



As of the Contigo system release on November 20, 2014, the robustness and reliability of Google Maps, the worldwide leader in mapping technology, is now part of the Contigo system. Mapping and address lookups now make full use of Google Maps.



1. Introduction to Google Maps

All maps in the Contigo portal have been updated to use Google Maps, including:

- Map View, Live Locates and Web Tracking
- All Reports and Scenario setup pages that utilize maps
- Click address to view map

New features have been introduced that make use of Google Maps:

- Google Maps Street View
- Landmark Import Preview

In addition, all location-based services in the Contigo portal now employ Google's comprehensive worldwide database. These include:

- Translating addresses into location points (in landmark creation for example)
- Converting GPS data received from beacons into street addresses for easy recognition and map display

Why Switch to Google Maps?

The map is a key component of the Contigo system, and we are committed to providing the best available technology to our customers.

Google Maps provides a reliable and feature-rich platform that is supported around the world.

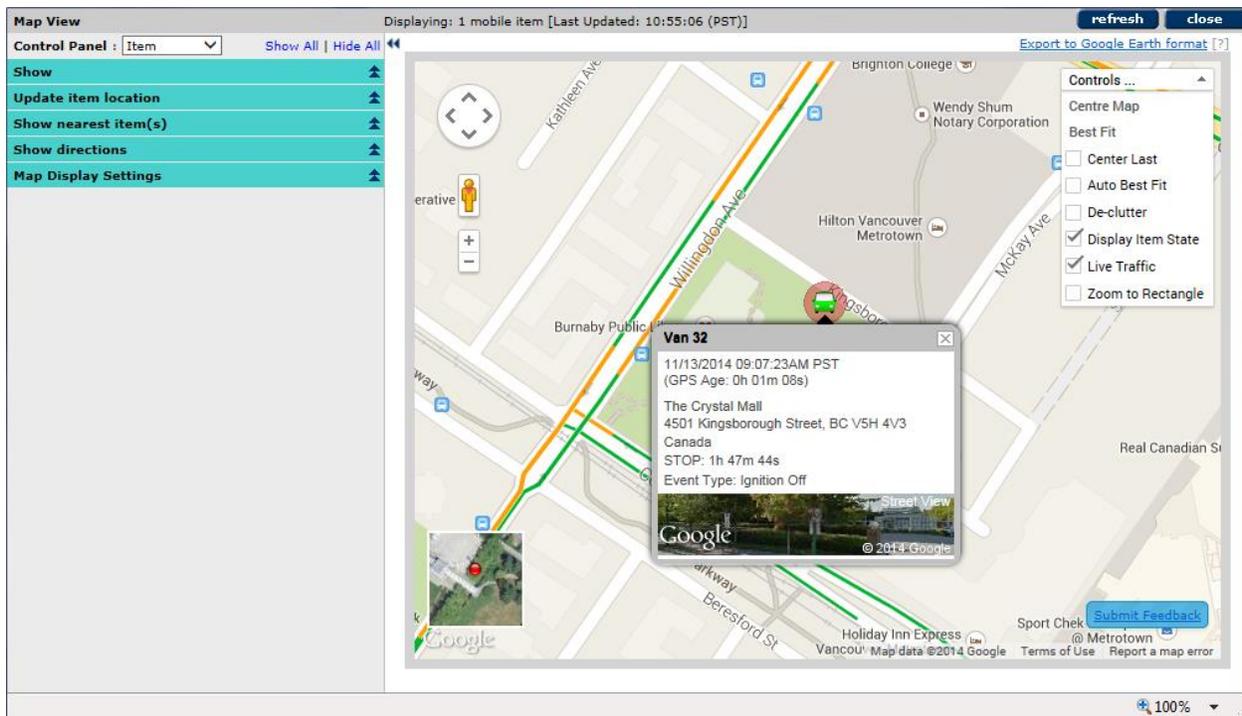


The following sections of this user guide will detail the implementation of Google Maps in more specific areas of the Contigo portal.

