Algo Device Management Platform (ADMP)

User Guide

Table of Contents

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Algo Technical Support
1-604-454-3790
support@algosolutions.com

1 PRODUCT OVERVIEW

The Algo Device Management Platform (ADMP) is a cloud-based device management solution to manage, monitor, and configure Algo IP endpoints from any location. ADMP is used by service providers and end users to effectively manage Algo IP endpoints in large environments and across multiple locations and networks.

Devices must have firmware version 5.2 or higher installed to be managed with ADMP. To access all the latest ADMP features, devices must be on the most recent firmware version available.

2 SECURITY

Algo takes precautions to mitigate the risk of cyberattacks and built ADMP with the safety of your data and systems in mind. ADMP and Algo devices use mutual authentication to ensure that data transferred between ADMP and the device is fully encrypted. This means only Algo devices can be used with ADMP.

ADMP does not store any unencrypted passwords.

ADMP uses the following ports and protocols:

Destination	Type	Purpose	Protocol	Security	Port	Service
iot.cloud.algosolutions.com	TCP	Monitoring and management	HTTPS, MQTT, TLS	TLS 1.2	443	IoT
production-cumulus-configs.s3.amazonaws.com	TCP	Configuration	HTTPS, MQTT, TLS	TLS 1.2	443	File Services

3   SETUP

To use ADMP, you must set up your account, users, and licenses.

3.1   Account Tiers

There are three types of ADMP accounts:

Trial	A Trial account is a free 3-month account with access to 25 device licenses. To sign up for a trial account, fill out the form at https://www.algosolutions.com/admp-demo-license/.
Pro	A Pro account uses device licenses that have been purchased or renewed. Set up for a Pro account is done by an Algo Support team member after you've purchased device licenses. Device licenses may be purchased at https://www.algosolutions.com/product/admp/.
Perpetual	A Perpetual account is available for Algo Authorized Integrators. To learn more about the Algo Authorized Integrator Program, visit https://www.algosolutions.com/integrator/.

After you have signed up for a demo, purchased ADMP device licenses, or have become an Algo Authorized Integrator, an Algo Support Team member will reach out to set up account users.

3.2   Users

Two kinds of users can access an ADMP account:

Admin	Viewer

• An admin can access the following pages and perform actions where applicable.
 	
    o Dashboard
    o Devices
    o Configure
    o ZTP
    o Export
    o Settings
	• A viewer will only be able to view the following pages. Actions cannot be performed.
	
	    o Dashboard
	    o Devices
	    o Configure
	    o Export

The Algo Support team will be able to assist with adding new users, removing users, and updating user types upon request. There is no limit to the number of users you can have on an account. To add or remove users, the account owner should contact support@algosolutions.com for assistance.

3.3 Licenses

ADMP licenses are per device, not per person or account. Device licenses are purchased and renewed annually in bundles of 25. An account can have up to 10,000 licenses.

You may purchase additional device licenses through an Algo reseller, distributor, or on the Algo website here: https://www.algosolutions.com/product/admp/.

3.4 Getting Started

Once an ADMP account has been set up, a username and password will be emailed to the registered user. The email will be sent from no-reply@verificationemail.com.

Once you receive your account details, use this information to log into your ADMP account here: https://dashboard.cloud.algosolutions.com/
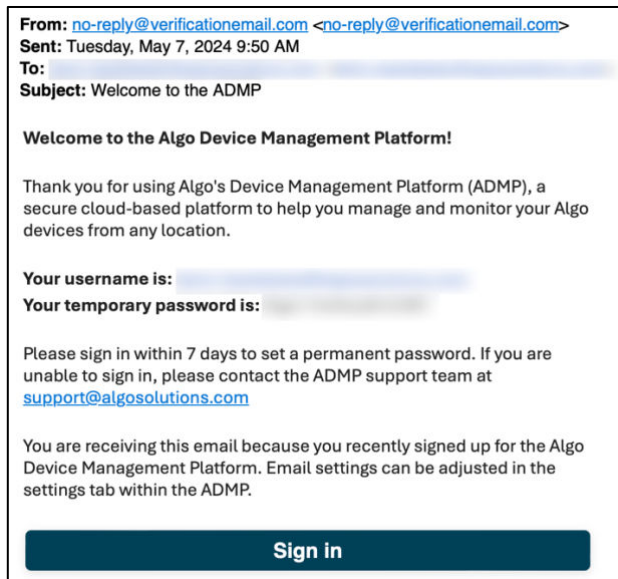
If you require any ADMP assistance, you will need to provide the Algo Support Team with your ADMP account ID. You can quickly access your account ID after logging in by clicking the user icon on the top right-hand side of the platform. Your account ID will be the first item listed. Use the copy icon to copy your account ID to your clipboard.
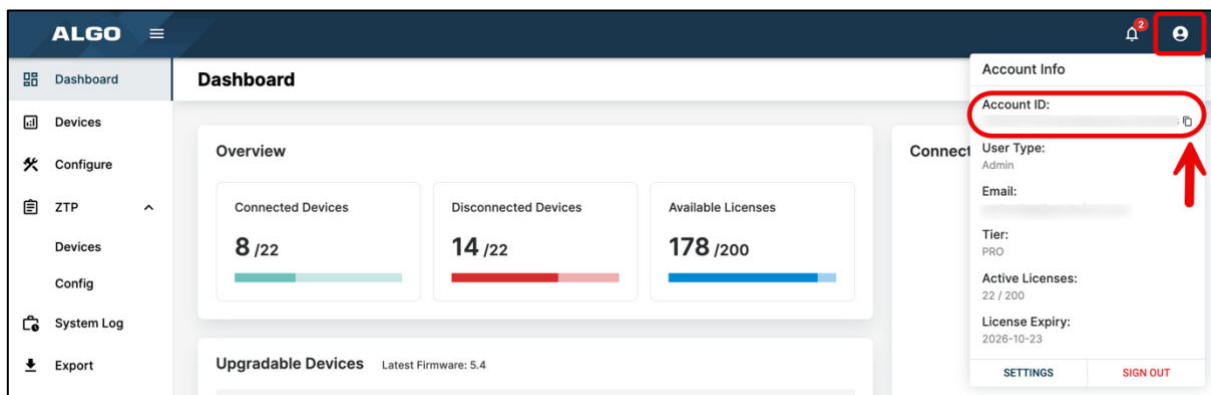
3.5   Connect an Algo IP Device to ADMP

To monitor your devices in ADMP you must first connect them to your account. You can do this manually using the web interface for each endpoint or via zero-touch provisioning.

To connect an Algo IP endpoint manually, open the web interface of your Algo device by typing the device IP address in your web browser. Log in using the default password (algo) or the password set by your team. After logging in:

1.   Open the **Advanced Settings** tab.

2.   Open the **Admin** sub-tab.

3.   Under **ADMP Cloud Monitoring** at the bottom of the page, enable **ADMP Cloud Monitoring**.

4.   Enter your Account ID
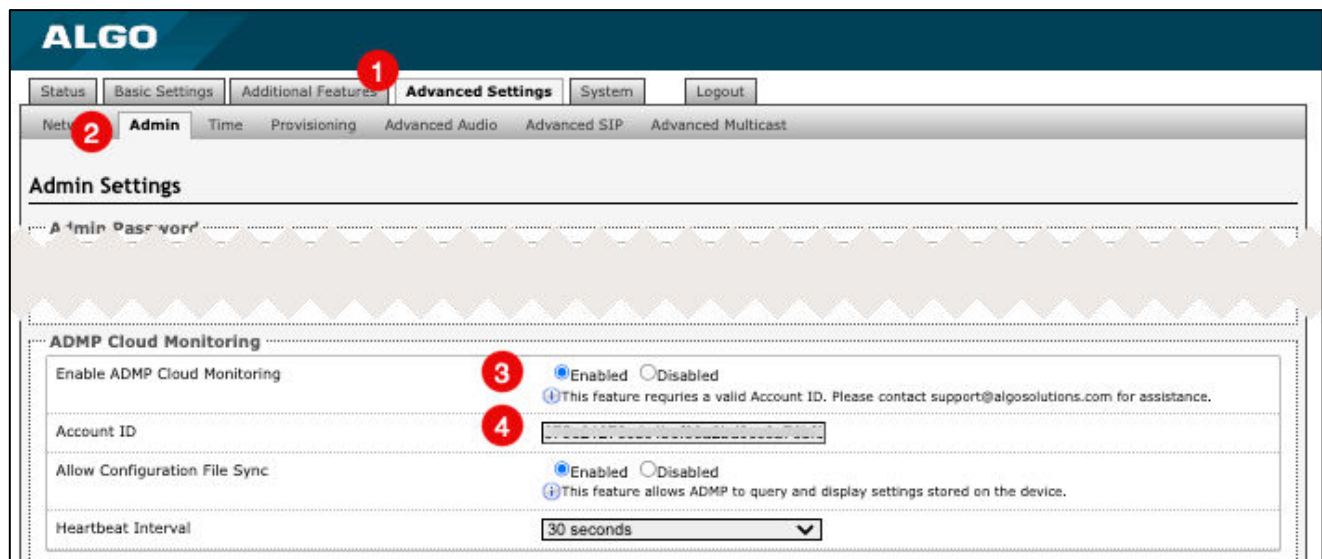
Configure the additional settings as preferred. Once complete, click **Save** at the bottom of the page.

