


# Warehouse Tools Set

## Warehouse Query

1. Click **Connect** to create a connection to the Warehouse.
  - Note, when the websocket is connected, the dot next to **Warehouse Query** in the navbar at the top will change to green.

The screenshot shows the 'Connected Vehicle Warehouse Tools' interface. At the top, a dark navigation bar contains the title and several status indicators: 'Warehouse Query' (green dot), 'SDC Subscription' (red dot), 'Data Deposit' (green dot), and 'Map Application' (red dot). Below the navigation bar, the main interface is divided into several sections. The top section is for 'Warehouse URL', with a text input field containing 'wss://webapp2.connectedvics.com:443/whfools23/websocket' and 'Connect' and 'Disconnect' buttons. Below this is the 'Query Parameters' section, which includes fields for 'System Name' (SDPC 2.3), 'Dialog ID' (154 (vehSitDataMessage)), 'Start Date', 'End Date', 'NW Corner Lat/Lng' (43.65296911628543, -85.9470748901367), and 'SE Corner Lat/Lng' (40.9603819457747C, -81.0380894775390). There are also 'Operator' dropdowns for the date and coordinate ranges. To the right of these fields are 'Order By' (Field, Descending) and 'Query Options' (Skip: 0, Limit: 100, Hex encoding). A 'Submit Query' button is at the bottom right of this section. Below the query parameters is the 'Query Results' section, which contains a text area displaying 'CONNECTED: sessionId=(10.109.156.251.443)<->r(96.244.83.75.58758)' and a 'Clear Results' button. To the right of the query results is the 'Query History' section, which is currently empty and has a 'Clear History' button. At the bottom center, there is a 'Record Count' field.

2. Define the query parameters.
  - Choose the system to run the query against, what type of messages to query for, specify a time range for the query, and define a bounding box for the area to search in.
  - Note that clicking the globe button next to the Lat/Lng selections will display a map allowing visual selection of latitude and longitude.
3. Define the query options.
  - Specify how many results the query should return, what encoding the results should be in, and the order of the results.
4. Click **Submit Query** to send the query to the warehouse.
  - The results will appear in the **Query Results** text area.
  - Note that although the cursor in all text areas is the prohibition sign  because the text areas are read-only, you can select the content of any text area and copy it via standard shortcut keys or a context menu available on the right click. The easiest way to copy all content from a text area is to click in the text area and then type Ctrl-A to select all lines and Ctrl-C to copy to clipboard.
  - The query that is sent to the Warehouse will be displayed in the **Query History** text area. This query can be used as direct input when using the Java Websocket Client.

Connected Vehicle Warehouse Tools

Warehouse Query

SDC Subscription

Data Deposit

Map Application

Warehouse URL
wss://webapp2.connectedvics.com:443/whtools23/websocket
Connect
Disconnect

System Name
SDPC 2.3
Dialog ID
162 (IntersectionSIData)
Start Date
2017-03-30T00:00:26
End Date
2017-03-30T23:55:29
NW Corner Lat/Lng
43.65296911828543
SE Corner Lat/Lng
40.96538194577476

Order By
Descending
Query Options
0
1
Hex
Encoding
Submit Query

Query Results
CONNECTED: sessionId=(10,100,156,251,443)->(96,244,83,75,58713)
2086260183a77a1f632005c4ee0700030c7d91113b7daeb0e72098e01cc000606e8753b6670
7c469622a45860708160308a1001010000639a6116198482a9c439a619729aeb1040800022
c02142002020000c734c26f33b9549cc734c36753bd52c410000458025400404000019e69
8549e77aca789e69672ca77ac4648200008b01050800808000031cd30b77cef594ff31cd3072c
ef5887a04000116028a10010100000639a619579deb2912639a620e39deb11440800022c06142
0020909000c734c37173bd6520c734c45f73bd2198100004580e48400404000019e69867e27
7ac0019e698aa1a77ac7368200010b0209080090a400031cd30c9ceef59f3d31cd315434ef59f9
0400021604a92110010048009090a618b69e9e4142639a62a980a61a26c8080042c19e4200020
0000c734c0053bd686c734b43d3bd5b108100004581668400404000019e69786a77ad12f1
8e697e0277ad6038200008b030d0800808000031cd2fe0e4ef5a29931cd2fb11cef5ac42040001
Clear Results
Record Count
1
Clear History

Query History
QUERY {"systemQueryName":"SDPC
2.3","dialogID":"162","startDate":"2017-03-30T04:00:26.009Z","start
DateOperator":"GTE","endDate":"2017-03-31T03:55:29.010Z","end
DateOperator":"LTE","nwLat":"43.652969118285434","nwLon":"","
85.94707489013672","seLat":"40.96538194577475","seLon":"","
81.03858947753906","orderByOrder":"","
1","skip":"0","limit":"1","resultEncoding":"hex"}
Clear History

- Repeat Steps 2 through 4 as desired.
- To clear any text area, click the respective **Clear Results** button under the text area.
  - Note this will have no impact on the connection or queries: only on the text being displayed.

