

# CanMap<sup>®</sup> Content Suite Support Manual

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## Customer Success

The effective adoption of location intelligence solutions involves more than just data. For ultimate success you need the right combination of data, technology, expertise and approach. DMTI Spatial's Support Services have been designed to ensure success throughout the entire lifecycle of your location intelligence solution.

Your customer support team provides you with extended expertise ensuring the right combination of skills, approach, quality and services are available to ensure you unlock the potential from your DMTI solution. This allows you to focus on running your business, not your location intelligence solution

## Customer Support Offerings

### Helpdesk and Standard Support

Our standard support offering is included with the purchase of any DMTI solution. For customer support contact the DMTI Customer Support Team at:

Phone: (905)948-2000 ex. 0

Internet: <https://www.dmtispatial.com/support-request/>

### Premium Support

In addition to the standard support offering, a Premium Support service is available. Premium Support offers three unique advantages;

#### *Quick Start Services*

- Specific help for new clients to DMTI, or simply receiving a new product

#### *Strategic Provisioning*

- Assists in implementing best practices and workflow development
- CanMap Content Suite walkthrough and business strategy
- Renting of a GIS Specialist

#### *Content Development*

- Out of schedule product shipments
- Geocoding and/or geocoding diagnostics
- Client specific data creation

To acquire Premium Support services or to learn more, contact DMTI Spatial at:

Phone: (905) 948-2000 ex.2574

## Product Enhancement Services

DMTI Spatial is committed to building the best products possible for our customers. By using our data every day in your mission critical application you are our best source for product refinement. Please let us know if you have an enhancement request or found an error in any of our products so that we can make the correction for the next release.

This is your opportunity to provide feedback directly to the DMTI Spatial Product Development Team. Please be as specific as possible so that we can improve our products quickly and accurately. To submit an error or request technical assistance please visit: <https://www.dmtispatial.com/support-request/>

If you have an idea for a new product, or an enhancement request for an existing product, please e-mail: [support@dmatispatial.com](mailto:support@dmatispatial.com)

## Frequently Asked Questions

### General FAQ

**Q:** When I install my new data version, will my old data be deleted?

**A:** No, the old data will not be deleted or overwritten. When you receive a new version of the CanMap Content Suite, install the data as directed. The installer will create a new folder with the new version of the data so that the old data is not over written. Once installed, you can use the new version of the data and delete, back up or keep the older version data.

## Administrative Boundaries and Places FAQ

**Q:** Is the PPN\_ID value in the PlaceNames layer relatable between versions?

**A:** Yes, the PPN\_ID is a unique ID assigned to each record. This ID does not change for consistent records. If an ID is no longer in the table, the Place Name was identified as being no longer in use. If an ID is in a new version and not in an older version, the Place Name has just recently been added to our database.

**Q:** Why aren't all Municipality names in the Municipality layer represented in the PlaceNames layer?

**A:** The Municipality layer was originally created and based on Census Subdivisions (CSD). CSD's are classified into 55 types, many of which are very large areas with dispersed populations. Some names therefore in the Municipality layer do not have PPN counterparts because they may not be 'populated places' as defined in the PPN product.

**Q:** Why can I not find the Neighbourhood or Community I am looking for?

**A:** The Neighbourhood and Community boundaries have been created based on currently available sources. As we continue to find more sources, additional Neighbourhood and Community boundaries will be added to subsequent releases.

Please feel free to use our Technical Support portal (<http://www.dmtispatial.com/Support.html>) to let us know what boundaries you are interested in seeing.

**Q:** Why are some of the Neighbourhood or Community boundaries not as I expected?

**A:** Each of the Neighbourhood boundaries has been created using a variety of sources. These boundaries were only altered to adhere to the current fabric of the DMTI Spatial data to have them nest together. Boundaries can be modified in subsequent releases through the identification of new sources and/or dialog with persons who are familiar with these areas. Some community boundaries were modeled using the DMTI populated place name product and were designed specifically to represent the street network density of the community. Since some of these communities are modeled they may be inaccurately depicted. As sources are identified for each community, the modeled data will be removed and replaced with more accurate boundary information from new sources.

