Ordnance Survey®

AddressBase® products

Getting started guide

Getting started guide v1.1

Preface

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The data in AddressBase is provided by GeoPlace, a limited liability partnership between the Local Government Group and Ordnance Survey.

1 AddressBase data applications

Three products have been designed to meet distinct customer requirements. All are derived from a single database, which captures data from multiple authoritative address sources. The source data is collated, verified and quality assured by GeoPlace. This database is then used to create the AddressBase products.

1.1 Examples of applications for AddressBase products

Product Name	AddressBase Premium	AddressBase Plus	AddressBase
Suggested application	Planning, mailing, postal delivery, analysis, statistics, strategic decision-making, address matching and verification, customer relationship management (CRM), web mapping, live 'front line' operational use.	Planning, mailing, postal delivery, analysis, statistics, strategic decision-making, address-matching and verification, CRM, web mapping.	Mailing, postal delivery.
Benefits	Key building block for 'e-government': • reduces duplication on effort on maintaining address information across multiple departments; and • facilitates data-sharing between departmental systems. Provides objects without a postal address (OWPA) records and multiple address references. Connectivity – the Unique Property Reference Number (UPRN) as the key identifier for a property/address that enables systems to share information about the same entities without the need to match multiple datasets. Created from a central hub managed by GeoPlace to bring all the address information together to ensure data management and update consistency.		

2 What do I need to use this data?

2.1 System requirements

AddressBase data is designed for use as a digital map within geographical information systems (GIS) and database systems. For details of Ordnance Survey's Licensed Partners, who can incorporate AddressBase in their systems, please see the systems/software page on the Ordnance Survey website.

Ordnance Survey does not recommend either suppliers or software products, as the most appropriate system will depend on many factors, such as the amount of data being taken, resources available within the organisation, the existing and planned information technology infrastructure and last but by no means least, the applications that AddressBase products can be used for.

However as a minimum, the following elements will be required in any system:

- a means of reading the data, either in its native format, or by translating it into a file format or for storage in a database;
- a means of storing and distributing the data, perhaps in a database or through a web-based service; and
- a way of visualising and querying the data, typically a GIS.

2.2 Backup provision of the product

You are advised to copy the supplied data to a backup medium.

2.3 Typical data volumes

For reading purposes it is recommended that users store the data on a single hard disc. This will speed up the ability of your computer to read the data.

Uncompressed file sizes for the full supply of England and Wales are as follows:

2.3.1 Uncompressed comma-separated values (CSV)

- AddressBase Premium is 25 Gb
- AddressBase Plus is 10 Gb
- AddressBase 4.4 Gb

2.3.2 Uncompressed Geography Markup Language (GML)

- AddressBase Premium is 123 Gb
- AddressBase Plus is 51.9 Gb
- AddressBase 10 Gb

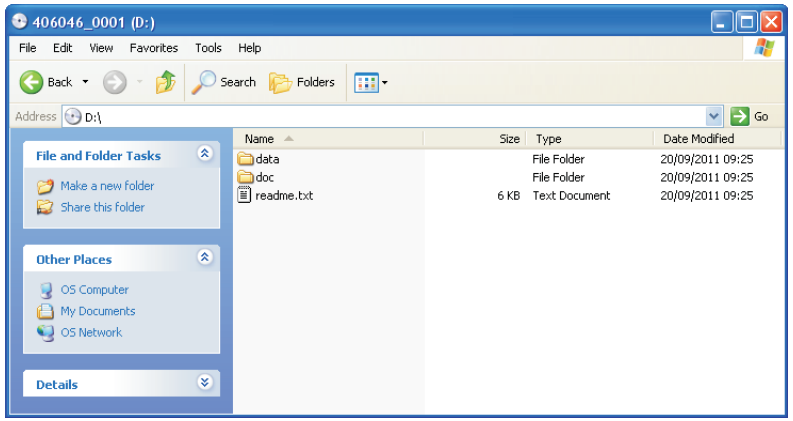
3 What's on the CD/DVD or in the data download?

3.1 Supply options:

3.1.1 CD/DVD

When a customer receives an order via offline media, the following files will be supplied.

- data
- doc
- readme.txt



Within the data directory, data files will be found in their compressed format.

The doc directory contains both standard and product-specific document files that describe what has been supplied in the order, including:

- Medialist.txt – outlining the contents of the media.
- Disccare.txt – outlining how to care for your media.
- Report.txt – outlining the order details.
- readme.txt – this document provides guidance notes on matters such as the file name referencing used and the directory structure of the DVD.

3.1.1 File Transfer Protocol (FTP)

With an FTP order, the same information is supplied as in section 3.1.1; but the file names will be slightly different, reflecting the FTP order number.

3.1.2 Download

Public Sector Mapping Agreement (PSMA) customers can download their geographic chunk data via our download service. When you click 'Download data', you will be required to enter a password to access the PSMA members' area. On successful entry to the download service, you will be able to view all of your orders in the members' area and download your data.

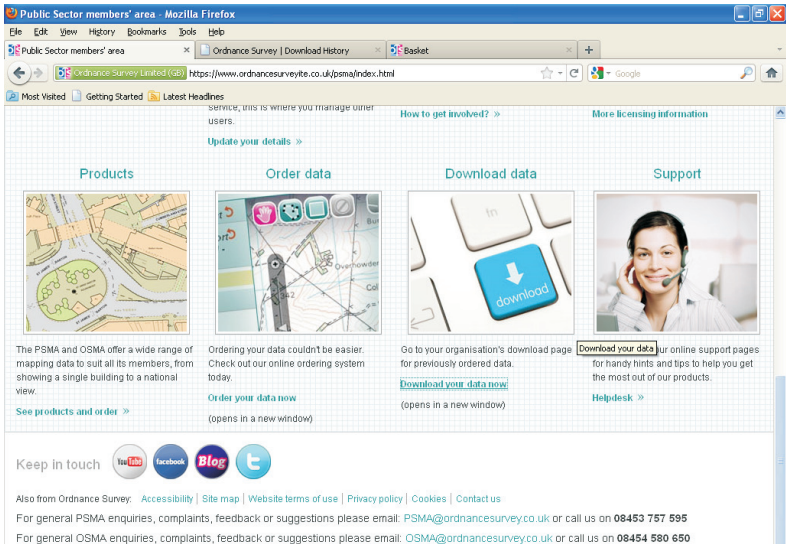


Figure 1: download data from our website

If you have ordered your data offline, you will be sent an email with a link to the download page.

Online Reference - 234831 - AddressBase

Thank you for placing your order for Ordnance Survey map data.

We are pleased to inform you that your order placed on Thursday 29th September 2011 is now available for download.

Please click here to download your data

Your order will be available to download for **seven days** from the date of this email.

Please note that larger files may take some time to download depending on your broadband/dial up connection speed.

Should you require any assistance with your download or have received this email in error, please contact our Business enquiries helpdesk on 08453 757535 and we will endeavour to resolve your issue. Our office opening hours are Monday to Friday 08:30 - 17:30 except for Public Holidays.

Kind regards,

Figure 2: download data via an email link

Within the PSMA members' area, you can download the data that you require by clicking on the 'Download' button (on the right of the screen).

