User Guide

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Introduction

1.1   PointX's national points of interest database provides essential information for businesses delivering location based services as well as users in central government, local authorities, emergency services and the commercial sector.

1.2   PointX is designed to report "a specific named entity undertaking a distinct activity at a discrete location."

1.3   Purpose built, the data has been compiled from a large number of different suppliers including among others the Ordnance Survey, 118 Information, Local Data Company, Royal Mail, Welsh Assembly, Wilmington Healthcare Ltd, The Cloud, Department for Transport, Experian, British Wind Energy Association and LINK.

1.4   The data has been placed into a hierarchical classification system with over 600 individual classes of records at the most detailed level. These range from airports to amusement parks, cattle grids to car parks, hospitals to hotels, museums to mosques, petrol stations to pubs and restaurants to railway stations. Data can be supplied covering all of Great Britain or based upon defined areas.

1.5   Containing both addressable and non-addressable information, the data is essential for "Where's my nearest……?" or   "How do I get to ……?" services as well as providing landmarks for applications involving navigation, logistics and spatial analysis.

1.6   PointX is committed to delivering the most comprehensive, consistent and current points of interest information for Great Britain. Our growing reported database of over three and a half million records is continuously maintained, with updates provided quarterly as standard.

1.7   PointX aims to provide a foundation dataset that can be linked to more detailed data maintained by our specialist data suppliers.

Classification Scheme

2.1   PointX has developed a unique three level classification scheme that classifies both addressable and non-addressable records that are found within the landscape.

2.2   The first level, known as "groups", provides a generic entry point into the classification system. The 9 Groups are as shown below.

> Accommodation, Eating and Drinking
>
> Commercial Services
>
> Attractions
>
> Sport and Entertainment
>
> Education and Health
>
> Public Infrastructure
>
> Manufacturing and Production
>
> Retail
>
> Transport

2.3   Groups are divided into "categories". Data can be selected at either level as part of the selection criteria for a customer's order.

2.4   The third level of detail is the "class" which consists of over 600 individual types of points of interest. All records supplied are classified at this level.

2.5   For full details of the classification scheme, please visit the PointX website at www.pointx.co.uk.

Data Structure

3.1   Each PointX record is supplied to conform to a standard output structure. The following section describes the nature of each of the fields that are included within the output. Please note that some fields may not be populated in all cases and, depending on how an order is configured, certain fields may not be present.

Unique Reference Number

This is a unique numeric identifier that is allocated by PointX for each record within the database. It will be retained by the record throughout its life cycle and will never be re-used. As records representing a feature change it is possible that the record reported for a feature will have a different unique reference number over time.

Name

This is the name of the organisation or record provided by the data supplier, for example, Southampton General Hospital. Where a supplier has not provided a specific name for the record PointX has reported what the feature is based on the provided classification, for example "Convenience Store".

PointX Classification Code

This field contains an eight-digit number which equates to the three levels – Group, Category and Class - of the record. This code can be used to link to the classification lookup to identify the textual description associated with this eight-digit code.

Feature Easting

This is the "Easting" element of the record's British National Grid Reference. These are provided to a resolution of at least one metre in most cases.

Feature Northing

This is the "Northing" element of the record's British National Grid Reference. These are provided to a resolution of at least one metre in most cases.

Feature Latitude

This latitude value of the feature in the ETR89 coordinate reference system.

Feature Longitude

This longitude value of the feature in the ETR89 coordinate reference system.

Positional Accuracy Code

This field provides an indication of the positional accuracy of the record in the form of a numeric code. This code can be used to link to the positional accuracy lookup to identify the textual description associated with this numeric code. These textual descriptions are further described in Appendix One of this guide. For most types of features only certain positional accuracies will be reported .

UPRN

UPRN (or Unique Property Reference Number) is a value assigned to every unit of land and property in the National Address Gazetteer. PointX strive to populate the UPRN wherever possible, and over half of all records will have a valid URPN. This can allow users to link between other external data holdings (such as AddressBase products) using the UPRN as a unique link.

Topographic TOID

An identifier for the feature providing a direct link to OS MasterMap®, detailed mapping produced by Britain's national mapping agency, Ordnance Survey. TOID® stands for Topographic Identifier. The derivation of the TOID® is explained in Appendix One of this guide.

Topographic TOID Version

Identifies which version of the Topographic TOID is being used for each record.

