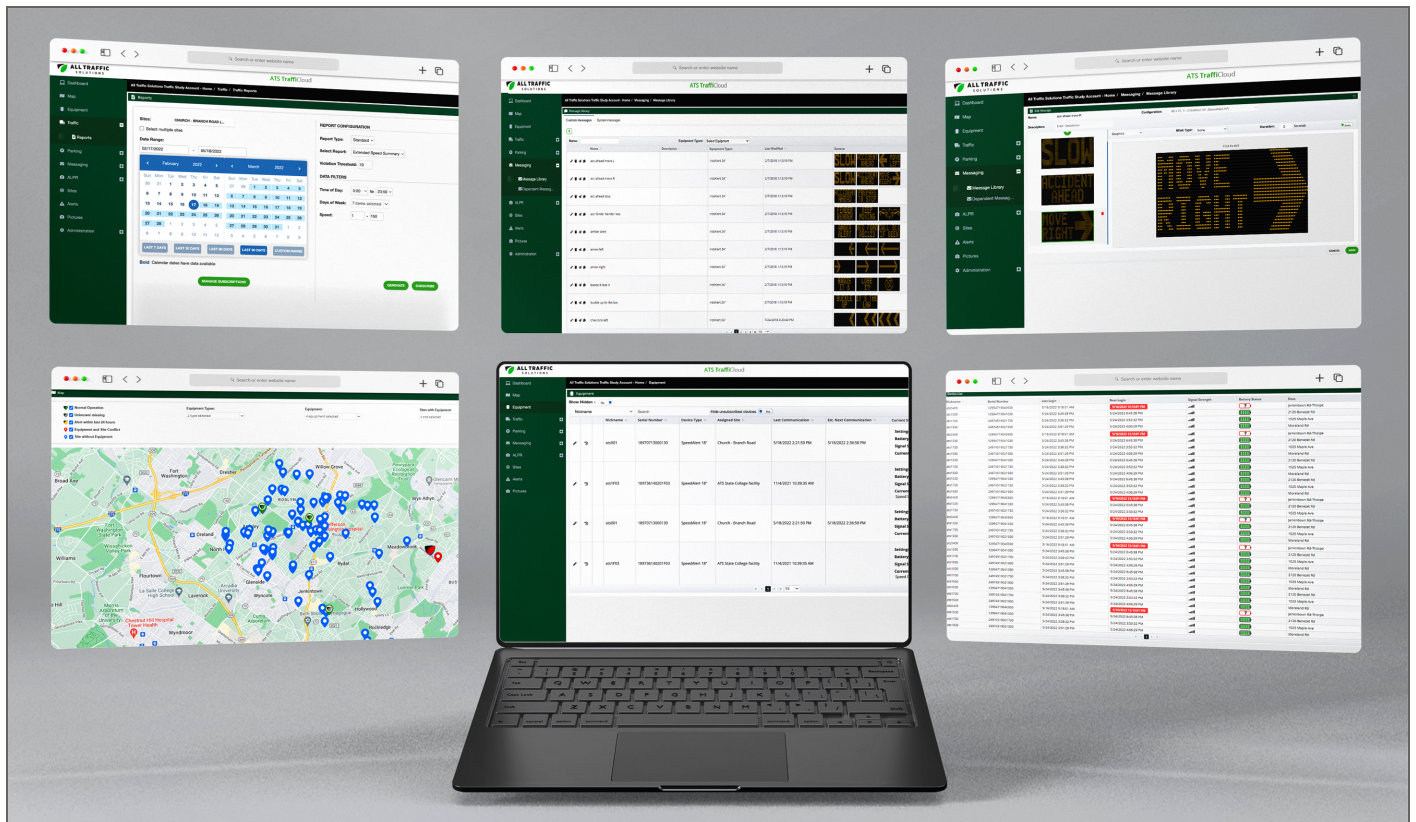


# TraffiCloud User Guide



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# About this document

This *TrafficCloud User Guide* is meant for anyone who needs to set up one or more ATS devices using TrafficCloud. The guide provides an introduction to TrafficCloud and describes the basic use and configuration of the system. For details about physical setup, refer to the *Quick Start Guide* provided with your device and available for download from the [ATS Customer Support page](#).




**NOTE:** This guide provides details about using TrafficCloud with all of the most popular ATS devices. Please ignore sections unrelated to your devices.



**TIP:** Before deployment to the road, you'll need to charge the batteries for your device, and then use TrafficCloud to set up a Site and add it to your device. Those are the basic steps to ensure that you can generate traffic reports.



**NOTE:** If you're reading this document online and have a medium- to large-screen monitor, it displays in a two-page layout  in Adobe® Reader, Acrobat Pro, or equivalent. You can change the viewing options to suit your preferences.

## Audience

This guide is intended for the use of TrafficCloud users and administrators and provides detailed instructions for performing primary activities as well as details about typical approaches and settings used.

## Browser requirements

TrafficCloud has been tested with all the leading Web browsers, and works best with Google Chrome.

## Documentation conventions

This document uses the following formatting conventions:

Format	Description
<b>Bold</b>	Used in procedures to indicate menu commands, interface controls and dialog box options.
<i>Italicized monospace text</i>	Used to indicate text that you should replace with your own. For example: In the Save As text box, enter c:\ <i>filename.ext</i> where <i>filename.ext</i> is the name of the file you want to save.
Right chevron >	Used to indicate a sequence of commands (and sub commands) to be carried out in the displayed order. For example, " <b>Equipment tab &gt; Nickname</b> refers to the Nickname section of the Equipment page".



**NOTE:** Notes are used as reminders or to provide information of interest that supplements or emphasizes important points of the main text.



**TIP:** Tips are used to suggest alternative methods, workarounds, and shortcuts that are not essential but that you may find useful in a given situation.



**CAUTION:** Cautions advise users of specific actions that could result in a loss of data.



# Chapter 1

## TraffiCloud Overview

---

Our TraffiCloud Traffic Suite Software makes it easy to manage your ATS devices and capture and view highly accurate, report-ready data from any Internet-connected device. You can generate reports using a variety of statistics, making it easier to track key data, from **Standard reports** about speed and volume, to **Premium reports** which track statistics such as compliant versus low-, medium-, and high-risk drivers, 85th percentile speeds, traffic calming effectiveness, and many other measures. With StatTrak, you'll also have a wide range of **Count & Classify reports**, which have all of the most useful statistics and group vehicles by small, medium, and large classes. See [Running reports](#) on page 83.



*Figure 1: ATS 5 Trailer and SpeedAlert radar-enabled messaging sign*



The TraffiCloud portal (see [portal.trafficcloud.com](https://portal.trafficcloud.com)) features the convenience of the cloud to enable you to monitor and manage all aspects of one or more ATS devices, without installing and maintaining software on your local computers. ATS devices not only collect the traffic data you need to produce reports, but they automatically upload the data remotely and securely to TraffiCloud, so that you don't have to drive to each device to perform data collection.

Here's a high-level summary of what you can do with TraffiCloud:

- » Create and assign Sites for devices and data
- » Configure the display settings of your devices
- » Monitor traffic data collected by devices
- » Set up and review alerts from devices
- » Generate and print statistical reports based on data gathered by devices
- » Add and manage users

Here's a list of our most popular devices and what you can do with them:

Device name	What you can do
<b>Shield</b>	With <b>Shield</b> radar signs, <b>Speed Display</b> is the most popular sign mode, providing immediate feedback about vehicle speed, with optional blinking and strobe warnings, for signs so equipped, at specified speeds.
<b>School Zone Alert</b>	With the <b>School Zone Alert</b> solution, <b>Speed Display</b> is the most popular sign mode, providing immediate feedback about vehicle speed, with optional blinking and strobe warnings, for signs so equipped, at specified speeds, and includes flashing beacons to warn motorists about speed reductions.
<b>SpeedAlert</b>	For the multipurpose <b>SpeedAlert</b> , <b>Dependent Messages</b> is the go-to sign mode, displaying messages specific to vehicle speed ("Your Speed XX", "Speed Limit: XX", then "Slow Down", "Too Fast!", "Have a Nice Day"). You can also use Single Message Mode to set up a variety of preset messages. A single message can have up to six screens.
<b>InstAlert</b>	<b>InstAlerts</b> display custom messages in <b>Single Message</b> mode wherever they're needed, to direct traffic for events or emergencies, or for public service messaging.
<b>StatTrak</b>	<b>StatTrak</b> devices provide discreet, wireless traffic data collection popular with law enforcement authorities and traffic engineers for their detailed statistics and reporting. StatTraks feature vehicle counts and speeds by class of vehicle (small, medium, and large).



## Exploring the TrafficCloud user interface

The TrafficCloud home page includes **navigation** tabs along the left side of the window, a header bar including user settings at top right, the main window, and a footer bar. Click any of the tabs to explore what you can do. The main window in the example in [Figure 2: below](#) shows the **Dashboard**, setup with some popular widgets. When your TrafficCloud account is first set up, you'll see a default Dashboard in the main viewing pane. Dashboards give you a quick overview of your All Traffic Solutions devices and activity, and you can add widgets to track your preferred items, like alert history, devices, and status.

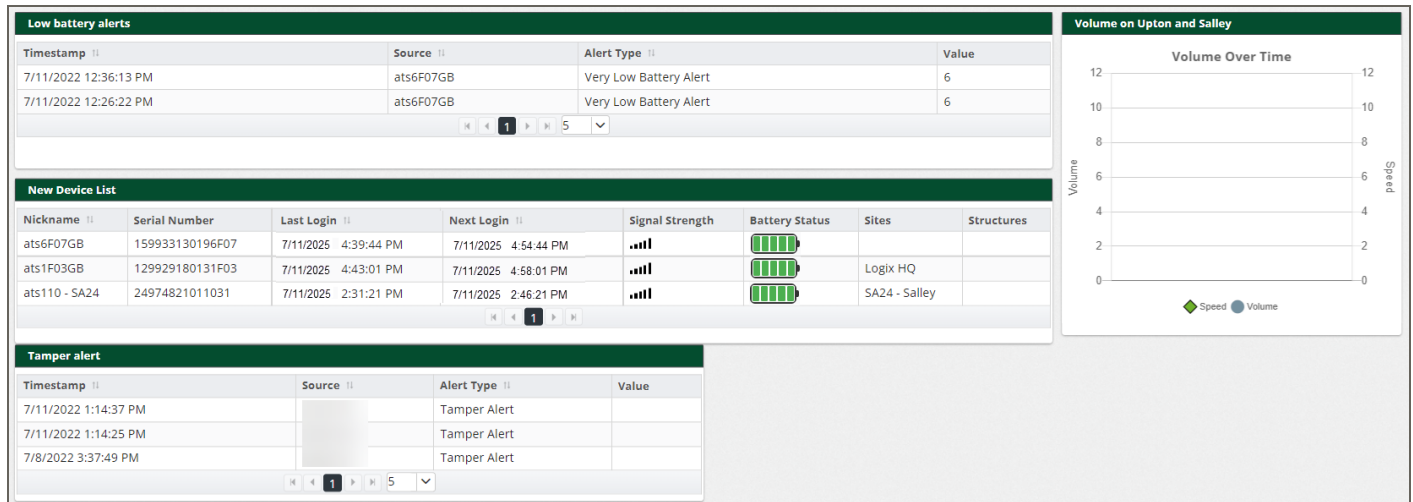






Figure 2: The TrafficCloud Dashboard

## Navigation menu tabs

Use the following table for details about the navigation menu tabs:

Icon	Tab	What you can do
	<b>Dashboard</b>	Set up dashboards and widgets to display alerts, and devices, and traffic volume over time. See <a href="#">Using dashboards on page 15</a> .
	<b>Map</b>	View your Sites on Google Maps and resolve any equipment conflicts. See <a href="#">Using the Map to view Sites on page 101</a> .
	<b>Equipment</b>	<p>Locate your devices and see vital statistics, such as nickname, serial number, and device type, last and estimated next communication, and current status, including battery charge level and signal strength.</p> <p>Click the <b>Pencil</b> icon  for your device on the Equipment summary page to open the Equipment management page, where you set your device mode, speed settings, schedules, alerts, and more. See <a href="#">Configuring your ATS devices on page 29</a>.</p>
	<b>Reports</b>	Generate <b>Traffic</b> reports for Sites and <b>Operational</b> reports for your equipment. See <a href="#">Running reports on page 83</a> .
	<b>Messaging</b>	Set default messaging or custom or speed-dependent messaging. See <a href="#">Using the Messaging libraries on page 63</a> .

Icon	Tab	What you can do
	<b>Sites</b>	Add new Sites and view and edit existing ones. See <a href="#">Creating a Site for your ATS device on page 23</a> .
	<b>Alerts</b>	View alerts generated by your devices. Alerts are sent to TraffiCloud immediately, whenever they are triggered. See <a href="#">Checking alerts on page 107</a> .
	<b>Pictures</b>	View photos taken by your devices and configure photo settings. See <a href="#">Checking pictures on page 113</a> .
	<b>Administration</b>	Administrators can manage the TraffiCloud account, view equipment status, check entitlements (subscription), and manage users, and uploads. See <a href="#">Administration on page 117</a> .

## The User menu

Use this section for details about the **User** menu.

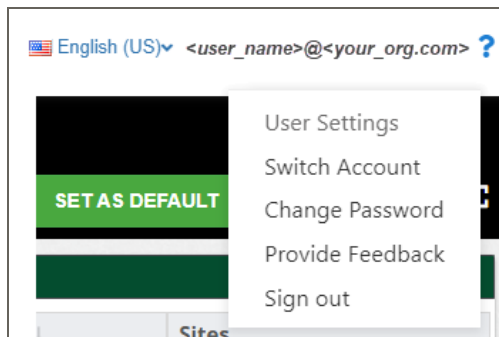


Figure 3: The User menu

The TraffiCloud **User** menu includes the following:

Menu item	What you can do
<b>User Settings</b>	Change your information, enable TraffiCloud text messaging for the account, add phone numbers, and more. See <a href="#">Editing a user on page 120</a> .
<b>Switch Account</b>	Switch between TraffiCloud accounts if you have more than one. You can also change the default account by clicking <b>Switch Account &gt; Make Primary</b> .
<b>Change Password</b>	Open the <b>Change Password</b> page.
<b>Provide Feedback</b>	Send feedback about TraffiCloud to Technical Customer Support.
<b>Sign out</b>	Log out from the TraffiCloud session.

# Chapter 2

## Getting started

As you start using TrafficCloud with your ATS devices, here's a high-level overview of the steps you'll need to cover:

### 1. Creating Sites for ATS devices

After you receive your TrafficCloud login credentials, you should create a Site for each of your ATS devices.

- On the TrafficCloud navigation menu, click **Sites** and then click the **Plus** sign  under the map.

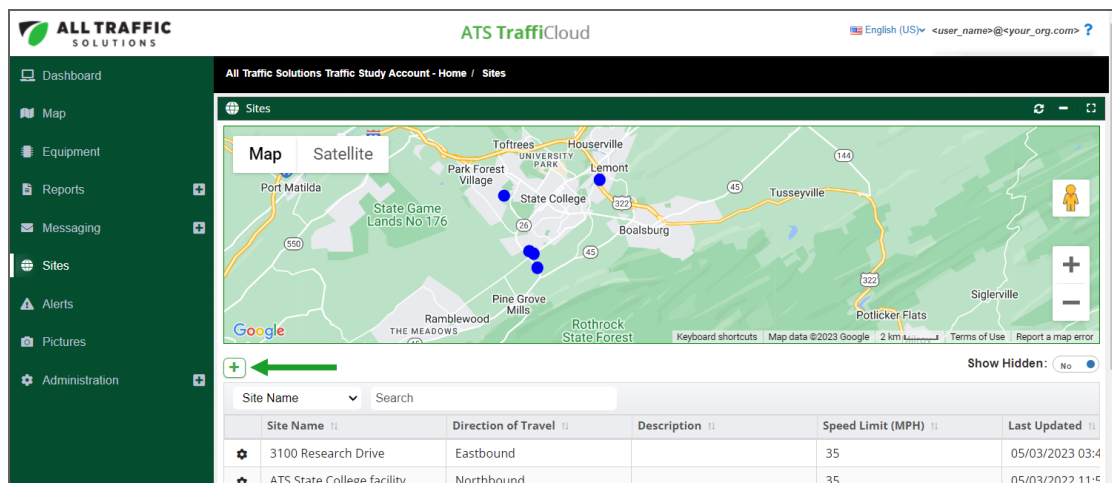


Figure 4: Adding a Site

After your initial training, for detailed instructions log in to TrafficCloud and click the TrafficCloud **Help** menu , where you can contact Customer Support or view TrafficCloud **Training Videos** and **Getting Started Guides**.

### 2. Taking your ATS device to the roadside

- Take your ATS device to the roadside and install it using the included *Quick Start Guide* for all your initial setup instructions. Take note of the product serial number. The serial number identifies the device to ATS

Customer Support, and enables you to specify which device is installed and where.

- B. Then in TrafficCloud, assign the Site to your ATS device. Please see [Assigning a Site to your ATS device on page 25](#).

### 3. Configuring ATS devices in TrafficCloud

Configure your ATS devices as needed. Configure speed settings, message display, and schedules, and configure TrafficCloud to send you and your team alerts for issues such as low battery, tampering, and, for radar-equipped devices, high-speed or low-average-speed events. Please see [Configuring your ATS devices on page 29](#).

### 4. Running reports

You can start generating reports after the first data upload (three hours), but we recommend running them with at least a full day of data. With a TrafficCloud subscription, data uploads to the website automatically, and with radar-enabled devices you can also run premium reports, such as Compliance & Risk or Enforcement Priorities. See [Running reports on page 83](#).

## Signing in to TrafficCloud for the first time

Once your organization has a TrafficCloud subscription, our team registers your users by setting up their email addresses as their user names, and sending them a Welcome email with a temporary password and a link to TrafficCloud. If this is your first time using an ATS device with TrafficCloud, make sure the purchaser has set up a user account for you.

#### To sign in to TrafficCloud:

1. In the Welcome email from All Traffic Solutions, click the **Join All Traffic Solutions <your account name> Account** link, or open the portal here: <https://portal.trafficcloud.com/login>
2. On the TrafficCloud menu, click Cloud Login. Enter your account email address for user name and the temporary password provided in the Welcome email.
3. Click the **OK** button. You'll then be prompted to create a new password.
  - A. In the **Old Password** box, enter the password from the Welcome email (you can copy and paste it, just make sure no trailing space is added).
  - B. In the **New Password** and **Confirm Password** boxes, enter a new password. Passwords must have a minimum of eight characters, and we recommend including at least one special character, number, uppercase letter, and lowercase letter. Password rules can be defined by your TrafficCloud administrator. You can also let your Web browser suggest and save a secure password.
  - C. Click the **Change Password** button.

ATS TrafficCloud

Change Password

Old Password Enter your password

New Password

• 8 characters minimum

Confirm Password

CANCEL CHANGE PASSWORD

You can reset your password as needed using **Change Password** on the **TrafficCloud User menu**.

## Using dashboards

When your TrafficCloud account is first set up, you'll see a default Device List widget on your dashboard in the main viewing pane. Dashboards give you a quick overview of your All Traffic Solutions devices and activity, and you can add widgets to track your preferred items, like alert history, devices, and status. The example below shows some Alerts History widgets, and a New Device list, along with a Traffic Volume widget at right. You can add widgets to dashboards, add multiple dashboards, and specify a default dashboard. Dashboards update automatically when you add or remove devices on your TrafficCloud account. See also: [Managing dashboard widgets on page 123](#)



**Watch the video**

Here's an example of what you'll see on a Default dashboard, showing a Device List widget:

Device List						
Nickname	Serial Number	Last Communication	Next Communication	Signal Strength	Battery Status	Sites
ATS335	12992311133530	8/29/2024 9:59 AM	8/29/2024 10:14 AM	...	...	Logix QA Test, SB
ALRP-Radar	G33734058501727081A	8/29/2024 10:00 AM	8/29/2024 10:15 AM	...	...	Maple View, WB
atsCS12	12993820068630	8/29/2024 9:59 AM	8/29/2024 10:14 AM	...	...	Wall Sh12, NB
ATS9586	181259586	8/29/2024 10:00 AM	8/29/2024 10:15 AM	...	...	Pine Avenue, WB
atsCS18	18971814042830	8/29/2024 9:59 AM	8/29/2024 10:14 AM	...	...	Stapleton & Wasaga, SB
STA-1A13	12344321	8/29/2024 10:00 AM	8/29/2024 10:15 AM	...	...	Avenue P, WB

Figure 5: The Default dashboard

## Adding widgets to your dashboard

Use this procedure to add widgets to your dashboard. **Watch our [DASHBOARDS AND WIDGETS](#) TRAINING VIDEO.**

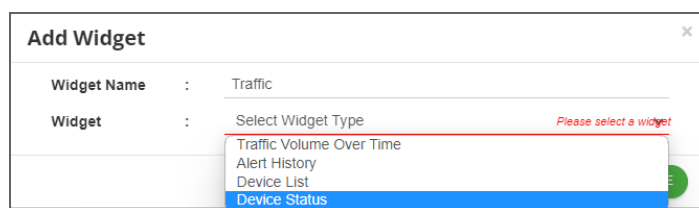


Figure 6: The Add Widget window

You can create these types of **Dashboard Widgets**:

Widget type	What it does
<b>Traffic Volume Over Time</b>	For radar-enabled devices, provides a graphic display of the volume of traffic over a given time period.
<b>Alert History</b>	Displays alerts for issues such as low battery, tampering, and, for radar-equipped devices, high-speed or low-average-speed events. We recommend creating a separate widget for each.
<b>Device List</b>	Displays a list of devices. You can configure the display for your devices, electrical power status, cellular signal strength, assigned Site, how often the data should be updated, and number of rows in the display table.

Widget type	What it does
<b>Device Status</b>	Displays the device nickname and serial number, Site, average speeds and 85% speeds, last alert, and last communication and estimated next communication.

To add a widget to your dashboard:

1. On the navigation menu, click the **Dashboard** tab. The Dashboard page opens, showing the default dashboard and any others that have been created on your account.
2. Click the **Edit** button just below the TrafficCloud title bar. The Dashboard editing buttons display.
3. Click the **+Widget** button. The **Add Widget** window opens.
4. Enter a name for the new Dashboard Widget, and click **Select Widget Type** as shown in [Figure 6: on the previous page](#).
5. Click the **Done** button to finish adding the widget.

## Setting up a Traffic Volume widget

Use this procedure to set up a **Traffic Volume** widget (radar-equipped devices only).

To set up a **Traffic Volume** widget:

1. Add the **Traffic Volume** widget (see [Adding widgets to your dashboard on the previous page](#)). The **Add Widget** window opens. Here's an example with the data set up:

The screenshot shows the 'Add Widget' dialog box. At the top, it says 'Add Widget' with a close button. Below that, 'Widget Name' is set to 'Hintonburg'. 'Widget' is set to 'Traffic Volume Over Time' with a dropdown arrow. The configuration section includes: 'Site' with a dropdown showing '1 site selected' and an info icon; 'Bin Increment (min)' set to '15'; 'Last X minutes' set to '60'; 'Update data every X seconds' set to '30'; 'Lanes' with a dropdown showing '1 lanes selected'; and 'Show Speed?' with a toggle switch set to 'ON'. At the bottom right are 'CANCEL' and 'DONE' buttons.

Figure 7: The Add Widget window > Traffic Volume Over Time

2. Use the following table for help with your selections:

Widget field	What you can do
<b>Widget Name</b>	Give the widget a representative name. For example, if you have signs or devices in multiple districts, you could name the widgets by district.
<b>Widget</b>	Select the <b>Traffic Volume</b> widget type.
<b>Site</b>	Select the Site or Sites you want reporting on. Most organizations use a single Site here. When you select multiple sites, TrafficCloud sums them together.



Widget field	What you can do
<b>Bin Increment (min)</b>	Groups the data in time increments of 15, 30, or 60 minutes.
<b>Last X minutes</b>	Sets the reporting period in minutes, from 30 to 300, in 30-minute increments.
<b>Update every X seconds</b>	Sets the update frequency, in seconds from 30 to 180, in 30-second increments.
<b>Lanes</b>	Sets the number of lanes to monitor, from 1 to 16. For Shield and School Zone Alert signs, set the number to 1.
<b>Show Speed?</b>	Sets whether speed should be displayed.

Here's an example of a **Traffic Volume** widget:

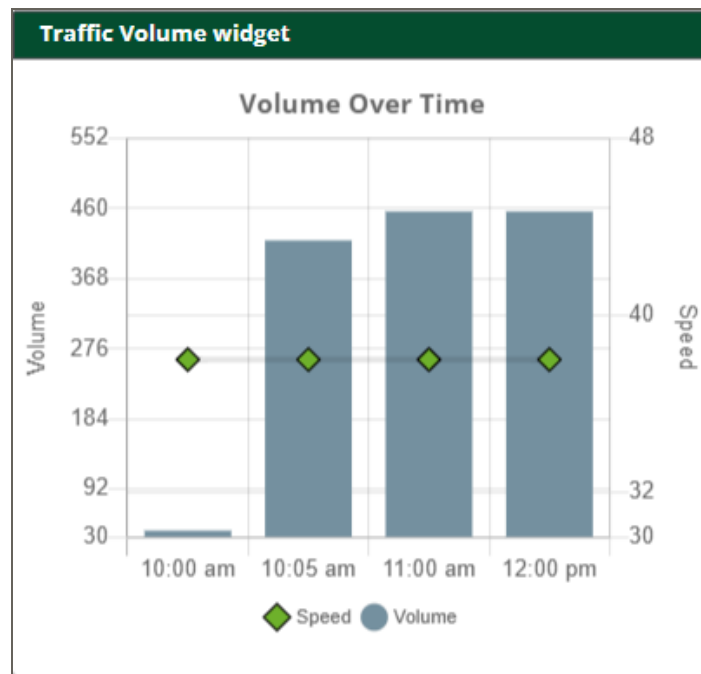


Figure 8: Traffic Volume widget example

## Setting up an Alert History widget

Use this procedure to set up an **Alert History** widget. Alerts are event notifications sent to TrafficCloud users for issues such as low battery, tampering, and, for radar-equipped devices, high-speed or low-average-speed events.

### To set up an Alert History widget:

1. Add the **Alert History** widget (see [Adding widgets to your dashboard on page 15](#)). The **Add Widget** window opens. Here's an example with the options selected:

The 'Add Widget' window shows the following configuration:

- Widget Name:** Long Beach
- Widget:** Alert History
- Alert Types:** 3 alert types selected
- Number to Display:** 10
- Update data every X seconds:** 30

Buttons: CANCEL, DONE

Figure 9: The Add Widget window > Alert History

- Use the following table for help with your selections:

Setting	What you can do
<b>Widget name</b>	Give the widget a representative name. For example, if you have signs or devices in multiple districts, you could name the widgets by district.
<b>Widget</b>	Select the <b>Alert History</b> widget type.
<b>Alert Types</b>	Select which of your devices you want reporting on.
<b>Number to Display</b>	Enable this option to set the number of alerts to display.
<b>Update data every X seconds</b>	Set how often the data is refreshed, ranging from 30 to 180 seconds in 30-second increments.

Here's an example of an **Alert History** widget:

Alerts			
Timestamp	Source	Alert Type	Value
1/6/2023 4:43:04 PM	Church - Branch Road	Tamper Alert	
1/5/2022 2:47:01 PM	Church - 2H 2021	Low Battery Alert	27
1/4/2022 3:48:02 PM	Church - 2H 2021	Low Battery Alert	30
1/3/2022 3:08:23 PM	Church - 2H 2021	Low Battery Alert	29

Figure 10: Alert History widget example

## Setting up a Device List widget

Use this procedure to set up a **Device List** widget, which will list the latest details about all of your ATS signs or devices, and includes an **Pencil (Edit)** icon to open the **Equipment** details page for the device.

### To set up a Device List widget:

- Add the **Device List** widget (see [Adding widgets to your dashboard on page 15](#)). The **Add Widget** window opens. Here's an example with the data set up:

The screenshot shows the 'Add Widget' dialog box. The 'Widget Name' is 'Westmount'. The 'Widget' type is 'Device List'. Under the 'Devices' section, it says '9 DEVICES SELECTED'. There are three toggle switches: 'Show Power?' (ON), 'Show Cell Signal?' (ON), and 'Show Assigned Site?' (ON). The 'Update data every X seconds' is set to 30. 'Show Structures?' is set to OFF. 'Auto Paginate (Seconds)' is set to 'Choose'. 'Number of Rows' is set to 10. At the bottom right are 'CANCEL' and 'DONE' buttons.

Figure 11: The Add Widget window > Device List

2. Use the following table for help with your selections:

Setting	What you can do
<b>Widget name</b>	Give the widget a representative name. For example, if you have signs or devices in multiple districts, you could name the widgets by district.
<b>Widget</b>	Select the <b>Device List</b> widget type.
<b>Devices</b>	Select which of your devices you want reporting for.
<b>Show Power?</b>	Enable this option to have the widget display the electrical power status for the devices.
<b>Show Cell Signal?</b>	Enable this option to display the signal strength of the cellular modem in the device.
<b>Show Assigned Site?</b>	Enable to show the name of the Site.
<b>Update every X seconds</b>	Enable this option to set how often the data is refreshed, ranging from 30 to 180 seconds in 30-second increments.
<b>Show Structures?</b>	If you have our Parking solution, this option enables display of parking structure names.
<b>Auto Paginate (Seconds)</b>	Forces the display to show the next or previous page at the specified interval (every 5 seconds, from 5 to 30 seconds).
<b>Number of Rows</b>	Specifies the number of rows in the widget data table.

Here's an example of a completed **Device List** widget. Click the **Pencil**  icon to open the **Equipment details** page for the listed device:






Device List							
	Nickname	Serial Number	Last Communication	Next Communication	Signal Strength	Battery Status	Sites
	ATS0332	24953722033230	4/20/2023 1:50 PM	4/20/2023 2:05 PM			
	STA-AEC6	23030439	5/8/2023 3:05 PM	5/8/2023 3:06 PM			ATS State College facility

Figure 12: Device List widget example

## Setting up a Device Status widget

Use this procedure to set up a **Device Status** widget, listing the status of your ATS devices.

### To set up a Device Status widget:

1. Add the **Device Status** widget (see [Adding widgets to your dashboard on page 15](#)). The **Add Widget** window opens. Here's an example with the data set up:

Add Widget

Widget Name : Device Status widget - Speed signs

Widget : Device Status

Device : ats0104

Update data every X seconds : 180

Average Speed : OFF

85% Speed : OFF

Battery % : ON

Signal Strength : ON

Current Message : OFF

Last Alert : ON

Last Comm : ON

Est. Next Comm : ON

CANCEL

DONE

Figure 13: Device Status

2. Use the following table for help with your selections:

Setting	What you can do
<b>Widget name</b>	Give the widget a representative name. For example, if you have signs or devices in multiple districts, you could name the widgets by district.
<b>Widget</b>	Select the <b>Device Status</b> widget type.
<b>Devices</b>	Select which of your devices you want reporting for.
<b>Update data every x seconds</b>	Enable this option to set how often the data is refreshed, ranging from 30 to 180 seconds in 30-second increments.

Setting	What you can do
<b>85% Speed</b>	Enable to show the 85% Speed (the speed that 85% of vehicles do not exceed) captured by the device.
<b>Battery %</b>	Enable to display the available battery charge percentage in the device.
<b>Signal Strength</b>	Enable to display the signal strength of the cellular modem in the device.
<b>Last Alert</b>	Displays the last type of alert triggered, for example "High Speed Alert".
<b>Last Comm</b>	Displays the date and time of the last communication from the device to TrafficCloud.
<b>Est. Next Comm</b>	Displays the estimated date and time of the next communication from the device to TrafficCloud. See <a href="#">When ATS devices send and receive data on page 49</a>

## Using multiple dashboards

Use this topic for help if you want to set up additional dashboards, such as for multiple users. Once you add another dashboard, you can also define it or any additional dashboard as the default for your user account and specify access permissions.

### To add a dashboard to TrafficCloud:

1. Click the **+Dashboard** button in the black header bar, near the top of the main TrafficCloud window. The **New Dashboard** window opens:

Figure 14: The New Dashboard window

2. Enter a name for the new dashboard, and optionally a description.
3. Optionally, you can also make the new dashboard private to specify users who can view and change it. Click the **Make Private** slider, as shown:

Figure 15: The New Dashboard window > Make Private

4. Click the **Users** drop-down to select users.
5. After you've made your changes, click the **Done** button to create the new dashboard.

To switch between dashboards:

- Click the dashboard drop-down list and select another dashboard.

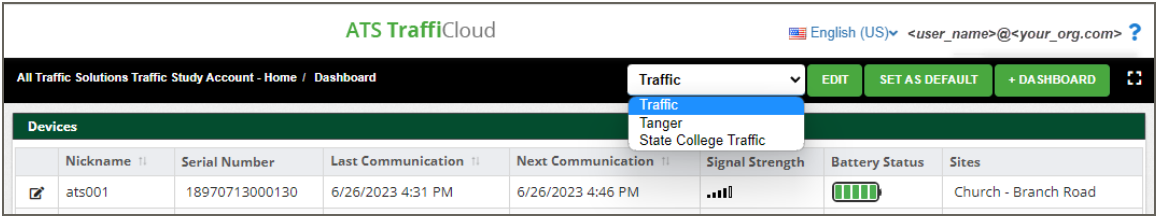



Figure 16: Dashboard drop-down list

Once you've created an additional dashboard, you can specify it as your own or others default dashboard, the dashboard that displays when you click the  **Dashboard** tab on the navigation menu.