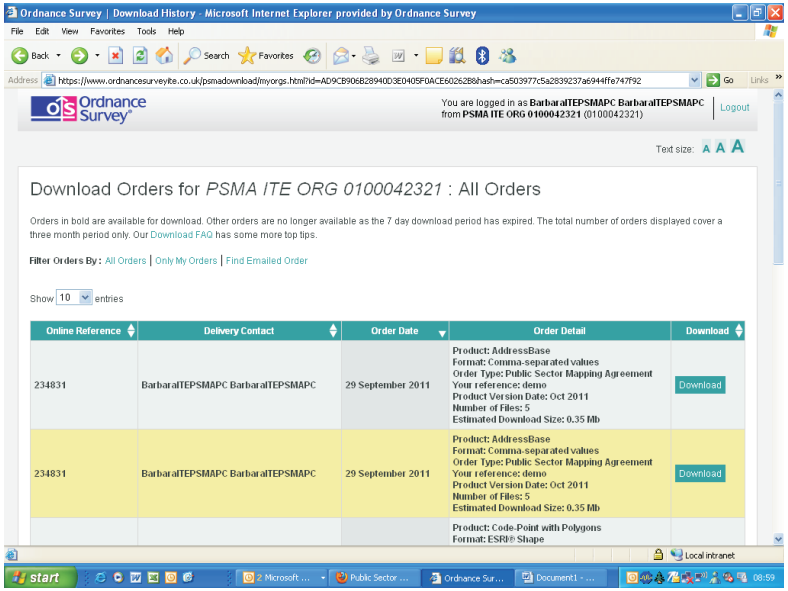


Figure 3: PSMA members' area

When you've downloaded the data, it will be available as a series of zipped data files. To unzip these files please see chapter 3.3, below.

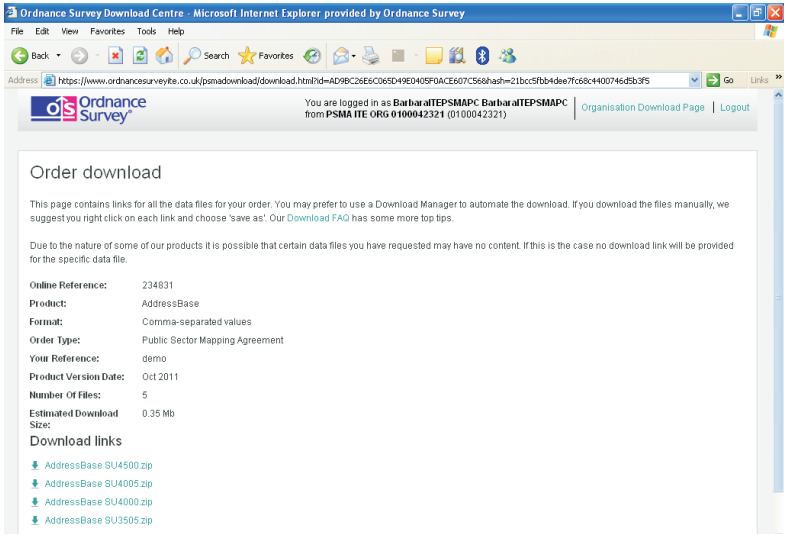


Figure 4: zipped data

3.2 Chunked files

The data is supplied as a number of chunked files that cover your selected area. These files are named according to the convention detailed below.

When you open your data, you will see a series of zip folders.

3.2.1 Non-geographic chunks

For example:

AddressBasePremium_FULL_2011-07-29_001_csv.zip

(Full supply of CSV)

or

AddressBasePremium_COU_2011-07-29_001_gml.zip

(Change-only update supply of GML)

3.2.2 Geographic chunks

For example:

AddressBasePremium_FULL_2011-07-29_TQ2020_csv.zip

(Full supply of CSV)

or

AddressBasePremium_COU_2011-07-29_TQ2020_gml.zip

(Change-only update supply of GML)

3.3 How do I unzip the files?

The AddressBase GML and CSV data is supplied in a compressed form (zip). Some software can access these files directly; others will require it to be uncompressed. To uncompress the zipped data files (.zip extension), use an unzipping utility found on most PCs, for example, WinZip®. Open-source zipping/unzipping software can be downloaded from the Internet, for example, 7-Zip.

3.4 Unzipped

When the files are unzipped they will appear as follows:

3.4.1 Non-geographic chunks

AddressBasePremium_2011-07-29_001.csv

3.4.2 Geographic chunks

AddressBasePremium_2011-07-29_NC4040.csv

These CSV files are now ready for use.

4 Managing the CSV data

The technique for managing AddressBase CSV data is determined by which of the three products was taken: AddressBase, AddressBase Plus or AddressBase Premium.

If using AddressBase or AddressBase Plus data, refer to Chapter 4.1. If using AddressBase Premium data please refer to Chapter 4.2.

4.1 AddressBase and AddressBase Plus

4.1.1 Merging multiple AddressBase or AddressBase Plus CSV files

For AddressBase and AddressBase Plus data – using the technique described in Chapter 3.3, unzip all the CSV files into a single folder, e.g. C:\AddressBase_Data or C:\AddressBase_Plus_Data.

It may be beneficial to merge all CSV files together to ensure that the user does not have to follow the import procedure for each of the individual files, which can be time-consuming and repetitive. The user can use any technique they feel comfortable with to merge all the individual CSV files in to a single file. This could include doing it manually using a text editor such as Notepad or TextPad (though this is very time-consuming), using a .bat batch file, or an MS-DOS® command.

To use the batch function:

- Copy the following text and paste it into a new Notepad document:

  *copy *.csv mergedABdata.csv*

  NOTE: mergedABdata.csv can be any user-defined file name with the extension .csv

- Save the Notepad document with the file extension .bat (for example, *mergedABdata.bat*) in the same directory as the CSV files unzipped in Chapter 3.3 (for example, *C:\AddressBase_Data*).
- Close the .bat file, and navigate to the directory where it was saved (for example, *C:\AddressBase_Data*). Double-click on the .bat file (for example, *mergedABdata.bat*) and an MS DOS window will appear. Once the process is complete, the MS-DOS screen will close automatically.
- If you look in the directory containing the AddressBase CSV files, and batch file (for example, *C:\ AddressBase_Data*), it can be seen that there is now an additional single file called *mergedABdata.csv*

4.1.2 Appending a header file to AddressBase and AddressBase Plus CSV

The three AddressBase CSV products, AddressBase, AddressBase Plus and AddressBase Premium all contain different attributes. As such, there is a separate header file for each of these. Header files for each product are supplied by Ordnance Survey and can be found on our web page.

Download the Header file that corresponds to the product that has been supplied:

- AddressBase
- AddressBase Plus

Paste the .csv header file contained within the zip folder into the same folder as the merged AddressBase.csv file created in Chapter 4.1.1.

Copy the appropriate version of the following text and paste it into a new Notepad document:

AddressBase

copy *AddressBase_Header.csv+mergedABdata.csv AB_Data.csv*

AddressBase Plus

copy *AddressBasePlus_Header.csv+ mergedAB_Plusdata.csv AB_Plus_Data.csv*

NOTE: mergedABdata.csv is the file that contains all of the AddressBase data merged into a single .csv file.

The order that the documents are referred to in the above text is important, as it states which file is appended to the other. In this instance the headers .csv file comes first, so that the column headers are the first line of the final AddressBase data file and the merged data file is appended to the column headers.

- Save the above Notepad document with the file extension .bat (for example, *append.bat*) in the same directory as where the column headers and the merged AddressBase data are located (for example, *C:\AddressBase_Data*).
- Close the .bat file and navigate to the directory where it was saved to (for example, *C:\AddressBase_Data*). Double-click on the new .bat file (for example, *append.bat*) and an MS-DOS window will appear. Once the process is complete, the MS-DOS screen will close automatically.
- If the user navigates to the directory where the column headers and the merged AddressBase data are located, it can be noticed that a new .csv file has been created, which is the merged column headers and AddressBase data (for example, *AB_Data.csv* or *AB_Plus_Data.csv*).

4.2 AddressBase Premium

Appending header files to AddressBase Premium can be done at the same time as splitting the record identifiers by following these instructions:

- Group all the AddressBase Premium CSV files into a folder with no other CSV files contained within.