USRN

The USRN (Unique Street Reference Number) is the identifier used within the NSG and TRSG and within the Ordnance Survey's AddressBase products. It is populated for all features, giving every PointX feature a Street reference to either the road access, or if not found, the nearest road network feature. It can also be used to link to other external data sources, such as OS Mastermap Highways Network

USRN Match Indicator

This field indicates how the feature was matched to a USRN:

> 1 – taken from OS AddressBase Core based on a match of UPRN.
>
> 2 – matched on the road/street name within the address element (within a tolerance of 500m) of the feature.
>
> 3 – matched spatially to the nearest USRN (as the crow flies) to the feature.

Please be aware that for Indicators 2 & 3, the USRN given may not be the available access to the feature.

Distance

The value in metres between the Feature Easting and Northing and the USRN given above. Gives an indication of how far away the feature access is from the OS MasterMap Highways road network.

Address Detail

For reported records that have an address and have been successfully matched this will contain the building name or number with a sub-premise and dependent thoroughfare if applicable.

Street Name

For reported records that have been successfully matched this will contain the name of the thoroughfare that the feature is located on.

Locality

For reported records that have been successfully matched this will contain the name of the geographical town name as assigned by the Local Authority that the feature is located within. For extra clarification, when an address has a dependent locality within it, this will prefix the postal town in the resulting output with a comma separating the 2 elements.

Geographic County

Derived from the Feature Easting and Northing values this is the geographic county that the record sits in. All records have this populated, and it is only intended to put the feature into a pseudo geographical context using a view of what we believe the geographic county extents to be.

Postcode

For reported records that have been successfully matched this will contain the full postcode that the feature is located within. For all other records the outbound postcode will be reported where they exist, and it has been possible to assign them.

Administrative Boundary

This field will always be populated with a value based upon which Administrative area the record sits on as held in Ordnance Survey's Boundary-Line Product. Should any features fall outside these areas then the value of the closest will be assigned. Values assigned will be one of Unitary Authority, District, London Borough or Metropolitan District.

Telephone Number

This field contains the full telephone number (with no spaces) if one is available for the record which is being reported. If no number is available, or what has been provided is too long to just be the number then the field will be blank. Where practical records with telephone numbers have been chosen for reporting over those without. **THIS FIELD MAY NOT BE AVAILABLE FOR ALL TYPES OF CUSTOMER.**

URL

Where a suitable web address for the feature in question has been supplied to PointX, or it has been possible to identify the appropriate address, it will be included in this field (with a www. prefix).

In all other cases the field will be blank. Before reporting any URL information PointX has validated that the address shown exists. Although the PointX team routinely perform reputation checks on all URLs, users need to be made aware that accessing any sites shown has the potential to expose them to possible malicious content that might be on those sites. Although likely to be few in number, and neutralised by standard virus protection software, it is an identified scenario that we would be remiss in not flagging as a possibility.

Brand

This field reports the brand name that is associated with the feature if one exists and has been identified. Only selected major brands will be populated but PointX strives to add more brands over time.

Qualifier Type

This field is linked with the Qualifier Data field. Qualifier Type is a constrained field which where populated, indicates what value Qualifier Data relates to. Examples of Qualifier Types include "SMS Number" or "Restaurant Type".

Qualifier Data

This field is linked with the Qualifier Type field. Qualifier Data reports the relevant values of the Qualifier Type for the record. As this can differ any absolute value can have a different context depending on the Qualifier Type. Examples of Qualifier Data values would include "dvndpdtd" (an SMS Number) or "Chinese Restaurant" (a Restaurant Type).

Provenance

This field denotes the name of the data supplier that provided the record to PointX.

Date of Supply

This indicates the PointX release date that the record belongs to and all records in a release will exhibit the same date value. It will be the first working day in the months of March, June, September and December as applicable.

Customer Orders

4.1   Any order supplied to the customer will consist of a number of physical files that broadly equate to each customer configuration for which data is being produced: -

There are 2 directories provided containing order information called "**Data**" and "**Docs**". The following describes the content of each of these directories.

<u>Data</u>

Features File

In an order there will be a single text file called "**features.txt**" containing all records for the order. The data is provided in the form of ASCII pipe ("|") delimited text file with a qualifier set to double quotes. The file contains a header row containing the field names.

A description of the contents of the file can be found within the section "Data Structure".

<u>Lookup Files</u>

The lookup files provide the descriptions associated with the PointX Classification Code, Positional Accuracy Code and Administrative Boundary fields. In the case of the full PointX Classification code field, the lookup descriptions can be found in a file called **classification_lookups.txt.** It must be remembered that the first 2 digits of the full classification code relate to the group, the third and fourth digits relate to the category and the fifth through eighth digits relate to the class portions.

In the case of the Positional Accuracy Code, the lookup file is called **positional_accuracy_lookups.txt**.

To let users know what type of Administrative Boundary is being reported in the Administrative Boundary field refer to the **administrative_boundary_lookups.txt** file.

