



VISUAL INFORMATION SYSTEMS

VMS WEB STUDIO® User Manual

Version 4.8.0



Scan QR code for latest version of manual

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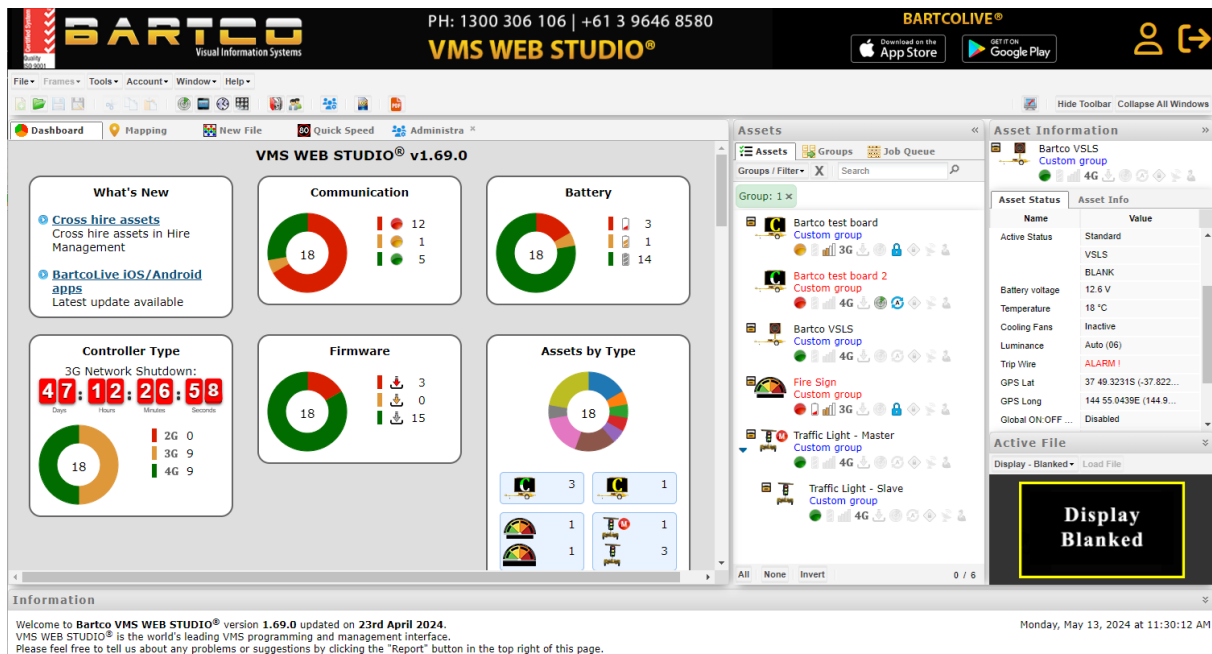
Introducing Bartco VMS Web Studio®

BARTCO VMS WEB STUDIO® is a web-based application that runs on BARTCO's secure cloud network for maximum security and high availability. It has been developed to allow customers to interact and provide full management of their BARTCO products, including Variable Message Signs (VMS), Variable Speed Limit Signs (VSLs), Electronic Fire Danger Rating signs, Electronic Snow / Wheel Chain Rating signs and Portable Traffic Signals, etc.

VMS WEB STUDIO® is a real-time internet-based communication facility enabling live communication via cellular or satellite networks from any internet enabled PC, laptop, tablet or mobile, eliminating the need for the installation of local software.

Features include:

- Fully web based allowing remote programming from any internet enabled PC / Laptop / Tablet or mobile.
- Secure login
- Asset Management and tracking system
- Create and manage customers (perfect for hire/rental companies)
- Quick and easy operation
- Clean user-friendly interface
- Asset grouping
- Program multiple assets instantly



1. Logging In

From the browser address bar go to the VMS Web Studio web page: www.vmsstudio.com

Enter your username and password as received in your email.

Notes:

- If you have not been allocated a username and password, please contact Bartco to receive a user access form.
- Contact Bartco to delete a user from Web Studio
- Bartco suggests using Google Chrome as the best compatible browser with Web Studio. Google Chrome can be downloaded at the link: <http://www.google.com/chrome>

The screenshot shows the Bartco VMS WEB STUDIO website. At the top, the Bartco logo is on the left, and the phone number 'PH: 1300 306 106 | +61 3 9646 8580' is on the right. Below the phone number is the text 'VMS WEB STUDIO®'. The main banner features a hand holding a smartphone displaying the Bartco app interface, set against a background of a city at night. To the right of the hand, the text 'New BartcoLive® App' is displayed, followed by 'Message Creation' and 'Greater Flexibility'. Below this text are two buttons: 'Download on the App Store' and 'GET IT ON Google Play'. A 'Read More' button is located at the bottom right of the banner. Below the banner, the text 'Welcome to Bartco VMS WEB STUDIO®' is displayed. Below this, a paragraph states 'VMS WEB STUDIO® is the world's leading VMS programming and management interface'. A login form titled 'Login to the Bartco Portal...' is centered on the page. The form has two input fields: 'Email or Username:' and 'Password:'. Below the input fields is a 'Login' button. At the bottom of the login form, there is a link that says 'Forgot your password Click Here'.

BARTCO
Visual Information Systems

PH: 1300 306 106 | +61 3 9646 8580
VMS WEB STUDIO®

New **BartcoLive®** App
Message Creation
Greater Flexibility

Download on the
App Store

GET IT ON
Google Play

Read More

Welcome to Bartco VMS WEB STUDIO®

VMS WEB STUDIO® is the world's leading VMS programming and management interface

Login to the Bartco Portal...

Email or Username:

Password:

Login

Forgot your password [Click Here](#)

2. Web Studio Main Page Orientation

Dashboard
provides helpful
insights on assets

Real time
asset's location
on map

Feature / Tool tabs:
Each tab represents a
different operational feature

Asset list: List of all
assets that user
has access to.

The screenshot shows the VMS WEB STUDIO v1.69.0 interface. The top navigation bar includes the Bartco logo, contact information (PH: 1300 306 106 | +61 3 9646 8580), and the BARTCOLIVE logo with app store links. The main dashboard features several widgets: 'What's New' with links to 'Cross hire assets' and 'BartcoLive iOS/Android apps'; 'Communication' and 'Battery' status widgets with donut charts; 'Controller Type' showing a 3G Network Shutdown timer; 'Firmware' status; and 'Assets by Type' with a pie chart. A right-hand sidebar contains the 'Assets' list, 'Asset Information' for a selected 'Bartco test board', and an 'Active File' section. The bottom status bar displays a welcome message and the current date and time.

Information panel:
displays result of an
action on asset

Details on asset's status
like battery, active file,
luminance, etc.

3. Assets, Groups and Job Queue

3.1 Assets















All the assets are displayed in the Assets List.

The screenshot shows the 'Assets' tab in the VMS WEB STUDIO interface. The interface includes a search bar at the top right for searching assets by name or serial number. Below the search bar is a filter section with a 'Groups / Filter' dropdown and a 'Group: 1 x' indicator. The main list displays assets with icons, names, and status indicators. Annotations point to various elements:

- Filter assets by name, type, group, etc.**: Points to the 'Groups / Filter' dropdown.
- Search asset by name, serial number,**: Points to the search bar.
- Various filters applied to assets**: Points to the 'Group: 1 x' indicator.
- Bartco board**: Points to the 'Bartco test board' asset icon.
- Asset icon: type of the asset**: Points to the 'Bartco test board 2' asset icon.
- Asset name**: Points to the 'Bartco test board' asset name.
- User defined Group name**: Points to the 'Custom group' label for the 'Bartco test board'.
- Status icons: legends (described below)**: Points to the status icons (e.g., 3G, 4G, lock, etc.) for the 'Bartco test board 2'.
- Select all assets, select none, invert selection**: Points to the 'All', 'None', and 'Invert' buttons at the bottom.
- Number of selected assets**: Points to the '1' in the '1 / 6' indicator.
- Total number of assets in list**: Points to the '6' in the '1 / 6' indicator.


3.1.1 Asset's icon and status icons




























Asset's icon represents type of the asset:

	5 Colour A Size		Amber A Size
	5 Colour B Size		Amber B Size
	5 Colour C Size		Amber C Size
	Portable Traffic Light - Master		Fire Sign 4 Ratings
	Portable Traffic Light – Slave		Retrofitted Fire Sign
	VSL (Variable Speed Limit Sign)		HDA sign
	Half Size - Speed Sign		HDC sign
			Wide Size Sign

Asset shows several status icons to denote various state of an asset as described below:



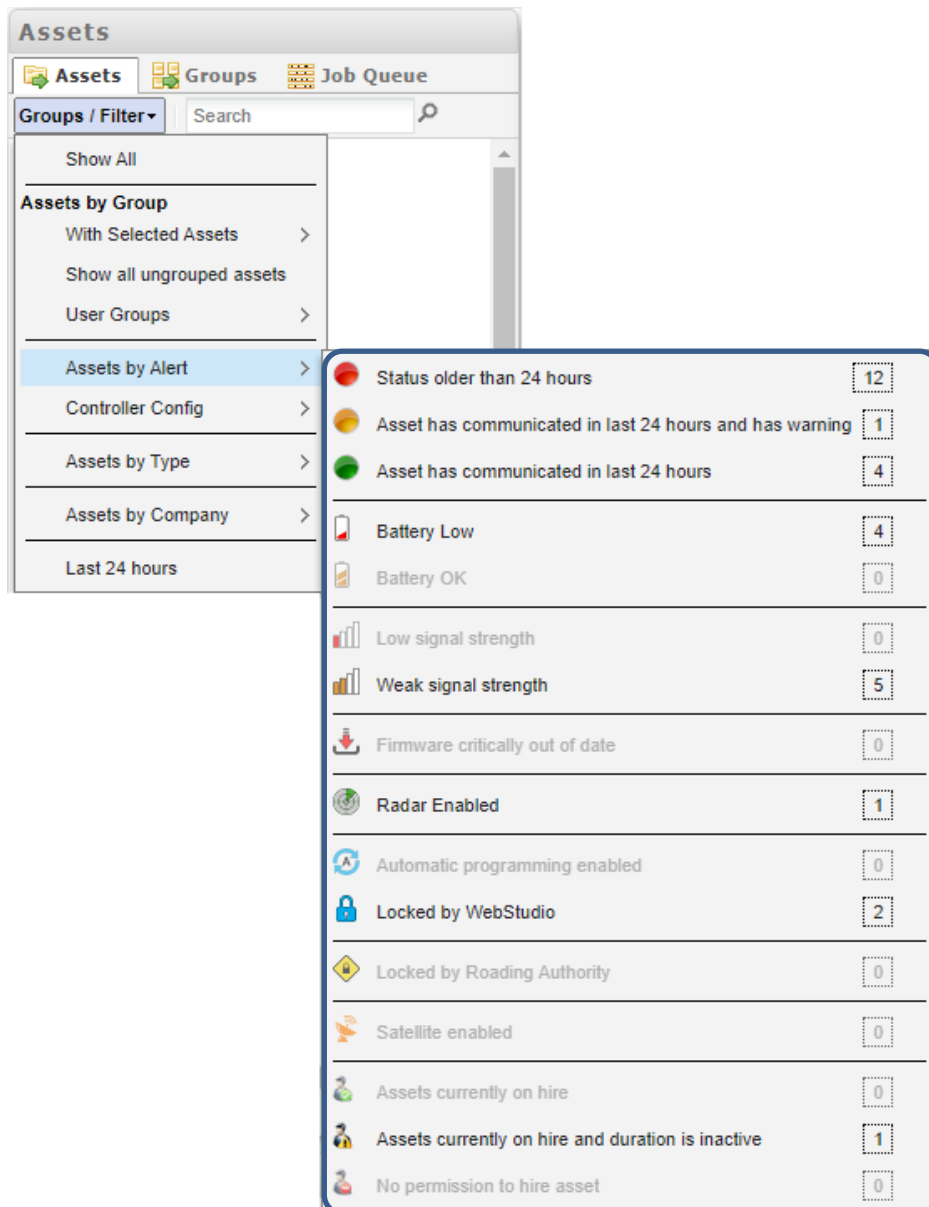
 represents Bartco board

	Status older than 24 hours		Locked by Web Studio
	Asset has communicated in last 24 hours and has warning		Automatic programming enabled
	Asset has communicated in last 24 hours		Automatic programming disabled
	Asset has no status		
	Battery Low (warning)		Radar enabled
	Battery OK		Radar disabled
	Battery Good		
	Low signal strength (warning)		Locked by Road Authority
	Weak signal strength		Not locked by Road Authority
	Strong signal strength		
	Firmware critically out of date (warning)		Asset is currently on hire
	New firmware available to upgrade		Asset is hired and hire duration is inactive
	Firmware upgrade is in progress		Asset is available to hire
	Latest firmware installed		No permission to hire asset
2G	2G controller		Hired asset access until DD MMM YYYY
3G	3G controller		
4G	4G controller		Upgrade to Web Studio

3.1.2 Filters

Filter assets by Alert, Controller Config, asset type, etc.

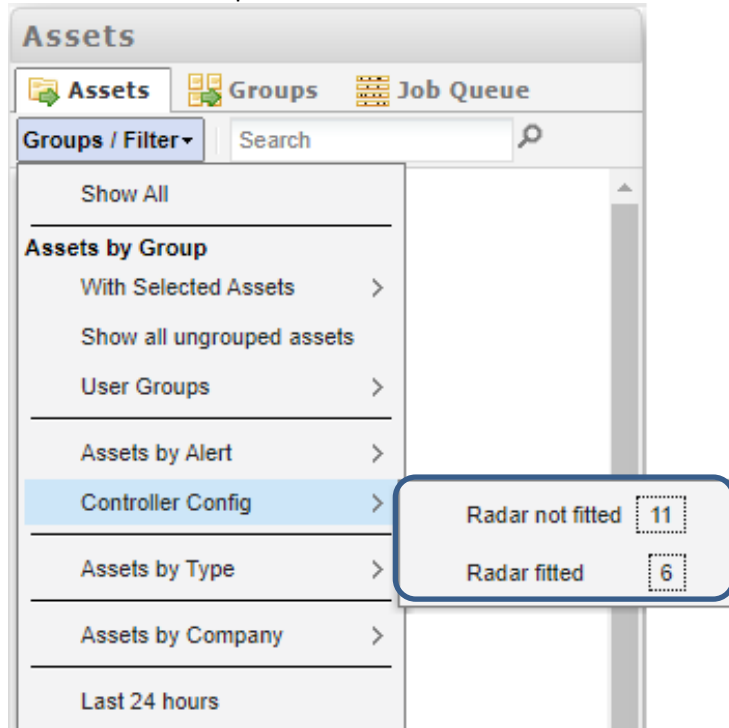
Assets by Alert menu shows below alerts:




The screenshot shows the 'Assets' menu in the VMS WEB STUDIO interface. The 'Assets by Alert' filter is selected, displaying a list of alerts and their counts. The alerts are as follows:

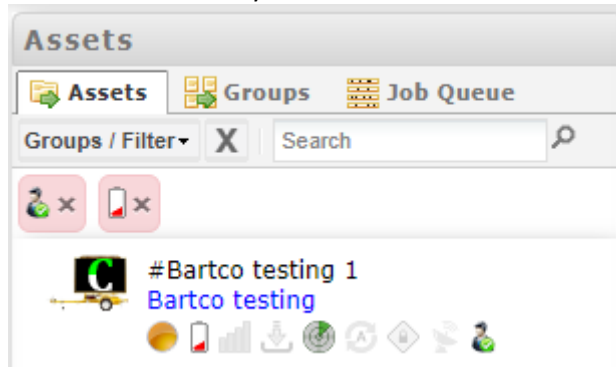
Alert	Count
Status older than 24 hours	12
Asset has communicated in last 24 hours and has warning	1
Asset has communicated in last 24 hours	4
Battery Low	4
Battery OK	0
Low signal strength	0
Weak signal strength	5
Firmware critically out of date	0
Radar Enabled	1
Automatic programming enabled	0
Locked by WebStudio	2
Locked by Roading Authority	0
Satellite enabled	0
Assets currently on hire	0
Assets currently on hire and duration is inactive	1
No permission to hire asset	0

Controller Config menu shows below options:



Various filters can be applied simultaneously to the assets list.

For example, filter all assets that are currently on hire  and has low battery .

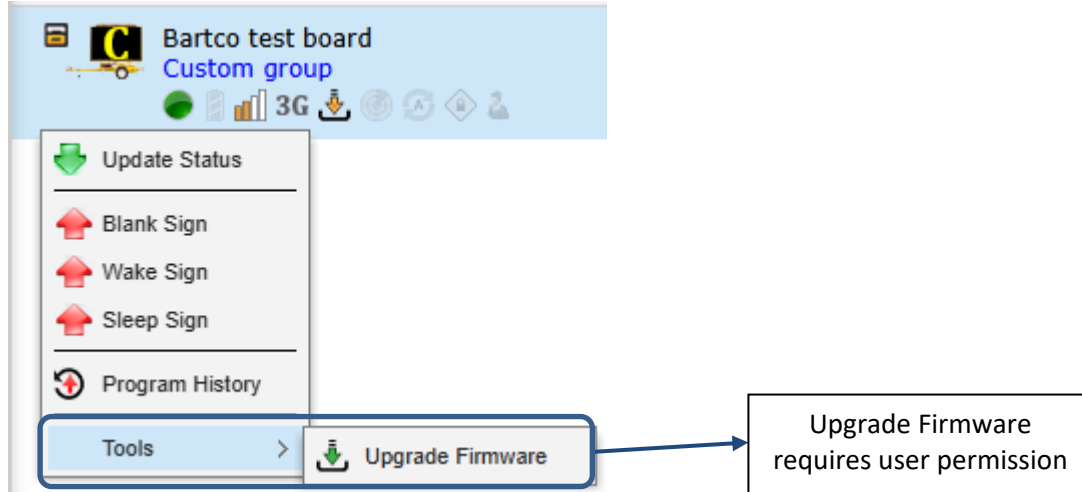


3.1.3 Quick options menu

Right click on selected asset in the Assets list to display quick options menu.

Note: this menu changes based on asset's type.

The following is an example of quick options menu on VMS:



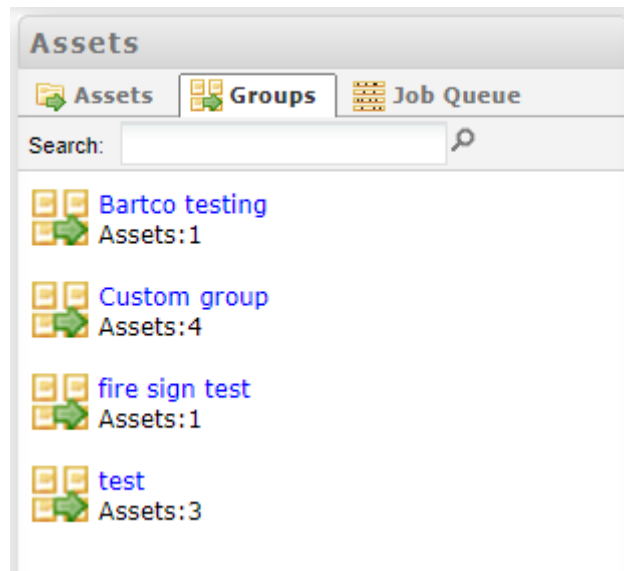
- i. Update status
Manually update the status of asset
- ii. Blank sign
Blank the display of asset
- iii. Wake sign
Start displaying last message on the asset
- iv. Sleep sign
Put asset in sleep mode
- v. Program History
Show history of messages programmed on the asset

Program History: 02 Jul 2021 12:23 PM					
Reload		Open File			
	Preview	Name	Type	Uploaded By	Uploaded Date
1		bartco logo	bart2		02/07/2021 11:43 am

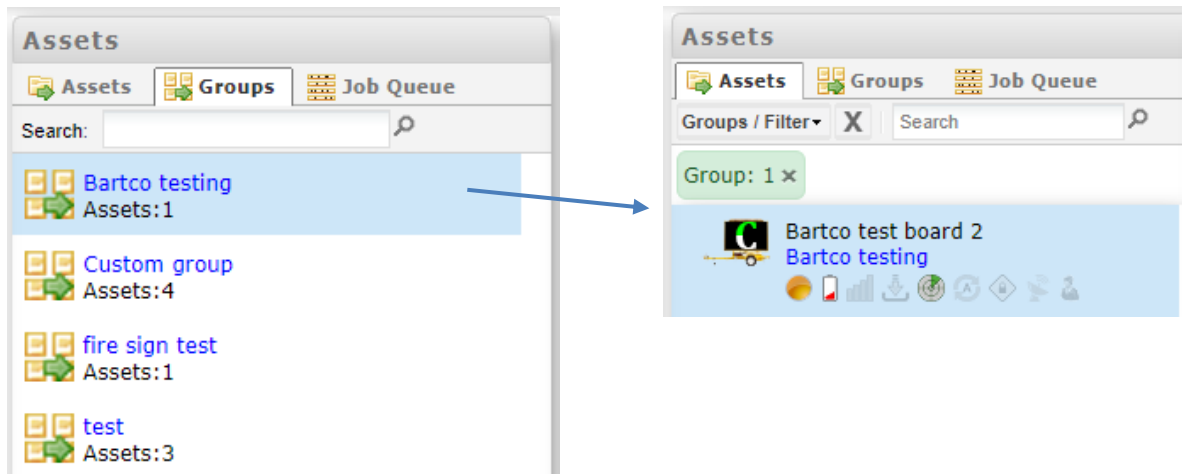
- vi. Upgrade Firmware
This option is only available if the user has permission to upgrade firmware on asset
Go to [16.2.2 Upgrade Firmware](#) section for more information.