After a few minutes, your Algo device will be connected to ADMP. On the **Status** tab of the device web interface, you should see **ADMP Cloud Monitoring** set to **Connected.** Your device will also now be listed on the **Devices** page of ADMP.

4   DASHBOARD

You will first see the Dashboard page when you log into your ADMP account. You will find summarized details about your connected Algo IP endpoints.
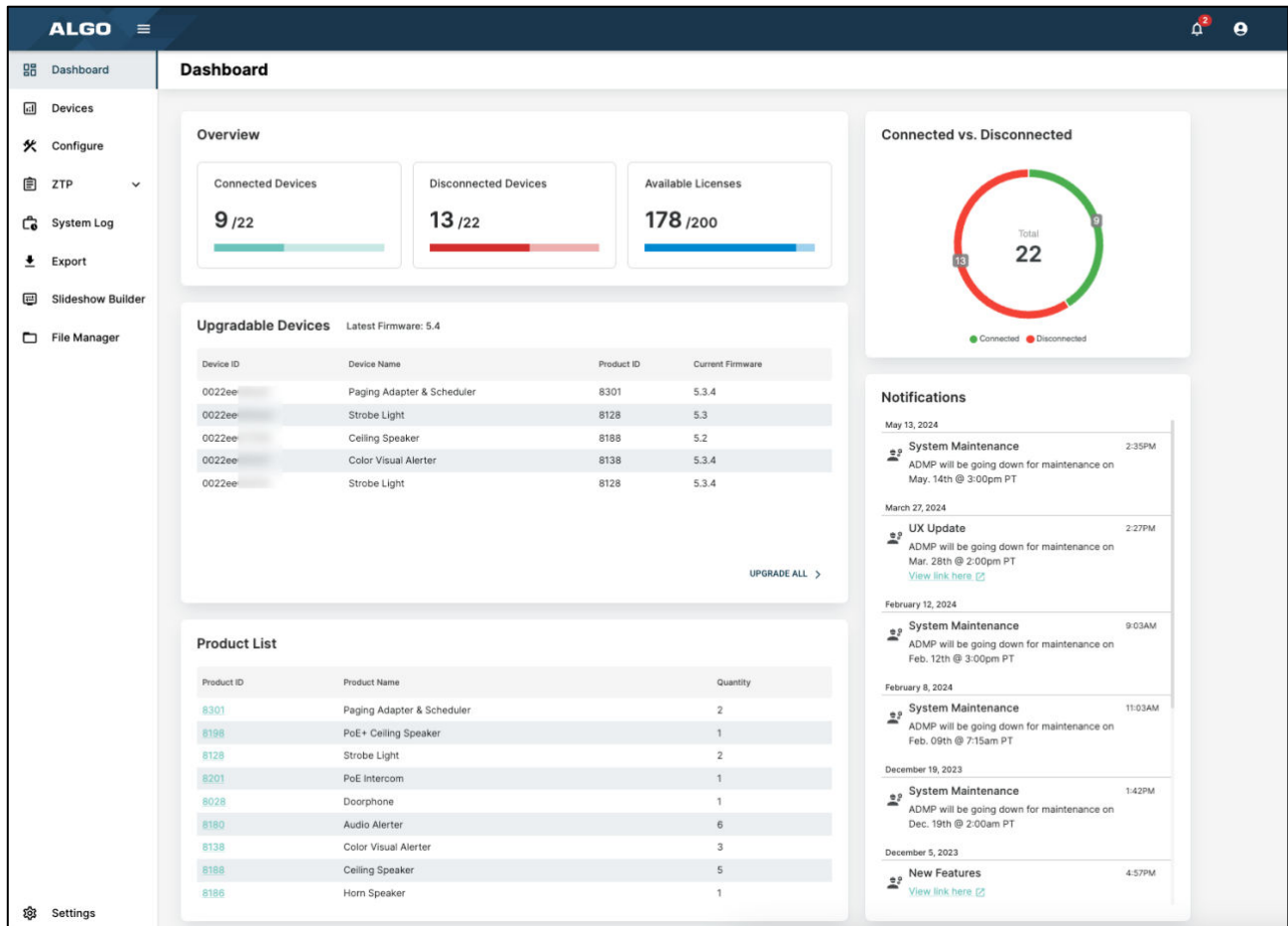
4.1   Overview

The Overview displays a quick summary of the count of your devices and licenses.
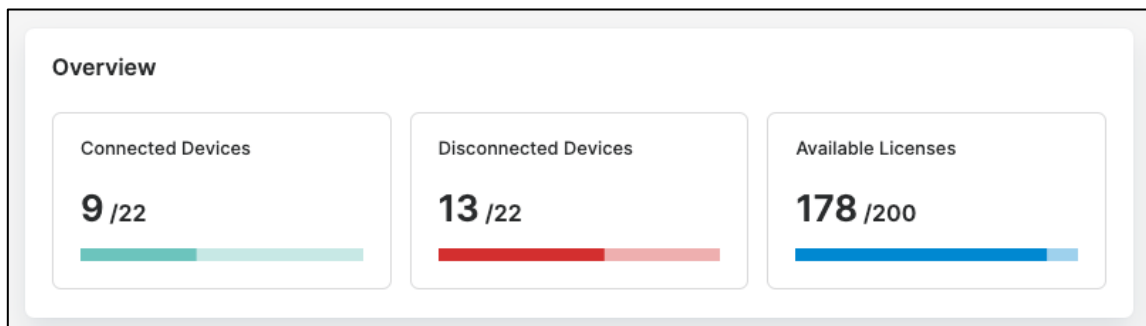
Connected Devices	The number of connected devices compared to the total number of detected devices, including those connected and disconnected.
Disconnected Devices	The number of disconnected devices compared to the total number of detected devices, including those connected and disconnected.
Available Licenses	The remaining device licenses you have available to manage additional Algo IP endpoints from ADMP.

4.2   Upgradeable Devices

Devices in this list have new firmware available. New firmware can be installed directly from ADMP.

Device ID	Each Algo device has a unique ID. This ID matches the MAC address of the device.
Device Name	The product name of your device.
Product ID	The SKU number of your device.
Current Firmware	The firmware version the device is currently using.

When you click **Upgrade All** at the bottom right of the section, you will be taken to the **Devices** page. To upgrade all device firmware from here, perform the following steps:

1. Click **All** on the top left of the page.

2. Check the top right box in the top row of the table to select all devices.

3. Click the **Actions** drop-down and select **Upgrade Latest**.

4. A pop-up will appear confirming your selected devices. Click **Upgrade** to proceed with the firmware upgrade.

4.3   Product List

The Product List displays all products connected to ADMP in your deployment.

Product ID	The SKU number of your device.
Product Name	The product name of your device.
Quantity	The number of deployed devices of the listed product.

4.4 Connected vs. Disconnected

A pie chart that represents the connected and disconnected devices.
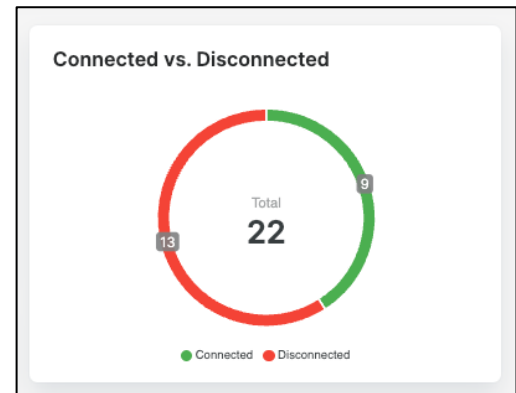

4.5 Notifications

The Notifications section of the Dashboard will display notices such as system outages, upcoming changes, and new ADMP features. This section should be checked regularly as these notifications will not be sent to user emails.

5 DEVICES

The Devices page is used to manage and maintain all devices. Three lists can be viewed: All, Connected, and Disconnected.