In all cases the files are provided in the form of ASCII pipe delimited text files. The files contain a header row detailing the field names.

Keywords data File

This file, first made available in the December 2005 PointX release, is provided in order to aid users in finding where within the PointX classification system certain activities are held. The initial terms being referenced are those held in the Local Government Business Category List Version 1. The file provided is called **Keywords.txt** and is an ASCII pipe ("|") delimited text file with no text qualifiers and the column headings as the first row.

PointX to SIC mappings file

The file called **PointX class to SIC.txt** provides mappings to SIC 2003 and SIC 2007 at a PointX class level and is in an ASCII pipe ("|") delimited text file with no text qualifiers and the column headings as the first row.

Supporting information is given in the **SIC supporting documentation.pdf** file held in the documents directory.

<u>Docs</u>

Summary File

The text file **summary.txt** provides a summary of the contents of the customer's configuration. It includes details of the PointX Order Number, the Order Tracking ID, the Customer Number, Customer Name, Contact Name, the Production Date, the Customer Configuration ID, Supply Type and the Geographical Area. In the case of an update, a "Last Supply Date" is included indicating when the customer last received data for this configuration. This is followed by a listing of the selected groups and categories within the output with feature counts associated with each. This pipe delimited file can be read into a package such as Access to give a group and category name and count lookup or breakdown if required.

Copyright

The text file **copyright_*Year*.txt** explains the copyright associated with the content of the order. Customers must always ensure that they adhere to the terms of their data licensing agreement.

Keywords Supporting documentation

Supporting documentation explaining the content of the Keywords.txt file, its scope and production methodology is given in the file **Keywords Documentation.pdf**.

Feedback

PointX strongly encourages user feedback, via Customer Support (customer.support@pointx.co.uk).

User Guide

A generic user guide **PointX User Guide *Year_Version*.pdf** is included (this document).

SIC mapping documentation

A file called **SIC supporting documentation.pdf** has been produced which provides information on the scope and methodologies employed in producing the SIC mappings given in the PointX class to SIC.txt file.

Descriptive class reporting

In order to give users a better idea of what exactly is likely to be contained in each PointX class a full breakdown of descriptive terms and a selection of brand names that occur in each PointX class has been produced, called **PointX Descriptive classes *Year_Version*.pdf**.

Background of Data Supplies

As and when data supplies change a file named **Notes on background of Data Supplies *Year_Version*.pdf** will be updated and provided. This file gives more detail on the datasets used within PointX and how they are processed.

At the discretion of PointX, the distributor, or Value-added reseller, other supporting documentation might be supplied.

Release Report

A breakdown of the classifications with suppliers mappings and counts is also included, for every quarterly release. This details how many features are in each release from each supplier, broken down by group, category and class. A file named **Release Report *Month Year.pdf*** will be included.

Appendix One: Scope of the Data

1. The Data is supplied to PointX in a wide variety of formats. Some of the data is supplied without grid references and PointX makes extensive efforts to geo-code this data by identifying a grid reference for each record. Ordnance Survey data and specialised geo-coding software is used to achieve this and to provide a confidence level indicator of positional accuracy for each record. Data which cannot be geo-coded, due to insufficient location or address detail, to a representative location is not included in the output.

2. Hence, the positional accuracy falls into one of the following categories:

    1. positioned to the location or address
    2. positioned to an adjacent location or address

    Additionally for only Cash Machines, Wi-Fi Hotspots and Public Telephones the following positional accuracies can also be reported:

    3. positioned to the road within the address or location
    4. positioned within the geographical locality

3. The data contains both addressable and nonaddressable records. Verified structured address information is only provided for those records that are addressable and have been successfully matched against Ordnance Survey data. No address information at all is supplied to PointX for certain types of record and for these, no information will be shown in the address fields unless PointX has been able to allocate information based upon the feature Easting and Northing values. Please note that PointX is committed to maximising the number of records that have a full structured address through continual review and liaison with our many data suppliers.

4. PointX records have been attributed with both a Topographic TOID® and Topographic TOID® version that have been directly derived from area features within the OS MasterMap® Topographic Layer on the basis of the grid reference of the PointX feature. Where it has not been possible to derive a valid Topographic TOID®, a Topographic TOID® value of "Not Assigned" and a Topographic TOID® version of "0" will be reported.

5.   PointX relies upon its data suppliers to provide the initial classification of each of the records. This is then used to allocate the appropriate PointX class to the feature. This can lead to cases where different PointX classes are applied to the same real-world feature, dependent upon the base classification used by the different data suppliers. As part of the production process the removal of multiple instances, of what is believed to be the same feature, it is possible that individual instances of what are, in fact, the same type of feature, can be reported in different PointX classes.

