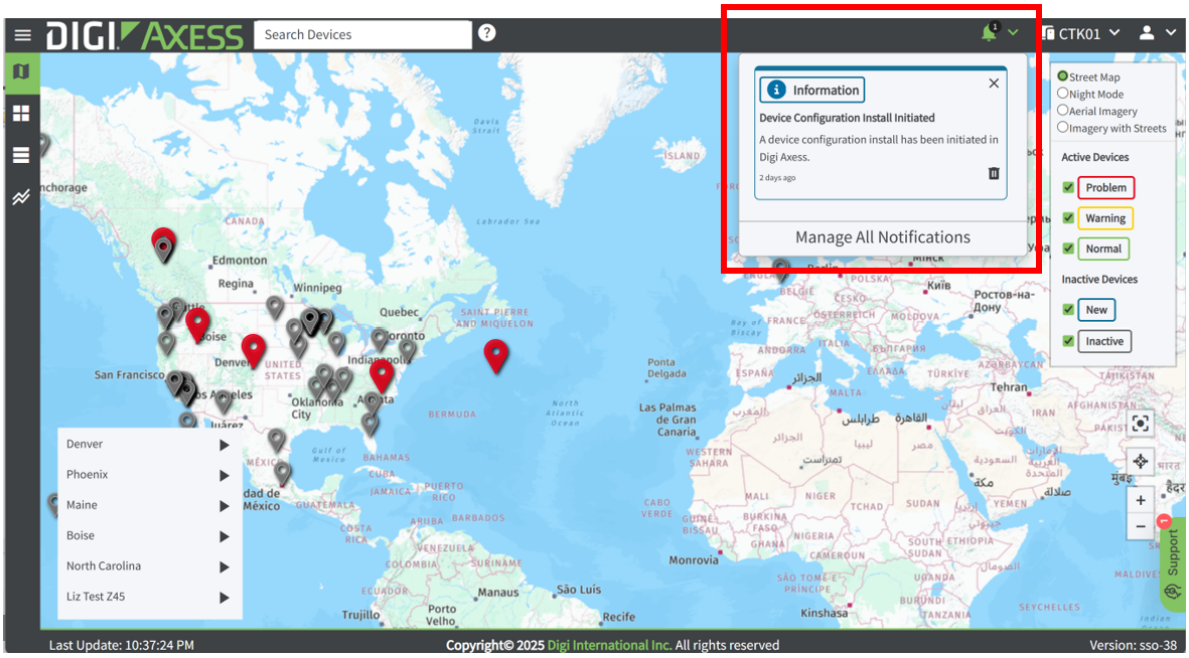
Option	Description
Default Tab	Click to display the map page display options: **Map**, Grid, Table, or Device Comparison. The default option is **Map**.
Default Group	Click to display all of the groups that you are able to view. The default option is **All Device Groups**.
Theme	Click to display the display theme options: **Browser Default**, **Light** or **Dark**. The default option is **Browser Default**.
Default Map	Click to display the map display options: **Street**, **Night**, **Satellite**, or **Hybrid**. The default option is **Street**.
Show Inactive Devices	Click to specify whether you want to include location pins for inactive devices in the map. Location pins for inactive devices are gray. Options are **Yes** or **No**. The default option is **No**.

4. Click **Save** to save and apply your choices.

View notifications from the bell icon in the Digi Axess toolbar

The bell icon in the **Digi Axess** toolbar shows you whether you have any notifications to review. The colored dot on the bell shows how many new notifications you have and the color of the dot signifies the notification level.

Click the down arrow next to the bell icon to view and manage the **Digi Axess** notifications.



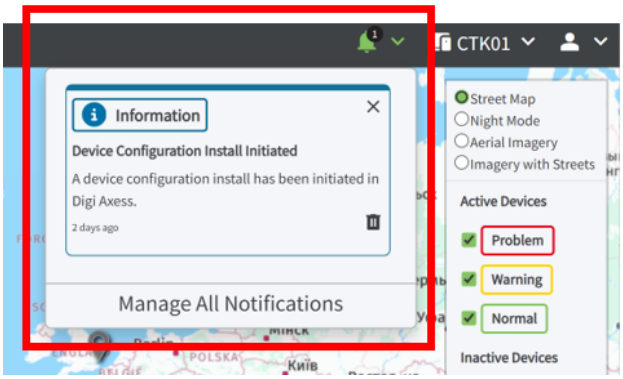
Notification type and number: Review the colored dot on the bell

The number in the colored dot on the bell shows how many new notifications you have. The color of the dot signifies the notification level.

Icon	Level	Color	Description
	Success	Green	A process has completed successfully.
	Warning	Yellow	At least one warning notification as been sent because a process has not completed as expected.
	Danger	Red	At least one danger notification as been sent because a process has not completed and requires attention.
	Information	Blue	Information about a process is provided.

Display the notifications

Click the down arrow next to the notification bell to display the notifications and management options.



Item	Level
List of notifications	The unread notifications display in a list of tiles. Click the notification tile to open the **Notifications** page and review the notification details.
X	Click **X** to remove the notification from this list. It is still available on the Notifications page, and noted as a "read" message. If you want the notification to be accessible again from the bell icon, mark the notification as "unread" in the **Notifications** page.
Delete icon	Click the **Delete** icon to delete the message.
Manage All Notifications	Click **Manage All Notifications** to display the notifications in the Notifications page.

Digi Axess update banner

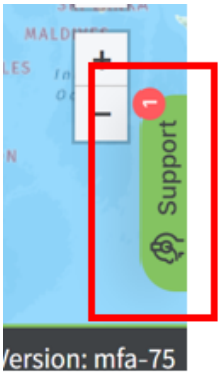
A Digi Axess update banner displays when you log into Digi Axess, and includes information about updates to Digi Axess. You can also ignore the banner so that it does not display.

- **Don't Show Again**: Click **Don't Show Again** to permanently turn off the banner. It will not display when you log into Digi Axess.
- **Ignore**: Click **Ignore** to close the banner. It displays the next time you log into Digi Axess.

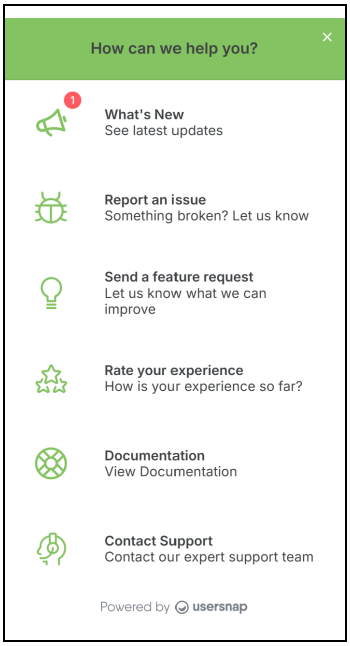
User feedback options and customer support

You can use the green **Support** link to access a set of feedback options, a link to the Digi Axess user guide, and access to customer support. The **Support** link displays on the bottom of every page.

If there are new messages to review, the number of messages displays in a red circle.



Click the **Support** link to display the support options page.



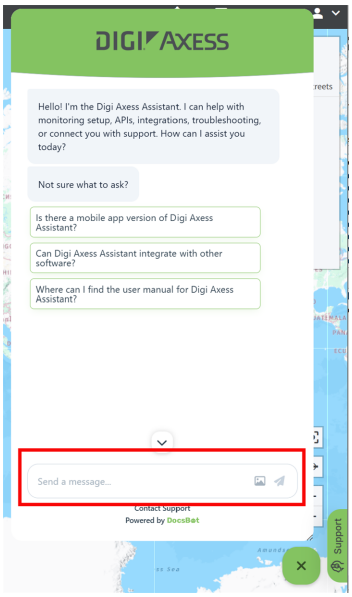
Option	Description
What's New	Displays an announcement dialog with current information about Digi Axess.
Report an issue	Capture information about an issue in Digi Axess.
Send a feature request	Share ideas about enhancements for Digi Axess.
Rate your experience	Tell us how we're doing! Click the stars and enter any comments.
Documentation	Open the Digi Axess online help.
Contact Support	Launch the Digi Support page.

Digi Axess Assistant

You can ask the Digi Axess Assistant for help on any topic about Digi Axess and the devices that connect to Digi Axess. Digi Axess Assistant is an AI-powered tool that searches the Digi Axess and related hardware documentation to find the answers you need.

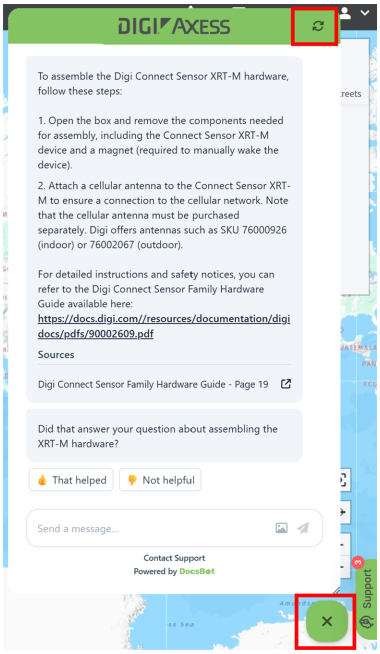
The Digi Axess Assistant is available in the lower right corner of every Digi Axess page.

Click the icon to display the Digi Axess Assistant question page. Type your question into the field provided and the answer displays in the same window.



To clear the window of all questions and responses, click the refresh button at the top of the screen.

When you are done working with the Digi Axess Assistant, click the green X icon to close it.


DIGI AXESS
To assemble the Digi Connect Sensor XRT-M hardware, follow these steps:
1. Open the box and remove the components needed for assembly, including the Connect Sensor XRT-M device and a magnet (required to manually wake the device).
2. Attach a cellular antenna to the Connect Sensor XRT-M to ensure a connection to the cellular network. Note that the cellular antenna must be purchased separately. Digi offers antennas such as SKU 76000926 (indoor) or 76002067 (outdoor).
For detailed instructions and safety notices, you can refer to the Digi Connect Sensor Family Hardware Guide available here:
https://docs.digi.com//resources/documentation/digidocs/pdfs/90002609.pdf
Sources
Digi Connect Sensor Family Hardware Guide - Page 19
Did that answer your question about assembling the XRT-M hardware?
That helped
Not helpful
Send a message...
Contact Support
Powered by DocsBot
Support

Review device status information in the Device Summary page

Information about the status of a device displays in the Device Summary page. The page is displayed from the Digi Axess map by clicking on a location pin or on a device name from the mapped device list.

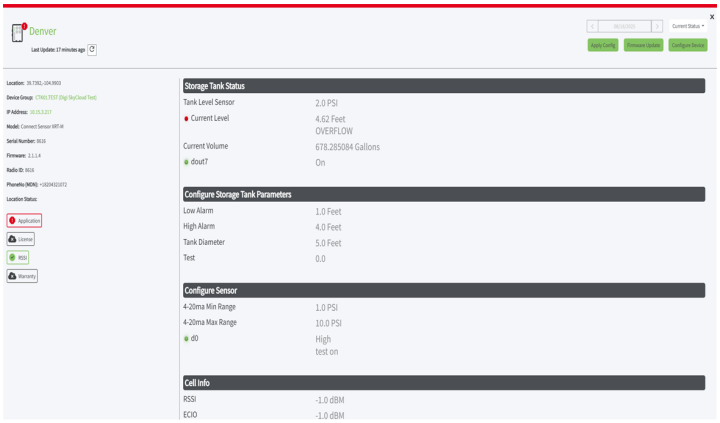
You can create dashboard groups, and then choose to hide groups that shouldn't be displayed, and determine if all groups or only a default group should be displayed.

You can also configure the display format for the groups, such as a graphical format or in a table. You can also configure how often the data should be refreshed.

Display the Device Summary page

Information about the status of a device displays in the Device Summary page.

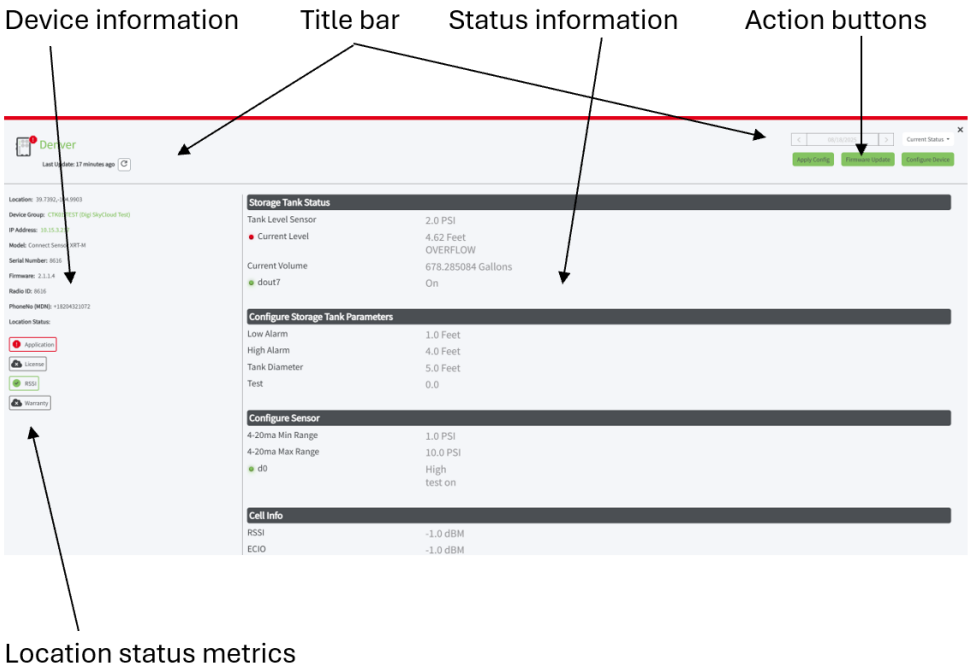
1. Log into Digi Axess. The Digi Axess map displays.
2. Select the device for which you want to display the Device Summary page and use one of the following methods to display the page:
   - Click on a location pin on the map.
   - Click on a device name from the mapped device list.



3. For information about the sections in the Device Summary page, see Review device information in the Device Summary page.

Review device information in the Device Summary page

You can display the Device Summary page by clicking on a location pin or on a device name from the mapped device list.



Action buttons

Button	Description
Apply Config	Click **Apply Config** to apply a configuration update to the device. This button displays only if the user logged in is an Admin. See Apply a configuration file to a Connect Sensor from the Device Summary page.
Firmware Update	Click **Firmware Update** to schedule a firmware update for the device. This button displays only if the user logged in is an Admin. See Update the Connect Sensor firmware from the Device Summary page.
Configure Device	Click **Configure Device** to access the web UI for the device. See Access the device's web UI from the Device Summary page.

Device information

Item	Description
Location	The latitude and longitude for the device's physical location. See the Assigning Coordinates table for details.

Item	Description
Device Group	The device group in which this device is included. See Device Management: Manage in Digi Axess Admin.
IP Address	The IP address assigned to the device.
Model	The device model name.
Serial Number	The device's identifier, which is the device's IMEI.
Firmware	The firmware version currently installed on the device.
Radio ID	The IMEI assigned to the device.
PhoneNo (MDN)	The phone number associated with the wireless account.
Location Status	A set of metrics tracked by the firmware. The color denotes the status of the metric. For detailed information, see Digi Axess Location Status information.

Title bar

Item	Description
Status indicator	The colored square next to the location name shows the status of the location. The color is determined by the Location Status items, which are listed on the left pane. ■ **Green**: All of the **Location Status** items are green. ■ **Yellow**: At least one of the **Location Status** items is yellow. The rest may be green or yellow, but none are red. ■ **Red**: At least one of the **Location Status** items is red. ■ **Gray**: The device has not connected to Digi Axess within the last 24 hours.
Blue Status indicator	A second colored square, which is always blue, displays if the device has an Automation input configured that evaluates either a threshold or an on/off state, and is then received by Digi Axess from the device. The input configuration is user-defined.
Name	The name of the location. Click the location name to launch the web UI for the device.
Date	Determines the date for the historical data that displays. The current date is the default. Click the **Date** to display a calendar pop-up. Select a day to display a historical view of network management data that is displayed on the device, radio, and network tabs. Click the **Previous Day** (left arrow) and **Next Day** (right arrow) to display data from the previous or the next day.
Last Update	The last time at which the device data was updated. Click the refresh button to refresh the data. 

Status information

The data available depends on the device. An overview of the sections that may display is in the table below.

For more detailed information, see:

- Review status information for a Connect Sensor

Item	Description
Current Status list box	Select the items that you would like to display in the body of the page. The information in each section is dependent on the device. ■ **Show all**: Show all of the available information. This is the default. ■ **Device-specific automation groups**: Any automation that has been programmed to collect data from the device displays as an option. ■ **Analysis**: Show only the graphed analysis of the collected data. ■ **System Status**: Show hardware information. ■ **Network Status**: Show cellular network information.

Location status metrics

The location status information is a set of metrics tracked by the firmware and displays in the asset list.

For detailed information, see Digi Axess Location Status information.

Review status information for a Connect Sensor

The device status, network status, and configuration information for a Connect Sensor can be displayed in the Device Summary page.

Automation Control Groups

Any automation control groups that have been assigned a group name display as a section on this page. The groups are unique to each Connect Sensor.

As an alternative, you can also review automation control group data in the Automation Dashboard page.

Device Status

The device status information is calculated for the current data as of the last time that the device reported information.

Item	Description
Battery 1 Status **Battery 2 Status**	A battery graphic describes the status of the battery. ■ **Full green**: Battery status good. ■ **Partial green**: Battery status good. ■ **Yellow**: Battery should be changed soon.

Item	Description
	■ **Red**: Battery needs to be changed. ■ **Dash**: Battery is not plugged in.
External Voltage	The voltage of a physically connected power supply.
Battery Only Connection Count	The number of connections made by the device without an external voltage connected. The external voltage is counted only if it is 9v or greater.
Case Temperature	The temperature of the Connect Sensor enclosure.
CPU Temperature	The temperature of the Connect Sensor device.
Firmware Version	The current firmware version installed on the device.

Network Status

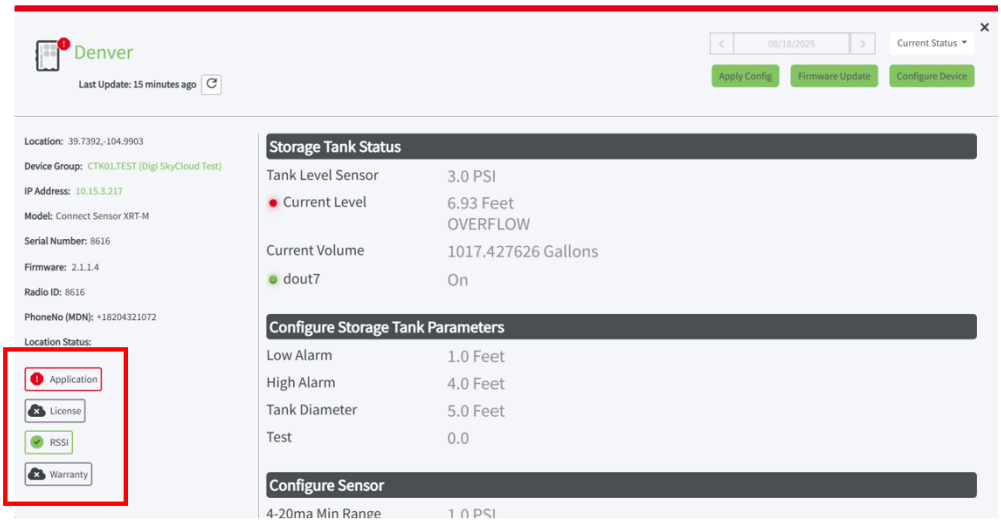
Item	Description
APN	The APN assigned to the device. ■ **(Auto)**: The APN is not yet known. This may occur if the Connect Sensor has not yet connected to Digi Axess. ■ **<APN number>**: The actual APN string that was used during the most recent connection between Connect Sensor and Digi Axess, or the APN that was manually assigned in the web UI.
Mobile Version	Displays the version number of the Digi application used to interact with the modem.
Cell Modem Model	Name of the cell modem model in the device.
Cell Modem Firmware	The current version of the cell modem firmware.
Provider	The name of the cellular carrier.
ICCID	The SIM card identifier.
IMSI	The unique International Mobile Subscriber Indentity assigned to the SIM card.
RSSI (Avg/Low/High)	The average, low, and high signal strength for the selected date.
EC/IO (Avg./Low/High)	The average, low, and high measure of the quality of the signal from the tower to the cell modem.
Cell ID	The unique number by a cell tower can be identified within a location area code (LAC) or a GSM network.
Last Disconnect Reason	The reason for the last time the device disconnected from a cell tower.

Config Status

Item	Description
Running Device Config	The name of the saved configuration that is currently applied on the device.
Sync Status	Information about the next synchronization between Digi Axess and the device. Options are: ■ Synced ■ Scheduled - Partial Sync ■ Scheduled - Full Sync
Last Sync	The date and time of the last full configuration synchronization between Digi Axess and the device.

Digi Axess Location Status information

The location status information is a set of metrics tracked by the firmware and displays in the asset list.



The metric color is determined by the thresholds assigned to the metric.

Metric	Description
Application	The application metric is a combination of the automation configurations defined for the device. Each automation is assigned thresholds that determine green, yellow, or red status. To determine the application metric status, Digi Axess considers the status of all of the automations. ■ **Green**: All automation configurations are green. ■ **Yellow**: At least one automation configuration is yellow. The rest may be

Metric	Description
	green or yellow, but none can be red. ■ **Red**: At least one automation configuration is red.
Battery	A battery graphic describes the status of the battery. ■ **Full green**: Battery status good. ■ **Partial green**: Battery status good. ■ **Yellow**: Battery should be changed soon. ■ **Red**: Battery needs to be changed. ■ **Dash**: Battery is not plugged in.
RSSI	Signal strength. ■ **Green**: -88 or above. ■ **Yellow**: Less than -88. ■ **Red**: Less than -98.
Warranty	Warranty status of the device. ■ **Green**: Active ■ **Red**: Expired ■ **Gray**: Unknown For more information about warranties, see Warranties: Review device warranties.

Apply a configuration file to a Connect Sensor from the Device Summary page

You can apply a selected device configuration to a Connect Sensor from the device's Device Summary page.

Two types of configuration files are available:

- **Saved**: A saved file is created when you save a copy of a configuration on a Connect Sensor. See Back up a Connect Sensor configuration.
- **Provided**: A set of standard Digi Axess configurations are available.

The update happens during the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually.

Note You can also apply a configuration to a Connect Sensor device or device group from the Digi Axess Administration menu, or from the device's web UI.

1. Log into Digi Axess. The Digi Axess map displays.
2. From the mapped device list, find the Connect Sensor device for which you want to update the Connect Sensor firmware.
3. Click the device name in the mapped device list. The Device Summary page displays.

4. Click the **Apply Config** button. The **Apply Device Configuration - Select Device Config** page displays.
5. From the **Device Configuration Type** field, select the configuration type.
   - **Provided**: The device configuration is saved locally.
   - **Shared**: The device configuration is saved to Digi Axess.
6. Select device configuration.
   - **Provided Device Configuration**: If you selected **Provided**, the **Provided Device Configuration** field displays. You can use this field to limit the configurations that are included in the list. As you type, the list is updated to include only the configurations that match the entry. You can also simply select a configuration from the list.
   - **Shared Device Configuration**: If you selected **Shared**, the **Shared Device Configuration** field displays. You can use this field to limit the configurations that are included in the list. As you type, the list is updated to include only the configurations that match the entry. You can also simply select a configuration from the list.
7. Click on a configuration from the list. The selected device or device group displays in the **Selected Device Config** window.

   Note Click on the selected device configuration option in the **Selected Device Config** list to deselect it.

8. Click **Next**. The **Apply Device Configuration - Confirm** page displays, showing the device to which the configuration will be applied, and information about the configuration.

   Note A yellow warning banner displays at the top of the screen, to alert you that applying a device configuration that cannot be undone.

9. Decide whether you want to apply the configuration:
   - **Confirm**: Click **Confirm** to continue and apply the configuration.
   - **Back**: Click **Back** to return to the previous screen.
   - **Home**: Click **Home** to return the main Digi Axess map page.

Update the Connect Sensor firmware from the Device Summary page

You can schedule an update to the Connect Sensor firmware from the device's Device Summary page. The update happens during the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually.

If the device is already scheduled for a firmware update, you are not allowed to schedule another update.

Note You can also update the device's firmware from the web UI.

1. Log into Digi Axess. The Digi Axess map displays.
2. From the mapped device list on the Digi Axess map, find the Connect Sensor device for which you want to update the Connect Sensor firmware.
3. Click the device name in the mapped device list. The Device Summary page displays.

4. Click the **Firmware Update** button. The **Firmware Update - Select Firmware** page displays.
5. From the **Firmware Type** list box, select the **Standard** option.
6. Select the firmware version that you want to apply to the device. You can either scroll through the list of versions, or use the **Firmware Versions** field to limit the list. As you type, the list is updated to include only the devices that match the entry. The selected firmware version displays in the **Selected Firmware** list.

   Note Click on the selected firmware update option in the **Selected Firmware** list to deselect it.

7. Click **Next**. The **Firmware Update - Confirm** page displays, showing the device that will be updated, and a summary of the selected firmware update.

   Note A yellow warning banner displays at the top of the screen, to confirm that a firmware update is selected to occur.

8. Decide whether you want to schedule the firmware update:
   - **Confirm**: Click **Confirm** to continue and schedule the firmware update.
   - **Back**: Click **Back** to return to the previous screen.
   - **Home**: Click **Home** to return the main Digi Axess map page.

Access the device's web UI from the Device Summary page

You can access a device's web UI from Device Summary page in the Digi Axess map.

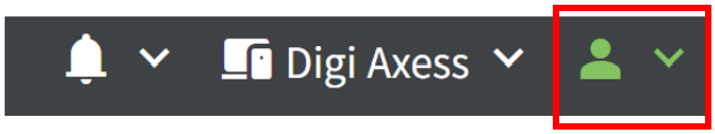
1. Log in to Digi Axess. The Digi Axess map displays.
2. Find the device that you want to configure, using one of the following methods, and display the Device Summary page.
   - Click on the device's location pin on the map.
   - If your device is mapped, scroll through the mapped device list displayed on the lower left of the Digi Axess map. Click on the device name.
   - Use the search feature in the toolbar. As you type, a list of matching devices displays. Click on the tile for the device you want to configure.
   - Click the Grid or Table icons on the left side of the map to display a list of devices. Use the search features to limit the devices displayed. Click on the tile or the row for the device you want to configure.
3. In the Device Summary page, click the device name or the **Configure Device** button.

   The web UI for the device displays in Digi Axess.

   Any changes you make are stored and then pushed from Digi Axess the next time that the Connect Sensor wakes and connects to the network. See Configure the Connect Sensor from the Automation Dashboard menu.

Digi Axess Account menu options

You can manage your Digi Axess user profile options from the **Account** menu in the Digi Axess map page. To display the map page, log in to Digi Axess. Click the down arrow next to the user profile icon to displays the **Account** menu.



Menu option	Description
Current User	Displays the user's login name.
Preferences	Click **Preferences** to select your defaults for the map page. These defaults are applied to the map page each time you log in. ▪ Set your map page display defaults
Edit Profile	Click **Edit Profile** to change your contact information, such as name, email, and phone numbers, set your screen style, and manage multi-factor authorization (MFA). ▪ Manage your user profile options
Change Password	Click **Change Password** to change your log in password for Digi Axess. ▪ Change your Digi Axess password
Administration	Click **Administration** to access the Digi Axess Admin dashboard. In the administration pages, you can manage contacts, services, devices and device groups, device configuration, and user profiles. ▪ Digi Axess Administration Dashboard overview Note Only users assigned the **Admin** or **Device User** roles can access the Digi Axess Admin dashboard.
Register Device	Click **Register Device** to register a device for use in Digi Axess. ▪ Register a Connect Sensor device

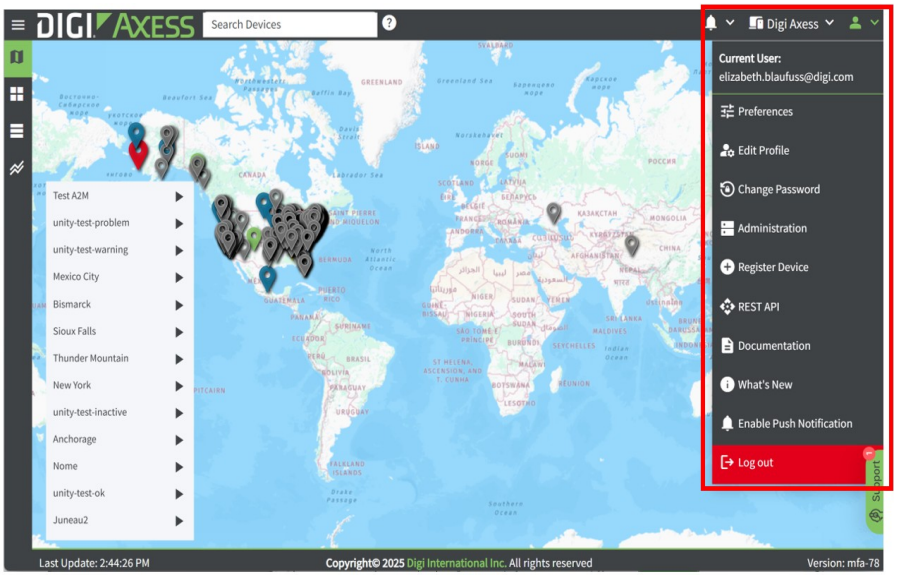
Menu option	Description
REST API	Click **REST API** to access the Digi Axess REST API documentation. The Digi Axess REST API enables owners to retrieve device sensor data for further processing.
Documentation	Click **Documentation** to launch the Digi Axess User Guide in a new browser window. In addition, you can also use the Digi Axess Assistant AI feature to ask questions about Digi Axess and related hardware.
What's New	Click **What's New** to display a list of recent updates. This is the same list that can be accessed from the update banner.
Enable Push Notification	Click **Enable Push Notification** to enable the feature and allow notifications to display as pop-up messages on your computer. When the feature is enabled, the menu option does not display in the **User Profile** menu. For more information, see Manage notification pop-ups.
Install As Application	Click **Install As Application** to install Digi Axess as a stand-alone application on your PC or other device. After you have installed it as an application, this menu option is no longer included in the list of menu options. For more information, see Install Digi Axess as a stand-alone application.
Log out	Click **Log out** to log out of Digi Axess. The Digi Axess log in page displays.

Access the Account menu

The **Account** menu consists of menu options you can use to manage your user profile and to access the Digi Axess Admin dashboard. You can access the **Account** menu from the Digi Axess map page.

1. Log into Digi Axess.
2. Make sure you are on the Digi Axess map page. If you are not, click the map icon to access the page.

3. Click the down arrow next to the user profile icon. The **Account** menu displays.



Manage Digi Axess passwords

You can change the password associated with your Digi Axess user log in name.

Change your Digi Axess password

You can change your Digi Axess password.

1. Log into Digi Axess.
2. Click the down arrow next to the user profile icon in the upper right corner of the page to display the **Account** menu.
3. Click **Change Password**. The **Digi Axess Change Password** page displays.
   a. In the **Current Password** field, enter your current password.
   b. In the **New Password** field, enter your new password. The password requirements are listed.
   c. In the **Confirm Password** field, re-enter your new password. The entries in the **New Password** and the **Confirm Password** fields must match.
4. Click **Submit**. An email is sent to Digi Axess. After a few minutes, an email is sent to the email address you entered with further instructions.

   If you choose not to change your password, click **Cancel** to return to the previous page.

Forgot your Digi Axess password

You can reset your Digi Axess password if needed, such as if you forgot your password.

1. Navigate to **digiaxess.com** in your web browser. The **Digi Axess Log In** page displays.
2. Click **Forgot Password**. The **Digi Axess Reset Password** page displays.
3. In the **Username** field, enter your email address.

4. Click **Submit**. An email is sent to Digi Axess. After a few minutes, an email with further instructions is sent to the email address you entered.

Manage your user profile options

You can manage a set of user profile options from the **Update Profile** page. You can access this page from the Digi Axess **Account** menu or from the Digi Axess Admin dashboard

1. Log into Digi Axess to access the Digi Axess map page.
2. In the toolbar, click the down arrow next to the user profile icon. The **Account** menu displays.
3. Click one of the following menu options to access the **Update Profile** page:
   - Click **Edit Profile**. The **Update Profile** page displays.
   - Click **Administration**. The Digi Axess Admin dashboard displays. In the toolbar panel on the left, click your user profile name. The **Update Profile** page displays.
4. Click the tabs to update your profile options.

Tab	Description
Contact Information	Click the **Contact Information** tab to update your contact information. Make updates to your contact information as needed in the **First name**, **Last name**, **Email**, **Phone Number**, and **Phone Number 2** fields. Note You can also add and update this information from the **User Management** > **Users** section in the Admin dashboard.
Preferences	Click the **Preferences** tab to update your screen style option. Options are: - **Browser Default** - **Light** - **Dark** Note You can also change this from the **Theme** option in the Admin menu.
Security	Click the **Security** tab to enable MFA for this user profile or manage MFA tokens.

5. Click **Save** to save your choices.

   If you don't want to save your changes, click **Home** to return to the Digi Axess map page.

Digi Axess Administration Dashboard overview

When you access the Digi Axess Admin page, the Admin page dashboard displays.

The Digi Axess administration dashboard options are used to apply device configurations, view firmware update history, create and update devices and device groups, manage notification contacts and groups, and create and maintain user profiles.

Dashboard

You can access the admin features from the dashboard or from the toolbar on the left of the page.

Dashboard feature	Description
User Name	The user name of the user logged into Digi Axess. Click the user name to display the **Update Profile** page, with tabs to manage different features. ■ **Contact Information**: Update your contact information. ■ **Preferences**: Update your screen style option ■ **Security**: Enable or manage multi-factor authentication (MFA). For detailed information, see Manage your user profile options.
Audit Logs	Review the Digi Axess logs. ■ Audit Logs
Data Export	Export the data from Digi Axess. ■ Data Export: Manage MQTT configuration ■ Data Export: Configure Event Queues
Device Configuration Management	Apply a saved device configuration to a device or a group of devices. ■ Device Configuration Management: Manage in Digi Axess Admin ■ Formulas: Manage in Digi Axess Admin
Device Firmware History	Review the Digi Axess firmware updates that have been applied. ■ Device Firmware History: Manage in Digi Axess Admin
Device Management	Manage device groups and apply a configuration to a device. ■ Device Management: Manage in Digi Axess Admin
Notification Management	Manage Digi Axess contact information and view the available services. ■ Notification Management: Manage in Digi Axess Admin Note Only users with **Admin** privileges can access the **Notification Management** section.
User Management	Manage Digi Axess users. ■ User profiles: Manage in Digi Axess Admin Note Only users with **Admin** privileges can access the **User Management** section.

Map icon

Click the map icon in the upper right corner of the page to return to the Digi Axess map. See Digi Axess map overview.

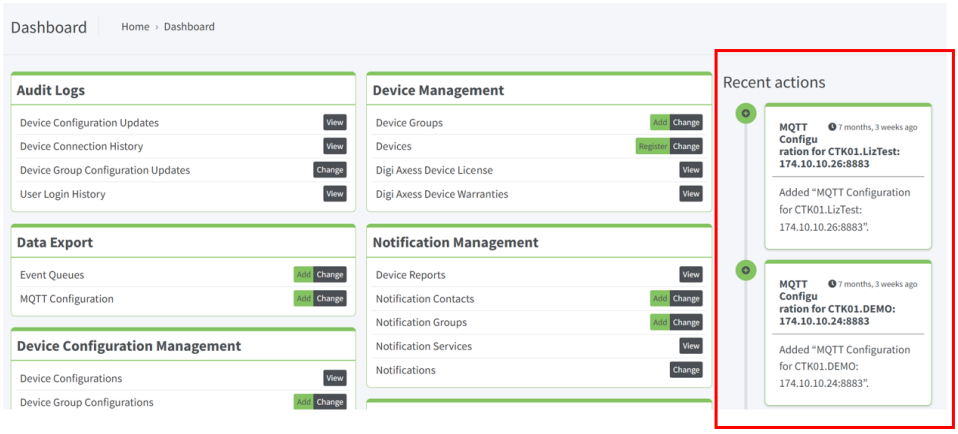
User profile icon

Click the profile icon in the upper right corner of the page for more features.

- **Change Password**: Click to change your Digi Axess password. See Change your Digi Axess password.
- **Log out**: Click to log out of Digi Axess. The Digi Axess log in page displays.

Recent Actions

The **Recent Actions** section on the right side of the page shows a time line list of the changes the user that is logged in has made. You can also review the history for device groups, devices, notification contacts, and notification groups in the associated page. See Review the update history.



Access the Digi Axess Admin page

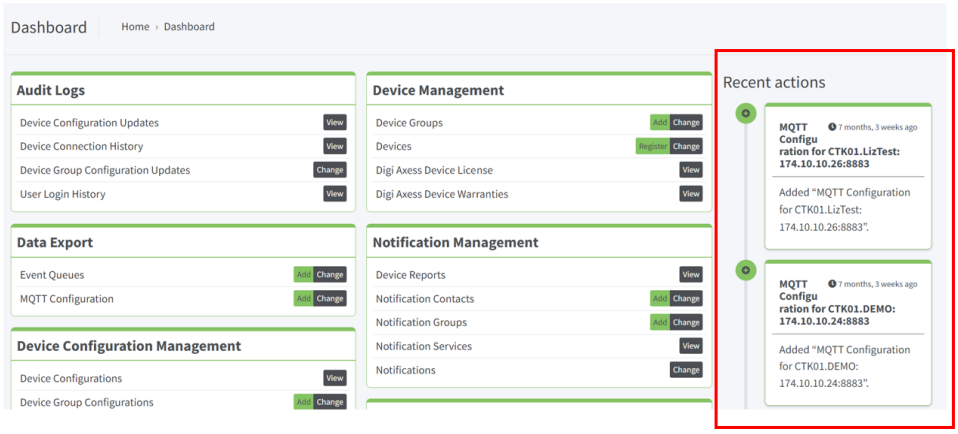
Note You must have **Admin** or **Device User** privileges to access Digi Axess Administration page. However, only users with **Admin** privileges can access the **Notification Management** and **User Management** sections.

1. Log into Digi Axess.
2. In the toolbar, click the down arrow next to the user icon. The **Account** menu displays.
3. Click **Administration**. The **Digi Axess Admin** page displays. For information about the page features, see Digi Axess Administration Dashboard overview.

Review the update history

When reviewing device groups, devices, notification contacts, and notification groups, you can review an event log that shows a list of changes that have occurred for the selected item.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **Device Groups**, **Devices**, **Notification Contacts**, or **Notification Groups**.
3. Find the item that you want to review. You can scroll through the list or use the **Search** box.
4. Click on the name of the item.
5. Click the **History** button. A time line of updates displays on the right side of the screen.



Register a Connect Sensor device

Your device must be registered with Digi Axess so that you can access and manage the device from Digi Axess. The process uses the device's IMEI as a unique identifier.

Note You can also register devices from the Devices page.

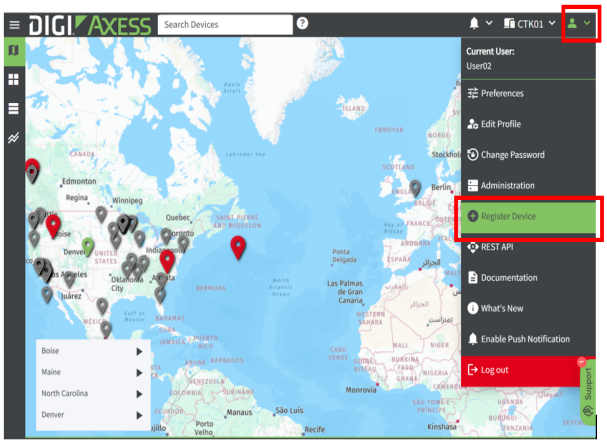
Before you begin

You will need this information to register your device:

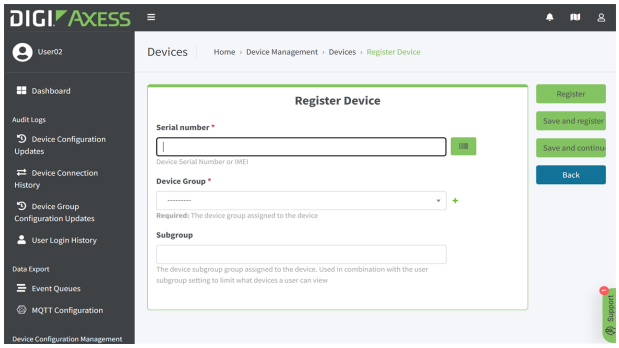
- The device's IMEI, which is printed on the device label.
- The device group in which the device should be included.

To register your device:

1. Log into Digi Axess.
2. Access the Digi Axess **Register Device** page.
   a. In the toolbar, click the down arrow next to the user profile icon. The **Account** menu displays.



b. Click **Register Device**. The **Register Device** page displays.



3. In the **Serial Number** field, enter the device's IMEI, which is printed on the device label. As an alternative, click the **Scan Barcode** button next to the field and use a camera or a saved image to enter an identifier.
4. From the **Device Group** list box, select a device group from the drop-down list.
5. (Optional) In the **Subgroup** field, enter a subgroup name.
6. Click **Register**. The **Set Device Location Source** page displays.
7. Name and define the device's physical location.
   a. In the **Location Name** field, enter a descriptive name for the device's physical location. If you leave this field blank, the device's serial number is used by default.
   b. Select a **Location Source** option, which defines the method used to configure the physical location for the device.
      - **None**: No physical location is defined. The device is unmapped and won't appear on the Digi Axess map. You can specify a location at a later time.
      - **Manual**: Manually enter the latitude and longitude of the physical location of the device.
      - **GPS**: The physical location is determined by the device's internal GPS. The location is updated the next time the device wakes and connects to Digi Axess.
8. In the **Set Device Configuration** page, from the **Choose a Configuration** list box, select an initial configuration for the device.

- **Demo Configuration**: This is the default configuration, and displays basic information in the Device Summary page: **Analog in Voltage**, **Digital in**, and **Case Temperature**.
- **Blank Configuration**: No data displays. You must manually configure the device in the device's **Administration** page.
- **Saved Configuration**: Select a configuration that you have previously created and saved. The configuration is applied to this device.

9. Click **Set** to save your selections.
10. Verify that the location and configuration selections are available. You need to wake the device, and when the device connects to Digi Axess, the configuration is pushed from Digi Axess to the Connect Sensor device.

    For detailed information, see Verify device registration.

Install Digi Axess as a stand-alone application

You can choose to install Digi Axess as a stand-alone application on your PC or other device. This enables you to access Digi Axess in a separate window rather than from a browser. When installed, webpush notifications from Digi Axess can be received on the device on which the app was installed.

Note After you have installed it as an application, this menu option is no longer included in the list of menu options.

1. Log into Digi Axess.
2. In the toolbar, click the down arrow next to the user icon. The **Account** menu displays.
3. Click **Install As Application**. The **Install App** window displays.
4. Click **Install**. The application is installed.
5. A message window displays, asking if you want to pin the application to your taskbar.
   - Click **Yes** to pin the application.
   - Click **No, thanks** if you don't want to pin the application.
6. To run the application, click the pinned application icon from the taskbar, or search your device for the Digi Axess app.

Manage notification pop-ups

You can enable the **Enable Push Notification** feature to allow notifications to display as pop-up messages on your computer. The feature can be disabled if needed.

Enable push notifications

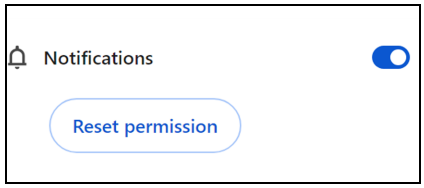
1. Log into Digi Axess.
2. Click the down arrow next to the user profile icon in the upper right corner of the page to display the **Account** menu.
3. Click **Enable Push Notification**. A confirmation dialog displays beneath the URL search bar in the browser window. The message **Get notifications** displays in the search bar.
4. Click **Allow** to enable feature.

As an alternative, click **Block** to block all notification pop-up messages.

5. The **Enable Push Notification** menu option is no longer on the **Account** menu.

Disable push notifications

1. Log into Digi Axess.
2. In the URL search bar, click the **View site information** icon on the left. A site information menu displays.
3. In the **Notifications** menu section, click **Reset permission**.



4. Reload the map page. The **Enable Push Notification** menu option is available on the **Account** menu.

Log into Digi Axess

Launch Digi Axess and log in using the user name and password for your Digi Axess account.

1. Navigate to digiaxess.com in your web browser.
2. Click **Login**. The **Digi Axess Log In** page displays.
3. Enter your user name and password.
   - **User name**: Enter the user name for your **Digi Axess** account. Verify the user name with your system administrator.
   - **Password**: Enter the password for your **Digi Axess** account.
4. Click **Submit** to log in to **Digi Axess**.

   Note If you have multi-factor authentication enabled, you must log in using MFA.

5. The **Digi Axess** update banner displays, on top of the **Digi Axess** map. If the banner does not display, it has been ignored in a previous session.
   - Click **Don't Show Again** to permanently turn off the banner.
   - Click **Ignore** to close the banner.

Create device comparison graphs in Digi Axess

Device comparison graphs show data collected from the automation applications configured for the devices. Each graph is an analytic input and shows processed data. The comparison graphs display in the **Device Comparison** page.

Graph represents one automation application configured on one or many devices

Each graph represents one automation application that collects and processes data configured on a device. The graph displays data from the device with a data line, which is labeled with the device name and represented by a unique line color. To ensure that data from more than one device is included in a graph, multiple devices should have an automation application configured with the same name, and should ideally collect the same type of data.

For example, you have 5 devices that collect air temperature data. Each device should be configured to have an automation application called Air Temperature, and that manipulates the air temperature data. When you view the device comparison graphs, you will see a graph called Air Temperature with five lines of data, one for each of the 5 devices.

Data intervals

The data is displayed in the following increments: current day, three days, one week, two weeks, or 30 days. Changing the increment in one graph changes the increment for all graphs. You can also zoom in on a particular section of a graph to see more detail.

Devices included in the graphs

By default, the comparison graphs include data from up to 10 devices that have data. Devices that have not collected data are ignored. If you have more than 10 devices that have collected data, the **Select Devices to Compare** page displays and you are required to select the devices that you want included in the graphs. You can select up to 10 devices.

You can change the devices that are included in the graphs as needed by clicking the Edit Device Selection button in the **Device Comparison** page.

For best results

- The devices in the group should all be configured with automation applications that have the same names.

- The automation applications that have the same names should collect the same type of data.

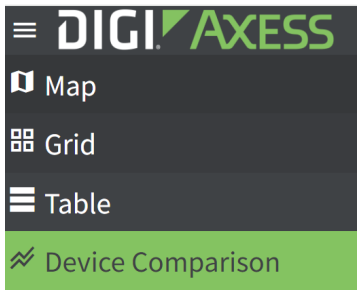
Display the device comparison graphs

The device comparison graphs display when you access the **Device Comparison** page.

By default, the comparison graphs include data from up to 10 devices that have data. Devices that have not collected data are ignored. If you have more than 10 devices that have collected data, the **Select Devices to Compare** page displays and you are required to select the devices that you want included in the graphs. You can select up to 10 devices.

1. Log into Digi Axess.
2. In the toolbar in the left pane, click the **Device Comparison** icon.

   Note By default, the names of the icons don't display. Click the hamburger icon in the toolbar to display the names of the icons.



3. The number of devices you have determines the next action.
   - If you have fewer than 10 devices that have collected data, the comparison graphs display.
   - If you have more than 10 devices that have collected data, the **Select Devices to Compare** page displays. Select up to 10 devices, then click **Compare Selected Devices**.

     For more detailed information about this process, see Select devices to display in the comparison graphs.

Select devices to display in the comparison graphs

The comparison graphs show the data collected for a selected set of up to 10 devices. You can select the devices that you want to include in the comparison graphs, and change them at any time.

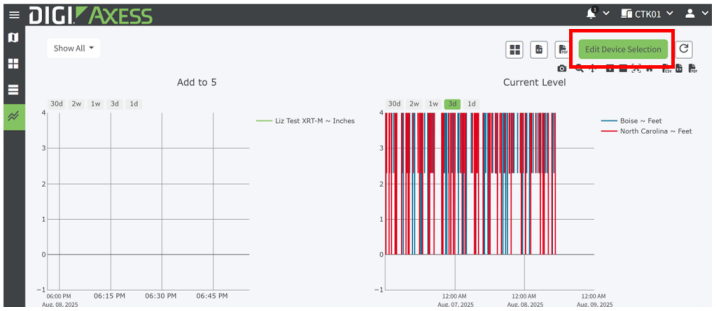
The status of a device is noted by color and an icon. The status is determined by set of metrics tracked by the firmware.

- **Green**: The device is running as expected.
- **Yellow**: A device process has not completed as expected.
- **Red**: A device process has not completed and requires attention.
- **Gray**: The device has not connected to Digi Axess within the configured connection time. The default is 24 hours.

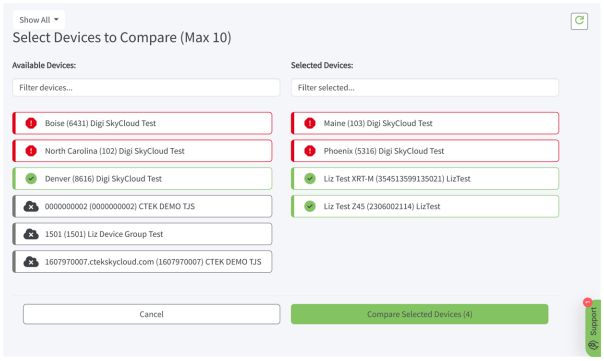
To select the devices that display in the comparison graphs:

1. Log into Digi Axess.
2. In the toolbar in the left pane, click the **Device Comparison** icon.

3. The **Device Comparison** page displays. Click **Edit Device Selection**.



4. The **Select Devices to Compare (Max 10)** page displays.



5. From the **Available Devices** list, find a device that you want to include in the comparison graphs. You can scroll through the list or use the search field to limit the list. As you type in the field, the list is limited to devices that match the text string.
6. Click on the selected device. It is moved from the **Available Devices** list to the **Selected Devices** list.