**Q:** Why is there empty space between Neighbourhood and Community boundaries?

**A:** Neighbourhood and Community Boundaries are not continuous and thus do not cover all areas of Canada. As more boundaries are added to the product, the amount of empty space will decrease.



## Enhanced Points of Interest FAQ

**Q:** How can I find specific types of points in the Enhanced Points of Interest datasets?

**A:** Each record in the EPOI dataset has a SIC code (Standard Industrial Classification). Using the provided SIC lookup table, link on the SIC code in the dataset to gain a better understanding of the Industrial classification of the record.

For example;

In the Enhanced Points of Interest dataset, you want only to find Medical and Surgical Hospitals. Using the EPOI look up tables, you would find Hospitals to be grouped under Major Group 80 as per the *EPOI\_MjrGroup\_TABLE*. In the *EPOI\_SicCode\_TABLE*, the code for General Hospitals is 8062. Therefore in the EPOI dataset, query out where SicCode = 8062 to get all General Medical Hospitals.

**Q:** How do I find a unique address for businesses or recreation facilities that share addresses?

**A:** It is common for businesses or other recreational facilities to share addresses, for example in skyscrapers or shopping centers.

Because of this addressing phenomenon, addressed points in specific layers contain a CAF field that allows users to identify records that have common addresses. The CAF is an alphanumeric code that is unique to a unique address.

NAME	ADDRESS	SIC	PHONE	CAF
Business 1	10 Main St.	A	1	ADD1
Business 2	10 Main St.	B	2	ADD1
Business 3	10 Main St.	C	3	ADD1
Business 4	1 King St.	D	4	ADD2
Business 5	1 King St.	E	5	ADD2

A group by query on the CAF field will allow a user to extract a single record by address.

The CAF is only applied to records that have an address. Some DMTI-sourced records (AttribCode = "1") do not have an address and therefore the CAF field is blank.

## Hydrography FAQ

Q: Is there any information included in the hydrographic layers that indicates the season in which the features were digitized?

A: No, the water features do not contain attributes or metadata that indicate seasonality of acquisition. The entities were digitized using various inputs at different times of the year and seasonality information has not been recorded in our sources.

## Land Cover FAQ

**Q:** There are many vegetation layers. How do I select the vegetation data for the areas that I'm interested in?

**A:** Since the Vegetation data is extensive, it is recommended to first open the VegetationIndexRegion layer and determine the geography of interest.

- Open the VegetationIndexRegion layer in either MapInfo or ArcMap
- Turn on the labelling or use the Information tool to determine the Index value from the VEG\_FILE field for the area(s) you would like to visualize
- OR
- Use a like query on the PROVS field to determine all the Vegetation files for a specific province
- Search through the Vegetation layers in your File Explorer that have the VEG\_FILE Index value in the filename suffix and add the layer(s) to your workspace.

## Postal Geography FAQ

**Q:** Why is there more than one postal code at the same location?

**A:** There are a number of scenarios where “stacking” can occur where there is more than one postal code at a specified x,y location.

These scenarios can include:

- Locations of large office or apartment buildings, where different floors of the same building are assigned separate postal codes
- In Enhanced Postal Points, postal code with a POSITION of 3, 4 or 5 (LDU/FSA/PPN centroids) all fall to the same centroid value.
- These are postal codes that are either unaddressed (e.g.: Lock boxes or P.O. Boxes) or cannot be presently geocoded to a specific point on a street network.

NOTE: “Stacked” postal codes in the Local Delivery Units product are accounted for in the Local Delivery UnitsTable.

**Q:** How do I connect the Local Delivery UnitsTABLE to the Local Delivery Units layer?

**A:** The Local Delivery Units layer can obtain the associated postal codes by relating the Local Delivery UnitsTABLE to the Local Delivery Units layer with a SQL statement like the following:

- “LocalDeliveryUnits.PCA\_ID = LocalDeliveryUnitsTABLE.PCA\_ID”
- (This expression may be different depending on software language).