NOTE: this folder must contain no spaces in any of the file directory path, for example, C:\AddressBaseData\ AddressBase_Premium

- Into this folder, add the AddressBase Premium header files:

Record_10_HEADER_Header.csv
Record_11_STREET_Header.csv
Record_15_STREETDESCRIPTOR_Header.csv
Record_21_BLPU_Header.csv
Record_23_XREF_Header.csv
Record_24_LPI_Header.csv
Record_28_DELIVERYPOINTADDRESS_Header.csv
Record_29_METADATA_Header.csv
Record_30_SUCCESSOR_Header.csv
Record_31_ORGANISATION_Header.csv
Record_32_CLASSIFICATION_Header.csv
Record_99_TRAILER_Header.csv

- Go to http://omniplex.om.funpic.de/home/ltru/gawk-win.zip and save the zip file in any location.
  - Unzip the file.
  - Copy the 'gawk.exe' file, contained within the 'gawk-win' folder, to the same folder as where all off the AddressBase Premium CSV and header files are located, for example, *C:\AddressBaseData\AddressBase_Premium*.

- Copy the following text and paste it into a new Notepad document:

```
FOR /F %%A IN ('dir *.csv /b/s') DO (CALL :process "%%A" "%%~NA")

@rem -- merge the individual record identifier files
copy *_10_Records.csv Master_10_Records.out
copy *_11_Records.csv Master_11_Records.out
copy *_15_Records.csv Master_15_Records.out
```

```
copy *_21_Records.csv Master_21_Records.out
copy *_23_Records.csv Master_23_Records.out
copy *_24_Records.csv Master_24_Records.out
copy *_28_Records.csv Master_28_Records.out
copy *_29_Records.csv Master_29_Records.out
copy *_30_Records.csv Master_30_Records.out
copy *_31_Records.csv Master_31_Records.out
copy *_32_Records.csv Master_32_Records.out
copy *_99_Records.csv Master_99_Records.out
del *_Records.csv

@rem -- add header records to the individual record identifier files
copy Record_10_HEADER_Header.csv+Master_10_Records.out ID10_Header_Records.csv
copy Record_11_STREET_Header.csv+Master_11_Records.out ID11_Street_Records.csv
copy Record_15_STREETDESCRIPTOR_Header.csv+Master_15_Records.out ID15_StreetDesc_Records.csv
copy Record_21_BLPU_Header.csv+Master_21_Records.out ID21_BLPU_Records.csv
copy Record_23_XREF_Header.csv+Master_23_Records.out ID23_XREF_Records.csv
copy Record_24_LPI_Header.csv+Master_24_Records.out ID24_LPI_Records.csv
copy Record_28_DELIVERYPOINTADDRESS_Header.csv+Master_28_Records.out ID28_DPA_Records.csv
copy Record_29_METADATA_Header.csv+Master_29_Records.out ID29_Metadata_Records.csv
copy Record_30_SUCCESSOR_Header.csv+Master_30_Records.out ID30_Successor_Records.csv
copy Record_31_ORGANISATION_Header.csv+Master_31_Records.out ID31_Org_Records.csv
copy Record_32_CLASSIFICATION_Header.csv+Master_32_Records.out ID32_Class_Records.csv
copy Record_99_TRAILER_Header.csv+Master_99_Records.out ID99_Trailer_Records.csv
del *.out
pause
exit

@rem -- split the source csv into individual files based on the record identifier
:process
SET tempvar1=%~1
SET tempvar2=%~2
gawk < %tempvar1% -F "," "{ if ($1 == \"10\") { print $0 } }" > %tempvar2%_10_Records.csv
gawk < %tempvar1% -F "," "{ if ($1 == \"11\") { print $0 } }" > %tempvar2%_11_Records.csv
gawk < %tempvar1% -F "," "{ if ($1 == \"15\") { print $0 } }" > %tempvar2%_15_Records.csv
gawk < %tempvar1% -F "," "{ if ($1 == \"21\") { print $0 } }" > %tempvar2%_21_Records.csv
gawk < %tempvar1% -F "," "{ if ($1 == \"23\") { print $0 } }" > %tempvar2%_23_Records.csv
```

```
gawk < %tempvar1% -F "," "{ if ($1 == \"24\") { print $0 } }" > %tempvar2%_24_Records.csv
gawk < %tempvar1% -F "," "{ if ($1 == \"28\") { print $0 } }" > %tempvar2%_28_Records.csv
gawk < %tempvar1% -F "," "{ if ($1 == \"29\") { print $0 } }" > %tempvar2%_29_Records.csv
gawk < %tempvar1% -F "," "{ if ($1 == \"30\") { print $0 } }" > %tempvar2%_30_Records.csv
gawk < %tempvar1% -F "," "{ if ($1 == \"31\") { print $0 } }" > %tempvar2%_31_Records.csv
gawk < %tempvar1% -F "," "{ if ($1 == \"32\") { print $0 } }" > %tempvar2%_32_Records.csv
gawk < %tempvar1% -F "," "{ if ($1 == \"99\") { print $0 } }" > %tempvar2%_99_Records.csv
GOTO :EOF
```

- Save the Notepad document with the file extension .bat (for example, process_AB_Premium.bat) in the same directory as the AddressBase Premium CSV files, header files and gawk.exe file (for example, *C:\AddressBaseData\AddressBase_Premium*).
- Close the .bat file, and navigate to the directory where it was saved (for example, *C:\AddressBaseData\AddressBase_Premium*). Double-click on the .bat file (for example, *process_AB_Premium.bat*) and an MS-DOS window will appear. Once the process is complete, the MS-DOS screen will close automatically.
- If you look in the directory containing the AddressBase Premium CSV files, header files, gawk.exe file, and batch file (for example, *C:\AddressBaseData\AddressBase_Premium*), it can be seen that there are now files that adhere to similar naming conventions as the header files, which contain the relevant AddressBase Premium data.

5 How do I load the CSV AddressBase products into a GIS?

AddressBase products can be loaded into several Geographic Information System (GIS). This chapter describes how to load AddressBase products into commonly used GIS. For more information on other GIS that AddressBase products are compatible with, please speak to your Account Manager.

5.1 ESRI®

These instructions are for use with ArcGIS Desktop 9.3 Service Pack 1.

When using CSV data in ArcGIS, it is necessary to have column headings. The default headings given by ArcGIS are numeric and have no real relevance to AddressBase, hence it is more appropriate to use the headings provided by Ordnance Survey. Instructions on how to merge the appropriate header files and data can be found in Chapter 4.

5.1.1 AddressBase and AddressBase Plus

- Start ArcCatalog.
- Connect to a folder where the AddressBase data you wish to use can be accessed, for example, *C:\AddressBase_Data* by:
  - clicking File;
  - then Connect Folder, and navigate to the relevant folder;
  - select the folder that is to be connected to from the main window; then
  - click OK.
- The folder should now appear in the navigation window to the left of the screen.
- Using the file tree on the left, navigate to the directory where you wish to create the File Geodatabase, for example, *C:\AddressBase_Geodatabase\AddressBase_Plus*.
- Right-click on the folder that you wish to contain the File Geodatabase, and select 'New' and 'File Geodatabase'.
- Rename the File Geodatabase to something relevant, for example, *'AB_Plus_FileDb.gdb'*, and press Enter.
- Right-click on the newly-created File Geodatabase, for example, *'AB_Plus_FileDb.gdb'*, and select 'Import', then 'Table (single)…'
  - For 'Input Rows', navigate to the location of the CSV file that you wish to open, that is, the file that contains the merged header and AddressBase Plus data file.
  - The 'Output Location' option should automatically populated by the location of the File Geodatabase that is to be updated, that is, *'AddressBase_Plus_FileDb.gdb'*.
  - Insert a relevant name for the Output Table, for example, *AddressBase_Plus_data*. *NOTE: there can be no spaces in the table name*.
- Click 'OK'.