6.   PointX continually endeavours to provide the most current information possible through agreements with its numerous data suppliers. To maintain integrity, the name and type of point of interest, as provided by the data supplier, are reported, except in the specific instances noted in 2.5 and in the name part of section of 3.1. In a small number of cases this may lead to discrepancies in respect of the occupants of a building. It should also be remembered that buildings are three dimensional objects which may have a number of different occupants on different floors.

Appendix Two: UPRN Assignment

1.   PointX is continuously striving to provide UPRNs where possible. However, there are several classes for which we have deemed it not so relevant for full population. These classes often have features that cannot be assigned a UPRN, and these classes are seen as a low priority for any future development work, in regard to increasing the UPRN population:

PointX Classification Code	CLASS_TEXT
1010002	CAMPING, CARAVANNING, MOBILE HOMES, HOLIDAY PARKS AND CENTRES
2100183	VEHICLE CLEANING SERVICES
2120200	SCRAP METAL DEALERS AND BREAKERS YARDS
3160232	BIRD RESERVES, COLLECTIONS AND SANCTUARIES
3160236	HORTICULTURAL ATTRACTIONS
3160237	SALMON LADDERS
3160239	ZOOS AND ANIMAL COLLECTIONS
3170240	ARCHAEOLOGICAL SITES
3170241	BATTLEFIELDS
3170245	HISTORIC AND CEREMONIAL STRUCTURES
3170246	HISTORICAL SHIPS
3180252	COMMONS
3180253	COUNTRY AND NATIONAL PARKS
3180254	PICNIC AREAS
3180255	PLAYGROUNDS
3190257	DESIGNATED SCENIC FEATURES
3190259	TRIGONOMETRIC POINTS
3200269	UNSPECIFIED AND OTHER ATTRACTIONS
3580804	LAKES AND WATERS
3580805	LOCHS AND LOCHANS
3580806	TARNS, POOLS AND MERES
3580807	RESERVOIRS
4240290	BOWLING FACILITIES
4240299	SHOOTING FACILITIES
4240300	SKI INFRASTRUCTURE AND AERIAL CABLEWAYS
4240302	SPORTS GROUNDS, STADIA AND PITCHES
6330404	ARMED SERVICES
6330407	COASTAL SAFETY
6340433	ELECTRICAL FEATURES
6340437	GAS FEATURES
6340438	METEOROLOGICAL FEATURES
6340440	REFUSE DISPOSAL FACILITIES
6340441	WASTE STORAGE, PROCESSING AND DISPOSAL
6340443	TELECOMMUNICATIONS FEATURES
6340453	ALLOTMENTS
6340455	DRINKING FOUNTAINS AND WATER POINTS

PointX Classification Code	CLASS_TEXT
6340457	LETTER BOXES
6340461	PUBLIC TOILETS
6340462	RECYCLING CENTRES
7380500	COAL MINING
7380501	OIL AND GAS EXTRACTION, REFINERY AND PRODUCT MANUFACTURE
7380502	ORE MINING
7380504	SAND, GRAVEL AND CLAY EXTRACTION AND MERCHANTS
7380506	STONE QUARRYING AND PREPARATION
7380507	UNSPECIFIED QUARRIES OR MINES
7390512	FISH AND SHELLFISH
7390514	FRUIT, FLOWER AND VEGETABLE GROWERS
7390520	POULTRY FARMING, EQUIPMENT AND SUPPLIES
7410531	BUSINESS PARKS AND INDUSTRIAL ESTATES
7410534	ENERGY PRODUCTION
7410536	LIME KILNS
7410537	OAST HOUSES
7410538	PIPELINES
7420582	MARINE EQUIPMENT INCLUDING BOATS AND SHIPS
7420616	WOOD PRODUCTS INCLUDING CHARCOAL, PAPER, CARD AND BOARD
9470703	LIVESTOCK MARKETS
10530729	HELIPADS
10540730	BRIDGES
10540733	CATTLE GRIDS
10540734	FORDS AND LEVEL CROSSINGS
10540736	PARKING
10540740	SIGNALLING FACILITIES
10540743	VIADUCTS
10540744	WEIGHBRIDGES
10560751	AQUEDUCTS
10560752	LOCKS
10560753	MOORINGS AND UNLOADING FACILITIES
10560755	WEIRS, SLUICES AND DAMS
10570758	TAXI RANKS
10590732	BUS STOPS
10590759	HAIL AND RIDE ZONES

For all other classes, PointX will continue to develop and enhance processes to capture UPRNs for as many features as are possible.