### *MapInfo example*

Open the LocalDeliveryUnits file

Select ‘Query’ → ‘SQL Select...’ from the Menu

Complete the following query in the SQL Select window:

```
SELECT * from LocalDeliveryUnits, LocalDeliveryUnitsTABLE WHERE LocalDeliveryUnits .PCA_ID =  
LocalDeliveryUnitsTABLE.PCA_ID
```

### *ArcMap example*

Right click the LocalDeliveryUnits file in the Table of Contents and click Join and Relates→Relate in the context menu

Select PCA\_ID in the first box

Type in the full path to LocalDeliveryUnitsTABLE.dbf in the second box and select PCA\_ID in the third box

Click OK and the table will be related to the layer.

Note: If a postal code does not exist in the LDU layer, it may be located in the lookup table and then its boundary can be found using its corresponding primary PCA\_ID in the LDU layer.

**Q: Why are there postal codes in the incorrect province?**

A: There are instances where postal codes fall outside of their correct province but are still considered valid. Some municipalities cross provincial borders yet retain the postal code(s) assigned to the municipality. For example, this scenario occurs in Flin Flon, SK.

**Q: Why are there postal codes outside their appropriate Forward Sortation Area?**

A: DMTI Spatial™ creates Forward Sortation Area (FSA) boundaries based on a point-in-polygon statistical analysis of the postal code product. While the largest clusters of points are captured, some postal codes may be located outside their appropriate FSA boundaries. Here are a few reasons why this occurs:

1. Anomalies within postal geography or conflicts within postal geography and the census geography that defines municipal names and boundaries.
2. Some postal codes fall outside their “correct” FSA boundaries due to administrative considerations. For example, several Federal government offices have assigned Ottawa postal codes (an FSA of K1A), but are actually located in Hull, Quebec.
3. Postal codes can also be misallocated due to simple addressing anomalies based on Canada Post data used to create postal codes. For example, Lakeland College institution in Lloydminster, Alberta has a postal code of “S9V 1Z3”. The first letter of the FSA, “S”, refers to a Saskatchewan postal code.
4. For the Enhanced Postal Points product, when geocoding we try to get the best street level position possible within certain logical thresholds. This allows us to place the Enhanced Postal Points to their most representative location achieving a higher precision than placing it to LDU, FSA or PPN centroid. As a result, the Enhanced Postal Points may fall just outside of their FSA, but will be closer to their true position.

The anomalies described above are typically not an issue in the operation of the postal system providing that mail is delivered to the intended recipients. However, in geographic analysis, where strict spatial analysis rules are enforced, these types of “gray area” anomalies can sometimes be more difficult to accommodate.

**Q: Why are there Enhanced Postal Points not falling in their appropriate LDU boundary?**

A: In most cases Enhanced Postal Points will fall into their corresponding Local Delivery Unit (LDU) boundary. When this is not the case:

1. The postal code in the Enhanced Postal Points product might be in the Local Delivery Unit Table related to the LDU postal code or
2. The EnhancedPostalPoint data has a POSITION value of 4 or 5 which is a centroid position and is not related to the LDU or
3. The Enhanced Postal Points were geocoded to the closest address on the street with which the Postal Code serves. This allows us to place the Enhanced Postal Points to its most representative location achieving a higher precision than placing it to LDU, FSA or PPN centroid. As a result the Enhanced Postal Points might fall outside of their appropriate LDU, but will be closer to their true position.

**Q: Why are there LDU boundaries with no Enhanced Postal Points?**

A: The Enhanced Postal Points product is a point file representing ranges of addresses served by one Postal Code. The LDU product is a polygon file representing individual addresses delineated by roads, water bodies and parks. Given these differences, there will not be an Enhanced Postal Points point in each LDU boundary since a range of addresses in Enhanced Postal Points can be broken up into several LDU boundaries dependant on the topology of the area.

**Q: How do I create Postal Route maps?**

A: Postal Route maps provide a representation of mail delivery routes. This information is best viewed by altering the symbology of the LDU product. Simply symbolize your data with a colour scheme based on the DEL\_M\_ID field to view this information on your map. This can also be done using the Enhanced Postal Points file, which has all postal codes represented spatially.