To create a map of the locations of the AddressBase records, they need to be geocoded. To do this:

- Right-click on the AddressBase table in the geodatabase that was created in the previous step and select Create Feature Class.
- Then, From XY Table…
  - Select the X_Coordinate attribute from the X Field: drop-down menu and the Y_Coordinate attribute from the Y Field: drop-down menu. Leave the Z Field: drop-down menu as <none>.
  - Then click on the Coordinate System of Input Coordinates… button, click Select…, and then navigate to and select the British National Grid – which should be located in the directory Coordinate Systems\Projected Coordinate Systems\National Grids. Click Add and then OK.
  - Click on the open folder button on the right of the text box referring to the Output, navigate to the location where you wish to save the output shapefile or feature class (it is suggested that this be within the geodatabase created above) and give the file a suitable name (for example, *AddressBase_Data_geocoded*), changing the Save as Type: option to File and Personal Geodatabase feature classes.
  - Click Save, leave the Configuration keyword: drop-down menu as Defaults, and press OK.

- So that the new feature class can be seen, right-click on the Personal Geodatabase where it was saved and select Refresh.

Now that all of the processing has been done, the data can be loaded into ArcMap:

- Start ArcMap.
- Select File > Add Data…
- Navigate to the folder where the AddressBase file Geodatabase was created.
- Double-click on the Geodatabase, and select all of the files contained within in one go.
- Click Add.

5.1.2 AddressBase Premium

Once the AddressBase Premium data has been split from the single CSV file that it is supplied in, into the CSV files for each of the individual record types, by following the steps outlined in Chapter 4, the files should be loaded into ArcCatalog:

- Start ArcCatalog.
- Connect to a folder where the AddressBase data you wish to use can be accessed, for example, C:\AddressBase_Data by:
  - clicking File;
  - then Connect Folder, and navigate to the relevant folder;
  - select the folder that is to be connected to from the main window; then
  - click OK.
- The folder should now appear in the navigation window to the left of the screen.
- Using the file tree on the left, navigate to the directory where you wish to create the File Geodatabase.
- Right click on the folder which you wish to contain the File Geodatabase, and select 'New' and 'File Geodatabase'.
- Rename the File Geodatabase to something relevant, for example, *'AddressBase_Premium.gdb'*, and press Enter.
- Right-click on the newly-created File Geodatabase, for example, *'AddressBase_Premium.gdb'*, and select 'Import', then 'Table (multiple)…'
  - For 'Input Table', navigate to the location of the .csv files that you wish to open, for example, the folder that contains the AddressBase data split into individual files by record type and select the files that you wish to add. Click 'Add'.
  - The 'Output Geodatabase' option should automatically be populated by the location of the File Geodatabase that is to be updated, for example, *'AddressBase_Premium.gdb'*.
  - Click OK.
- Once the process is complete, click Close.

To create a map of the locations of the AddressBase Premium records, they need to be geocoded. To do this:

- Double-click on the geodatabase that the AddressBase data was just imported into.
- Right-click on the table that was created from AddressBase Premium records with a record type of 21, for example, 'ID21_ BLPU_Records', in the geodatabase and select Create Feature Class.
- Then, From XY Table…
  - Select the X_Coordinate attribute from the X Field: drop-down menu and the Y_Coordinate attribute from the Y Field: drop-down menu. Leave the Z Field: drop-down menu as <none>.
  - Click on the Coordinate System of Input Coordinates… button, click Select…, and then navigate to and select the British National Grid – which should be located in the directory Coordinate Systems\Projected Coordinate Systems\National Grids. Click Add and then OK.
  - Click on the open folder button on the right of the text box referring to the Output, navigate to the location where you wish to save the output shapefile or feature class (it is suggested that this be within the geodatabase created in 6.1.2) and give the file a suitable name (for example,

XYID21_BLPU_Records), changing the Save as Type: option to File and Personal Geodatabase feature classes.
    - Click Save, leave the Configuration keyword: drop-down menu as Defaults, and press OK.
- So that the new feature class can be seen, right-click on the Personal Geodatabase where it was saved and select Refresh.

Now that all of the processing has been done, the data should be loaded into ArcMap so that the individual tables, split by record type, can be 'related'.

- Start ArcMap.
- Select File > Add Data…
- Navigate to the folder where the AddressBase Premium file Geodatabase was created.
- Double-click on the Geodatabase, and select all of the files contained within in one go.
- Click Add.

The way in which all of the individual tables are related/joined can be found within the AddressBase Premium technical specification.

However, for ease of reference, the following joins/relates should be made:

- BLPU (spatial data for record identifier 21)
    - UPRN – Application Cross Reference (record identifier 23) UPRN
    - UPRN – LPI (record identifier 24) UPRN
    - UPRN – Delivery Point Address (record identifier 28) UPRN
    - UPRN – Successor Record (record identifier 30) UPRN
    - UPRN – Organisation (record identifier 31) UPRN
    - UPRN – Classification (record identifier 32) UPRN
- LPI (record identifier 24) USRN – Street (record identifier 11) USRN
- Street (record identifier 11) USRN – Street Descriptor (record identifier 15) USRN

To create the relevant relates:

- With the Source tab selected in the left-hand navigation window, right-click on the first table you wish to relate to another:
    - select Joins and Relates; then
    - Relate…
- From the first drop-down, select the attribute from the first table that is going to be used to create the relate between the two tables (relationships stated above).
- From the second drop-down menu, select the table that is going to be related to (relationships stated above).
- From the third drop-down menu, select the attribute from the table that is being related to (relationships stated above).
- In the fourth box, input a relevant name for the relate, for example, *BLPU_to_Organisation*.
- Click OK.
- Repeat this process for all of the joins/relates.

5.1.3 Helpful tip

Once the data has been loaded into ArcMap, if the user wishes to display more relevant information in the 'Info' tool than the ESRI defined Object ID, it is possible to change this by:

- double-click on the spatial dataset that you wish to change the Primary Display Field of;
- select the 'Fields' tab; then
- change the Primary Display Field to the desired field, for example, for AddressBase and AddressBase Plus data – UPRN.

5.2 MapInfo®

These instructions are based on the use of MapInfo Professional v10.5.2.

When using CSV data in MapInfo, it is not a critical requirement to have column headings; however, for ease of use of the data, it is recommended that the default headings supplied by Ordnance Survey are used in conjunction with the data. Instructions on how to merge the appropriate header files and data can be found in chapter 4.

5.2.1 AddressBase and AddressBase Plus

- Start MapInfo.
- 'Cancel' the Quick Start prompt.
- Click 'File', then 'Open…', and navigate to the folder that contains the AddressBase data combined with the appropriate header file created in chapter 4.
- In the 'Files of Type' drop down menu, select 'Comma delimited CSV (*.csv)', and select the merged AddressBase data and header file to be loaded. Click 'Open'.
- The tick box next to 'Use First Line for Column Titles' should be checked. Then press OK.

5.2.2 Format attributes

When adding data this way, the field type classifications and field sizes of each column are done automatically – to fit the type of data that MapInfo believes is contained within the column and the largest value of that classification found within that column. The classifications and field sizes of some attributes may not match the field types and sizes stated in the AddressBase technical specification. These should be changed so that they match the values stated. It is only possible to change the classification types and values in an editable copy of a table – as the initial MapInfo table created simply references the CSV file that was opened and it is not possible to edit the classification of an attribute. Hence, a copy will have to be created so that the edits can be made.

- Go to File, Save Copy As…, select the AddressBase table that was loaded in, Save As…, name the table to be created, then click Save.
- Open the table that was just created. File, Open…, navigate to and select the copy of <copy_of_AddressBase>, click Open.

Once the copy has been saved and opened, to check and change any attribute classifications that do not match those stated in the AddressBase technical specification, navigate to: Table > Maintenance > Table Structure…then select the table to be edited and click OK.

On this screen, it is possible to change the Type and Width of each attribute to match that stated in the AddressBase technical specification. This should be adhered to for all attributes apart from the UPRN, which should be classified as Float, and all attributes that have a Field Type of 'Date' in the AddressBase technical specification, which should be classified as Character with a length of 10. These discrepancies are due to software-specific issues in handling the data. After all changes have been made, click OK.