Within these lists, you can use the top bar to add tags, perform actions, search, and filter.
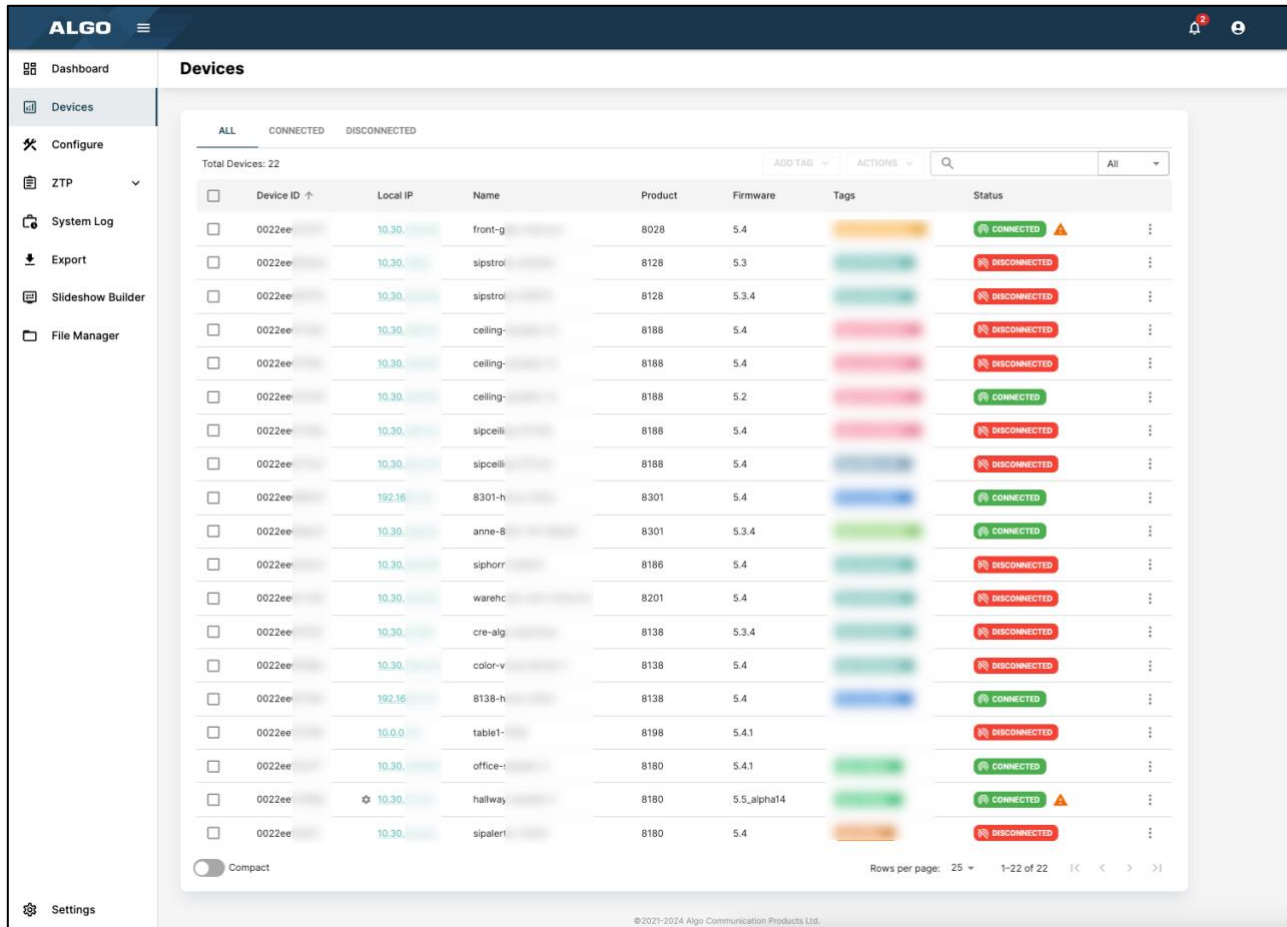
Device ID	Each Algo device has a unique ID. This ID is the same as the device MAC address.
Local IP	The IP address of each device used to access the device web interface. If you are using ADMP on a different network than the one the device is using, you may not be able to reach this IP address.
Name	The device name or hostname registered in the device web interface.
Product	The SKU number of your device.
Firmware	The firmware version the device is currently using.

Tags	Customizable tags used to easily group devices together based on location, use, or any other preference.
Status	Each device will show its status as **Connected** or **Disconnected**. When an action is in progress, the status will appear as **Rebooting**, **Upgrading**, **Configuring**, **Setting Volume**, **Deleting**, **Downloading**, or **Trying**.

5.1.1 Add Tags

Tags can be made and assigned to devices from the Devices page. Up to 8 tags can be added to a single device and up to 100 tags can be made and used across all devices.

Tags can also be created and managed on the **Configure** page.
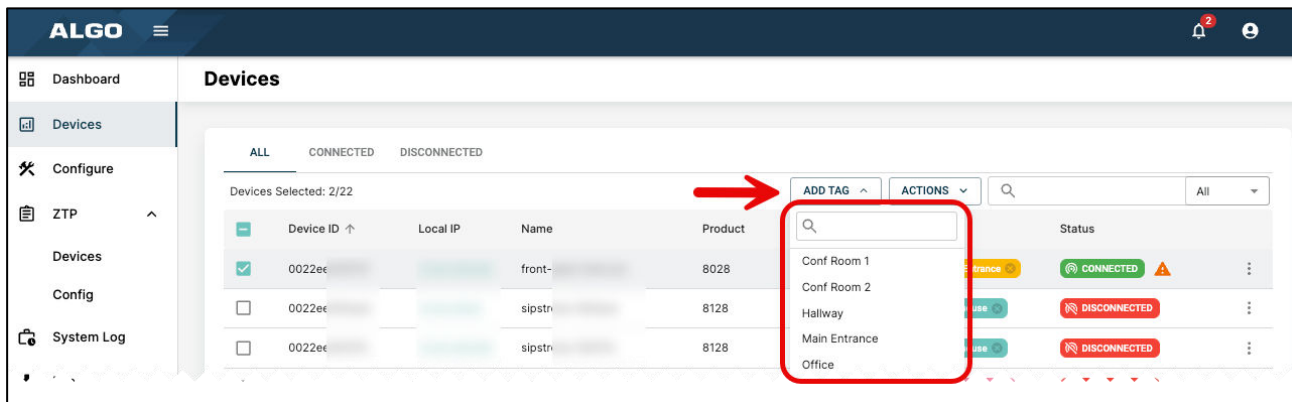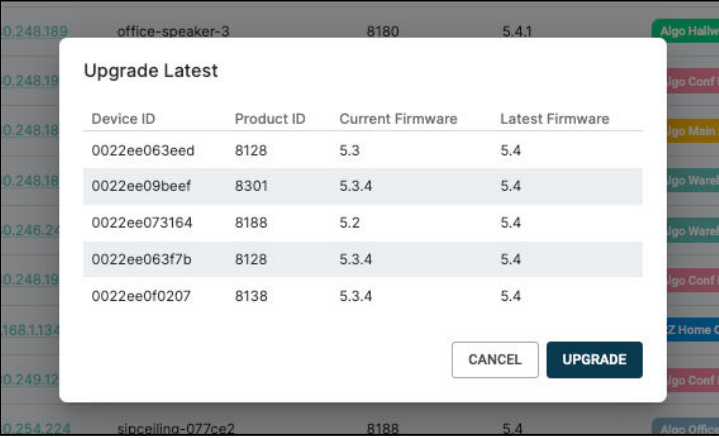

To add a tag to a device:

1. Select the device(s) you would like to add a tag to.

2. Click on Add Tag to see the drop-down of tag options.

3. Select an existing tag from the list or type a new tag and click **+Create tag** to create and apply a new tag.
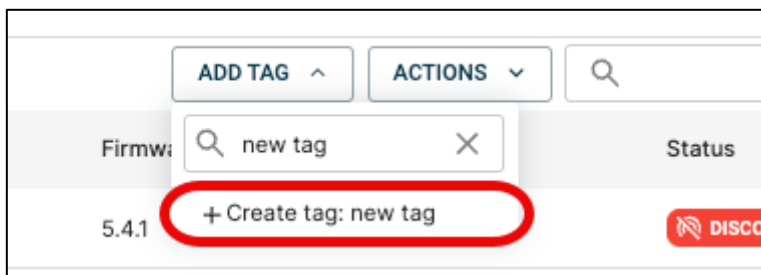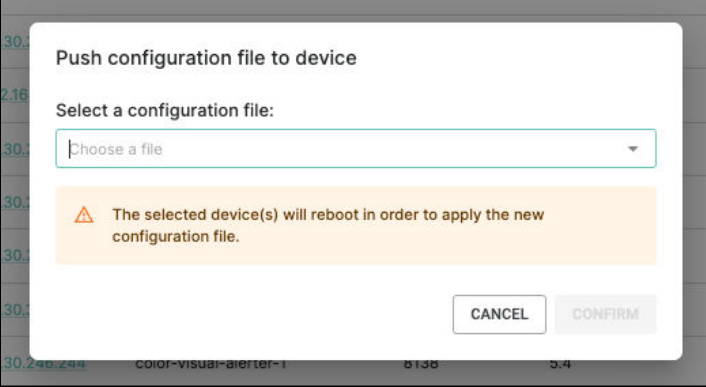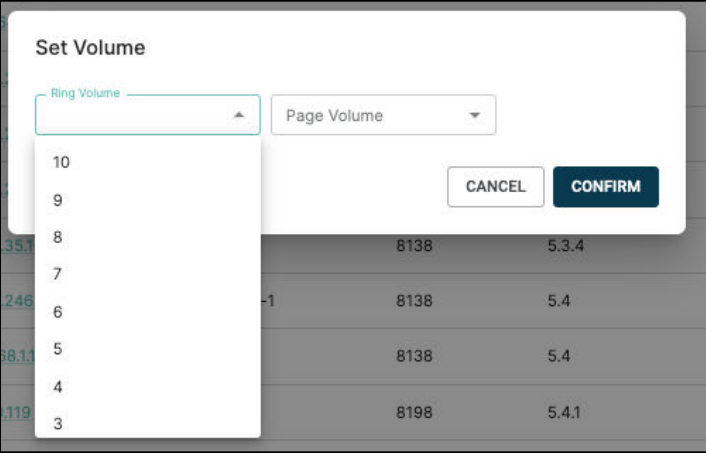
5.1.2 Actions

There are many ways to manage multiple devices using the **Actions** drop-down on the Devices page. To perform an action, select the device(s) you want to manage, and then choose an action from the **Actions** drop-down menu.
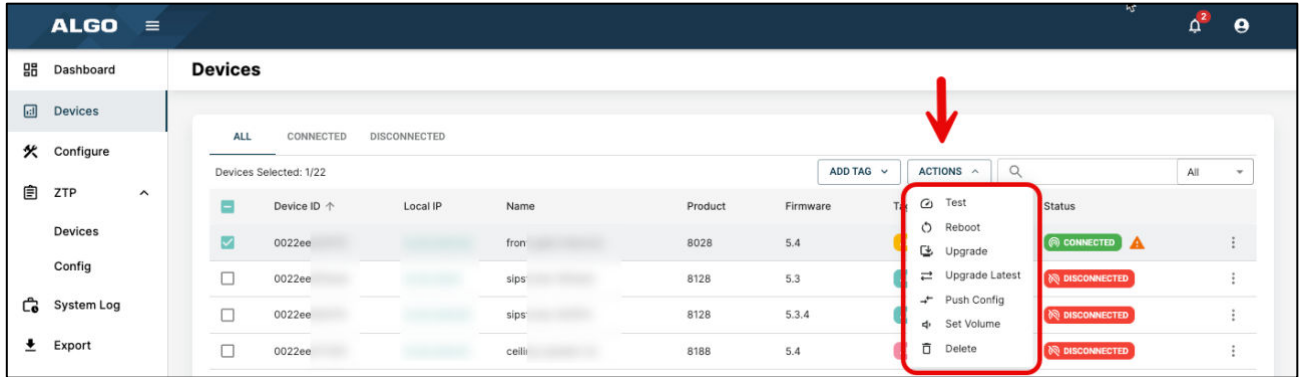

Test	The following will take place when a test is performed:
	• Speakers, Displays, Intercoms: Play a tone
	• Paging Adapters: Will play a tone if connected to an audio device.
	• Visual Alerters: The lights will flash
Reboot	Use to restart selected devices. This will not reset the devices settings.
Upgrade Latest	Upgrade selected devices to the latest firmware. When performed, a pop-up will appear confirming your selected devices. Click **Upgrade** to proceed with the firmware upgrade.

|	
Push Config	Select a configuration file to push configurations onto selected devices. Configuration files can be uploaded using the **Configure** page. Partial configuration files are best for bulk configuration updates. See section 6 for more details. If you plan to use multicast, you should not push the same configuration file to all devices. Your sender and receiver devices will require different configurations.
Set Volume	This action is applicable to speakers and paging adapters. The **Ring Volume** can be set from –5 to 10. The **Page Volume** can be set from –5 to 10. Every volume setting is 3 dB below the maximum volume with the lowest volume being 45 dB less than maximum (ie. 10 is the maximum volume, 9 is 3 dB less than max, 8 is 6 dB less than max, 7 is 9 dB less than max, etc)
Delete	Remove the device license from selected devices. This will disable ADMP from the device in the device web interface if the device is currently connected to ADMP.

For a connected device, you will see this:
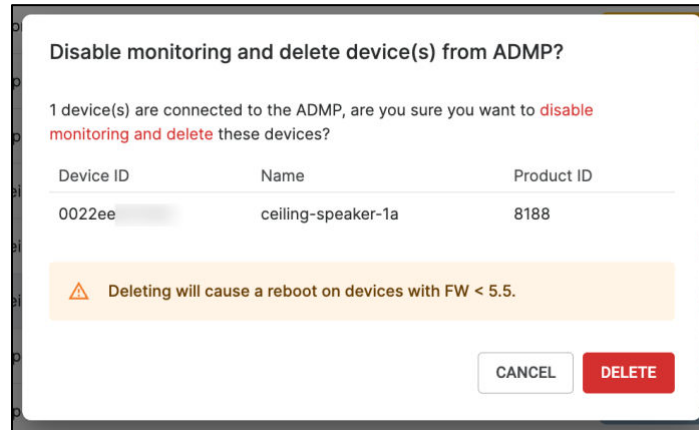
For disconnected device, you will see this:
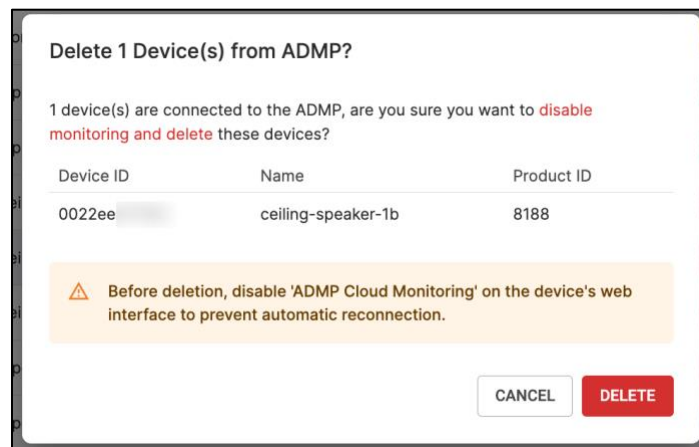
Additional actions are available to be performed on individual devices. To access and use these actions, click the kebab icon on the right edge of the device's row.
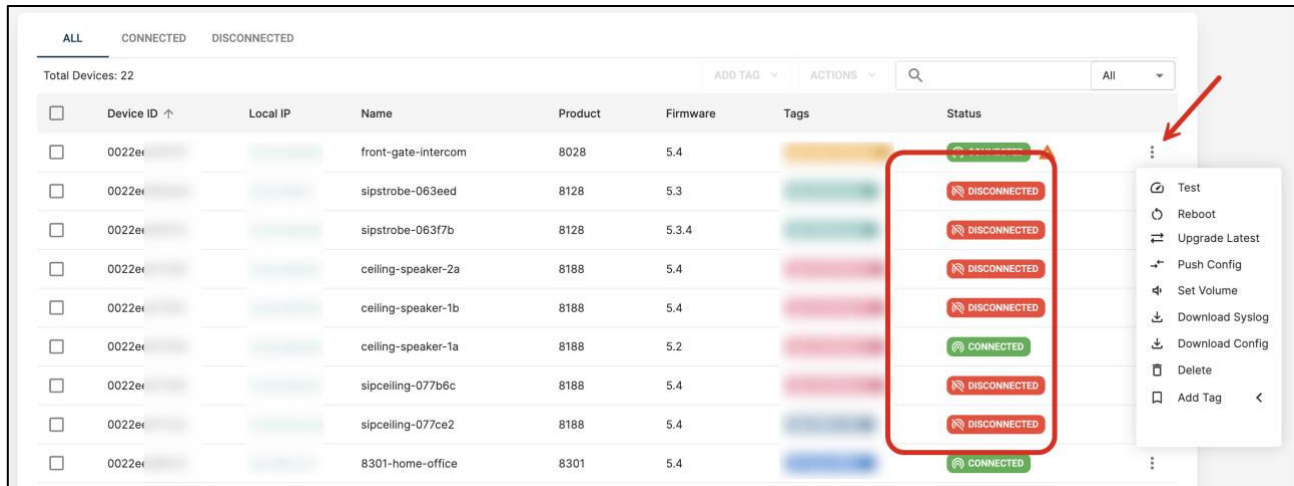
Additional actions include:

Download Syslog	When performed, a .txt file of your device's system log will be downloaded.
Download Config	When performed, a .txt file of your device's configuration file will be downloaded.