To set your default dashboard:

- Open your new dashboard.
- In the black header bar near the top of the main TrafficCloud window, click the **Set as Default** button (see [Figure 16: above](#)). The dashboard will be set as the default for your user account. Other users can still view and edit the default dashboard unless you also make it private. See [Figure 15: on the previous page](#).



# Chapter 3

## Creating a Site for your ATS device

To get started using your ATS device with TrafficCloud you'll need to *create* at least one Site for each device, as described below, and then *assign* your device to it (see [Assigning a Site to your ATS device on page 25](#)).

Sites are the key to generating traffic reports, because TrafficCloud organizes traffic data for reports by Site. You can even assign Sites to InstAlert signs so that Site names can appear in battery and tamper alerts.

You can perform these steps before (recommended) or after you install a device at a physical location. For details about physical setup, refer to the *Quick Start Guide* provided with your device and available for download from the [ATS Customer Support page](#).



Watch the video



**TIP:** If you'll be using a device at multiple Sites, you can repeat the steps below for those Sites or add them later.

### To create a Site in TrafficCloud:

1. On the navigation menu, click **Sites** and then click the **Plus** sign  under the map.

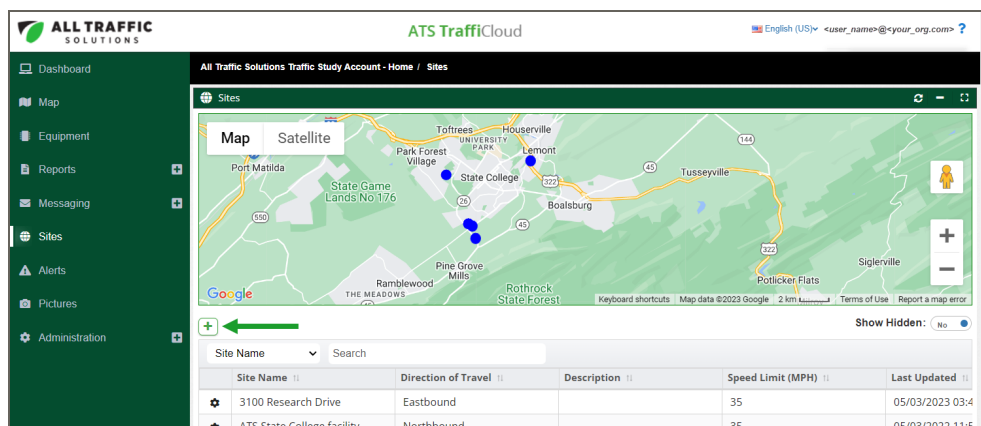


Figure 17: The Sites page > Add Site button

The **Add Site** window opens.

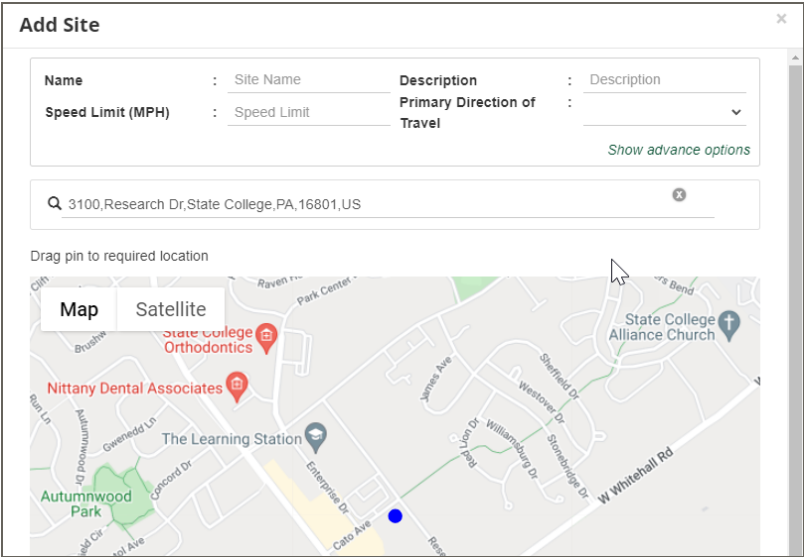



Figure 18: The Add Site window

2. Set up the Site, using the following table for details:

Setting	What you can do
Name	Enter a Site name that will identify the location for the device in the Sites list. For example, First Avenue and 54th.
Description	Optionally, enter a description for the Site.
Speed Limit	Enter the speed limit for the Site.
Primary Direction of Travel	Select the primary direction of travel where vehicles will be approaching the front of the device: <b>North</b> , <b>South</b> , <b>East</b> , or <b>West</b> . If the street direction is between two of the primary directions, choose the closest one. Only StatTraks detect bidirectional traffic.
Address	<div>Enter an address for the Site using the following methods. The blue dot represents the Site for your device on the map.</div> <div><div>A.</div><div>In the address search box, enter the address or intersection where the device will be located. The address field displays pattern matches for the address as you type. Select the address from the list. You can also copy and paste an address from your address book.</div></div>

Setting	What you can do
	<p>B. Zoom the map until you can see street names.</p> <p>To zoom, you can do any of these:</p> <ul style="list-style-type: none"> <li>» Roll the middle mouse button forward,</li> <li>» Use the <b>+</b> sign on the bottom right corner of the map, or</li> <li>» Click the keyboard <b>+</b> key. See the <b>Keyboard Shortcuts</b> at the bottom-right corner of the map as well.</li> </ul> <p>C. Drag the blue dot to the planned location. The goal is to move the dot to within 100 feet of the Site address.</p> <p><b>TIP:</b> As you zoom, click and hold the mouse button on the map to drag and reposition your view of the blue dot or status marker.</p>



**TIP:** You can also use Google **Satellite view** or drag the **Pegman**  onto the map to switch to **Street view**. Drag the Pegman to the blue dot and release the mouse button when you see the street view popup.

- Click the **Save Site** button. Your Site will appear in the **Sites** list in the main window. By default, only active Sites show in the list. Click **Show Hidden** to show all Sites, including active and hidden Sites.


## Assigning a Site to your ATS device

Once you've created a Site, the next thing you'll need to do is assign your ATS device to the Site using TrafficCloud. Watch our [TRAINING VIDEO](#)

You can perform these steps before or after you install the ATS device on location, but we recommend performing them beforehand so you'll have your data as soon as the ATS device are placed on Site.

For InstAlerts, assigning a Site is helpful to understand the location for alerts, but Site settings are less important than for other devices since there is no radar.

### To assign a Site to your ATS device:

- On the navigation menu, click the **Equipment** tab and then click the **Pencil** icon  next to the ATS device in the **Equipment** list. Alternatively, on the **Dashboard**, click the Pencil icon in the **Device List** next to the device you want to assign the Site to.



**TIP:** If you need to filter the **Equipment** list, click the **Expand Filter** button. You can filter by nickname, serial number, device type, Site, last communication, and power level.

The **Equipment** details page opens.



Equipment			
Show Hidden : <input type="radio"/> No <input checked="" type="radio"/>			
		Nickname <small>↑↓</small>	Serial Number <small>↑↓</small>
		ats0103	18953123010330


Figure 19: The Equipment details page (Shields, SpeedAlerts, and School Zone Alert)

Figure 20: The Equipment details page (for StatTrak)

2. Verify your preferred **Sign Mode** for sign displays. With Shield, School Zone Alert, and SpeedAlert signs, the default is set to **Speed Display**. With InstAlert signs, the default is set to **Single Message**. With StatTrak, sign modes do not apply. See [Setting Sign Modes on page 30](#).
3. In the **Assigned Site** box, click the down arrow and select your Site, as shown in [Figure 21: on the facing page](#).

Figure 21: Equipment > Assigned Site box




**TIP:** Next to the **Assigned Site** box, you can also click the **Plus** sign  to create a new Site and assign it in one step.

- A prompt appears asking if you want to apply the speed limit to the sign that you specified when you created the Site. Click **Yes** to confirm. If you want to change the speed limit, you can click **No** and change it on the **Equipment** page. The Site will now be assigned to your sign.
- Click the **Save All Equipment Settings** button.

## Editing a Site

Use this procedure to edit an existing Site.

### To edit a Site:

- On the navigation menu, click **Sites**. The **Sites** page opens. See also [Creating a Site for your ATS device on page 23](#).
- Click the **View Sites** icon , next to the Site name in the **Sites** list.

Site Name	Direction of Travel	Description	Speed Limit (MPH)	Last Updated
ATS State College facility	Northbound		35	03-05-2022 11:53:58:am
Church - Branch Road	Eastbound		25	09-05-2022 12:00:54:pm
Citel Ave. and Research				

Figure 22: The View Sites button

- Make your changes and click the **Save Site** button. Your changes appear in the Sites list.





# Chapter 4

## Configuring your ATS devices

Use the **Equipment** tab to locate and update TrafficCloud settings for your ATS devices. The initial **Equipment** list page displays identifying information for your devices, including nickname, serial number, device type, assigned Site, last and estimated next communication, and battery status. Configuration options for each device appear on the **Equipment** details page.




Watch the video



Watch the video



Watch the video

You can go to the **Equipment** list page or the **Device List** on the Dashboard and click the **Pencil** icon  next to any device to open the **Equipment** details page. There, depending on which device you have, you can set:

- **Sign Mode**, the type of information the sign displays, such as vehicle speed for radar-enabled signs, messages, and daily and weekly schedules.
- **Assigned Site**, the location TrafficCloud recognizes where you plan to place the device. The Site is also key to preparation of reports.
- **Speed** settings, such as speed limit, speed slots (when to collect data), speeds to display and when to blink or strobe (if equipped), and radar sensitivity,
- **Alerts and Images**, for issues such as low battery, tampering, and, for radar-equipped devices, high-speed or low-average-speed events. Also, whether to take pictures and at what resolution.

## Setting Sign Modes

ATS signs include a variety of display modes, depending on the capabilities of your sign. Sign modes are only available for signs, not StatTrak data loggers, which do not have a display.

Here's where you can set **Sign Modes**, showing the available modes for each sign type:

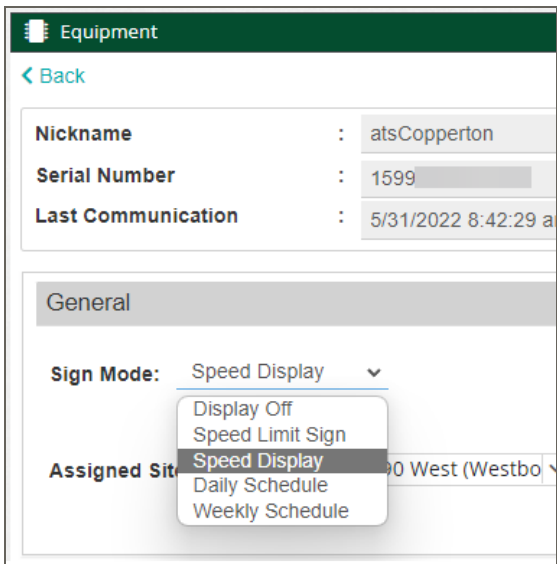


Figure 23: Shield and School Zone Alert Sign Modes

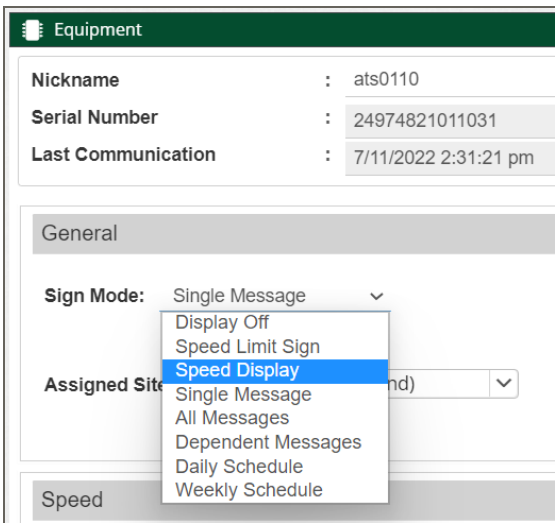


Figure 24: SpeedAlert Sign Modes

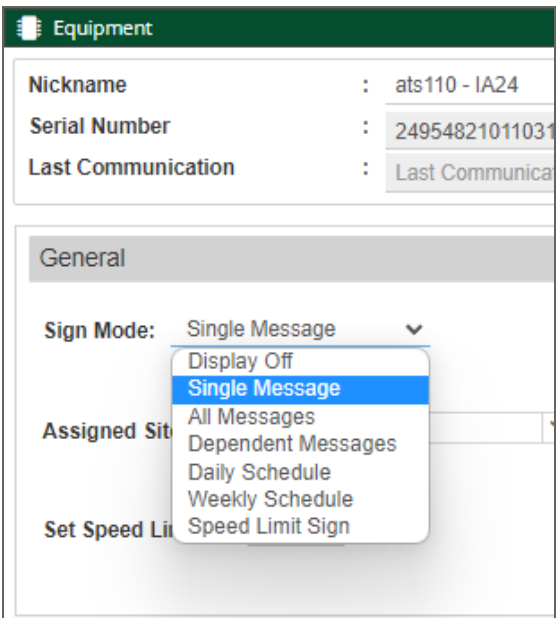




Figure 25: InstAlert Sign Modes

Sign Mode	What you can do
<b>Display Off</b>	For Shield, School Zone Alert, and SpeedAlert, you can turn the display off, but still collect traffic and status data. This mode is recommended for performing traffic studies at a Site. See <a href="#">Performing a traffic study on page 41</a> . For InstAlert signs, maintains a connection to TrafficCloud and collects status data, but message display is turned off.
<b>Speed Limit Sign</b>	Display the speed limit, and for radar-enabled signs still collect data and blinks and strobes based on your sign settings for speed warnings as vehicles pass through the sign's radar detection zone. See <a href="#">Configuring speed sign settings on the next page</a> .   <b>NOTE:</b> If you use this setting, to avoid driver confusion be sure to remove the <b>Your Speed</b> faceplate.
<b>Speed Display</b>	Display the detected speed of oncoming vehicles, adjusting as vehicles change speeds and pass through the sign's radar detection zone. With <b>Shield</b> and <b>School Zone Alert</b> radar signs, <b>Speed Display</b> is the most popular sign mode, providing immediate feedback about vehicle speed, with optional blinking and strobe warnings, for signs so equipped, at specified speeds. School Zone Alert also includes flashing beacons to warn motorists about speed reductions. See <a href="#">Configuring speed sign settings on the next page</a> .
<b>Single Message</b>	Rotate a message of up to six screens in sequence. There are 24 factory-preset messages included with ATS devices. You can also create your own messages (for example, "Flood Warning", "Amber Alert"), depending on your needs. See <a href="#">Enabling messaging for signs on page 34</a> .
<b>All Messages</b>	Display all of the messages in the sign's memory in sequence.
<b>Dependent Messages</b>	Display a series of speed-dependent messages. For the multipurpose <b>SpeedAlert</b> , <b>Dependent Messages</b> is the go-to sign mode, displaying messages specific to vehicle speed ("Your Speed XX", "Speed Limit: XX", then "Slow Down", "Too Fast!", "Have a Nice Day"). See <a href="#">Creating a Dependent Message on page 67</a> .
 <b>TIP:</b> A popular option with dependent messaging, which also prolongs battery life, is programming the sign to go blank when no vehicle is detected.	
<b>Scheduling</b> For <b>all signs</b> , including <b>School Zone Alert</b> , you can create daily and weekly schedules, adjusting the speed limit during scheduled periods of the day or week, such as for deployment to school zones when students are attending school, or for construction zones during work hours. You can also set up exceptions for holidays and other days where you need to alter the typical schedule. For <b>SpeedAlert</b> and <b>InstAlert</b> signs, in addition to the above, you can display messaging during scheduled periods of the day or week related to traffic calming or for directing traffic for events like construction, concerts, games, or special events.	
<b>Daily Schedule</b>	Adjusts the speed limit and messaging used for your sign during scheduled periods of the day. See <a href="#">Setting up a daily schedule on page 53</a> .

Sign Mode	What you can do
Weekly Schedule	Adjusts the speed limit and messaging used for your sign during scheduled periods of the day. Setting a weekly schedule is more appropriate than a daily schedule for speed signs monitoring school or construction zones, where the speed reduction and messaging would usually be necessary only on workdays and during working hours, and messaging signs directing traffic at specific times and days of the week, for events lasting anywhere from a few days, such as festivals or conventions, or longer. See <a href="#">Setting up a weekly schedule</a> on page 57.

Configuring speed sign settings

As shown below, in the **Equipment page > Speed** settings, you can set your sign's speed limit and scheduling, when it collects traffic data, speed ranges to display, when it should blink or strobe, along with radar sensitivity.

Speed

Set Speed Limit to: 45 mph

Collect Traffic Data between: 10 mph and 100 mph

Display Speeds ☒ between: 10 mph and 70 mph

Blink Screen Above ☒ 45 mph

Activate Strobe Above: ☐ 45 mph


Radar Sensitivity: 1 8 10



Watch the video

Figure 26: Speed settings

Use the following table for details about configuring speed settings:

Setting	Description
Set Speed Limit to	Sets the speed limit for the sign. The speed limit is also set in the TrafficCloud <b>Site</b> tab and initially using the <b>Speed Limit</b> button on the sign itself. TrafficCloud settings take precedence over the settings on the physical sign.
Collect Traffic Data between	Sets the minimum and maximum speeds defining when traffic data is collected (radar-enabled signs only).
Display Speeds	Sets the range of speeds to be displayed. To avoid joy riders competing for "high scores" on radar signs, most organizations set the maximum display speed much lower than the data collection maximum speed.
Blink Above	Sets the speed when the display starts to blink. Most organizations set this at the speed limit of five to 10 mph over, depending on the situation. Uncheck to disable this setting if preferred.
Activate Strobe Above	Sets the speed when the strobe light in the sign (if equipped) starts to flash. Organizations that use the strobe option typically set it to 10-15 mph above the speed limit. Uncheck to disable this setting if preferred.
Radar Sensitivity	Sets the sensitivity level of the radar device in the sign, ranging from least to most sensitive. We recommend using settings between four and eight. <div> <b>NOTE:</b> Setting radar sensitivity to less than four can result in unreliable detection distances, such as the vehicle being past the sign before it illuminates, while settings above eight can cause the radar to pick up background objects, vehicles on cross streets, or other interference.</div>

## Configuring StatTrak Equipment settings

As shown here, on the StatTrak **Equipment** page, you can create and assign a site, specify the radar detection range, and create and monitor alerts.

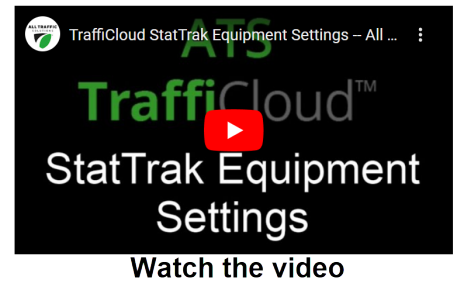


Figure 27: Equipment settings

Use the following table for details about equipment settings:

Setting	What you can do
<b>Properties</b>	The properties section at the top of the page includes an <b>Add Site</b> button, a configurable nickname field, and displays serial number, last and estimated next communication, device type, and time zone.
<b>Nickname</b>	Use this field to change the name in TrafficCloud for your ATS devices.
<b>Assigned Site</b>	Use the drop-down to select from existing Sites. See <a href="#">Assigning a Site to your ATS device on page 25</a>
<b>Add Site</b>	Click to open the Add Site window. See <a href="#">Creating a Site for your ATS device on page 23</a>
<b>Speed Limit</b>	Enter a value to program the device with the speed limit for the roadway.
<b>Collect Traffic Data between</b>	Sets the minimum and maximum speeds defining when traffic data is collected (radar-enabled signs only).
<b>Add Alert</b>	Click to add an alert to your device. See <a href="#">Configuring Alerts and Images on page 37</a>
<b>Alert Type</b>	Here's a list of the alert types you can use with ATS devices: <ul style="list-style-type: none"> <li>» Low Battery Alert</li> <li>» Very Low Battery Alert</li> <li>» Tamper Alert (Signs only)</li> <li>» High Speed Alert</li> <li>» Low Average Speed Alert</li> <li>» Sign Moved Alert (Signs only)</li> </ul>

## Enabling messaging for signs

With TrafficCloud you can deploy, create, and manage messages to your messaging-enabled signs using the **Equipment** and **Messaging** tabs.



Watch the video



Watch the video

You can store a maximum of 24 messages plus a placeholder message, referred to as the **InstaMessage**. The InstaMessage is always the first message in the **Single Message** list on the page. You can create an unlimited number of custom or dependent messages in TrafficCloud. See [Using the Messaging libraries on page 63](#).




**TIP:** You can't directly delete the InstaMessage, but you can replace it using the **Messaging > Assign Message**  command. See [Sending a message to one or more signs on page 74](#).




Figure 28: Sign Modes for Messaging (SpeedAlert)

For details, see [Understanding messaging modes on the facing page](#).

In **Single Message** mode and **Dependent Messages** modes, you can:







- » select from the default messages or create your own messages,
- » activate, add, edit, reorder, or copy messages, and
- » choose messages from the **Message Library** or **Dependent Message Library**.

### To set up messaging for your sign:

1. On the navigation menu, click the **Equipment** tab. The **Equipment** summary page opens, listing all of the signs and devices in your organization. Alternatively, you can open the **Device List** on the **Dashboard**.
2. Click the **Pencil** icon  next to the sign you want to set up messaging for. The **Equipment** details page opens for the sign.
3. In the **General** section, click the **Sign Mode** drop-down list and select the mode you want to use: **Single Message**, **All Messages**, or, for SpeedAlert, **Dependent Messages**. The **Sign Modes** for messaging are described in [Understanding messaging modes on the facing page](#).
4. Scroll down to the **Messages** screen of the **Equipment** page.
5. If you select **Dependent Messages**, you can select from the following options:

Option	What you can do
<b>View</b>	View the default message.
<b>Edit</b>	Click the <b>Edit</b> button to edit the default message. See <a href="#">Editing a message on page 75</a> .
<b>Copy</b>	Click the <b>Copy</b> button to copy the current message to the <b>Dependent Message Library</b> . This is the preferred way to create a new Dependent Message. See <a href="#">Creating a Dependent Message on page 67</a> .
<b>Choose From Dependent Message Library</b>	Click the <b>Choose From Dependent Message Library</b> button to select another message, if others have been added. Select a message and click the <b>Choose</b> button.

6. If you select either **Single Message** or **All Messages**, you can select from the following options:

Option	What you can do
<b>Add</b>	Click the <b>Add</b> button  to create a new message or choose from the library.  <b>NOTE:</b> If the <b>Add</b> button is grayed out, it means the sign already has the maximum 24 messages stored locally. To add another message, first you'll need to delete one of the existing messages.
<b>View and Select messages</b>	View and select existing messages. When you select a message, scroll down and select messages to preview any of the screens in the message.
<b>Make Active</b>	Select a message and, to make it the active message on the sign, click the <b>Make Active</b> button, (not available in <b>All Messages</b> mode).
<b>Save</b>	Click the <b>Save</b> icon  to save a copy of a selected message to the <b>Message Library</b> .
<b>Edit</b>	Click the <b>Pencil</b> icon  to edit the selected message. See <a href="#">Editing a message on page 75</a> .
<b>Reorder</b>	Drag the menu icon  to change the order of a selected message in the list.
<b>Delete</b>	Click the <b>Delete</b> icon  to delete a selected message.

7. After you've made your changes click the **Save All Equipment Settings** button.

## Understanding messaging modes

Use this section to understand the **Sign Modes** for messaging that you can use with messaging signs. With **Shield** and **School Zone Alert** radar signs, **Speed Display** is the most popular sign mode, providing immediate feedback about vehicle speed, with optional blinking and strobe warnings, for signs so equipped, at specified speeds. School Zone Alert also includes flashing beacons to warn motorists about speed reductions. For the multipurpose **SpeedAlert**, **Dependent Messages** is the go-to sign mode, displaying messages specific to vehicle speed ("Your Speed XX", "Speed Limit: XX", then "Slow Down", "Too Fast!", "Have a Nice Day"). InstAlerts display dedicated messages and message groups, such as "Flood Warning", "Amber Alert", "Registration Ahead".

See also [Using the Messaging libraries on page 63](#).



## Dependent Messages mode

Dependent Messages mode displays a series of speed-dependent messages. Depending on the speed of the approaching vehicle, the default message displays positive reinforcement, an advisory, or a warning.

*Figure 29:* below shows where you can

- » edit the preset messages or metadata, draw or enter new images, and change the template, blink type, or duration of display for each screen in a given message,
- » copy a message to the **Dependent Message Library**, or
- » choose a message from the Dependent Message Library.

The screenshot shows the 'Edit Dependent Message' interface. At the top, there's a header bar with a green background and a white icon. Below it, the 'Name' field is set to 'Speed Dependent Message' and the 'Description' field is empty with a placeholder 'Enter Description'. The 'Configuration' dropdown is set to '96 / 27, 1 : 2 (SpeedAlert 24\*)' and the 'Message Type' dropdown is set to 'Speed'. The main area contains five rows of message templates, each with a description, a green edit icon, and a preview image. The rows are: 'No Vehicle : chevrons left' (preview: black screen), 'Under Speed Limit : Thank You' (preview: 'YOUR SPEED' and 'THANK YOU FOR DRIVING SAFELY'), 'Within 10 over the speed limit : Speed Limit' (preview: 'SPEED LIMIT' and 'YOUR SPEED'), 'Between 10 and 20 over the speed limit : SLOW DOWN' (preview: 'SPEED LIMIT', 'YOUR SPEED', and 'SLOW DOWN'), and 'More than 20 over the speed limit : TOO FAST' (preview: 'TOO FAST!', 'YOUR SPEED', and 'SLOW DOWN'). At the bottom right, there are 'CANCEL' and 'SAVE' buttons. At the bottom center, there are 'CANCEL' and 'SAVE ALL EQUIPMENT SETTINGS' buttons.

*Figure 29: The default Dependent Message*



**TIP:** A popular option with dependent messaging, which also prolongs battery life, is programming the sign to go blank when no vehicle is detected.

## Single Message mode

Single Message mode rotates a message of up to six screens in sequence. There are 24 default messages included with messaging signs. You can also create your own messages. See [Creating a custom message on page 69](#).

*Figure 30:* on the facing page shows an example of the **Single Message** screen, where you can activate a message, view or change the active message, add a new message, reorder messages, save a copy of a message to the library, or delete messages.



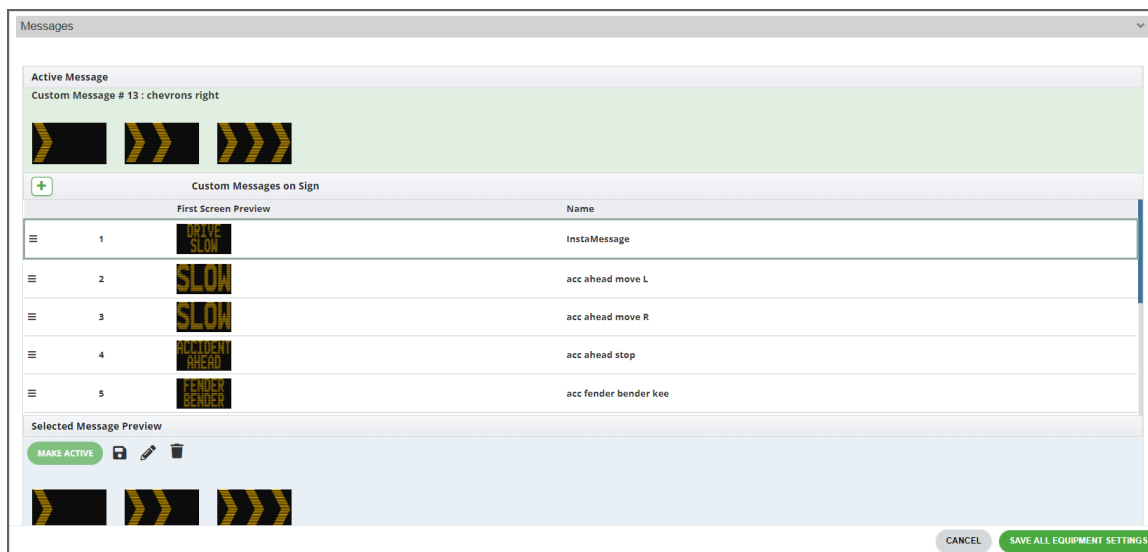


Figure 30: Single Message display

## All Messages mode

All Messages mode displays all of the messages in the sign's memory in sequence.

Here is an example of the **All Messages** screen, where you can preview any message, reorder messages, save a copy of a message to the library, or delete messages:

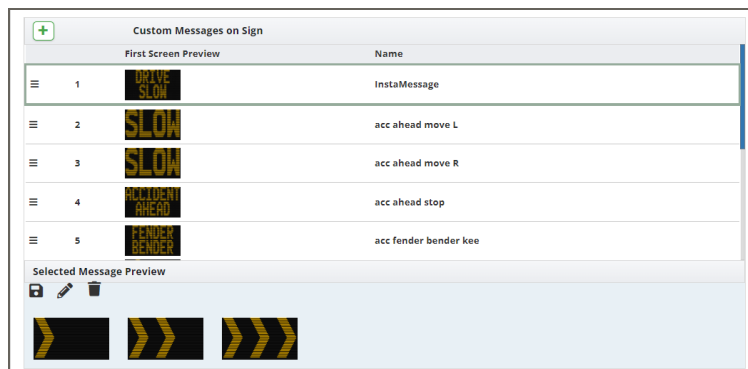


Figure 31: All Messages page


## Configuring Alerts and Images

Use this topic for help with configuring **Alerts**. See also *Checking alerts* on page 107. *Figure 32:* on the next page Traffic data is sent by the device to TrafficCloud regularly, but signs send alerts immediately. Signs send alerts immediately to TrafficCloud. See *When ATS devices send and receive data* on page 49.





**NOTE:** Tamper alerts are available only on signs.

### To configure Alerts and Images:

1. On the navigation menu, click the **Equipment** tab and then click the Pencil icon  next to the device you want to update the alerts for. The **Equipment** details page opens.



**Watch the video**

-  **TIP:** If you have a **Device List** widget for the device on the **Dashboard**, you can access the **Equipment** details page directly from there. On the navigation menu, click the **Dashboard** tab and in the Device List widget, click the **Pencil** icon  for the device.
2. Scroll down to the **Alerts and Images** settings.