**Q: Why are there 'holes' in the LDU boundary file?**

A: There are two instances where the LDU product will contain no data. They are the following:

1. DMTI Spatial™ creates LDU boundaries based around topographical inputs. Parks and water bodies are not included in the LDU polygon fabric. No LDU polygons will be created where these phenomena occur.
2. LDU boundaries are based off of address points from Canada Post. In some areas we might not yet have LDU boundaries for addressed areas. This is usually a case where either Canada Post

addressing does not match our CanMap® Streetfiles addressing or we are working on obtaining and integrating new sources into our Streetfiles. As sources are continually acquired and integrated into our CanMap Streetfiles, we can further enhance the completeness of our LDU product.

**Q:** I cannot find the postal code I am looking for?

**A:** There are two reasons you cannot find your postal code in the LDU product:

1. The postal code might be in the Local Delivery Units Table. This table links to a postal code in the LDU data, giving the postal code in the lookup table a spatial location. Basic GIS topology rules do not allow multiple polygons on top of each other.
2. The postal code you are looking for might not currently be available in the LDU product for one of two reasons:
  - a. Canada Post's postal code data is only valid for one month following its release. Given this, the postal codes in the LDU product may not be an exhaustive list.
  - b. DMTI may not have all active postal codes represented in the LDU product. As we continue to obtain sources, we will gain the ability to incorporate any missing postal codes into the product.

**Note:** The Enhanced Postal Points product contains all Active postal codes for a period valid one month from the release data. Please refer to this product for a list of Active and Retired postal codes to further verify the validity of the postal code you are looking for.

**Q:** Why are some DAs not present in the P2C table?

**A:** The P2C (Postal to Census) table represents StatsCan information for MEPs (Multiple Enhanced Postal Codes) using a point-in-polygon operation. This means that if a DA is not present in the table, there are no MEPs that fall within those DAs.

**Q:** Why aren't ESRI locators functioning correctly (MEPs and UEPs)?

**A:** The locators were generated using ArcMap 10.x. ArcGIS will display an error if these locators are used in earlier ESRI versions. The user must install ArcMap 10.1 with Service Pack 1 or higher in order for the locator to function without error. See the following link for a more detailed description of the problem:

<http://support.esri.com/em/knowledgebase/techarticles/detail/42971>

**Q: How do I select the most representative point for a postal code in the EnhancedPostalPoint layer?**

**A:** The EnhancedPostalPoint layer can contain more than one record for a given postal code. This is due to the fact that the product is a point file representing one or many range(s) of addresses served by a Postal Code. For users that only require one point for each postal code, the 'SLI' field indicates the best record to use within each postal code group. Where SLI = '1', that record is the best representative point for the given postal code (e.g. It is spatially central to the group and/or has high spatial accuracy).

The following query will select all records where the field 'SLI' in the EnhancedPostalPoint layer contains a value of '1'.

"Select \* from EnhancedPostalPoint where SLI = 1"

Save this table and you now have a unique postal point layer.


**Q: How do I create High Precision Enhanced Postal Points?**

**A:** The Multiple Enhanced Postal Codes contain two sets of coordinates. By default, the MEP are spatially enabled with the values in the LONGITUDE and LATITUDE columns which represent routable and interpolated locations. To create points for high precision locations where available and interpolated where not available, the steps below can be followed to reference the HP\_LONG and HP\_LAT coordinates.

**For the MapInfo format:**

1. Open the AREAmep data file in MapInfo.
2. Select 'Query' → 'SQL Select...' from the Menu
3. Complete the following query in the SQL Select window → Select \* from AREAmep where SLI = 1
4. Select 'File' → 'Save Copy As...' from the Menu
5. Choose your CANuep query and click 'OK'.
6. Type in an appropriate file name and click 'Save'.

**For the ArcGIS format:**

1. With a session of ArcMap open, click on the 'Add Data'  button to select the AREAmep.shp.
2. With the layer now displayed in the Data view, go to 'Selection' > 'Select By Attributes' in the main Menu.
3. Add the statement *SLI = 1* using the Query functions and ensure that 'Create a new selection' is the Method. Click 'OK'
4. When the selection is complete, Right click the layer > 'Selection' > 'Create Layer From Selected Features' – The selected features will be added as its own layer to the Table of Contents.
5. Right Click on this selection layer and go to Data > 'Export Data' and save All Features as AREAupep – this will create a new shape file based on your selection.