6   CONFIGURE

The configure page is used to manage device tags and configuration files. When the **Push Config** action is used to apply a configuration file, the device configuration will change based on what is in the file. If the file does not include a field or parameter set on the device, the device will retain the existing configuration for that field.

6.1   Tags

The tags section can be used to add or edit new tags.

Create New Tag

To create a new tag, click **+ Add Tag**.

A window will open where you can type in the new tag name and select a color. You can enter a Hex color code (ex. #6CC4BD) if you'd like a specific color.

Once complete, click **Confirm**.
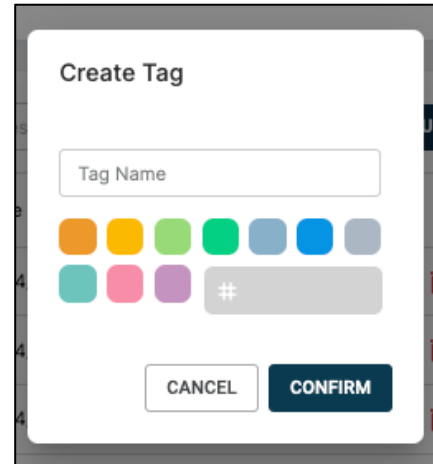
Edit an Existing Tag

To edit an existing tag, click the tag in the main bar.

A window will open where you can edit the tag name or change the color. You can enter a Hex color code (ex. #6CC4BD) if you'd like a specific color.

Once complete, click **Confirm**.

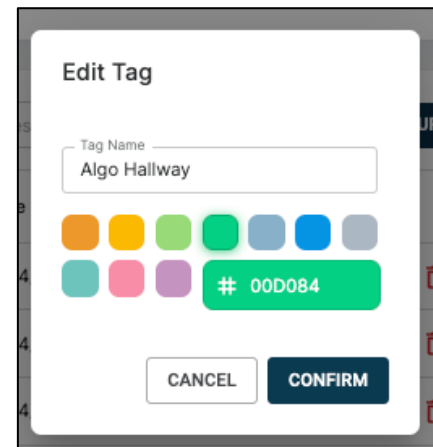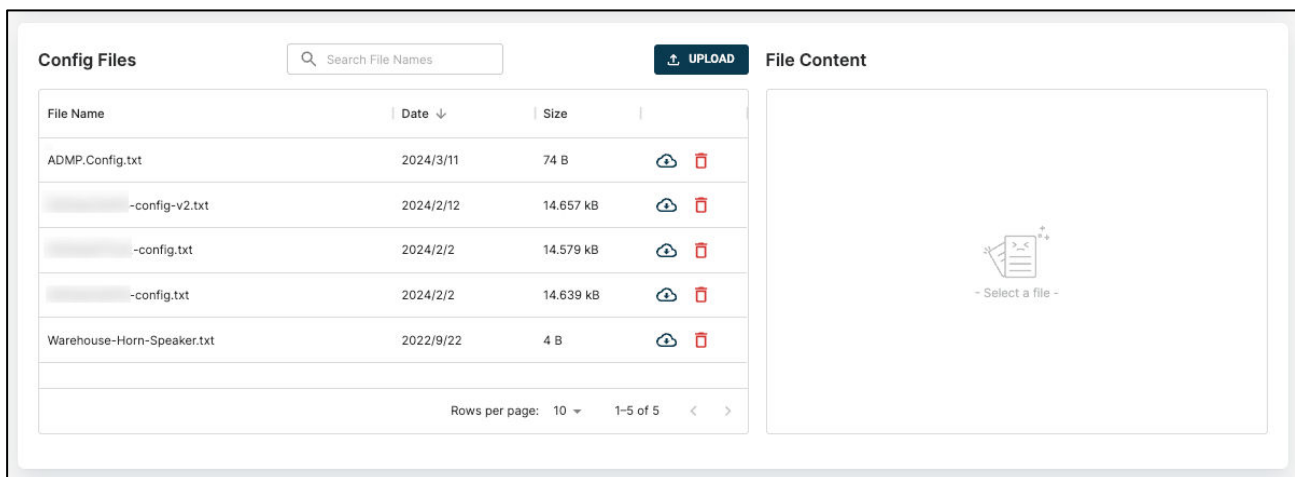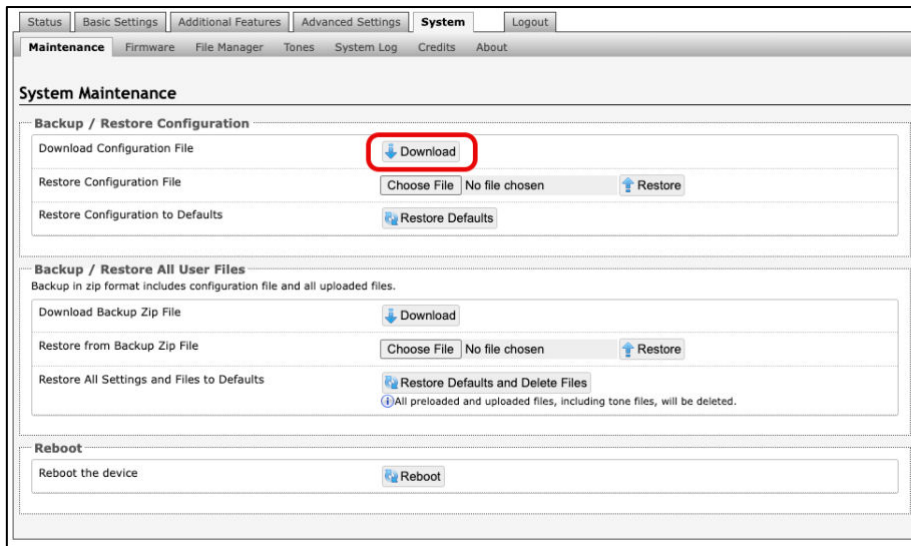## 6.2   Config Files and File Content

Use the Config Files section to upload and preview configuration files. To assign a configuration file to a device, use the **Devices** page and the action **Push Config**. See section 4.1.2 for more details.

The file can be named anything you would like. However, the following is necessary for a configuration file to be used in ADMP:

- It must be in the format .txt

- It must be a valid Algo configuration file or a partial Algo configuration file. A partial configuration file is recommended when you want to reconfigure some but not all settings across several devices. To retrieve an Algo configuration file, open your device web interface and go to the tab **System → Maintenance**. Click **Download** under **Backup/Restore Configuration**.

To upload a new configuration file:

1. Click **Upload**

2. Drag and drop your configuration file into the window or click **Choose files**.

3. Click **Upload**

4. To preview uploaded files, click on the file in the list and view **File Content**.

5. To assign a configuration file to a device, use the **Devices** page and the action **Push Config**. See section 4.1.2 for more details.
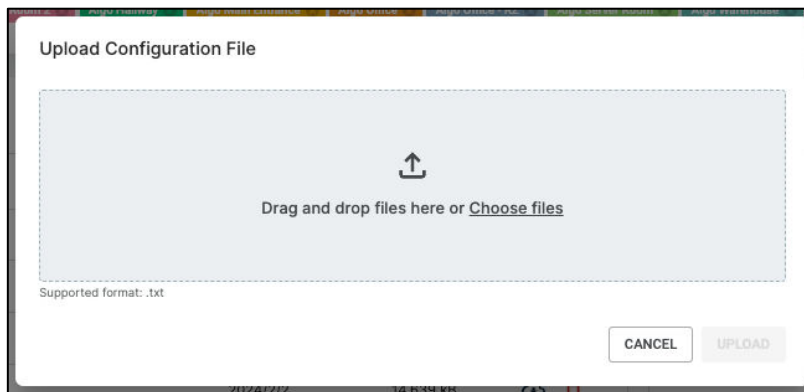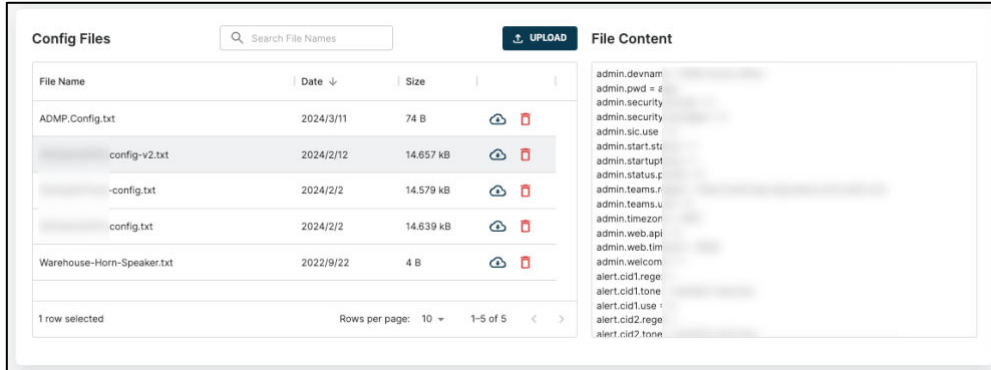
7   ZTP

Zero-touch provisioning (ZTP) is a method of configuring devices automatically to simplify and speed up deployments in large-scale environments. This removes the need for manual configuration.

