SmartTruckRoute iOS

Developer Documentation

help@smarttruckroute.com

SmartTruckRoute allows developers and fleet managers to easily send (or push) destinations directly to the app from their own apps or simply texting or emailing the points. The different methods available to you for communicating with SmartTruckRoute to accomplish truck specific routing and navigation are outlined below. Feel free to contact us if you have any questions.

<u>**Types of calls**</u>

<u>PUSH</u> - SmartTruckRoute automatically launches and creates the route

<u>VIA</u> - create a route that contains via points, such as 10 stops within a route

<u>ROUTE</u> - when you need to specify an origin use the ROUTE call to give both origin and destination.

There are several ways to communicate to our app, this is also called Deep Linking when passed directly from an app or web page:

1. **Text** to the device (user taps the link) - this solution is useful when testing your implementation when integrating truck routing from your app. Also, a fleet manager can send just one destination for example, perhaps in an emergency to quickly get the driver the correct destination and begin routing from the current position. The driver has control over when to begin that route.

2. **Email** to the device, keep in mind that email links require the http:// prefix, the user then taps the link. Once again, this is useful when testing your implementation or there is an emergency to quickly get the driver the correct

destination and begin routing from the current position. Typical use case would be an existing logistics system that offers connection to drivers. The driver has control over when to begin that route.

3. **Push** notification such as a firebase notification (FCM), Apple notification or others. Same format as #1 above, showing the "Text" solution.

4. **Web redirect** from within your web page – perhaps you have a button within your web page to allow navigation. Web directs can be used online if you have a newsletter with a button for navigation and you wish to automatically call SmartTruckRoute rather than Google Maps for example.

Redirect to SmartTruckRoute app from your app

In the case where you need to test internally to see if your app is properly calling SmartTruckRoute (without sending a route), or in the case of digital marketing such as a link to SmartTruckRoute from within social media or newsletter, use this format:

teletype.smarttruck://smarttruckroute.com/truck?

Send Destination and Automatically Route Using SmartTruckRoute

Destination can be texted or emailed to the device, when the link is tapped, the app will be launched (unless it is already running) and the route will automatically be created with the specified destination. Push & Redirect automatically.

teletype.smarttruck://smarttruckroute.com/via/truck?{followed by parameters described below}

For example, the following string has two "via" points, and the last point is the destination:

teletype.smarttruck://smarttruckroute.com/via/truck?vaddr=WP1,8900NW35thLn_Doral_ FL33172@25.8072391,-80.3392561&vaddr=WP2,5510SW76thSt_Miami_FL33143@25 .6997704,-80.2834048&daddr=WP11,7396SRockNationRd_Dixon_IL61021@41.91468 45,-89.3933182

Parameters

"**vaddr**" - this is an optional parameter, offering 10 maximum allowable points. The points are processed in the order received.

"vaddr=Address(label)@lat,lon"
ex. "vaddr=Walmart_Dist_Ctr/@28.508072,-82.2192753

"**daddr**" - this is the last address which must actually be specified in GPS coordinates as shown in the call request therefore it is the final "destination" and is required for all requests.

"daddr": Destination address *Always required ex. "daddr=label@lat,lon" such as "daddr=Anheuser@40.8070072,-73.8749063" or
"daddr=WP1,8900NW35thLn_Doral_FL33172@25.8072391,-80.3392561"

Keep in mind that the information after the = sign and before the @ symbol is called the "label" - that can be anything you wish including the street address or a name, however the SmartTruckRoute app is only interpreting and passing the GPS coordinates when we use via point routing (in decimal degree format) for the points. Do not attempt to use addresses for via point routing. If your label is composed of more than one "word" replace spaces with the underscore character or commas.

Example of via point routing with "via" points and the final destination:

teletype.smarttruck://smarttruckroute.com/via/truck?vaddr=WP1,8900NW35thLn_Doral_FL33172@25.8072391,-80.3392561&vaddr=WP2,5510SW76thSt_Miami_FL33143@25.6997704,-80.2834048&vaddr=WP3,2490BriarcliffRdNE_Atlanta_GA30329@33.8269596,-84.331525&vaddr=WP4,4770BufordHwyNE_Atlanta_GA30341@33.8819155,-84.2903265&vaddr=WP5,3173LeconteAve_Atlanta_GA30319@33.882249,-84.3353163&vaddr=WP6,5681KingsportDr_Atlanta_GA30342@33.9096952,-84.383362&vaddr=WP7,181HagensRd_StPauls_NC28384@34.839904,-78.9663134&vaddr=WP8,2425PrincessAnneRd_VirginiaBeach_VA23456@36.7522145,-76.054795&vaddr=WP9,892LosColonisDr_VirginiaBeach_VA23456@36.744032,-75.9876463&vaddr=WP10,2693RelianceDr_VirginiaBeach_VA23452@36.8119329,-76.0591946&daddr=Destination,7396SRockNationRd_Dixon_IL61021@41.9146845,-89.3933182 .