5.2.3 Geocoding

In order to create a map of the location of the AddressBase records, they need to be geocoded. To do this, ensure that the table of AddressBase records that you wish to geocode is open, and then:

- Navigate to 'Table', Create Points…
- Select:
  - The table you wish to geocode from the Create Points for Table: drop-down menu.
  - The X_Coordinate attribute from the Get X Coordinates from Column: drop-down menu.

- The Y_Coordinate attribute from the Get Y Coordinates from Column: drop-down menu.

- Then click on the Projection… button:
  - Select the British Coordinate Systems option from the Category drop-down menu and then the British National Grid [EPSG: 27700].
  - Click OK to close that screen, and once again, OK to close the next screen.
- To view the geocoded points, go to Window, New Map Window.

5.2.4 General considerations

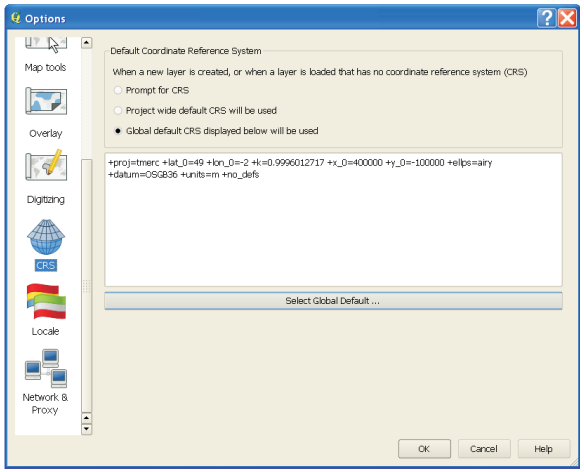
MapInfo has a size limit of 2 Gb on each table. This equates to a maximum number of approximately 4 million AddressBase records.

5.3 QGIS

This method is designed for use with QGIS 1.6.0.

5.3.1 Set projection

- Click Settings
  - Then Options…



Select 'CRS' from the left-hand side menu.
  - Ensure that 'Global default CRS displayed below will be used.
  - Click on 'Select Global Default…'
    - In the Search area:
- ensure Authority = All
- Search for = ID
- in the text box insert '27700' and press Find.
    - In the Coordinate Reference System Selector at the top of the screen, ensure that 'OSGB 1936 / British National Grid' is highlighted.
    - Click OK.
  - Click OK.

5.3.2 AddressBase and AddressBase Plus

- Go to Plugins.
  - Then Manage Plugins…
- Check the checkbox next to Add Delimited Text Layer.
  - Then OK.
- Return to Plugins.
  - Select Delimited text.
    - then Add delimited text layer.
- In the dialog box, click the '…' button and navigate to the location of the AddressBase CSV file that was created in Chapter 4 – containing the merged header files and AddressBase data.
  - Select the CSV file, and press Open.
- Accept the default or create a new layer name for the dataset.
- In the delimiter string text box, type ","
- Click the Parse button, which will then allow you to select the geometry attributes:
  - For the X field, select the X_Coordinate attribute from the drop-down option.
  - For the Y field select the Y_Coordinate attribute from the drop-down option.
- Press OK.

6 Importing AddressBase products into a database

AddressBase products can be loaded into several types of database. This chapter describes how to load AddressBase products into commonly used ones. For more information on other databases that AddressBase products are compatible with, please speak to your Account Manager.

6.1 Microsoft® Access

This method is designed for use with Microsoft Access '97.

6.1.1 AddressBase and AddressBase Plus

It is possible to import AddressBase and AddressBase Plus data directly into Microsoft Access. You must first create a Microsoft Access Database by clicking:

- File.
- New Database…
- Double click on the blank database icon. Name and save the database somewhere convenient.

After creating the database, to import the AddressBase data:

- Click File.
  - Then Get External Data.
    - Then Import…
    - Change the selection of the 'Files of type:' to Text Files.
    - Navigate to the location of the AddressBase CSV file that contains the data and headers in a single file.
    - Select the file and click Import.
- In the next box that appears, ensure the Delimited option is selected.
  - Then click Next.
- Then 'Comma' from the delimiter options.
  - Tick the First Row Contains Filed Names option.
  - Select " from the Text Qualifier drop-down menu.
  - Then Advanced:
    - change the Date Order: option to "YMD".
    - tick the Four Digit Years box.
    - change the Date Delimited to be "-".
    - tick the Leading Zeros in Dates box.
  - Click OK.
  - Then Next.

Then In a New Table.
- Then Next.

This is where some more detailed manual work becomes necessary.

- On the next screen you are prompted to specify information about each of the fields that were imported. You must select and work through each field that you have imported, individually, and ensure that the 'Data_Type:' of each field matches the Field Type classification stated for that attribute in the AddressBase technical specifications.
  - This is true for all attributes apart from the UPRN and the OS_Address_TOID, which should be given the Field Type: Text – as there are issues with Microsoft Access handling values over 2,147,483,647.
- For UPRN, you should ensure that the Indexed: box has Yes (no duplicates) is selected.
- Once these steps have been carried out, click Next.
- Select the option to 'Choose my own Primary Key', selecting the UPRN.
- Click Next.
- Finally, give your table a name and click Finish.

6.1.2 AddressBase Premium

You must first create a Microsoft Access Database by clicking:

- File.
- New Database…

- Double-click on the Blank Database icon. Name and save the database somewhere convenient.

After creating the database, to import the AddressBase Premium data:

- Click File.
  - then Get External Data.
    - Then Import…
    - Change the selection of the 'Files of type:' to Text Files.
    - Navigate to the location of the AddressBase Premium CSV files that contain the data, split by record type, and headers in a single file.
    - Select the file and click Import.
- In the next box that appears, ensure the Delimited option is selected.
  - Click Next.
- Then 'Comma' from the delimiter options.
  - Tick the First Row Contains Filed Names option.
  - Select " from the Text Qualifier drop-down menu.
  - Then Advanced,
    - Change the Date Order: option to "YMD".
    - Tick the Four Digit Years box.
    - Change the Date Delimited to be "-"
    - Tick the Leading Zeros in Dates box.
  - Then click OK.
  - Then Next.
- Then In a New Table
  - Then Next.
- Click Next.
- Select the option to 'No Primary Key'.
- Click Next.
- Finally, give your table a relevant name and click Finish.

This process should be repeated for all AddressBase Premium datasets, split by record type – importing them all into the same Access database.

Once all the datasets have been imported, they can be linked via queries. To do this:

Click Insert.
  - Then Query.
- Select Design View and press OK.
- Highlight all of the tables that are to be joined in the main body of the dialogue window, and press Add, then Close.

Hint: make the query window as large as possible here so that creating the joins graphically is easier.

- To create the joins between the relevant tables:
- Select the attribute to be joined from the first table, and without letting go of the mouse button, drag it to the matching attribute in the table to be joined to.

These are the joins to be created:

- BLPU (record identifier 21)
  - UPRN – Application Cross Reference (record identifier 23) UPRN
  - UPRN – LPI (record identifier 24) UPRN
  - UPRN – Delivery Point Address (record identifier 28) UPRN
  - UPRN – Successor Record (record identifier 30) UPRN
  - UPRN – Organisation (record identifier 31) UPRN
  - UPRN – Classification (record identifier 32) UPRN
- LPI (record identifier 24) USRN – Street (record identifier 11) USRN
- Street (record identifier 11) USRN – Street Descriptor (record identifier 15) USRN
- Once these have all been created, save the database.

6.1.3 General considerations

It should be noted that Microsoft Access '97 has a maximum table size of 1 Gb. This equates to a maximum number of approximately 3 million AddressBase records.

6.2 PostGIS

These notes outline how to load AddressBase Premium into a PostGresSQL database using text files created using the CSV file merge utility. They have been prepared using version 1.12.3 of PostGresSQL and with an assumption that you have set-up your database with the PostGIS spatial extension. The instructions only cover loading AddressBase Premium. To load AddressBase or AddressBase Plus, you will need to create an SQL script to build a single table for each. Then use the SQL COPY statement to load the data into the table in a similar way to that described below.