3.2 Groups

Very useful if you have multiple assets in your account. Assets can be grouped by one project, area, or section of roadway using user defined group name.




Selecting a group will list all the assets in that group:




➤ **Group an asset using Asset Info:**

- i. Select asset from Assets list
- ii. Go to Asset Info
- iii. Update value of the “Group” field

Asset Information



Bartco test board 2
[Bartco testing](#)



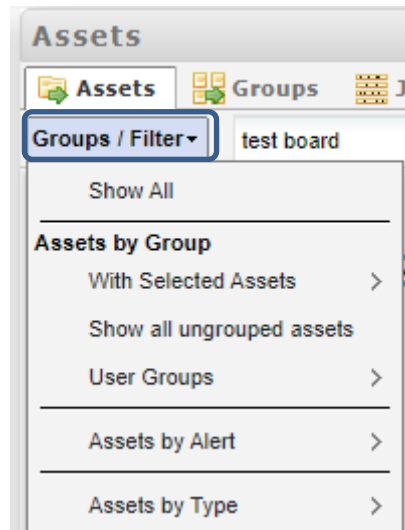
Asset Status

Asset Info

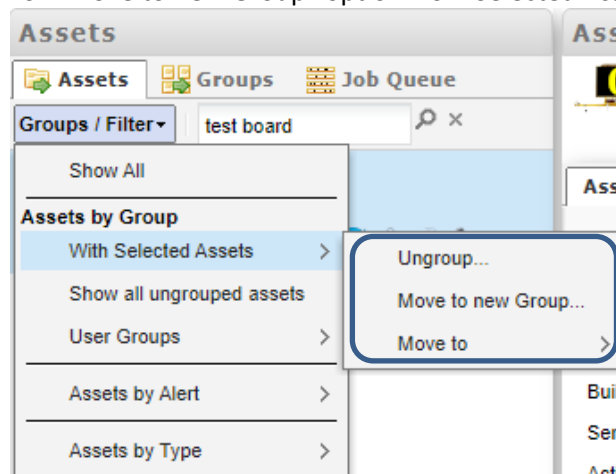
Name	Value
Company	Bartco
Asset ID	187371
Model / Plant type	VMS 400 5 Colour
Controller Serial	A018THS104
Trailer VIN	tab
Trailer Registration	tab
Trailer Serial	
Special Features	
Firmware Version	1.5.24VHE
Hardware Version	Issue 8 F
Label	Bartco test board 2
SIM PIN	
Client Ref	123
Trailer Key	
Group	Bartco testing

➤ **Group an asset using Groups/Filter:**

- i. Select asset from Assets list
- ii. Select **Groups / Filter**

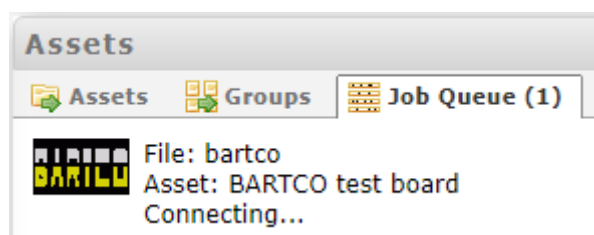


- iii. Select "Move to" or "Move to new Group" option from Selected Assets menu



3.3 Job Queue

Upload file, updating status, etc. tasks are added in the Job Queue. When the job is completed successfully, it will be removed from the Job Queue. If there is an error in completing the job, then the error is displayed in the Job Queue.



4. Asset Information

Click on an asset to see its detailed status.

Assets

Assets Groups Job Queue

Groups / Filter test board

Bartco test board
Custom group

Asset Information

Bartco test board
Custom group

Name	Value
Date	Fri, 09 Jun 2023
Time	15 : 27 (+10:00)
Firmware version	1.5.24VGE
Serial number	A016THS328
Active File	bartco
Active Status	Standard
	Amber
	ON
Battery voltage	13.5 V
Temperature	28 °C
Cooling Fans	Inactive
LED Output	80%
Luminance	01
Trip Wire	ALARM !
Radar	Disabled
GPS Lat	37 49.3072S (-37.821...
GPS Long	144 55.0706E (144.9...
Global ON:OFF ...	Disabled
Signal Strength	■■■■ (8)
Files	bartco

Active File

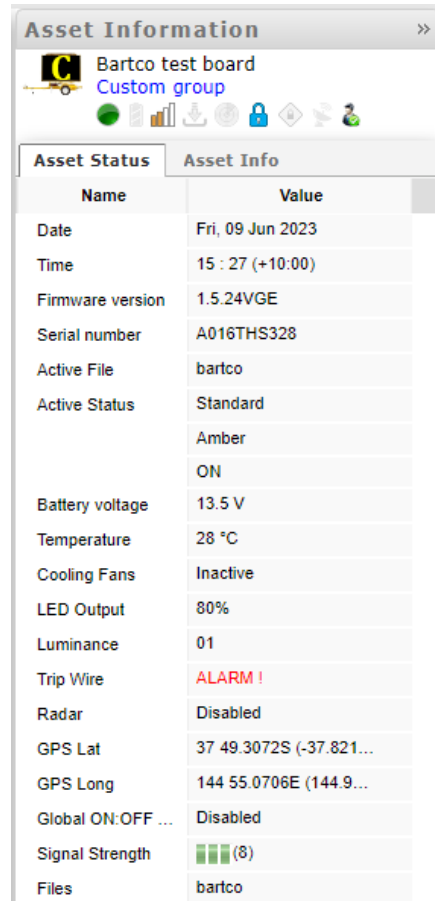
bartco Load File

Asset's last known status, radar status and asset's info

Active File: Displays last known status/message of the selected asset.

4.1 Asset Status

The fields in the status changes based on the asset type. The below is an example of VMS:



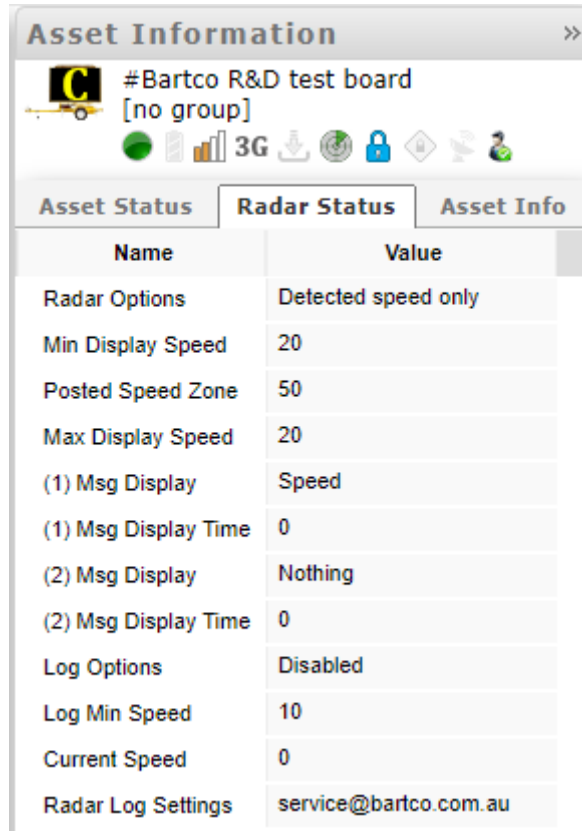
Name	Value
Date	Fri, 09 Jun 2023
Time	15 : 27 (+10:00)
Firmware version	1.5.24VGE
Serial number	A016THS328
Active File	bartco
Active Status	Standard
	Amber
	ON
Battery voltage	13.5 V
Temperature	28 °C
Cooling Fans	Inactive
LED Output	80%
Luminance	01
Trip Wire	ALARM !
Radar	Disabled
GPS Lat	37 49.3072S (-37.821...
GPS Long	144 55.0706E (144.9...
Global ON: OFF ...	Disabled
Signal Strength	📶 (8)
Files	bartco



Date	Last date when asset communicated with Web Studio
Time	Last time when asset communicated with Web Studio (+10:00) shows the timezone of the asset (+11:00 DST) is displayed when Daylight Savings Time is applied
Firmware version	Firmware version of the asset
Serial number	Serial number of the asset
Active File	Asset is currently displaying this file
Active Status	State of the asset
Battery voltage	Battery of the asset
Temperature	Temperature of the controller in centigrade
Cooling Fans	Cooling fans are active or inactive
LED Output	Brightness of the display in percentage
Luminance	Shows level of luminance and Auto or Manual mode
Trip Wire	Tamper Alarm loop The name of this field can be set using "Input 1 Label" in Asset Info. Default value is "Trip Wire"
Radar	Radar is enabled/disabled on the asset
GPS Lat	GPS latitude of the asset If GPS is lost then asset is shown at last known location on Mapping tab and Asset's status icon shows as warning

GPS Long	GPS longitude of the asset If GPS is lost then asset is shown at last known location on Mapping tab and Asset's status icon shows as warning
Global ON:OFF Time	Global time to switch the display on/off
Signal Strength	Signal strength of the asset
Files	List of files stored on the asset

4.2 Radar Status

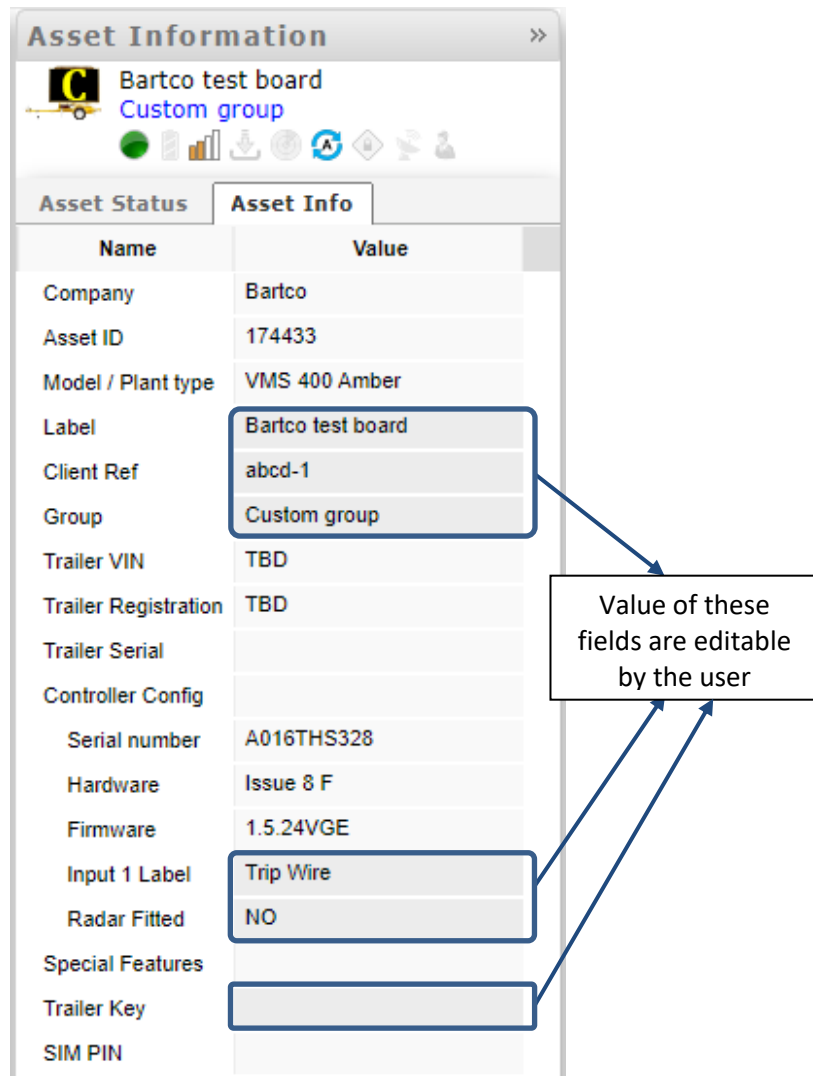
Radar Status is only available when Radar is enabled on an asset



Asset Information	
 #Bartco R&D test board [no group]	
	
Asset Status	Radar Status
Name	Value
Radar Options	Detected speed only
Min Display Speed	20
Posted Speed Zone	50
Max Display Speed	20
(1) Msg Display	Speed
(1) Msg Display Time	0
(2) Msg Display	Nothing
(2) Msg Display Time	0
Log Options	Disabled
Log Min Speed	10
Current Speed	0
Radar Log Settings	service@bartco.com.au

Radar Options	Radar setup to display detected speed only or interrupt displayed message
Min Display Speed	Minimum detection / display speed
Posted Speed Zone	Posted Speed Zone
Max Display Speed	Maximum detection / display speed
(1) Msg Display	First message displayed when vehicle is detected
(1) Msg Display Time	Duration (in sections) for which first message is displayed
(2) Msg Display	Second message displayed when vehicle is detected
(2) Msg Display Time	Duration (in sections) for which second message is displayed
Log Options	Logging enabled or disabled
Log Min Speed	Minimum speed for logging
Current Speed	Last speed detected by Radar
Radar Log Settings	List of email addresses to receive radar logs daily

4.3 Asset Info



Asset Information

Bartco test board
Custom group

Asset Status | **Asset Info**

Name	Value
Company	Bartco
Asset ID	174433
Model / Plant type	VMS 400 Amber
Label	Bartco test board
Client Ref	abcd-1
Group	Custom group
Trailer VIN	TBD
Trailer Registration	TBD
Trailer Serial	
Controller Config	
Serial number	A016THS328
Hardware	Issue 8 F
Firmware	1.5.24VGE
Input 1 Label	Trip Wire
Radar Fitted	NO
Special Features	
Trailer Key	
SIM PIN	

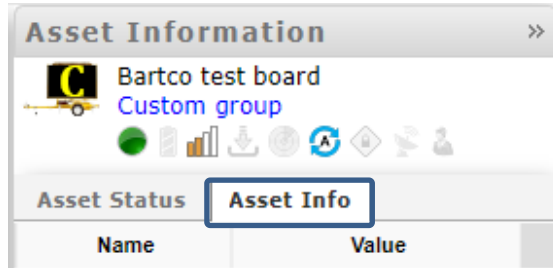
Value of these fields are editable by the user

Company	Owner company of the asset
Asset ID	Unique identified of the asset
Model / Plant type	Asset type
Label	Name of the asset (editable by user)
Client Ref	Another name of the asset (editable by user)
Group	Group of the asset (editable by user)
Trailer VIN	VIN number of the asset's trailer
Trailer Registration	Rego number of the asset's trailer
Trailer Serial	Serial number of the asset's trailer
Serial number	Serial number of the asset
Hardware Version	Hardware version of the asset
Firmware Version	Firmware version of the asset
Input 1 Label	Label for Input 1 on the controller (editable by user)
Radar Fitted	Radar is fitted on the asset (editable by user)
Special Features	Any special characteristics of the asset, such as 4G
Trailer Key	Trailer key of the asset (editable by user)
SIM PIN	Sim card PIN number (if applicable)

4.3.1 Change label/name of asset

To change the label/name of an asset:

- i. Select asset from Assets list
- ii. Go to Asset Info tab



- iii. Click on the value of Label field

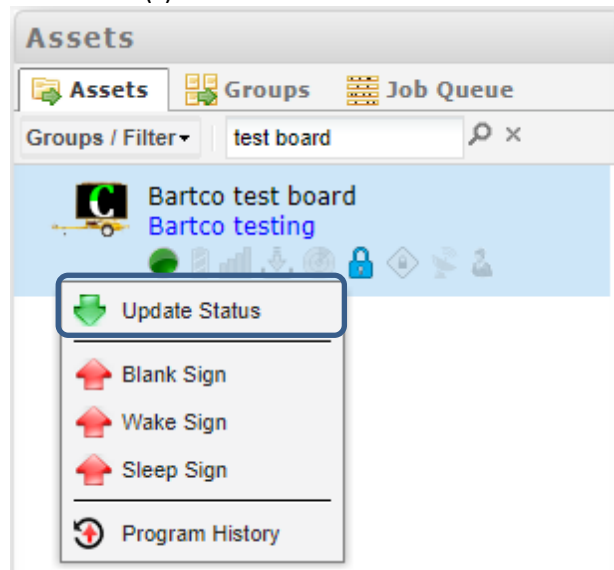


- iv. Type new name and press Enter
The new name will get updated immediately

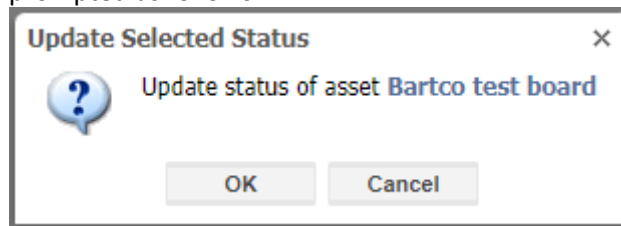
5. Update Status

To update the status of an asset:

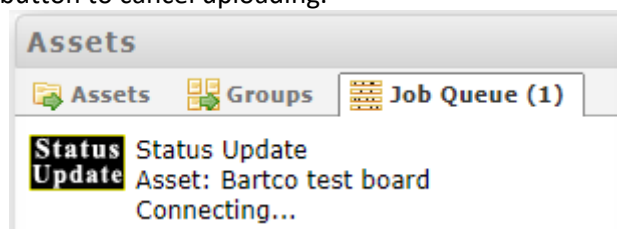
- i. Select asset(s) from the Assets list
- ii. Right click on selected asset(s)



- iii. The user will be prompted as follows:

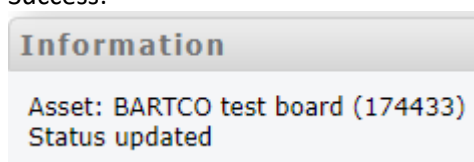


- iv. Click on OK to update status of the selected asset(s). The job will appear in Job Queue. Click on Cancel button to cancel uploading.

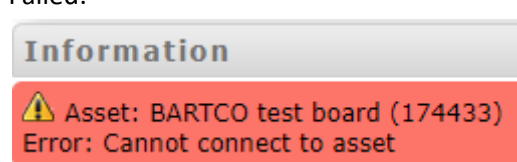


On completion, the result will be displayed in the Information panel at the bottom of the page.

Success:



Failed:



6. Mapping

Bartco's assets have inbuilt tracking system. This is used to display location of assets on maps. The location of the asset is the last known location of asset when it communicated with Web Studio.

The screenshot shows the 'Mapping' tab in the VMS Web Studio interface. A map of Melbourne is displayed with a 'Bartco test board' asset marker. A pop-up window for the asset shows details: Voltage: 13.5 V, Temperature: 28°C, and Trip Wire: ALARM!. A black box with the text 'Display Blanked' is overlaid on the asset details. Below the map, four callout boxes explain the functionality of the map controls:

- Directions to my asset:** Get directions to your asset from a given address
- Print Map:** Print map view
- Measure Distance:** Measure distance between points
- Assets Panel:** Double click on asset to get a close-up of the asset location

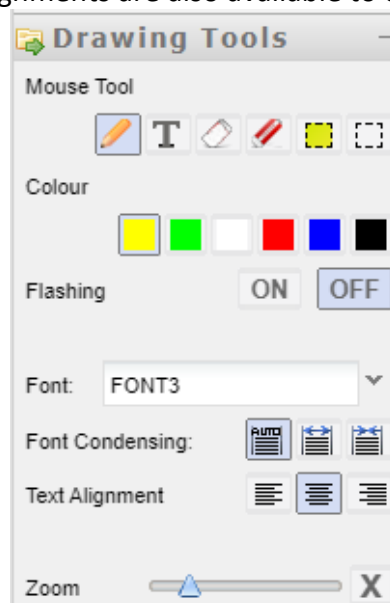
7. Create Message

Creating a message is undertaken by selecting the “New File” tab from the main navigation page. This tab is also known as Drawing Area which creates Standard file. Once the message is prepared and saved under a name then that name will appear on the tab instead of new file/untitled.

