



Platinum Postal Code^{OM} Suite

User Manual
v2010.3

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* Postal Code is an official mark of Canada Post Corporation

About DMTI Spatial

DMTI Spatial™ Inc. is Canada's leading Location Intelligence provider. We enable users to understand their customers, optimize resources, realize opportunities, maximize profitability and make more informed decisions through accurate products and innovative thinking.

DMTI Spatial publishes precision built street map, rail and routing data (CanMap®), a detailed water layer, and innovative geocoding and address management software (GeoPinpoint™). In addition, DMTI Spatial publishes a full range of positionally accurate geospatial data products including: enhanced points of interest (EPOI), census data and boundaries, postal geography, topographic maps, and US mapping data. As part of a complete business geographic solution, DMTI Spatial™ offers a wide range of GIS services, consulting, and software training.

Established in 1994, DMTI Spatial is committed to setting the standard within the GIS industry for precision built geo-spatial data and address management services.

At DMTI Spatial, we believe that our true strength comes from working closely with our customers and providing innovative solutions to meet their strategic business objectives. As Canada's premier spatial solutions provider we pride ourselves with having worked with North America's leading organizations to support their mission critical applications.

DMTI Spatial works with large and small organizations representative of a wide variety of industries:

- Agriculture
- Banking/Finance
- Consulting
- Education
- Emergency Services
- Engineering
- Environmental
- Forestry
- Government
- Health
- High Technology
- Insurance
- Manufacturing
- Media
- Mining
- Real Estate
- Retail
- Telecommunications
- Transportation
- Utilities

We are a member of the ESRI Canada Business Partner Program, and winner of the 2001 ESRI Worldwide New Business Partner of the Year Award and the 2005 ESRI Foundation Partner of the Year Award. We are a strategic business partner of MapInfo and winner of the Markham Board of Trade 2000 Award for Entrepreneurship and Innovation. Recipient of The Association of Canadian Map Libraries and Archives (ACMLA) 2002 Certificate of Appreciation.



Really Smart Spatial Solutions™

Through the application of its products and services, DMTI Spatial™ has been involved with projects such as: location-based services, logistics planning, emergency dispatch, facilities management, data management, customer care, address management, land base development in support of network planning, and marketing/demographic analysis applications.

DMTI Spatial™ can provide all of the components necessary for the acquisition, implementation, operation and maintenance of a successful GIS system within companies of all sizes. Through its product and service offering, DMTI Spatial™ can provide users with 5 key components:

1. Accurate, detailed, and compatible data
2. Comprehensive maintenance program
3. GIS software
4. Consulting and services
5. Software training

DMTI Spatial™ Product & Service Portfolio

DMTI Spatial's product & service offering includes:

CanMap® - Digital Map Data for Canada

- CanMap® Streetfiles
- CanMap® RouteLogistics
- CanMap® Rail
- CanMap® Major Roads and Highways
- CanMap® Parks & Recreation
- CanMap® Water

Satellite Imagery

- Satellite StreetView™

Municipal Amalgamations

- CanMap® Municipality Amalgamation File (MAF)

Business & Recreational Points of Interest

- Enhanced Points Of Interest (EPOI)

GeoPinpoint™ Suite

- Canada's Geocoding Solution
- Modular Architecture
- Windows Standalone Desktop Version
- UNIX, Java Wrapper, ActiveX (DLL Version)

Topographic Data and Base Maps

- Canadian Atlas Map Bundle (CAMB)
- Populated Placenames
- National Topographic Data Base (NTDB)
- 30 & 90m Digital Elevation Models (DEM)
- Clutter Data

Postal Geography – Platinum Postal Code^{OM} Suite

- Six-Digit Postal Code File (LDU Boundary)
- Enhanced Postal Code File (MEP)
- Forward Sortation Areas (FSA) Boundary

1996 Census Boundaries & Demographic Data

- Enumeration Area (EA)
- Census Subdivision (CSD)
- Census Division (CD)
- Census Metropolitan Area/Census Agglomeration (CMA/CA)
- Census Tract (CT)
- Federal Electoral Districts (FED)

2001/6 Census Boundaries

- Dissemination Area (DA)
- Census Subdivision (CSD)
- Census Division (CD)
- Census Metropolitan Area/Census Agglomeration (CMA/CA)
- Census Tract (CT)
- Federal Electoral Districts (FED)

GIS Software

- Contour Modeling and Display
- Demographic Profiling and Lifestyle Targeting
- Geocoding and Mapping Software
- Routing and Logistics

Consulting and Services

- Address Management Solutions
- Application Development
- Database Marketing
- Data Conversion and Creation
- Database Scrubbing
- Geocoding Services
- GIS Consulting
- Technical Support

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Technical Support, Error Reporting & 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:

<http://www.dmtispatial.com/en/Resources/TechSupport.aspx>

If you have an idea for a new product, or an enhancement request for an existing product, please e-mail:

pm@dmtispatial.com

Contact Information

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Product Enhancement Requests: pm@dmtispatial.com

Technical Support: <http://www.dmtispatial.com/helpdesk/index.aspx>

Trademarks and Notices

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About Platinum Postal Code^{OM} Suite

The Platinum Postal Code^{OM} Suite is comprised of the following postal products:

The **Platinum Postal Code^{OM} Suite - Multiple Enhanced Postal Code** product is a precision-based point file representing over 1 million postal codes across Canada. The Multiple Enhanced Postal Code product allows for a one to many relationship. For example, one postal code may represent more than one postal code location.