It is recommended that you have an understanding of database terminology before attempting to follow this guide.

6.2.1 Loading instruction

To Load AddressBase Premium use the following steps:

1. Prepare the text files as described in Chapter 4.
2. Remove any carriage returns from the end of the output file as this will close the import to file.
3. Start PGAdmin tool (this can be found on the Start Menu – PostGreSQL).
4. Either connect to an existing database or create a new database (it is recommended that the encoding is set to UTF-8).
5. Open the public schema and create the tables using the following steps.
   a. Open the SQL query tool
   b. Copy the SQL scripts in section 6.2.3 into the query window. These should be copied individually; you will need to create the following tables
      - BLPU
      - Classifications
      - Cross reference table
      - Delivery Point Address
      - LPI
      - Organisation
      - Streets
      - Street Descriptor
      - Successor Records
6. Once the tables have been created the data can be loaded into each table using the SQL COPY, adding the CSV option as the first line contains a header record for each table.

Note that the path and file name may need to be changed to reflect your data.

```
COPY abp_blpu_record FROM 'C:/Address/ID21_BLPU_Records.csv' DELIMITER ',' CSV HEADER;
COPY abp_delivery_point FROM 'C:/Address/ID28_DPA_Records.csv' DELIMITER ',' CSV HEADER;
COPY abp_lpi FROM 'C:/Address/ID24_LPI_Records.csv' DELIMITER ',' CSV HEADER;
COPY abp_crossref FROM 'C:/Address/ID23_XREF_Records.csv' DELIMITER ',' CSV HEADER;
COPY abp_classification FROM 'C:/Address/ID32_Class_Records.csv' DELIMITER ',' CSV HEADER;
COPY abp_street FROM 'C:/Address/ID11_Street_Records.csv' DELIMITER ',' CSV HEADER;
COPY abp_street_descriptor FROM 'C:/Address/ID15_StreetDesc_Records.csv' DELIMITER ',' CSV HEADER ;
COPY abp_organisation FROM 'C:/Address/ID31_Org_Records.csv' DELIMITER ',' CSV HEADER;
COPY abp_successor FROM 'C:/Address/ID30_Successor_Records.csv' DELIMITER ',' CSV HEADER;
```

7. Once loaded you may want to add primary and foreign keys to the data. However these can only be added on columns where the data values are unique. Where there is no unique data values an index may be added which will aid searching. For the BLPU table, the UPRN provides a unique value and USRN in and Streets data. Primary Keys are added using the following steps.
   a. Right click on the table name and select New Object – New Primary Key
   b. Enter a Name to call the key and select the Columns tab
   c. From the drop down at the foot of the window select UPRN
   d. Click on Add
   e. Click Add then OK

Repeat the procedure for the Streets table and USRN.

8. However in the other tables these columns may contain duplicate values. As an alternative object identifiers (OID) can be added to each table (these are also required to use the data in some GIS including QGIS and MapInfo. The following SQL can be used for this:

   ```
   ALTER TABLE insert_table_name SET WITH OIDS
   ```

9. To help performance when querying across mutliple tables a foreign key may be added however as with a primary key only unique data columns can used.
   a. Click on the table you wish to add the key too in pgAdmin
   b. Click on the + sign
   c. Right click on Constraints and select New Object > New Foreign Key
   d. Under the Properties Tab select the table to join to from the References drop down
   e. On the same tab enter a Name for the key (e.g FKey1)
   f. Click on Columns tab
   g. Click on the unique field for Local field and the same field from the Referencing drop down
   h. Click on Add and OK
   i. Click OK

10. You will need to repeat this for each table that contain suitable fields.

11. You can also index the data by following these steps.
    a. Click on the table in pgAdmin
    b. Click on the + sign
    c. Right click on Indexes > New Index
    d. On the Properties enter a Name (for example, Idx1)
    e. Click on the Columns tab
    f. Select Column (for example, UPRN or USRN)
    g. Click Add and then OK

6.2.2 Converting coordinates to geometry

The coordinate information loaded from the text file is held in separate text columns. However, to use the spatial functions in PostGIS these will need to be converted to geometry. Before you can convert data to geometry your schema will need to contain a copy of the spatial reference table (spatial_ref_sys). If this is not present in your list of tables it can be created using the table in the template_postgis database (this is part of the PostGIS install). This table contains the definitions for the spatial reference systems defined as SRID in the SQL commands. In this example the data is loaded into the geometry type however it is also possible to use geography type.

The first step is to add the geometry column using the SQL AddGeometryColumn function.

```
SELECT AddGeometryColumn ('public', 'abp_blpu_record', 'geom', 27700, 'POINT', 2).
```

Where public is yours schema names followed by table name and the column which will hold the geometry. It is important to define the SRID as 27700 (British National GRID), the data type as point and 2 for XY data.

Next load the data into your new geometry column using the following SQL –

```
UPDATE public.abp_blpu_record SET geom = ST_ GeomFromText('POINT(' ||  x_coordinate || ' ' || y_coordinate || ')', 27700 ).
```

This sets the geom column in the BLPU table to equal the values from the x_coordinate and y_coordinate columns, with the spatial reference defined as 27700.

Finally create a spatial index on the data using –

```
CREATE INDEX idx_blpu_geom ON public.abp_blpu_record USING gist(geom)
```

This adds the index name idx_blpu_geom to the same table on the geom column.

6.2.3 SQL statements

BLPU

```
CREATE TABLE abp_blpu (
RECORD_IDENTIFIER bigint,
CHANGE_TYPE varchar(1) ,
PRO_ORDER integer ,
UPRN bigint NOT NULL,
LOGICAL_STATUS integer ,
BLPU_STATE integer ,
BLPU_STATE_DATE date ,
PARENT_UPRN bigint ,
X_COORDINATE numeric(9,3) ,
Y_COORDINATE numeric(10,3) ,
RPC integer ,
LOCAL_CUSTODIAN_CODE integer ,
START_DATE date ,
```

```
END_DATE date ,
LAST_UPDATE_DATE date ,
ENTRY_DATE date ,
POSTAL_ADDRESS char(1),
POSTCODE_LOCATOR char(8),
MULTI_OCC_COUNT integer
)
```

Classifications

```
CREATE TABLE abp_classification (
RECORD_IDENTIFIER bigint NOT NULL,
CHANGE_TYPE varchar(1),
PRO_ORDER integer,
UPRN bigint NOT NULL,
CLASS_KEY varchar(14),
CLASSIFICATION_CODE varchar(4),
CLASS_SCHEME varchar(60),
SCHEME_VERSION numeric(4,2),
START_DATE date,
END_DATE date,
LAST_UPDATE_DATE date,
ENTRY_DATE date)
```

Cross reference table

```
CREATE TABLE abp_crossref (
RECORD_IDENTIFIER bigint NOT NULL,
CHANGE_TYPE varchar(1),
PRO_ORDER integer,
UPRN bigint NOT NULL,
XREF_KEY varchar(14),
CROSS_REFERENCE varchar(20),
VERSION integer,
SOURCE varchar(6),
START_DATE date,
END_DATE date,
UPRN bigint NOT NULL,
```

```
ORG_KEY varchar(14),
ORGANISATION varchar(120),
LEGAL_NAME varchar(60),
START_DATE date,
END_DATE date,
LAST_UPDATE_DATE date,
ENTRY_DATE date
)
```