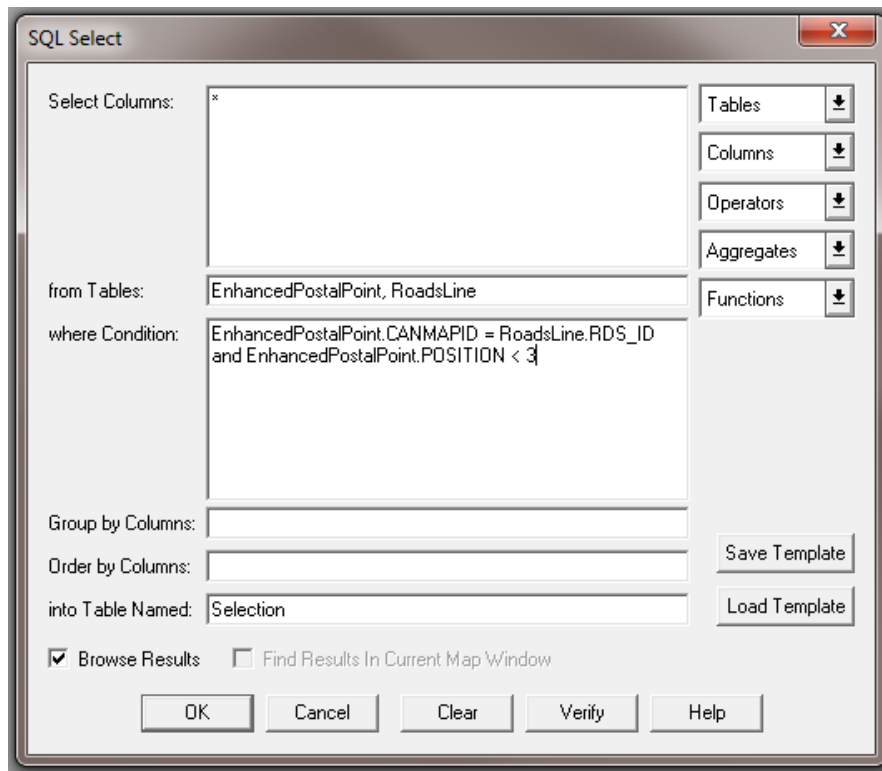
6. Finally, you will also be prompted to add the new shape file as a layer to the map.

**Q:** How can I determine the address ranges associated to the points in the EnhancedPostalPoint layer?

**A:** Address ranges can be added as an attribute for each postal point that has a Precision Code of 1 or 2 by joining the layer to the RoadsLine layer. To retrieve this information from the road network, join the EnhancedPostalPoint layer to the RoadsLine layer where CANMAPID = RDS\_ID.


**For the MapInfo format:**

1. Open the *RoadsLine* and the EnhancedPostalPoint files in MapInfo.
2. Got to Query → SQL Select
3. Query from the two tables, where  
 “EnhancedPostalPoint.CANMAPID = RoadsLine.RDS\_ID and EnhancedPostalPoint.POSITION < 3”