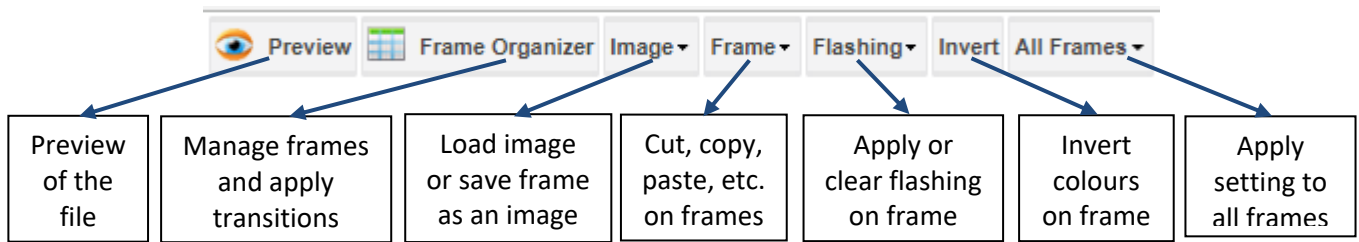
The screenshot shows the VMS Web Studio interface. A callout box points to the 'Drawing Tools' panel on the left, stating: 'Drawing tools like pen, eraser, colours, flashing, font size, etc.' Another callout box points to the frame navigation buttons at the top of the drawing area, stating: 'Multiple frames can be created. Use arrow buttons to navigate between frames'. A third callout box points to the 'Predefined' tab in the left panel, stating: 'Predefined images can be used directly on drawing area'. A fourth callout box points to the central drawing area, stating: 'Drawing area: type text or draw design. This is visual representation of your asset's display (VMS, Fire sign, etc.)'. A fifth callout box points to the 'UPLOAD' button in the bottom right corner, stating: 'Upload standard file to asset'. The drawing area itself displays the text 'ROADWORKS' in yellow and '1-10 DEC' in red on a black background.

Draw or type your desired message in the drawing area. The drawing area is scaled to be the same size as the asset (VMS, Fire sign, etc.).

The message can be typed in colour by selecting the required colour from the Drawing Tools. Different font sizes and line alignments are also available to choose.



Various functions on the frame can be performed using the below menu:



Multiple frames can be created with different frame time. Use arrow buttons to navigate through the frames.



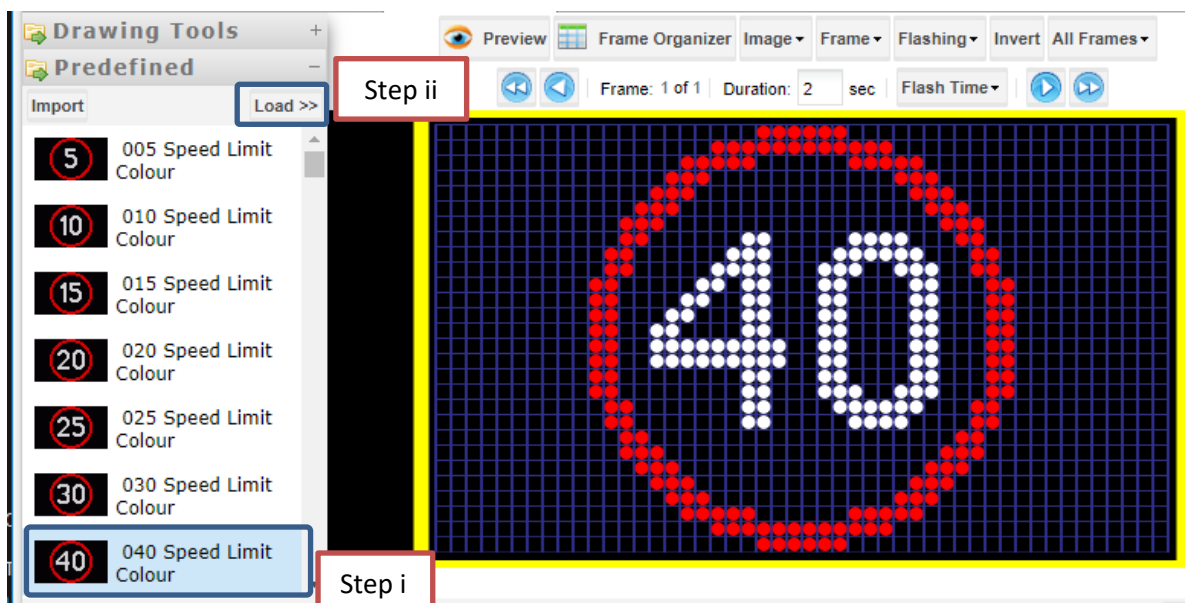
Frame timing can start at 0.1 of a second to create animations. Length of message, asset position and target audience should all be considered when selecting frame times.

7.1 Predefined Images

Several predefined images are available like speeds, land closure, etc. which can be loaded directly onto the frame to prepare a message.

➤ To load a predefined image:

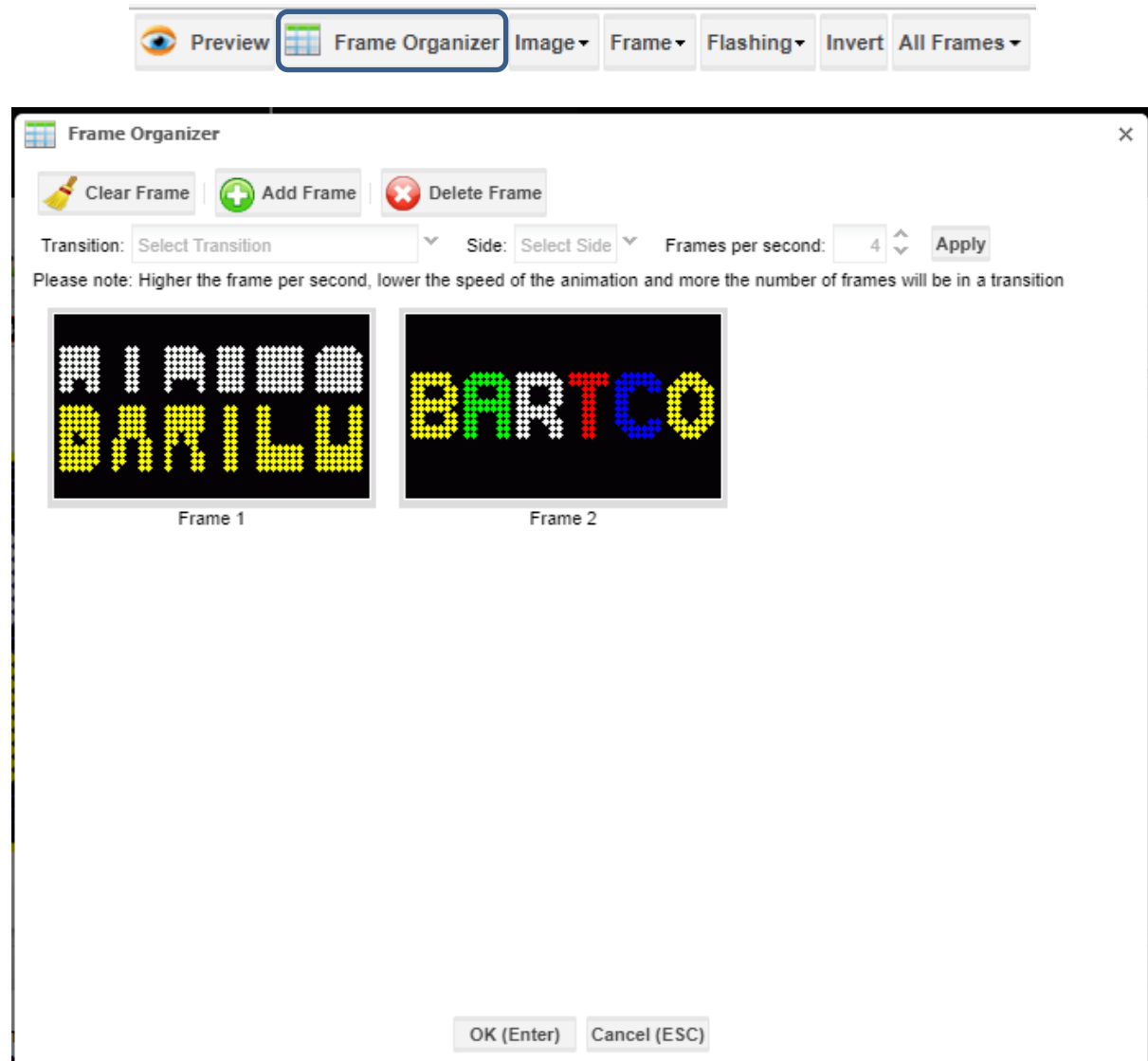
- i. Select image from the predefined images list
- ii. Click on "Load >>" button
Predefined image will be loaded in frame on the drawing area



7.2 Message Transitions/Animations

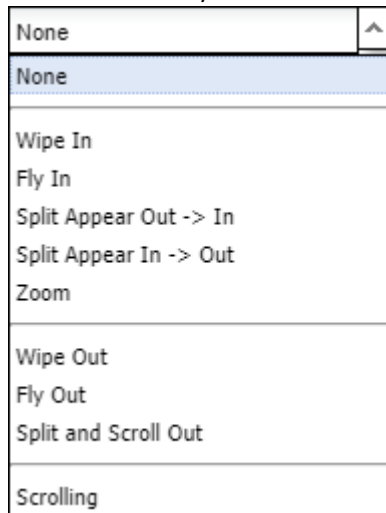
More commonly VMS are being used for advertising and promotions. Web Studio has the ability to create dynamic and animated messages to enhance the appeal of your message.

To create a message transition or animation, simply create your message and then click on the Frame Organizer button from the menu.

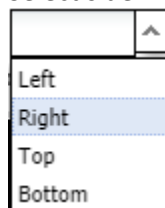


➤ **To apply transition/animation to your message:**

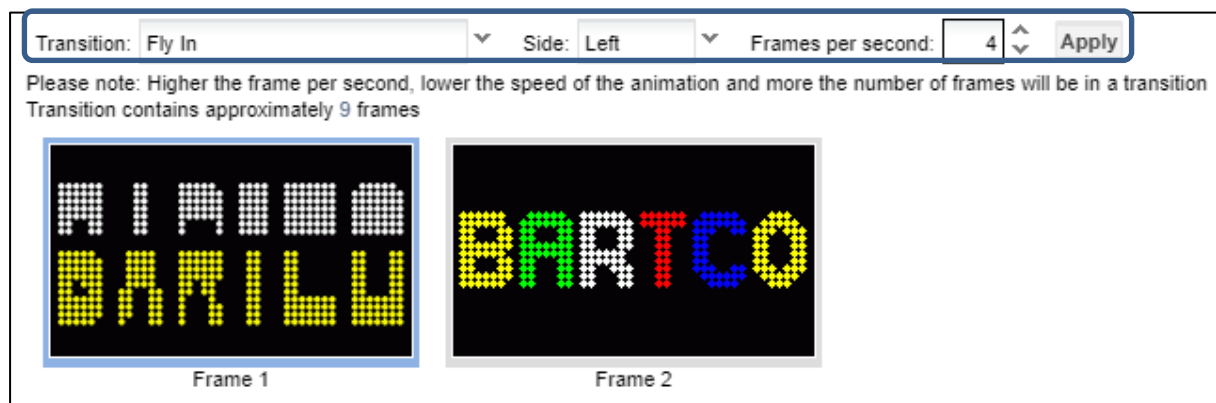
- i. Click on desired frame to be animated in Frame Organizer
- ii. Select transition/animation from the dropdown



- iii. Select side



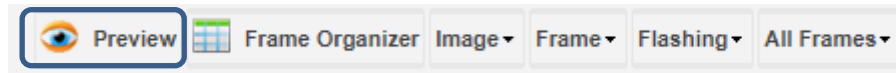
- iv. Set frames per second
Note: higher the frame per second, lower the speed of the animation and more the number of frames in transition.
- v. Click on Apply button
The selected frame will display the preview of the transition



- vi. After finishing applying transitions to desired frames, click on OK to save the changes and close the Frame Organizer

7.3 Preview

Check the preview of the message to see how it will look on the VMS:



Preview of the message:

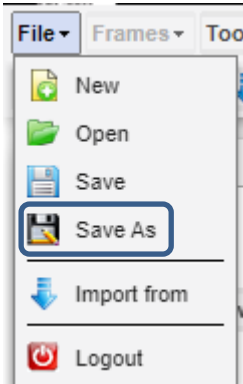


8. Uploading file to asset

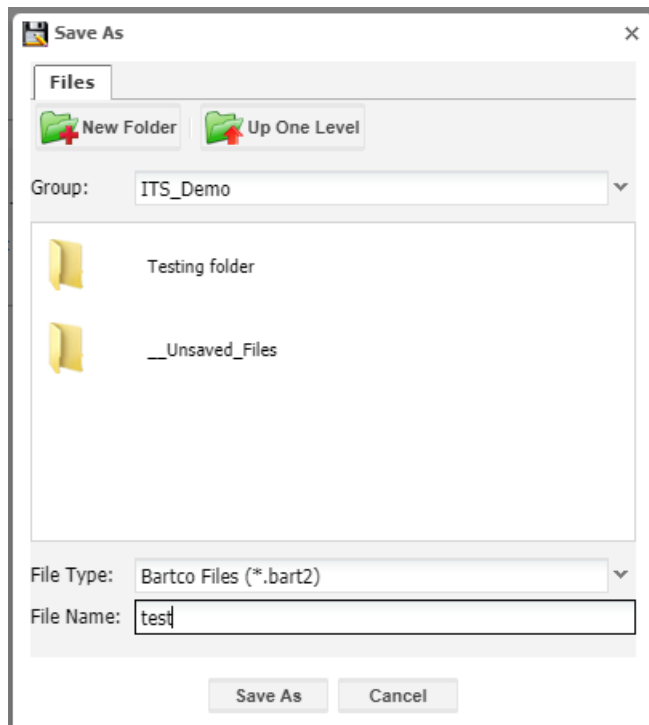
Once the file has been prepared, it can either be saved or directly uploaded to the asset. To use messages in Radar and/or Schedule, it needs to be saved first. The message is saved in the cloud and is accessible to all the users of your company using their Web Studio account.

8.1 Save File

- i. Go to File -> Save As

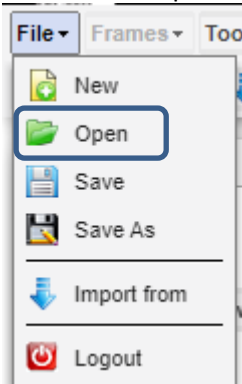


- ii. Enter filename and click on Save As button to save the file

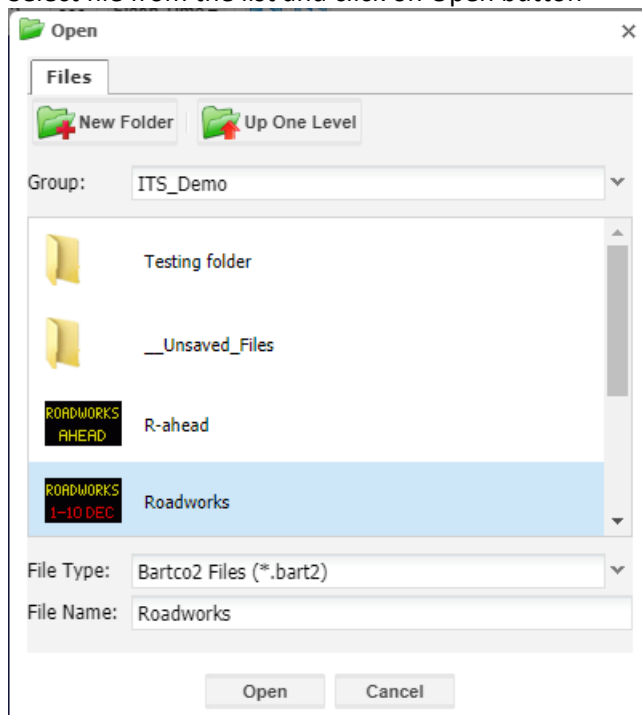


8.2 Open File

- i. Go to File -> Open



- ii. Select file from the list and click on Open button

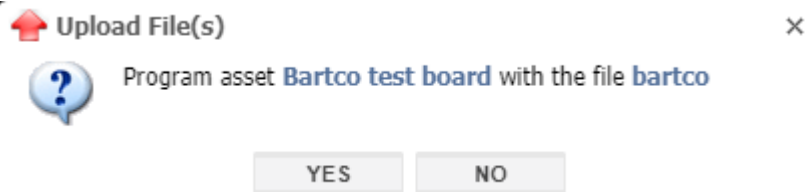


8.3 Upload saved file to asset

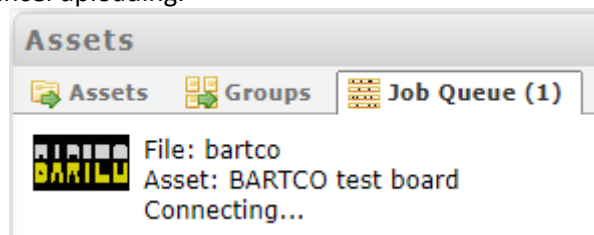
- i. After your file has been saved/opened, select asset(s) from the Asset list that you wish to upload the message to.
Note: Multiple assets can be programmed simultaneously by holding down the shift or Ctrl key on your keyboard when selecting asset(s).

- ii. Click on Upload button 
The file that is open in the tab will be uploaded to the selected asset.

- iii. The user will be prompted as follows:

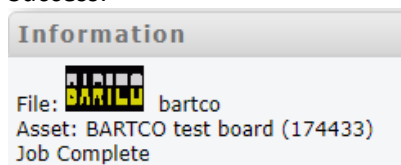


- iv. Click on YES to upload file to the selected asset(s). The job will appear in Job Queue. Click on NO to cancel uploading.

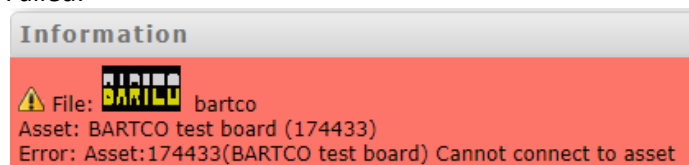


On completion, the result will be displayed in the Information panel at the bottom of the page.

Success:



Failed:



Note: After you have uploaded your message, the active file will update with your current message and the overall asset status.

8.4 Upload file without saving

Messages can be uploaded without saving them first.

- i. After your desired message is prepared, select asset from the Asset list that you wish to upload the message to.

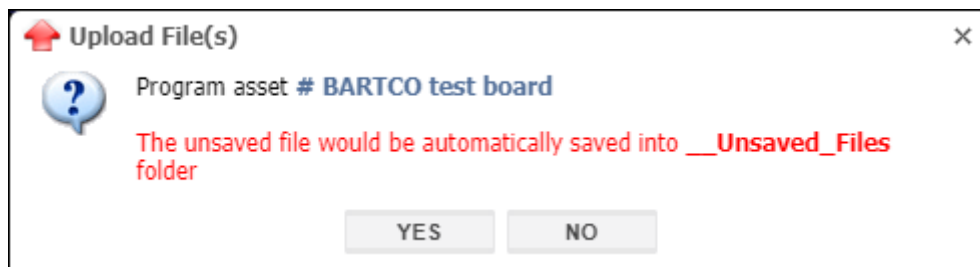
Note: Multiple assets can be programmed simultaneously by holding down the shift or Ctrl key on your keyboard when selecting asset(s).

- ii. Click on Upload button  **UPLOAD**
The message will be automatically saved into your __Unsaved_Files folder.

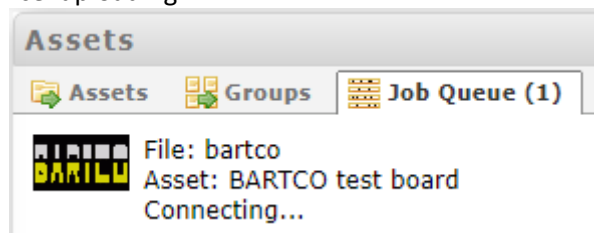
Notes:

- Files in this folder can be opened and resaved into another folder.
- Files cannot be manually saved into this folder.
- Files cannot be moved in or out of this folder with the File Manager.

- iii. The user will be prompted as follows to remind that an unsaved file is being uploaded:

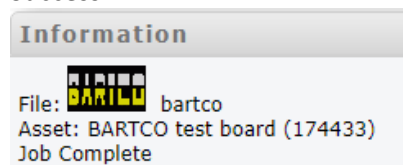


- iv. Click on YES to upload file to the selected asset(s). The job will appear in Job Queue. Click on NO to cancel uploading.