Alerts and Images

☒ Low Battery Alert Threshold: 30 % Auto Silence for (min): 15 

EDIT

☒ Very Low Battery Alert Threshold: 15 % Auto Silence for (min): 15 

EDIT

☒ Tamper Alert Threshold: Auto Silence for (min): 1 

EDIT

☒ High Speed Alert Threshold: 53 mph Auto Silence for (min): 1 

EDIT

☒ Low Average Speed Alert Threshold: 10 mph Auto Silence for (min): 

EDIT

Take Picture ☒ Quality High

Take Picture ☒ Quality High

Take Picture ☒ Quality High

Take Awareness Image: ☐ Every 15 min Quality High

☐ Sign Moved Alert 



EDIT

If you have selected "Send Alert" and "Take Picture" the alert email will have an attached image

Figure 32: Alerts and Images (Shields, SpeedAlerts, and School Zone Alert)

Alerts

Alert Type : All

Type	Recipients	Email SMS	Auto Silence (m)	Threshold
  High Speed Alert	Eric Kline	<input checked="" type="checkbox"/> <input type="checkbox"/>	60	45

<

<

1

>

>

CANCEL

SAVE ALL EQUIPMENT SETTINGS

Figure 33: Alerts and Images (StatTrak)

3. Use this table for details about configuring **Alerts**:

Setting	What you can do
<b>Low Battery Alert</b>	<p><b>To set low battery alerts:</b></p> <ol style="list-style-type: none"> <li>For signs, click the checkbox on the left side of the page to enable low battery alerts.</li> <li>For StatTraks, in the <b>Alert Type</b> box, click the <b>Plus Sign</b>  and select <b>Low Battery Alert</b>.</li> <li>Click the <b>Edit</b> button to open the <b>Edit</b> window, where you can set up: <ul style="list-style-type: none"> <li>text and email alerts for TrafficCloud users and guest users. To enable alerts, move the slider to "Yes",</li> </ul> <div>  <b>NOTE:</b> To enable text alerts, the <b>Allow Text Messages</b> slider must be set to <b>Yes</b>, and the user added in the <b>Administration &gt; Users</b> tab. See <a href="#">Adding a user on page 118</a>. </div> </li> </ol>
	<ul style="list-style-type: none"> <li>the charge level (threshold %) for when you want to receive battery alerts. We recommend the low battery alert threshold be set at 50% in freezing temperatures and 30% in seasonable weather.</li> <li>a timespan for auto-silencing alerts.</li> </ul> <ol style="list-style-type: none"> <li>Click the <b>Save Alert</b> button to save your changes.</li> </ol> <p>See <a href="#">Editing alerts on the next page</a></p>
<b>Very Low Battery Alert</b>	<p>See <b>Low Battery Alert</b>, above.</p> <p>We recommend the <b>Very Low Battery Alert</b> threshold be set at 30% in freezing temperatures and 10% in seasonable weather.</p>
<b>Tamper Alert</b> <b>High Speed Alert</b> <b>Low Average Speed Alert</b>	<p><b>To set tamper alerts and speed alerts:</b></p> <ol style="list-style-type: none"> <li>For signs, click the checkbox on the left side of the page to enable low battery alerts.</li> <li>For StatTraks, click the <b>Plus Sign</b>  and in the <b>Alert Type</b> box, and select <b>Low Battery Alert</b>.</li> <li>Click the <b>Edit</b> button to open the <b>Edit</b> window, where you can set up: <ul style="list-style-type: none"> <li>enable text and email alerts for TrafficCloud users and guest users. To enable alerts, move the slider to <b>Yes</b>,</li> </ul> <div>  <b>NOTE:</b> To enable text alerts, the <b>Allow Text Messages</b> slider must be set to <b>Yes</b>, and the user's mobile phone number added in the <b>Administration &gt; Users</b> tab. See <a href="#">Adding a user on page 118</a>. </div> <ul style="list-style-type: none"> <li>for speed alerts, set a speed threshold (in mph or kph, depending on your account settings).</li> <li>set a timespan for auto-silencing alerts. Silenced alerts temporarily suspend notifications, but do not stop recording of events and transmission to TrafficCloud. For <b>Tampering</b>, we recommend no auto-silencing. Set auto-silencing to zero.</li> </ul> <p>See <a href="#">Editing alerts on the next page</a>.</p> </li> </ol>
	<ol style="list-style-type: none"> <li>Click the <b>Save Alert</b> button to save your changes.</li> <li>Optionally, click the <b>Take Picture</b> checkbox and set the image quality (<b>Low</b>, <b>Medium</b> or <b>High</b>) to have a picture taken when an event is detected.</li> </ol> <p>If you select <b>Send Alert</b> and <b>Take Picture</b>, the alert email will include an attached image.</p> <div>  <b>NOTE:</b> The cameras miss vehicles occasionally and image quality is not yet advanced enough to capture license plates. </div>

Setting	What you can do
Take Awareness Image	<p>Awareness Images are photos triggered at set intervals, independent of a specific event.</p> <ol style="list-style-type: none"><li>Click the checkbox to enable the sign to take a picture at set intervals.</li><li>Beside <b>Every</b>, click the down arrow and select a time interval from the list. The range is from 15 to 240 minutes, at 15-minute intervals.</li><li>For the <b>Quality</b> setting, you can select <b>Low</b>, <b>Medium</b>, or <b>High</b> for the picture.</li></ol>
Sign Moved Alert	<p>Click the <b>Edit</b> button to open the <b>Edit alert</b> window, where you can change settings for the following:</p> <ul style="list-style-type: none"><li>which users receive the alerts,</li><li>the <b>Threshold</b> for how many feet (or meters, depending on your account) a device can be moved before an alert is triggered, and</li><li>the delay in minutes to <b>Auto Silence</b> an alert after it's raised. For details, see <a href="#">Using SmartSites on page 43</a>.</li></ul> <p><b>Disabling Sign Moved Alert:</b> To disable sign moved alerts, clear the check box for the option.</p>

- Click the **Save All Equipment Settings** button.

## Editing alerts

Use this topic for details about setting up notifications for alerts. To enable text messaging from TrafficCloud to your mobile phone, your user account must include your mobile phone number.

### To edit an alert:

- Open the **Equipment** page, and scroll down to **Alerts**.
- Click the checkbox next to the alert you want to edit and click the **Edit** button (StatTraks have a pencil icon to edit alerts). The **Edit** window opens.

Edit

Alert Type : Low Battery Alert

User	Send sms	Send email
<user_name>@<your_org>.com	No	No
<user_name>@<your_org>.com	No	No
<user_name>@<your_org>.com	No	Yes
	No	No
	No	No

Guest User	Send sms	Send email
<user_name>@<quest_org>.com	No	No
<user_name>@<quest_org>.com	No	No
	No	No
	No	No

Threshold (%) : 30

Auto silence for (min) : 15

CANCEL

SAVE ALERT

Figure 34: The Edit alerts window


- Use the following table for help with editing alert settings:

Setting	What you can do
<b>Alert Type</b>	Select the Alert Type you want to edit.
<b>User and Guest User</b>	Enable SMS (text messages) or email (or both) to be sent to selected users.
	<b>Send SMS</b> Move the slider to <b>Yes</b> to enable, and <b>No</b> to disable sending text message alerts.
	<b>Send email</b> Move the slider to <b>Yes</b> to enable, and <b>No</b> to disable sending email alerts.
	<b>Users</b> are members of the organization granted access to the TrafficCloud account. <b>Guest users</b> are users granted read only access to the TrafficCloud account.
<b>Threshold</b>	The point at which a given alert should be triggered, such as battery charge level, speed, or the distance a sign must be moved before a <b>Sign Moved Alert</b> is triggered.
<b>Auto silence for (min)</b>	Enter a timespan in minutes for how long to prevent alerts from being sent after an incident.

- When you've finished your changes, click the **Save All Equipment Settings** button.

### To disable or delete an existing alert:

In the **Equipment > Alerts** table


- For signs, uncheck the box next to the alert to disable it.
- For StatTrak, click the **Delete** icon  and click the **Confirm** button to delete the alert.

## Performing a traffic study

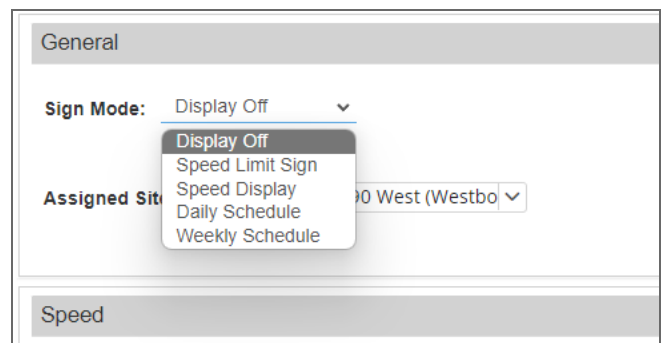
If you want to perform a traffic study, we recommend setting ATS radar-enabled signs to **Display Off** mode, also referred to as "stealth mode". In this mode, the signs still collect data but appear to be turned off, which should eliminate the traffic calming influence of having the speed display visible to motorists.

For example, you could install the sign in a new location, leave the display off for a week to collect the data, and run a **Compliance & Risk** report to get a feel for whether speeding is a significant issue in that location. Then, you could turn the **Speed Display** mode on, collect the data for another week and compare the differences.

### To set up Display Off mode:

- Open the **Equipment** tab, and click the **Pencil** icon  next to the sign you want to use for your study. The **Equipment** page opens.
- Click the **Sign Mode** box, and select **Display Off**.
- Click the **Save All Equipment Settings** button. The sign display turns off the next time the sign checks in during its three-hour cycle. Even with the display off, data will still be collected according to your settings.

For details about analyzing the data collected, see [Running reports on page 83](#).




The screenshot shows the 'General' tab of the Equipment settings page. The 'Sign Mode' dropdown menu is open, showing options: 'Display Off' (selected), 'Speed Limit Sign', 'Speed Display', 'Daily Schedule', and 'Weekly Schedule'. The 'Assigned Site' dropdown shows '90 West (Westbo)'.

## Retroactively adding a Site to an ATS device

Use the steps in this procedure to retroactively add a Site to an ATS device if have placed it on location before assigning a Site to it in TrafficCloud. As long as you turned your device on and set a speed limit before installing it, your ATS device should capture and upload traffic data to the cloud regardless of the location. All you need to do is assign the Site in TrafficCloud to associate the data with the Site.

### To retroactively add a Site to an ATS device:

1. Click the three dot **History** icon  next to the device nickname in the **Equipment** list.

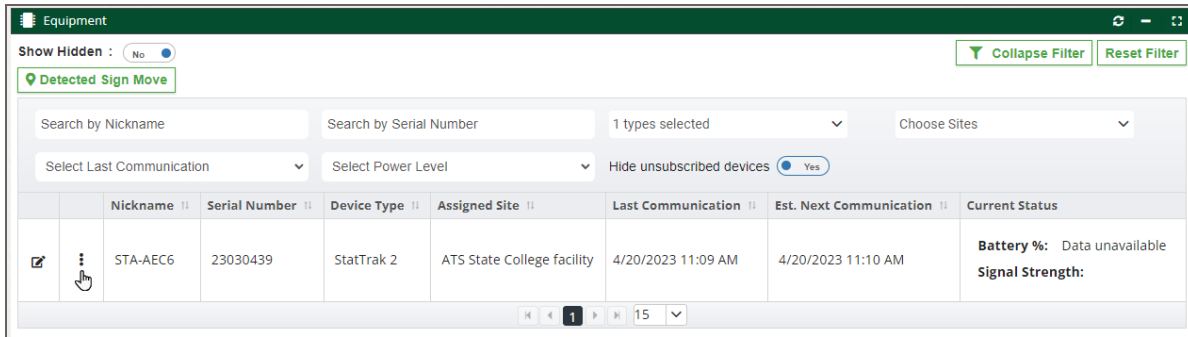




Figure 35: The History icon

The **Site History** window opens, showing the **Calendar View**. If you prefer, you can change to the **Table View** to view the Sites without a calendar.

2. In the **Site History** window, click the **Plus** icon . The **Add Site Entry** window opens, as shown in [Figure 36: below](#).

Dates where the ATS device was deployed are shown with a header bar in the calendar. You can scroll the calendar back to the desired date and click the **Pencil** icon  to select that date.

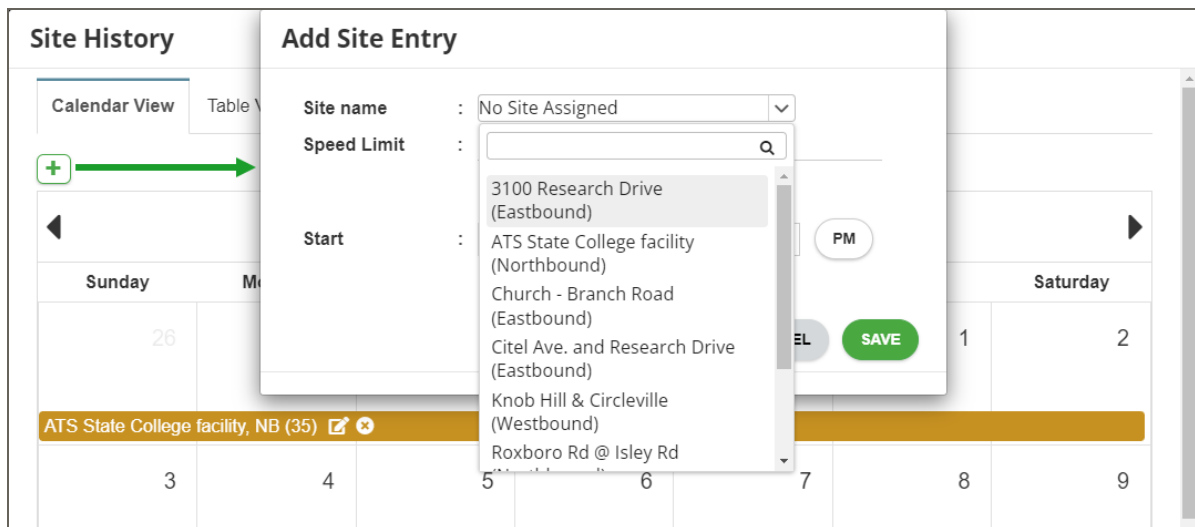


Figure 36: The Add Site Entry window > Calendar View

3. Click the **Site name** box as shown above, and select your Site from the drop-down list. The **Speed Limit** field populates automatically from your existing settings, as shown in the next step.
4. Select a start date and time in the past when your ATS device began collecting data.

**Add Site Entry**

Site name : ATS State College facility (Northboi ▾)

Speed Limit : 35

Start : 11/01/2023 05 : 40 PM

CANCEL SAVE

Figure 37: Setting a start date and time

5. Click **Save** in the **Add Site Entry** window.
6. Click **Save** in the **Site History** window to complete your changes.

## Using SmartSites

The SmartSites feature detects when a sign is moved to a new location, before reassigning the Site (the sign's expected location) in TrafficCloud. Up-to-date Site assignment is critical to ensuring accurate data collection for traffic reports, and to generating accurate tamper alerts, battery alerts, and high speed alerts from signs. At this time, the SmartSites feature is only available for signs.

SmartSites enables TrafficCloud to track any GPS-enabled sign and report the last known location. You can review and update the detected Site or mark the sign as stolen.

If someone moves one of your devices to a new Site before updating the location in TrafficCloud the device GPS module triggers the SmartSites feature.

This feature is also useful in the unlikely event of device theft or loss. The location is an estimate of where the GPS approximates the sign to be. Here's what you'll see:



- TrafficCloud sends an alert email indicating that a sign move has been detected. Click the link in the email to go straight to the **Detected Sign Move** window, showing the **Device Nickname**, **Move Detected Timestamp**, **Current Site**, **Suggested Site**, and **Speed Limit of Suggested Site**. The window also shows the current estimated sign location 📍 and the Suggested Site 📍 on the TrafficCloud Map, as shown in this example:

**Detected Sign Move**

Device Nickname: atoutside sig Move Detected Timestamp: 4/3/2023 4:02 AM Current Site: Knob Hill & Circleville


Suggested Site: ATS State College facili + Speed Limit of suggested Site: 35 mph

Map showing current location (📍) and suggested location (📍).

MARK AS STOLEN CANCEL SAVE MOVE



Figure 38: Detected Sign Move window

- a red **Pending Moves** icon  appears next to the **Equipment** tab,
- the **Detected Sign Move** button appears on the **Equipment** list page,

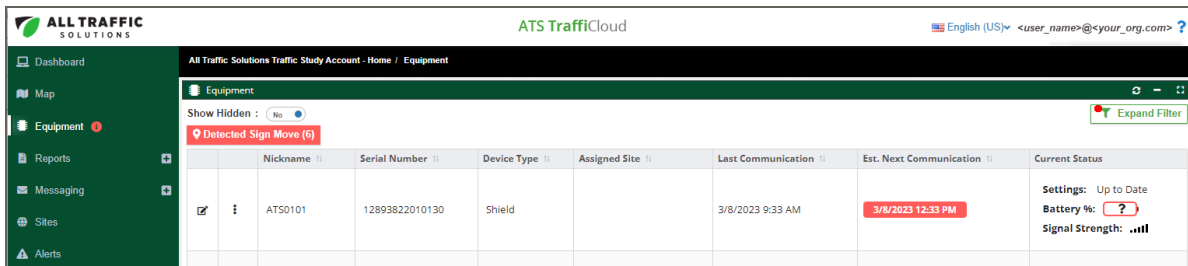


Figure 39: SmartSites notifications: Pending Moves icon and Detected Sign Move button

- an **Equipment and Site Conflict** displays on the Map, as shown here:

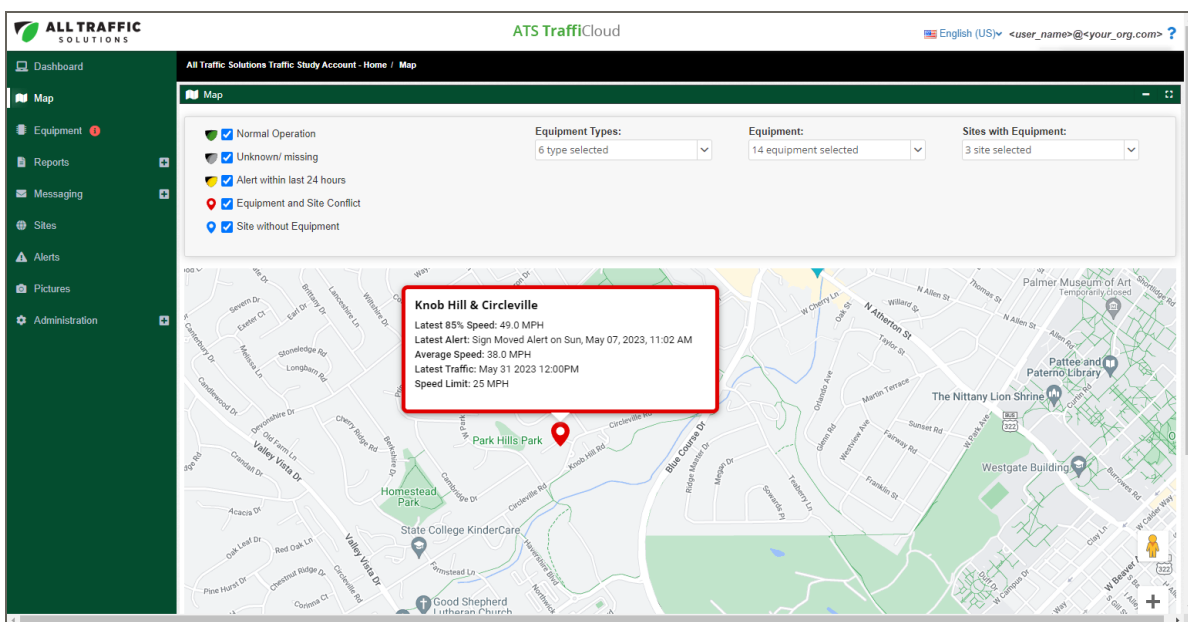



Figure 40: Maps - Equipment and Site Conflict


## Configuring Sign Moved Alerts

To use the SmartSites feature, you must enable the **Sign Moved Alert** for your sign. On the **Equipment** details page, you can turn the Sign Moved Alert on or off, and adjust the threshold in feet or meters (depending on your account settings) for when an alert is triggered or the amount of time between repeat notifications.

### To configure Sign Moved Alerts:

1. On the navigation menu, click the **Equipment** tab and in the **Equipment** list click the **Pencil** icon  for the device you want to update the alert for. The **Equipment** details page for the sign opens.



**TIP:** If you have a **Device List** widget for the device on the **Dashboard**, you can access the **Equipment** details page directly from there. On the navigation menu, click the **Dashboard** tab and in the Device List widget, click the **Pencil** icon  for the device.



2. Scroll down to **Alerts and Images**. The **Sign Moved Alert** controls appear at the bottom of the section, as shown here:

Figure 41: Alerts and Images > Sign Moved settings

3. Do either of the following:
  - A. Turn the **Sign Moved Alert** on or off using the check box. If this option is turned off, no sign moved alert will be raised if the sign is moved again until you turn it back on, or
  - B. Click the **Edit** button to adjust the
    - notification settings for which users will receive the alerts
    - **Threshold** and **Auto-Silence** settings. The Threshold setting adjusts the distance in feet or meters that the sign must be moved before an alert is triggered, and Auto-Silence adjusts how many minutes the system should wait before raising another alert.

### To configure Sign Moved Alert settings globally:

Users with administrator privileges can also configure the following:

1. On the navigation menu, click **Administration**. The **Account** page opens.
2. In the **Sign Moved** section, change any of the following:

Setting	What it adjusts
<b>Device Moved Threshold</b>	The distance a sign can be moved before the <b>Sign Moved Alert</b> is raised. The default is 500 feet (152 m).
<b>Site Matched Threshold</b>	How close a moved device must be to an existing TrafficCloud Site before SmartSites proposes it as a Site Match when a move is detected. The default is 100 feet (30 m).
<b>Device Moved Auto Accept</b>	Automatically accepts all sign moves without raising alerts. The default is No.

## Responding to Sign Moved Alerts

Use this section for help with responding to a **Sign Moved Alert**.

### To respond to a detected sign move:


1. On the navigation menu, click the **Equipment** tab and then click the **Detected Sign Move** button. The **Detected Moves** list page opens.

Device Nickname	Suggested Site	Timestamp	Decline	Review
atsoutside sig	ATS State College facility	4/3/2023 1:02 AM	Decline	Review
atsoutside sig		4/2/2023 10:03 PM	Decline	Review
ATS0101		3/8/2023 9:32 AM	Decline	Review

Figure 42: The Detected Moves page

2. On the **Detected Moves** page, do either of the following:
  - » click the **Review** button for more information.
  - » click the **Decline** button to reject the device move notification.

When you click the Review button, the **Detected Sign Move** window for that sign opens. See [Figure 38:](#) on page 44.

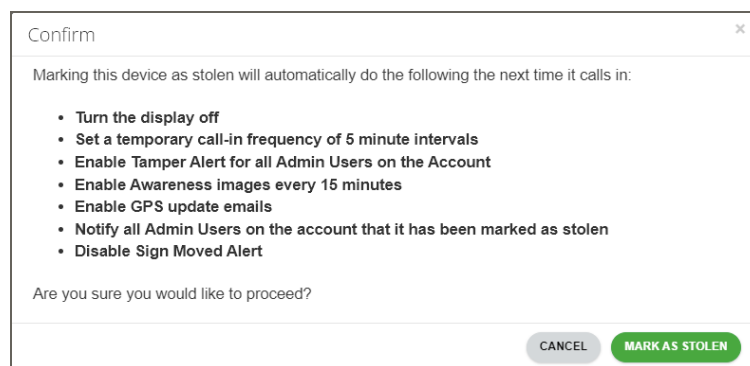
3. In the **Detected Sign Move** window, you can do any of the following:
  - Assign a Site, using the **Suggested Site** or by selecting another existing Site from the drop-down list. The map updates to show the location of the available Sites. See also [Assigning a Site to your ATS device on page 25](#).  
OR
  - Add a new Site, by clicking the **Add new site**  button. In the **Add Site** window, enter the required data and click **Save Site**. For detailed instructions, see also [Creating a Site for your ATS device on page 23](#).  
Review your changes and click the **Save Move** button.  
OR
  - Mark the device as stolen. See [Marking a device as stolen below](#).

## Marking a device as stolen

As shown in [Figure 43:](#) below, when you mark a device as stolen the display will turn off, and the device will call in to TrafficCloud every five minutes, sending its location, tamper alerts, and other data. The sign will also send awareness images (photos) every 15 minutes, and GPS update emails, which show the latest estimated location, and will send alerts by email to all admin-level users that it has been marked as stolen. In addition, the system will disable the **Sign Moved Alert**.

### To mark a device as stolen:


1. When you click the **Mark as Stolen** button, a popup window opens, listing the ways the device will be secured:



*Figure 43: Mark as Stolen confirmation window*


2. To proceed, click the **Mark As Stolen** button. The device will be marked as stolen and the actions described in [Figure 43:](#) above will be triggered.

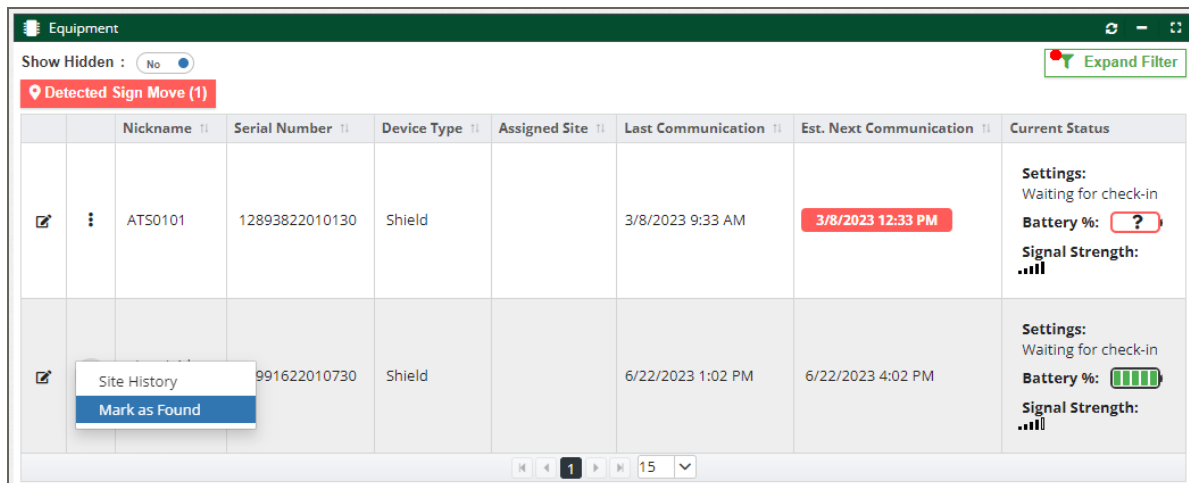
## To mark a device as found:

1. On the navigation menu, click the **Equipment** tab and then click the **Pencil** icon  next to the device you want to mark as found. The **Equipment** details page opens.



**NOTE:** If you're unsure of the name of the stolen device, you can identify it in the **Device Marked as Stolen** email alert. Users who opted in for alerts about the device all receive the email.

2. Click the three dot **History** icon  next to the device nickname in the **Equipment** list, and select **Mark as Found**.









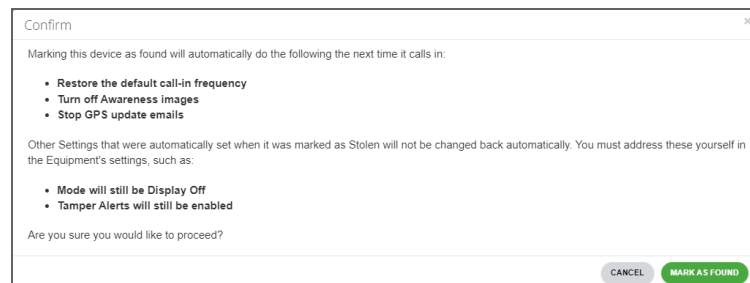
		Nickname	Serial Number	Device Type	Assigned Site	Last Communication	Est. Next Communication	Current Status
		ATS0101	12893822010130	Shield		3/8/2023 9:33 AM	3/8/2023 12:33 PM	Settings: Waiting for check-in Battery %:  Signal Strength: 
			991622010730	Shield		6/22/2023 1:02 PM	6/22/2023 4:02 PM	Settings: Waiting for check-in Battery %:  Signal Strength: 

Figure 44: History icon  > Mark as Found

A confirmation popup window opens.



Confirm

Marking this device as found will automatically do the following the next time it calls in:

- Restore the default call-in frequency
- Turn off Awareness Images
- Stop GPS update emails

Other Settings that were automatically set when it was marked as Stolen will not be changed back automatically. You must address these yourself in the Equipment's settings, such as:

- Mode will still be Display Off
- Tamper Alerts will still be enabled

Are you sure you would like to proceed?

CANCEL MARK AS FOUND

3. Click the **Mark as Found** button to cancel the security measures and return the device to normal operation.

## Setting a new Nickname for your ATS device

Use this topic to revise the original **Nickname** given to your ATS devices. By default, TrafficCloud sorts the **Equipment** list by nickname (a human friendly name you set). For the new nickname, enter a name that displays your ATS devices to help you find them quickly in the list.



**TIP:** If you need to filter the list, click **Expand Filter**. You can filter by Nickname, serial number, device type, Site, last communication, and power level.



You can also sort the list from first to last by clicking the **Sort** (up/down arrow) button  beside any column heading.




Figure 45: The Equipment page > Sort buttons

### To set up a Nickname:

1. On the navigation menu, click the **Equipment** tab and then click the **Pencil** icon  next to the device you want to change the nickname for. The **Equipment** details page opens.



**TIP:** If you have a **Device List** widget for the device on the **Dashboard**, you can access the **Equipment** details page directly from there. On the navigation menu, click the **Dashboard** tab and in the Device List widget, click the **Pencil** icon  for the device.

2. In the **Nickname** field, enter a new name. The name must begin with "ats" (upper or lower case) for all signs and is limited to 14 characters or less.

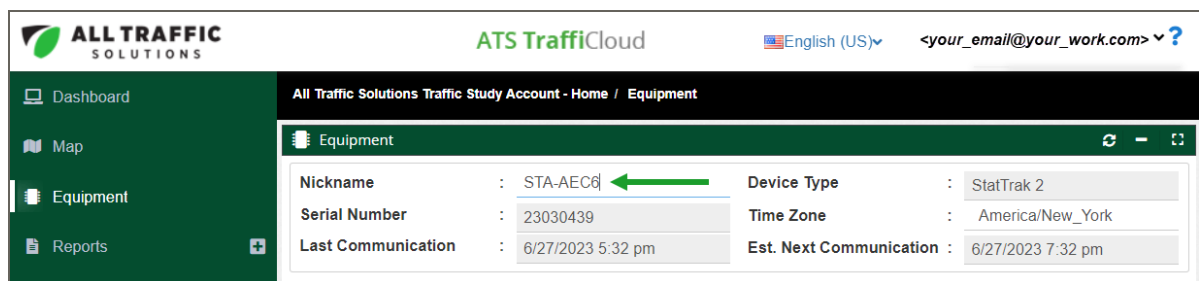


Figure 46: The Nickname field

3. Click the **Save All Equipment Settings** button.

## When ATS devices send and receive data

Here's a quick summary of when ATS devices communicate back to TrafficCloud, both to pick up new settings and upload data. You can check for the last call-in on the **Equipment** summary page. Here's an example of what you'll see, with the **Last Communication** and **Estimated Next Communication** fields highlighted:

	Nickname	Serial Number	Device Type	Assigned Site	Last Communication	Est. Next Communication	Current Status
	ats001	18970713000130	SpeedAlert 18"	Church - Branch Road	7/11/2022 9:35:18 AM	7/11/2022 9:50:18 AM	<b>Settings:</b> Up to Date <b>Battery %:</b> <b>Signal Strength:</b> <b>Current Message:</b> Speed Display Mode (variable)
	ATS0107	15991622010730	Shield		7/11/2022 8:57:33 AM	7/11/2022 11:57:33 AM	<b>Sign Mode:</b> Daily Schedule <b>Settings:</b> Up to Date <b>Battery %:</b> <b>Signal Strength:</b>

Figure 47: Last and Est. Next Communication (SpeedAlert and Shield)

You can also set up a **Device List** widget in the **Dashboard** to track device status and properties. See [Setting up a Device List widget on page 18](#).

### About call-in scheduling

ATS devices send updates to TrafficCloud as follows:

Device type	Alerts	Settings	Traffic Data
Shield	Immediately	Every 3 hours	Every 3 hours
SpeedAlert	Immediately	Every 15 minutes	Every 3 hours
InstAlert	Immediately	Every 15 minutes	Not available
StatTrak	Every 30 minutes	Every 30 minutes	Every 30 minutes



# Chapter 5

## Setting up schedules

Use this topic for a quick overview about how to set up daily or weekly schedules and holidays and exceptions for your sign. Available options vary by sign type.

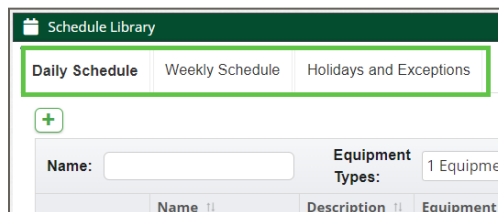
For **all signs**, including **School Zone Alert**, you can create daily and weekly schedules, adjusting the speed limit during scheduled periods of the day or week, such as for deployment to school zones when students are attending school, or for construction zones during work hours. You can also set up exceptions for holidays and other days where you need to alter the typical schedule.

For **SpeedAlert** and **InstAlert** signs, in addition to the above, you can display messaging during scheduled periods of the day or week related to traffic calming or for directing traffic for events like construction, concerts, games, or special events.

### To set up a daily or weekly schedule or holidays and exceptions:

On the **Schedule Library** page for your sign, you can create any of the following:

To create this schedule type	Use these topics
A <b>Daily Schedule</b>	<i>Using the Schedule Library on the next page and <a href="#">Setting up a daily schedule</a> on page 53,</i>
A <b>Weekly Schedule</b>	<i>Using the Schedule Library on the next page and <a href="#">Setting up a weekly schedule</a> on page 57,</i>
A <b>Holiday or Exception</b> for a special day, season or other time period	<i>Using the Schedule Library on the next page and <a href="#">Setting up scheduling exceptions</a> on page 61.</i>



**Watch the video**

## To assign a schedule to a device:

- See [Using the Schedule Library](#) below and [Assigning schedules to devices](#) on page 62.

## Limitations

- Schedules are supported with signs only.
- Scheduling exceptions are supported in Shield, SpeedAlert, and InstAlert signs only.

## Using the Schedule Library

The **Schedule Library** provides a number of handy tools to help you set up your schedules. You can share schedules created in the library with all signs of the same type, whereas schedules created in the **Equipment** tab are only available for the selected sign.
















Schedule Library						
<div> <div>Daily Schedule</div> <div>Weekly Schedule</div> <div>Holidays and Exceptions</div> </div>						
<div> <div>+</div> <div>Name: <input type="text"/></div> <div>Equipment Types: 2 Equipment type selected</div> </div>						
	Name	Description	Equipment Types	Last Modified	Schedule Preview	
    	State college Sign		SpeedAlert 18"	07/19/2024 01:50:46 PM	<b>Time window:</b> 00:00 - 07:00 07:00 - 08:00 08:00 - 15:00 15:00 - 16:00 16:00 - 00:00	<b>Mode:</b> Speed Limit Sign Display Off Speed Limit Sign Display Off Speed Limit Sign
    	State college training		SpeedAlert 18"	07/19/2024 01:52:07 PM	<b>Time window:</b> 00:00 - 07:00 07:00 - 08:00 08:00 - 15:00 15:00 - 16:00 16:00 - 00:00	<b>Mode:</b> Speed Limit Sign Display Off Speed Limit Sign Display Off Speed Limit Sign

Figure 48: The Schedule Library

Use the following table for quick help in understanding the Schedule Library icons:

Icon	Name	What you can do
	<b>Plus sign</b>	Create a schedule. See <a href="#">Setting up a daily schedule</a> on the facing page and <a href="#">Setting up a weekly schedule</a> on page 57
	<b>Edit (Pencil)</b>	Edit an existing schedule.
	<b>Delete (Trash)</b>	Delete a schedule.
	<b>Assign</b>	<a href="#">Assign a schedule to a device.</a>
	<b>Copy</b>	Copy a schedule.