2. Map View

The screenshot below shows the different look for Map View with the integration of Google Maps.

Map View with Google Maps



The map controls that were previously located outside of the map area have been included in a drop down menu located in the upper right corner of the map itself. Once the appropriate selection have been made, this menu can be closed in order to maximize the screen area of the map itself. Simply clicking the arrow icon will drop down the menu for further selections.

The standard Google view features are found in the upper left portion of the map. The arrows are clicked to move the map view up/down/left/right. This manipulation of the view can also be accomplished by left-clicking anywhere on the map and dragging the view in any direction.

The plus and minus icons are left-clicked to zoom in and out on the current view. Zooming in on a particular map location can also be done by double clicking on any point on the map. The mouse wheel will also zoom in and out on the current map view, centered at the current location of the mouse icon. "Zoom to Rectangle" is not a standard Google Maps zooming technique, but it was popular in the previous version of the Contigo portal so it has been added as an option in the Controls menu. When checked, a single left-click on the map will start one corner of the rectangle. Dragging the mouse will show the rectangle highlighted in red. Once the zoom rectangle is the desired size, a second left click will zoom the current view to the selected rectangle.

The box in the lower left corner of the map is the toggle between satellite view and map view in Google Maps. The red dot in the box is situated at the center of the current map display.

Clicking on the vehicle icon will open the detail popup for the currently displayed event. The image displayed at the bottom of the popup is a link to Google Street View at the location of that particular event. Note that Street View can always be accessed by dragging the Street View icon (👤) and dropping it on any map location that you would like to view.

Right clicking anywhere on the map will bring up a menu from which you can display the address at the current mouse location, or create a landmark on the map at that location.

3. Reports

All of the map controls described above for Map View are also available in all reports in the Contigo portal that use a map display in the report output. The screenshot below shows a typical Route Log report with the new Google Maps view.

Route Log Report with Google Maps

The screenshot shows a web application interface with a navigation menu at the top (home, vehicles, assets, personnel, maintenance, reports, messaging, dispatch, administration, help, logout). Below the menu, there are tabs for 'Real-time Reports' and 'Scheduled Reports'. The main content area is titled 'Route Log Report' and includes buttons for 'cancel', 'report setup', 'print', and 'export...'. A Google Map is displayed, showing a route with a popup window for 'Van 32'. The popup window contains the following information:

- 11/12/2014 07:33:50AM PST
- 61kph SW
- 8757 Armstrong Avenue
- Burnaby, BC V3N 2H8
- Canada
- Event Type: Locate

Below the map, there is a table of events:

[18]	11/12/2014 07:34:50AM	7668 Endersby Street, Burnaby, BC, Canada, V3N 3Y9	Locate	NW 8	C
[17]	11/12/2014 07:33:50AM	8757 Armstrong Avenue, Burnaby, BC, Canada, V3N 2H8	Locate	SW 61	C
[16]	11/12/2014 07:32:50AM	7468 Cariboo Road, Burnaby, BC, Canada, V3N 4A7	Posted Speed Alert	S 68	C
[15]	11/12/2014 07:32:50AM	7468 Cariboo Road, Burnaby, BC, Canada, V3N 4A7	Locate	S 68	C
[14]	11/12/2014 07:32:42AM	7440 Cariboo Road, Burnaby, BC, Canada, V3N 4V5	Posted Speed Alert	S 70	C
[13]	11/12/2014 07:32:42AM	7440 Cariboo Road, Burnaby, BC, Canada, V3N 4V5	Speed	S 70	C
[12]	11/12/2014 07:31:50AM	7200 Cariboo Road, Burnaby, BC, Canada, V3N 4A7	Locate	E 18	C
[11]	11/12/2014 07:30:50AM	Gaglardi Way, Burnaby, BC, Canada, V3N	Locate	- 0	C
[10]	11/12/2014 07:29:50AM	Gaglardi Way, Burnaby, BC, Canada, V3N 4A5	Locate	S 16	C

The interface also includes a 'powered by contigo' logo and a '© Contigo Systems Inc.' copyright notice.