   The number of selected devices displays in the **Compare Selected Devices** button. When you have selected 10 devices, you cannot select any more.
7. You can remove a device from the **Selected Devices** list.
   a. To find a device that you want to remove from the comparison graphs, scroll through the list or use the search field to limit the list. As you type in the field, the list is limited to

devices that match the text string.

b. Click on a device in the **Selected Devices** list. It is moved from the **Selected Devices** list to the **Available Devices** list.

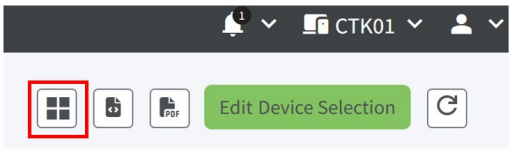
8. When selections are complete, click **Compare Selected Devices**. The **Device Comparison** screen displays and shows data for only the selected devices.

Toggle the graph layout

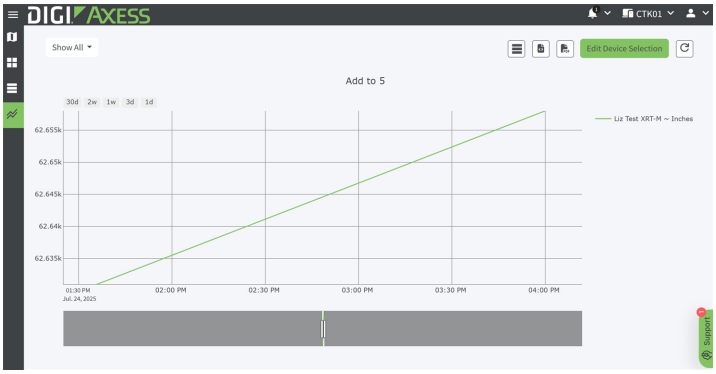
You can toggle the graph layout to display either one or two graphs in each row. By default, two graphs display in each row.

1. Log into Digi Axess.
2. In the toolbar in the left pane, click the Device Comparison icon to display the graphs. The **Device Comparison** screen displays, showing two graphs in each row.

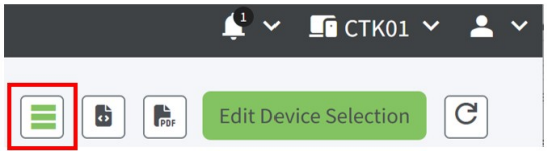
3. Click the **Toggle Graph Layout** icon.



4. The **Device Comparison** screen is updated to show one graph in each row.



5. Click the **Toggle Graph Layout** icon again to display two graphs in each row.



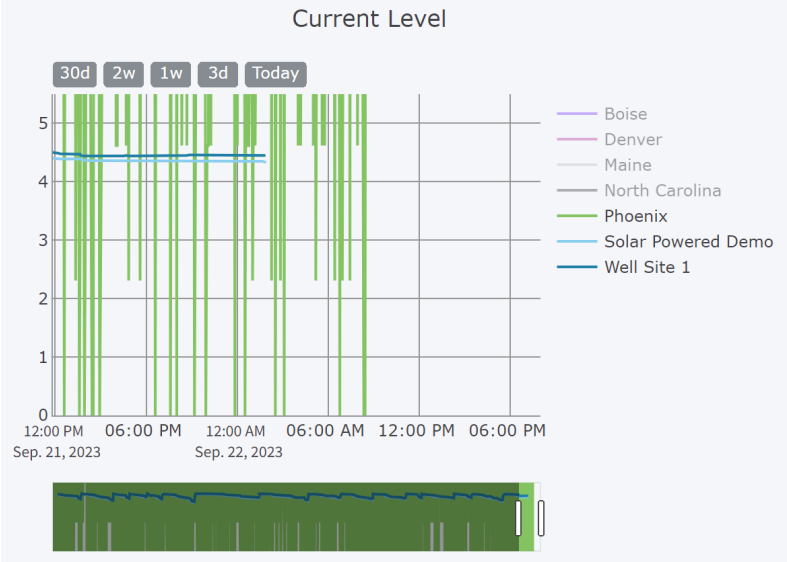
Toggle location data on and off

Each line in a graph represents the processed data from one device, and the data line for each device is assigned a unique color. The color for a device is the same in each graph. Data from up to 10 devices is included in the graphs.

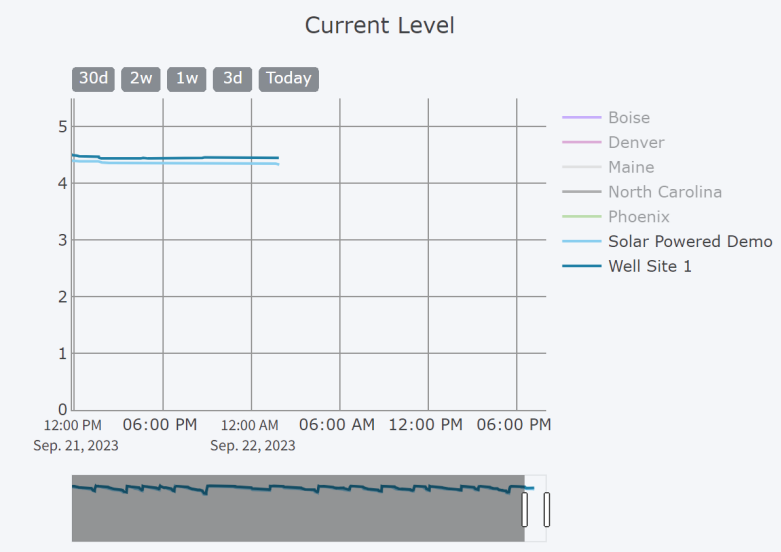
Toggle data for one device on and off

To limit the data in a graph, you can click on a location name to toggle data from that device off and on. The data is toggled from all of the graphs on the page.

In this example, Phoenix (green), Solar Powered Demo (light blue), and Well Site 1 (dark blue) are all toggled on. Colored lines display for each device.



Click Phoenix (green) to toggle off that data line. When Phoenix is toggled off, and only the Solar Powered Demo (light blue) and Well Site 1 (dark blue) data display. Phoenix and the color sample to the right of the graph are grayed out in the list of locations.



Toggle data on and off for all devices except for the selected device

You can toggle data on and off for all devices except for a selected device. The change is made in all of the graphs.

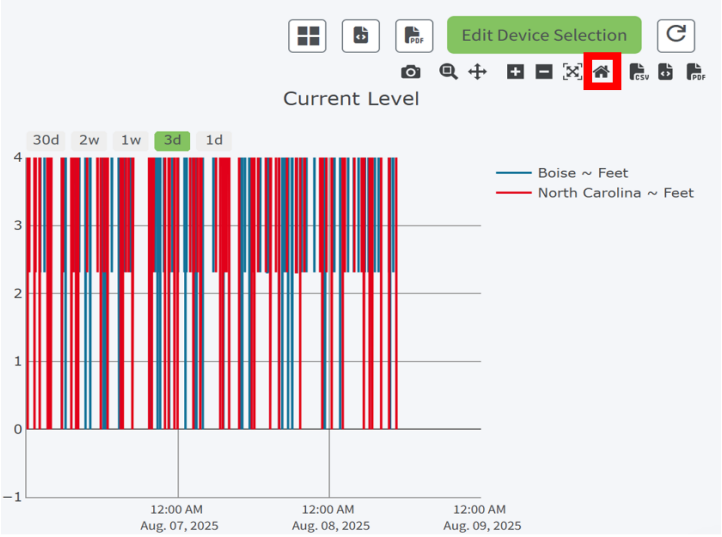
- Double-click on the device that has the data you want to display. Only data for that device is displayed on all the graphs.
- Double-click on the displayed device to display all device data in the graphs.

Change the time interval for a graph

You can show the graph data in different time intervals, choosing from the default set shown as buttons above each graph or by using the slider under the graph to zoom in or out on a specific time frame. Changing the time interval in one graph changes it for all graphs. By default, the graphs show data collected over the last three days.

Reset graphs to the default time interval

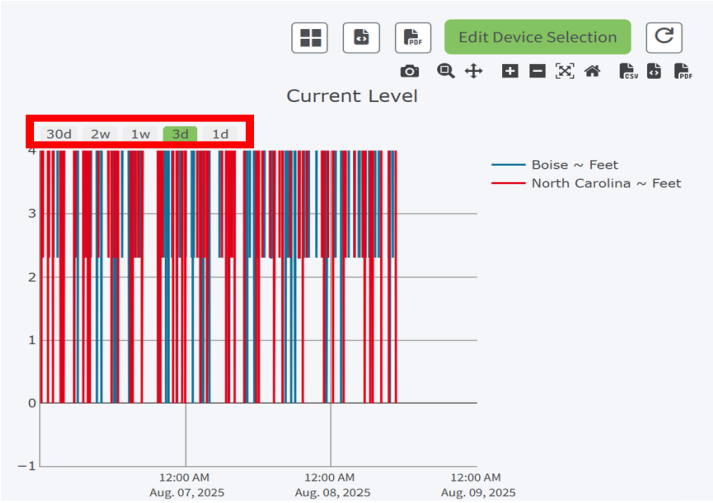
To reset the graphs to the default of three days, hover over a graph to display the graph toolbar. Click the **Home** icon in the toolbar above graph.



Use the time interval buttons

Click a time interval button above a graph to change the time interval in all the graphs. A day begins at 12:00 a.m.

- **30d**: Display the last 30 days of data.
- **2w**: Display the last 14 days of data.
- **1w**: Display the last 7 days of data.
- **3d**: Display the last 3 days of data. This is the default.
- **Today**: Display the data from the current day.

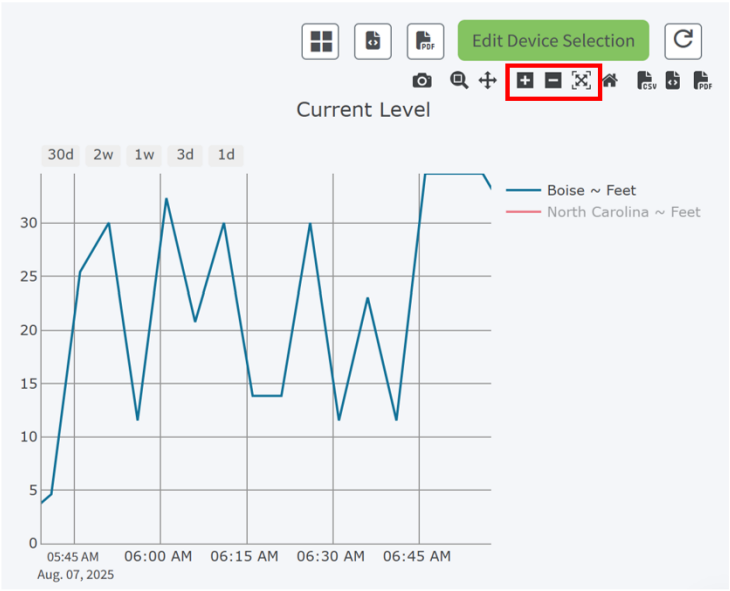


User the slider under a graph to zoom in or out

You can use the slider under each graph to zoom in or out. This feature is useful if you want to review date for a particular date or time frame that is not represented by the time interval buttons.

Display data in increments measured by hours or minutes

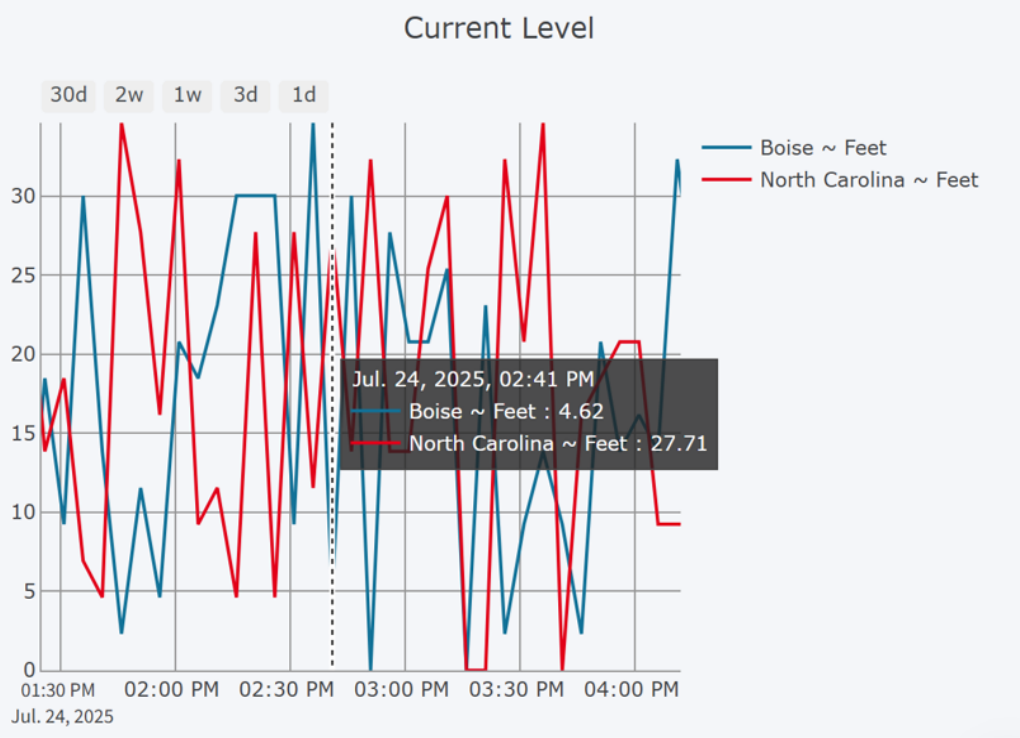
You can use the zoom buttons in the graph toolbar to zoom in or out on the graph. This feature is useful if you want to reduce the time interval to a certain hour or minute.



View detailed data for specific date and time

You can display the data point for a specific date and time on the graph by hovering over the graph. A pop-up dialog displays and shows the selected date and time. As you move the pointer over the graph, the date and time changes.

For each device, the data point and the closest date and time on which data was collected displays.

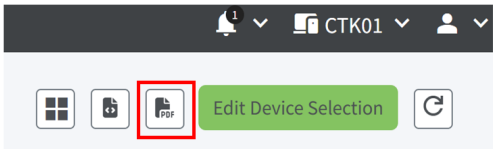


Create a PDF of a graph

You can create a PDF for one specific graph, or for all of the graphs. The PDF is saved to your download folder.

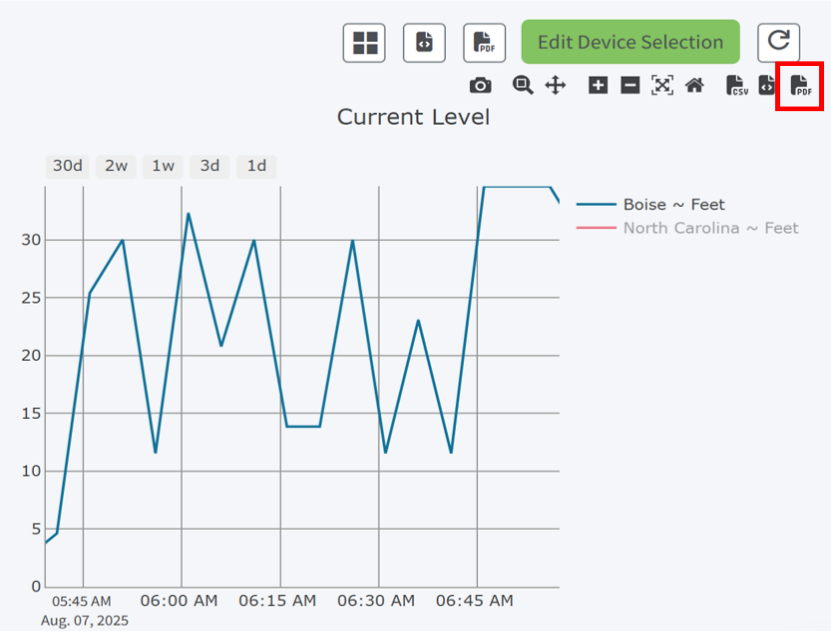
1. Log into Digi Axess.
2. In the toolbar in the left pane, click the Device Comparison icon to display the graphs.
3. To create a PDF of all of the graphs:

   From the toolbar at the top right of the page, click the **PDF** icon. The PDF is created and saved to your download folder.



4. To create a PDF of one graph:
   a. Hover over the graph for which you want to create a PDF. A toolbar for the graph displays.

b. Click the **PDF** icon. The PDF is created and saved to your download folder.

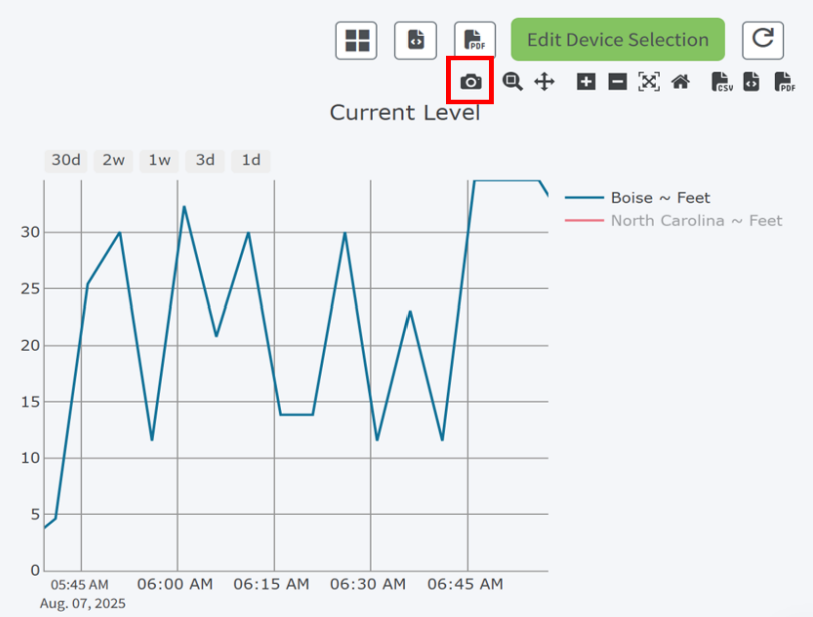


Create a PNG of a graph

You can create a PNG file of a graph.

1. Log into Digi Axess.
2. In the toolbar in the left pane, click the Device Comparison icon to display the graphs.
3. Hover over the graph for which you want to create a PNG. A toolbar for the graph displays.

4. Click the **PNG** icon. The PNG file is created and saved to your download folder.

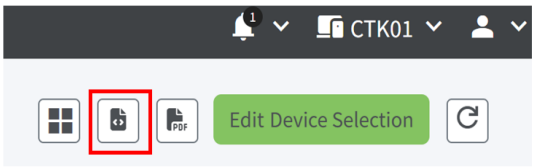


Download a JSON file for a graph

You can download a JSON file for one specific graph, or for all of the graphs.

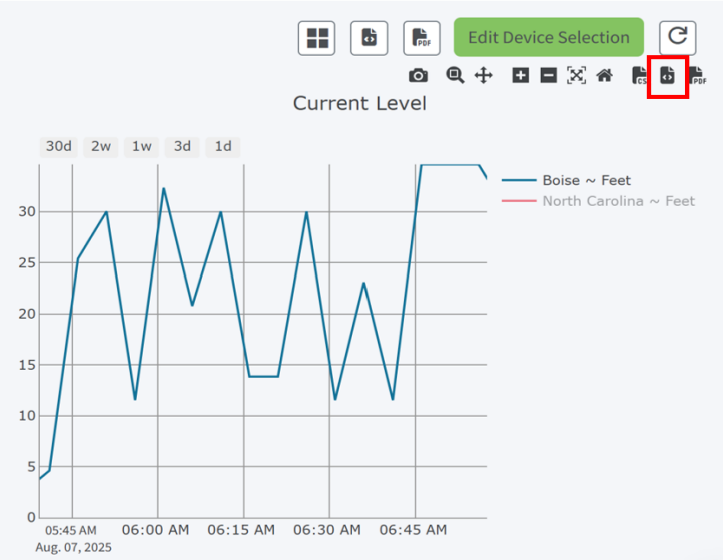
1. Log into Digi Axess.
2. In the toolbar in the left pane, click the Device Comparison icon to display the graphs.
3. To download code for all of the graphs:

   From the toolbar at the top right of the page, click the **JSON** icon. The file is created and saved to your download folder.



4. To download code for one graph:
   a. Hover over the graph for which you want to download a file. A toolbar for the graph displays.

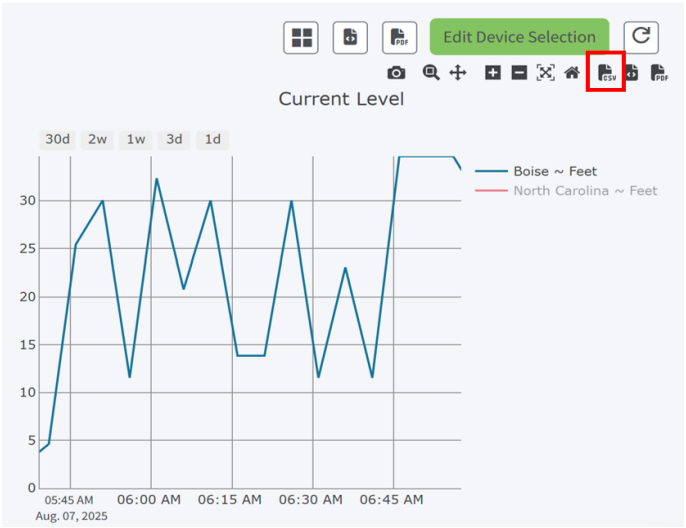
b. Click the **JSON** icon. The file is created and saved to your download folder.



Download graph data into a CSV file

You can download the data for one selected graph to a comma-separated values (CSV) file.

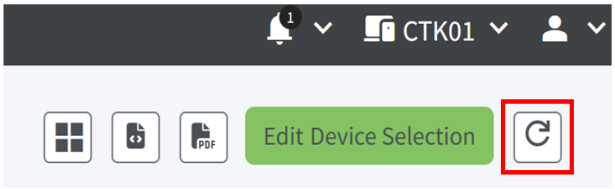
1. Log into Digi Axess.
2. In the toolbar in the left pane, click the Device Comparison icon to display the graphs.
3. Hover over the graph for which you want to create a PDF. A toolbar for the graph displays.
4. Click the **CSV** icon to create the CSV file and save it to your download folder.



Refresh the device data in the graphs

You can update the device data shown in the graphs. Any changes made from when you originally opened the graphs page or last refreshed are included in the graphs, such as uploaded data or changes made to the configuration of device.

1. Log into Digi Axess.
2. In the toolbar in the left pane, click the Device Comparison icon to display the graphs.
3. From the toolbar at the top right of the page, click the **Refresh** icon to update the graphs.



Data Export: Manage MQTT configuration

The MQTT (Message Queuing Telemetry Transport) messaging protocol can be configured for a Connect Sensor device. You can manually configure MQTT for a Connect Sensor device, or create an MQTT configuration for a device group that can be applied to any Connect Sensor device in the group.

The MQTT device group configurations are created in the Administration dashboard in Digi Axess. MQTT is configured for a Connect Sensor device from the device's web UI.

Create an MQTT configuration

You can create an MQTT configuration for a device group in the Administration dashboard in Digi Axess.

- Configure MQTT from the Administration dashboard

After you have added an MQTT configuration, you can maintain it:

- Review the MQTT configurations
- Edit an MQTT configuration
- Delete an MQTT configuration

Apply an MQTT device group configuration to a Connect Sensor

You can apply an MQTTconfiguration to a Connect Sensor in the device's web UI.

- Apply an MQTT device group configuration to a device

Configure MQTT from the Administration dashboard

You can configure MQTT for a device group.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Data Export** section in the Admin dashboard, click **Add** next to the **MQTT Configuration** label. As an alternative, you can click **MQTT Configuration** from the dashboard pane to the left of the page and then click **Add MQTT Configuration** at the top of the page. The **General Settings** page displays.
3. Begin configuration in the **General Settings** page.
   a. From the **Device Group** list box, select the device group for which you want to configure MQTT. This configuration is available for all devices in the device group.

b. In the **Description** field, enter a descriptive name for the configuration. The name must be unique for the device group.

4. Click the green arrow at the top of the page. The **MQTT Configuration** page displays.
5. Enable the MQTT service and continue with configuration in the **MQTT Configuration** page.

Field	Description
MQTT Enabled	Click **MQTT Enabled** to enable the MQTT service. The toggle button is green when the service is enabled.
MQTT Spec	Select the option that determines the format of the MQTT data and from where the data is sent. Options are: ▪ **MQTT on Device - No Formula Support**: Raw data is sent. This is the default. ▪ **Digi Axess Single Value - Formula Support**: A separate topic per value is sent, and includes only current data. ▪ **Digi Axess JSON - Formula Support**: A single topic for all values is sent, and includes current and historical data.
Send Sample Data to Digi Axess	Enable **Send Sample Data to Digi Axess** if you want to send sample data to Digi Axess for further processing. This is disabled by default, and when it is disabled, no data is sent to Digi Axess.
QoS	Currently only one MQTT quality of service level is available. The **0 - at most once** option is selected by default.
Publish Retain	Enable **Publish Retain** if you want to enable the retain flag on published messages. This is disabled by default.
MQTT Version	Select the MQTT version that you want to use.
MQTT Topic Prefix	In the **MQTT Topic Prefix** field, enter the MQTT topic prefix to use. The following variables are supported: **$Model**, **$LocationName**, and **$SerialNumber**. The **MQTT topic preview** space previews what the topic will be when the variables are resolved and the postfix is added.
MQTT Topic Preview	Previews what the topic will be when the variables defined in the **MQTT Topic Prefix** are resolved and the postfix is added.

6. Click the green arrow at the top of the page. The **MQTT Broker Configuration** page displays.
7. Configure the MQTT broker.

Field	Description
MQTT Broker Host	Enter MQTT the broker host to which data is sent. The MQTT broker host must be unique.

Field	Description
MQTT Broker Port	Enter the number of the MQTT Broker port to which data should be sent.
Username	Enter the user name to authenticate with the broker.
Password	Enter the password to authenticate with the broker. Click the eye icon next to the field to toggle the password display.
TLS Enabled	Enable TLS.
TLS Cert Check	Enables checking the broker identity with a certificate.

8. Click **Add**. The MQTT configuration is saved. The **MQTT Configuration** page displays, and includes the new configuration.

Review the MQTT configurations

You can review the existing MQTT configurations.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Data Export** section in the Admin dashboard, click **MQTT Configuration**. As an alternative, you can click **MQTT Configuration** from the dashboard pane to the left of the page. A list of the MQTT configurations displays.
3. Review the information for each configuration.

Field	Description
MQTT Broker Host	The MQTT broker host configuration. Click the MQTT broker host link to display the configuration details.
MQTT Broker Port	The number of the MQTT Broker port to which data should be sent.
Description	The descriptive name for the configuration. The name is unique for the device group.
Device Group	The device group for which the MQTT is configured.
MQTT Enabled	Confirms whether the MQTT service is enabled. ■ **Enabled**: A check mark displays in a green circle. ■ **Disabled**: An x displays in a red circle.
MQTT Spec	Currently the only supported format is the standard MQTT format, with raw data being sent. The **MQTT on Device - No Formula Support** option is selected by default.

Edit an MQTT configuration

You can edit an MQTT configuration.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Data Export** section in the Admin dashboard, click **Change** next to the **MQTT Configuration** label. As an alternative, you can click **MQTT Configuration** from the dashboard pane to the left of the page and then click the link in the Mqtt Broker Host column for the configuration that you want to change. The **MQTT Configuration** page displays.
3. Click each tab to edit the configuration. For details about each item, see Configure MQTT from the Administration dashboard.
4. When changes are complete, click **Save**. You are returned to review page, and the message "The MQTT configuration was changed successfully" displays in a green banner.

Delete an MQTT configuration

You can delete an MQTT configuration that is no longer needed.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Data Export** section in the Admin dashboard, click **MQTT Configuration**. As an alternative, you can click **MQTT Configuration** from the dashboard pane to the left of the page. A list of the MQTT configurations displays.
3. Select the configuration(s) that you want to delete.
   - Click the check box next to each configuration you want to delete. You can select more than one.
   - Click the **MQTT broker host** check box to select all of the configurations.
4. From the **Go** list box, select the **Delete selected MQTT Configuration** option.
5. Click **Go**. The **Delete Multiple Objects** page displays and overview of the group(s) and related items that will be deleted.
6. Click **Yes, I'm sure** to complete the deletion process. You are returned to the **MQTT Configuration** page. A green banner with a **Successfully deleted** message displays at the top of the page.
   - Click **No, take me back** if you don't want to complete the deletion.

Data Export: Configure Event Queues

You can create and use event queues to collect data from Digi Axess and save it until you ask for the data using an API call. The event queue consists of the data streams from the devices in a device group. This feature reduces the number of calls you need to make to collect the data you want.

You can save the event queue data to a location of your choice, where you can examine the data. Once you have read the data with the API call, the data is deleted from Digi Axess.

You can pull up to 1,000 events at a time. If you have more than 1,000, the next call shows the remaining events.

The event queue API calls are listed in the **Event Queue** section of the API REST documentation.

Review the event queues

You can review a list of the event queues.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Data Export** section in the Admin dashboard, click **Event Queues**. As an alternative, you can click **Event Queues** from the dashboard pane to the left of the page. The **Event Queues** page displays.
3. The table below describes the **Event Queues** page.

Item	Description
Add Event Queue button	Click **Add Event Queue** to add an event queue.
Go button	Click **Go** to delete selected event queues.
Device Group	The name of the device group for which data is collected by the event queue. Click the device group name to edit the event queue.
Description	The event queue name.
Enabled	Specifies whether the event queue is enabled and can collect data. ■ Green circle: The event queue is enabled and can collect data. ■ Red circle: The event queue is disabled and cannot collect data.
Last Event	The date and time on which the last event was queued.
Last Query	The date and time on which the last event query was made.
Unread events	The number of stored events.

Add an event queue

You can create and use event queues to collect data from Digi Axess and save it until you ask for the data using an API call.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Data Export** section in the Admin dashboard, click **Add** next to the **Event Queues** label. As an alternative, you can click **Event Queues** from the dashboard pane to the left of the page and then click **Add Event Queue** at the top of the page. The **Event Queues General Settings** page displays.
3. From the **Device Group** list box, select a device group. The data streams from the devices in this device group are included in the event queue.
4. In the **Description** field, enter a descriptive name for this event queue.
5. From the **Format** list box, select the format in which the data will be sent.
6. Determine the devices for which data will be collected.

- **Include Device Group Devices**: Select this option to collect events for all of the devices in the device group.
- **Include Child Device Group Devices:** Select this option to collect events for all devices in the child device groups

7. Click **Add**. You are returned the **Event Queues** page. The event queue you just created is in the event queue list.

Edit an event queue

Delete this text and replace it with your own content.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Data Export** section in the Admin dashboard, click **Event Queues**. As an alternative, you can click **Event Queues** from the dashboard pane to the left of the page. The **Event Queues** page displays.
3. In the list of event queues, click on the device group name of the queue that you want to edit.
4. Click the **Current Status** tab, to enable or disable the event queue, and review information about the queue.
   - Click the **Enabled** toggle to enable and disable the event queue.
     - **Enabled**: When enabled, the toggle is green and event queue data is collected.
     - **Disabled**: When disabled, the toggle is gray and event queue data is not collected.
   - **Last event**: The date and time on which the last event was queued.
   - **Last query**: The date and time on which the last event query was made.
   - **Unread events**: The number of stored events.
5. Click the **General Settings** tab to review and update the event queue configuration. For information about each field, see Add an event queue.
6. Click the **Supported Events** tab to specify whether device data events will be queued.
   - Click the **Queue Device Data Events** toggle to determine whether device data events are queued.
     - **Enabled**: When enabled, the toggle is green and device data events are collected. This is the default.
     - **Disabled**: When disabled, the toggle is gray and device data events are not collected.
7. Click **Save** if you have made any changes. You are returned to the **Event Queues** page and the message "The Event Queue was changed successfully" displays in a green banner.

Delete an event queue

You can delete an event queue that is no longer needed.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.

2. From the **Data Export** section in the Admin dashboard, click **Event Queues**. As an alternative, you can click **Event Queues** from the dashboard pane to the left of the page. The **Event Queues** page displays.
3. Select the event queue(s) that you want to delete.
    - Click the check box next to each queue you want to delete. You can select more than one.
    - Click the check box in the header to select all of the configurations.
4. From the **Go** list box, select the **Delete selected Event Queues** option.
5. Click **Go**. The **Delete Multiple Objects** page displays and overview of the queue(s) that will be deleted.
6. Click **Yes, I'm sure** to complete the deletion process. You are returned to the **Event Queues** page. A green banner with a **Successfully deleted x Event Queues** message displays at the top of the page.
    - Click **No, take me back** if you don't want to complete the deletion.

Access event queue API calls

The event queue API calls are listed in the **Event Queue** section of the API documentation.

1. Log into Digi Axess. The Digi Axess map displays.
2. Click the down arrow next to the user icon in the upper right corner of the page to display the **Account** menu.
3. Click **Change Password**. Click **REST API**. The **Digi Axess REST API** page displays.
4. Scroll down to the **Event Queue** section to review the API calls.

Device Configuration Management: Manage in Digi Axess Admin

In the **Device Configuration Management** pages you can apply a configuration to one device or to a group of devices. You can also create a device group configuration, which enables you to apply a configuration to the devices in a device group.

The list of configurations available includes the device configurations that have been backed up and saved, for the devices that are in a device group to which you have access, plus all of the default configurations that are provided with your Digi Axess account.

Other ways to apply a configuration to a device

- From the Device Summary page.
- From the device's web UI.

Before you begin

You should have saved a configuration that you want to apply to other devices, or have access to a default configuration. Configurations are created and saved from a device's web UI.

Create a device group configuration

You can create a device group configuration that enables you to apply the same device configuration to all of the devices of a selected device model in a device group. This feature is useful when you want to ensure that all of the devices in a group have the same configuration.

After you have created the device group configuration, it is included in the list of configurations in the Device Group Configurations page.

Device configuration

You can select one device configuration that will be applied to the devices in the device group. The list of configurations available includes the device configurations that have been backed up and saved, for the devices that are in a device group to which you have access, plus all of the default configurations that are provided with your Digi Axess account.

Device models

The configuration is applied only to one selected device model. If your device group includes multiple device models, the selected configuration is applied only to the models of the type selected.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Configuration Management** section in the Admin dashboard, click **Add** next to the **Device Group Configurations** label.

   As an alternative, you can click **Device Group Configurations** from the dashboard pane to the left of the page. The **Device Group Configurations** page displays. Click **Add Device Group Configuration**.
3. From the **Device Group** list box, select the device group for which you want to create a device group configuration.

   Note Click the green plus sign next to the list box to create a new device group.
4. From the **Device Model** list box, select the device model to which the configuration should be applied.
5. From the **Device Config** list box, select the device configuration that should be applied to the devices.
6. The **Apply To Existing Devices** option displays, and is enabled by default. When you save the device group configuration, the selected configuration is applied to the devices of the selected type in the device group.

   If you want to apply the configuration at a later date, deselect this option. You can reapply the configuration when needed.
7. Click **Add**. The **Device Group Configurations** page is updated to display messages at the top of the screen to verify that the device configuration was initiated.
   - **Device configuration initiated**: This message displays if the **Apply To Existing Devices** was enabled. Click the **here** link to review the installation history for the device group configuration.
   - **The Device Group Configuration was added successfully**: This message displays to confirm that the device group configuration was a created. Click the link to review the device group configuration
8. Click **Back** to return the previous screen or **Reapply Device Configuraion** to apply the device group configuration.

Select a configuration and apply to one device

You can apply a device configuration to one selected Connect Sensor device. The configuration is applied the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually using a magnet.

The list of configurations available includes the device configurations that have been backed up and saved, for the devices that are in a device group to which you have access, plus all of the default configurations that are provided with your Digi Axess account.

Note You can apply a configuration to a Connect Sensor device using this method or other methods. See Apply a configuration to a device or a device group: Overview.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.

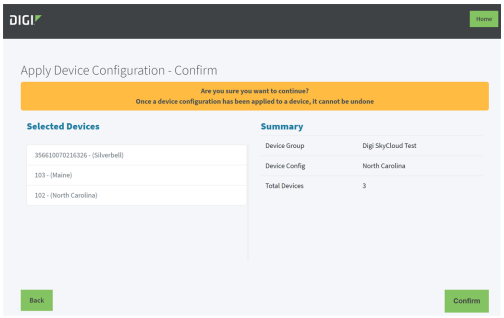
2. From the **Device Configuration Management** section in the Admin dashboard, click **Device Configurations** or **View** next to that label.

   As an alternative, you can click **Device Configurations** from the dashboard pane to the left of the page. The **Device Configurations** page displays a list of configurations that can be applied.
3. Find the configuration that you want to apply. To find a configuration, you can scroll through the list or use the **Device Model** and/or a **Device Group** fields to filter the list.
4. For the desired configuration, click **Apply Config**. The **Apply Device Configuration - Select Devices** page displays.
5. From the **Device select** list box, select **Single Device**. A list of devices displays.
6. To find a device, scroll through the list or use the **Filter** field to filter the list. As you type in the field, the list of devices is filtered to match the entry. Click on the device to which you want to apply the configuration. Only one device can be selected.

   The selected device is moved to the right side of the page and displays in a green banner in the **Selected Device** window.

   Note To deselect a selected option in the **Selected Device** window, click it. It is moved to the left side of the page and you can select a different device.
7. Click **Next**. The **Apply Device Configuration - Confirm** page displays, showing the device to which the configuration will be applied, and information about the configuration.

   Note A yellow warning banner displays at the top of the screen, to alert you that applying a device configuration that cannot be undone.



8. Click **Confirm** to continue and apply the configuration.

   Note If you have changed your mind, click **Back** to return to the previous screen.
9. The **Apply Device Configuration - Results** page displays a summary of the update.
10. Click **View Results** to navigate to the Install History page to view more information.
    - **Install Details**: Shows the name of the device configuration and the device group to which it was applied.
      - **Device Config**: Click the device configuration name to display information about the configuration.

- **Device Group**: Click the device group name to display information about the device group.

- **Install Status**: Shows the completion progress of the configuration application.
- **Devices**: Contains a list of the devices to which the configuration was applied.

Select a configuration and apply to a device group

You can apply a device configuration to the Connect Sensor devices in a selected device group. Some device groups may have devices of more than one device model. In this situation, the configuration is applied to only those devices of the same device model specified for the configuration.

The configuration is applied the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually using a magnet.

The list of configurations available includes the device configurations that have been backed up and saved, for the devices that are in a device group to which you have access, plus all of the default configurations that are provided with your Digi Axess account.

Note You can apply a configuration to a Connect Sensor device using this method or other methods. See Apply a configuration to a device or a device group: Overview.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Configuration Management** section in the Admin dashboard, click **Device Configurations** or **View** next to that label.

   As an alternative, you can click **Device Configurations** from the dashboard pane to the left of the page. The **Device Configurations** page displays a list of configurations that can be applied.
3. Find the configuration that you want to apply. To find a configuration, you can scroll through the list or use the **Device Model** and/or a **Device Group** fields to filter the list.
4. For the desired configuration, click **Apply Config**. The **Apply Device Configuration - Select Devices** page displays.
5. From the **Device select** list box, select **Device Group**. A list of device groups displays.
6. To find a device group, scroll through the list or use the **Filter** field to filter the list. As you type in the field, the list of device groups is filtered to match the entry. Click on the group to which you want to apply the configuration. Only one group can be selected.

   The selected group is moved to the right side of the page and displays in a green banner in the **Selected Device Group** window.

   Note To deselect a selected option in the **Selected Device Group** window, click it. It is moved to the left side of the page and you can select a different group.
7. Click **Next**.

   If you selected a device group that did not have a device model specified, the **Apply Device Configuration - Select Model** page displays.

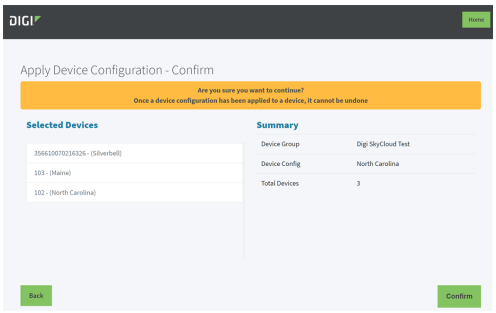
   a. Select a model from the **Models** list. The selected model is moved to the right side of the page and displays in a green banner in the **Selected Models** window. Only one model

can be selected.

b. Click **Next**

8. The **Apply Device Configuration - Confirm** page displays, showing the devices to which the configuration will be applied, and information about the configuration.

Note A yellow warning banner displays at the top of the screen, to alert you that applying a device configuration that cannot be undone.



9. Click **Confirm** to continue and apply the configuration.

   If you have changed your mind, click **Back** to return to the previous screen.

View information about a device configuration

You can view information about a device configuration, such as the name and the device model type to which the configuration can be applied, in the **Device Configurations** page.

The list of configurations available includes the device configurations that have been backed up and saved, for the devices that are in a device group to which you have access, plus all of the default configurations that are provided with your Digi Axess account.

Note You can also access the **Device Configurations** page from the Device Group Configuration Updates audit log.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Configuration Management** section in the Admin dashboard, click **Device Configurations** or **View** next to that label.

   As an alternative, you can click **Device Configurations** from the dashboard pane to the left of the page. The **Device Configurations** page displays a list of configurations that can be applied.
3. Select a configuration that you want to review. You can scroll through the list or filter it. Select a **Device Model** and/or a **Device Group** and then click **Search** to display configurations that match the filters.
4. Click on a configuration name. The **Device Configurations** page displays.
5. Information about the configuration can be reviewed and updated.
   - **Name**: The name of the configuration. You can type in a new name, but a name is required.

- **Device Group**: The device group connected to the configuration. The device configuration is available to all devices in the device group and its child groups. Click the device group name to access the Device Groups page and review details about the device group.
- **Device Model**: The type of device to which the configuration can be applied.
  - The default configurations have **None** as the **Device Model** option, which means that the demo configuration can be applied to any Connect Sensor device models.
  - Some device groups may have devices of more than one device model. In this situation, the configuration is applied to only those devices of the same device model specified for the configuration.
- **Device Configuration Type**: The type of device configuration, such as application.

6. Determine the next action.
   - **Save**: Save any changes made to the configuration and close the page.
   - **Delete**: Delete this configuration. See Delete a device group configuration.
   - **Save and continue editing**: Save any changes made to the configuration and remain on this page.
   - **History**: Display the change history for the configuration.

Reapply a device group configuration

You can apply a device group configuration to the devices in a device group as needed. This ensures that the configuration for the device models of the same type are in sync.

The list of configurations available includes the device configurations that have been backed up and saved, for the devices that are in a device group to which you have access, plus all of the default configurations that are provided with your Digi Axess account.

Note You can apply a configuration to a Connect Sensor device using this method or other methods. See Apply a configuration to a device or a device group: Overview.

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1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Configuration Management** section in the Admin dashboard, click **Device Group Configurations**.

   As an alternative, you can click **Device Configurations** from the dashboard pane to the left of the page. The **Device Group Configurations** page displays.
3. Scroll through the list of device group configurations to find the one that you want to reapply.
4. In the row for the group you want to update, click **Reapply Device Configuration**. The **Confirm Device Configuration Reapplication** page displays, showing a list of the devices in the device group.
5. Click **Continue** to reapply the configuration. The **Device Group Configurations** page is updated to display a message at the top of the screen to verify that the device configuration was initiated. Click the **here** link to review the installation history for the device group configuration.
   - Click **Back** to return to the previous page. The configuration is not reapplied.

Delete a device group configuration

You can delete a device group configuration that is no longer needed.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Configuration Management** section in the Admin dashboard, click **Device Group Configurations**.

   As an alternative, you can click **Device Group Configurations** from the dashboard pane to the left of the page. The **Device Group Configurations** page displays.
3. Click the check box next to each of the device group configurations that you want to delete.
4. From the list box next to the **Go** button, select the **Delete Selected Device Group Configurations** option.
5. Click **Go**. The **Delete multiple objects** page displays.
6. Review the deletions.
7. To complete the deletion, click **Yes, I'm sure**. You are returned to the **Device Group Configurations** page. A banner displays, with the message "Successfully deleted x Device Group configuration."

   If you don't want to delete anything, click **No, take me back** to return to the **Notification Contacts** page.

Review the device configuration install history for a device

You can review the configurations that have been applied to a selected device.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Configuration Management** section in the Admin dashboard, click **Install History (Device)** or **View** next to that label. As an alternative, you can click **Install History (Device)** from the dashboard pane to the left of the page.

   The **Install History (Device)** page displays a list of configurations that have been applied, from most recent applied date to least recent.
3. Use the search fields to filter the list of devices.
   - **Completed**: Limit the updates included in the list to those with the selected completion status:
     - **Yes**: The update completed.
     - **No**: The update did not complete.
     - **Unknown**: Completion status is inconclusive.
   - **Error**: Limit the updates included in the list to those with the selected error reporting option:
     - **Yes**: An error occurred during the configuration update.
     - **No**: An error did not occur during the configuration update.
     - **Unknown**: Error status is unknown.
   - **Devices**: Select one device from the list.

- **Start Time - UTC**: Limit the updates in the list to those that started within one of the time intervals:
  - **Today**: The current date.
  - **Past 7 days**: The last seven days.
  - **This month**: The last month.
  - **This year**: The last year.
- **Complete Time - UTC**: Limit the updates in the list to those that completed within one of the time intervals:
  - **Today**: The current date.
  - **Past 7 days**: The last seven days.
  - **This month**: The last month.
  - **This year**: The last year.
  - **No date**: The update does not have a completion date.
  - **Has date**: The update has a completion date that does not fit into a time interval option.

4. Click **Search** to apply the filters and limit the display to the selected device.
5. The **Scheduled**, **Completed**, and **Installed Success** columns show the status of the device configuration application on the selected device.
   - **Green check**: Action completed successfully.
   - **Red X**: Action did not complete successfully.
   - **Gray question mark**: Action incomplete.
6. In the **Device Config Install History** column, click the name of the device configuration to display additional information. A page of detailed information displays.
   - **Install Details**: Shows the name of the device configuration and the device to which it was applied
     - **Device Config Install History**: Click the device configuration name to display information about the device configuration history. See Review the device group configuration installation history.
     - **Device**: Click the device name to display information about the device. See Review and update device information.
   - **Intall Status**: Shows the completion progress of the device configuration installation.
   - **Device Status**: Shows the device configuration currently applied to the device. See Review and update device information.
7. Click **Close** to return to the **Install History (Device)** page.

Review the device group configuration installation history

You can review information about the configurations that have been applied to a selected device group.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Configuration Management** section in the Admin dashboard, click **Install History** or **View** next to that label. As an alternative, you can click **Install History** from the

dashboard pane to the left of the page.

The **Install History** page displays a list of configurations that have been applied, from most recently applied to least recent.

3. Use the search fields to filter the list of devices.
   - **Completed**: Limit the updates included in the list to those with the selected completion status:
     - **Yes**: The update completed.
     - **No**: The update did not complete.
     - **Unknown**: Completion status is inconclusive.
   - **Device Groups**: Limit the updates included in the list to the device group selected from the list.
   - **Device Configurations**: Limit the updates included in the list to the device configuration selected from the list.
   - **Start Time - UTC**: Limit the updates included the list to those that started within one of the time intervals:
     - **Today**: The current date.
     - **Past 7 days**: The last seven days.
     - **This month**: The last 30 days.
     - **This year**: The last year.
   - **Complete Time - UTC**: Limit the updates included the list to those that completed within one of the time intervals:
     - **Today**: The current date.
     - **Past 7 days**: The last seven days.
     - **This month**: The last 30 days.
     - **This year**: The last year.
     - **No date**: The update does not have a completion date.
     - **Has date**: The update has a completion date that does not fit into a time interval option.
4. Click **Search** to apply the filters.
5. Find the device group configuration application event that you want to review. The **Scheduled**, **Completed**, and **Installed Success** columns show the status of the application.
   - **Green check**: Action completed successfully.
   - **Red X**: Action did not complete successfully.
   - **Gray question mark**: Action incomplete.
6. Click a name in the **Device Config** column to display detailed information about the device group configuration.
   - **Install Details**: Shows the name of the device configuration and the device group to which it was applied.
     - **Device Config**: Click the device configuration name to display information about the configuration.

- **Device Group**: Click the device group name to display information about the device group.

- **Install Status**: Shows the completion progress of the configuration application.
- **Devices**: Contains a list of the devices to which the configuration was applied.

7. Click **Close** to return to the **Install History** page.

Formulas: Manage in Digi Axess Admin

Formulas use the input data collected from a device and apply calculations to provide a meaningful output. A formula is connected to an input on a device, and the formula runs every time data is collected on the device for that input.

Formulas are built as a set of sequential steps. For each step, you choose a formula option and a formula operator to create an output which can be reviewed in Digi Axess.

Where are formulas used?

After a formula has been created, you can connect the formula to an input configuration on an input pin, and then enable the configuration. If you want the data from the input configuration to be included in the Device Summary page, you can select a display group.

Stop a formula from running

When you no longer want the formula to run, you can remove it from the input.

Managing formulas

From the Administration dashboard, you can add, edit, and delete formulas.

Note Formulas, as well as formulas for a specific device, can be created and managed from the web UI for the device. See Formulas: Manage from the web UI.

Add a formula from the Administration dashboard

You can create a formula that will be available to all devices in the selected device group and to the devices in any child groups.

Note A formula created in the **Formula** section in the Administration dashboard is also available in the device's web UI. See Add a device group formula in the web UI.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Configuration Management** section in the Admin dashboard, click **Formula** or **Add** next to that link. As an alternative, you can click **Formula** from the dashboard pane to the left of the page and then click **Add** at the top of the page.
3. In the **Name** field, enter a descriptive name for the formula. The name must be unique within the selected device group.
4. From the **Device group** list box, select a device group. The formula you are creating will be available to all devices in the selected device group and to the devices in any child groups.

