



Cumulus Mobile App (CMA) Guide

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INTRODUCTION

The Cumulus Mobile App (CMA) is the field-facing application of the Cumulus Quality Execution System. It is used by foremen, pipe fitters, electricians, quality inspectors, and other field personnel to execute step-by-step inspection and construction workflows, record work completions, interact with Bluetooth-connected smart tools, and capture photographic evidence – directly from a tablet or mobile device on the job site.

CMA is designed for industrial environments: noisy job sites, gloved hands, low light, and variable connectivity. All core workflows are available offline and sync automatically when a connection is restored. Data captured in the CMA is immediately available in Control Center for super users to review, report on, and action.

This guide covers the **Cumulus Mobile App version 6.0.5**. It walks through device setup, day-to-day navigation, executing workflows, and the full range of features available to field users and site administrators. This guide assumes the reader has access to a configured Cumulus site. For information on configuring workflows, managing users, and administering your site, refer to the Cumulus Control Center User Guide or email support@cumulusds.com for more information.

SYSTEM REQUIREMENTS

Before installing or using the CMA, ensure the device meets the following requirements.

Supported App Versions

Cumulus supports CMA versions released within the last six (6) months. As of March 2026, the oldest supported version is v5.5.12. Running an unsupported version may result in degraded functionality and is not covered by Cumulus support.

**note this guide is covers CMA 6 series, please seek your Cumulus customer support professional for older guide assistance*

Supported Operating Systems

The following operating system versions are supported as of March 2026:

- **Android:** versions 14, 15, and 16
- **iOS:** versions 18 and 26



Cumulus supports mobile operating systems for which the device manufacturer provides regular security updates. If your device is running an OS version not listed above, Cumulus Digital Systems cannot guarantee the stability or functionality of the CMA and does not provide support for it.

Cumulus does not support beta versions of mobile operating systems. Support for a new OS version is typically added shortly after the manufacturer's general release date.

For further assistance, contact Cumulus technical support at support@cumulusquality.com.

GETTING STARTED

Setting up the CMA on a new device is a Four-part process. First, a site administrator generates a site configuration QR code (commonly referred to as a “binding token”) from Control Center. Second, the device is configured by scanning that site configuration QR code, and users log in using individual login QR code also generated from Control Center (Or enters a username and password).

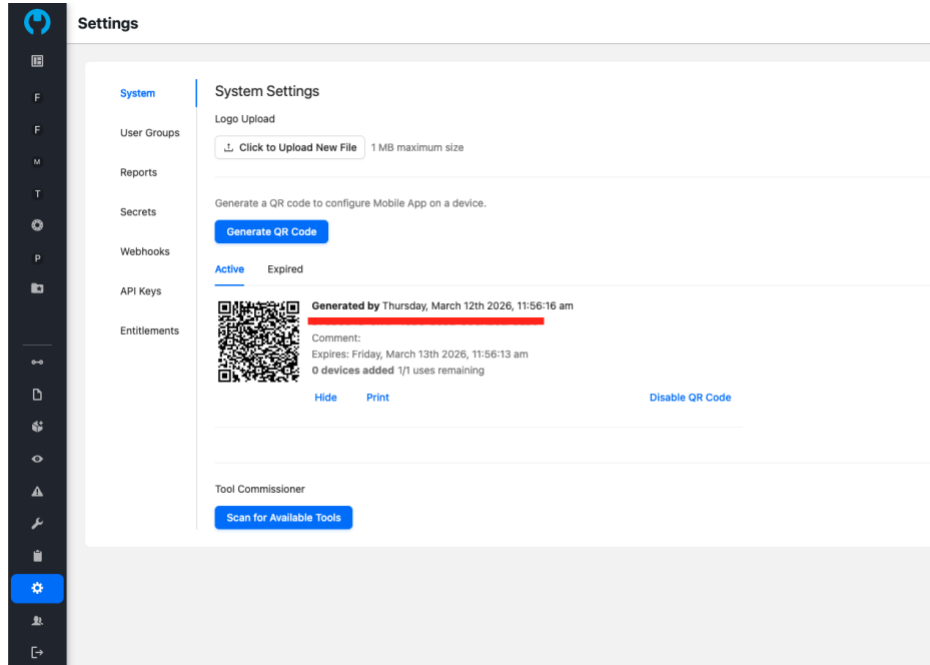
Part 1: Generating the Site Configuration QR Code

This step is completed by a site administrator in Control Center. You will need Settings access to complete this step. Contact your site administrator if you do not have access.

- Log in to Control Center and select **Settings** from the main navigation.
- Select **Generate QR Code**.
- Enter the **Number of Uses** – how many devices this code can configure.
- Enter an **Expiration Date** for the code. Codes can expire between 24 hours and one month from generation. *

Note: the expiration applies only to the initial device setup – once a device is configured, it does not expire.

- Select **OK**. A confirmation message is displayed and the QR code is generated.
- Select **Print** to save or export the QR code for distribution.



Part 2: Configuring the Device

This step is completed on the tablet or mobile device being added to the site.

- Install the Cumulus Mobile App from the App Store or Google Play Store, then launch it.
- On the launch screen, select **Get Started**.
- When prompted, select **OK** to grant the app camera access. Camera access is required – the app cannot complete setup without it.
- When prompted, select **OK** to grant the app Bluetooth access. Bluetooth access is required to connect tools with the application.
- When prompted, select **Allow** to grant notification permissions. Notifications are used to alert users to sync status and pending actions.
- Point the device camera at the site configuration QR code generated in Part 1. The site location is displayed on screen after a successful scan.
- Select **Confirm Changes**. The user login screen is displayed.