As in previous versions of Contigo reports, all addresses in the system are displayed as links. Clicking on any address link will display a small Google Map highlighting that particular address. Note that the "Click Address"

map does not have all of the features of the maps in Map View and Reports, as it is intended to be used for quick reference only.

As with Map View, the event detail popup contains an image linking directly to Google Street View for the location of that event. The following screenshot shows the result of clicking the Street View image in the popup window displayed in the example Route Log above.

Route Log Displaying Google Street View

[18]	11/12/2014 07:34:50AM	7668 Endersby Street, Burnaby, BC, Canada, V3N 3Y9	Locate	NW 8	C
[17]	11/12/2014 07:33:50AM	8757 Armstrong Avenue, Burnaby, BC, Canada, V3N 2H8	Locate	SW 61	C
[16]	11/12/2014 07:32:50AM	7468 Cariboo Road, Burnaby, BC, Canada, V3N 4A7	Posted Speed Alert S	68	C
[15]	11/12/2014 07:32:50AM	7468 Cariboo Road, Burnaby, BC, Canada, V3N 4A7	Locate	S 68	C
[14]	11/12/2014 07:32:42AM	7440 Cariboo Road, Burnaby, BC, Canada, V3N 4V5	Posted Speed Alert S	70	C
[13]	11/12/2014 07:32:42AM	7440 Cariboo Road, Burnaby, BC, Canada, V3N 4V5	Speed	S 70	C
[12]	11/12/2014 07:31:50AM	7200 Cariboo Road, Burnaby, BC, Canada, V3N 4A7	Locate	E 18	C
[11]	11/12/2014 07:30:50AM	Gaglardi Way, Burnaby, BC, Canada, V3N	Locate	- 0	C
[10]	11/12/2014 07:29:50AM	Gaglardi Way, Burnaby, BC, Canada, V3N 4A5	Locate	S 16	C

Street View fills the current map window and all of the standard Google controls for the image are included. To return to the map view at any time, click on the "Back to Map" bar provided at the bottom of the satellite view toggle box in the lower left corner of the image.

4. Landmark Import

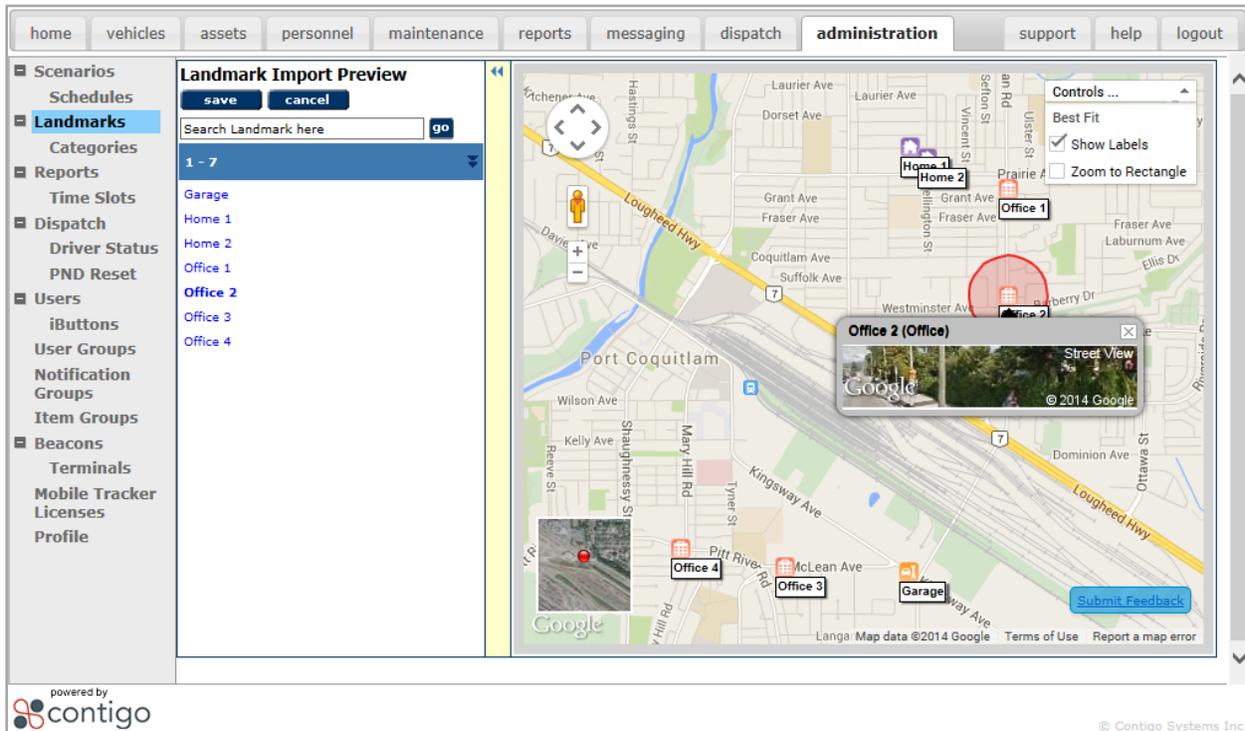
Going forward, the robustness of the Google Maps API will allow us to include many map customizations to improve the efficiency of the portal interface. The first such improvement is a new preview map which displays landmarks that have been bulk imported from a data file.