5. Click **Save** to save the formula. The **Formula Definition** page displays.
6. If needed, you can change the name in the **Formula Name** field.
7. If you are adding an input pin or an output pin to the formula, you can use the **Reference Device** field. From the **Reference Device** field, select a device that has a similar configuration to the devices that will be in the new formula you are creating. The configured pins from the reference device are available when adding an input pin or an output pin to the formula. The input pin and output pin options that you can select from the list box are limited to those that are configured for the reference device.

   This feature allows you to easily reuse a pin configuration and eliminates the need to manually enter the number of a configured input pin or output pin.
8. Create a formula by adding steps.
   a. Select a formula option from the first list box in the step. Information about the option displays in the screen.
   b. If a parameter list displays, enter an appropriate value for the selected formula.
      - **Input Pin**: You are required enter the number of the input pin or, if a list box is available, to select the name of a configured and enabled input pin for a Connect Sensor.

        Using the Reference Device field

        This field is used only if the following conditions are met:

        - You are maintaining a formula in the Administration dashboard or a device group formula from the web UI.
        - You have added an input pin to the formula. You are required to enter a pin number or select an option from the parameter list box.

        If you selected a device from the **Reference Device** field, the parameter field is a list box with options are limited to the input pins configured for the selected reference device. You can select an appropriate input pin that works for your formula.

        If you didn't select a device from the **Reference Device** field, you must manually enter the an input pin number.
      - **Output Pin**: You are required enter the number of the output pin or, if a list box is available, to select the name of a configured and enabled output pin for a Connect Sensor.

        Using the Reference Device field

        This field is used only if the following conditions are met:

        - You are maintaining a formula in the Administration dashboard or a device group formula from the web UI.
        - You have added an output pin to the formula. You are required to enter a pin number or select an option from the parameter list box.

        If you selected a device from the **Reference Device** field, the parameter field is a list box with options are limited to the output pins configured for the selected reference device. You can select an appropriate output pin that works for your formula.

        If you didn't select a device from the **Reference Device** field, you must manually enter the an output pin number.

c. From the **Add** list box, select a formula operator.
d. Determine the next action for the formula.
   - **Add below**: Add a step to the formula below the current step.
   - **Add above**: Add a step to the formula above the current step.
   - **Delete**: Delete the current step.
   - **Don't choose an option**: Do not choose an option if the formula is complete.
e. Repeat the process to add more items to the formula.

9. Click **Save** to save the formula. A confirmation dialog displays.
10. Click **OK** to confirm the change. A green banner displays the message "Formula Successfully Updated."
11. Click **Back** to return to the **Formulas** page. The page is updated to show the date and time on which the formula was added and updated.

Edit a formula from the Administration dashboard

You can edit the formula name and the steps in a formula.

Note You cannot change the device group selected for the formula.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Configuration Management** section in the Admin dashboard, click **Formula** or **Change** next to that link. As an alternative, you can click **Formula** from the dashboard pane to the left of the page.
3. Find the formula that you want to edit.
   - Scroll through the list of formulas.
   - Limit the list by selecting a device group from the **Device Group** list box.
   - Use the search field to search for a device group by name.
4. Click **Edit Formula** for the formula that you want to edit. The **Formula Definition** page displays.
5. If desired, update the name in the **Formula Name** field.
6. If you are adding an input pin or an output pin to the formula, you can use the **Reference Device** field. From the **Reference Device** field, select a device that has a similar configuration to the devices that will be in the new formula you are creating. The configured pins from the reference device are available when adding an input pin or an output pin to the formula. The input pin and output pin options that you can select from the list box are limited to those that are configured for the reference device.

   This feature allows you to easily reuse a pin configuration and eliminates the need to manually enter the number of a configured input pin or output pin.
7. Edit the formula as needed. For information about the fields, see Add a formula from the Administration dashboard.
8. Click **Save** to save the changes. A confirmation dialog displays.
9. Click **OK** to confirm the change. A green banner displays the message "Formula Successfully Updated."

10. Click **Back** to return to the **Formulas** page. The page is updated to show the date and time on which the formula was updated.

Edit a formula from the review page in the Administration dashboard

You can edit the formula name and the steps in the formula from the formula review page.

Note You cannot change the device group selected for the formula.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Configuration Management** section in the Admin dashboard, click **Formula** or **Change** next to that link. As an alternative, you can click **Formula** from the dashboard pane to the left of the page.
3. Find the formula that you want to edit.
   - Scroll through the list of formulas.
   - Limit the list by selecting a device group from the **Device Group** list box.
   - Use the search field to search for a device group by name.
4. Click on the formula name in the **Name** column. The **Device Formula** section in the **Formulas** page displays.
5. Click the blue **Edit Formula** button. The **Formula Definition** page displays.
6. If desired, update the name in the **Formula Name** field.
7. If you are adding an input pin or an output pin to the formula, you can use the **Reference Device** field. From the **Reference Device** field, select a device that has a similar configuration to the devices that will be in the new formula you are creating. The configured pins from the reference device are available when adding an input pin or an output pin to the formula. The input pin and output pin options that you can select from the list box are limited to those that are configured for the reference device.

   This feature allows you to easily reuse a pin configuration and eliminates the need to manually enter the number of a configured input pin or output pin.
8. Edit the formula as needed. For information about the fields, see Add a formula from the Administration dashboard.
9. Click **Save** to save the changes. A confirmation dialog displays.
10. Click **OK** to confirm the change. A green banner displays the message "Formula Successfully Updated."
11. Click **Back** to return to the **Formula** page. The page is updated to show the date and time on which the formula was added and updated.

Review formula details from the Administration dashboard

You can review the details about a formula if needed.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.

2. From the **Device Configuration Management** section in the Admin dashboard, click **Formula** or **Change** next to that link. As an alternative, you can click **Formula** from the dashboard pane to the left of the page.
3. Find the formula that you want to review.
   - Scroll through the list.
   - Limit the list by selecting a device group from the **Device Group** list box.
   - Use the search field to search for a device group by name.
4. Click on the formula name in the **Name** column. The **Device Formula** section in the **Formulas** page displays. You can review and make changes in the page.
5. You can review the following items:
   - **Name**: The formula name displays in the **Name** field. You can change the name if needed. If you change the name, click **Save**. You are returned to the **Formulas** page.
   - **Device Group**: The selected device group displays in the **Device Group** field. Click the device group name to view details about the group in the **Device Group** page. See Review device group details.
   - **Created**: The date and time on which the formula was created.
   - **Modified**: The date and time on which the formula was last updated.
6. You can use the buttons on the right side the page to perform these functions:
   - **Edit Formula**: Click **Edit Formula** to change the formula calculations. See Edit a formula from the review page in the Administration dashboard.
   - **Delete**: Click **Delete** to delete the formula. See Delete a formula from the review page in the Administration Dashboard.

Delete a formula using the Go button from the Administration dashboard

You can delete a formula that is no longer needed by clicking the **Go** button on the **Formulas** page. The formula is deleted from the **Formulas** page and is also deleted from the Formula Definition page in the device's web UI.

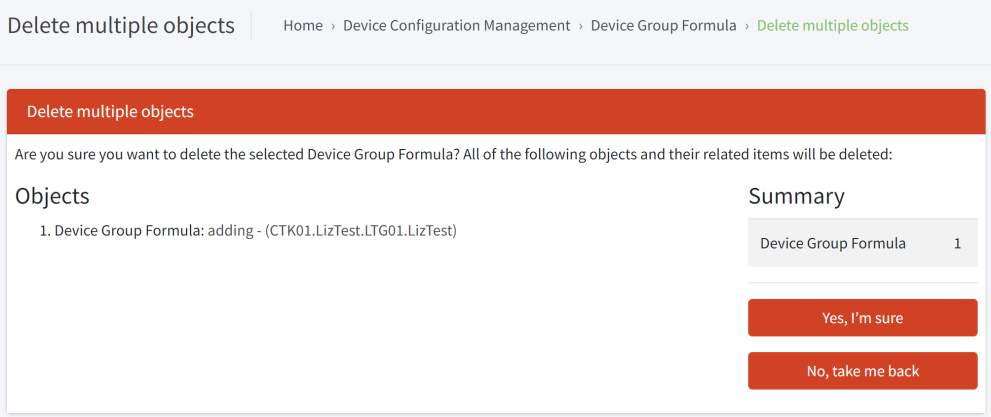
If the formula has been connected to an input pin on a device, you are not allowed to delete the formula. The **Delete Multiple Objects** page displays a list of the devices to which the formula is assigned to an input pin. Before you can delete the formula, you must select a different formula for those input pins or disable the pin.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Configuration Management** section in the Admin dashboard, click **Formula** or **Change** next to that link. As an alternative, you can click **Formula** from the dashboard pane to the left of the page.
3. Click the check box next to each of the formulas that you want to delete.

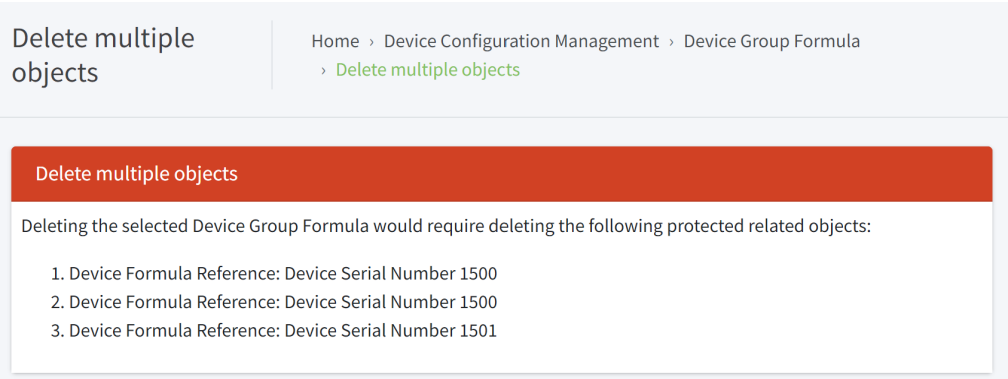
   To choose items to delete, you can scroll through the list or use the search fields to limit it.
4. From the list box next to the **Go** button, select the **Delete Selected Formulas** option.
5. Click **Go**. The **Delete multiple objects** page displays.
6. Review the deletions.

- To complete the deletion, click **Yes, I'm sure**. You are returned to the **Formulas** page. A banner displays, with the message "Successfully deleted x Formulas."

  If you don't want to delete anything, click **No, take me back** to return to the **Formulas** page.



- If the formula has been connected to an input pin on a device, you are not allowed to delete the formula. A list of the devices to which the formula is assigned to an input pin displays. Before you can delete the formula, you must select a different formula for those input pins or disable the pin.



Delete a formula from the review page in the Administration Dashboard

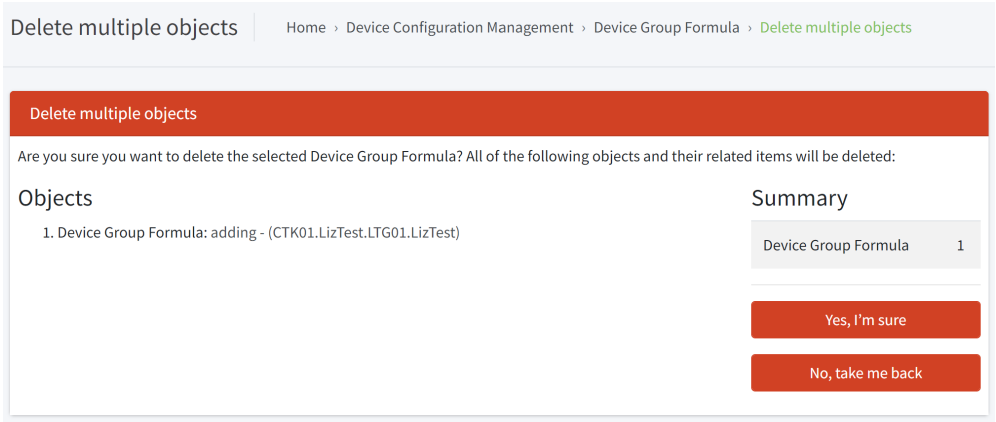
You can delete a formula that is no longer needed by clicking the red **Delete** button when reviewing information about a formula. The formula is deleted from the **Formulas** page and is also deleted from the Formula Definition page in the device's web UI.

If the formula has been connected to an input pin on a device, you are not allowed to delete the formula. The **Delete Multiple Objects** page displays a list of the devices to which the formula is assigned to an input pin. Before you can delete the formula, you must select a different formula for those input pins or disable the pin.

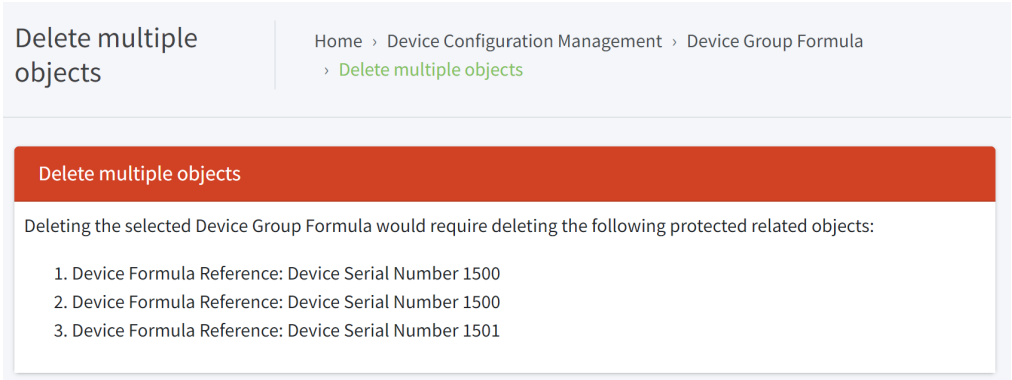
1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.

2. From the **Device Configuration Management** section in the Admin dashboard, click **Formula** or **Change** next to that link. As an alternative, you can click **Formula** from the dashboard pane to the left of the page.
3. Find the formula that you want to review and delete.
   - Scroll through the list.
   - Limit the list by selecting a device group from the **Device Group** list box.
   - Use the search field to search for a device group by name.
4. Click on the formula name in the **Name** column. The **Device Formula** section in the **Formulas** page displays.
5. Click **Delete** to delete the formula.
6. Review the deletions.
   - To complete the deletion, click **Yes, I'm sure**. You are returned to the **Formulas** page. A banner displays, with the message "The Formula was deleted successfully."

     If you don't want to delete anything, click **No, take me back** to return to the **Formulas** page.



   - If the formula has been connected to an input pin on a device, you are not allowed to delete the formula. A list of the devices to which the formula is assigned to an input pin displays. Before you can delete the formula, you must select a different formula for those input pins or disable the pin.



Device Firmware History: Manage in Digi Axess Admin

You can review the history of the Connect Sensor firmware updates that have been applied to a selected device or device group. You can also cancel an update that is scheduled to occur at a future date.

Review firmware update history

Where?	One selected device	All Connect Sensor devices in a device group	Description
Update History page		X	Review the Connect Sensor firmware update history for a device group
Update History (Device) page	X		Review firmware update history for a Connect Sensor

Cancel a scheduled firmware update

Where?	One selected device	All Connect Sensor devices in a device group	Description
Update History page		X	Cancel a firmware update for the Connect Sensor devices in a device group
Update History (Device) page	X		Cancel a firmware update for a Connect Sensor device from the Administration menu

Review firmware update history for a Connect Sensor

You can review the history of the Connect Sensor firmware updates that have been applied to a selected device. You can also cancel an update that is scheduled to occur at a future date.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Firmware History** section in the Admin dashboard, click **Update History (Device)** or **View** next to that label. As an alternative, you can click **Update History (Device)** from the dashboard pane to the left of the page.

   The **Update History (Device)** page displays a list of Digi Axess firmware updates that have been applied, starting from the most recent applied date.
3. Use the search fields to filter the list of devices.
   - **Completed**: Limit the updates included in the list to those with the selected completion status:
     - **Yes**: The update completed.
     - **No**: The update did not complete.
     - **Unknown**: The update completion status is inconclusive.
   - **Error**: Limit the updates included in the list to those with the selected error reporting option:
     - **Yes**: An error occurred during the firware update.
     - **No**: An error did not occur during the update.
     - **Unknown**: Error status is unknown.
   - **Devices**: Select one device from the list.
   - **Start Time - UTC**: Limit the updates in the list to those that started within one of the time intervals:
     - **Today**: The current date.
     - **Past 7 days**: The last seven days.
     - **This month**: The last month.
     - **This year**: The last year.
   - **Complete Time - UTC**: Limit the updates in the list to those that completed within one of the time intervals:
     - **Today**: The current date.
     - **Past 7 days**: The last seven days.
     - **This month**: The last month.
     - **This year**: The last year.
     - **No date**: The update does not have a completion date.
     - **Has date**: The update has a completion date that does not fit into a time interval option.
4. Click **Search** to apply the filters.
5. To view additional information about a configuration application, click on a name in the **Firmware Update History** list. A page of detailed information displays.
   - **Update Details**: Shows the name of the device configuration and the device to which it was applied
     - **Firmware Update History**: Click the firmware version name to display information about the firmware version update history. See Review the Connect Sensor firmware update history for a device group.

- **Device**: Click the device name to display information about the device. See Review and update device information.

- **Update Status**: Shows the completion progress of the configuration application.
- **Device Status**: Shows the device configuration currently applied to the device.

Review the Connect Sensor firmware update history for a device group

You can review the history of the Connect Sensor firmware updates that have been applied to a selected device group. You can also cancel an update that is scheduled to occur at a future date.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Firmware History** section in the Admin dashboard, click **Update History** or **View** next to that label. As an alternative, you can click **Update History** from the dashboard pane to the left of the page.

   The **Update History** page displays a list of firmware updates that have been applied, starting with the most recent.
3. Use the search fields to filter the list of devices.
   - **Completed**: Limit the updates included in the list to those with the selected completion status:
     - **Yes**: The firmware update completed.
     - **No**: The firmware update did not complete.
     - **Unknown**: The firmware update completion status is inconclusive.
   - **Device Groups**: Limit the updates included in the list to the device group selected from the list.
   - **Start Time - UTC**: Limit the updates in the list to those that started within one of the time intervals:
     - **Today**: The current date.
     - **Past 7 days**: The last seven days.
     - **This month**: The last month.
     - **This year**: The last year.
   - **Complete Time - UTC**: Limit the updates in the list to those that completed within one of the time intervals:
     - **Today**: The current date.
     - **Past 7 days**: The last seven days.
     - **This month**: The last month.
     - **This year**: The last year.
     - **No date**: The update does not have a completion date.
     - **Has date**: The update has a completion date that does not fit into a time interval option.
4. Click **Search** to apply the filters.

5. To view additional information about a firmware update event, click on a name in the **Firmware Type** column. A page of detailed information displays.
    - **Update Details**: Includes the firmware type, firmware version, and the device group that was updated. Click on the device group to review the device group details.
    - **Update Status**: Includes the update start and end times, update success, and error messages.
    - **Devices**: Includes a list of the devices in the device group.
        - Click on the identifier in the **Device** column to access device information in the Update History (Device) page.
        - Click **Cancel Update** to cancel a Digi Axess firmware update that is scheduled for a future date. For details, see Cancel a firmware update for a Connect Sensor device from the Administration menu.
6. Actions can be taken using the buttons on the page:
    - **Cancel Update**: Click **Cancel Update** to cancel a Digi Axess firmware update that is scheduled for a future date. For details, see Cancel a firmware update for a Connect Sensor device from the Administration menu.
    - **Close**: Click **Close** to return to the previous screen.
    - **History**: Click **History** to view the update firmware change history for the device group.

Cancel a firmware update for a Connect Sensor device from the Administration menu

You can cancel a firmware update for a Connect Sensor device that is scheduled for a future date.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Firmware History** section in the Admin dashboard, click **Update History (Device)** or **View** next to that label. As an alternative, you can click **Update History (Device)** from the dashboard pane to the left of the page.

   The firmware update history for the Connect Sensor devices displays.
3. Use the search fields to filter the list of devices.
4. In the row for your selected device, click **Cancel Update**. The **Confirm Firmware Update Cancellation** page displays.
5. Click **Continue**. The firmware update is canceled, and a confirmation page displays.
6. Click the **Update Status** tab to confirm the cancellation. In the **Error Message** section, a note displays: "Firmware Update Canceled".
7. Click **Close** to close the page.

Cancel a firmware update for the Connect Sensor devices in a device group

You can cancel a firmware update for a device group that is scheduled for a future date. The firmware update is canceled for all of the Connect Sensor devices in the group.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Firmware History** section in the Admin dashboard, click **Update History** or **View** next to that label. As an alternative, you can click **Update History** from the dashboard pane to the left of the page.

   The firmware update history for the device groups displays.
3. Use the search fields to filter the list of device groups.
4. In the row for your selected device group, click **Cancel Update**. The **Confirm Firmware Update Cancellation** page displays.
5. Click **Continue**. The firmware update is canceled, and a confirmation page displays.
6. Click the **Update Status** tab to confirm the cancellation. In the **Error Message** section, a note displays: "Firmware update for one or more devices canceled. Check device tab for more details".
7. Click **Close** to close the page.

Device Management: Manage in Digi Axess Admin

You can use the device groups feature in Digi Axess to create groups of similar types of devices, or a device hierarchy. For example, you can create regional device groups, groups of devices where device reports are sent to the same group of users, or groups of devices that have the same configuration. This feature is useful when your organization has multiple devices that can be managed as a group.

Device and device group overview

The sections below include details about devices, device groups, and sub-groups.

Devices

Each device that you purchase is added to Digi Axess. When you log into Digi Axess, you can view the devices from the Digi Axess map or, if you have Digi Axess Admin privileges, from the Digi Axess Admin page.

You can associate each device with one device group.

Device groups

A master device group is available by default in your Digi Axess. This ensures that if a device group is needed when using a feature, one is available even if you decide not to create or use device groups.

If you decide to use device groups, Digi recommends that you make a plan of your device group hierarchy before you begin creating device groups. This may help you determine the purpose for your device groups and decide how many levels you need and which devices and users should be attached to each device group.

Device sub-groups

A device sub-group is a way to further categorize devices within a device group. Device groups and sub-groups are assigned to both devices and user profiles, and these work together to create a way to limit device access to a set of users within a device group.

Note A device sub-group name is entered as free-form text. Be sure you remember the sub-group names you have entered and enter it correctly for other devices or user profiles. This ensures that you don't accidentally create undesired sub-groups due to a misspelling.

Example

You have a device group named REGIONS, and you have devices in that group that are located in New York and in California.

Within the REGIONS device group, you want users in New York to have access to only the devices in New York, and users in California to have access to only the devices in California. You can create an EAST sub-group for New York and a WEST sub-group for California.

- **EAST sub-group**: For each device in New York AND for each user profile in New York, you would select the REGIONS device group, and enter EAST as the device sub-group.
- **WEST sub-group:** For each device in California AND for each user profile in California, you would select the REGIONS device group, and enter WEST as the device sub-group.

Result

The users in the REGIONS device group and WEST sub-group can only see devices that are in the same device group/sub-group combination.

The users in the REGIONS device group and EAST sub-group can only see devices that are in the same device group/sub-group combination.

Using sub-groups in a device group hierarchy

Sub-groups are recognized within a device group hierarchy as well. User profiles assigned to a device group and sub-group in a parent device group can only see devices in any child device group that are assigned the same device group/sub-group combination.

Example

The REGIONS device group is a child group under the WORLD device group.

Result

User profiles assigned to the WORLD device group and the WEST sub-group can see devices assigned to the WEST sub-group in both the WORLD and REGIONS device groups.

User profiles assigned to the WORLD device group and the EAST sub-group can see devices assigned to the EAST sub-group in both the WORLD and REGIONS device groups.

Apply a configuration to a device or a device group: Overview

You can apply a device configuration to one selected Connect Sensor device in a device group, or to all of the devices in a group that are the same model. The configuration is applied the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually using a magnet.

- **All devices of the same model type**: Apply a device group configuration to the devices of the same model in a device group as needed. This ensures that the configuration for the device models of the same type are in sync.
- **One device in a device group**: You can apply a device group configuration to only one device in a device group or to one that is not in a device group. This is useful if you have one device in a group that should have a different configuration.

Note You can apply a configuration file from the Digi Axess Admin menu or from the map only to Connect Sensor devices.

The table below contains all of the methods available for applying a configuration to a Connect Sensor.

Update one device

Digi Axess Admin Menu	Information
Pick a device, then pick the configuration. **Device Management** > **Devices**	Select one device and apply a configuration
Pick a configuration, then pick a device. **Device Configuration Management** > **Device Configurations**	Select a configuration and apply to one device

Digi Axess Map	Information
Device Summary page	Apply a configuration file to a Connect Sensor from the Device Summary page

Update all devices of the same model in a device group

Digi Axess Admin Menu	Update one device
Pick a group, then pick a device model and configuration combo from the **Configurations** tab. **Device Management** > **Device Groups**	Select a device group and apply a configuration from the Configurations tab
Pick a group, then a device model, then a configuration. **Device Management** > **Device Groups**	Select a device group from the Device Groups page and apply a configuration
Pick a group, then a device model, then a configuration, then click the blue **Apply Config** button. **Device Management** > **Device Groups**	Select a device group and use the blue Apply Config button
Pick a configuration and model combo, then pick a device group. **Device Configuration Management** > **Device Configurations**	Select a configuration and apply to a device group
Pick a device group, model, and configuration combo. **Device Configuration Management** > **Device Configurations**	Reapply a device group configuration

Device Groups: Manage in Digi Axess

You can create devices groups for a set of devices that are similar. This feature is useful for applying device group configurations to multiple devices at the same time or for creating a group of devices for a certain group of users.

Device groups work with the user profiles that you create for each user that should be able to log in to Digi Axess. By default, a user is automatically assigned to the top level of the device group heirarchy. You can assign a different user group to a user, which ensures that the user is able to interact with only the devices in that device group. For more information about assigning a device group to a user, see:

- Add a user profile from the Digi Axess Admin page
- Update a user profile from the Digi Axess Admin page

Add a device group

You can create device groups as needed. You can use device groups to create groups of similar types of devices.

After a device group has been created, you can assign it to devices and user profiles.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Add** next to **Device Groups**.

   As an alternative, you can click **Device Groups** from the dashboard pane on the left of the screen, then click **Add Device Group**.
3. The **Device Groups** page displays, and you can create a new group.
   - **Group Name**: Enter a descriptive name for the device group. A name displays by default, but can be changed. An entry is required.
   - **Parent Group**: From the list box, select a parent device group. An entry is required. If this new group should be at the top level of a hierarchy, select the master device group for your organization.
   - **New Group ID**: Enter a unique identifier for the device group. An entry is required.
4. Click **Add** to save the change. Other options are **Save and add another** and **Save and continue editing**.

Review device group details

You can review details about the device groups from the **Device Groups** page. Some details can be updated, and you can change the stale notifications thresholds and reapply a configuration to the devices of the same device model in the group.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Device Groups** or **Change** next to **Device Groups**. As an alternative, click **Device Groups** from the dashboard pane on the left of the screen.

   The **Device Groups** page displays.

3. In the **Group Name** column, click on the name of the device group that you want to review. To find a group, scroll through the list of names, or limit the list using the search field. Type a search term in the search field and then click **Search**.
4. The **Device Groups** page displays pages of information about the group.
   - **Group Settings** tab: Review and update the group name, parent group, and group ID. See Update the device group name, ID, and parent group.
   - **Stale Notifications** tab: Determine the thresholds for all of the devices in a device group that determine whether a notification is stale. See Stale notifications for a device group.
   - **Configurations** tab: Review the configurations available for this group. You can also reapply a configuration to the devices of the same device model in the group. See Select a device group and apply a configuration from the Configurations tab.
   - **Devices** tab: Review information about the devices in the group: serial number, physical location description, and device model.
   - **Users** tab: Review information about the users in the group: user name, first name, last name, and email address.
   - **Child Groups** tab: Review the group name and group path information about the child groups assigned to this group. Click the pencil icon to navigate to the Group Settings tab for the child group.

Stale notifications for a device group

You can determine the thresholds for all of the devices in a device group that determine whether a stale notification is sent to the users that are connected to the device group. A device becomes stale when it has not connected to Digi Axess during the specified time period.

By default, the stale notification configuration is inherited from the device group's parent group.

Note You can change the notification settings for a device if desired.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **Device Management** section.
2. From the **Device Management** section in the Admin dashboard, click **Change** next to **Device Groups**. As an alternative, you can click **Device Groups** from the dashboard pane on the left of the screen.

   The **Device Groups** page displays.
3. In the **Group Name** column, click on the name of the device group that you want to review. The **Device Groups** page for that device displays.

   To find a group, scroll through the list of names, or limit the list using the search field. Type a search term in the search field and then click **Search**.
4. Click the **Stale Notifications** tab.
5. Disable **Inherit Settings**. **Enable Stale Notifications** is enabled by default.
6. Make the desired updates.
   - **Stale period**: Enter time period in hours since the device last connected to Digi Axess. The default is 24 hours.

- **Resend period**: Select a time period option to determine when another stale notification should be sent. The default is 1 day.
- **Resend limit**: Enter the maximum number of times a stale notification can be sent. The default is 3.

7. Click **Save** to save the changes.

Update the device group name, ID, and parent group

You can review and update the group name, parent group, and group ID in the **Group Settings** tab.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Device Groups** or **Change** next to **Device Groups**. As an alternative, click **Device Groups** from the dashboard pane on the left of the screen.

   The **Device Groups** page displays.
3. In the **Group Name** column, click on the name of the device group that you want to review. To find a group, scroll through the list of names, or limit the list using the search field. Type a search term in the search field and then click **Search**.
4. Click the **Group Settings** tab.
   - **Group Name**: (Required) Enter a descriptive name for the device group.
   - **Parent Group:** Click the down arrow next to the field to change the parent group.
   - **Updated Group ID**: (Required) Enter a unique ID for the device group. The ID must be at least 4 characters and can contain only numbers and letters.
5. Click **Save** to save the changes.

Select a device group and apply a configuration from the Configurations tab

You can apply a configuration to the devices of the same model type in a device group. This ensures that the configuration for the device models of the same type are in sync.

Note You can apply a configuration to a Connect Sensor device using this method or other methods. See Apply a configuration to a device or a device group: Overview.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Device Groups**. As an alternative, you can click **Device Groups** from the dashboard pane to the left of the page. The **Device Groups** page displays.
3. In the **Group Name** column, click on the name of the device group that you want to review. To find a group, scroll through the list of names, or limit the list using the search field. Type a search term in the search field and then click **Search**.
4. Click the **Configurations** tab.
5. Determine the model type to which you want to reapply the device configuration, and click **Reapply Device Configuration** in that row. The **Confirm Device Configuration**

Reapplication page displays, showing a list of the devices in the device group.

- Click **Continue** to reapply the configuration. The **Device Group Configurations** page is updated to display a message at the top of the screen to verify that the device configuration was initiated. Click the **here** link to review the installation history for the device group configuration.
- Click **Back** to return to the previous page. The configuration is not reapplied.

Select a device group from the Device Groups page and apply a configuration

You can apply a device configuration to all of the devices of one device model in a device group from the **Device Groups** page.

The configuration is applied the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually using a magnet.

The list of configurations available includes the device configurations that have been backed up and saved, for the devices that are in a device group to which you have access, plus all of the default configurations that are provided with your Digi Axess account.

Note You can apply a configuration to a Connect Sensor device using this method or other methods. See Apply a configuration to a device or a device group: Overview.

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1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Device Groups** or **View** next to that label.

   As an alternative, you can click **Device Groups** from the dashboard pane to the left of the page. The **Device Groups** page displays a list of configurations that can be applied.
3. Find the group to which the device you want to update is included. You can scroll through list or use the **Search** field to find the group.
4. For the desired group, click **Apply Config**. The **Apply Device Configuration - Select Model** page displays.
5. From the list of models, click on the device model that is the type that you want to update.

   The selected model is moved to the right side of the page and displays in a green banner in the **Selected Model** window.

   Note To deselect a selected option in the **Selected Model** window, click it. It is moved to the left side of the page and you can select a different device model.

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6. Click **Next**. The **Apply Device Configuration - Select Device Config** page displays, showing information about the configuration.
   a. From the **Device Configuration Type** list box, select the configuration type.
      - **Provided**: The device configuration is saved locally.
      - **Shared**: The device configuration is saved to Digi Axess.
   b. Select a configuration from the list of options. The selected configuration is moved to the right side of the page and displayed in the **Select Device Config** window.

7. Click **Next**. The **Apply Device Configuration - Confirm** page displays, showing the devices to which the configuration will be applied, and information about the configuration.
8. Click **Confirm** to continue and apply the configuration.

   If you have changed your mind, click **Back** to return to the previous screen.

Select a device group and use the blue Apply Config button

You can apply a device configuration to the Connect Sensor devices in a device group by clicking the blue **Apply Config** button in the **Device Groups** page.

The configuration is applied the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually using a magnet.

The list of configurations available includes the device configurations that have been backed up and saved, for the devices that are in a device group to which you have access, plus all of the default configurations that are provided with your Digi Axess account.

Note You can apply a configuration to a Connect Sensor device using this method or other methods. See Apply a configuration to a device or a device group: Overview.

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1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Configuration Management** section in the Admin dashboard, click **Device Configurations** or **View** next to that label.

   As an alternative, you can click **Device Configurations** from the dashboard pane to the left of the page. The **Device Configurations** page displays a list of configurations that can be applied. The **Device Groups** page displays.
3. In the **Group Name** column, click on the name of the device group that you want to update. To find a group, scroll through the list of names, or limit the list using the search field. Type a search term in the search field and then click **Search**. The **Device Groups** page for that device displays.
4. Click the blue **Apply Config** button on the right side of the page. The **Apply Device Configuration - Select Model** page displays.
5. Select a model from the **Models** list. The selected model is moved to the right side of the page and displays in a green banner in the **Selected Models** window. Only one model can be selected.
6. Click **Next**. The **Apply Device Configuration - Select Devices** page displays.
7. From the **Device Configuration** type list box, select the configuration type.
   - **Provided**: The device configuration is saved locally.
   - **Shared**: The device configuration is saved to Digi Axess.
8. Select a configuration from the list of options. The selected configuration is moved to the right side of the page and displayed in the **Select Device Config** window.
9. Click **Next**.
10. The **Apply Device Configuration - Confirm** page displays, showing the devices to which the configuration will be applied, and information about the configuration.

    Note A yellow warning banner displays at the top of the screen, to alert you that applying a

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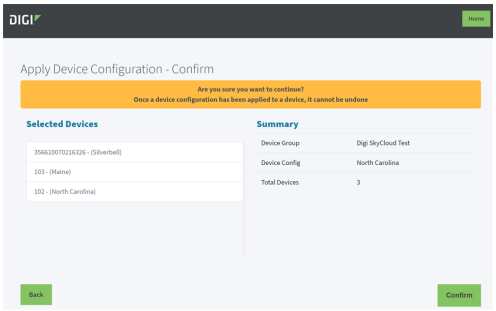
device configuration that cannot be undone.



11. Click **Confirm** to continue and apply the configuration.

    If you have changed your mind, click **Back** to return to the previous screen.

Update the firmware

You can schedule an update to the Connect Sensor firmware from the **Device Group** page. The update happens during the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually.

If the device is already scheduled for a firmware update, you are not allowed to schedule another update.

A device group may contain devices of more than one type. When you configure the firmware update, you are required to specify a device from the Connect Sensor family. Devices that are different from the selected type are ignored and the firmware update is not applied.

Update the Connect Sensor firmware from the Device Groups page

You can schedule an update to the Connect Sensor firmware from the **Device Group** page. The update happens during the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Device Groups** or **View** next to that label.

   As an alternative, you can click **Device Groups** from the dashboard pane to the left of the page. The **Device Groups** page displays a list of configurations that can be applied.
3. Find the group to which the device you want to update is included. You can scroll through list or use the **Search** field to find the group.
4. Click **Firmware Update** for that device group. The **Firmware Update - Select Model** page displays.
5. Click the Connect Sensor device model option. The selected option displays in the **Selected Model** column.

   Note To deselect the device model option, click the model option in the **Selected Model** column.
6. Click **Next**. The **Firmware Update - Select Firmware** page displays.

7. From the **Firmware Type** list box, select the **Standard** option.
8. Select the firmware version that you want to apply to the device. The selected firmware version displays in the **Selected Firmware** list.

   To find a version, you can either scroll through the list of versions, or use the **Firmware Versions** field to limit the list. As you type, the list is updated to include only the devices that match the entry.

   Note Click on the selected firmware update option in the **Selected Firmware** list to deselect it.

9. Click **Next**. The **Firmware Update - Confirm** page displays, showing the device that will be updated, and a summary of the selected firmware update. Devices in the device group that are not of the selected device model type are included in the Unavailable Devices list. The firmware update will not be scheduled for these devices.

   Note A yellow warning banner displays at the top of the screen, to confirm that a firmware update is selected to occur.

10. Click **Confirm** to continue and schedule the firmware update. The **Firmware Update - Results** page displays a summary of the update.
11. Click **View Results** to navigate to the Update History page to view more information.
    - **Update Details**: Includes the firmware type, firmware version, and the device group that was updated. Click on the device group to review the device group details.
    - **Update Status**: Includes the update start and end times, update success, and error messages.
    - **Devices**: Includes a list of the devices in the device group.
      - Click on the identifier in the **Device** column to access device information in the Update History (Device) page.
      - Click **Cancel Update** to cancel a Digi Axess firmware update that is scheduled for a future date. For details, see Cancel a firmware update for a Connect Sensor device from the Administration menu.

Update the firmware for a device group using the blue Firmware Update button

You can schedule an update to the Connect Sensor firmware from the **Device Group** page. The update happens during the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Device Groups** or **View** next to that label.

   As an alternative, you can click **Device Groups** from the dashboard pane to the left of the page. The **Device Groups** page displays a list of configurations that can be applied.
3. In the **Group Name** column, click on the name of the device group that you want to review. The **Device Groups** page for that group displays.

   To find a group, scroll through the list of names, or limit the list using the search field. Type a search term in the search field and then click **Search**.

4. Click the blue **Firmware Update** button. The **Firmware Update - Select Model** page displays.
5. Click the Connect Sensor device model option. The selected option displays in the **Selected Model** column.

   Note To deselect the device model option, click the model option in the **Selected Model** column.

6. Click **Next**. The **Firmware Update - Select Firmware** page displays.
7. From the **Firmware Type** list box, select the **Standard** option.
8. Select the firmware version that you want to apply to the device. The selected firmware version displays in the **Selected Firmware** list.

   To find a version, you can either scroll through the list of versions, or use the **Firmware Versions** field to limit the list. As you type, the list is updated to include only the devices that match the entry.

   Note Click on the selected firmware update option in the **Selected Firmware** list to deselect it.

9. Click **Next**. The **Firmware Update - Confirm** page displays, showing the device that will be updated, and a summary of the selected firmware update. Devices in the device group that are not of the selected device model type are included in the Unavailable Devices list. The firmware update will not be scheduled for these devices.

   Note A yellow warning banner displays at the top of the screen, to confirm that a firmware update is selected to occur.

10. Click **Confirm** to continue and schedule the firmware update. The **Firmware Update - Results** page displays a summary of the update.
11. Click **View Results** to navigate to the Update History page to view more information.
    - **Update Details**: Includes the firmware type, firmware version, and the device group that was updated. Click on the device group to review the device group details.
    - **Update Status**: Includes the update start and end times, update success, and error messages.
    - **Devices**: Includes a list of the devices in the device group.
      - Click on the identifier in the **Device** column to access device information in the Update History (Device) page.
      - Click **Cancel Update** to cancel a Digi Axess firmware update that is scheduled for a future date. For details, see Cancel a firmware update for a Connect Sensor device from the Administration menu.

Delete a device group

You can delete a device group that is no longer needed.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.

2. From the **Device Management** section in the Admin dashboard, click **Device Groups** or **Change** next to **Device Groups**. As an alternative, click **Device Groups** from the dashboard pane on the left of the screen.

   The **Device Groups** page displays.
3. To find the group(s) that you want to delete, scroll through the list of names, or limit the list using the search field. Type a search term in the search field and then click **Search**.
4. Click the check box next to the names of the device groups that you want to delete. You can select more than one.
5. From the **Go** list box, select the **Delete Selected Device Groups** option.
6. Click **Go**. The **Delete Multiple Objects** page displays and overview of the group(s) and related items that will be deleted.
7. Click **Yes, I'm sure** to complete the deletion process. You are returned to the **Device Groups** page. A green banner with a **Successfully deleted** message displays at the top of the page.
   - Click **No, take me back** if you don't want to complete the deletion.

Devices: Manage in Digi Axess Admin

All of your devices that are registered with Digi Axess can be configured and information reviewed from the Digi Axess Admin page.

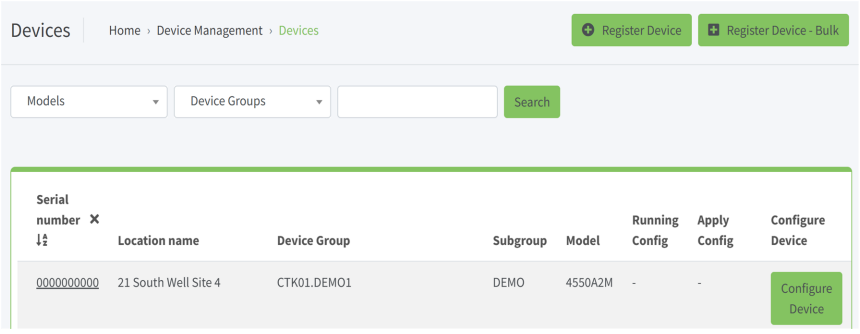
Access the Devices page from Digi Axess Admin

A list of the devices registered with Digi Axess is displayed in the **Devices** page. You can filter the list by device model and device group, and also search for a specific device.

You can also configure a device and update the Digi Axess firmware from the **Devices** page.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **Device Management** section.
2. From the **Device Management** section in the Admin dashboard, click **Devices**. As an alternative, you can click **Devices** from the **Device Management** section in the dashboard pane on the left of the screen.

   The **Devices** page displays.



Devices page overview

Within the **Device** page, you can search for a particular device by an identifier or filter the list by model and device group and access the **Device Summary** page for the device.

You can apply a saved configuration to the device. If a device configuration has been applied to the selected device, the name of the configuration displays.

The table describes the actions you can perform in this page.

Item	Description
Register Device	Click **Register Device** to register a device with Digi Axess. ■ Register a Connect Sensor from the Devices page
Register Device - Bulk	Click **Register Device - Bulk** to register multiple devices and assign them to one device group. ■ Register a group of devices in bulk from the Devices page
Filter the device list	You can apply filters to the list of devices to limit the devices displayed.
Sort the device list	You can use the column headers to sort the device list.
Serial number	Click the serial number for a device to access the device's information.
Running Config	Click the current configuration name in the **Running Config** column to review details about the configuration.
Apply Config	You can apply a device group configuration to one device. See Select one device and apply a configuration.
Configure Device	Click **Configure Device** to access the web UI for the device. You can use the options to configure the device. ■ Configure a Connect Sensor from the web UI

Filter and sort the device list in the Devices page

You can review a list of the devices that have been added to Digi Axess. When you log into Digi Axess, you can view the devices from the Digi Axess map or, if you have Digi Axess Admin privileges, from the Digi Axess Admin page.

Filter the device list

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Devices**. As an alternative, you can click **Devices** from the dashboard pane to the left of the page. The **Devices** page displays. For each device, the following information is available: **Serial Number**. **Location name**, **Device Group**, **Subgroup**, and **Model**. **Running config** shows the configuration currently running on the device.

3. You can limit the list by selecting a model or the devices in a particular device group, or by using the search feature. You can combine the search methods.
   - **Model**: Select a model option from the **Model** list box and click **Search**.
   - **Device Groups**: Select a device group form the **Device Groups** list box and click **Search**.
   - **Search field**: Enter a search term in the search field and then click **Search**.
4. Click the **Serial Number** link to display detailed information about the device.

Sort the list of devices

You can sort the list of devices in ascending or descending order by identifier: serial number, location name, device group, or sub-group. By default, the devices are listed in descending order.

1. Access the Devices page from Digi Axess Admin.
2. Hover over an identifier name in the device list. The name turns green.
3. Click on an identifier name. The sort symbol displays.
   - Click the identifier name again to change the sort order.
   - Click the X next the identifier name to remove the sort order symbol.

Review and update device information

You can review details about a device from the **Devices** page. Some details can be updated, such as the location name and the stale notifications thresholds.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Devices** or **Change** next to **Devices**. As an alternative, click **Devices** from the dashboard pane on the left of the screen.

   The **Devices** page displays.
3. Search for the device that you want to update. You can scroll through the list or use the search fields to limit the list.
4. In the **Serial Number** column, click on the serial number of the device that you want to review and update.
5. The **Devices** page is updated to display pages of information about the group.

Option	Description
Device	Displays identifying information for the device, device group information, and information about the device group configuration currently running on the device. ■ **Serial number** and **IMEI**: The device's unique identifiers. ■ **Device Group** and **Subgroup**: The device group and subgroup to which the device is assigned, which you can change. See Change the device group for a device. ■ **Model**: The device model.

Option	Description
	■ **Running Config** and **Config Status**: The device configuration currently running on the device and its status. Click the running configuration name or configuration status link to review configuration details.
Location	You can change the location name and review the location details. Note The GPS coordinates are configured in the device's web UI: Connect Sensor.
Stale Notifications	Determine the thresholds for a device that determine whether a notification is stale. ■ Stale notifications for a device
Warranty	Review information about the device's warranty. ■ Review warranty information for a device
Logging	You can enable system logging if needed. ■ Configure system logging in the Devices page
Contact Groups	You can add a device to or delete a device from a notification group. This ensures that any notifications from the device are sent to the users assigned to the notification group. ■ Update the notification groups for a device
Device Notifications	Review the notifications about this device.
Device Reports	Review information about the device reports.
Device Configuration Updates	Review information about the device configuration updates.

Register a Connect Sensor from the Devices page

Your device must be registered with Digi Axess so that you can access and manage the device from Digi Axess. The process uses the device's IMEI as a unique identifier.

Note You can also register a device in the Digi Axess Account menu from the map page.

Before you begin

You will need this information to register your device:

- Serial number or IMEI
- The device group in which the device should be included.

To register your device:

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **Device Management** section.
2. From the **Device Management** section in the Admin dashboard, click **Devices** or **Register** next to that label.

   As an alternative, you can click **Devices** from the dashboard pane to the left of the page. The **Devices** page displays. Click **Register Device** in the top right corner of the page.
3. The **Register Device** section displays. In the **Serial Number** field, enter the unique identifier for the device. You can enter the device's serial number or IMEI. As an alternative, click the **Scan Barcode** button next to the field and use a camera or a saved image to enter an identifier.
4. From the **Device Group** list box, select a device group from the drop-down list.
5. (Optional) In the **Subgroup** field, enter a subgroup name.
6. Click **Register**. The **Set Device Location Source** page displays.
7. Name and define the device's physical location.
   a. In the **Location Name** field, enter a descriptive name for the device's physical location. If you leave this field blank, the device's serial number is used by default.
   b. Select a **Location Source** option, which defines the method used to configure the physical location for the device.
      - **None**: No physical location is defined. The device is unmapped and won't appear on the Digi Axess map. You can specify a location at a later time.
      - **Manual**: Manually enter the latitude and longitude of the physical location of the device.
      - **GPS**: The physical location is determined by the device's internal GPS. The location is updated the next time the device wakes and connects to Digi Axess.
8. In the **Set Device Configuration** page, from the **Choose a Configuration** list box, select an initial configuration for the device.
   - **Demo Configuration**: This is the default configuration, and displays basic information in the Device Summary page: **Analog in Voltage**, **Digital in**, and **Case Temperature**.
   - **Blank Configuration**: No data displays. You must manually configure the device in the device's **Administration** page.
   - **Saved Configuration**: Select a configuration that you have previously created and saved. The configuration is applied to this device.
9. Click **Set** to save your selections.
10. Verify that the location and configuration selections are available. You need to wake the device, and when the device connects to Digi Axess, the configuration is pushed from Digi Axess to the Connect Sensor device. For detailed information, see Verify device registration.

Register a group of devices in bulk from the Devices page

You can use the bulk registration process to register a group of devices to one device group.

This process uses a CSV file that contains the information about each device that is needed to complete registration, including the unique identifier for the device (serial number or IMEI).

The CSV file is created after the order fulfillment process is completed, and is emailed by default to the email address associated with the sales order.

Before you begin

You should have these items before you begin the bulk device registration process.

- Download the CSV file that was emailed, and store it in a place that can be accessed by Digi Axess.
- Determine the device group in which the devices should be included.

To register your devices:

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **Device Management** section.
2. From the **Device Management** section in the Admin dashboard, click **Devices** or **Change** next to that label.

   As an alternative, you can click **Devices** from the dashboard pane on the left of the page.
3. The **Devices** page displays. Click **Register Device - Bulk** in the top right corner of the page. The **Register Device--Bulk** page displays.
4. From the **Device Group** list box, select a device group from the drop-down list.
5. Select the CSV file.
   a. In the **Device CSV File** section, click **Choose File**. The **Open** dialog displays.
   b. Navigate to the location at which you saved the file.
   c. Select the file and click **Open**.
   d. You are returned to the **Register Device--Bulk** page and the selected file displays in the field.
6. Click **Import** to import the file and start the registration process.
7. When registration is complete, the **Register Device - Bulk Results** page displays. The page includes a list of the devices that were registered, a list of any that were not registered, and a summary of the registration details.

   If you need to retain this information, take a screen shot of the page. After you close this page you cannot review it again.
8. Click **Done** to close this page.

Change the device group for a device

You can update the device group and subgroup assigned to the device. This information is initially assigned when the device was registered..

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **Device Management** section.
2. From the **Device Management** section in the Admin dashboard, click **Devices** or **Change** next to that label. As an alternative, you can click **Devices** from the dashboard pane to the left of the page. The **Devices** page displays.
3. Search for the device that you want to update. You can scroll through the list or use the search fields to limit the list.
4. In the **Serial Number** column, click the serial number for the device that you want to update. The **Device** tab displays.

5. From the **Device Group** list box, select a device group from the drop-down list.
6. (Optional) In the **Subgroup** field, enter a subgroup name.
7. Click **Save** to save your selections.