The **Platinum Postal Code^{OM} Suite - LDU Boundaries** product is a polygon file representing the geographic location of the 6 digits postal code. The boundary file is generated from point addresses with six-digit postal codes attribute assignments. The LDU Boundaries allow for a many to many relationship. For example, one postal code may be represented by more than one LDU boundary and one LDU boundary may be associated with multiple postal codes.

The **Platinum Postal Code^{OM} Suite - Forward Sortation Area (FSA) Boundaries** product represents the first three characters of a postal code indicating a specific geographic area and is aligned to nest with Platinum Postal Code^{OM} Suite - LDU Boundaries and Platinum Postal Code^{OM} Suite - Multiple Enhanced Postal Code product.

Note: The **Platinum Postal Code^{OM} Suite - Unique Enhanced Postal Code (UEP)** is sold separately.

Layer Properties

Platinum Postal Code^{OM} Suite - Multiple Enhanced Postal Codes

Property	Description
Coverage	National
Currency	Aug 15, 2010
Level of Accuracy	Ranging from CanMap® Streetfiles to DA centroid.
Projection	All layers are displayed as unprojected Longitude – Latitude
Datum	All layers are in NAD83 datum
Format	ESRI, MapInfo, ASCII ¹

Platinum Postal Code^{OM} Suite - Local Delivery Unit Boundaries and Platinum Postal Code^{OM} Suite - Forward Sortation Area Boundaries

Property	Description
Coverage	National
Currency	Aug 15, 2010
Projection	All layers are displayed as unprojected Longitude – Latitude
Datum	All layers are in NAD83 datum
Format	ESRI, MapInfo

¹ Custom formats available upon request. Refer to [Appendix A: File Extensions](#) for more information regarding file extensions.

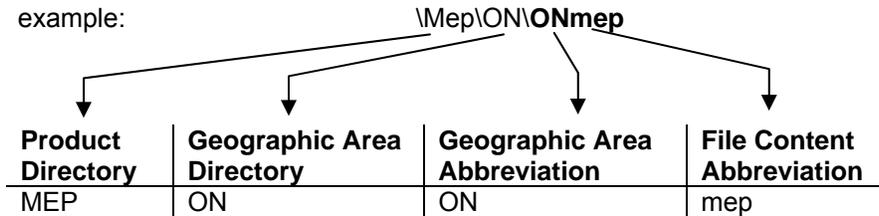
About Platinum Postal Code^{OM} Suite (cont'd)

Layer Naming Conventions

The Platinum Postal Code^{OM} Suite - Multiple Enhanced Postal Code product is organized into the following directory structure and uses the following directory and file naming conventions:

Platinum Postal Code^{OM} Suite - Multiple Enhanced Postal Code

example:

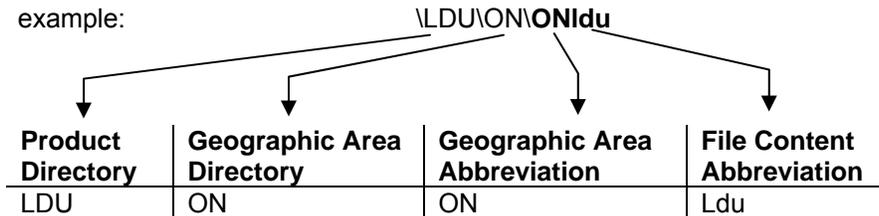


The Platinum Postal Code^{OM} Suite - Local Delivery Unit Boundaries product is organized into the following directory structure and use the Postal Code Areas (PCA) file naming convention:

Geographic Area Abbreviation + Layer Content Abbreviation = Layer Name

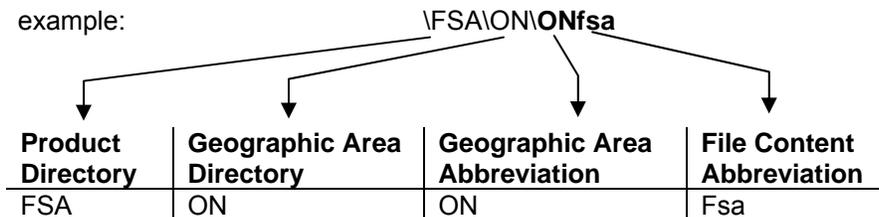
Platinum Postal Code^{OM} Suite - Local Delivery Unit Boundaries

example:



Platinum Postal Code^{OM} Suite - Forward Sortation Area Boundaries

example:



The geographic area directory indicates the geographic coverage of the layer, for example ON = Ontario.

The geographic area represents DMTI Spatial's standard geographic areas. For more information refer to the following file and field names in the Canada Directory included with the Platinum Postal Code^{OM} Suite.