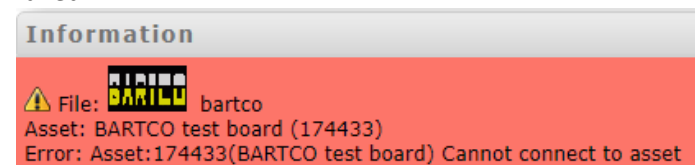


On completion, the result will be displayed in the Information panel at the bottom of the page.

Success:



Failed:



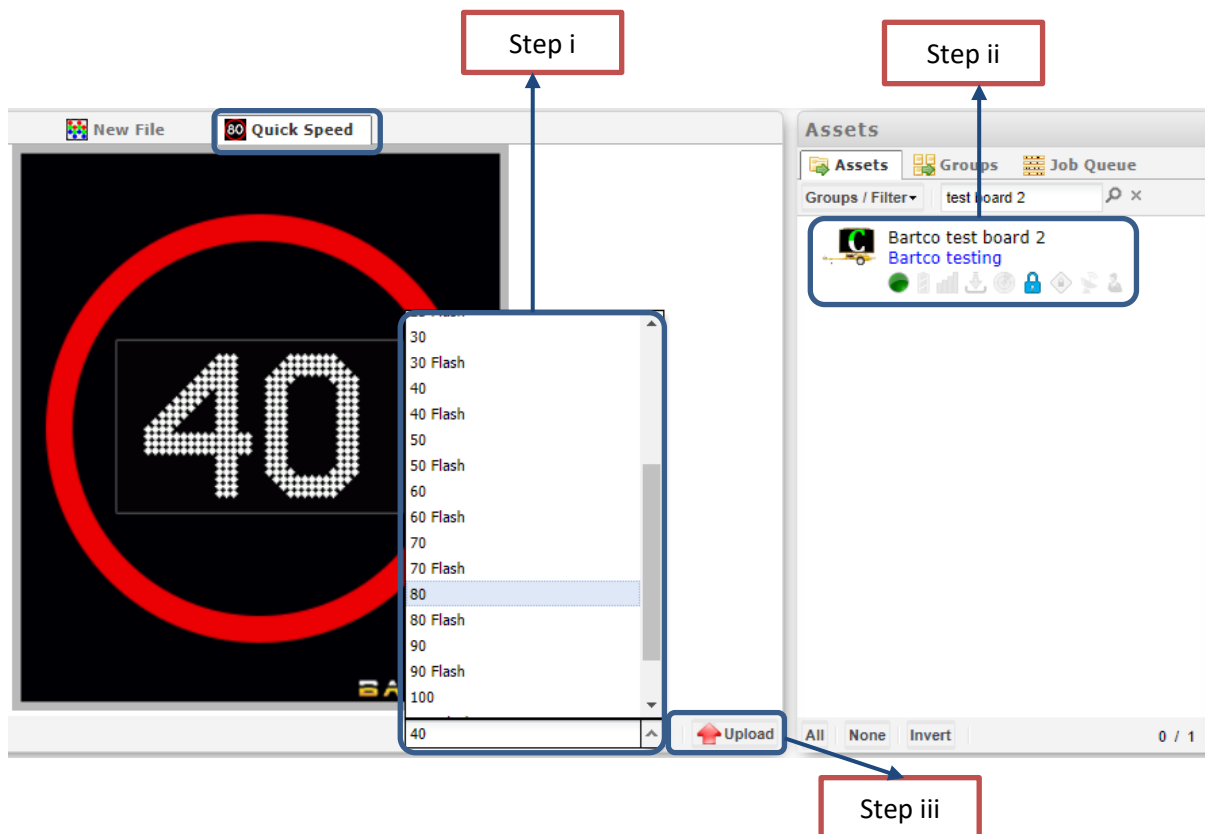
Note: After you have uploaded your message, the active file will update with your current message and the overall asset status.

9. Quick Speed

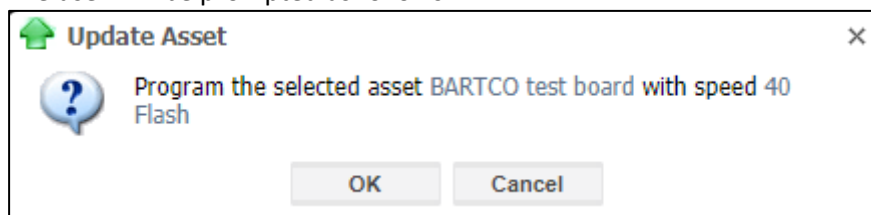
Quick speed is designed to quickly change speed limits on VMS or VLS assets.

➤ **To change the speed:**

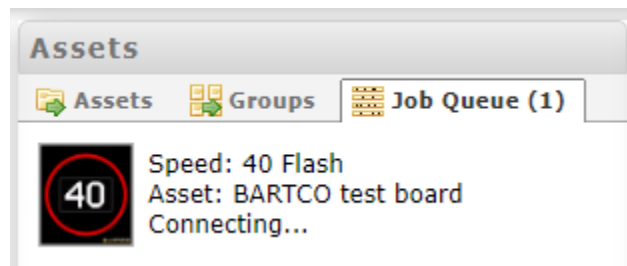
- i. Select speed from the dropdown list
- ii. Select asset(s) from the Assets list
- iii. Click on “Upload” on Quick Speed tab



- iv. The user will be prompted as follows:

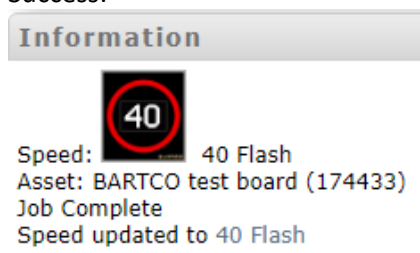


- v. Click on OK to upload speed to the selected asset(s). The job will appear in Job Queue. Click on Cancel button to cancel uploading.

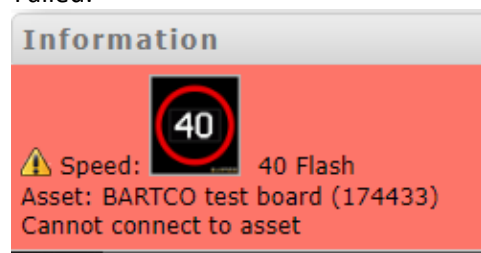


On completion, the result will be displayed in the Information panel at the bottom of the page.

Success:



Failed:



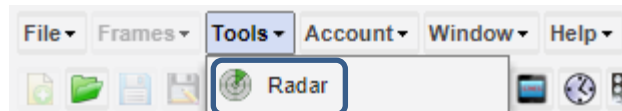
10. Radar

Any Bartco VMS asset can become a speed advisory sign provided the asset is fitted with a Radar.

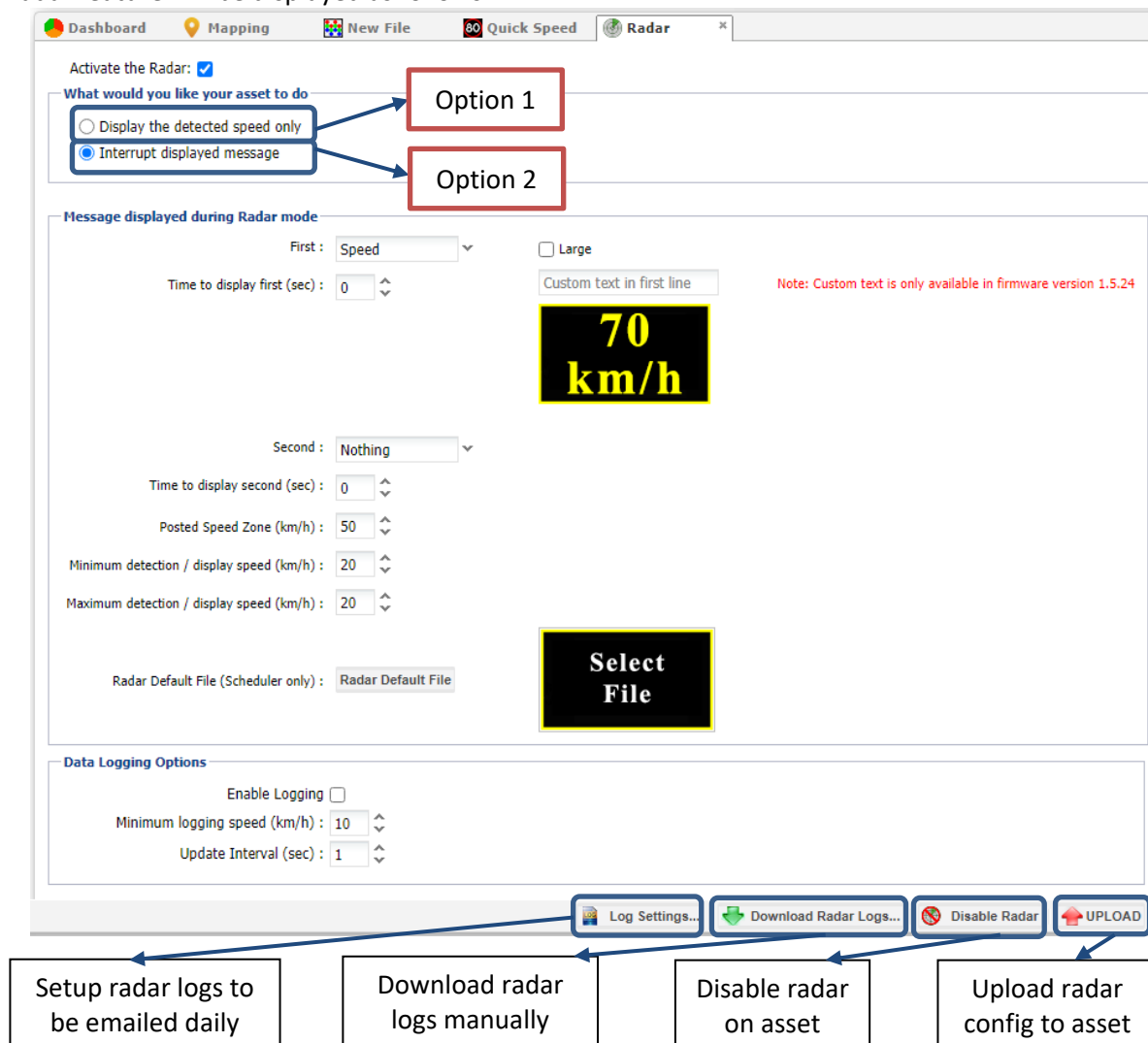
The Radar can be programmed in two ways depending on the requirement:

- **Option 1: Display the detected speed only**
The asset typically stays in off mode and starts displaying the speed of the vehicle upon detection then go to sleep again. On top of detecting the speed of the approaching vehicle, the user can also set up an advisory message if the road user is going above the specified speed limit or below the speed limit.
- **Option 2: Interrupt displayed message**
Instead of going to sleep/off the asset can show a standard message or speed limit message when no vehicle is present. In this instance, the standard message needs to be uploaded to the asset separately to the radar file.

The Radar feature is accessible under the “Tools” menu:



Radar feature will be displayed as follows:



The screenshot shows the Radar configuration window with the following sections and annotations:

- Activate the Radar:** ☒ (checked)
- What would you like your asset to do:**
 - ☐ Display the detected speed only (labeled **Option 1**)
 - ☒ Interrupt displayed message (labeled **Option 2**)
- Message displayed during Radar mode:**
 - First: Speed (dropdown)
 - Time to display first (sec): 0 (spinner)
 - Large (checkbox)
 - Custom text in first line (text input)
 - Note: Custom text is only available in firmware version 1.5.24
 - Visual preview: **70 km/h**
 - Second: Nothing (dropdown)
 - Time to display second (sec): 0 (spinner)
 - Posted Speed Zone (km/h): 50 (spinner)
 - Minimum detection / display speed (km/h): 20 (spinner)
 - Maximum detection / display speed (km/h): 20 (spinner)
 - Radar Default File (Scheduler only): Radar Default File (text input)
 - Visual preview: **Select File**
- Data Logging Options:**
 - Enable Logging (checkbox)
 - Minimum logging speed (km/h): 10 (spinner)
 - Update Interval (sec): 1 (spinner)
- Action Buttons:**
 - Log Settings... (button)
 - Download Radar Logs... (button)
 - Disable Radar (button)
 - UPLOAD (button)

Annotations at the bottom of the screenshot:

- Setup radar logs to be emailed daily (points to Log Settings...)
- Download radar logs manually (points to Download Radar Logs...)
- Disable radar on asset (points to Disable Radar)
- Upload radar config to asset (points to UPLOAD)

Two actions can be executed on the asset after the radar detects approaching vehicle.

The first action on the asset can be set to any of the following:

Message displayed during Radar mode

First : Speed

☐ Large

Time to display first (sec) : Speed

Custom text in first line

70
km/h

- i. **Speed**
Asset shows the detected vehicle speed only, it can be shown in 2 different formats. Example: speed can be shown as 70 km/h or just 70 (tick Large checkbox for this)
- ii. **Radar High/Low**
In this option the user can upload 2 files (Such as “TOO FAST” for speeding and THANK YOU for doing below the speed limit) that can advise the speeding vehicle that they are doing over the speed limit or doing below the speed limit without showing the vehicle speed.
- iii. **Radar High**
In this option the user can only upload 1 file that can advise the speeding vehicle if the vehicle is approaching above the speed limit to say SLOW DOWN or TOO FAST. If the vehicle is doing below the speed limit, then the asset will not respond to them.
- iv. **Radar Low**
In this option the user can only upload 1 file that can advise the speeding vehicle if the vehicle is approaching below the speed limit to say THANK YOU. If the vehicle is doing above the speed limit, then the asset will not respond to them.

The second action on the asset can be set as follows:

If the first action of the asset is to show the vehicle speed and follow it up with advisory message, then the user needs to select SPEED option in the first option and RADAR HIGH/LOW in second option.

Message displayed during Radar mode

First : Speed

☐ Large

Time to display first (sec) : 2

Custom text in first line

Note: Custom text is only available in firmware version 1.5.24

70
km/h

Second : Radar High/Low

Time to display second (sec) : 2

Radar High File: slowdown

Radar Low File: thankyou

SLOW
DOWN

THANK
YOU

Note: The files such as TOO FAST, SLOW DOWN or THANK YOU needs to be prepared first as described in section [7. Create Message](#) and save the files as described in section [8.1 Save File](#)

The so-called over speed and under speed threshold can be set up at the “Posted Speed Zone”
Minimum and maximum detection speed limits can also be setup on the asset to prevent it to be abused.

Note: the asset will not respond if the detected speed of the approaching vehicle is outside of the minimum and maximum detection range. However, the logs will record the speed of every vehicle.

Posted Speed Zone (km/h) :	50	⬆ ⬇ ⬆
Minimum detection / display speed (km/h) :	20	⬆ ⬇ ⬆
Maximum detection / display speed (km/h) :	20	⬆ ⬇ ⬆

The user can also schedule a radar that can turn on/off at certain times of the day. Radar default file can be used if a message needs to be displayed on the asset during the scheduled radar times.

Note: Radar default file will only work if the radar file is scheduled. For example, see section [12.2 Schedule a radar file](#).

Radar Default File (Scheduler only) :	Radar Default File	<div>Select File</div>
---------------------------------------	--------------------	------------------------

Enable data logging to record detected speed of the vehicle with a timestamp. Radar logs can be downloaded manually or set up to be emailed daily.


Data Logging Options

Enable Logging	<input type="checkbox"/>
Minimum logging speed (km/h) :	10 ⬆ ⬇ ⬆
Update Interval (sec) :	1 ⬆ ⬇ ⬆

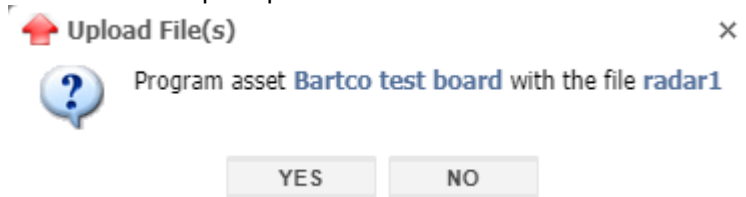
➤ **Upload radar to asset**

- i. Save file if required for later use as described in section [8.1 Save File](#)
Note: Radar files are saved as different file types than standard files. You may wish to have a separate folder for your radar config.

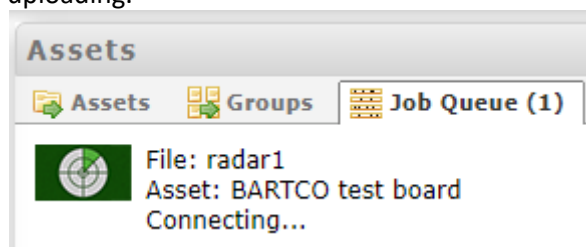
- ii. Select asset(s) in Assets list

- iii. Click on Upload button  at bottom of the Radar tab
Radar config that is open in the Radar tab will be uploaded to the selected asset.

- iv. The user will be prompted as follows:

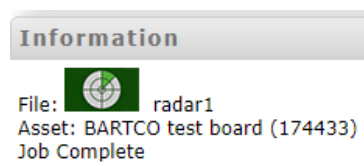


- v. Click on YES to upload file to the selected asset(s). The job will appear in Job Queue. Click on NO to cancel uploading.

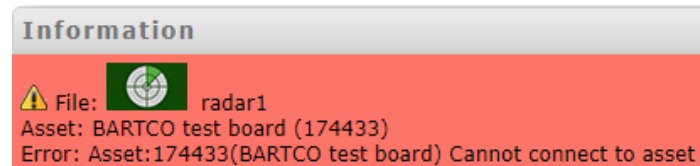


On completion, the result will be displayed in the Information panel at the bottom of the page.

Success:



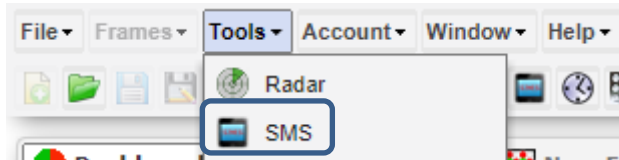
Failed:



11. SMS & Security

Your asset is equipped with security and operational features which means the asset can send an SMS to the operator/s if the unit is tampered with, stolen or if there are any voltage issues.

From the Tools menu select SMS:



The following SMS options can be set:

The screenshot shows the 'SMS & Security' configuration window. It has three main sections: 'Alarms', 'Mobile Phone Numbers', and 'Reporting Interval'. Annotations with arrows point to specific features:

- Various alarms to be set on asset:** Points to the 'Alarms' section, which includes checkboxes for 'Over Voltage', 'Under Voltage', 'Over Temperature', 'GPS Movement', and 'Tamper Enabled', each with a corresponding numerical input field and unit.
- Set mobile numbers to which SMS is sent by asset:** Points to the 'Mobile Phone Numbers' section, which has a text input for 'Mobile number' and a 'Phone Number' button.
- Reporting interval for alarms:** Points to the 'Reporting Interval' section, which has a dropdown menu set to '60' and the unit 'minutes'.
- Upload SMS config file to asset:** Points to the 'Upload' button at the bottom right of the window.

Additional details in the 'Alarms' section include a note: 'Note: Traffic Light controllers only support Under Voltage'. The 'Under Voltage' checkbox is checked, and its value is set to '11 Vdc'. The 'Blank display on VMS. Flash amber on Traffic Light controllers' checkbox is also checked.

Select your options as required, following are suggested settings:

- Over voltage: recommended at 14.5 V
 - Under voltage: recommended at 11.0 V
 - Over Temperature: usually not required
 - GPS movement: recommended at 1000 m
- Note: Ensure that you either upload this option after the asset has been deployed to its desired location or the asset is set to sleep prior to moving.
- Tamper Enabled: Anti tamper wire where it is fitted

After your options are selected, input up to 3 mobile phone numbers that will be alerted if any of the alerts are activated.

Mobile Phone Numbers

Mobile number:

Phone Number

No mobile numbers

Add

Delete

Reporting Interval

Reporting Interval: minutes


To remove SMS settings simply uncheck all the boxes and upload file to the asset.

We suggest saving your active and inactive SMS settings in separate folders for consistency and future use.

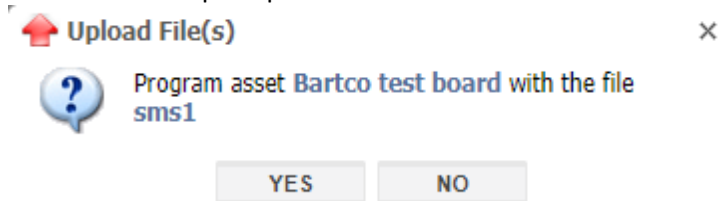
➤ **Upload SMS config to asset**

- i. Save file if required for later use as described in section [8.1 Save File](#)
Note: SMS files are saved as different file types than standard files. You may wish to have a separate folder for your SMS config.