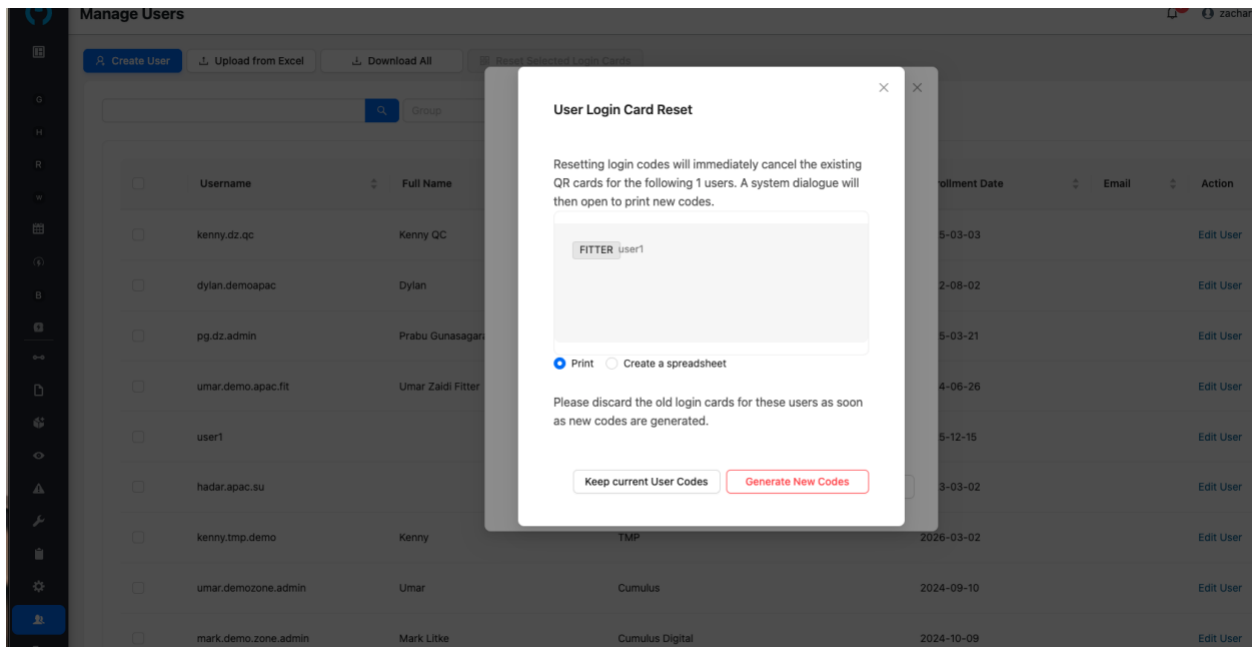
Part 3: Generating User Login QR Codes

User login QR codes are generated in Control Center and can be created for individual users or entire user groups at once. You will need Control Center access to complete this.

Multiple QR codes at once:



- In Control Center, select **Manage Users**.
- You will have to have Mobile Group selected from the drop down in the Group box.
- Check the selection box next to each user (or user group) you want to generate a login code for.
- Select **Reset Selected Login Cards**.
- Review the list of selected users in the confirmation dialog, then select **Generate New Codes**.
- Distribute the login QR codes to the relevant users.



Part 4: Logging In

Each user logs in to the CMA using a personal QR login card generated in Control Center. Your Site URL is displayed at the top of the login screen to confirm the device is pointing to the correct site. **Users may also use a user name and password option by selecting the username and password option.**

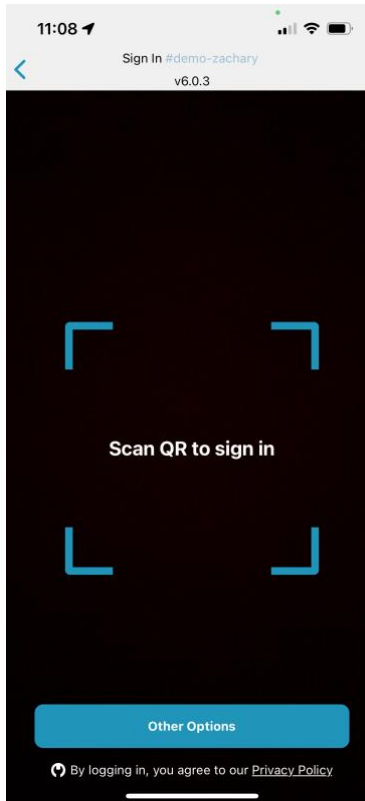
Important: Your initial login must be completed while the device has an active internet connection. The app cannot authenticate for the first time in offline mode.

- On the login screen, select **Have a QR Code? Log in Here**.
- Select **Scan QR to Sign In** and point the camera at your personal QR login card.
- The app authenticates and loads your workflow data. The **Workflows** screen is displayed.



Continue with Password

Change Site





Note if you select the change site button you will have to return to step one

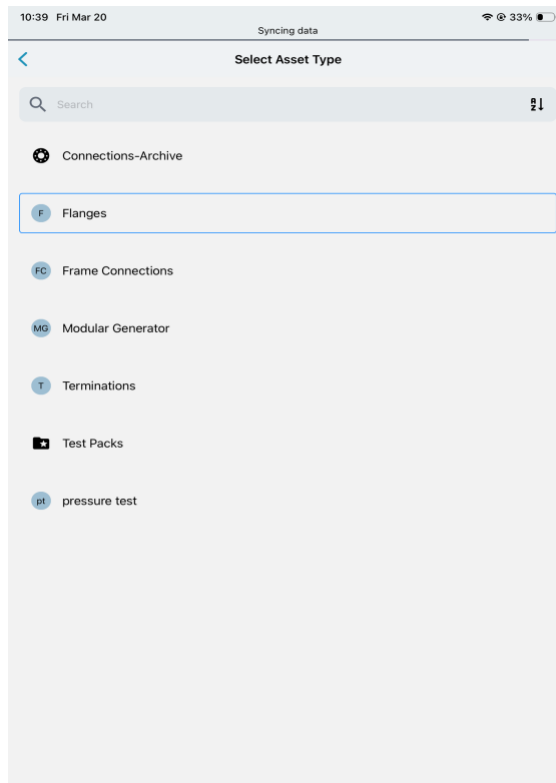
WORKING OFFLINE

The CMA is designed to function in low-connectivity and no-connectivity environments. You can execute workflows, record completions, and capture photos without an active internet connection. All data is stored locally on the device and uploaded automatically when connectivity is restored.

Starting an Offline Session

To work offline, complete the following steps before leaving the coverage area:

- Log in to the CMA while the device has an active internet connection. Authentication requires a live connection.
- Allow the app to fully sync. The sync indicator at the top of the screen confirms when all data has been downloaded to the device.
- You can now turn off Wi-Fi or move to an area without connectivity. The app continues to function normally.



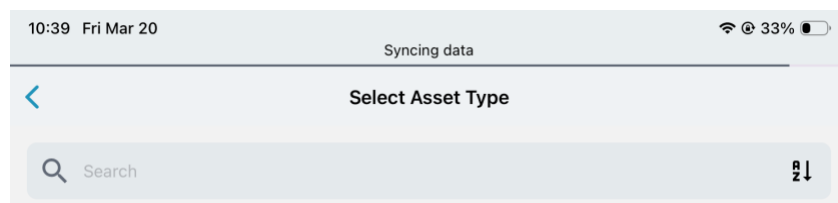


Ending an Offline Session and Syncing

At the end of your shift or when you return to a coverage area, sync your completed work back to the server:

- Reconnect the device to Wi-Fi or a mobile network.
- The CMA detects the connection and automatically begins uploading pending records. A **pending sync count** is displayed on the Assets index while the upload is in progress.
- Wait for the sync to complete before closing the app.