Access the device configuration web UI from Digi Axess Admin page

You can log in to a device's web UI from the Digi Axess Admin page Dashboard.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Devices**. As an alternative, you can click **Devices** from the dashboard pane to the left of the page. The **Devices** page displays.
3. Search for the device that you want to update. You can scroll through the list or use the search fields to limit the list.
4. Click the green **Configure Device** button.

   The web UI for the device displays in Digi Axess. Any changes you make are stored and then pushed from Digi Axess the next time that the Connect Sensor wakes and connects to the network.

Review details about the device's current configuration

You can review information about the device group configuration that is currently running on the device.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Devices** or **Change** next to **Devices**. As an alternative, click **Devices** from the dashboard pane on the left of the screen.

   The **Devices** page displays.
3. Search for the device that you want to update. You can scroll through the list or use the search fields to limit the list.
4. Use one of the following methods to review details about the current configuration running on the device.
   - **Devices page**: From the **Devices** page, in the **Runnig Config** column, click the configuration name. The **Device Configurations > Device Configuration** screen displays.
   - **Device page**: From the **Devices** page, click the serial number in the **Serial Number** column. The **Device** page for the device displays. Scroll down to the **Running Config** section and click the name of the configuration. The **Device Configurations > Device Configuration** screen displays.
5. To review the installation status of the current configuration, click the link in the **Config Status** section. The **Install History (Device)** page displays, showing information about the installation status.

Review device configuration update details

You can review information about the configuration updates that have occurred on a device.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Devices** or **Change** next to **Devices**. As an alternative, click **Devices** from the dashboard pane on the left of the screen.

   The **Devices** page displays.
3. Search for the device whose configuration you want to review. You can scroll through the list or use the search fields to limit the list.
4. For the desired device, click the serial number link in the **Serial Number** column. Information about the device displays.
5. Click the **Device Configuration Updates** tab at the top of the page. The page is updated to display information about the configuration updates for this device.
   - **Update time**: The time at which the configuration update started.
   - **Event source**: The source from which the update was started. Options are:
     - **UI**: Initiated from the Digi Axess user interface.
     - **API**: Initiated from Digi Axess REST API.
   - **User**: The user logged in when the update was started.
   - **Session**: The session that was active when the update was started.
6. Click the **Look** icon for the row to open the Device Configuration Updates page and display additional information about the update.

Review warranty information for a device

You can review the warranty information for a device that is registered with **Digi Axess**.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Devices** or **Change** next to **Devices**. As an alternative, click **Devices** from the dashboard pane on the left of the screen.

   The **Devices** page displays.
3. Search for the device whose warranty you want to review. You can scroll through the list or use the search fields to limit the list.
4. For the desired device, click the serial number link in the **Serial Number** column. Information about the device displays.
5. Click the **Warranty** tab. The device's warranty information displays.
   - **Digi Axess Device Warranty**: Click the device link to display warranty information in the **Digi Axess Device Warranties** page.
   - **Warranty state**: The current state of the warranty. Options are **Active**, **Expired**, or **Unknown**.
   - **Warranty start date**: The date on which the warranty began.
   - **Warranty end date**: The date on which the warranty expired.

Update a device's location name

You can change the descriptive name for the device's location.

Note The location name can also be changed in the web UI for a Connect Sensor.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Devices** or **Change** next to **Devices**. As an alternative, click **Devices** from the dashboard pane on the left of the screen.

   The **Device Groups** page displays.
3. Search for the device that you want to update. You can scroll through the list or use the search fields to limit the list.
4. From the **Serial Number** column, click the serial number for the device you want to update.
5. Click the green arrows to navigate to the **Location** page.
6. In the **Location name** field, enter a descriptive name for the device's location.
7. Click **Save**. You are returned to the **Devices** page and the new name displays in the **Location name** column.

Update the notification groups for a device

You can add a device to one or more notification groups. All of the notification contacts in a notification group receive the same notifications from the devices in the notification group, such as device reports and automation threshold alarms.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **Device Management** section.
2. From the **Device Management** section in the Admin dashboard, click **Devices** or **Change** next to that label. As an alternative, you can click **Devices** from the dashboard pane to the left of the page. The **Devices** page displays.
3. Search for the device that you want to update. You can scroll through the list or use the search fields to limit the list.
4. In the **Serial Number** column, click the serial number for the device that you want to update. The **Device** tab displays.
5. Click the green arrows to navigate to the **Contact Groups** page.
6. Add a contact group.

   From an empty or filled **Contact group** list box, click the down arrow to choose a contact group. You can use the search field to enter a search term and limit the list of options.

   To add the device to another notification group, click **Add another Contact Group** to add a new row to the page, and repeat the process.
7. Remove a device from a contact group.
   a. Click the check box in the **Delete?** column for the group you want to remove.
   b. Click **Remove**.
8. Click **Save** to save your changes.

Stale notifications for a device

You can determine the thresholds for a device that determine whether a stale notification is sent to the users that are connected to this device. A device becomes stale when it has not connected to Digi Axess during the specified time period.

By default, the stale notification configuration is inherited from the device's parent group.

Note You can change the notification settings for all devices in the parent group if desired.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **Device Management** section.
2. From the **Device Management** section in the Admin dashboard, click **Change** next to **Devices**.

   As an alternative, you can click **Devices** from the dashboard pane on the left of the screen.
3. Search for the device that you want to update. The search results display in a list.
4. From the **Serial Number** column, click the serial number of the device that you want to change. The **Devices** page for that device displays.
5. Click the arrow buttons to scroll to the **Stale Notifications** page.
6. Disable **Inherit Settings**. **Enable Stale Notifications** is enabled by default.
7. Make the desired updates.
   - **Stale period**: Enter time period in hours since the device last connected to Digi Axess. The default is 24 hours.
   - **Resend period**: Select a time period option to determine when another stale notification should be sent. The default is 1 day.
   - **Resend limit**: Enter the maximum number of times a stale notification can be sent. The default is 3.
8. Click **Save** to save the changes.

Select one device and apply a configuration

You can apply a device configuration to one selected Connect Sensor device in a device group from the **Device Groups** page. This feature is useful if you have a new device in a group or if the configuration for one device is different from the others in the device group.

The configuration is applied the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually using a magnet.

The list of configurations available includes the device configurations that have been backed up and saved, for the devices that are in a device group to which you have access, plus all of the default configurations that are provided with your Digi Axess account.

Note You can apply a configuration to a Connect Sensor device using this method or other methods. See Apply a configuration to a device or a device group: Overview.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Devices** or **Change** next to that label.

As an alternative, you can click **Devices** from the dashboard pane to the left of the page. The **Devices** page displays a list of configurations that can be applied.

3. Find the device that you want to update. You can scroll through list or use the **Search** field to find the group. You can also use the **Models** and **Device Groups** list boxes to filter the list of devices.
4. For the desired device, click **Apply Config**. The **Apply Device Configuration - Select Device Config** page displays.
5. From the **Device Configuration Type** list box, select the configuration type.
   - **Provided**: The device configuration is saved locally.
   - **Shared**: The device configuration is saved to Digi Axess.
6. A list of provided or shared configurations display. You can use the **Filter** field to search for a configuration.
7. Click on the configuration you want to apply to the device. The configuration is moved to the right side of the page in the **Selected Device Config** window, and displays in a green banner.
8. Click **Next**. The **Apply Device Configuration - Confirm** page displays, showing the device to which the configuration will be applied, and information about the configuration.
9. Click **Confirm** to continue and apply the configuration.

   Note If you have changed your mind, click **Back** to return to the previous screen.

10. The **Apply Device Configuration - Results** page displays a summary of the update.
11. Click **View Results** to navigate to the Install History page to view more information.
    - **Install Details**: Shows the name of the device configuration and the device group to which it was applied.
      - **Device Config**: Click the device configuration name to display information about the configuration.
      - **Device Group**: Click the device group name to display information about the device group.
    - **Install Status**: Shows the completion progress of the configuration application.
    - **Devices**: Contains a list of the devices to which the configuration was applied.

Clear historical sensor data from a device

You can clear the historical sensor data for a selected device from the Admin menu. When you use this feature, all of the historical sensor data is deleted. Once deleted, the sensor data cannot be recovered.

This feature is useful if you have changed the sensor connected to a pin on a device, and you want to see only data for the sensors that are currently connected to the device.

Note As an alternative, you can also delete Connect Sensor sensor data from the Automation Dashboard.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.

2. From the **Device Management** section in the Admin dashboard, click **Change** next to **Devices**. As an alternative, you can click **Devices** from the dashboard pane on the left of the screen.

   The **Devices** page displays.
3. Search for the device for which you want to clear sensor data. You can limit the list by selecting a model or the devices in a particular device group, or by using the search feature. You can combine the search methods.
   - **Model**: Select a model option from the **Model** list box and click **Search**.
   - **Device Groups**: Select a device group form the **Device Groups** list box and click **Search**.
   - **Search field**: Enter a search term in the search field and then click **Search**.
4. Click the **Serial Number** link to display detailed information about the device.
5. Click **Clear Sensor Data**. The **Confirm Clear Sensor Data** page displays.
6. Review the messages, and then click **Confirm** to clear the sensor data. You are returned o the **Devices** page for the device. A green banner displays the message: **Device Sensor Data Cleared**.

Configure system logging in the Devices page

You can configure system logging for a Connect Sensor in the **Devices** page for the device. This feature is useful as a support tool and does not need to be enabled unless you are instructed to do so.

Note You can also configure system logging for a device from the device's web UI.

When enabled, system events are stored on the device. Each time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually with a magnet, a log is pushed from the device to Digi Axess. The logs are listed in the **Device Logs** window, and can be downloaded and saved on your computer.

The logs are collected for the number of days specified. When the time limit is reached, the logging feature is automatically disabled and logs are no longer collected from the device.

When new logs are sent from the device to Digi Axess, any logs over seven days old are automatically cleared. You can also manually clear any logs when needed.

Enable system logging

You must enable system logging if you want to use the feature.

Note You can also enable system logging from the Connect Sensor web UI. See Configure system logging.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Devices** or **Change** next to **Devices**. As an alternative, click **Devices** from the dashboard pane on the left of the screen.

   The **Device Groups** page displays.

3. Search for the device that you want to update. You can scroll through the list or use the search fields to limit the list.

   Note Make sure that the type in the **Model** column is **Connect Sensor XRT-M**.

4. From the **Serial Number** column, click the serial number for the device you want to update.
5. Click the green arrows to navigate to the **Logging** page.
6. Click the **Enable Device Logging** slider button.
7. From the **Disable Logging In** list box, select the number of days logs should be collected. When the time limit is reached, the logging feature is automatically disabled and logs are no longer collected from the device.
8. Any logs display in the **Device Logs** window. When new logs are sent from the device to Digi Axess, any logs over seven days old are automatically cleared. You can also manually clear any logs when needed.
9. Click **Save**. You are returned to the **Devices** page.

Clear a system log

You can manually clear all of the system logs.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Devices** or **Change** next to **Devices**. As an alternative, click **Devices** from the dashboard pane on the left of the screen.

   The **Device Groups** page displays.
3. Search for the device that you want to update. You can scroll through the list or use the search fields to limit the list.

   Note Make sure that the type in the **Model** column is **Connect Sensor XRT-M**.

4. From the **Serial Number** column, click the serial number for the device you want to update.
5. Click the green arrows to navigate to the **Logging** page.
6. Click **Clear Device Logs**.

Download system logs

Before the logs are automatically cleared, you can download the logs and save them on your computer. The log files are stored as a *.txt file.

Note You must have enabled the system logging feature. See Enable system logging.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Devices** or **Change** next to **Devices**. As an alternative, click **Devices** from the dashboard pane on the left of the screen.

   The **Device Groups** page displays.

3. Search for the device that you want to update. You can scroll through the list or use the search fields to limit the list.

   Note Make sure that the type in the **Model** column is **Connect Sensor XRT-M**.

4. From the **Serial Number** column, click the serial number for the device you want to update.
5. Click the green arrows to navigate to the **Logging** page.
6. Click **Download Device Logs**. The log files are downloaded onto your computer.
7. You can name and save the log to a desired location.

Warranties: Review device warranties

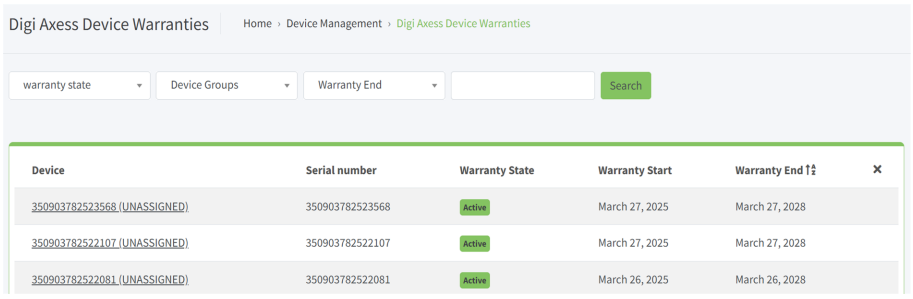
You can review the warranty information for your devices in the **Digi Axess Device Warranties** page. You can filter the list of devices by warranty state, device group, and the warranty end date. You can also search for a specific device by name or serial number.

Warranty information is updated once a day, and is included for notification only.

Note You can also review a warranty for a specific device from the **Devices** page. Warranty status is also displayed in the Device Summary page for a device.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **Device Management** section.
2. From the **Device Management** section in the Admin dashboard, click **Digi Axess Device Warranties** or the **View** button next to the link. As an alternative, you can click **Device Management** > **Digi Axess Device Warranties** in the dashboard pane on the left of the screen.

   The **Digi Axess Device Warranties** page displays.



3. You can use the filters in any combination to limit the list. Select from the options and then click **Search**
   - **Warranty state**: Select a warranty state option from the list box. Options are **Active**, **Expired**, or **Unknown**.
   - **Device Groups**: Select a device group from the list box.
   - **Warranty End**: Select an end date option from the list box.
   - **Search**: Enter search criteria text string.
4. You can review the warranty information for all of your devices.

Field	Description
Device	The name of the device. Click the device name link to navigate to the **Digi Axess Device Warranty** page for the selected device. ■ Review warranty information for a device
Serial Number	The serial number assigned to the device.
Warranty State	The current state of the warranty. Options are **Active**, **Expired**, or **Unknown**.
Warranty start date	The date on which the warranty began.
Warranty end date	The date on which the warranty expired.

Configure Multi-Factor Authentication (MFA)

You can use multi-factor authentication (MFA) in **Digi Axess** to provide extra security when users log in.

You can configure MFA for a device group or for an individual user.

- **Device group**: When MFA is configured for a device group, every user in that device group and all of the child device groups is required to set up MFA before they can log in to **Digi Axess**.
- **Individual user**: You can configure MFA for an individual. If MFA has been configured for a device group to which the user is assigned, you can override the MFA device group configuration.

MFA (Multi-Factor Authentication) and **SSO (Single Sign-On)**

Within Digi Axess, you cannot use both MFA and SSO. For more detailed information, see Configure SSO (Single Sign-On).

Get Started with Multi-Factor Authentication (MFA)

The steps in this section explain how to configure MFA.

Step 1: Enable MFA

Enable MFA for all the users in a device group and that device group's child groups, or for a single user.

- Configure MFA for a device group
- Configure MFA for an individual user

Step 2: Activate MFA for a user profile

The first time a user logs in after MFA has been enabled, the user is required to activate MFA for their user profile.

- Activate MFA for a user profile when you log into Digi Axess

Step 3: Log in using MFA

After a user has activated MFA, they must use MFA each time they log in to **Digi Axess**.

- Log in to Digi Axess using MFA

Optional actions

A user can review the MFA configuration for their user profile, generate backup tokens, and remove MFA.

- Review MFA configuration and generate MFA backup tokens
- Remove MFA from a user profile
- Log in to Digi Axess using an MFA backup token
- Activate MFA for a user profile from the Update Profile page

Configure MFA for a device group

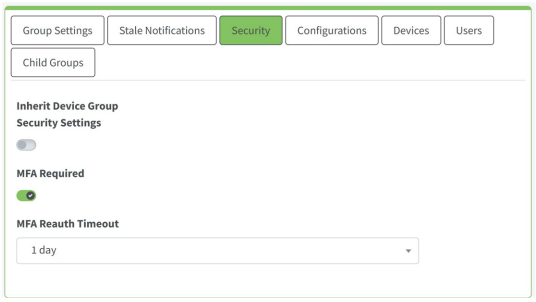
Multi-factor authentication (MFA) is configured for a device group, and every user in that device group and all of that group's child device groups is required to activate MFA on their user profile before they can log in to **Digi Axess**.

For each device group, you can decide whether to use the MFA configuration inherited from the device group's parent group, or to change the configuration for this device group. The **Inherit Device Group Security Settings** and **MFA Required** options work together to determine whether a device group and the group's children have MFA enabled.

To enable MFA for a device group:

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Device Groups** or **Change** next to **Device Groups**. As an alternative, click **Device Groups** from the dashboard pane on the left of the screen.

   The **Device Groups** page displays.
3. Find the device group which you want to configure for MFA. Scroll through the list of names, or limit the list using the search field. Type a search term in the search field and then click **Search**.
4. In the **Group Name** column, click on the name of the device group for which you want to set up MFA. The **Device Groups** page displays.
5. Click the **Security** tab. The security configuration options display.
6. Configure the MFA options:
   a. If **Inherit Device Group Security Settings** is enabled and you want to enable MFA for this device group, click the toggle button for the option to disable it.
   b. Click the **MFA Required** toggle button to enable it.

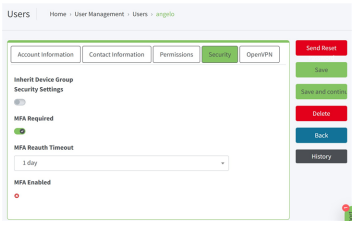


7. From the **MFA Reauth** list box, select the time interval at which the user will be required to re-authenticate using MFA when logging in.
8. Click **Save** to save the change.

Configure MFA for an individual user

You can configure multi-factor authentication for an individual user.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **User Management** section.
2. From the **User Management** section in the **Admin** dashboard, click **Change** next to **Users**. As an alternative, you can click **User Management** > **Users** from the dashboard pane on the left of the screen.
3. The **Users** page displays.
4. Find the user profile that you want to update. You can scroll through the list of user profiles or use the **Search** fields to search for a profile.
5. Click on the user profile name. The **Users** page for the user displays.
6. Click the **Security** tab.
7. Configure the MFA options:
   a. If **Inherit Device Group Security Settings** is enabled, click the toggle button for the option to disable it.
   b. Click the **MFA Required** toggle button to enable it.



8. From the **MFA Reauth** list box, select the time interval at which the user will be required to re-authenticate using MFA when logging in.
9. The icon in the **MFA Enabled** section denotes whether the user has enabled MFA.
   - **X**: The user has not enabled MFA.
   - **Check mark**: The user has enabled MFA.
10. Click **Save**.

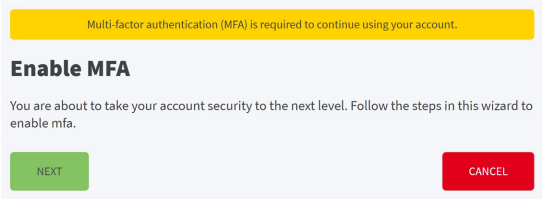
Activate MFA for a user profile when you log into Digi Axess

The first time you log in to **Digi Axess** after multi-factor authentication (MFA) has enabled, you are required to activate MFA for your user profile.

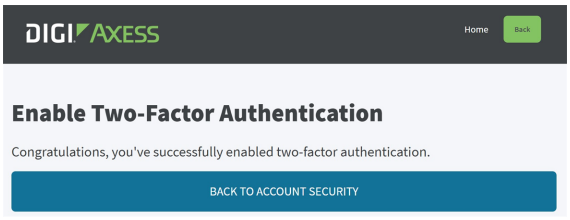
You are asked to select an authentication method. You can choose an app-based verification (such as Duo, Authy,or Google Authenticator) or a device or biometric verification (such as YubiKey, Passkey, or Windows Hello).

You can also create backup tokens, which are used to authenticate you if you don't have another device from which to complete multi-factor authentication when you log in. Once you have generated these, you should store them in a secure location for future use.

1. Navigate to digiaxess.com in your web browser.
2. Click **Login**. The **Digi Axess Log In** page displays.
3. Enter your user name and password.
   - **User name**: Enter the user name for your Digi Axess account. Verify the user name with your system administrator.
   - **Password**: Enter the password for your Digi Axess account.
4. Click **Submit**. The **Enable MFA** page displays.

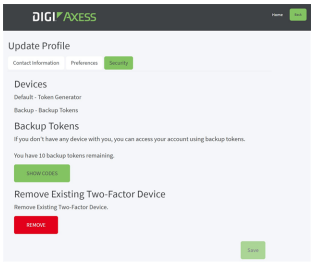


5. Click **Next**. You are required to select an authentication method. Options are:
   a. **Token generator**: Use an app-based verification, such as Duo, Authy,or Google Authenticator.
   b. **WebAuthn**: Use a device or biometric verification, such as YubiKey, Passkey, or Windows Hello.
6. Click **Next**. Follow the **Enable MFA** wizard to complete the process. When complete, a confirmation page displays.



7. Click **Back to Account Security**. The **Update Profile** page displays.
8. You should create back-up tokens, which are used to authenticate you as the user if you don't have another device from which to complete the multi-factor authentication when you log in.
   a. Click **Show Codes**. You may be asked to log in using MFA. The **Backup Tokens** page displays.
   b. Click **Generate Tokens**. The page is updated to display 10 tokens.
   c. Save the tokens to a secure location that is easily accessible to you if you don't have another device from which to complete the multi-factor authentication.
   d. Click **Back to Account Security**. The **Update Profile** page is updated to show that you

have 10 backup tokens available.



9. Click **Home** to display the **Digi Axess** map page.

Log in to Digi Axess using MFA

After multi-factor authentication (MFA) has been enabled for your user profile, you must use the second authentication tool you chose when logging into **Digi Axess**.

1. Navigate to digiaxess.com in your web browser.
2. Click **Login**. The **Digi Axess Log In** page displays.
3. Enter your user name and password.
   - **User name**: Enter the user name for your **Digi Axess** account. Verify the user name with your system administrator.
   - **Password**: Enter the password for your **Digi Axess** account.
4. Click **Submit** to log in to **Digi Axess**. The **Digi Axess Log In** page is updated for MFA.
5. In the **Token** field, enter the token generated by your token generator on your authentication device.
6. You can deselect the **Don't ask again on this device** option to avoid having to use MFA to sign in the next time you log into **Digi Axess**.
7. Click **Submit** to log in to **Digi Axess**.

Log in to Digi Axess using an MFA backup token

After multi-factor authentication (MFA) has been enabled for your user profile, you must use the second authentication tool you chose when logging into **Digi Axess**. If you don't have access to your secondary authentication tool (for example, your phone battery has died), you can use one of the backup tokens that you previously generated and saved.

1. Navigate to where you saved your backup tokens, and display the tokens. You can copy/paste or type the token into the **Digi Axess Log In** page in another step.
2. Navigate to digiaxess.com in your web browser.
3. Click **Login**. The **Digi Axess Log In** page displays.
4. Enter your user name and password.
   - **User name**: Enter the user name for your **Digi Axess** account. Verify the user name with your system administrator.
   - **Password**: Enter the password for your **Digi Axess** account.
5. Click **Submit** to log in to **Digi Axess**. The **Digi Axess Log In** page is updated for MFA.

6. Click **Use Backup Token**. The **Digi Axess Log In** page is updated.
7. Enter your backup token in the **Token** field.
8. You can deselect the **Don't ask again on this device** option to avoid having to use MFA to sign in the next time you log into **Digi Axess**.
9. Click **Submit** to log in to **Digi Axess**.

Review MFA configuration and generate MFA backup tokens

After multi-factor authentication (MFA) has been enabled for a user's profile, the user can review information about their MFA configuration and create more backup tokens if needed.

Back-up tokens can be used to access your device if you don't have another device from which to complete the multi-factor authentication when you log in.

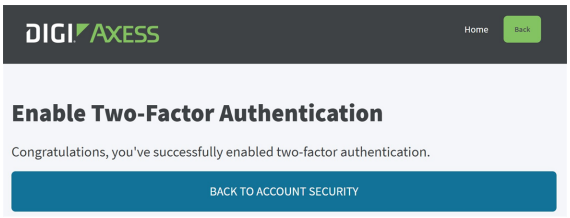
1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **User Management** section.
2. In the left-hand pane, click your log in name at the top of the section. The **Update Profile** screen displays.
3. Click the **Security** tab, if is not selected by default.
4. In the **Devices** section, you can verify your authentication method and your backup method. Options are:
   a. **Token generator**: Use an app-based verification, such as Duo, Authy,or Google Authenticator.
   b. **WebAuthn**: Use a device or biometric verification, such as YubiKey, Passkey, or Windows Hello.
5. Click **Show Codes** to display your remaining backup codes. The **Backup Tokens** page displays, and shows your remaining backup codes. You can have up to 10, and can regenerate new codes at any time.
   a. Click **Generate Tokens** to create 10 new backup codes.
   b. Copy these tokens, and save them to a place that is easily accessible to you if you don't have another device from which to complete the multi-factor authentication.
   c. Click **Back to Account Security**. The **Update Profile** page is updated to show that you have 10 backup tokens available.
6. Click **Back** to return to the **User Profiles** page.
7. Click **Home** to return to the **Digi Axess** map page.

Remove MFA from a user profile

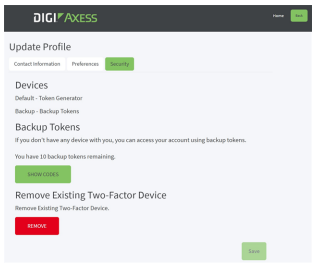
After multi-factor authentication (MFA) has been enabled for a user's profile, the user can review remove an existing two-factor device if needed. If you do this action, you must re-enable MFA for your user profile to be able to log into **Digi Axess**.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **User Management** section.

2. In the left-hand pane, click your log in name at the top of the section. The **Update Profile** screen displays.
3. Click the **Security** tab, if is not selected by default.
4. Click **Remove**. The **Remove Two-factor Device** page displays.
5. Click **Confirm** to confirm this action.
6. Click **Remove**. The **Enable MFA** page displays.
7. Click **Next**. You are required to select an authentication method. Options are:
   a. **Token generator**: Use an app-based verification, such as Duo, Authy,or Google Authenticator.
   b. **WebAuthn**: Use a device or biometric verification, such as YubiKey, Passkey, or Windows Hello.
8. Click **Next**. Follow the **Enable MFA** wizard to complete the process. When complete, a confirmation page displays.



9. Click **Back to Account Security**. The **Update Profile** page displays.
10. You should create back-up tokens, which can be used to access your device if you don't have another device from which to complete the multi-factor authentication when you log in.
    a. Click **Show Codes**. You may be asked to log in using MFA. The **Backup Tokens** page displays.
    b. Click **Generate Tokens**. The page is updated to display 10 tokens.
    c. Copy these tokens, and save them to a place that is easily accessible to you if you don't have another device from which to complete the multi-factor authentication.
    d. Click **Back to Account Security**. The **Update Profile** page is updated to show that you have 10 backup tokens available.

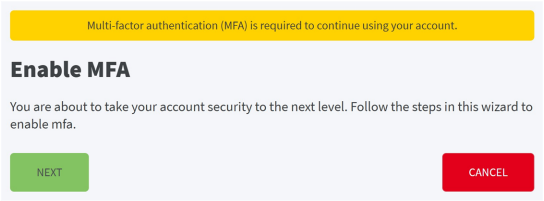


11. Click **Home** to display the **Digi Axess** map page.

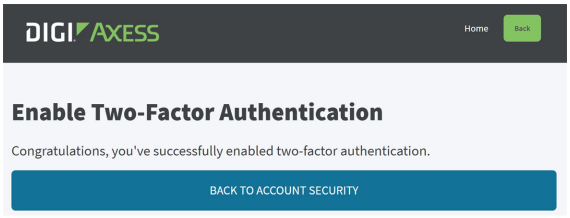
Activate MFA for a user profile from the Update Profile page

You can activate multi-factor authentication from the **Update Profile** page. You can access this page from the Digi Axess Account menu or the Admin dashboard.

1. Log into Digi Axess to access the Digi Axess map page.
2. In the toolbar, click the down arrow next to the user profile icon. The **Account** menu displays.
3. Click **Administration**. The Digi Axess Admin dashboard displays.
4. In the toolbar panel on the left, click your user profile name. The **Update Profile** page displays.
5. Click the **Security** tab. The **Enable MFA** page displays.

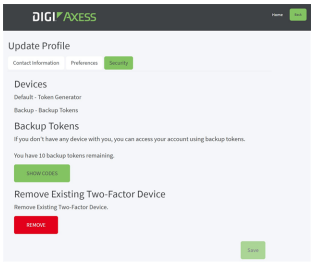


6. Click **Next**. You are required to select an authentication method. Options are:
   a. **Token generator**: Use an app-based verification, such as Duo, Authy,or Google Authenticator.
   b. **WebAuthn**: Use a device or biometric verification, such as YubiKey, Passkey, or Windows Hello.
7. Click **Next**. Follow the **Enable MFA** wizard to complete the process. When complete, a confirmation page displays.



8. Click **Back to Account Security**. The **Update Profile** page displays.
9. You should create back-up tokens, which can be used to access your device if you don't have another device from which to complete the multi-factor authentication when you log in.
   a. Click **Show Codes**. You may be asked to log in using MFA. The **Backup Tokens** page displays.
   b. Click **Generate Tokens**. The page is updated to display 10 tokens.
   c. Copy these tokens, and save them to a place that is easily accessible to you if you don't have another device from which to complete the multi-factor authentication.
   d. Click **Back to Account Security**. The **Update Profile** page is updated to show that you

have 10 backup tokens available.



10. Click **Home** to display the **Digi Axess** map page.

Configure SSO (Single Sign-On)

You can use Single Sign-On (SSO) in Digi Axess to provide extra security when users log in. After you have your SSO application running, you can add the Digi Axess credentials to your SSO app, and vice-versa, to ensure a connection.

Within Digi Axess, you can configure SSO for a device group, and then enable SSO for any user in that group.

SSO (Single Sign-On) and MFA (Multi-Factor Authentication)

Within Digi Axess, you cannot use both SSO and MFA. If you choose to use SSO and have enabled MFA for your users, you must remove MFA for each user.

Get Started with SSO

The steps in this section explain how to SSO for Digi Axess.

Step 1: Add Digi Axess to your SSO application

After your SSO application is running, add the Digi Axess credentials.

- Add Digi credentials to your SSO application

Step 2: Configure SSO for a device group in Digi Axess

Configure SSO for a device group from the Administration dashboard in Digi Axess.

- Configure SSO for a device group

Step 3: Enable SSO for the users in the device group in Digi Axess

Enable SSO for the users in a device group for which SSO has been configured.

- Enable SSO for a user

Step 4: Add the users to the SSO application

The users in Digi Axess that have SSO enabled must also be added into your SSO application.

- Add the users to the SSO application

Step 5: Assign an SSO password for Digi Axess Mobile app

If you have users that use Digi Axess Mobile app you must ceate an SSO password. This password must be entered once into Digi Axess Mobile app to enable the users log into the application.

- Create an SSO password
- Delete a generated SSO password

Add Digi credentials to your SSO application

After your SSO application is running, you should create an entry for Digi Axess in your SSO app and add the Digi Axess credentials. The credentials information is displayed in the **SAML SSO Configuration** tab in the **Device Groups** page.

The URLs included in the **Device Groups** page are unique to the device group that you are configuring for SSO. You can copy the URLs from the **Device Groups** page and then paste them into your SSO app.

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1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Device Groups** or **Change** next to **Device Groups**. As an alternative, click **Device Groups** from the dashboard pane on the left of the screen.

   The **Device Groups** page displays.
3. Find the device group which you want to configure for SSO. Scroll through the list of names, or limit the list using the search field.
4. In the **Group Name** column, click on the name of the device group which you want to configure. The **Device Groups** page displays.
5. Click the **SAML SSO Configuration** tab. The SSO configuration options display.
6. De-select the **Inherit SAML settings from parent** option. This option is selected by default.
7. Select **Enable SAML SSO**.
8. Scroll to the bottom of the page to review the URLs for this device group. The names of the fields that you need to complete in your SSO app are unique to your app. Examples are listed for each of the device group's URLS.
   a. Copy a URL from the **Device Groups** page.
   b. Paste it into the appropriate field in your SSO app.
   c. Repeat the process until all of the required fields in your app are completed

Configure SSO for a device group

You must configure SSO for a device group before you can enable SSO for a user.

Before you begin

To ensure that Digi Axess can connect to your SSO application, information from the SSO app must be included in the device group SSO configuration.

Make sure you have the following information available from your SSO application:

- Identity Provider (IdP) Entity ID
- Identity Provider (IdP) Single Sign-On URL
- X.509 certificate from the IdP

To configure SSO for a device group:

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Device Management** section in the Admin dashboard, click **Device Groups** or **Change** next to **Device Groups**. As an alternative, click **Device Groups** from the dashboard pane on the left of the screen.

   The **Device Groups** page displays.
3. Find the device group which you want to configure for SSO. Scroll through the list of names, or limit the list using the search field.
4. In the **Group Name** column, click on the name of the device group which you want to configure. The **Device Groups** page displays.
5. Click the **SAML SSO Configuration** tab. The SSO configuration options display.
6. To configure SSO for this device group, de-select the **Inherit SAML settings from parent** option. This option is selected by default.
7. Select **Enable SAML SSO**. Additional fields display in the page.
8. Enter the required SSO information from your SSO application.
   - **Entity ID**: Enter the Identity Provider's (IdP) entity ID.
   - **SSO URL**: Enter the Identity Provider'a (IdP) Single Sign-On URL.
   - **IdP x509 Certificate**: Enter the full X.509 certificate from the IdP.
9. Click **Save**.

Enable SSO for a user

After you have configured SSO for a device group, you can enable SSO for the users in that device group.

Before you begin

Review these requirements to ensure that you are allowed to enable SSO for a user.

- **Device group SSO configuration**: You can enable SSO for a user only if it is in a device group that is configured for SSO.
- **SSO and MFA (Multi-Factor Authentication)**: Within Digi Axess, you cannot use both SSO and MFA. If you choose to use SSO and have enabled MFA for your users, you must remove MFA for each user.

To enable SSO for a user:

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **User Management** section.
2. From the **User Management** section in the **Admin** dashboard, click **Change** next to **Users**. As an alternative, you can click **User Management** > **Users** from the dashboard pane on the left of the screen.

The **Users** page displays.

3. Find the user profile that you want to update. You can scroll through the list of user profiles or use the **Search** fields to search for a profile.
4. Click on the user profile name. The **Users** page for the user displays.
5. Click the **Security** tab.
6. Review the status of the **MFA Enabled** field to determine whether SSO can be enabled.
   - **Green check mark**: MFA is enabled for this user and must be removed before you can enable SSO.
   - **Red X**: MFA is not enabled and SSO can be enabled for this user.
7. Click **Enable Single Sign-On**. When selected, the page updates to display only this option.

   Note If you cannot select this option, this user is not in a device group that has been configured for SSO. SSO can be enabled for a user only if it's in device group that has been configured for SSO.

8. Click **Save**.

Add the users to the SSO application

The users in Digi Axess that have SSO enabled must also be added into your SSO application.

Review the following requirements for the name IDs entered into your SSO application.

- The Name ID for your SSO app may be a user's email or their Digi Axess user name.
- The user's email or user name is case sensitive.
- The user's email or user name in the SSO app must exactly match the user's email or user name in Digi Axess.

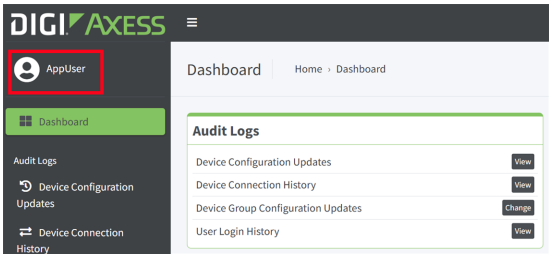
Create an SSO password

If you use Digi Axess Mobile app you must generate an SSO password so that you can log in to the application. The next time you access Digi Axess Mobile app you can enter the SSO password. The application remembers the password for subsequent log ins.

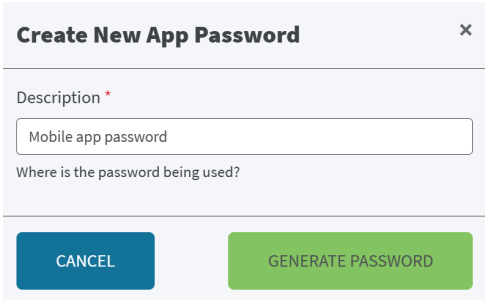
You can generate up to 5 passwords. The password description and the date and time the password was generated and last used display in the **Update Profile** page. You can also delete a password if needed.

When the password is generated, copy the password and save it so that you can retrieve it when needed. This password will only be shown once and you will not be able to see it again.

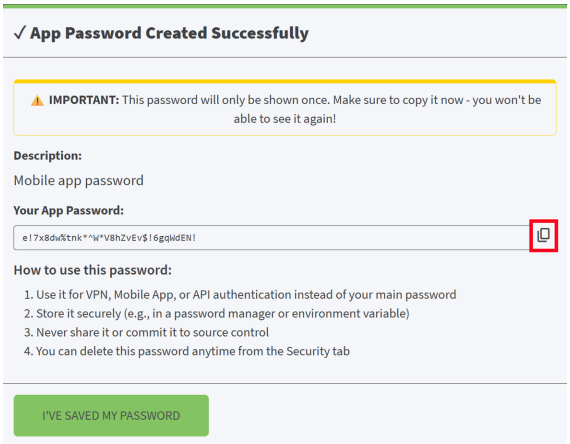
1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. Click your user name next to the user icon in the upper left corner of the screen.



3. The **Update Profile** page displays.
4. Click the **Security** tab if it is not already selected.
5. In the **Application Passwords** section, click **Create New App Password**. The **Create New App Password** dialog displays.
6. In the **Description** field, enter a description of where you will use the password.



7. Click **Generate Password**. The password is generated and the app password dialog displays.



8. Click the **Copy to Clipboard** icon next to the **Your App Password** field. This saves the password to your mobile device's clipboard.

Make sure to copy the password. This is your only opportunity to view and copy the password.

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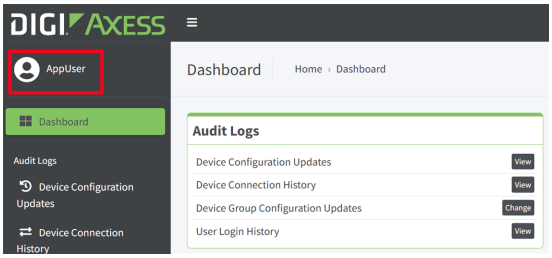
9. Paste the password from the clipboard to a location from which you can retrieve the password.
10. After you have copied and saved your password, click **I've saved my password**. The **Update Profile** page updates and information about the password you created displays in the **Application Password** section.

Delete a generated SSO password

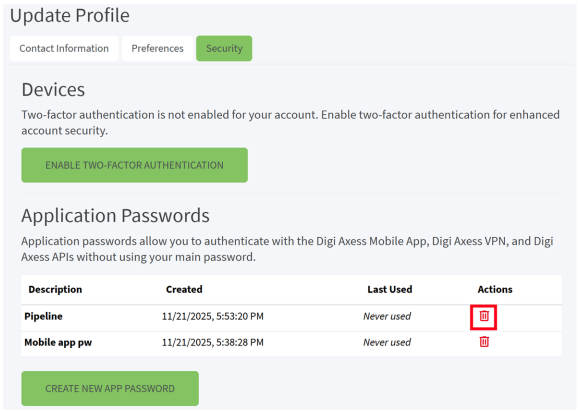
You can delete a generated SSO password if needed.

Note Be aware that after you delete an SSO password, any applications using this password will no longer be able to authenticate.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. Click your user name next to the user icon in the upper left corner of the screen.



3. The **Update Profile** page displays.
4. Click the **Security** tab if it is not already selected. A list of generated passwords displays in the **Application Passwords** section of the page.



5. Click the **Delete app password** icon in the **Actions** column for the password that you want to delete. A confirmation dialog displays.
6. Click **OK**. The page updates and a green banner with the message "App password deleted successfully" displays.

Notification Management: Manage in Digi Axess Admin

The notifications feature in Digi Axess lets you choose the type of device events that you want to know about, and which users should receive notifications and reports.

Notification contacts and groups

For each user that should receive notifications, you should create a notification contact. You can also create a notification group, that consists of the users (notification contacts) that should receive the same type of notification.

Notification types

The notifications that a user could receive are one of these types:

- **Default**: Depending on the device, different types of default notifications are collected and sent from the devices. For a detailed list, see Notification types.
- **Threshold** alarm: Alerts associated with an automation threshold alarm. A threshold alarm is configured for an input or output pin on your device.

For more information about these types, see Review notifications.

Get Started with notifications

Step 1: Create notification contacts

A notification contact should be created for anyone who should receive information from Digi Axess, such as device reports and notifications.

- Manage Notification contacts

Step 2: Create notification groups

A notification group is a set of notification contacts that should all receive the same notifications.

- Manage Notification Groups

Step 3: Assign notification reports to a notification group

Notification services consists of a list of pre-determined reports that you can associate with a notification group. The reports are sent to the contacts in the notification group.

You can view the report options but not change a report or add a new one.

- Review Notification Services report options

Step 4: Review notifications

Notifications page

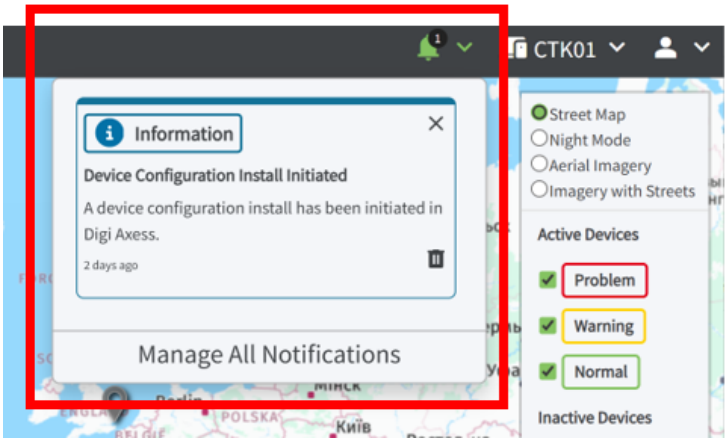
You can review all of the notifications that have been sent to you from the Notifications page. The list can be filtered by when the notification was sent, notification type, urgency level, and source type.

- Review notifications

Bell icon in the Digi Axess toolbar

You can also review the notification alerts from the bell icon in the Digi Axess toolbar. Click the down arrow next to the bell icon to view and manage the Digi Axess notifications.

- View notifications from the bell icon in the Digi Axess toolbar



Manage Notification contacts

A notification contact should be created for anyone who should receive notifications from devices registered with Digi Axess, such as device reports and automation threshold alarms.

You can view the notification contacts in the **Notification Contacts** page. Contacts can be either associated with a user profile, or you can manually add a notification contact for a user that should receive notifications but does not have a user profile.

- **Contact information without a user profile**

  You can manually add contact information for users that should receive reports and alerts, but do not have a Digi Axess user profile. You can make any changes to the contact information as needed.

- **Contact information associated with a user profile**

  Contact information for each user is required when you create a user profile. You can access the user's contact information from the **Notification Contacts** page, but you can't change the user's contact information. A banner displays at the top of the page to alert you of this. You can, however, disable the notification contact so that the user does not receive notifications and you can add and update the notification contact groups for this user.

Add a notification contact for a user without a user profile

You can add contact information for anyone that should receive reports and alerts, but does have not a Digi Axess user profile.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **Add** next to **Notification Contacts**.

   As an alternative, you can click **Notification Contacts** from the dashboard pane on the left of the screen, then click **Add Notification Contact**.
3. Click the **Contact Settings** tab.
   a. From the **Device Group** list box, select a device group. This is required.
   b. **Active**: Select **Active** if the contact is allowed to receive notifications (reports and alerts). This is the default. Deselect this option to suspend this contact. No notifications are sent to this contact.
   c. **Receive Reports**: Select **Receive Reports** so that this contact will receive notification reports. This is the default. Deselect this option to ensure reports are not sent to this contact.
   d. **Receive Alerts**: Select **Receive Alerts** so that this contact will receive notifications and automation threshold alarms originating from a device. This is the default. Deselect this option to stop sending notifications and alarms to this contact.
4. Click the **Contact Details** tab.
   a. Enter the contact information in the **Email**, **First name**, **Last name**, **Phone**, and **Phone2** fields. Entries in the **Email** and **First name** fields are required.
5. Click the **Contact Groups** tab.
   a. From the **Contact group** list box, select the contact group in which this contact should be included, if desired. This is optional.
   b. To add additional contact group, click **Add another Contact Group** to repeat the process.
6. Click **Add** to save the change. Other options are **Save and add another** and **Save and continue editing**.

Update notification contact information for a user without a user profile

You can update notification contact information from the **Notification Contact** page only for contacts that are not connected to a user profile.

Note If a contact is connected to a user profile, a yellow caution banner displays the **Notification Contact** page, and you have limited options for updating the contact. See Update notification contact information for a user with a user profile.

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1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.

2. From the **Notification Management** section in the Admin dashboard, click **Change** next to **Notification Contacts**.

   As an alternative, you can click **Notification Contacts** from the dashboard pane on the left of the screen.
3. Find the contact that you want to update. You can scroll through the list of contacts or use the **Search** field to search for a contact.
4. Click on the contact name. The contact information displays.
5. Make the changes as needed. For information about the fields, see Add a notification contact for a user without a user profile.
6. Click **Add** to save the change. Other options are **Save and add another** and **Save and continue editing**.

Delete a notification contact for a user without a user profile

You can delete a notification contact that is not connected to a user profile. When this occurs, that contact will no longer receive notifications.

Note If a contact is connected to a user profile, a yellow caution banner displays in the **Notification Contacts** page. The contact information cannot be deleted from the **Notification Contacts** page.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **Change** next to **Notification Contacts**. As an alternative, you can click **Notification Contacts** from the dashboard pane on the left of the screen.
3. Find the contact you want to delete. You can scroll through the list or use the **Search** box.
4. Click the selection box next to the contact you want to delete.
5. From the list box next to the **Go** button, select **Delete selected Notification Contacts**.
6. Click **Go**. The **Delete multiple objects** page displays.
7. Review the deletions.
8. To complete the deletion, click **Yes, I'm sure**.

   If you don't want to delete anything, click **No, take me back** to return to the **Notification Contacts** page.

Suspend notifications for a notification contact for a user without a user profile

You can suspend notifications for an active contact that is not associated with a user profile. When this occurs, the contact information is considered inactive and that contact will no longer receive notifications or notification reports.

Note If a contact is connected to a user profile, a yellow caution banner displays the **Notification Contact** page, and you cannot update the contact information from this page. The contact information should be suspended from the user profile. See Activate or suspend a user profile.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **Change** next to **Notification Contacts**.

   As an alternative, you can click **Notification Contacts** from the dashboard pane on the left of the screen.
3. Find the contact you want to change. You can scroll through the list or use the **Search** box.
4. Click the **Contact Settings** tab.
   - **Active**: De-select **Active** if the contact should not receive notifications (reports and alerts). No notifications are sent to this contact.
   - **Receive Reports**: De-select **Receive Reports** if the contact should not receive notification reports.
   - **Receive Alerts**: De-select **Receive Alerts** if the contact should not receive notifications and automation threshold alarms originating from a device.
5. Click **Add** to save the change. Other options are **Save and add another** and **Save and continue editing**.

Update notification contact information for a user with a user profile

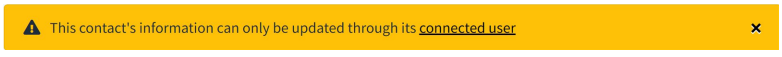
You can access the notification contact information for a user with a user profile from the **Notification Contacts** page, but you can't change the user's contact information. A banner displays at the top of the page to alert you of this.

You can, however, disable the notification contact so that the user does not receive notifications and you can add and update the notification contact groups.

For more options, you can update the user profile from the **Users** page. See Update a user profile from the Digi Axess Admin page.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **Change** next to **Notification Contacts**.

   As an alternative, you can click **Notification Contacts** from the dashboard pane on the left of the screen.
3. Find the contact that you want to update. You can scroll through the list of contacts or use the **Search** field to search for a contact.
4. Click on the contact name. The contact information displays. If the notification contact is associated with a user profile, a yellow banner displays across the page as an alert.

   Note Click the **connected user** link to access the user profile for this notification contact.
5. Click the **Contact Settings** tab.

a. De-select **Active** if the contact should not receive notifications (reports and alerts). No notifications are sent to this contact.

6. Click the **Contact Groups** tab.
   a. From the **Contact group** list box, select the contact group in which this contact should be included, if desired. This is optional.
   b. To add additional contact group, click **Add another Contact Group** to repeat the process.
7. Click **Add** to save the change. Other options are **Save and add another** and **Save and continue editing**.

Manage Notification Groups

You can create notification groups for a set of notification contacts that should all receive the same notifications from devices in the notification group, such as device reports and automation threshold alarms.

Each notification group is assigned a descriptive name and is associated with at least one device group. You can also add notification contacts and devices that are not in the selected device group (s).

Notification contacts: Who will receive a notification?

- Users in the device group(s) selected for the notification group.
- Individual notification contacts (with or without a user profile) that are not in the device group (s) selected but are assigned to the notification group.

> Note The **Active** option in the notification contact must be enabled for any user to be able to receive notifications. See Add a notification contact for a user without a user profile and Update notification contact information for a user with a user profile.

Devices: Which devices send notifications?

- Devices in the device group(s) specified for the notification group send a notification.
- Devices that are not in a specified device group but are individually assigned to the notification group send a notification.

Add a notification group

A notification group is a set of notification contacts that should receive reports and notifications from the devices and device groups assigned to the notification group.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **Add** next to **Notification Groups**.