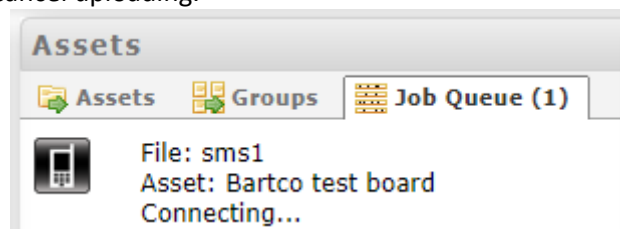
- ii. Select asset(s) in Assets list

- iii. Click on Upload button  at bottom of the SMS & Security tab
SMS config that is open in the SMS & Security tab will be uploaded to the selected asset.

- iv. The user will be prompted as follows:

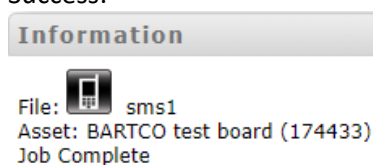


- v. Click on YES to upload file to the selected asset(s). The job will appear in Job Queue. Click on NO to cancel uploading.

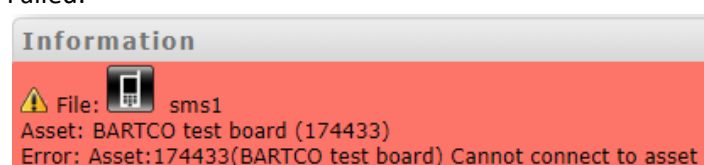


On completion, the result will be displayed in the Information panel at the bottom of the page.

Success:



Failed:



12. Scheduler

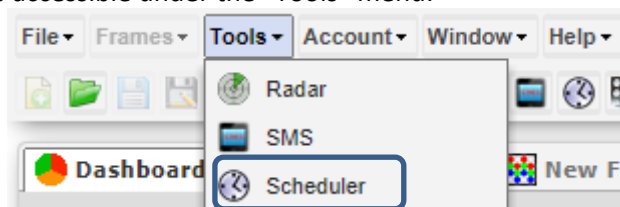
Your VMS comes standard with a GPS module which allows the VMS to keep time as well as the ability to schedule messages as required, instead of uploading messages each time.

Perfect for Roadworks applications where there may be a pre-warning message, and a message to be displayed once the Roadworks begin.

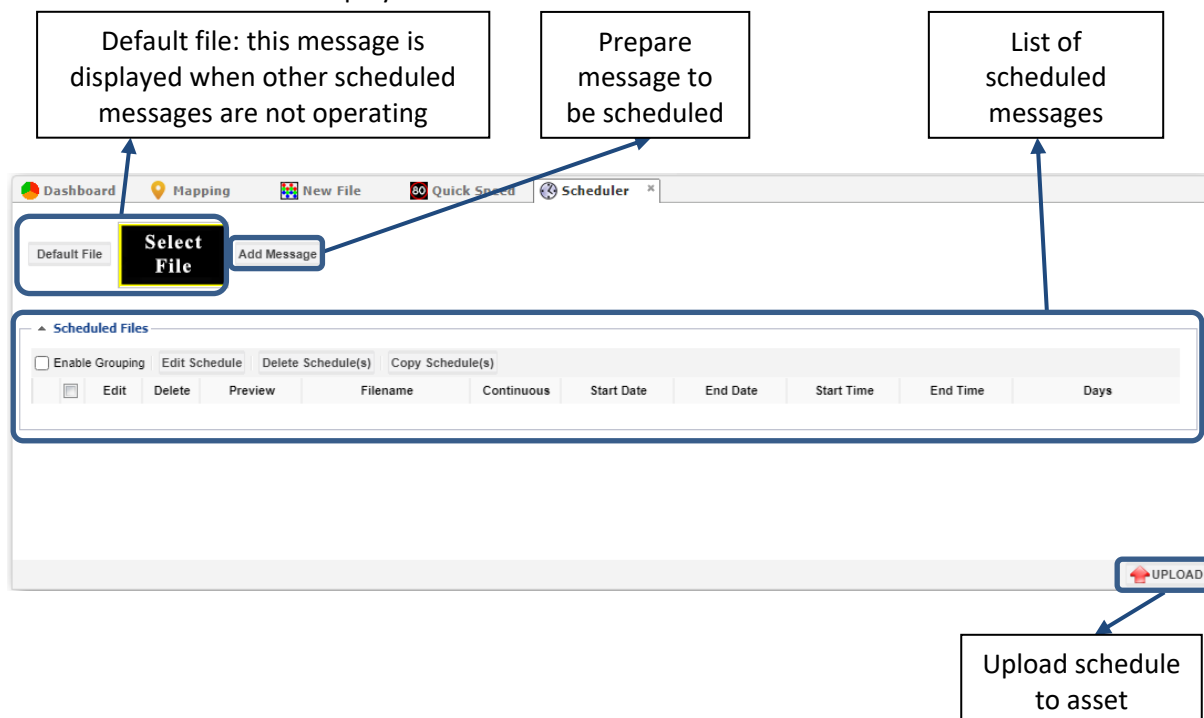
12.1 Create Schedule

To Schedule a file, the desired messages need to be created first as described in section [7. Create Message](#) and save those messages as described in section [8.1 Save Message](#)

The Scheduler feature is accessible under the “Tools” menu:



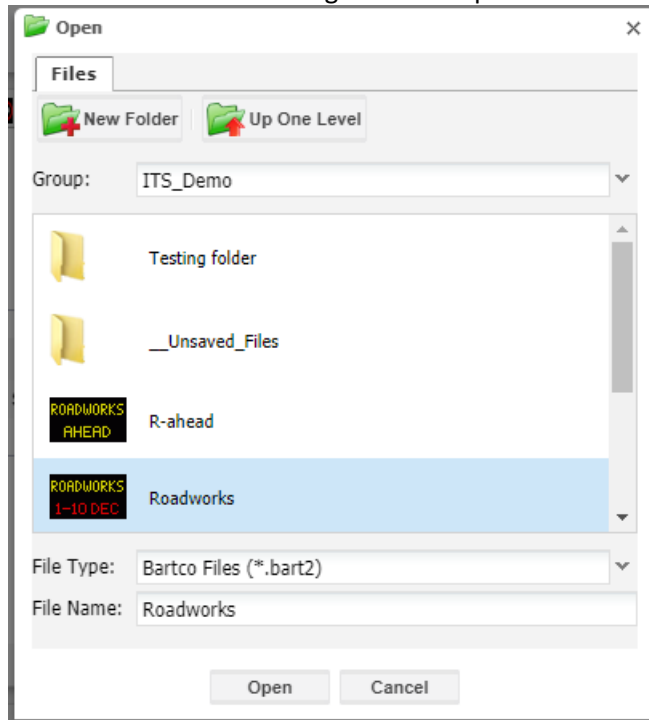
Scheduler feature will be displayed as follows:



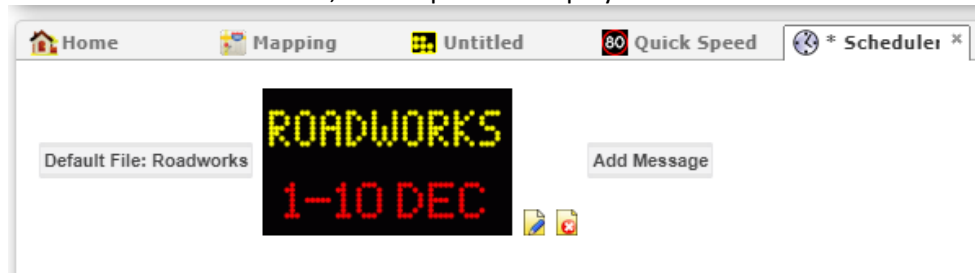
Default file: the default file is displayed when the other scheduled messages are not operating. If no default message is selected, then the asset will be blanked when the other scheduled messages are not operating.

➤ **Select a default file:**

- i. Click on Default File button
- ii. Select a file from File Dialog and click Open

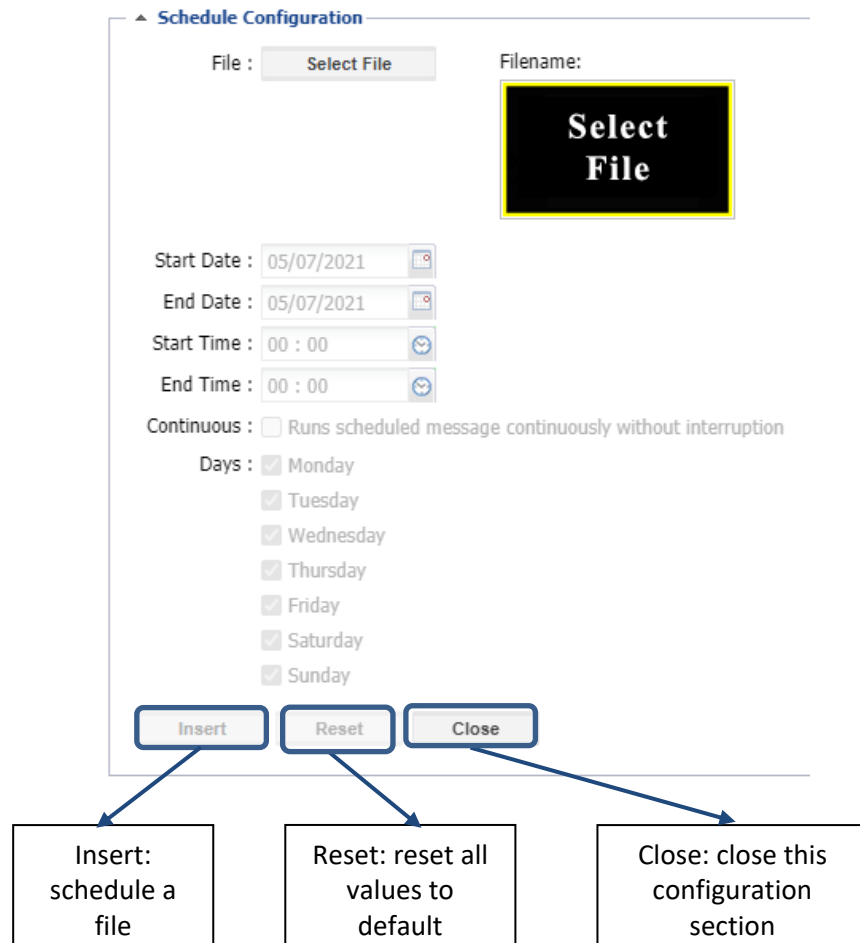


- iii. Default file will be selected, and its preview displayed as below:



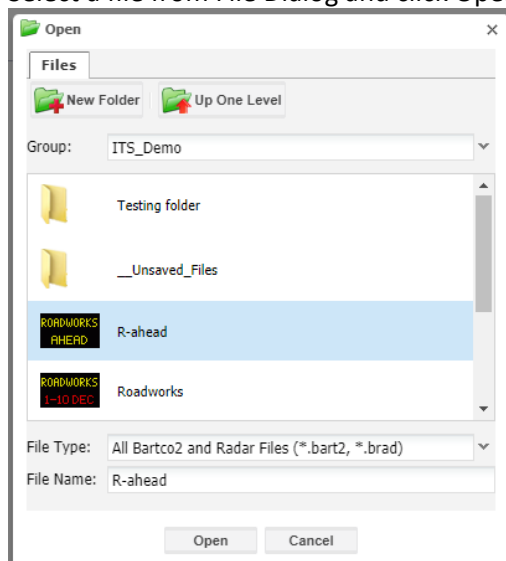
➤ **Schedule a message:**

- i. Click on “Add Message” button



- ii. Click on “Select File” button


- iii. Select a file from File Dialog and click Open



- iv. A file will be selected, and its preview displayed as below.
Other options will now be enabled

▲ **Schedule Configuration**

File : Filename: R-ahead



Start Date : 05/07/2021

End Date : 05/07/2021

Start Time : 00 : 00

End Time : 00 : 00

Continuous : ☐ Runs scheduled message continuously without interruption

Days : ☒ Monday
☒ Tuesday
☒ Wednesday
☒ Thursday
☒ Friday
☒ Saturday
☒ Sunday

- v. Set date and time for the selected message to run as part of schedule

Start Date : 01/12/2021

End Date : 10/12/2021

Start Time : 09 : 00

End Time : 18 : 00

Continuous : ☐ Runs scheduled message continuously without interruption

Days : ☒ Monday
☒ Tuesday
☒ Wednesday
☒ Thursday
☒ Friday
☒ Saturday
☒ Sunday

Click on the calendar
and clock icons to
change select date and

- vi. Click on “Insert” button to add this message to the list

▲ **Scheduled Files**

☐ Enable Grouping

	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	<input type="button" value="Preview"/>	Filename	Continuous	Start Date	End Date	Start Time	End Time	Days
1				R-ahead	NO	01/12/2021	10/12/2021	09 : 00	18 : 00	All

The message R-ahead will now run from 01/12/2021 to 10/12/2021 from 9am to 6pm every day.
Outside these times, the default message will be displayed.


Note: If the Continuous box is checked then the message will run from 9am on 01/12/2021 until 6pm on 10/12/2021 as a continuously running message.

If you would like any other messages to be scheduled simply repeat the process above.

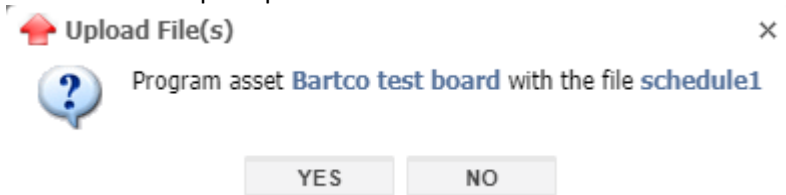
➤ **Upload schedule to asset**

- i. Save file if required for later use as described in section [8.1 Save File](#)
Note: Scheduled files are saved as different file types than standard files. You may wish to have a separate folder for your schedules.

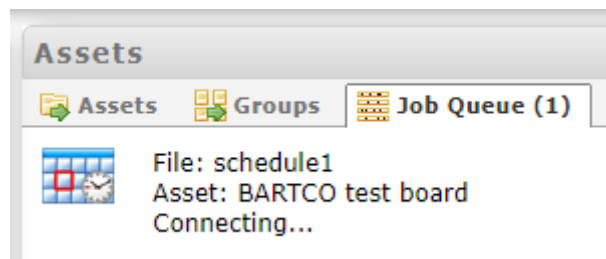
- ii. Select asset(s) in Assets list

- iii. Click on Upload button  at bottom of the Scheduler tab
Schedule that is open in the Scheduler tab will be uploaded to the selected asset.

- iv. The user will be prompted as follows:

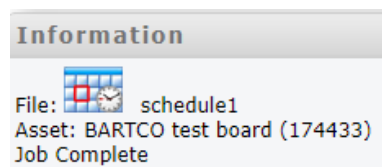


- v. Click on YES to upload file to the selected asset(s). The job will appear in Job Queue. Click on NO to cancel uploading.

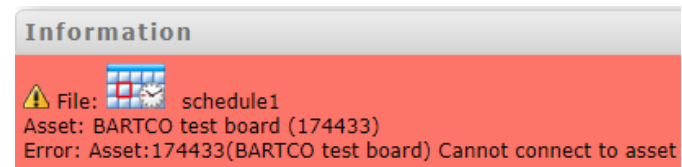


On completion, the result will be displayed in the Information panel at the bottom of the page.

Success:



Failed:



12.2 Schedule a radar file

Example of scheduling a radar file:

A VMS asset is placed in school zone that normally shows the speed limit 60 and changes the speed limit to 40 between 8:00am to 9:30am with radar that shows “SLOW DOWN” if the vehicle goes over the speed limit of 40.

In this case the radar file will be created with the following:

Activate the Radar: ☒

What would you like your asset to do

☐ Display the detected speed only

☒ Interrupt displayed message

Message displayed during Radar mode

First : Speed

Time to display first (sec) : 2

Second : Radar High

Time to display second (sec) : 2

Posted Speed Zone (km/h) : 40

Minimum detection / display speed (km/h) : 10

Maximum detection / display speed (km/h) : 60

Radar Default File (Scheduler only) : Radar Default File: 40FLASH

Custom text in first line

Note: Custom text is only available in firmware version 1.5.24

70 km/h

Radar High File: slowdown

SLOW DOWN

40

Data Logging Options

Enable Logging ☐

Minimum logging speed (km/h) : 10

Update Interval (sec) : 1

Once the radar file is ready then the schedule will be prepared with the current radar file between 8:00am to 9:30am with a default file that shows the speed limit 60.

Home Mapping 40FLASH Quick Speed Radar - 40km Scheduler

Default File: 60FLASH

Add Message

60

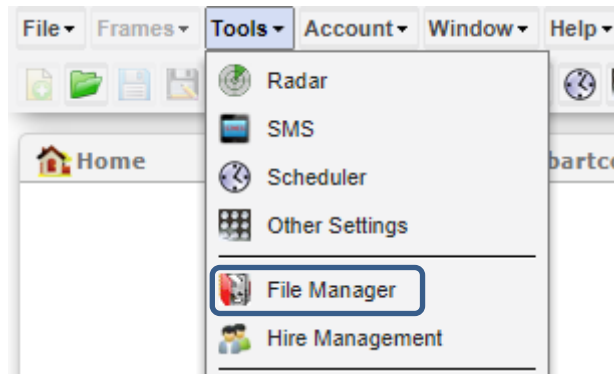
Scheduled Files

☐ Enable Grouping Edit Schedule Delete Schedule(s) Copy Schedule(s)

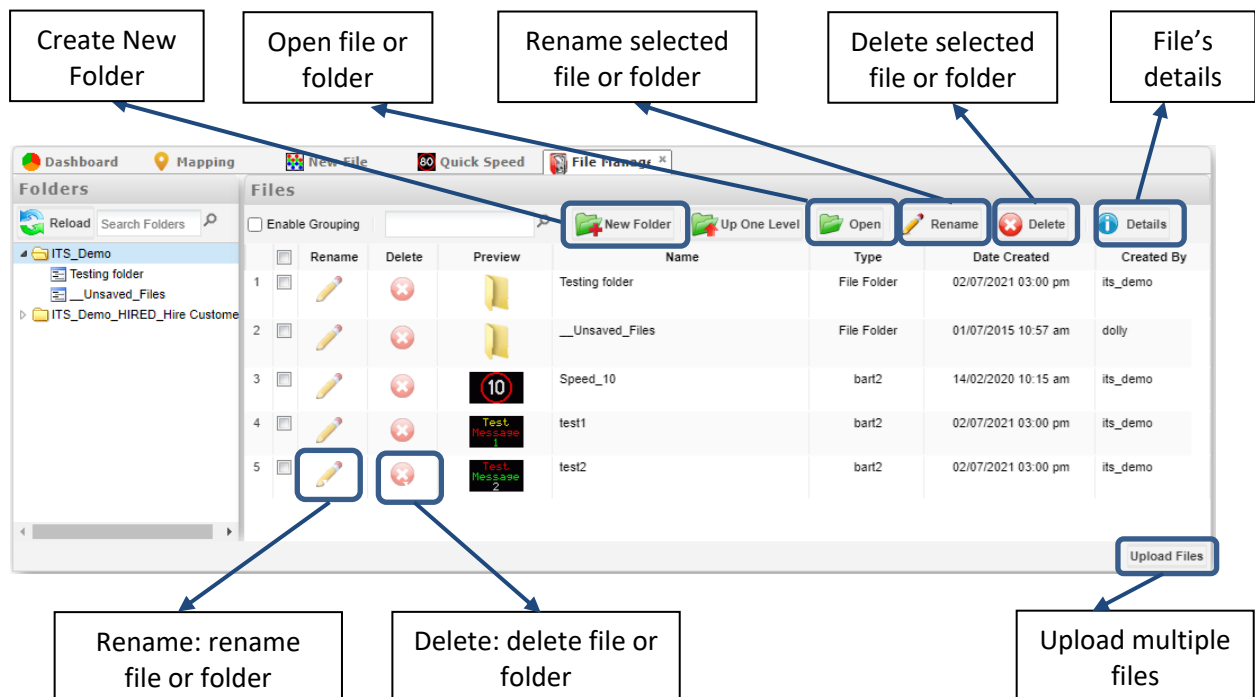
	Edit	Delete	Preview	Filename	Continuous	Start Date	End Date	Start Time	End Time	Days
1				40km_radar	NO	01/03/2021	31/03/2021	08 : 00	09 : 30	Monday, Tuesday, Wednesday, Thursday, Friday

13. File Manager

Multiple messages or options to your asset can be uploaded directly from File Manager



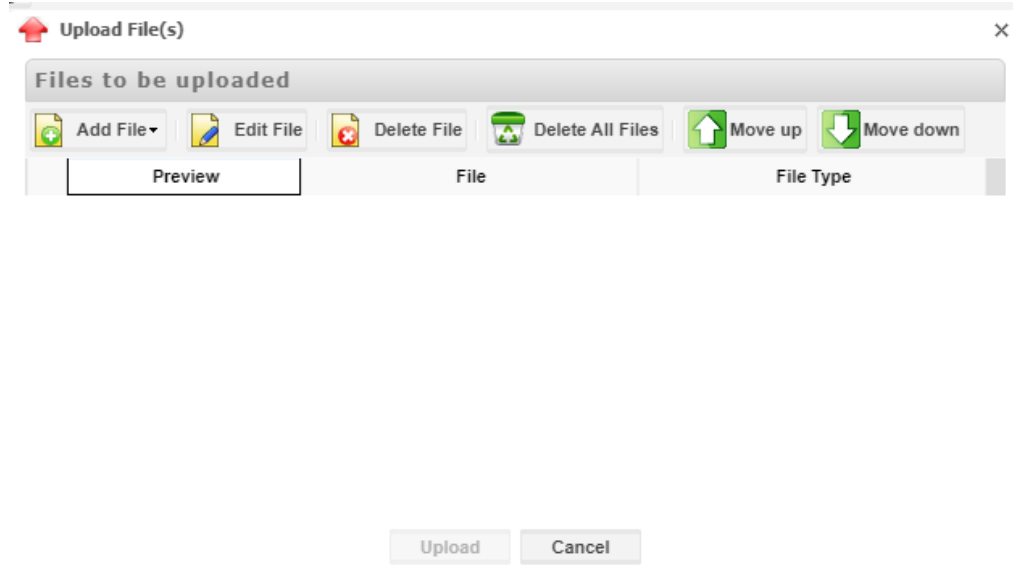
File Manager displays list of files and folders.