## Setting up a daily schedule

Set your **Sign Mode** to **Daily Schedule** if you want to use the same speed reduction or repeat the same message every day and don't want to vary or repeat it using the weekly scheduling options.

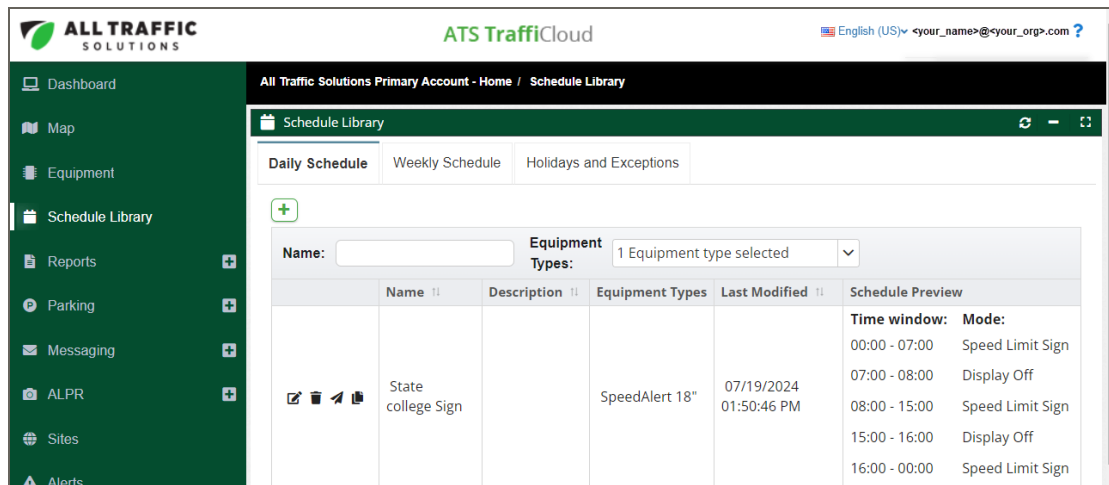



Figure 49: Schedule Library > Daily Schedule tab

### To set up a daily schedule:

1. On the navigation menu, click the **Schedule Library** tab.
2. Click the **Plus** sign  below the tabs, as shown. The **Add Daily Schedule** page opens.
3. On the **Add Daily Schedule** page, type in the name you want to use for your schedule, select the sign type, and add an optional description.

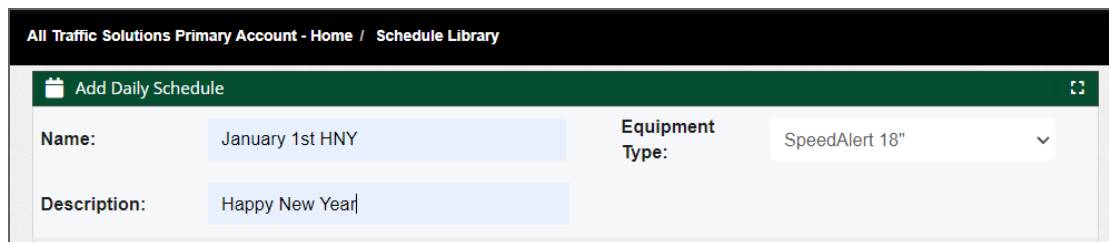
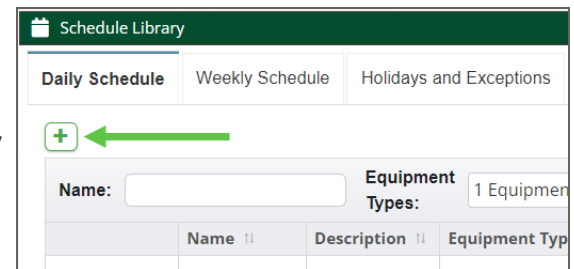


Figure 50: Adding Schedule properties

4. Click anywhere in the scheduling pane to start adding daily scheduling windows for the sign. You'll need to create schedule windows to cover all 24 hours of the day. You can create up to 13 different windows per day.

Add Daily Schedule

Name:

January 1st HNY

Equipment Type:

SpeedAlert 18"

Description:

Happy New Year|

+ NEW WINDOW

SORT

00:00to00:00Sign Mode:Single Message

Default 18 schedule msg

CANCEL

SAVE

Figure 51: Daily Schedule (InstAlerts and SpeedAlerts)

Use this table for help with the settings:

Setting	What you can do
Name	Type in a name for the schedule, such as the type of speed reduction or the location.
Equipment Type	Select the type of sign you'll be using for the schedule.
Description	Optionally, type in a description for the schedule.
Time frame	Set the time frames for message display and speed reduction.
Sign mode	Set the <b>Sign Mode</b> you want to use. Typical modes: <div> <div> <i>Device type</i>  Shields and School Zone Alert  SpeedAlerts  InstAlerts </div> <div> <i>Typical mode</i>  <b>Speed Display</b> or <b>Display Off</b>  <b>Dependent Messages</b> or <b>Single Message</b>  <b>Single Message</b> </div> </div>
Enable Camera	Click the checkbox if you want the camera enabled when the radar detects a violation. For details about how to ensure that your sign captures photos when you want it to, see <a href="#">Configuring Alerts and Images on page 37</a> .
Enable Aux Output	Enables an optional relay (switch) to allow control of a customer-provided external device, based on radar speeds (for example, a camera, light, or siren (feature not available in the Schedule Library, but you can apply it from the <b>Equipment</b> page)
Reduce Speed Limit By	Enter the amount you want to reduce the speed limit by during scheduled hours. For example, if the regular speed limit is 35 mph and you want to reduce it by 15 to 20 mph, enter 15 or 20. The sign will use the reduced speed during scheduled hours.
Reduce Blink Trigger By	First, click the checkbox if you want to set a <b>Blink Trigger</b> , the reduced speed when the sign will start to blink, and then enter the amount of the speed reduction from the normal speed for the sign.

Setting	What you can do
<b>Reduce Strobe Trigger By</b>	Click the checkbox if you want to set a <b>Strobe Trigger</b> , the reduced speed when the strobe light in the sign (if equipped) will start to flash, and enter the amount of the speed reduction from the normal speed for the sign (not available in the Schedule Library, but you can apply it from the <b>Equipment</b> page).

In the following example for **Shield**, the schedule and settings are:

- **Schedule** is set from 00:00 to 00:00 (midnight to midnight)
- **Sign Mode** is set to **Speed Display**,
- No speed reduction is applied,
- the **Camera** is enabled, and
- the options for **Reduce Speed Limit By** and **Reduce Blink Trigger By** are not enabled.

The screenshot shows the 'Add Daily Schedule' form for a 'Shield' sign. The form is titled 'Add Daily Schedule' and has a close button in the top right corner. It contains the following fields and controls:

- Name:** A text input field containing 'No reduction'.
- Equipment Type:** A dropdown menu set to 'Shield'.
- Description:** A text input field containing 'local boulevards'.
- Buttons:** '+ NEW WINDOW' and 'SORT' buttons are located to the right of the description field.
- Schedule Section:**
  - Time Range:** Two time input fields, both set to '00:00', with a 'to' label between them.
  - Sign Mode:** A dropdown menu set to 'Speed Display'.
  - Enable Camera:** A checkbox that is checked, with the label 'Enable Camera'.
  - Reduce Speed Limit By:** A text input field set to '0' with the unit 'MPH'.
  - Reduce Blink Trigger by:** A text input field set to '0' with the unit 'MPH'.
- Bottom Buttons:** 'CANCEL' and 'SAVE' buttons are located at the bottom right of the form.

Figure 52: Daily Schedule (expanded view - Shield)

In the next example, for **SpeedAlert**,

- The sign is set to **Single Message** (School Zone, 20 MPH - see also, [Creating a Dependent Message on page 67](#)) over a 24-hour schedule,
- The **Camera** is enabled,
- Speed reductions by 10 mph are applied during the scheduling window from 07:00 to 17:00: **Reduce Speed Limit, Reduce Blink Trigger**.

The screenshot shows a 'Daily Schedule' interface for a 'SpeedAlert' sign. It consists of three time slots:

- 00:00 to 07:00:** Sign Mode: Display Off. Includes a trash icon and a right arrow.
- 07:00 to 17:00:** Sign Mode: Single Message. Includes a trash icon and a dropdown arrow. Below this, there are checkboxes for 'Enable Camera' (checked), 'Reduce Speed Limit By 10 MPH', and 'Reduce Blink Trigger by 10 MPH'. A message preview shows 'SCHOOL ZONE' and '20 MPH'. To the right of the preview are buttons for '+', 'EDIT', and 'CHOOSE FROM MESSAGE LIBRARY'.
- 17:00 to 00:00:** Sign Mode: Display Off. Includes a trash icon and a dropdown arrow. Below this, there are checkboxes for 'Enable Camera' (checked), 'Reduce Speed Limit By 0 MPH', and 'Reduce Blink Trigger by 0 MPH' (unchecked).

Figure 53: Daily Schedule (expanded view - SpeedAlert)

- Click below the **+ New Window** button to add scheduling windows until all 24 hours of the day are covered. TrafficCloud automatically adds another period of the day that hasn't been covered yet.

Here's an example 24-hour schedule for a **Shield** sign, including:

- Sign Mode** is set to
  - Speed Display** from 07:00 to 19:00, and
  - Display Off** and no speed reduction for the first and last of the three periods of the day,
- a 10-mph speed reduction from 07:00 to 19:00.

The screenshot shows a 'Daily Schedule' interface for a 'Shield' sign. It consists of three time slots:

- 00:00 to 07:00:** Sign Mode: Display Off. Includes a trash icon and a right arrow.
- 07:00 to 19:00:** Sign Mode: Speed Display. Includes a trash icon and a dropdown arrow. Below this, there are checkboxes for 'Enable Camera' (checked), 'Reduce Speed Limit By 10 MPH', and 'Reduce Blink Trigger by 10 MPH' (unchecked).
- 19:00 to 00:00:** Sign Mode: Display Off. Includes a trash icon and a dropdown arrow. Below this, there are checkboxes for 'Enable Camera' (checked), 'Reduce Speed Limit By 0 MPH', and 'Reduce Blink Trigger by 0 MPH' (unchecked).

Figure 54: Daily Schedule - 24 hours (Shield)

In the following example for **InstAlert**,


- Sign Mode** is set to
  - Single Message** from 07:00 to 19:00.
  - Display Off** for the first and last of the three periods of the day,

The interface shows a 24-hour schedule configuration for a sign. It is divided into three time slots:

- 00:00 to 07:00:** Sign Mode: Display Off. Includes a trash icon and a right arrow.
- 07:00 to 19:00:** Sign Mode: Single Message. Includes a trash icon and a dropdown arrow. Below this slot, there is a section for "Msg to Show: Click It" with a plus icon, an "EDIT" button, and a "CHOOSE FROM MESSAGE LIBRARY" button. Three message thumbnails are shown: "CLICK IT", "OR TICKET!", and "BUCKLE UP!".
- 19:00 to 00:00:** Sign Mode: Display Off. Includes a trash icon and a dropdown arrow. Below this slot, there is a checked "Enable Camera" option.

Figure 55: Daily Schedule - 24 hours (InstAlert)



**TIP:** You can use the **Sort** button to sort multiple schedules from morning to night, or the trash icon  to delete a scheduling window.

- Click the **Save** button to apply your changes.

## Setting up a weekly schedule

Setting a weekly schedule is more appropriate than a daily schedule for speed signs monitoring school or construction zones, where the speed reduction and messaging would usually be necessary only on workdays and during working hours, and messaging signs directing traffic at specific times and days of the week, for events lasting anywhere from a few days, such as festivals or conventions, or longer.

The "Schedule Library" window has three tabs: "Daily Schedule", "Weekly Schedule" (selected), and "Holidays and Exceptions". Below the tabs is a green plus icon to add a new schedule. Below that is a form with "Name:" and "Equipment Types:" (showing "1 Equipment type selected").





	Name	Description	Equipment Types	Last Modified	Schedule Preview
  	Route 66 West		SpeedAlert 18"	02/22/2024 08:32:49 AM	<b>Time window:</b> 00:00 - 00:00 <b>Mode:</b> Single Message <b>Days:</b> Sun, Mon, Tue, Wed, Thu, Fri, Sat

Figure 56: Schedule Library > Weekly Schedule tab

### To set up a weekly schedule:

- On the navigation menu, click the **Schedule Library** tab.
- Click the **Plus** sign  below the tabs, as shown at right. The **Add Weekly Schedule** page opens.
- Type in the name you want to use for your schedule, select the sign type, and add an optional description.

The "Schedule Library" window shows the "Weekly Schedule" tab. Below the tabs is a green plus icon with a green arrow pointing to it. Below that is a form with "Name:" and "Equipment Types:" (showing "1 Equip").

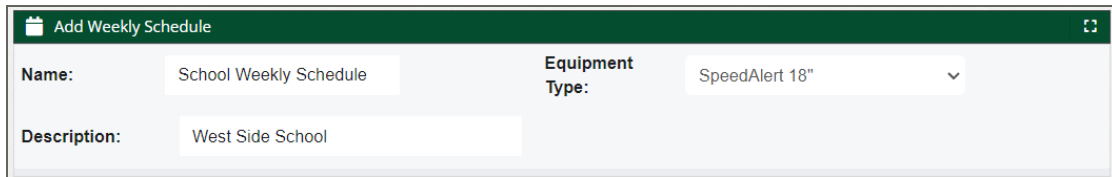


Figure 57: The Add Weekly Schedule fields

4. Click the tab for the day of the week you'd like to set up first.
5. Click anywhere in the scheduling pane to expand a scheduling window.

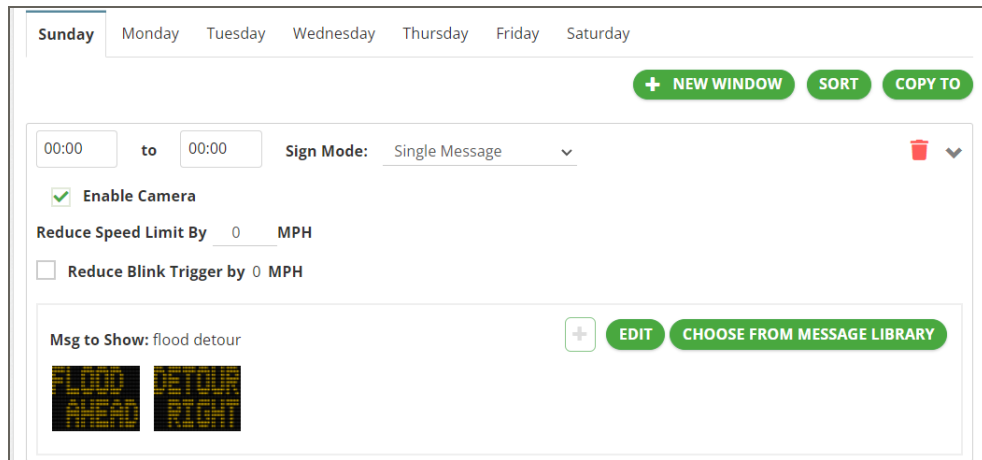


Figure 58: Weekly Schedule > Day of week tab (InstAlerts and SpeedAlerts)

6. Click anywhere in the scheduling pane, and select scheduling options.
- In the following example for **Shield** signs, the schedule settings are:
- The **Schedule** is set on Mondays:
    - from 00:00 to 07:00 no speed reduction,
    - from 07:00 to 19:00, a speed reduction of 15 MPH, including for **Reduce Speed Limit By**, **Reduce Blink Trigger By**,
    - from 19:00 to 00:00, no speed reduction,
  - **Sign Mode** is set to **Speed Display**, and
  - the camera is enabled.

Figure 59: Weekly Schedule (expanded view, Shield)

Please see page 54 for details about scheduling options.

In the next example, for a **SpeedAlert**, the settings are:

- **Sign Mode** is set to **Dependent Messages**,
- **Reduce Speed Limit by** and **Reduce Blink Trigger by** are both reduced by 15 mph.

Figure 60: Weekly Schedule (expanded view, SpeedAlert)

For details about Dependent Message settings, see [Creating a Dependent Message](#) on page 67.

7. Click below the **+ New Window** button to add scheduling windows until all 24 hours of the day are covered. TrafficCloud automatically adds another period of the day that hasn't been covered yet.

8. If you have a standard daily schedule you want to copy to the other days, such as Monday to Friday, do the following:
  - A. Click **Copy To**,
  - B. Select the other days you want to copy to,
  - C. Click **Copy to Selected Days**, as shown, copying the schedule from **Monday** over to **Tuesday** through **Friday**:

The screenshot shows the 'Add Weekly Schedule' window. The 'Name' is 'Weekly Downtown' and 'Equipment Type' is 'SpeedAlert 18\".

Figure 61: Weekly Schedule > Copy to other days (SpeedAlert)

9. For any days you don't want to apply a speed limit reduction, leave the default timespan from midnight to midnight (00:00 to 00:00), and the speed settings to 0, for example:

The screenshot shows the 'Edit Weekly Schedule' window. The 'Name' is 'School Weekly Schedule' and 'Equipment Type' is 'SpeedAlert 18\".

Figure 62: Weekly Schedule > No speed reduction (SpeedAlert)

10. Click the **Save** button to apply your changes.




## Setting up scheduling exceptions

Use this procedure to set up scheduling exceptions.

Scheduling exceptions are supported in Shield, SpeedAlert, and InstAlert signs only.

### To set up a new scheduling exception:

1. On the navigation menu, click **Schedule Library**, then click the **Holidays and Exceptions** tab.
2. Click the  sign to create a new holiday or schedule exception. The **Add Holiday and Exception** page opens.

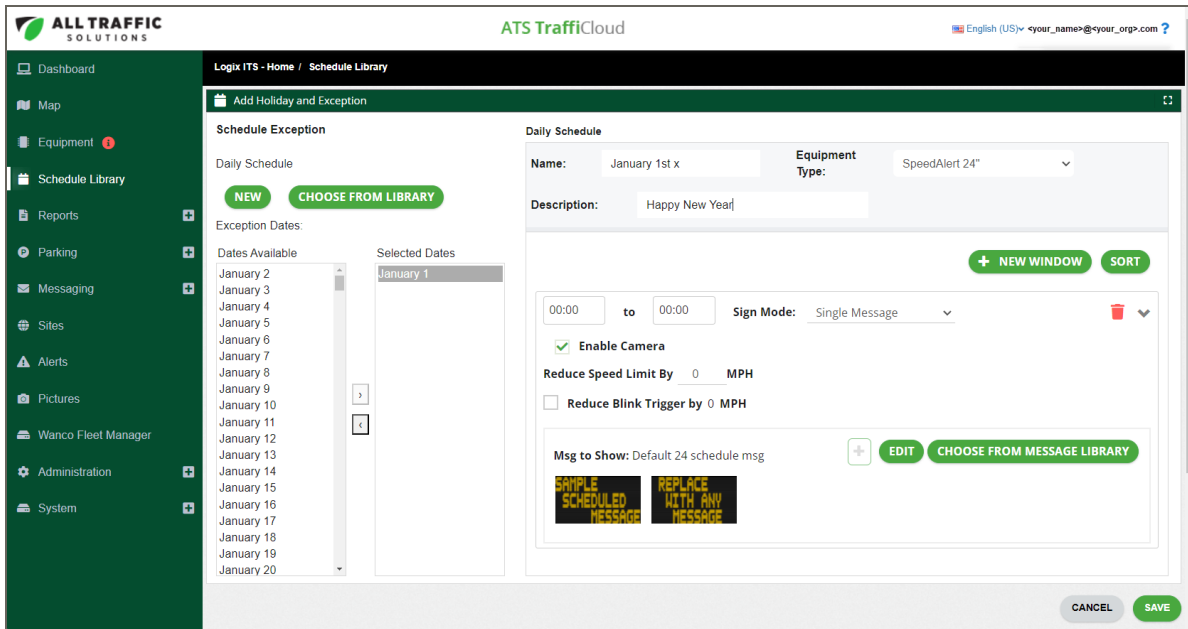


Figure 63: The Add Holiday and Exception page

3. Click the **New** button.
4. Enter a name and select the device you want to apply the exception to. Optionally, enter a description for the schedule exception.
5. Select the dates for the exception (click a date on the left and move it to the right using the right arrow button).
6. Select or create the message you want to display.
7. Click the **Save** button. The new exception displays on the **Schedule Library > Holidays and Exceptions**. See [Assigning schedules to devices on the next page](#).



**NOTE:** You can also click the **Choose From Library** button to create a new schedule exception by editing an existing one.


## Assigning schedules to devices

Use this topic for help with assigning schedules to devices.

### Prerequisite

- To appear in the list, the sign you're sending the schedule to must be in either **Daily** or **Weekly Schedule** mode.

### To assign a schedule to a device:

- In the **Daily Schedule** or **Weekly Schedule** schedules table, click the **Assign** icon  next to the schedule you want to assign. The **Assign Daily Schedule To Signs** window opens.
- Select the sign from the list and click the **Send** button.

Assign Daily Schedule To Signs

State college Sign

Time window:

00:00 - 07:00

07:00 - 08:00

08:00 - 15:00

15:00 - 16:00

16:00 - 00:00

Mode:

Speed Limit Sign

Display Off

Speed Limit Sign

Display Off

Speed Limit Sign

<input type="checkbox"/>	Nickname ⓘ	Serial Number ⓘ	Last Communication ⓘ	Est. Next Communication ⓘ	Current Sign Mode	Schedule Preview
<input checked="" type="checkbox"/>	atsCS18	18971814042830	7/19/2024 1:43 PM	7/19/2024 1:58 PM	Weekly Schedule	
<input type="checkbox"/>	ats 421				Dependent Messages	

⏪

1

⏩

20

⌵

CANCEL

SEND

Figure 64: The Assign Daily Schedule To Signs window

# Chapter 6

## Using the Messaging Libraries

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Use the topics in this chapter to create additional messaging for your signs using the Messaging libraries.

You typically set up initial messaging for your sign using the defaults in the TrafficCloud **Equipment** tab, but the **Messaging** tab gives you more capabilities for creating new messages, sending messages to multiple signs, editing messages, adding screens from the **Screen Library**, and using the drawing tool.



Watch the video



Watch the video

## The Dependent Message Library

Dependent messaging is the go to sign mode for SpeedAlert signs, displaying speed-dependent messages specific to vehicle speed ("Slow Down", "Too Fast!", "Have a Nice Day"), or dedicated messages ("Flood Warning", "Amber Alert").

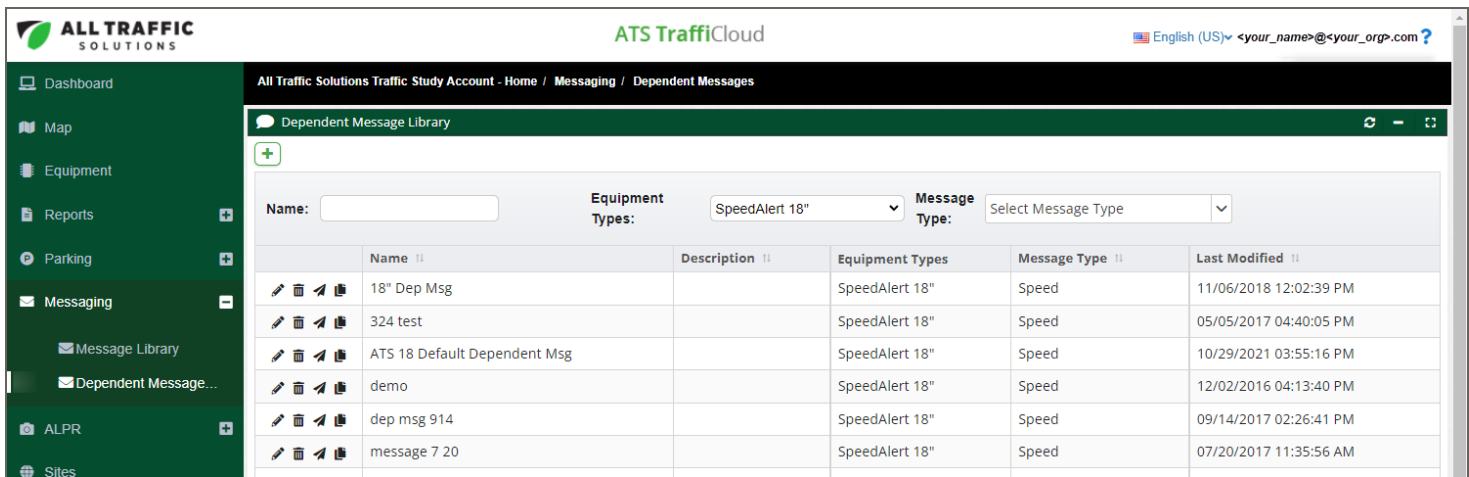



Figure 65: Dependent Message Library

The **Dependent Message** Library is where TrafficCloud stores any new Dependent Messages you create or copy from the **Equipment > Messages** page.

You create new Dependent Messages by clicking the plus button  at the top of the page. See [Creating a Dependent Message](#) on page 67.

## The Message Library

The **Message Library** includes the **Custom Messages** and **System Messages** tabs, as well as the **Screen Library**.

### The Message Library > System messages tab

The TrafficCloud **Message Library > System messages** tab stores system messages, which are the default single messages available for use.

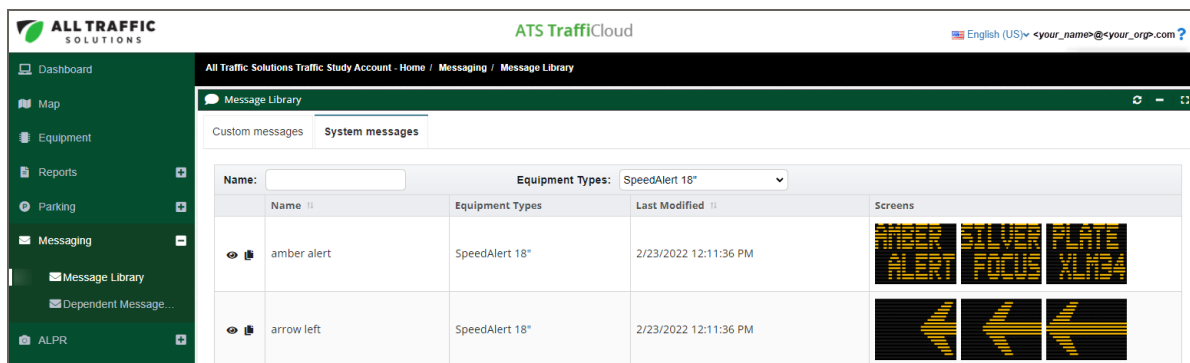




Figure 66: The Message Library > System messages

Here are the primary tasks you can perform in the **System messages** tab:

- click the **Copy** icon  to copy a system message to the **Custom** tab,
- view existing messages,
- click the **Preview** icon  to view the detailed settings and screens of a message.

See [Creating a custom message](#) on page 69.

## The Message Library > Custom messages tab

The TrafficCloud **Message Library > Custom messages** tab stores custom messages, which are new single messages that users have created for your account. See [Creating a custom message on page 69](#).

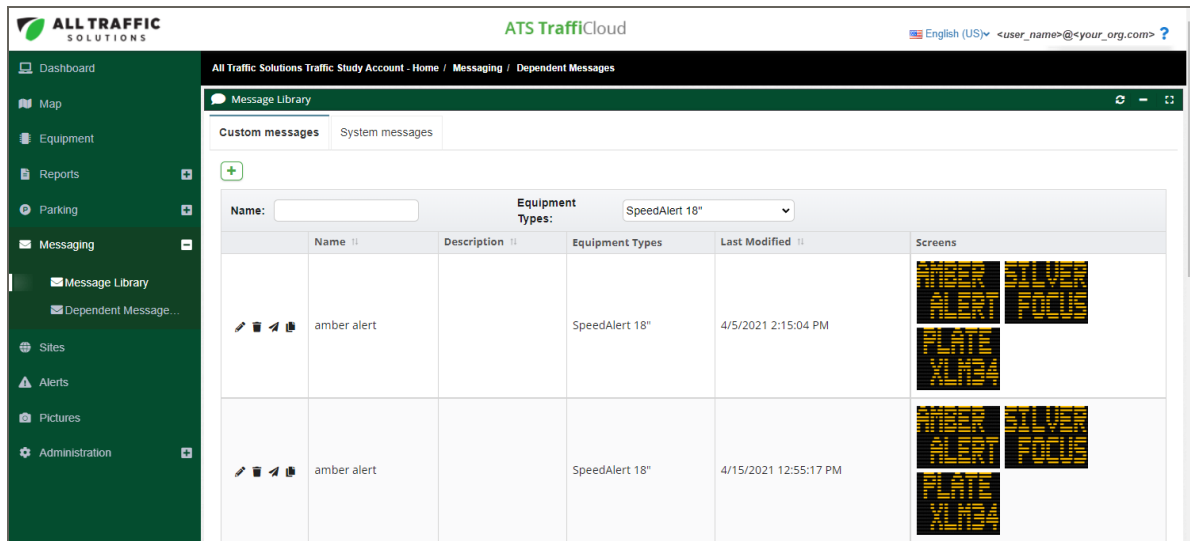







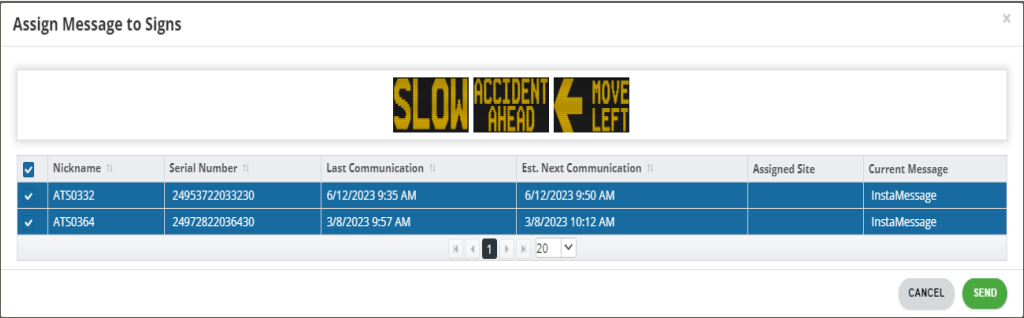

Figure 67: The Message Library > Custom messages

You can do the following on the **Custom messages** tab:

- send messages to your signs,
- create new custom messages by clicking the plus button  at the top of the page,
- edit messages,
- view existing messages (you can filter the list by **Name** or **Equipment Types**)
- copy messages, and
- delete messages.

Use the following table for details about each of the tasks you can perform:

Icon	Name	What you can do
	<b>New Message</b>	Opens the <b>New Message</b> window, where you can create your own brand new messages. See <a href="#">Creating a custom message on page 69</a> .
	<b>Edit</b>	Opens the <b>Edit Message</b> page, where you can customize messages. See <a href="#">Editing a message on page 75</a> .
	<b>Delete</b>	Opens the <b>Confirm Message Deletion</b> window, where you can delete the message.

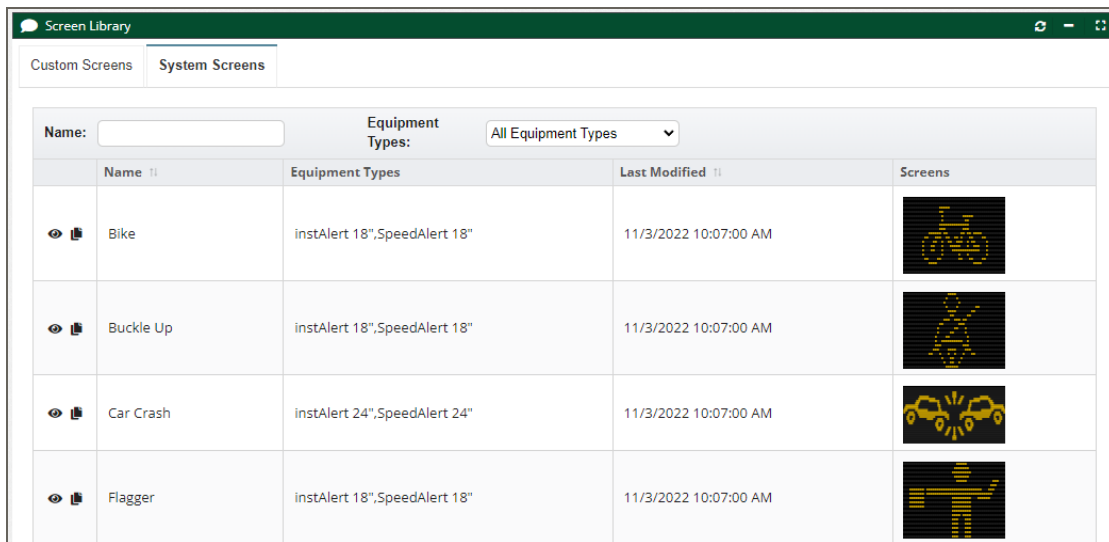
Icon	Name	What you can do
	<b>Assign Message</b>	<p>Opens the <b>Assign Message</b> window, where you can send and activate the selected message on one or more signs. Select the signs where you want to activate the message, and click the <b>Send</b> button. For example:</p>  <p>See <a href="#">Sending a message to one or more signs on page 74</a>.</p>
	<b>Copy Message</b>	Instantly creates a copy of your message in the <b>Custom</b> tab.