Delivery Point Address

```
CREATE TABLE abp_delivery_point (
RECORD_IDENTIFIER bigint,
CHANGE_TYPE varchar(1),
PRO_ORDER integer,
UPRN bigint,
PARENT_ADDRESSABLE_UPRN bigint,
RM_UDPRN bigint,
ORGANISATION_NAME varchar(60),
DEPARTMENT_NAME varchar(60),
SUB_BUILDING_NAME varchar(60),
BUILDING_NAME varchar(60),
BUILDING_NUMBER integer,
DEPENDENT_THOROUGHFARE_NAME varchar(80),
THROUGHFARE_NAME varchar(80),
DOUBLE_DEPENDENT_LOCALITY varchar(35),
DEPENDENT_LOCALITY varchar(35),
POST_TOWN varchar(30),
POSTCODE varchar(8),
POSTCODE_TYPE varchar(5),
WELSH_DEPENDENT_THOROUGHFARE varchar(80),
WELSH_THOROUGHFARE_NAME varchar(80),
WELSH_DOUBLE_DEPENDENT_LOCALITY varchar(35),
WELSH_DEPENDENT_LOCALITY varchar(35),
WELSH_POST_TOWN varchar(30),
PO_BOX_NUMBER varchar(6),
PROCESS_DATE date,
START_DATE date,
END_DATE date,
LAST_UPDATE_DATE date,
ENTRY_DATE date
)
```

LPI

```
CREATE TABLE abp_lpi (
RECORD_IDENTIFIER bigint NOT NULL,
CHANGE_TYPE varchar(1),
PRO_ORDER integer,
UPRN bigint NOT NULL DEFAULT '0',
LPI_KEY varchar(14),
LANGUAGE varchar(3),
LOGICAL_STATUS integer,
START_DATE date,
END_DATE date,
LAST_UPDATE_DATE date,
ENTRY_DATE date,
SAO_START_NUMBER integer,
SAO_START_SUFFIX varchar(2),
SAO_END_NUMBER integer,
SAO_END_SUFFIX varchar(2),
SAO_TEXT varchar(90),
PAO_START_NUMBER integer,
PAO_START_SUFFIX varchar(2),
PAO_END_NUMBER integer,
PAO_END_SUFFIX varchar(2),
PAO_TEXT varchar(90),
USRN bigint,
USRN_MATCH_INDICATOR varchar(1),
AREA_NAME varchar(35),
LEVEL char(30),
OFFICIAL_FLAG char(1)
)
```

Organisation

```
CREATE TABLE abp_organisation (
RECORD_IDENTIFIER bigint NOT NULL,
CHANGE_TYPE varchar(1),
PRO_ORDER integer,
UPRN bigint NOT NULL,
ORG_KEY varchar(14), e
ORGANISATION varchar(120),
LEGAL_NAME varchar(60),
START_DATE date,
END_DATE date,
LAST_UPDATE_DATE date,
ENTRY_DATE date
)
```

Streets

```
CREATE TABLE abp_street (
RECORD_IDENTIFIER bigint NOT NULL,
CHANGE_TYPE varchar(1),
PRO_ORDER integer,
USRN bigint NOT NULL,
RECORD_TYPE integer,
SWA_ORG_REF_NAMING bigint,
STATE integer,
STATE_DATE date,
STREET_SURFACE integer,
STREET_CLASSIFICATION integer,
VERSION integer,
STREET_START_DATE date,
STREET_END_DATE date,
LAST_UPDATE_DATE date,
RECORD_ENTRY_DATE date,
STREET_START_X numeric(9,3),
STREET_START_Y numeric(10,3),
STREET_END_X numeric(9,3),
STREET_END_Y numeric(10,3),
STREET_TOLERANCE integer
)
```

Street Descriptor

```
CREATE TABLE abp_street_descriptor (
RECORD_IDENTIFIER bigint NOT NULL,
CHANGE_TYPE varchar(1),
PRO_ORDER integer,
USRN bigint NOT NULL,
STREET_DESCRIPTOR varchar(100),
LOCALITY_NAME varchar(35),
TOWN_NAME varchar(30),
ADMINSTRATIVE_AREA varchar(30),
LANGUAGE varchar(3)
)
```

Successor Records

```
CREATE TABLE abp_successor (
RECORD_IDENTIFIER bigint NOT NULL,
CHANGE_TYPE varchar(1),
PRO_ORDER integer,
UPRN bigint NOT NULL,
SUCC_KEY varchar(14),
START_DATE date,
END_DATE date,
LAST_UPDATE_DATE date,
ENTRY_DATE date,
SUCCESSOR integer
)
```

7 How do I load the GML data?

GML is an XML dialect which can be used to model geographic features. It was designed by the OGC as a means for people to share information regardless of the particular applications or technology that they use. In the first instance, GML was used to overcome the differences between different GIS applications by providing a neutral file format as an alternative to proprietary formats such as ESRI SHAPE or MapInfo TAB files and so on. However, because it is independent of applications there is no reason to assume that data exchanged in GML is being exchanged between GIS – it can be moved between databases or other types of application. GML therefore has a wider application than just GIS data transfer.

GML data can be viewed using software such as Snowflake GML Viewer http://www.snowflakesoftware.co.uk/products/gmlviewer/ or FME Data Inspector/Universal Viewer http://docs.safe.com/fme/html/FME_UniversalViewer/welcome_to_the_fme_universal_viewer.htm

GML data can be loaded into a database using software such as Snowflake Go Loader http://www.snowflakesoftware.com/products/goloader/schemas/ordnancesurvey/address_base.htm

As yet, we are unaware of any other solutions that are available from Licensed Partners to load the GML data.

If customers wish to use AddressBase products supplied in GML format, they will need to develop code that will enable the data to be used effectively.

8 How do I apply AddressBase change-only update (COU)?

Introduction

The purpose of this chapter is to highlight the steps that AddressBase, AddressBase Plus and AddressBase Premium users should take into consideration when applying change-only update (COU) to their AddressBase data holdings or when creating a COU process to align with their existing business processes. This document aims to give a synoptic view of the COU process and recommends steps that should be followed by the customer to ensure a standard in the way COU is applied.

COU

Change-Only-Update (COU) can be described as a supply of features that have been created or have changed in a customer's order area since the customer took initial full supply of AddressBase or last took an update. An initial full supply contains all address records for the complete area covered by the order. COU contains new features, new versions of features and information about departed features. Any feature within the order area that has not undergone any change will not be supplied.

CSV COU records are ordered chronologically. This is done because an address record can be updated more than once in a file, so processing the file in order is key to the most current record being retained.

COU will be supplied on a six-weekly basis.

Customers may request updates of the latest changes in their order area at any time using the Ordnance Survey online service. Customers can assign a regular date for receipt of COU. These will then be sent automatically on the required media or placed on the FTP server for collection (if under 400 Mb).

COU is supplied as customer-defined non-geographic chunks for all customers. If you are a PSMA member, you are entitled to supply as 5 km by 5 km geographic chunks.

The AddressBase database is live and undergoes continuous revision. Period licence customers have unlimited access to COU and can order updates or resupplies at any time.
When a customer orders COU, a 'change-since' date is specified and all features that have changed since midnight on the date specified are supplied. This will normally be the date the data was last extracted from the Ordnance Survey main holding, but could be a previous date. The last extraction date can be found on the label of the CD/DVD containing the data (order no date) or in two 'read me' files accompanying the data (extraction date). The extraction date can also be checked by opening up one of the GML files in a text editor and checking the first 20 lines or so of the GML file for the <osgb:queryChangeSinceDate> tag; which is the extraction date of that order. To ensure that there are no temporal gaps between taking supplies of OS MasterMap® data, it is important to enter the right dates into the online ordering system when requesting COU; similarly the correct extraction date must be entered into the translator/loader (if required) to ensure the data holding does not become corrupt; to prevent this from happening, most translators are designed to verify if the extraction dates are chronological).

While ordering online, the two dates that are needed are the order date and the extraction date (or currency date) of the customer's previous supply of data. It is important that these dates are not mixed up. The order date is the date the order was placed by the customer. The extraction (or currency) date is the date that the database was last updated and is the date that must be used when you place a COU order to ensure there is not a gap in your data holdings.