   As an alternative, you can click **Notification Groups** from the dashboard pane on the left of the screen, then click **Add Notification Group**.
3. Click the **Group Settings** tab.

a. From the **Device Group** list box, select a device group. This is required.
b. Enter a name for the notification group in the **Name** field. This is required.
c. By default, a new notification group is active and the **Active** option is selected. If you want to make the notification group inactive, de-select the **Active** option.
d. **Include Device Group Devices**: Select this option if you want to automatically include all devices from the configured device group in the notification group. If you don't select this option, you can associate a notification group with an individual device.
e. **Include Device Group Contacts**: Select this option if you want to automatically include all notification contacts in the configured device group in the notification group. If you don't select this option, you can associate a notification group with an individual notification contact.
f. **Include Child Device Group Devices**: Select this option if you want to automatically include all child device groups of the configured device group in this notification group. This applies only to devices.

4. Click the **Services** tab.
   a. From the **Service** list box, select a report that you want to send to the contacts in the notification group. For information about the reports, see Review Notification Services report options.
   b. To select additional reports, click **Add another Services** and repeat the process.
5. Click **Add** to save the change. Other options are **Save and add another** and **Save and continue editing**.

Delete a notification group

You can delete a notification group that is no longer needed. Choose from the following deletion methods.

Delete one or more notification groups

This process enables you to select multiple notification groups for deletion.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **Change** next to **Notification Groups**. As an alternative, you can click **Notification Groups** from the dashboard pane on the left of the screen.
3. Find the notification group(s) you want to delete. You can scroll through the list or use the **Search** box.
4. Click the selection box next to each notification group you want to delete.
5. From the list box next to the **Go** button, select **Delete selected Notification Groups**.
6. Click **Go**. The **Delete multiple objects** page displays.
7. Review the deletions.
8. To complete the deletion, click **Yes, I'm sure**.

   If you don't want to delete anything, click **No, take me back** to return to the **Notification Contacts** page.

Delete one notification group

This process enables you to delete one notification group.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **Change** next to **Notification Groups**. As an alternative, you can click **Notification Groups** from the dashboard pane on the left of the screen.
3. Find the notification group you want to delete. You can scroll through the list or use the **Search** box.
4. Click on the notification group name.
5. Click **Delete**. The **Delete multiple objects** page displays.
6. Review the deletion.
7. To complete the deletion, click **Yes, I'm sure**.

   If you don't want to delete anything, click **No, take me back** to return to the **Notification Contacts** page.

Search for a notification group

You can use the filters on the **Notifications Group** screen to filter the list of notifications group.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **Change** next to **Notification Groups**.

   As an alternative, you can click **Notification Groups** from the dashboard pane on the left of the screen.
3. Use one of the following methods to filter the notifications to limit the list.
   - **Scroll**: You can scroll through the list to find the notification you want to review.
   - **Search**: In the blank search field, enter a search term, then click **Search**.
   - **Filter**: Use the filter options to filter the list. Click **Search** to apply the filters and limit the list.
     - **Name**: Select a name from the list.
     - **Device Group**: Select a device group. All of the notification groups that are assigned that device group display.

Update a notification group

You can update a notification group, and add notification contacts and devices that are not in the device group(s) assigned to the notification group.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.

2. From the **Notification Management** section in the Admin dashboard, click **Change** next to **Notification Groups**.

   As an alternative, you can click **Notification Groups** from the dashboard pane on the left of the screen.
3. Find the notification group that you want to update.
4. Click on the name of the group.
5. Update the notification group settings.
   a. Click the **Group Settings** tab.
   b. From the **Device Group** list box, select a different device group if desired. An entry is required.
   c. You can change the name for the notification group in the **Name** field. An entry is required.
   d. The **Active** option determines whether notifications are sent. Select the **Active** option to send notifications. If you want to make the notification group inactive, de-select the **Active** option.
   e. **Include Device Group Devices**: Select this option if you want to automatically include all devices from the configured device group in the notification group. If you don't select this option, you can associate a notification group with an individual device.
   f. **Include Device Group Contacts**: Select this option if you want to automatically include all notification contacts in the configured device group in the notification group. If you don't select this option, you can associate a notification group with an individual notification contact.
   g. **Include Child Device Group Devices**: Select this option if you want to automatically include all child device groups of the configured device group in this notification group. This applies only to devices.
6. Add notification contacts that aren't in the selected device group(s). This is useful if you want to add a notification contact that isn't associated with a user profile.
   a. Click the **Contacts** tab.
   b. From the **Contact** list box, select a notification contact.
   c. To add another contact, click the plus sign next to the **Contact** field or click **Add another Contact** and repeat the process.
7. Add devices that aren't in one of the device groups specified in the **Group Settings** tab.
   a. Click the **Devices** tab.
   b. From the **Device** list box, select a device.
   c. To add another device, click the plus sign next to the **Device** field or click **Add another Device** and repeat the process.
8. You can update the reports selected for the notification group.
   a. Click the **Services** tab.
   b. From the **Service** list box, select a report that you want to send to the contacts in the notification group. For information about the reports, see Review Notification Services report options.
   c. To select additional reports, click **Add another Services** and repeat the process.

9. Click **Add** to save the change. Other options are **Save and add another** and **Save and continue editing**.

Turn off notifications from a notification group

You can turn off notifications sent from a notification group. This ensures that the notification contacts in the notification group do not receive notifications.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **Change** next to **Notification Groups**. As an alternative, you can click **Notification Groups** from the dashboard pane on the left of the screen.
3. Find the notification group you want to change. You can scroll through the list or use the **Search** box.
4. Click on the name of the notification group that you want to change.
5. Click the **Group Settings** tab.
6. Deselect the **Active** option.
7. Click **Add** to save the change. Other options are **Save and add another** and **Save and continue editing**.

Review Notification Services report options

Notification services consists of a list of pre-determined reports that you can associate with a notification group. The reports are sent to the contacts in the notification group.

The report data is collected when the device connects to Digi Axess and transfers data. When Digi Axess detects a data change, it sends the report using the most recently collected data. Connect Sensor devices send data on each device's connection schedule.

The reports that have been sent can be reviewed in the Device Reports page.

Note You can view the report options but not change a report or add a new one.

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1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **View** next to **Notification Services**. As an alternative, you can click **Notification Services** from the dashboard pane on the left of the screen.
3. Review the report options.
   - **PDF Monthly Plots**: Generates a summary report for the past month using the device configuration ranges. The report is sent after the first device data push of the month.
   - **PDF Email Auto-Range Plots**: Generates a summary report for the past day using the auto ranges. The report is sent after the first device data push of the day.
   - **PDF Email Plots (Defined Range)**: Generates a summary report for the past day using the device configuration ranges. The report is sent after the first device data push of the day.

Device Reports: Review in Digi Axess Admin

You can review the device reports that are sent to the contacts in a notification group. Up to three device reports can be selected for a notification group, and each contains daily or monthly information.

A device report is available for 30 days, and then automatically deleted. You can save a report to a different location if the data is needed for longer that 30 days. You can manually delete reports at any time.

Before you begin

- For reports to appear in this screen, you must have selected a device report for at least one notification contact group. See Add a notification group.
- You can review information about the reports to help you select a report. See Review Notification Services report options.

Review the device report list

You can review the list of reports that have been generated, and review information about a selected report.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **Device Reports** or click **View** next to **Device Reports**. As an alternative, you can click **Device Reports** from the dashboard pane on the left of the screen. The **Device Reports** screen displays.
3. Use one of the following methods to filter the notifications to limit the list.
   - **Scroll**: You can scroll through the list to find the notification you want to review.
   - **Search**: In the blank search field, enter a search term, then click **Search**.
   - **Filter**: Use the filter options to filter the list. Click **Search** to apply the filters and limit the list.
     - **Serial number**: Select a device's serial number.
     - **Location name**: Select the name of the device.
     - **Device Group**: Select a device group.
     - **Report Type**: Select a report type.
     - **Report Generation Time**: Select a time range.
4. You can also review details about the device report.
   a. Click the serial number link for a report. The **Details** page displays.
      - **Device**: The serial number and device name display as a link. Click the link to display device information in the Devices page.
      - **Title**: The report title, which includes the location name, and the date and time range covered by the report.
      - **Report Type**: The report type.
      - **Attachments**: A PDF of the report is attached. Click the link to download the report PDF.
   b. Click **Close** to return to the **Device Reports** page.

Delete a device report

You can delete device report if needed.

Note A device report automatically deleted after 30 days.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **Device Reports** or click **View** next to **Device Reports**. As an alternative, you can click **Device Reports** from the dashboard pane on the left of the screen.
3. Find the report(s) you want to delete. You can scroll through the list, use the **Search** box to search for a term, or use the search selectors to limit the list of reports.
4. Click the selection box next to each report you want to delete. You can select more than one. To select all of the reports, click the selection box in the title bar.
5. From the list box next to the **Go** button, select **Delete selected Device Reports**.
6. Click **Go**. The **Delete Multiple Objects** page displays and overview of the report(s) that will be deleted.
7. Click **Yes, I'm sure** to complete the deletion process. You are returned to the **Device Reports** page. A green banner with a **Successfully deleted x Device Report** message displays at the top of the page.

Review notifications

All of the notifications that were sent to you within the last 30 days are available for review in the Notifications page. You can filter the notifications to limit the list, review the notifications, display more information, and mark a notification as read or unread.

Notifications: What types of notifications are sent?

- **Default**: Depending on the device, different types of default notifications are collected and sent from the devices. For a detailed list, see Notification types.
- **Threshold Alarm**: Alerts associated with an automation threshold alarm. A threshold alarm is configured for an input or output pin on your device.

How are notification contacts assigned for threshold alarm notifications?

A notification contact group can be assigned to an automation for a Connect Sensor device. When an automation threshold is met on Connect Sensor device, an alarm notification is sent to all of the contacts in the notification contact group.

Note Notifications are automatically deleted 30 days after creation.

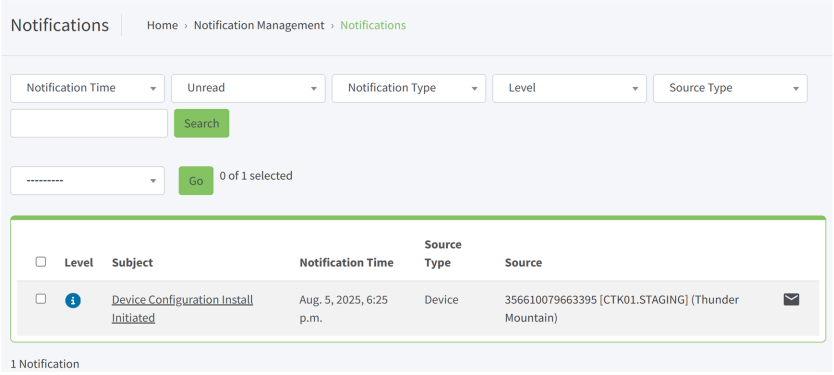
Access the Notifications page

You can review the notifications that have been sent to you. You can filter the list and review any of the messages.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification**

Management section.

2. From the **Notification Management** section in the Admin dashboard, click **Change** next to **Notifications**. As an alternative, you can click **Notifications** from the dashboard pane on the left of the screen. The **Notifications** page displays.



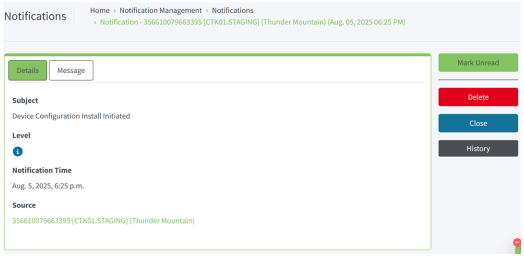
3. Use one of the following methods to filter the notifications to limit the list.
   - **Scroll**: You can scroll through the list to find the notification you want to review.
   - **Search**: In the blank search field, enter a search term, then click **Search**.
   - **Filter**: Use the filter options to filter the list. Click **Search** to apply the filters and limit the list.
     - **Notification Time**: Select a time period from the list of options: **Today**, **Past 7 Days**, **This Month**, **This Year**. Notifications are automatically deleted 30 days after creation.
     - **Unread**: Specify whether you want to display unread items (**Yes**) or read items (**No**).
     - **Notification Type**: Limit the messages to the selected type: **Battery**, **DeviceConfigInstall**, **FirmwareUpdate**, **GPSUpdate**, **Stale**. See Notification types for more information.
     - **Level**: Limit the messages by status level: **Danger**, **Warning**, **Success**, or **Info**. The level is noted by the icon next to the message subject in the grid. See Notification levels for more information.

Review a notification message

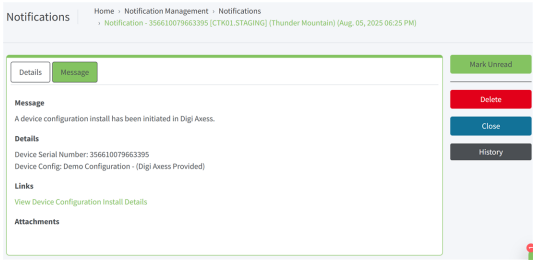
You can review the notification content. Detailed information about when and from where the notification was sent as well as the notification text.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with Admin privileges can access the **Notification Management** section.
2. From the **Notification Management** section in the Admin dashboard, click **Change** next to **Notifications**. As an alternative, you can click **Notifications** from the dashboard pane on the left of the screen. The **Notifications** page displays.
3. Filter the list to find the notification you want to review.

4. Click a notification subject line from the **Subject** column. Notification details display.
   - **Details** tab: Click the **Details** tab to show details about the notification. This tab displays by default. To review information about where the notification originated, click the **Source** link.



   - **Message** tab: Click the **Message** tab to show the notification text and review the message.



5. Click **Close** to return the **Notifications** screen.

Mark a notification as read or unread

You can change the status of a message as read or unread. An envelope icon displays for each notification.

- **Envelope closed**: The notification is unread.
- **Envelope open**: The notification has been read.

Change one notification from read to unread in the Messages page

1. Access the Notifications page and filter the notifications as described in the next step.
2. From the **Unread** list box, select **No**.
3. Click **Search**. All read notifications are displayed. The envelope icons are open.
4. From the **Subject** column, click on the link for the notification that you want to change. The **Details** and **Message** tabs become available.
5. Click **Mark Unread**. You are returned to the **Notifications** page. The envelope icon for the changed notification is closed.

Change multiple notifications from read to unread in the Notifications page

1. Access the Notifications page and filter the notifications as described in the next step.
2. From the **Unread** list box, select **No**.

3. Click **Search**. All read notifications are displayed. The envelope icons are open.
4. For each notification that you want to change to unread, click the check box for that notification. To select all of the notifications, click the check box in the header row.
5. From the list box next to **Go**, select **Mark selected notification as unread**.
6. Click **Go**. The envelope icons for the selected notifications are closed.

Change multiple notifications from unread to read in the Notifications page

1. Access the Notifications page and filter the notifications as described in the next step.
2. From the **Unread** list box, select **Yes**.
3. Click **Search**. All unread notifications are displayed. The envelope icons are closed.
4. For each notification that you want to change to read, click the check box for that notification. To select all of the notifications, click the check box in the header row.
5. From the list box next to **Go**, select **Mark selected notification as read**.
6. Click **Go**. The envelope icons for the selected notifications are open.

Delete a notification

You can delete a notification if desired. By default, notifications are automatically deleted 30 days after creation.

Delete one notification from the Messages page

1. Access the Notifications page and filter the list to find the notification you want to delete.
2. From the **Subject** column, click on the link for the notification that you want to delete. The **Details** and **Message** tabs become available.
3. Click **Delete**. The **Delete notifications** page displays.
4. Review information about the notification that you have selected to delete.
5. To delete the notification, click **Yes, I'm sure**. The notification is deleted and you are returned to the **Notifications** page.

   If you don't want to delete the notification, click **No, take me back** to return to the **Messages** page. Click **Close** to return to the **Notifications** page.

Delete one or more messages from the Notifications page

1. Access the Notifications page and filter the list to find the notification you want to delete.
2. For each notification that you want to delete, click the check box for that notification. To select all of the notifications, click the check box in the header row.
3. From the list box next to **Go**, select **Delete Selected Notifications**.
4. Click **Go**. The **Delete notifications** page displays.
5. Review information about the notification(s) that you have selected to delete.
6. To delete the notification(s), click **Yes, I'm sure**. The notification is deleted and you are returned to the **Notifications** page.

   If you don't want to delete the notification(s), click **No, take me back** to return to the **Messages** page. Click **Close** to return to the **Notifications** page.

Notification levels

The notification level describes the urgency status of the notification. The levels are noted by an icon in the **Notifications** page.

Icon	Level	Color	Description
	**Success**	Green	A process has completed successfully.
	**Warning**	Yellow	At least one warning notification as been sent because a process has not completed as expected.
	**Danger**	Red	At least one danger notification as been sent because a process has not completed and requires attention.
	**Information**	Blue	Information about a process is provided.

Notification types

The tables below explain the types of notifications that may be sent.

Stale Device Notifications alert

A stale device notification is sent when the device is no longer connecting to Digi Axess. The time threshold can be configured at the device and device group level, and defaults to 24 hours.

- Device not connecting to Digi Axess.

Battery alerts

A battery alert is sent when any of the battery conditions shown below are met.

- Battery Replacement Required
- Battery Replacement Recommended
- Battery Has Been Removed
- Battery Has Been Replaced
- External Power State Change Detected (yellow banner): This notification is sent in a yellow warning banner when Digi Axess has detected that the external power has been disconnected and the device is running on battery power only.
- External Power State Change Detected (green banner): This notification is sent in a green banner when Digi Axess has detected that the external power has been connected and the batteries are in backup mode.

Device Configuration alerts

A device configuration alert is sent when any of the conditions shown below are met.

- Device Configuration Installation
- Device Configuration Install Initiated
- Device Configuration Completed
- Device Configuration Completed with Errors

Firmware Update alerts

A firmware update alert is sent when any of the conditions shown below are met.

- Firmware Update Initiated
- Firmware Update Completed
- Firmware Update Completed with Errors
- Firmware Update Cancelled

GPS Location Update alerts

A GPS location update alert is sent when any of the conditions shown below are met.

- GPS Location Update
- GPS Location Update Requested
- GPS Location Update Success
- GPS Location Update Failed
- GPS Location Update Cancelled

User profiles: Manage in Digi Axess Admin

A user profile should be created for each user that is allowed to log in to Digi Axess. A user profile consists of a user name and contact information. You must also assign each user to a device group and specify a user role, and determine what notifications the user should receive.

User profile information

Each user profile is defined by the information added into these sections.

- Account Information
- Contact Information
- Permissions
- Security

Note The **OpenVPN** feature is not used by Connect Sensor devices. You can ignore the **OpenVPN** tab.

Account Information

Item	Description
Username	The user name is the log in name for the user profile. A user name is required. When you save a new user profile, an email is sent to the user, who must reply to the email to activate their account.
Active	After a user profile has been created, the **Account Information** section includes an **Active** option. The **Active** option is grayed-out an unavailable until the user completes the user profile by replying to the activation email. When the reply is received, the **Active** option is selected by default. When the **Active** option is selected, you can de-select the option to suspend a user's account. See Activate or suspend a user profile.
Session timeout	You can set the length of time to automatically log the user out user if no activity detected.

Contact Information

You can add contact information for anyone that should receive device reports and automation threshold alert notifications sent by Digi Axess.

Contact information can be added or updated using either of these methods:

- Any user can add or update their own contact information from their user profile. See Manage your user profile options.
- An Admin user can add or update contact information for anyone from the Digi Axess Admin page. See Update a user profile from the Digi Axess Admin page.

Note For a person that should have contact information but is not allowed to log into Digi Axess, contact information can be entered in the **Notification Contacts** page. See Add a notification contact for a user without a user profile.

Item	Description
Email	Enter the email at which the user can be receive the following information: ■ **Device reports**: Device reports are sent to the notification contacts in the notification groups assigned to the device reports. ■ **Automation threshold alert notifications**: Automation alert notifications can be set for an automation. When an automation threshold is met, a notification is sent to the notification contacts in the notification groups assigned to the automation. Note This contact information is used only when an automation threshold is met on a Connect Sensor device, and an alarm notification is sent by Digi Axess.
Phone number **Phone number 2**	Enter the user's phone number(s). ■ **Phone number**: Enter the user's primary phone number. ■ **Phone number 2**: Enter the user's secondary phone number.
First name	Enter the user's first name.
Last name	Enter the user's surname.

Permissions

In the **Permissions** section, you can specify a device group, which determines the notification groups this user profile is included in, a user role, and determine whether user should receive reports and alerts.

Item	Description
Device Group	Select the device group the user is assigned to. Users will be able to view all devices in this group and all of its children groups.
Device Subgroup	You can enter a device subgroup to limit the user to be able to view only the devices assigned the same subgroup.

Item	Description
User Role	Specify a **User Role**, which limits the user's actions. ■ **Admin**: User has read/write capability for all features. • Only users assigned **Admin** privileges can access the **User Management** section of the **Digi Axess Administration** page. • One user profile with **Admin** privileges is available by default in your Digi Axess. This ensures that at least one user is able to maintain configurations and access the Digi Axess Administration page. ■ **Device User**: User has read/write capability for all features, except for the **Notification Management** and **User Management** features in Digi Axess Administration. ■ **View Only**: User can only view information.
Receive Reports	User receives reports for all contact groups configured to send reports to the user's device group. This option is selected by default for **Admin** and **Device User** user roles.
Receive Alerts	User receives alerts for all contact groups configured to send alerts to the user's device group. This option is selected by default for **Admin** and **Device User** user roles.

Security

In the **Security** section, you can review and manage the SSO (Single Sign-On) and MFA (Multi-Factor Authentication configuration. Within Digi Axess, you cannot use both SSO and MFA.

For detailed information about each feature, see:

- **MFA**: Configure Multi-Factor Authentication (MFA)
- **SSO**: Configure SSO (Single Sign-On)

Item	Description
Enable Single Sign-On	Determines whether the user is able to use the SSO (Single Sign-On) feature. ■ **Enabled**: The user is required to use the SSO feature. Note You can enable SSO for a user only if it is in a device group that is configured for SSO. ■ **Disabled**: The user is not able to user the SSO feature. For detailed information, see Configure SSO (Single Sign-On) and Enable SSO for a user.
Inherit Device Group Security Settings	Determines whether the MFA configuration is inherited from the device group that is assigned to this user. ■ **Enabled**: The MFA configuration for this user is inherited from the device group that is assigned to this user.

Item	Description
	▪ **Disabled**: The MFA configuration for this user is not inherited from the device group that is assigned to this user. For more detailed information, see Configure MFA for a device group.
MFA Required	Determines whether MFA is required for this user when logging in to **Digi Axess**. ▪ **Enabled**: The MFA configuration for this user is required for this user when logging in to **Digi Axess**. ▪ **Disabled**: The MFA configuration for this user is not required for this user when logging in to **Digi Axess**. For more detailed information, see Configure MFA for a device group and Configure MFA for an individual user.
MFA Reauth Timeout	Select the time interval at which the user will be required to re-authenticate using MFA when logging in. For more detailed information, see Configure MFA for a device group and Configure MFA for an individual user.
MFA Enabled	The icon in the **MFA Enabled** section denotes whether the user has enabled MFA. ▪ **X**: The user has not enabled MFA. ▪ **Check mark**: The user has enabled MFA. For more detailed information, see Activate MFA for a user profile when you log into Digi Axess.

Add a user profile from the Digi Axess Admin page

You can create a user profile for each user that is allowed to log into Digi Axess.

For more information about the sections in a user profile, see User profile information.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **User Management** section.
2. From the **User Management** section in the **Admin** dashboard, click **Add** next to **Users**.

   As an alternative, you can click **Users** from the dashboard pane on the left of the screen, then click **Add User**.
3. The **Account Information** page displays. This is used to identify the user account.
   a. In the **Username** field, enter a unique user name. Spaces are not allowed. An entry is required.
   b. Click the green arrow to advance to the next page.
4. The **Contact Information** page displays. For details about how this information is used, see Contact Information overview.

a. In the **Email** field, enter an email address for the user. An entry is required.
b. In the **Phone number** and **Phone number 2** fields, enter contact phone numbers for the user.
c. In the **First name** and **Last name** fields, enter the user's name.
d. Click the green arrow to advance to the next page.

5. The **Permissions** page displays. In this page you can assign a device group and a user role, and determine whether user should receive reports and alerts.
   a. From the **Device Group** list box, select a device group for the user. The user has permission to manage and/or view the devices in this device group and receive notifications, depending on the assigned user role.
   b. In the **Device Subgroup** field, enter a device sub-group to limit access to this device only to users in the same device group and device sub-group. See Device sub-groups for more information.
   c. From the **User Role** list box, select the role for this user.
      - **Admin**: User has read/write capability for all features.
        - Only users assigned **Admin** privileges can access the **User Management** section of the **Digi Axess Administration** page.
        - One user profile with **Admin** privileges is available by default in your Digi Axess. This ensures that at least one user is able to maintain configurations and access the Digi Axess Administration page.
      - **Device User**: User has read/write capability for all features, except for the **Notification Management** and **User Management** features in Digi Axess Administration.
      - **View Only**: User can only view information.
   d. Select **Receive Reports** if this user should receive reports for all contact groups configured to send reports to the user's device group. This option is selected by default for **Admin** and **Device User** roles.
   e. Select **Receive Alerts** if this user should receive automation threshold alerts for all contact groups configured to send alerts to the user's device group. This option is selected by default for **Admin** and **Device User** roles.
   f. Click the green arrow to advance to the next page.
6. The **Security** page displays. In this page you can enable SSO (Single Sign-On) for the user.
   a. Click the **Enable Single Sign-On** option to enable SSO for the user. For more information about SSO, see Configure SSO (Single Sign-On).
7. Click **Add** to save the change. Other options are **Save and add another** and **Save and continue editing**.

Update a user profile from the Digi Axess Admin page

You can make changes to a user profile if needed.

By design, an Admin user is not able to update their own profile. When you have accessed your own user profile, a yellow banner with a warning message displays at the top of the screen.

Note Any user can change their own contact information from their user profile, which is accessed from the **Account** menu in the Digi Axess map page. See Manage your user profile options.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **User Management** section.
2. From the **User Management** section in the Admin dashboard, click **Change** next to **Users**.

   As an alternative, you can click **User Management** > **Users** from the dashboard pane on the left of the screen.
3. Find the user profile that you want to update. You can scroll through the list of user profiles or use the **Search** fields to search for a profile.
4. Click on the user profile name. The **Users** screen displays.
5. The **Account Information** tab is selected by default. This is used to identify the user account.
   - **Username**: Change the user name. Spaces are not allowed. An entry is required.
   - **Active** option: Click the option to suspend or activate a user profile. When a user profile is suspended, that user cannot log into Digi Axess. See Activate or suspend a user profile.
   - **Session timeout**: Select a time out interval option. When no activity is detected during this time interval, the user is automatically logged out.
6. Click the **Contact Information** tab. For details about how this information is used, see Contact Information overview.
   - **Email**: Update the email address. An email address is required.
   - **Phone number** and **Phone number 2**: Update the primary and secondary phone numbers.
   - **First name** and **Last name**: Update the user's first and last name.
7. Click the **Permissions** tab to update the user's permissions.
   - **Device Group**: Select a device group for the user. The user has permission to manage and/or view the devices in this device group and receive notifications, depending on the assigned user role.

     Note This field cannot be changed if you are updating your own user profile.

   - **Device Subgroup**: Enter a device sub-group to limit access to this device only to users in the same device group and device sub-group. See Device sub-groups for more information.

     Note This field cannot be changed if you are updating your own user profile.

   - **User Role**: Select the role for this user.

     Note This field cannot be changed if you are updating your own user profile.

     - **Admin**: User has read/write capability for all features.
       - Only users assigned **Admin** privileges can access the **User Management** section of the **Digi Axess Administration** page.

    - One user profile with **Admin** privileges is available by default in your Digi Axess. This ensures that at least one user is able to maintain configurations and access the Digi Axess Administration page.
  - **Device User**: User has read/write capability for all features, except for the **Notification Management** and **User Management** features in Digi Axess Administration.
  - **View Only**: User can only view information.
- **Receive Reports**: Select this option if this user should receive reports for all contact groups configured to send reports to the user's device group. This option is selected by default for **Admin** and **Device User** roles.
- **Receive Alerts**: Select this option if this user should receive automation threshold alerts for all contact groups configured to send alerts to the user's device group. This option is selected by default for **Admin** and **Device User** roles.

8. Click the **Security** tab to manage the SSO (Single Sign-On) and MFA (Multi-Factor Authentication) features.

   Note Within Digi Axess, you cannot use both SSO and MFA.

   - **Enable Single Sign-On**: Determines whether the user is required to use SSO. When this option is disabled, the MFA configuration fields display.
   - **Inherit Device Group Setting**s: Determine how the MFA configuration is configured:
     - **Enabled**: The MFA configuration inherited from a device group to which the user is assigned.
     - **Disabled**: MFA is configured for just this user.
   - **MFA Required**: Enable this option if MFA is required for this user.
   - **MFA Reauth Timeout**: Select the time interval at which the user will be required to re-authenticate using MFA when logging in.
   - **MFA Enabled**: Denotes whether the user has enabled MFA.
9. The **OpenVPN** feature is not used by Connect Sensor devices. You can ignore the **OpenVPN** tab.
10. Click **Save** to save the change.

Activate or suspend a user profile

You can use the **Active** option in a user profile to suspend or activate a user's profile. When a user profile is suspended, that user cannot log into Digi Axess.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **User Management** section.
2. From the **Admin** dashboard or the dashboard pane on the left of the screen, click **Users**. A list of user profiles displays.
3. Find the user profile that you want to update. You can scroll through the list of users or use the **Search** field to search for a profile.
4. The **Account Information** page should display by default. If not, click the green back arrow to navigate to that page.

- To suspend the user profile, click the green **Active** check box.
- To activate the user profile, click the white **Active** check box.

5. Click **Add** to save the change. Other options are **Save and add another** and **Save and continue editing**.

Change a user's Digi Axess password from the user profile

You can change a user's password from the user profile.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page. However, only users with **Admin** privileges can access the **User Management** section.
2. From the **User Management** section in the Admin dashboard, click **Change** next to **Users**.

   As an alternative, you can click **Users** from the dashboard pane on the left of the screen.
3. Find the user profile that you want to update. You can scroll through the list of user profiles or use the **Search** field to search for a profile.
4. Click on the user profile name. The **Users** screen displays.
5. Click **Send Reset Password**. An email is sent to the user, which contains a password reset link.

Audit Logs

You can review audit logs that show the history of various processes.

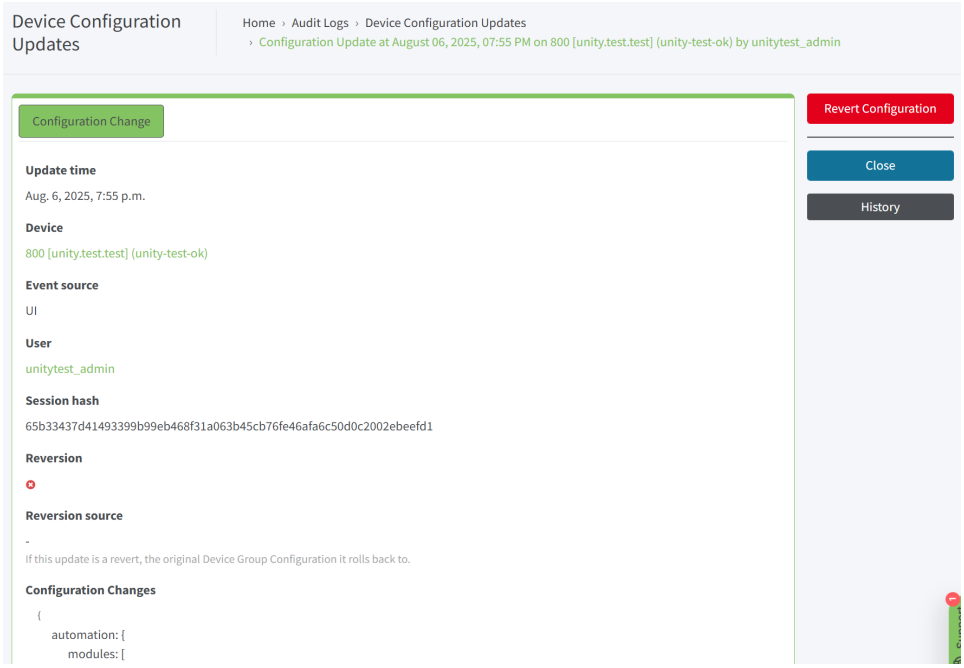
Audit Log	Description
Device Configuration Updates	Review historical information about the configuration updates for devices. ■ Review the device configuration updates audit log
Device Connection History	Review historical information about the connections made between the device and Digi Axess. ■ Review the device connection history audit log
Device Group Configuration Updates	Review historical information about updates for saved and shared device group configurations. ■ Review the device group configuration updates audit log
User Login History	Review historical information about the users that have logged in or out of Digi Axess. ■ Review the user login history audit log

Review the device configuration updates audit log

You can review information about the configuration updates that have occurred on a device.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Audit Logs** section in the Admin dashboard, click **Device Configuration Updates** or click **View** next to that link. As an alternative, click **Audit Logs** > **Device Configuration Updates** from the dashboard pane on the left of the screen.

   The **Device Configuration Updates** page displays.
3. Configuration update details for the devices displays in the page.
   - **Update time**: The date and time at which the configuration update started. Click the update time link to open the Device Configuration Updates page for this configuration event.



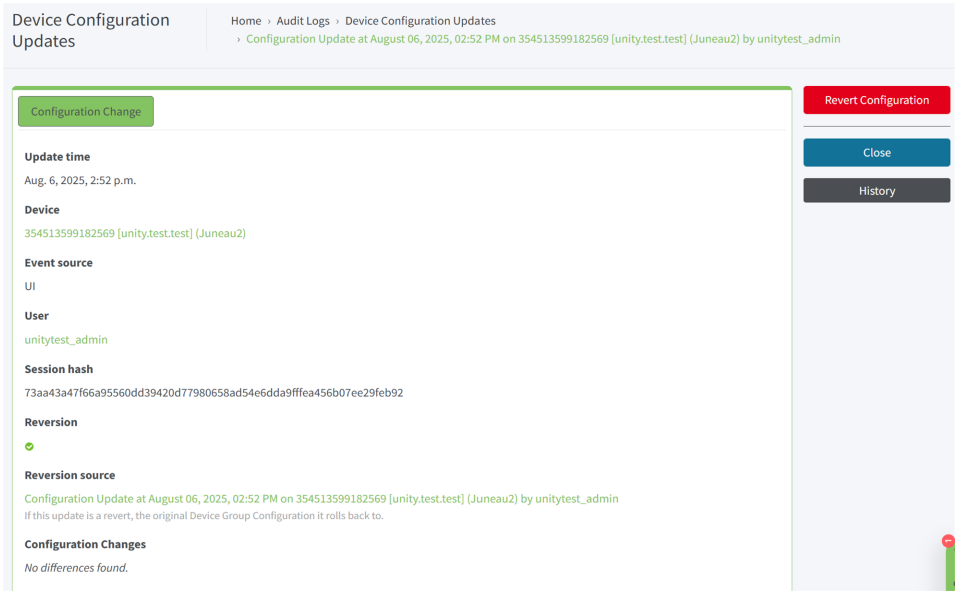
- **Device**: The device that was updated. The device is identified by serial number, device group, and name: *serial number* [*device group*] (*device name*).
- **Event source**: The source from which the update was started. Options are:
  - **UI**: Initiated from the Digi Axess user interface.
  - **API**: Initiated from Digi Axess REST API.
- **User**: The user logged in when the update was started.
- **Session Hash**: The session that was active when the update was started.
- **Reversion**: Denotes whether a reversion to a previous configuration version has occurred.
  - **Green circle**: The configuration update was part of a reversion to a previous configuration version.
  - **Red circle**: The configuration update was not made as part of a reversion to a previous configuration version.
- **Revert Configuration button**: Click **Revert Configuration** to revert the configuration for the specified device back to configuration that was installed before the previous update.

4. You can use the filters in any combination to limit the list. Select from the options and then click **Search**.
   - **Update time**: Select an update time option from the list box.
   - **Device**: Select a device option from the list box.
   - **User**: Select a user from the list box.
   - **Search field**: Enter a search string.

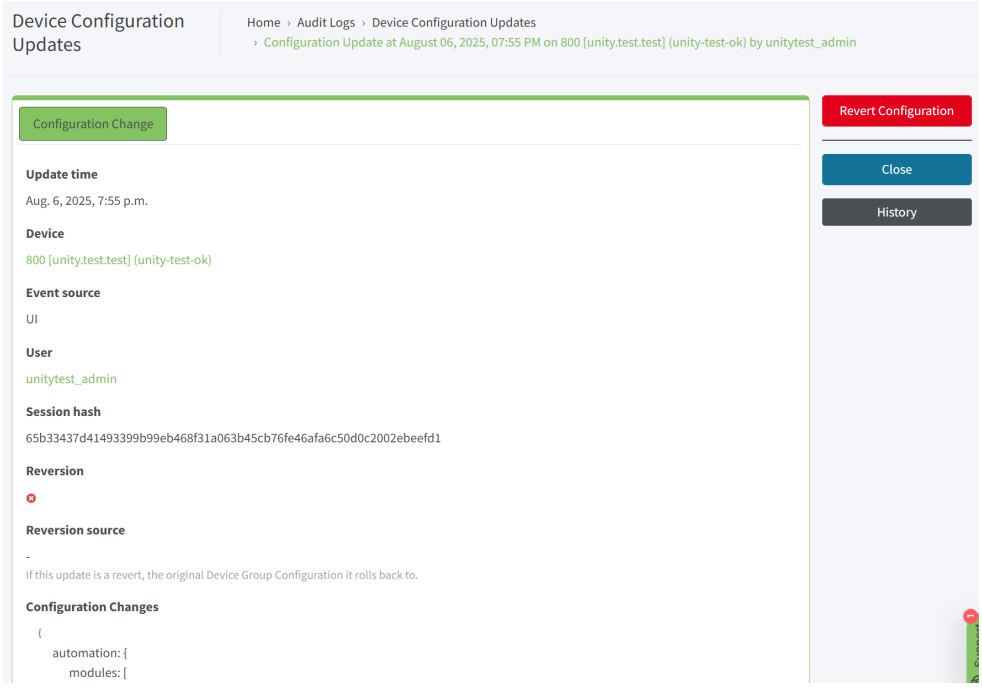
Review a configuration change event

You can review the details of a configuration change event from the Device Configuration Updates audit log, or from the Devices page.

Reversion



No reversion



Field or Button	Description
Update time	The date and time on which the configuration update started.
Device	The device that was updated. The device is identified by serial number, device group, and name: *serial number* [*device group*] (*device name*).
Event Source	**Event source**: The source from which the update was started. Options are: ■ **UI**: Initiated from the Digi Axess user interface. ■ **API**: Initiated from Digi Axess REST API.
User	The user logged in when the update was started. Click the user link to view information about the user in the Users page.
Session Hash	The session that was active when the update was started.
Reversion	Denotes whether a reversion to a previous configuration version has occurred. ■ **Green circle**: The configuration update was part of a reversion to a previous configuration version. ■ **Red circle**: The configuration update was not made as part of a reversion to a previous configuration version.
Reversion Source	The source of the reversion is listed. Click the link to display the changes in the **Configuration Changes** field. If this update is a reversion to a previous configuration version, the reversion source is the device configuration it rolls back to. Note This field has an entry only if the reversion icon is a green circle.
Configuration Changes	The changes between the current version and previous version display.

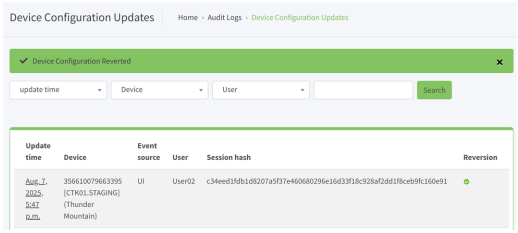
Revert a device configuration update

You can click the **Revert Configuration** button to revert the configuration for the specified device back to the configuration that was installed before the previous update.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Audit Logs** section in the Admin dashboard, click **Device Configuration Updates** or click **View** next to that link. As an alternative, click **Audit Logs** > **Device Configuration Updates** from the dashboard pane on the left of the screen.

   The **Device Configuration Updates** page displays configuration update details for the devices.
3. Click the link in the **Update time** column for the configuration that you want to revert. The open the **Device Configuration Updates** page for the device displays.
4. Click **Revert Configuration**. The **Confirm Revert Device Configuration** page displays. The page specifies the version to which the device will be reverted if you continue with the process.

5. Click **Revert**. The configuration is reverted, and you are returned to the **Device Configuration Updates** screen. A banner displays at the top of the screen, to verify the reversion. The reversion is included in the version list.

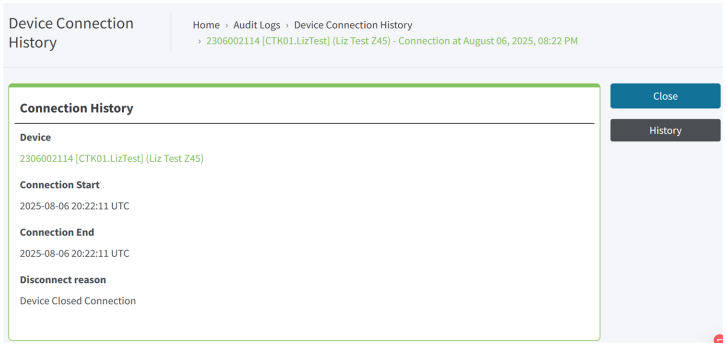


Review the device connection history audit log

You can review information about device connections to **Digi Axess**

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Audit Logs** section in the Admin dashboard, click **Device Connection History** or click **View** next to that link. As an alternative, click **Audit Logs** > **Device Connection History** from the dashboard pane on the left of the screen.

   The **Device Connection History** page displays.
3. Connection history for the devices displays in the page.
   - **Device**: The device that made the connection. The device is identified by serial number, device group, and name, as follows: *serial number* [*device group*] (*device name*). Click on the **Device** link to display the **Connection History** page.



     In the **Connection History** page, click on the device name link to open the Devices page and display information about this device.
   - **Connection Start**: The date and time the connection was made.
   - **Connection End**: The date and time the connection ended.
   - **Disconnect Reason**: The reason that the device was disconnected. Options are: **Unknown**, **Timeout**, **Device Closed Connection**,or **Invalid Data**.
4. You can use the filters in any combination to limit the list. Select from the options and then click **Search**.
   - **Disconnect Reason**: Select a disconnect reason from the list box. Options are: **Unknown**, **Timeout**, **Device Closed Connection**,or **Invalid Data**.

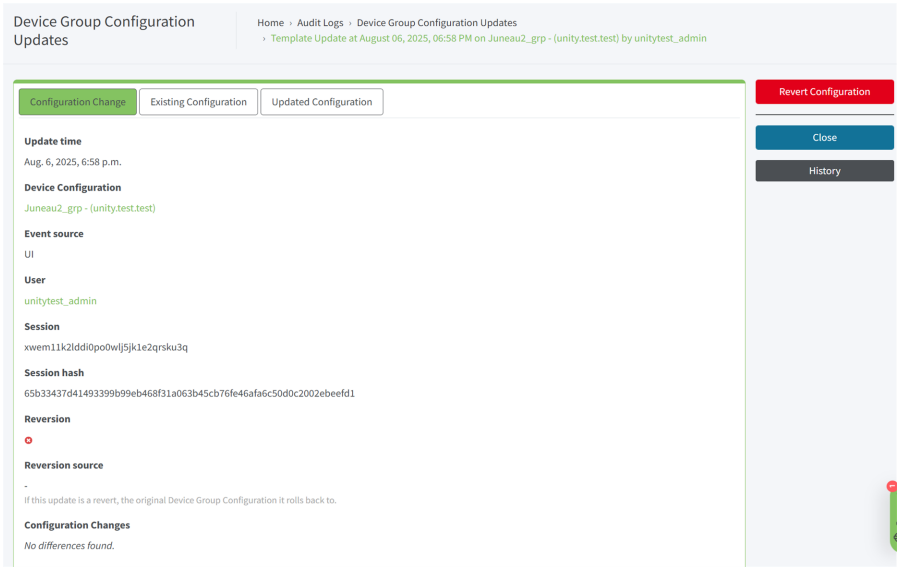
- **Connection Start Time**: Select a time period option from the list box.
- **Search field**: Enter a search string.

Review the device group configuration updates audit log

You can review information about the saved/shared configuration updates for the devices in a device group.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Audit Logs** section in the Admin dashboard, click **Device Group Configuration Updates** or click **View** next to that link. As an alternative, click **Audit Logs** > **Device Group Configuration Updates** from the dashboard pane on the left of the screen.

   The **Device Group Configuration Updates** page displays.
3. Configuration update details for the devices displays in the page.
   - **Update time**: The date and time at which the configuration update started. Click the update time link to open the Device Group Configuration Updates page for this configuration event.



   - **Device Configuration**: The device configuration that was applied to the devices in the group. The device configuration is identified by device group and name: *device group* (*device name*).
   - **Event source**: The source from which the update was started. Options are:
     - **UI**: Initiated from the Digi Axess user interface.
     - **API**: Initiated from Digi Axess REST API.
   - **User**: The user logged in when the update was started.
   - **Session Hash**: The session that was active when the update was started.
   - **Reversion**: Denotes whether a reversion to a previous configuration version has occurred.

- **Green circle**: The configuration update was part of a reversion to a previous configuration version.
- **Red circle**: The configuration update was not made as part of a reversion to a previous configuration version.

- **Revert Configuration button**: Click **Revert Configuration** to revert the configuration for the devices in the device group back to the configuration that was installed before the previous update.

4. You can use the filters in any combination to limit the list. Select from the options and then click **Search**.
   - **Update time**: Select an update time option from the list box.
   - **Template**: Select a configuration template option from the list box.
   - **User**: Select a user from the list box.
   - **Search field**: Enter a search string.

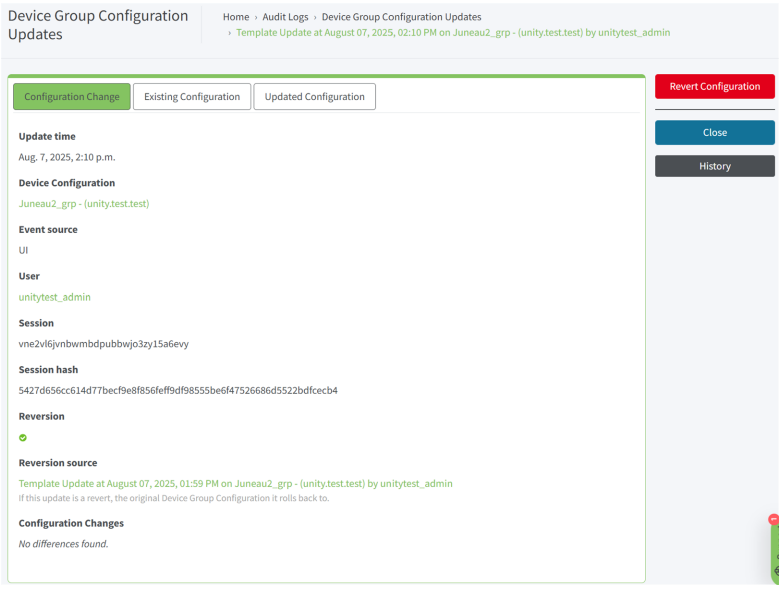
Review a device group configuration change event

You can review the details of a configuration change event for the devices in a group from the Device Group Configuration Updates audit log.

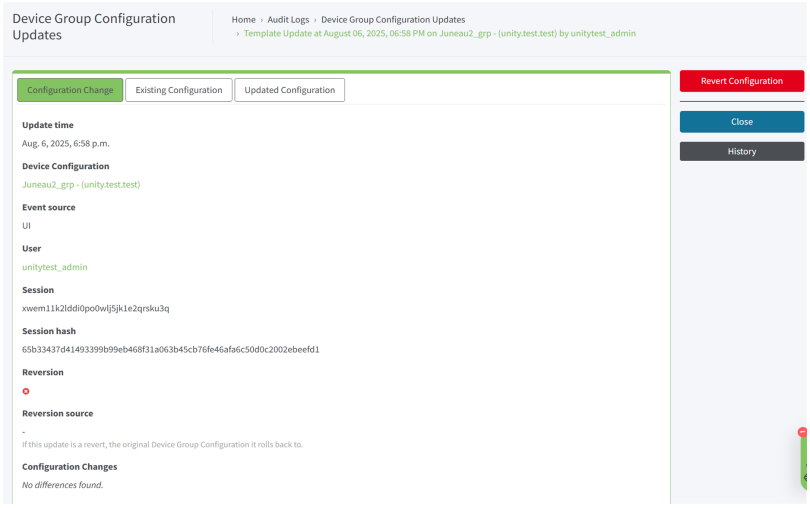
Each tab shows different information:

- **Configuration Change**: Click the **Configuration Change** tab to display detailed information about the update. Refer to the table below for information about the fields in the page.
- **Existing Configuration**: Click the **Existing Configuration** tab to display the former configuration. You can click the **Code/Tree** toggle to choose the display format: as code or in a tree layout.
- **Updated Configuration**: Click the **UpdatedConfiguration** tab to display the current configuration. You can click the **Code/Tree** toggle to choose the display format: as code or in a tree layout.

Reversion



No reversion



Configuration Change

Field or Button	Description
Update time	The date and time on which the configuration update started.
Device Configuration	The device configuration that was applied to the devices in the group. The device configuration is identified by device group and name: *device group* (*device name*). Click the device configuration link to view information in the Device Configurations page.
Event Source	**Event source**: The source from which the update was started. Options are: ■ **UI**: Initiated from the Digi Axess user interface. ■ **API**: Initiated from Digi Axess REST API.
User	The user logged in when the update was started. Click the user link to view information about the user in the Users page.
Session Hash	The session that was active when the update was started.
Reversion	Denotes whether a reversion to a previous configuration version has occurred. ■ **Green circle**: The configuration update was part of a reversion to a previous configuration version. ■ **Red circle**: The configuration update was not made as part of a reversion to a previous configuration version.
Reversion Source	The source of the reversion is listed. Click the link to display the changes in the **Configuration Changes** field. If this update is a reversion to a previous configuration version, the reversion source is the original device group configuration it rolls back to.