Connected Vehicle Warehouse Tools

Warehouse Query

SDC Subscription

Data Deposit

Map Application

Warehouse URL
wss://webapp2.connectedvics.com:443/whtools23/websocket
Connect
Disconnect

System Name
SDPC 2.3
Dialog ID
162 (IntersectionSIData)
Start Date
2017-03-30T00:00:26
End Date
2017-03-30T23:55:29
NW Corner Lat/Lng
43.65296911828543
SE Corner Lat/Lng
40.96538194577476

Order By
Descending
Query Options
0
1
Hex
Encoding
Submit Query

Query Results
Clear Results
Record Count
Clear History


Query History
QUERY {"systemQueryName":"SDPC
2.3","dialogID":"162","startDate":"2017-03-30T04:00:26.009Z","start
DateOperator":"GTE","endDate":"2017-03-31T03:55:29.010Z","end
DateOperator":"LTE","nwLat":"43.652969118285434","nwLon":"","
85.94707489013672","seLat":"40.96538194577475","seLon":"","
81.03858947753906","orderByOrder":"","
1","skip":"0","limit":"1","resultEncoding":"hex"}
Clear History

- When done, click **Disconnect** to close the Warehouse connection.
  - Note, when the websocket is disconnected, the dot next to **Warehouse Query** in the navbar at the top will change to red.

## SDC Subscription

1. Click **Connect** to create a connection to the Warehouse.
  - Note, when the websocket is connected, the dot next to **SDC Subscription** in the navbar at the top will change to green.

The screenshot shows the 'Connected Vehicle Warehouse Tools' interface. At the top, a dark navbar contains the title and several status indicators: 'Warehouse Query' (red dot), 'SDC Subscription' (green dot), 'Data Deposit' (green dot), and 'Map Application' (red dot). Below the navbar, a instruction bar reads: 'To Subscribe to the SDC: 1. Connect to the Warehouse 2. Enter and Submit your criteria 3. View connection'. The main content area is divided into two panels. The left panel, titled 'Warehouse URL', contains a text input field with the URL 'wss://webapp2.connectedvcs.com/443/whfoils23/websocket' and 'Connect' and 'Disconnect' buttons. Below this is a form for defining subscription criteria. It includes a 'System Name' dropdown set to 'SDC 2.3', a 'Dialog ID' dropdown set to '154 (vehStatDataMessage)', and two pairs of text inputs for bounding box coordinates: 'NW Corner Lat/Lng' (43.6529691182854, -85.947074890136) and 'SE Corner Lat/Lng' (40.9653819457747, -81.038589477539). There are globe icons next to these coordinate inputs. Below the coordinates is a 'VSM Type' section with checkboxes for 'fund(1)', 'vehstat(2)', 'weather(4)', 'env(8)', and 'elveh(16)'. At the bottom of the form is a 'Result Encoding' dropdown set to 'Hex' and an 'Encoding' label. The right panel, titled 'Subscription Results', contains a large text area displaying the message: 'CONNECTED: sessionId=(10:109:156:251:443) <->r(96:244:83:75:58636)'. Below the text area are 'Submit Subscription' and 'Clear Results' buttons, and a small counter showing '1'.

2. Define the subscription parameters.
  - Choose the system to run the query against, what type of messages to watch for, define the bounding box of the area to watch for messages, and choose the result encoding.
  - Note that clicking the globe button next to the Lat/Lng selections will display a map allowing visual selection of latitude and longitude.
3. Click **Submit Subscription** to open the subscription to the warehouse.
  - The results will appear in the **Subscription Results** text area.
  - Note that although the cursor in all text areas is the prohibition sign  because the text areas are read-only, you can select the content of any text area and copy it via standard shortcut keys or a context menu available on the right click. The easiest way to copy all content from a text area is to click in the text area and then type Ctrl-A to select all lines and Ctrl-C to copy to clipboard.
  - The SUBSCRIBE and START JSON that is sent to the Warehouse will also be displayed in the **Subscription Results** text area. These query can be used as direct input when using the Java Websocket Client.