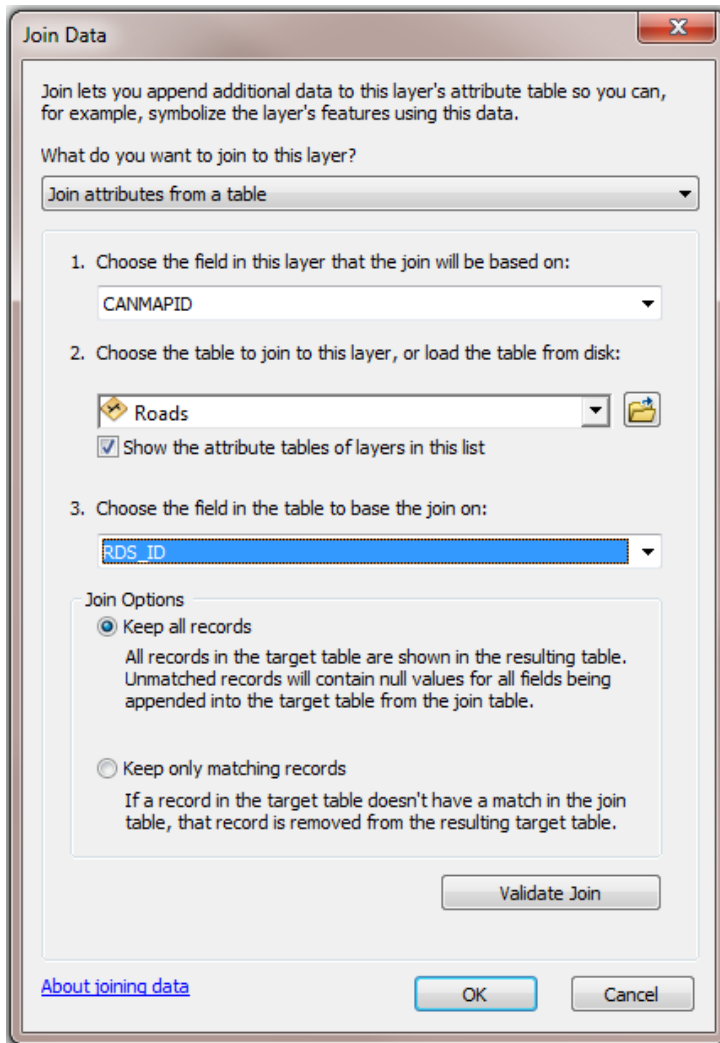


4. Hit OK.

**For the ArcGIS Shapefile or FGDB format:**

1. With a session of ArcMap open, click on the 'Add Data'  button and add the EnhancedPostalPoint and RoadsLine layers.

2. Got to Selection → Select By Attributes and select from the Postal Points layer where 'POSITION < 3'. Hit OK.
3. Right click the Postal Point layer in the Table of Contents → Selection → Create Layer From Selected Features
4. Right click on this Selection layer > Join and Relates > Join. Choose the CANMAPID and RDS\_ID columns for the join. Hit OK.



5. The Selection Postal Points layer now includes the roads network attribution, including address ranges.

## Transportation FAQ

**Q:** How do I join the RoadsTable or RoutingTable to the Roads data?

**A:** To link information from tables to data, the user must complete a manual join.

In MapInfo:

- Open both the *Roads* data file and the *RoadsTable* file in MapInfo.
- Select 'Query' > 'SQL Select...'
- Complete the following query in the Query Menu
- Select \* from *Roads*, *RoadsTable* where *Roads*.UniqueId = *RoadsTable*.Rds\_Id
- 'Verify' the SQL query and if valid, press 'OK'.

Once the query result has been obtained, you can then view the joined tables e.g. 'Joined\_Results' via the Info Tool in the Map Window or through the 'Joined\_Results' Table Browser. To create a permanent join simply save the joined tables as a new MapInfo Table.

In ArcGIS

- Select the 'Add Data' button to open the *RoadsTable* and *Roads* data.
- Right-click on *Roads*, and select 'Joins and Relates'; select 'Join...' from the sub-menu of choices.
- Complete the form using the UniqueId and Rds\_Id fields as the common field between the tables. Once complete hit 'OK'.
- Once the join is complete select the *Roads*, right click and select 'Open Attribute Table'. Once open, you can now scroll through the results of the join.
- To undo the joins between the data tables select the *Roads* attribute table, right click and select 'Joins and Relates' selecting 'Remove Join(s)' from the sub-menu of choices.

**Q:** How do I select a specific direction on the highways?

**A:** After joining the Roads data to the RoutingTable (See Previous Question), query where:

`'CANrte.Street= "HWY NAME" and CANrte_Lut.Div_Rd_Dir = "BOUND"'`

Where "HWY NAME" is the name of the highway as depicted in the file.

And where "BOUND" is the directional bound of the highway you would like to select out

Potential values are:

Value	Definition
NB	North Bound
EB	East Bound
SB	South Bound
WB	West Bound

**Q:** What is the level of accuracy that can be found throughout the Roads data?

**A:** DMTI road segments are generally accurate up to 60cm in most urban areas, and as low as 15m-30m in rural areas.

As all CanMap segments have been referenced against digital sources, as well as satellite imagery, their accuracy may vary from the above statement for a number of different reasons, albeit at a very small scale:

- Lower-quality satellite imagery
- New roads created that do not exist in the most recent satellite imagery
- Improper referencing of existing satellite or aerial photography (due to lack of control points)