Field or Button	Description
	Note This field has an entry only if the reversion icon is a green circle.
Configuration Changes	The changes between the current version and previous version display.

Revert a device group configuration update

You can click the **Revert Configuration** button to revert the configuration for the devices in a device group back to the configuration that was installed before the previous update.

vice.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Audit Logs** section in the Admin dashboard, click **Device Group Configuration Updates** or click **View** next to that link. As an alternative, click **Audit Logs** > **Device Group Configuration Updates** from the dashboard pane on the left of the screen.

   The **Device Group Configuration Updates** page displays configuration update details for the device groups.
3. Click the link in the **Update time** column for the configuration that you want to revert. The **Device Group Configuration Updates** page for the device group displays.
4. Click **Revert Configuration**. The **Confirm Revert Device Group Configuration** page displays. The page specifies the version to which the devices in the group will be reverted if you continue with the process.
5. Click **Revert**. The configuration is reverted, and you are returned to the **Device Group Configuration Updates** screen. A banner displays at the top of the screen, to verify the reversion. The reversion is included in the version list.

Review the user login history audit log

You can review your users's **Digi Axess** logging history.

1. Access the Digi Axess Admin page. You must have **Admin** or **Device User** privileges to access this page.
2. From the **Audit Logs** section in the Admin dashboard, click **User Login History** or click **View** next to that link. As an alternative, click **Audit Logs** > **User Login History** from the dashboard pane on the left of the screen.

   The **User Login History** page displays.
3. Log in history for all of the **Digi Axess** users displays in the page.
   - **User**: The user's **Digi Axess** log in name. Click on the user's name to display information about this session for the user.
   - **Event Type**: The type of log in event. Options are **Login**, **Logout**, or **Session Timeout**.
   - **Timestamp**: The date and time of the event.
   - **Session hash**: The session in which the event occurred.

4. You can use the filters in any combination to limit the list. Select from the options and then click **Search**.
   - **Event Type**: Select an event type from the list box. Options are **Login**, **Logout**, or **Session Timeout**.
   - **Timestamp**: Select a time period option from the list box.
   - **User**: Select a user name from the list box. You can use the search field at the top of list to limit the selections. As you type in the field, the options are limited to those that contain the search string.
   - **Search field**: Enter a search string.

Use the Digi Axess Mobile app to manage your devices

You can use the Digi Axess Mobile app to log into Digi Axess to monitor all of your devices, and receive and manage notifications from Digi Axess.

With the Digi Axess Mobile app, you can quickly connect to the Connect Sensor devices near you that are awake and have the mobile app service enabled on the device. The app uses Bluetooth to find and connect to the Connect Sensor devices.

This feature is intended to be used for the initial deployment of a Connect Sensor. You can use the mobile app to see sensor readings in real time to verify that the sensors are working as expected.

Step 1: Get and install the Digi Axess Mobile app

The Digi Axess Mobile app is available from the app store, and can be installed on your mobile device, such as a mobile phone or a tablet.

- Install the Digi Axess Mobile app

Step 2: Enable the mobile app service

You must enable the mobile app service on the Connect Sensor devices that you want to connect to from the Digi Axess Mobile app. This service must be configured individually on each Connect Sensor device.

- Enable the mobile app service for the Connect Sensor

Step 3: Wake the Connect Sensor and connect to the device from the Digi Axess Mobile app

You can use the Digi Axess Mobile app to quickly connect to the Connect Sensor devices near you that are awake. Once a device is connected to the app, you can verify that the sensors connected to the device are working as expected.

- Connect to the Connect Sensor devices near you from the Digi Axess Mobile app

Step 4: Use the Digi Axess features

You can review your devices, launch and log into Digi Axess, review notifications, and configure your device. You can also review the Digi Axess Mobile app menu options.

Feature	Description
Open the Digi Axess Mobile app	Open the app from your mobile device, such as a phone or a tablet. You can log in to access the Digi Axess Mobile app menu and to display detailed information about a device. ■ Log in to the Digi Axess Mobile app
Connect via Bluetooth	Connect to your Connect Sensor devices that are physically near you and are awake. ■ Connect to the Connect Sensor devices near you from the Digi Axess Mobile app
Monitor your devices	Display a list of the devices that are registered with Digi Axess. You can drill down on a device to review detailed information. ■ Monitor your devices from the Digi Axess Mobile app
Review notifications from Digi Axess	Review notifications from Digi Axess. ■ Review Digi Axess notifications in the Digi Axess Mobile app
Configure your device	Log into Digi Axess and configure your device. ■ Configure a device from the Digi Axess Mobile app
Digi Axess Mobile app menu options	Review the Digi Axess Mobile app menu options. ■ Digi Axess Mobile app menu options overview
Configure the Digi Axess Mobile app	Configure the app settings. ■ Configure the Digi Axess Mobile app

Install the Digi Axess Mobile app

The Digi Axess Mobile app is available from the app store, and can be installed on your mobile device, such as a mobile phone or a tablet.

1. On your mobile device, navigate to the App Store.
2. Search for **Digi Axess Mobile**.
3. Click **Get**.
4. Follow the standard App Store process to install the app.

Enable the mobile app service for the Connect Sensor

You must enable the mobile app service for each Connect Sensor device that you want to connect to from the Digi Axess Mobile app. This process must be configured individually for each Connect Sensor device.

When you enable the service, you must also specify how long the service should remain enabled before it is automatically disabled. You can manually disable the service at any time.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Services** > **Digi Axess Services** > **Mobile App Connection**. The **Mobile App Connection Configuration** page displays.
3. Click the **Enable Mobile App Connection** toggle button. When the service is enabled, the toggle button is green.
4. From the **Automatically Disable Mobile App Connection** list box, select an option that determines how long the service should remain enabled. When the selected time limit is reached, the service is automatically disabled.

   The default is **2 days**.
5. Click **Update**. A confirmation dialog displays.
6. Click **OK** to complete the change.

NEXT STEP: After you have enabled the mobile app service you can wake your Connect Sensor and connect to the device from the Digi Axess Mobile app. See Connect to the Connect Sensor devices near you from the Digi Axess Mobile app.

Connect to the Connect Sensor devices near you from the Digi Axess Mobile app

You can use Digi Axess Mobile app to quickly connect to the Connect Sensor devices near you. The app uses Bluetooth to find and connect to the devices that are awake and have the mobile app service enabled on the device.

Once a device is connected to the app, you can verify that the sensors connected to the device are working as expected. This feature is intended to be used for the initial connection to a Connect Sensor.

Before you begin

On your mobile device

- The Digi Axess Mobile app must be installed.
- The Bluetooth setting must be enabled.

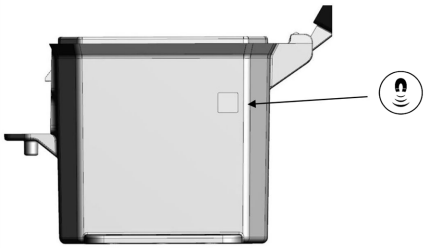
On the Connect Sensor

- The mobile app service must be enabled.
- You must be physically near enough to the device to touch it so that you can wake it with a magnet.

Step 1: Wake the Connect Sensor

1. Wake the Connect Sensor.
   a. If the Connect Sensor is in a NEMA enclosure, open the enclosure.
   b. Locate the magnet sensor sticker on the side of the device.

      Digi Connect Sensor XRT-M NEMA



Connect Sensor XRT-M

c. Swipe a magnet across the magnet sensor sticker to wake the device.

d. The LED on the edge of the SIM card slot shows the status of the device. When it is awake, the LED next to the SIM card slot blinks blue.

Step 2: Connect to the Connect Sensor from the Digi Axess Mobile app

1. Open the Digi Axess Mobile app on your mobile device. The **Manage Devices** screen displays.
2. Connect to the Connect Sensor using one of the following methods:
   - **Connect via Bluetooth**: From the **Manage Devices** screen, click **Connect via Bluetooth**.
   - **Find Bluetooth Device**: Click the Digi Axess Mobile app menu in the upper right corner of the page, and select **Find Bluetooth Device**. The menu displays only if you have logged into the app.

     Note If you don't have Bluetooth enabled on your mobile device, the **Allow Bluetooth access to find devices** page displays. Follow the instructions to enable Bluetooth, and then return to the Digi Axess Mobile app.
3. The **Locating Nearby Devices** graphic displays in the **Find Device** page while the app searches for Connect Sensor devices.
4. When devices are found by the Digi Axess Mobile app, a list of the devices displays in the **Available Devices** lists.

   Note If no devices are found, the **No devices found** page displays. Troubleshooting information is displayed on the page. Make any adjustments and click **Retry** at the bottom of the page.
5. Click on a device in the list. The **Device Information** page displays a list of the sensors connected to the Connect Sensor.
6. Click on the name of a sensor in the **Select a Sensor to Read Data** section. The data from that sensor displays on the app screen. Repeat this step for any other sensor in the list.
7. When your review is complete, return to the **Manage Devices** page.

8. After you have connected to the Connect Sensor and verified sensor activity, you should disable the mobile app service.
   - **Automatically disable the mobile app service**: When you enable the mobile app service, you can specify how long the service should remain enabled before the service is automatically disabled.
     - Enable the mobile app service for the Connect Sensor
   - **Manually disable the mobile app service**: You can manually disable the mobile app service when the connection to the Digi Axess Mobile app is no longer needed.
     - Manually disable the mobile app service

Manually disable the mobile app service

If you have enabled the mobile app service for your device, you can manually disable it before the time limit is reached for it to be automatically disabled.

1. Access the device's web UI from the Device Summary page.
2. From the **Services** section, click **Digi Axess Services**. The **Digi Axess Services** page displays.
3. Click **Mobile App Connection**. The **Mobile App Connection Configuration** page displays.
4. If the mobile app service is enabled, the **Enable Mobile App Connection** toggle button is green and can be manually disabled. Click the **Enable Mobile App Connection** toggle button. When it is disabled, the toggle button is gray.
5. Click **Update**. A confirmation dialog displays.
6. Click **OK** to complete the change.

Monitor your devices from the Digi Axess Mobile app

You can monitor your devices from the Digi Axess Mobile app. You can also choose to launch and log into Digi Axess for a device.

Before you begin

- Make sure you have your Digi Axess log in user name and password.

To monitor your devices:

1. Open the Digi Axess Mobile app on your mobile device. The **Manage Devices** screen displays.
2. In the **Manage Devices** page, click **Devices monitoring** to display information about the devices registered with Digi Axess.

   Note If you have not already signed in to Digi Axess from the Digi Axess Mobile app, the **Sign in to access device data** page displays. Log into Digi Axess to access your devices and the Digi Axess Mobile app menu.

3. In the **Devices Monitoring** page, information about each sensor is displayed in a tile. Click a tile to display more detailed information in the **Device Information** page.

   You can search for a device or limit the device list using these features.

Feature	Description
Search	Use the **Search** field to limit the list of devices displayed in the page. As you type in the field, the list is limited to the devices that match the search string.
All Devices list box	Use the **All Devices** list box to choose a device group. Select an option and then click **Select Group** to limit the list. Options are: ■ **Search**: Search for a device group. ■ **All Devices**: Click this option to include all devices. ■ **Group name**: The device group names are listed. Select a name from the list box. You can also select a child device group.
Scroll	Scroll through page to review the list of devices. Each device displays on a tile, and includes pertinent information.
Select a tile	Click on a tile to display more information about a device, such as system status, data usage, and network status. You can also click **Device Configuration** to access the device and review or update the configuration.

Review Digi Axess notifications in the Digi Axess Mobile app

You can review notifications from Digi Axess in the Digi Axess Mobile app. New notifications display when you open the app, and you can access unread notifications from the menu in the **Manage Devices** page.

1. Open the Digi Axess Mobile app on your mobile device. The **Manage Devices** screen displays.
2. Click the menu icon in the upper right corner of the **Manage Devices** page. The Digi Axess Mobile app menu displays.

   Note If the menu icon is not available, you need to log into the Digi Axess Mobile app. The menu icon displays after you have logged into the Digi Axess Mobile app.

3. Click **Notification Center**. The **Notifications** page displays.

   The number of unread messages displays next to the menu option in a green circle.
4. Click on a message to read the complete message and additional information about the device.
   - In the **Resources** section, click on the links to access more information about the message.
   - Scroll to the bottom of the page, and click **Open Device** to display additional information about the device in the **Device Information** page.

Configure a device from the Digi Axess Mobile app

You can configure a device from the Digi Axess Mobile app. The process includes logging into Digi Axess.

Before you begin

- Make sure you have your Digi Axess log in user name and password.

To configure a device:

1. Open the Digi Axess Mobile app on your mobile device. The **Manage Devices** screen displays.
2. In the **Manage Devices** page, click **Devices monitoring** to display information about the devices registered with Digi Axess.

   Note If you have not already signed in to Digi Axess from the Digi Axess Mobile app, the **Sign in to access device data** page displays. Log into Digi Axess to access your devices and the Digi Axess Mobile app menu.

3. In the **Devices Monitoring** page, information about each sensor is displayed in a tile. Click a tile to display more detailed information in the **Device Information** page. You can use the search features to search for a device or limit the list of devices.
4. Click **Device Configuration** to access the device. The Digi Axess log in page displays.
   a. Enter your Digi Axess user name and password in the **Username** and **Password** fields.
   b. Click **Sign In**.

Log in to the Digi Axess Mobile app

You need to log into Digi Axess from the Digi Axess Mobile app on your mobile device to be able to access the Digi Axess Mobile app menu options and review device details.

Before you begin

- You will need your Digi Axess log in credentials.

To log in to the Digi Axess Mobile app:

1. Open the Digi Axess Mobile app on your mobile device. The **Manage Devices** screen displays.
2. In the **Manage Devices** page, click **Devices monitoring**. The **Sign in to access device data** page displays.
3. Enter your Digi Axess user name and password in the **Username** and **Password** fields.
4. Click **Sign In**.
   - A list of the devices that you are allowed to access displays in the **Devices Monitoring** page.
   - The Digi Axess Mobile app menu displays at the top of the page. For information about the menu options, see Digi Axess Mobile app menu options overview.

Digi Axess Mobile app menu options overview

The Digi Axess Mobile app menu displays in the upper right corner of the **Manage Devices** page when you open the Digi Axess Mobile app and are logged in to the app.

1. Open the Digi Axess Mobile app on your mobile device. The **Manage Devices** screen displays.
2. Click the menu icon in the upper right corner of the **Manage Devices** page.

Note If the menu is not there, log in to the app.

The Digi Axess Mobile app menu displays.

Menu option	Description
Home	Click **Home** to return to the **Manage Devices** page.
Find Bluetooth Device	Click **Find Bluetooth Device** to find Connect Sensor devices. The **Locating Nearby Devices** graphic displays in the **Find Device** page while the app searches for devices. ■ Connect to the Connect Sensor devices near you from the Digi Axess Mobile app **Note** You can also access this feature from the Connect via Bluetooth option in the Digi Axess Mobile app.
Devices Monitoring	Click **Devices Monitoring** to display a list of the devices in the **Devices Monitoring** page that you are allowed to access. ■ Monitor your devices from the Digi Axess Mobile app.
Notification Center	Click **Notification Center** to display notifications from Digi Axess in the **Notifications** page. The number of unread messages displays next to the menu option in a green circle. ■ Review Digi Axess notifications in the Digi Axess Mobile app.
Settings	Click **Settings** to configure the Digi Axess Mobile app. ■ Configure the Digi Axess Mobile app
Sign Out	Click **Sign Out** to end your Digi Axess Mobile app session. A confirmation dialog displays. ■ **Cancel**: Click **Cancel** to close the dialog and remain logged in. ■ **Sign Out**: Click **Sign Out** to sign out of the Digi Axess Mobile app.

Configure the Digi Axess Mobile app

You can configure your language preference and security options for the Digi Axess Mobile app from the **Settings** page, which is available from the Digi Axess Mobile app menu. The menu displays in the upper right corner of the **Manage Devices** page when you open the Digi Axess Mobile app and are logged in to the app.

1. Open the Digi Axess Mobile app on your mobile device. The **Manage Devices** screen displays.
2. Click the Digi Axess Mobile app menu that displays in the upper right corner of the screen.

   Note If the menu is not there, log in to the app.

3. Click **Settings**. The **Settings** page displays.
4. Configure the app as needed.

Menu option	Description
Language	In the **Language** section, select your desired language from the list box.
Security	In the **Security** section, you can configure the app to use the Face ID feature configured for your device to log into Digi Axess. ■ **Enable**: Enable the **Access with Face ID** option to use Face ID to log into Digi Axess from the Digi Axess Mobile app. ■ **Disable**: Disable the **Access with Face ID** option if you do not want to use Face ID to log into Digi Axess from the Digi Axess Mobile app. You can manually log into Digi Axess.

Configure a Connect Sensor from the web UI

These sections explain how to configure a device in the Connect Sensor family from Digi Axess. The first step is to access the **Automation Dashboard** for Connect Sensor, either from Digi Axess or by logging directly into the device.

For information about the accessing the **Automation Dashboard**, and the dashboard features and configuration options, refer to:

- Access the Automation Dashboard for a Connect Sensor
- Access the device's web UI from the Device Summary page
- Configure the Connect Sensor from the Automation Dashboard menu

How are configuration changes pushed to a Connect Sensor?

By default, the Connect Sensor is configured to wake up and connect to Digi Axess every 12 hours. When the device is awake and connected to Digi Axess, it pushes sensor data to Digi Axess, and then asks Digi Axess for configuration changes. If there are any, Digi Axess pushes the changes and the device applies them, restarts, and then reconnects to Digi Axess. When this process is complete, the Connect Sensor goes to sleep and waits to wake and reconnect at the next scheduled time.

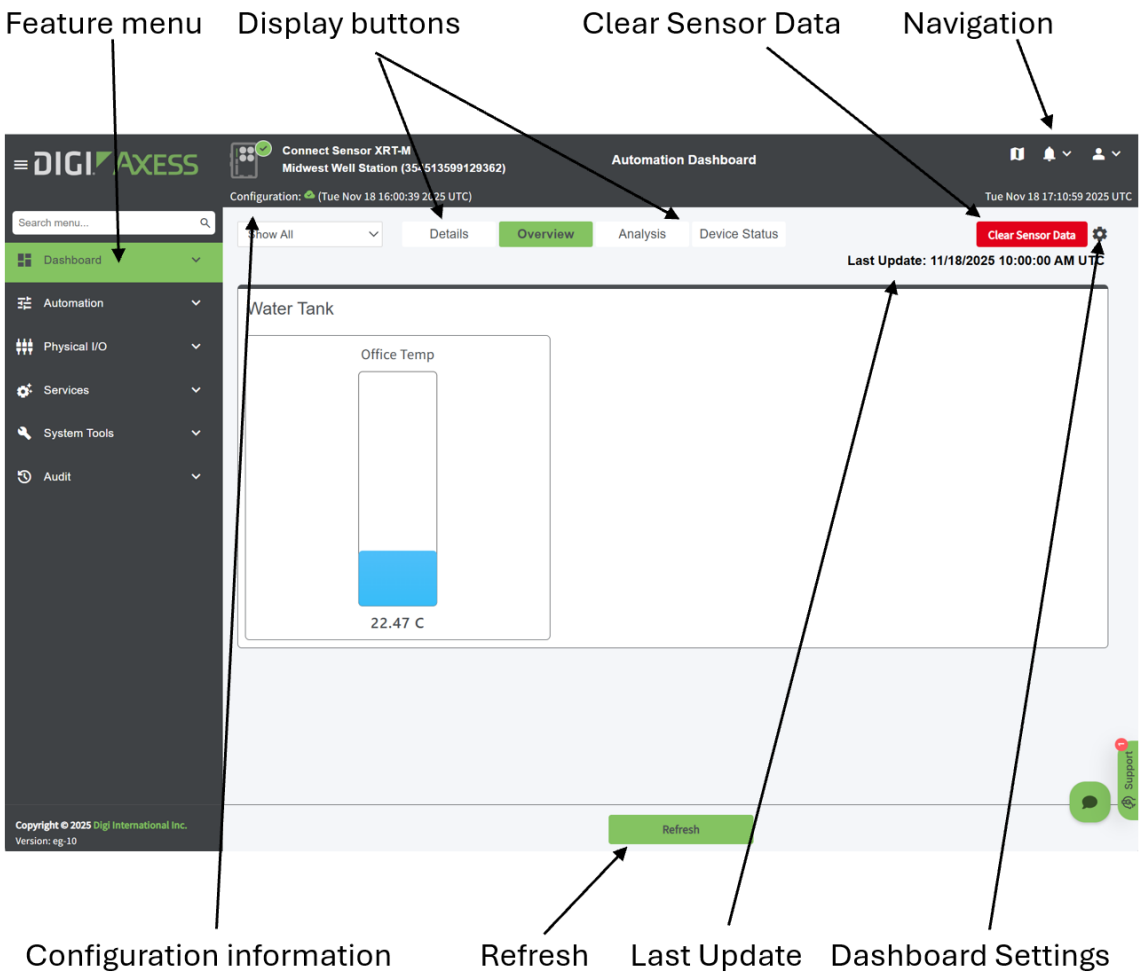
You can choose to configure a wake-and-connect schedule for a device if you don't want to use the default schedule. A schedule determines the first wake-up time, the time interval between reading the sensor connected to the Connect Sensor, and how many reads should occur before data is pushed from the device to Digi Axess.

For more information, see Configure the data collection and push schedule.

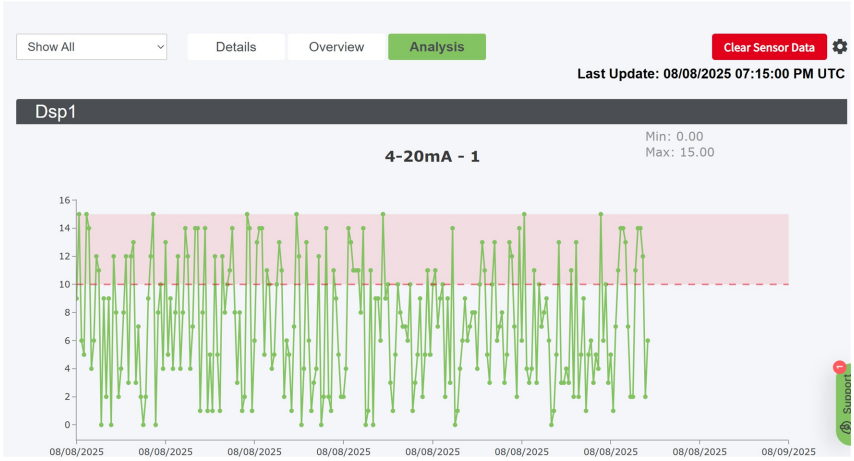
Access the Automation Dashboard for a Connect Sensor

The **Automation Dashboard** displays when you access the web UI for Connect Sensor from the Device Summary page.

You can use the options in the dashboard to configure the device, clear sensor data, review automation information, and review network, system, and configuration status.



Dashboard features	Description
Feature menu	The feature menu options are used to configure the device. ■ Configure the Connect Sensor from the Automation Dashboard menu
Display buttons	Use the display buttons to select the type of information to display in the dashboard. ■ **Details**: Displays the current value for the inputs and outputs that have been programmed to collect data from the device. This is user-defined. ■ **Overview**: Displays current input and output values in a graphical format. Only the values that have a gauge type selected will display. ■ **Analysis**: Displays current input and output values in a graph. This is available only for data that changes over time. Roll the cursor over data to view the date details. If you have set a threshold for a pin, the threshold configuration is

Dashboard features	Description
	represented in the graph.  ■ **Device Status**: Displays system, network, and device status information. See Review status information for a Connect Sensor.
Clear Sensor Data button	Click **Clear Sensor Data** to clear all of the sensor data stored on the device. ■ Clear Connect Sensor sensor data from the Automation Dashboard
Navigation tools	Use the navigation icons to access more features.  ■ **Map**: Click the map icon to return to the Digi Axess map page. ■ **Bell**: Click the bell icon to review notifications. ■ **User**: Click the down arrow next to the user profile icon to display a list of user profile management options and the login name for the current user.
Configuration information	Displays configuration information about the synchronization status between Digi Axess and the device. Options are: ■ Synced (Date and time of the last synchronization) ■ Scheduled - Partial Sync (Pending Device Connection) ■ Scheduled - Full Sync (Pending Device Connection)
Refresh button	Click **Refresh** to update the data on the dashboard.
Last update information	The last date and time that the device woke and pushed data to Digi Axess. The data displayed on the page reflects the most recently collected data.
Dashboard settings	Choose how you want the pin data display in the dashboard, and how often the data should be refreshed.

Dashboard features	Description
	For detailed instructions, see ■ **Display Template**: Select the default display format of the pin values in the **Details** tab. Options are: • **Default**: The information for each pin displays in a tile. • **Tabular**. The **Tabular** information displays in a table format. ■ **Default View**: Select which dashboard tab displays as the default: **Details**, **Overview**, or **Analysis**. ■ **Auto-Refresh Time**: Specify the time interval at which you want the data to be automatically refreshed. The time is measure in seconds. The lowest time interval value you can enter is 30. The default is **0**, which means that the data is not refreshed automatically. You can manually refresh the data at any time by clicking the **Refresh** button at the bottom of the page.

Access the device's web UI from the Device Summary page

You can access a device's web UI from Device Summary page in the Digi Axess map.

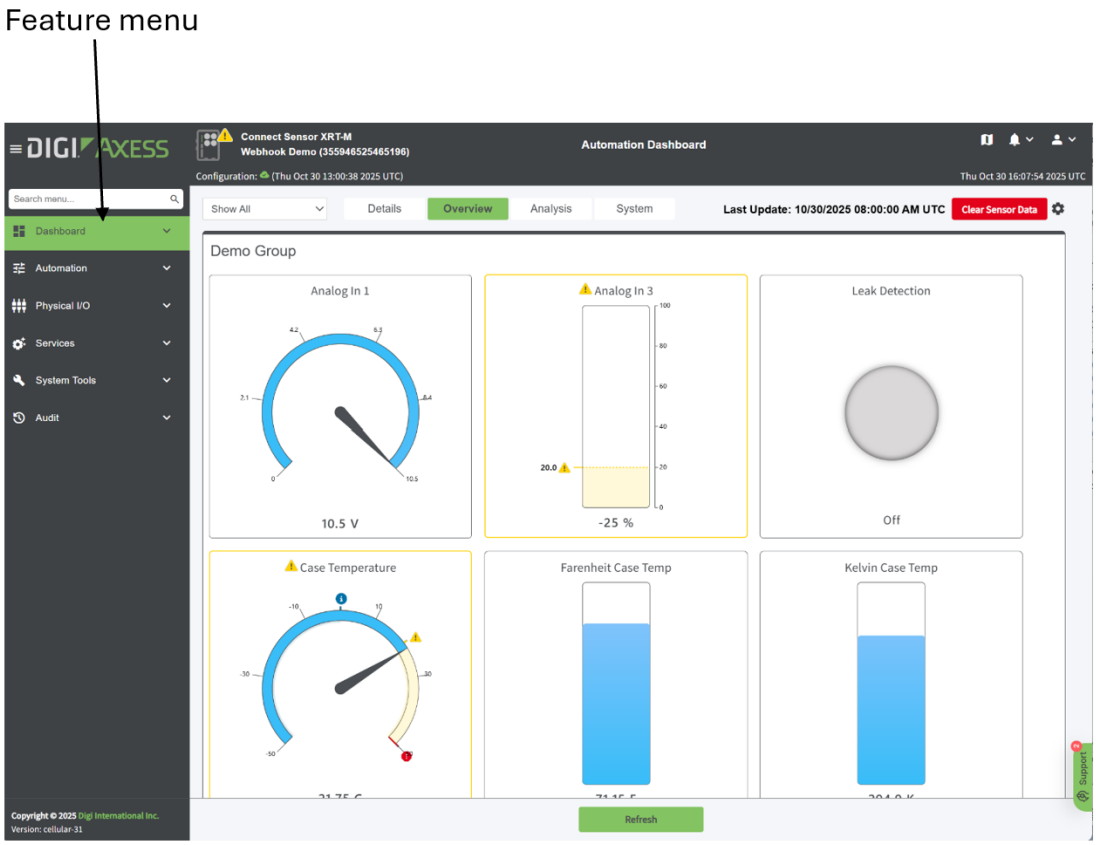
1. Log in to Digi Axess. The Digi Axess map displays.
2. Find the device that you want to configure, using one of the following methods, and display the Device Summary page.
   - Click on the device's location pin on the map.
   - If your device is mapped, scroll through the mapped device list displayed on the lower left of the Digi Axess map. Click on the device name.
   - Use the search feature in the toolbar. As you type, a list of matching devices displays. Click on the tile for the device you want to configure.
   - Click the Grid or Table icons on the left side of the map to display a list of devices. Use the search features to limit the devices displayed. Click on the tile or the row for the device you want to configure.
3. In the Device Summary page, click the device name or the **Configure Device** button.

   The web UI for the device displays in Digi Axess.

   Any changes you make are stored and then pushed from Digi Axess the next time that the Connect Sensor wakes and connects to the network. See Configure the Connect Sensor from the Automation Dashboard menu.

Configure the Connect Sensor from the Automation Dashboard menu

You can configure a Connect Sensor using the feature menu in the Automation Dashboard.



Dashboard

Menu option	Description
Dashboard Settings	Manage dashboard groups. ■ Configure the Automation Dashboard groups and display ■ Add dashboard groups and configure the display options ■ Delete a dashboard group ■ Configure the Automation Dashboard display

Automation

Menu option	Description
Inputs	Configure and manage inputs pins. ■ Configure input pins
Outputs	Configure and manage output pins.

Menu option	Description
	■ Configure output pins
Formulas	Create and manage formulas. ■ Formulas: Manage from the web UI.
Programs	Create and manage programs. ■ Programs
I/O Modules	Introduce data into the system from a Modbus or a virtual source. ■ Set up I/O modules
Force Config Update	A full force configuration update overwrites the entire device configuration based on the Digi Axess configuration. Digi recommends forcing a configuration update only when the sync status shows as **Synced** but the device configuration is not properly synced and you have physical access to the device. ■ Force a full configuration update on a Connect Sensor

Physical I/O

Menu option	Description
Serial	Configure the serial port on the Connect Sensor. ■ Configure the Connect Sensor serial port in Digi Axess
Cellular	Change the cellular connection type or the SIM card in the device. ■ Change the connection from Cat-M1 to NB-IoT ■ Change the connection from NB-IoT to Cat-M1 ■ Replace the SIM card and change the cellular network settings
Analog I/O	Configure the analog I/O input pins, each of which you can configure as either a 4-20 mA current loop or a voltage input. ■ Configure analog inputs and power outputs for a Connect Sensor
Digital I/O	Configure the digital I/O input pin as a digital input or a pulse counter. ■ Configure a digital input for a Connect Sensor on the digital I/O pin ■ Configure a pulse counter for a Connect Sensor on the digital I/O pin
Location Source	Configure the physical location. ■ Configure the location coordinates for a Connect Sensor

Services

Menu option		Description
MQTT		Configure MQTT for this device, or apply an MQTT configuration that was created in the Digi Axess Administration dashboard for a device group in which the current device is included. ■ Configure MQTT for a device
Digi Axess Services	**Device Schedule**	You can configure the sensor data collection and push schedule for the device. ■ Configure the data collection and push schedule ■ Configure the wake up interval for a Connect Sensor ■ Reset the device schedule to the factory default
	Server Configuration	You can update the Digi Axess server URLs and sub-group ID if necessary. Changes are not recommended. ■ Configure the Digi Axess and NTP servers for the device ■ Reset the Digi Axess and NTP server configuration ■ Configure the subgroup IP for Connect Sensor
	Mobile App Connection	You can use the Digi Axess Mobile app to perform the initial connection of your device to Digi Axess. ■ Use the Digi Axess Mobile app to manage your devices ■ Enable the mobile app service for the Connect Sensor

System Tools

Menu option	Description
Logging	Enable system logging. ■ Configure system logging in the web UI ■ Configure system logging ■ Download system logs ■ Clear a system log
Backup/Restore	Save a device's configuration file and apply a configuration file to a device. ■ Configurations: Save and apply to a Connect Sensor ■ Apply a configuration to a Connect Sensor ■ Back up a Connect Sensor configuration
Firmware Update	Update the device firmware. ■ Update the Connect Sensor firmware from the web UI

Menu option	Description
	■ Cancel a firmware update for a Connect Sensor device from the web UI
Cellular Firmware Update	Update the cellular firmware for the device. ■ Cellular modem firmware update: Connect Sensor
Clear Sensor Data	Clear all of the Connect Sensor sensor data stored in Digi Axess. ■ Clear Connect Sensor sensor data from the Automation Dashboard

Audit

Menu option	Description
Configuration History	Review information about the device's configuration change events. You can also revert the current configuration to a prior configuration. ■ Review the device's configuration history ■ Revert the device's configuration
Connection History	Review the device's Digi Axess connection history and track successful connections, as well as missed and off-schedule connections. ■ Review the device's connection history ■ Clear the device's connection history

Configure the Automation Dashboard groups and display

You can create dashboard groups as way to group the pin data for display on the **Automation Dashboard**, Device Summary page and in the device comparison graphs. A dashboard group can be applied when you configure an input pin or an output pin. This feature can be used to group similar devices together for easy comparison.

Note For best results in the device comparison graphs page, the devices in a device group should have similar dashboard groups.

Add and manage dashboard groups

After you have created dashboard groups, you can choose to hide groups that shouldn't be displayed, and determine if all groups or only a default group should display on the **Automation Dashboard** and Device Summary page.

You can also delete dashboard groups if needed.

- Add dashboard groups and configure the display options
- Delete a dashboard group

Specify the dashboard groups display format

You can configure how the dashboard groups are displayed, such as a graphical format or in a table. You can also configure how often the data should be refreshed.

- Configure the Automation Dashboard display

Add dashboard groups and configure the display options

You can add a dashboard group as needed. A dashboard group can be used to organize similar pin data, so pick a name for the group that clearly describes the type of data that you want to group together.

After you have created dashboard groups, you can choose to hide groups that shouldn't be displayed, and determine if all groups or only a default group should display.

The dashboard groups display on the **Automation Dashboard**, Device Summary page and in the device comparison graphs.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Dashboard** > **Dashboard Settings**. The **Dashboard Settings** page displays.
3. Add a dashboard group.
   a. Click **Add Group**. A numbered field displays.
   b. Enter a descriptive name for the dashboard group in the field.
   c. To add another group, click **Add Group** and repeat the process.
4. Configure the dashboard group display options.
   - **Hide**: Click **Hide** for each dashboard group that you don't want to display on the dashboard.
   - **Default**: Click **Default** to specify a default dashboard group. This will be the only group displayed on the dashboard. This option can be selected for only one dashboard group, and if this option is selected for one group, it is deselected for any other group. When **Default** is selected for a group, **Show All Panels on Dashboard** is deselected.
   - **Show All Panels on Dashboard**: Click **Show All Panels on Dashboard** to include all of the dashboard groups by default. When **Show All Panels on Dashboard** is selected, **Default** is deselected.
5. Click **Update**.

Delete a dashboard group

You can delete a dashboard group that is no longer needed. A deletion is permanent and cannot be undone.

Note If any pins are assigned to the dashboard group, you will not be able to delete the group. Before you begin, you should ensure that no pins are assigned to the group.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Dashboard** > **Dashboard Settings**. The **Dashboard Settings** page displays.
3. In the **Dashboard Groups** section, find the group that you want to delete.
4. Click the **Delete** icon next to the group. A confirmation dialog displays.
5. Click **OK**.
6. Click **Update**. A confirmation dialog displays.

7. Click **OK**.
   - The "Parameters Successfully Updated" banner displays if the deletion was successful.
   - The "Panel is in use" banner displays if the group has any pins assigned to it. The group is not deleted.

Configure the Automation Dashboard display

You can configure how the dashboard groups are displayed in the **Automation Dashboard** and the Device Summary page. You can also configure how often the data should be refreshed.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Use one of the following methods to access the dashboard settings options.
   - Click the gear icon next to the **Clear Sensor Data** button. The configuration settings display.
   - Choose **Dashboard** > **Dashboard Settings**. The **Dashboard Settings** page displays. The configuration settings are in the **Dashboard Options** section.
3. Configure the dashboard display:
   - **Display Template**: Select the default display format of the pin values in the **Details** tab. Options are:
     - **Default**: The information for each pin displays in a tile.
     - **Tabular**. The **Tabular** information displays in a table format.
   - **Default View**: Select which dashboard tab displays as the default: **Details**, **Overview**, or **Analysis**.
   - **Auto-Refresh Time**: Specify the time interval at which you want the data to be automatically refreshed. The time is measure in seconds. The lowest time interval value you can enter is 30. The default is **0**, which means that the data is not refreshed automatically. You can manually refresh the data at any time by clicking the **Refresh** button at the bottom of the page.
4. Click **Update** to save your changes.

Configure the Connect Sensor serial port in Digi Axess

You can configure the Connect Sensor serial port in Digi Axess.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Physical I/O** > **Serial**. The **Serial Configuration** page displays.
3. In the **Serial Port 1** fields, configure the serial port. Refer to the table below for field descriptions.
4. Click **Update** to save the configuration.

Field	Description
Framing mode	Select the framing mode you want to use for Modbus. Options are: ■ **ASCII** ■ **RTU**: This is the default. Note This option is only used if you are using Modbus.
Baud	Select the baud rate needed to connect to Digi Axess. The default is **19200**.
Data bits	Select the number of data bits needed to connect to Digi Axess. The default is **8 Bits**.
Stop bits	Select the number of stop bits needed to connect to Digi Axess. The default is **1 Bit**.
Parity	Select the type of parity needed to connect to Digi Axess. The default is **None**.
Power output	Enables or disables the power output source. Options are: ■ **Enabled** ■ **Disabled**: This is the default.
Output voltage	Specifies the voltage level output for the power source. The default is **3.3 Volts**.
Read delay	Specifies the time in seconds that the sensor voltage is enabled before Connect Sensor reads its value. This allows the sensor to stabilize to get an accurate reading. The default is **0**. Note A higher read delay keeps the device powered on longer, which reduces battery life.

Configure the location coordinates for a Connect Sensor

You can configure the latitude and longitude coordinates of the physical location of a device.

Coordinates for the Connect Sensor can be configured manually or by GPS. When you choose the GPS method, a request is sent to the device. When the device wakes up and receives the request, it connects to the GPS satellites to determine its GPS coordinates, and then sends the information back to Digi Axess.

- Configure the location with manually defined coordinates
- Configure the location with GPS-defined coordinates
- Change the location name for a Connect Sensor

Information about the current location displays in the **System Location Configuration** page.

- **Latitude**: The latitude coordinate of the device's physical location.
- **Longitude**: The longitude coordinate of the device's physical location.
- **Location Source**: The method used to determine the latitude and longitude.

  - **manual**: The coordinates were manually configured.
  - **gps**: The coordinates were updated by a GPS location request to the device.
  - **error**: The device was unable to get its GPS location. In this situation, an error banner displays on the page and the location reverts to the last configured location coordinates.
- **Last Update**: The last date and time on which the coordinates were updated.

Configure the location with manually defined coordinates

The physical location for a Connect Sensor's location can be determined by manually defining the device's coordinates in the **System Location Page**.

Note You can also request the location from the device, which is determined using the GPS. See Configure the location with GPS-defined coordinates.

1. Determine the latitude and longitude coordinates for the device's location. You can use the physical address of where the device is located and a mapping application to discover the coordinates.
2. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
3. Choose **Physical I/O** > **Location Source**. For information about the fields on this screen, see Configure the location coordinates for a Connect Sensor.
4. Click **Manual Override**. The **Manual Location Override** section displays.
5. In the **Latitude** and **Longitude** fields, enter the latitude and longitude coordinates for the device's location.
6. Click **Update**.
7. Click **OK** to confirm update.

Configure the location with GPS-defined coordinates

You can use GPS to find the latitude and longitude coordinates of a Connect Sensor's physical location. When you choose the GPS method, a request is sent to the device. When the device wakes up and receives the request, it connects to GPS satellites to determine its GPS coordinates, and then sends the information back to Digi Axess, and the coordinates are updated.

If the device was unable to get its GPS location, an error banner displays on the page and the location reverts to the last configured location coordinates.

Note You can also manually define the location coordinates for a Connect Sensor. See Configure the location with manually defined coordinates.

To determine the device's location using GPS:

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Physical I/O** > **Location Source**. For information about the fields on this screen, see Configure the location coordinates for a Connect Sensor.
3. Click **Request GPS position** to start the process. A banner displays on the page: **GPS Location Update Pending Device Connection**. The banner displays until the process completes in one of the following ways:

- **Coordinates are updated**: The device sends updated coordinates to Digi Axess. The **gps** option displays in the **Location Source** field and the coordinates are updated.
- **Error occurs**: The device determines it cannot get the GPS coordinates. The **error** option displays in the **Location Source** field and the coordinates revert to the last configured location coordinates.

4. You can cancel the GPS request if needed. Click **Cancel GPS Request**.

Change the location name for a Connect Sensor

You can change the descriptive name for the device's location.

Note The location name can also be changed from the **Administration** menu.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Physical I/O** > **Location Source**. For information about the fields on this screen, see Configure the location coordinates for a Connect Sensor.
3. Click the **edit** icon next to the **Location Name** field.
4. Enter a new name in the field.
5. Click the **save** icon. A green banner with the message **Location Name Updated** displays.

Configure the Connect Sensor digital I/O pin

Connect Sensor has one digital I/O pin. You can configure the pin as a digital input or a pulse counter.

Configure a digital input for a Connect Sensor on the digital I/O pin

Connect Sensor has one digital I/O pin and you can configure the pin as a digital input.

Note You can also configure the digital I/O pin as a pulse counter. See Configure a pulse counter for a Connect Sensor on the digital I/O pin.

When configured as a digital input, Connect Sensor detects the presence of a voltage level that is either “high” or “low”. Connect Sensor detects voltage levels during sleep cycles and reports them to Digi Axess when prompted by the **Wake device on** option for the pin, and during the device's scheduled reporting intervals.

To configure the digital I/O pin as a digital input:

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Physical I/O** > **Digital I/O**. The **Digital I/O** page displays.
3. For **Type**, select **Digital Input**.
4. Configure the pin. Information about the fields is in the table below.
5. Click **Update** to save your changes.

Option	Description
Input Enabled	Determine when the pin is enabled. Options are: ■ **Auto**: The pin is enabled only when referenced by an automation input. This is the default. ■ **Always**: The pin is always enabled.
Internal pullup resistor	Enable or disable the internal pull-up resistor to drive a logic level voltage. For example, use this to drive a logic voltage across a mechanical switch to read the value (open or closed) of the mechanical switch. Options are: ■ **Enabled**: When **Digital Input** is selected, this option is automatically enabled. ■ **Disabled**: This is the default.
Wake device on	Specifies when you want the Connect Sensor to wake up and push data to Digi Axess. Options are: ■ **None**: Data is stored until the Connect Sensor wakes up at the next scheduled time. ■ **Rising Edge**: When the rising edge is met, the Connect Sensor wakes and sends data. ■ **Falling Edge**: When the falling edge is met, the Connect Sensor wakes and sends data. ■ **Rising and falling edges**: When the rising edge or the falling edge is met, the Connect Sensor wakes and sends data.
Power output	Configure the power output. Options are: ■ **Disabled**: Power does not need to be provided to the sensor. This is the default. ■ **Enabled**: Power does need to be provided to the sensor. ■ **Read Delay Only**: When this feature is enabled, you can choose to let the Connect Sensor power the sensor connected to the device, as some sensors need time to level and take the correct reading. • **0**: The Connect Sensor does not power the sensor. This is the default. • **n seconds**: The Connect Sensor powers the sensor for the number of seconds specified.
Output voltage	Specifies the voltage level output for the power source. The default is **3.3 Volts**.
Read delay	Specifies the time in seconds that the sensor voltage is enabled before Connect Sensor reads its value. This allows the sensor to stabilize to get an accurate reading. The default is **0**. Note A higher read delay keeps the device powered on longer, which reduces battery life.

Configure a pulse counter for a Connect Sensor on the digital I/O pin

Connect Sensor has one digital I/O pin and you can configure it as a pulse counter.

Note You can also configure the digital I/O pin as a digital input. See Configure a digital input for a Connect Sensor on the digital I/O pin.

When configured as a digital pulse counter, Connect Sensor continues to count pulses during sleep cycles and reports them to Digi Axess during normal reporting intervals.

For example, if Connect Sensor reports every hour, the sensor counts pulses during each hour Connect Sensor is in sleep mode. At the end of each hour, Connect Sensor wakes and reports the total pulse count for that hour to Digi Axess. The pulse counter resets to zero after each wake cycle and stores the values until the next reporting interval.

To configure a pulse counter on the digital pin:

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Physical I/O** > **Digital I/O**. The **Digital I/O** page displays.
3. For **Type**, select **Pulse Counter**.
4. Configure the pin. Information about the fields is in the table below.
5. Click **Update** to save your changes.

Option	Description
Input Enabled	Determine when the pin is enabled. Options are: ■ **Auto**: The pin is enabled only when referenced by an automation input. This is the default. ■ **Always**: The pin is always enabled.
Internal pullup resistor	Enable or disable the internal pull-up resistor to drive a logic level voltage. For example, use this to drive a logic voltage across a mechanical switch to read the value (open or closed) of the mechanical switch. Options are: ■ **Enabled** ■ **Disabled**: This is the default.
Power output	Enables or disables the power output source. Options are: ■ **Enabled** ■ **Disabled**: This is the default.
Output voltage	Specifies the voltage level output for the power source. The default is **3.3 Volts**.
Read delay	Specifies the time in seconds that the sensor voltage is enabled before Connect Sensor reads its value. This allows the sensor to stabilize to get an accurate reading. The default is **0**.

Option	Description
	Note A higher read delay keeps the device powered on longer, which reduces battery life.

Configure analog inputs and power outputs for a Connect Sensor

Connect Sensor has four analog inputs, each of which you can configure as either a 4-20 mA current loop or a voltage input.

Analog power outputs

You can enable and configure the analog power output options when you use Connect Sensor to power analog sensors. Each of the four analog inputs also has four corresponding power outputs to power sensors. The analog power outputs work independently: each one powers only its corresponding analog input.

When Connect Sensor powers multiple sensors, it powers only one sensor at a time for each sensor reading. This also allows you to set different voltage ranges for each power output.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Physical I/O** > **Analog I/O**. The **Analog I/O Configuration** page displays.
3. Select the analog input that you want to configure: **Analog 1**, **Analog 2**, **Analog 3**, and **Analog 4**. Information about the fields is in the table below.
4. Click **Update** to save your changes.

Option	Description
Input Type	Determine the analog input type. Options are: ■ **4-20mA Current Loop** ■ **Voltage Input**. This is the default.
Input Enabled	Determine when the pin is enabled. Options are: ■ **Auto**: The pin is enabled only when referenced by an automation input. This is the default. ■ **Always**: The pin is always enabled.
Power output	Configure the power output. Options are: ■ **Disabled**: Power does not need to be provided to the sensor. This is the default. ■ **Enabled**: Power does need to be provided to the sensor. ■ **Read Delay Only**: When this feature is enabled, you can choose to let the Connect Sensor power the sensor connected to the device, as

Option	Description
	some sensors need time to level and take the correct reading. • **0**: The Connect Sensor does not power the sensor. This is the default. • **n seconds**: The Connect Sensor powers the sensor for the number of seconds specified.
Oversampling	Select the option that describes the desired value for the sampled data. Options are: ■ **Off**: Do not use this option. This is the default. ■ **Average** ■ **Minimum** ■ **Maximum** See Oversampling for a feature description. Note Reading a large number of data samples over a long interval reduces battery life.
Oversampling Delay	Specify the time interval between oversampling readings. The time is measured in milliseconds.
Oversampling count	Specify the number of data samples that must be taken.
High send trigger	Specify whether you want to generate a high trigger report. Options are: ■ **Disabled** ■ **Enabled**
High trigger	Specifies the input value that generates a high alarm report when the high trigger is enabled.
Low send trigger	Specify whether you want to generate a low trigger report. Options are: ■ **Disabled** ■ **Enabled**
Low trigger	Specifies the input value that generates a low alarm report when the low trigger is enabled.
Hysteresis	Specifies the input value to keep an alarm on or to shut off an alarm during high and low alarm states. ■ 0: hysteresis is off ■ 1 or more: hysteresis is on and managing alarms. The default is 1.0. See Hysteresis for more information.
Power output	Enables or disables the power output source. Options are:

Option	Description
	■ **Enabled** ■ **Disabled**: This is the default.
Output voltage	Specifies the voltage level output for the power source. The default is **3.3 Volts**.
Read delay	Specifies the time in seconds that the sensor voltage is enabled before Connect Sensor reads its value. This allows the sensor to stabilize to get an accurate reading. The default is **0**. Note A higher read delay keeps the device powered on longer, which reduces battery life.

Oversampling

The oversampling feature enables you to increase the precision of a data sample collected at a scheduled reading by reading multiple samples. You can specify the number of samples that should be read and the time interval between each reading. You can also specify how the data samples should be manipulated to create the final data sample that is pushed: an average value of all of the samples, the minimum value, or the maximum.

For example, oversampling is configured to discover the average value of 10 readings taken 70 milliseconds apart. Whenever Connect Sensor needs a value for that sensor, it actually reads the sensor 10 times, 70 milliseconds apart; averages those results; and uses the averaged value as the sensor reading.

Note Reading a large number of data samples over a long interval reduces battery life.

Hysteresis

Sensor values may sometimes fluctuate during an alarm condition, which causes Connect Sensor to send multiple alarm reports.

Hysteresis works with the high and low alarm thresholds to tell the device when to keep an alarm on without sending additional alarm reports, or when to shut off an alarm. Use this to avoid repeated alarms during common sensor input value fluctuations.

For example, a pressure sensor input value increases to the high threshold and the device sends a high alarm report. However, the pressure sensor input value continues to increase and decrease repeatedly between normal and high thresholds during this alarm condition. If you have not set a hysteresis range, the Connect Sensor device sends an alarm report every time the sensor input value reaches the high threshold.