Connected Vehicle Warehouse Tools

Warehouse Query ●
SDC Subscription ●
Data Deposit ●
Map Application ●

To Subscribe to the SDC: 1. Connect to the Warehouse 2. Enter and Submit your criteria 3. View connection

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Warehouse URL

Connect
Disconnect

System Name
SDC 2.3

Dialog ID
154 (vehSitDataMessage)

NW Corner
43.6529691182854
-85.947074890136

SE Corner
40.9653819457747
-81.0385894775396

VSM Type
☐ fund(1)
☐ vehstat(2)
☐ weather(4)
☐ env(8)
☐ elevh(16)

Result Encoding
Hex
Encoding

Subscription Results

CONNECTED: sessionId=(10.109.156.251.443)
<->r(96.244.83.75.58836)
SUBSCRIBE ("vsmType":0,"systemSubName":"SDC 2.3","dialogID":"154","nwLat":"43.652969118285434","nwLon":"-85.94707489013672","seLat":"40.96538194577475","seLon":"-81.03858947753906","resultEncoding":"hex")
+
85.94707489013672","seLat":"40.96538194577475","seLon":"-81.03858947753906","resultEncoding":"hex")
START ("vsmType":0,"systemSubName":"SDC 2.3","dialogID":"154","nwLat":"43.652969118285434","nwLon":"-85.94707489013672","seLat":"40.96538194577475","seLon":"-81.03858947753906","resultEncoding":"hex")
+
85.94707489013672","seLat":"40.96538194577475","seLon":"-81.03858947753906","resultEncoding":"hex")

Submit Subscription
Clear Results
2

4. To stop the subscription, click **Disconnect**.
  - Note, when the websocket is disconnected, the dot next to **SDC Subscription** in the navbar at the top will change to red.
5. To clear the **Subscription Results**, click the **Clear Results** button at any time.
  - Note this will have no impact on the connection or subscription: only on the text being displayed.
6. For changes to the subscription parameters to take effect, the connection must be restarted (Steps 4 & 1) and the subscription resubmitted (Step 3).

## Data Deposit

The dot next to **Data Deposit** in the navbar at the top must be green to deposit data. This should happen automatically when opening the Warehouse Tools, but if connection is lost it may turn red. If the dot is red, a page refresh is required to reset the websocket connection.

- 1.) Select File Upload or Text Entry.
  - a. If File Upload is selected, click **Browse...** to open the dialog to select the file from the system.
  - b. If Text Entry is selected, enter the data to be deposited.
- 2.) Choose the system in which the data will be deposited.
- 3.) Choose the encoding format of the source data.

Connected Vehicle Warehouse Tools

Warehouse Query SDC Subscription Data Deposit Map Application

To deposit messages: 1. Connect to the Warehouse 2. Enter and Submit your criteria 3. View results

Input Option:

Text Entry

System Name:

SDC 2.3

Data Encoding:

Hexadecimal

Messages

20882601868e10389c801484ee07b0039c7dd1113b7daeb0e72dffbce000c008061a0053beea72ce6959ed062600b70196008a1001010  
0002639a567ea9d75c3c639a567649d7742e639a566de9d778b0a800042c022420020200004c734aca2d3beeb7d8c734ac9213beee8  
5cc734ac7d5bef15c4100004580648400402000298e695ae56770d50d19e5958bce770d51718e695c05a770d4ef19e695c34a770d4789  
9e695c5a277ad35019e695c77a77dca8b69e695c926770d501020000801008060904900231c22b584efbac5731cd2b734cefba0831cd  
2b64e4efbabe131cd2b584efbaa7d0400017e7e1352ec350000c3402000020080868020a045900204540000020d0