About Platinum Postal Code^{OM} Suite (cont'd)

Platinum Postal Code^{OM} Suite - Multiple Enhanced Postal Code

Layer Name	Field Name	Description
AREAmep\Canada\CANtop	Full_Name	Topographic Coverage Area Name
AREAmep\Canada\CANtop	Name	Topographic Coverage Area Abbreviation

Platinum Postal Code^{OM} Suite - LDU Boundaries

Layer Name	Field Name	Description
AREIdu\Canada\CANtop	Full_Name	Topographic Coverage Area Name
AREIdu\Canada\CANtop	Name	Topographic Coverage Area Abbreviation

Platinum Postal Code^{OM} Suite - Forward Sortation Area Boundaries

Layer Name	Field Name	Description
AREAfsa\Canada\CANtop	Full_Name	Topographic Coverage Area Name
AREAfsa\Canada\CANtop	Name	Topographic Coverage Area Abbreviation

Platinum Postal Code^{OM} Suite contains the following general content directories:

Platinum Postal Code^{OM} Suite - Multiple Enhanced Postal Code

Directory Name	Description
Canada	Canada Directory
MEP	Multiple Enhanced Postal Code Directory

Platinum Postal Code^{OM} Suite - Local Delivery Unit Boundaries

Directory Name	Description
Canada	Canada Directory
LDU	Local Delivery Unit Boundaries Directory

Platinum Postal Code^{OM} Suite - Forward Sortation Area Boundaries

Directory Name	Description
Canada	Canada Directory
FSA	Forward Sortation Area Directory

About Platinum Postal Code^{OM} Suite Release (cont'd)

Layer Contents

The Platinum Postal Code^{OM} Suite contains the following additional layers:

Canada Directory

Layer Name	Description	Feature Type
CANacb	Area Code Boundaries	Polygon
CANcap	Capital Cities	Point
CANprv	Provincial/Territorial Boundaries	Polygon
CANrmn	Regional Municipality Boundaries	Polygon
CANtop	Topographic Coverage Areas	Polygon
CANtzs	Time Zones (Standard Time)	Polygon
CANtzd	Time Zones (Daylight Savings Time)	Polygon
CANwat	National Water	Polygon

The Canada Directory is included with the Platinum Postal Code^{OM} Suite products. For more information regarding the Canada Directory refer to the [Canada Directory User Manual](#) included with Platinum Postal Code^{OM} Suite.

Topological Reference Directory

Layer Name	Description	Feature Type
AREAwatr	Major and Minor Water Body Reference	Polygon
AREAwatl	Minor Water Line Reference	Polyline
AREAprks	Park Boundary Reference	Polygon
AREArail	Rail and Transit Line Reference	Polyline

The Topological Reference Directory is included with the Platinum Postal Code^{OM} Suite - Local Delivery Unit Boundary product. These spatial data layers are included as a topological reference to the LDU polygons. No attribute information is included for these spatial reference layers. If you wish to obtain the full CanMap® Data Product for any of these layers, please contact DMTI Spatial.

Platinum Postal Code^{OM} Suite - Multiple Enhanced Postal Code Directory

Layer Name	Description	Feature Type
AREAmep	Multiple Enhanced Postal Code	Points (Active records)
AREAmep_retired	Multiple Enhanced Postal Code	Points (Retired records)

Platinum Postal Code^{OM} Suite - Local Delivery Unit Boundaries Directory

Layer Name	Description	Feature Type
AREAldu	LDU Boundaries	Polygons
AREAlut	Postal Code Lookup Table	Database file

Platinum Postal Code^{OM} Suite - Forward Sortation Area Boundaries Directory

Layer Name	Description	Feature Type
AREAfsa	FSA Boundaries	Polygons

Data Dictionary

Platinum Postal Code^{OM} Suite - Multiple Enhanced Postal Codes

Layer Location

\\MEP\AREAmep

Layer Structure²

Field Name	Field Type	Field Size	Description
MEP_ID	Decimal	9,0	Multiple enhanced postal code point unique identifier. Used to link to Postal2Census table (Appendix G)
POSTALCODE	Character	6	Postal Code data with no space between the FSA and LDU. (i.e. L1R2H2)
POST_CODE	Character	7	Postal Code data with a space between the FSA and LDU (i.e. L1R 2H2)
SLI	Decimal	1,0	Single Link indicator (Identifies main postal code record when multiple exist).
PROV ³	Character	2	2 letter alpha abbreviation (Canada Post) according to the first letter of the postal code (i.e. L1R2H2 = ON)
COMM_NAME	Character	68	Community name
MAF_ID	Decimal	9,0	Uniquely identifies a municipal amalgamation boundary
BIRTH_DATE	Character	8	Date when the postal code became active (YYYYMMDD format).
RET_DATE	Character	8	Date when a postal code was retired or no longer in use by Canada Post Corporation (YYYYMMDD format)
DOM_DELMDE	Character	2	Dominant Delivery Mode Type identifying the primary type of delivery service for Active Postal Code records only
TOTAL_POC	Decimal	5,0	Total Points of Call – the total number of points of call (apartments, businesses, houses and farms) served by the postal code for all delivery mode types for Active Postal Code records only
POC_APART	Decimal	5,0	Points of Call for Apartments – the total number of apartments served by the postal code for all delivery mode types for Active Postal Code records only
POC_BUS	Decimal	5,0	Points of Call for Businesses – the total number of businesses served by the postal code for all delivery mode types for Active Postal Code records only
POC_HOUSE	Decimal	5,0	Points of Call for Houses – the total number of houses served by the postal code for all delivery mode types for Active Postal Code records only
POC_FARM	Decimal	5,0	Points of Call for Farms – the total number of farms served by the postal code for all delivery mode types for Active Postal Code records only
TOTAL_CC	Decimal	5,0	Total Consumers' Choice – the total number of points of call (apartments, businesses, houses and farms) served by the postal code where consumers wish to receive unaddressed mail for all delivery mode types for Active Postal Code records only
CC_APART	Decimal	5,0	Consumers' Choice for Apartments – the total number of apartments served by the postal code where consumers wish