The following are examples of how high and low hysteresis works with a voltage input:

- **High hysteresis:** If your high threshold is 10 volts and your hysteresis value is 2 volts, then your high alarm hysteresis is 8 volts. This means that the alarm turns on when the sensor input value reaches 10 volts and remains on if the sensor input value stays above 8 volts. No additional alarm reports are sent during this alarm condition. The alarm turns off when the sensor input value falls below 8 volts.

- **Low hysteresis:** If your low alarm threshold is 2 volts and the hysteresis value is 3 volts, then your low alarm hysteresis is 5 volts. This means that the alarm turns on when the sensor input value reaches 2 volts and remains on if the sensor input value stays below 5 volts. No additional alarm reports are sent during this alarm condition. The alarm turns off when the sensor input value rises above 5 volts.

Setting the hysteresis threshold to 0 (zero) causes Connect Sensor to send an alarm report every time the sensor input value exceeds a high or low alarm threshold.

Note Setting the hysteresis threshold to 0 (zero) may cause excessive data usage and reduce battery life.

Replace the SIM card and change the cellular network settings

You can choose to replace the Digi-provided SIM card with a different SIM card. If you do, you are required to change the device's cellular network settings so that it can connect to the new carrier's cellular network. The configuration information is provided by the SIM card carrier.

Note You can update the device's cellular network settings if needed, but do so with caution. Any changes made to the configuration may cause the device to no longer connect to the internet. Digi recommends making changes only when you have physical access to the device.

Use one of the following methods to change a device's SIM card and configure the network connection.

- Replace the SIM card and change the cellular network settings from the web UI
- Replace the SIM card and change the cellular network settings from the CLI

Replace the SIM card and change the cellular network settings from the web UI

Each Connect Sensor has a SIM card supplied by Digi installed by default, but you can choose to replace the Digi-supplied SIM card with your own SIM card. If you do, you need to configure the device so that it can connect to the carrier's cellular network.

If any information from the SIM card carrier is not correctly applied, the device will no longer connect to Digi Axess.

Before you begin

You will need the following items:

- **SIM card**: Make sure you have the SIM card you want to insert into the device.
- **Small tool**: You will need a small tool to push the access tab next to the SIM slot.
- **Magnet**: You will need a magnet to manually wake the device.

You should have these items prepared:

- The new SIM card must be activated.
- Make sure you have the APN and additional information from the carrier about the SIM card you want to insert into the device.
- You must be physically close enough to the device to wake it with the magnet and replace the SIM card.

Step 1: Configure the device for the new SIM card

In this step, you will configure the device with the information for the new carrier in Digi Axess.

1. Make sure that the SIM card supplied by Digi is inserted into the device. You will replace the existing SIM card with your own in a later step.
2. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
3. Choose **Physical I/O** > **Cellular**. The **Cellular Configuration** page displays.
4. Click **Edit**.
5. From the **Profile name** section, define the APN name.
   a. Choose **Define Name**.
   b. In the field provided, enter the APN name.
6. If your carrier requires additional APN access information, specify the following information. Otherwise, you can skip this step.
   - **Username**: Enter the user name associated with the APN.
   - **Password section**: Select **Update Password**. Enter the new password in the **New Password** field, and then enter the same password in the **Confirm Password** field.
   - **Pin section**: Select **Update Pin**. Enter the new PIN in the **New Pin** field, and then enter the same PIN in the **Confirm Pin** field
7. In the **Mtu** field, enter the largest PDU that can be communicated.
8. Click **Update** to save the changes.

Step 2: Wake the device

In this step, you will wake the Connect Sensor with a magnet, which ensures that the device is updated with the new configuration.

1. Make sure you are physically close to the device.
2. Manually wake the Connect Sensor with the magnet.
3. When the device wakes up and has connected to the cellular network, the SIM card LED is solid green. The device automatically connects to Digi Axess and any configuration changes are applied to the device.
4. When the updates are complete and the Connect Sensor is asleep, continue to **Step 3**.

Step 3: Install your new SIM card

In this step you will remove the existing SIM card and insert the new one.

Note Retain the Digi-supplied SIM card, in case you need to reset the device to the default configuration.

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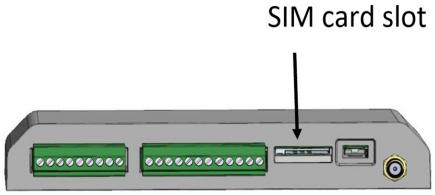
1. Orient the Connect Sensor so the top of the device is facing you.
2. If your device has a NEMA case, open the case.
3. Locate the SIM card slot.



4. Use your tool to push the existing SIM card into the slot. The SIM card will pop out.
5. Remove the existing SIM card and retain it in a safe place.
6. Insert your new SIM card into the SIM card slot. Match the chamfered corner of the SIM card to the chamfered corner of the slot.
7. Use your tool to push the SIM card into the slot.
8. If your device has a NEMA case, close the case.
9. Continue to **Step 4**.

Step 4: Verify that the Connect Sensor can connect to Digi Axess

In this step, you will verify that the device has been configured correctly by making sure the device can connect to Digi Axess.

1. Connect to Digi Axess and update the configuration on the Connect Sensor.
   a. Manually wake the Connect Sensor with the magnet.
   b. When the device wakes up, it connects to Digi Axess and applies any configuration changes.
   c. When the updates are complete and the Connect Sensor is asleep, continue to the next step.
2. Log into Digi Axess.
3. Find the updated device using one of the following methods.
   - Use the **Search Devices** field in the toolbar to find the device that you just updated. You can search by serial number or location name.
   - Click on the device's location pin in the map.
   - Select the device from the list of mapped devices.
   - Display the devices in the table format and search for the device.

Replace the SIM card and change the cellular network settings from the CLI

Each Connect Sensor has a SIM card supplied by Digi installed by default, but you can choose to replace the Digi-supplied SIM card with your own SIM. If you do, you are required to configure the device with the credentials for the new SIM card.

If any information from the SIM card carrier is not correctly applied, the device will no longer connect to Digi Axess.

Before you begin

You will need the following items:

- **SIM card**: Make sure you have the SIM card you want to insert into the device.
- **Small tool**: You will need a small tool to push the access tab next to the SIM slot.
- **Magnet**: You will need a magnet to manually wake the device.
- **USB type A to B cable**: You will need a USB type A to B cable to connect your computer to the Connect Sensor.

You should have these items prepared:

- The new SIM card must be activated.
- Make sure you have the APN and additional information from the carrier about the SIM card you want to insert into the device.
- You should have a terminal emulator, such as Tera Term or Putty, installed on your computer.
- You must be physically close enough to the device to connect your computer to it, wake it with the magnet, and replace the SIM card.

Step 1: Configure the APN cellular network settings for the new SIM card

In this step, you will configure the APN on the device using the CLI. This ensures that when the device connects to Digi Axess, the configuration updates from Digi Axess match the configuration already on the device.

1. Use the USB cable to connect your computer to the device.
   a. Connect the type A end of the USB cable to the USB port on your computer.
   b. Connect the type B end of the USB cable to the mini USB port on the device.
2. Open the terminal emulator on your computer.
3. Open a connection to the USB port on the device. Use these settings:
   - **Connection port**: Connect to the COM port associated with the USB cable connected to the Connect Sensor.
   - **Baud rate or bits per second**: 115200
   - **Data**: 8 bit
   - **Parity**: None
   - **Stop**: 1 bit
   - **Flow control**: None
4. Use the magnet to wake the Connect Sensor.
5. Type the CLI command: **custom apn=<*apn*>**

   where <***apn***> is the APN for the carrier.
6. Press **Enter**.

Note The Connect Sensor waits 30 seconds from when you pressed **Enter** to begin processing the command.

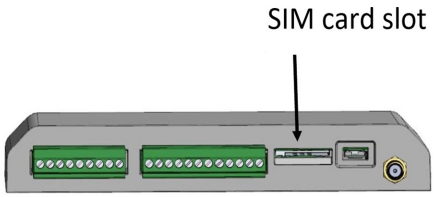
7. If your carrier requires additional APN access information, enter the following commands and provide the information. Press **Enter** after each command.
   - Type the CLI command: **custom usr=<*usr*>**
     where <***usr***> is the user name associated with the APN.
   - Type the CLI command: **custom pwd=<*pwd*>**
     where <***pwd***> is the password associated with the APN.
   - Type the CLI command: **custom pin=<*pin*>**
     where <***pin***> is the PIN associated with the SIM card.
8. (Optional) If you entered a **custom** command, you can use the **activate** command to process the custom command immediately, rather than waiting 30 seconds.
   a. Type the CLI command: **activate**
   b. Press **Enter**.
9. When the Connect Sensor has processed the CLI command, the device goes to sleep. The following line displays in the terminal program when the device is sleeping:
   Zzz...
10. Close the terminal program after the device has gone to sleep.
11. Disconnect the USB cable from the Connect Sensor and the computer.
12. Continue to **Step 2**.

Step 2: Install your new SIM card

In this step, you will remove the existing SIM card and insert the new one.

Note Retain the Digi-supplied SIM card, in case you need to reset the device to the default configuration.

1. Orient the Connect Sensor so the top of the device is facing you.
2. If your device has a NEMA case, open the case.
3. Locate the SIM card slot.



4. Use your tool to push the existing SIM card into the slot. The SIM card will pop out.
5. Remove the existing SIM card and retain it in a safe place.
6. Insert your new SIM card into the SIM card slot. Match the chamfered corner of the SIM card to the chamfered corner of the slot.
7. Use your tool to push the SIM card into the slot.
8. If your device has a NEMA case, close the case.

9. Continue to **Step 3**.

Step 3: Verify that the Connect Sensor can connect to Digi Axess

In this step, you will verify that the device's APN has been configured correctly by making sure the device can connect to Digi Axess.

1. Connect to Digi Axess and update the configuration on the Connect Sensor.
   a. Manually wake the Connect Sensor with the magnet.
   b. When the device wakes up, it connects to Digi Axess and applies any configuration changes.
   c. When the updates are complete and the Connect Sensor is asleep, continue to the next step.
2. Log into Digi Axess.
3. Find the updated device using one of the following methods.
   - Use the **Search Devices** field in the toolbar to find the device that you just updated. You can search by serial number or location name.
   - Click on the device's location pin in the map.
   - Select the device from the list of mapped devices.
   - Display the devices in the table format and search for the device.

Configurations: Save and apply to a Connect Sensor

You can save the configuration for a Connect Sensor, and apply it to the same device or to other devices of the same time.

The configuration is apply to a device during the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually.

Back up a Connect Sensor configuration

You can back up a Connect Sensor's configuration and save it to the default download location on your computer.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **System Tools** > **Backup/Restore**. The **Backup/Restore Configuration** page displays.
3. From the **Select an Option** section, click **Save/Backup**.
4. In the **Select a Location** section, select where the configuration should be saved: **Local Storage** or **Shared Digi Axess**.
   - **Local Storage**: Saves the configuration file to your computer. This is the default.
     a. Select **Local Storage**.
     b. In the **File name** field, enter the file name for the saved configuration. The file is given a unique name by default but you can change it.
   - **Shared Digi Axess**: Saves the configuration file to a Digi Axess device group.

a. Select **Shared Digi Axess**.
b. The **Axess Group** list box displays. Select the group with which you want to share this configuration.
c. In the **Configuration Name** field, enter the file name for the saved configuration. The file is given a unique name by default but you can change it.

5. In the **Select a Module** section, the **Automation Control** option is selected by default.
6. Click **Submit**. A "Configuration Successfully Saved" banner displays on the page. The configuration file is saved to the download location.

Apply a configuration to a Connect Sensor

You can apply a configuration file to a Connect Sensor. Three types of configuration files are available:

- **Saved**: A saved file is created when you save a copy of a configuration on a Connect Sensor. See Back up a Connect Sensor configuration.
- **Provided**: A set of standard Digi Axess configurations are available.
- **Device Group**: A configuration can be created for a device group, and these are available to install if the device you are configuring is in that device group. See Back up a Connect Sensor configuration.

The update happens during the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually.

Note You can also apply a configuration to a Connect Sensor device or device group from the Digi Axess Administration menu, or from the Device Summary page.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **System Tools** > **Backup/Restore.** The **Backup/Restore Configuration** page displays.
3. From the **Select an Option** section, click **Install**.
4. Configure the install options in the **Install Options** section.
   - **Reset Settings Not Defined In Configuration to Defaults**
     - **Disabled**: Any settings not defined in the configuration will maintain their existing values. This is the default.
     - **Enabled**: Any settings not defined in the configuration will be reset to their default values.
   - **Install Settings Not Supported By Current Firmware**
     - **Enabled**: Any settings not supported by the currently installed firmware will still be installed and when the device is updated to a firmware version that supports the settings the settings will become active. This is the default.
     - **Disabled**: The unsupported settings will not be installed.
5. Select the type of configuration file that you want to configure, and then select the associated configuration file.

Config file type	Description
Saved	Apply the file: a. In the **Select a Location** section, click **Local Storage**. b. From the **Select a Module** section, click **Choose File** and navigate to a saved back up file. c. Click **Open**. The name of the selected file displays in the page. d. Click **Submit** to store the install instruction. The configuration install occurs the next time that the Connect Sensor wakes and connects to Digi Axess.
Provided	Apply the file: a. In the **Select a Location** section, click **Provided**. b. From the **Select a Configuration** list box, select an option. c. Click **Submit** to store the install instruction. The configuration install occurs the next time that the Connect Sensor wakes and connects to Digi Axess.
Device Group	Apply the file: a. In the **Select a Location** section, click **Shared Digi Axess**. b. From the **Select a Configuration** list box, select a configuration associated with a device group. c. Click **Submit** to store the install instruction. The configuration install occurs the next time that the Connect Sensor wakes and connects to Digi Axess.

Force a full configuration update on a Connect Sensor

Forcing a full configuration update overwrites the entire Connect Sensor configuration on the device based on the Connect Sensor configuration stored in Digi Axess.

The update happens during the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually.

Digi recommends only forcing a configuration update when the Sync Status in the Device Summary page shows as **Synced** but the device configuration is not properly synced and you have physical access to the device.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Force Full Config**. The **Force Full Device Config Update** page displays.
3. Click **Force Full Config** to force a full configuration update for the device. The device's configuration in Digi Axess is pushed to the device and overwrites the device's existing configuration.

Update the Connect Sensor firmware

You can update the Connect Sensor firmware on a selected device or all of the Connect Sensor devices in a device group. The update happens during the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually.

You can cancel a Digi Axess firmware update that is scheduled for a device or a device group for a future date. The firmware update for the device or for all of the Connect Sensor devices in the device group is canceled.

The tables below explain the update, review, and cancellation options.

Note You can update the firmware on a device from the Digi Axess Admin page, or from the device's web UI. The history of the device's firmware updates and canceling a schedule firmware update can only be done from the Digi Axess Admin page.

Firmware update

Where?		One selected device	All Connect Sensor devices in a device group	Description
Device Groups page	Digi Axess Admin dashboard		X	Update the Connect Sensor firmware from the Device Groups page
Device Summary page	Digi Axess map	X		Update the Connect Sensor firmware from the Device Summary page
Device's web UI	Digi Axess web UI	X		Update the Connect Sensor firmware from the web UI

Review firmware update history

Where?		One selected device	All Connect Sensor devices in a device group	Description
Update History page	Digi Axess Admin dashboard		X	Review the Connect Sensor firmware update history for a device group
Update History (Device) page	Digi Axess Admin dashboard	X		Review firmware update history for a Connect Sensor

Cancel a scheduled firmware update

Where?		One selected device	All Connect Sensor devices in a device group	Description
Update History page	Digi Axess Admin dashboard		X	Cancel a firmware update for the Connect Sensor devices in a device group
Update History (Device) page	Digi Axess Admin dashboard	X		Cancel a firmware update for a Connect Sensor device from the Administration menu
Device's web UI	Digi Axessweb UI	X		Cancel a firmware update for a Connect Sensor device from the web UI

Update the Connect Sensor firmware from the web UI

You can schedule an update to the Connect Sensor firmware. The update happens during the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually.

In the **Device Reported Firmware** section, you can review information about the firmware that is currently installed on the device.

A banner displays at the top of the screen to alert you whether a Connect Sensor firmware update is currently running. If the device is already scheduled for a firmware update, you are not allowed to schedule another update.

Note You can also update the device's firmware from the Device Summary page.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **System Tools** > **Firmware Update**. The **Update Firmware** screen displays.
3. From the **Select a Firmware Type** list box, select the **standard** option.

   Note Other options may be available, but do not choose an option other than **standard** unless directed.

4. From the **Select a Firmware Version** list box, select the firmware version that you want to update to.
5. Click **Schedule Update** to store the update instruction. The firmware update occurs the next time that the Connect Sensor wakes and connects to Digi Axess. A confirmation dialog displays.
6. Click **OK**. The "Firmware Update Scheduled" banner displays at the top of the page.
7. In the banner, you can click **Refresh** to update the update status.

Cancel a firmware update for a Connect Sensor device from the web UI

You can cancel a firmware update for a Connect Sensor device that is scheduled for a future date from the device's web UI.

When a firmware update has been schedule and can be canceled, "Firmware Update Scheduled" displays in a banner at the top of the page.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **System Tools** > **Firmware Update**. The **Update Firmware** screen displays.
3. Click **Cancel Update**.

Cellular modem firmware update: Connect Sensor

You can schedule an update to the cellular modem firmware on the Connect Sensor. The update happens during the next time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually.

In the **Device Reported Cellular Firmware** section, you can review information about the cellular firmware that is currently installed on the device.

A banner displays at the top of the screen to alert you whether a cellular modem firmware update is currently running. If the device is already scheduled for a cellular firmware update or if newer firmware is not available, you are not allowed to schedule an update.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **System Tools** > **Cellular Firmware Update**. The **Update Cellular Firmware** page displays. Information about the current cell modem firmware displays in the **Device Reported Cellular Firmware** section.
3. From the **Select a Cellular Firmware Version** list box, select the firmware version that you want to update to.
4. Click **Schedule Update** to store the update instruction. The firmware update occurs the next time that the Connect Sensor wakes and connects to Digi Axess.

Clear sensor data from the device's web UI

You can remove all historical sensor data stored on the Connect Sensor device from the device's web UI. This feature is useful if you have changed the sensor connected to a pin on the Connect Sensor, and you want to see only data for the sensors that are currently connected to the device.

WARNING! Once deleted, the sensor data cannot be recovered.

Use one of the following methods to clear the sensor data from the Connect Sensor's web UI:

- **Automation Dashboard**: Clear Connect Sensor sensor data from the Automation Dashboard

Clear Connect Sensor sensor data from the Automation Dashboard

You can remove all historical sensor data stored on the Connect Sensor device from the **Automation Dashboard**. This feature is useful if you have changed the sensor connected to a pin on the Connect Sensor, and you want to see only data for the sensors that are currently connected to the device.

WARNING! Once deleted, the sensor data cannot be recovered.

Note As an alternative, you can also delete Connect Sensor sensor data from the **Device Management** section from the Digi Axess Admin menu.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose one of the following methods:
   - Click the **Clear Sensor Data** button at the top of the page.
   - From the feature menu, choose **System Tools** > **Clear Sensor Data**.
3. The **Clear Sensor Data** page displays, with a banner message warning that once deleted, the sensor data cannot be recovered.
4. Click **Clear Sensor Data** to delete the historical sensor data.

Configure MQTT for a device

The MQTT (Message Queuing Telemetry Transport) messaging protocol can be configured for a Connect Sensor device. You can manually configure MQTT for a Connect Sensor device, or create an MQTT configuration for a device group that can be applied to any Connect Sensor device in the group.

The MQTT device group configurations are created in the Administration dashboard in Digi Axess. MQTT is configured for a Connect Sensor device from the device's web UI.

Before you begin

- To use the MQTT feature, you must have Connect Sensor XRT-M firmware version 4.2.1.26 or above installed on the Connect Sensor. You can review the current firmware version installed on the device and update the firmware if needed.

Configure MQTT for a Connect Sensor

You can configure MQTT for a Connect Sensor in the device's web UI.

- Manually configure MQTT for one device
- Apply an MQTT device group configuration to a device

You can add or edit an MQTT device group configuration from the device's web UI.

- Create or edit an MQTT configuration from the device's web UI

Configure MQTT for a device from the device's web UI

You can manually configure MQTT for a Connect Sensor.

Note If available, you can choose to apply an MQTT configuration that was created for a device group in which this device is included. See Apply a device group MQTT configuration.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Services** > **MQTT**. The **MQTT Configuration** page displays.
3. From the **Active MQTT Configuration** list box, select **Current Device Only**.
4. Click the **MQTT Enabled** slider button. When MQTT is enabled, the button is green. The **MQTT Configuration** page updates to display more options.
5. Configure the options in the **MQTT Configuration** section.

Field	Description
MQTT Spec	Select the option that determines the format of the MQTT data and from where the data is sent. Options are: ▪ **MQTT on Device - No Formula Support**: Raw data is sent. This is the default. ▪ **Digi Axess Single Value - Formula Support**: A separate topic per value is sent, and includes only current data. ▪ **Digi Axess JSON - Formula Support**: A single topic for all values is sent, and includes current and historical data.
Send Sample Data to Digi Axess	Enable **Send Sample Data to Digi Axess** if you want to send sample data to Digi Axess for further processing. This is disabled by default, and when it is disabled, no data is sent to Digi Axess.
QoS	Currently only one MQTT quality of service level is available. The **0 - at most once** option is selected by default.
Publish Retain	Enable **Publish Retain** if you want to enable the retain flag on published messages. This is disabled by default.
MQTT Version	Select the MQTT version that you want to use.
MQTT Topic Prefix	In the **MQTT Topic Prefix** field, enter the MQTT topic prefix to use. The following variables are supported: **$Model**, **$LocationName**, and **$SerialNumber**. The **MQTT topic preview** space previews what the topic will be when the variables are resolved and the postfix is added.
MQTT Topic Preview	Previews what the topic will be when the variables defined in the **MQTT Topic Prefix** are resolved and the postfix is added.

6. Configure the options in the **Broker Configuration** section.

Field	Description
MQTT Broker Host	Enter MQTT the broker host to which data is sent. The MQTT broker host must be unique.
MQTT Broker Port	Enter the number of the MQTT Broker port to which data should be sent.
Username	Enter the user name to authenticate with the broker.
Password	Enter the password to authenticate with the broker. Click the eye icon next to the field to toggle the password display.
TLS Enabled	Enable TLS.
TLS Cert Check	Enables checking the broker identity with a certificate.

7. Click **Update** to save and apply the MQTT configuration.

Apply a device group MQTT configuration

You can apply an MQTT configuration that was created for the device group in which this device is included.

For information about creating an MQTT device group configuration, see Data Export: Manage MQTT configuration.

Note You can also manually configure MQTT for the device. See Configure MQTT for a device from the device's web UI.

1. Access the device's web UI from the Device Summary page.
2. In the **Services** section, click **MQTT**. The **MQTT Configuration** page displays.

   Note The **MQTT** option is available only if firmware version 4.2.1.26 or above is installed on the device. You can review the current firmware version installed on the device and update the firmware if needed.

3. From the **Active MQTT Configuration** list box, select a device group MQTT configuration option. The **MQTT Configuration** page is updated to show the device group MQTT configuration.
4. Click **Update** to save the selection.

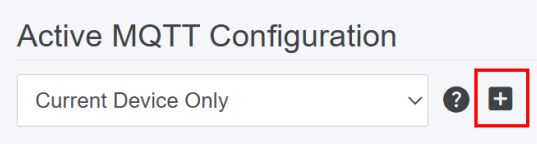
Create or edit an MQTT configuration from the device's web UI

You can create a new MQTT device group configuration from the **MQTT Configuration** page, or update selected configuration.

Note The **MQTT** option is available only if firmware version 4.2.1.26 or above is installed on the device. You can review the current firmware version installed on the device and update the firmware if needed.

Create an MQTT device group configuration

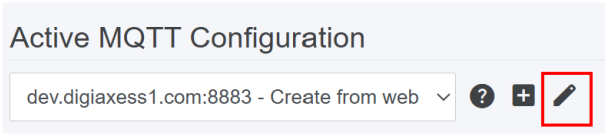
1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Services** > **MQTT**. The **MQTT Configuration** page displays.
3. Click the plus icon to launch a new browser window. The **MQTT Configuration** page displays in the Digi Axess Administration dashboard.



4. Create and save a new device group MQTT configuration.
5. When complete, close the Digi Axess Administration dashboard browser window and return to the browser window for the web UI **MQTT Configuration** page.
6. Select the MQTT configuration you just created.
7. Click **Update** to save the selection.

Edit an MQTT device group configuration

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Services** > **MQTT**. The **MQTT Configuration** page displays.
3. From the **Active MQTT Configuration** list box, select a device group MQTT configuration option. The **MQTT Configuration** page is updated to show the device group MQTT configuration.
4. Click the pencil icon to launch a new browser window. The **MQTT Configuration** page displays in the Digi Axess Administration dashboard, showing the configuration for the MQTT configuration you selected.



5. Update the configuration as needed.
6. When complete, close the Digi Axess Administration dashboard browser window and return to the browser window for the web UI **MQTT Configuration** page.
7. Click **Update** to save the change.

Configure system logging in the web UI

You can configure system logging for a Connect Sensor in the device's web UI. This feature is useful as a support tool and does not need to be enabled unless you are instructed to do so.

Note You can also configure system logging for a device from the **Devices** page in the Digi Axess Administration menu.

When enabled, system events are stored on the device. Each time that the Connect Sensor wakes up and connects to Digi Axess, either at the scheduled wake time or if it is done manually with a magnet, a log is pushed from the device to Digi Axess. The logs are listed in the **Device Logs** window, and can be downloaded and saved on your computer.

The logs are collected for the number of days specified. When the time limit is reached, the logging feature is automatically disabled and logs are no longer collected from the device.

When new logs are sent from the device to Digi Axess, any logs over seven days old are automatically cleared. You can also manually clear any logs when needed.

Configure system logging

You can enable and configure system logging.

Note You can also enable system logging from the **Devices** page in the Digi Axess Administration menu. See Enable system logging.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **System Tools** > **Logging**. The **System Logging Configuration** page displays.
3. Click **Enable Device Logging**. When enabled, the slider is green.
4. From the **Disable Logging In** list box, select the time period for which you want to collect and store system logs. When the time limit is reached, the logging feature is automatically disabled and logs are no longer collected from the device.
5. Any logs display in the **Device Logs** window. When new logs are sent from the device to Digi Axess, any logs over seven days old are automatically cleared. You can also manually clear any logs when needed.
6. Click **Update**.
7. Click **OK** to confirm the update.

Download system logs

Before the logs are automatically cleared, you can download the logs and save them on your computer. The log files are stored as a *.txt file.

Note You must have enabled the system logging feature. See Configure system logging.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **System Tools** > **Logging**. The **System Logging Configuration** page displays.
3. Click **Download Device Logs**. The log file is downloaded onto your computer.
4. You can name and save the log to a desired location.

Clear a system log

You can manually clear the system logs. Once a log has been cleared, it cannot be restored.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **System Tools** > **Logging**. The **System Logging Configuration** page displays.
3. Click **Clear Device Logs**. A confirmation dialog displays with a message noting that logs cannot be restored.
4. Click **OK**.

Review audit logs from the Connect Sensor's web UI

You can review the logs for the device's configuration history and connection history. If you have applied more than one configuration on the device, you can use the revert feature to revert to a selected configuration.

Device Configuration History

- Review the device's configuration history
- Revert the device's configuration

Device Connection History

- Review the device's connection history
- Clear the device's connection history

Review the device's configuration history

You can review information about the device's configuration change events in the **Configuration History** page. Each configuration change event displays in the list of tiles on the left side of the page. The complete current configuration displays in the window.

The configuration tile includes information about the configuration:

- **Log in name**: The user log in name of the user who was logged in when the configuration change occurred.
- **Date**: A short hand date, such as "yesterday" or "2 months ago" displays in the upper right had corner of the tile. The date and time the change occurred displays at the bottom of the tile.
- **Application**: An identifier for the application that was used to change the configuration displays.
  - **UI**: The device's web user interface.
  - **API**: Initiated from Digi Axess REST API.

To display the **Configuration History** page:

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Audit** > **Configuration History**. The **Configuration History** screen displays.

Revert the device's configuration

If you have applied more than one configuration on the device, you can use the revert feature to revert to any previous configuration.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Audit** > **Configuration History**. The **Configuration History** screen displays.
3. Click on a configuration tile from the list on the left side of the page. That configuration displays in the window, and the differences when compared to the current configuration are noted by color:
   - **Green**: Configuration additions or changes.
   - **Red**: Configuration deletions.
4. When you have selected the version you want to revert to, click **Revert**. A confirmation dialog displays.
5. Click **OK**.
   - **Complete**: A success banner displays if the reversion was successful.
   - **Error**: An error banner displays if the reversion could not be completed.

Review the device's connection history

You can review the device's Digi Axess connection history and track successful connections, and missed and off-schedule connections in the **Connection History** page.

By default, all connection information for the prior week is included. You can update the connection status option and date range if needed.

- **Connection Statistics**: Displays the total of each of the selected connection types for the specified date range.
- **Connection Success Rate**: Displays the connection success rate as a percentage of the total connection attempts.

To review the connection history:

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Audit** > **Connection History**. The **Connection History** screen displays.
3. Update the connection history parameters.
   a. From the **Status** list box, select the connection status type that you want to include.
      - **All**: All connection history.
      - **Connected**: Successful connections that occurred as scheduled.
      - **Missed**: Unsuccessful connections.
      - **Off-schedule**: Successful connections that occurred at an unscheduled time.
   b. In the **From** and **To** fields, enter the desired date range.
   c. Click **Apply** to update the page.

Clear the device's connection history

You can clear the device's connection history. This feature is useful if you have made a change to the device that would affect connections and want to start collecting connection data after the change.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Audit** > **Connection History**. The **Connection History** screen displays.
3. Click **Clear History**. A confirmation dialog displays.
4. Click **OK**.

Configure the Digi Axess server options for a Connect Sensor

You can configure the Digi Axess and NTP servers, and specify a group ID in the **Digi Axess Service Configuration** page.

WARNING! Any changes made to the Digi Axess Server URL configuration may cause the device to no longer connect with Digi Axess. Digi recommends making changes to this section only when you have physical access to the device.

Digi Axess server and NTP server

The URLs for the Digi Axess and the NTP servers are defined during the initial set up, and should not be changed. If you change the configuration, you can reset it to the factory default URLs.

- Configure the Digi Axess and NTP servers for the device
- Reset the Digi Axess and NTP server configuration

Digi Axess Group ID

The **Cloud Group ID** is used to limit access to the devices that a user can see. The **Cloud Group ID** works with a user's profile: If a user is assigned to a subgroup, they can only see devices with the same subgroup id.

- Configure the Digi Axess and NTP servers for the device

Configure the Digi Axess and NTP servers for the device

You can configure the Digi Axess and NTP servers for the device in the **Digi Axess Service Configuration** page.

WARNING! Any changes made to the Digi Axess Server URL configuration may cause the device to no longer connect with Digi Axess. Digi recommends making changes to this section only when you have physical access to the device. If you change the configuration, you can reset it to the factory defaults if needed.

To configure servers:

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Services** > **Digi Axess Services** > **Server Configuration**. The **Server Configuration** page displays.
3. Click **Edit**.
4. Configure the server URLs.

- **Digi Axess Server**: Enter the URL of the Digi Axess server that this device should connect to.
- **NTP Server**: Enter the URL of the NTP server to which the Connect Sensor connects to synchronize time.

5. Click **Update** to save your changes. A confirmation dialog displays.
6. Click **OK** to complete the change.

Reset the Digi Axess and NTP server configuration

You can reset both the Digi Axess and the NTP server to the factory default URLs in the **Digi Axess Service Configuration** page.

WARNING! Any changes made to the Digi Axess Server URL configuration may cause the device to no longer connect with Digi Axess. Digi recommends making changes to this section only when you have physical access to the device.

To reset the server configuration:

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Services** > **Digi Axess Services** > **Server Configuration**. The **Server Configuration** page displays.
3. Click **Edit** to allow changes to be made to the page.
4. Click **Reset both servers to factory defaults**.
5. Click **Update** to save your changes. A confirmation dialog displays.
6. Click **OK** to complete the change.

Configure the subgroup IP for Connect Sensor

You can specify a **Digi Axess** subgroup ID in the **Digi Axess Service Configuration** page. The **Cloud Group ID** is used to limit access to the devices that a user can see. The **Cloud Group ID** works with a user's profile: If a user is assigned to a sub-group, they can only see devices with the same sugroup ID.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Services** > **Digi Axess Services** > **Server Configuration**. The **Server Configuration** page displays.
3. Click **Edit** to allow changes to be made to the page.
4. In the **Group Configuration** section, enter the **Digi Axess** sub-group ID for the device in the **Cloud Group ID** field.
5. Click **Update** to save your changes. A confirmation dialog displays.
6. Click **OK** to complete the change.

Configure the data collection and push schedule

By default, the Connect Sensor is configured to wake up and connect to Digi Axess every 12 hours. When the device is awake and connected to Digi Axess, it pushes sensor data to Digi Axess, and then asks Digi Axess for configuration changes. If there are any, Digi Axess pushes the changes and the device applies them, restarts, and then reconnects to Digi Axess. When this process is complete, the Connect Sensor goes to sleep and waits to wake and reconnect at the next scheduled time.

You can choose to configure a wake-and-connect schedule for a device if you don't want to use the default schedule. A schedule determines the first wake-up time, the time interval between reading the sensor connected to the Connect Sensor, and how many reads should occur before data is pushed from the device to Digi Axess.

Schedule graph

You can review the graph that displays. The graph is a preview of a full day of what the expected sample and push schedule would be for the device. The total number of reads (**Total Reads**) and pushes (**Total Pushes**) made during the 24-hour time period are noted in the graph.

Configure the wake up interval for a Connect Sensor

You can configure a schedule for a device that determines the first wake-up time, the time interval between reading the sensor connected to the Connect Sensor, and how many reads should occur before data is pushed from the device to Digi Axess.

By default, the Connect Sensor is configured to wake up and connect to Digi Axess every 12 hours. If you configure a schedule, you can revert the configuration to the default, if needed.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Services** > **Digi Axess Services** > **Device Schedule**.
3. Click **Edit** to allow changes to be made to the page.
4. Configure the configuration synchronization schedule.
   a. In the **First Report** field, enter the first time that the Connect Sensor should wake up, connect to Digi Axess, push sensor data, and receive data pushed from Digi Axess.
   b. In the **Read Interval** fields, enter the time interval between reads (data collection) from the sensors.
   c. In the **Report Interval** field, enter the number of reads that should occur before Connect Sensor pushes data to Digi Axess.
5. Click **Update** to save your changes. A confirmation dialog displays.
6. Click **OK** to complete the change.

Reset the device schedule to the factory default

You can reset a device's wake up and data collection schedule to the factory default.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Services** > **Digi Axess Services** > **Device Schedule**. The **Device Schedule** page displays.
3. Click **Edit** to allow changes to be made to the page.

4. Click **Reset Schedule Config**. A confirmation dialog displays.
5. Click **OK** to complete the change.
6. Click **Update** to save your changes. A confirmation dialog displays.
7. Click **OK** to complete the change.

Establish a connection to NB-IoT

By default, the Connect Sensor is configured to connect to the Cat-M1 cellular network. If the Connect Sensor is deployed in an area without Cat-M1 cellular service, the device won't be able to connect to the cellular network. You can switch the network connection option for the device from Cat-M1 to NB-Iot, which will allow a cellular connection to the device.

Since the device cannot connect to the cellular network, and subsequently can't connect to Digi Axess and pull down any configuration changes, you must physically connect your computer to the USB port on the device and use a CLI command to change to NB-IoT.

For best results, you should update the network connection option in Digi Axess first, and then on the device itself.

- Change the connection from Cat-M1 to NB-IoT

If needed, you can change the connection from NB-IoT back to Cat-M1.

- Change the connection from NB-IoT to Cat-M1

Change the connection from Cat-M1 to NB-IoT

By default, the cellular connection for a Connect Sensor device is set to Cat-M1. You can change it to NB-IoT if the device is deployed in an area without Cat-M1 cellular service.

For best results, you should update the network connection option in Digi Axess first, and then on the device itself.

Step 1: Change the cellular connection type in Digi Axess

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Physical I/O** > **Cellular**. The **Cellular Configuration** page displays.
3. Click **Edit**.
4. In the **Modem Configuration** section, click the **Iot Tech** list box.
5. Select the **NB-IoT** option.
6. Click **Update** to save the changes.

Step 2: Change the cellular network connection type on a Connect Sensor

Required elements

- A terminal emulator, such as Tera Term or Putty, installed on your computer.
- A USB type A to B cable to connect your computer to the Connect Sensor.
- A magnet to wake the device.
- You must be physically close enough to the device to connect your computer to the device and wake it with the magnet.

To change the connection type to NB-IoT on the device:

1. Use the USB cable to connect your computer to the device.
   a. Connect the type A end of the USB cable to the USB port on your computer.
   b. Connect the type B end of the USB cable to the mini USB port on the device.
2. Open the terminal emulator on your computer.
3. Open a connection to the USB port on the device. Use these settings:
   - **Connection port**: Connect to the COM port associated with the USB cable connected to Digi Connect Sensor
   - **Baud rate or bits per second**: 115200
   - **Data**: 8 bit
   - **Parity**: None
   - **Stop**: 1 bit
   - **Flow control**: None
4. Use the magnet to wake the Connect Sensor.
5. Type the CLI command: **custom iot=nbiot**
6. Press **Enter**.

   Note The Connect Sensor waits 30 seconds from when you pressed **Enter** to begin processing the command.

7. (Optional) If you entered a **custom** command, you can use the **activate** command to process the custom command immediately, rather than waiting 30 seconds.
   a. Type the CLI command: **activate**
   b. Press **Enter**.
8. When the Connect Sensor has processed the CLI command, the device goes to sleep. The following line displays in the terminal program when the device is sleeping:

   Zzz...
9. Close the terminal program.
10. Disconnect the USB cable from the Connect Sensor and the computer.

Change the connection from NB-IoT to Cat-M1

If you have switched your device to connect to the NB-IoT cellular network, you can switch back to connect to Cat-M1 when needed.

For best results, you should update the network connection option in Digi Axess first, and then on the device itself.

Step 1: Change the cellular connection type in Digi Axess

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Physical I/O** > **Cellular**. The **Cellular Configuration** page displays.
3. Click **Edit**.
4. In the **Modem Configuration** section, click the **Iot Tech** list box.

5. Select the **M1** option.
6. Click **Update** to save the changes.

Step 2: Change the cellular network connection type on a Connect Sensor

Required elements

- A terminal emulator, such as Tera Term or Putty, installed on your computer.
- A USB type A to B cable to connect your computer to the Connect Sensor.
- A magnet to wake the device.
- You must be physically close enough to the device to connect your computer to the device and wake it with the magnet.

To change the connection type to Cat-M1 on the device:

1. Use the USB cable to connect your computer to the device.
   a. Connect the type A end of the USB cable to the USB port on your computer.
   b. Connect the type B end of the USB cable to the mini USB port on the device.
2. Open the terminal emulator on your computer.
3. Open a connection to the USB port on the device. Use these settings:
   - **Connection port**: Connect to the COM port associated with the USB cable connected to Digi Connect Sensor
   - **Baud rate or bits per second**: 115200
   - **Data**: 8 bit
   - **Parity**: None
   - **Stop**: 1 bit
   - **Flow control**: None
4. Use the magnet to wake the Connect Sensor.
5. Type the CLI command: **custom iot=catm1**
6. Press **Enter**.

   Note The Connect Sensor waits 30 seconds from when you pressed **Enter** to begin processing the command.

7. (Optional) If you entered a **custom** command, you can use the **activate** command to process the custom command immediately, rather than waiting 30 seconds.
   a. Type the CLI command: **activate**
   b. Press **Enter**.
8. When the Connect Sensor has processed the CLI command, the device goes to sleep. The following line displays in the terminal program when the device is sleeping:

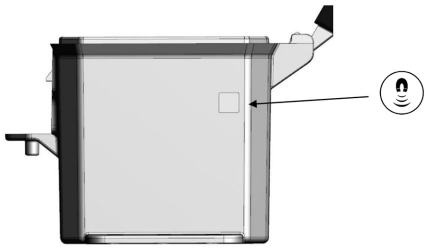
   Zzz...
9. Close the terminal program.
10. Disconnect the USB cable from the Connect Sensor and the computer.

Manually wake the Connect Sensor

The Connect Sensor is in sleep mode until it wakes to connect to Digi Axess at a scheduled time. You can wake the device manually, if needed, using the magnet supplied with the device. Waking the Connect Sensor manually forces a connection to Digi Axess.

1. You must physically be near enough to the Connect Sensor to touch it.
2. Locate the magnet sensor sticker on the side of the device.

   Digi Connect Sensor XRT-M NEMA



   Connect Sensor XRT-M

3. Swipe a magnet across the magnet sensor sticker to wake the Connect Sensor.
4. The LED on the edge of the SIM card slot shows the status of the device. Refer to the LED wake sequence in the table below.
5. The Connect Sensor connects to Digi Axess when it successfully connects to the cellular network.

LED wake sequence

The LED on the edge of the SIM card slot shows the status of the device. When the device wakes, the device connects to Digi Axess and pushes any collected data, and collects any configuration changes that are pushed from Digi Axess. This process make take a few minutes.

Behavior	LED indication
Wake by user (as by magnet)	Red & Blue on together for 1 sec
While sensors are being sampled	Blue LED flashes (2Hz), generally on for a very short period
Cell initialized, trying to connect	Green LED flashes (2Hz)
Cell has connection	Green LED on solid
Cell completes with success	Blue LED on solid 3 sec
Cell completes with failure	Red LED on solid 3 sec
During firmware update	Toggle quickly between Red and Blue LEDConnect Sensor

Automation Control

The Automation Control feature provides the logic and control necessary to create automation applications that evaluate analog, digital, and pulse discrete inputs, a full range of Modbus input types, and, based on input values, apply programming logic to control output devices through both discrete and Modbus outputs.

Configure input pins

You can configure the input pins on the device and use the data collected from the pin in automation control formulas. Each input pin can be configured for one of the following types: **Numeric**, **Digital**, or **Hex**.

Configure a digital input pin

You can configure an input pin for digital data.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Inputs**. The **Input Configuration** page displays.
3. In the **Input Type** column, click on a **Disabled** button.

   Note An input pin with an input type other than **Disabled** has already been configured and can be updated.

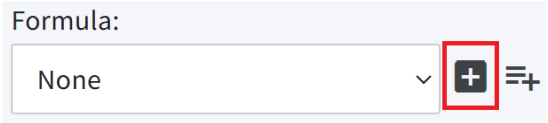
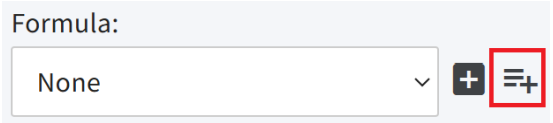
4. At the top of the page, click **Digital**.
5. Configure the settings as described in the tables below.

   Digital Input Source

Item	Description
Primary Source	Select an input source option. ■ **Configured Inputs**: Select an input pin. ■ **Configured Outputs:** Select an output pin. ■ **System Variables**: Select a standard data option. ■ **Onboard I/O**
Additional	Use the **Additional Modifiers** to take the value you have coming in from the

Item	Description
Modifiers	pin and combine it with multiple digital inputs or outputs, outside of a formula. ■ **Operation**: Select **AND** or **OR**. ■ **Source**: Select an input source.

General Pin Options

Item	Description
Polarity	Select the polarity for the input pin to specify which status option signifies "off". ■ **0**: 0 is off. ■ **1**: 1 is off.
Formula	(Optional) Select an existing formula from the **Formula** list box. When data is received from the input source, the formula is run, and the result is the output value for this source. You can create a formula from this page if needed. ■ **Add Device Formula**: Click the plus icon to display the Add Formula page so you can create a formula for this device.  ■ **Add Device Group Formula**: Click the plus with lines icon to the display the Add Device Group Formula page so you can create a formula that can be used by the devices in a specified device group. 

Display Options

Item	Description
Input Name	Enter a descriptive name for in the input source. The name should be unique.
[ON Label]	Enter a label that describes the "on" state of the input pin and displays

Item	Description
	instead of the "on" **Polarity** option (1 or 0). This label displays on the Digi Axess pages and graphs. This label works with the **[OFF] Label**. For example, the **[ON]** and **[OFF]** labels could say HIGH and LOW, or ON and OFF.
[OFF Label]	Enter a label that describes the "off" state of the input pin and displays instead of the "off" **Polarity** option (1 or 0). This label displays on the Digi Axess pages and graphs. This label works with the **[ON] Label**. For example, the **[ON]** and **[OFF]** labels could say HIGH and LOW, or ON and OFF.
Display Group	Select a display group in which this input source will be included. A display group is used to group similar devices together for easy comparison. The options in the **Display Group** list box are defined in the Dashboard Settings page. If you choose **Disabled**, the input source is not included in a display group.
Display Value	Select the label(s) for this input source that should display within Digi Axess. ■ **Input Source**: Display only the **Input Name** label entered in the **Display Options** section. ■ **Threshold Alert**: Display only the **Threshold Alert** label entered in the **Thresholds** section. The **Threshold Alert** label is available only if a threshold has been configured and then applied to this device. ■ **Both**: Display both the **Input Name** label and the **Threshold Alert** label.
Indicator Type	Specify whether the status of an alarm should display as a colored dot on the Device Summary page and the Automation Dashboard. ■ **None**: The colored dot displays in gray. ■ **LED**: The colored dot displays the color configured in the **Alarm State** list box.
Gauge Type	Select how the data from the input source should be graphically displayed within Digi Axess. ■ **None**: Do not graphically display the data. ■ **Linear Gauge**: Display the data in a vertical bar. ■ **Radial Gauge**: Display the data in a curved bar. ■ **Tank Gauge**: Display the data in a wide vertical bar.

6. You can configure a threshold for the on and off states of the input pin, if needed. When a threshold is enabled and the threshold value is met, an LED button that displays next to the **[ON] Label** or **[OFF] Label** changes to the color selected from the **Alarm State** list box.

   Alarms/Programs: OFF State Alarms

Item	Description
Alarm	You can enable a threshold alarm for when the input pin changes to the **[OFF] State** by selecting a notification group from the **Off State Alarm** list box. When a threshold is enabled and the **Off State Threshold Alert** value is met, an LED button that displays next to the **[OFF] Label** changes to the color selected from the **Off State Alarm State** list box.
Threshold Alert	Enter an **Off State Threshold Value** that is compared to the input source value. If the value of the input pin matches the threshold value, a colored alarm dot displays within Digi Axess. The color is determined by the **Off State Alarm State** option.
Alarm State	Select a color for the colored dot that displays next to the **[OFF] Label** in Digi Axess pages when the **Off State Threshold Alert** value is met. ■ **None**: The dot is gray. ■ **Green** ■ **Yellow** ■ **Red**: The red dot blinks. ■ **Blue**

Alarms/Programs: ON State Alarms

Item	Description
Alarm	You can enable a threshold alarm for when the input pin changes to the **[ON] State** by selecting a notification group from the **On State Alarm** list box. When a threshold is enabled and the **On State Threshold Alert** value is met, an LED button that displays next to the **[ON] Label** changes to the color selected from the **On State Alarm State** list box.
Threshold Alert	Enter a **Threshold Value** that is compared to the input source value. If the value of the input pin matches the threshold value, a colored alarm dot displays within Digi Axess. The color is determined by the **On State Alarm State** option.
Alarm State	Select a color for the dot button that displays next to the **[ON] Label** in Digi Axess pages when the **On State Threshold Alert** value is met. ■ **None**: The dot is gray. ■ **Green** ■ **Yellow** ■ **Red**: The red dot blinks. ■ **Blue**

7. Click **Enable**. A confirmation dialog displays.
8. Click **OK**. Click **Back** to return to the **Input Configuration** page.

Configure a numeric input pin

You can configure an input pin for numeric data.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Inputs**. The **Input Configuration** page displays.
3. In the **Input Type** column, click on a **Disabled** button.

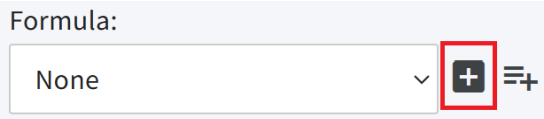
   Note An input pin with an input type other than **Disabled** has already been configured and can be updated.

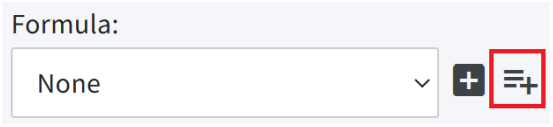
4. At the top of the page, click **Numeric**.
5. Configure the settings as described in the tables below.

   Numeric Input Source

Item	Description
Input Source	Select an input source option. ■ **Configured Inputs**: Select an input pin. ■ **Configured Outputs:** Select an output pin. ■ **System Variables**: Select a standard data option.

   General Pin Options

Item	Description
Formula	(Optional) Select an existing formula from the **Formula** list box. When data is received from the input source, the formula is run, and the result is the output value for this source. You can create a formula from this page if needed. ■ **Add Device Formula**: Click the plus icon to display the Add Formula page so you can create a formula for this device.  ■ **Add Device Group Formula**: Click the plus with lines icon to the display the Add Device Group Formula page so you can create a formula that can be used by the devices in a specified device group.

Item	Description
	
Min Units and **Max Units**	(Optional) Specify the minimum and maximum units range. These unit numbers are only used when you have selected the Standard Conversion formula from the **Formula** list box.

Display Options

Item	Description
Input Name	Enter a descriptive name for in the input source. The name should be unique.
Unit of Measure	Enter the unit of measurement that describes what you are measuring, such as height, volume, or pressure. This is a label that displays in Digi Axess.
Decimal Scale	Select a decimal option from the list box that determines the number of decimal points to display when the numeric output displays in Digi Axess. The number is truncated to the selected decimal option and not rounded. The default is **2 digits**.
Display Group	Select a display group in which this input source will be included. A display group is used to group similar devices together for easy comparison. The options in the **Display Group** list box are defined in the Dashboard Settings page. If you choose **Disabled**, the input source is not included in a display group.
Display Value	Select the label(s) for this input source that should display within Digi Axess. ■ **Input Source**: Display only the **Input Name** label entered in the **Display Options** section. ■ **Threshold Alert**: Display only the **Threshold Alert** label entered in the **Thresholds** section. The **Threshold Alert** label is available only if a threshold has been configured and then applied to this device. ■ **Both**: Display both the **Input Name** label and the **Threshold Alert** label.
Gauge Type	Select how the data from the input source should be graphically displayed within Digi Axess. ■ **None**: Do not graphically display the data. ■ **Linear Gauge**: Display the data in a vertical bar. ■ **Radial Gauge**: Display the data in a curved bar. ■ **Tank Gauge**: Display the data in a wide vertical bar.