## The Screen Library

You can import screens from the **Screen Library** into any message you create or edit, making message creation faster and easier.

The **Screen Library** window, a sub tab of the **Message Library**, includes two sections:

- The **Custom Screens** tab: Stores the new screens created on your account.
- The **System Screens** tab: Stores stock images for 18-in. and 24-in. messaging signs. Examples of preset images, shown below, include "Bike", "Buckle Up", and "Car Crash".











Screen Library			
Custom Screens		System Screens	
Name:	Equipment Types:	All Equipment Types	
Name	Equipment Types	Last Modified	Screens
 Bike	InstAlert 18", SpeedAlert 18"	11/3/2022 10:07:00 AM	
 Buckle Up	InstAlert 18", SpeedAlert 18"	11/3/2022 10:07:00 AM	
 Car Crash	InstAlert 24", SpeedAlert 24"	11/3/2022 10:07:00 AM	
 Flagger	InstAlert 18", SpeedAlert 18"	11/3/2022 10:07:00 AM	

Figure 68: The Screen Library

See [Copying messages on page 71](#).

## Creating a Dependent Message


Use this procedure to create a new **Dependent Message** with your SpeedAlert signs. A default Dependent Message is included in the TrafficCloud **Equipment** page for your sign, but if you need to create a new one, the fastest way is to copy the default Dependent Message to the **Dependent Message Library** and then to modify it there, as described in this procedure.

A Dependent Message is a group of regular messages, where each message displayed on the sign is "dependent" on the radar input gathered as a vehicle approaches. Depending on the speed the radar is reading, a different message will be displayed. A message sign can only display one dependent message at a time.



**Watch the video**

### To copy a Dependent Message:

1. On the navigation menu, click **Equipment**. The **Equipment** page opens, listing all of the signs and devices in your organization.
2. Click the **Pencil** icon  next to the sign you want to set up messaging for. The **Equipment** page opens for the sign.
3. In the **General** section, click the **Sign Mode** drop-down list and select **Dependent Messages**.
4. Scroll down to **Dependent Messages** to display the default message.

Speed Condition	Message Text	Visual Representation
No Vehicle	Empty Message	[Empty Sign]
Under Speed Limit	Speed Limit Y...	[SPEED LIMIT XX] [YOUR SPEED XX]
Within 10 over the speed limit	Thank you	[YOUR SPEED XX] [THANK YOU FOR DRIVING SAFELY]
Between 10 and 20 over the speed limit	Slow Down	[SPEED LIMIT XX] [YOUR SPEED XX] [SLOW DOWN]
More than 20 over the speed limit	Too Fast	[TOO FAST!] [YOUR SPEED XX] [SLOW DOWN]

Figure 69: The Default Dependent Message

5. Click **Copy**. The **Change Dependent Message Name** window opens.

Change Dependent Message Name


Dependent Message Name :

CANCEL CONFIRM


Figure 70: The Change Dependent Message Name window

- Change the message name, and click the **Confirm** button. A confirmation popup appears, and TrafficCloud copies the message to the **Dependent Message Library**.

### To create your own Dependent Message from a copy:

- On the navigation menu, click **Messaging > Dependent Message Library**. The **Dependent Message Library** page opens.
- Click the **Pencil** icon  next to the **Dependent Message** you copied in the previous steps of this procedure.



**TIP:** Click the **Copy** icon  on the **Dependent Message Library** page if you want to make a copy of your copy before you begin.

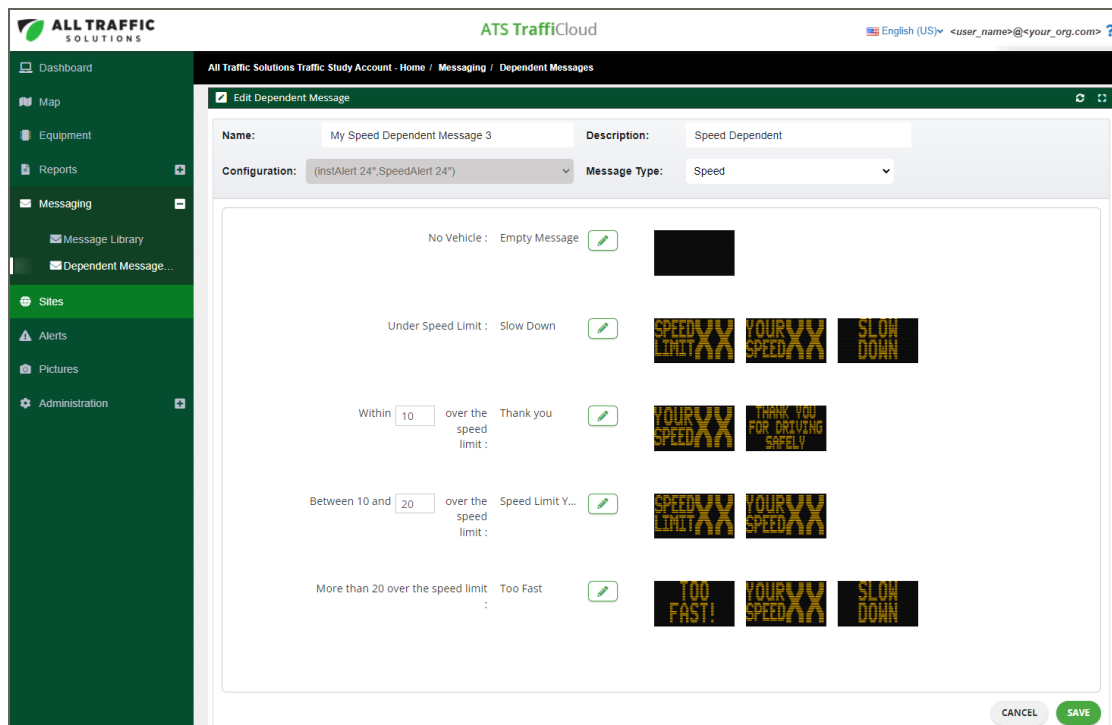



Figure 71: The Edit Dependent Message page

- On the **Edit Dependent Message** page, click the **Pencil** icon  next to any of the message screens that you want to update. The **Edit** menu displays.



Add Message

Choose from Message Library

Figure 72: The Dependent Messages page > Edit menu



4. Do either of the following:

- Click **Add Message** if you want to create a new message. See [Creating a custom message below](#).



**TIP:** The **Your Speed** and **Speed Limit** templates are particularly useful in creating radar-based messages, because they include the layout shown here and placeholders for detected speeds.



- Click **Choose from Message Library** to choose an existing message. A popup window opens, where you can select any message from the Message Library. Click a message to copy it immediately into your Dependent Message.


5. Click the **Save** button to save your work for any of the five messages that you edit.

6. Click **Save** again on the **Edit Dependent Message** page.

## Creating a custom message

Use this procedure to create a custom message to store in the **Messaging** tab. Each message can include up to six screens. To copy a custom message (also referred to as a single message) to your sign, see [Sending a message to one or more signs on page 74](#).

### To create a custom message:

- On the navigation menu, click **Messaging**. The **Message Library** page opens.
- Click the **Plus** button  at the top of the page. The **New Message** page opens.



Watch the video

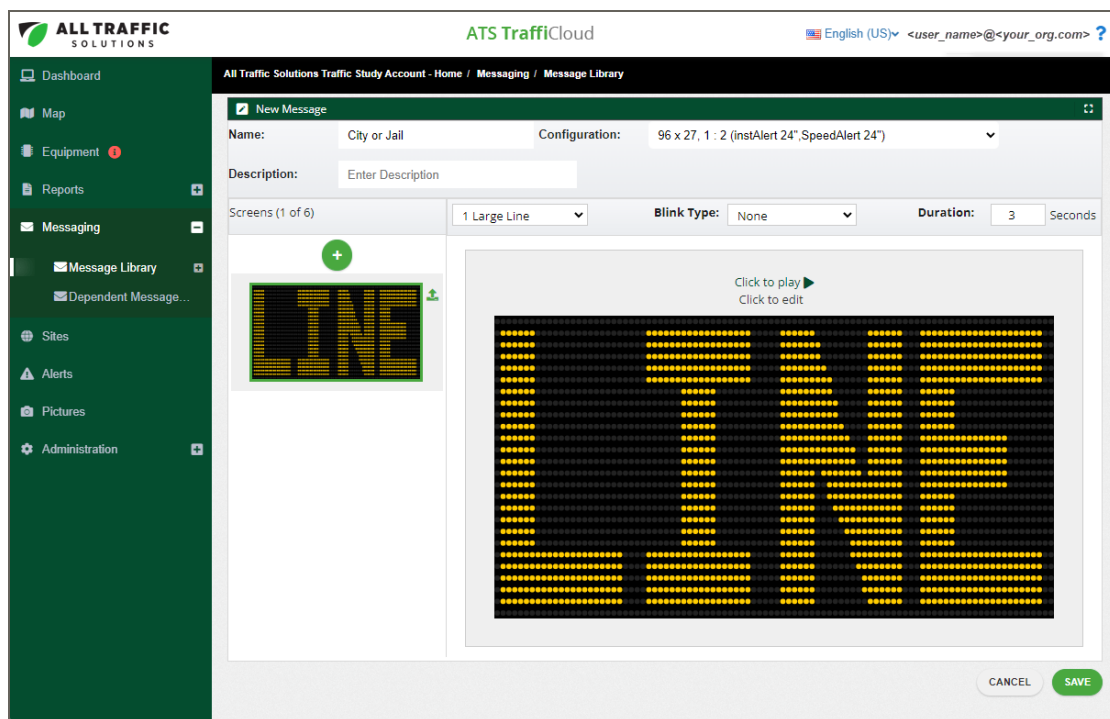



Figure 73: The New Message page

3. Enter a **Name** and optionally a **Description** for the message and, if you have multiple signs in various sizes, choose your **Configuration**.

### To create a new message screen:

- » Click inside the default message screen and start typing. The default messages are **1 Large Line** of up to four letters or digits.

### To select from the Screen Library:

1. Click the **Plus** sign  in the window and select **Choose from Screen Library** from the popup. The **Choose Screen** window opens.
2. Select your preferred screen. The **Custom Screens** tab shows screens uploaded by the customer. Click the **System Screens** tab to select from a list of preset screens.

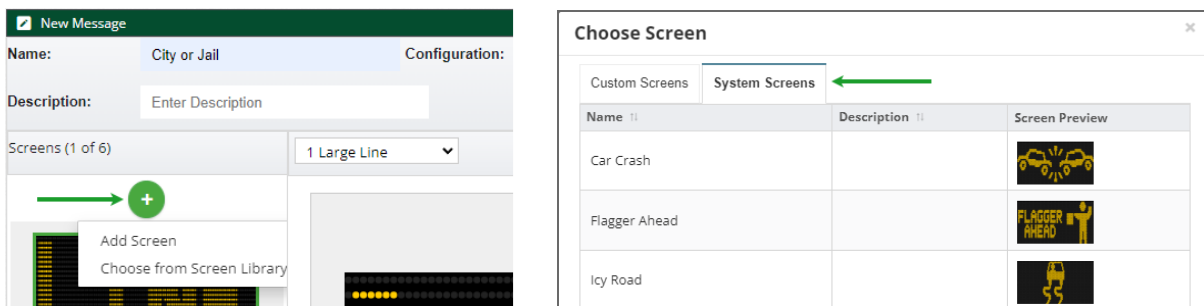


Figure 74: New Message > Choose from Screen Library

### To create a message from a template:

1. Click the **Templates** drop-down list and select another message layout.

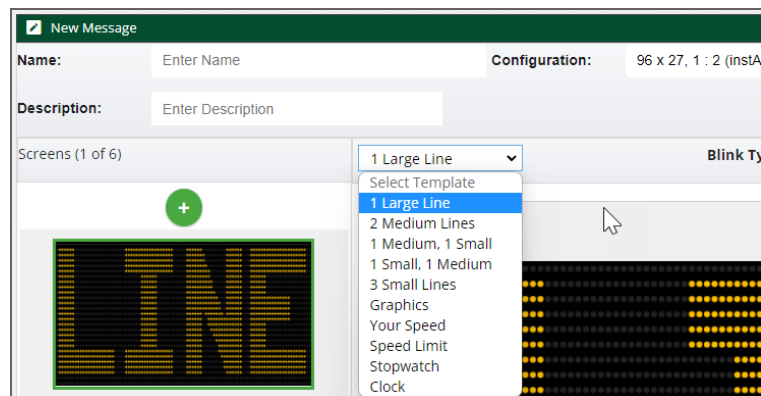


Figure 75: New Message > Templates drop-down (SpeedAlert)



**TIP:** The **Your Speed** and **Speed Limit** templates are particularly useful in creating radar-based messages, because they include the layout shown here and placeholders for detected speeds.



2. Choose from the available template options:

Sign type	Line sizes and combinations	Characters per line
<b>SpeedAlert 18</b> <b>InstAlert 18</b>	1 large line	One line of up to four characters.
	2 medium lines	Two medium lines of up to six characters each.
<b>SpeedAlert 24</b> <b>InstAlert 24</b>	1 large line	Up to four characters.
	2 medium lines	Two lines of up to eight characters each.
	1 medium, 1 small line	One line of up to eight characters and a second line of up to 12 characters.
	1 small, 1 medium	A first line of up to 12 characters and a second line of up to eight characters.
	3 small lines	Three lines of up to 12 characters each.

- Click **Templates > Graphics** to use the drawing tool (see [Using the drawing tool on page 78](#)).

### To set blink options:

Optionally, do any of the following:

- » Choose a **Blink Type: None, Blinking, or Inverting**.
- » If you choose, **Blinking** or **Inverting**, choose a **Blink Rate: Slow** (the default), **Medium**, or **Fast**.
- » Set a blink **Duration**, from 1-5 seconds. Keep in mind the average traffic speed and the number of screens you plan to display so that motorists will have time to see all of the screens in your message.

Select **Click to Play**  to preview any effects you assign.

### To finalize the custom message:

- » Click the **Save** button to save your new custom message. Next, see [Sending a message to one or more signs on page 74](#).

## Copying messages

Use the procedures in this topic for help with copying screens from the **Message Library**, which includes a large number of preset screens in the **System messages** tab and **Screen Library**. To use preset screens, you copy them to the **Custom Screens** tab, and from there you can use them for your sign as needed. See [Sending a message to one or more signs on page 74](#) and [Enabling messaging for signs on page 34](#).

### To copy a message from the System Screens tab:

- On the navigation menu, click **Messaging**. The **Message Library** page opens.
- Click the **System Screens** tab.

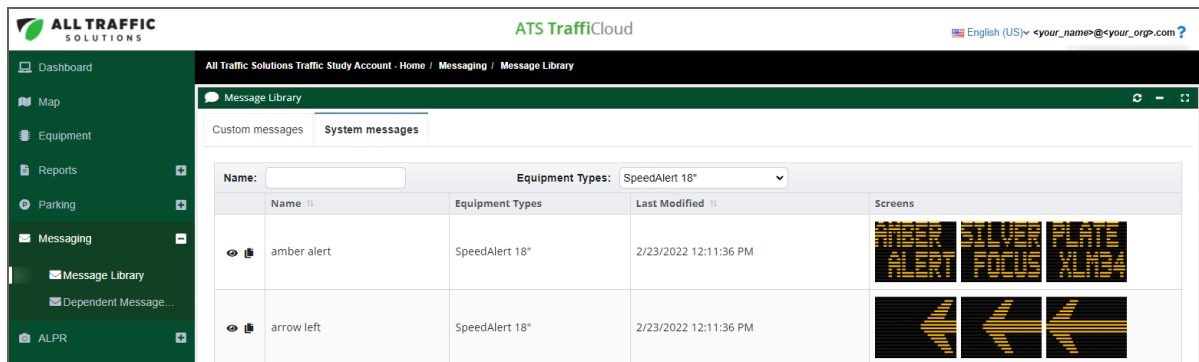


Figure 76: The Message Library > System messages

3. On the **System messages** tab, locate the message you want to copy. Then, you can either click the **View** icon next to any message to view the message and its settings or copy the message to your **Custom messages**, as follows:
  - A. Click the **Copy Message** icon . The **Change Message Name** window opens.
  - B. Enter a new name for the message, for example:

Change Message Name

Current Name

:

amber alert

New Name

:

amber alert 2

CANCEL

CONFIRM

Figure 77: The Change Message Name window

- C. Click the **Custom messages** tab to view the copied message, which you'll now be able to use for your sign. See [Sending a message to one or more signs on page 74](#) and [Enabling messaging for signs on page 34](#).

### To copy a preset screen from the Screen Library:

1. To open the **Screen Library**, click the plus sign next to the **Message Library** tab.

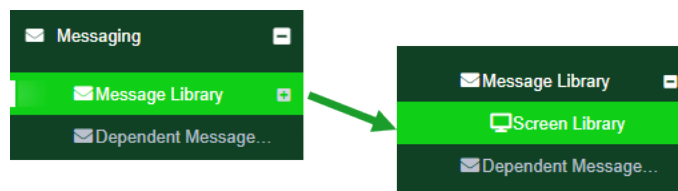


Figure 78: The Screen Library tab

2. In the Screen Library, click the **System Screens** tab.

Name	Equipment Types	Last Modified	Screens
Bike	instAlert 18",SpeedAlert 18"	11/3/2022 10:07:00 AM	
Buckle Up	instAlert 18",SpeedAlert 18"	11/3/2022 10:07:00 AM	
Car Crash	instAlert 24",SpeedAlert 24"	11/3/2022 10:07:00 AM	
Flagger	instAlert 18",SpeedAlert 18"	11/3/2022 10:07:00 AM	

Figure 79: Preset screens in the System Screens tab

- Click the **View** icon next to any message to view the message and its settings.
- Click the **Copy Message** icon . The **Copy to Custom Screens** window opens.
- Enter a new name for the message, for example:

Copy to Custom Screens

Current Name : Bike

New Name : Bike 2

CANCEL CREATE

Figure 80: The Copy to Custom Screens window

- Click the **Create** button. A confirmation popup displays.



**TIP:** To hold a confirmation on screen, click on it when it pops up.

- Click the **Custom Screens** tab to view the copied message, which you'll now be able to use for your sign. See [Sending a message to one or more signs](#) on the next page and [Enabling messaging for signs](#) on page 34.



Name	Description	Equipment Types	Last Modified	Screens
amber alert 2		SpeedAlert 18"	6/17/2022 4:19:59 PM	

Figure 81: View your new custom message

## To copy messages from the Messaging libraries to your sign:

1. In the **Custom Messages** tab, or **Dependent Messages Library** page, click the **Copy Message** icon  next to any message you want to copy. The **Change Message Name** window opens. See [Figure 77: on page 72](#).



**TIP:** In the **Edit Message** window, you can click the **Up arrow (Copy to)** icon  to copy from the **Custom Messages** tab to the **Screen Library**. Click **Message Library > Edit message** .

2. Enter a new name for the message. You must enter a unique name, and apart from ampersand (&), special characters and punctuation marks are not permitted.
3. Click the **Confirm** button.

## Sending a message to one or more signs

Use this procedure to send and activate a message to one or more signs associated with your account. The **Assign Message** command replaces the InstaMessage on the sign, and displays it the next time the sign calls in, within 15 minutes.



**NOTE:** You can't delete the InstaMessage directly. If you change your mind and want to replace it, repeat steps 2-5 below.

## To send a message to one or more signs:

1. On the navigation menu, click **Messaging**. The **Message Library** page opens to the **Custom messages** tab.

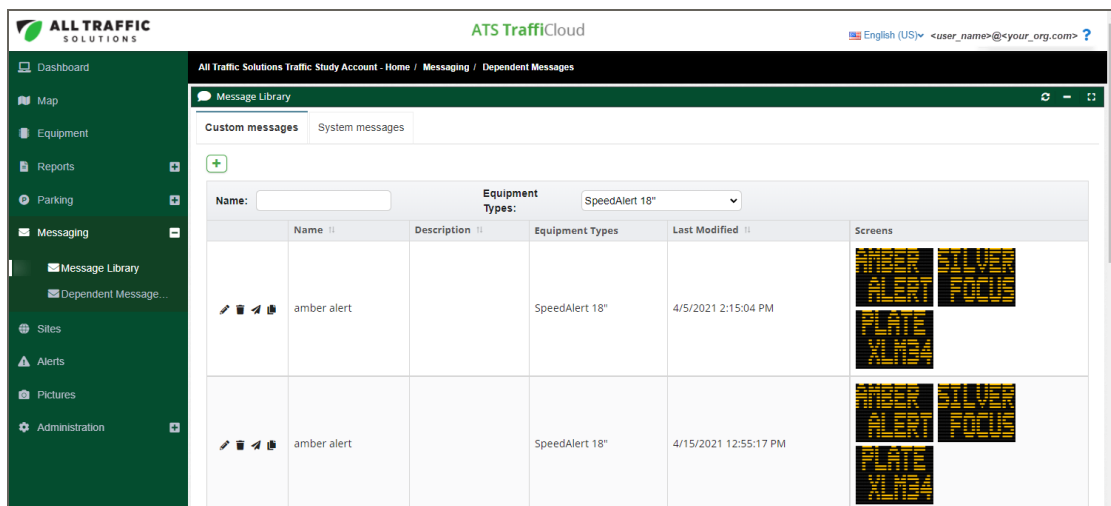



Figure 82: The Message Library > Custom messages

2. Locate the message you want to send and activate. You can filter the list by typing in the **Name** box or by selecting your sign type in the **Equipment Type** drop-down list.
3. Click the **Assign Message**  icon. The **Assign Message** window opens. Only signs compatible with the message type display in the list. For example, when you assign a message designed for SpeedAlert or InstAlert 24 signs, SpeedAlert or InstAlert 18s will not display in the list. For example,

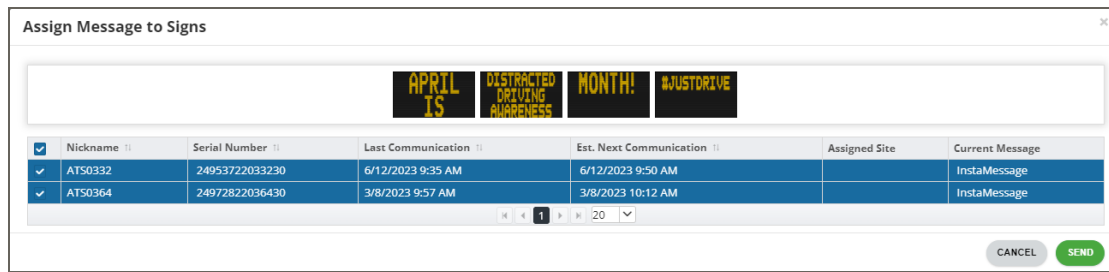


Figure 83: The Assign Message window

- Select the signs you want to send the message to. If you want to send the message to all of your signs, click the check box at the top of the first column.
- Click the **Send** button. A confirmation popup displays.



- Go to the **Equipment** tab to view the copied message. The copied message will replace the current InstaMessage and upload to the sign at the next communication interval, becoming the active message on the sign.


## Editing a message


The TrafficCloud **Messaging** and **Equipment** pages provide the **Edit Message** screen, where you can:

- » Add, revise, or delete message screens in a message,
- » Select a template, blink type, and duration for the display of each screen,
- » Using the **Graphics** template, draw and erase pixels using the mouse,
- » Edit the name or description of the message.

### To edit a message:

- On the navigation menu, click the **Messaging** tab.
- For SpeedAlerts, click either **Message Library** or **Dependent Messages**.

In the table, click the **Pencil** icon  at the left side of the row with the message you want to edit. The **Edit Message** screen opens. Skip to step 4.

- For InstAlerts, in the **Custom messages** tab, click the **Pencil** icon  at the left side of the row with the message you want to edit. The **Edit Message** screen opens.



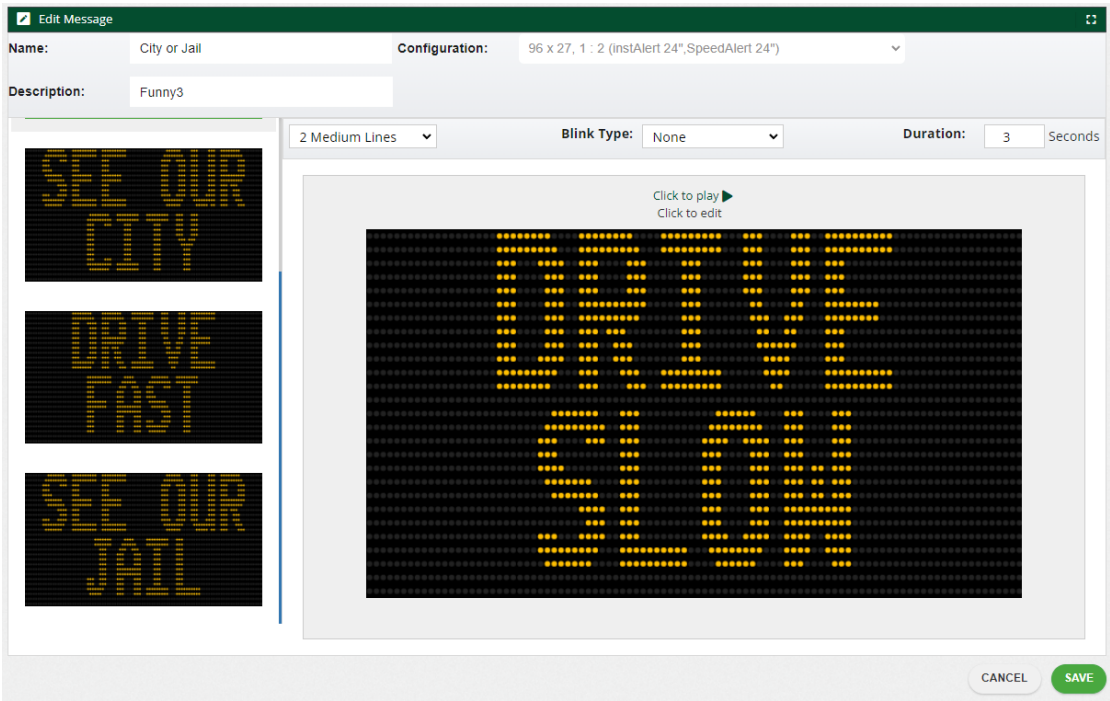





Figure 84: The Edit Message screen

4.
- Click inside any message to edit the text. You can delete existing characters and type new ones, change the template, or change the justification. Only template messages are not editable.

Use this table for help with the **Edit Message** screen options:

Setting	Description
Name	Displays the name of the message screen. You can change it as needed.
Configuration	Displays the sign dimensions, measured in pixels, such as "96 x 27" , and the sign type. The <b>Configuration</b> drop-down list is only active if you have more than one size of messaging sign.
Description	Optionally, enter a description for the message.
Screens	<div>Displays the existing screens in the main window pane.</div> <div><div>• Click the + button  to add screens. TrafficCloud adds the new screen after the currently selected screen.</div><div>• Click the <b>Up arrow (Copy to)</b> icon  to copy a message to the <b>Screen Library</b>.</div><div>• You can also click the <b>Delete</b> icon  to permanently delete a message screen.</div></div>



Setting	Description																			
<div>Select Template<div>1 Large Line ▼<div>Select Template1 Large Line2 Medium Lines1 Medium, 1 Small1 Small, 1 Medium3 Small LinesGraphicsYour SpeedSpeed LimitStopwatchClock</div></div></div>	<div>Displays the following template options for the current sign:</div> <table><tr><th>Sign type</th><th>Line sizes and combinations</th><th>Characters per line</th></tr><tr><td rowspan="2">SpeedAlert 18 InstAlert 18</td><td>1 large line</td><td>One line of up to four characters.</td></tr><tr><td>2 medium lines</td><td>Two medium lines of up to six characters each.</td></tr><tr><td rowspan="5">SpeedAlert 24 InstAlert 24</td><td>1 large line</td><td>Up to four characters.</td></tr><tr><td>2 medium lines</td><td>Two lines of up to eight characters each.</td></tr><tr><td>1 medium, 1 small line</td><td>One line of up to eight characters and a second line of up to 12 characters.</td></tr><tr><td>1 small, 1 medium</td><td>A first line of up to 12 characters and a second line of up to eight characters.</td></tr><tr><td>3 small lines</td><td>Three lines of up to 12 characters each.</td></tr></table>	Sign type	Line sizes and combinations	Characters per line	SpeedAlert 18 InstAlert 18	1 large line	One line of up to four characters.	2 medium lines	Two medium lines of up to six characters each.	SpeedAlert 24 InstAlert 24	1 large line	Up to four characters.	2 medium lines	Two lines of up to eight characters each.	1 medium, 1 small line	One line of up to eight characters and a second line of up to 12 characters.	1 small, 1 medium	A first line of up to 12 characters and a second line of up to eight characters.	3 small lines	Three lines of up to 12 characters each.
Sign type	Line sizes and combinations	Characters per line																		
SpeedAlert 18 InstAlert 18	1 large line	One line of up to four characters.																		
	2 medium lines	Two medium lines of up to six characters each.																		
SpeedAlert 24 InstAlert 24	1 large line	Up to four characters.																		
	2 medium lines	Two lines of up to eight characters each.																		
	1 medium, 1 small line	One line of up to eight characters and a second line of up to 12 characters.																		
	1 small, 1 medium	A first line of up to 12 characters and a second line of up to eight characters.																		
	3 small lines	Three lines of up to 12 characters each.																		
Blink Type	<div>The options are:</div> <ul style="list-style-type: none"><li>• <b>None</b>,</li><li>• <b>Blinking</b>, and</li><li>• <b>Inverting</b>, which swaps the pixels and blank space used for the lettering and background.</li></ul> <div>Select <b>Click to Play</b>▶ to preview any effects you assign.</div>																			
Blink Rate	<div>If you choose <b>Blinking</b> or <b>Inverting</b>, choose a <b>Blink Rate</b>:</div> <ul style="list-style-type: none"><li>• <b>Slow</b> (the default),</li><li>• <b>Medium</b>, or</li><li>• <b>Fast</b>.</li></ul> <div>Select <b>Click to Play</b>▶ to preview any effects you assign.</div>																			
Duration	<div>Sets the duration in seconds, from 1 to 5, of the display of each message screen. Keep in mind the average traffic speed and the number of screens you plan to display so that motorists will have time to see all of the screens in your message.</div> <div>Select <b>Click to Play</b>▶ to preview any effects you assign.</div>																			
Draw/Erase	<div>When you select the <b>Graphics</b> template, the slider alternates between drawing and erasing pixels. See <i>Using the drawing tool on the next page</i>.</div>																			

5. After you've made your changes click the **Save All Equipment Settings** button.

## Using the drawing tool

In addition to adding messages using text, TrafficCloud provides a drawing tool you can use to add pixel-based figures to your messages. You can add a new blank message screen to draw on or draw on an existing message.

### To use the drawing tool:

- On the navigation menu, do one of the following:
  - Click **Messaging > Dependent Messages**. The **Dependent Message Library** page opens.

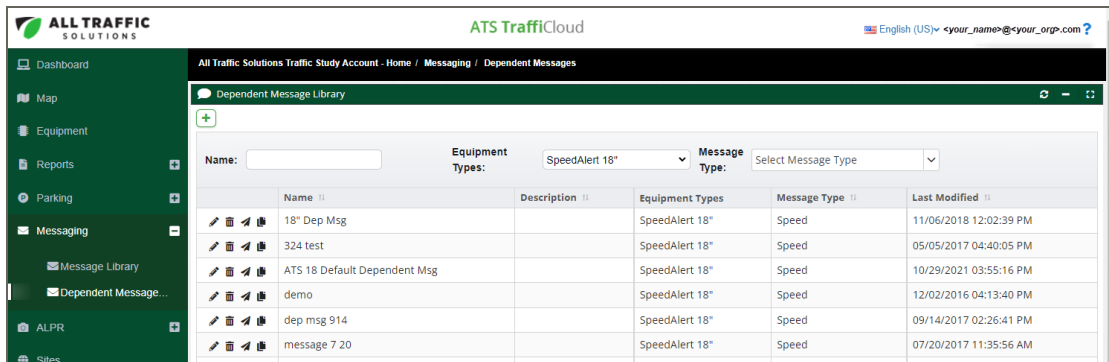


Figure 85: The Dependent Message Library

- Click **Messaging**. The **Message Library** page opens to the **Custom messages** tab.
- On the navigation menu, click **Messaging**. The **Message Library** page opens to the **Custom messages** tab.