² Please note that ASCII tab delimited format, the field sizes may vary.

³ For more information refer to [Appendix B: Canadian Provincial and Territorial Codes and Abbreviations](#)

			to receive unaddressed mail for all delivery mode types for Active Postal Code records only
CC_BUS	Decimal	5,0	Consumers' Choice for Businesses – the total number of businesses served by the postal code where consumers wish to receive unaddressed mail for all delivery mode types for Active Postal Code records only
CC_HOUSE	Decimal	5,0	Consumers' Choice for Houses – the total number of houses served by the postal code where consumers wish to receive unaddressed mail for all delivery mode types for Active Postal Code records only
CC_FARM	Decimal	5,0	Consumers' Choice for Farms – the total number of farms served by the postal code where consumers wish to receive unaddressed mail for all delivery mode types for Active Postal Code records only
PC_COUNT	Decimal	5,0	Total number of Postal Code point records associated with each postal code
POSITION	Decimal	2,0	Representative point flag, this identifies the method used to geographically position the coordinate
LONGITUDE	Decimal	11,6	Longitude in decimal degrees
LATITUDE	Decimal	11,6	Latitude in decimal degrees
CANMAPID	Decimal	9,0	ID to reference to CanMap street file

Dominant Delivery Mode (DOM_DELMDE)

Delivery Mode Type	Description
CF	Call For
DR	Direct
GD	General Delivery
LB	Lock Box
LC	Letter Carrier
MR	Mobile Route
RR	Rural Route
SS	Suburban Service

Each Postal Code can have more than one Delivery Mode Type. Dominance for this field is based on the highest total combined Points of Call (PoCs) for each Delivery Mode Type.

For example: A0A1H0 has two delivery mode types; GD and LB.
 GD has a total of 41 PoCs (4 businesses and 37 homes).
 LB has a total of 85 PoCs (5 businesses and 80 homes).

Since the LB delivery mode type has a combined number of PoCs larger than the GD PoC, it would be deemed the dominant type therefore appearing in the DOM_DELMDE field for the postal code A0A1H0.

Point of Call (POC) and Consumers' Choice (CC) Descriptions⁴

Type	Description
APART	<p>Is a self contained dwelling unit within a multiple unit residential building of three or more such dwelling units in which:</p> <p>All the units share a common main entrance and civic address but have individual suite numbers. For the purpose of this definition, common entrance means entrance to the building or to the complex, i.e., private lane or road. For urban areas, each unit has as a separate mail receptacle, which normally forms part of a centralized mail receiving facility.</p> <p>If a business is operated from an apartment, which is also used as a dwelling, it is classified as an apartment.</p>
BUS	A point of call where the primary activity is commercial or industrial. If a business is operated from a house or an apartment, which is also used as a dwelling, it is classified as a house or an apartment.
HOUSE	Is a building with one or two dwelling units. If a business is operated in a house that is also used as a dwelling, it is classified as a house.
FARM	Dwelling or a point of call associated with a tract of land used to raise crops, animals or fish as a primary source of income or revenue. If there is any doubt, it is classified as a house.

POSITION

Position Code	Description
1	Block-face representative point from CanMap® streets – High precision; the postal code address range geocoded to street segment(s) within the FSA and Municipal boundary.
2	Block-face representation from CanMap® streets – Lower precision; the postal code address range geocoded to closest address on street segment(s) and within the FSA boundary.
3	Postal Code placed to Platinum Postal Code ^{OM} Suite - Local Delivery Unit (LDU) centroid.
4	Postal Code placed to Platinum Postal Code ^{OM} Suite - Forward Sortation Area (FSA) Centroid.
5	Postal Code placed to Populated Placename (PPN) centroid.

⁴ Source: Canada Post Corporation, 2005. Website: <http://www.canadapost.ca/CPC2/addrm/hh/doc/about-e.asp>

Data Dictionary (cont'd)

Platinum Postal Code^{OM} Suite - Local Delivery Unit Boundaries (LDU)