Do not force quit or exit the app while offline work is pending sync. Closing the app before sync is complete may result in data loss. Always confirm the pending sync count has reached zero before closing.



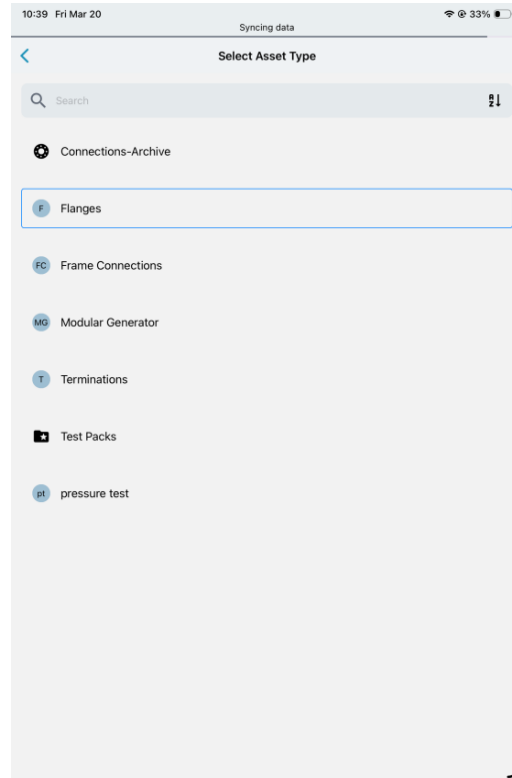
NAVIGATING THE APP

Selecting an Asset Type

When you first log in, the **Select Asset Type** screen is displayed. This screen lists all Asset Types available to you on the current site.

- Use the Initial tab to see Asset Types that already have records assigned to you.
- Use the **search bar** to filter the Asset Types list by name.
- Select a workflow to open the Asset index for that Asset Types.

Examples of typical Available Asset Types: Connections, Electrical Busway, Equipment, Instrumentation, Cable, and Test Packs, depending on your site configuration.



Switching Asset Types

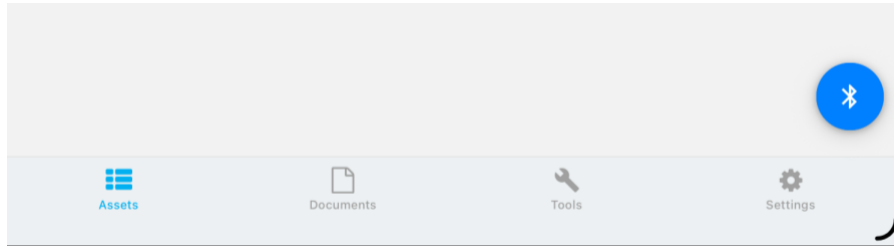
You can switch to a different Asset Type at any time from the Asset screen.

- Select the change Icon at the top of the Assets screen to open the Asset Types selector.
- Use the **search bar** to filter available Asset Types by name.
- Select the Asset Types you want to switch to.

Bottom Navigation Bar

The bottom navigation bar provides access to the following areas:

- **Assets** – The list of work records (connections, generic entities, or test packs depending on your site configuration).
- **Documents** – Drawings and documents associated with your site.
- **Settings** – Device settings, sync status, and sign out.
- **Tools** – The tools page on CMA will allow field users an inside look to what has been configured in the Cumulus Control Center. This gives them a leg up on what tools are available for use in the field.



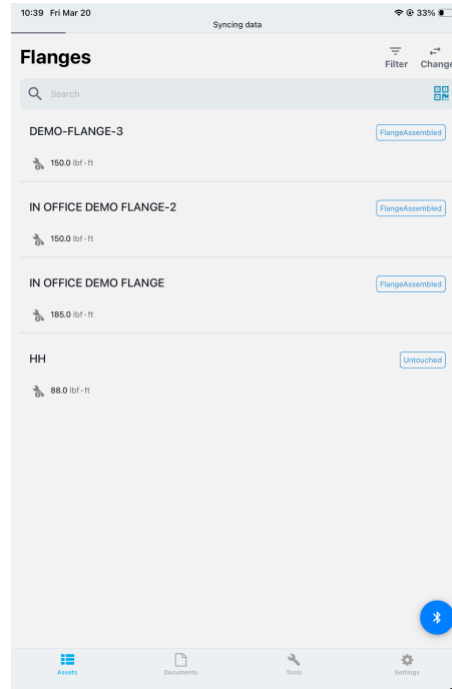
ASSETS

The Assets tab is the main index of work records on your site for a particular Asset type. Depending on how your site is configured, records may be referred to as connections, flanges, assets, or test packs. All record types share the same index layout and filtering controls.

Assets Index

The Asset index displays all records available in your current Asset Types. From this screen, you can:

- Search for a record by name or any field value using the **search bar**.
- Scan a QR code to jump directly to a record – select the **QR code icon** on the search bar.
- Filter and sort records by status, or any other property using the **Filter** button.
- View the connected tool status – the **tool indicator button** Turns Green when an active tool is connected.
- Swipe down on the list to refresh and pull the latest records from the server.
- Multi-select records to assign, schedule, or attach documents in bulk.



Searching , Filtering, and Scanning a tag

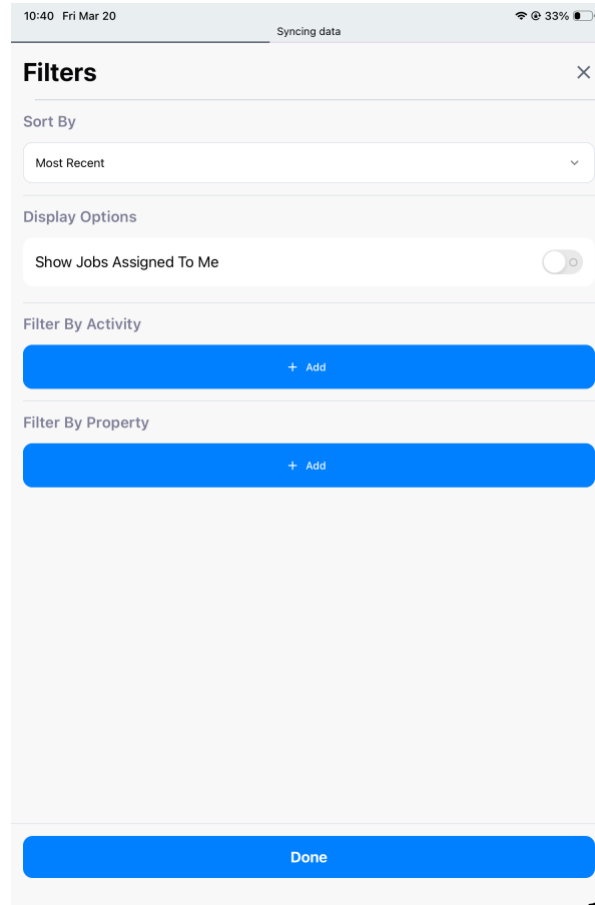
CMA supports several ways to find the record you are looking for.