6. Specify threshold alarms. When an alarm threshold is met, an alarm notification is sent to the specified notification group. You can create more than one threshold for an input source. A new threshold can be placed before or after an existing one, and the thresholds are numbered sequentially.

   Thresholds section

Item	Description
Threshold xx (where **xx** is the threshold number)	From the **Threshold xx** list box, select a comparison option. This is used to compare a value from the input source data to the defined **Trigger Value** and **Reset Value**. Note If **Disabled** is selected, this threshold alarm is not used.
Trigger Value	Enter a **Trigger Value** that is compared to the input source value. Depending on how the threshold is configured, the following actions may occur. ■ If the comparison condition selected from the **Threshold** list box is met, an alarm notification is logged. ■ **Send Alarm**: If a notification group was selected for **Send Alarm**, an alarm notification is sent to the users in that group. ■ **Alarm State**: If an **Alarm State** other than **None** is selected, a colored alarm LED button displays within Digi Axess.
Reset Value	Enter a **Reset Value** that is compared to the input source value. When the reset value is met, the colored dot changes to gray.
Send Alarm	Specify whether you to send an alarm to the users in a notification group when the **Trigger Value** is met. ■ Send an alarm notification: Select a notification group from the list box. ■ Do not send an alarm notification: Select **No Alarms** from the list box.
Threshold Alert	Enter a descriptive name for the alert. This label displays within Digi Axess.
Alarm State	Select a color for the colored dot that displays next to the **Threshold Alert** label. ■ **None**: The dot is gray. ■ **Green** ■ **Yellow** ■ **Red**: The red dot blinks. ■ **Blue**
Options	From the list box, you can choose to add another threshold alarm or

Item	Description
	delete an existing one. The threshold alarms are renumbered to be consecutive. ■ **Add Below**: Add a threshold alarm after the selected alarm. The threshold alarms are renumbered to be consecutive. ■ **Add Above**: Add a threshold alarm before the selected alarm. ■ **Delete**: Delete the selected threshold alarm.

7. Click **Enable**. A confirmation dialog displays.
8. Click **OK**. Click **Back** to return to the **Input Configuration** page.

Configure a hex input pin

You can configure an input source for hex data.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Inputs**. The **Input Configuration** page displays.
3. In the **Input Type** column, click on a **Disabled** button.

   Note An input pin with an input type other than **Disabled** has already been configured and can be updated.

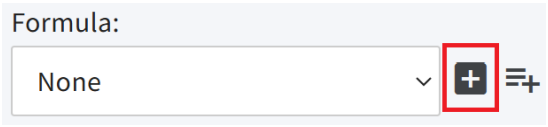
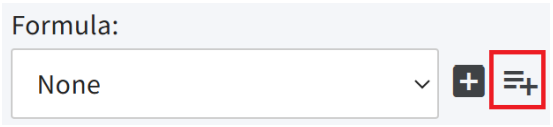
4. At the top of the page, click **Hex**.
5. Configure the settings as described in the tables below.

   Hex Input Source

Item	Description
Input Source	Select an input source option. ■ **Configured Inputs**: Select an input pin. ■ **Configured Outputs:** Select an output pin. ■ **System Variables**: Select a standard data option. ■ **Industrial Protocols**

   General Pin Options

Item	Description
Formula	(Optional) Select an existing formula from the **Formula** list box. When data is received from the input source, the formula is run, and the result is the output value for this source. You can create a formula from this page if needed. ■ **Add Device Formula**: Click the plus icon to display the

Item	Description
	Add Formula page so you can create a formula for this device.  ■ **Add Device Group Formula**: Click the plus with lines icon to the display the Add Device Group Formula page so you can create a formula that can be used by the devices in a specified device group. 

Display Options

Item	Description
Input Name	Enter a descriptive name for in the input source. The name should be unique.
Unit of Measure	Enter the unit of measurement that describes what you are measuring, such as height, volume, or pressure. This is a label that displays in Digi Axess.
Display Group	Select a display group in which this input source will be included. A display group is used to group similar devices together for easy comparison. The options in the **Display Group** list box are defined in the Dashboard Settings page. If you choose **Disabled**, the input source is not included in a display group.
Display Value	Select the label(s) for this input source that should display within Digi Axess. ■ **Input Source**: Display only the **Input Name** label entered in the **Display Options** section. ■ **Threshold Alert**: Display only the **Threshold Alert** label entered in the **Thresholds** section. The **Threshold Alert** label is available only if a threshold has been configured and then applied to this device. ■ **Both**: Display both the **Input Name** label and the **Threshold Alert** label.
Indicator Type	Specify whether the status of an alarm should display as a colored dot on the Device Summary page and the Automation Dashboard. ■ **None**: The colored dot displays in gray.

Item	Description
	■ **LED**: The colored dot displays the color configured in the **Alarm State** list box.

6. Specify threshold alarms. When an alarm threshold is met, an alarm notification is sent to the specified notification group. You can create more than one threshold for an input source. A new threshold can be placed before or after an existing one, and the thresholds are numbered sequentially.

   Thresholds section

Item	Description
Threshold xx (where **xx** is the threshold number)	From the **Threshold xx** list box, select a comparison option. This is used to compare a value from the input source data to the defined **Trigger Value** and **Reset Value**. Note If **Disabled** is selected, this threshold alarm is not used.
Trigger Value	Enter a **Trigger Value** that is compared to the input source value. Depending on how the threshold is configured, the following actions may occur. ■ If the comparison condition selected from the **Threshold** list box is met, an alarm notification is logged. ■ **Send Alarm**: If a notification group was selected for **Send Alarm**, an alarm notification is sent to the users in that group. ■ **Alarm State**: If an **Alarm State** other than **None** is selected, a colored alarm LED button displays within Digi Axess.
Mask Value	Enter a hexadecimal (hex) mask value that is compared to the input source value. Depending on how the threshold is configured, the following actions may occur. ■ If the comparison condition selected from the **Threshold** list box is met, an alarm notification is logged. ■ **Send Alarm**: If a notification group was selected for **Send Alarm**, an alarm notification is sent to the users in that group. ■ **Alarm State**: If an **Alarm State** other than **None** is selected, a colored alarm LED button displays within Digi Axess.
Send Alarm	Specify whether you to send an alarm to the users in a notification group when the **Trigger Value** is met. ■ Send an alarm notification: Select a notification group from the list box. ■ Do not send an alarm notification: Select **No Alarms** from the list box.

Item	Description
Threshold Alert	Enter a descriptive name for the alert. This label displays within Digi Axess.
Alarm State	Select a color for the colored dot that displays next to the **Threshold Alert** label. ■ **None**: The dot is gray. ■ **Green** ■ **Yellow** ■ **Red**: The red dot blinks. ■ **Blue**
Options	From the list box, you can choose to add another threshold alarm or delete an existing one. The threshold alarms are renumbered to be consecutive. ■ **Add Below**: Add a threshold alarm after the selected alarm. The threshold alarms are renumbered to be consecutive. ■ **Add Above**: Add a threshold alarm before the selected alarm. ■ **Delete**: Delete the selected threshold alarm.

7. Click **Enable**. A confirmation dialog displays.
8. Click **OK**. Click **Back** to return to the **Input Configuration** page.

Update a configured input pin

You can change an input pin that has been configured.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Inputs**. The **Input Configuration** page displays.
3. In the **Input Type** column, click on the type for the pin that that you wan to update: **Numeric**, **Digital**, or **Hex**. The **Input Pin X Configuration** page displays, where **X** is the input pin number.

   Note An input pin with the **Disabled** input type has not been configured. For information about configuring an input pin, see Configure input pins.

4. The **Current Status** section displays at the top of the **Input Pin X Configuration** page. Current information about the pin displays.
   - **Type**: The input type configured for the pin. Options are **Numeric**, **Digital**, or **Hex**.
   - **Value**: The current value of the pin.
5. Configure the input pin, as desired, for the selected input type. For detailed information about each input type, see:
   - Configure a numeric input pin
   - Configure a digital input pin
   - Configure a hex input pin

6. When changes are complete, click **Update**. A confirmation dialog displays.
7. Click **OK** to save your changes.

Configure output pins

You can configure the output pins on the device and use the data collected from the pin in automation control formulas. Each output pin can be configured for one of the following types: **Numeric**, **Digital**, or **Hex**.

Configure a digital output pin

You can configure an output pin for digital data.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Outputs**. The **Ouput Configuration** page displays.
3. In the **Output Type** column, click on a **Disabled** button.

   Note An output pin with an output type other than **Disabled** has already been configured and can be updated.

4. At the top of the page, click **Digital**.
5. From the **Destination** list box, select the output pin.
6. Configure the settings as described in the tables below.

General Pin Options

Item	Description
State	Select the status for the output pin. The selected status displays until the output value has been calculated. ■ **On**: Set the output pin status on. ■ **Off**: Set the output pin status off. This is the default.
On Program	When the output pin is in the **On** state, the selected program runs. Click the **Add Program** icon next to the field to add a program.
Off Program	When the output pin is in the **Off** state, the selected program runs. Click the **Add Program** icon next to the field to add a program.

Display Options

Item	Description
Output Name	Enter a descriptive name for the output source. The name should be unique.
Display Group	Select a display group in which this output source will be included. A display group is used to group similar devices together for easy comparison.

Item	Description
	The options in the **Display Group** list box are defined in the Dashboard Settings page. If you choose **Disabled**, the output source is not included in a display group.
[ON Label]	Enter a label that describes the "on" state of the output pin. This label displays on the Digi Axess pages and graphs. This label works with the **[OFF] Label**. For example, the **[ON]** and **[OFF]** labels could say HIGH and LOW, or ON and OFF.
[OFF Label]	Enter a label that describes the "off" state of the output pin. This label displays on the Digi Axess pages and graphs. This label works with the **[ON] Label**. For example, the **[ON]** and **[OFF]** labels could say HIGH and LOW, or ON and OFF.
[ON] Indicator	Specify whether an indicator for the **[ON]** status of the output should display. The status displays as a colored dot on the Device Summary page and the Automation Dashboard. ■ **No color**: A colored indicator does not display. ■ **Red**, **Green**, **Yellow**, or **Blue**: Choose a color that is meaningful to your organization to represent the [ON] status.
[OFF] Indicator	Specify whether an indicator for the **[OFF]** status of the output should display. The status displays as a colored dot on the Device Summary page and the Automation Dashboard. ■ **No color**: A colored indicator does not display. ■ **Red**, **Green**, **Yellow**, or **Blue**: Choose a color that is meaningful to your organization to represent the **[OFF]** status.

7. Click **Enable**. A confirmation dialog displays.
8. Click **OK**. Click **Back** to return to the **Output Configuration** page.

Configure a numeric output pin

You can configure an output source for numeric data.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Outputs**. The **Ouput Configuration** page displays.
3. In the **Output Type** column, click on a **Disabled** button.

   Note An output pin with an output type other than **Disabled** has already been configured and can be updated.

4. At the top of the page, click **Numeric**.
5. From the **Destination** list box, select the output pin.
6. Configure the settings as described in the tables below.

General Pin Options

Item	Description
Current Value	Set a value for a variable that can be used in a formula. For example, if your formula needs the value of the height of a tank, and the default height is 5 feet, then enter 5.
Min Value **Max Value**	(Optional) Specify the acceptable minimum and maximum value range for the **Current Value**. This ensures that the output is inside an acceptable range.
Program	Run the selected program. Click the **Add Program** icon next to the field to add a program.

Display Options

Item	Description
Output Name	Enter a descriptive name for the output source. The name should be unique.
Display Group	Select a display group in which this output source will be included. A display group is used to group similar devices together for easy comparison. The options in the **Display Group** list box are defined in the Dashboard Settings page. If you choose **Disabled**, the output source is not included in a display group.
Unit of Measure	Enter the unit of measurement that describes what you are measuring, such as height, volume, or pressure. This is a label that displays in Digi Axess.
Decimal Scale	Select a decimal option from the list box that determines the number of decimal points to display when the numeric output displays in Digi Axess. The number is truncated to the selected decimal option and is not rounded. The default is **2 digits**.
Gauge Type	Select how the data from the input source should be graphically displayed within Digi Axess. ■ **None**: Do not graphically display the data. ■ **Linear Gauge**: Display the data in a vertical bar. ■ **Radial Gauge**: Display the data in a curved bar. ■ **Tank Gauge**: Display the data in a wide vertical bar.

7. Click **Enable**. A confirmation dialog displays.
8. Click **OK**. Click **Back** to return to the **Output Configuration** page.

Configure a hex output pin

You can configure an output source for hex data.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Outputs**. The **Ouput Configuration** page displays.
3. In the **Output Type** column, click on a **Disabled** button.

   Note An output pin with an output type other than **Disabled** has already been configured and can be updated.

4. At the top of the page, click **Hex**.
5. From the **Destination** list box, select the output pin.
6. Configure the settings as described in the tables below.

   General Pin Options

Item	Description
Current Value	Set a value for a variable that can be used in a formula. For example, if your formula needs the value of the height of a tank, and the default height is 5 feet, then enter 5.
Program	Run the selected program. Click the **Add Program** icon next to the field to add a program.

   Display Options

Item	Description
Output Name	Enter a descriptive name for the output source. The name should be unique.
Display Group	Select a display group in which this output source will be included. A display group is used to group similar devices together for easy comparison. The options in the **Display Group** list box are defined in the Dashboard Settings page. If you choose **Disabled**, the output source is not included in a display group.
Unit of Measure	Enter the unit of measurement that describes what you are measuring, such as height, volume, or pressure. This is a label that displays in Digi Axess.

7. Click **Enable**. A confirmation dialog displays.
8. Click **OK**. Click **Back** to return to the **Output Configuration** page.

Update a configured output pin

You can change an output pin that has been configured.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Outputs**. The **Ouput Configuration** page displays.

3. In the **Output Type** column, click on the type for pin that has been configured: **Numeric**, **Digital**, or **Hex**. The **Output Pin X Configuration** page displays, where **X** is the input pin number.

   Note An output pin with the **Disabled** output type has not been configured. For information about configuring an output pin, see Configure output pins.

4. The **Current Status** section displays at the top of the **Output Pin X Configuration** page. Current information about the pin displays.
   - **Type**: The output type configured for the pin. Options are **Numeric**, **Digital**, or **Hex**.
   - **Value**: The current value of the pin.
5. Configure the output pin, as desired, for the selected output type. For detailed information about each input type, see:
   - Configure a digital output pin
   - Configure a numeric output pin
   - Configure a hex output pin
6. When changes are complete, click **Update**. A confirmation dialog displays.
7. Click **OK** to save your changes.

Formulas: Manage from the web UI

Formulas use the input data collected from a device and apply calculations to provide a meaningful output. A formula is connected to an input on a device, and the formula runs every time data is collected on the device for that input.

Formulas are built as a set of sequential steps. For each step, you choose a formula option and a formula operator to create an output which can be reviewed in Digi Axess.

Where are formulas used?

After a formula has been created, you can connect the formula to an input configuration on an input pin, and then enable the configuration. If you want the data from the input configuration to be included in the Device Summary page, you can select a display group.

Stop a formula from running

When you no longer want the formula to run, you can remove it from the input.

Device-defined and device group formulas

You can create a formula that is used for one specific device, or for the devices in a device group. A set of standard formulas provided by Digi Axess is also available.

- Device formula: Create and manage formulas for a specific device. You can add and manage device-defined formulas only on the device's web UI.
- Device group formula: Create and manage device group formulas. A device group formula is available to the devices in the device group selected for the formula.

  Note Device group formulas can also be created and managed from the Digi Axess Administration dashboard. See Formulas: Manage in Digi Axess Admin.

- Digi Axess formulas: A set of standard formulas created by Digi are available.

Add a device-defined formula in the web UI

You can create a formula for one specific device.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Formulas**. The **Manage Formulas** page displays.
3. In the **Device Defined Formulas** section, click **Add Device Formula**. The **Formula Definition** page displays.
4. In the **Formula Definition** section, enter a descriptive name in the **Formula Name** field.
5. Create a formula by adding steps.
   a. Select a formula option from the step list box. Information about the option displays in the screen.
   b. Depending on the calculation option, a parameter field may display. Enter an appropriate value for the selected formula in the parameter field.
   c. From the **Add** list box, select a formula operator.
   d. Determine the next action for the formula.
      - **Add below**: Add a step to the formula below the current step.
      - **Add above**: Add a step to the formula above the current step.
      - **Delete**: Delete the current step.
      - **Don't choose an option**: Do not choose an option if the formula is complete.
   e. Repeat the process to add more items to the formula.
6. Click **Save** to save the formula. A confirmation dialog displays.
7. Click **OK** to confirm the change.
8. Click **Back** to return to the **Manage Formulas** page. The formula you created displays in the **Device Defined Formulas** list on the page.

Edit a formula for a device in the web UI

You can edit a device formula if needed.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Formulas**. The **Manage Formulas** page displays.
3. In the **Device Defined Formulas** section, click the name of the formula that you want to change. The **Formula Definition** page displays.
4. If desired, update the name in the **Formula Name** field.
5. Edit the formula as needed. For information about the fields, see Add a device-defined formula in the web UI.
6. Click **Save** to save the formula. A confirmation dialog displays.
7. Click **OK** to confirm the change. A green banner with the message "Formula Successfully Updated" displays at the top of the page.
8. Click **Back** to return to the **Manage Formulas** page.

Copy a device formula in the web UI

You can copy a formula that has been created for a device to create a new device formula. You can rename and edit the copied formula as needed.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Formulas**. The **Manage Formulas** page displays.
3. In the **Device Defined Formulas** section, find the formula that you want to copy.
4. Click the **Copy Formula** icon next to the formula name. The copied formula is added to the end of the list of formulas. A sequential number is appended to the formula name.

   The message "Formula Has Been Copied" displays in a green banner at the top of the page.
5. Edit the formula as needed.
   a. Click the name of the copied formula to open it in the **Formula Definition** screen.
   b. Change the name of the formula in the **Formula Name** field.
   c. Edit the formula as needed. For information about the fields, see Add a device-defined formula in the web UI.
   d. Click **Save** to save your changes. A confirmation dialog displays.
   e. Click **OK**. A green banner with the message "Formula Successfully Updated" displays at the top of the page

Delete a device formula from the web UI

You can delete a formula that has been created for a device.

If you try to delete a formula that is connected to a input pin, an error message displays and you are not allowed to delete the formula. You should edit the input configurations that use the formula you want to delete, and then delete the formula.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Formulas**. The **Manage Formulas** page displays.
3. In the **Device Defined Formulas** section, find the formula that you want to delete.
4. Click the **Delete Formula** icon next to the formula name. A confirmation dialog displays.
5. Click **OK** to confirm the deletion. The message "Formula Successfully Deleted" displays in a green banner at the top of the page.

   If the formula is used in an input pin configuration, the message "ERROR: "*Pin name*" uses formula "*Formula name*" " displays. The formula is not deleted.

Save a device formula as a device group formula

A formula created for a device can be saved as a device group formula for a selected device group. The device group formula will be available to all devices in the selected device group and to the devices in any child groups.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Formulas**. The **Manage Formulas** page displays.

3. In the **Device Defined Formulas** section, find the formula that you want to save as a device group formula.
4. Click the **Save to Device Group** icon next to the formula name. The **Save Formula to Device Group** page displays.
   a. In the **Name** field, enter a descriptive name for the device group formula.
   b. From the **Device Group** list box, select a device group. The device group formula will be available to any device in this device group and to the devices in any child groups.
5. Click **Save** to save the device group formula. A confirmation dialog displays.
6. Click **OK**. The **Formula Definition** page displays.
7. Edit the formula as needed.
   a. Change the name of the formula in the **Formula Name** field.
   b. Edit the formula. For information about the fields, see Add a device-defined formula in the web UI.
   c. Click **Save** to save your changes. A confirmation dialog displays.
   d. Click **OK**. A green banner with the message "Formula Successfully Updated" displays at the top of the page.

Add a device group formula in the web UI

You can create a device group formula that will be available to all devices in the selected device group and to the devices in any child groups.

Note A device group formula added from the device's web UI is also available in the Digi Axess Administration dashboard. See Add a formula from the Administration dashboard.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Formulas**. The **Manage Formulas** page displays.
3. In the **Device Group Formulas** section, click **Add Device Group Formula**. The **Create Formula** page displays.
   a. In the **Name** field, enter a descriptive name for the device group formula. The name must be unique within the selected device group.
   b. From the **Device group** list box, select a device group. The formula you are creating will be available to all devices in the selected device group and to the devices in any child groups.
   c. If you are adding an input pin or an output pin to the formula, you can use the **Reference Device** field. From the **Reference Device** field, select a device that has a similar configuration to the devices that will be in the new formula you are creating. The configured pins from the reference device are available when adding an input pin or an output pin to the formula. The input pin and output pin options that you can select from the list box are limited to those that are configured for the reference device.

      This feature allows you to easily reuse a pin configuration and eliminates the need to manually enter the number of a configured input pin or output pin.
   d. Click **Save** to save the formula. A confirmation dialog displays.

e. Click **OK** to confirm the change. The **Formula Definition** page displays.

4. Enter a descriptive name in the **Formula Name** field.

5. Create a formula by adding steps.
   a. Select a formula option from the first list box in the step. Information about the option displays in the screen.
   b. If a parameter field displays, enter an appropriate value for the selected formula.
      - **Input Pin**: You are required enter the number of the input pin or, if a list box is available, to select the name of a configured and enabled input pin for a Connect Sensor.

        Using the Reference Device field

        This field is used only if the following conditions are met:
        - You are maintaining a formula in the Administration dashboard or a device group formula from the web UI.
        - You have added an input pin to the formula. You are required to enter a pin number or select an option from the parameter list box.

        If you selected a device from the **Reference Device** field, the parameter field is a list box with options are limited to the input pins configured for the selected reference device. You can select an appropriate input pin that works for your formula.

        If you didn't select a device from the **Reference Device** field, you must manually enter the an input pin number.
      - **Output Pin**: You are required enter the number of the output pin or, if a list box is available, to select the name of a configured and enabled output pin for a Connect Sensor.

        Using the Reference Device field

        This field is used only if the following conditions are met:
        - You are maintaining a formula in the Administration dashboard or a device group formula from the web UI.
        - You have added an output pin to the formula. You are required to enter a pin number or select an option from the parameter list box.

        If you selected a device from the **Reference Device** field, the parameter field is a list box with options are limited to the output pins configured for the selected reference device. You can select an appropriate output pin that works for your formula.

        If you didn't select a device from the **Reference Device** field, you must manually enter the an output pin number.
   c. From the **Add** list box, select a formula operator.
   d. Determine the next action for the formula.
      - **Add below**: Add a step to the formula below the current step.
      - **Add above**: Add a step to the formula above the current step.
      - **Delete**: Delete the current step.
      - **Don't choose an option**: Do not choose an option if the formula is complete.
   e. Repeat the process to add more items to the formula.

6. Click **Save** to save the formula. A confirmation dialog displays.
7. Click **OK** to confirm the change.
8. Click **Back** to return to the **Manage Formulas** page. The formula you created displays in the **Device Group Formulas** list on the page.

Edit a device group formula from the web UI

You can edit the formula name and the steps in the formula for a device group formula.

Be aware

- You cannot change the device group selected for the formula.
- You cannot delete a device group formula from the web UI. However, you can delete it from the Administration dashboard in Digi Axess. See Delete a formula using the Go button from the Administration dashboard and Delete a formula from the review page in the Administration Dashboard.

To edit a device group formula:

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Formulas**. The **Manage Formulas** page displays.
3. In the **Device Group Formulas** section, click the name of the device group formula that you want to change. The **Formula Definition** page displays.
4. If desired, update the name in the **Formula Name** field. The name must be unique within the selected device group.
5. If you are adding an input pin or an output pin to the formula, you can use the **Reference Device** field. From the **Reference Device** field, select a device that has a similar configuration to the devices that will be in the new formula you are creating. The configured pins from the reference device are available when adding an input pin or an output pin to the formula. The input pin and output pin options that you can select from the list box are limited to those that are configured for the reference device.

   This feature allows you to easily reuse a pin configuration and eliminates the need to manually enter the number of a configured input pin or output pin.
6. Edit the formula as needed. For information about the fields, see Add a device group formula in the web UI.
7. Click **Save** to save the changes. A confirmation dialog displays.
8. Click **OK** to confirm the change. A green banner with the message "Formula Successfully Updated" displays at the top of the page.
9. Click **Back** to return to the **Device Group Formula** page.

Review the Digi Axess formulas

A set of basic formulas created by Digi are available. The formulas can't be changed, copied, or deleted, but can be connected to an input. These are available for all devices.

To review a Digi Axess formula:

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.

2. Choose **Automation** > **Formulas**. The **Manage Formulas** page displays.
3. In the **Digi Axess Formulas** section, click on the name of the formula you want to review. The **Formula Definition** page for the formula displays.
   - **IEEE 754 Float - BADC**
   - **IEEE 754 Float - DCBA**
   - **Integer - BADC**
   - **Standard Conversion**
4. Click **Back** to return to the **Manage Formulas** page.

Formula options

Formulas allow mathematical pre-processing on all numeric, analog, and hex inputs, and post-processing on numeric and hex outputs on Modbus type I/O modules.

The tables below describe the options that are available to create a formula.

- Constants
- Device Schedule Values
- Calculated Values
- Hex Functions
- Trigonometric Functions
- Mathematical Functions

Formula reference

Formulas are developed using a stack calculator. The calculator mechanism uses postfix notation, a mathematical notation in which every operator follows all of its operands.

For example, to find the sum of 2 plus 2:

Infix Notation: 2 [+] 2 result 4

Postfix Notation: 2 [Ent] 2 [+] result 4

Controller Formula Screen: [constant value=] 2 [Ent] [constant value=] 2 [Add] result 4

Unless otherwise directed, the result of a formula calculation will be placed on the input or output pin invoking the formula.

Constants formulas

Formula	Description
Current Pin	Allows the use of the current value of the input invoking the formula.
Input Pin	Allows the use of the current value of an input pin other than the one invoking the formula. You are required enter the number of the input pin or, if a list box is available, to select the name of a configured and enabled input pin on a Connect Sensor. **In-line Parameters** - **Input pin**: Integer or a currently configured input from the list box. **Using the Reference Device field**

Formula	Description
	This field is used only if the following conditions are met: ■ You are maintaining a formula in the Administration dashboard or a device group formula from the web UI. ■ You have added an input pin to the formula. You are required to enter a pin number or select an option from the parameter list box. If you selected a device from the **Reference Device** field, the parameter field is a list box with options are limited to the input pins configured for the selected reference device. You can select an appropriate input pin that works for your formula. If you didn't select a device from the **Reference Device** field, you must manually enter the an input pin number.
Output Pin	Allows the use of the current value of the output pin invoking the formula. You are required enter the number of the output pin or, if a list box is available, to select the name of a configured and enabled output pin on a Connect Sensor. **In-line Parameters** ■ **Output Pin**: Integer or a currently configured input from the list box. **Using the Reference Device field** This field is used only if the following conditions are met: ■ You are maintaining a formula in the Administration dashboard or a device group formula from the web UI. ■ You have added an output pin to the formula. You are required to enter a pin number or select an option from the parameter list box. If you selected a device from the **Reference Device** field, the parameter field is a list box with options are limited to the output pins configured for the selected reference device. You can select an appropriate output pin that works for your formula. If you didn't select a device from the **Reference Device** field, you must manually enter the an output pin number.
Constant Value	Allows a user defined numeric value to be used in the formula. You are required to enter a numeric value. **In-line Parameters** ■ **Numeric Value**: Integer/Decimal When a constant value has more than 9 decimal value precision, the full value is stored, but only a maximum of 9 places will be displayed back on return. After a constant value is defined within a formula, it is not updated unless the **Update** option is checked before clicking **Save**.
PI	The constant pi.
Constant Hex Value	Allows a user defined hex value to be used in the formula. You are required to enter the hex value. **In-line Parameters**

Formula	Description
	▪ **Hex Value**: 0 - FFFF
Correction	Allows the use of the correction value that is defined for the input or output pin invoking the formula.
Min Range	Allows the use of the minimum range value of the analog input invoking the formula.
Max Range	Allows the use of the maximum range value of the analog input pin invoking the formula.
Min Units	Allows the use of the minumum units value of the input or output pin invoking the formula.
Max Units	Allows the use of the maximum units value of the input or output pin invoking the formula.

Device Schedule Values

Formula	Description
Read Interval	Sets the interval between readings. The value can be set in minutes or hours. Readings are saved on the device until the report interval is reached..
Report Interval	Determines the amount of readings taken until the device reports the readings to Digi Axess. This number must be set so the device will report at least once per day.

Calculated Values formulas

Formula	Description
[Max-Min] Range	Allows the use of the value of the difference between the **Max Range** and **Min Range** of the analog input pin invoking the formula.
[Max-Min] Units	Allows the use of the value of the difference between the **Max Units** and **Min Units** of the input or output pin invoking the formula.
Fn Trim Below	Returns the **Trim Below Value** when the sample is below that value. You are required to enter a numeric value. **In-line Parameters** ▪ **Trim Below Value**: Numeric
Fn Trim Over	Return the **Trim Above Value** when the sample is above that value. You are required to enter a numeric value. **In-line Parameters** ▪ **Trim Above Value**: Numeric

Hex Functions

Formula	Description
Fn Swap Words	Performs a 16 bit swap on 32-bit MODBUS register reads when necessary. **Example**: ABCD1234 becomes 1234ABCD. [Current Input] [Ent] [Fn Swap Words]
Fn Swap Bytes	Performs 8 bit swap on 16 or 32-bit MODBUS register reads when necessary. **Example**: ABCD1234 becomes CDAB3412. [Current Input] [Ent] [Fn Swap Bytes]
Fn Reg16 to Signed	Performs the conversion of a 16 bit hex value to a signed integer value. The value to be converted is taken from the last value in the calculator's stack. **Example**: Assume the invoking pin is an input of a MODBUS module configured as hex and the source is a 16-bit Holding register. Use the register value as a signed integer. [Current Input] [Ent] [Fn Reg16 to Signed]
Fn Reg32 to Signed	Performs the conversion of a 32 bit hex value to a signed integer value. The value to be converted is taken from the last value in the calculator's stack. **Example**: Assume the invoking pin is the input of a MODBUS module configured as hex and the source is a 32-bit Holding register. Use the register value as a signed integer. [Current Input] [Ent] [Fn Reg32 to Signed]
Fn Reg32 to Float	Performs the conversion of a 32 bit hex value to a float value. The value to be converted is taken from the last value in the calculator's stack. **Example 1**: Assume the invoking pin is an input of a MODBUS module configured as hex and the source is a 32-bit Holding register. Use the register value as a float. [Current Input] [Ent] [Fn Reg32 to Float]

Trigonometric Functions

Formula	Description
Radians to Degrees	Performs the conversion of a numeric value in radians to degrees.
Degrees to Radians	Performs the conversion of a numeric value in degrees to radians.
Sin - Radians	Performs sin function on numeric value in radians.
Cos - Radians	Performs cosine function on numeric value in radians.
Tan - Radians	Performs tangent function on numeric value in radians.
Asin - Radians	Performs arc sin function on numeric value and returns radians
Acos - Radians	Performs arc cosine function on numeric value and returns radians
Atan - Radians	Performs arc tangent function on numeric value and returns radians.

Mathematical Functions

Formula	Description
Square Root	Performs square root function on numeric value.

Formula operators

You can use the formula operators to complete a formula.

Formula	Description
Sub	Subtract
Add	Add
Mul	Multiply
Div	Divide
Xch	Exchange the position of the last two values in the stack.
And	Bitwise And
Or	Bitwise Or
Ent	Enter a value into the stack.
Pop	Pop: Bring a value out of the stack.
Xor	Bitwise XOR (Exclusive Or) function to the previous value on the stack. Note For Connect Sensor devices, **Xor** allows only Digital and Hex input pins.
Y^X	Exponential calculation where Y is the current value on the stack and X is the value being added to the stack. The Y value must be sequentially before the X value in the stack.

Programs

Programs are named groups of functions that can be applied to a specific input or output as the result of a threshold event on an input or output. For instance, a program called "Power Indicator OFF" could be used to turn off an indicator whenever charging power is removed from a battery powered system. The same program could also set the application status to yellow on the Digi Axess map.

A program is assigned to an input pin or an output pin.

Create an Automation Control program

You can create an automation control program using the available functions. When you select a function, screen hints describe the function's parameter list.

Parameters are entered with a space separator.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **Programs**. The **Manage Programs** page displays.
3. Click **Add New**.
4. In the **Program Definition** section, enter a descriptive name in the **Program Name** field.
5. Enter a step in the **Insert Step** section.
   a. Select a step number from the first list box.
   b. Select a function from the second list box. Information about the function displays in the screen.
   c. Enter the parameters for the selected function in the parameter field.
   d. Click **Update**.
   e. Repeat the process for each step in the program.

Input Configuration - Set

You can change an initial value or initial reference on a numeric pin under program control. When this function is executed, the permanent stored value for the selected parameteris updated.

The table below describes the in-line parameters.

In-line parameters	Description
Input pin number: Numeric input pin number	<**pin number**>
Parameter to Modify	[**18**]: Initial Value [**19**]: Initial Reference [**20**]: Minimum Value [**21**]: Maximum Value
New Value Source Type	[**i**]nput or [**o**]utput or [**u**]ser defined
Pin Number/Value: New Value source pin number or user defined value	<**pin number**> or <**value**>
Multiplier: Value by which the parameter being modified is multiplied	<**value**>

Input Thresholds - Set

You can change the fields of a defined threshold in the **Input Threshold Set** program.

The table below describes the in-line parameters.

In-line Parameter	Description
Input Pin Number: Numeric/Analog/Pulse input pin number	<**pin number**>
Threshold: [1 - 17] Threshold Number	[**1 - 17**] Threshold Number of Trigger

In-line Parameter	Description
Threshold Field	[**1**]: Trigger Value and Reset Value = Trigger * Factor [**7**]: Trigger Value and Reset Value = Trigger + Factor
New Value Source Type	[**i**]nput or [**o**]utput or [**u**]ser defined
Pin Number/Value: New Value source pin number or user-defined value	<**pin number**> or <**value**>
Factor Source Type	[**i**]nput or [**o**]utput or [**u**]ser defined
Factor Value: New Value source pin number or user-defined value	<**pin number**> or <**value**>

Set up I/O modules

You can use input/output modules, sensor data, and Modbus data to bring information into the application to develop monitoring and control solutions.

- Configure a 16 port Virtual I/O module
- Configure an 8 Port Modbus RTU module
- Enable, disable, or delete a module

Configure a 16 port Virtual I/O module

You can configure a 16 port virtual I/O module on your Connect Sensor. A 16 port virtual I/O module consists of 8 virtual inputs and 8 virtual outputs that can be defined as data type digital, numeric, or hex. You can configure the virtual inputs and outputs in the Input Configuration and Output Pins configuration pages.

Since virtual I/O modules are internal to the device, communications is also internal. There are no off-box communications.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **I/O Module**. The **I/O Module Configuration** page displays.
3. In the **Add a New Device** section, select **16 Port Virtual I/O** from the **New Device Type** field.
4. Click **Add**. The module is saved and displays in the **Configured Devices** section. It is enabled by default. You can disable it if needed.

Configure an 8 Port Modbus RTU module

You can configure an 8 port Modbus RTU module on your Connect Sensor. An 8 port Modbus RTU module consists of 8 inputs and 8 outputs which can be mapped onto Modbus registers, holding registers, or coils. You can configure the virtual inputs and outputs in the Input Configuration and Output Pins configuration pages.

Multiple MODBUS modules can be created for the same address to increase the number of available inputs and outputs.

A 16-Port MODBUS module supports 2-wire RS485 communications with a MODBUS RTU protocol.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **I/O Module**. The **I/O Module Configuration** page displays.
3. In the **Add a New Device** section, select **8 Port Modbus Input** from the **New Device Type** field.
4. In the **Address** field, enter the address for the module. Addresses for 16-port Modbus I/O RTU modules (RS485) are hexadecimal numbers between 01 and EF. You must use caps for Hex. This address must match the I/O module's address assignment.
5. Click **Add**. The module is saved and displays in the **Configured Devices** section. It is enabled by default. You can disable it if needed.

Enable, disable, or delete a module

The virtual I/O or Modbus RTU module are enabled by default. You can disable a module if necessary and then enable it again when needed. More than one of each type can be enabled.

You can also delete any module except for the virtual I/O module labeled as number 1. This is default module and cannot be deleted.

1. Access the web UI for Connect Sensor from the Device Summary page. The **Automation Dashboard** displays.
2. Choose **Automation** > **I/O Module**. The **I/O Module Configuration** page displays.
3. In the **Configured Devices** section, find the module that you want to modify abd and select an option.
   - **Enable**: From the module's list box, select **Enable** to enable the module. The modules are enabled by default when one is created.
   - **Disable**: From the module's list box, select **Disable** to disable the module.
   - **Delete**: From the module's list box, select **Delete** to delete the module. You cannot delete the default virtual I/O module labeled as number 1.
4. Click **Save**.

CLI Commands

You can use the CLI commands to configure some features in the Connect Sensor. You can connect your computer with a USB cable to the mini USB port on the device, and then use a terminal emulator to configure it.

The CLI commands should be used mainly when your device cannot connect to the network.

Required elements

- A terminal emulator, such as Tera Term or Putty, installed on your computer.
- A USB type A to B cable to connect your computer to the Connect Sensor.
- A magnet to wake the device.
- You must be physically close enough to the device to connect your computer to the device and wake it with the magnet.

Configure the Connect Sensor

Follow these steps connect to the device and configure it.

- Use a CLI command to configure a Connect Sensor

List of CLI commands

- **activate**: Activate custom settings.
- **custom apn=<*apn*>**: Configure the APN.
- **custom clear**: Reset any configuration changes you have made using any of the **custom** commands.
- **custom iot=catm1**: Change the connection type to a Cat-M1 connection.
- **custom iot=nbiot**: Change the connection type to an NB-IoT connection.
- **fwupdate**: Update the device's firmware.
- **status**: Get the current status.

Use a CLI command to configure a Connect Sensor

You can use a CLI command to configure your device.

Required elements

- A terminal emulator, such as Tera Term or Putty, installed on your computer.
- A USB type A to B cable to connect your computer to the Connect Sensor.
- A magnet to wake the device.

- You must be physically close enough to the device to connect your computer to the device and wake it with the magnet.

To use the CLI:

1. Use the USB cable to connect your computer to the device.
   a. Connect the type A end of the USB cable to the USB port on your computer.
   b. Connect the type B end of the USB cable to the mini USB port on the device.
2. Open the terminal emulator on your computer.
3. Open a connection to the USB port on the device. Use these settings:
   - **Connection port**: Connect to the COM port associated with the USB cable connected to Digi Connect Sensor
   - **Baud rate or bits per second**: 115200
   - **Data**: 8 bit
   - **Parity**: None
   - **Stop**: 1 bit
   - **Flow control**: None
4. Use the magnet to wake the Connect Sensor.
5. Type the CLI command. For a list of available commands, see CLI Commands.
6. Press **Enter**.

   Note The Connect Sensor waits 30 seconds from when you pressed **Enter** to begin processing the command.

7. (Optional) If you entered a **custom** command, you can use the **activate** command to process the custom command immediately, rather than waiting 30 seconds.
   a. Type the CLI command: **activate**
   b. Press **Enter**.
8. When the Connect Sensor has processed the CLI command, the device goes to sleep. The following line displays in the terminal program when the device is sleeping:

   Zzz...
9. Close the terminal program.
10. Disconnect the USB cable from the Connect Sensor and the computer.

activate

Activate custom settings. Enter this command after you enter a **custom** command to activate the **custom** command immediately, rather than wait 30 seconds.

This command works with:

- **custom apn=<*apn*>**: Configure the APN.
- **custom clear**: Reset any configuration changes you have made using any of the **custom** commands.
- **custom iot=catm1**: Change the connection type to a Cat-M1 connection.
- **custom iot=nbiot**: Change the connection type to an NB-IoT connection.

For instructions on how to use the command, see Use a CLI command to configure a Connect Sensor.

Syntax

```
activate
```

Parameters

None

custom clear

Reset any configuration changes you have made using any of the **custom** commands. The configurations revert to the original settings.

This command works with:

- **custom apn=<*apn*>**: Configure the APN.
- **custom iot=catm1**: Change the connection type to a Cat-M1 connection.
- **custom iot=nbiot**: Change the connection type to an NB-IoT connection.

For instructions on how to use the command, see Use a CLI command to configure a Connect Sensor.

Syntax

```
custom clear
```

Parameters

None

custom apn=<*apn*>

Configure the APN.

Each Connect Sensor has a SIM card supplied by Digi installed by default, but you can choose to replace the Digi-provided SIM card with your own SIM. If you do, you are required to enter the APN name, and may be required to enter APN access information.

The SIM card carrier should provide these elements:

- **APN name**: This is always required.
- **APN access information**: These items may be required by the SIM card carrier, and will be provided to you by the carrier: User name, password, and PIN number.

Using the CLI to update the APN is one step of a larger process. For complete instructions, see Replace the SIM card and change the cellular network settings from the CLI.

You can update the APN profile configuration if needed, but do so with caution. Any changes made to the APN Profile configuration may cause the device to no longer connect to the internet. Digi recommends making changes only when you have physical access to the device.

Syntax

```
custom apn=<apn>
```

```
custom usr=<usr>
```

```
custom pwd=<pwd>
```

```
custom pin=<pin>
```

Parameters

apn: Name of the APN.

user: The user name associated with the APN.

pwd: The password associated with the APN.

pin: The PIN associated with the SIM card.

custom iot=catm1

You can use this command to configure your device to connect to the Cat-M1 cellular network if it has been configured to connect to the NB-IoT network.

For best results, you should update the network connection option in Digi Axess first, and then use the **custom iot=catm1** command to configure the device.

For an example, see Change the connection from NB-IoT to Cat-M1.

Syntax

```
custom iot=catm1
```

Parameters

None

custom iot=nbiot

By default, the Connect Sensor is configured to connect to the Cat-M1 cellular network. If the Connect Sensor is deployed in an area without Cat-M1 cellular service, the device won't be able to connect to the cellular network. You can switch the network connection option for the device from Cat-M1 to NB-Iot, which will allow a cellular connection to the device.

For best results, you should update the network connection option in Digi Axess first, and then use the **custom iot=nbiot** command to configure the device.

For an example, see Change the connection from Cat-M1 to NB-IoT.

Syntax

```
custom iot=nbiot
```

Parameters

None

fwupdate

Use this command to update the Connect Sensor firmware.

For instructions on how to use the command, see Use a CLI command to configure a Connect Sensor.

This command should be used only if you are unable to update the device's firmware from Digi Axess. In this situation, you should contact Digi support for assistance.

Syntax

```
fwupdate
```

Parameters

None

status

Use this command to review device status information. This command can be used to help with local debugging.

Basic information about the device is displayed, with items such as device type, device ID, firmware version, battery life percentage, and temperature. Additional information about the SIM card, carrier details, and connection history is included.

For instructions on how to use the command, see Use a CLI command to configure a Connect Sensor.

Syntax

```
status
```

Parameters

None

Legacy device: Connect Sensor+

The Connect Sensor+ with Digi Axess (CSENSE-S210) has been replaced by the Digi Connect Sensor XRT-M (CSENSE-M210) and is now End of Life (EOL). The replacement product, CSENSE-M210, offers a more robust exterior enclosure, a protected board, dual batteries, and an integrated antenna. The change was effective immediately as of the notification date, 11/25/2024.

The information in this section contains information specific to Connect Sensor+ with Digi Axess (CSENSE-S210) when using Digi Axess. Otherwise, all other information in this document is applicable to the Connect Sensor+.

Applicable hardware

SKU	Description
CSENSE-S210	Connect Sensor+, LTE Verizon (Digi Axess)

Safety information

- Safety notices
- Technical specifications

Assemble and power your Digi Connect Sensor+ devices

This documentation is in the Digi Connect Sensor Family Hardware Guide.

- Assemble the Connect Sensor+ hardware

Manually define the location of a Digi Connect Sensor+ device

The physical location for a Connect Sensor+'s location can only be determined by manually defining the device's longitude and latitude coordinates in the **System Location Page**. The coordinates cannot be determined automatically.

To specify the physical location

1. Determine the latitude and longitude coordinates for the device's location. You can use the physical address of where the device is located and a mapping application to discover the coordinates.

2. Access the device's web UI from the Device Summary page.
3. In the **Interfaces** section, click **Location Source**. For information about the fields on this screen, see Configure the location coordinates for a Connect Sensor.
4. Click **Manual Override**. The **Manual Location Override** section displays.
5. In the **Latitude** and **Longitude** fields, enter the latitude and longitude coordinates for the device's location.
6. Click **Update**.
7. Click **OK** to confirm update.

Notification types

The tables below explain the types of notifications that may be sent to a Connect Sensor+

Stale Device Notifications alert

A stale device notification is sent when the device is no longer connecting to Digi Axess. The time threshold can be configured at the device and device group level, and defaults to 24 hours.

- Device not connecting to Digi Axess

Battery alerts

A battery alert is sent when this battery condition is met.

- Battery Replacement Required

Device Configuration alerts

A device configuration alert is sent when any of the conditions shown below are met.

- Device Configuration Installation
- Device Configuration Install Initiated
- Device Configuration Completed
- Device Configuration Completed with Errors

Firmware Update alerts

A firmware update alert is sent when any of the conditions shown below are met.

- Firmware Update Initiated
- Firmware Update Completed
- Firmware Update Completed with Errors
- Firmware Update Cancelled

Manually wake the Connect Sensor+

If Connect Sensor+ is powered and all LEDs are off, it is in sleep mode. You can wake the device manually, if needed.

Note The LED indicators only light up when you wake the device by manual intervention: pressing the Wake button inside the device or using a magnet. When the device automatically wakes up as scheduled to take and push readings, the LEDs do not light up since no one may be physically present to see the LED start-up sequence. See Connect Sensor LED start-up sequence.

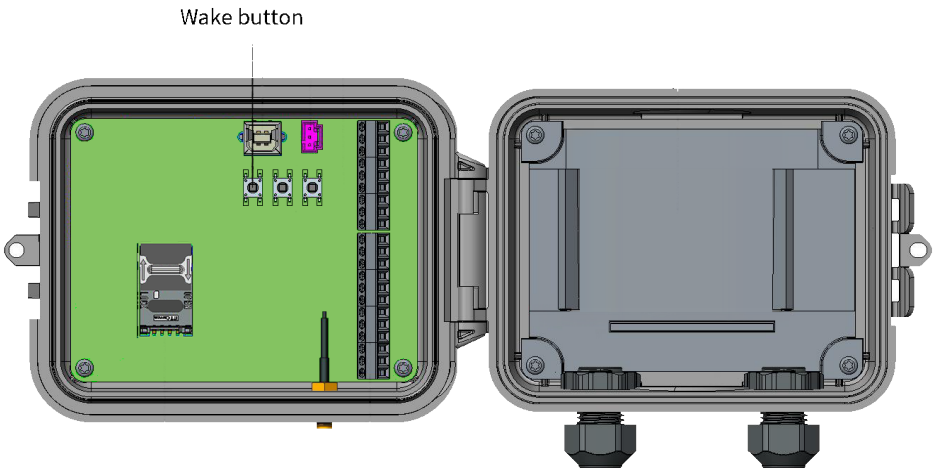
Manually wake the device: Magnet swipe

You can swipe a magnet across the top of the device to wake the Connect Sensor+.

Manually wake the device: Wake button

You can wake the Connect Sensor+ by pressing the Wake button inside the device.

1. Open the device.
2. Press the Wake button inside the device.



3. When you wake Connect Sensor+, the LED indicators light up in a predetermined sequence as the device wakes up.
4. Close the cover on the device. The cover snaps into place.

Note The Connect Sensor+ enclosure may require some force to close. This is intended as part of the design to ensure a robust seal in damp or dusty environments. For details about closing the Connect Sensor+ enclosure, see Closing the Connect Sensor+.

Connect Sensor+ LED start-up sequence

The LED indicators light up in a predetermined sequence when you manually wake the Connect Sensor+.

1. Press the Wake button inside the device or swipe a magnet across the device.
2. The cellular and battery LEDs light up purple for one second and then turn off.

3. The sensor LED blinks green as readings are taken and then turns off when readings are complete.
4. If Bluetooth is enabled, the Bluetooth LED blinks yellow for 30 seconds. If a Bluetooth device is attached, the Bluetooth LED turns solid and remains lit.

   Note If Bluetooth is not enabled, the Bluetooth LED does not light up.

5. Connect Sensor+ takes and pushes data readings.
   a. The cellular LED blinks red while the Connect Sensor+ attempts to bring up the modem and connect to the cellular network.
   b. The Connect Sensor+ takes a battery life reading. The battery LED blinks either blue or red, depending on the status of the battery life.
   c. The cellular LED blinks blue until the connection to Digi Axess is complete.
   d. The Connect Sensor+ pushes the data. When the data transfer is complete, the cellular LED is solid blue.
   e. After a few seconds, the cellular LED turns off.

Closing the Connect Sensor+

All Connect Sensor+ products are shipped to you closed. You will need to open the device to install the battery, the SIM card, and to wire third-party sensors to the Connect Sensor+ I/O interface. After you have opened the enclosure, it may require some force to close. This is intended as part of the design to ensure a robust seal in damp or dusty environments.

Note Using gaskets, seals, glands or plugs other than those supplied by Digi may void certifications and regulatory approvals.

If you have problems closing the enclosure after either of these operations, please follow these instructions:

1. Ensure the gasket is fully seated in the groove on the enclosure.
2. Place the device on a flat, stable surface.
3. Apply pressure to the top of the Connect Sensor+ and pull the front door clip closed with your finger.