8.1 Chunking

To make the management of large areas easier, the data is split into chunks of smaller data. The primary supply mechanism is referred to as non-geographic chunks. Although this is the main mechanism for delivery of data, PSMA customers are able to order geographic chunks (5 km tiles) as well as non-geographic chunks.

8.1.1 Non-geographic chunking

Non-geographic chunking is a way of dividing up data into chunks that are supplied in separate volumes that have a fixed maximum number of records, as opposed to a given geographic National Grid area. For this reason, it is possible for features from various geographic locations to appear in one volume and for adjacent features to appear in different volumes. Non-geographic chunk volumes are designed for use as a set to load into spatial databases but can be used in a file format as long as all chunks are translated or imported into the system at the same time. The maximum number of records per volume is 1 million complete address records. When the data in one volume reaches this limit, a new volume is started.

8.1.2 Geographic chunking

PSMA customer data will be supplied as 5 km by 5 km chunks that reference to the 1 km tile in the south-west corner of the 5 km tile; for example, *AddressBasePremium_2011-07-29_NC4040.csv*. Based on your area of interest, for example the boundary of your local authority, a 5 km by 5 km grid covering the area of interest is generated.

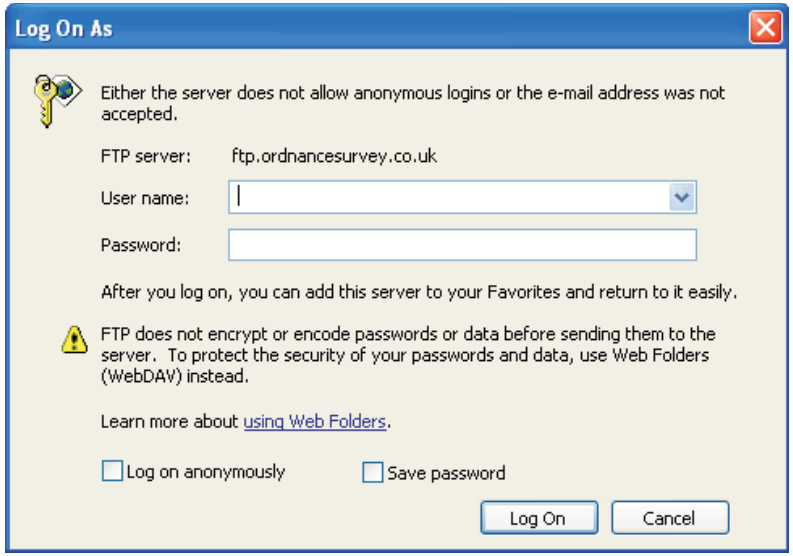
Any features intersecting with squares in that grid are added to a chunk file representing the square. Geographic chunking is performed using standard Ordnance Survey National Grid.

8.2 Procedure for processing change-only updates

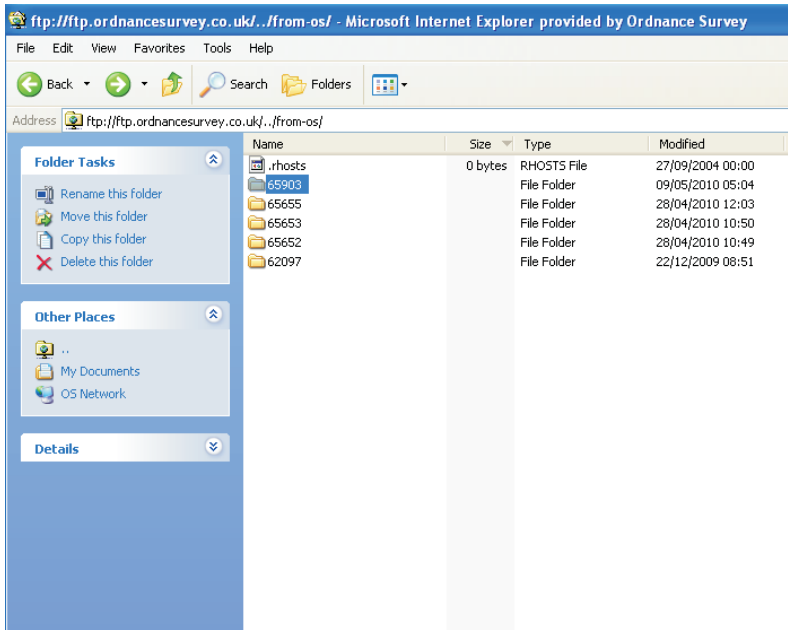
Described below is a suggested method for processing change-only updates.

8.2.1 Receive COU DVD or download COU supply from FTP server

The first stage concerns obtaining the data; for FTP orders, these can be downloaded from the Ordnance Survey FTP server. Please note that the FTP server is limited to an order volume of 400 Mb.



FTP Log-on screen



FTP download screen.

8.2.2 Update COU tracker spreadsheet

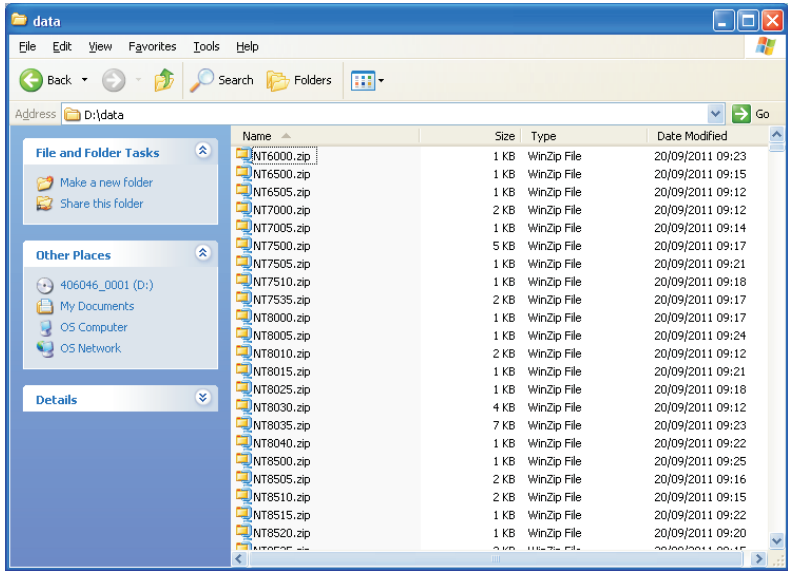
For some organisations that have more than one staff member updating their OSMM holding, it is useful to have a spreadsheet that records information on which COU DVDs have been received or which COU orders have been downloaded. This also acts as an internal control measure for customers that have received the COU DVD or downloaded the data form the FTP server. Also, this will also provide a check to make sure that the DVD is next to load in order, this is useful if customers have several COU orders to process.

COU Order Number	Ordnance Survey Product	Date Received	Change-since date (Extraction date)
59226	AddressBase	03/10/2011	30/09/2011
61804	AddressBase	17/12/2011	14/12/2011
64339	AddressBase	31/01/2012	28/01/2012

Note: for illustrative purposes only

8.2.3 Copy data files on DVD to local hard disk

This step is added to assist in the speed of processing; it has been noted that it is faster to process data translation and loading while the source files i.e. CSV files are on Hard disk rather than the supply media.



Screen showing Zip files copied from data folder of supply media.

9 Further information

AddressBase Products pages:

http://www.ordnancesurvey.co.uk/oswebsite/products/addressbase-premium/index.html
http://www.ordnancesurvey.co.uk/oswebsite/products/addressbase-plus/index.html
http://www.ordnancesurvey.co.uk/oswebsite/products/addressbase/index.html

www.ordnancesurvey.co.uk
customerservices@ordnancesurvey.co.uk

General enquiries: +44 (0)8456 05 05 05
Dedicated Welsh Language HelpLine: 08456 05 05 04
Textphone (deaf and hard of hearing users only please): +44 (0)23 8005 6146

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