Search by All Fields

The search bar searches across all available properties for the selected Asset Type.

Filter by Activity

- Select the **Filter** button to open the activity filter panel.
- Select a status to filter the index to records with that activity status. A **chip** appears on the index confirming the active filter.
- Select the **X** on the filter applied, or select **Load All** in the filter panel, to clear the filter.



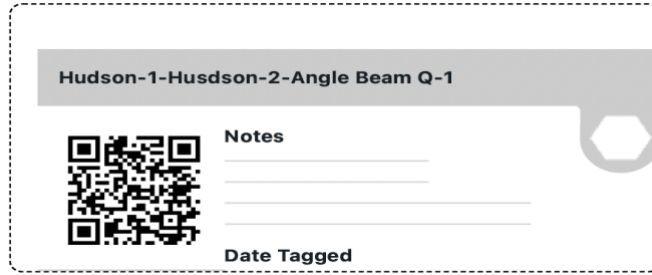
Filter by Property

You can add one or more property filters to narrow the index to records matching specific field values.

- Select the **filter icon** to open the property filter panel.
- Select **Add Filter** and choose the property you want to filter by.
- Enter or select the value to filter on.
- Repeat to add multiple filters. All filters are applied together (AND logic).
- Select **Clear Filters** to remove all active property filters.

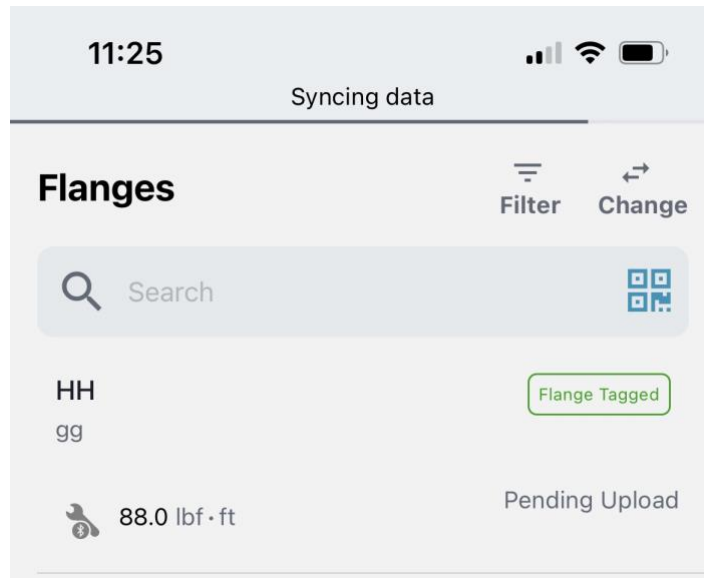
Scanning a Tag

The Asset search bar allows you to scan previously configured QR codes (created from Control Center) for individual assets to quickly jump users to that specific Asset.



Pending Upload

Each record on the Asset index displays its current sync status. Records that have not yet uploaded to the server are marked with a **Pending Upload Indicator**. Once a record has fully synced, it transitions to a **blue border**, indicating it is the most recently worked record. A pending sync count is also displayed at the top of the screen.



Asset Overview

Selecting a record from the Assets index opens the Asset Overview. This screen shows all details for the record, including its current operation status, specifications, attached documents, history, and any child associations.

For records, the Asset Overview displays the Properties of that asset as organized in the Properties section of the workflow.

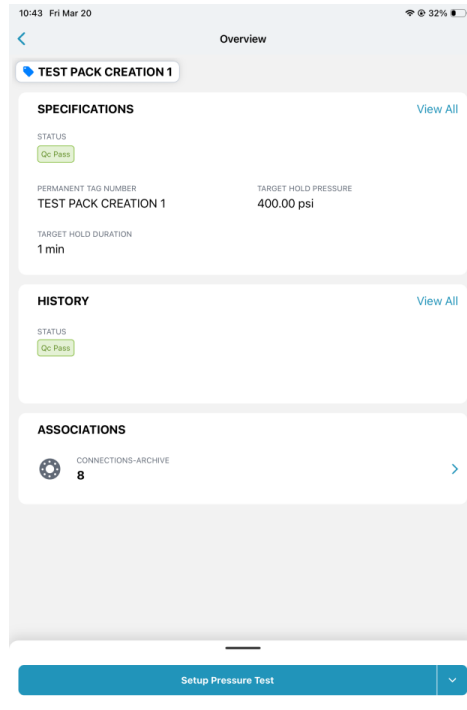
From the Asset Overview you can also access:

- **History** – a full log of all operations and status changes for the record.



- **Documents** – drawings and isometric files associated with the record.
- **Child Associations** – any child records linked to this connection.
- **Location** – the physical location data for the record ***if configured***.

Note: Generic entities and test packs list all configured properties in full. All record types display consistent sections for history, document associations, and child entities where applicable.

