

## Bus Tracking

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### Overview

The Bus Tracking product integration maps the locations of buses and their stops, per bus route.

The following vendors are currently supported:

- Samsara
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### User Experience

The following section describes information relating to the user experience for the Bus Tracking product integration.

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#### User Activities

Users can view where the buses for various routes are currently located. They can also look up stops per route.

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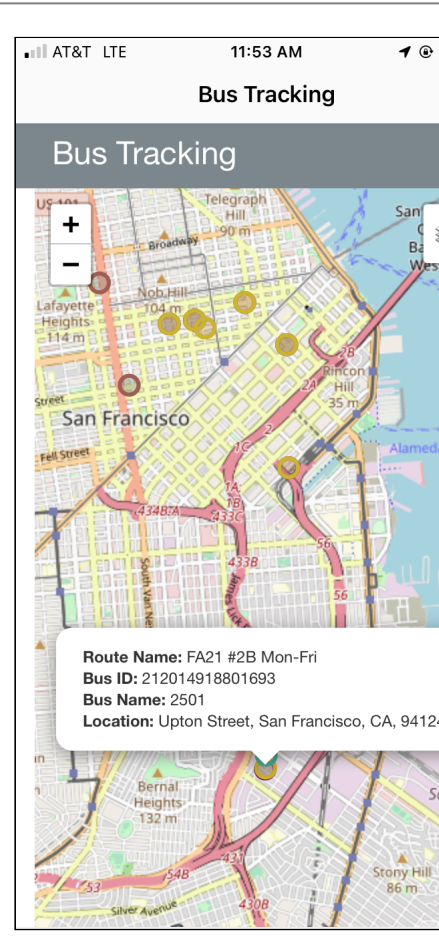
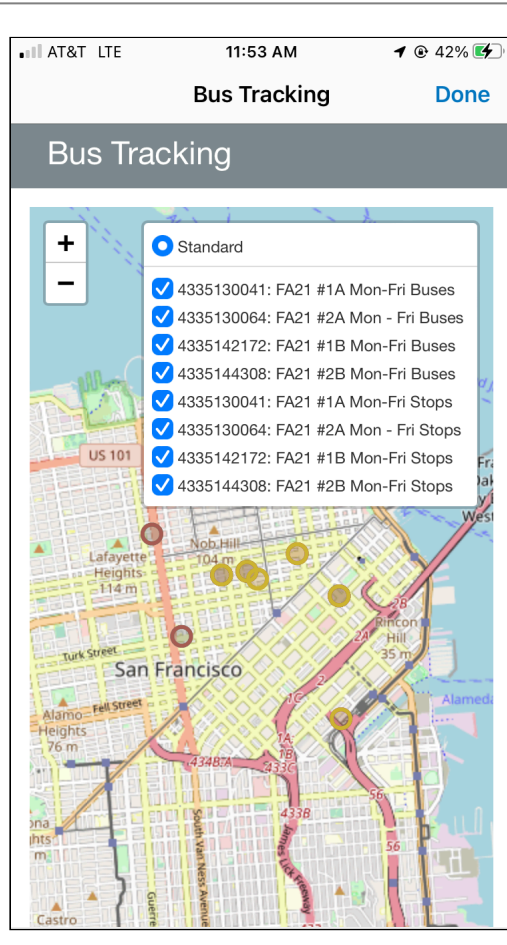
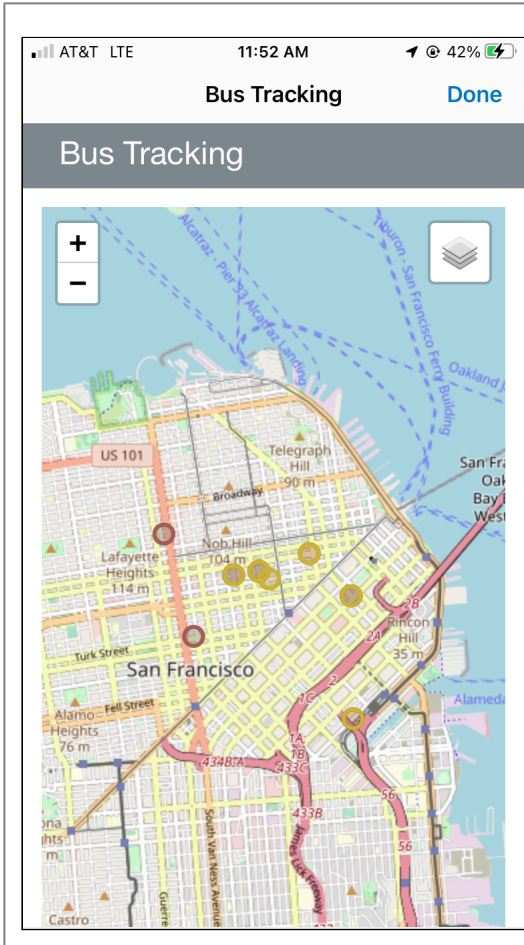
#### Authentication

There is no need for additional user authentication besides the API authentication.