Layer Location

\\LDU\AREA\ldu

Layer Structure

Field Name	Field Type	Field Size	Description
PCA_ID	Decimal	9,0	Postal Code Area Unique Identifier (also referred to as LDU boundaries)
POSTALCODE	Character	6	Postal Code data with no space between the FSA and LDU (i.e. L1R2H2)
PROV	Character	2	2 letter alpha abbreviation (Canada Post) according to the first letter of the postal code (i.e. L1R2H2 = ON)
MAF_ID	Decimal	9,0	Uniquely identifies a Municipal Amalgamation boundary
PREC_CODE	Decimal	1,0	Code indicating the positional accuracy or precision of the polygon feature
PCA_COUNT	Decimal	4,0	Total number of Postal Code Area records associated with each postal code
DOM_PCA	Decimal	1,0	Dominant Postal Code Area Indicator
MULTI_PC	Decimal	1,0	Multiple Postal Codes Indicator (1 means multiple, 0 means single)
DEL_M_ID	Character	6	Dominant delivery mode type and ID.
LONGITUDE	Float		Longitude in decimal degrees
LATITUDE	Float		Latitude in decimal degrees

PCA_ID

The first two digits of the PCA_ID code reflect the province that the LDU is associated with

PCA_ID (2 digits)	Province
10	AB
11	BC
12	MB
13	NB
14	NL
15	NS
16	NT
17	NU
18	ON
19	PE
20	QC
21	SK
22	YT

PREC_CODE (Precision Code)

Precision Code	Description
1	Postal Code Area representing rooftop point addresses.
2	Postal Code Area representing parcel centroid point addresses.
3	Postal Code Area representing interpolated point addresses (High precision).
4	Postal Code Area representing interpolated point addresses (Low precision).
5	Postal Code Area representing extrapolation based on inference in relation to populated place name location (Low precision).

Layer Content

Postal Code Local Delivery Unit (LDU) boundary is created from CPC postal code address dataset and CanMap® Streetfiles. Each postal code is assigned a land parcel on the base of street blocks.

DOM_PCA indicates the dominant postal code boundary with value 1. If there is only one PCA boundary corresponding to the postal code, the DOM_PCA has a value of 1. If one postal code has multiple PCA boundaries, the boundary, which includes the highest number of addresses, will be given a value of 1.

Data Dictionary (cont'd)

Platinum Postal Code^{OM} Suite - Local Delivery Unit Boundaries Lookup Table

Table Location

\\LDU\AREA\lut

Table Structure

Field Name	Field Type	Field Size	Description
PRIMARY_PC	Character	6	Primary Postal Code data with no space between the FSA and LDU (i.e. L1R2H2). The postal code value contained within this column will be associated with the value in the LDU boundary file.
OTHER_PC	Character	6	Other associated Postal Code data with no space between the FSA and LDU (i.e. L1R2H2). These are postal codes, which share the same physical address as the Primary Postal Code (i.e., the postal codes are “stacked” on top of each other).

Table Content

The Local Delivery Unit Boundaries Lookup Table (LUT) provides a link to postal codes where a building or discrete area has multiple postal codes. The postal code associated servicing the greatest number of addresses (i.e., points of call) is represented in the LDU layer. The non-dominant postal codes are retained in the LUT table and are not represented in the Local Delivery Unit (LDU) layer.

Joining the Lookup Table with Local Delivery Unit Boundaries (Postal Code Areas) Table

The users of LDU Boundary product can obtain the associated postal codes by relating the lookup table to the LDU layer with a SQL statement

“XXIdu.POSTALCODE = XXlut.PRIMARY_PC” (the expression may be different in a specific software).

MapInfo example

1. Open the XXIdu file
2. Select 'Query' → 'SQL Select...' from the Menu
3. Complete the following query in the SQL Select window:

```
SELECT * from XXIdu, XXlut WHERE XXIduPOSTALCODE = XXlutPRIMARY_PC
```

ArcMap example

1. Right click the XXIdu file in the TOC and click Join and Relates→Relate in the context menu
2. Select POSTALCODE in the first box
3. Type in the full path to XXlut.dbf in the second box and select PRIMARY_PC in the third box
4. Click OK and the lookup table will be related to the LDU layer

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 postal code in the LDU layer.

Data Dictionary (cont'd)

Platinum Postal Code^{OM} Suite - Forward Sortation Area (FSA)

Layer Location

\\FSA\AREA\fsa

Layer Structure

Field Name	Field Type	Field Size	Description
FSA	Character	3	Forward Sortation Area
PROV	Character	2	Provincial/Territorial Abbreviation ⁵

Layer Content

The first three characters of a postal code represent the Forward Sortation Area (FSA) indicating a geographic area in an urban or rural area. The first character of the FSA identifies one of the 18 major geographic areas, provinces or districts.

FSA boundaries may include multi-polygon regions, for example two or more polygons forming one region/entity reflecting the complexity inherent in FSA geography. Generally, FSA boundaries conform to streets, administrative boundaries and other physical features within CanMap® products.

Please refer to *Appendix C: Understanding Postal Geography* for more information.

⁵ For more information refer to [Appendix C: Canadian Provincial and Territorial Codes and Abbreviations](#)

Appendix A: File Extensions

ESRI® File Extensions

Refer to the following table for descriptions of ESRI® file extensions. All file extensions are not available for all DMTI products.

File Extension	File Description
*.shp	Part of standard ESRI® Shapefile
*.shx	Part of standard ESRI® Shapefile
*.dbf	Part of standard ESRI® Shapefile
*.sbn	Part of Spatial Index
*.sbx	Part of Spatial Index
*.lyr	Layer Properties
*.prj	Datum and Projection Properties
*.mxd	ArcGIS Project file

MapInfo® Professional File Extensions

Refer to the following table for descriptions of MapInfo file extensions.