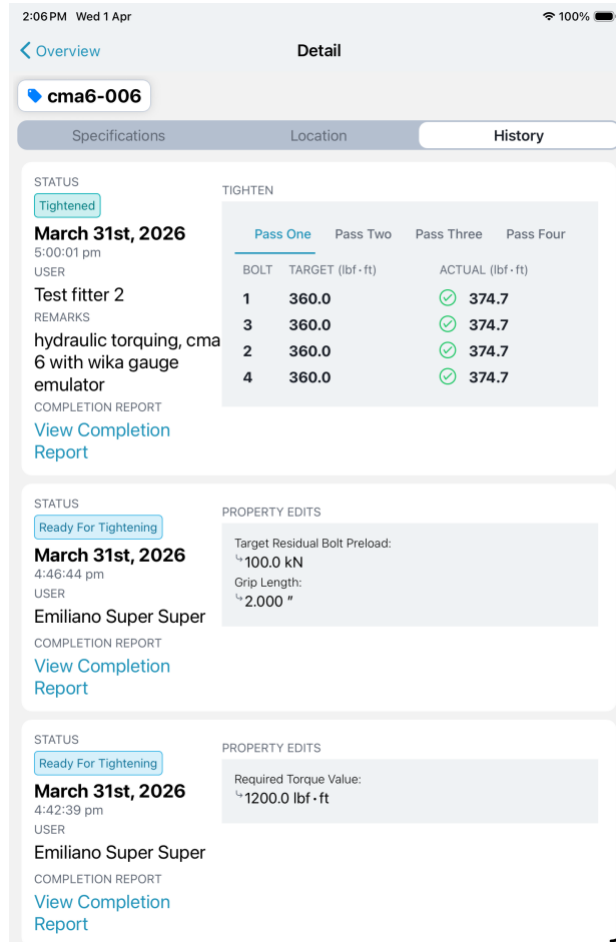


History

The Asset History page shows a full log of all operations and status changes for a record. Select **History** from the Asset Overview to access it.

The history view displays operation completions, property edits, and status transitions. For connection records, a **property edits summary** is included alongside the standard history entries.

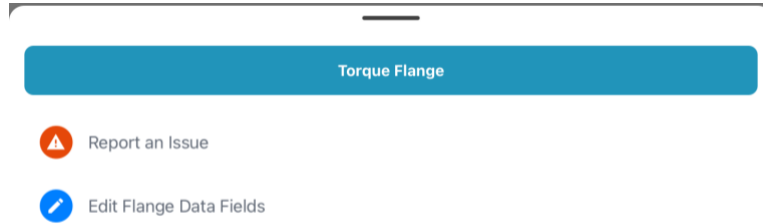
Note: The permission "App history Viewers" must be enabled for your user group to see the Histories tab. **Users also need to be online to view Histories*



Reporting an Issue

If an Asset cannot be worked or needs to be flagged for review, you can report an issue and mark it as invalid directly from the Asset Overview.

- From the Asset Overview, select up carrot icon next to the **workflow operation button**.
- Select **Report**
- Enter notes describing the issue in the notes field.
- Select **Mark as Invalid** to confirm. The connection status is updated and the record is flagged for follow-up in Control Center.



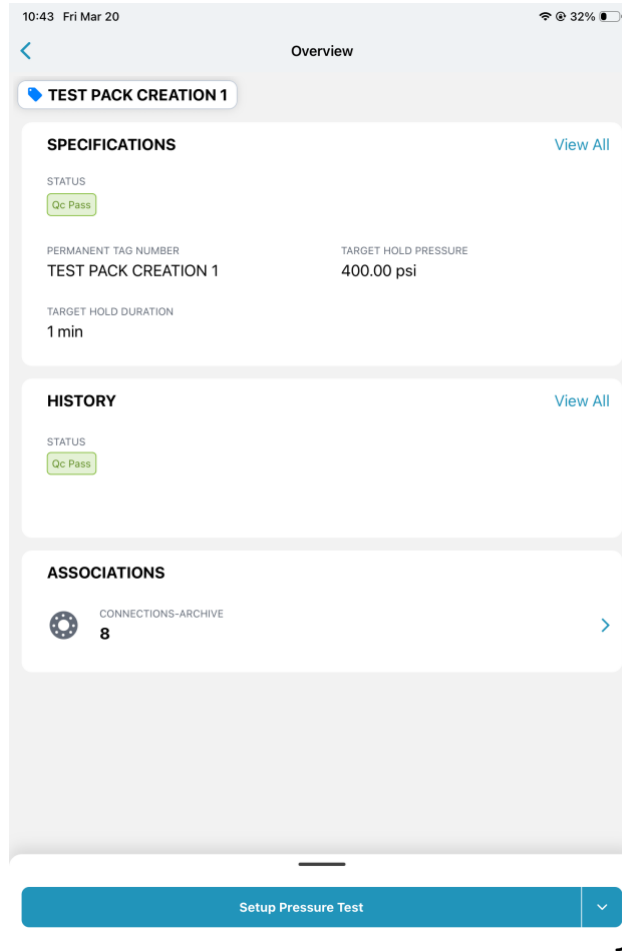
EXECUTING A WORKFLOW

Workflows are the step-by-step procedures you follow to complete an operation on an asset record. Each operation in a workflow contains one or more action steps – such as recording data, taking photos, or running a torquing sequence. Operations are completed in sequence, and each completion is recorded in the asset history.

Your site may use different workflow names or a different number of operations depending on how it is configured in Control Center. The principles and navigation are the same regardless of workflow configuration.

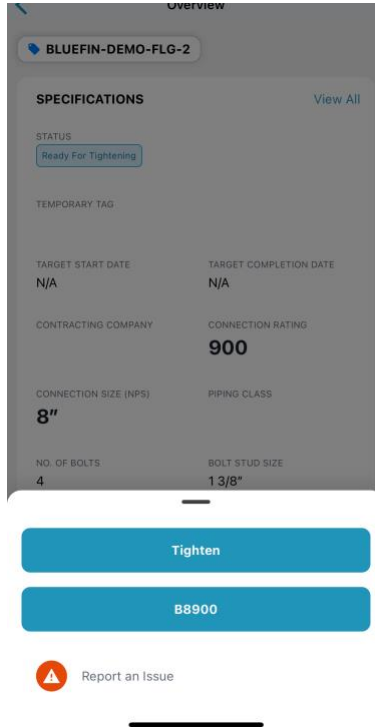
Starting an Operation

- Open a record from the Asset index.
- The Asset Overview displays the current operation and its status.
- Select the operation button to begin executing its steps.
**Note; If the displayed operation is not the one you need to conduct , select the up carrot next to the operation button or pull the actions up to see more options*
- Complete each step in order. Steps that require tool input, data entry, or photo capture are described in the Action Types section below.
- When all steps are complete, confirm to record the operation outcome. The record advances to the next operation in the workflow sequence.



Multiple operations

Some operations have more than one option for operations to perform for a given condition and status of an asset. The operation button will only show the first configured option but the up arrow to the side will give you more options to perform if necessary.