All Algo IP endpoints shipped after November 2022 can use ZTP. Algo's ZTP service is free and can be accessed via ADMP. Though full ADMP access requires licensing, no license is required to use the ZTP service.

Algo devices have ZTP enabled by default. This setting is disabled as soon as you begin to manually configure a device. ZTP is only active when a device is first installed or after a device has been factory reset.

Use the ZTP request form if you would like a ZTP-only account or if you have an existing ADMP account and would like to add ZTP to it.
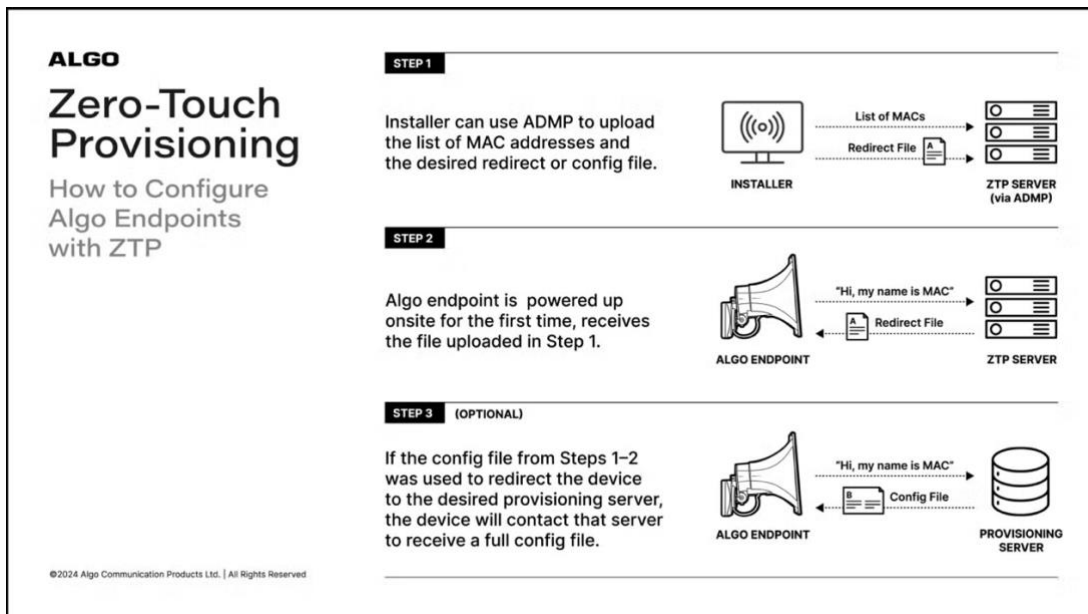
7.1 Device Mapping

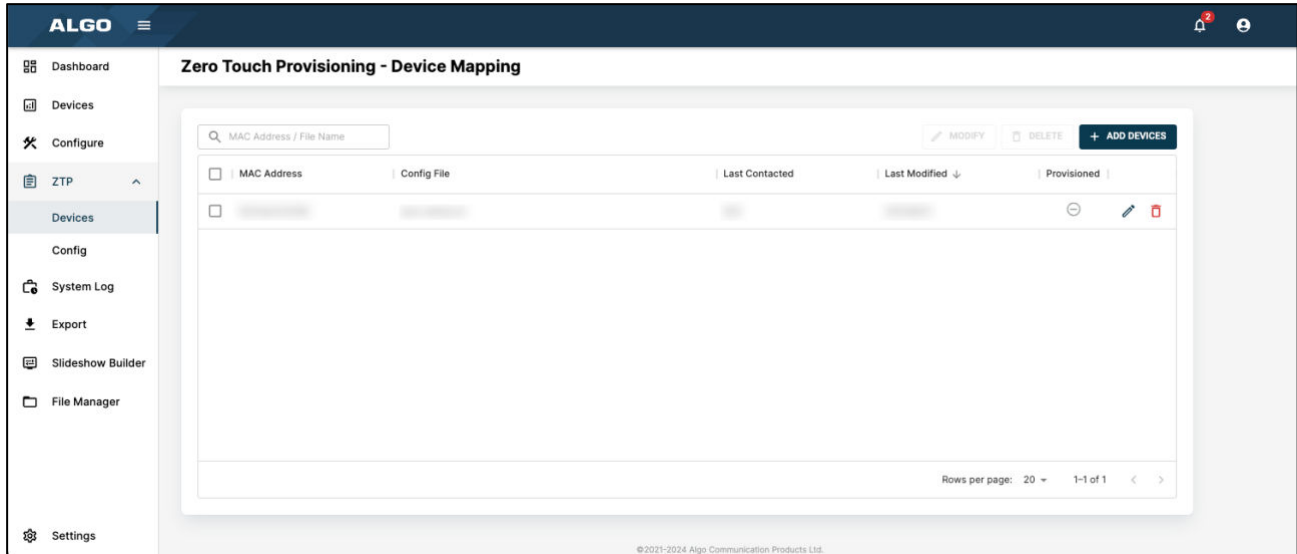The Device Mapping page is used to map devices to configuration files. When using ZTP, once a MAC address has been claimed by an ADMP account, it cannot be claimed by another. If the MAC address is removed from ADMP, it may be claimed by another account.

MAC Address	The MAC address of an added device. A device MAC address can be found on the **Status → Device Status** page of the device web interface.
Config File	The selected configuration file to apply to the device using ZTP.
Last Contacted	The most recent date the device contacted ADMP.
Last Modified	The most recent date the device mapping was modified.
Provisioned	Whether or not a device has been successfully provisioned. If part of your provisioning includes connecting the device to ADMP, you will be able to use the primary **Device** and **Configure** pages of ADMP for additional configuration.

To add devices that you would like to use ZTP for:

1. Click **+ Add Devices**

2. A new window will pop up. Upload a .txt file containing a list of MAC addresses for your devices or enter the list of MAC addresses directly into the window with comma-separated values.

3. Select a configuration file from the drop-down menu. These files can be added and previewed on the **ZTP → Config** page.

4. Click **Confirm** to finish mapping your devices to the selected configuration file.
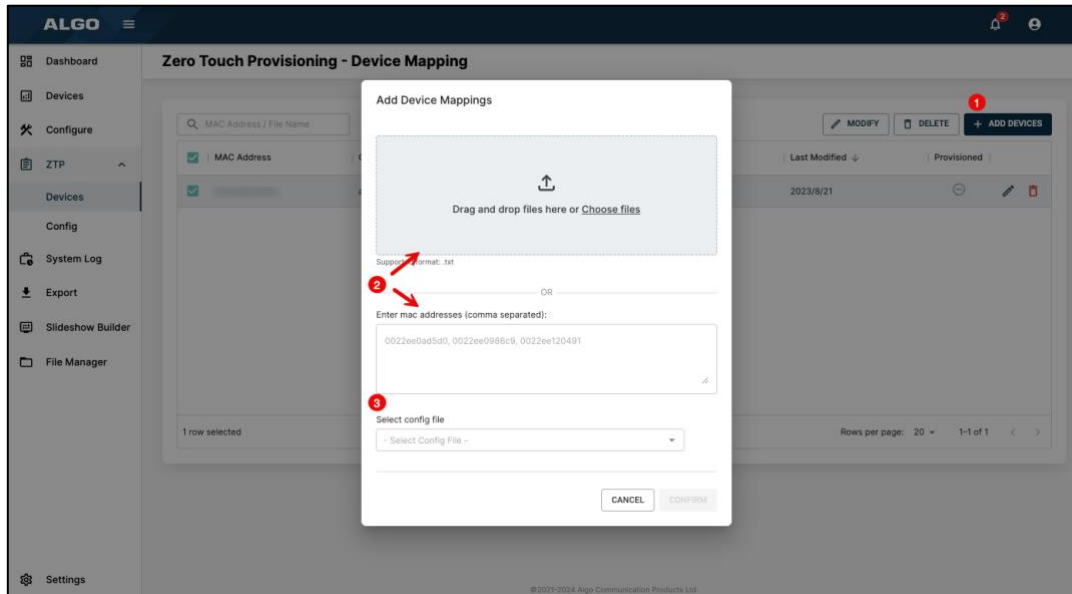
Once the upload is complete, you will see your devices added to the table on the page. When a device is plugged in for the first time, it will reach out to the ZTP server, grab the configuration information, and apply it to the device based on its MAC address.