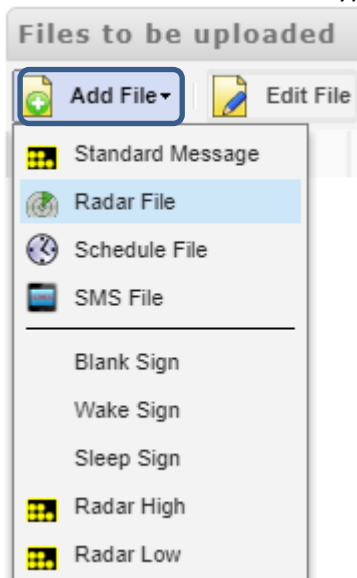
13.1 Upload multiple files

- i. Click on Upload Files

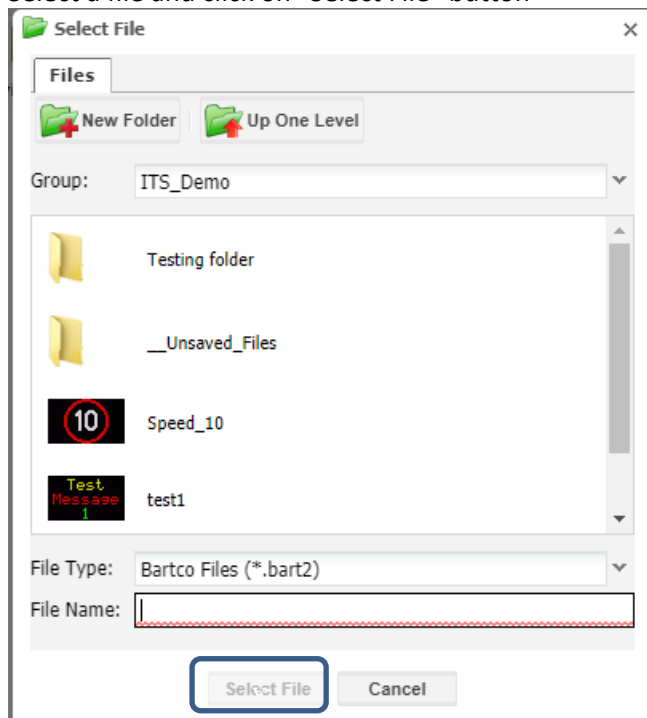
The following dialog will be displayed:



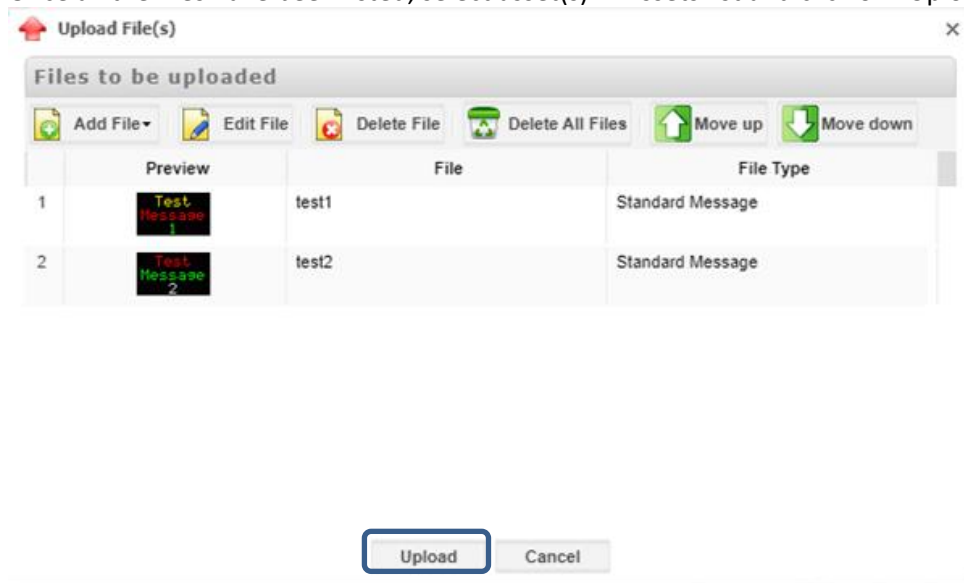
- ii. Click on Add File and select type of file (Standard, Radar, etc.) or function (Blank sign, etc.)



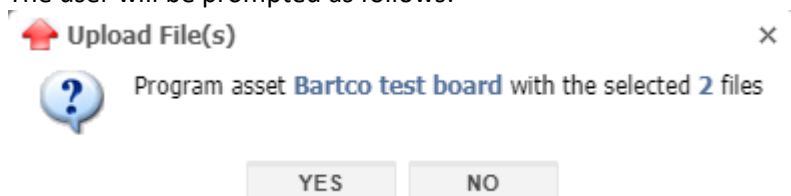
- iii. For type of file, select file(s) from file dialog
Select a file and click on “Select File” button



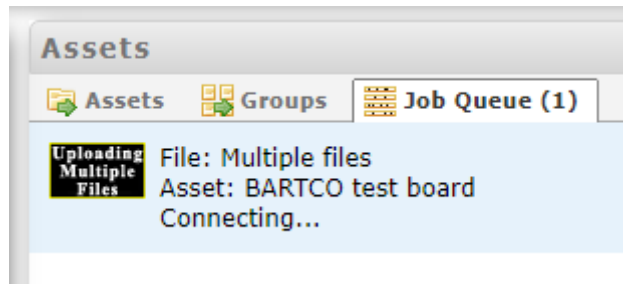
- iv. Once all the files have been listed, select asset(s) in Assets list and click on “Upload” button



- v. The user will be prompted as follows:

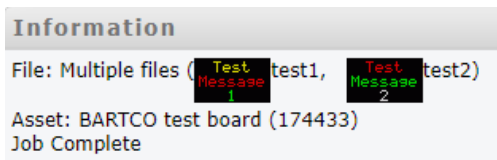


- vi. Click on YES to upload files to the selected asset(s). The job will appear in Job Queue. Click on NO to cancel uploading.

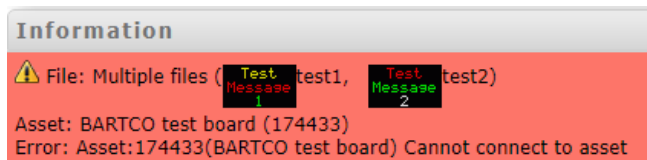


On completion, the result will be displayed in the Information panel at the bottom of the page.

Success:



Failed:

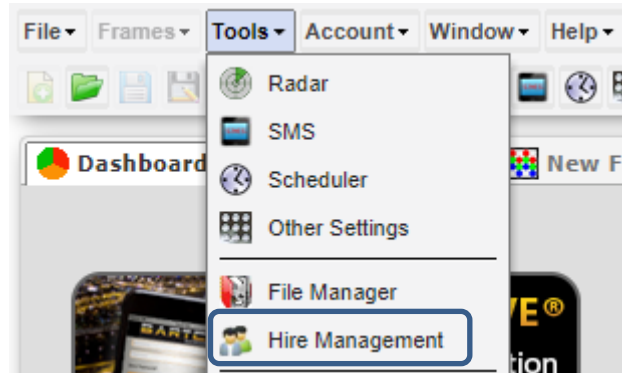


14. Hire Management

A significant feature of Bartco's Web Studio is for hire companies or other general users to be able to provide their own customer or user with a login and access to asset(s).

Customers can be given access to the system for a determined period, relative to their hire period. Once the customer has finished their hire, they do not have access to the asset again. The hire user uses their username and password to login to Web Studio.

The Hire Management feature is accessible under the "Tools" menu:



Hire Management feature will be displayed as follows:

Customers: create, edit, and delete hire customers

Users: hire users that can access assigned assets

Assets: assign or unassign assets that hire users can access

Notes: add notes for hire customer that is only visible to you

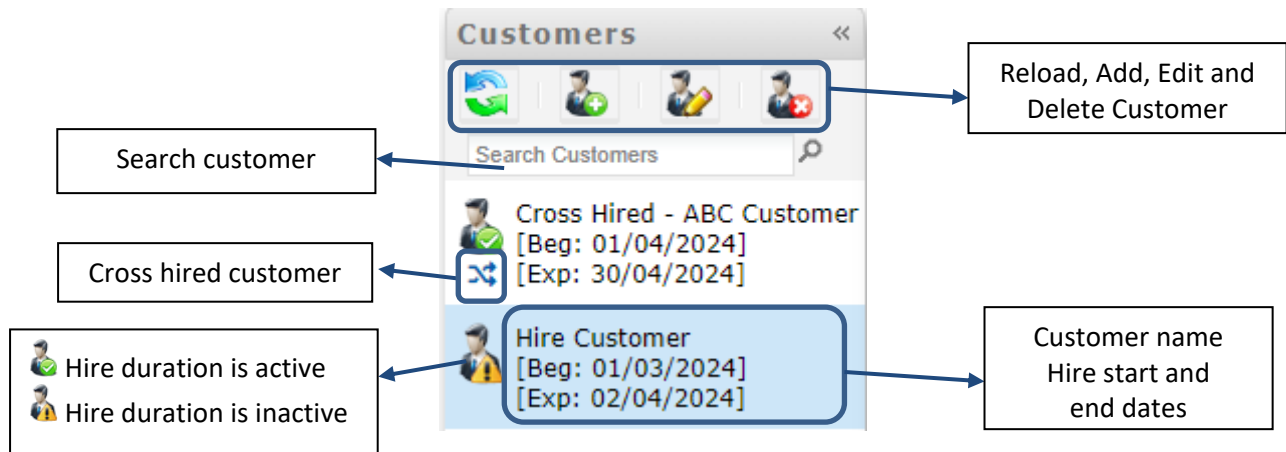
Hire Users

Add Hire User
Edit Hire User
Delete Hire User

	Edit	Del...	Opts	Username	Email	Phone
1				test_user1	test@bartco.com.au	1300306106

14.1 Customers

Shows list of all hire customers. The hired assets and hire users' account are only accessible during valid hire duration (begin and expiry dates).



14.1.1 Cross Hiring

Cross hire assets to other companies who already have VMS Web Studio account. No need to create hire users for such customers.

14.1.1.1 Permission to hire assets

You can allow or prevent other company to hire your assets:

- Tick “Allow Hiring Assets” checkbox to allow customer to hire your assets to others
- Untick “Allow Hiring Assets” checkbox to prevent customer from hiring your assets to others

Add new customer

Cross Hiring

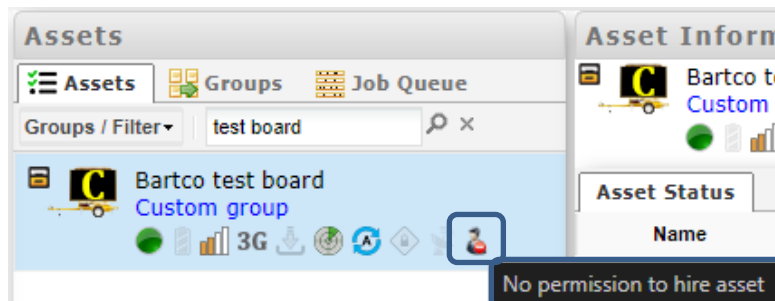
Cross Hiring ? : ☒

Unique Code ? :

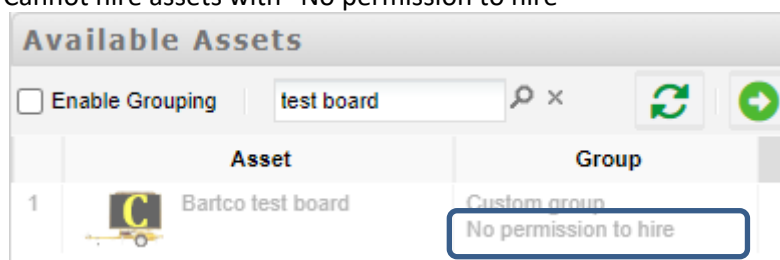
Allow Hiring Assets ? : ☐

Cross hired assets with no permission to hire asset is shown as below:

- Asset’s status icon:



- Hire Management - Available Assets:
Cannot hire assets with “No permission to hire”

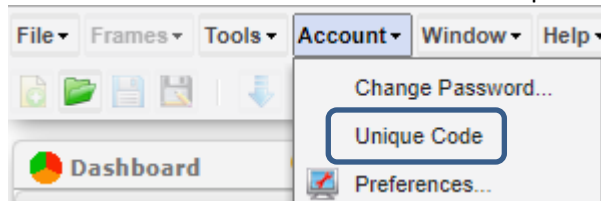


14.1.1.2 Cross hire assets from another company

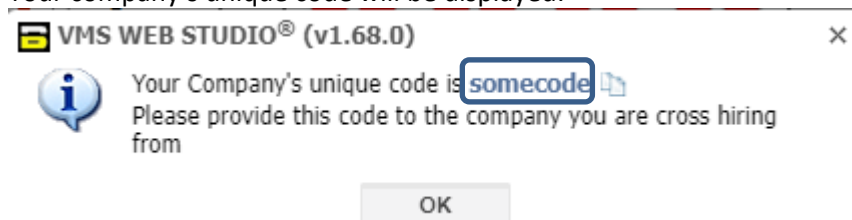
To cross hire assets from another company provide them with your company's unique code.


➤ **To get your unique code:**

- i. Click on "Accounts" menu and click on "Unique Code" submenu



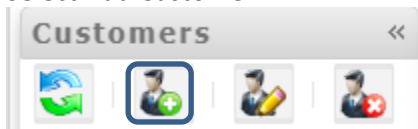
- ii. Your company's unique code will be displayed:



- iii. Copy the unique code by clicking on  button
- iv. Securely send the unique code to the company you are hiring assets from

14.1.2 Create Hire Customer

- i. Select Add Customer



- ii. Add hire customer form will be displayed:

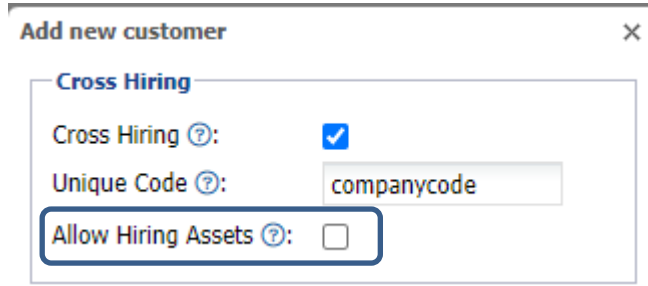
- iii. Cross hire assets
Skip this step if not cross hiring assets

- a. Tick "Cross Hiring" checkbox

- b. The unique code of company you are cross hiring assets to


- c. Allow customer to hire your assets to other users
YES: tick checkbox


NO: untick checkbox




Add new customer

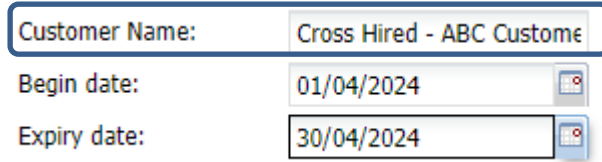
Cross Hiring

Cross Hiring : ☒

Unique Code :

Allow Hiring Assets : ☐

- iv. Add name of the hire customer

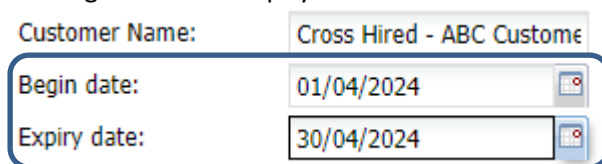


Customer Name:

Begin date:

Expiry date:

- v. Add begin date and expiry date



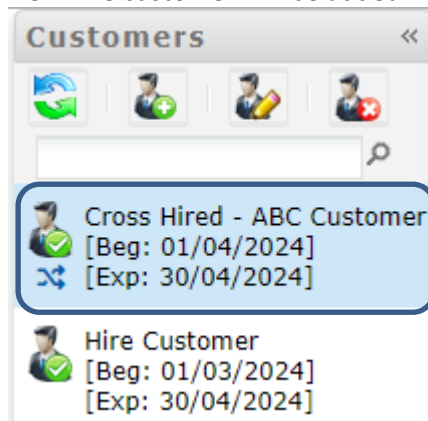
Customer Name:

Begin date:





Expiry date:


- vi. Click OK


- vii. New hire customer will be added in the list of Customers:



Customers

 Cross Hired - ABC Customer
[Beg: 01/04/2024]
[Exp: 30/04/2024]

 Hire Customer
[Beg: 01/03/2024]
[Exp: 30/04/2024]

14.2 Hire Users

After the hire customer has been added, create new hire user(s) to the hire customer.
Skip this step when cross hiring assets.

Note: For security purposes it is a good idea for each user to have their own username and password.

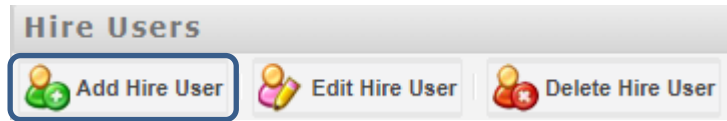
The hire user will be responsible for what is displayed on the asset under their login.
Hire users can only access their account during valid hire duration - begin and expiry dates of Customer.

The screenshot shows the 'Hire Users' management interface. Callouts point to the following features:

- Add new hire user:** Points to the 'Add Hire User' button in the top toolbar.
- Edit details or permissions of selected hire user:** Points to the 'Edit Hire User' button in the top toolbar.
- Delete selected hire user:** Points to the 'Delete Hire User' button in the top toolbar.
- Unlock hire user's account:** Points to the 'Unlock Account' button in the context menu for a selected user.
- Request reset password of hire user's account:** Points to the 'Reset Password' button in the context menu for a selected user.
- Form to add or update hire user:** Points to the 'Add Hire User' modal form, which includes fields for Username, Email, Phone Number, Password, and checkboxes for Enabled, Allow Save, Allow Upload, Allow Settings, and Program History.

14.2.1 Create Hire User

- i. Click Add Hire User



- ii. Enter username, email and phone number in the hire user form along with appropriate permissions.