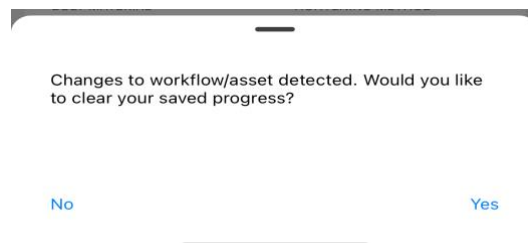
Workflow Conditions

Some operations are conditional – they only appear when specific criteria are met on the record.

Clearing Saved Operation Progress

If a workflow configuration change is detected after you have already started an operation, the CMA gives you the option to clear your saved progress and restart the operation with the updated configuration.

- When a workflow change is detected, a prompt is displayed offering to clear the saved progress for the affected operation.
- Select **Clear Progress** to reset the operation and begin again with the current workflow configuration.





Action Types

Each step in an operation is one of the following action types. The steps available in your workflow depend on how it was configured in Control Center.

Checklist

Checklist steps present a list of questions or inspection items to confirm. Select each item to mark it complete.

The screenshot shows a mobile application interface for a checklist step titled "Flange Breakdown". At the top, the time is 12:27, and there are navigation options for "Back" and "Actions". A progress indicator shows 0 out of 5 steps completed. The checklist contains five questions, each with three response buttons: "Yes", "No", and "N/A".

- Question 1: "Have the studs been retrieved from the 'Job Box'?" (Yes is selected)
- Question 2: "Does the bolt/nut thread surfaces have any damage, scoring, cupping, or corrosion?" (No is selected)
- Question 3: "Have all studs been cleaned, wiped down and penetrating oil been applied?"
- Question 4: "Is there any defects with the groove ring on the mating flange?"
- Question 5: "Have both groove rings been properly cleaned and free of debris?"

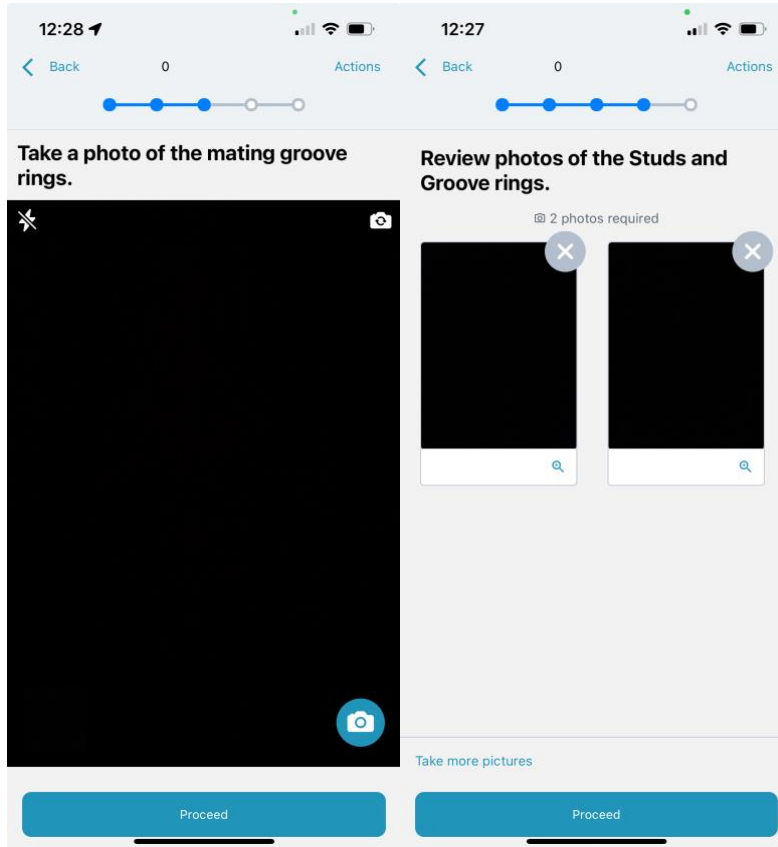
A "Proceed" button is located at the bottom of the form.

Take Photos

Photo steps require you to capture one or more images using the device camera. Photo capture is mandatory – subsequent steps that depend on photo evidence cannot be completed until the required photos are taken.

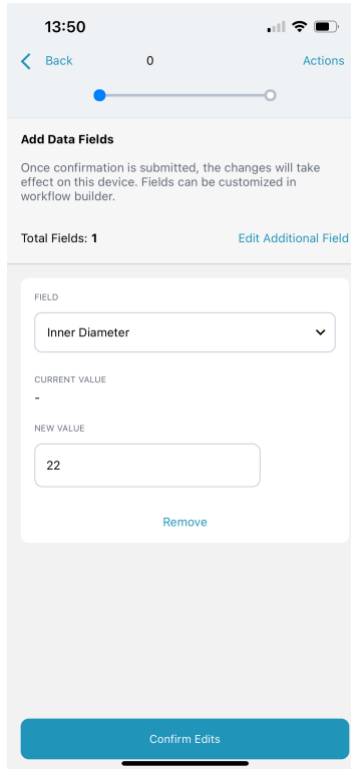
- Capture the required photos. The step is marked complete when the minimum number of required photos has been taken.

All take photo steps must have a review photo step configured with it



Data Entry

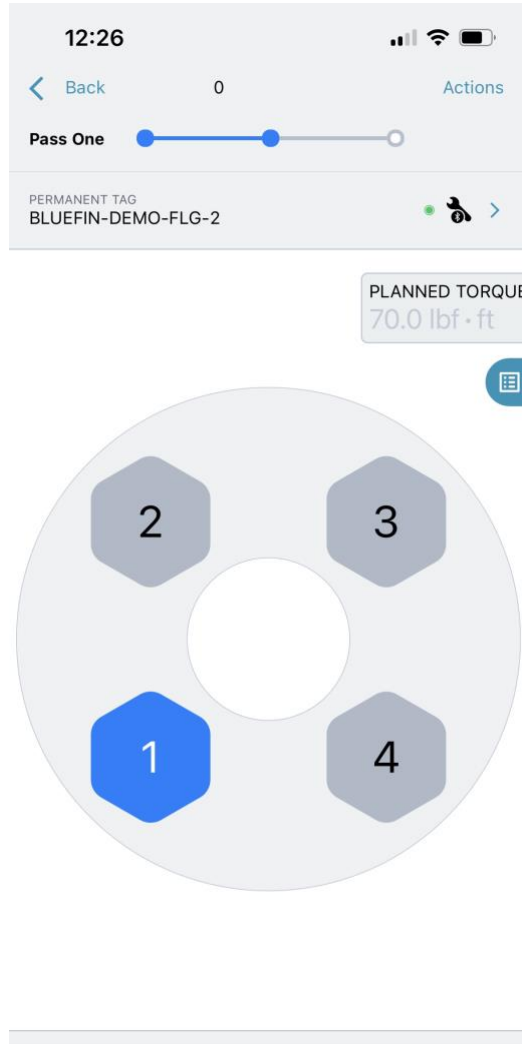
Data entry steps prompt you to enter one or more field values directly into the CMA. Enter the requested values and select **Save** to proceed.