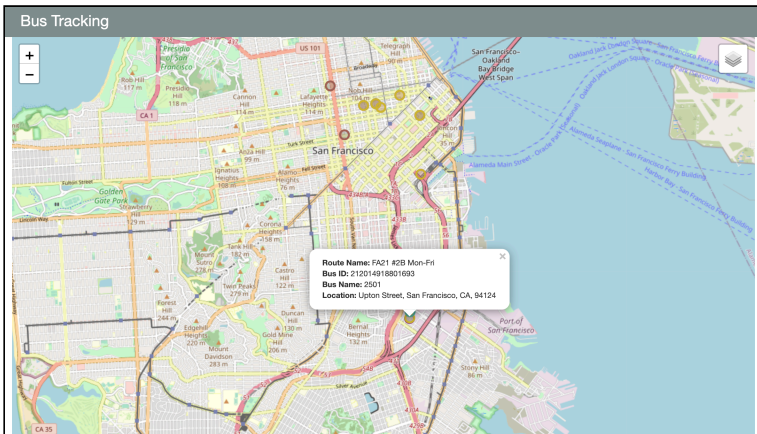
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#### Screenshots

The following is an example of the Bus Tracking page:



Mobile view example



Web view example

## Technical Overview

The following section describes technical information for the Samsara product integration.

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## Prerequisites

The following prerequisites are required for the Samsara product integration.

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## Configuration

Configuration Option	Description	Mandatory	Data Type	Default	Example
<b>Manage Integration</b>					
Enable Product Integration	Select to enable the product integration on the user's campusM app.	No	Checkbox	Unselected	
Product Integration Description	A description of the product integration for internal use.	Yes	String		
Screen Title	The title that appears in the top header of the service.	No	String	Bus Tracking	
<b>Vendor</b>					
Vendor Name	Defines to which vendor the integration connects.	Yes	Drop-down list		Samsara
<b>Samsara Configuration</b>					
This section contains the Samsara API details to define the API structure. You can test the API configuration. See <a href="#">Testing API Product Integration Configuration</a> .					
Authentication Type	Authentication type against the web service. The options are: <ul style="list-style-type: none"><li>No Auth</li><li>Bearer token</li></ul>	Yes	Drop-down list		
Bus Marker Size	This specifies the radius of the bus markers and user location marker on the map. The value sets the radius of the circle in meters.	No	Number	100	

Bus Route Timeframe	Sets the timeframe to query for routes.	Yes	Number	8	
Timezone	Sets the time zone for the routes.	Yes	Drop-down list	UTC	
<b>Look and Feel</b>					
Primary Theme Color	Select a color for the main elements on the page.	No	Color Picker	#444444	
Secondary Theme Color	Select a color for the secondary elements on the page.	No	Color Picker	#6f8ea4	
<b>Text/Labels</b>					
Bus Tracking Header	Pager header	No	String	Bus Tracking	
User's Current Position Message	This appears in the route list.	No	String	Your current position	
User's Current Position Label	This appears in the popup for the map marker for the user's location.	No	String	This is your current location.	
Route Name Label	Label used in the map marker popups	No	String	Route Name	
Bus ID Label	Label used in the map marker popups	No	String	Bus ID	
Bus Name Label	Label used in the map marker popups	No	String	Bus Name	
Location Label	Label used in the map marker popups	No	String	Location	
Stop Name Label	Label used in the map marker popups	No	String	Stop Name	

Address Label	Label used in the map marker popups	No	String	Address	
Scheduled Arrival Times Label	Label used in the map marker popups	No	String	Scheduled Arrival Times	
Scheduled Departure Times Label	Label used in the map marker popups	No	String	Scheduled Departure Times	
Live Sharing URL Label	Label used in the map marker popups	No	String	Live Sharing URL	
Map Layer Bus Label	Label for the map layer associated with buses for a specific route	No	String	Buses	
Map Layer Stop Label	Label for the map layer associated with stops for a specific route	No	String	Stops	
Base Map Layer Label	Name of the base map layer	No	String	Standard	
Error Message	Message to display when there's an error retrieving the data.	No	String	Unable to reach the service at this time. Please try again later.	
<p><b>Import/ Export Configuration</b></p> <p>You can configure product integration and then export it to another campusM environment, for example, from sandbox to production or from preview to production.</p>					
Export	Create a JSON file with all product integration configurations.	No			
Import	Use this option to load configuration from JSON of an exported product integration.	No			

- Samsara

- Have your bearer token for authentication at hand for the configuration page.
- API Information
  - This product integration uses the following Samsara endpoints. These endpoints are expected to be populated accurately.

- GET <https://api.samsara.com/fleet/routes?startTime={{ example start time }}&endTime={{ example end time }}>
  - This is used to grab the various routes. This also gives us the buses and stops associated with a given route.
- GET <https://api.samsara.com/addresses>
  - This is used to grab the locations of the bus stops' route.
- GET <https://api.samsara.com/fleet/vehicles/locations>
  - This is used to grab the current locations of the buses on the routes.
- These API calls occur every 15 seconds and are centralized to avoid hitting API limits.