The Landmark Import Preview map allows users to visually check the landmarks imported from a file so that errors

can be caught before the landmarks are saved to the database. The format of the import file remains the same, and the same procedure is used to select the file after clicking the “import” button on the Landmark administration page.

Once the file has been read into the system, the addresses are geocoded by Google and the following preview map is displayed in the portal.

Landmark Import Preview



At this point, the landmarks have not yet been saved in the database, allowing the user to adjust the location of the icons right on the map, as well as open Street View for any imported landmark to verify the location before saving. Clicking on any imported landmark in the left-hand column will zoom in on the icon and highlight the radius of the landmark on the map. As with other maps, the user can also check the satellite view of the landmark, or view it in Street View.

The location of the landmark may be adjusted by clicking and dragging the icon to a new spot. Note that these adjustments are intended to be minor, and the address of the landmark will remain the same as what was read from the import file, even though the location of the icon has moved slightly.

If any errors are encountered during the import, they will be indicated in the left-hand column and the user will be provided with a button to download the errors (with a description of what went wrong) so that they can be corrected and re-imported.

Once the user is satisfied with the result of the import, clicking “save” will write all the landmarks to the database and they will appear on portal maps.

5. Important Considerations

- Occasionally, reverse-geocoded addresses that appear in your portal may show a range of street numbers (example: "6266-6280 Marlborough Avenue, Burnaby, BC"). Google returns addresses in this format if the location point does not fall precisely at a particular street number.
- Google Maps uses JavaScript for rendering maps in the browser, and does not support Flash technology. Because of this, the Contigo portal no longer supports Flash, and the option to switch between Flash and JavaScript maps will no longer be available in your administration profile.
- Google Maps is compatible with the following browsers:
 - For desktop:
 - Internet Explorer 8–11 inclusive (Windows)
 - The current and previous version of Firefox (Windows, Mac OS X, Linux)
 - The current and previous version of Chrome (Windows, Mac OS X, Linux)
 - The current and previous version of Safari (Mac OS X)
 - For Android:
 - The current version of Chrome on Android 4.1+
 - For iOS:
 - Mobile Safari on the current and previous major version of iOS
 - The current version of Chrome for iOS
 - Note that Internet Explorer's Compatibility View is not supported.

We hope you enjoy the Google Maps experience in your Contigo portal. If you experience any difficulty obtaining appropriate results from Google Maps, please contact Contigo Support at support@contigo.com.