Smart Torquing Enhanced (Bolt Torquing)

Smart Torquing steps guide you through a bolt tightening sequence using a Bluetooth-connected torque tool. The CMA displays the bolt pattern SVG for the asset and indicates the tightening sequence in real time. See the Tightening section above for a full walkthrough of the tightening process.

- Ensure the torque tool is paired and the **tool indicator** shows a connected status before starting.
- The bolt pattern SVG is displayed. Bolts highlight in sequence as each one is torqued to the target value.
- The step is complete when all bolts have been torqued to the required value across all passes.
- Advanced torquing settings (target values, pass counts) are configured in Control Center Workflow Builder and cannot be edited in the CMA.



Pressure Testing

Pressure testing steps allow you to record results across test phases in a single or multiple operations.

- Each phase is presented in sequence. Enter the target pressure, hold duration, and actual pressure reading for each phase.
- Additional phases can be added or modified directly in the CMA during execution.
- All phase results are recorded in the asset history.

Bolt Tensioning

Bolt tensioning steps appear in the CMA as part of the operation sequence. Tensioning steps do not display editable fields in the CMA – all bolt tensioning configuration is managed in Control Center Workflow Builder. For a full walkthrough, see the Cumulus Bolt Tensioning guide for further details.



Hydraulic Tensioning

Hydraulic tensioning steps guide you through a bolt-stretching procedure using hydraulic tensioning equipment. The CMA displays the bolt pattern and sequence, and records tensioning values for each bolt. For a full walkthrough, see the **Cumulus Hydraulic Tensioning Guide** for further details.

Insulation Resistance Test

Insulation resistance test steps capture megohm readings for electrical insulation testing. The CMA prompts you through each test point and records the measured resistance values. For a full walkthrough, see the **Cumulus Insulation Resistance guide** for further details.

Low Resistance Test

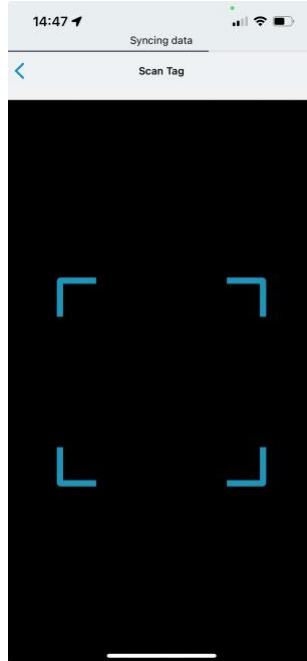
Low resistance test steps capture micro-ohm readings for continuity and contact resistance testing. The CMA prompts you through each test point and records the measured values. For a full walkthrough, see the **Cumulus Low Resistance Guide** For Further details.

Attach Document

Attach Document steps allow you to attach a file – such as a PDF, drawing, or certificate – directly to the asset record as part of the workflow. Select the attach button, choose or capture the file, and confirm. The attached document appears in the Documents tab of the asset record.

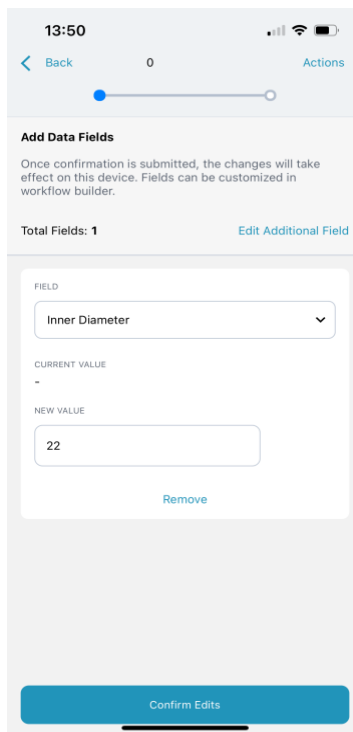
Capture Tag

Capture Tag steps prompt you to scan or photograph a physical tag (such as a nameplate, QR code, or barcode) on the asset. The captured image is stored with the asset record for traceability.



Edit Single Data

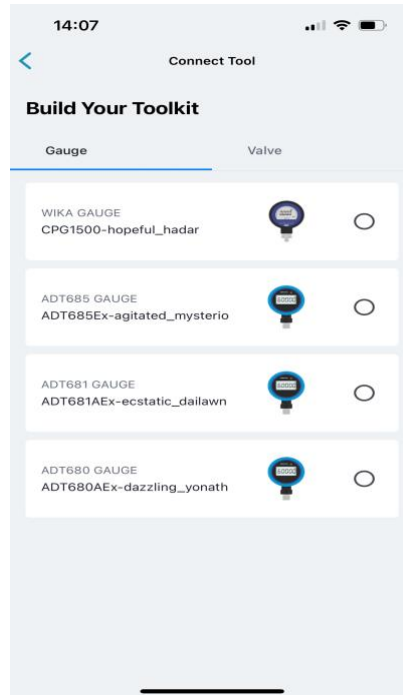
Edit Single Data steps allow you to update a single property value on the asset record mid-workflow. The CMA displays the field name and its current value; enter the updated value and confirm to proceed.





Tool Selection

Tool Selection steps require you to select a tool before the workflow can continue. The CMA opens the Connect Tool screen where you choose from available Bluetooth-connected tools (gauges, valves, torque wrenches, etc.). Once a tool is selected and connected, the workflow proceeds to the next step. See the Tools section of this guide for more on connecting tools.

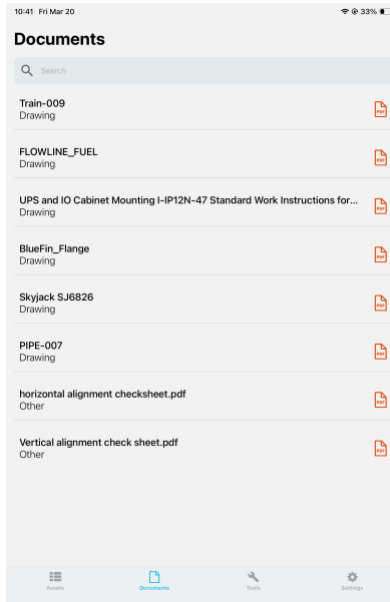


DOCUMENTS

The Documents tab provides access to all drawings and documents associated with your site. It displays both files from the Cumulus document management system and legacy drawings for connection entity types.