File Extension	File Description
*.dat	Attribute Data
*.id	Graphic Index
*.ind	Attribute Index
*.map	Graphic Data
*.tab	Tab File
*.wor	Workspace

Appendix B: Provincial and Territorial Abbreviations

The provincial/territorial names and abbreviations reflect those in effect on January 1, 2001 with the exception of the name change of the province of Newfoundland and Labrador (previously Newfoundland), which came into effect on December 6, 2001. Newfoundland and Labrador is recognized by the alpha code NL (formerly NF). There were no changes to the abbreviation for Newfoundland and Labrador.

On April 1, 1999 the Northwest Territories was divided into two territories to create Nunavut Territory. On December 18, 2000, Canada Post has introduced a new alpha code (NU) for Nunavut.

Province/Territory (English)	Province/Territory (French)	Abbreviation ⁶
Alberta	Alberta	AB
British Columbia	Colombie-Britannique	BC
Manitoba	Manitoba	MB
New Brunswick	Nouveau-Brunswick	NB
Newfoundland and Labrador	Terre-Neuve-et-Labrador	NL
Nova Scotia	Nouvelle-Écosse	NS
Northwest Territories	Territoires du Nord-Ouest	NT
Nunavut	Nunavut	NU
Ontario	Ontario	ON
Prince Edward Island	Île-du-Prince-Édouard	PE
Québec	Québec	QC
Saskatchewan	Saskatchewan	SK
Yukon	Yukon	YT

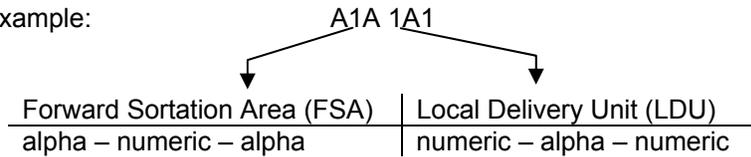
¹ Source: Canada Post Corporation, The Canadian Addressing Guide, October 2002

Appendix C: Understanding Postal Geography⁷

Postal Code Structure

An integral part of every address in Canada, the postal code was designed to aid in the sorting and delivery of mail. Maintained by the Canada Post Corporation, a postal code is defined as a six-character uniformly structured, alphanumeric code in the form “ANA NAN” where “A” represents an alphabetic character and “N” represents a numeric character and has two components: the “FSA” and the “LDU”.

example:



Forward Sortation Area Boundaries

The first three characters of a postal code represent the Forward Sortation Area (FSA) indicating a geographic area in an urban or rural area. The first character of the FSA identifies one of the 18 major geographic areas, provinces or districts. **Refer to Figure 1.**