You can modify the mapping if you make an error and want to change the configuration file. This must be done before the device reaches out for the first time.

1. There are two ways to modify devices:

   a. Multiple devices at a time. To do this, select all devices and click **Modify**.

   b. Individually. To do this, click ✏ on the device's row.

2. A window will appear for you to select a new configuration file. See section 7.2 for more details.
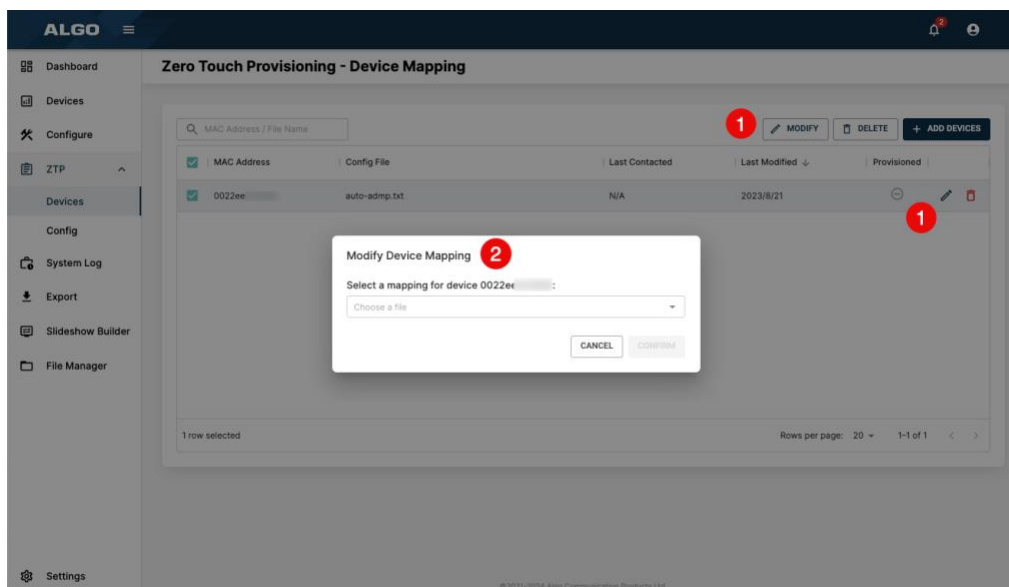
7.2   Configuration Files

Use the **ZTP → Config** page to upload configuration files that will specifically be used for ZTP. These ZTP config files can include configurations to connect a device to ADMP, eliminating the need to add an account ID for each device individually.

Algo's ZTP service is primarily meant to be used as a redirection service to your provisioning server. While it will accept files containing additional settings such as SIP parameters, it is not meant for this purpose.

To redirect your devices to a provisioning server, your configuration file should contain:

```
prov.server.method = static
prov.server.static = https://some-local-server
prov.sync.endtime = 03:00:00
prov.sync.frequency = daily
prov.sync.time = 02:00:00
prov.use = 1
prov.i = 1
iot.mqtt.ka = 30
iot.tenant = [ADMP account ID]
iot.use = 1
```

To enable ADMP cloud monitoring on your device, your configuration file should contain:

```
iot.mqtt.ka = 30
iot.tenant = [ADMP account ID]
iot.use = 1
```
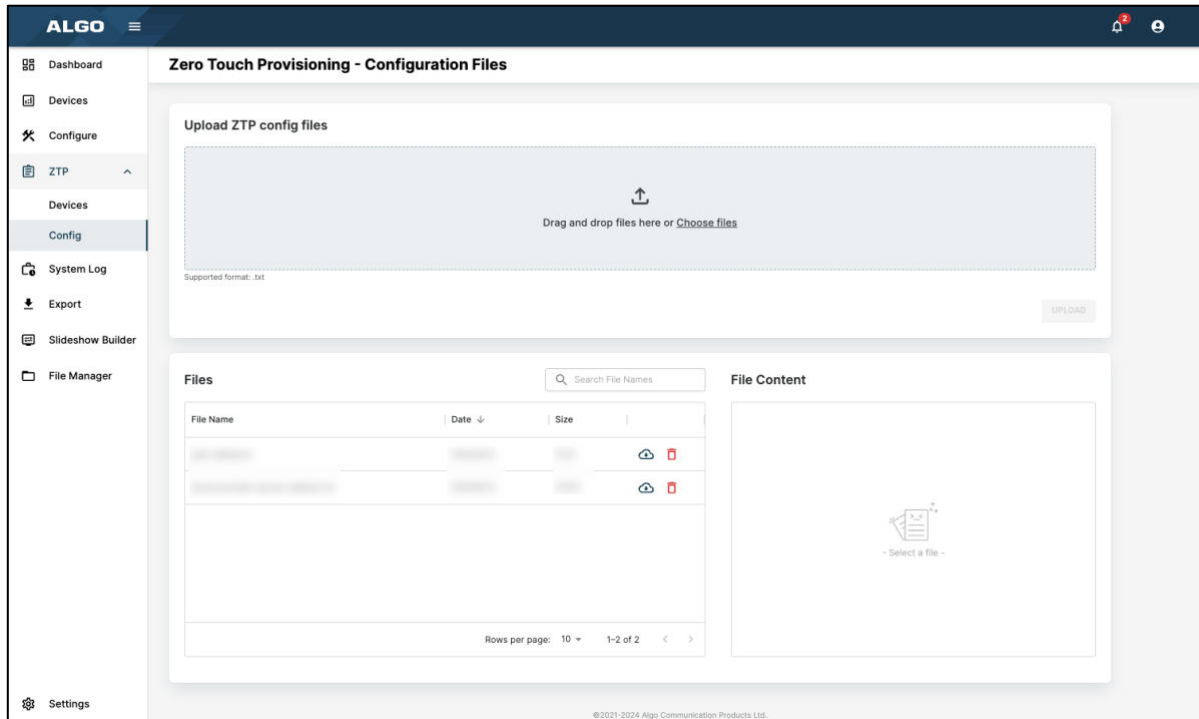
The following is necessary for a configuration file to be used for ZTP:

- It must be in the format .txt

- It must be a valid Algo configuration file. Any settings not specified in the file will retain their default factory values. To retrieve an Algo configuration file, open your device web interface and go to the tab **System → Maintenance**. Click **Download** under **Backup/Restore Configuration**.
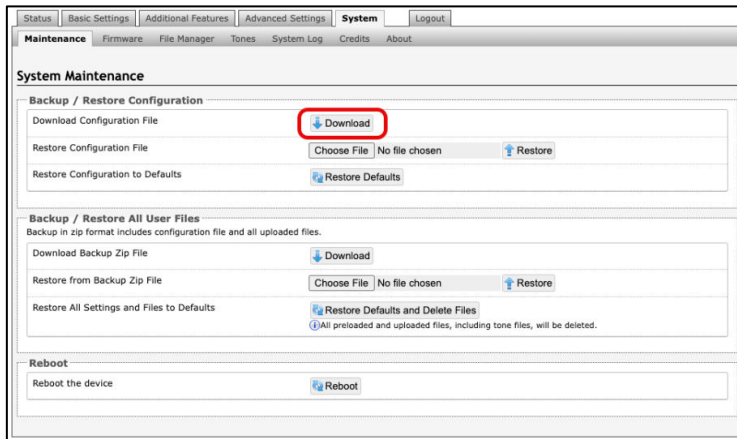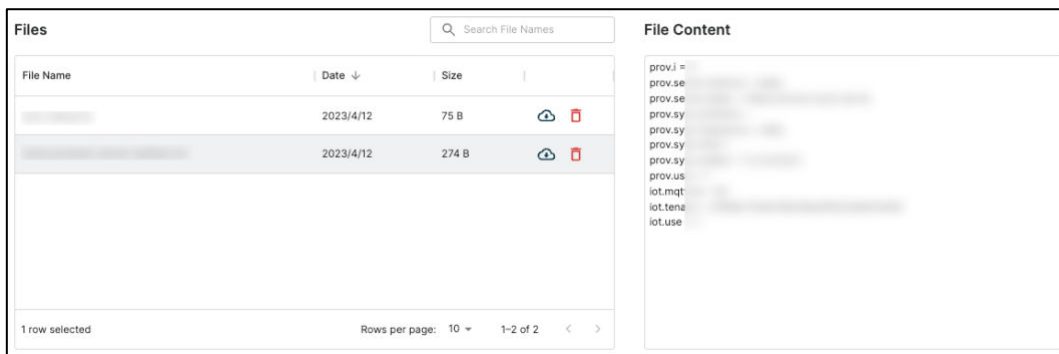
To upload a new configuration file:

1. Select your configuration file to upload by dragging and dropping the file into the window or selecting your files.
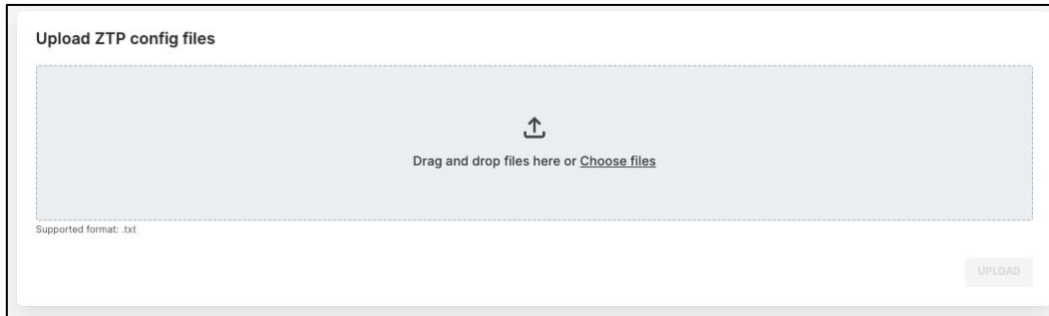

2. Click **Upload**

3. To preview uploaded files, click on the file in the list and view **File Content**.

4. To assign a configuration file to a device, use the **ZTP → Devices** page. See section 6.1 for more details.

8   EXPORT

The Export page is used to download backup device configuration files. This feature will create a downloadable ZIP of all configuration files used on connected devices. Backup of a device's configuration file may fail if the device is busy or disconnected. Please make sure all devices are using firmware 5.3 or above before initiating a backup.
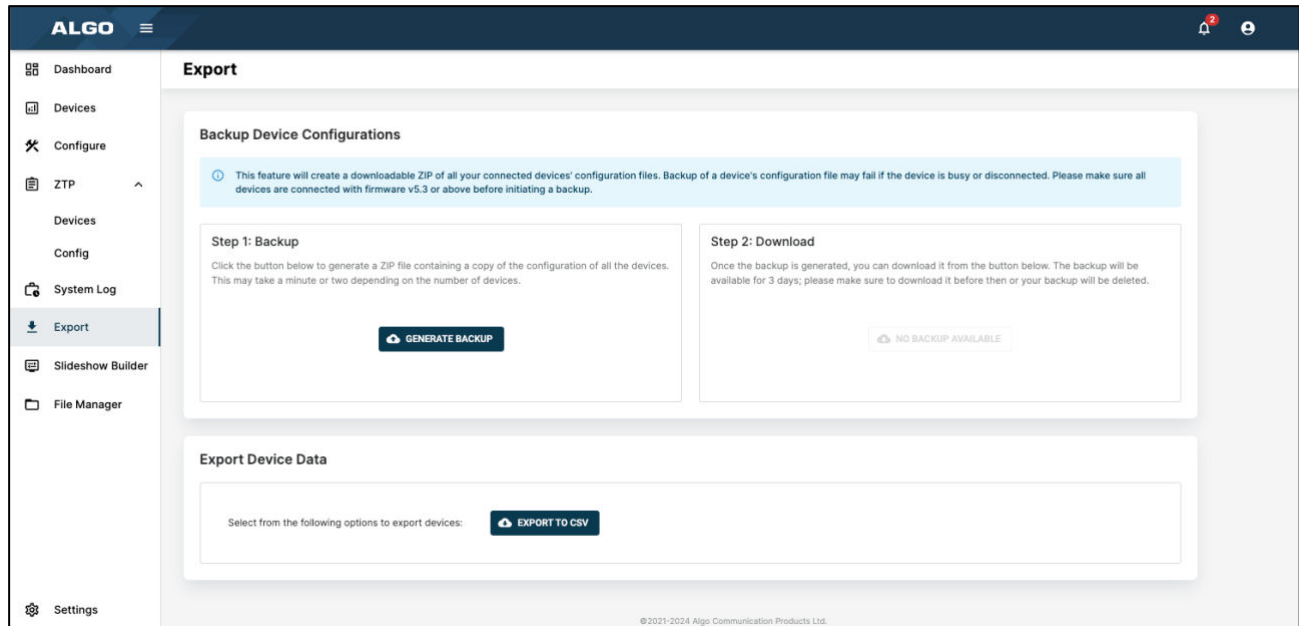
To create a backup folder to export:

1. Under **Step 1: Backup**, click **Generate Backup** to generate a ZIP file containing a copy of the configuration of all the devices. This may take a minute or two depending on the number of devices. After clicking **Generate Backup**, the button will spin indicating the file is loading.

2. Once the backup is generated, you can download it by clicking **Download Backup From: [Date]**. The backup will be available for 3 days and will be unavailable after.
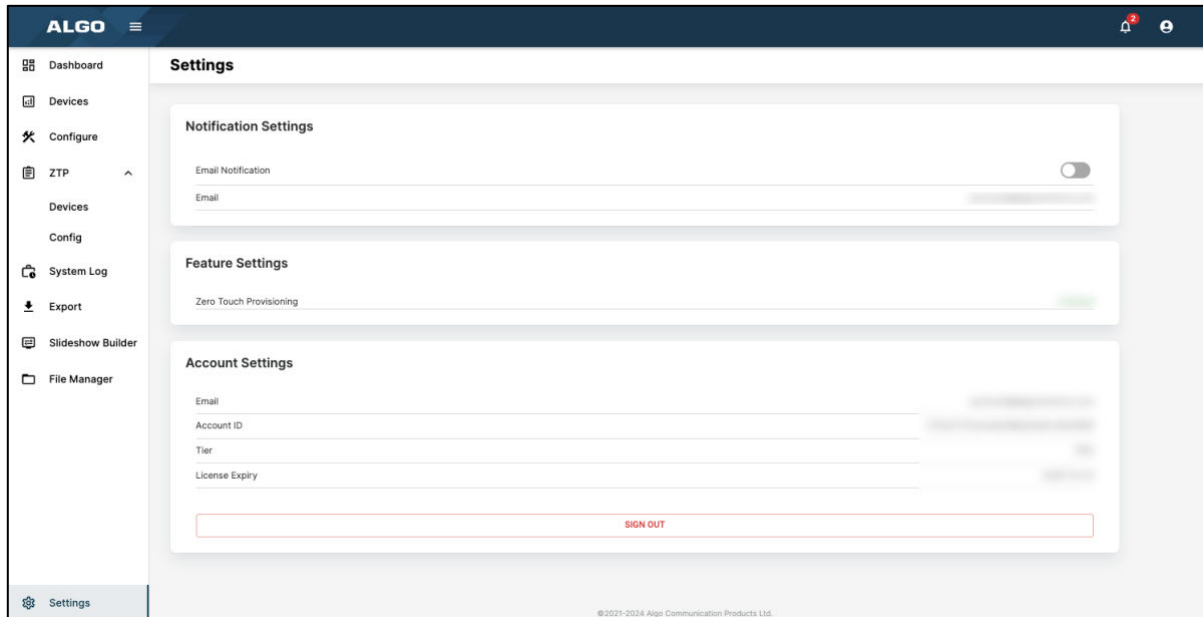
3. When you click download, a ZIP file will be downloaded. After you unzip the file, you'll find various .txt files for your products as well as a file called **ADMP device export report.csv**

4. Open **ADMP device export report.csv** to review the data. This report will include a list of devices and the number of successful, failed, and skipped devices.

9   SETTINGS

The Settings menu displays your account settings and license details.

9.1 Notification Settings

Email Notification	Turn on to receive email notifications about: • **Disconnection**: You will be notified when I device is disconnected from ADMP • **Back Online**: You will be notified when a device is re-connected to ADMP • **Fault Detection**: You will be notified when there is a fault or disconnection between an Algo IP endpoint and accessory device. This includes products like Algo satellite speakers, the Algo 8028 intercom, and call buttons.
Email	The individual user email address used to log into the ADMP account. This is a read only field and cannot be edited.

9.2 Feature Settings

Zero Touch Provisioning	Zero-touch provisioning is enabled by default. To disable zero-touch provisioning, please contact the Algo support team.

9.3 Account Settings

These fields are read-only.

Email	The individual user email used to log into the ADMP account.
Account ID	A unique ID for your company account. An Account ID is required to connect a device to ADMP.
Tier	There are three kinds of account tiers: Trial, Pro, and Perpetual. See section 2.1 for more details.
License Expiry	The soonest date any licenses will expire. If you have bought licenses at different times, they will have different expiration dates. However, the date listed here represents when any licenses you have will expire next.