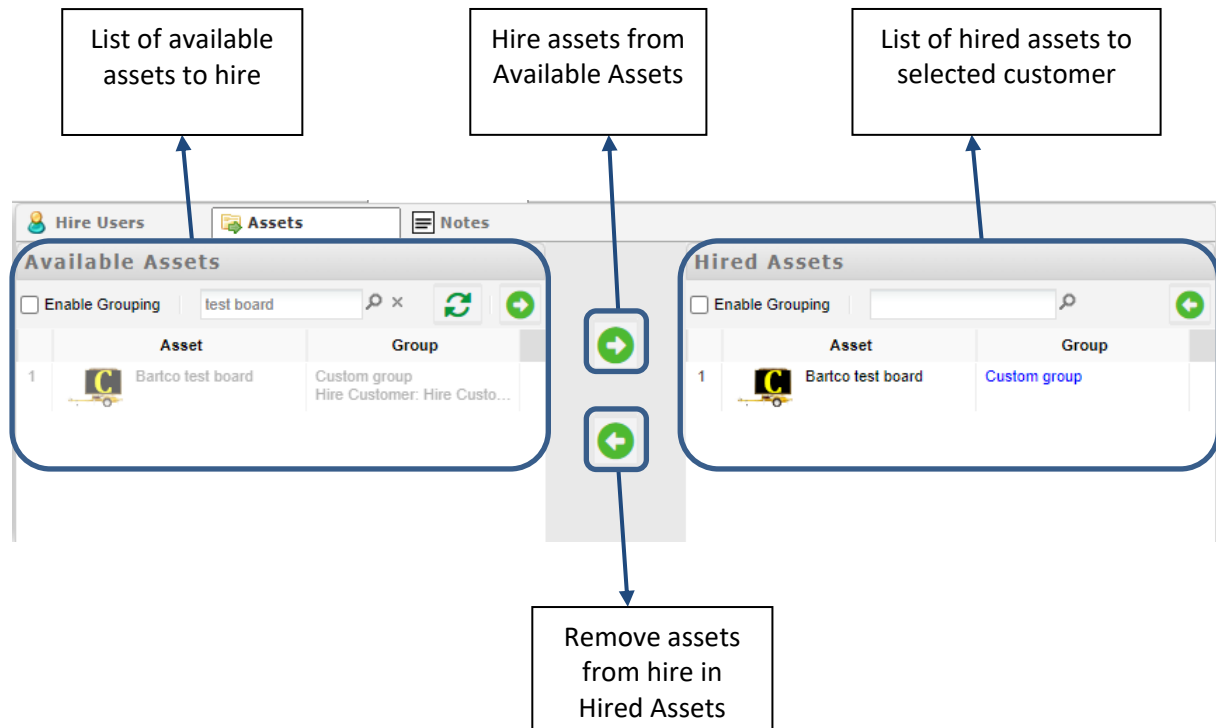
- iii. Click Add Hire User

- iv. The new hire user will be added in the Hire Users list

Hire Users									
Add Hire User Edit Hire User Delete Hire User									
		Edit	Del...	Opts	Username	Email	Phone	Enabled	Allow Save
1				Opts ▾	hireuser	email@bartco.com.au	+61111222333	YES	YES

14.3 Assets

Hire assets to selected hire customer. The hired assets are only accessible by the users of selected hire customer during valid hire duration.



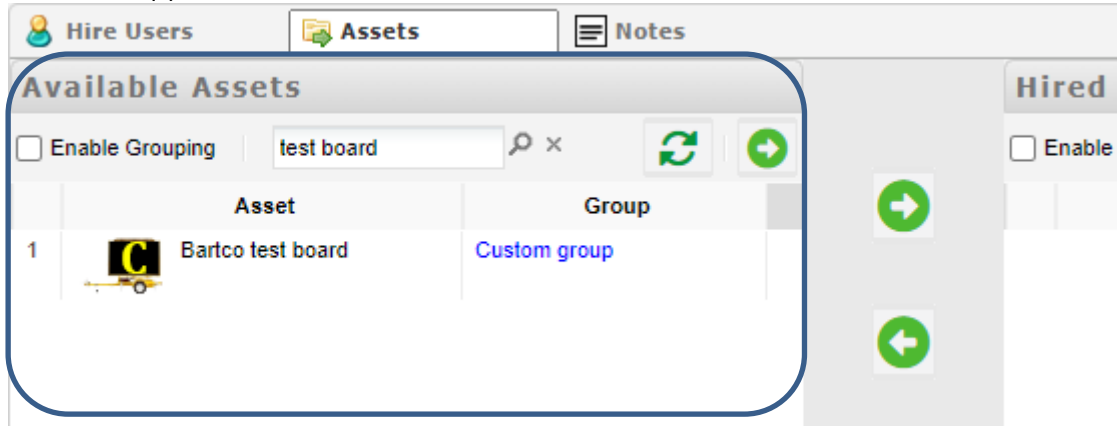
14.3.1 Hire Asset to Customer


i. Select Hire Customer from the list

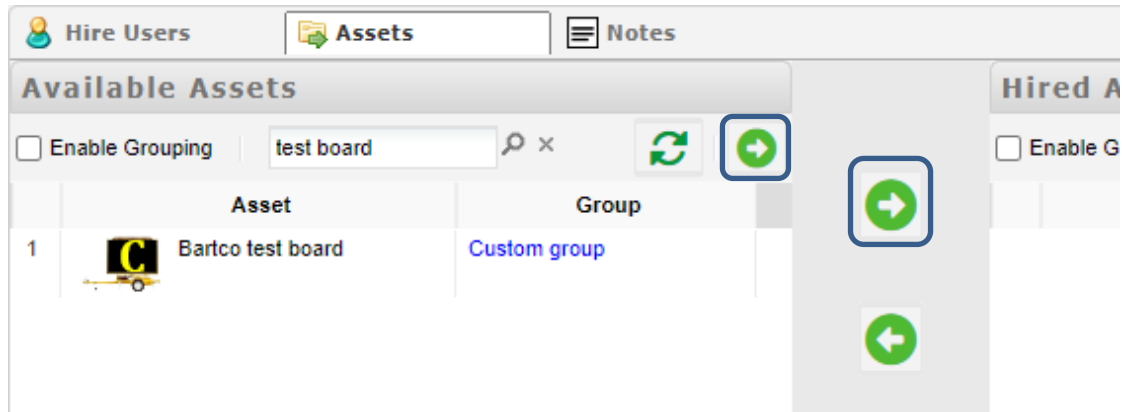
ii. Go to Assets tab




iii. Select asset(s) to hire from Available Assets:



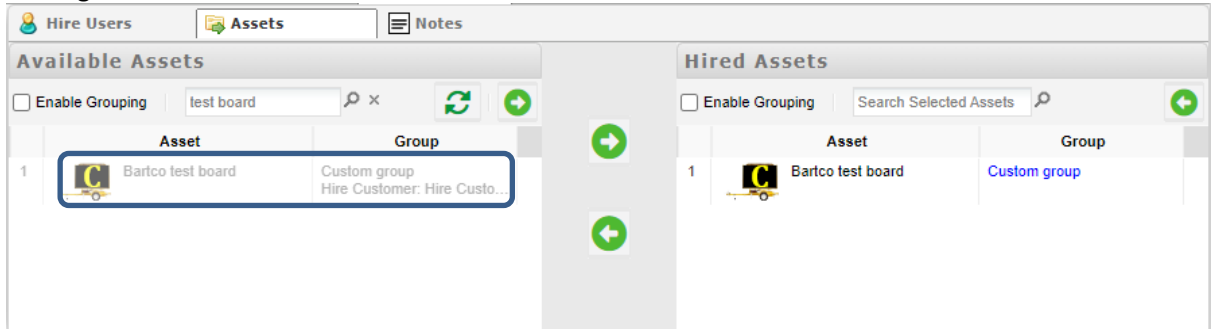
iv. Use  button to hire assets from Available Assets:



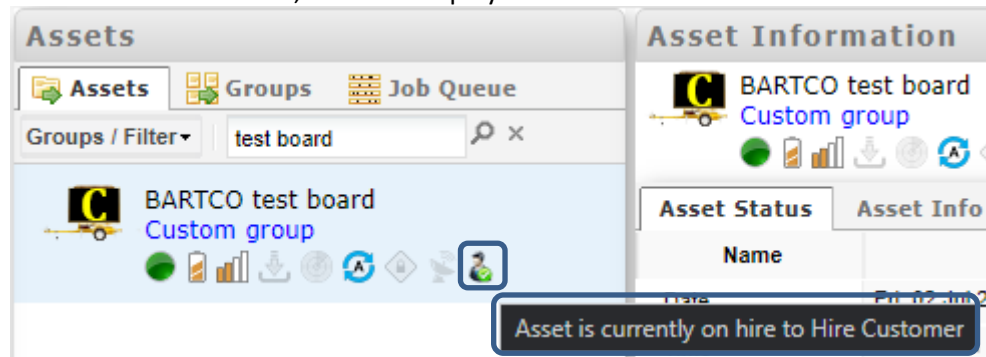
v. Use  button to remove assets from hire in Hired Assets:







- vi. Asset gets listed in Hired Assets to indicate the hire customer has access to it:



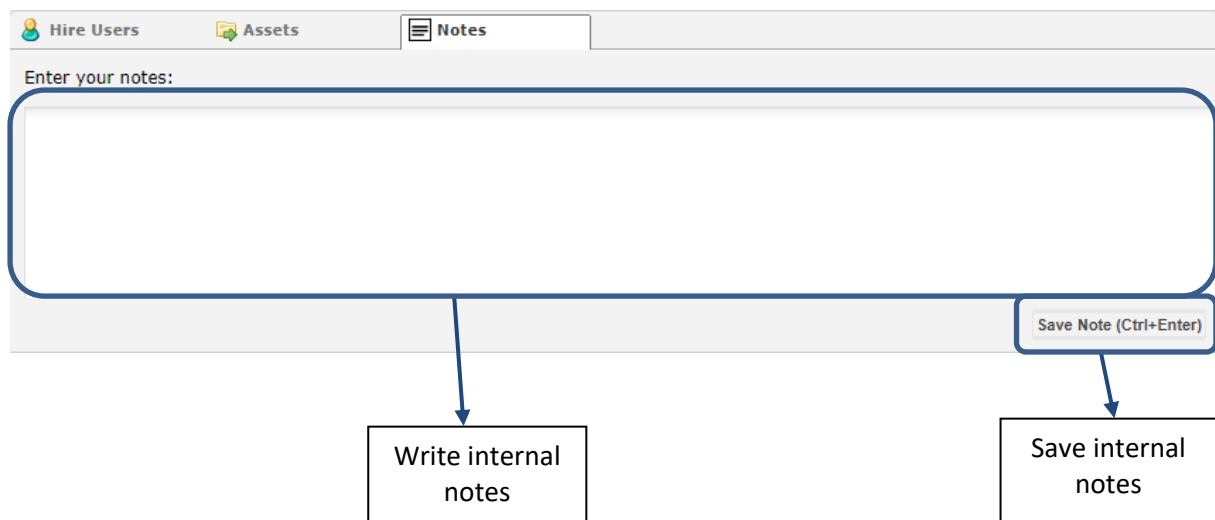
- vii. When the asset is on hire, it will be displayed on the Asset's status icons:



-  Asset is currently on hire to HIRE-CUSTOMER-NAME
-  Asset is hired to HIRE-CUSTOMER-NAME and hire duration is inactive
-  Asset is available to hire
-  No permission to hire asset

14.4 Notes

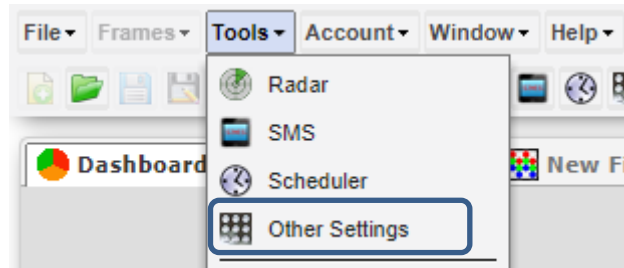
Save notes for each hire customer. These notes are only visible to users of your company.



15. Other Settings

Other Settings contains various special settings for assets.

The Other Settings feature is accessible under the “Tools” menu:



Other Settings feature will be displayed as follows:

The 'Other Settings' window is shown with four sections, each annotated with a callout box:

- Global On / Off Times:** Contains a checkbox for 'Activate On/Off Times', two time pickers for 'On Time' and 'Off Time' (both set to 00:00), and 'Upload' and 'Reset' buttons. An arrow points to the callout: "Set Global on/off times on asset".
- Time Zone Settings:** Contains a 'State/Country Presets' dropdown (set to VIC), a 'Time Zone' selector (+10 hours 00 mins), 'Daylight Savings' start and end dates (01/10/2023 and 07/04/2024), and 'Upload' and 'Reset' buttons. An arrow points to the callout: "Set time zone on asset".
- Change SMS Password:** Contains 'Old Password' and 'New Password' input fields (the first contains '123456'), and 'Upload' and 'Reset' buttons. An arrow points to the callout: "Change password for SMS commands on asset".
- Luminance Settings:** Contains a 'Luminance' dropdown (set to Auto) and 'Upload' and 'Reset' buttons. An arrow points to the callout: "Set luminance settings on asset".

15.1 Global On / Off Times

Global on/off times on an asset when enabled displays message only between on and off times. The display would remain off during all other times.

15.1.1 Activate global on/off times

- i. Tick “Active On/Off Times” checkbox to enable global on/off times
- ii. Select On time
- iii. Select Off time
- iv. Select asset(s) from Assets list
- v. Click Upload to upload settings to asset(s)

Global On / Off Times

Activate On/Off Times : ☒

On Time : 08 : 00

Off Time : 17 : 00

Upload Reset

Step i

Step ii

Step iii

Step v

- vi. Asset's status shows new global on/off times:

GPS Lat	37 49.3271S (-37.822...
GPS Long	144 55.0371E (144.9...
Global ON:OFF ...	0800:1700
Signal Strength	■■■ (10)

15.1.2 Deactivate global on/off times

- i. Untick “Active On/Off Times” checkbox to disable global on/off times
- ii. Select asset(s) from Assets list
- iii. Click Upload to upload settings to asset(s)

Global On / Off Times

Activate On/Off Times : ☐

On Time : 00 : 00

Off Time : 00 : 00

Upload Reset

Step i

Step iii

- v. Asset's status shows global on/off times as disabled:

GPS Lat	37 49.3072S (-37.821...
GPS Long	144 55.0706E (144.9...
Global ON:OFF ...	Disabled
Signal Strength	■■■ (8)

15.2 Time Zone Settings

Set time zone on an asset to run schedule and record radar logs in local time.

Select from Australian state or countries to prefill time zone and daylight savings date (if applicable).

Time Zone Settings

State/Country Presets : VIC

Time Zone : + 10 hours 00 mins

Daylight Savings :

Start Date : 01/10/2023

End Date : 07/04/2024

Upload Reset

➤ To set time zone on asset:

- i. Select from Australian state or country

State/Country Presets :

VIC

----- Australia -----

ACT

NSW

NSW, Broken Hill

NT

QLD

SA

TAS

VIC

WA

New Zealand

UK

France

- ii. Change time zone and daylight savings only if required
- iii. Select asset(s) from Assets list
- iv. Click Upload to upload settings to asset(s)

- v. Asset's status shows new time zone

Asset Status		Asset Info	
Name		Value	
Date		Fri, 09 Jun 2023	
Time		15 : 27 (+10:00)	
Firmware version		1.5.24VGE	
Serial number		A016THS328	

15.3 Change SMS Password

Sending SMS commands requires password. Use this setting to change password for SMS commands on asset.

Note: this feature is only available on request

▲ Change SMS Password

Old Password :

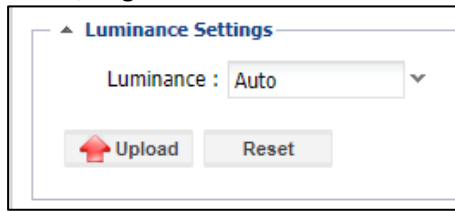
New Password :

➤ **To change SMS password:**

- i. Set Old Password and New Password
- ii. Select asset(s) from Assets list
- iii. Click Upload to upload settings to asset(s)

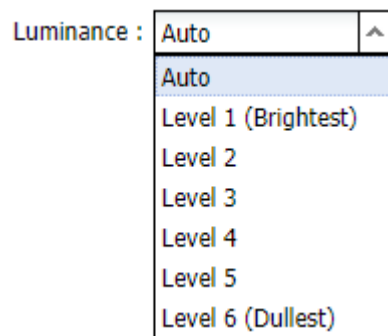
15.4 Luminance Settings

Set luminance/brightness on asset to automatic mode or manual mode.



➤ **To set luminance on asset:**

- i. Select luminance from dropdown
 - Use Auto for automatic mode
 - Use Level 1 to 6 for manual mode



- ii. Select asset(s) from Assets list
- iii. Click Upload to upload settings to asset(s)
- iv. Asset's status shows new Luminance

Automatic mode:

LED Output	4%
Luminance	Auto (06)
Radar	Disabled

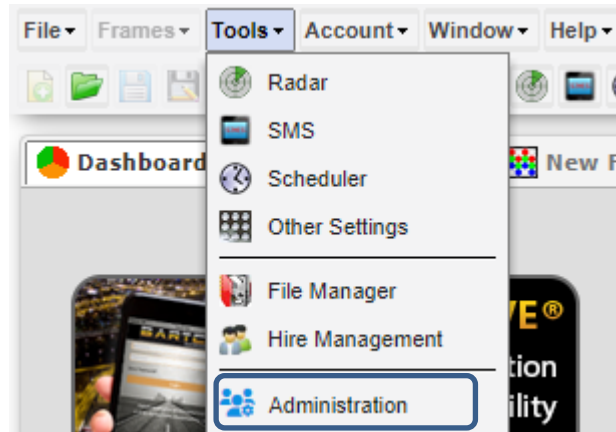
Manual mode at level 1:

LED Output	6%
Luminance	01
Radar	Disabled

16. Administration

This tab is only available if user has permission to access it.

The Administration feature is accessible under the “Tools” menu:

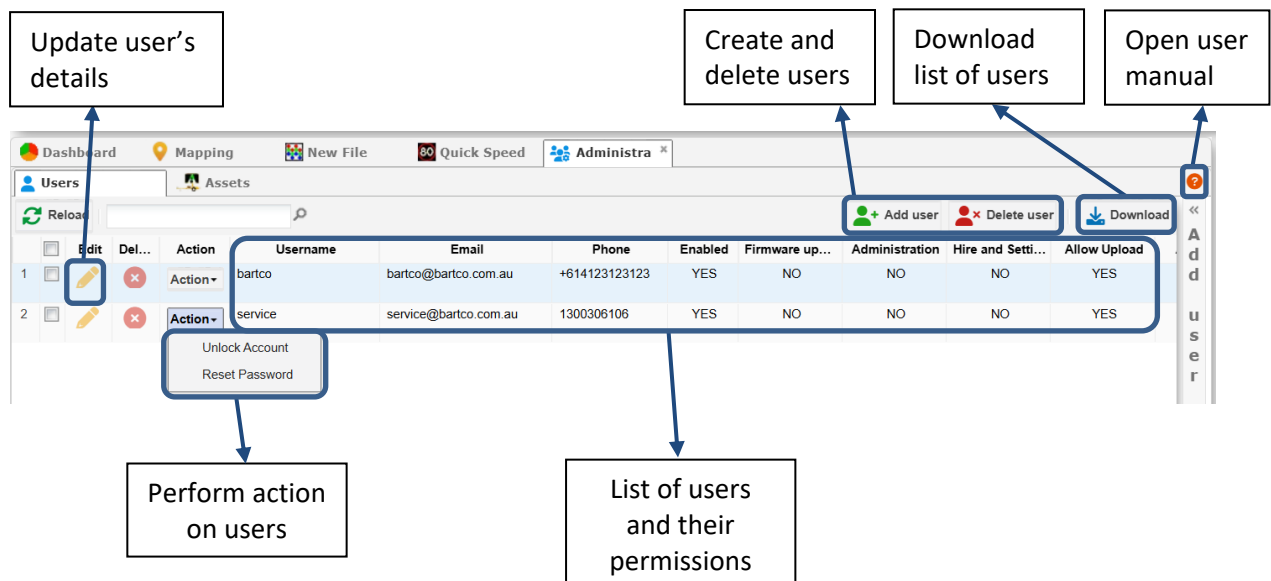


16.1 Users

Manage existing users or create new users using this tab.

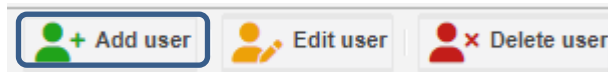
Note: For security purposes it is a good idea for each user to have their own user account.

Users will be displayed as follows:



16.1.1 Create User

- v. Click Add User



- vi. Enter username, email and phone number in the user form along with appropriate permissions.