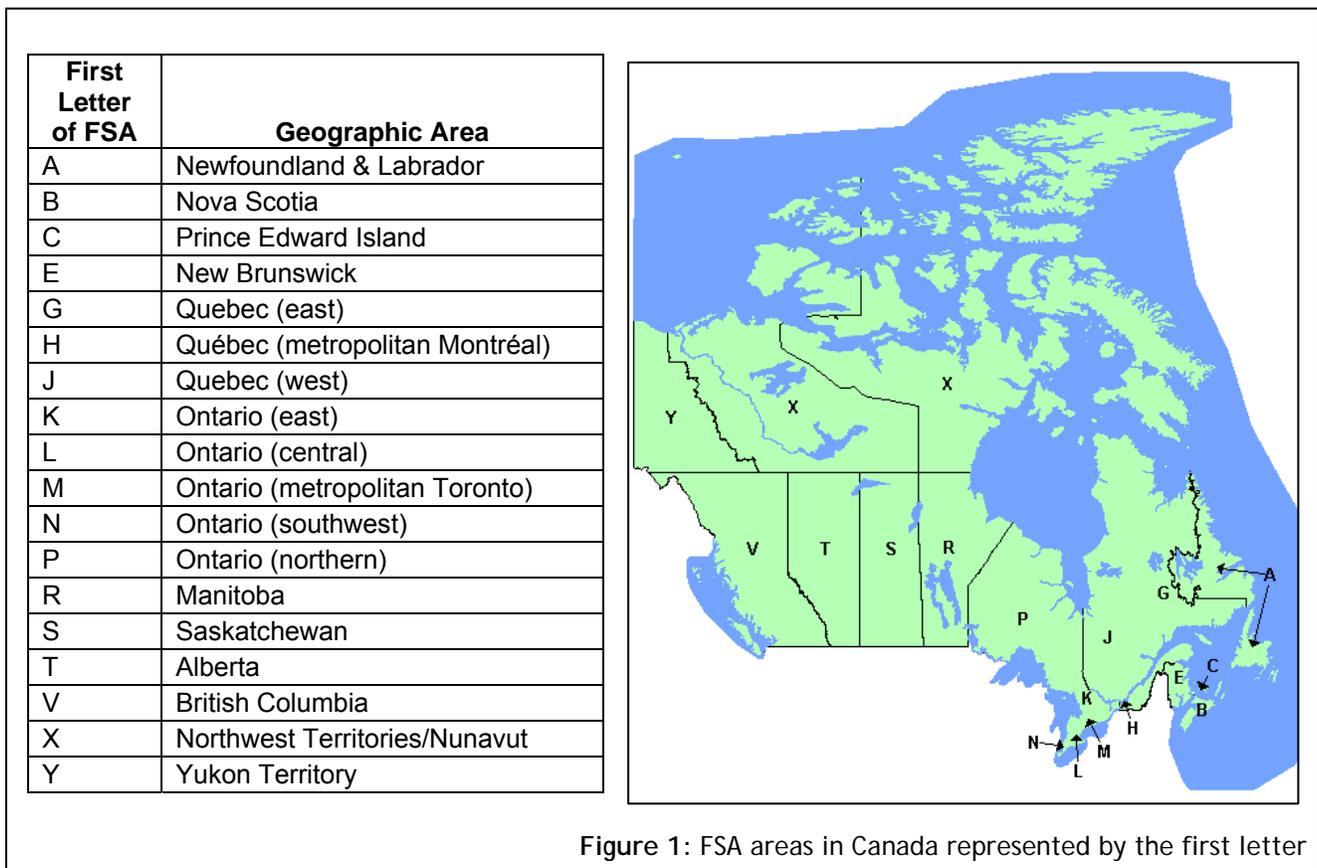


Figure 1: FSA areas in Canada represented by the first letter

⁷ Source: Canada Post Corporation, 2003

The second numeric character (numerals 0-9) of the FSA Boundary identifies either an urban postal code or a rural postal code. Rural postal codes are represented by the numeral 0 (zero), for example A0A, and are serviced by rural route drivers and/or postal outlets. Urban postal codes are represented by the numerals 1 to 9, for example E2J, and are generally serviced by letter carriers or community mailboxes.

The third character of the FSA segment, in conjunction with the first two characters, describes an area of a city or town or other geographic area.

Local Delivery Unit (LDU)

The last three characters represent the Local Delivery Unit (LDU) identifying a specific business or residential point of delivery located within an FSA.

Appendix D: Creating Unique Enhanced Postal Codes from Multiple Enhanced Postal Codes

Multiple Enhanced Postal Codes contain every occurrence of a particular postal code, including the most representative, or dominant, point for a postal code. Unique Enhanced Postal Codes only contain the dominant postal code points. The Multiple Enhanced Postal Code product contains a field called 'SLI', or Single Link Indicator. This field flags each postal code record for dominance, or greatest representation. If the record is the dominant, or most representative, point it is given a '1' in the SLI field. All other records for the postal code are given a '0' SLI value. This means the Unique Enhanced Postal Code product can in fact be created from the Multiple Enhanced product by querying out the dominant postal code records.

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 (See Figure 1) → Select * from AREAmep where SLI = 1
4. Select 'File' → 'Save Copy As...' from the Menu
5. Choose your query and click 'Ok'.
6. Type in an appropriate file name and click 'Save'.

For the ArcView format:

1. With a session of ArcView open, open a new View window and click on the 'Add Theme'  button to select the AREAmep.shp.
2. With the theme now in the View Window, click on the 'Query Builder' button .
3. Add the statement $SLI = 1$ using the Query Builder functions and select 'New Set' (See Figure 2 below)
4. When the selection is complete, go to 'Theme' → 'Convert to Shapefile' on your ArcView menu – this will create a new shape file based on your selection.
5. Finally, you will be prompted to save the new shape file to a location and to name the new shape file accordingly (i.e., AREAmep). You will also be prompted to add the shape file as a theme to the view.