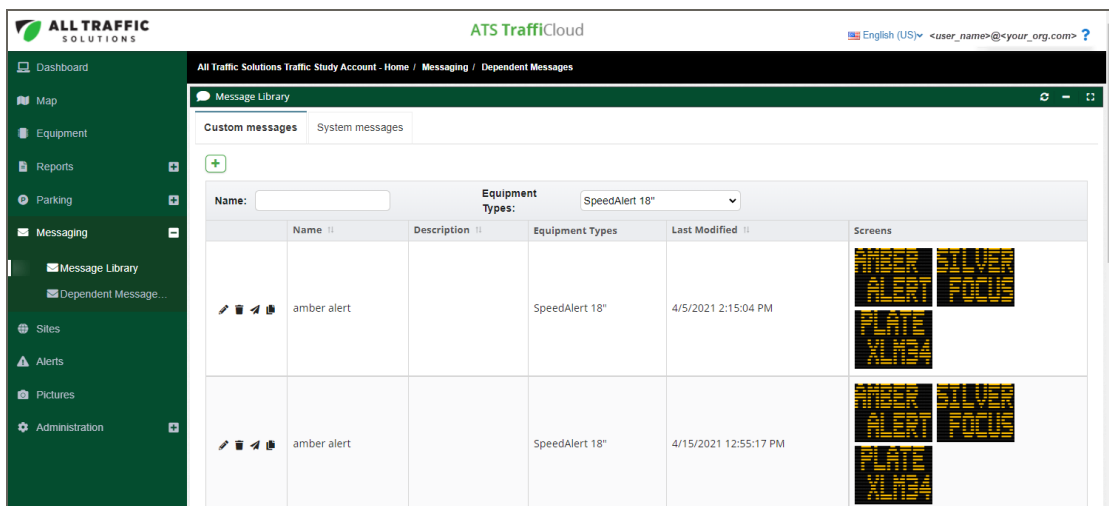



Figure 86: The Message Library > Custom messages



**TIP:** You can also use the drawing tool on the **Equipment** page. Go to the **Messages** section for your sign.

- Click the **Plus** button  at the top of the page. The **New Message** page opens.
- Click the templates drop-down menu, and select **Graphics**, as shown:

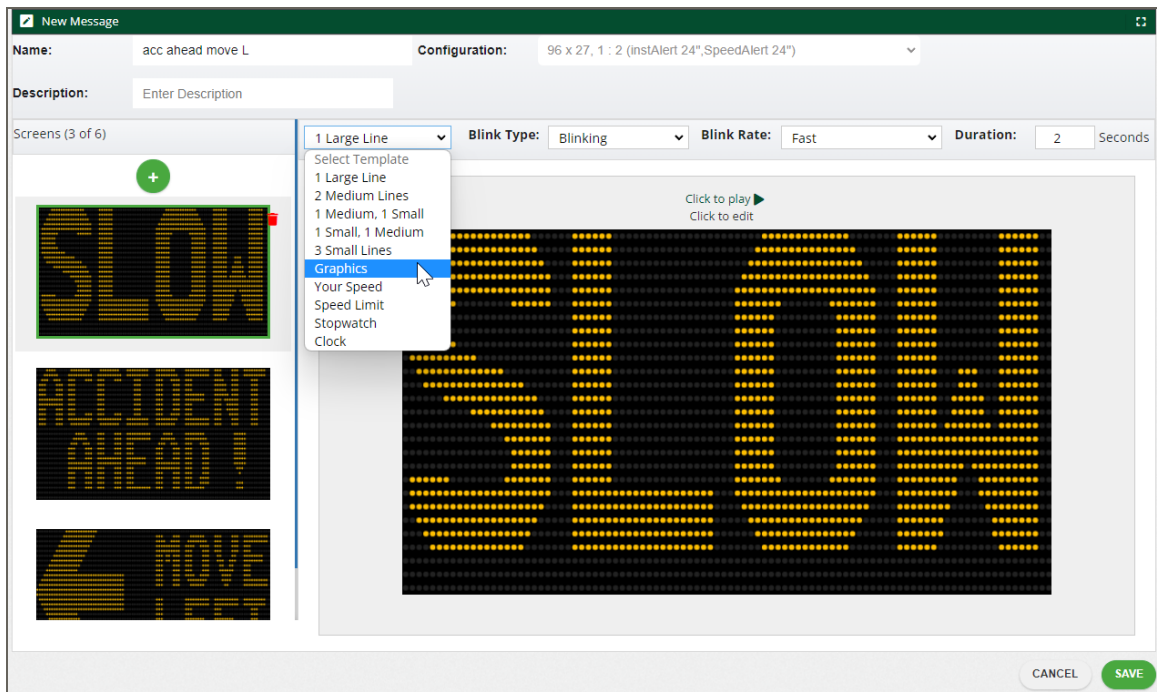


Figure 87: The New Message window > Select Graphics

- The **Confirm Template Change** window opens.

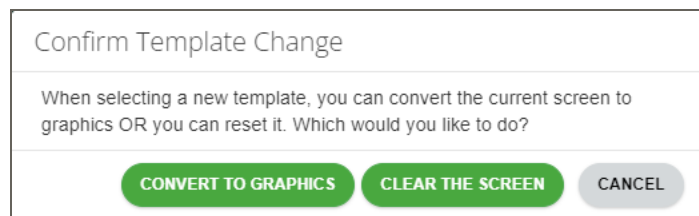


Figure 88: Confirm Template Change window

- Choose either of these options for using the drawing tool. TrafficCloud displays the window on a per-message screen basis, but remembers your choices.

Setting	What it does
<b>Convert to Graphics</b>	Enables drawing with pixels on the selected screen. The existing text is converted to pixels so that you can add graphics to it. Click <b>Draw</b> to add pixels or <b>Erase</b> to remove anything from the screen. Graphics can't be converted back to text.
<b>Clear the Screen</b>	Resets the screen to a blank, so that you can draw anywhere on the screen.

As long as you are using the **Graphics** template, the **Draw** slider is active at the top-right of the page, as shown here:

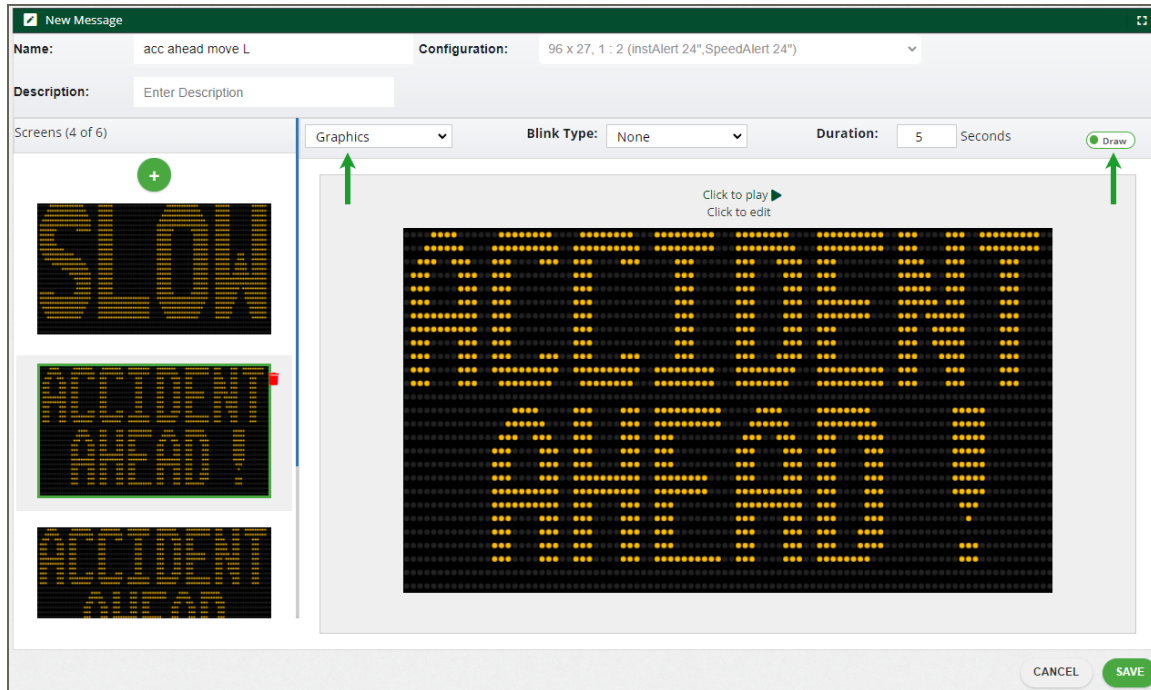



Figure 89: The New Message window > Drawing mode

7. Do one of the following:

- To update an existing screen, select the message, and start drawing by clicking the mouse. To erase any pixels, click the **Draw** slider to toggle it to **Erase** mode, and click each pixel you want to erase. In the example in [Figure 89](#): above, a custom exclamation mark was added to the existing message screen using the drawing tool.
- To add a new screen, click the **Add** button  to add a new message screen to draw on, and draw and erase pixels as needed. For example:

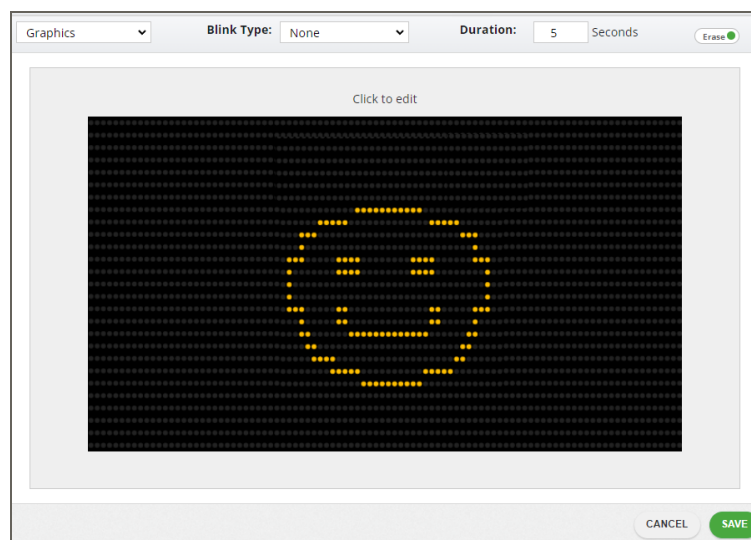


Figure 90: Freehand drawing example



**TIP:** You can draw or erase a pixel at a time, or drag with the mouse along the screen to design a string of lights.

8. After you've made your changes, click the **Save** button.
9. If you are on the **Equipment** page, also click the **Save All Equipment Settings** button.



# Chapter 7

## Running reports

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With TrafficCloud reports at your fingertips, you can quickly understand the driving patterns and issues on a given street, intersection, or your community as a whole. You can generate reports using a variety of statistics, making it easier to track key data, from **Standard reports** about speed and volume, to **Premium reports** which track statistics such as compliant versus low-, medium-, and high-risk drivers, 85th percentile speeds, traffic calming effectiveness, and many other measures. With StatTrak, you'll also have a wide range of **Count & Classify reports**, which have all of the most useful statistics and group vehicles by small, medium, and large classes.



Watch the video

**ATS radar display signs and StatTrak vehicle counting and classification devices** collect report-ready data as vehicles pass by during a given time

period and automatically upload it remotely and securely to TrafficCloud. That way, you don't have to go to the device location to perform a manual download. The **Reports** feature analyzes and presents the data in a variety of useful ways to help with traffic planning and enforcement.

With all devices, you can generate **Operational Reports**, which monitor your device's **Power Log History**, including **Voltage**, **Current**, and **Power Percent**.

Every TrafficCloud **Reports** page includes a place to select the Site you want reporting on, a calendar to select the date range, and options for report selection and configuration and for managing report scheduling. See [Configuring reports on page 86](#).

## Standard and Premium reports

TraffiCloud subscribers have access to Premium Reports, and all ATS device owners have access to Standard Reports. Here's a quick summary of the reports you can generate:

Standard Reports		Premium Reports	
<b>Volume by Time</b>	Provides traffic counts by hour and date.	<b>Compliance &amp; Risk</b>	Identifies the volume of compliant drivers vs. low, medium, and high risk drivers.
<b>Volume by Speed</b>	Displays vehicles counted in 5-mph (8-kph) increments.	<b>Enforcement Priorities</b>	Analyzes and compares traffic data, listing time periods at Sites with the worst violation numbers.
<b>Speed Summary</b>	Provides a concise summary of speeds at a given Site.	<b>Extended Speed Summary</b>	Provides a concise summary of speeds at a given Site, including charts and tables.
<b>Raw Data Export</b>	Generates data for all traffic by date, including speed measurements (maximum, minimum, mean, 85%, median, and pace speed).	<b>Speed Effectiveness</b>	Measures the effectiveness of devices in voluntary speed reduction, comparing speed at first detection by the device to when the vehicle passes.
		<b>Comparison Reports</b>	Compare data between two dates for a given Site (not multiple Sites).

The most important reports as you get started analyzing your traffic data for signs are the **Compliance & Risk** reports and **Enforcement Priorities** reports and for StatTraks the Count & Classify Reports.


## StatTrak Count & Classify reports

StatTrak includes the following specialized traffic reports, showing vehicle counts and classifications by small, medium, or large:



Report name	Description
<b>Overview - Traffic Analysis report</b>	Provides an overview of the speeds identified, over one or two lanes, total vehicles and total 85th percentile vehicles, volumes and violators, and then a summary of the number of vehicles by class: small, medium, and large.
<b>Speed by Direction</b>	Tracks date, time, and direction over one or two lanes, and average speed, as well as 85th percentile speed, minimum and maximum speeds, percentage of violators, average violators, and total violators.
<b>Classification by Direction</b>	Tracks date, time, and direction, over one or two lanes, and small, medium, and large classes of vehicles, along with total or average volumes. You can specify time intervals from every five minutes to daily or weekly.
<b>Compliance and Risk by Direction</b>	Tracks date, time, and direction over one or two lanes, compliant and low-to-high-risk motorists, along with totals.



Report name	Description
<b>Volume by Speed by Direction</b>	Tracks date, time, and direction over one or two lanes, and speed violation counts by 5-mph (8-kph) increments, along with average speed and total volume by hour and in aggregate.
<b>Volume by Time</b>	Tracks date, time, direction, and volume of vehicles over one or two lanes.
<b>Custom Traffic Report</b>	Tracks date, time, and speed over one or two lanes, by 10-mph (16-kph) increments (speed bins). Also tracks up to 16 categories of traffic data, from Speed Limit and Tolerated Speed to Percent Compliant and Percent Violators, to 85% Speed, among others. You can also specify which classes of vehicles to track (small, medium, or large). The default categories for the report are Speed Limit, Counts by Speed Bins, Total Vehicle Count, and Average Speed.
<b>Raw Data Export</b>	Tracks date and time, number of lanes, direction, and speed.

 **TIP:** You can also set up a **Traffic Volume** widget in the **Dashboard**. See [Setting up a Traffic Volume widget on page 16](#).

### To generate reports:

1. On the navigation menu, click **Reports**. You can stay on the **Traffic**  page, or for reports about equipment status, click **Operational** .
2. In the **Report Category** box, use the default **Single Site** option.
3. Click in the **Sites** box and select your Site from the drop-down (the Site determines the device you'll be collecting data for). You can filter the list by typing Site names and then selecting your Site.
4. Select the dates for your report. See [Configuring reports on the next page](#). For Comparison reports, you'll need to repeat the step and select an additional date for comparison.
5. For speed signs, under **Report Type**, select **Standard** or **Premium**, as required. For StatTrak, select **Count & Classify** to take advantage of the options to include one or two lanes and vehicle classification.
6. Click the **Select Report** drop-down, and select a report type. See [Figure 91: below](#) for an example of what you'll see with a **Compliance & Risk** report selected, which includes **Violation Threshold** set to the default of 10 mph (16 kph) above the speed limit, and **High Threshold**, set to the default of 20 mph (32 kph) above the speed limit.

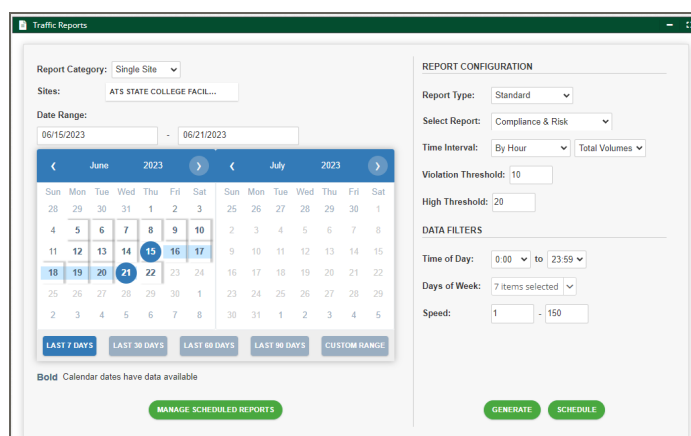


Figure 91: The Reports page (Shields, SpeedAlerts, and School Zone Alert)

In the next example, for StatTrak, the **Overview** report is selected, with **Violation Threshold** set to the default of 10 mph (16 kph) above the speed limit, and two lanes selected.

The screenshot shows the 'Traffic Reports' interface. On the left, under 'Report Category', 'Single Site' is selected. The 'Sites' dropdown shows 'ATS STATE COLLEGE FACIL...'. The 'Date Range' is set from '06/15/2023' to '06/21/2023'. A calendar view shows June and July 2023, with dates 15, 16, 17, 18, 19, 20, and 21 highlighted. Below the calendar are buttons for 'LAST 7 DAYS', 'LAST 30 DAYS', 'LAST 60 DAYS', 'LAST 90 DAYS', and 'CUSTOM RANGE'. A note says 'Bold Calendar dates have data available'. At the bottom is a 'MANAGE SCHEDULED REPORTS' button. On the right, the 'REPORT CONFIGURATION' section shows 'Report Type' as 'Count & Classify', 'Select Report' as 'Overview', and 'Violation Threshold' as '10'. The 'DATA FILTERS' section shows 'Time of Day' as '0:00' to '23:59', 'Days of Week' as '7 items selected', 'Lanes' as '2 items selected', and 'Speed' as '1' to '150' mph. At the bottom right are 'GENERATE' and 'SCHEDULE' buttons.

Figure 92: The Reports page (StatTrak)


7. In the **Data Filters** section, you can accept the defaults or adjust the settings for items such as **Time of Day**, **Day of Week**, and **Speed**.
8. Click the **Generate** button to create a report for the selected date range. Your report displays below the configuration section.

## Configuring reports

Use the following table for help using the **Reports** page fields. The fields displayed vary depending on report type and report selected.

Setting	What you can do
<b>Report Category</b>	In the <b>Report Category</b> box, use the default <b>Single Site</b> option.
<b>Sites</b>	Select a Site or Sites from your list. A report must have at least one Site assigned before you can generate it. See <a href="#">Assigning a Site to your ATS device on page 25</a> .
<b>Select multiple sites</b>	Click the check box to enable reporting about multiple Sites. Only the <b>Enforcement Priorities</b> report and the <b>County and Classify</b> report, for StatTraks and Speedlane devices, are optimized for multiple Sites.
<b>Date Range</b>	<p>Reports also require a date range. You can use the buttons for the last seven, 30, 60, or 90 days, or even enter dates manually, using the format MM/DD/YYYY.</p> <p>To select from the calendar:</p> <ol style="list-style-type: none"> <li>1. Click the <b>Custom Range</b> button.</li> <li>2. Click the start date.</li> <li>3. Move the mouse pointer to the end date.</li> <li>4. Click the end date.</li> </ol> <p><b>NOTE:</b> To view premium reports, you must select dates when your TrafficCloud subscription has been active.</p>

Setting	What you can do
<b>Report Configuration</b>	
<b>Report Type</b>	Use the default <b>Standard</b> report type to have access to all of the regular reports. If you also have a StatTrak or Speedlane device, you can use the <b>Count &amp; Classify</b> reports.
<b>Select Report</b>	Select one of the available report types.
<b>Ranking</b>	For <b>Enforcement Priorities</b> reports, you can choose between <ul style="list-style-type: none"> <li>• <b>85% Speed:</b> Ranks the results based on the maximum speed that 85% of drivers will not exceed on a given road, even if there were no speed limits, stop signs, or traffic signals. This is the default selection.</li> <li>• <b>Speed and Volume:</b> Ranks the results based on speed or volume of vehicles, or an average of both. You can move the slider from zero to 100%. The default setting is 50%.</li> </ul>
<b>Bin Size</b>	For <b>Volume by Speed</b> reports, sets the bin size for each increment in speed, measured in mph (or kph). The options are either 5 mph or 10 mph.
<b>Time Interval</b>	Select the time interval for the report. For <b>Compliance and Risk</b> reports, you can choose by hour, half-hour, 15-minute intervals, or by day of the week, date, or week. The available options vary by report. <b>Total Volumes</b> You can choose between <b>Total Volume</b> , which is the total number of vehicles passing the device during a given interval, and <b>Total Average</b> , which shows the average number of vehicles during the interval.
<b>Violation Threshold</b>	Sets the speed in mph (or kph) that will be considered a violation. The default is 10 mph above the speed limit, but you can change it before you generate the report (Premium feature).
<b>Report in Percentages</b>	Sets the speed in mph (or kph) that will be considered a violation. The default is 10 mph above the speed limit, but you can change it before you generate the report (Premium feature).
<b>High Threshold</b>	Sets the speed in mph (or kph) that will be defined as high risk. The default is 20 mph (32 kph) above the speed limit, but you can change it before you generate the report (Premium feature).
<b>Minimum Hourly Vehicles</b>	For <b>Enforcement Priorities</b> reports, sets the minimum number of vehicles to be detected per hour before a report is generated (Premium feature).
<b>Data Filters</b>	
<b>Time of Day</b>	Sets the time span during a given day for the report, with the default being all day, from 0:00 to 23:59 (midnight to midnight).

Setting	What you can do
<b>Days of Week</b>	Sets the days of the week for the report to gather data.
<b>Lanes</b>	For StatTraks, sets the number of lanes to be monitored, either 1 or 2.
<b>Speed</b>	Sets the speed range the report should include.
For <b>StatTrak Custom Traffic Reports</b> , you can use minimum and maximum class settings to exclude classes, such as small vehicles or large vehicles. You must specify at least two classes, you cannot specify the same minimum and maximum class size, and you cannot specify a smaller maximum size than the minimum size.	
<b>Min. Class</b>	Sets the minimum class: <b>Small</b> or <b>Medium</b> .
<b>Max. Class</b>	Sets the maximum class: <b>Medium</b> , or <b>Large</b> .
<b>Violation Threshold</b>	See above.
<b>Scheduled reports</b>	
<b>Manage Scheduled Reports</b>	Opens the <b>Manage Scheduled Reports</b> window, where you can adjust existing schedule settings.
<b>View icon</b> 	Opens the <b>Schedule</b> window, where you can create recurring automatic report generation. Give the report a name, select other users on the TrafficCloud account, file type, and time of day and frequency of the report, which can be any or all of the days of the week or month.
<b>Generating reports</b>	
<b>Generate</b>	<p>Generates the report – scroll down on the <b>Reports</b> page to view it. For details and examples, see</p> <ul style="list-style-type: none"> <li>• <a href="#">Compliance &amp; Risk reports</a> on the facing page</li> <li>• <a href="#">Enforcement Priorities reports</a> on page 90</li> </ul> <p>For StatTrak, see also:</p> <ul style="list-style-type: none"> <li>• <a href="#">Count &amp; Classify reports for StatTrak</a> on page 91</li> </ul>

## Compliance & Risk reports

**Compliance & Risk** reports are one the two most useful reports to law enforcement authorities, along with Enforcement Priorities. Compliance & Risk reports identify the volume of compliant drivers vs. low-, medium-, and high-risk drivers, displaying the results in two pages: in a table and in bar and line graphs.

Here's an example of the first page of the report, which provides a table averaging the results by the hour for a 24-hour period for the dates selected:

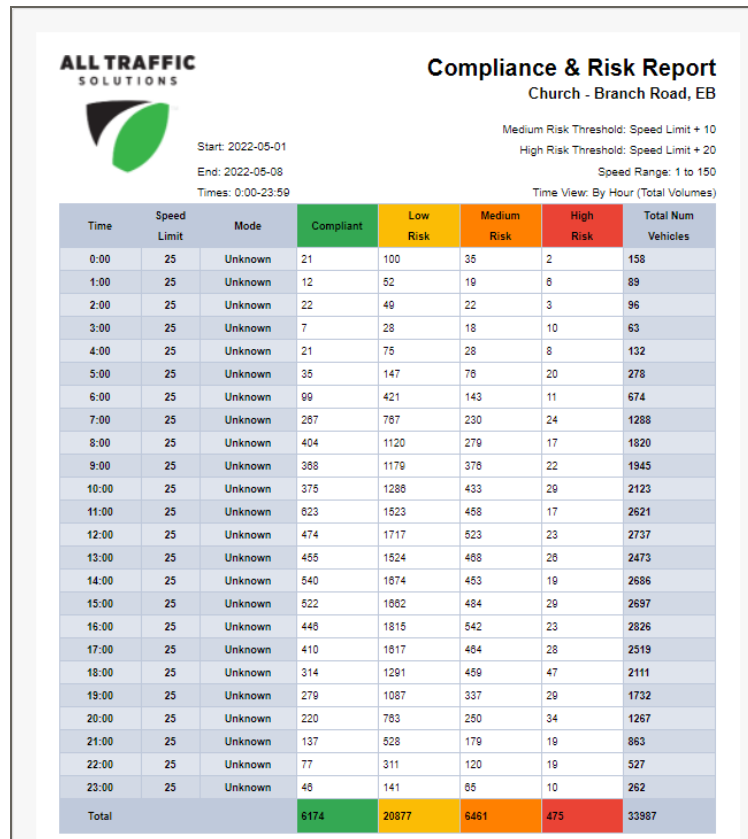


Figure 93: Compliance & Risk report: Table view

Here are the bar and line charts for the same report:

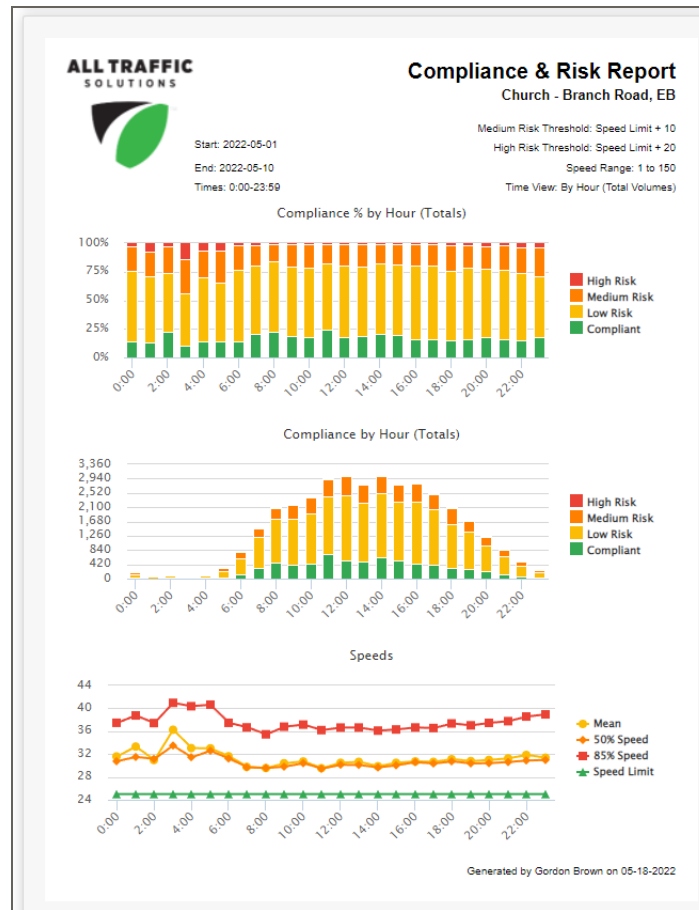


Figure 94: Compliance & Risk reports: Chart view

## Enforcement Priorities reports

The **Enforcement Priorities** report is one of the two most useful reports to law enforcement authorities, along with Compliance & Risk reports. The Enforcement Priorities report analyzes and compares traffic data, listing time periods at Sites with the worst violation numbers.

Here's an example of the **Enforcement Priorities > 85% Speed** report, which ranks the results based on the vehicles with the 85th percentile speed (the speed that 85% of vehicles will not exceed) for the dates selected:

**ALL TRAFFIC SOLUTIONS**

**Enforcement Priorities Report**  
Church - Branch Road, EB

Start: 2022-05-01  
End: 2022-05-10  
Times: 0:00-23:59

Violation Threshold: Speed Limit + 10  
Speed Range: 1 to 150  
Rank Results By: 85% Speed

#	Site	Day of Week	Time	Speed Limit	Average Speed	Average Violator Speed	85% Speed	Average # Vehicles	Average # Violators
1	Church - Branch Road, EB	Wed	4:00 - 5:00	25	34.0	43.4	44.0	21	9
2	Church - Branch Road, EB	Thu	4:00 - 5:00	25	35.0	43.5	44.0	28	11
3	Church - Branch Road, EB	Thu	23:00 - 24:00	25	33.0	43.1	43.0	29	10
4	Church - Branch Road, EB	Sun	7:00 - 8:00	25	34.2	41.7	42.8	51	22

Figure 95: Enforcement Priorities > 85% Speed

And here is an example of the **Enforcement Priorities > Volume and Speed** report, set to 50%, which ranks the results based on a combination of the average number of vehicles (**Volume**) and the average number of violators (**Speed**).

ALL TRAFFIC SOLUTIONS		Enforcement Priorities Report							
		Start: 2022-05-01 End: 2022-05-08 Times: 0:00-23:59				Violation Threshold: Speed Limit +10 Speed Range: 1 to 150 Rank Results By: 50% Volume, 50% Speed			
#	Site	Day of Week	Time	Speed Limit	Average Speed	Average Violator Speed	85% Speed	Average # Vehicles	Average # Violators
1	Church - Branch Road, EB	Sat	16:00 - 17:00	25	32.0	39.8	40.0	308	91
2	Church - Branch Road, EB	Sun	12:00 - 13:00	25	30.9	39.3	36.8	376	78
3	Church - Branch Road, EB	Fri	18:00 - 19:00	25	31.7	39.9	37.7	272	77
4	Church - Branch Road, EB	Thu	12:00 - 13:00	25	31.0	39.5	37.6	325	77
5	Church - Branch Road, EB	Mon	12:00 - 13:00	25	30.5	39.3	36.7	350	77
6	Church - Branch Road, EB	Fri	16:00 - 17:00	25	31.0	39.6	37.0	396	76
7	Church - Branch Road, EB	Sat	12:00 - 13:00	25	31.7	39.1	38.2	296	75

Figure 96: Enforcement Priorities > 50% volume and 50% speed

## Count & Classify reports for StatTrak

**StatTrak Count & Classify** reports identify the volume of compliant vs. low-, medium-, and high-risk drivers, in one or two directions and can count vehicles by class, small, medium, and large.