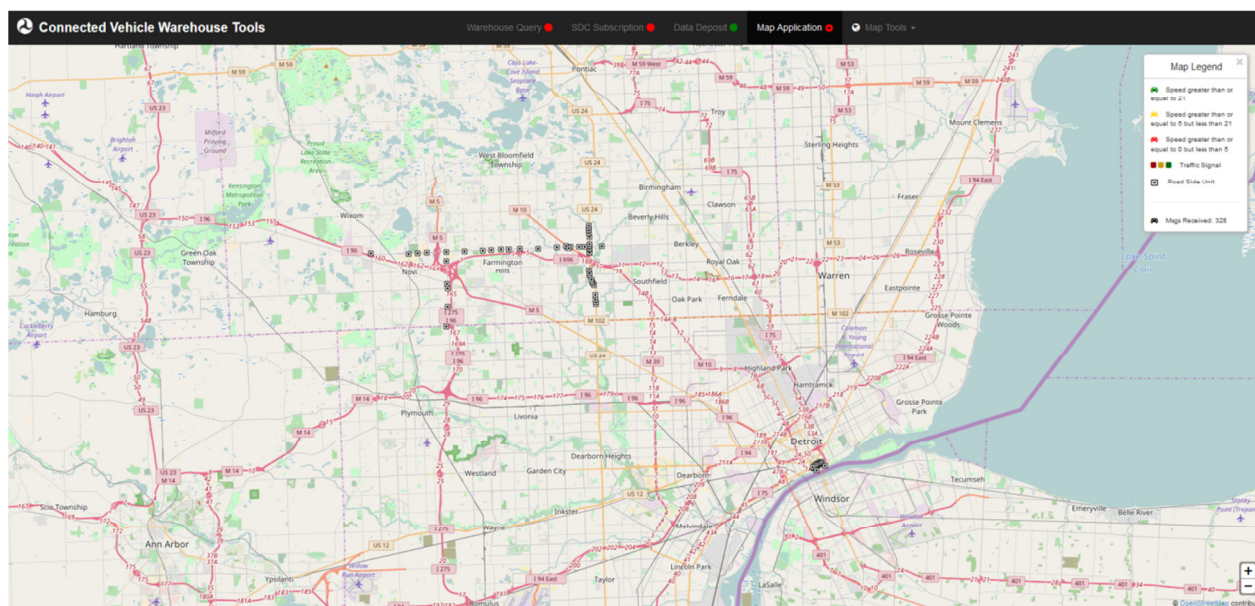
Submit File

Clear Form

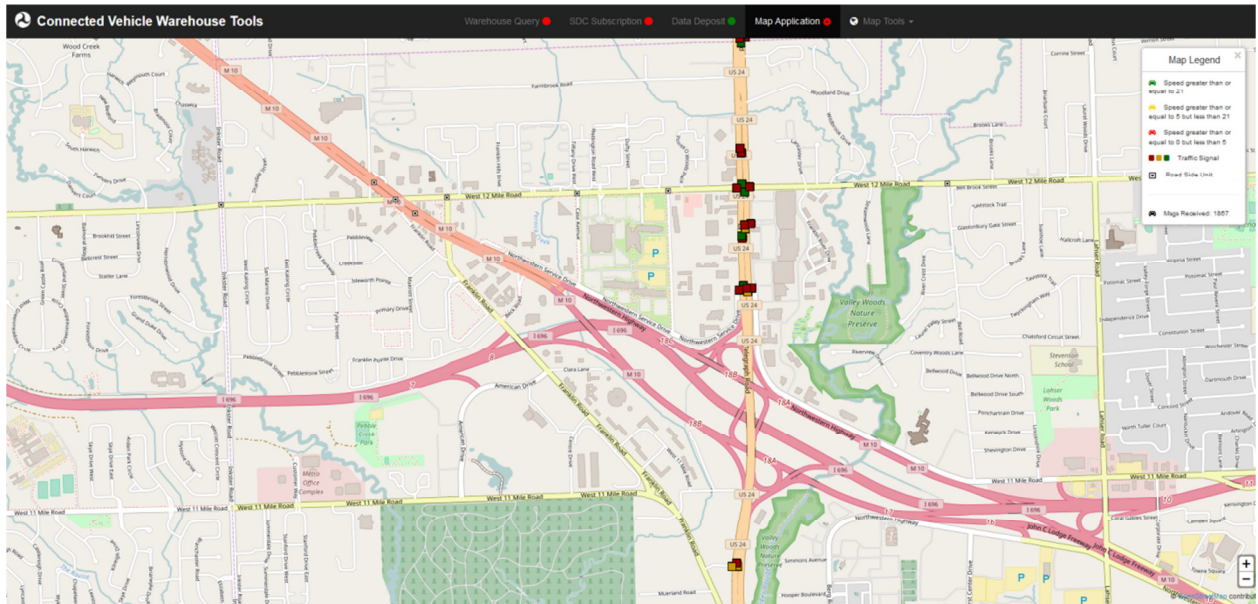
4.) Click **Submit File** to deposit the data.

## Map Application

To run the Map Application, select the **Map Tools** drop down box and then select **Start Application**. When the websocket is connected, the dot next to **Map Application** in the navbar at the top will change into a spinning gear.



The Map will then begin to display information that is currently streaming to the systems. Some information, such as Traffic Signals, will require the map to be zoomed in to be displayed.



To stop the map, select **Stop Application** from the **Map Tools** drop down. When the websocket is disconnected, the spinning gear next to **Map Application** in the navbar at the top will return to dot.