Viewing Documents

- Select **Documents** from the bottom navigation bar.
- Select a document card to open the file using the device's default viewer for that file type.
- Documents associated with a specific connection can also be accessed from the **Documents** section of the Asset Overview.



Deleting Documents

- Documents in the Cumulus document management system can be deleted by performing a Long hold the cards and tapping the **trash icon**.
- Legacy drawings cannot be deleted from the CMA or from Control Center.

Note: Selecting the trash icon on a legacy drawing displays a message confirming that legacy drawings cannot be deleted.

TOOLS

The CMA provides two ways to manage Bluetooth-connected tools: the Connect a Tool button on the Assets index, and the dedicated Tools page accessible from the bottom navigation bar.

Connect a Tool (Assets Index)

The green Bluetooth floating action button in the bottom-right corner of the Assets index lets you connect a tool at any time – outside of a workflow. Tap the button to expand two options:

- **New Asset** – Create a new asset record directly from the CMA.
- **Connect Tool** – Opens the Build Your Toolkit screen where you can pair a Bluetooth tool (gauge or valve) before starting a workflow.

When you select Connect Tool, the list of available Bluetooth connected tools appears.



Once a tool is connected, the floating action button on the Assets index turns green to indicate an active Bluetooth connection.

Tools Page

Select the Tools icon from the bottom navigation bar to open the Tools page. This page displays all tools that have been configured for your site in Control Center.

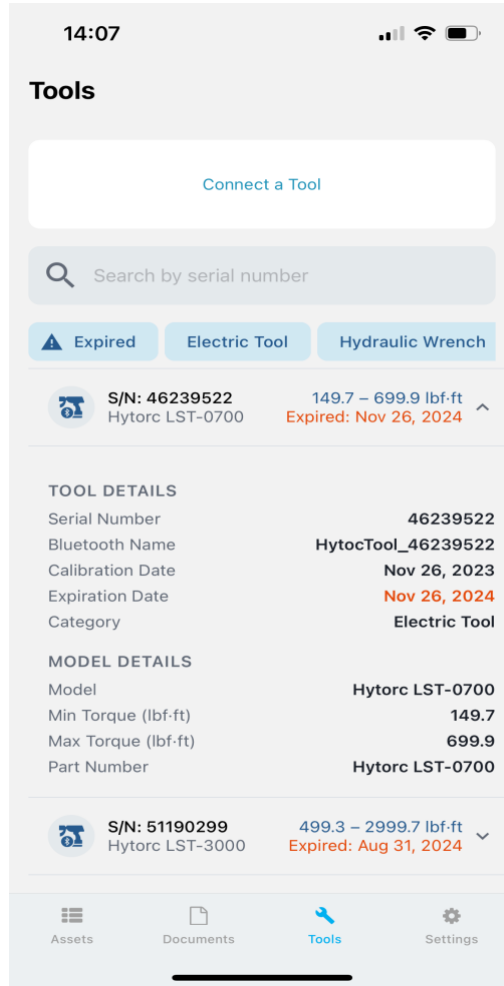
The Tools page includes:

- **Connect a Tool** – A button at the top of the page that opens the Build Your Toolkit screen to pair a Bluetooth enabled tool.
- **Search by serial number** – A search bar to quickly locate a specific tool by its serial number.
- **Filters** – Blue category tiles at the top of the list (e.g., Expired, Electric Tool, Hydraulic Wrench) that let you filter tools by type or status. Select a chip to apply the filter; select the X on an active chip to remove it. A Clear filters button appears below the chips when a filter is active, showing the total count of matching tools.
- **Tool list** – Each tool displays its serial number, model name, torque range (in configured units), and calibration expiration date. Tools with expired calibration show the expiration date in red. Select the expand arrow on any tool to reveal full details.

Expanding a tool reveals two sections:

- **Tool Details** – Serial Number, Bluetooth Name, Calibration Date, Expiration Date, and Category.
- **Model Details** – Model, Min Torque, Max Torque (in lbf·ft), and Part Number.

You can also connect a tool directly from this page by selecting the Connect a Tool button at the top.

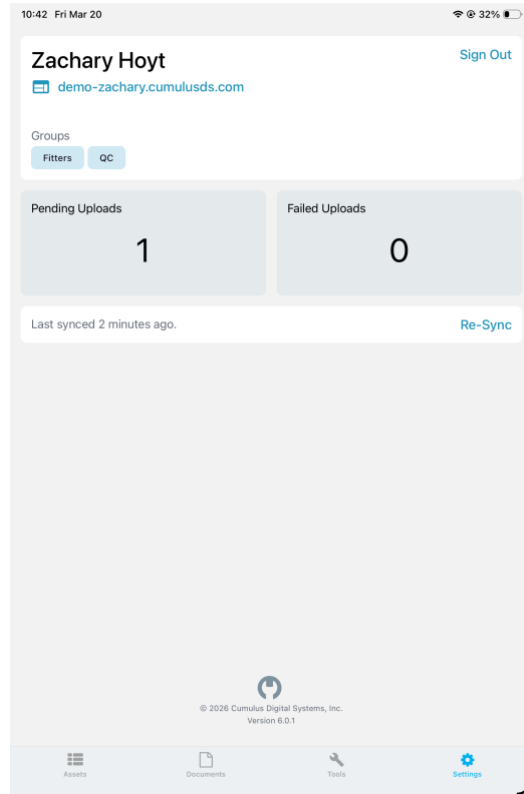


SETTINGS

The Settings page provides device-level configuration options, sync status, sign out, and – for users with the appropriate permissions – user management tools.

Accessing Settings

Select **Settings** from the bottom navigation bar.



Signing Out

Select **Sign Out** from the Settings page to log out of the current user session. The device remains configured for the site – the next user can log in by scanning their personal QR login card.

Pending Syncs

The pending sync counter will show the users the number of items they have withing the application left to be sent to the server , and collected as a work completion.

- **Failed uploads** – add a new view to the Mobile app to show users any work that did not upload properly. Items in the failed uploads do count toward your pending sync count, and automatically send a support ticket with logs to Cumulus support.

TOURS

[Content to be added – Tours section details forthcoming.]

SUPPORT



If you have questions pertaining to functionality covered in this documentation please contact Cumulus at support@cumulusds.com .