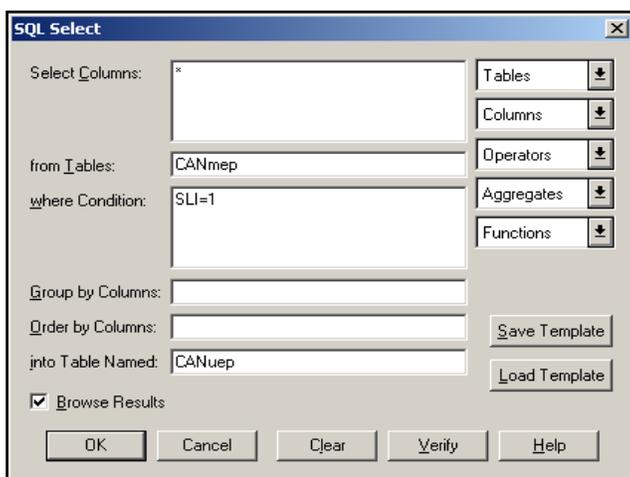


Figure 1: Querying the MEP

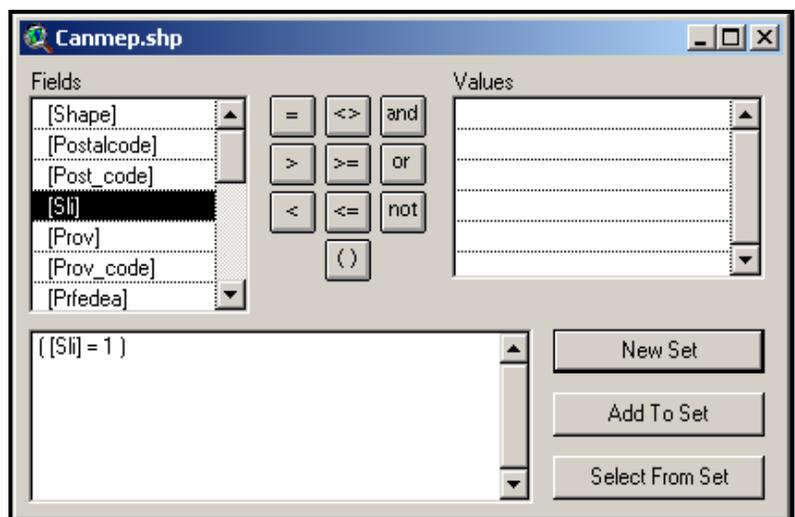


Figure 2: Querying the MEP

Appendix E: Postal Geography FAQ

Q: Why is there more than one postal code at the same location in MEP and LDU?

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 MEP, postal code points with a POSITION code of 3, 4 or 5 (LDU/FSA/PPN) 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 LDU product are accounted for in the Local Delivery Unit Boundaries Lookup Table

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 FSA boundary?

A: DMTI Spatial™ creates 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:

- Anomalies within postal geography or conflicts within postal geography and the census geography that defines municipal names and boundaries
- Some postal codes fall outside their “correct” FSA boundaries due to administrative considerations. For example, several Federal government offices assigned Ottawa postal codes (an FSA of K1A), but are actually located in Hull, Quebec.
- Postal codes can also be mislocated 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.
- For the MEP product, when geocoding we try to get the best street level position possible within certain logical thresholds. This allows us to place the MEP point to its most representative location achieving a higher precision than placing it to LDU, FSA or PPN centroid. As a result, the MEP point may fall just outside of its FSA, but will be closer to its 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 MEP points not falling in their appropriate LDU boundary?

A: In most cases the MEP points will fall into their corresponding LDU boundary. When this is not the case:

- The postal code in the MEP product might be in the Local Delivery Unit Boundaries Lookup Table related to the LDU postal code or
- The MEP point has a POSITION value of 4 or 5 which is a centroid position and is not related to the LDU or

- The MEP point was geocoded to the closest address on the street with which the Postal code serves. This allows us to place the MEP point to its most representative location achieving a higher precision than placing it to LDU, FSA or PPN centroid. As a result the MEP might fall outside of its appropriate LDU, but will be closer to its true position.

Q Why are there LDU boundaries with no MEP point?

A: The MEP 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 MEP point in each LDU boundary since a range of addresses in MEP can be broken up into several LDU boundaries dependant on the topology of the area.

Q: How do I create Postal Route maps by using the DEL_M_ID field in LDU?

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.

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:

- DMTI Spatial™ creates LDU boundaries based around topographical inputs. Parks, water bodies and roads are not included in the LDU polygon fabric. No LDU polygons will be created where these phenomena occur.
- 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's addresses do 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 why you cannot find your postal code in the LDU product:

- The postal code might be in the Postal code Lookup Table. This table links to a postal code in the LDU product 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. Please see Local Delivery Units Boundary Lookup Table for more information on how to link a postal code in the Lookup table to the LDU product.
- The postal code you are looking for might not currently be available in the LDU product for one of two reasons:
 - 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.
 - 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 MEP 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.

Appendix F: ISO 19115:2003 Compliant Metadata

Metadata Notification

As of May 15th 2005, DMTI Spatial data products have metadata that are ISO 19115:2003 compliant.

This product now includes structured metadata files as provided in XML and/or HTM format. These metadata files reside with the graphic or database files to which they are associated. It is recommended that users review and customize the metadata as per their specific needs.

This latest addition to the CanMap[®] line of products is another enhancement that will benefit our users and increase overall product satisfaction.

Appendix G: Postal2Census table

This table contains explicit and unilateral relationships of 6-digit postal code point geometry to various level of census geography as delineated in the 1996 and 2001 periods. The purpose of the table is to provide a bridge between Canadian postal code points (MEP, UEP) and historic census geography boundaries.

File Structure

Field Name	Description	Type	Size
MEP_ID	Multiple enhanced postal code point unique identifier	Dec	9,0
PRFEDEA_96	Enumeration Area Code for 1996 Census Period	Char	8
PRCDDA_01	Dissemination Area Unique Identifier for 2001 Census Period	Char	8
CMACT_96	Census Tract Code for 1996 Census Period	Char	10
CTNAME_01	Census Tract Unique Identifier for 2001 Census Period	Char	10
PRDCSD_96	Uniquely identifies a census subdivision 1996 Census Period	Char	7
PRDCSD_01	Uniquely identifies a census subdivision 2001 Census Period	Char	7
PRCD_96	Uniquely identifies a census division 1996 Census Period	Char	4
PRCD_01	Uniquely identifies a census division 2001 Census Period	Char	4
PROV	2 letter alpha abbreviation (Canada Post) according to the first letter of the postal code (e.g., ON)	Char	2

File Type: ASCII CSV

Maintenance Frequency: Quarterly – synchronized to latest Platinum Postal Code^{OM} Suite - MEP product release.