### Overview - Traffic Analysis report

The **Overview - Traffic Analysis** report provides an overview of the speeds identified, over one or two lanes, total vehicles and total 85th percentile vehicles, volumes and violators, and then a summary of the number of vehicles by class: small, medium, and large. Here's an example report:

ALL TRAFFIC

SOLUTIONS

Start: 2023-06-17

End: 2023-06-15

Times: 0:00-23:59:59

Traffic Analysis Report

ATS State College facility, NB

Speed Range: 1-150 mph

Violation Threshold: 10

Lanes Included: 1, 2

Speed

Speed Limit	35 mph
85th Percentile Speed	34 mph
50th Percentile Speed	26 mph
Average Speed	24.9 mph
Pace Speed Range (10 mph)	21 - 31 mph
Max Speed	55 mph
Min Speed	6 mph

Vehicles

Total Vehicles	15974 counts
85th Percentile Vehicles	14089 counts

Volumes

	Time	5 Day (Mon-Fri)	7 Day (Sun-Sat)	
ADT		1973	1452	
AM Peak	8:00 - 9:00	160	112	
PM Peak	12:00 - 13:00	197	137	
	Over Threshold	% Violators	Avg Violator Speed	
Tuesday	21	0.5	48.2	
Friday	4	0.2	47.3	
Saturday	9	0.7	47.8	
Sunday	6	0.7	48.3	
Wednesday	9	0.4	47.8	
Thursday	6	0.3	47.3	
Monday	12	0.3	48.3	

Class Counts

	Number	%
Small (Class 1)	1288	8.1
Medium (Class 2-3)	14418	90.3
Large (Class 4-12)	268	1.7

Figure 97: Overview - Traffic Analysis report





## Compliance and Risk by Direction report

The **Compliance and Risk by Direction** report tracks date, time, and direction over one or two lanes, compliant and low-to-high-risk motorists, along with totals. Here's an example report:

ALL TRAFFIC SOLUTIONS		Compliance and Risk by Direction					
		ATS State College facility, NB					
		Speed Limit: 35		Length Range: 0-500 ft			
		Start: 2023-06-17		Speed Range: 1-150 mph			
		End: 2023-08-15		Med Risk Threshold: 10			
		Times: 0:00:00-23:59:59		High Risk Threshold: 20			
				Lanes Included: 1, 2			
Date	Time	Direction	Compliant (0-35)	Low Risk (36-45)	Medium Risk (46-55)	High Risk (56+)	Total
2023-06-17	0:00	SB	4	2	0	0	6
		NB	7	0	0	0	7
	1:00	SB	1	0	0	0	1
		NB	4	0	0	0	4
	2:00	SB	1	0	0	0	1
	3:00	SB	1	0	0	0	1
		NB	1	0	0	0	1
	5:00	SB	3	1	0	0	4
		NB	2	1	0	0	3
	6:00	SB	6	0	0	0	6
		NB	6	1	0	0	7
	7:00	SB	11	2	0	0	13
		NB	10	1	0	0	11
	8:00	SB	21	3	0	0	24
		NB	18	3	0	0	21

Figure 100: Compliance and Risk by Direction reports

## Volume by Speed report

The **Volume by Speed** report tracks date, time, and direction over one or two lanes, and speed violation counts by 5-mph (8-kph) increments, along with average speed and total volume by hour and in aggregate. Here's an example report:

ALL TRAFFIC

SOLUTIONS

Start: 2023-06-17

End: 2023-08-15

Times: 0:00:00-23:59:59

Length Range: 0-500 ft

Speed Range: 1-150 mph

Lanes Included: 1, 2

Volume by Speed by Direction

ATS State College facility, NB

Dates	Time	Direction	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 +	Total
06-17	0:00	SB	0	0	0	1	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
		NB	0	0	1	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	1:00	SB	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
		NB	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	2:00	SB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
		3:00	SB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		NB	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:00	SB	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
		NB	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	6:00	SB	0	0	1	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
NB		0	0	0	1	2	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
	7:00	SB	0	0	0	0	1	6	4	0	2	0	0	0	0	0	0	0	0	0	0	0	13	

Figure 101: Volume by Speed reports



## Raw Data Export report

The **Raw Data Export** report tracks date and time, number of lanes, direction, and speed. This report is meant for export to .csv file for import by data analysis software, and therefore excludes a report title and other standard formatting. Here's an example report:

Date	Lane	Direction	Speed	Length
2023-06-17 00:18:02.7580000	2	SB	29	2
2023-06-17 00:21:12.7590000	1	NB	18	2
2023-06-17 00:21:12.7600000	1	NB	18	2
2023-06-17 00:21:12.7610000	1	NB	14	2
2023-06-17 00:22:18.7620000	2	SB	27	2
2023-06-17 00:29:30.7630000	1	NB	32	2
2023-06-17 00:29:32.7640000	1	NB	22	2
2023-06-17 00:30:00.7650000	2	SB	39	2

Figure 104: Raw Data Export reports

## Operational reports: Power Log History

**Operational** reports provide technical details about your device, such as power logs for the batteries. You can track the battery percentage history of your equipment. This report is ideal if you want to see how long a power source might last on a single charge, or check the autonomy of solar-powered equipment. [Play the TRAINING VIDEO about Operational report setup](#)

Here's an example **Operational report > Power Log History** report, which logs device battery power levels by date and time:

ALL TRAFFIC SOLUTIONS		Device Power Report		
		STA-AEC6 (SN: 23030439)		
		Start: 2023-06-22		
		End: 2023-06-29		
		Times: 0:00-23:59		
Date (UTC)	Time	Voltage	Power Current	Power Percent
2023-06-22	04:52:27.253	13.01	9.0	70%
2023-06-22	06:53:05.09	13.01	9.0	70%
2023-06-22	08:53:45.696	13.01	9.0	70%
2023-06-22	10:54:17.247	13.03	9.0	75%
2023-06-22	12:54:50.184	13.01	9.0	70%
2023-06-22	14:55:23.281	13.01	9.0	70%
2023-06-22	16:55:59.249	13.01	9.0	70%
2023-06-22	18:56:30.145	13.01	9.0	70%
2023-06-22	20:57:08.611	13.01	9.0	70%
2023-06-22	22:57:46.503	13.0	9.0	68%
2023-06-23	00:58:25.508	13.0	9.0	68%

Figure 105: Operational reports > Power Log History



## Scheduling reports

Once you have configured a report for a given Site, you can schedule TrafficCloud to send it to you or any other user on the same TrafficCloud account via email.

You can also configure the report name, file format (pdf or csv), time of day, days of the week, and even the dates when the report is sent out, or suspend a report schedule using the **Active** slider.

Figure 106: Reports > Schedule window

### To schedule reports:

1. On the navigation menu, click **Reports**, and follow the steps in [Running reports on page 83](#). Your report displays below the configuration section.
2. Once you have generated your report, click the **Schedule** button.

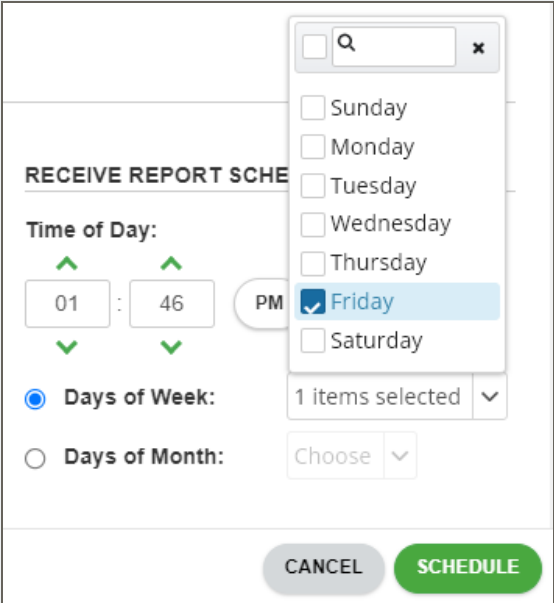
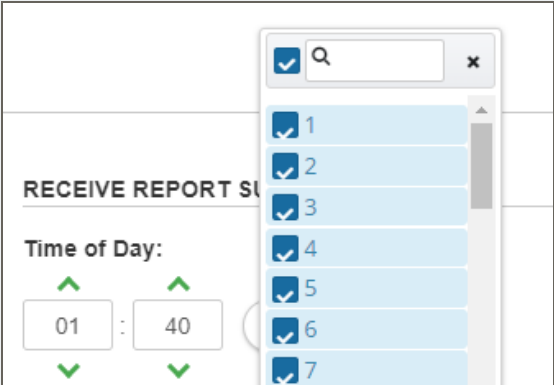
Figure 107: The Schedule button

The **Schedule** window opens, with the **Report Schedule** and **Receive Report Schedules** sections across the bottom.

Figure 108: Report Schedule settings

3. Use the following table for help with your selections:

Setting	What you can do
<b>Report Schedule</b>	
<b>Name</b>	Type a representative name for the report. Using the Site name and an abbreviation of the report type is useful, such as "Church Branch Road - Eastbound - C&R" (for Compliance and Risk). TrafficCloud displays the report name in the subject line of the email it sends you.
<b>Scheduled Users</b>	Click in the drop-down list, and choose your email address or those of any TrafficCloud users you need to include in the report notifications. You can type the first few letters of any email address to filter the list. At least one user must be selected.
<b>File Type</b>	Select the type of file to be sent: <b>pdf</b> or <b>csv</b> .
<b>Active</b>	Click the slider to select whether you want the report to be active (sent on schedule): <b>Yes</b> or <b>No</b> .
<b>Receive Report Schedule</b>	
<b>Time of Day</b>	Set the time of day you'd like the reports to be sent. The time format is based on 12 hours, AM or PM.

Setting	What you can do
Days of Week	<div><p>Click in the drop-down list and choose the days of the week you'd like the reports to be sent on, for example, on Fridays, as shown:</p></div>
Days of Month	<div><p>Click in the drop-down list and choose the days of the month you'd like reports to be sent on. To select all of the days of the month, select the top checkbox.</p></div>

4. After you've completed your selections, click the **Schedule** button.

## Managing report scheduling

Use this procedure for help with managing report scheduling.

### To set up report scheduling:

1. On the navigation menu, click **Reports**.
2. Click the **Sites** box, and select the Site you want to manage report schedules for.
3. In **Report Configuration**, select a **Report Type** and **Report**, and do any other report setup you need.
4. Click the **Manage Scheduled Reports** button at the bottom of the page, as shown in *Figure 109*: .

Figure 109: Manage Scheduled Reports button

The **Manage Scheduled Reports** window opens.


Name	Status	Scheduled
Portage and Main - Standard	Inactive	Yes
Church Branch Road - Eastbound	Active	No
State College Mon to Fri	Active	Yes
Classification report	Active	Yes

Figure 110: The Manage Scheduled Reports window

- To activate or deactivate scheduled reports from being sent, click the **Yes/No** slider next to any report name in the list. A confirmation window opens. Click to confirm your choice.



**TIP:** If the list is long, you can filter by **Name**, **Status**, or **Scheduled**, or by typing characters from the report name in the **Search** box.

- Optionally, click the **View** icon  next to the name of a report you want to update the schedule for. The main **Schedule** window opens.
- In the **Report Schedule** section at the bottom left of the window (see [Figure 111: on the next page](#), click the **Active** slider. Set it to **Yes** to activate the report schedule or **No** to deactivate it. Note that deactivating the schedule will apply to all users scheduled to receive the report.

REPORT SCHEDULE

Name: Church Branch Road - East

Scheduled Users: 1 users selected

File Type: pdf

Active: ☒ Yes

Figure 111: Report Schedule window

- After you complete your selections, click the **Update** button. The changes for the report will be updated in TrafficCloud the next time the device sends in data.

## Printing reports

Use this procedure for help with printing reports from TrafficCloud.

### To print reports:

- Generate a report. See [Running reports on page 83](#).
- Scroll to the bottom of the page and use the default file format for your report (**.pdf**) or change it to **.csv** as required.
- Click the **Export** button. A copy of the report is generated in the format you selected in the previous step and placed in your **Downloads** folder.

15:00:00							
2022-05-01 80	38	40	25	34.0	38.0	34.0	35.0
15:50:00							
2022-05-01 80	233	50	14	32.0	38.0	32.0	33.0
16:00:00							

«
<
1
2
3
4
5
6
7
8
9
10
>
»

pdf
EXPORT

Figure 112: The Reports Export button

- Open the file on your computer. You can view it there or send it to your printer.
- 💡 **TIP:** If you subscribe to reports, you can also view or print them from your email client. See [Scheduling reports on page 96](#).



# Chapter 8

## Using the Map to view Sites

Use this chapter for help with the TrafficCloud **Map** page. TrafficCloud uses Google Maps to display status markers, which provide the location, status, and overview data of each of your ATS devices. StatTrak can capture both inbound and outbound data.

### Understanding the Map page

Here's an example of what you'll see on the **Map** page, showing

- most Sites with **Normal Operation** and at the assigned Site: 📍,
- one **Site without Equipment**: 📍, and
- one Site with an **Equipment and Site Conflict**: 🚫 and 📍.



Watch the video

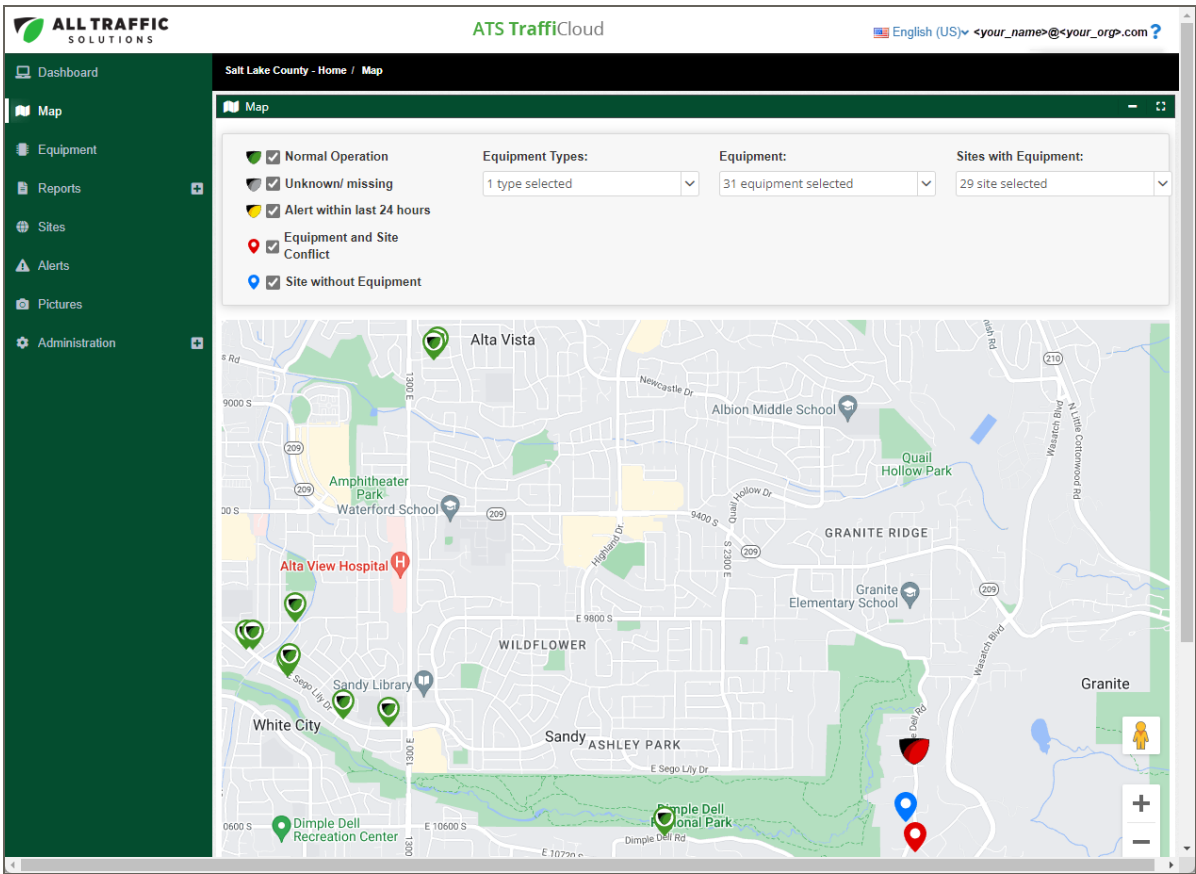



Figure 113: The Map page

Viewing equipment status markers and popups

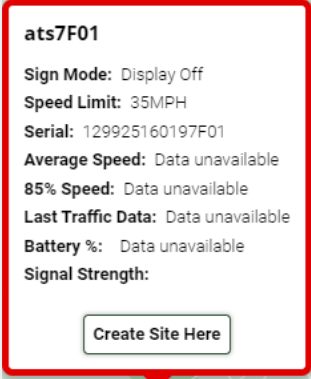
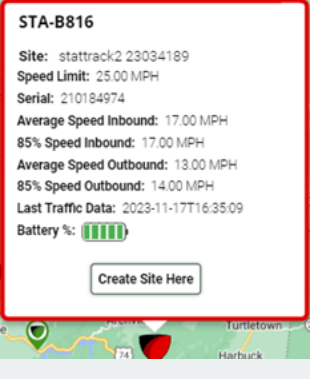

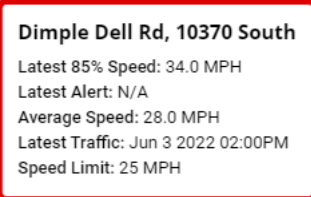
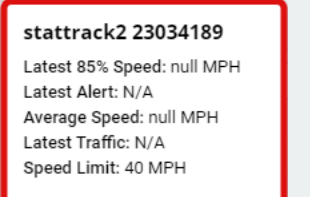

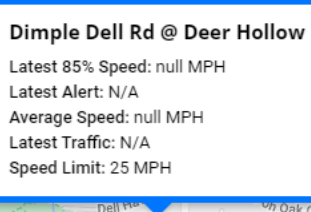
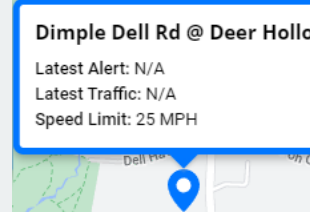
Use the table below for help with the **Map** page status markers and popups.

To display the status popup for a Site:

- » Hover the mouse over the status marker.

Status marker and popup		Description
Normal operation		
<div><div><div>atsWhite City - 0118</div><div>Sign Mode: Speed Display</div><div>Speed Limit: 25MPH</div><div>Serial: 15990919011830</div><div>Average Speed: 25MPH</div><div>85% Speed: 30MPH</div><div>Last Traffic Data: Data unavailable</div><div>Battery %: <div></div></div><div>Signal Strength: <div></div></div></div><div><div>Shields, SpeedAlerts, and School Zone Alert</div></div></div>	<div><div><div>STA-B816</div><div>Site: stattrack2 23034189</div><div>Speed Limit: 25.00 MPH</div><div>Serial: 210184972</div><div>Average Speed Inbound: 13.00 MPH</div><div>85% Speed Inbound: 13.00 MPH</div><div>Average Speed Outbound: 19.00 MPH</div><div>85% Speed Outbound: 19.00 MPH</div><div>Last Traffic Data: 2023-11-17T16:28:47</div><div>Battery %: <div></div></div></div><div><div>StatTraks</div></div></div>	The Site and equipment are operating normally. The green circle around the <b>Normal Operation</b> shield icon  means that the device is at the assigned Site.

Status marker and popup	Description
<p><b>Unknown or Missing</b></p> <div data-bbox="203 247 513 682"> <p><b>atsSandy Area</b></p> <p><b>Sign Mode:</b> Speed Display</p> <p><b>Speed Limit:</b> 25MPH</p> <p><b>Serial:</b> 15991622010530</p> <p><b>Average Speed:</b> 39MPH</p> <p><b>85% Speed:</b> 49MPH</p> <p><b>Last Traffic Data:</b> Data unavailable</p> <p><b>Battery %:</b> </p> <p><b>Signal Strength:</b> </p> <p><a href="#">Create Site Here</a></p> </div> <div data-bbox="609 247 894 682"> <p><b>ats110 - IA24</b></p> <p><b>Sign Mode:</b> Daily Schedule</p> <p><b>Speed Limit:</b> 25MPH</p> <p><b>Serial:</b> </p> <p><b>Battery %:</b> Data unavailable</p> <p><b>Signal Strength:</b></p> <p><b>Current Message:</b></p> <p><a href="#">Create Site Here</a></p> </div> <p><i>Shields, SpeedAlerts, and School Zone Alert</i></p>	<p>The status of the equipment is unknown, and it may be powered off or otherwise not communicating. A green circle around a gray shield status marker  indicates that when the device last communicated, it was at its assigned Site. Use the <b>Create Site Here</b> button if you need to create a Site at the location.</p>
<p><b>Alert within last 24 hours</b></p> <div data-bbox="228 852 548 1098"> <p><b>Dimple Dell Rd, 10370 South</b></p> <p><b>Latest 85% Speed:</b> 34.0 MPH</p> <p><b>Latest Alert:</b> Tamper alert</p> <p><b>Average Speed:</b> 28.0 MPH</p> <p><b>Latest Traffic:</b> Jun 3 2022 02:00PM</p> <p><b>Speed Limit:</b> 25 MPH</p> </div> <div data-bbox="609 852 927 1098"> <p><b>Dimple Dell Rd, 10370 South</b></p> <p><b>Latest Alert:</b> Tamper alert</p> <p><b>Latest Traffic:</b> Jun 3 2022 02:00PM</p> <p><b>Speed Limit:</b> 25 MPH</p> </div> <p><i>Shields, SpeedAlerts, and School Zone Alert</i></p> <div data-bbox="228 1203 548 1449"> <p><b>Dimple Dell Rd, 10370 South</b></p> <p><b>Latest 85% Speed:</b> 34.0 MPH</p> <p><b>Latest Alert:</b> High Speed Alert</p> <p><b>Average Speed:</b> 28.0 MPH</p> <p><b>Latest Traffic:</b> Jun 3 2022 02:00PM</p> <p><b>Speed Limit:</b> 25 MPH</p> </div> <p><i>StatTraks</i></p>	<p>The Site has registered an alert within the past 24 hours. A green circle around a yellow shield  indicates that the device is at its assigned Site.</p>

Status marker and popup	Description
<p><b>Equipment and Site Conflict (Expected location)</b></p> <div>   </div> <p><i>Shields, SpeedAlerts, and School Zone Alert</i></p> <p><i>StatTraks</i></p>	<p>Flags a mismatch between the GPS coordinates coming from the equipment and the location set up in the Site. For example, this can occur when you move a device to a new location without reassigning the device to that Site.</p> <p><b>To resolve the conflict</b>, hover the mouse pointer over the red shield status marker  to display the popup, and then click the <b>Create Site Here</b> button. For details, see <a href="#">Resolving equipment and Site conflicts</a> on page 106.</p>
<p><b>Equipment and Site Conflict (Actual location)</b></p> <div>   </div> <div>  </div> <p><i>InstAlerts</i></p>	<p>Represents a Site that is assigned to the device, as shown above, but the device is not in the correct location.</p> <p>To resolve the conflict, see the previous row in this table, or go to <a href="#">Resolving equipment and Site conflicts</a> on page 106.</p>
<p><b>Site without Equipment</b></p> <div>   </div> <p><i>Shields, SpeedAlerts, School Zone Alert, StatTraks</i></p> <p><i>InstAlerts</i></p>	<p>The Site has no equipment assigned to it, and the popup displays the following categories, with no data:</p> <ul style="list-style-type: none"> <li>• <b>Latest 85% Speed</b></li> <li>• <b>Latest Alert</b></li> <li>• <b>Average Speed</b></li> <li>• <b>Latest Traffic</b></li> </ul>

## Filtering the Map page

You can use filters to dynamically show or hide equipment on the **Map** page. As you select or deselect each filter type, the map updates automatically.

Use this topic for details about filtering the Map page.

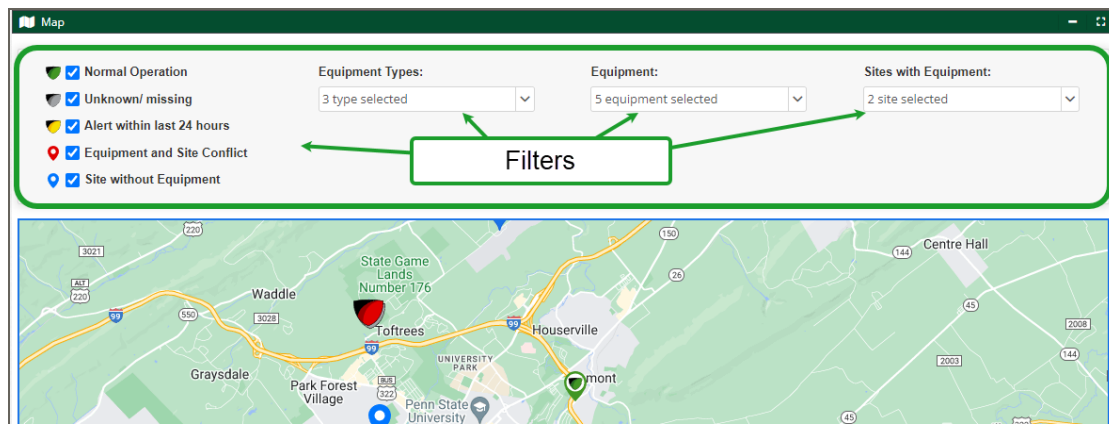


Figure 114: The Map page > Filters

### To filter the Map page:

1. On the navigation menu, click the **Map** tab. The **Map** page opens.
2. Set the zoom level you prefer. Typically, you need to zoom until you can see street names. To zoom in,
  - To zoom, you can do any of these:
    - » Roll the middle mouse button forward,
    - » Use the **+** sign on the bottom right corner of the map, or
    - » Click the keyboard **+** key. See the **Keyboard Shortcuts** at the bottom-right corner of the map as well.
3. Use the following table for details about using filters. As you select and deselect filters, you'll see the status markers appear and disappear on the map. By default, all filter types are selected.



**TIP:** As you zoom, click and hold the mouse button on the map to drag and reposition your view of the blue dot or status marker.

Filter type	What you can do
<b>Status Marker check boxes</b>	Select and deselect check boxes to show status markers by type. For details about status markers, see <a href="#">Using the Map to view Sites on page 101</a> .
<b>Equipment Types</b>	Select or search by equipment type.
<b>Equipment</b>	Select or search by specific equipment nickname.
<b>Sites with Equipment</b>	Select or search by Sites with equipment.

## Resolving equipment and Site conflicts

You can use the **Equipment and Site Conflict** status marker and popup to resolve Site conflicts, which are mismatches between the GPS coordinates coming from the equipment and the location you set up in TrafficCloud for the device. For details about these markers, see .

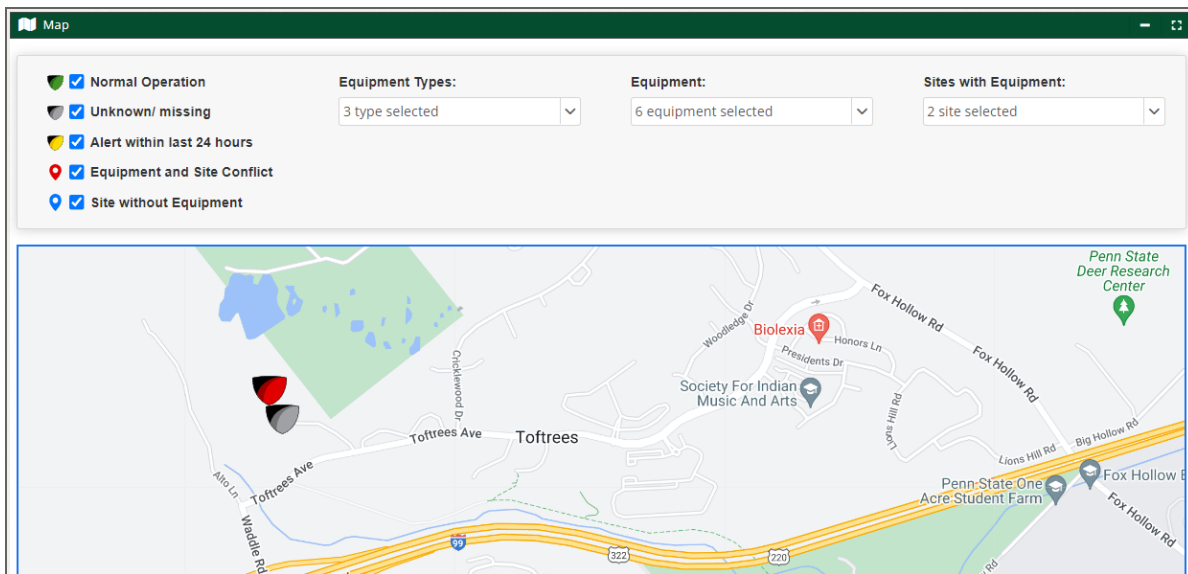


Figure 115: The Map page > Equipment and Site Conflict

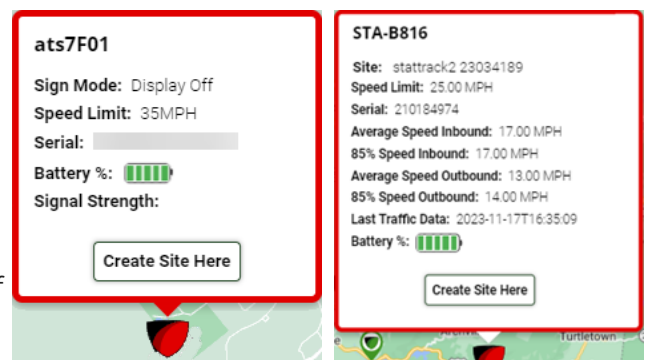
### To resolve equipment and Site conflicts:

1. On the navigation menu, click the **Map** tab. The **Map** page opens.
2. Zoom the map view to the area of the conflict. To zoom in,
  - To zoom, you can do any of these:
    - » Roll the middle mouse button forward,
    - » Use the **+** sign on the bottom right corner of the map, or
    - » Click the keyboard **+** key. See the **Keyboard Shortcuts** at the bottom-right corner of the map as well.



**TIP:** As you zoom, click and hold the mouse button on the map to drag and reposition your view of the blue dot or status marker.

3. Locate the red shield icon and hover the mouse button over it. The popup displays, as shown.
4. Click the **Create Site Here** button. The **Add Site** window opens, showing the blue dot, representing the current location on the map. You can drag it as required. See also [Creating a Site for your ATS device on page 23](#).
5. Add a Site name, speed limit, description, and direction of travel and click the **Save Site** button.



# Chapter 9

## Checking alerts

The TrafficCloud **Alerts** tab opens an archive of alerts, which are event notifications sent to TrafficCloud users for issues such as low battery, tampering, and, for radar-equipped devices, high-speed or low-average-speed events.

The **Alerts** page includes the following:

- Drop-down filter lists, you can use to filter the display by **Device**, **Site**, **Alert Type**, and **Date Range**.
- Details for alerts by **Time stamp**, **Device**, **Site**, **Alert Type**, **Threshold**, and **Recipients**. See [Viewing alerts on the next page](#).
- A **View** icon ⓘ next to each alert in the table. Click to open the **View Alert** window, where you can view and print alert details (see [Using the View Alert window on page 109](#)).



**Watch the video**

### See also

- [Configuring Alerts and Images on page 37](#)
- [Checking pictures on page 113](#)
- [Setting up an Alert History widget on page 17](#)



## Viewing alerts

Use this topic for details about viewing **Alerts** for issues such as low battery, tampering, and, for radar-equipped devices, high-speed or low-average-speed events.

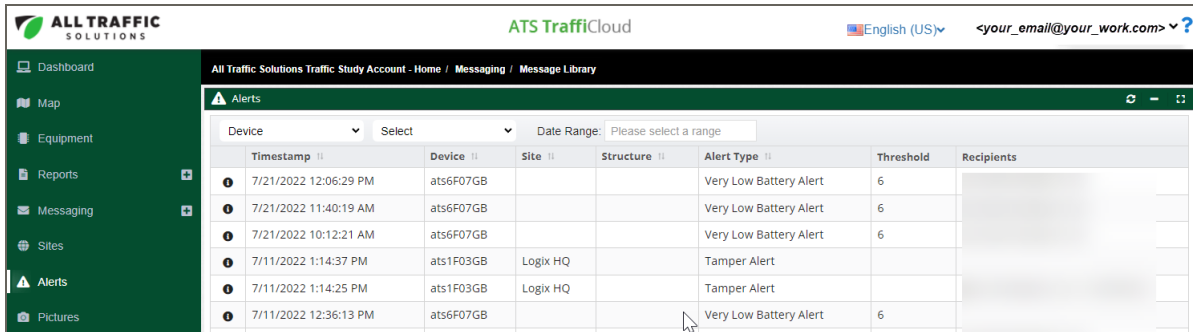


Figure 116: The Alerts page > Viewing Alerts

### To view alerts:

1. On the navigation menu, click the **Alerts** tab. The **Alerts** page opens.
2. The default date range displays alerts for the past week only. If no alerts are showing, press the **Clear** button to display all alerts, as shown:

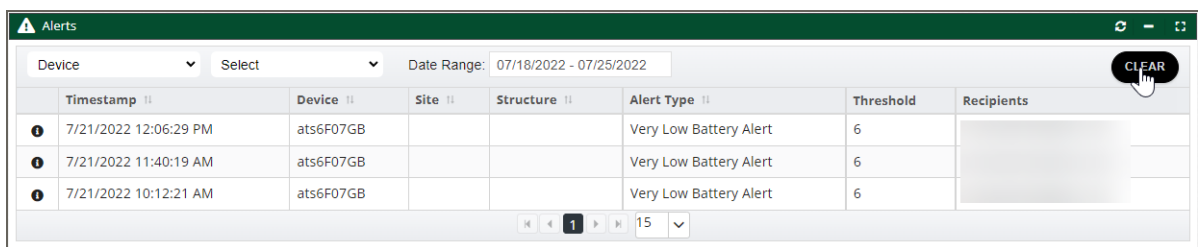


Figure 117: The Alerts page > Clear button

3. Use the following table for help with the fields in the **Alerts** table:

Setting	Description
<b>Filters</b>	Use the filters to narrow the number of alerts that TrafficCloud displays. See <a href="#">Filtering alerts on page 110</a> .
<b>View icon</b> ⓘ	Opens the <b>View Alert</b> window.
<b>Timestamp</b>	The timestamp indicating when the <b>Alert</b> was sent.
<b>Device</b>	The device <b>Nickname</b> .
<b>Site</b>	The <b>Site</b> name representing the physical location of your device.
<b>Structure</b>	The <b>Structure</b> column is only used in parking applications.
<b>Alert Type</b>	The alert type that was sent.
<b>Recipients</b>	The email address or cell number of the users the alert was sent to.



**TIP:** You can also set up an **Alert History** widget in the **Dashboard**. See [Setting up an Alert History widget on page 17](#).



## Using the View Alert window

Use this topic for details about using the **View Alert** window.


### To open the View Alert window:

1. On the navigation menu, click the **Alerts** tab. The **Alerts** page opens.
2. Click the **View** icon ⓘ next to an alert in the table. The **View Alert** window opens. The first example here includes a photo. Photos are enabled in **Equipment > Alerts and Images**. See [Configuring Alerts and Images](#) on page 37.

View Alert

High Speed Alert on ats001

Timestamp	: 06/28/2022 11:17 AM
Device	: ats001
Site	: Church - Branch Road
Structure	: Structure
Alert Type	: High Speed Alert
Email Recipients	: ekline@intuitivecontrols.com
SMS Recipients	: SMS Recipients



SMS

SMS

Email

A vehicle traveling 54 passed Church - Branch Road at Tue, Jun 28, 2022, 11:17 AM. The speed limit at this location is 25 .