Add user >>

Username:

Email:

Phone Number:

Password: Password is automatically generated and sent to user's email address

Enabled: ☒ Enable user account

Features

Administration: ☐ access Administration tab → Access Administration feature

Hire and Settings: ☒ access Hire Management and Log Settings → Access Hire Management and Log Settings features

Special Permissions

Firmware upgrade: ☐ remotely upgrade firmware on assets → Upgrade firmware to latest version on asset

Allow Upload: ☒ upload files and settings to assets → Upload files and settings to assets

Allow Save: ☒ create and modify files → Create and modify files

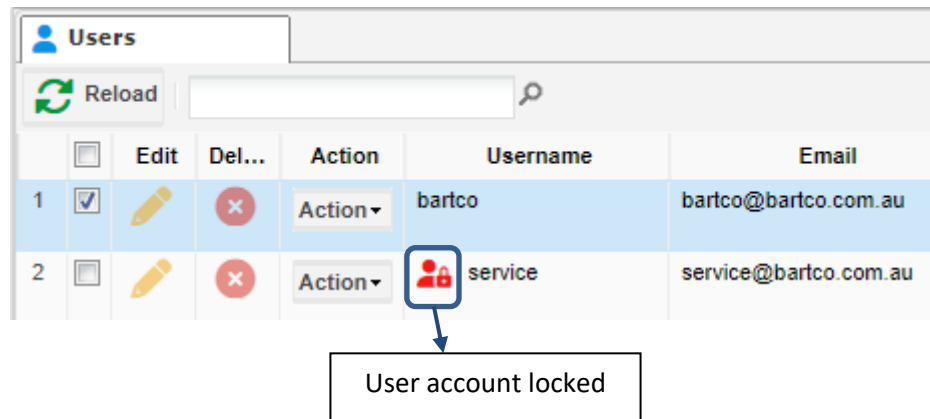
- vii. Click Add user

- viii. The new user will be added in the Users list

			Action	Username	Email	Phone	Enabled	Administration	Hire and Setti..
1			Action	bartco	bartco@bartco.com.au	+61412123123	YES	YES	YES
2			Action	service	service@bartco.com.au	22	YES	NO	NO
3			Action	testuser	email@bartco.com.au	+61111222333	YES	NO	YES

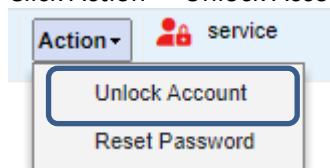
16.1.2 Unlock Account

User account gets locked temporarily due to incorrect login attempts. Users with Administration tab can unlock those temporarily locked user accounts.

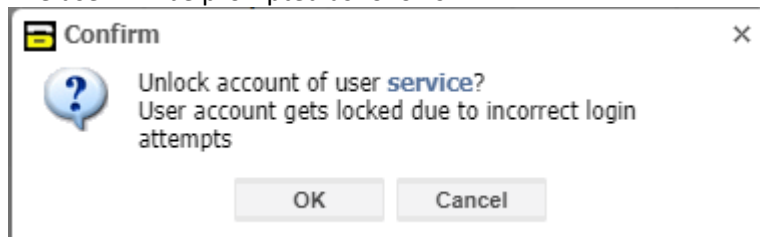


➤ **To unlock user account:**

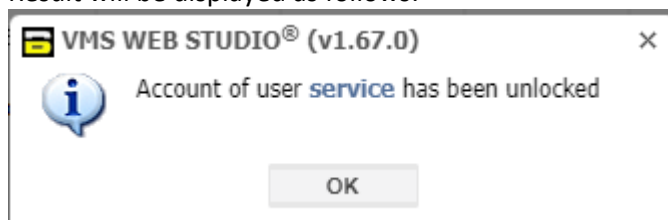
- i. Click Action -> Unlock Account



- ii. The user will be prompted as follows:



- iii. Result will be displayed as follows:



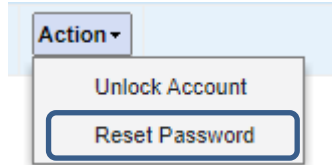
- iv. "service" user account has been unlocked and the user will then be able to login again

16.1.3 Reset Password

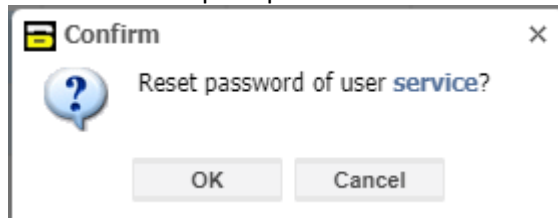
Reset user's password – same as "Forgot your password" on login page

➤ **To reset password:**

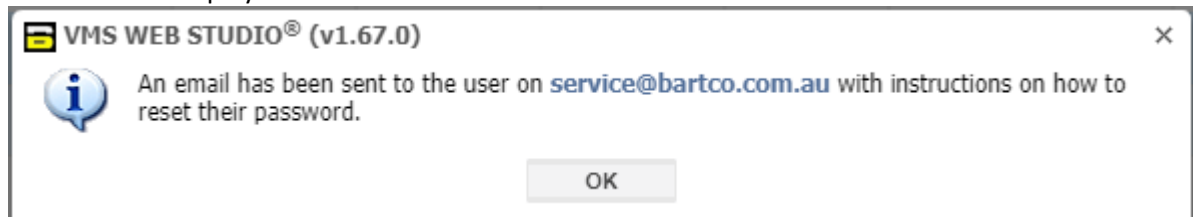
- i. Click Action -> Reset Password



- ii. The user will be prompted as follows:



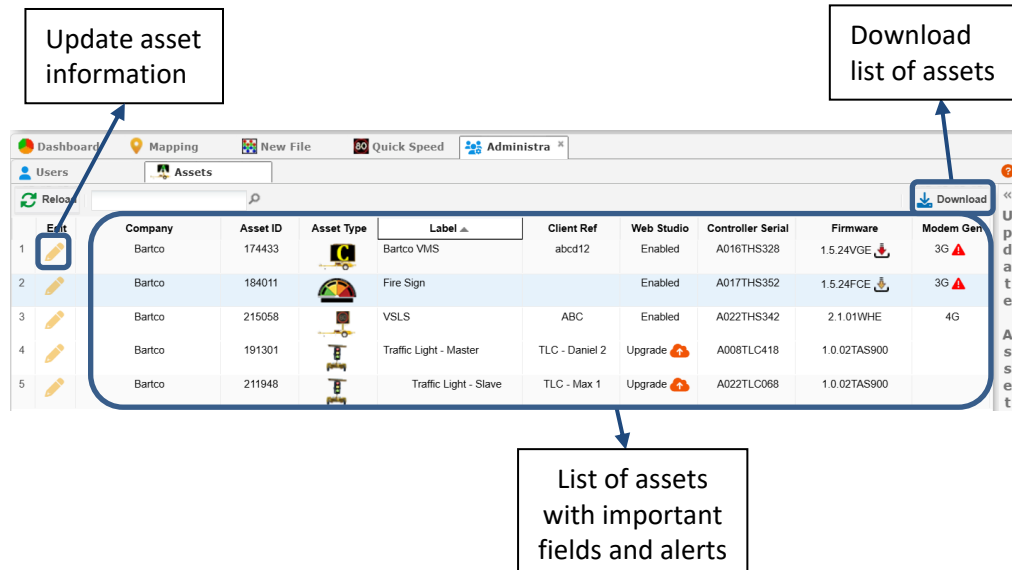
- iii. Result will be displayed as follows:



16.2 Assets

Assets tab lists all your assets in easily accessible table format. Get an overview of 3G/4G assets and manage various fields of an asset.

Assets will be displayed as follows:



The screenshot shows the 'Assets' tab in the VMS WEB STUDIO interface. The interface includes a top navigation bar with tabs like 'Dashboard', 'Mapping', 'New File', 'Quick Speed', and 'Administra'. Below the navigation bar, there's a 'Users' section and a 'Assets' section. The 'Assets' section contains a table with columns: 'Company', 'Asset ID', 'Asset Type', 'Label', 'Client Ref', 'Web Studio', 'Controller Serial', 'Firmware', and 'Modem Gen'. The table lists five assets. Annotations with arrows point to specific features: 'Update asset information' points to the 'Edit' icon in the first row; 'Download list of assets' points to the 'Download' button in the top right corner; and 'List of assets with important fields and alerts' points to the table itself.

	Company	Asset ID	Asset Type	Label	Client Ref	Web Studio	Controller Serial	Firmware	Modem Gen
1	Bartco	174433	Bartco VMS		abcd12	Enabled	A016THS328	1.5.24VGE	3G
2	Bartco	184011	Fire Sign			Enabled	A017THS352	1.5.24FCE	3G
3	Bartco	215058	VSLs		ABC	Enabled	A022THS342	2.1.01WHE	4G
4	Bartco	191301	Traffic Light - Master		TLC - Daniel 2	Upgrade	A008TLC418	1.0.02TAS900	
5	Bartco	211948	Traffic Light - Slave		TLC - Max 1	Upgrade	A022TLC068	1.0.02TAS900	

16.2.1 Update Asset Details

- i. Select an asset from Assets grid
- ii. Double click on selected asset or click Edit asset button



- iii. Update asset's Label, Client Reference and Radar Fitted fields

Update Asset

Asset ID: 174433

Controller Serial: A016THS328

Label: Bartco test board

Client Ref: Test

Radar Fitted:

☐ Radar fitted on the asset

Update Asset

Company: Bartco

Asset Type: VMS 400 Amber

Trailer VIN: TBD-rd-vin

Trailer Rego: TBD-rd-rego

Modem Gen: 3G

Web Studio: Enabled

Request Change

Firmware: 1.5.24VGE

Note: New firmware available to upgrade

Upgrade Firmware

Hire Info: Available

Cancel

Update asset's fields

- iv. Request Bartco's service team to update Company, Asset Type, VIN, Registration, Modem Gen and Web Studio fields of an asset

Update Asset >>

Asset ID: 174433

Controller Serial: A016THS328


Label: Bartco test board

Client Ref: Test

Radar Fitted: ☐ Radar fitted on the asset


Update Asset

Company ? Bartco

Asset Type ?  VMS 400 Amber


Trailer VIN ? TBD-rd-vin

Trailer Rego ? TBD-rd-rego

Modem Gen: 3G 

Web Studio: Enabled

Request Change

Firmware: 1.5.24VGE 

Note: New firmware available to upgrade

Upgrade Firmware





Hire Info: Available

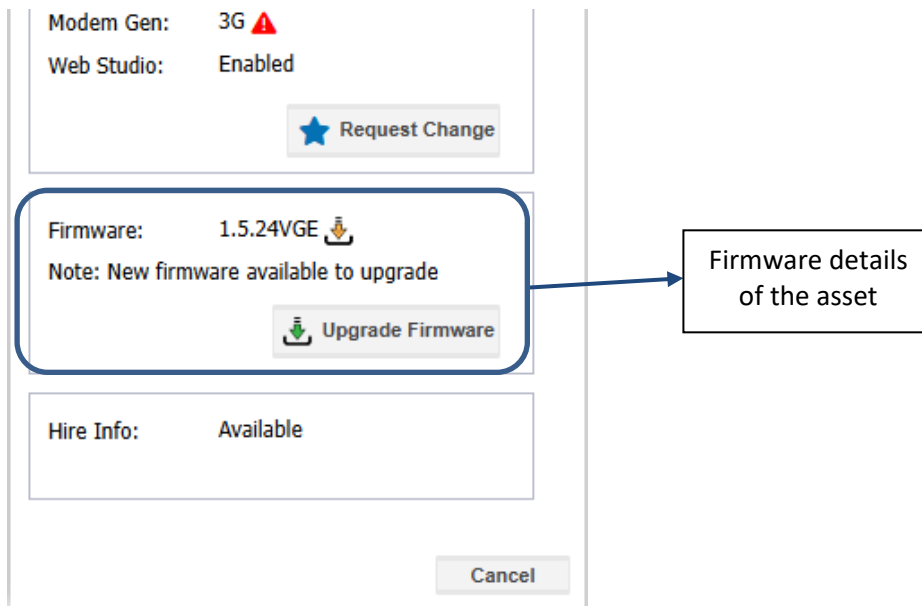
Cancel

Request Bartco's service team to update information of an asset

16.2.2 Upgrade Firmware

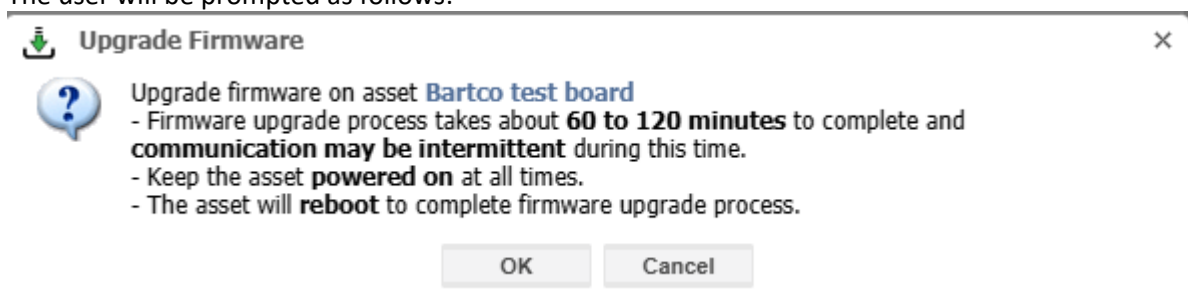
“Upgrade Firmware” button is only available when new firmware is available to upgrade

-  Firmware critically out of date (warning)
-  New firmware available to upgrade
-  Firmware upgrade is in progress
-  Latest firmware installed

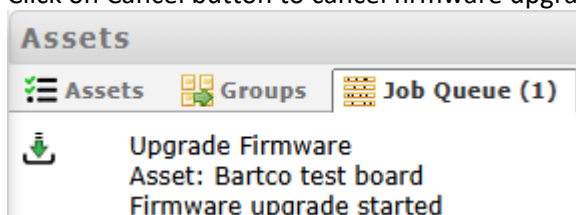



To upgrade firmware on asset:

- i. Click on Upgrade Firmware in Administration – Assets tab or right click on the asset in Assets list
- ii. The user will be prompted as follows:



- iii. Click on OK to start firmware upgrade process on the selected asset(s). The job will appear in Job Queue. Click on Cancel button to cancel firmware upgrade.

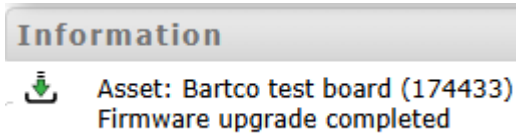


- iv. The asset's status icon will change to 

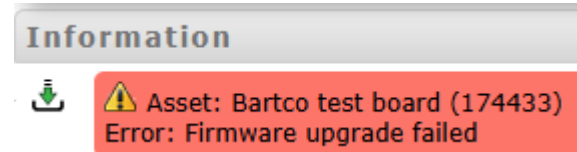


- v. Firmware upgrade takes about 60 to 120 minutes to complete.
On completion, the result will be displayed in the Information panel at the bottom of the page.

Success:



Failed:



17. Special assets






17.1 Electronic Fire Danger Rating Signs (Fire Signs)

Bartco's Electronic Fire Danger Rating signs (fire signs) are programmed with a fire rating and corresponding message as below:

Fire Rating	Message
No Rating	NO RATING
Moderate	PLAN AND PREPARE
High	BE READY TO ACT
Extreme	TAKE ACTION NOW
Catastrophic	LEAVE BUSHFIRE AREA










17.1.1 Fire sign – 4 ratings

The following table shows fire rating with its message on the new 4 ratings fire sign:

Fire Rating	Message (frame 1) (00-00-0000 replaced with date dd-mm-yyyy)
No Rating	
Moderate	
High	
Extreme	
Catastrophic	

17.1.2 Fire sign – retrofitted

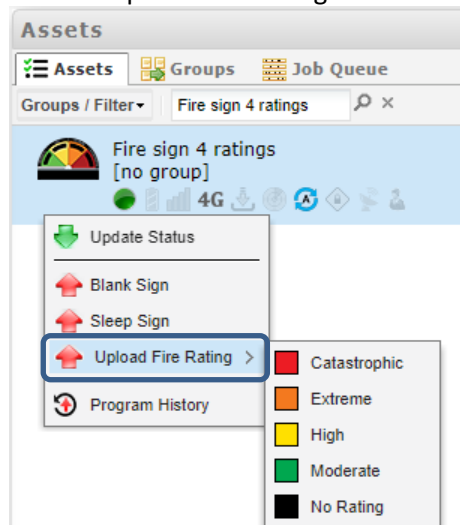
The following table shows fire rating with its message on retrofitted fire sign:

Fire Rating	Message (frame 1)	Message (frame 2)
No Rating		
Moderate		
High		
Extreme		
Catastrophic		

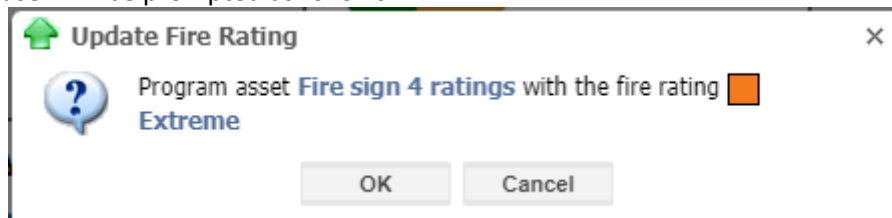
17.1.3 Upload Fire Rating

To upload fire rating on an asset:

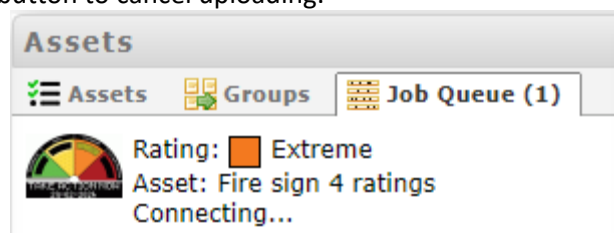
- i. Select asset(s) from the Assets list
- ii. Right click on selected asset(s)
Select a rating from the menu "Upload Fire Rating"



- iii. The user will be prompted as follows:

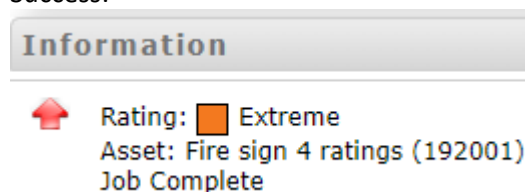


- iv. Click on OK to upload fire rating on the selected asset(s). The job will appear in Job Queue. Click on Cancel button to cancel uploading.



On completion, the result will be displayed in the Information panel at the bottom of the page.

Success:



Failed:



17.1.4 Asset Status – special fields

Special fields in Asset's status:

FDR	Fire Danger Rating being displayed on the fire sign: <ul style="list-style-type: none"> - No Rating - Moderate - High - Extreme - Catastrophic
-----	---

17.2 VSLs

17.2.1 Upload Speed

Use [Quick Speed](#) to upload speed to a VSLs

17.2.2 Asset Status – special fields

Special fields in Asset's status:

Annulus Flashing	Annulus Flashing state of VSLs <ul style="list-style-type: none"> - Synchronized - Unsynchronized - Unknown (unsupported firmware version)
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17.3 Traffic Lights

17.3.1 Asset Status – special fields

Special fields in Asset's status:

Control Type	Control type selected: <ul style="list-style-type: none"> - One Way Mode - Two Way Mode
Operation Mode	Operation mode selected: <ul style="list-style-type: none"> - POWER OFF - AUTO - MANUAL - SENSOR - FLASH YELLOW - FLASH YELLOW ON FAULTY - MAINTENANCE
Fault	Fault reported
Is Master	YES if this Traffic Light is a master otherwise NO
Radio Network	Radio network


Special fields in Asset's status for Master only:

Remote Controllers	List of Radio Remote controllers connected to master
Phase Time	Various phase time of Master and slave(s) in format: Red : Yellow : Max Green : Extend Green
Slave Info	Slave's controller serial number Additional information about all the slaves connected to master
Radio RSSI	Slave's RSSI
Battery	Slave's battery

18. Troubleshooting

- No Communication

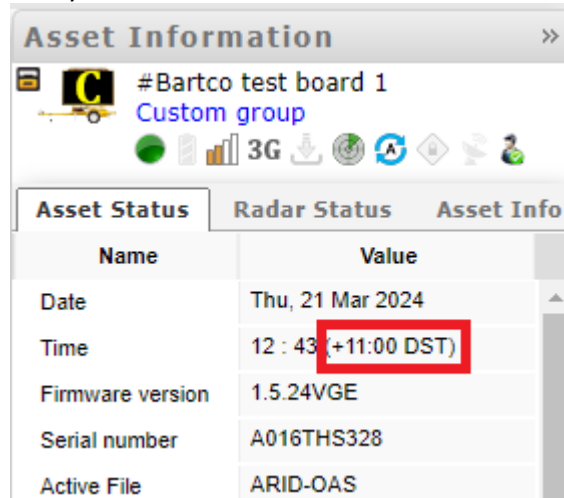
When the asset doesn't communicate on Web Studio with the following error:

 Asset: BARTCO test board (174433)
Error: Cannot connect to asset

POSSIBLE CAUSE	POSSIBLE SOLUTION
Asset out of mobile phone coverage	Move asset to better coverage
Sim card not inserted properly	Check sim card orientation (Reset power after re-positioning sim)
Modem Failure	Contact Bartco
Electrical	Check fuses and battery level

- Daylight Savings change

- Verify time zone on assets to ensure accurate operation of Schedule, Radar, etc.



- Upload time zone settings to an asset as described in section [15.2 Time Zone Settings](#)

Please contact Bartco's technical support on 1300 306 106 or service@bartco.com.au for any technical assistance.