.

"**xaddr**" : Optional avoid address, can have multiple "xaddr".

"**minimizeTolls**": Optional toll setting. "1" true, routes will avoid tolled roads as much as possible, "0" or if omitted, routes will use tolled roads as normal.

PUSH DESTINATION ADDRESS

Example: send the destination address (use text message, email or push notification) to the device. Example to call SmartTruckRoute and automatically enter destination: teletype.smarttruck://smarttruckroute.com/push/truck?daddr=44+School+St,+Boston,+MA+02108

PUSH DESTINATION W/O LAT, LONG (Address without Lat, Long)

teletype.smarttruck://smarttruckroute.com/push/truck?daddr=5+South+84th,+Tolleson,+AZ+85353

 PUSH DESTINATION WITH LAT, LONG

teletype.smarttruck://smarttruckroute.com/route/truck?daddr=Business-Park-NY@40.7470198,-73.4940509

PUSH DESTINATION WITH LAT, LONG & VEHICLE SETTINGS (Destination Address with lat, long is mandatory)

teletype.smarttruck://smarttruckroute.com/route/truck?daddr=NewYork@40.712776,-74.005974&vehConfig=us,124,300,85,500,0,5,1,1

Where the resulting vehicle configuration is: 12'5" high, 30' long, 8'6" wide, 5,000 pounds, no hazmat, 5 axles, 1 trailer, fifth wheel coupling.

Default configuration (USA):

Note that SmartTruckRoute uses the following defaults so there is no need to specify these each time you send a request (unless you need to overwrite an existing set of specifications.

13'6" high, 53' trailer (length) ,8'6" width, 80,000 lbs weight, no hazmat, 5 axles, one

trailer, 5th wheel coupling. Length only refers to the trailer length or in the case of box trucks, the cargo area.

vehConfig Parameters:

"vehConfig": Optional vehicle configuration for requested route. Car routes ignore this parameter. For non-car routes, if omitted, existing client settings are used.

ex. "vehConfig=units,height,length,width,weight,hazmat,axles,trailers,5thWheel"

Units: "us" for inches or pounds or "m" for centimeters or kilograms

Height,Length,Width: Integer value in inches or centimeters depending on units

Weight: Integer value in pounds or kilograms depending on units

Hazmat: Hazardous materials permit class, range 0 to 9 (0 for none)

Axles: Total number of axles, range 2 to 33

Trailers: Total number of trailers, range 0 to 3 (0 for none)

5thWheel: "0" for drawbar towing or none. "1" for kingpin with 5th Wheel coupling

GPS Coordinate parameters:

lat: double value for latitude in the range -90.0 to 90.0

lon: double value for longitude in the range -180.0 to 180.0

Call Type parameters:

type: "car" or "truck"

Note: Car type can be used if you want to check the difference in routing between a car route and a truck route using our system. Most likely you will use the "truck" parameter for your calls.

Route Type:

"minimizeTolls": Optional toll setting. "1" is true, routes will avoid tolled roads as much as possible. "0" or if omitted, routes will use tolled roads as normal.

PUSH DESTINATION WITH LAT, LONG, VEHICLE SETTINGS, VIA ADDRESS (Destination Address with lat, long is mandatory)

teletype.smarttruck://smarttruckroute.com/route/truck?daddr=NewYork@40.712776,-74.005974&vaddr=Boston@42.360081,-71.058884&vehConfig=us,162,636,102,8000,0,5,1,1

Route Type:

There is no parameter for Route Type, all routes will be performed using Quickest for the appropriate vehicle (ie. Car, Truck, RV, Bus, etc.).

Via Point Optimization

To optimize routing you are welcome to take advantage of the http://www.SmartTruckDispatch.com free web service. Contact us if you need further information.