CANCEL

PRINT

Figure 118: The View Alert window

Setting	Description
<b>Timestamp</b>	The timestamp when the alert was sent.
<b>Device</b>	The device <b>Nickname</b> .
<b>Site</b>	The <b>Site</b> name representing the physical location of your device.
<b>Structure</b>	The <b>Structure</b> column is only used in parking applications.
<b>Alert Type</b>	The alert type that was sent.
<b>Email Recipients</b>	The email addresses of the users the alert was sent to.
<b>SMS Recipients</b>	The cell phone numbers of the users the alert was sent to.
<b>SMS</b>	The content of the text message (SMS) that was sent.
<b>Email</b>	The content of the email message that was sent.
<b>Print</b>	The <b>Print</b> button - click to print alert details.

## Filtering alerts

You can use filters to dynamically show or hide alerts on the **Alerts** page. As you select or deselect each filter type, the map updates automatically.

Use this topic for details about filtering the **Alerts** page.

Alerts						
Device		Select Device		Date Range: 11/09/2023 - 11/16/2023		CLEAR
	Timestamp	Device	Site	Structure	Alert Type	Value
	11/16/2023 11:18:14 AM	ats001	Church - Branch Road, EB		High Speed Alert	53.0
	11/16/2023 10:53:19 AM	ats001	Church - Branch Road, EB		High Speed Alert	54.0
	11/16/2023 10:29:38 AM	ats001	Church - Branch Road, EB		High Speed Alert	53.0
	11/16/2023 7:46:45 AM	ats001	Church - Branch Road, EB		High Speed Alert	53.0

Figure 119: The Alerts page > Filtering Alerts

### To filter the Alerts page:

- On the navigation menu, click the **Alerts** tab. The **Alerts** page opens.
- You can select from the following options in the first filter drop-down list: **Device**, **Site** and **Alert Type**. As you select and deselect filter options, related filters become available in the second drop-down list.

For example, if you use the default **Device** filter, the second drop-down displays the available devices, as shown in this example:

Alerts						
Device		1 devices selected		Date Range: 11/09/2023 - 11/16/2023		CLEAR
	Timestamp	<input type="text" value="Q"/>		Structure	Alert Type	Value
	11/16/2023 11:18:14 AM	<input type="checkbox"/> 131202200123-01 - 131202200123-01			High Speed Alert	53.0
	11/16/2023 10:53:19 AM	<input checked="" type="checkbox"/> 18970713000130 - ats001			High Speed Alert	54.0
	11/16/2023 10:29:38 AM	<input type="checkbox"/> 12893822010130 - ATS0101			High Speed Alert	53.0
	11/16/2023 7:46:45 AM	<input type="checkbox"/> 15893122010230 - ATS0102			High Speed Alert	53.0
	11/16/2023 5:16:00 AM	<input type="checkbox"/> 18873822010430 - ats0104			High Speed Alert	53.0
		<input type="checkbox"/> 18953822011130 - ATS0111			High Speed Alert	53.0
		<input type="checkbox"/> 131202200123 - ATS0123			High Speed Alert	53.0
		<input type="checkbox"/> 10903023030030 - ATS0300			High Speed Alert	53.0

Figure 120: Alerts > Filtering by Device

In [Figure 121: on the facing page](#), the first filter is set to **Site**, to show alerts associated with the selected Site for the specified date range. Or you can click the **Clear** button to clear a selected date range and display all alerts for a Site:

Site	Timestamp	Structure	Alert Type	Value	Recipients
3100 Research Drive Eastbound	11/16/2023 11:11 AM		High Speed Alert	53.0	
Andrew Test Westbound	11/16/2023 10:55 AM		High Speed Alert	54.0	
ATS State College facility Northbound	11/16/2023 10:22 AM		High Speed Alert	53.0	
ats test Eastbound	11/16/2023 7:46 AM		High Speed Alert	53.0	
beaver stadium Eastbound					
Church - 1H 2019 Southbound					
Church - 2H 2018 Northbound					
Church - 2H 2019 Southbound					

Figure 121: Alerts > Filtering by Site

Figure 122: below shows an example of filtering by date. To select a **Date Range** in the calendar, first click the start date, move the mouse pointer to the end date, and then click the end date.

Or, you can click the **Clear** button to clear all dates so that all prior alerts are shown.

Device	Timestamp	Structure	Alert Type	Value	Recipients
1 devices selected	11/9/2023 2:39 PM		High Speed Alert	6.0	
	11/9/2023 1:07 PM		High Speed Alert	6.0	
	11/9/2023 12:00 PM		High Speed Alert	6.0	
	11/9/2023 8:44 AM		High Speed Alert	6.0	
	11/9/2023 6:38 AM		High Speed Alert	6.0	
	11/9/2023 2:30 AM		High Speed Alert	6.0	

Figure 122: Alerts > Filtering by Date Range




# Chapter 10

## Checking pictures

---

Use the topics in this chapter for help with checking photos available from the TrafficCloud **Pictures** tab. The **Pictures** page includes the following:

- Drop-down lists, where you can filter the display by **Site**, **Date Range**, **Image Type**, and **Device**,
- A table displaying existing photos by **Timestamp**, **Image Type**, **Site**, **Device**, **Quality**, **Retention status**, and **Image** thumbnails.
- A **Pencil** icon  next to each picture in the table that opens the **Preview** window, where you can manage pictures (see our [TRAINING VIDEO](#) at right and [Managing pictures on page 115](#)),



**Watch the video**

To configure your sign to take pictures, go to the **Equipment page** for your sign and scroll down to **Alerts and Images**. You can enable automatic picture-taking based on **Tampering**, **High Speed**, or **Low Speed** events, or take **Awareness Images**, photos triggered at set intervals, independent of a specific event. See [Configuring Alerts and Images on page 37](#).

Note that only camera-equipped devices can take pictures.

## The Pictures page

Here's an example of what you'll see on the **Pictures** page:

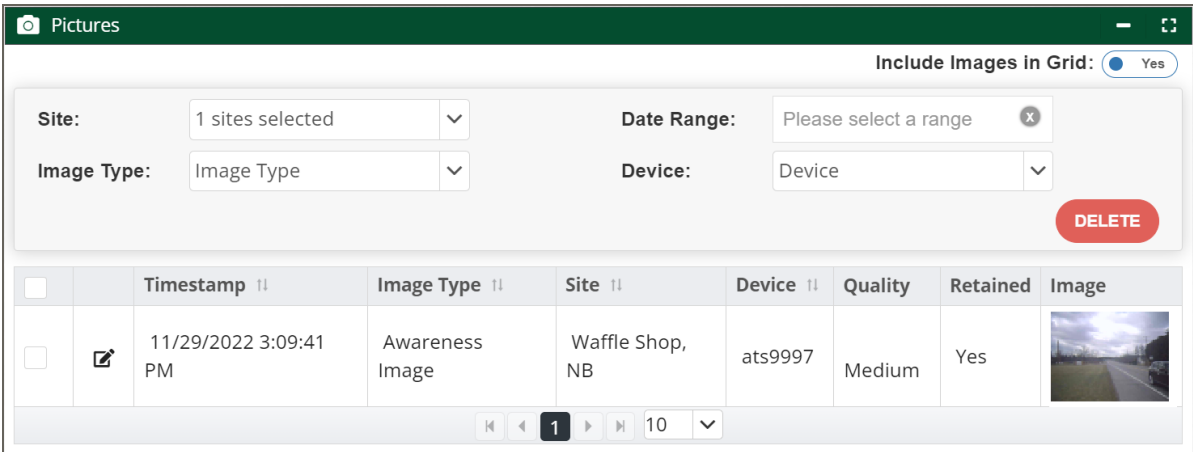




Figure 123: The Pictures page

Use the following table for details about using the **Pictures** page:

Setting	Name	How to use it
Thumbnails	Include Images in Grid	To display thumbnails on the page, click the <b>Images slider</b> to change the setting from <b>No</b> to <b>Yes</b> .
Filters		Use the filters section to sort the photo display, which can be useful when you have a large number of pictures.
	Site	Filters the display to show pictures captured at specific Sites in the grid. By default, photos from all Sites display. Click the down arrow to select or search by Site name.
	Date Range	Filters the display to show photos captured on specific dates. By default, the past week is selected. You can click the <b>x</b> icon to clear the dates and view all photos, or click on the existing dates to display a calendar popup. To select a date range in the calendar, first click the start date, move the mouse pointer to the end date, and then click the end date.
	Image Type	Filters the display to show pictures based on the kind of image taken: <ul style="list-style-type: none"><li>• <b>Awareness Image,</b></li><li>• <b>Congestion Event,</b></li><li>• <b>High Speed Event,</b></li><li>• <b>Tamper Event,</b> and</li><li>• <b>User Triggered</b> (photos captured using the SmartApps mobile app).</li></ul> By default, photos from all Sites display. Click the down arrow to select or search by <b>Image Type</b> .
	Device	Filters the display to show all (the default) or specific devices available. Click the down arrow to select or search by device type.

Setting	Name	How to use it
<b>Pictures page table options and fields</b>		This section provides details about the options and fields in the table on the <b>Pictures</b> page. Click the up/down arrows  where applicable, beside column headers to change the sort order.
	<b>Pencil icon</b> 	Opens the <b>Preview</b> window, where you can manage pictures (see <a href="#">Managing pictures below</a> ).
	<b>Timestamp</b>	Displays the date and time the picture was taken.
	<b>Image Type</b>	Displays the image type. See <b>Image Type</b> , above.
	<b>Site</b>	Displays the Site where the picture was taken. Pictures taken by signs with no Site assigned will have blank <b>Site</b> fields on the <b>Pictures</b> page and in the <b>Preview</b> window.
	<b>Device</b>	Displays the device type used to take the picture.
	<b>Quality</b>	Displays the image quality: <b>Low</b> , <b>Medium</b> , or <b>High</b> .
	<b>Retained</b>	Displays the retention status of the picture, which can be <b>Yes</b> or <b>No</b> . The default status ( <b>No</b> ), purges the picture automatically after six months. To keep a picture indefinitely, click the <b>Edit</b> button and change the status to <b>Yes</b> .
	<b>Image</b>	Displays a thumbnail of a retained image.
	<b>Delete button</b>	Select any row and click the <b>Delete</b> button to delete the record.

## Managing pictures


You can use the **Preview** window to do the following:

- » view or print pictures,
- » view details about the event that triggered taking the photo (such as time and date, event type, and speed),
- » change the retention period,
- » add comments,
- » delete pictures,
- » view picture details,
- » navigate between pictures.

### To manage your pictures in the Preview window:

1. In the grid view, click the **Pencil icon**  to open the **Preview** window.

Preview



Timestamp : 5/8/2022 7:24:44 PM

Image Type : High Speed Event

Speed : 57

Site : Church - 2H 2021

Device : ats001

Picture Quality : High

Retain this image past 6 months? : 

No

Comments :

PRINT

DELETE

PREVIOUS

CLOSE

SAVE

NEXT

Figure 124: The Preview window

2. Use the following table for details about the interactive features of the **Preview** window:

Setting	What you can do
Retain this image past 6 months?	Move the slider to <b>Yes</b> to set the retention period for the picture to an indefinite period of time.
Comments	Enter any comments you want to record about the picture.
Print	Click to save a PDF with the photo and descriptive data. Your browser should display the PDF in a new tab or window, with options to print and download the picture.
Delete	Click to delete the picture and its record. A prompt appears, asking you to confirm.
Save/Close	Click to save your changes or to close the window.
Next/Previous	Click to navigate between pictures on the <b>Pictures</b> page.



# Chapter 11

## Administration

---


This chapter covers basic administration tasks you may need to perform as you get started with TrafficCloud.

- Adding a user ..... 118
- Editing a user ..... 120
- Deactivating a user ..... 121
- About TrafficCloud user logs ..... 121
- Viewing user logs in TrafficCloud ..... 122
- Managing dashboard widgets ..... 123

## Adding a user

Use this topic to add a TrafficCloud user.

To add a user:

1. Click the **Administration** tab, and select **Users**.
2. Click the **Plus sign**  under the **Users** page title bar, as shown here:

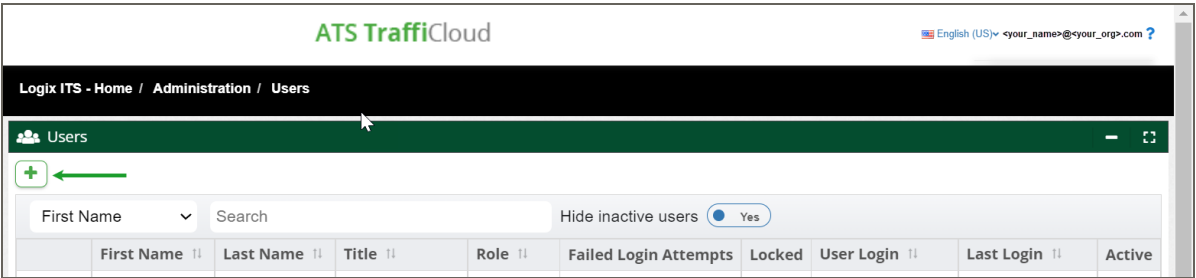


Figure 125: The Add User button

The **Add User** window opens.

Basic Info

Email Address

: jsmith@acmepoliceforces.com

Title

: Constable

First Name

: Jason

Last Name

: Smith

Active

: ☒ Yes

Role

: Admin Users

Security

Access Key

: Access key

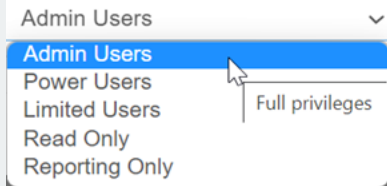
CANCEL

SAVE USER

Figure 126: The Add User window

3. Use this table for help with filling in the **Add User** fields:

Setting		Description
Basic Info		In this section, add the user's email address, identifying information, whether they should receive text alerts, and to specify their role.
	Email address	Add the user's corporate email address.
	Title	Add the user's title.
	First Name/Last Name	Add the user's name.

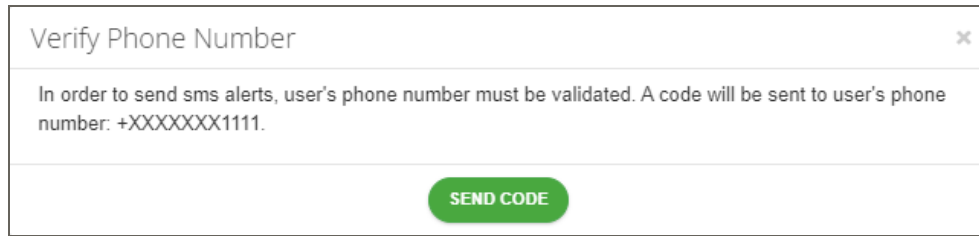
Setting		Description
	Allow Text Messages	Leave the slider at the default ( <b>Yes</b> ) and add the user's phone number with the <b>Add Phone</b> button. This slider must be set to <b>Yes</b> to permit the user to receive text-based alerts from the sign or device. To deactivate text messaging for a user, move the slider to No.
	Active	Leave the default setting ( <b>Yes</b> ) to ensure the user has TrafficCloud access. To deactivate the TrafficCloud user account, move the slider to <b>No</b> .
	Role	Choose the role you want to give to the user: 
Here are the available roles and brief descriptions:		
	Admin Users	Full privileges.
	Power Users	Full privileges, except for user management and deleting messages in the <b>Message Libraries</b> .
	Limited Users	Can edit most options, but can't create and delete.
	Read Only	Can view most options, but is unable to edit.
	Reporting Only	Can edit dashboards and reports only.
<b>Security</b>	Access Key	An access key is only necessary for users who require access to the API without having to log in. Please contact customer support if you want to use the API.

4. Click the **Save User** button. The **Register a phone number** window opens.



Figure 127: Register a phone number window

5. To set up text message notifications for TrafficCloud alerts, enter a phone number and click the **Yes** button to opt in. The **Verify Phone Number** popup window opens.

A modal window titled "Verify Phone Number" with a close button (X) in the top right corner. The main text reads: "In order to send sms alerts, user's phone number must be validated. A code will be sent to user's phone number: +XXXXXXXX1111." At the bottom center is a green button labeled "SEND CODE".

Verify Phone Number

In order to send sms alerts, user's phone number must be validated. A code will be sent to user's phone number: +XXXXXXXX1111.

SEND CODE


Figure 128: Verify phone number popup window

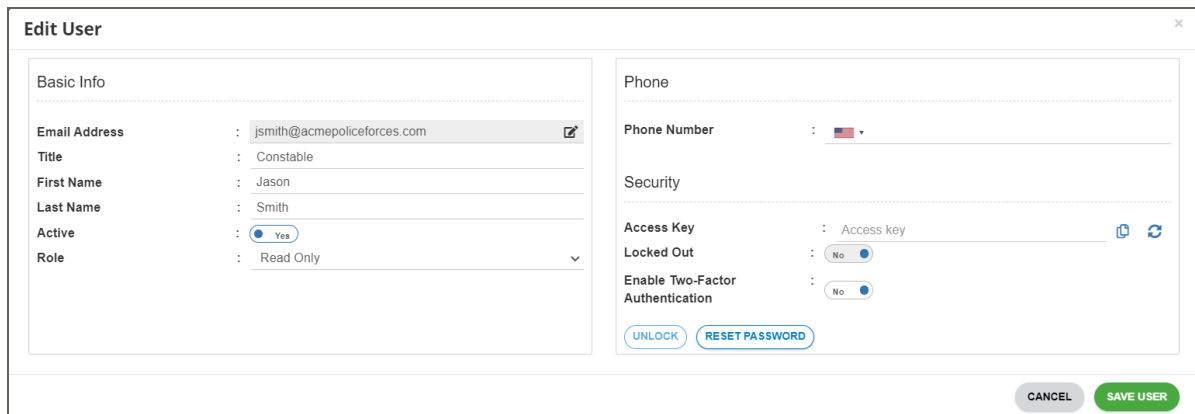
- Click the **Send Code** button to have a code sent to the user's cell phone number immediately.
- Once the user enters the one-time passcode (OTP), the user is deemed to have opted in to text message notifications, and TrafficCloud will be able to send them text alerts. See [Configuring Alerts and Images on page 37](#).

## Editing a user

Use this topic for help with editing a TrafficCloud user. You can edit the settings described in [Adding a user on page 118](#), unlock locked out users, and reset passwords.

### To edit a user:

- Click the **Administration** tab, and select **Users**.
- Click the **Pencil** icon  beside the name of the user you want to edit. The **Edit User** window opens.

A modal window titled "Edit User" with a close button (X) in the top right corner. It is divided into two main sections: "Basic Info" on the left and "Phone" on the right. The "Basic Info" section contains fields for Email Address (jsmith@acmepoliceforces.com), Title (Constable), First Name (Jason), Last Name (Smith), Active (Yes), and Role (Read Only). The "Phone" section contains fields for Phone Number (with a country code dropdown), Security (Access Key), Locked Out (No), and Enable Two-Factor Authentication (No). At the bottom of the "Phone" section are buttons for "UNLOCK" and "RESET PASSWORD". At the bottom right of the modal are "CANCEL" and "SAVE USER" buttons.

Edit User

Basic Info

Email Address : jsmith@acmepoliceforces.com

Title : Constable


First Name : Jason

Last Name : Smith

Active : Yes

Role : Read Only

Phone

Phone Number : 

Security

Access Key : Access key

Locked Out : No

Enable Two-Factor Authentication : No

UNLOCK RESET PASSWORD

CANCEL SAVE USER


Figure 129: The Edit User window

- Do any of the following:
  - Edit any of the settings described in [Adding a user on page 118](#).
  - If the user is locked out, move the **Locked Out** slider from **Yes** to **No**, and click the **Unlock** button.
  - If the user needs a password reset, click the **Reset Password** button. The user will receive a password reset email with a temporary password.
  - If necessary, click the **Send Code** button to verify the phone number when prompted. TrafficCloud will send a code to the user's phone to validate the phone number. Once the user confirms, the phone number is verified in TrafficCloud.
- Click the **Save User** button.

## Deactivating a user

Use this topic to deactivate a user in TrafficCloud.

### To deactivate a user:

1. Click the **Administration** tab, and select **Users**.
2. Click the **Pencil** icon  beside the name of the user you want to deactivate. The **Edit User** window opens.

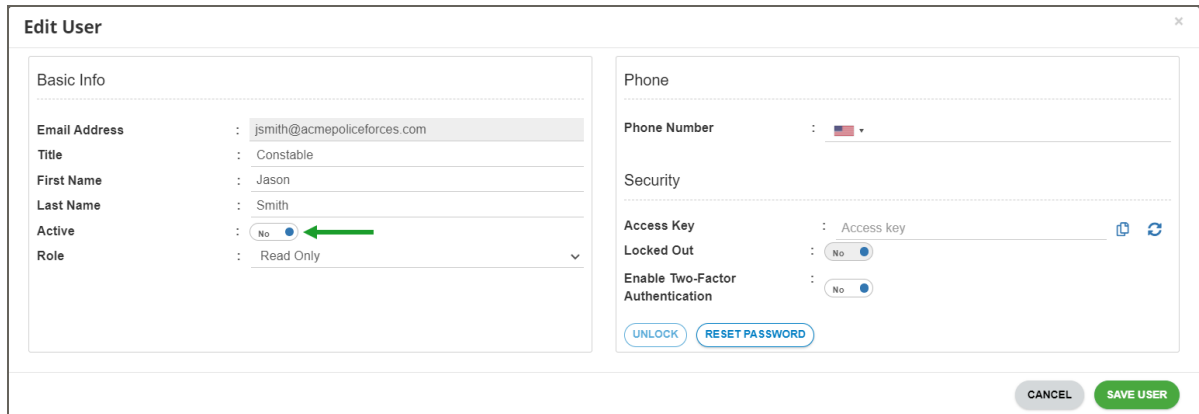


Figure 130: Deactivating a user

3. Beside **Active**, move the slider to **No**.

By default, only active users display on the **Administration > Users** page. To show deactivated users, move the **Hide Inactive Users** slider to **No**.

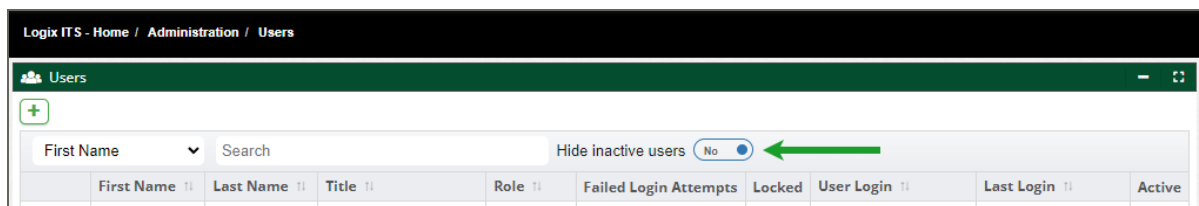


Figure 131: The Hide Inactive users slider

4. Click the **Save User** button.

## About TrafficCloud user logs

**TrafficCloud** administrators can use the Customer Audit feature to check user logs for recent activity.

### Data access options

The data is accessible via

- the TrafficCloud **Reports** tab (see [Viewing user logs in TrafficCloud on the next page](#)), or
- using an API platform. To arrange access, please contact our Customer Support team. See [Contacting Customer Support on page 127](#).

## Viewing user logs in TrafficCloud

Use this topic for details about viewing user logs in **TrafficCloud**. The user logs document "events", which are user activities performed in TrafficCloud and details such as which module they used, for which Site, and any other user affected. Only users with the admin role can view user logs.

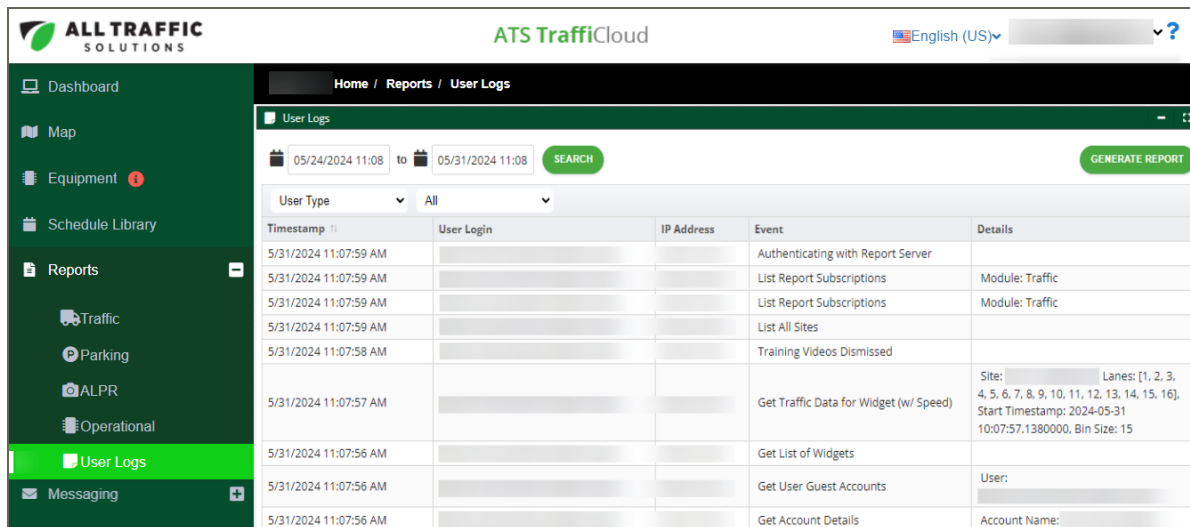


Figure 132: The User Logs page

### To view TrafficCloud user logs:

- On the navigation menu, click the **Reports** tab, then **User Logs**. The **User Logs** page opens, as shown above.
- In addition to viewing the logs displayed by default on the **User Logs** page, you can do the following:
  - Select a new date range and click the **Search** button to change the period of user activity displayed. The default time period is one week.
  - Click the **Generate Report** button to either a) download a .csv file of the user activity or b) send an email containing a .csv file of the user activity to the email address associated with the user's account.
  - Click the **User Type** drop down to select the user type: **All**, **User**, or **Guest**.
- Use the following table as a reference for the fields in the **User Logs** table:

Setting	Description
<b>Timestamp</b>	Displays the time and date of the event.
<b>User Login</b>	Displays the email address of the user whose activity was logged.
<b>IP Address</b>	Displays the IP address of the computer the user was logged in from when the event was tracked.
<b>Event</b>	Displays the name of the event that was logged.
<b>Details</b>	Displays details about the event, such as the account logged in from, the Site or other user affected, and the device the user connected to.

## Managing dashboard widgets

Use the procedures in this section for help with managing dashboard widgets. The options in Add Widget and Edit Widget windows vary, depending on the type of widget you're editing. See also [Adding widgets to your dashboard on page 15](#).

### Editing a dashboard widget

Use this procedure to edit a dashboard widget. The options in Add Widget and Edit Widget windows vary, depending on the type of widget you're editing. See also [Adding widgets to your dashboard on page 15](#).

#### To edit a dashboard widget:

1. Click the **Edit** button in the top right of the main window.

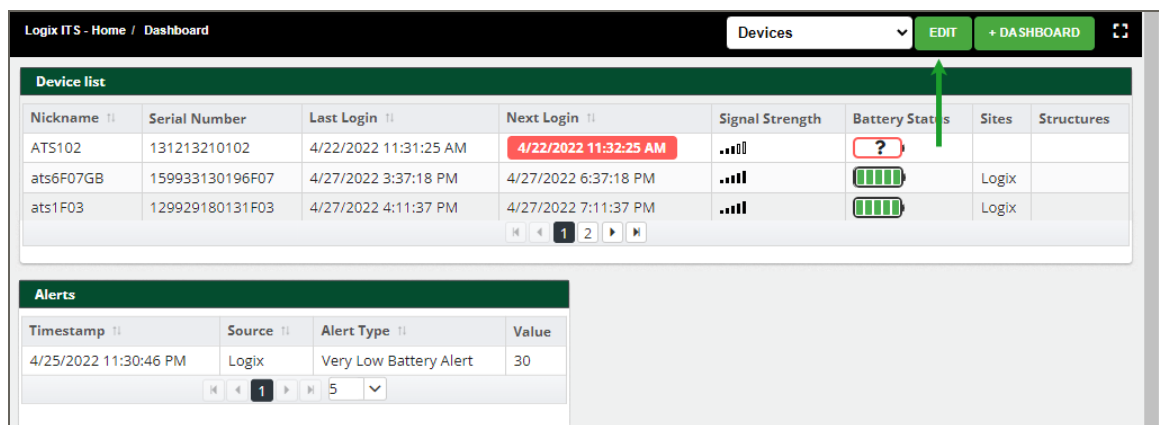




Figure 133: Editing Widgets > The Edit button

The window changes to display the **Edit Widget**  and **Delete Widget**  icons in the top-right corner of your widget title bars, as shown:

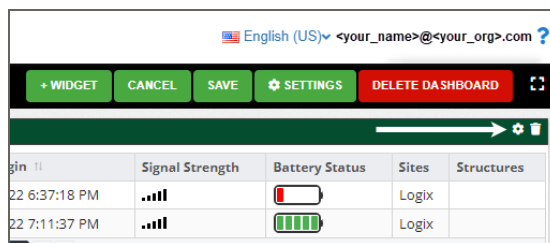

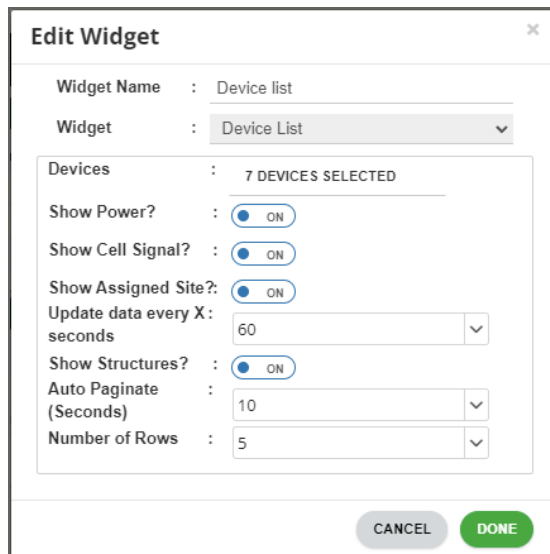


Figure 134: The Edit Widget and Delete Widget icons

2. Click the cog icon  to open the **Edit Widget** window.

The 'Edit Widget' window is a modal dialog with a close button in the top right. It contains the following fields and controls:

- Widget Name**: Text input with 'Device list'.
- Widget**: Dropdown menu with 'Device List' selected.
- Devices**: Text input with '7 DEVICES SELECTED'.
- Show Power?**: Toggle switch set to 'ON'.
- Show Cell Signal?**: Toggle switch set to 'ON'.
- Show Assigned Site?:**: Toggle switch set to 'ON'.
- Update data every X:**: Text input with '60' and a unit dropdown set to 'seconds'.
- Show Structures?**: Toggle switch set to 'ON'.
- Auto Paginate (Seconds)**: Text input with '10' and a unit dropdown.
- Number of Rows**: Text input with '5' and a unit dropdown.

At the bottom right are 'CANCEL' and 'DONE' buttons.


Figure 135: The Edit Widget window

3. Make your selections. Required selections are marked with a red underline.
4. Click **Done** when you have completed your selections.

## Deleting a dashboard widget

Use this procedure to delete a dashboard widget.

### To delete a dashboard widget:

1. Click the **Trash** icon  at the right side of the widget title bar. A popup appears prompting you to confirm.
2. Click **Confirm**.

## Deleting a dashboard

Use this procedure to delete a dashboard. To delete a dashboard you must have at least two dashboards in place, because TrafficCloud requires that you have at least one dashboard, which will be the default dashboard.

### To delete a dashboard:

1. Select a non-default dashboard from the Dashboards list, as shown:

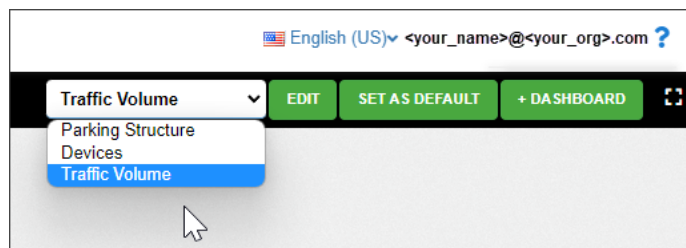


Figure 136: The Widgets menu



- Click the **Edit** button. The editing buttons appear.



*Figure 137: The Widget editing buttons*

- Click the **Delete Dashboard** button. A popup appears prompting you to confirm.
- Click **Confirm**.



**TIP:** You can't delete the default Dashboard, but if you want a blank dashboard you can click **Edit** and then click the **trash bin** icon to delete each widget.



## Contacting Customer Support

For support for your All Traffic Solutions products,

- visit the Customer Support page at <https://www.alltrafficsolutions.com/support/>,
- send email to [support@alltrafficsolutions.com](mailto:support@alltrafficsolutions.com), or
- call 1-866-366-6602, Option 2 anytime between 8:00 a.m. and 6:00 p.m. Eastern Time, Monday to Friday.

## Technical documentation and training

Please visit our **ATS Start-Up Guides** page at <https://www.alltrafficsolutions.com/get-started/> for links to the most recent versions of our technical documentation, including the initial setup documentation and this *TraffiCloud User Guide*.

Contact Customer Support to discuss your TrafficCloud training options. For online training resources, please visit our **TrafficCloud Training Videos Hub** at <https://flow.alltrafficsolutions.com/hub-training-video-trafficcloud-0-0-0-0>, or scan the QR code:





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